



**US Army Corps
of Engineers**®
New England District
696 Virginia Road
Concord, MA 01742-2751

PUBLIC NOTICE

Comment Period Begins: December 20, 2022
Comment Period Ends: January 19, 2023
In Reply Refer To: Dan Vasconcelos
Phone: (978) 318-8653
E-mail: daniel.b.vasconcelos@usace.army.mil

The District Engineer has received a permit application to conduct work in waters of the United States from the Massachusetts Department of Transportation (MassDOT) – Highway Division, 10 Park Plaza, Boston, Massachusetts 02116. This work is proposed in Long Pond and associated vegetated wetlands at the bridge conveying Champeaux Road over Long Pond, and within East Brimfield Lake, in Sturbridge, Massachusetts. The site coordinates are: Latitude 42.128769°N, Longitude -72.128303°W.

Note: Although this project is eligible for review under the General Permits for Massachusetts (MA GPs), the work is not expected to be complete until after the MA GPs expire on April 5, 2023. The applicant is therefore seeking an individual permit to allow more time to complete the work.

The work involves the permanent discharge of 3,132 square feet of fill material below the Ordinary High Water (OHW) mark of Long Pond and East Brimfield Lake, including 143 square feet within submerged aquatic vegetation (SAV), and 401 square feet within other vegetated wetlands, associated with the replacement of the bridge conveying Champeaux Road over Long Pond. The proposed work includes replacing the existing 3-span bridge with a new single-span bridge in the same alignment, constructing new abutments, widening/paving the approaches, and placement of slope stabilization at the abutments and wingwalls. Existing bridge piers will be removed and cut 2' below the mudline. A compensatory flood storage area will be created within East Brimfield Lake, approximately 1.5 miles south of the bridge, by excavating and then re-stabilizing an existing rockfill slope. An additional 917 square feet of temporary impacts below OHW, including 131 square feet within SAV, and 13 square feet of temporary impacts within other vegetated wetlands, are proposed resulting from installation of cofferdams and associated dewatering to allow work to occur in the dry. The applicant's stated purpose for this project is to replace the structurally deficient bridge.

The work is shown on the enclosed plans entitled "MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION PLAN AND PROFILE OF CHAMPEAUX ROAD OVER LONG POND BRIDGE NO. S-30-019 (C8Y)/COMPENSATORY FLOOD STORAGE EAST BRIMFIELD LAKE IN THE TOWN OF STURBRIDGE WORCESTER COUNTY" on 11 sheets, and dated "11/16/22".

The project has been designed to avoid and minimize impacts to waters of the United States, including wetlands, through the use of various best management practices, including the installation of erosion and sedimentation controls at the project limits, conducting repair work within a sandbag cofferdam to reduce turbidity, and installing geotextile fabric below proposed rockfill to prevent erosion of native material from below the rock. No compensatory mitigation is proposed because the impacts are considered minimal.

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.
- Section 14 of the Rivers and Harbors Act of 1899 (33 USC 408)

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 U.S. Army Corps of Engineers, New England District (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.

Where the activity involves the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of disposing it in ocean waters, the evaluation of the impact of the activity in the public interest will also include application of the guidelines promulgated by the Administrator, U.S Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act, and/or Section 103 of the Marine Protection Research and Sanctuaries Act of 1972, as amended.

NATIONAL HISTORIC PRESERVATION ACT

The Federal Highway Administration (FHWA) is the lead federal agency responsible for coordination pursuant to Section 106 of the National Historic Preservation Act. MassDOT has initiated coordination with the State Historic Preservation Officer (SHPO), Massachusetts Board of Underwater Archaeological Resources (BUAR), and relevant Tribal Historic Preservation Officers (THPOs) on behalf of the FHWA. Although FHWA has taken the lead on this consultation, based on his initial review, the District Engineer has determined that little likelihood exists for the proposed work to impinge upon properties with cultural or Native American significance, or listed in, or eligible for listing in, the National Register of Historic Places. The Corps will continue review and consultation as required to fulfil the requirements of the National Historic Preservation Act as part of the permit review process.

ENDANGERED SPECIES CONSULTATION

FHWA is the lead federal agency responsible for coordination pursuant to Section 7 of the Endangered Species Act. Although FHWA is the lead federal agency, the Corps has reviewed 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. It is our preliminary determination that the proposed activity for which authorization is being sought is designed, situated or will be operated/used in such a manner that it is not likely to adversely affect a listed species or their critical habitat. FHWA is coordinating with the U.S. Fish and Wildlife Service on listed species under their jurisdiction and the ESA consultation will be concluded prior to the final decision.

OTHER GOVERNMENT AUTHORIZATIONS

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

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

COMMENTS

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. Comments should be submitted in writing by the above date. If you have any questions, please contact Dan Vasconcelos at (978) 318-8653, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

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. All comments will be considered a matter of public record. 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.

Paul Maniccia

**Paul M. Maniccia
Chief, Permits and Enforcement Branch
Regulatory Division**

CENAE-R
FILE NO. NAE-2013-01457

If you would prefer not to continue receiving Public Notices by email, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil.

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION

STURBRIDGE
CHAMPEAUX ROAD OVER LONG POND/
EAST BRIMFIELD LAKE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	1	11
PROJECT FILE NO.		610826	

TITLE SHEET & INDEX
REVISED AS OF 11/16/22

PLAN AND PROFILE OF
CHAMPEAUX ROAD OVER LONG POND
BRIDGE NO. S-30-019 (C8Y)

IN THE TOWN OF
STURBRIDGE
WORCESTER COUNTY

FEDERAL AID PROJECT NO.

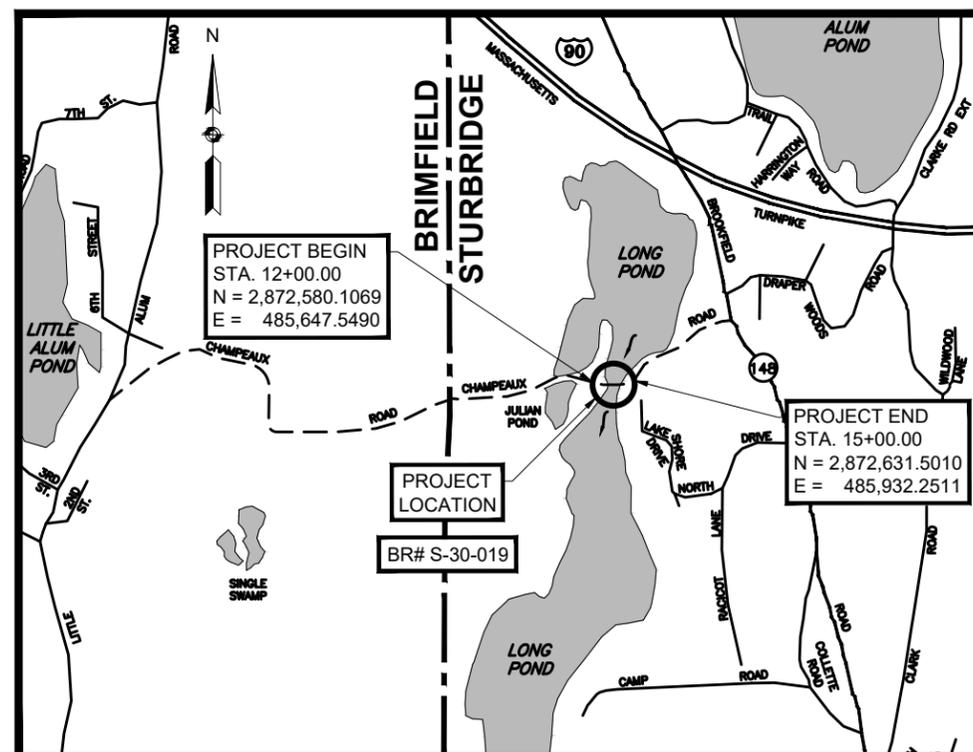
PLAN OF
COMPENSATORY FLOOD STORAGE
EAST BRIMFIELD LAKE

IN THE TOWN OF
STURBRIDGE
WORCESTER COUNTY

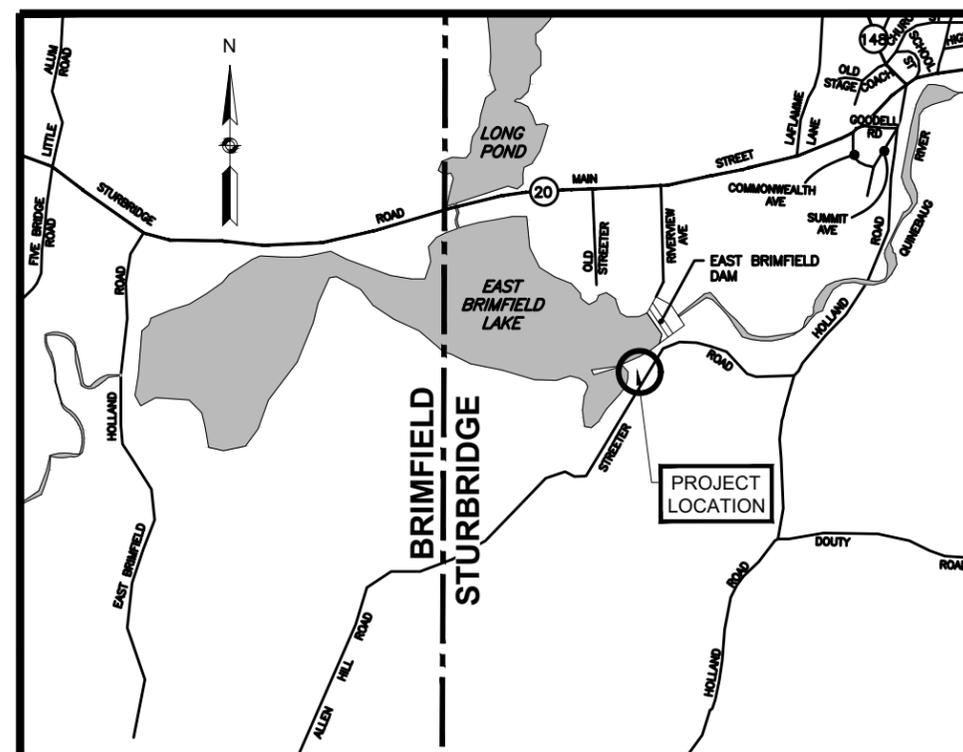
FEDERAL AID PROJECT NO.

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

PERMITTING PLANS



LENGTH OF PROJECT = 300.00 FEET = 0.057 MILE



SCALE: 1" = 2000'

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
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6	RESOURCE IMPACT PLAN - CHAMPEAUX ROAD
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10	WETLAND REPLICATION PLAN
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DATE	DESCRIPTION	REV #
11/16/2022	REVISED PERMITTING PLANS	3
09/23/2022	REVISED PERMITTING PLANS	2
05/16/2022	REVISED PERMITTING PLANS	1
1/25/2022	PERMITTING PLANS SUBMITTED	-



141 Longwood Drive, Suite 304
Norwell, MA 02061-1620
781-982-7700 - www.chacompanies.com

APPROVED

CHIEF ENGINEER

DATE

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		JERSEY BARRIER
		CATCH BASIN
		CATCH BASIN CURB INLET
		FLAG POLE
		GAS PUMP
		MAIL BOX
		POST SQUARE
		POST CIRCULAR
		WELL
		ELECTRIC HANDHOLE
		FENCE GATE POST
		GAS GATE
		BORING HOLE
		MONITORING WELL
		TEST PIT
		HYDRANT
		LIGHT POLE
		COUNTY BOUND
		GPS POINT
		CABLE MANHOLE
		DRAINAGE MANHOLE
		ELECTRIC MANHOLE
		GAS MANHOLE
		MISC MANHOLE
		SEWER MANHOLE
		TELEPHONE MANHOLE
		WATER MANHOLE
		MASSACHUSETTS HIGHWAY BOUND
		MONUMENT
		STONE BOUND
		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
		TROLLEY POLE OR GUY POLE
		TRANSMISSION POLE
		UTILITY POLE W/ FIREBOX
		UTILITY POLE WITH DOUBLE LIGHT
		UTILITY POLE W/ 1 LIGHT
		UTILITY POLE
		BUSH
		TREE
		STUMP
		SWAMP / MARSH
		WATER GATE
		PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
		CONTOURS (ON-THE-GROUND SURVEY DATA)
		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS
		GUARD RAIL - DOUBLE FACE - STEEL POSTS
		GUARD RAIL - DOUBLE FACE - WOOD POSTS
		CHAIN LINK OR METAL FENCE
		WOOD FENCE
		HAY BALES/SILT FENCE
		SEDIMENT CONTROL BARRIER
		TREE LINE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		BANK OF RIVER OR STREAM
		BORDER OF WETLAND
		100 FT WETLAND BUFFER
		200 FT RIVERFRONT BUFFER
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE EASEMENT

TRAFFIC SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		CONTROLLER PHASE ACTUATED
		TRAFFIC SIGNAL HEAD (SIZE AS NOTED)
		WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)
		VIDEO DETECTION CAMERA
		MICROWAVE DETECTOR
		PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE
		EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT
		VEHICULAR SIGNAL HEAD
		VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
		FLASHING BEACON
		PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)
		RAILROAD SIGNAL
		SIGNAL POST AND BASE (ALPHA-NUMERIC DESIGNATION NOTED)
		MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)
		HIGH MAST POLE OR TOWER
		SIGN AND POST
		SIGN AND POST (2 POSTS)
		MAST ARM WITH LUMINAIRE
		OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		CONTROL CABINET, POLE MOUNTED
		FLASHING BEACON CONTROL AND METER PEDESTAL
		LOAD CENTER ASSEMBLY
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		PAVEMENT ARROW - WHITE
		LEGEND "ONLY" - WHITE
		STOP LINE
		CROSSWALK
		SOLID WHITE LINE
		SOLID YELLOW LINE
		BROKEN WHITE LINE
		BROKEN YELLOW LINE
		DOTTED WHITE LINE
		DOTTED YELLOW LINE
		DOTTED WHITE LINE EXTENSION
		DOTTED YELLOW LINE EXTENSION
		DOUBLE WHITE LINE
		DOUBLE YELLOW LINE

ABBREVIATIONS

GENERAL	DESCRIPTION
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
BIT.	BITUMINOUS
BC	BOTTOM OF CURB
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CSP	CORRUGATED STEEL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	STEADY DON'T WALK - PORTLAND ORANGE
DWY	DRIVEWAY
ELEV (or EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EXIST (or EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
NIC	NOT IN CONTRACT
NO.	NUMBER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY

STURBRIDGE
CHAMPEAUX ROAD OVER LONG POND/
EAST BRIMFIELD LAKE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	2	11
PROJECT FILE NO.		610826	

LEGEND & ABBREVIATIONS
REVISED AS OF 11/16/22

ABBREVIATIONS (cont.)

GENERAL	DESCRIPTION
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SHLO	STATE HIGHWAY LAYOUT LINE
SW	SIDEWALK
T	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
WCR	WHEEL CHAIR RAMP
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

TRAFFIC SIGNAL ABBREVIATIONS

CAB	CABINET
CCVE	CLOSED CIRCUIT VIDEO EQUIPMENT
DW	STEADY UPRAISED HAND
FDW	FLASHING UPRAISED HAND
FR	FLASHING CIRCULAR RED
FRL	FLASHING RED LEFT ARROW
FRR	FLASHING RED RIGHT ARROW
FY	FLASHING CIRCULAR YELLOW
FYL	FLASHING YELLOW LEFT ARROW
FYR	FLASHING YELLOW RIGHT ARROW
G	STEADY CIRCULAR GREEN
GL	STEADY GREEN LEFT ARROW
GR	STEADY GREEN RIGHT ARROW
GSL	STEADY GREEN SLASH LEFT ARROW
GSR	STEADY GREEN SLASH RIGHT ARROW
GV	STEADY GREEN VERTICAL ARROW
OL	OVERLAP
PED	PEDESTRIAN
PTZ	PAN, TILT, ZOOM
R	STEADY CIRCULAR RED
RL	STEADY RED LEFT ARROW
RR	STEADY RED RIGHT ARROW
TR SIG	TRAFFIC SIGNAL
TSC	TRAFFIC SIGNAL CONDUIT
W	STEADY WALKING PERSON
Y	STEADY CIRCULAR YELLOW
YL	STEADY YELLOW LEFT ARROW

STURBRIDGE
CHAMPEAUX ROAD OVER LONG POND/
EAST BRIMFIELD LAKE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	3	11
PROJECT FILE NO.		610826	

TYPICAL SECTIONS
REVISED AS OF 11/16/22

PAVEMENT NOTES:

PROPOSED FULL DEPTH PAVEMENT:

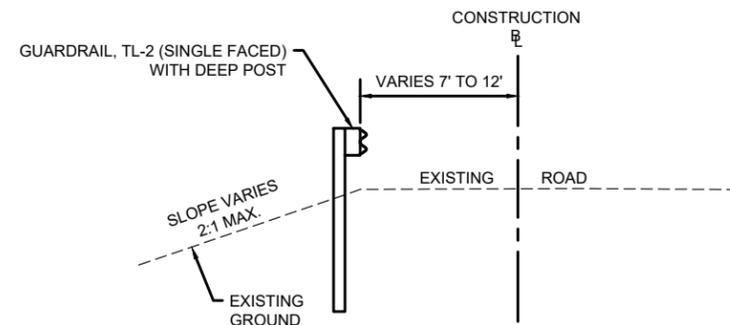
SURFACE: 1 1/2" SUPERPAVE BRIDGE SURFACE COURSE - 9.5 (SSC-B-9.5) OVER ASPHALT EMULSION FOR TACK COAT OVER
2 1/2" SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC-12.5) OVER ASPHALT EMULSION FOR TACK COAT OVER

BASE: 4 1/2" SUPERPAVE BASE COURSE - 37.5 (SBC-37.5) OVER

SUBBASE: 4" DENSE GRADED CRUSHED STONE FOR SUB-BASE OVER
8" GRAVEL BORROW - TYPE C

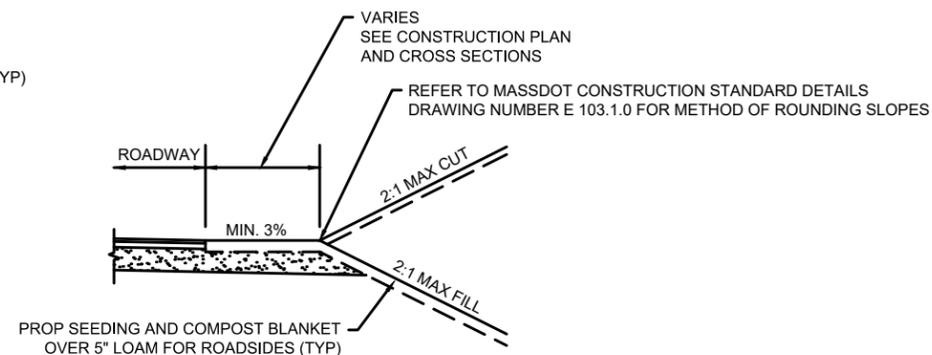
THE FINAL 1 1/2" SURFACE COURSE OF SUPERPAVE SHALL BE PLACED IN ONE CONTINUOUS OPERATION FROM BEGIN PROJECT TO END PROJECT.

ALL HMA PAVING, HMA FOR PATCHING, ASPHALT EMULSION FOR TACK COAT, AND HMA JOINT SEALANT SHALL CONFORM WITH SECTION 450 HOT MIX ASPHALT PAVEMENT SPECIFICATIONS.



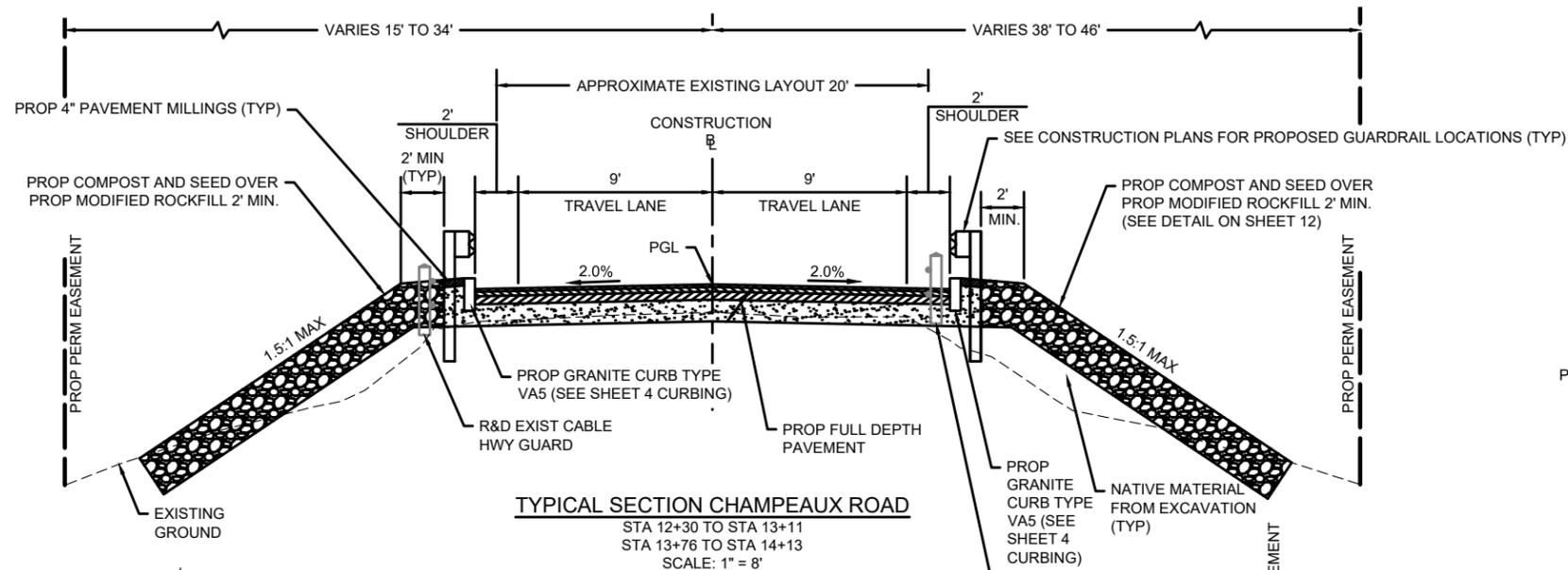
TYPICAL SECTION CHAMPEAUX ROAD

STA 15+00 TO STA 17+23
SCALE: 1" = 8'



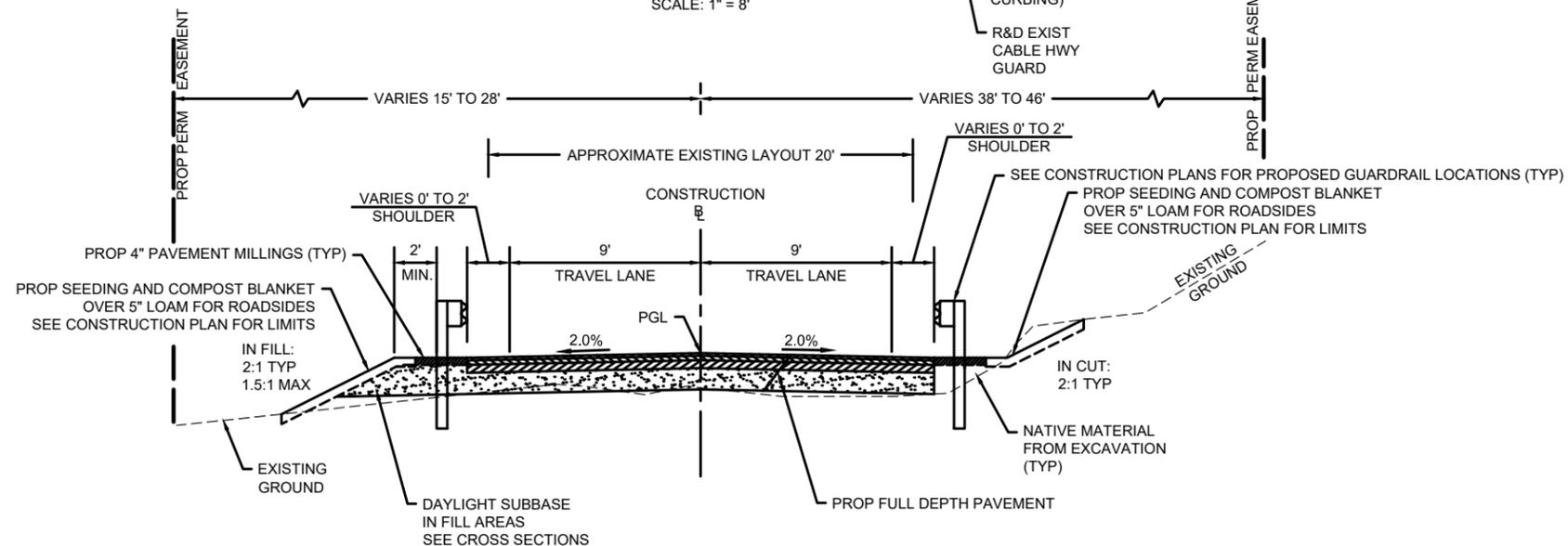
SLOPE TREATMENT WITHOUT GUARDRAIL

SEE CONSTRUCTION PLAN FOR LOCATIONS
SCALE: 1" = 8'



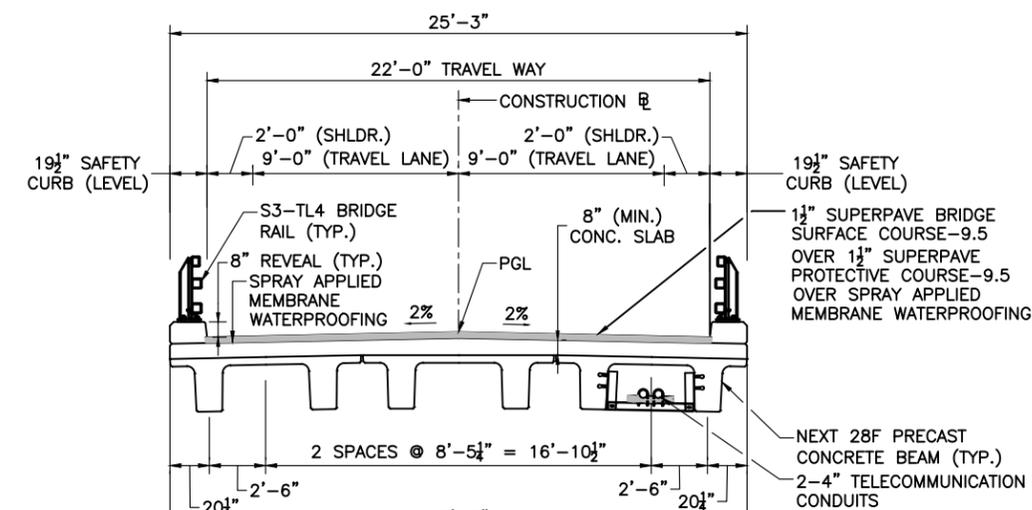
TYPICAL SECTION CHAMPEAUX ROAD

STA 12+30 TO STA 13+11
STA 13+76 TO STA 14+13
SCALE: 1" = 8'



TYPICAL SECTION CHAMPEAUX ROAD

STA 12+00 TO STA 12+30
STA 14+13 TO STA 15+00
SCALE: 1" = 8'



TYPICAL SECTION CHAMPEAUX ROAD BRIDGE

C/L BEARINGS STA 13+12.61 TO STA 13+74.44
SCALE: 1" = 8'

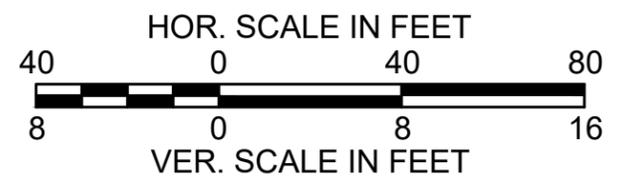
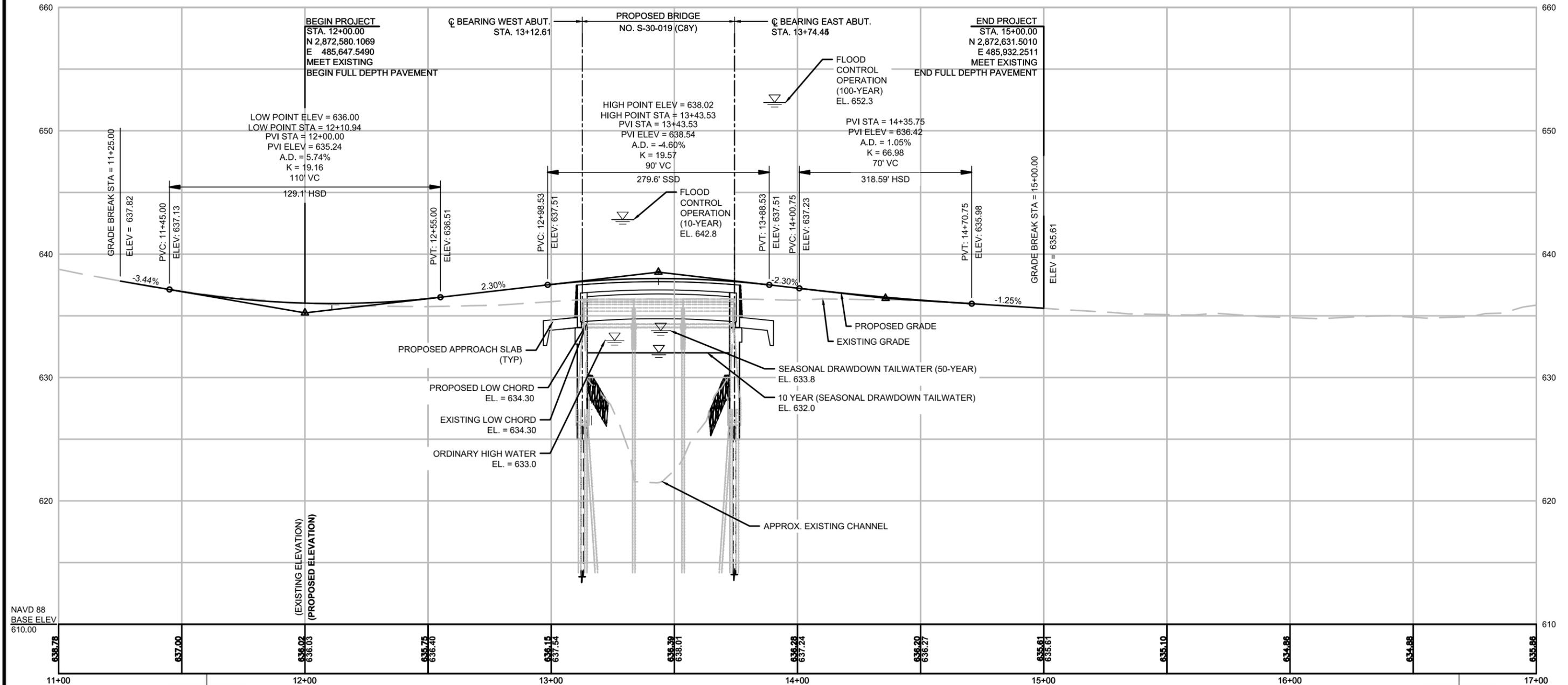
STURBRIDGE
CHAMPEAUX ROAD OVER LONG POND/
EAST BRIMFIELD LAKE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	4	11

PROJECT FILE NO. 610826

PROFILE
REVISED AS OF 11/16/22

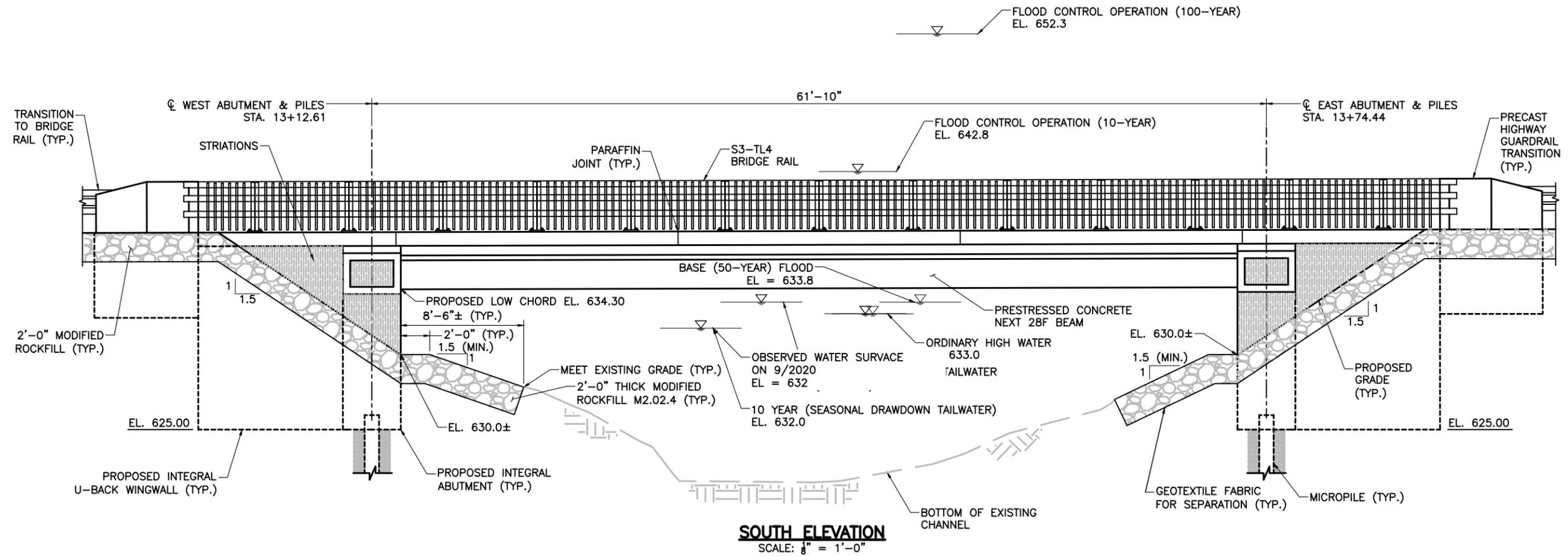
CHAMPEAUX ROAD



STURBRIDGE
 CHAMPEAUX ROAD OVER LONG POND/
 EAST BRIMFIELD LAKE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	5	11
PROJECT FILE NO.		610826	

ELEVATION
 REVISED AS OF 11/16/22



STURBRIDGE
CHAMPEAUX ROAD OVER LONG POND/
EAST BRIMFIELD LAKE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	7	11

PROJECT FILE NO. 610826

SUBMERGED AQUATIC VEGETATION MAP-
CHAMPEAUX ROAD
REVISED AS OF 11/16/22

Floodplain / Floodway	Road/Bridge Site	Compensatory Site	Total
Between Elevations	Net (cy)	Net (cy)	Impact (cy)
629	629.99 3 Fill	0	3 Fill
630	630.99 6 Fill	0	6 Fill
631	631.99 12 Fill	-52 Cut	-40 Cut
632	632.99 17 Fill	-41 Cut	-23 Cut
633	633.99 20 Fill	-37 Cut	-17 Cut
634	634.99 25 Fill	-33 Cut	-8 Cut
635	635.99 53 Fill	-28 Cut	25 Fill
636	636.99 88 Fill	-24 Cut	64 Fill
637	637.99 15 Fill	-21 Cut	-6 Cut
638	638.99 0 Fill	-15 Cut	-15 Cut
Totals	237 Fill	-250 Cut	-13 Cut

LUW/WOTUS PERMANENT IMPACTS (SW) = 14 SF
BANK IMPACTS = 8 FT

LUW/WOTUS TEMPORARY IMPACTS (SW) = 60 SF
BANK IMPACTS = 17 FT

ACOE C342-2
UNITED STATES OF AMERICA
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
BOOK 4125 / PAGE 355

ACOE C341
UNITED STATES OF AMERICA
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
BOOK 4066 / PAGE 242

ACOE C332
N/F
UNITED STATES OF AMERICA
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
BOOK 4025 / PAGE 186

ACOE C340
N/F
UNITED STATES OF AMERICA
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
BOOK 4005 / PAGE 580

ACOE C331
UNITED STATES OF AMERICA
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
BOOK 4005 / PAGE 580

ACOE C338
N/F
UNITED STATES OF AMERICA
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
BOOK 4017 / PAGE 206

ACOE C342-1
UNITED STATES OF AMERICA
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
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ACOE C337
UNITED STATES OF AMERICA
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
BOOK 4017 / PAGE 214

ACOE C315
N/F
UNITED STATES OF AMERICA
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
BOOK 4125 / PAGE 355

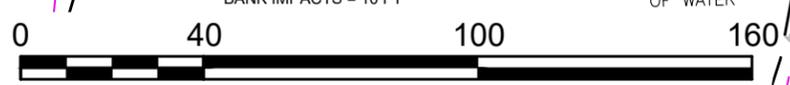
TOTAL IMPACTS OF SUBMERGED
AQUATIC VEGETATION

PERMANENT (S.F.)	143
TEMPORARY (S.F.)	131
TOTALS (S.F.)	274

NOTE: IMPACTS ARE FOR THIS SHEET ONLY

LEGEND

	PERMANENT IMPACTS
	TEMPORARY IMPACTS
	VEGETATED WETLAND IMPACTS
	SUBMERGED AQUATIC VEGETATION IMPACTS (SAV)
	FEMA 100-YEAR FLOODZONE
	WETLANDS
	ORDINARY HIGH WATER (OHW)



SCALE: 1" = 40'

2619
N: 2872804.256'
E: 485709.788'
EL: 635.684'
MAG DOT GPS

31
N: 2872781.052'
E: 485668.810'
EL: 640.620'
ROD 31

32
N: 2872758.464'
E: 486043.925'
EL: 634.820'
ROD 32

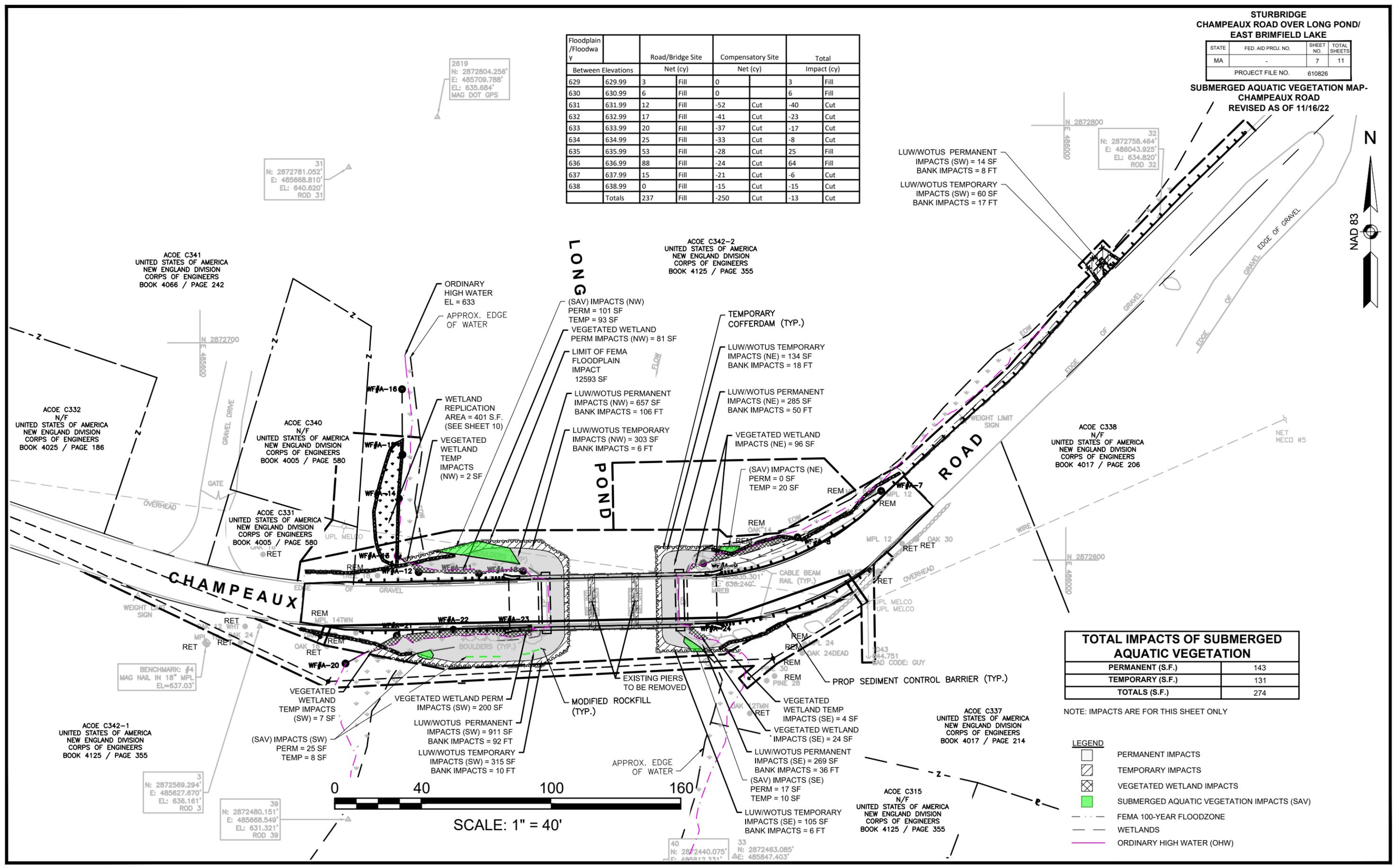
BENCHMARK: #4
MAG NAIL IN 18" MPL
EL=637.03'

3
N: 2872569.294'
E: 485627.670'
EL: 636.161'
ROD 3

39
N: 2872480.151'
E: 485668.549'
EL: 631.321'
ROD 39

40
N: 2872440.075'
E: 485812.731'
EL: 636.161'
ROD 40

33
N: 2872463.085'
E: 485847.403'
EL: 636.161'
ROD 33

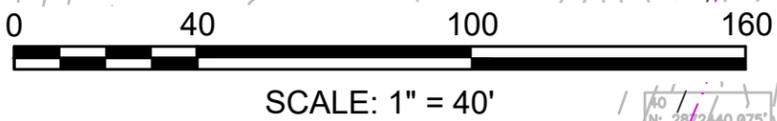
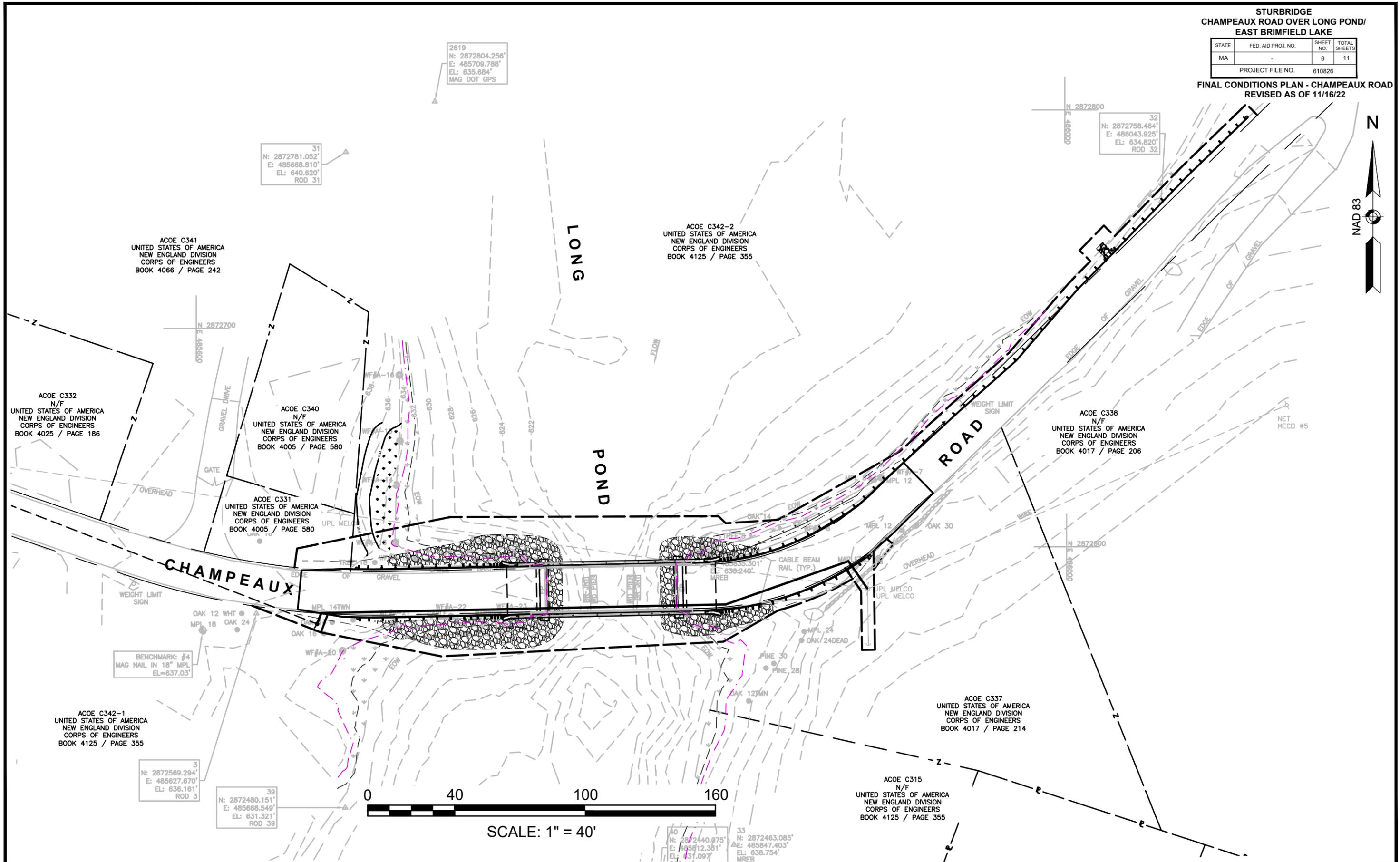


STURBRIDGE
CHAMPEAUX ROAD OVER LONG POND/
EAST BRIMFIELD LAKE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	8	11

PROJECT FILE NO. 610826

FINAL CONDITIONS PLAN - CHAMPEAUX ROAD
REVISED AS OF 11/16/22



104
N: 2864813.023'
E: 485754.340'
EL: 638.615'
ROD

LEGEND

- PERMANENT IMPACTS
- TEMPORARY IMPACTS
- FEMA 100-YEAR FLOODZONE

EAST BRIMFIELD LAKE

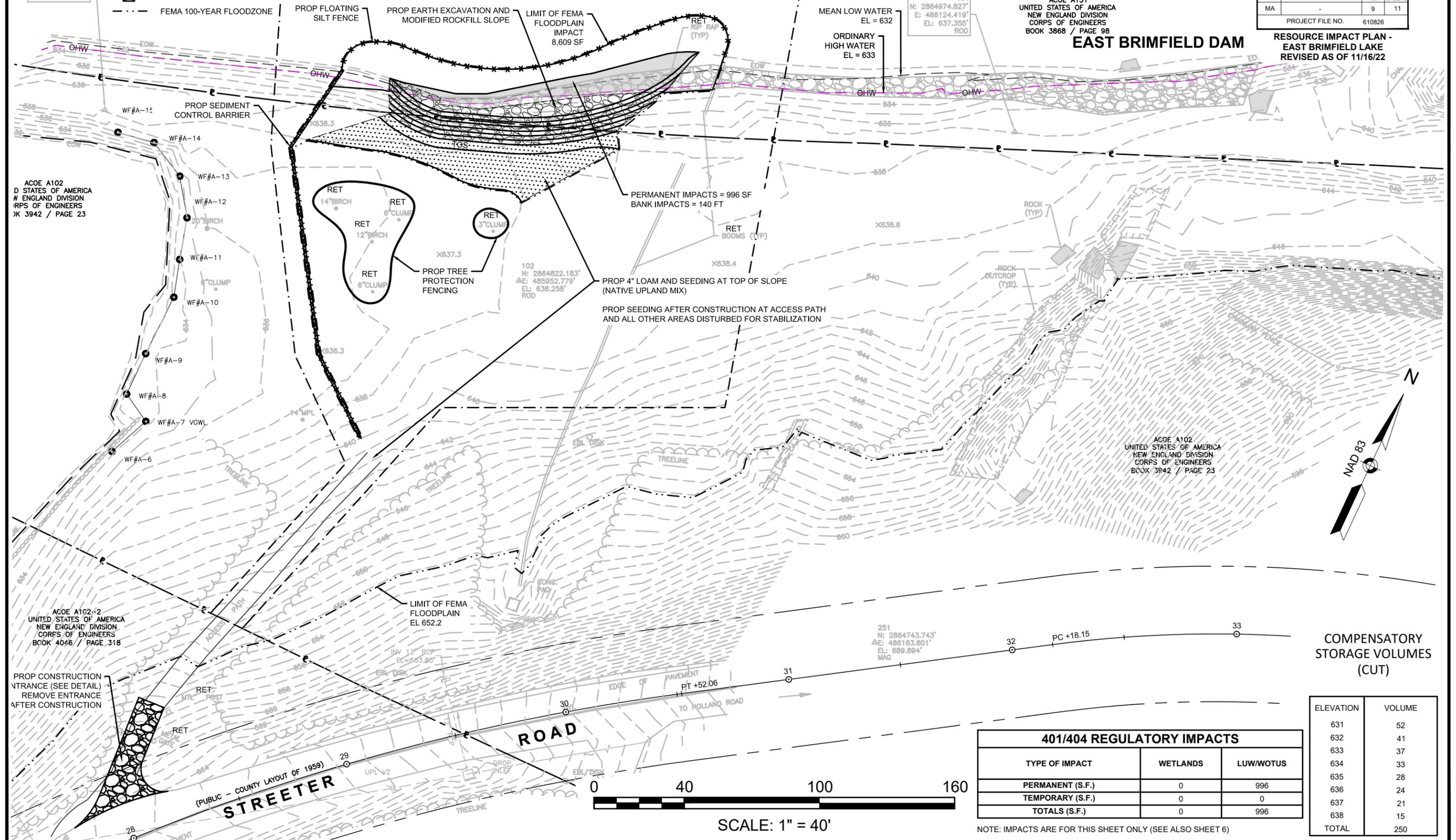
**STURBRIDGE
CHAMPEAUX ROAD OVER LONG POND/
EAST BRIMFIELD LAKE**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	9	11
PROJECT FILE NO.		610826	

ACOE A131
UNITED STATES OF AMERICA
NEW ENGLAND DIVISION
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EAST BRIMFIELD DAM

**RESOURCE IMPACT PLAN -
EAST BRIMFIELD LAKE
REVISED AS OF 11/16/22**



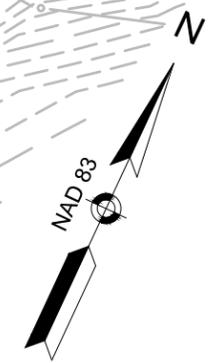
ACOE A102
UNITED STATES OF AMERICA
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
BOOK 3942 / PAGE 23

102
N: 2864822.183'
E: 485952.779'
EL: 638.258'
ROD

101
N: 2864974.827'
E: 486124.419'
EL: 637.355'
ROD

ACOE A102
UNITED STATES OF AMERICA
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
BOOK 3942 / PAGE 23

ACOE A102-2
UNITED STATES OF AMERICA
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
BOOK 4046 / PAGE 318



SCALE: 1" = 40'

**COMPENSATORY
STORAGE VOLUMES
(CUT)**

ELEVATION	VOLUME
631	52
632	41
633	37
634	33
635	28
636	24
637	21
638	15
TOTAL	250

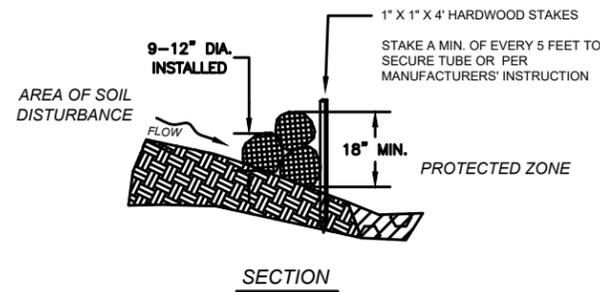
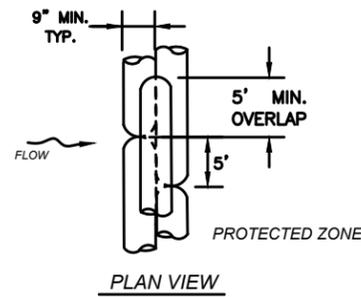
401/404 REGULATORY IMPACTS		
TYPE OF IMPACT	WETLANDS	LUW/WOTUS
PERMANENT (S.F.)	0	996
TEMPORARY (S.F.)	0	0
TOTALS (S.F.)	0	996

NOTE: IMPACTS ARE FOR THIS SHEET ONLY (SEE ALSO SHEET 6)

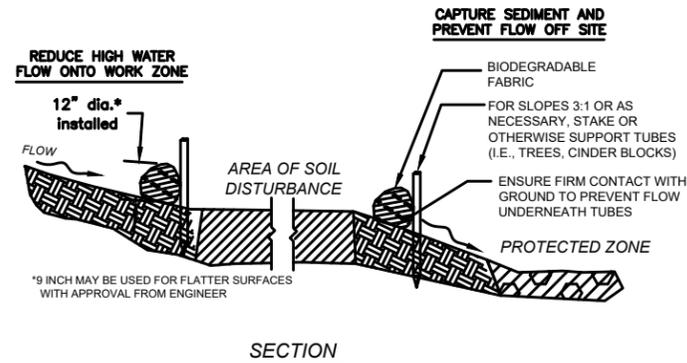
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	11	11

PROJECT FILE NO. 610826
CONSTRUCTION DETAILS
REVISED AS OF 11/16/22

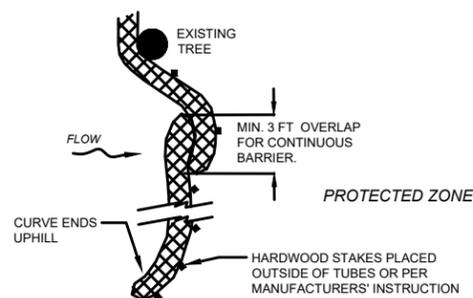
WHERE SPECIFIED ON CONSTRUCTION
PLANS OR AS REQUIRED



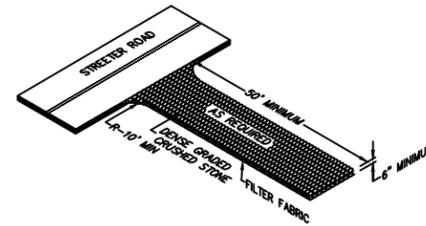
COMPOST FILTER TUBES STACKED
NOT TO SCALE



SEDIMENT BARRIER - COMPOST FILTER TUBE
NOT TO SCALE

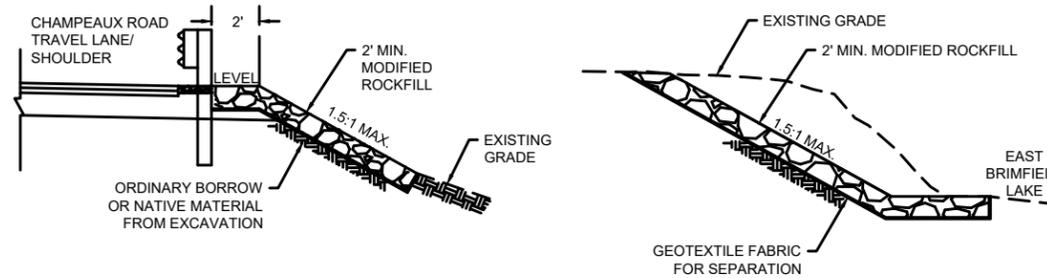


PLACE TUBE AS CLOSE TO LIMIT OF SOIL DISTURBANCE AS POSSIBLE, ALONG CONTOURS, AND PERPENDICULAR TO FLOW.
ADJUST LOCATION AS REQUIRED FOR OPTIMUM EFFECTIVENESS. DO NOT INSTALL IN WATERWAYS.

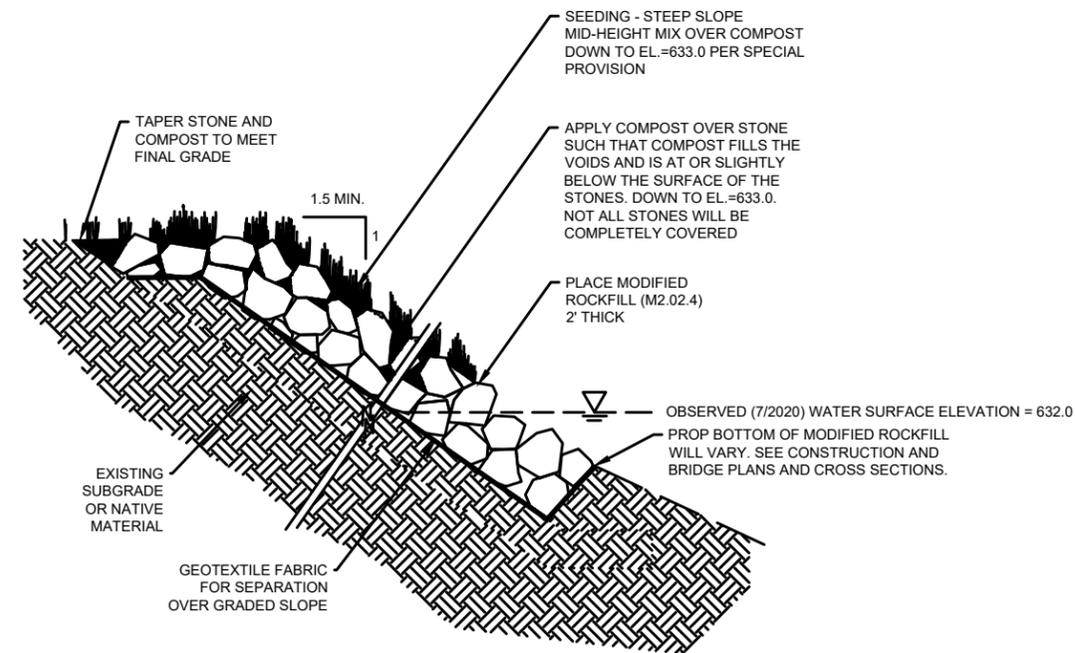


CONSTRUCTION ENTRANCE
NOT TO SCALE

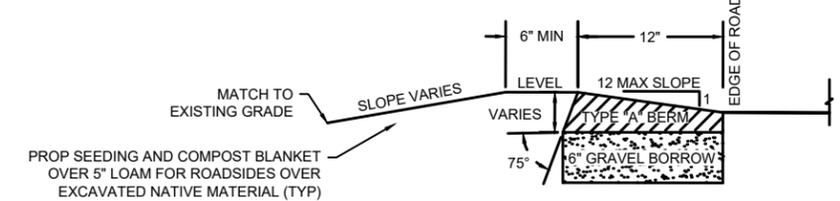
- NOTES:
1. REMOVE TOPSOIL AND ORGANICS PRIOR TO PLACEMENT OF DENSE CRUSHED STONE.
 2. ENTRANCE SHALL BE 12' WIDE MINIMUM.
 3. SUB-BASE OF FREE DRAINING BACKFILL MAY BE USED IN LIEU OF GEOTEXTILE FILTER FABRIC.
 4. MAINTAIN BY TOP DRESSING WITH ADDITIONAL STONE AND REPAIRING RUTS AS REQUIRED. ADDITIONAL LENGTH MAY BE REQUIRED IF SEDIMENT IS TRACKED ONTO PAVED AREAS. ANY SEDIMENT SPILLED, DROPPED OR TRACKED ONTO PAVED SURFACES SHALL BE REMOVED IMMEDIATELY.



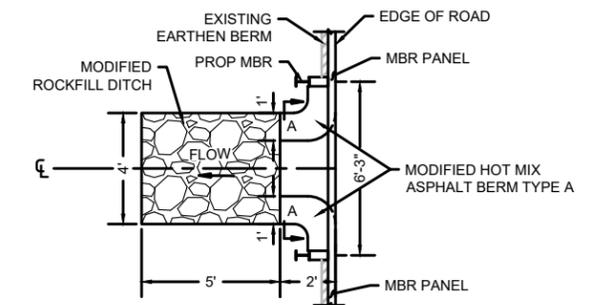
MODIFIED ROCKFILL DETAIL
NOT TO SCALE



COMPOST AND SEED OVER MODIFIED ROCKFILL
NOT TO SCALE

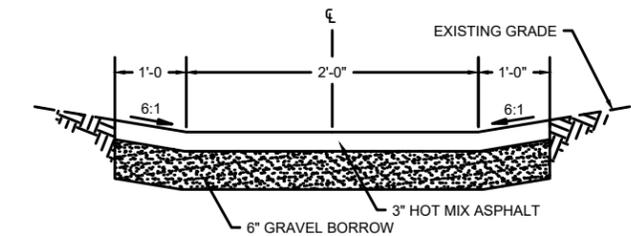


MODIFIED HOT MIX ASPHALT BERM TYPE A
NOT TO SCALE

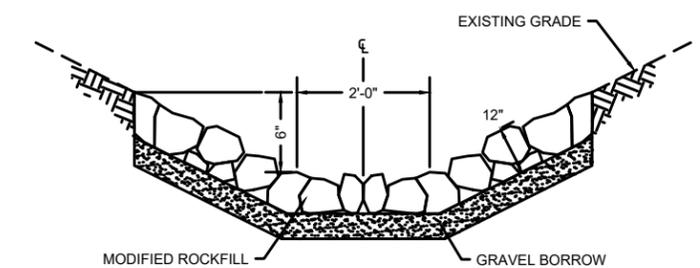


NOTE:
PROP PAVED LEAKOFF SHALL BE CONSTRUCTED BETWEEN GUARDRAIL POSTS SO THAT THE GUARDRAIL POSTS ARE NOT WITHIN OR OBSTRUCT FLOW TO THE PAVED LEAKOFF.

PLAN VIEW



PAVED LEAK OFF DETAIL
NOT TO SCALE



NOTE:
1. SLOPES MAY VARY TO SUIT CONDITIONS AS PER PLANS OR ENGINEER.

MODIFIED ROCKFILL DITCH DETAIL
NOT TO SCALE