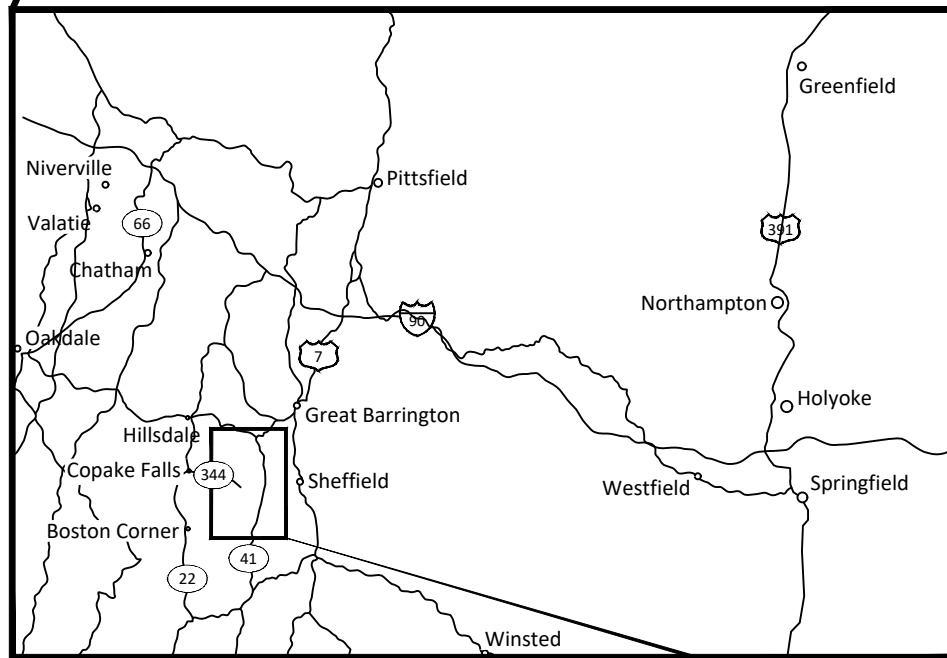


BECKER POND DAM REMOVAL

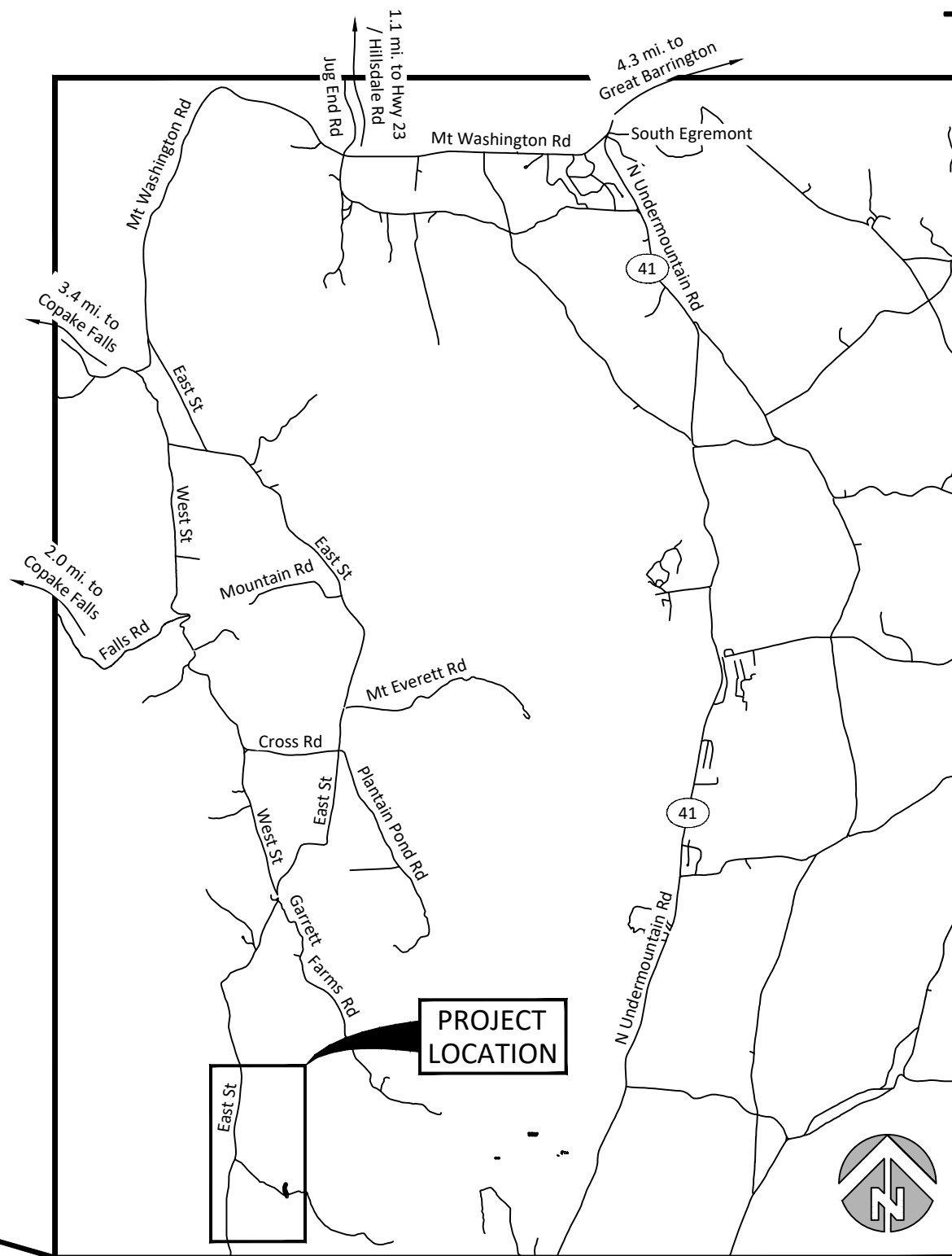
100% DESIGN PLANS

JUNE 30, 2024

LOCATION MAP
STATE OF MASSACHUSETTS
NOT TO SCALE



VICINITY MAP
SCALE: 1" = 15 MI.



SITE MAP
SCALE: 1" = 1 MI.

SHEET LIST

1. Cover, Location, and Sheet List
2. Notes
3. Existing Conditions, Ownership and Survey Control
4. Access and Staging, Erosion, and Sediment Control
5. Existing Conditions
6. Dam Removal Plan and Profile STA 1+50 to STA 2+75
7. Pilot Channel Plan and Profiles STA 2+75 to STA 5+75
8. Pilot Channel Plan and Profiles STA 5+75 to STA 8+00
9. Dam Removal Grading Cross Sections
10. Dam Removal Grading Cross Sections and Details
11. Pilot Channel Construction Cross Sections
12. Large Wood Structure Details
13. Surface Fabric Treatment Details
14. Resource Area Impacts



COORDINATES:
LATITUDE 42°03'29.88" N
LONGITUDE 73°27'33.12" W

MOUNT WASHINGTON, BERKSHIRE COUNTY, MASSACHUSETTS

WATERBODY: BECKER POND
TRIBUTARY OF: SHENOB BROOK AND HOUSATONIC RIVER

Issued for Bid

ProjectActive_EastCoast\BeckerPond\CAD\IFB_forBid.dwg - 8/14/24

NO.	SAW BY	DATE	REVISION DESCRIPTION
1	SAW	6/30/2024	REVISED TO ADDRESS PERMIT REQUIREMENTS ISSUE FOR BID

DF, SJ, SAW	CC, NN, SAW	SAW
DRAWN	DESIGNED	CHECKED
SAW	08/12/2022	18-05-01
APPROVED	DATE	PROJECT

BECKER POND DAM REMOVAL
THE NATURE CONSERVANCY
BERKSHIRE COUNTY, MASSACHUSETTS



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COVER, LOCATION
AND SHEET LIST

SHEET

1 OF 14

GENERAL NOTES

1. The Contractor shall notify "dig-safe" (888)-344-7233 at least 72 hours prior to excavation.
2. All excavation must be accomplished in accordance with all Federal (e.g., OSHA), State, and local regulations.
3. The Contractor shall be responsible for site security and job safety, construction activities.
4. Work within local rights-of-way shall conform to local municipal standards; work within state rights-of-way shall conform to the latest edition of the state highway departments standard specifications for highways and bridges.
5. All project activities including, but not limited to, active work, site preparation, staging, and stockpiling shall take place within the Limit of Work as shown on the plans. If it is determined that the Limit of Work needs to be moved or expanded, notify the project Owner to initiate coordination with relevant regulatory agencies. No work shall occur outside the Limit of Work shown on the plans without proper approvals.
6. Upon award of contract, Contractor shall make necessary construction notifications and apply for and obtain necessary permits, pay fees, and post bonds associated with the work indicated on the drawings, in the specifications, and in the contract documents (including the Permits).
7. Damage to public and/or private property resulting from project work shall be repaired by the Contractor at no additional cost to the Owner.
8. Areas disturbed during construction and not within the restoration footprint shown on the Drawings shall be restored to conform with the previous undisturbed condition. Document pre-disturbance conditions with photographs to assist and inform the restoration activities.
9. In the event that suspected contaminated soil, groundwater, or other media are encountered during excavation and construction activities based on visual, olfactory, or other evidence, the Contractor shall stop work in the vicinity of the suspect material to avoid further spreading of the material, and shall notify the Owner immediately so that the appropriate testing and subsequent action can be taken.

ACCESS AND EASEMENTS

1. The Base Bid calculation will include the Add/Alt for Access Alternative 1. Assume the Owner will obtain a temporary access easement from the property owners (7-0/5 Collins/Benjamin). Use of this access alternative shall not prevent the property owner's free use of the shed.
2. Provide an Add/Alt bid for construction and post-project restoration of Access Alternative 2.

EROSION AND SEDIMENTATION CONTROL

1. This project requires a NPDES Construction General Permit (NPDES CGP). No later than 14 days prior to the start of construction, the Contractor shall prepare a SWPPP and file an eNOI in accordance with the permit requirements. The Contractor shall be responsible for maintaining compliance with all elements of the NPDES CGP throughout the duration of construction.
2. The Contractor shall be responsible for identifying types and locations for stormwater erosion and sedimentation control (E&SC) measures that may be necessary to maintain compliance with the NPDES CGP. All E&SC measures should remain within the limit of work shown on these plans.
3. The Contractor shall control stormwater runoff during construction to prevent adverse impacts to off-site areas and shall be responsible to repair resulting damages, if any, at no cost to the Owner.
4. Prior to starting any other work on the site, the Contractor shall install erosion control measures as shown on the plans and additional measures, if necessary, as identified and/or required in federal, state, and local approval documents pertaining to this project. Approval must be granted by the Town of Mount Washington's Conservation Agent before additional work may commence.
5. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. Erosion controls shall be inspected and maintained on a daily basis until the site is stabilized. Erosion problems shall be reported in accordance with all relevant permits.
6. Upon completion of construction and establishment of permanent ground cover, or other vegetation, and following authorization by the Town of Mount Washington's Conservation Agent, the Contractor shall remove and dispose of erosion control measures and clean sediment and debris from the project site.

UTILITIES

1. There are no known utilities beyond the public right-of-way. Prior to beginning construction, the Contractor shall verify and determine the exact locations, sizes, and elevations of the existing utilities and, shall confirm that there are no interferences with existing utilities, including routes within the public right-of-way. If an existing utility is found to conflict with the proposed work, the location, elevation, and size of the utility shall be accurately determined without delay by the Contractor, and the information furnished in writing to the Engineer for the resolution of the conflict. Contractor's failure to notify prior to performing additional work releases Owner from obligations for additional payments with otherwise may be warranted to resolve the conflict.
2. Any utility infrastructure that is damaged during the performance of the work shall be replaced in kind at no cost to the Owner.
3. The contractor shall make arrangements for and shall be responsible for paying fees for any relocation, alteration, and/or adjustment of utilities, whether work is performed by Contractor or by the utilities company.

SCHEDULE AND TIME OF YEAR RESTRICTIONS FOR SENSITIVE SPECIES

1. Project work performed during the inactive season between November 1 and April 14 may proceed without restrictions.
2. If project work must extend into the active season, between April 15 and October 31, it will be subject to special conditions. Refer to the Specifications and permit NHESP File No. 18-37448 and attachments.

LAYOUT AND MATERIALS

1. Any existing property line monumentation disturbed during construction shall be set or reset by a professional licensed surveyor.
2. Prior to the start of construction, the contractor shall verify existing elevations at the control points, the dam crest, and the channel invert to assure proper transitions between existing and proposed features.
3. Symbols and legends of project features are graphic representations and are not necessarily scaled to their actual dimensions or locations on the drawings. The Contractor shall refer to the detail sheet dimensions, shop drawings, and field measurements of supplied products for layout of the project features.
4. Contractor shall not rely solely on electronic versions of plans, specifications, and data files that are obtained from the designers, but shall verify location of project features in accordance with the paper copies of the plans and specifications that are supplied as part of the contract documents.
5. Any and all mesh construction materials must conform to the requirements described in the permit conditions provided by the Massachusetts Division of Fish and Wildlife. Refer to the Specifications and permit NHESP File No. 18-37448 and attachments. Pre-authorized materials include (1) standard, black silt fencing (i.e., 36-in wide, tightly woven), (2) orange safety fencing (aka barrier or snow fencing) with nominal 2" or greater openings installed tightly between supports and with a 6" minimum gap along the ground, and (3) chain-link fencing with 2" or greater openings and installed with a 6" minimum gap along the ground.

DEMOLITION

1. The Contractor shall remove and dispose of demolition debris and existing man-made surface features within the Limit of Work, including concrete, metal, masonry and wood associated with the dam, at an appropriate off-site facility in accordance with applicable federal, state, and local regulations, ordinances, and statutes.
2. Unless otherwise specifically provided on the plans or in the specifications, the Engineer has not prepared designs for and shall have no responsibility for the presence, discovery, removal, abatement or disposal of hazardous materials, toxic wastes or pollutants at the project site. The Engineer shall not be responsible for any claims of loss, damage, expense, delay, injury or death arising from the presence of hazardous material and Contractor shall indemnify and hold harmless the Engineer from any claims made in connection therewith. Moreover, the Engineer shall have no administrative obligations of any type with regard to any Contractor amendment involving the issues of presence, discovery, removal, abatement or disposal of asbestos or other hazardous materials.

EXISTING CONDITIONS

1. The horizontal datum for this drawing set is NAD83 Massachusetts state plane. The units are in feet.
2. The vertical datum for this drawing set is NAVD88. The units are in feet.
3. The existing condition, site specific, topographic survey was performed by Inter-Fluve in April, 2018 and May, 2019. The limit of survey boundary identifies the limits of this survey. Contours beyond the limit of survey boundary are derived from the 2016 USGS CONED topobathymetric model (1887-2016) New England dataset (circa 2019).
4. The existing condition, site specific bathymetric and depth of refusal survey was performed by Inter-Fluve in April, 2018.
5. The property lines shown on the plans are approximate. The parcel data was provided by TNC circa 2019.
6. The trail alignments were provided by TNC circa 2019.
7. The field-delineated resource areas were identified in the field by BSC Group on May 16, 2022 using handheld GPS with sub-meter accuracy

PERMITS and Licenses:

All work shall be conducted in accordance with all applicable local, state, and federal permit requirements, including, but not limited to the following:

1. Mount Washington, Restoration Order of Conditions, MassDEP FILE # 232-0046
2. MassDEP 401 Water Quality Certification for Dredging, # 23-2226-0005-APP
3. NHESP FILE, #18-37448
4. U.S. Army Corps of Engineers Section 404 permit, #NAE-2020-01622
5. EEA, #16226
6. Chapter 91

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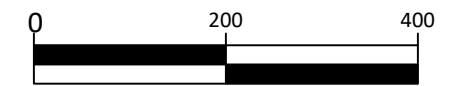
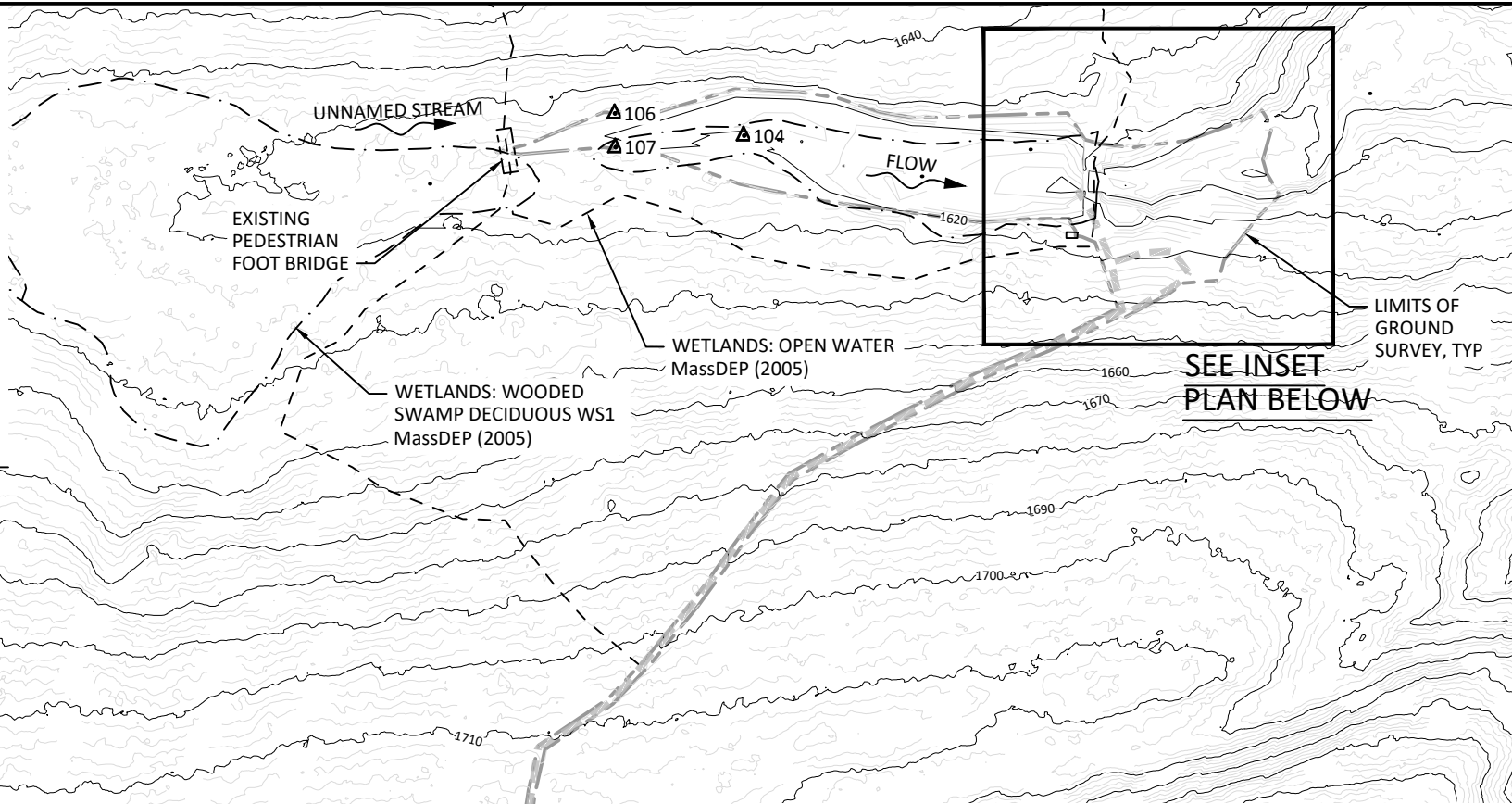
NOTES

SHEET

2 OF 14

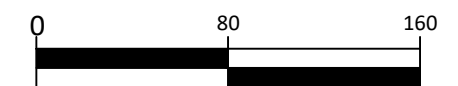
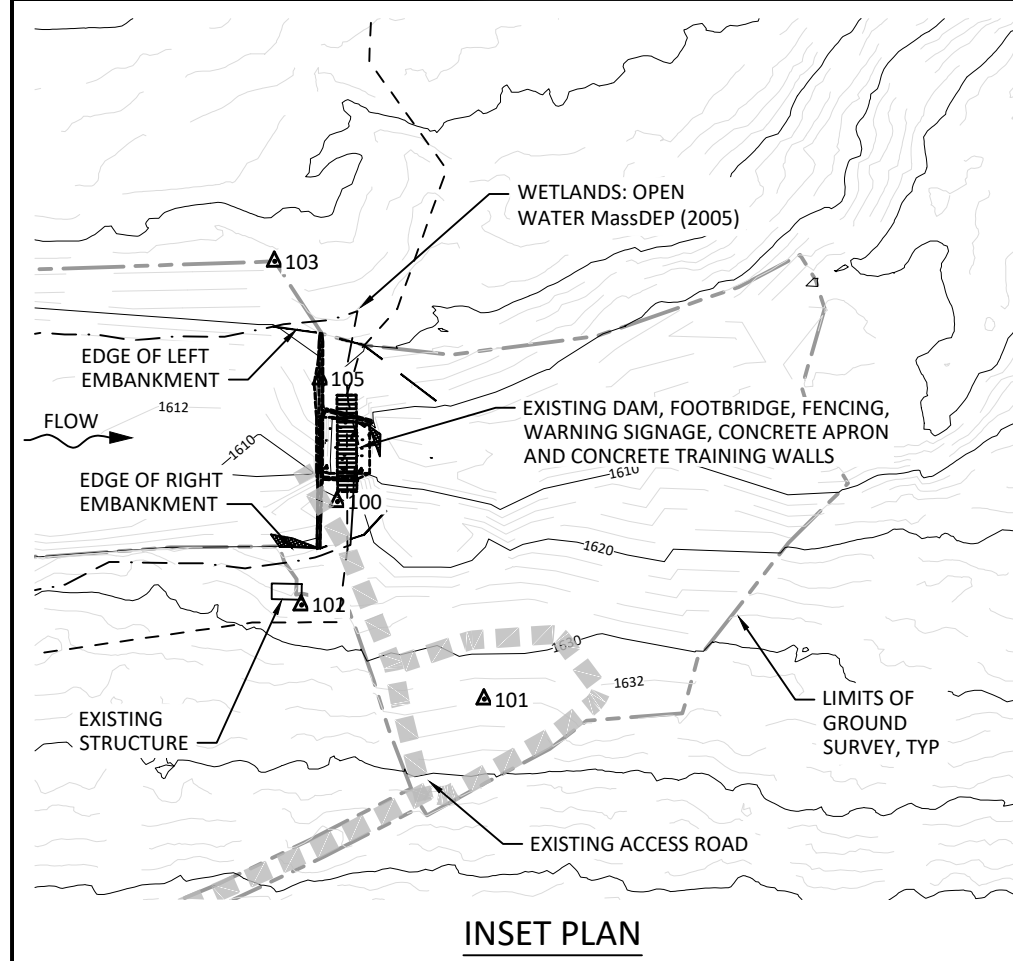
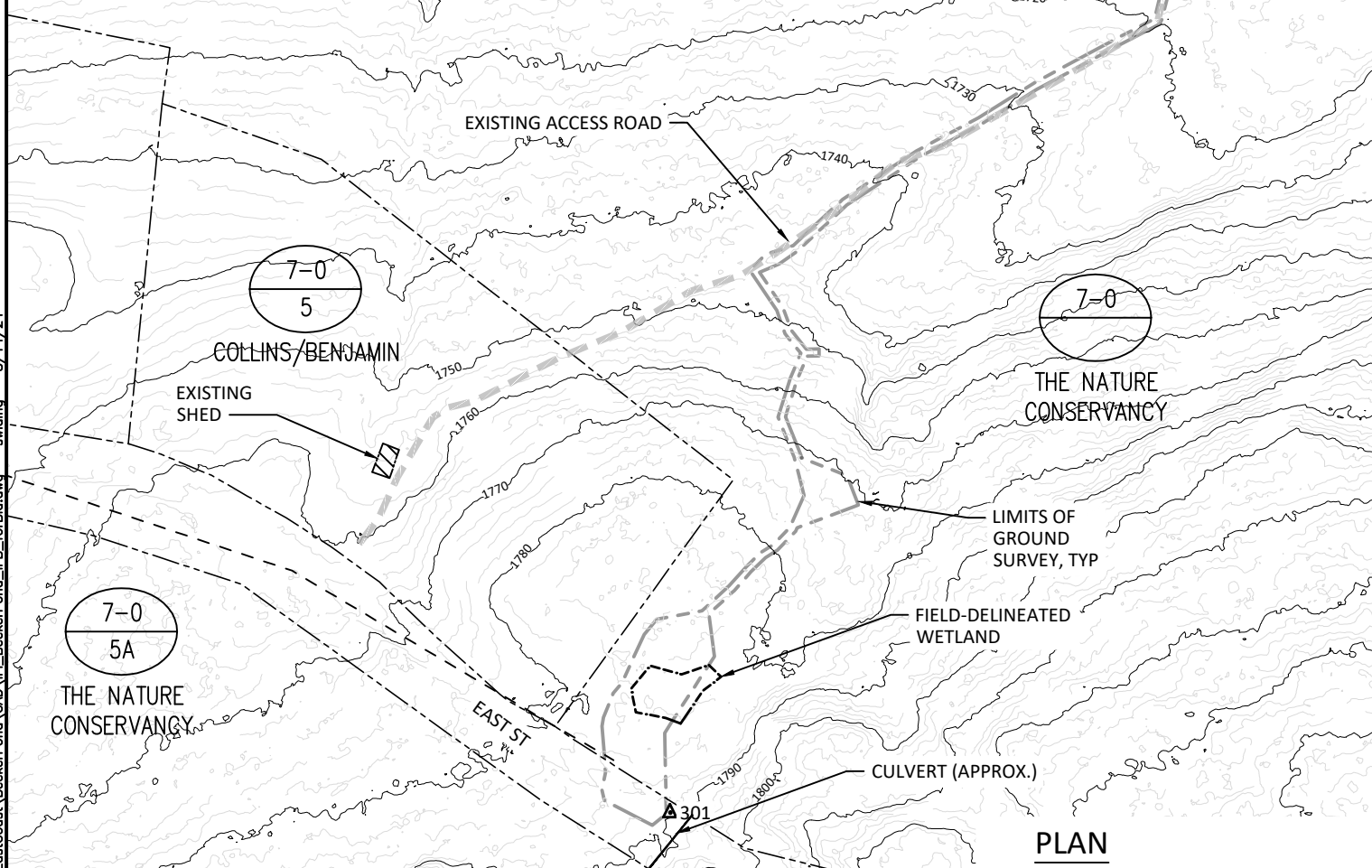
SURVEY CONTROL POINTS				
PT NO	NORTHING	EASTING	ELEVATION	DESCRIPTION
100	2852371.25'	124142.01'	1620.87'	STAKE
101	2852290.85'	124078.40'	1635.07'	CAPPED REBAR
102	2852374.56'	124096.57'	1627.66'	CAPPED REBAR
103	2852422.40'	124232.01'	1626.99'	CAPPED REBAR
104	2852767.31'	124112.83'	1620.78'	STAKE
105	2852391.20'	124189.53'	1622.10'	PK NAIL
106	2852914.11'	124099.55'	1624.06'	STAKE
107	2822903.58'	124062.79'	1621.03'	STAKE
301	2853108.94'	122251.53'	1790.53'	PK NAIL

NOTES:
 1. ALL SURVEYED CONTROL POINTS MUST BE PROTECTED FROM DISTURBANCE. IF A CONTROL POINT MUST BE DISTURBED, COORDINATE WITH THE ENGINEER PRIOR TO GRADING.



SCALE IN FEET

- LEGEND**
- SURVEY CONTROL POINT
 - EXISTING 10-FT CONTOURS
 - PROPERTY LINE (MassGIS)
 - PROPERTY LINE (TNC GIS)
 - EXISTING TRAIL
 - LIMITS OF GROUND SURVEY
 - EXISTING ROAD
 - FIELD DELINEATED WETLAND
 - MAP NUMBER
LOT NUMBER
 - CHIAPPPELLONI PROPERTY OWNER
 - WETLANDS MassDEP (2005)



SCALE IN FEET

- LEGEND**
- SURVEY CONTROL POINT
 - EXISTING 2-FT CONTOURS
 - EXISTING 10-FT CONTOURS
 - LIMITS OF GROUND SURVEY
 - EXISTING ROAD
 - EXISTING TRAIL
 - WETLANDS MassDEP (2005)

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SAW APPROVED	08/12/2022 DATE	18-05-01 PROJECT

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**EXISTING CONDITIONS,
 OWNERSHIP, AND
 SURVEY CONTROL**

SHEET
3 OF 14

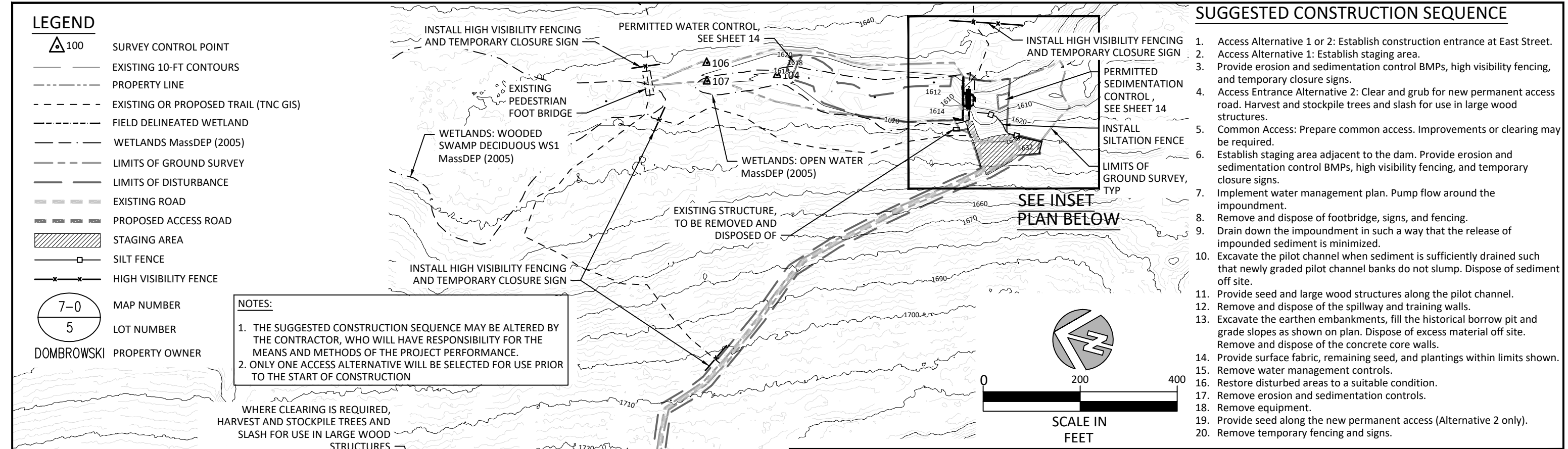
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LEGEND

- SURVEY CONTROL POINT
- EXISTING 10-FT CONTOURS
- PROPERTY LINE
- EXISTING OR PROPOSED TRAIL (TNC GIS)
- FIELD DELINEATED WETLAND
- WETLANDS MassDEP (2005)
- LIMITS OF GROUND SURVEY
- LIMITS OF DISTURBANCE
- EXISTING ROAD
- PROPOSED ACCESS ROAD
- STAGING AREA
- SILT FENCE
- HIGH VISIBILITY FENCE

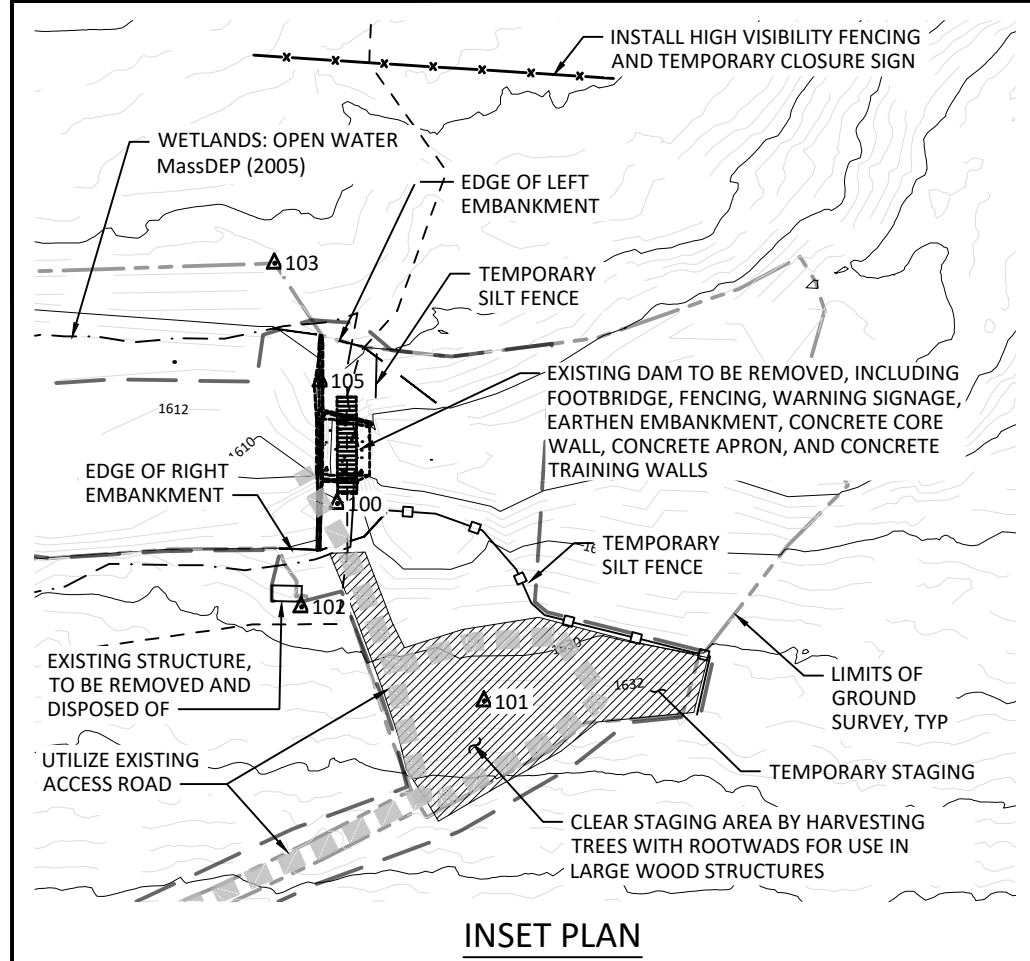
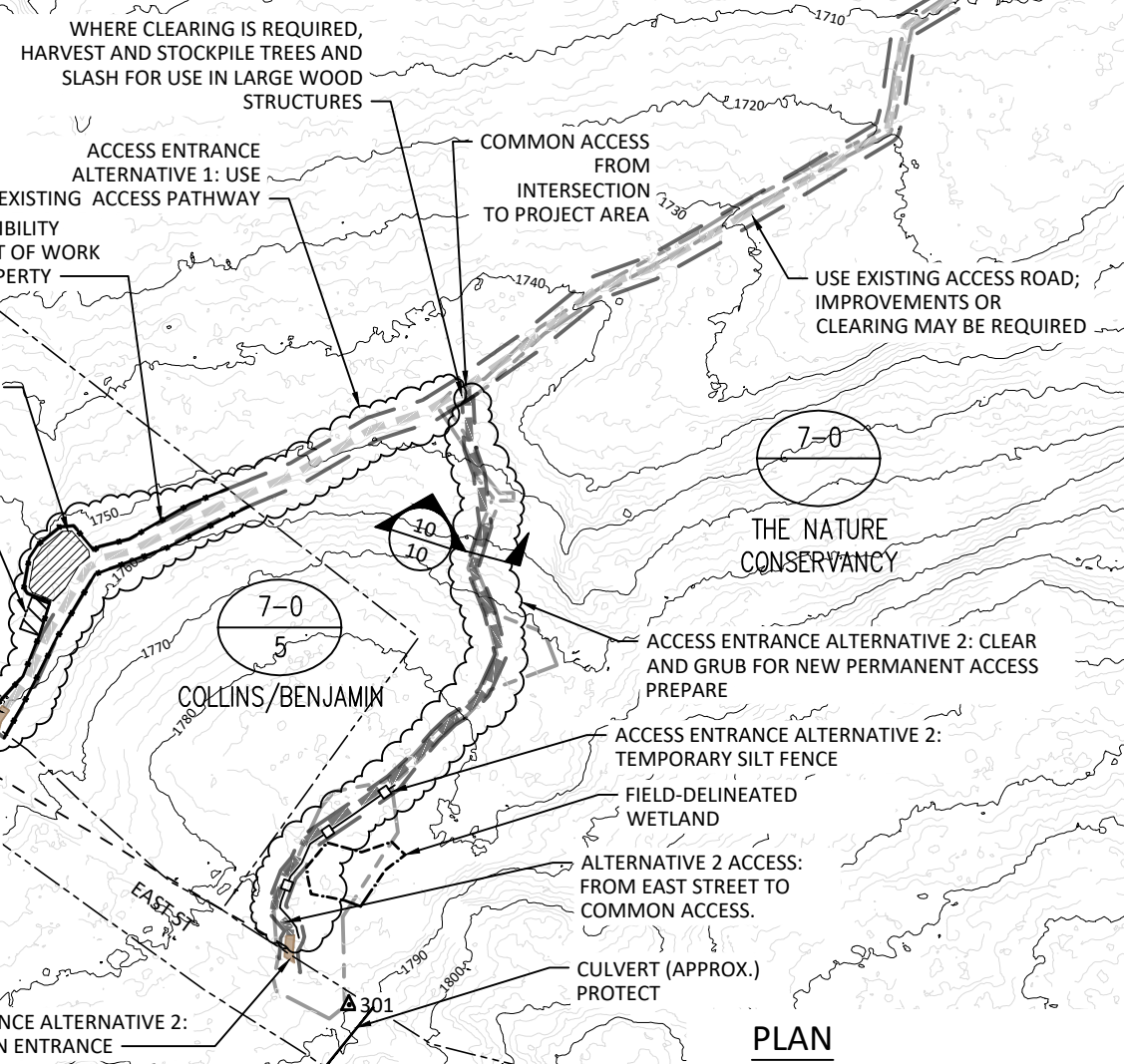
7-0 MAP NUMBER
 5 LOT NUMBER
 DOMBROWSKI PROPERTY OWNER

NOTES:
 1. THE SUGGESTED CONSTRUCTION SEQUENCE MAY BE ALTERED BY THE CONTRACTOR, WHO WILL HAVE RESPONSIBILITY FOR THE MEANS AND METHODS OF THE PROJECT PERFORMANCE.
 2. ONLY ONE ACCESS ALTERNATIVE WILL BE SELECTED FOR USE PRIOR TO THE START OF CONSTRUCTION



SUGGESTED CONSTRUCTION SEQUENCE

1. Access Alternative 1 or 2: Establish construction entrance at East Street.
2. Access Alternative 1: Establish staging area.
3. Provide erosion and sedimentation control BMPs, high visibility fencing, and temporary closure signs.
4. Access Entrance Alternative 2: Clear and grub for new permanent access road. Harvest and stockpile trees and slash for use in large wood structures.
5. Common Access: Prepare common access. Improvements or clearing may be required.
6. Establish staging area adjacent to the dam. Provide erosion and sedimentation control BMPs, high visibility fencing, and temporary closure signs.
7. Implement water management plan. Pump flow around the impoundment.
8. Remove and dispose of footbridge, signs, and fencing.
9. Drain down the impoundment in such a way that the release of impounded sediment is minimized.
10. Excavate the pilot channel when sediment is sufficiently drained such that newly graded pilot channel banks do not slump. Dispose of sediment off site.
11. Provide seed and large wood structures along the pilot channel.
12. Remove and dispose of the spillway and training walls.
13. Excavate the earthen embankments, fill the historical borrow pit and grade slopes as shown on plan. Dispose of excess material off site. Remove and dispose of the concrete core walls.
14. Provide surface fabric, remaining seed, and plantings within limits shown.
15. Remove water management controls.
16. Restore disturbed areas to a suitable condition.
17. Remove erosion and sedimentation controls.
18. Remove equipment.
19. Provide seed along the new permanent access (Alternative 2 only).
20. Remove temporary fencing and signs.



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**BECKER POND DAM REMOVAL
 THE NATURE CONSERVANCY
 BERKSHIRE COUNTY, MASSACHUSETTS**








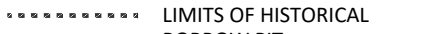





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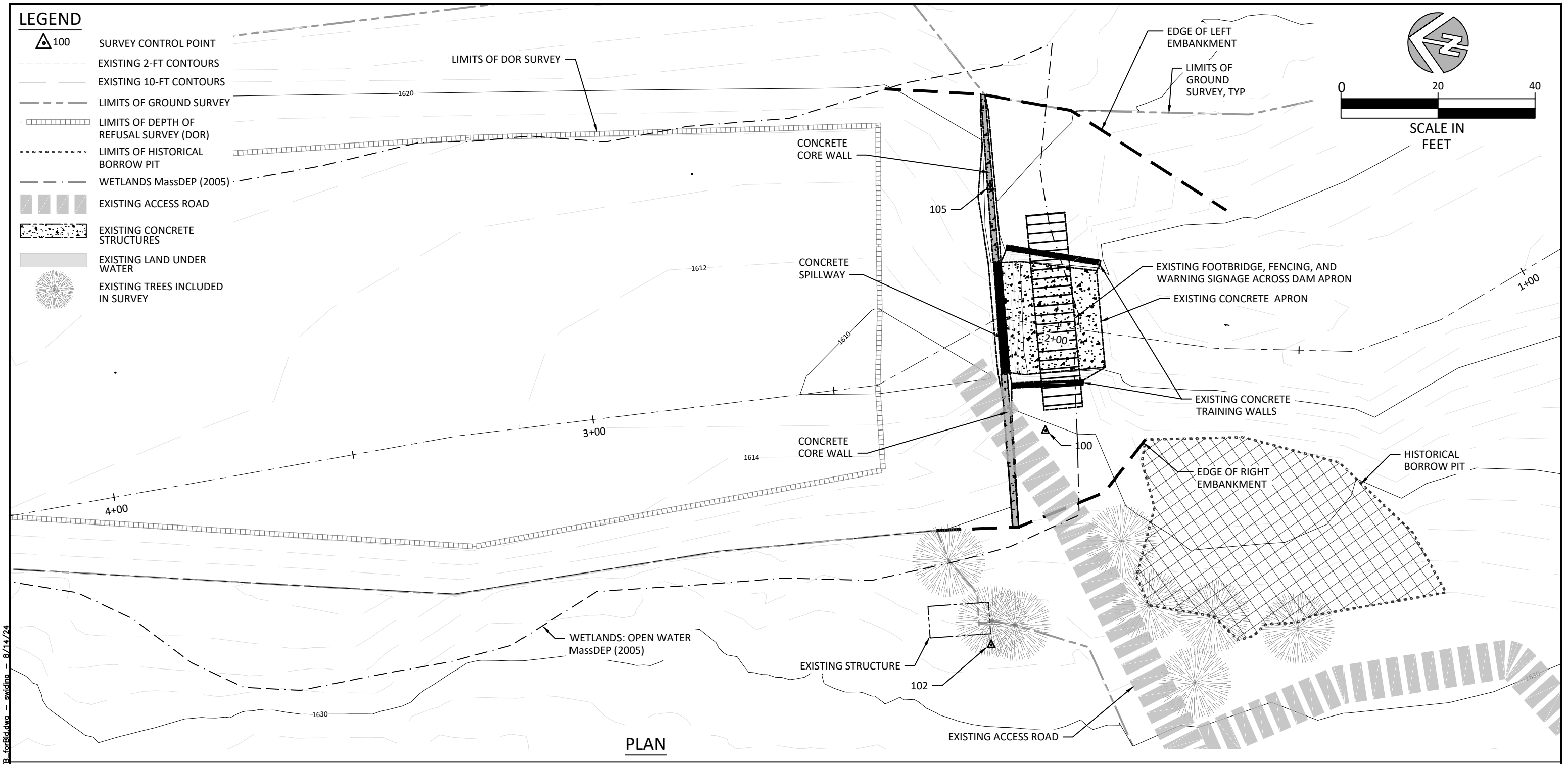
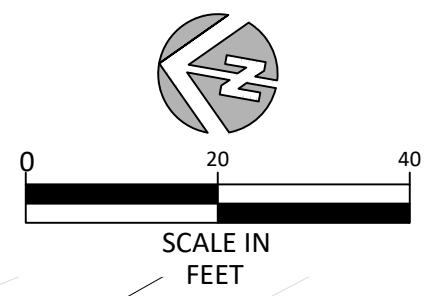
**ACCESS AND STAGING, EROSION
 AND SEDIMENT CONTROL**

SHEET
 4 OF 14

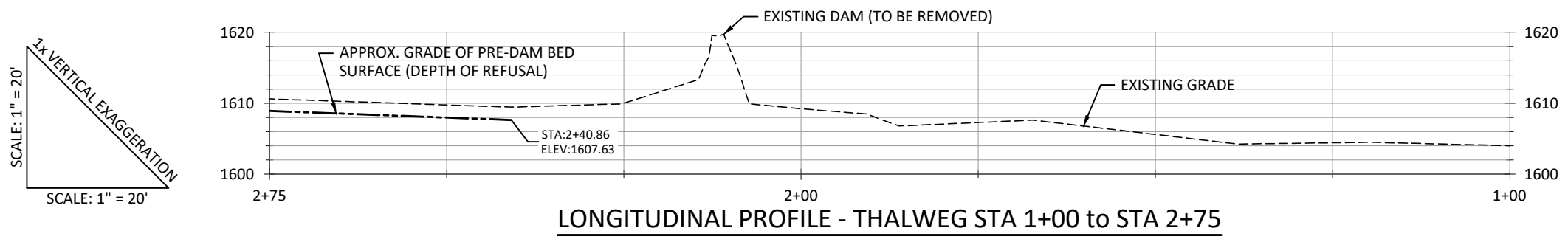
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LEGEND

-  SURVEY CONTROL POINT
-  EXISTING 2-FT CONTOURS
-  EXISTING 10-FT CONTOURS
-  LIMITS OF GROUND SURVEY
-  LIMITS OF DEPTH OF REFUSAL SURVEY (DOR)
-  LIMITS OF HISTORICAL BORROW PIT
-  WETLANDS MassDEP (2005)
-  EXISTING ACCESS ROAD
-  EXISTING CONCRETE STRUCTURES
-  EXISTING LAND UNDER WATER
-  EXISTING TREES INCLUDED IN SURVEY



PLAN



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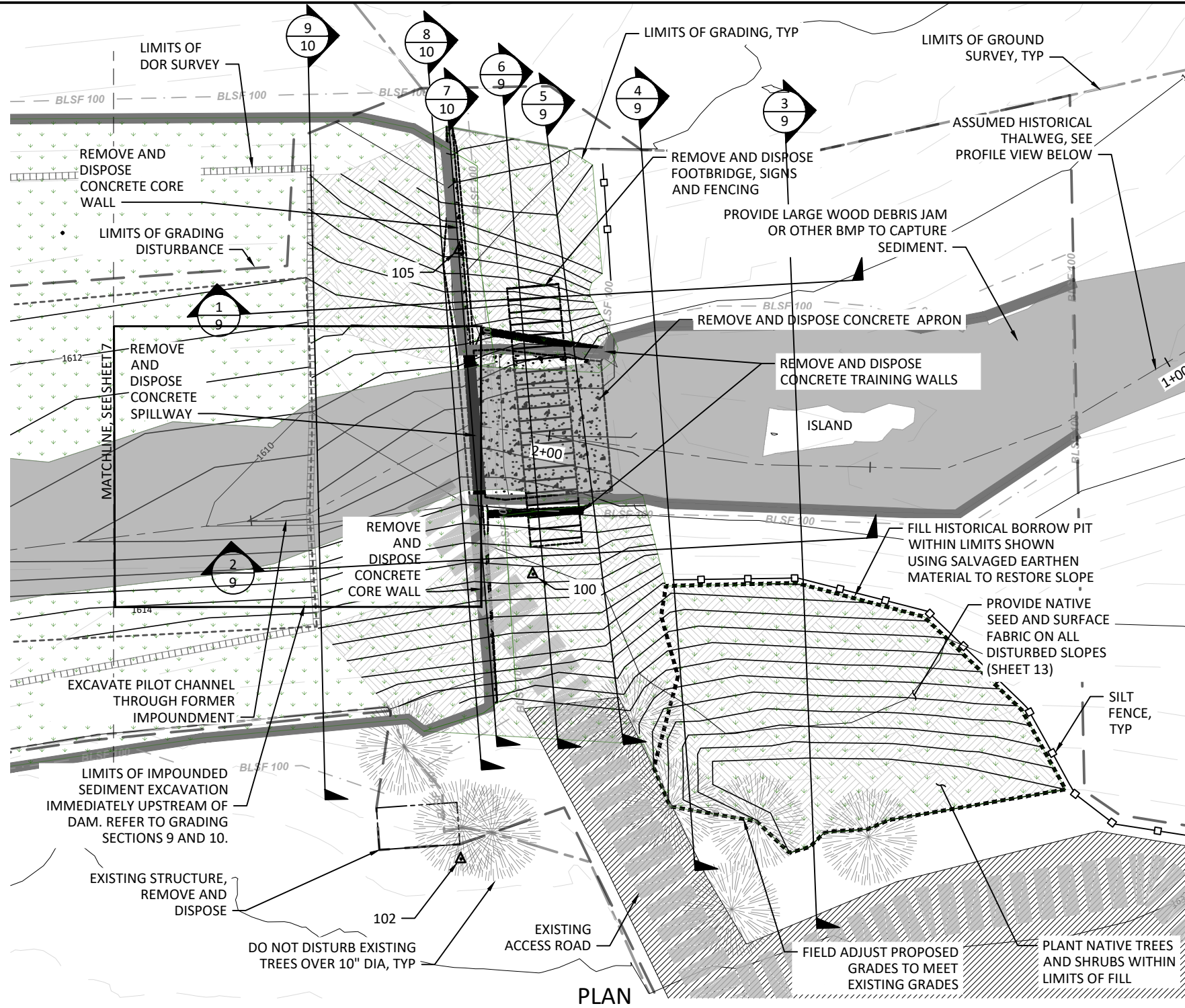


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EXISTING CONDITIONS

NOTES:

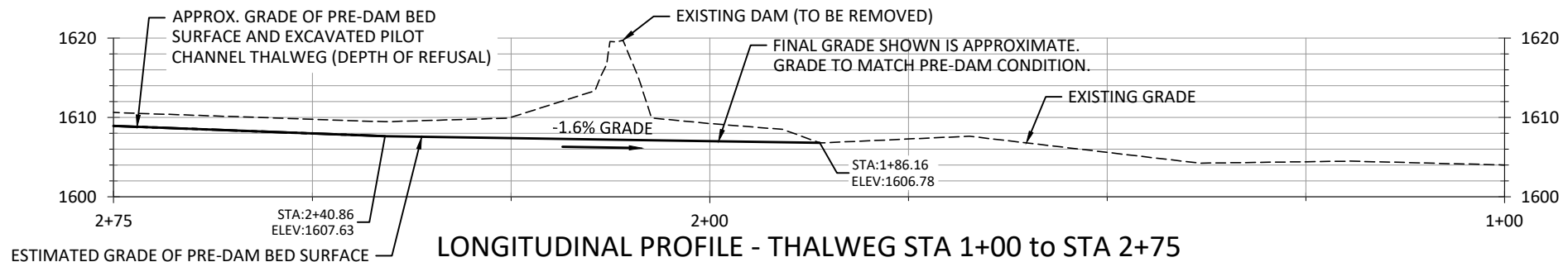
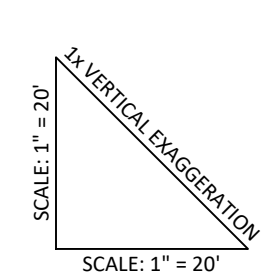
1. Stake and flag and maintain the limit of disturbance for visual identification in the field.
2. Trees and slash for large wood structures shall be harvested/salvaged from within the limits of disturbance.
3. Perform earthwork in conditions free of actively flowing water. Methods of diverting and dewatering shall be submitted with the Water Control Plan as part of the Construction Operations Plan prior to start of work. Refer to specifications.
4. Plan and conduct excavation and demolition operations in such a way that the release of impounded sediment is minimized.
5. Remove full lateral and vertical extents of the dam components including the concrete core wall, concrete training walls, concrete apron, and all associated appurtenances. Concrete and debris shall be disposed of off site.
6. Verify the full lateral and vertical extents of subsurface features including the concrete core wall. Extents shown on this plan are estimated.
7. Remove the earthen embankment as shown in the proposed grading.
8. Refer to specifications for fill requirements including the preparation of the existing surface.
9. Salvaged earthen material shall be reused on-site to fill the historical borrow pit, as shown on this plan. Excess earthen material shall be disposed of off site.
10. Grade banks and channel as shown from downstream limit of disturbance to station 1+83, see Sheet 9.
11. For pilot channel grading, excavate pilot channel within limit of disturbance. Pilot excavation should be from the depth of refusal at the assumed thalweg, with side slopes at approximately 2:1 to existing bed and a maximum top width of approximately 23 feet unless otherwise shown. If historic native channel material is encountered, it shall remain in place.
12. Excavated impounded sediment shall be disposed of off site.
13. Remove the existing foot bridge, signs, and fencing and dispose of off site.
14. Seed applied outside the Limits of Disturbance shall be broadcast by hand.



SCALE IN FEET

LEGEND

- EXISTING 2-FT CONTOURS
- EXISTING 10-FT CONTOURS
- LIMITS OF GROUND SURVEY
- LIMITS OF DEPTH OF REFUSAL SURVEY (DOR)
- LIMITS OF DISTURBANCE
- ESTIMATED LIMIT OF GRADING
- EXISTING ACCESS ROAD
- ▨ TEMPORARY STAGING AND STOCKPILE AREA
- ▤ EXISTING CONCRETE STRUCTURES
- ANTICIPATED LAND UNDER WATER AFTER DAM REMOVAL
- ☼ EXISTING TREES
- PROPOSED 1-FT CONTOURS
- ▨ PROPOSED SURFACE FABRIC INSTALLATION (SHEET 13)
- TEMPORARY SILT FENCE
- APPROXIMATE FILL AREA BOUNDARY
- NATIVE SEED APPLICATION
- ORDINARY HIGH WATER (EXISTING CONDITIONS)
- BLSF 100 --- BORDERING LAND SUBJECT TO FLOODING (BLSF-EXISTING CONDITIONS)



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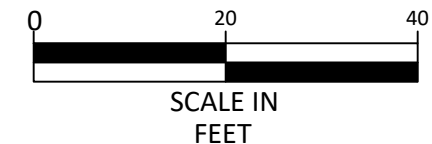
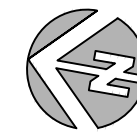
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BECKER POND DAM REMOVAL
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DAM REMOVAL PLAN AND
PROFILE STA 1+50 TO STA 2+75

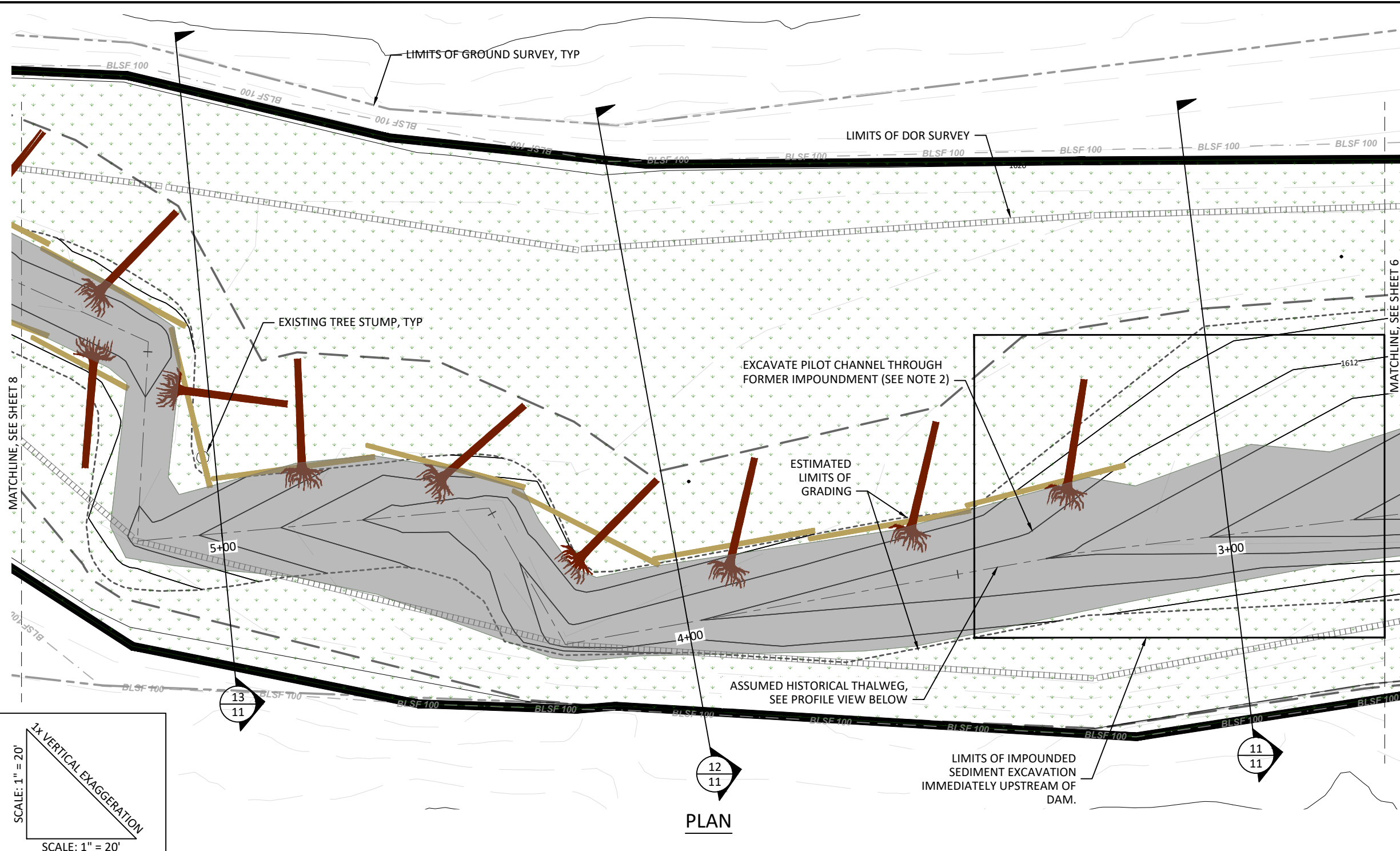


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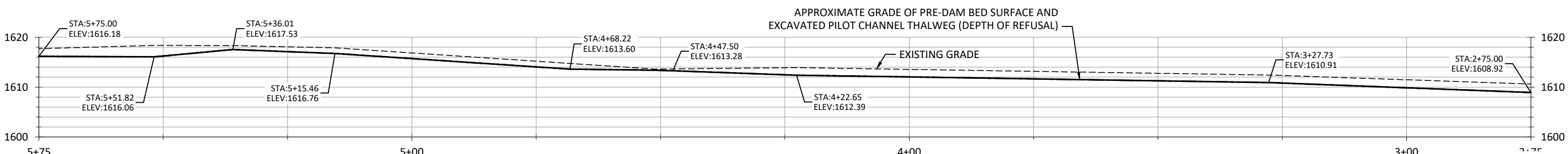
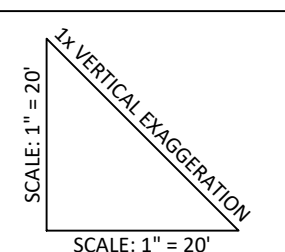
- - - - - EXISTING 2-FT CONTOURS
- - - - - EXISTING 10-FT CONTOURS
- ORDINARY HIGH WATER (EXISTING CONDITIONS)
- - - - - BLSF 100 BORDERING LAND SUBJECT TO FLOODING (BLSF EXISTING CONDITIONS)
- - - - - PROPOSED 1-FT CONTOURS
- - - - - LIMITS OF GROUND SURVEY
- - - - - LIMITS OF DISTURBANCE
- - - - - ESTIMATED LIMIT OF GRADING
- ▭ LIMITS OF DEPTH OF REFUSAL SURVEY (DOR)
- ▭ ANTICIPATED LAND UNDER WATER AFTER DAM REMOVAL
- ▭ NATIVE SEED APPLICATION
- ✂ LARGE WOOD STRUCTURE

NOTES:

1. STAKE AND FLAG LIMIT OF DISTURBANCE FOR VISUAL IDENTIFICATION IN THE FIELD.
2. FOR PILOT CHANNEL GRADING, EXCAVATE PILOT CHANNEL WITHIN LIMIT OF DISTURBANCE. EXCAVATION SHOULD BE FROM THE DEPTH OF REFUSAL AT THE ASSUMED THALWEG, WITH SIDE SLOPES AT APPROXIMATELY 2:1 TO EXISTING BED WITH A MAXIMUM TOP WIDTH OF 23 FEET UNLESS OTHERWISE SHOWN. IF HISTORIC NATIVE CHANNEL MATERIAL IS ENCOUNTERED, IT SHALL REMAIN IN PLACE.
3. SEED APPLIED OUTSIDE THE LIMITS OF DISTURBANCE SHALL BE BROADCAST BY HAND.



PLAN



LONGITUDINAL PROFILE - THALWEG STA 2+75 TO STA 5+75

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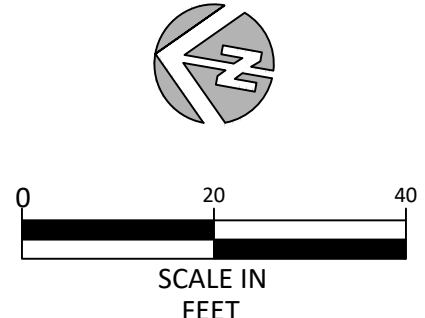
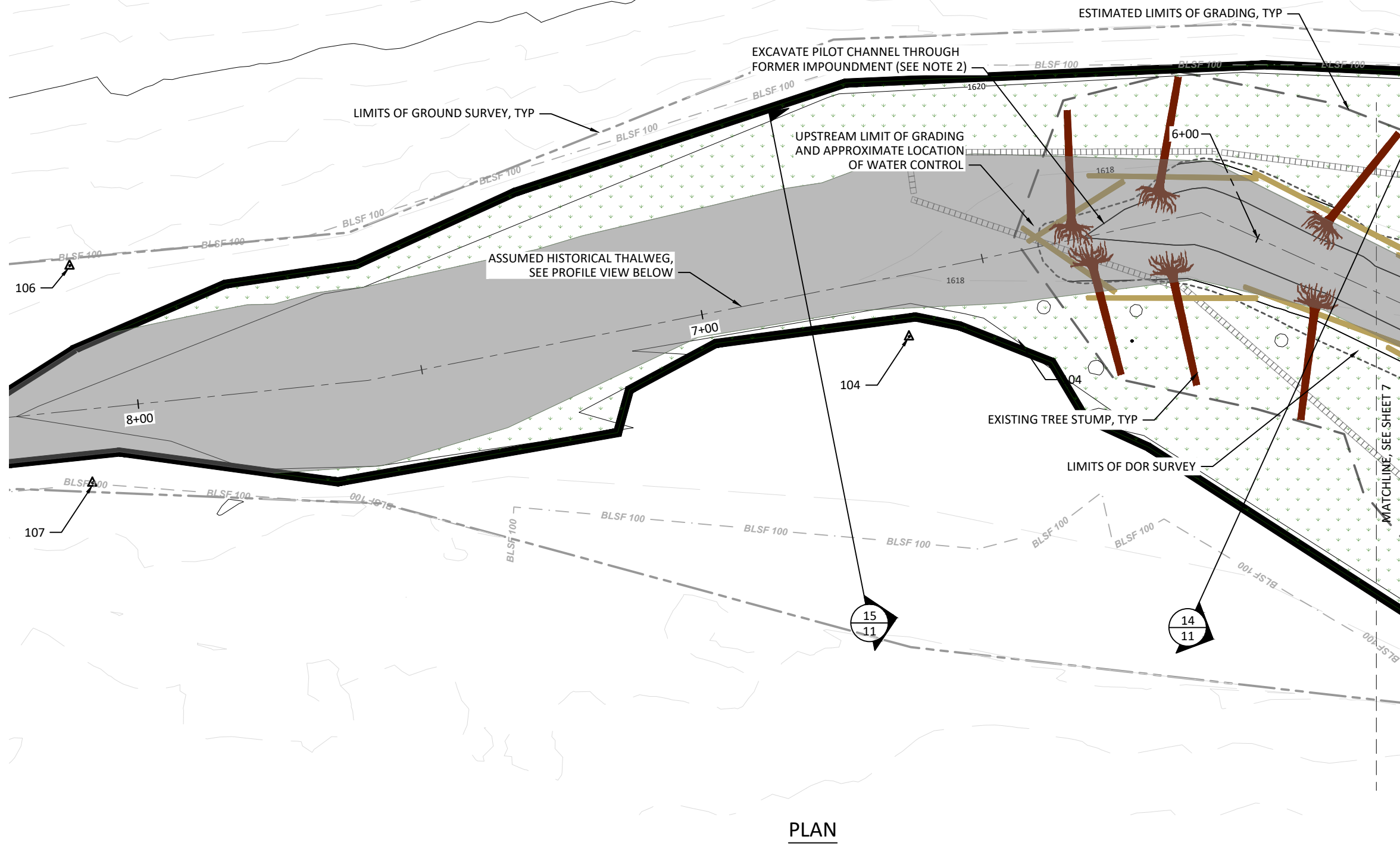
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THE NATURE CONSERVANCY
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**PILOT CHANNEL PLAN AND
PROFILE STA 2+75 TO STA 5+75**

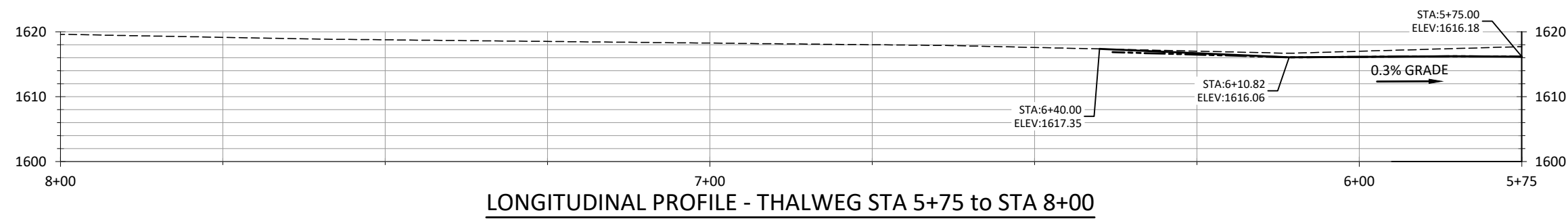
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- LEGEND**
- EXISTING 2-FT CONTOURS
 - EXISTING 10-FT CONTOURS
 - ORDINARY HIGH WATER (EXISTING CONDITIONS)
 - BORDERING LAND SUBJECT TO FLOODING (BLSF EXISTING CONDITIONS)
 - PROPOSED 1-FT CONTOURS
 - LIMITS OF GROUND SURVEY
 - LIMITS OF DEPTH OF REFUSAL SURVEY (DOR)
 - LIMITS OF DISTURBANCE
 - ESTIMATED LIMIT OF GRADING
 - ANTICIPATED LAND UNDER WATER AFTER DAM REMOVAL
 - NATIVE SEED APPLICATION
 - LARGE WOOD STRUCTURE

- NOTES:**
1. STAKE AND FLAG LIMIT OF DISTURBANCE FOR VISUAL IDENTIFICATION IN THE FIELD.
 2. FOR PILOT CHANNEL GRADING, EXCAVATE PILOT CHANNEL WITHIN LIMIT OF DISTURBANCE. EXCAVATION SHOULD BE FROM THE DEPTH OF REFUSAL AT THE ASSUMED THALWEG, WITH SIDE SLOPES AT APPROXIMATELY 2:1 TO EXISTING BED WITH A MAXIMUM TOP WIDTH OF 23 FEET. IF HISTORIC NATIVE CHANNEL MATERIAL IS ENCOUNTERED, IT SHALL REMAIN IN PLACE.
 3. SEED APPLIED OUTSIDE THE LIMITS OF DISTURBANCE SHALL BE BROADCAST BY HAND.

PLAN



LONGITUDINAL PROFILE - THALWEG STA 5+75 to STA 8+00

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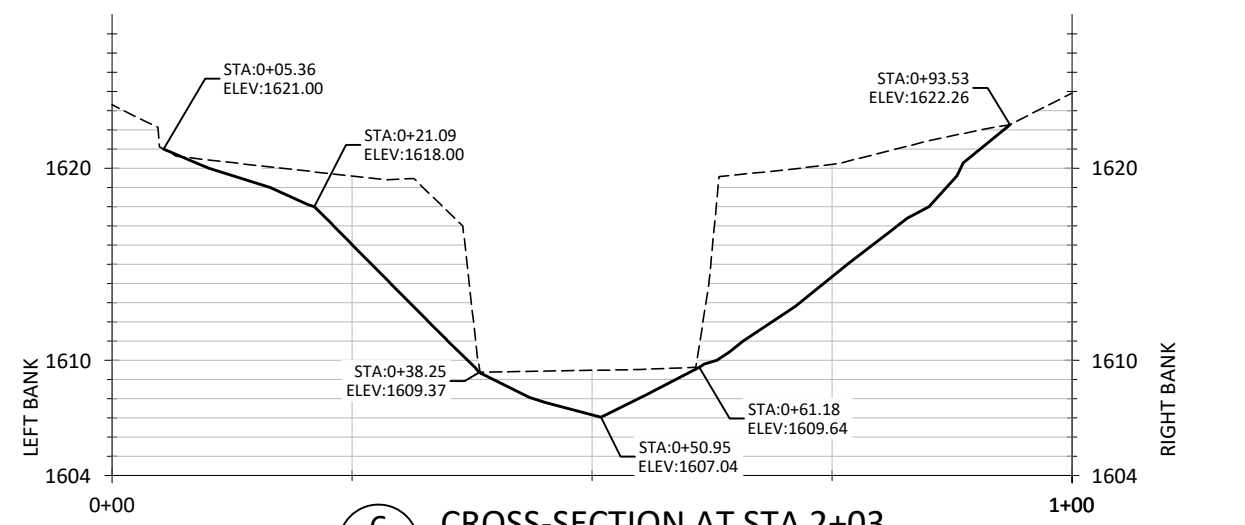
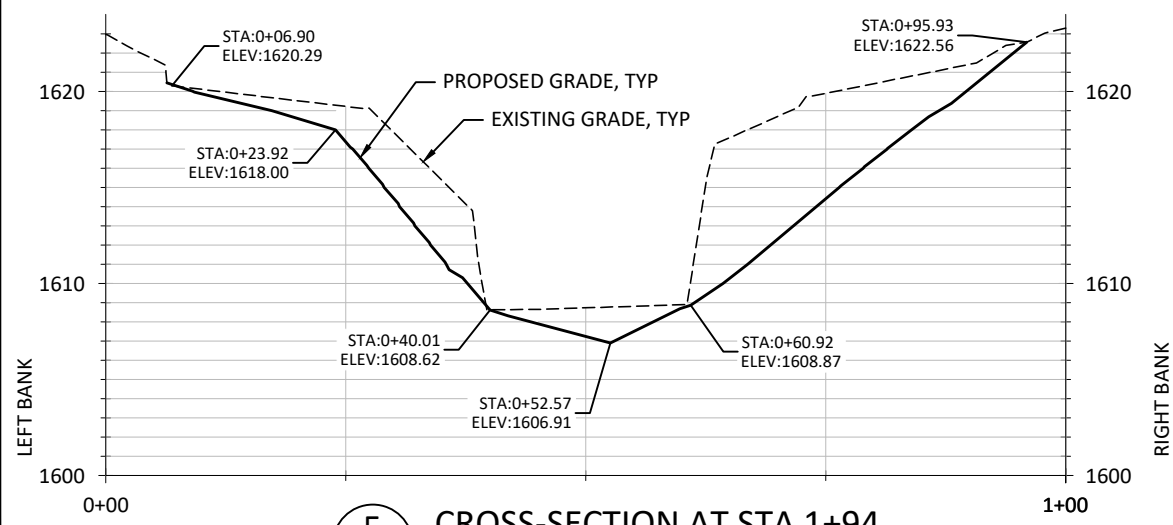
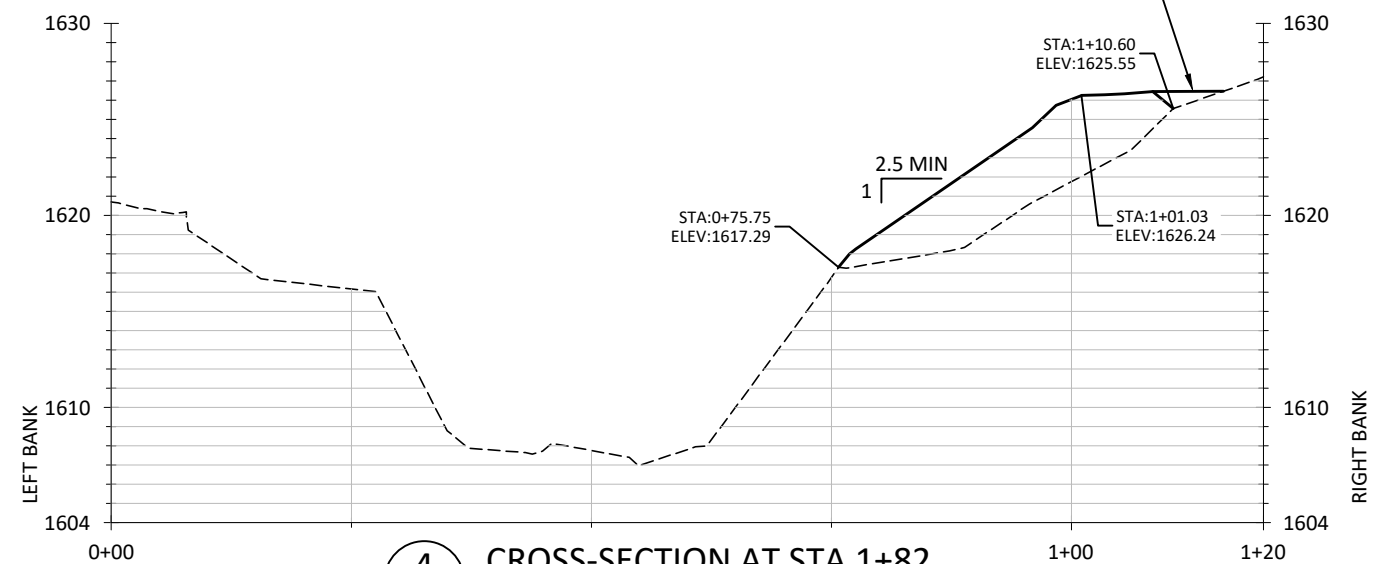
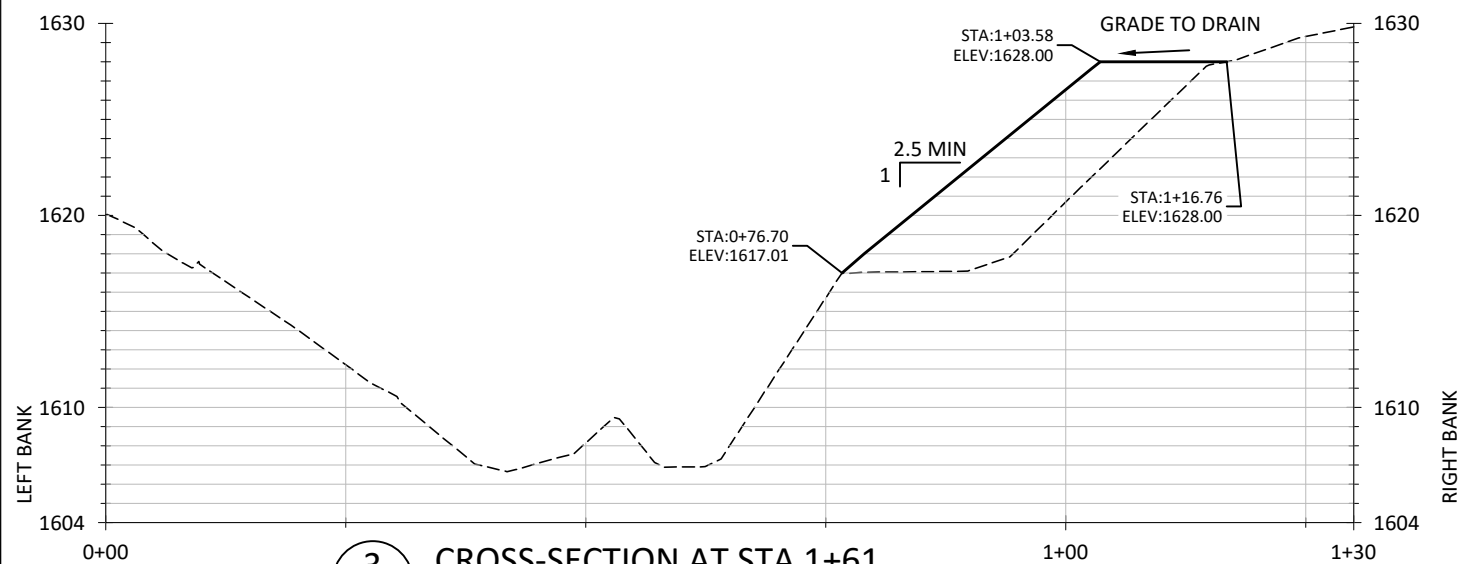
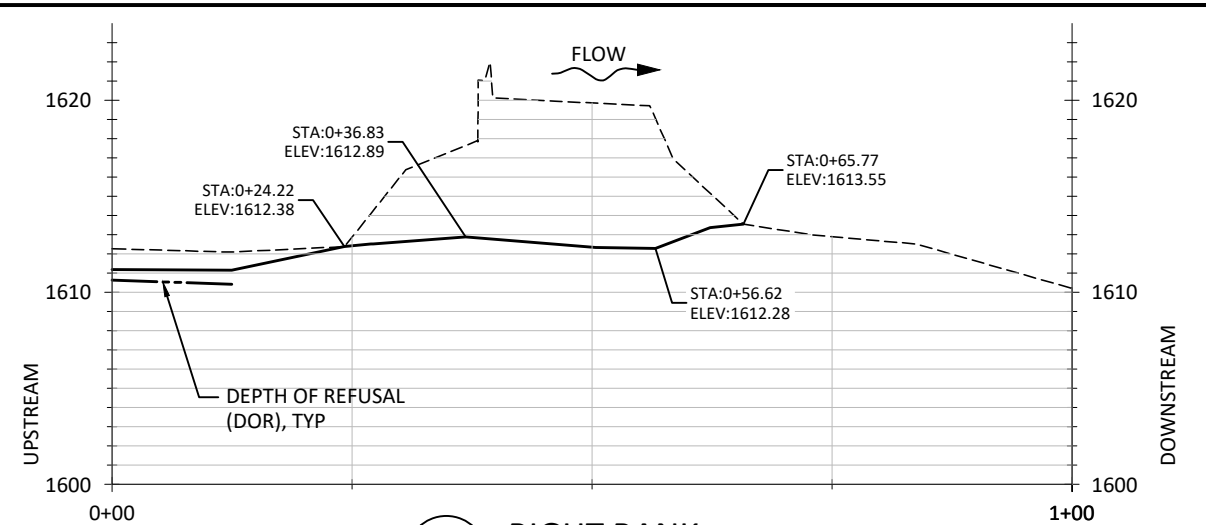
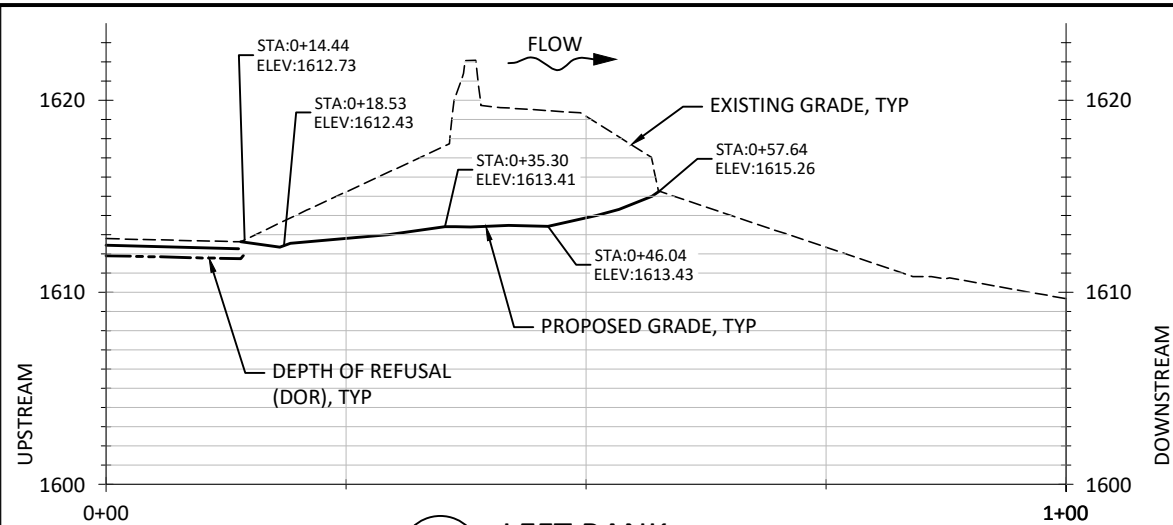
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**PILOT CHANNEL PLAN AND
PROFILE STA 5+75 TO STA 8+00**



NOTES:

1. SECTIONS ARE ORIENTED LEFT TO RIGHT FACING DOWNSTREAM.
2. THE MAXIMUM SLOPE IN FILL AREAS SHALL BE 2.5:1.
3. THE PROPOSED CUT SLOPES PRESENTED ON THESE SECTIONS REPRESENT OUR BEST ESTIMATES OF THE PRE-DAM RIVER CHANNEL GEOMETRY.
4. THE PROPOSED CUT-SLOPES ARE NOT INTENDED TO BE PRESCRIPTIVE. THE INTENT OF EXCAVATION ACTIVITIES IS TO REMOVE FILL MATERIAL OR IMPOUNDED SEDIMENT THAT IS ON TOP OF THE HISTORIC NATIVE MATERIAL, WHICH IS LIKELY TO CONSIST OF COBBLES, BOULDERS, AND ROCK. IF HISTORIC NATIVE MATERIAL IS ENCOUNTERED ABOVE THE PROPOSED GRADE, IT SHALL REMAIN IN PLACE. IF HISTORIC NATIVE MATERIAL IS NOT ENCOUNTERED AT THE PROPOSED GRADE, NO FURTHER EXCAVATION IS REQUESTED.
5. THE PROPOSED CUT-SLOPES HAVE BEEN USED TO ESTIMATE THE VOLUME OF SALVAGED MATERIAL THAT WILL NEED TO BE DISPOSED OF, EITHER IN DESIGNATED AREAS ON-SITE, OR AT OFF-SITE FACILITIES.

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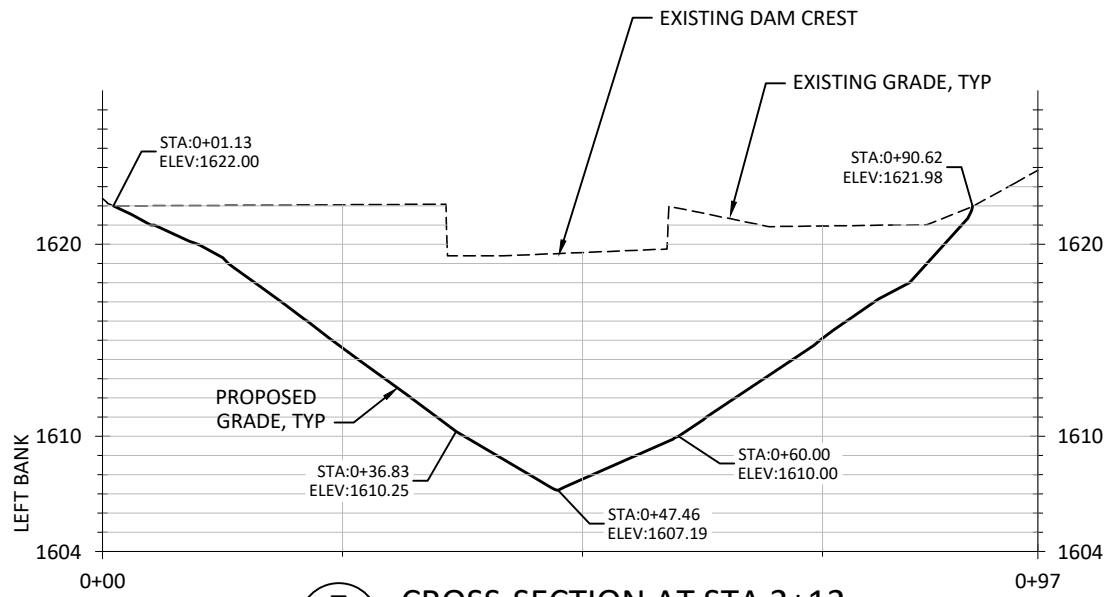
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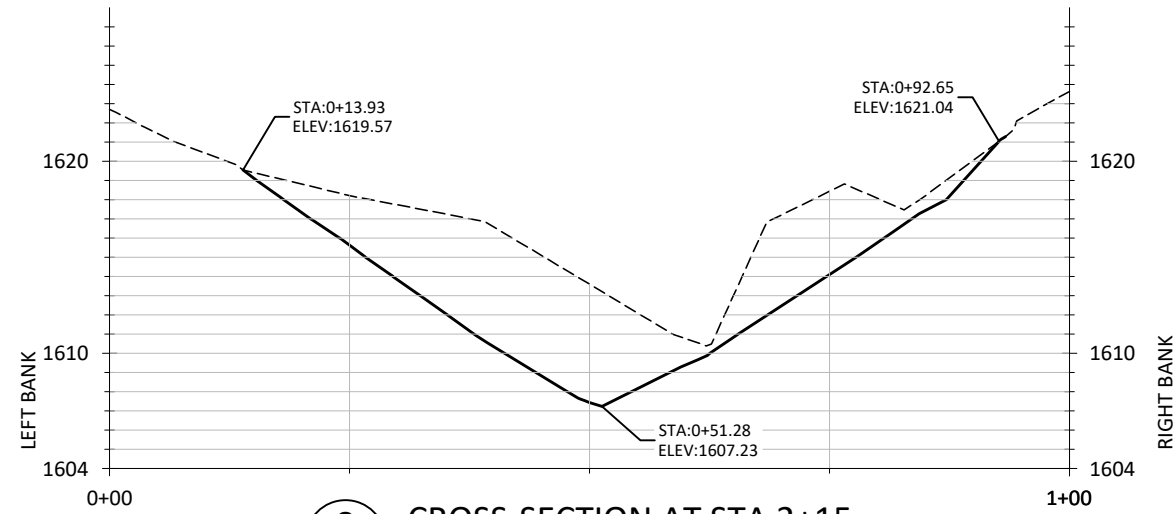
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DAM REMOVAL GRADING
CROSS SECTIONS

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9 OF 14



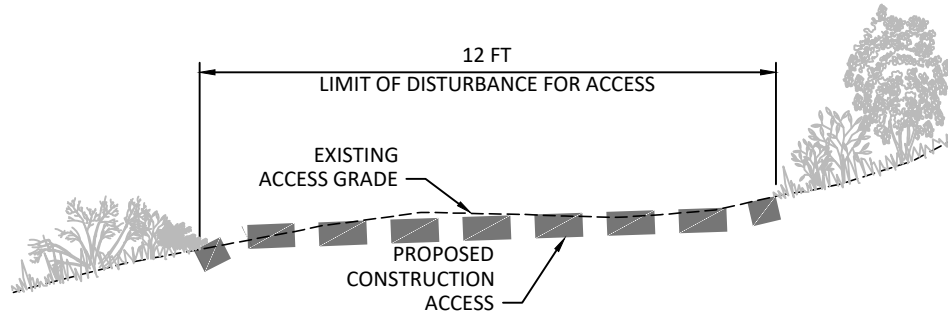
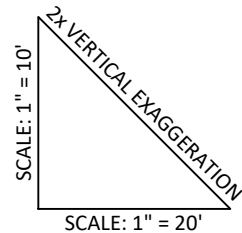
7
10 CROSS-SECTION AT STA 2+12



8
10 CROSS-SECTION AT STA 2+15

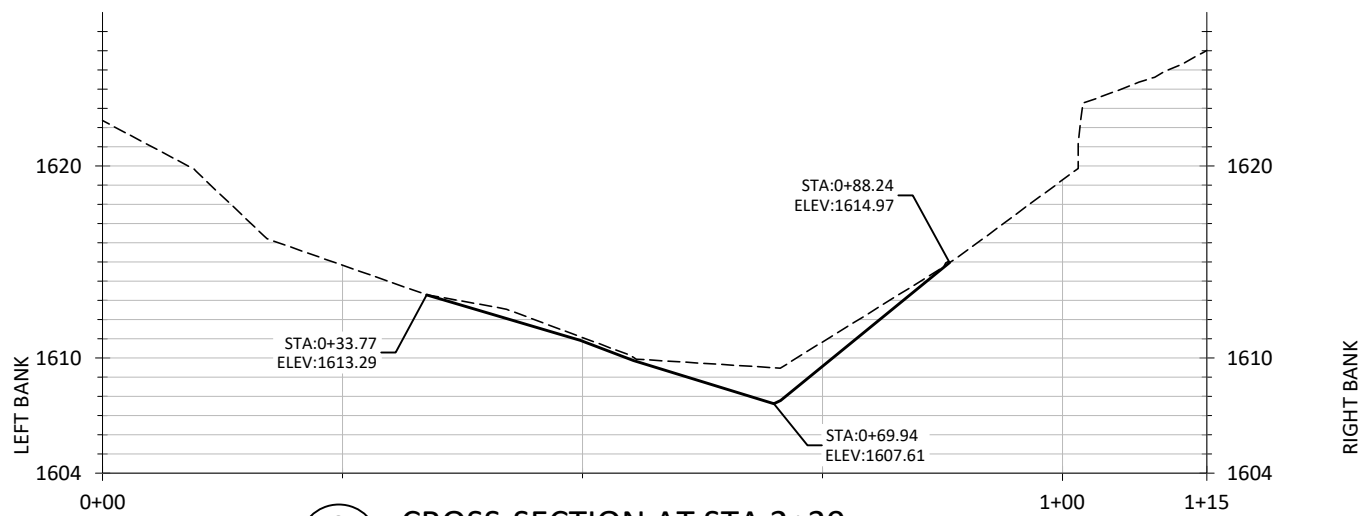
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10
10 TYPICAL NEW ACCESS ROAD CROSS-SECTION
NOT TO SCALE

- NOTE:
- FOLLOWING COMPLETION OF CONSTRUCTION, RESTORE THE TYPICAL NEW ACCESS ROAD CROSS SECTION AS DESCRIBED HERE.
1. REMOVE ANY SUPPLEMENTAL TEMPORARY BEARING MATERIAL THAT MAY HAVE BEEN PLACED TO SUPPORT CONSTRUCTION-PERIOD VEHICLE ACCESS.
 2. SCARIFY THE SOIL, BROADCAST SEED, APPLY MULCH.
 3. LEAVE FOUR FEET OF CLEAR PATH IN THE CENTER FOR PERMANENT PEDESTRIAN USE.
 4. PLACE OPPORTUNISTIC SALVAGE MATERIAL (E.G., WOOD, BOULDER) AT RESTORED CONSTRUCTION ENTRANCE TO PREVENT VEHICLE INTRUSION TO THE RESTORED PATH.



9
10 CROSS-SECTION AT STA 2+39

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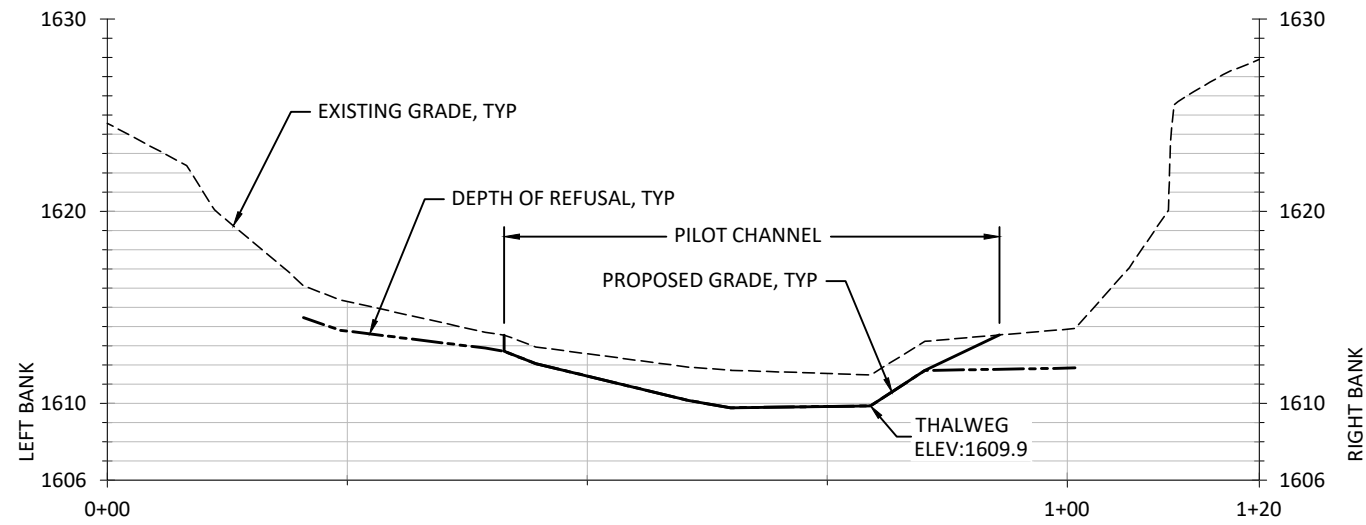
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BERKSHIRE COUNTY, MASSACHUSETTS

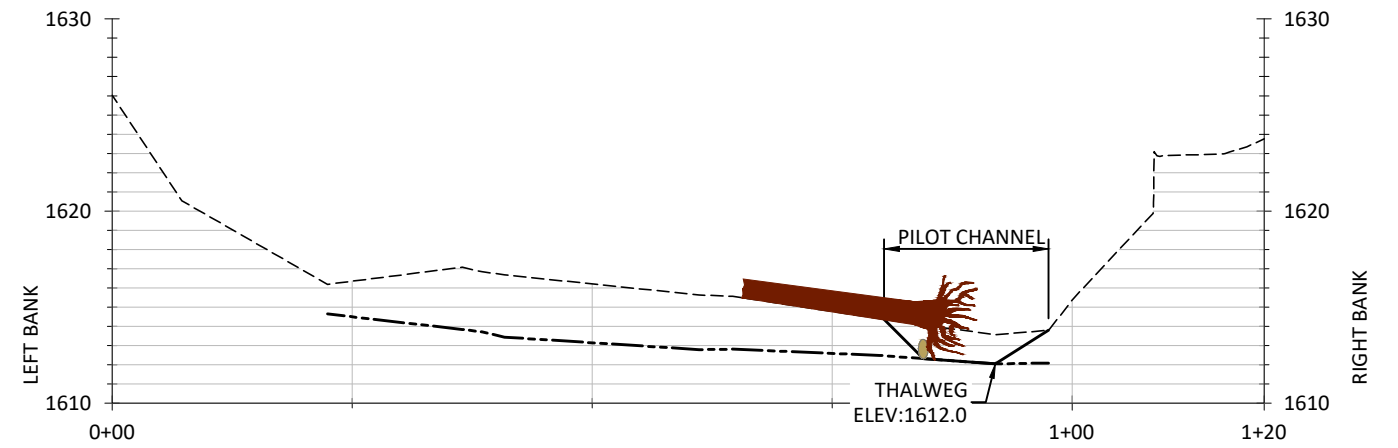


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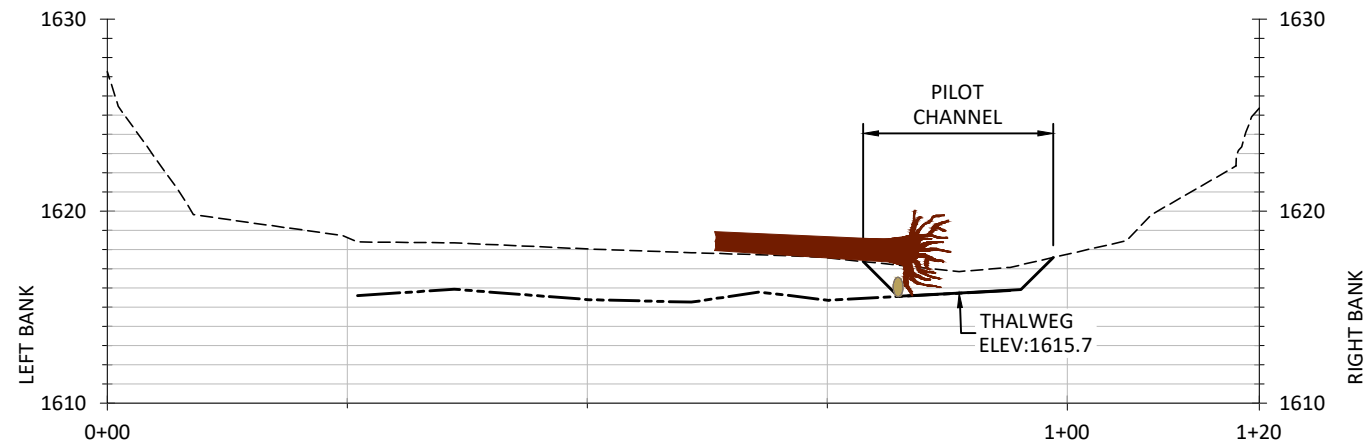
DAM REMOVAL GRADING
CROSS SECTIONS AND DETAILS



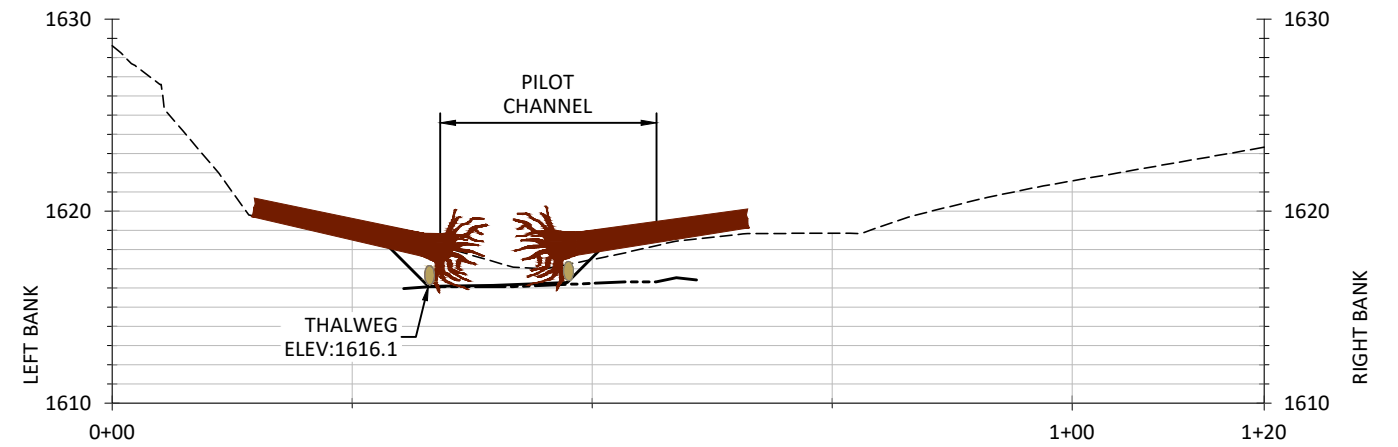
11 CROSS-SECTION AT STA 3+00
11



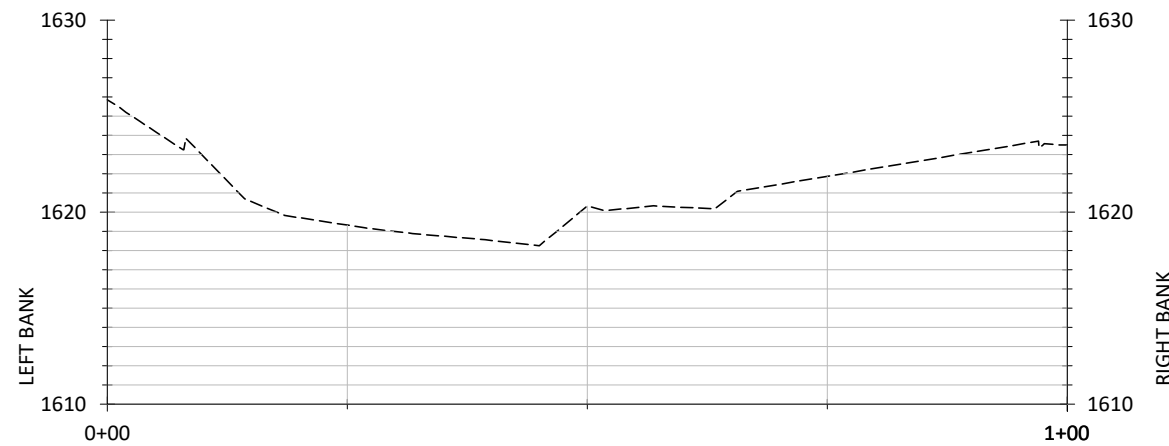
12 CROSS-SECTION AT STA 4+00
11



13 CROSS-SECTION AT STA 5+00
11



14 CROSS-SECTION AT STA 6+00
11



15 CROSS-SECTION AT STA 7+00
11

SCALE: 1" = 10'
2x VERTICAL EXAGGERATION
SCALE: 1" = 20'

NOTES:

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BERKSHIRE COUNTY, MASSACHUSETTS



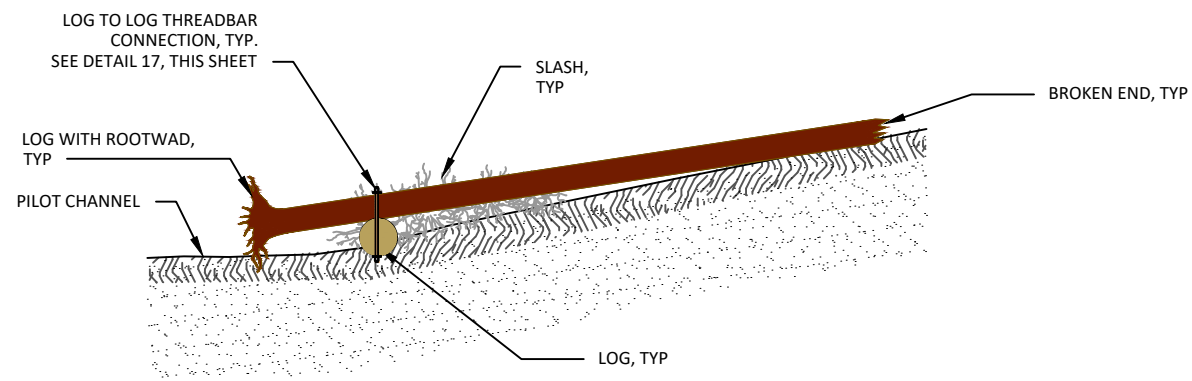
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PILOT CHANNEL
CONSTRUCTION CROSS
SECTIONS

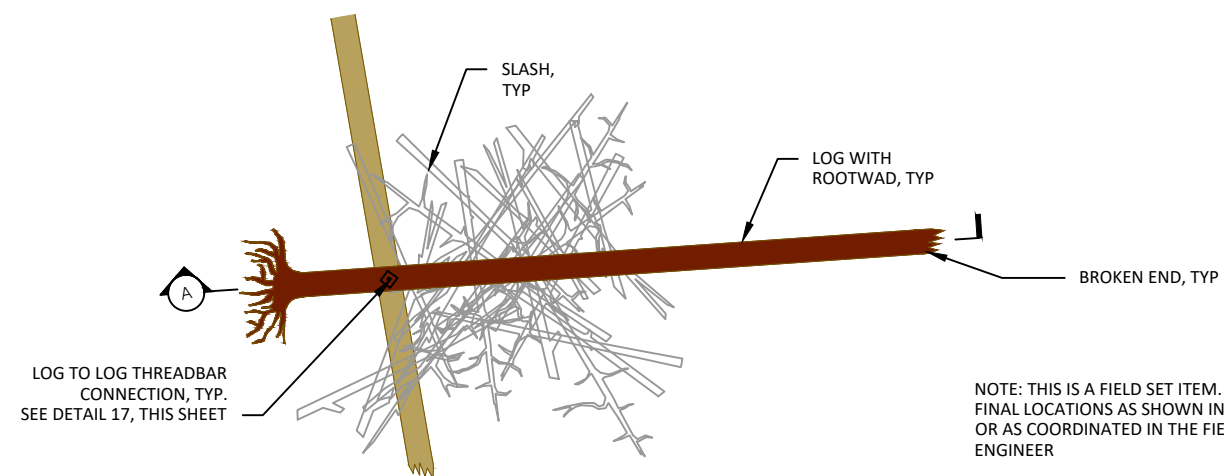
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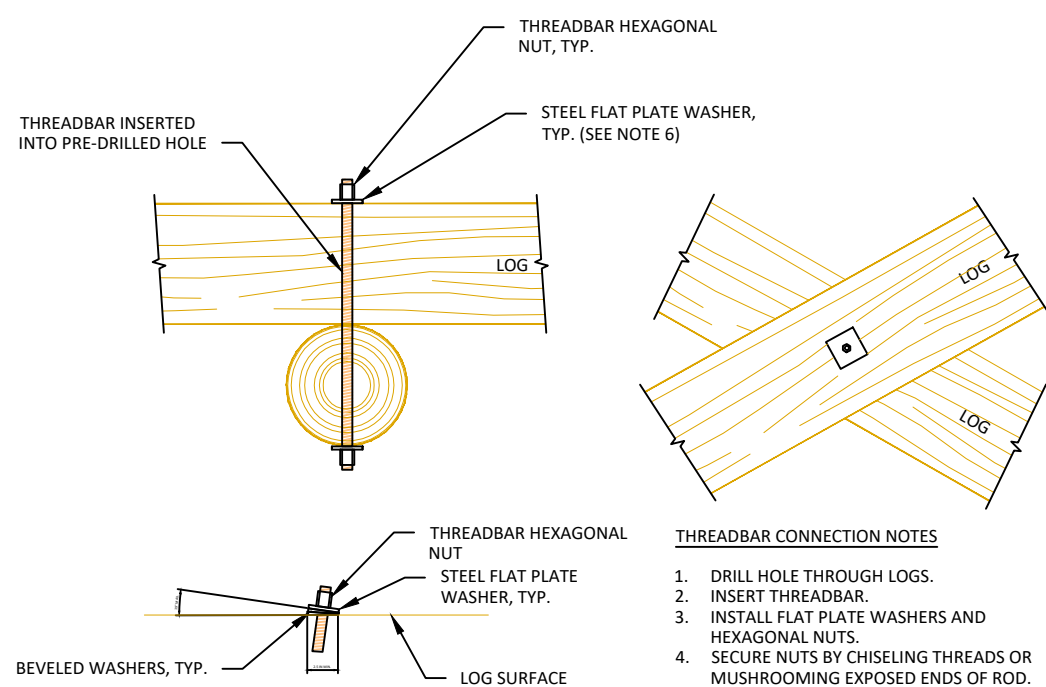


(A) TYPICAL SECTION VIEW



(B) TYPICAL PLAN VIEW

16
12 TYPICAL DETAIL: LARGE WOOD STRUCTURE



- THREADBAR CONNECTION NOTES**
1. DRILL HOLE THROUGH LOGS.
 2. INSERT THREADBAR.
 3. INSTALL FLAT PLATE WASHERS AND HEXAGONAL NUTS.
 4. SECURE NUTS BY CHISELING THREADS OR MUSHROOMING EXPOSED ENDS OF ROD. FILE OR GRIND OFF SHARP EDGES.
 5. FILE OR GRIND OFF SHARP EDGES.
 6. BEVELED WASHERS WILL BE REQUIRED BY THE ECOLOGIST TEAM IN THE FIELD IF ANGLE OF PRE-DRILLED HOLE IS NOT PERPENDICULAR TO BOTH LOGS.

17
12 LOG TO LOG THREADBAR CONNECTION

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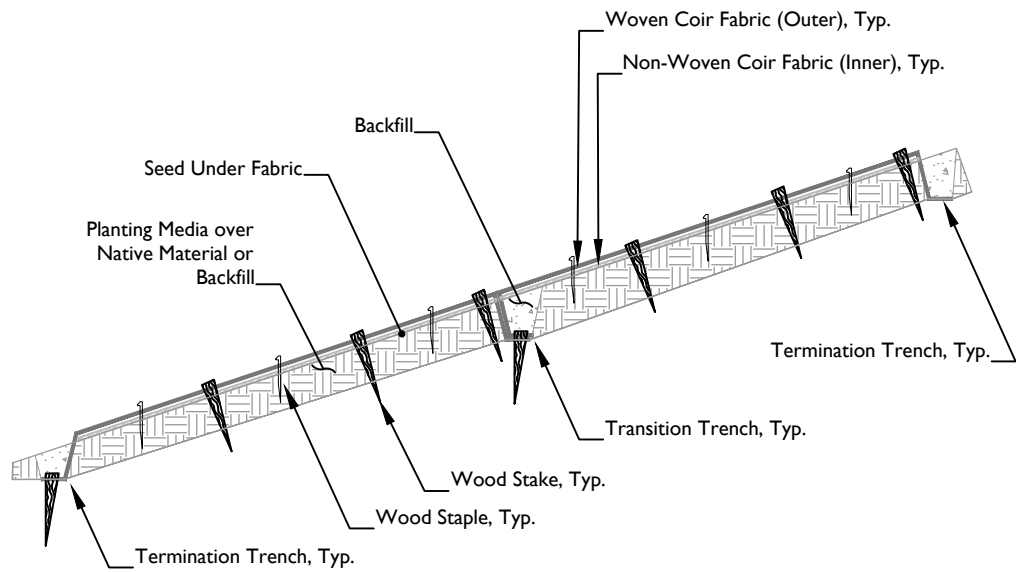
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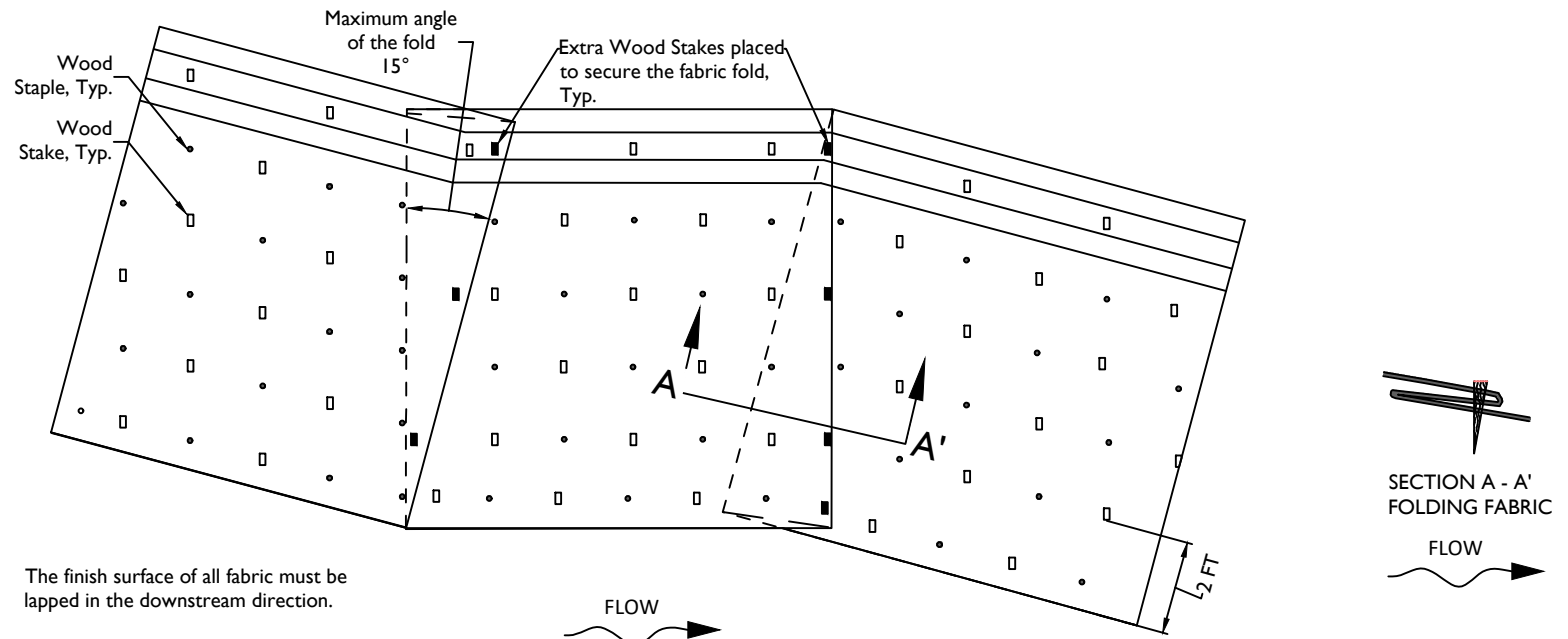
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LARGE WOOD STRUCTURE
DETAILS

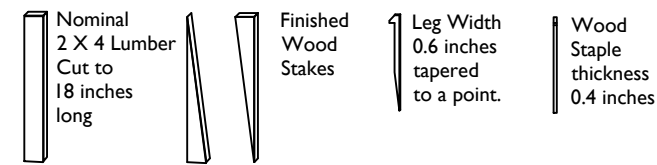
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18 TYPICAL DETAIL
13 FABRIC SLOPE STABILIZATION
1 inch = 4 feet

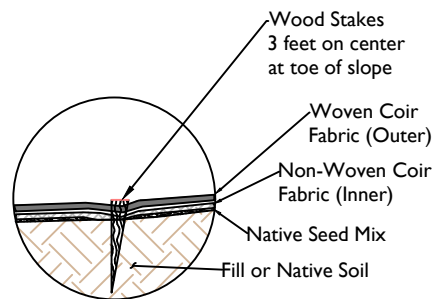


24 TYPICAL DETAIL
13 FOLDING OUTER FABRIC
1 inch = 4 feet

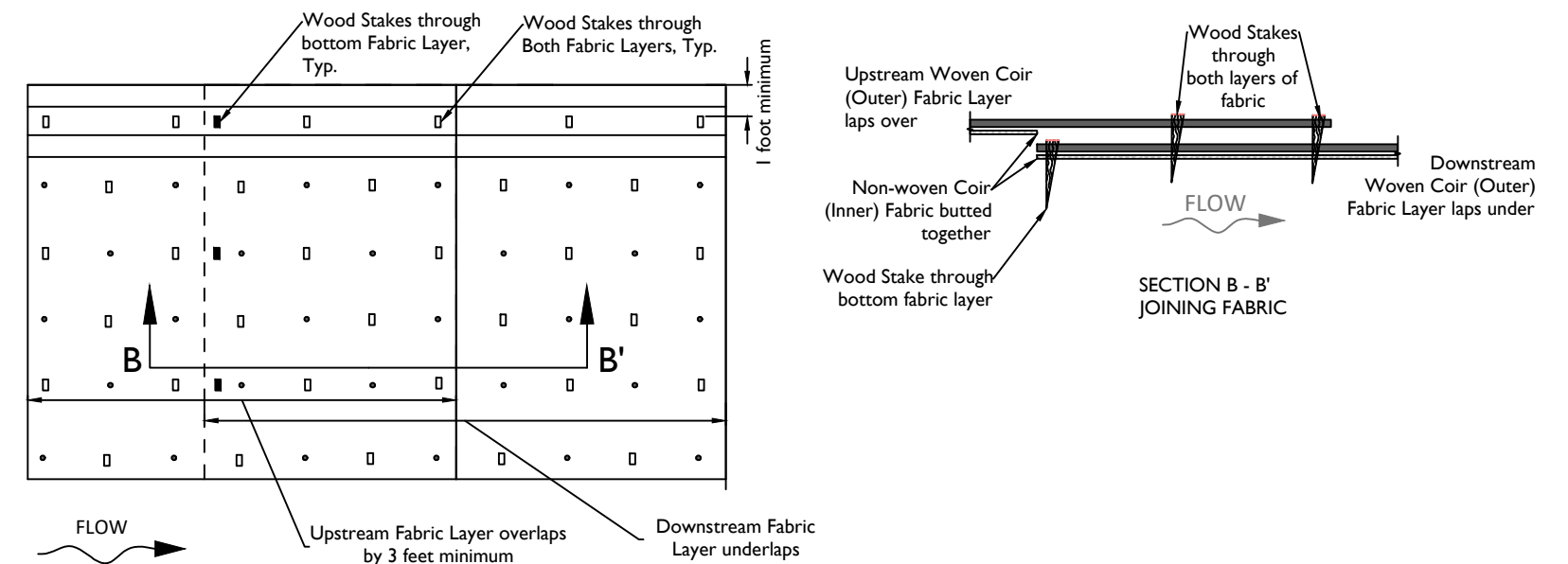


19 TYPICAL DETAIL
13 WOOD STAKES
1 inch = 2 feet

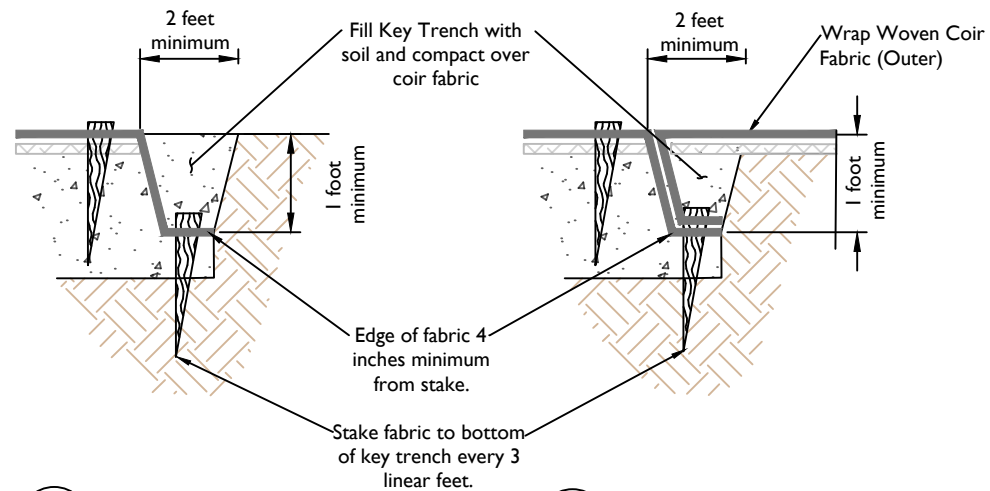
20 TYPICAL DETAIL
13 WOOD STAPLES
1 inch = 2 feet



21 KEY DETAIL
13 TOE OF SLOPE
1 inch = 4 feet



25 TYPICAL DETAIL
13 JOINING FABRIC
1 inch = 4 feet



22 KEY TRENCH DETAIL
13 TERMINATION TRENCH
1 inch = 2 feet

23 KEY TRENCH DETAIL
13 TRANSITION TRENCH
1 inch = 2 feet

Fabric Installation Notes:
Wood Stakes are to be installed at 3 feet on center in staggered rows.
Wood Staples are to be installed at 18 inches on center, with respect to Wood Stakes, in staggered rows.
Supplement with additional Wood Staples to eliminate wrinkles and bulges and to maintain contact between fabric and soil.

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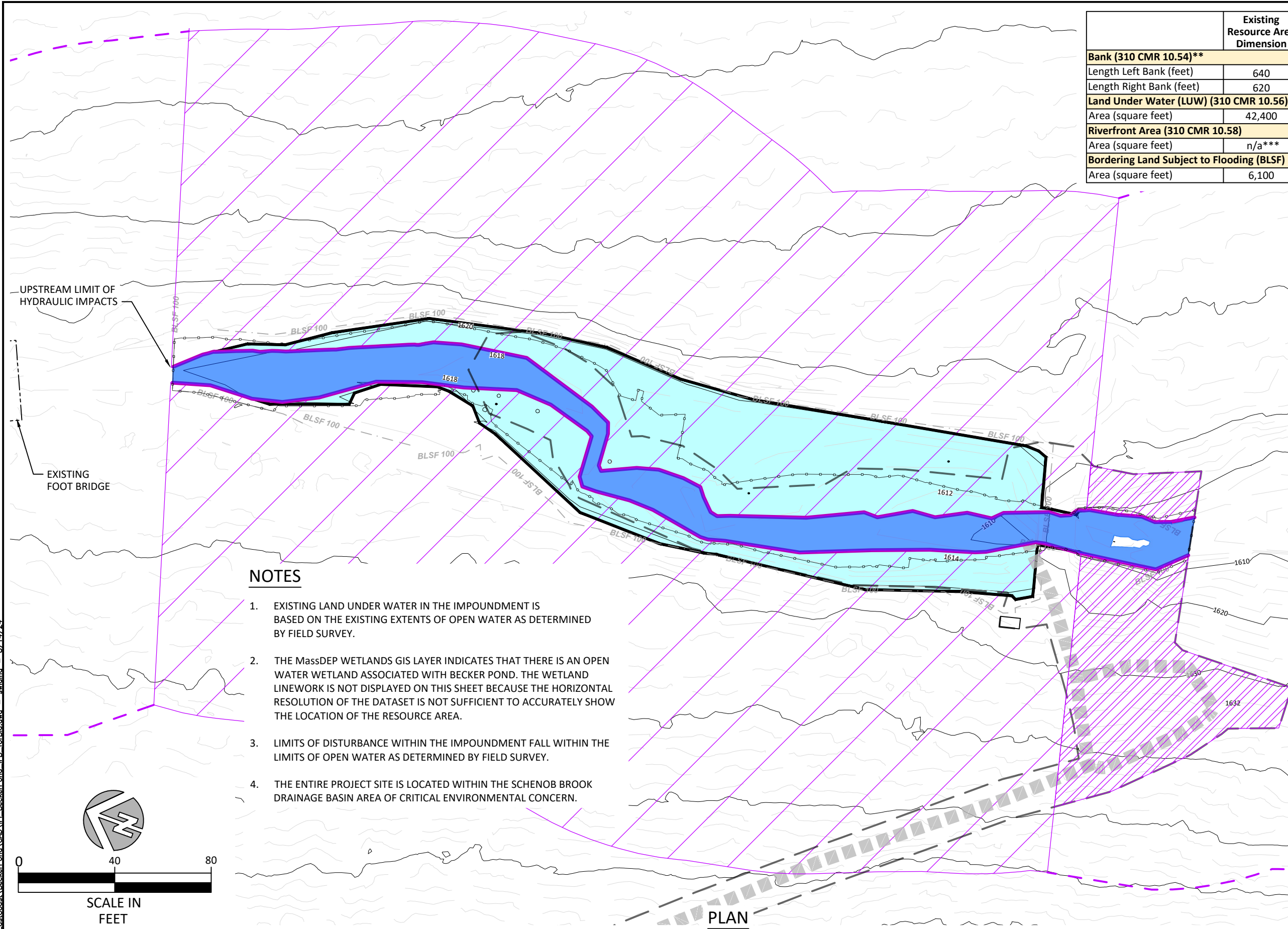
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SURFACE FABRIC TREATMENT
DETAILS

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	Existing Resource Area Dimension	Proposed Resource Area Dimension	Net Change in Resource Area	Temporary Construction Impact*
Bank (310 CMR 10.54)**				
Length Left Bank (feet)	640	640	0**	140
Length Right Bank (feet)	620	620	0**	145
Land Under Water (LUW) (310 CMR 10.56)				
Area (square feet)	42,400	13,200	-29,200	25,500
Riverfront Area (310 CMR 10.58)				
Area (square feet)	n/a***	255,500	255,500	14,150
Bordering Land Subject to Flooding (BLSF) (310 CMR 10.57)				
Area (square feet)	6,100	14,300	8,200	530

NOTES:
 * The temporary construction impact is calculated relative to the Existing Resource Area and the Limit of Disturbance.
 ** 550 feet of left bank and 560 feet of right bank will be permanently relocated upon removal of the impoundment.
 *** Riverfront Area is not applicable to the existing impoundment. Riverfront Area will be created upon removal of the impoundment.

LEGEND
 EXISTING AND PROPOSED RESOURCE AREAS

	EXISTING
	PROPOSED

LAND UNDERWATER (310CMR10.56)

	EXISTING
	PROPOSED

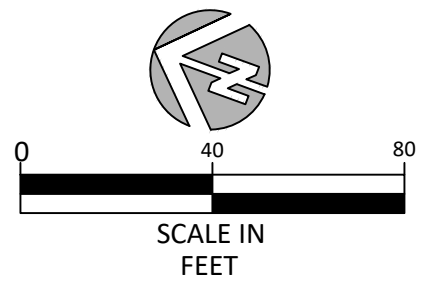
LAND SUBJECT TO FLOODING (310CMR10.57)

	BLSF 100	EXISTING
	BLSF 100	PROPOSED

RIVERFRONT AREA (310CMR10.58)

	NEW
	TEMPORARY IMPACTS
	EXISTING RIVERFRONT BOUNDARY
	LIMITS OF DISTURBANCE
	EXISTING ROAD

- NOTES**
- EXISTING LAND UNDER WATER IN THE IMPOUNDMENT IS BASED ON THE EXISTING EXTENTS OF OPEN WATER AS DETERMINED BY FIELD SURVEY.
 - THE MassDEP WETLANDS GIS LAYER INDICATES THAT THERE IS AN OPEN WATER WETLAND ASSOCIATED WITH BECKER POND. THE WETLAND LINEWORK IS NOT DISPLAYED ON THIS SHEET BECAUSE THE HORIZONTAL RESOLUTION OF THE DATASET IS NOT SUFFICIENT TO ACCURATELY SHOW THE LOCATION OF THE RESOURCE AREA.
 - LIMITS OF DISTURBANCE WITHIN THE IMPOUNDMENT FALL WITHIN THE LIMITS OF OPEN WATER AS DETERMINED BY FIELD SURVEY.
 - THE ENTIRE PROJECT SITE IS LOCATED WITHIN THE SCHENOB BROOK DRAINAGE BASIN AREA OF CRITICAL ENVIRONMENTAL CONCERN.



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RESOURCE AREA IMPACTS