

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION



TRAFFIC DATA

Current (2012) ADT ..... 1780

HYDROLOGIC DATA

Drainage Area ..... 104.2 sq mi  
Design Discharge (Q50) ..... 3,000 cfs  
Check Discharge (Q100) ..... 3,369 cfs  
Headwater Elevation (Q50) ..... 584.88 ft  
Headwater Elevation (Q100) ..... 585.20 ft  
Discharge Velocity (Q50) ..... 5.94 fps  
Discharge Velocity (Q100) ..... 6.24 fps

CROSS LAKE TOWNSHIP  
AROOSTOOK  
THOROUGHFARE BRIDGE  
OVER  
FISH RIVER  
ROUTE 161 (CARIBOU ROAD)  
WORK IDENTIFICATION NO. BH-1832(500)X  
BRIDGE NO. 2851

LIST OF DRAWINGS

Title Sheet .....	1
Quantities & General Notes .....	2
General Plan .....	3
Countermeasure Details .....	4
Right of Way Map .....	5

UTILITIES

Maine Public Service Company  
Northland Telephone (Fairpoint)

MAINTENANCE OF TRAFFIC

Existing one lane road in the vicinity of the bridge may be closed during periods of work. Road is to be reopened to traffic at the close of each work day.

PROJECT LOCATION:	Thoroughfare Bridge (#2851) over the Fish River on Route 161 (Caribou Road). Located 0.5 Miles Southeast of Route 162. Lat 47°07'47.2", Long. -68°19'05"
PROGRAM AREA:	Bridge
OUTLINE OF WORK:	Bridge Scour Countermeasures: Installation of Countermeasure Around Pier and Incidental Work.

18325.00 WIN 18325.00

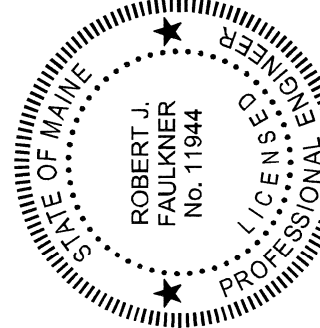
CROSS LAKE TOWNSHIP  
THOROUGHFARE BRIDGE

TITLE SHEET

SHEET NUMBER

1

OF 5



SIGNATURE  
11944  
P.E. NUMBER  
11772012  
DATE

PROGRAM	PROJECT INFORMATION
PROJECT MANAGER	BRIDGE
DESIGNER	
CONSULTANT	
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
COMMISSIONER:		11/13/12
CHIEF ENGINEER:		11/13/12

Date:11/7/2012

Username:

Division:

Filename:\001\_Title.dgn

Date:11/14/2012

Username:

Division:

Filename: ... \002\_Estimate.dgn

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
ITEMS COMMON TO BOTH ALTERNATES			
203.20	COMMON EXCAVATION	CY	20
511.07	COFFERDAM	LS	1
629.05	HAND LABOR, STRAIGHT TIME	HR	10
631.121	HVY DUTY ALL PURP EXC (INC OPER)	HR	10
631.172	TRUCK-LARGE (INC OPER)	HR	10
639.19	FIELD OFFICE TYPE B	EA	1
652.33	DRUM	EA	25
652.34	CONE	EA	25
652.35	CONSTRUCTION SIGNS	SF	100
652.361	MAINTENANCE OF TRAFFICE CONTROL DEVICES	LS	1
652.38	FLAGGER	HR	40
659.10	MOBILIZATION	LS	1
ITEMS COMMON TO ALTERNATE NO.1 (STONE FILL)			
203.2315	DISPOSAL OF DREDGE MATERIAL	T	310
610.07	STONE FILL	CY	220
620.50	EROSION CONTROL FILTER LAYER	SY	160
656.75	TEMP SOIL EROSION & WATER POLLUTION CONTROL	LS	1
ITEMS COMMON TO ALTERNATE NO.2 (CONCRETE CABLE MATS)			
502.83	CONCRETE CABLE MAT	SF	1420
656.75	TEMP SOIL EROSION & WATER POLLUTION CONTROL	LS	1

GENERAL CONSTRUCTION NOTES

1. If necessary, temporary one lane closure with flagged alternating one way traffic may be utilized during periods of work. Road is to be reopened to traffic at the close of each work day. Subject to coordination with the Resident and the Town.

2. Left and Right designations are based on looking downstream.

3. Payment for equipment, labor, and materials to access the work, as well as re-establish original ground, will be considered incidental to related Contract Bid items.

4. The clearing limits as shown on the plans are approximate. The exact limits will be established in the field by the Resident. Payment for clearing will be considered incidental to Contract Bid items.

5. Contractor shall be aware of overhead utilities parallel to the downstream fascia. Location of any additional utilities is unknown.

6. Plans of the existing structure are available on the MaineDOT website for information only. Existing plans may not be current or "as-built".

7. Contractor shall field verify stream bed elevations along the upstream bridge fascia, downstream bridge fascia and along the centerline of the bridge. Streambed elevations shall be taken every 5 feet along all three lines and provided to the Resident. Resident will determine final streambed elevation(s) based on this information. This work shall not be paid for directly and will be considered incidental to related contract items.

8. Sections shown on the design plans depict "typical" conditions. The intent of the installation may have to be altered to fit actual site conditions as directed by the Resident.

9. Outlines of the countermeasure installation are approximate and represent the minimum dimensions desired. The Resident may direct modifications to fit site conditions.

10. Estimates of quantities are necessarily approximate. Payment will be made on actual quantities installed to the satisfaction of the Resident.

11. Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:

a. If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.

b. If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.

c. If a design change results in changes to estimate quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.

12. Work at the pier shall be performed within cofferdams per Specification 511.

13. The top surface of the countermeasure material shall be as indicated on the plans, flush with the top of footing but matching the surface of the undisturbed stream bottom at the outer edges in the stream.

14. Excavated stream bottom material that cannot be beneficially reused on-site (as approved by the Resident) shall be disposed of in accordance with Special Provision 203 - Disposal of Dredge Material.

15. The Contractor shall abide by all requirements of the construction permits, including periods when no work in the stream is allowed to protect fish passage.

16. Erosion Control Filter Layer (Item 620.50) shall be placed beneath the countermeasure material installation. Ground beneath must be smoothed out prior to placement in accordance with Special Provision 620.

17. Excavation required for installation of countermeasure, as shown on the plans, shall be considered incidental to related Contract Bid Items. Quantity estimated for Item 203.20 shall be for any additional miscellaneous excavation, as directed by the Resident.

18. Contractor shall avoid damaging existing dry hydrant at the downstream left corner of the bridge. Any repairs to the dry hydrant, as directed by the Resident, shall be at the Contractor's expense.

19. Grout testing and curing boxes shall be considered incidental to related Contract Bid Items.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

BH - 1832(500)X

WIN  
18325.00

BRIDGE PLANS

Cross Lake Twp - BR 2851  
SCOUR COUNTERMEASURE

INSTALLATION PLAN

ESTIMATED QUANTITIES  
& GENERAL NOTES

SHEET NUMBER

2

OF 5

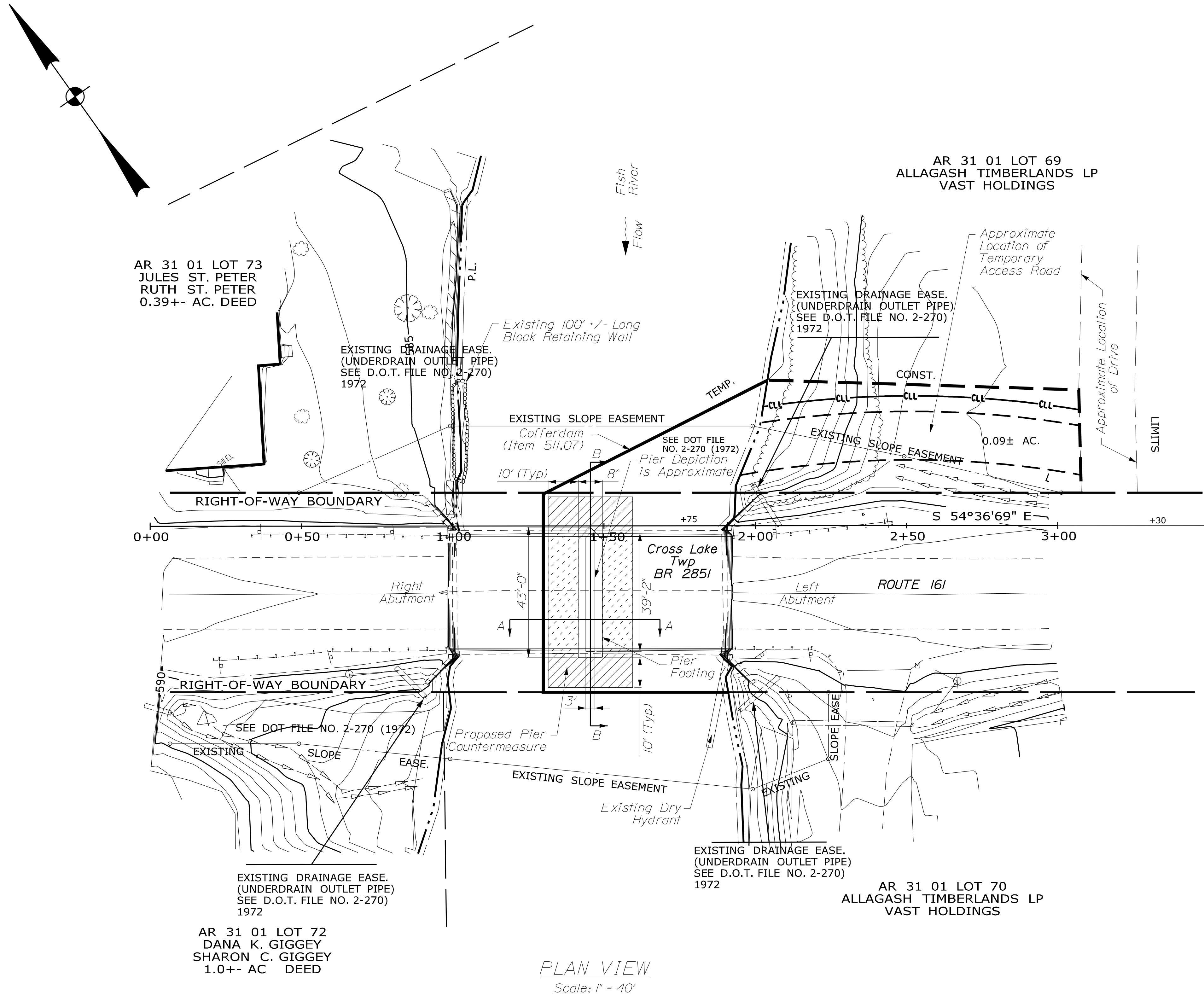


Date:11/7/2012

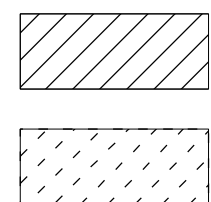
Username:

Division:

Filename: ... \003\_Bridge.dgn



PLAN LEGEND



Proposed Pier Countermeasure\*

Proposed Pier Countermeasure\* Under Bridge

\* See Sections on Sheet 4 for Minimum Thickness Requirements.

Note:

1. See Countermeasure Details Sheet for Section A-A and B-B.



Left Side of Pier



Left Abutment (Upstream)

Note: Straight Alignment Based Between Stations 1+00.0 and 1+90.8 Located at Exterior Edge of Abutment Seat at Backwall as Shown in the Above Photo.



Downstream Nose of Pier

STATE OF MAINE	
DEPARTMENT OF TRANSPORTATION	
BH-1832(500)X	
WIN	BRIDGE PLANS
18325.00	
Bridge No. 2851	

PROJ. MANAGER	DATE	BY	SIGNATURE	P.E. NUMBER	DATE
R. Faulkner	11/7/2012	M. Domes			
DESIGN-DETAILED	11/7/2012	B. Horne			
CHECKED-REVIEWED					
DESIGN-DETAILED					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

Cross Lake Twp - BR 2851 SCOUR COUNTERMEASURE INSTALLATION PLAN	GENERAL PLAN
---	--------------

SHEET NUMBER
3
OF 5

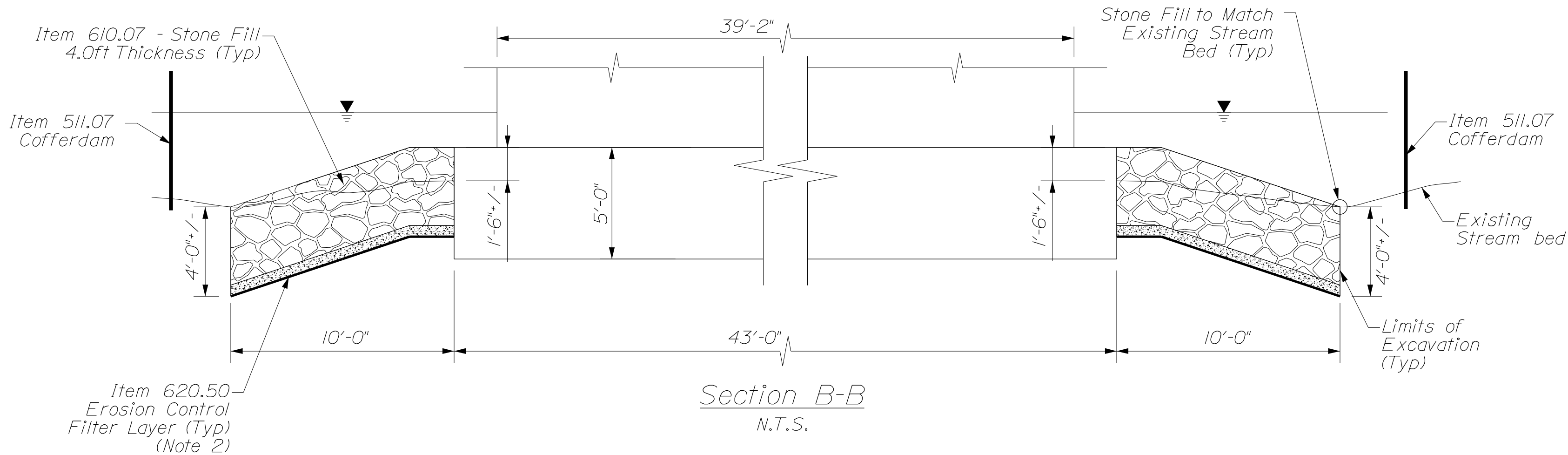
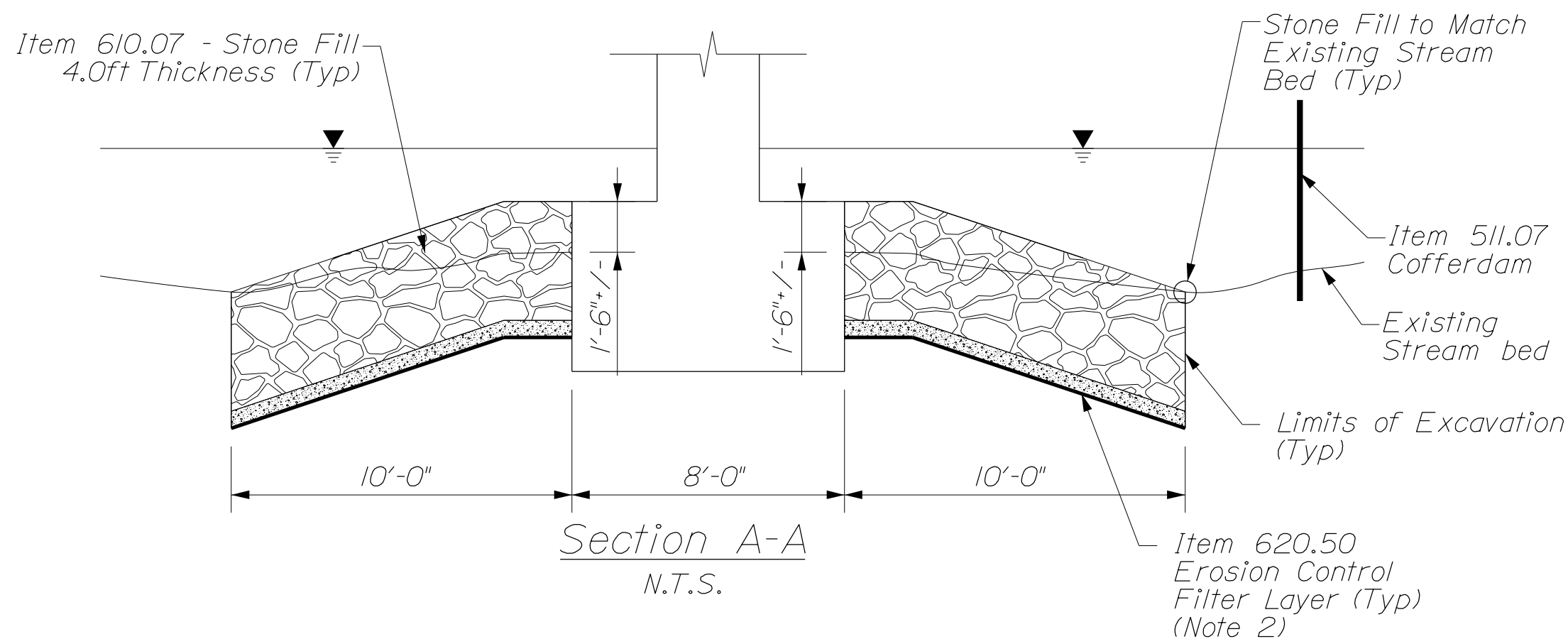
Date:11/14/2012

Username:

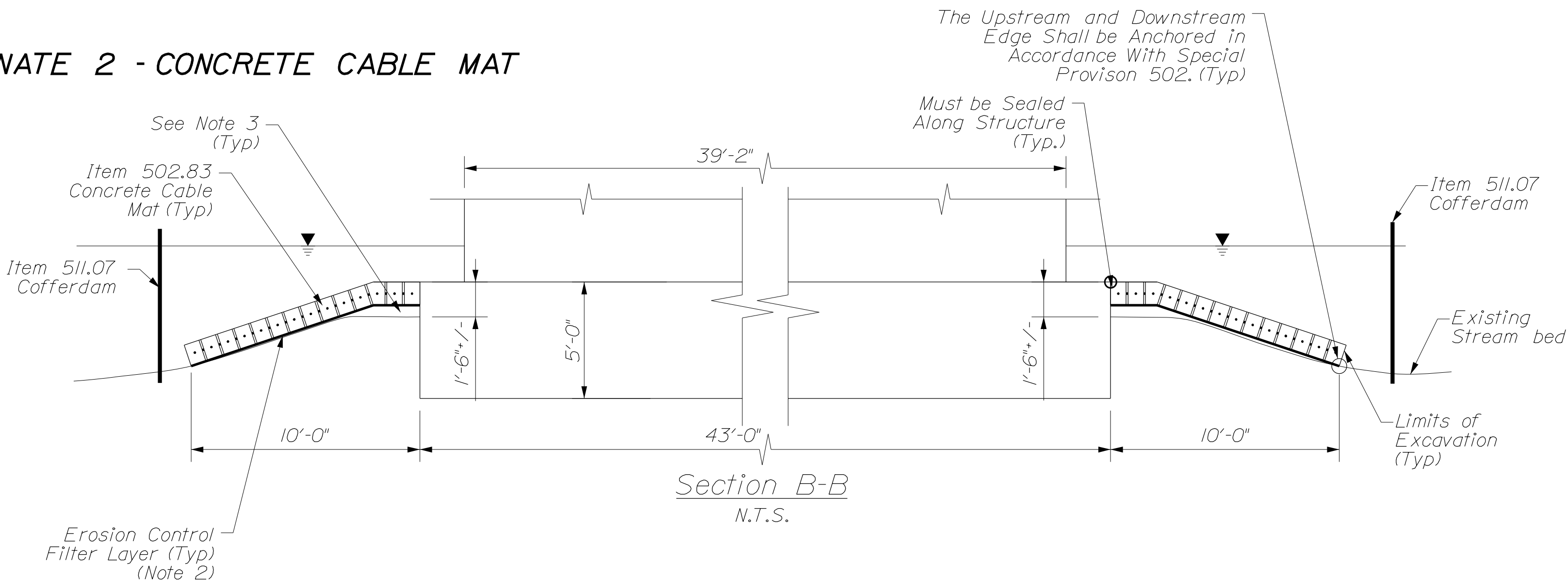
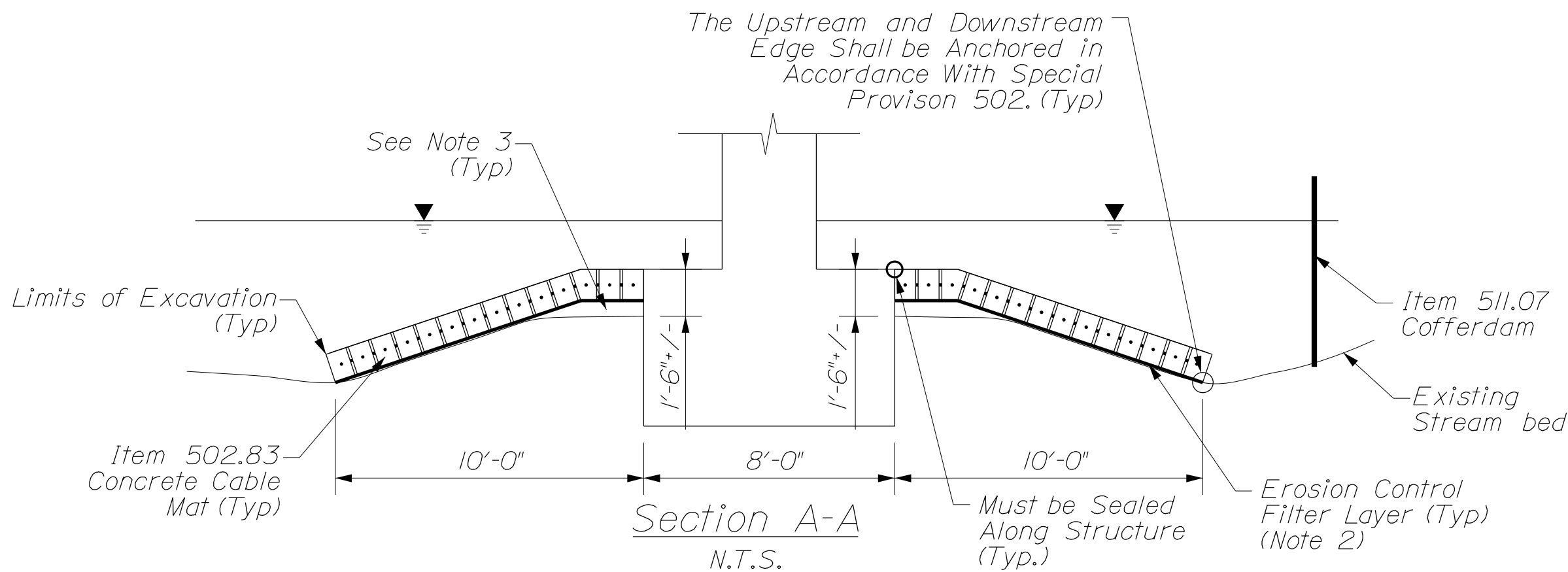
Division:

Filename: ... \004\_Btyp.dgn

ALTERNATE 1 - STONE FILL



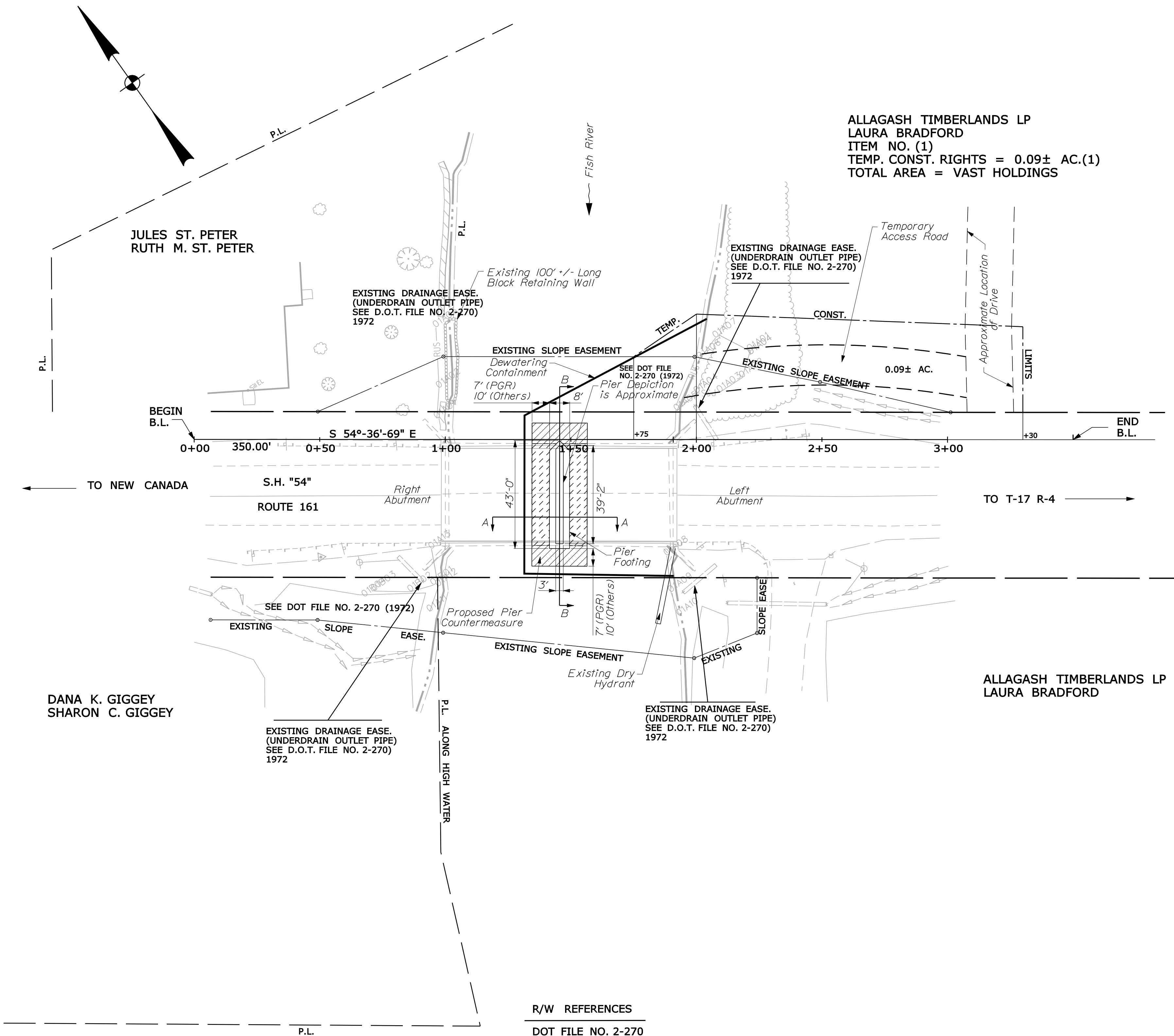
ALTERNATE 2 - CONCRETE CABLE MAT



Notes:

1. Clearance From Low Chord to Stream bed During Field Visit on 6/9/2009 Varied From 7.1ft to 8.2ft, With a Water Depth of Approximately 1.5ft.
2. Protective Aggregate Cushion of Erosion Control Layer shall be 6" thick beneath Stone Fill. Concrete Cable Mats shall bear directly on geotextile fabric. Geotextile fabric under Concrete Cable Mats shall be considered incidental to Item 502.83.
3. Existing Stream bed Shall be Leveled in Accordance With Special Provision 502. Material Required to Raise Stream bed Elevation Shall be Considered Incidental to Item 502.83.

DATE	SIGNATURE	P.E. NUMBER	DATE
11/2012			
11/2012			



R/W REFERENCES

DOT FILE NO. 2-270

AROOSTOOK COUNTY COMM. REC.  
VOL. 5 PG.356

BRIDGE NO. 2851  
THOROUGHFARE BRIDGE  
OVER  
FISH RIVER  
WIN 18325.00

REVISIONS				PLAN FILED IN PLAN BOOK						COUNTY RECORD				DAVID BERNHARDT COMMISSIONER KENNETH L. SWEENEY CHIEF ENGINEER  DATE
NO.	DATE	DESCRIPTION	BY	NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE					

PLAN NOT TO BE RECORDED

STATE HIGHWAY "54"		
ROUTE 161		
CROSS LAKE TWP. AROOSTOOK COUNTY		
FEDERAL AID PROJECT NO. BH-1832(500)X		
SEPTEMBER 2012 SCALE 1" = 25'	RIGHT-OF-WAY MAP SHEET 1 OF 1	D.O.T. FILE NO. 2-548

SHEET NUMBER
5
OF 5

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016  
CROSS LAKE TWP.  
RIGHT OF WAY MAP

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W		
PROP. LINES		
AREAS		D.S.G.

SYMBOLS

• IP or • IIPF (IRON PIPE or PIN FOUND)  
□ S.T. (SEPTIC TANK)  
△ BM (BENCH MARK)  
— WATER LINE  
— GAS LINE  
— TELEPHONE LINE  
— SEWER LINE

(WELL)  
— GRADING LIMIT LINE  
— CONSTRUCTION LIMIT LINE  
— PROPERTY LINE  
— PL  
— LIMITS OF TROUGHT PORTION (LOW.P.)  
— EXISTING RIGHT OF WAY  
— NEW RIGHT OF WAY  
— NEW ROW WITHIN EXIST. ROW  
— CONTROL OF ACCESS