

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



EDMUNDS TWP - DENNYSVILLE WASHINGTON COUNTY DENNYS RIVER BRIDGE OVER DENNYS RIVER U.S. ROUTE 1 PROJECT NO. 18968.00 PROJECT LENGTH 0.036 mi. BRIDGE NO. 5626

LIST OF DRAWINGS

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Pier Rehabilitation	4
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UTILITIES

Emera Maine
Maine Fiber Company
Fairpoint Communication

MAINTENANCE OF TRAFFIC

Maintain two lanes of traffic whenever possible. Daily lane closures will be allowed for access and Contractor safety. Temporary lane closures to be controlled by flaggers.

SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Eighth Edition 2017.

TRAFFIC DATA

Current (2018) AADT	1610
Future (2038) AADT	1930
DHV - % of AADT	12%
Design Hour Volume	232
Heavy Trucks (% of AADT)	11%
Heavy Trucks (% of DHV)	11%
Directional Distribution (% of DHV)	54%
18 kip Equivalent P 2.0	69
18 kip Equivalent P 2.5	66
Design Speed (mph)	55

MATERIALS

Concrete:
Piers Class "A SCC"
Abutments Class "A"

Reinforcing Steel ASTM A 615/A 615M, Grade 60

BASIC DESIGN STRESSES

Concrete f 'c = 4000 psi
Reinforcing Steel f y = 60,000 psi

PROJECT LOCATION	Dennys River Bridge which carries U.S. Route 1 over Dennys River. Located at the Edmunds Twp - Dennysville town line. Lat./Long. 44°54'23.1" N 67°13'23.4" W
PROGRAM AREA	Highway Bridges - Traditional
OUTLINE OF WORK	Bridge Substructure Rehabilitation

WIN 18968.00

18968.00

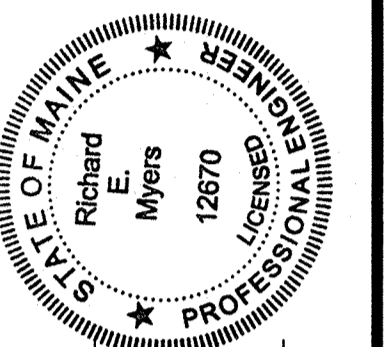
EDMUNDS TWP - DENNYSVILLE
DENNYS RIVER BRIDGE

TITLE SHEET

SHEET NUMBER

1

OF 6



SIGNATURE: *R. E. Myers*
12670
P.E. NUMBER
DATE: 7.19.18

PROGRAM	BRIDGE
PROJECT MANAGER	M. WIGHT
DESIGNER	B. BARTLETT
CONSULTANT	
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

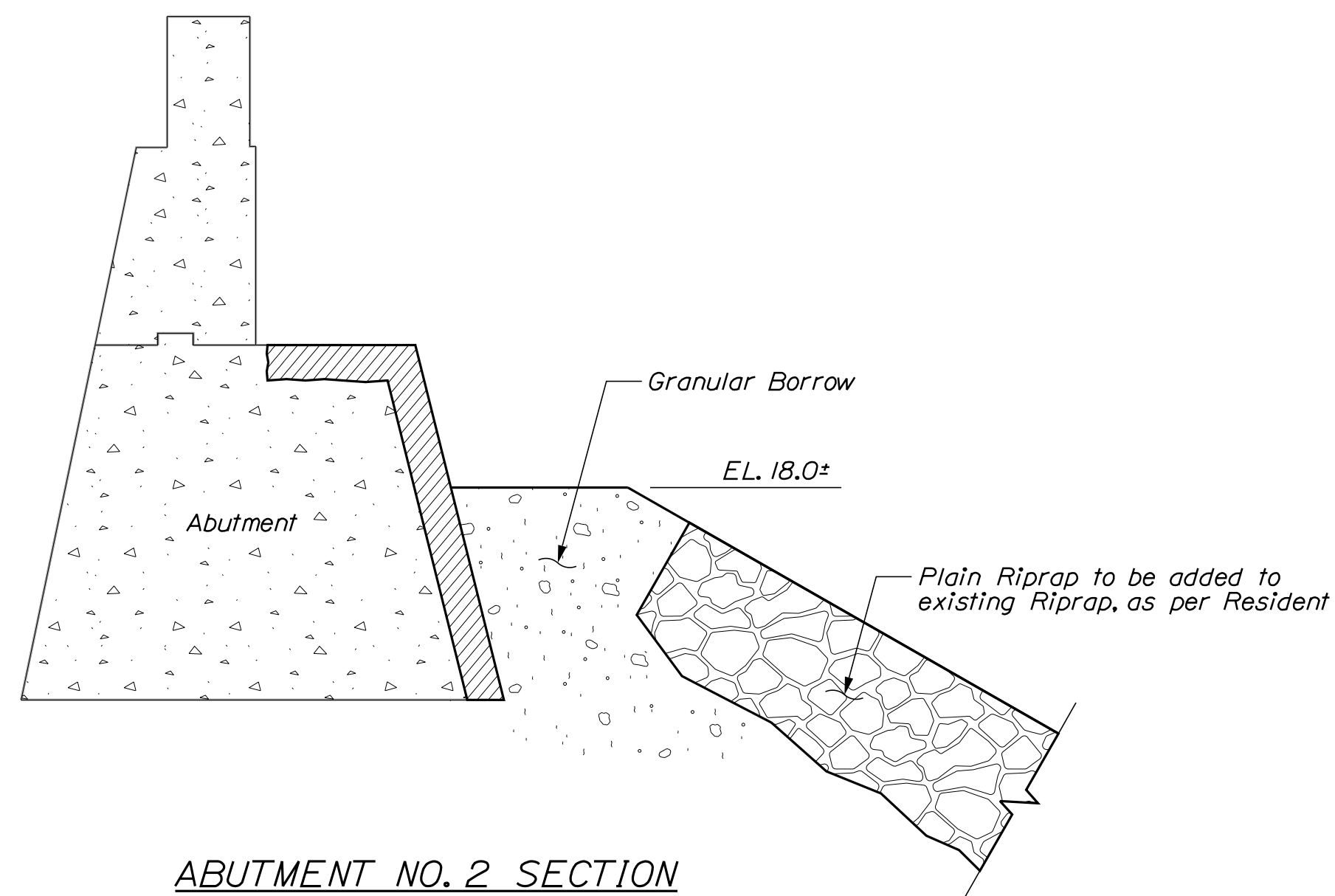
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED: *[Signature]*
COMMISSIONER: *[Signature]*
DATE: 7/19/18
CHIEF ENGINEER: *[Signature]*

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
203.25	GRANULAR BORROW	10	CY
502.23	STRUCTURAL CONCRETE PIERS	36	CY
503.12	REINFORCING STEEL, FABRICATED AND DELIVERED	3550	LB
503.13	REINFORCING STEEL, PLACING	3550	LB
511.07	COFFERDAM, PIER NO. 1	1	LS
511.07	COFFERDAM, PIER NO. 2	1	LS
514.06	CURING BOX FOR CONCRETE CYLINDERS	1	EA
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES (180 SY)	1	LS
518.60	REPAIR OF VERTICAL SURFACES < 8 IN.	12	SF
518.61	REPAIR OF VERTICAL SURFACES ≥ 8 INCHES	4	CY
610.08	PLAIN RIPRAP	75	CY
615.07	LOAM	10	CY
618.14	SEEDING METHOD NO. 2	2	UN
619.12	MULCH	2	UN
619.14	EROSION CONTROL MIX	10	CY
620.58	EROSION CONTROL GEOTEXTILE	110	SY
629.05	HAND LABOR, STRAIGHT TIME	100	HR
631.10	AIR COMPRESSOR (INCLUDING OPERATOR)	16	HR
631.11	AIR TOOL (INCLUDING OPERATOR)	16	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	40	HR
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	10	HR
631.34	STONE SAW RENTAL (INCLUDING OPERATOR)	32	HR
639.19	FIELD OFFICE TYPE B	0.5	EA
652.33	DRUM	25	EA
652.34	CONE	25	EA
652.35	CONSTRUCTION SIGNS	300	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES (30 CD)	1	LS
652.38	FLAGGER	720	HR
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

GENERAL CONSTRUCTION NOTES

- Place loam 2 inches deep on all new or reconstructed sideslopes or as directed by the Resident.
- Erosion Control Mix may be substituted in those areas normally receiving loam and seed as directed by the Resident. Placement shall be in accordance with Standard Specifications Section 619, Mulch. Payment will be made under Item No. 619.14, Erosion Control Mix.
- Protective Coating for Concrete Surfaces shall be applied to the following areas:

All concrete pier columns
All repaired pier caps
- Project information referred to below may be accessed at the following MaineDOT web address: <http://www.maine.gov/mdot/contractors/>.
- The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.
- Select, previous inspection photographs are attached to the existing bridge plans located on the web. These photographs are provided for informational purposes only to show the piers during a low tide cycle. It is uncertain if this is a common low tide or an extreme low tide.
- 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:
 - If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.
 - If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.
 - If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.
- Payment for equipment, labor, and materials to access the work, as well as re-establish original ground conditions, will be considered incidental to related Contract Items.
- Based on survey and historical inspection photos, high tide is around elevation 7 to 8 and low tide is around elevation -3 to -4. Elevations are approximate and referenced to the NAVD88.
- The intent of the cofferdam pay items is not to provide a dewatered work space for the entire tide range. The cofferdam pay items are intended to provide the Contractor more time during the tide range to work in the river.
- Removal of the existing wrought iron shell around each pier column shall be paid for under Hand Labor and equipment rental items. Applicable items shall be agreed upon between the Resident and the Contractor before the work commences. Disposal of the existing wrought iron shells will be considered incidental to the Contract. No separate payment will be made for disposal.
- Elevations shown for abutment and pier elements are derived from survey of the bridge seats and existing plan dimensions. Actual elevations in the field may vary.



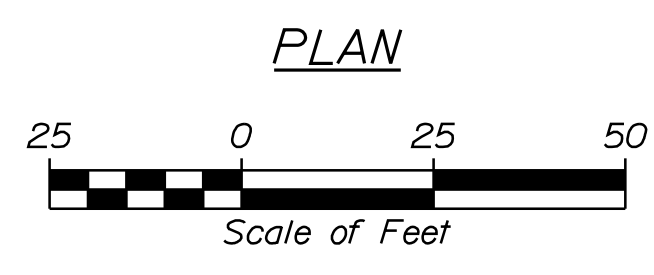
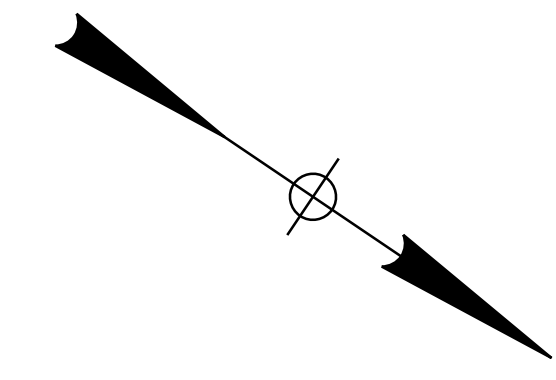
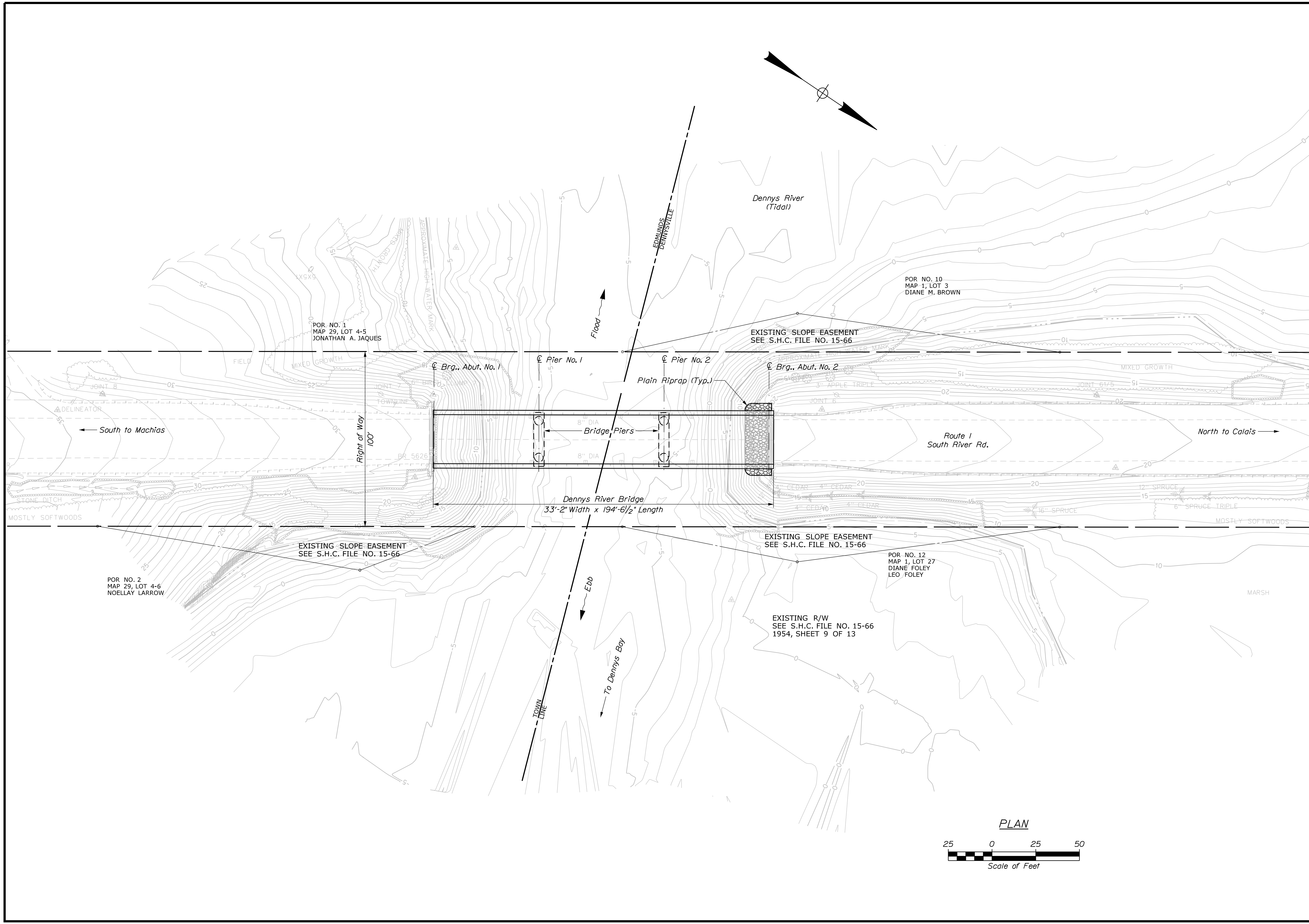
ABUTMENT NO. 2 SECTION

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	18968.00 WIN 18968.00	BRIDGE NO. 5626 BRIDGE PLANS
DENNYS RIVER BRIDGE DENNYS RIVER EDMUNDS TWP - DENNISVILLE WASHINGTON COUNTY	ESTIMATED QUANTITIES AND GENERAL CONSTRUCTION NOTES	SHEET NUMBER 2 OF 6
DESIGN-DETAILED: B. BARTLETT CHECKED-REVIEWED: M. POULIN DESIGN-DETAILED: REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	BY: D. SHAW DATE: JULY 2018 SIGNATURE: P.E. NUMBER: DATE:	DATE: JULY 2018 DATE: JULY 2018

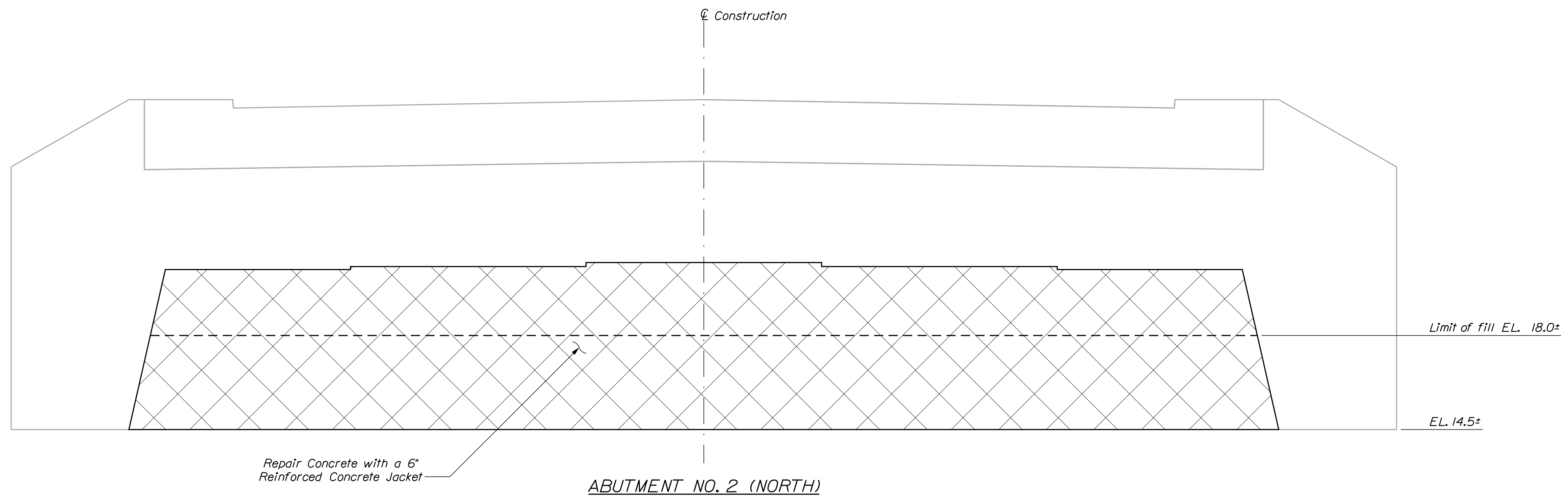
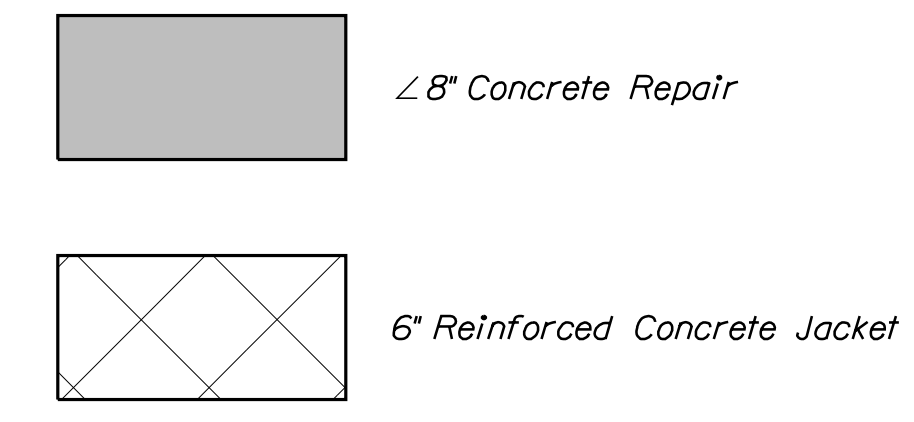
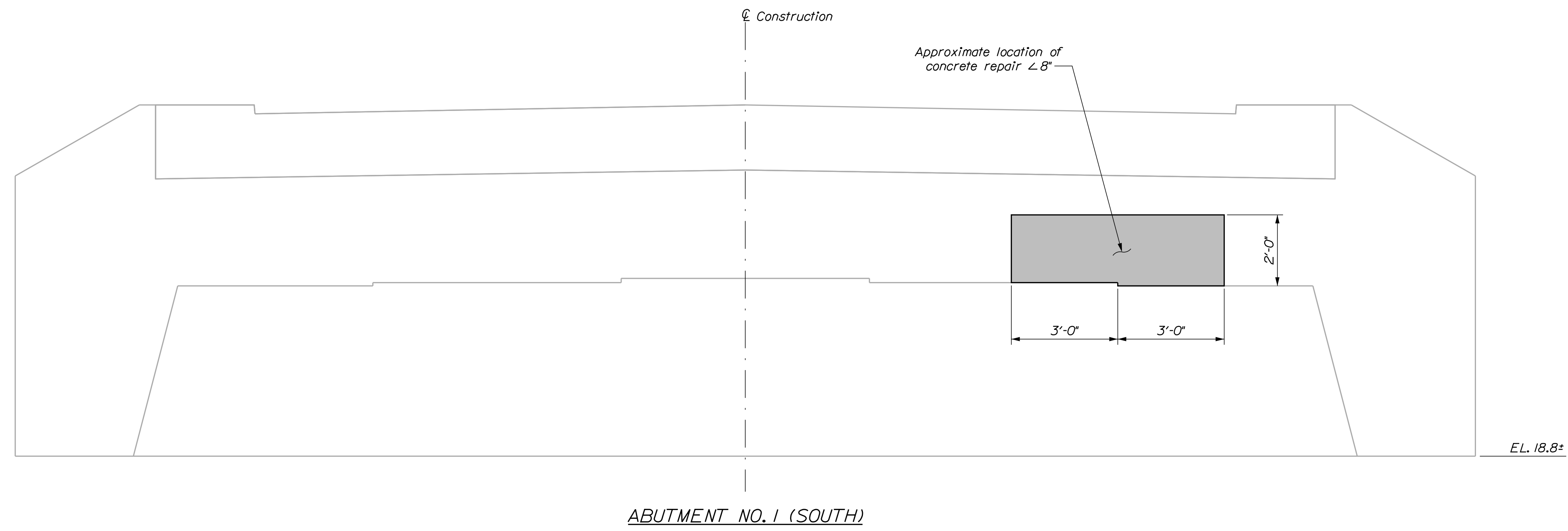
Date: 7/19/2018

Username: David Shaw

Filename: ... \00\BRIDGE\MSTA\003_CenPlan.dgn Division: BRIDGE



STATE OF MAINE DEPARTMENT OF TRANSPORTATION		18968.00	
EDMUNDS TWP - DENNISVILLE WASHINGTON COUNTY		WIN 18968.00	
DENNIS RIVER BRIDGE DENNIS RIVER EDMUNDS TWP - DENNISVILLE WASHINGTON COUNTY		BRIDGE NO. 5626 BRIDGE PLANS	
PROJ. MANAGER	M. WIGHT	BY	DATE
CHECKED/REVIEWED	B. BARTLETT	D. SHAW	JULY 2018
DESIGN/DETAILED			
DESIGN/DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
GENERAL PLAN		SIGNATURE	P.E. NUMBER
			DATE
SHEET NUMBER		3	
		OF 6	



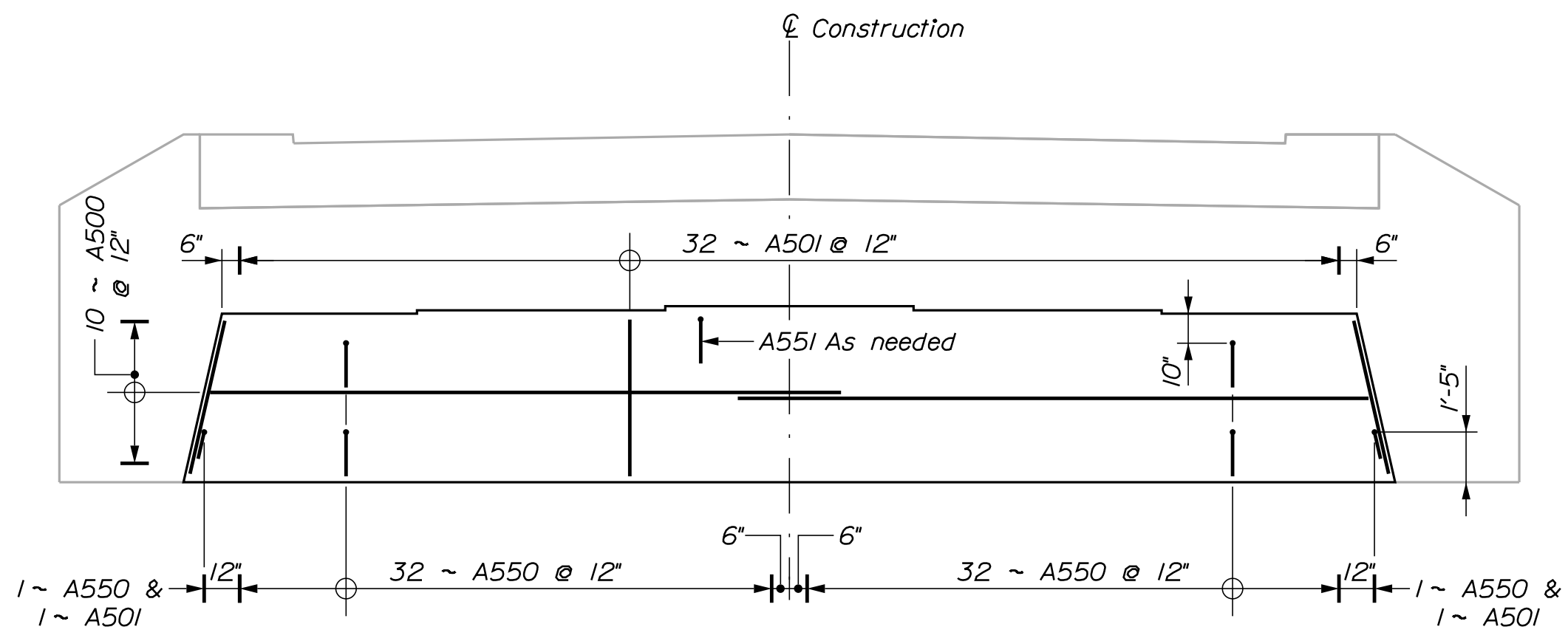
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		18968.00		WIN		18968.00		BRIDGE NO. 5626		BRIDGE PLANS	
DENNIS RIVER BRIDGE		DENNIS RIVER		EDMUNDS TWP - DENNISVILLE WASHINGTON COUNTY		ABUTMENT REHABILITATION		SHEET NUMBER		5		OF 6	
PROJ. MANAGER	M. WIGHT	BY	D. SHAW	DATE	JULY 2018	SIGNATURE	P.E. NUMBER	DATE					
DESIGN-DETAILED	B. BARTLETT	CHECKED-REVIEWED											
DESIGN-DETAILED		DESIGN-DETAILED											
REVISIONS 1		REVISIONS 2											
REVISIONS 3		REVISIONS 4											
FIELD CHANGES													

Date: 7/19/2018

Username: David.Shaw

Division: BRIDGE

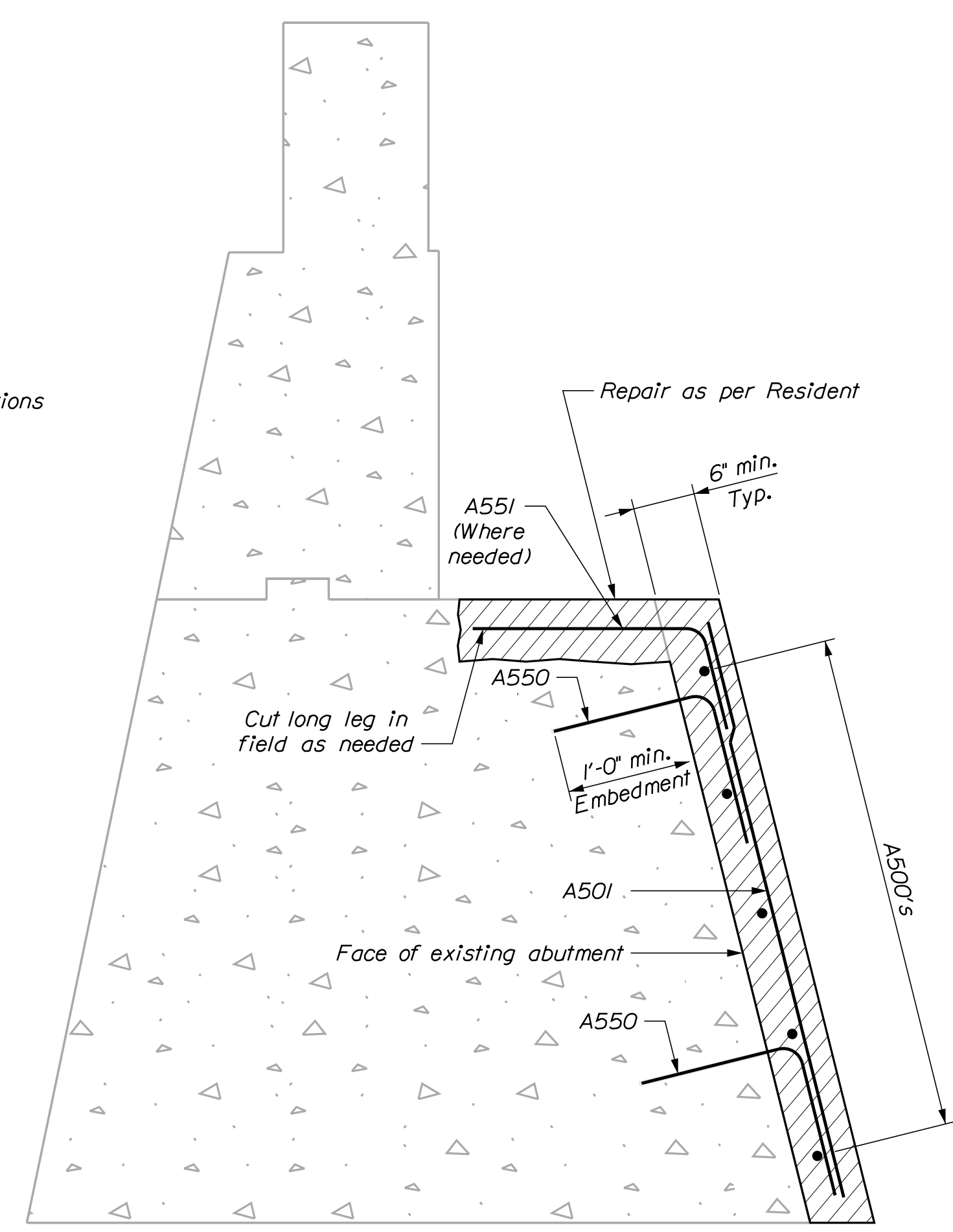
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ABUTMENT NO. 2 (NORTH)

ABUTMENT AND WINGWALL NOTES

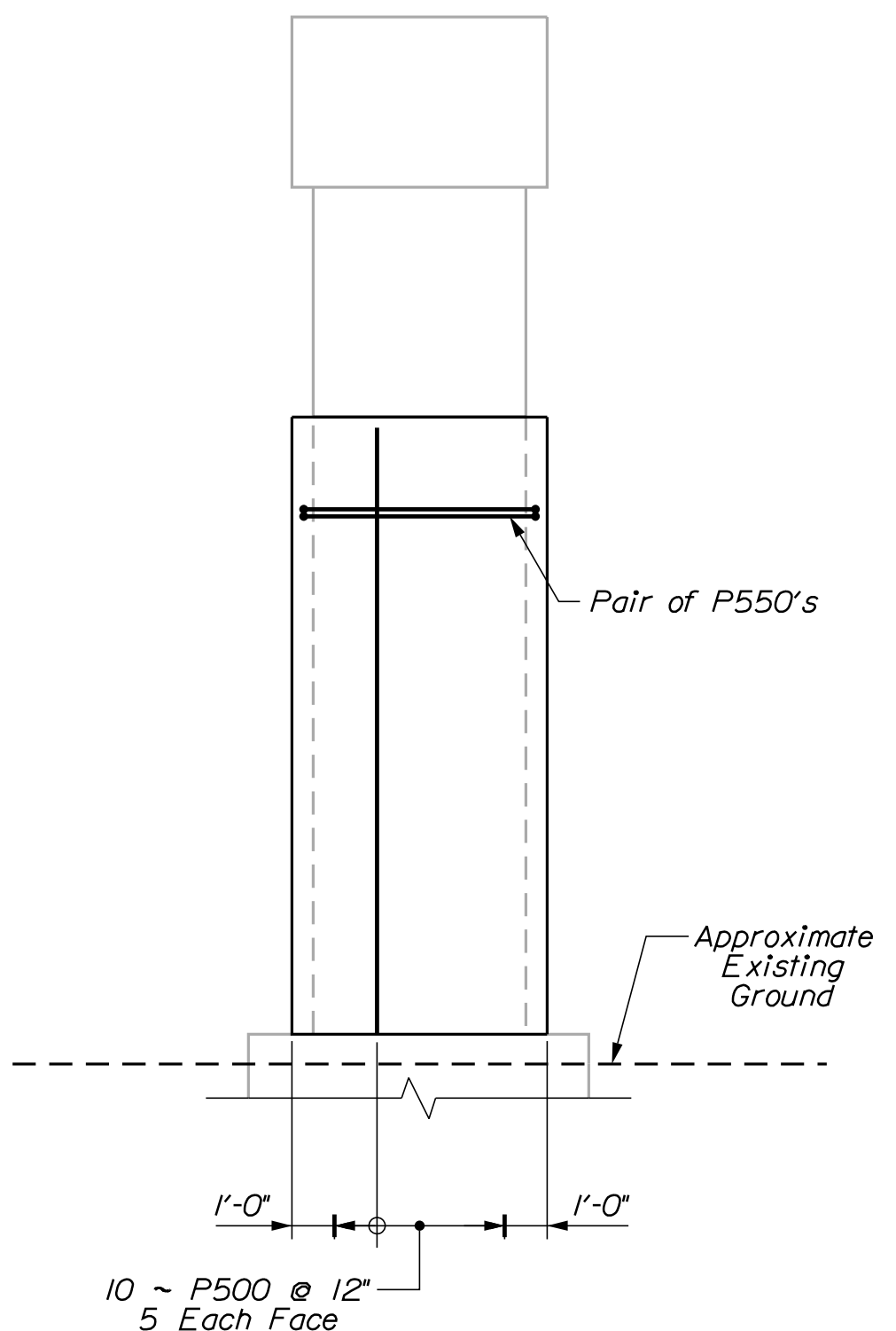
1. The Contractor shall use care not to damage the existing reinforcing steel which is to remain. Any damaged reinforcing steel shall be replaced as directed by the Resident at no expense to the Department.
2. Reinforcing steel shall have 2 inches of cover unless otherwise noted.
3. All dimensions based on or related to the existing bridge shall be verified in the field by the Contractor.
4. All exposed edges of concrete shall have a 3/4" chamfer unless noted otherwise.
5. Where drilling and anchoring reinforcement is specified, the Contractor shall use a material listed on the Maine Department of Transportation Qualified Products List of Concrete Adhesive Anchor Systems. The depth of embedment shall be sufficient to develop 125% of the yield strength of the bar per the manufacturer's recommendations or 12 inches, whichever is greater. Proposed anchoring material and embedment depth shall be submitted for approval. No separate payment will be made for drilling and anchoring of reinforcing steel, but shall be incidental to the related concrete or reinforcing pay item.
6. Surface preparation and concrete for the reinforced concrete jacket on the abutment will be paid for under 518.61.



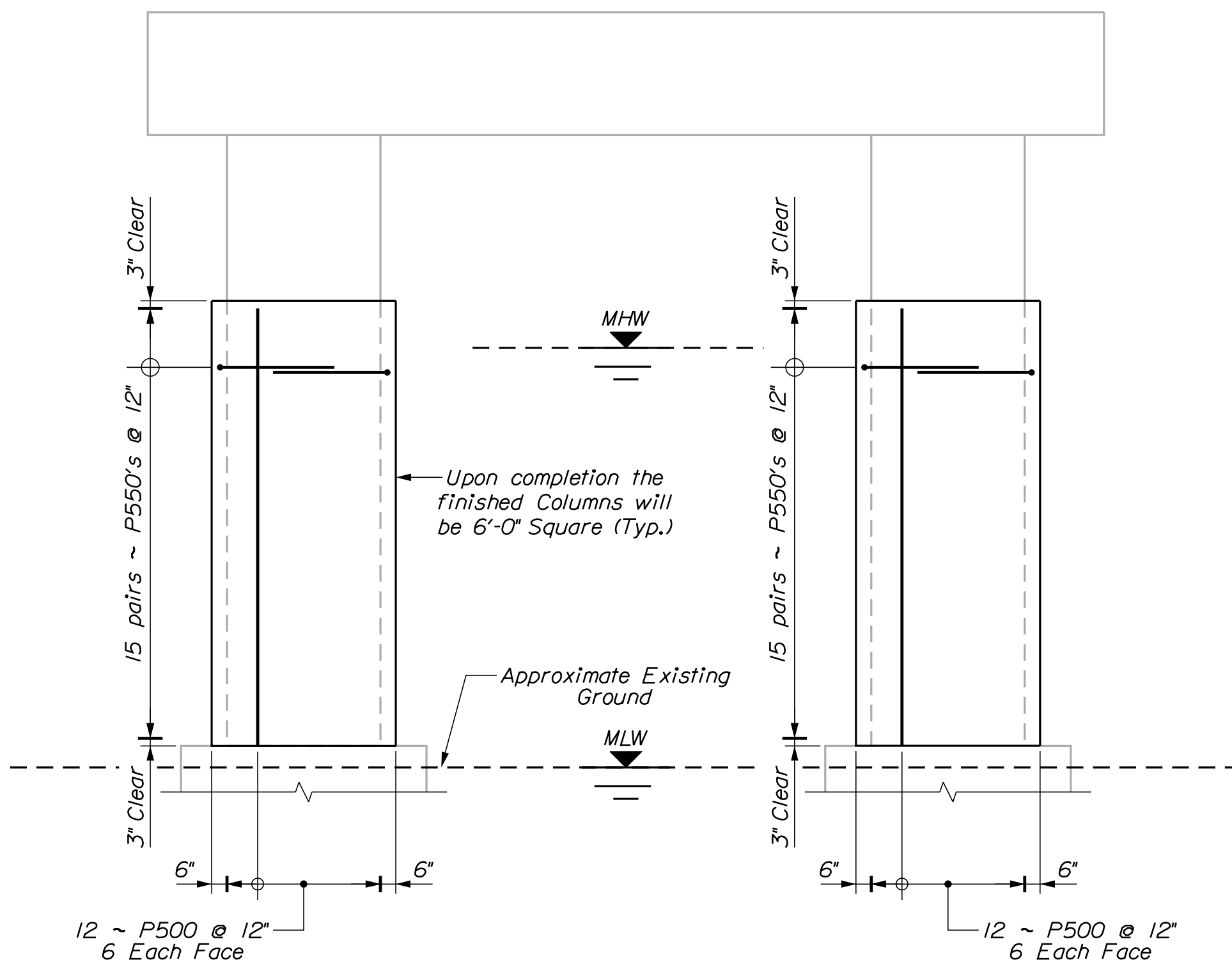
ABUTMENT SECTION

STRAIGHT BARS			
MARK	QTY.	LENGTH	LOCATION
ABUTMENT NO. 2			
A500	10	17'-9"	Abutment No. 2 Breastwall
A501	34	4'-5"	Abutment No. 2 Breastwall
PIERS			
P500	88	14'-3"	Column (22 Each Column)

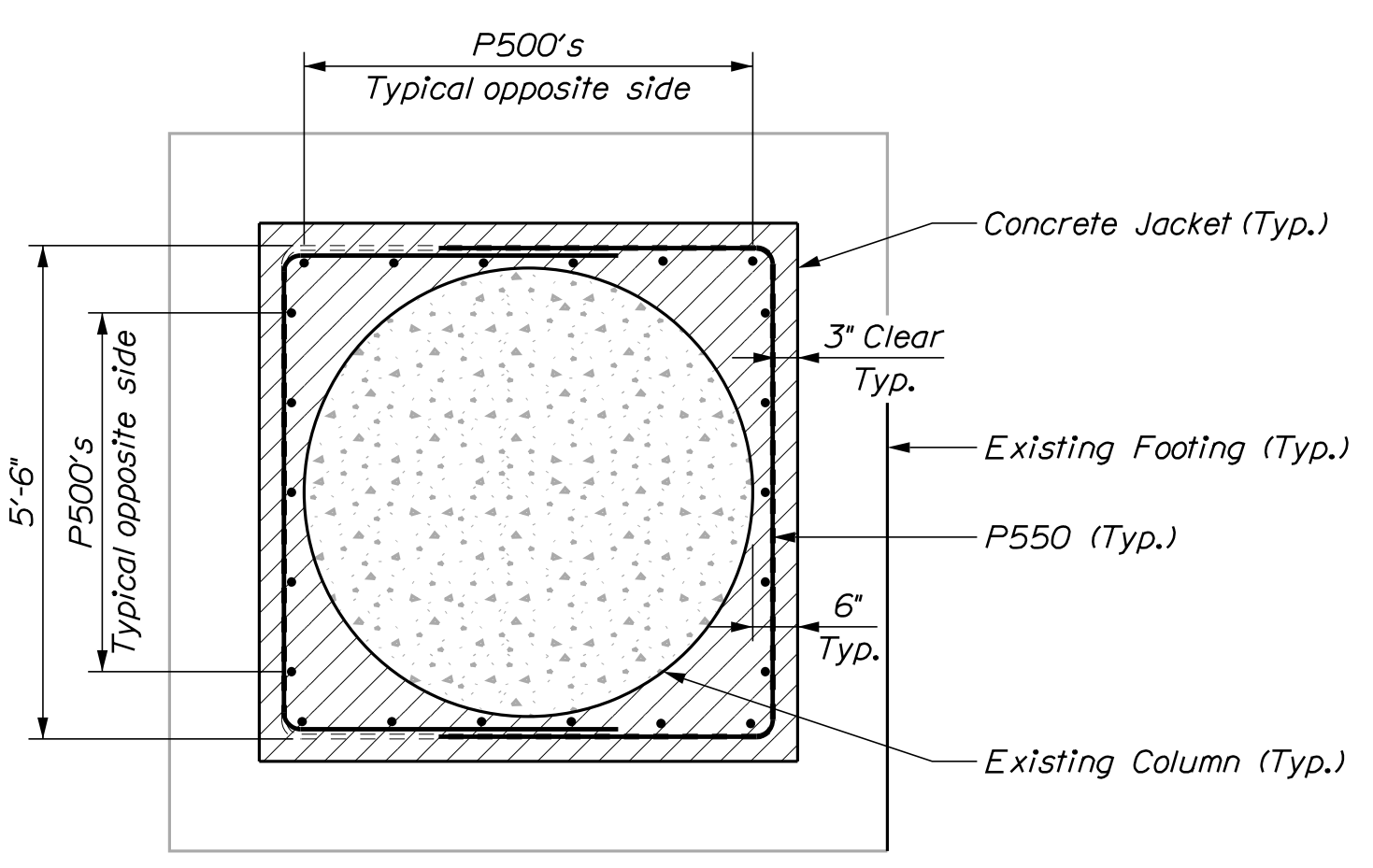
BENT BARS																
MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION		
ABUTMENT NO. 2																
A550	66	2'-6"	L	1'-3"	1'-3"											Abutment Breastwall
A551	30	2'-10"	TL	2'-0"	10"						1'-0/2"					Bridge Seat
PIERS																
P550	120	13'-0"	U	3'-9"	5'-6"	3'-9"										Pier Column (30 per column)



SIDE Reinforcement for concrete jacket

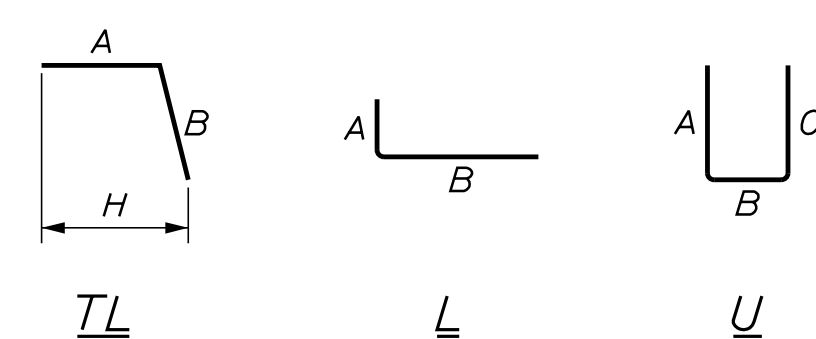


ELEVATION Reinforcement for concrete jacket



SECTION OF JACKETED CONCRETE COLUMN

TYPE - BENDING DIAGRAMS



All dimensions are out-to-out of bar.
Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.
Reinforcing Bar: ASTM A 615/A 615M, Grade 60

GENERAL NOTES

1. The first two digits following the letter(s) of the mark indicate the size of the bar:
Mark "A502" = bar size #5
Mark "P805" = bar size #8
Mark "S650" = bar size #6
2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case will be based on crank bars as scheduled on the plans.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	18968.00 WIN 18968.00	BRIDGE NO. 6626 BRIDGE PLANS
DENNIS RIVER BRIDGE DENNIS RIVER EDMUNDS TWP - DENNISVILLE WASHINGTON COUNTY	ABUTMENT AND PIER REINFORCEMENT	SHEET NUMBER 6 OF 6
PROJ. MANAGER DESIGN-DETAILED CHECKED-REVIEWED DESIGN-DETAILED DESIGN-DETAILED REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	M. WIGHT B. BARTLETT D. SHAW	DATE JULY 2018
SIGNATURE	P.E. NUMBER	DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



EDMUNDS TWP.
WASHINGTON COUNTY
NEW HOBART STREAM BRIDGE
OVER
HOBART STREAM
U.S. ROUTE 1
PROJECT NO. 18969.00
PROJECT LENGTH 0.029 mi.
BRIDGE NO. 5612

SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Eighth Edition 2017.

TRAFFIC DATA

Current (2017) AADT	1590
Future (2037) AADT	1910
DHV - % of AADT	11%
Design Hour Volume	210
Heavy Trucks (% of AADT)	11%
Heavy Trucks (% of DHV)	11%
Directional Distribution (% of DHV)	54%
18 kip Equivalent P 2.0	69
18 kip Equivalent P 2.5	66
Design Speed (mph)	55

MATERIALS

Concrete:
Piers Class "A SCC"
Abutments Class "A"

Reinforcing Steel ASTM A 615/A 615M, Grade 60

BASIC DESIGN STRESSES

Concrete f 'c = 4000 psi
Reinforcing Steel f y = 60,000 psi

LIST OF DRAWINGS

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Abutment Rehabilitation	5
Abutment and Pier Reinforcement	6

UTILITIES

Emera Maine
Maine Fiber Company

Charter Communications
Fairpoint Communications

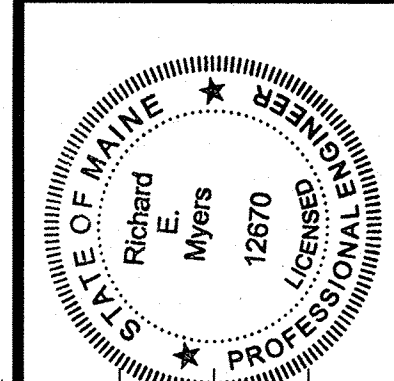
MAINTENANCE OF TRAFFIC

Maintain two lanes of traffic whenever possible. Daily lane closures will be allowed for access and Contractor safety. Temporary lane closures to be controlled by flaggers.

PROJECT LOCATION	New Hobart Stream Bridge which carries U.S. Route 1 over Hobart Stream. Located 0.3 of a mile south of Belyea Road. Lat./Long. 44°53'11.1" N 67°12'01.6" W
PROGRAM AREA	Highway Bridges - Traditional
OUTLINE OF WORK	Bridge Substructure Rehabilitation

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED: [Signature]
COMMISSIONER: [Signature]
CHIEF ENGINEER: [Signature]

DATE: 7/19/18
7-19-18



SIGNATURE: [Signature]
12.6.70
P.E. NUMBER: 12670
DATE: 2.5.2018

PROJECT INFORMATION

PROGRAM	BRIDGE
PROJECT MANAGER	M. WIGHT
DESIGNER	B. BARTLETT
CONSULTANT	
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

EDMUNDS TWP.
NEW HOBART STREAM BRIDGE
TITLE SHEET

SHEET NUMBER
1
OF 6

WIN 18969.00

Date: 6/25/2018
Username: David Shaw
Division: BRIDGE
Filename: \\00\BRIDGE\MSTA\001_Title.dgn

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
502.23	STRUCTURAL CONCRETE PIERS	35	CY
503.12	REINFORCING STEEL, FABRICATED AND DELIVERED	3020	LB
503.13	REINFORCING STEEL, PLACING	3020	LB
511.07	COFFERDAM, PIER NO. 1	1	LS
511.07	COFFERDAM, PIER NO. 2	1	LS
514.06	CURING BOX FOR CONCRETE CYLINDERS	1	EA
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES (190 SY)	1	LS
518.60	REPAIR OF VERTICAL SURFACES < 8 IN.	200	SF
518.61	REPAIR OF VERTICAL SURFACES ≥ 8 IN.	2	CY
518.70	REPAIR OF OVERHEAD SURFACES < 8 IN.	80	SF
615.07	LOAM	10	CY
618.14	SEEDING METHOD NUMBER 2	2	UN
619.12	MULCH	2	UN
619.14	EROSION CONTROL MIX	10	CY
629.05	HAND LABOR, STRAIGHT TIME	100	HR
631.10	AIR COMPRESSOR (INCLUDING OPERATOR)	16	HR
631.11	AIR TOOL (INCLUDING OPERATOR)	16	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	40	HR
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	10	HR
631.34	STONE SAW RENTAL (INCLUDING OPERATOR)	32	HR
639.19	FIELD OFFICE TYPE B	0.5	EA
652.33	DRUM	25	EA
652.34	CONE	25	EA
652.35	CONSTRUCTION SIGNS	300	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES (30 CD)	1	LS
652.38	FLAGGER	720	HR
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

GENERAL CONSTRUCTION NOTES

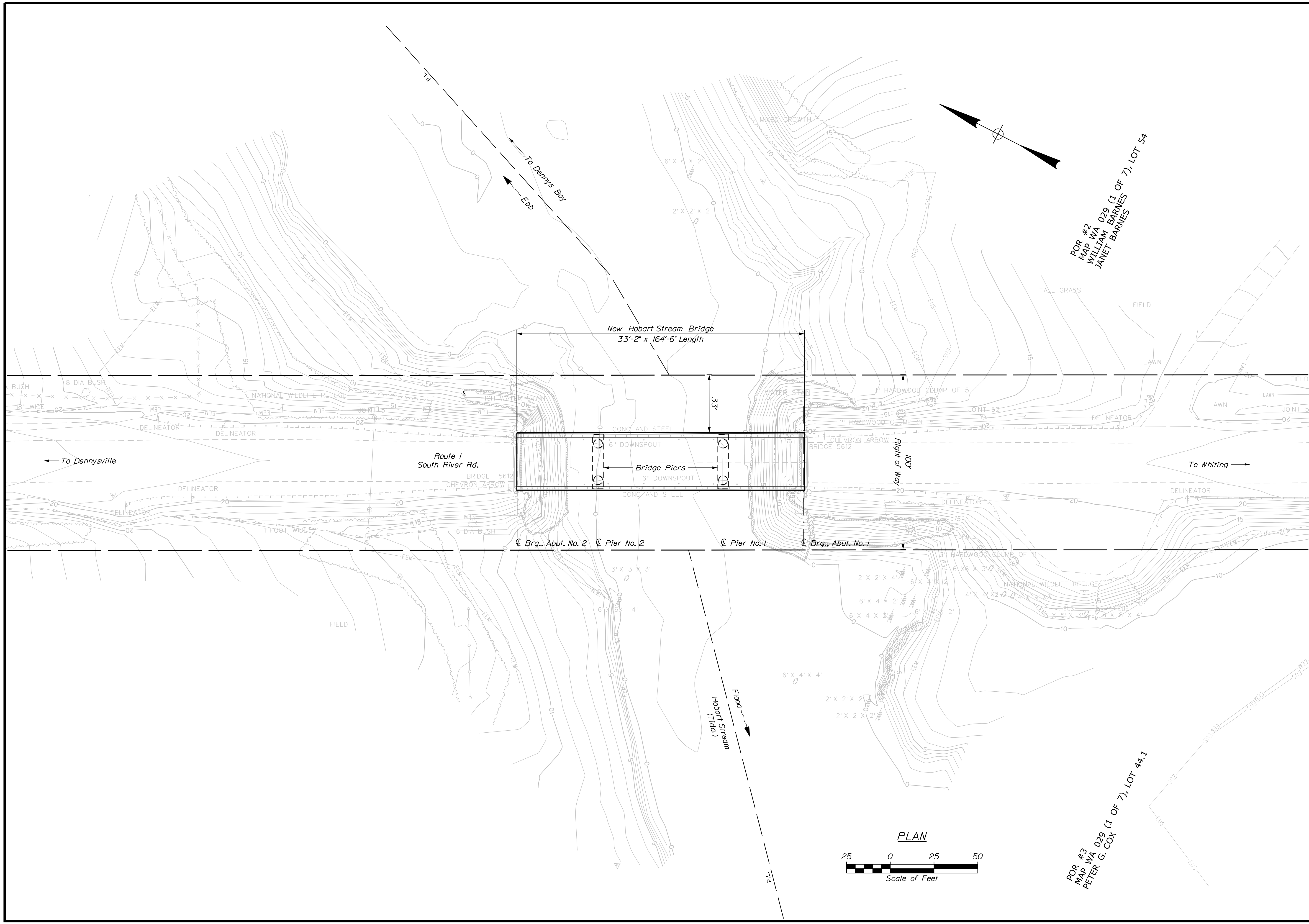
- Place loam 2 inches deep on all new or reconstructed sideslopes or as directed by the Resident.
- Erosion Control Mix may be substituted in those areas normally receiving loam and seed as directed by the Resident. Placement shall be in accordance with Standard Specifications Section 619, Mulch. Payment will be made under Item No. 619.14, Erosion Control Mix.
- Protective Coating for Concrete Surfaces shall be applied to the following areas:
 - All concrete pier columns
 - All repaired pier caps
- Project information referred to below may be accessed at the following MaineDOT web address: <http://www.maine.gov/mdot/contractors/>.
- The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.
- Select, previous inspection photographs are attached to the existing bridge plans located on the web. These photographs are provided for informational purposes only to show the piers during a low tide cycle. It is uncertain if this is a common low tide or an extreme low tide.
- 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:
 - If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.
 - If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.
 - If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.
- Payment for equipment, labor, and materials to access the work, as well as re-establish original ground conditions, will be considered incidental to related Contract Items.
- Based on survey and historical inspection photos, high tide is around elevation 10 to 11 and low tide is around elevation 0 to -1. Elevations are approximate and referenced to the NAVD88.
- The intent of the cofferdam pay items is not to provide a dewatered work space for the entire tide range. The cofferdam pay items are intended to provide the Contractor more time during the tide range to work in the river.
- Removal of the existing wrought iron shell around each pier column shall be paid for under Hand Labor and equipment rental items. Applicable items shall be agreed upon between the Resident and the Contractor before the work commences. Disposal of the existing wrought iron shells will be considered incidental to the Contract. No separate payment will be made for disposal.
- Excavation required to expose the top of the existing footings/pile cap will be paid for under Hand Labor and/or appropriate equipment rental items. Applicable items shall be agreed upon between the Resident and the Contractor before the work commences.
- Elevations shown for abutment and pier elements are derived from survey of the bridge seats and existing plan dimensions. Actual elevations in the field may vary.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION 18969.00 WIN 18969.00 BRIDGE NO. 5612 BRIDGE PLANS	NEW HOBART STREAM BRIDGE HOBART STREAM EDMUNDS TWP. WASHINGTON COUNTY ESTIMATED QUANTITIES AND GENERAL CONSTRUCTION NOTES
SHEET NUMBER 2 OF 6	PROJ. MANAGER DESIGN-DETAILED CHECKED-REVIEWED DESIGNS-DETAILED REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES
MIKE WRIGHT B. BARTLETT M. POLIIN	BY D. SHAW
DATE JULY 2018 JULY 2018	SIGNATURE P.E. NUMBER DATE

Date: 6/25/2018

Username: David Shaw

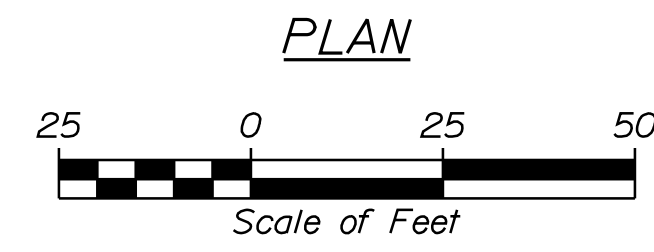
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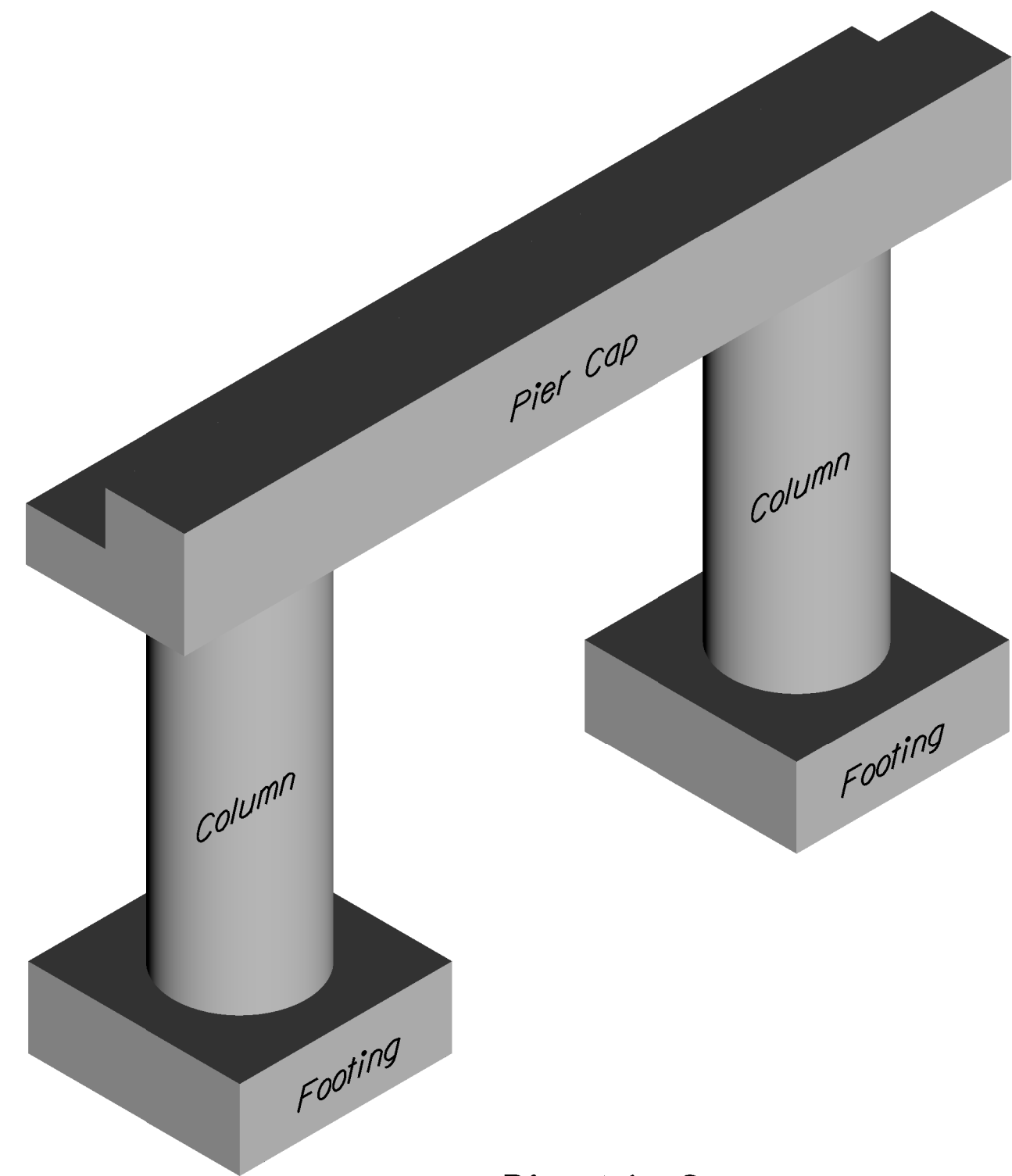


STATE OF MAINE DEPARTMENT OF TRANSPORTATION		18969.00	
BRIDGE NO. 6612		WIN 18969.00	
BRIDGE PLANS			
PROJ. MGR	MKE WIGHT	DATE	JULY 2018
CHECKED	D. BARTLETT	BY	D. SHAW
DESIGN	REVIEWED	SIGNATURE	
DESIGN	DETAILED	P.E. NUMBER	
REVISIONS 1		DATE	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
NEW HOBART STREAM BRIDGE HOBART STREAM EDMUNDS TWP. WASHINGTON COUNTY		GENERAL PLAN	
SHEET NUMBER		3	
		OF 6	

POR #2
MAP WA 029 (1 OF 7), LOT 54
WILLIAM BARNES
JANET BARNES

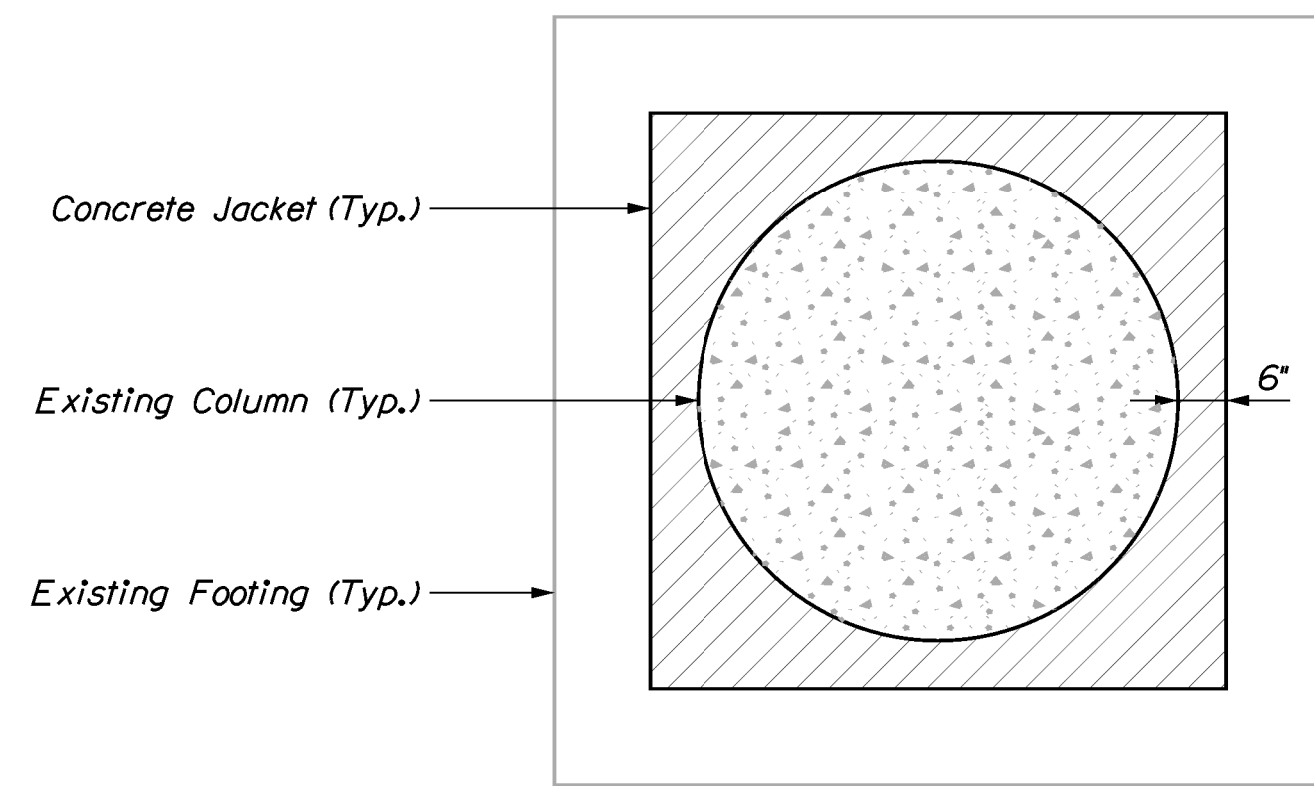
POR #3
MAP WA 029 (1 OF 7), LOT 44.1
PETER G. COX



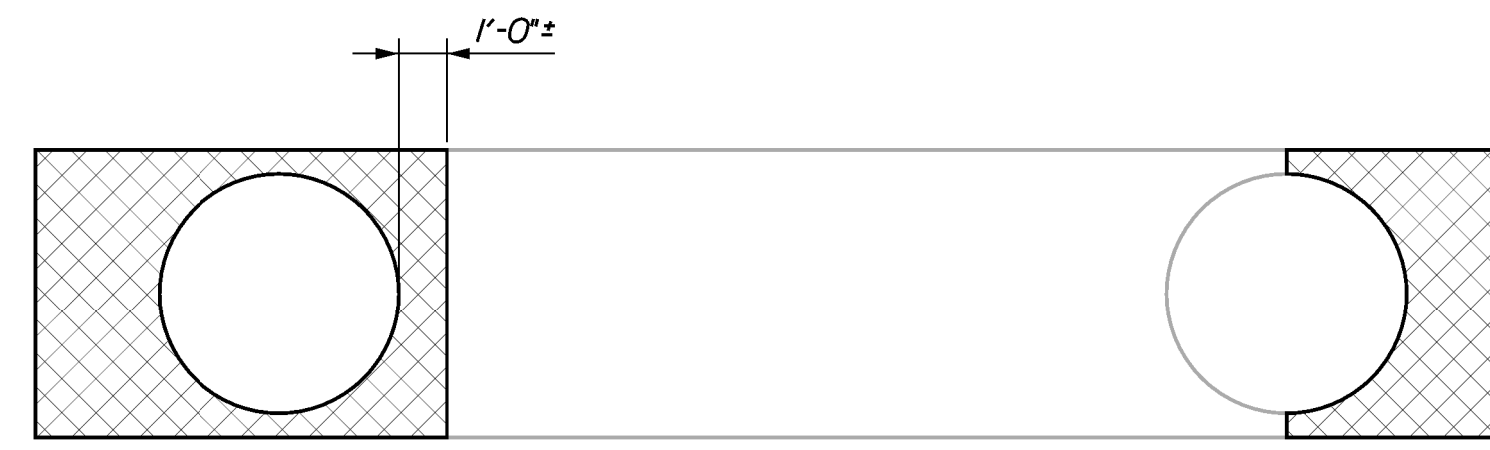


Pier 1 & 2

Note:
Wrought Iron Shell on each pier column shall be removed and replaced with a new Reinforced Concrete Jacket (4 pier columns total)

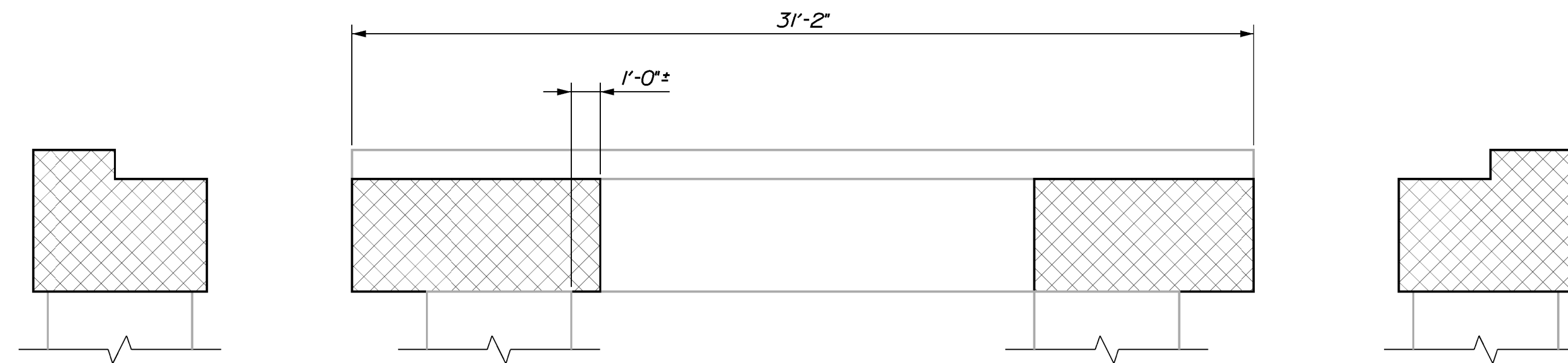


PIER COLUMN SECTION
(Reinforcement not shown)



EXISTING NORTH PIER CAP
Underside of Pier Cap

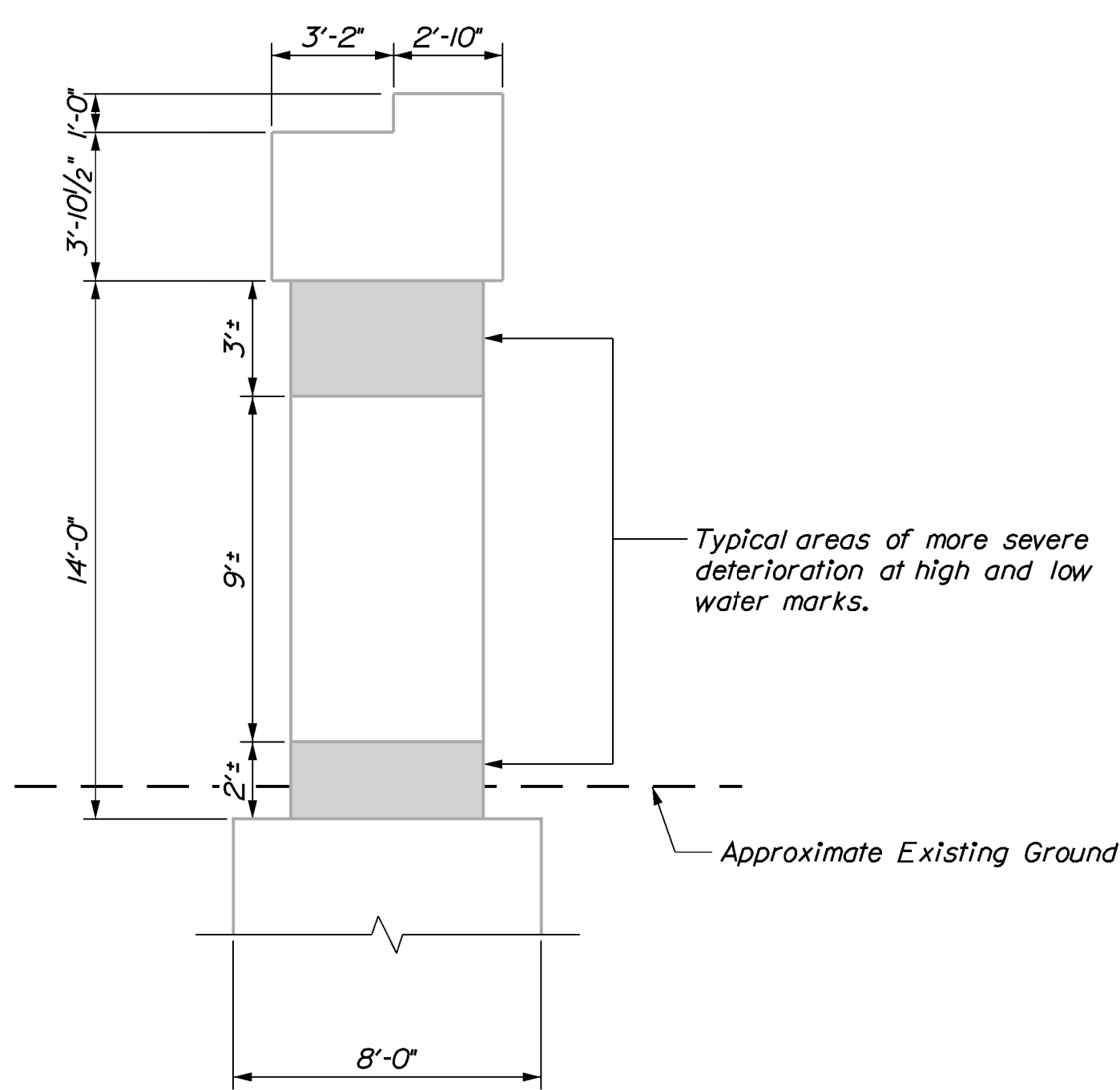
∠ 8" Concrete Repair



EXISTING NORTH PIER CAP
Southern Face

END OF PIER CAP

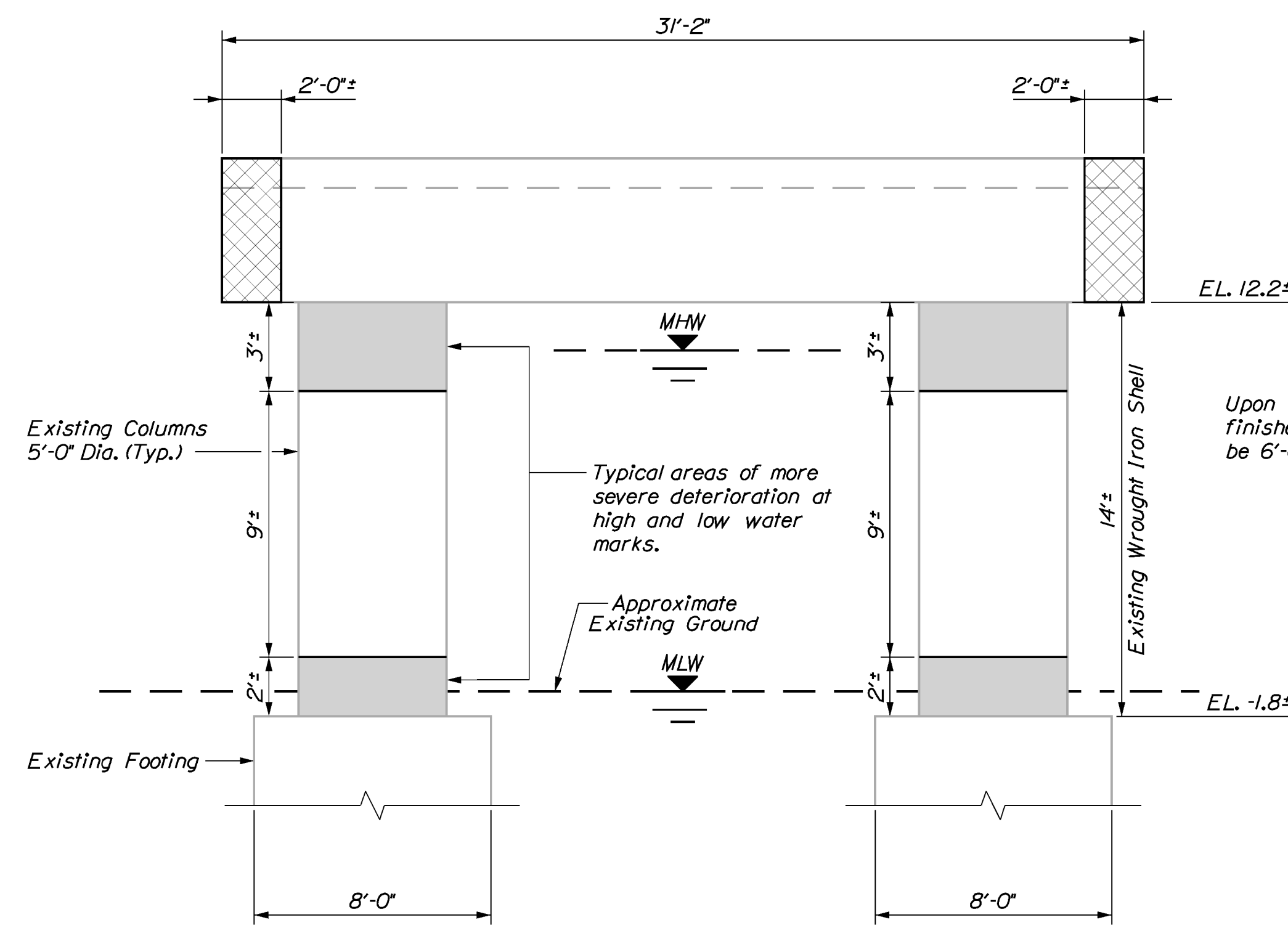
END OF PIER CAP



SIDE VIEW

Typical areas of more severe deterioration at high and low water marks.

Approximate Existing Ground



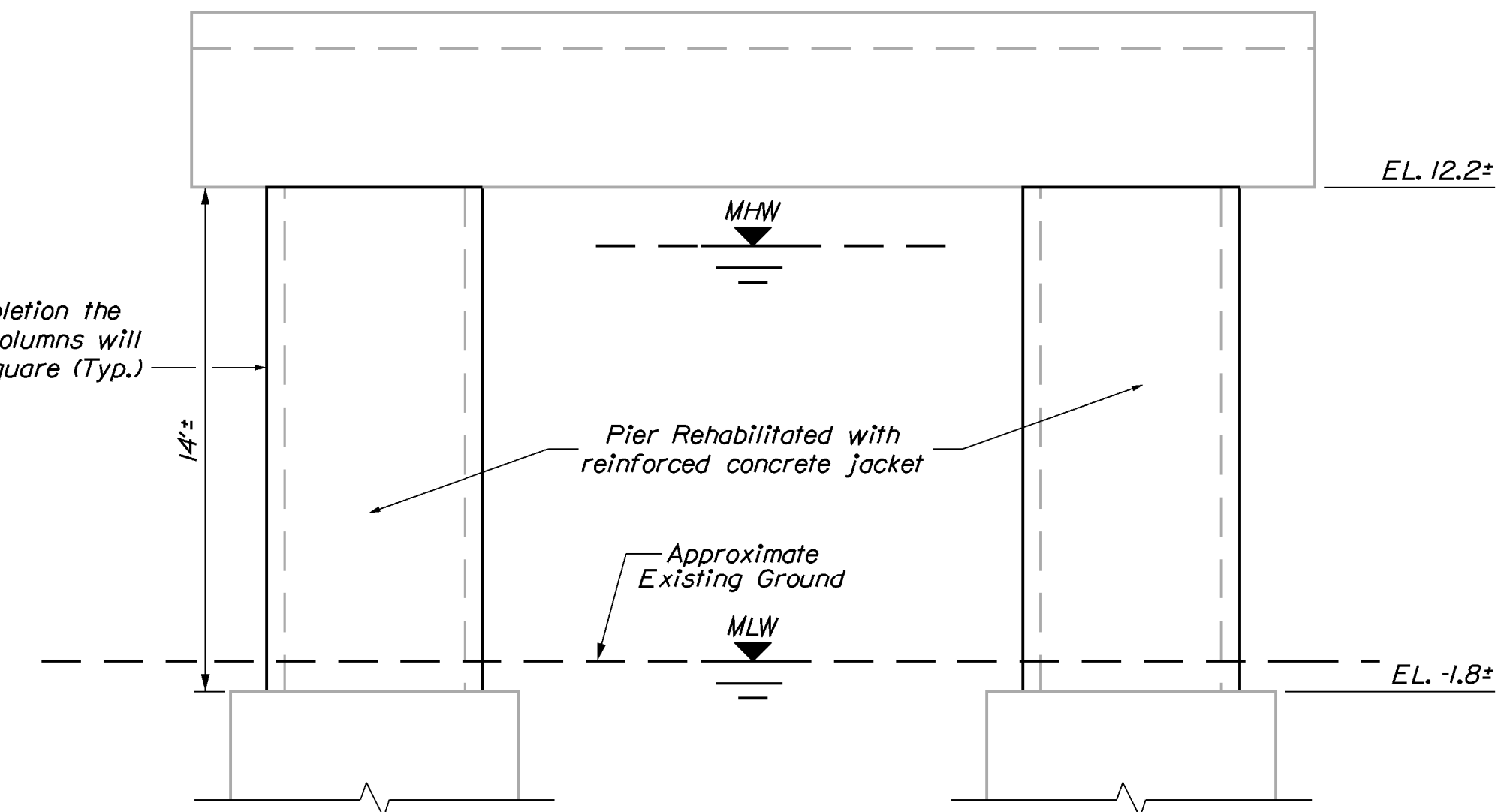
EXISTING PIER
Northern Face of North Pier shown
(Abutment Side)

Typical areas of more severe deterioration at high and low water marks.

Approximate Existing Ground

Upon completion the finished Columns will be 6'-0" Square (Typ.)

Existing Wrought Iron Shell



REHABILITATED PIER
(Typical both piers)

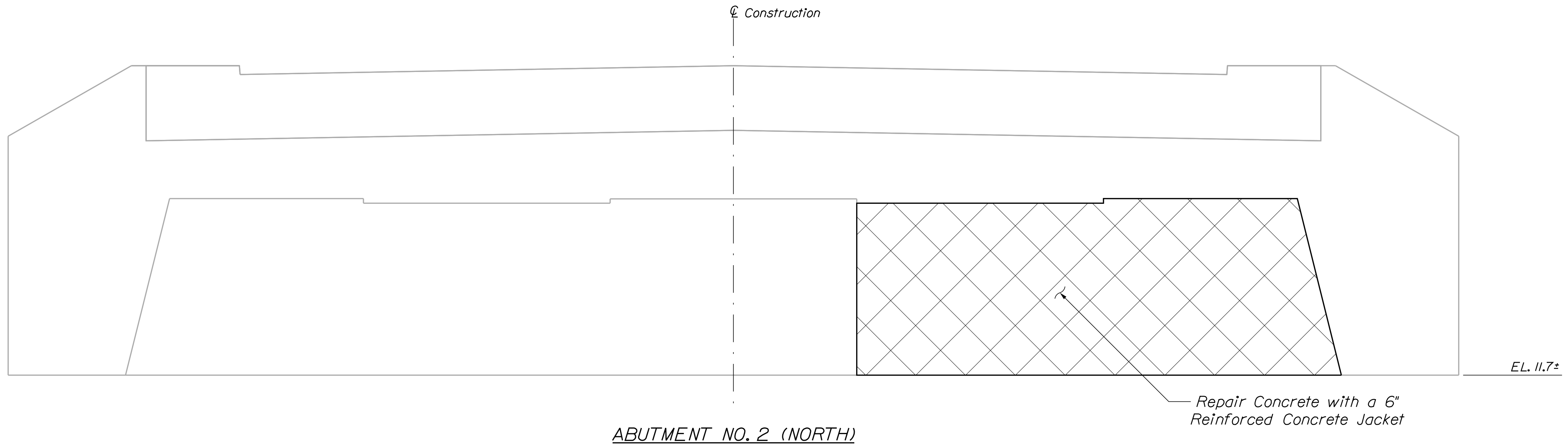
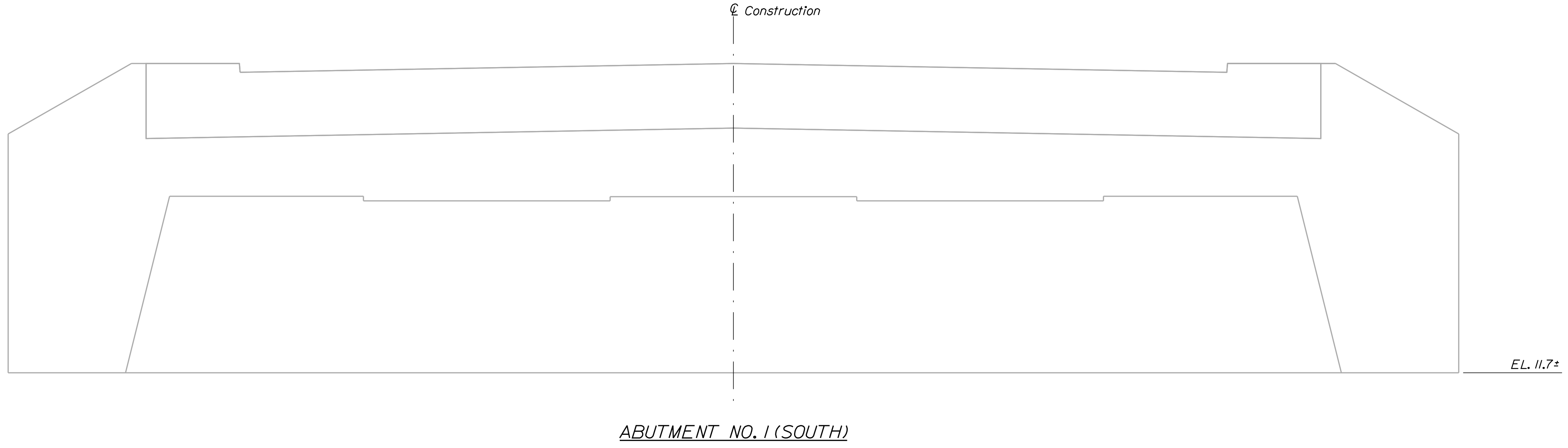
Pier Rehabilitated with reinforced concrete jacket

Approximate Existing Ground

PROJ. MANAGER	DATE
CHECKED-REVIEWED	JULY 2018
DESIGN-Detailed	
DESIGN-Detailed	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

BY	SIGNATURE
DATE	
DATE	
DATE	
DATE	
DATE	

NEW HOBART STREAM BRIDGE
HOBART STREAM
EDMUNDS TWP. WASHINGTON COUNTY
PIER REHABILITATION



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

18969.00

BRIDGE NO. 8612 WIN 18969.00 BRIDGE PLANS

DESIGNED	BY	DATE
CHECKED-REVIEWED	D. SHAW	JULY 2018
DESIGNED-REVIEWED		
DESIGNED-REVIEWED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

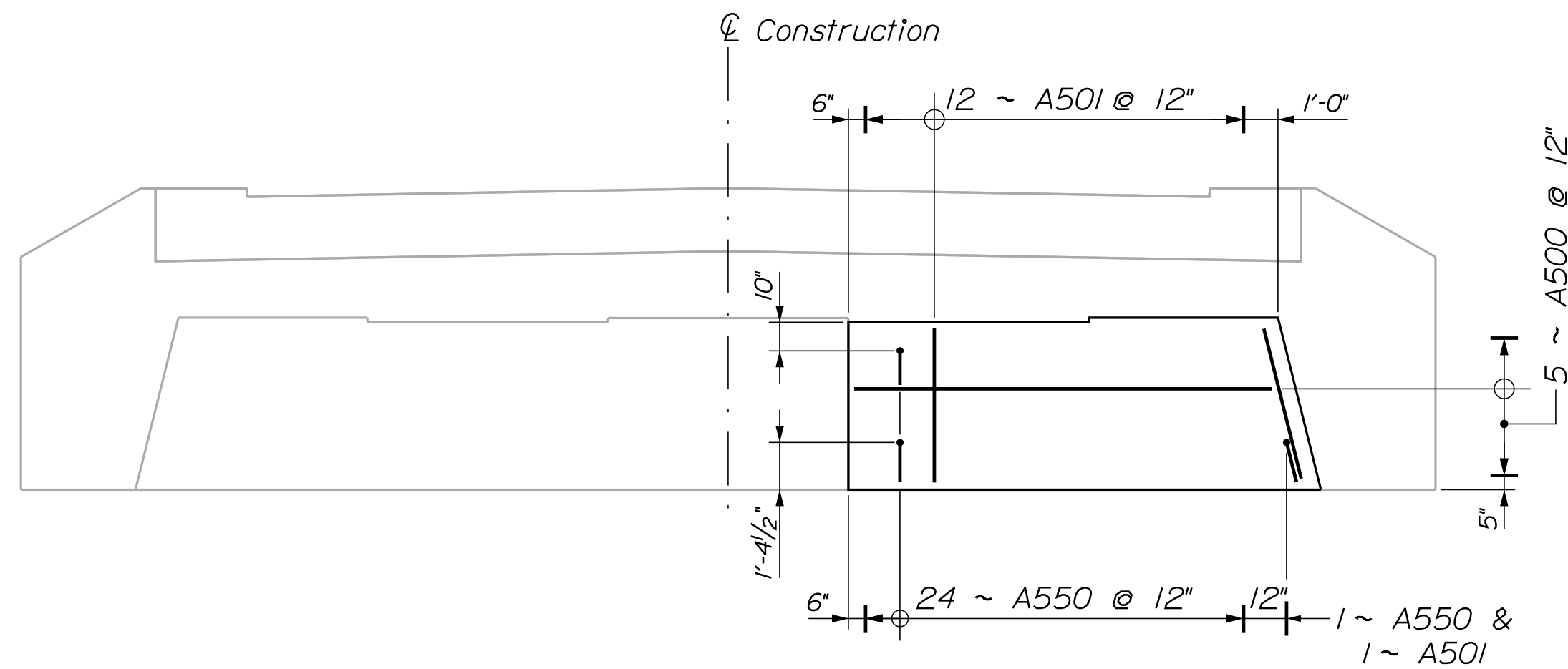
SIGNATURE	DATE
P.E. NUMBER	

NEW HOBART STREAM BRIDGE
HOBART STREAM
EDMUNDS TWP. WASHINGTON COUNTY
ABUTMENT REHABILITATION

SHEET NUMBER

5

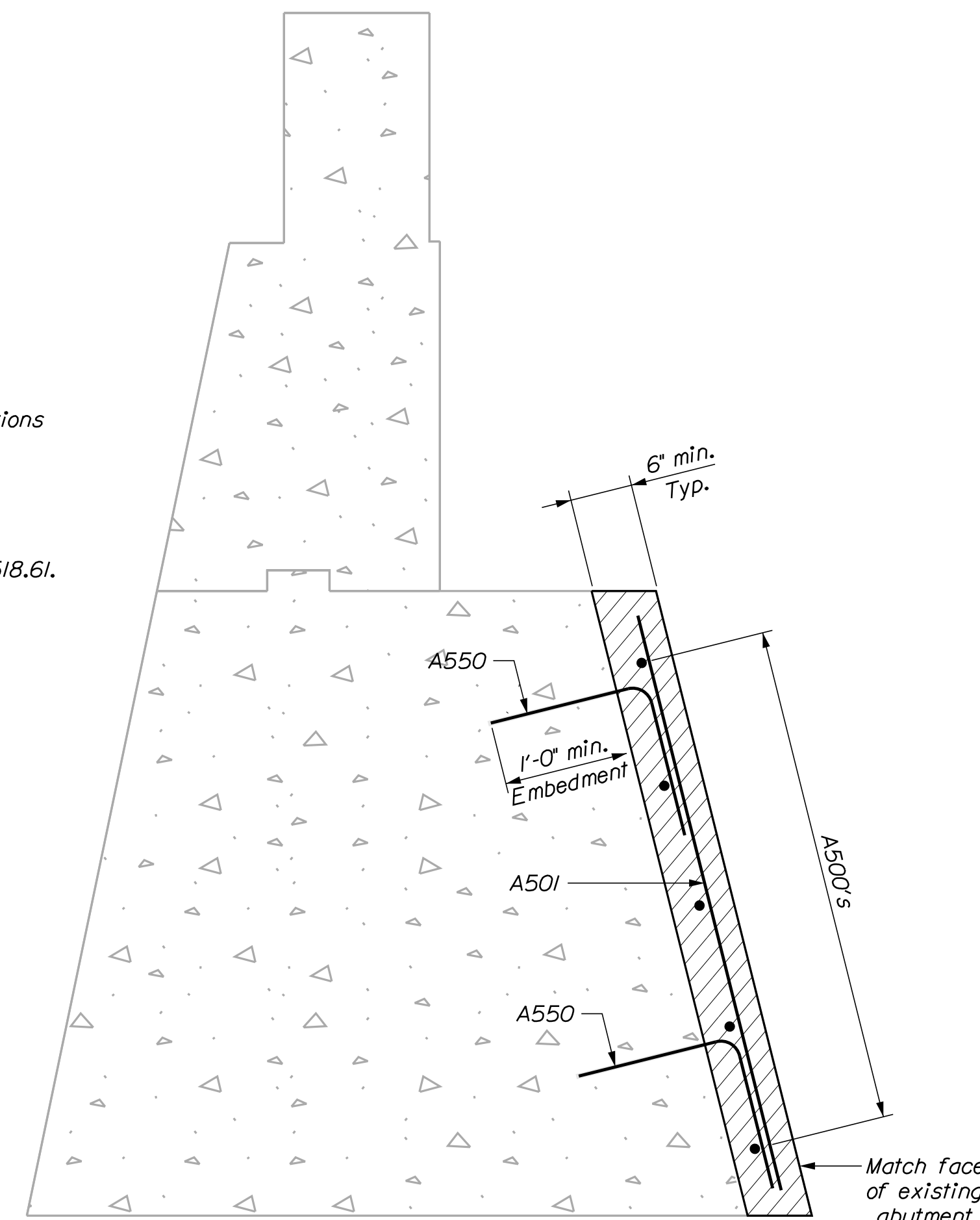
OF 6



ABUTMENT NO. 1 (SOUTH)

ABUTMENT AND WINGWALL NOTES

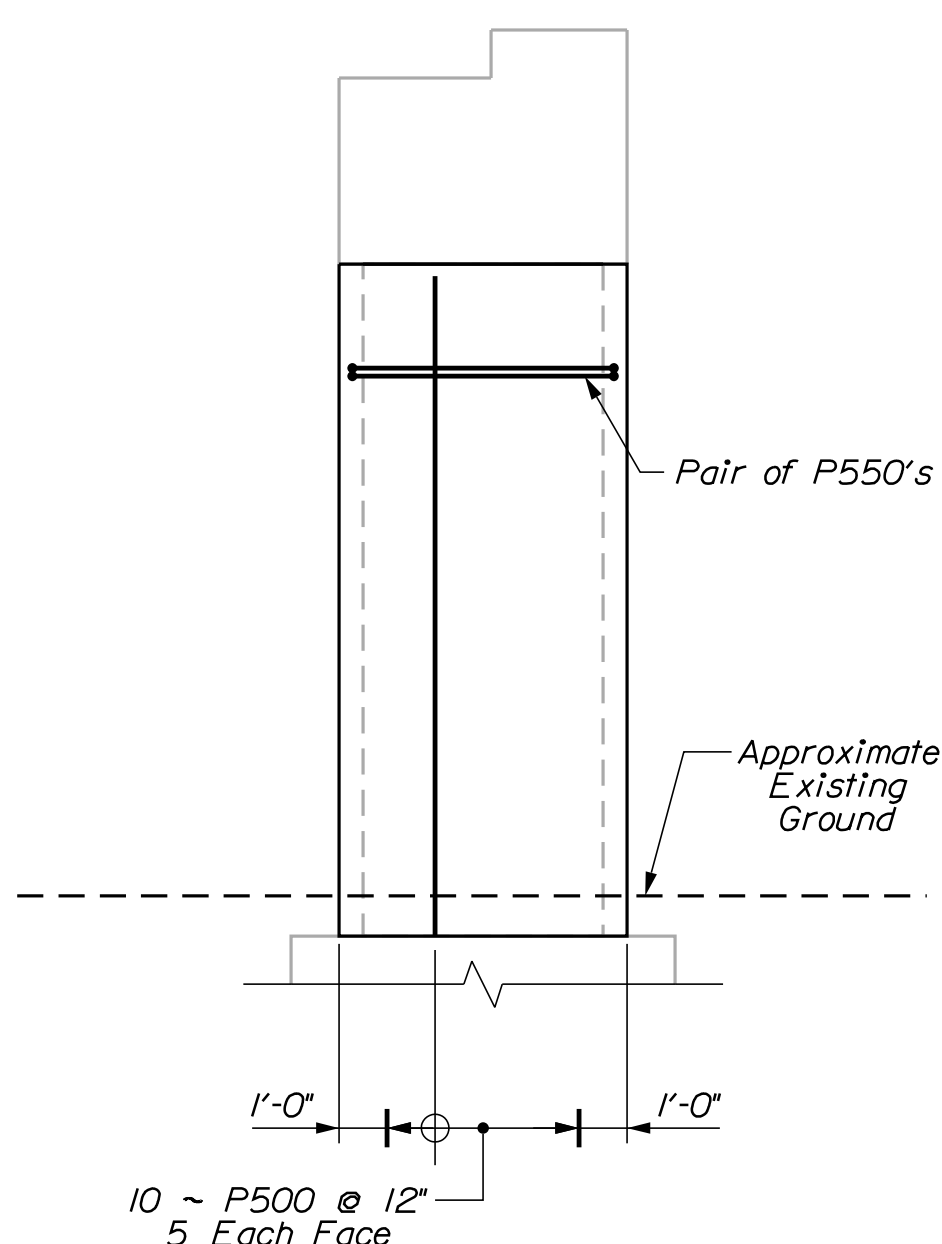
1. The Contractor shall use care not to damage the existing reinforcing steel which is to remain. Any damaged reinforcing steel shall be replaced as directed by the Resident at no expense to the Department.
2. Reinforcing steel shall have 2 inches of cover unless otherwise noted.
3. All dimensions based on or related to the existing bridge shall be verified in the field by the Contractor.
4. All exposed edges of concrete shall have a 3/4" chamfer unless noted otherwise.
5. Where drilling and anchoring reinforcement is specified, the Contractor shall use a material listed on the Maine Department of Transportation Qualified Products List of Concrete Adhesive Anchor Systems. The depth of embedment shall be sufficient to develop 125% of the yield strength of the bar per the manufacturer's recommendations or 12 inches, whichever is greater. Proposed anchoring material and embedment depth shall be submitted for approval. No separate payment will be made for drilling and anchoring of reinforcing steel, but shall be incidental to the related concrete or reinforcing pay item.
6. Surface preparation and concrete for the abutment repair will be paid for under 518.61.



ABUTMENT SECTION

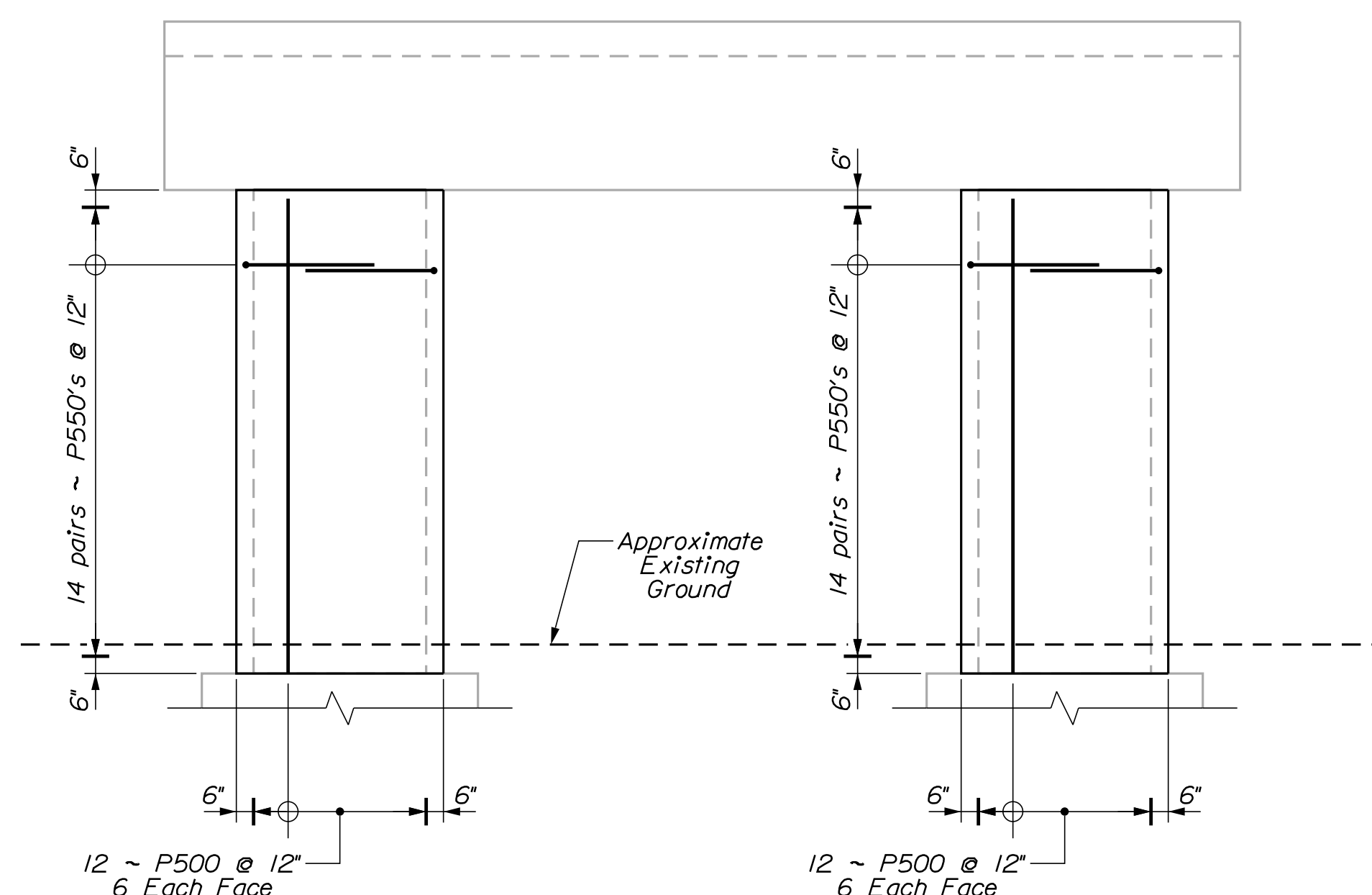
STRAIGHT BARS			
MARK	QTY.	LENGTH	LOCATION
ABUTMENT NO. 2			
A500	5	12'-2"	Abutment No. 2 Breastwall
A501	13	4'-9"	Abutment No. 2 Breastwall
PIERS			
P500	88	14'-3"	Column (22 Each Column)
MARK	QTY.	LENGTH	LOCATION

BENT BARS															
MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION	
ABUTMENT NO. 2															
A550	25	2'-6"	L	1'-3"	1'-3"										Abutment Breastwall
PIERS															
P550	112	13'-0"	U	3'-9"	5'-6"	3'-9"									Pier Column (28 per column)
MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION	



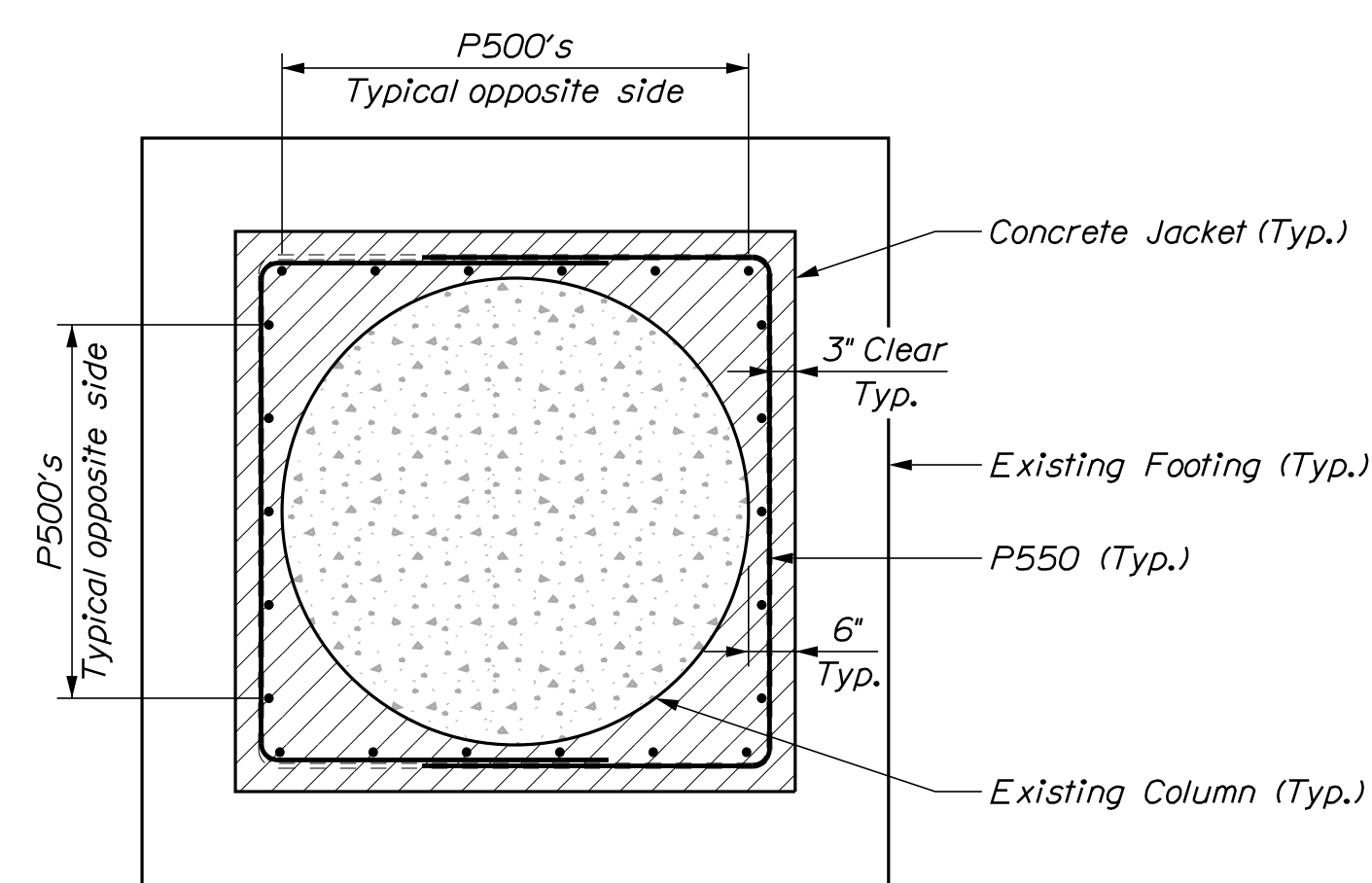
SIDE

Reinforcement for concrete jacket



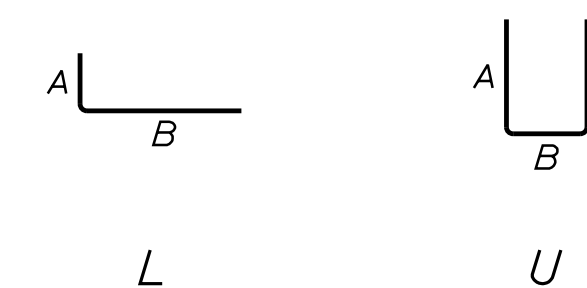
ELEVATION

Reinforcement for concrete jacket



SECTION OF JACKETED CONCRETE COLUMN

TYPE - BENDING DIAGRAMS



All dimensions are out-to-out of bar.

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.

Reinforcing Bar: ASTM A 615/A 615M, Grade 60

GENERAL NOTES

1. The first two digits following the letter(s) of the mark indicate the size of the bar:

- Mark "A502" = bar size #5
- Mark "P805" = bar size #8
- Mark "S650" = bar size #6

2. Each crank bar, Type B, may be replaced by two (2) straight bars (one top and one bottom) of the same bar size as the crank bar. Payment in either case will be based on crank bars as scheduled on the plans.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	18969.00 WIN 18969.00	BRIDGE NO. 6612	BRIDGE PLANS
NEW HOBART STREAM BRIDGE HOBART STREAM EDMUNDS TWP. WASHINGTON COUNTY	DATE JULY 2018	BY D. SHAW	SIGNATURE
ABUTMENT AND PIER REINFORCEMENT	DESIGN-REVIEWED	DESIGN-DETAILED	P.E. NUMBER
SHEET NUMBER	REVISIONS 1	REVISIONS 2	DATE
6	REVISIONS 3	REVISIONS 4	FIELD CHANGES
OF 6			