

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION

**SPECIFICATIONS**

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Ninth Edition 2020.

**DESIGN LOADING**

Live Load ..... HL - 93 Modified for Strength I

**STRUCTURE LIST**

Structure	Station
Eaton Tributary Bridge, No. 6651	273+48
Critter Crossing #2, No. 6654	289+11

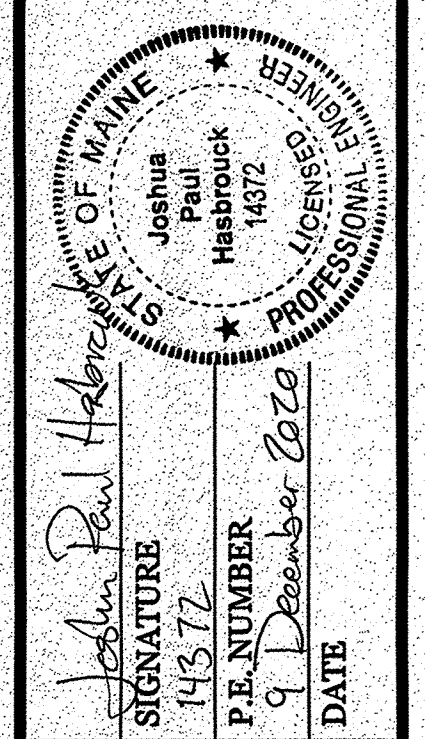


## BREWER-EDDINGTON PENOBSCOT COUNTY I-395/ROUTE 9 CONNECTOR STREAM CROSSINGS FEDERAL AID PROJECT NO. 1891500

**LIST OF DRAWINGS**

Title Sheet .....	1
Precast Box Details - Eaton Tributary Bridge .....	2
Precast Box Details - Critter Crossing #2 .....	3
Precast Box Details - Headwall & Toewall .....	4
Route 9 Laydown Area Plan .....	5

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
COMMISSIONER: <i>[Signature]</i>	<i>[Signature]</i>	12-15-2020
CHIEF ENGINEER: <i>[Signature]</i>		12-15-2020



PROJECT INFORMATION	BRIDGE
PROGRAM	M. WIGHT
PROJECT MANAGER	J. HASBROUCK
DESIGNER	N/A
CONSULTANT	
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

1891500	WIN018915.60
BREWER-EDDINGTON I-395/ROUTE 9 CONNECTOR	TITLE SHEET

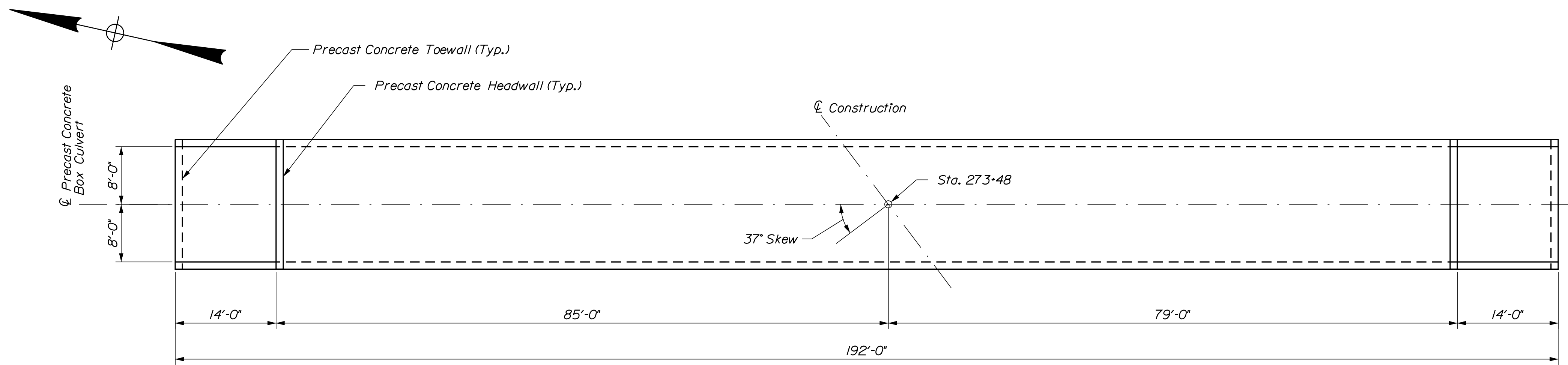
SHEET NUMBER	1
OF 5	

**PROJECT LOCATION** Starting in Brewer at the intersection of I-395 and Wilson Street (Route 1A). Ending in Eddington on Route 9 approximately 1000' west of where Route 9 crosses Meadow Brook.

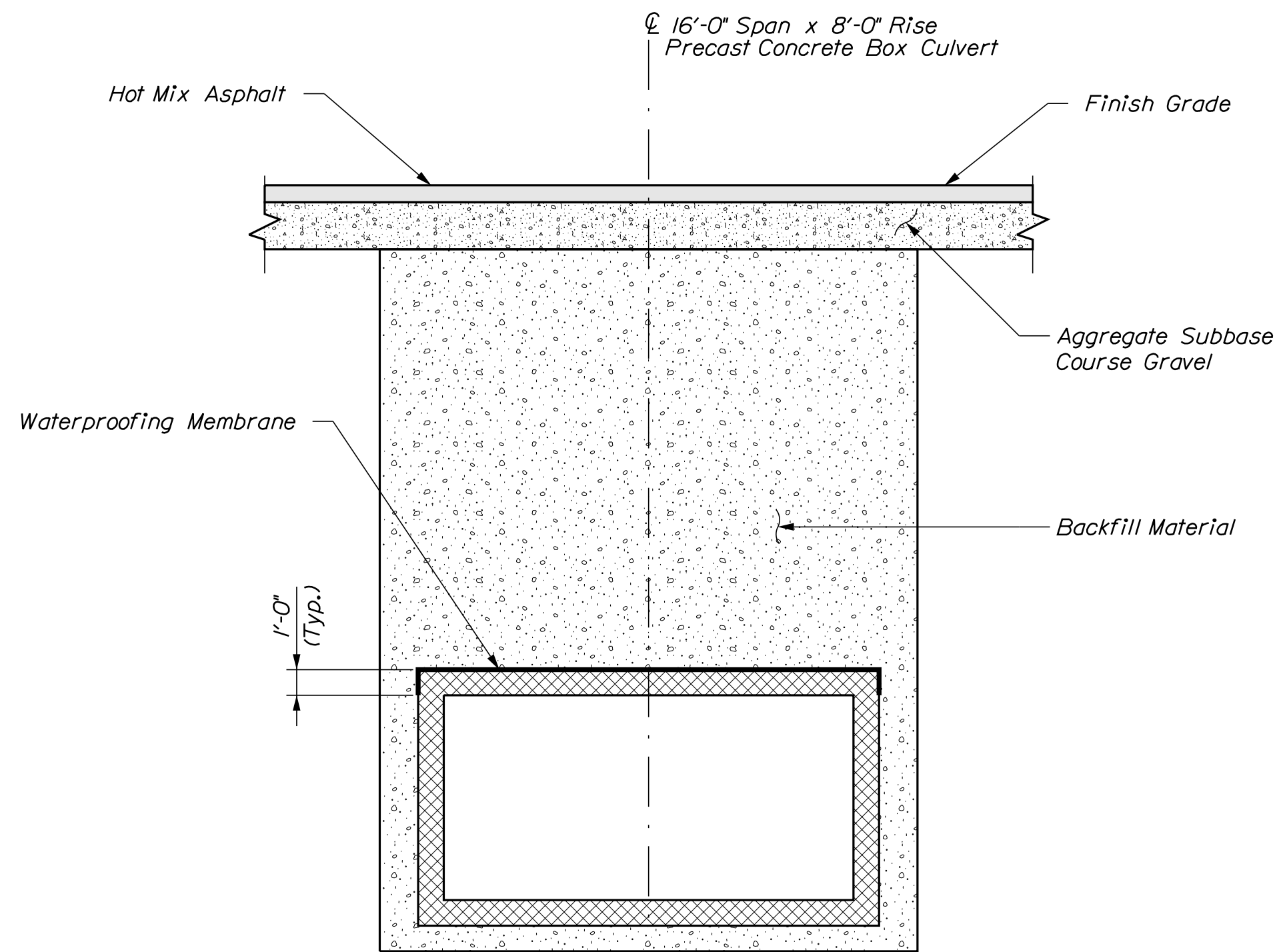
Filename: \001\_Title (Stream and Snowmobile).qgd Division: HIGHWAY  
 Username: common  
 Date: 12/18/2020

**PRECAST CONCRETE BOX CULVERT NOTES**

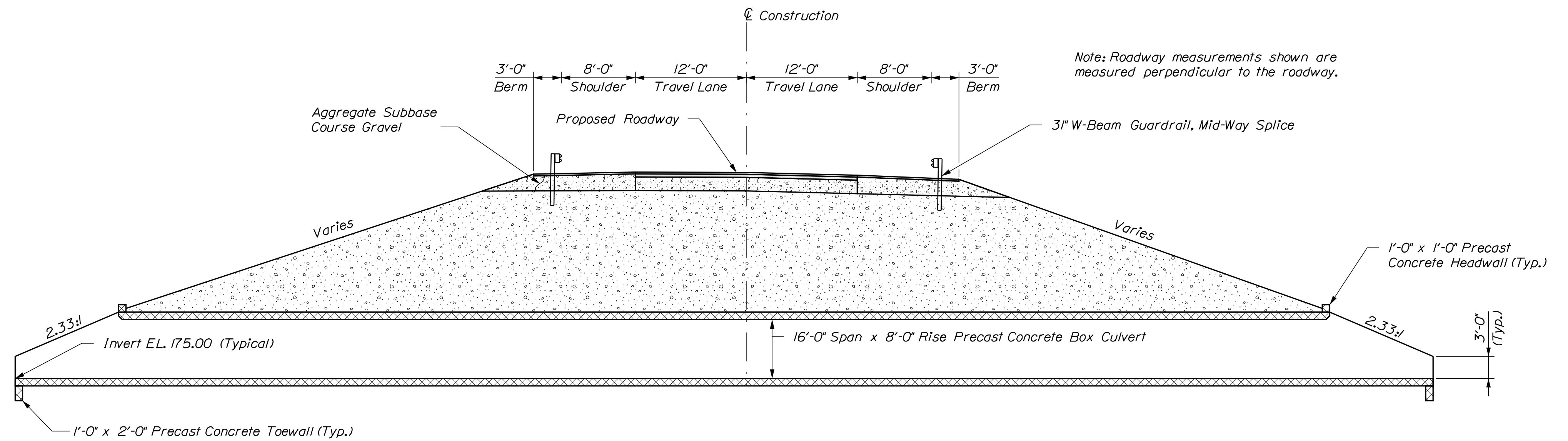
1. The minimum fill cover is 17.97'± at Sta. 273+21.66±; 20.0'± Rt.
2. The maximum fill cover is 19.09'± at Sta. 273+59.22±;  $\nabla$  Roadway
3. The precast units shall be designed to carry construction loadings with a minimum fill cover of 18 inches on top of the units.
4. Backfill material in final construction will vary, and includes lightweight fill in some areas. For design, assume Granular Borrow material will be used for all structures.
5. The bedding detail underneath the box will vary based on soil conditions, but will be a minimum of 1' of granular material. Additional geotechnical information may be requested from the Department if required for design.
6. All surfaces of the precast concrete units, except horizontal surfaces that are facing downwards while in storage, shall be coated with Protective Coating for Concrete Surfaces meeting the requirements of Standard Specifications Section 515. Protective Coating will not be paid for separately, but will be incidental to the precast concrete box culvert.
7. A clamshell precast concrete box culvert shall be required.



**PROPOSED PRECAST CONCRETE BOX PLAN**



**PROPOSED TYPICAL PRECAST CONCRETE BOX TRANSVERSE SECTION**



**PROPOSED TYPICAL PRECAST CONCRETE BOX LONGITUDINAL SECTION**  
Section Along  $\nabla$  of Concrete Box at Sta. 273+48 Skewed 37° Ahead on Left

Date: 12/19/2020

Username: common

Filename: ... \002\_Btypical\_EatonBrookTrib(273+36).dgn; Design: BRIDGE

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
1891500  
WIN  
018915.60  
BRIDGE NO. 6651  
BRIDGE PLANS

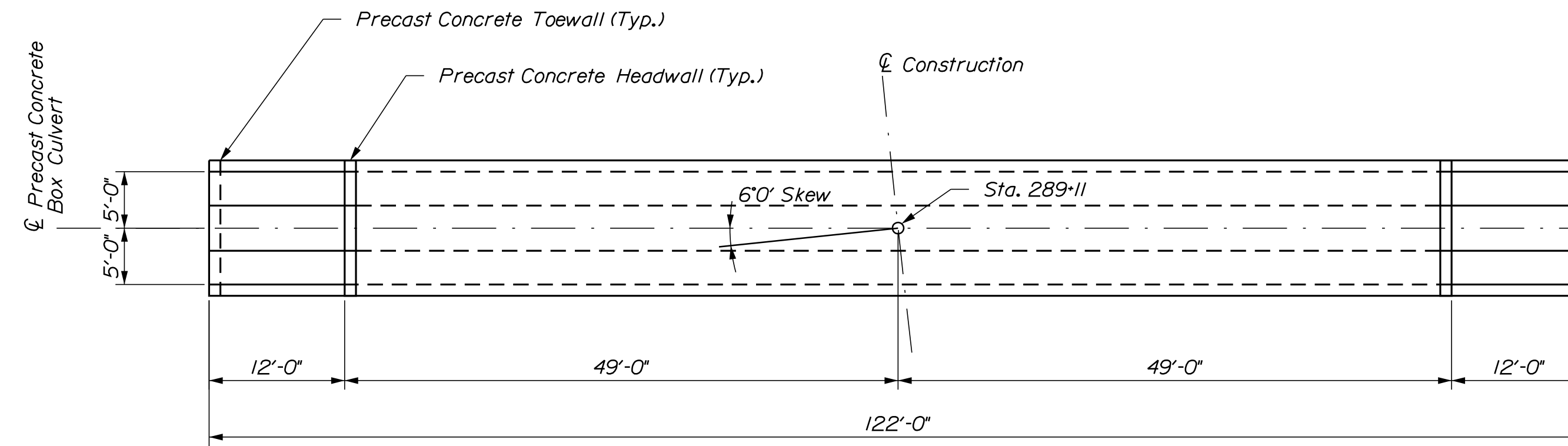
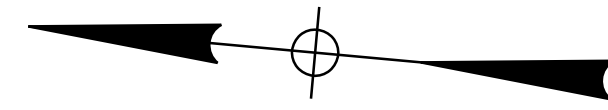
PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN DETAILED	J. HASBROUCK	R. MAYER	OCT 2020
CHECKED/REVIEWED	R. MYERS	D. SHAW	OCT 2020
DESIGN DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

I-395/ROUTE 9 CONNECTOR  
EATON BROOK TRIBUTARY (273+36)  
BREWER-EDDINGTON PENOBSCOT COUNTY  
PRECAST BOX DETAILS -  
EATON TRIBUTARY BRIDGE

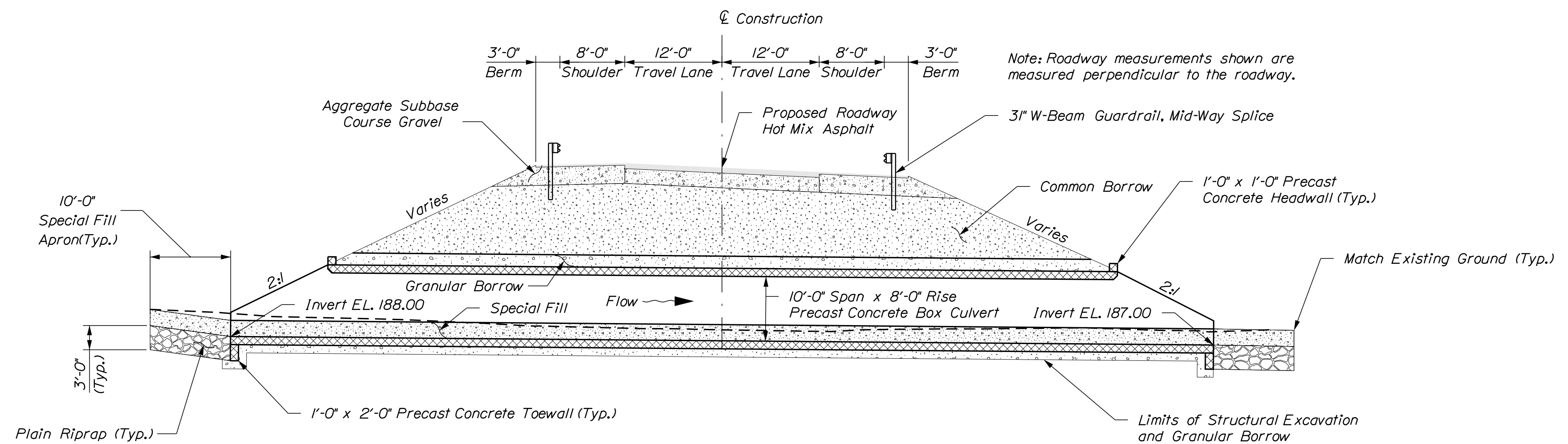
SHEET NUMBER  
**2**  
OF 5

**PRECAST CONCRETE BOX CULVERT NOTES**

1. The minimum fill cover is 11.58'± at Sta. 289+6.30±; 20'± Rt.
2. The maximum fill cover is 13.00'± at Sta. 289+14.81±; 12'± Lt.
3. The precast units shall be designed to carry construction loadings with a minimum fill cover of 18 inches on top of the units.
4. Backfill material in final construction will vary, and includes lightweight fill in some areas. For design, assume Granular Borrow material will be used for all structures.
5. The bedding detail underneath the box will vary based on soil conditions, but will be a minimum of 1' of granular material. Additional geotechnical information may be requested from the Department if required for design.
6. All surfaces of the precast concrete units, except horizontal surfaces that are facing downwards while in storage, shall be coated with Protective Coating for Concrete Surfaces meeting the requirements of Standard Specifications Section 515. Protective Coating will not be paid for separately, but will be incidental to the precast concrete box culvert.
7. A clamshell precast concrete box culvert shall be required.



**PROPOSED PRECAST CONCRETE BOX PLAN**



**PROPOSED TYPICAL PRECAST CONCRETE BOX LONGITUDINAL SECTION**

Section Along  $\phi$  of Concrete Box at Sta. 289+11 Skewed 6' Ahead on Left

Date: 12/19/2020

Username: common

Filename: ... \003\_Btypical\_Critter-Crossings\_2.dgn Division: BRIDGE

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
1891500  
WIN  
018915.50  
BRIDGE NO. 6654  
BRIDGE PLANS

SIGNATURE  
P.E. NUMBER  
DATE

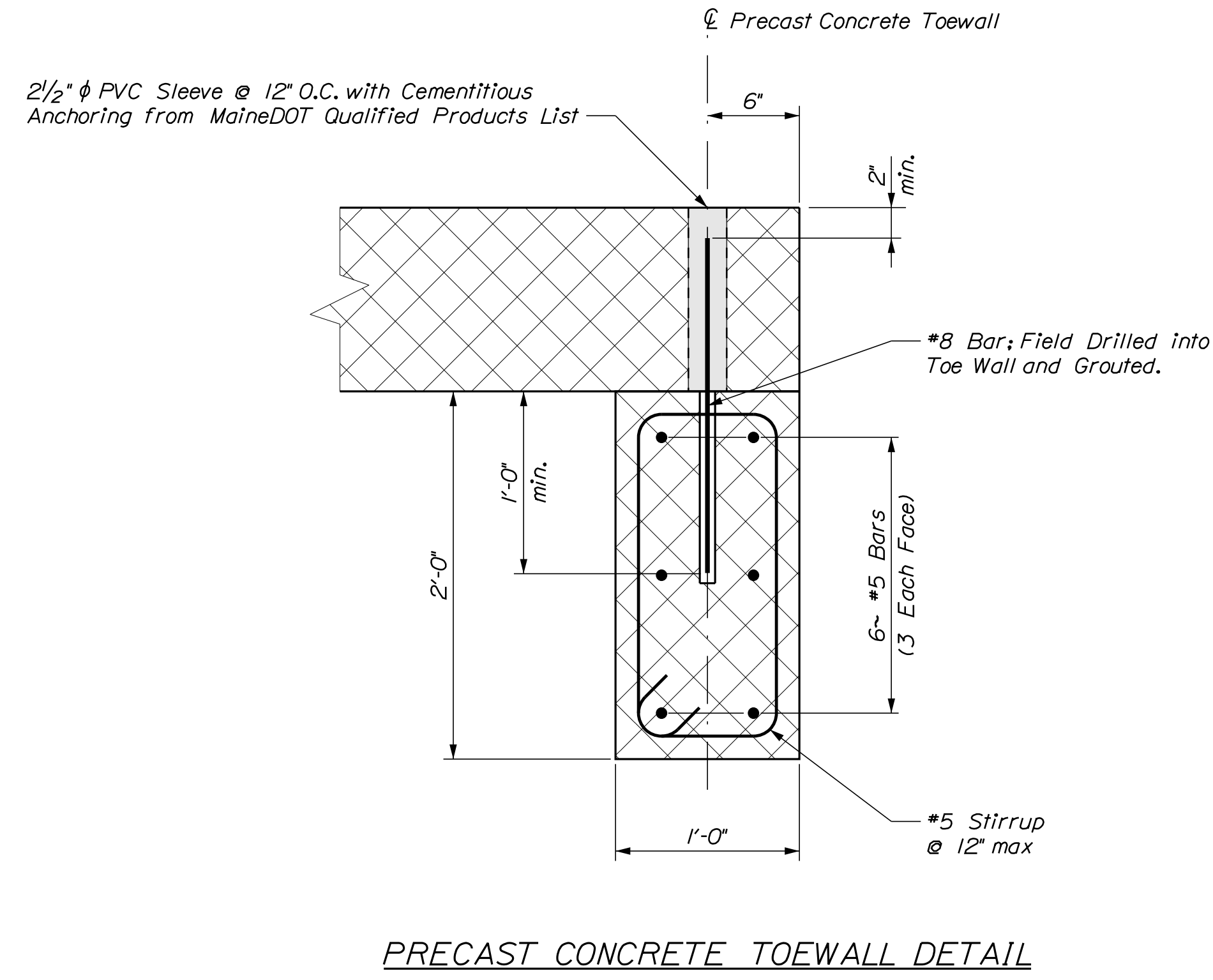
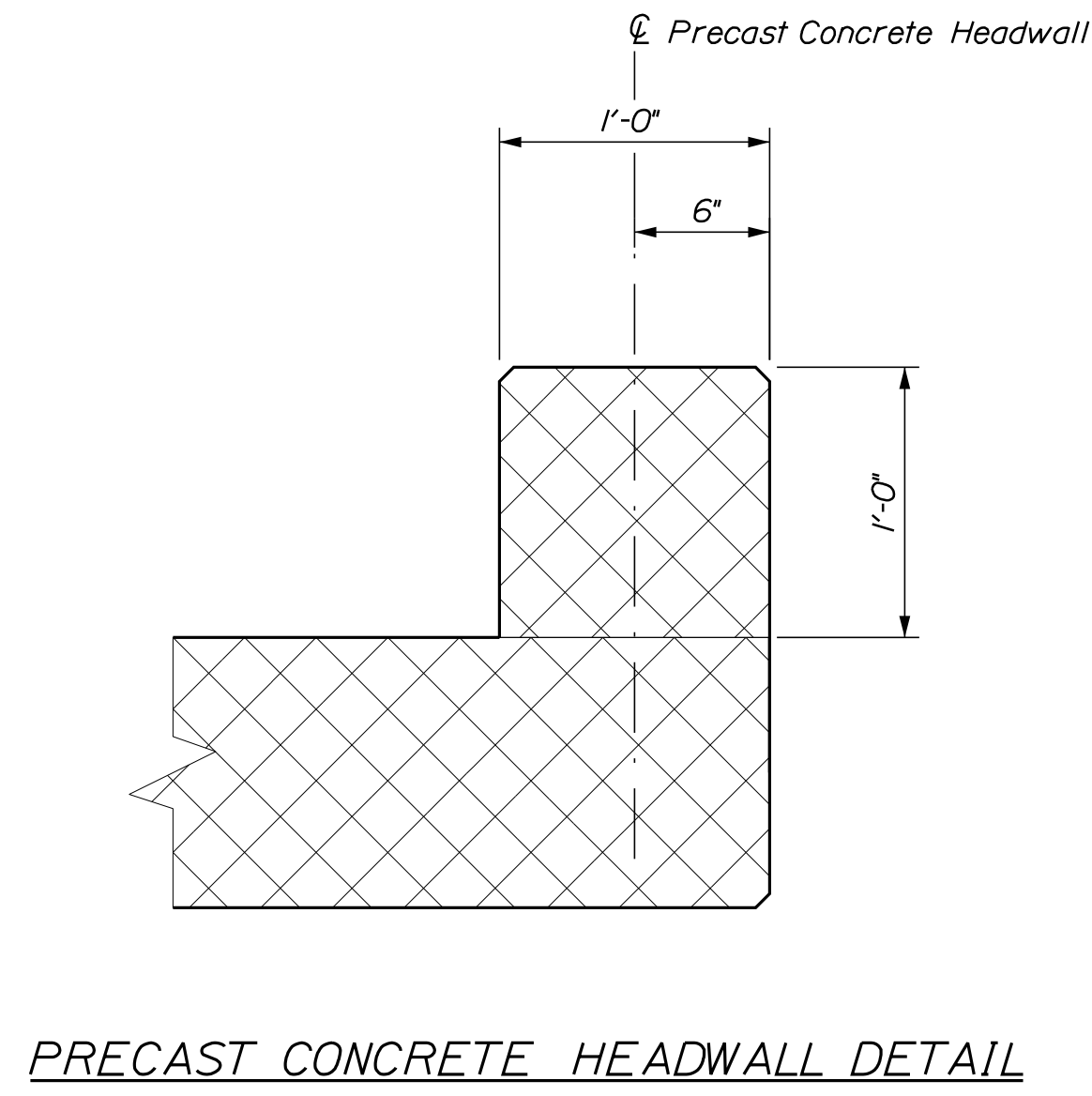
PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN-DETAILED	J. HASBROUCK	R. MAYER	OCT. 2020
CHECKED-REVIEWED	R. MYERS	D. SHAW	OCT. 2020
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

I-395/ROUTE 9 CONNECTOR  
WETLAND CROSSING (289+11)  
BREWER-EDDINGTON PENOBSCOT COUNTY  
PRECAST BOX DETAILS -  
CRITTER CROSSING #2

SHEET NUMBER

3

OF 5



SHEET NUMBER

4

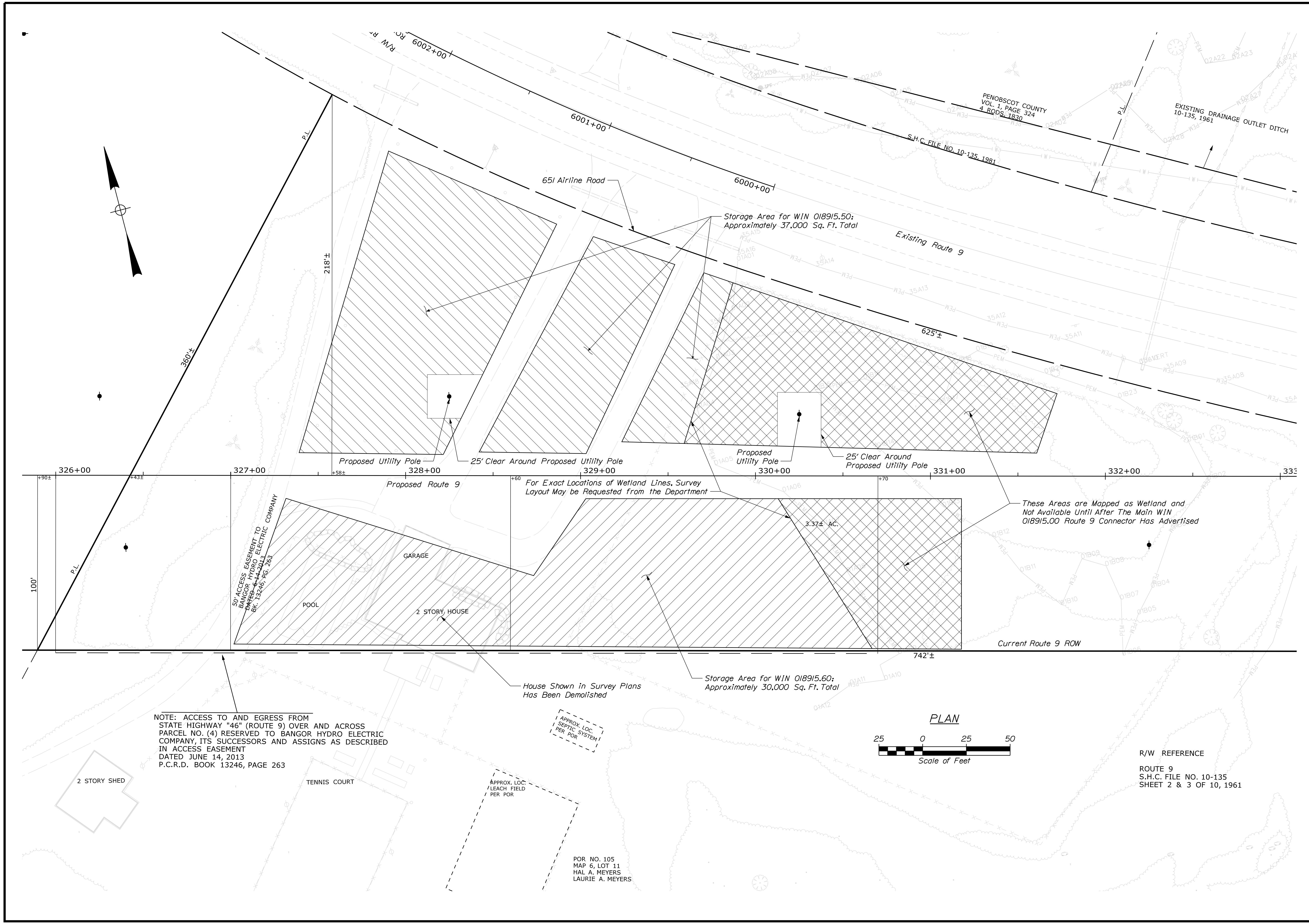
OF 5

I-395/ROUTE 9 CONNECTOR  
VARIOUS BRIDGES  
BREWER-EDDINGTON PENOBSCOT COUNTY  
**PRECAST BOX DETAILS -  
HEADWALL & TOEWALL**

PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN-DETAILED	J. HASBROUCK	R. MAYER	OCT. 2020
CHECKED-REVIEWED	R. MYERS	D. SHAW	OCT. 2020
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE	P.E. NUMBER	DATE

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
**1891500**  
BRIDGE NO. **WIN** 018915.60  
BRIDGE PLANS



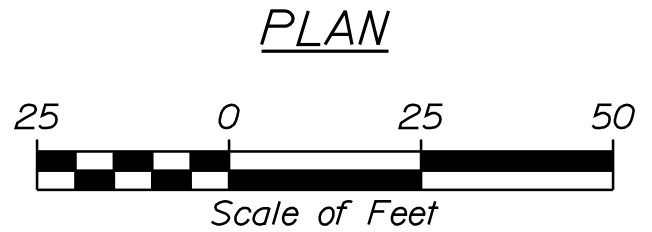
NOTE: ACCESS TO AND EGRESS FROM STATE HIGHWAY "46" (ROUTE 9) OVER AND ACROSS PARCEL NO. (4) RESERVED TO BANGOR HYDRO ELECTRIC COMPANY, ITS SUCCESSORS AND ASSIGNS AS DESCRIBED IN ACCESS EASEMENT DATED JUNE 14, 2013 P.C.R.D. BOOK 13246, PAGE 263

House Shown in Survey Plans Has Been Demolished

Storage Area for WIN 018915.60; Approximately 30,000 Sq. Ft. Total

Storage Area for WIN 018915.50; Approximately 37,000 Sq. Ft. Total

These Areas are Mapped as Wetland and Not Available Until After The Main WIN 018915.00 Route 9 Connector Has Advertised



R/W REFERENCE  
ROUTE 9  
S.H.C. FILE NO. 10-135  
SHEET 2 & 3 OF 10, 1961

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
1891500		WIN 018915.60	
BRIDGE NO.		BRIDGE PLANS	
I-395/ROUTE 9 CONNECTOR		SHEET NUMBER	
VARIOUS BRIDGES		5	
BREWER-EDDINGTON PENOBSCOT COUNTY		OF 5	
ROUTE 9 LAYDOWN			
AREA PLAN			
PROJ. MANAGER	M. WIGHT	BY	DATE
DESIGN-DETAILED	J. HASBROUCK	R. MAYER	OCT 2020
CHECKED-REVIEWED	R. MYERS	D. SHAW	OCT 2020
DESIGNS-DETAILED			SIGNATURE
REVISIONS 1			P.E. NUMBER
REVISIONS 2			DATE
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			