

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 |
|--------------------------------------|---------|
| Snow Scooter Bridge, No. 6644 | 77+00 |
| Critter Crossing #1, No. 6650 | 272+35 |
| White Tail Crossing Bridge, No. 6652 | 275+88 |
| Snow Sled Bridge, No. 6653 | 284+27 |

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

LIST OF DRAWINGS

| | |
|--|---|
| Title Sheet | 1 |
| Precast Box Details - Snow Scooter Bridge | 2 |
| Precast Box Details - Critter Crossing # 1 | 3 |
| Precast Box Details - White Tail Crossing Bridge | 4 |
| Precast Box Details - Snow Sled Bridge | 5 |
| Precast Box Details - Headwall | 6 |
| Route 9 Laydown Area Plan | 7 |

Date: 12/9/2020

Username: common

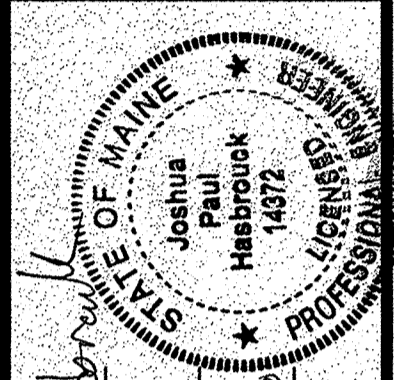
Filename: \001_Title (Stream and Snowmobile).dgn Division: HIGHWAY

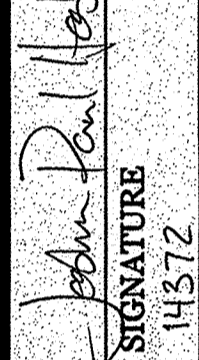
1891500 WIN018915.50

BREWER-EDDINGTON
I-395/ROUTE 9 CONNECTOR
TITLE SHEET

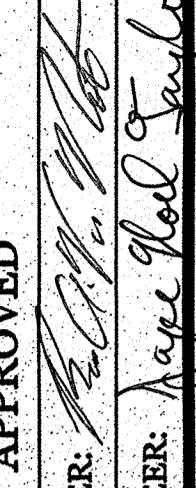
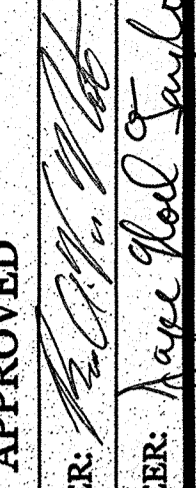
SHEET NUMBER
1
OF 7

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.



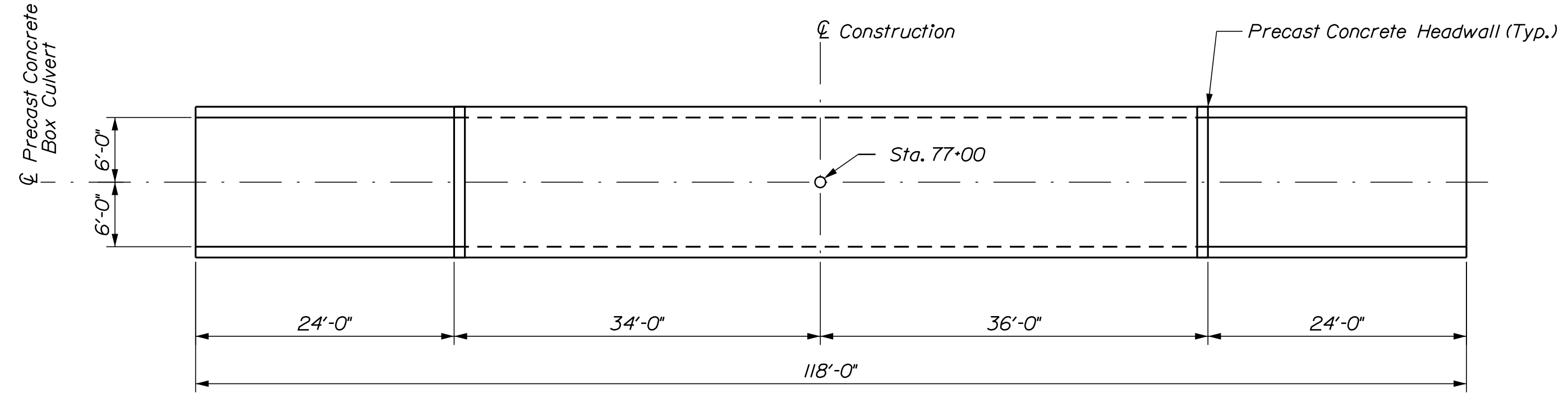
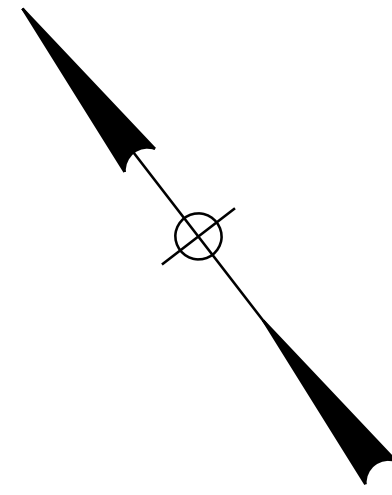

 SIGNATURE
 14372
 P.E. NUMBER
 9 December 2020
 DATE

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

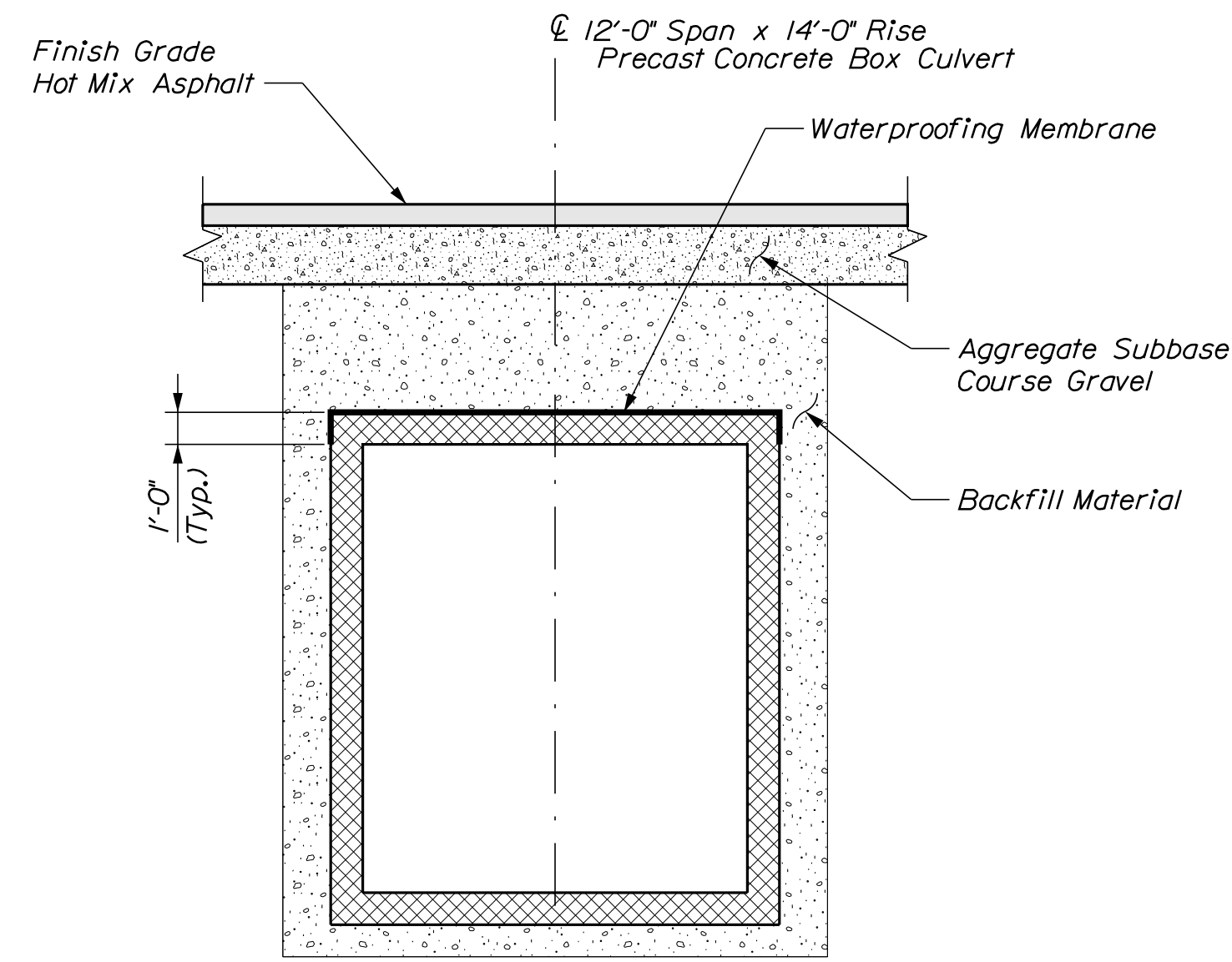
| STATE OF MAINE DEPARTMENT OF TRANSPORTATION | APPROVED | DATE |
|--|--|--------------------------|
|  COMMISSIONER: |  CHIEF ENGINEER: | 12-15-2020 12-15-2020 |

PRECAST CONCRETE BOX CULVERT NOTES

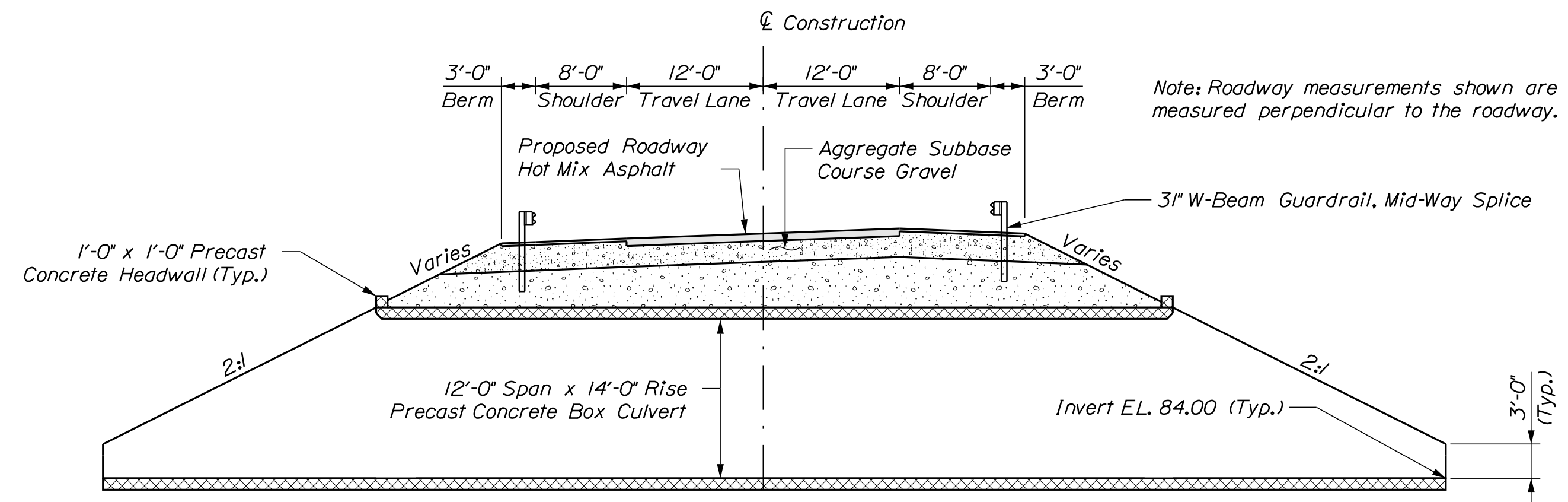
1. The minimum fill cover is 5.67'± at Sta. 77+07.0±; 20'± Lt.
2. The maximum fill cover is 6.99'± at Sta. 76+93.0±; 12'± Rt.
3. The precast units shall be designed to carry construction loadings with a minimum fill cover of 18 inches on top of the units.
4. Backfill material in final construction will 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.



PROPOSED PRECAST CONCRETE BOX PLAN



PROPOSED TYPICAL PRECAST CONCRETE BOX TRANSVERSE SECTION



PROPOSED TYPICAL PRECAST CONCRETE BOX LONGITUDINAL SECTION

Section Along ϕ of Concrete Box at Station 77+00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
1891500
WIN
018915.50
BRIDGE NO. 6644
BRIDGE PLANS

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

I-395/ROUTE 9 CONNECTOR
SNOWMOBILE 10C (77+55)
BREWER-EDDINGTON PENOBSCOT COUNTY
**PRECAST BOX DETAILS -
SNOW SCOOTER BRIDGE**

SHEET NUMBER

2

OF 7

Date: 12/19/2020

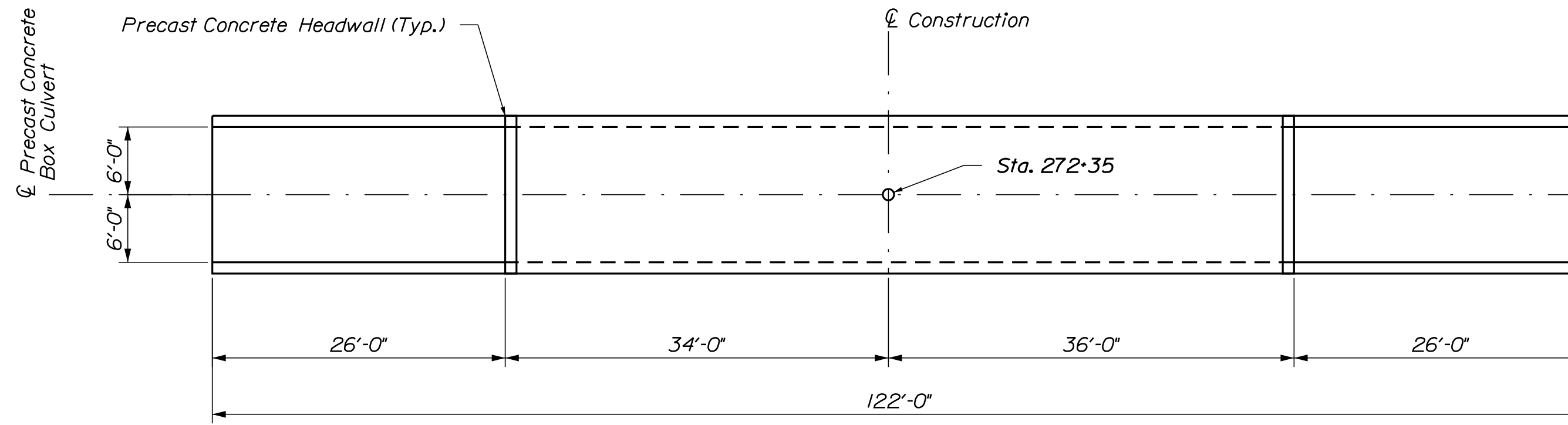
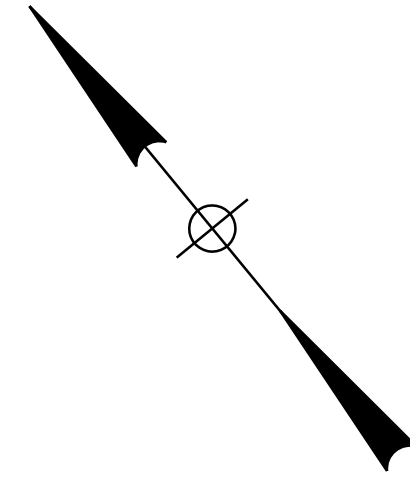
Username: common

Division: BRIDGE

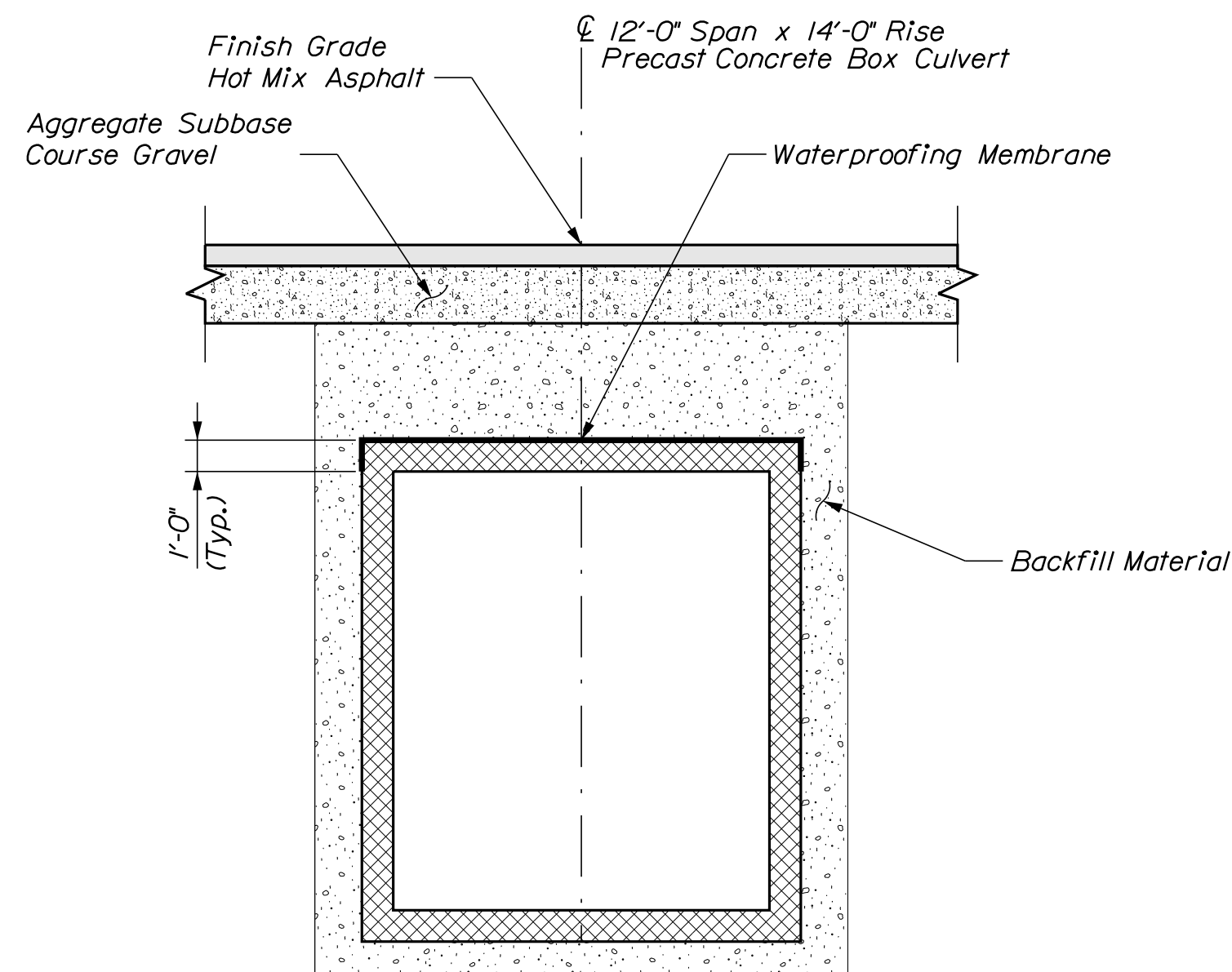
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PRECAST CONCRETE BOX CULVERT NOTES

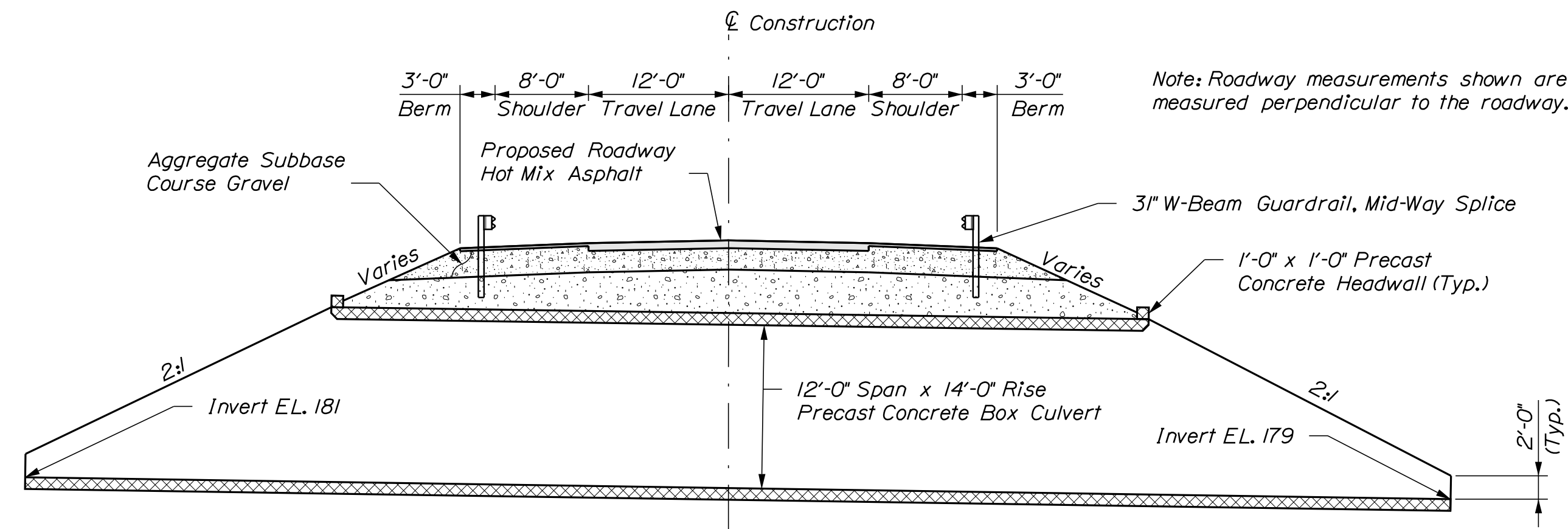
1. The minimum fill cover is 5.28'± at Sta. 272+28.0±; 20'± Lt.
2. The maximum fill cover is 6.34'± at Sta. 272+42.0±; \varnothing Roadway
3. The precast units shall be designed to carry construction loadings with a minimum fill cover of 18 inches on top of the units.
4. Backfill material in final construction 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.



PROPOSED PRECAST CONCRETE BOX PLAN



PROPOSED TYPICAL PRECAST CONCRETE BOX TRANSVERSE SECTION



PROPOSED TYPICAL PRECAST CONCRETE BOX LONGITUDINAL SECTION

Section Along \varnothing of Concrete Box at Station 272+35

Date: 12/19/2020

Username: common

Division: BRIDGE

Filename: ... \003_Btypical_Wildlife(272+36).dgn

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

1891500

WIN

BRIDGE NO. 6650

BRIDGE PLANS

SIGNATURE

DATE

P.E. NUMBER

DATE

PROJ. MANAGER

DESIGN-DETAILED

CHECKED-REVIEWED

DESIGNS-DETAILED

REVISIONS 1

REVISIONS 2

REVISIONS 3

REVISIONS 4

BY

DATE

BY

DATE

BY

DATE

BY

DATE

I-395/ROUTE 9 CONNECTOR
WILDLIFE 1 (272+36)
BREWER-EDDINGTON PENOBSCOT COUNTY

PRECAST BOX DETAILS -
CRITTER CROSSING #1

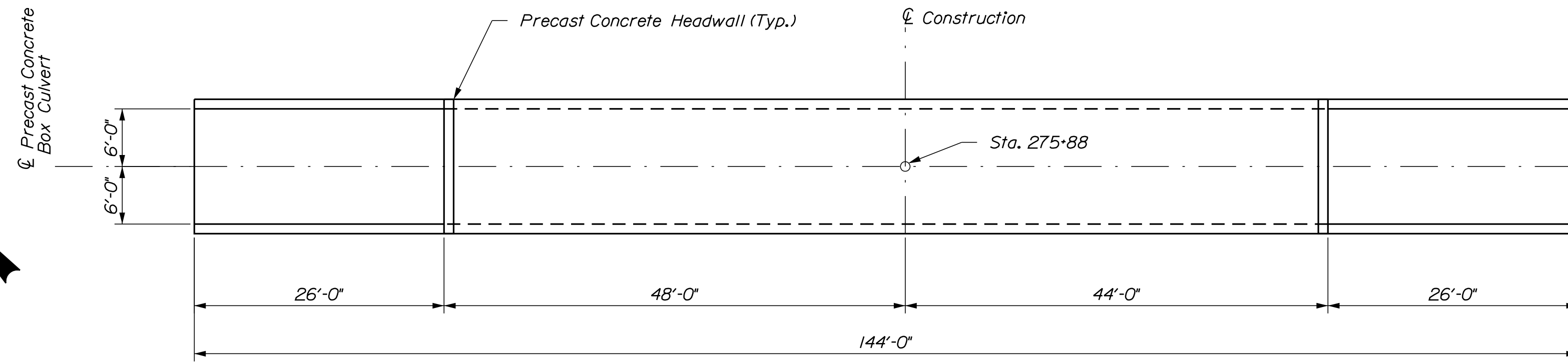
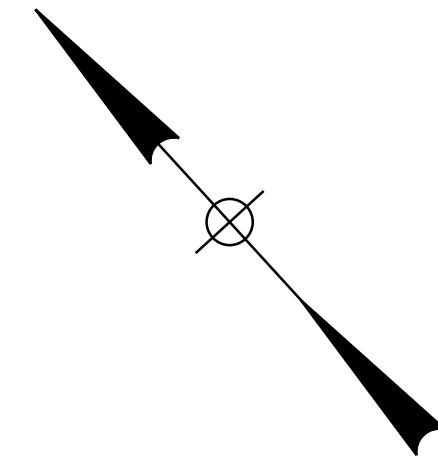
SHEET NUMBER

3

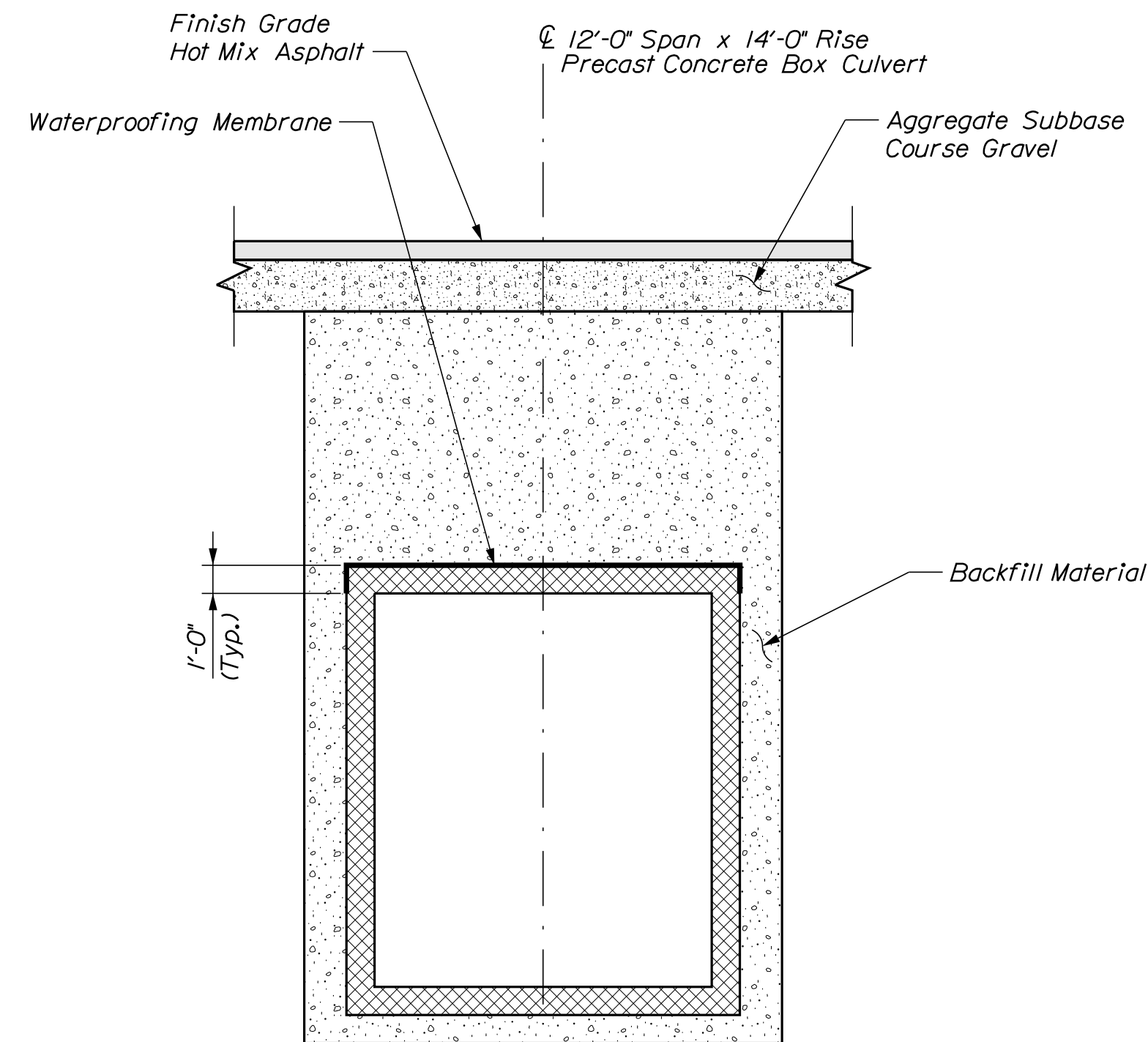
OF 7

PRECAST CONCRETE BOX CULVERT NOTES

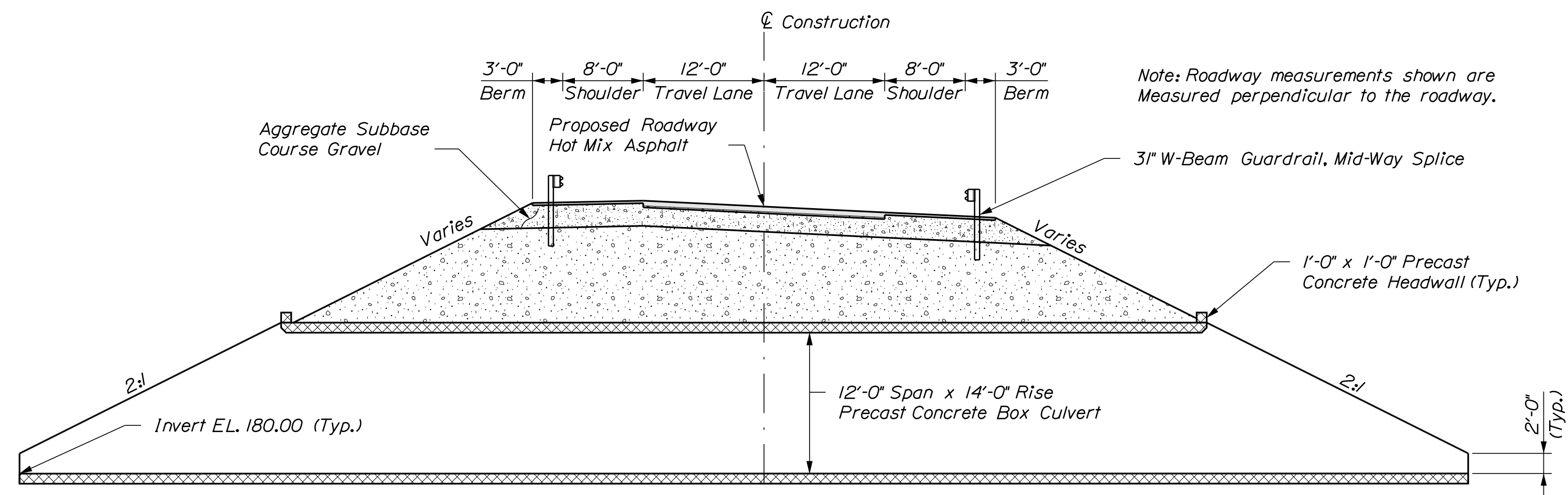
1. The minimum fill cover is 10.45'± at Sta. 275+81.0±; 20'± Rt.
2. The maximum fill cover is 12.20'± at Sta. 275+95.0±; 12'± Lt.
3. The precast units shall be designed to carry construction loadings with a minimum fill cover of 18 inches on top of the units.
4. Backfill material in final construction 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.



PROPOSED PRECAST CONCRETE BOX PLAN



PROPOSED TYPICAL PRECAST CONCRETE BOX TRANSVERSE SECTION



PROPOSED TYPICAL PRECAST CONCRETE BOX LONGITUDINAL SECTION

Section Along C of Concrete Box at Station 275+88

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
1891500
WIN
018915.50
BRIDGE NO. 6652
BRIDGE PLANS

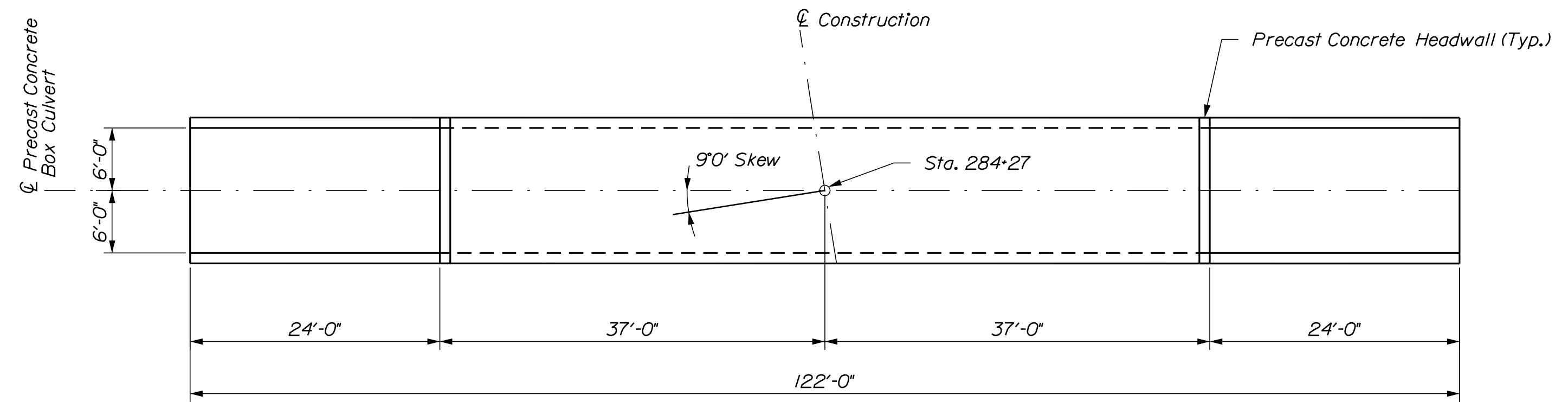
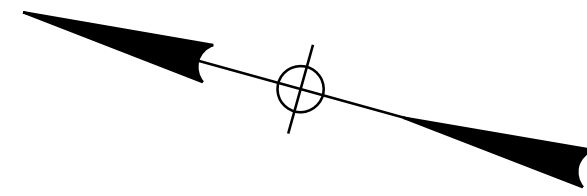
| PROJ. MANAGER | M. WIGHT | BY | DATE |
|------------------|--------------|----------|-----------|
| DESIGN-DETAILED | J. HASBROUCK | R. MAYER | OCT. 2020 |
| CHECKED-REVIEWED | R. MYERS | D. SHAW | OCT. 2020 |
| DESIGN-DETAILED | | | |
| REVISIONS 1 | | | |
| REVISIONS 2 | | | |
| REVISIONS 3 | | |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

I-395/ROUTE 9 CONNECTOR
WILDLIFE 2 (275+89)
BREWER-EDDINGTON PENOBSCOT COUNTY
PRECAST BOX DETAILS -
WHITE TAIL CROSSING BRIDGE

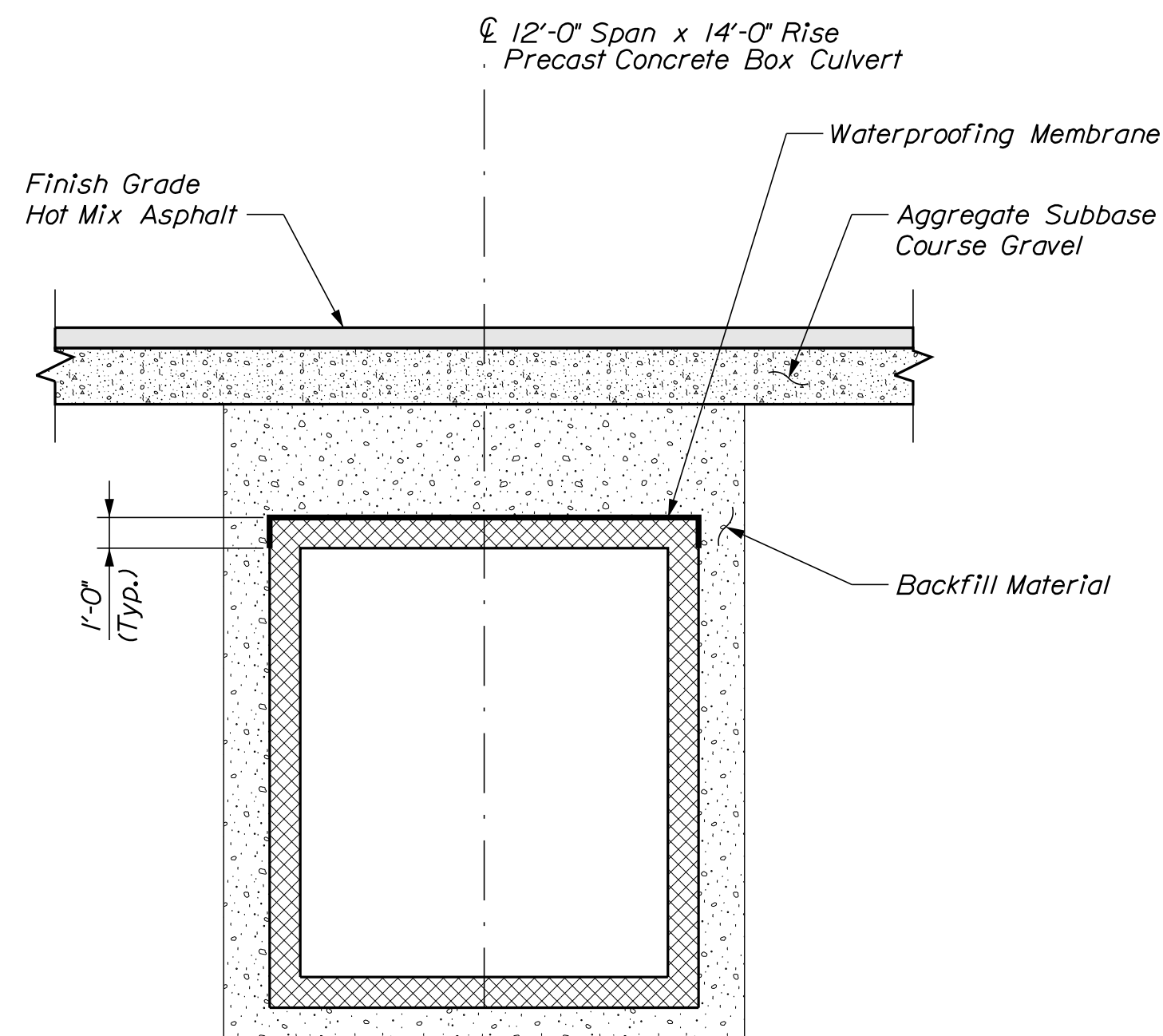
SHEET NUMBER
4
OF 7

PRECAST CONCRETE BOX CULVERT NOTES

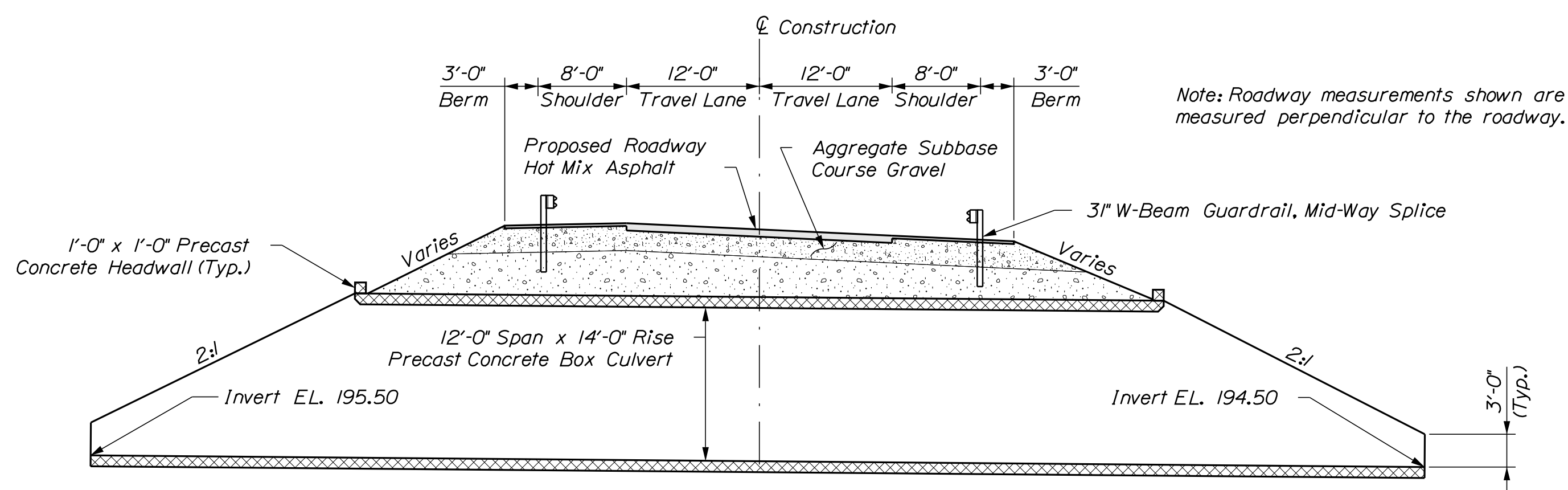
1. The minimum fill cover is 5.39'± at Sta. 284+32.1±; 20'± Rt.
2. The maximum fill cover is 6.66'± at Sta. 284+22.0±; 12'± Lt.
3. The precast units shall be designed to carry construction loadings with a minimum fill cover of 18 inches on top of the units.
4. Backfill material in final construction 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.



PROPOSED PRECAST CONCRETE BOX PLAN



PROPOSED TYPICAL PRECAST CONCRETE BOX TRANSVERSE SECTION



PROPOSED TYPICAL PRECAST CONCRETE BOX LONGITUDINAL SECTION

Section Along ϕ of Concrete Box at Station 284+27 Skewed 9° Ahead on Left

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
1891500
WIN
018915.50
BRIDGE NO. 6653
BRIDGE PLANS

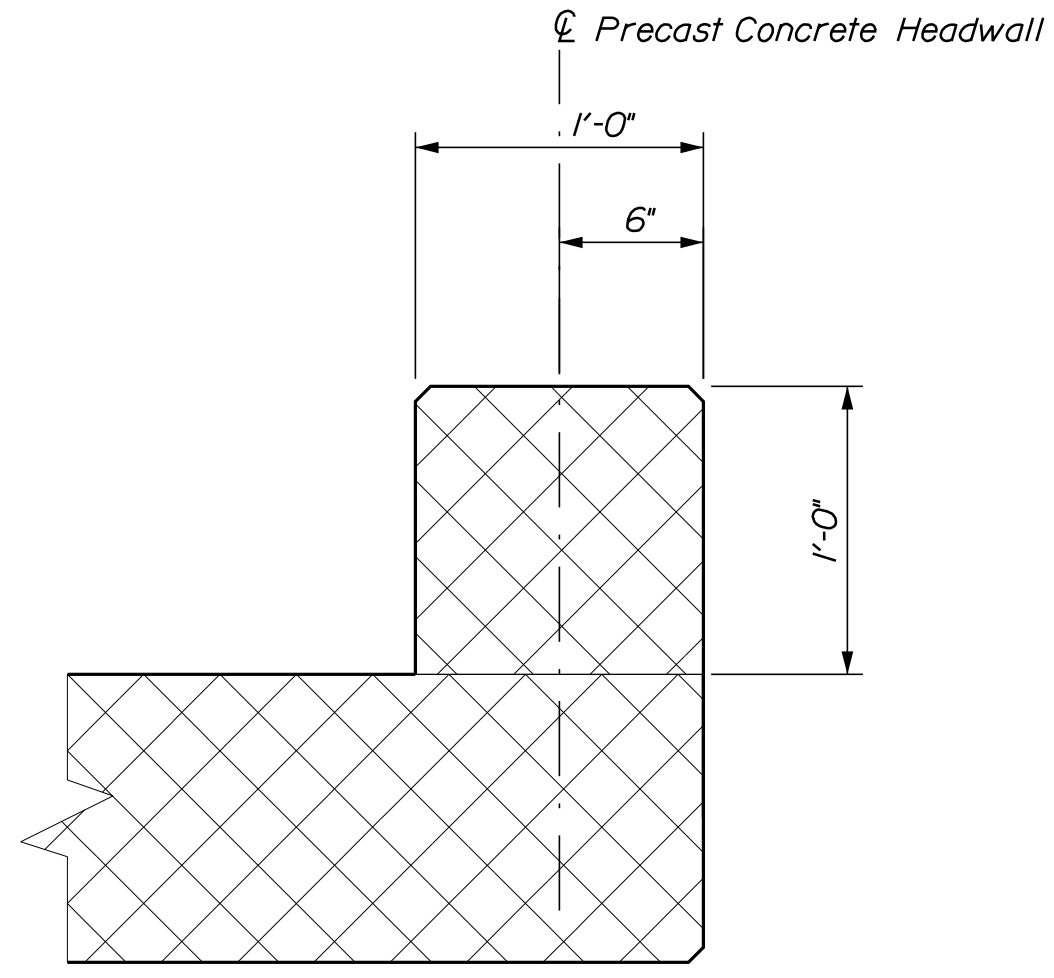
| PROJ. MANAGER | M. WIGHT | BY | DATE |
|------------------|--------------|----------|-----------|
| DESIGN-DETAILED | J. HASBROUCK | R. MAYER | OCT. 2020 |
| CHECKED-REVIEWED | R. MYERS | D. SHAW | OCT. 2020 |
| DESIGN-DETAILED | | | |
| REVISIONS 1 | | | |
| REVISIONS 2 | | | |
| REVISIONS 3 | | |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

I-395/ROUTE 9 CONNECTOR
SNOWMOBILE 107 (284+06)
BREWER-EDDINGTON PENOBSCOT COUNTY
**PRECAST BOX DETAILS -
SNOW SLED BRIDGE**

SHEET NUMBER

5

OF 7



PRECAST CONCRETE HEADWALL DETAIL

SHEET NUMBER

6

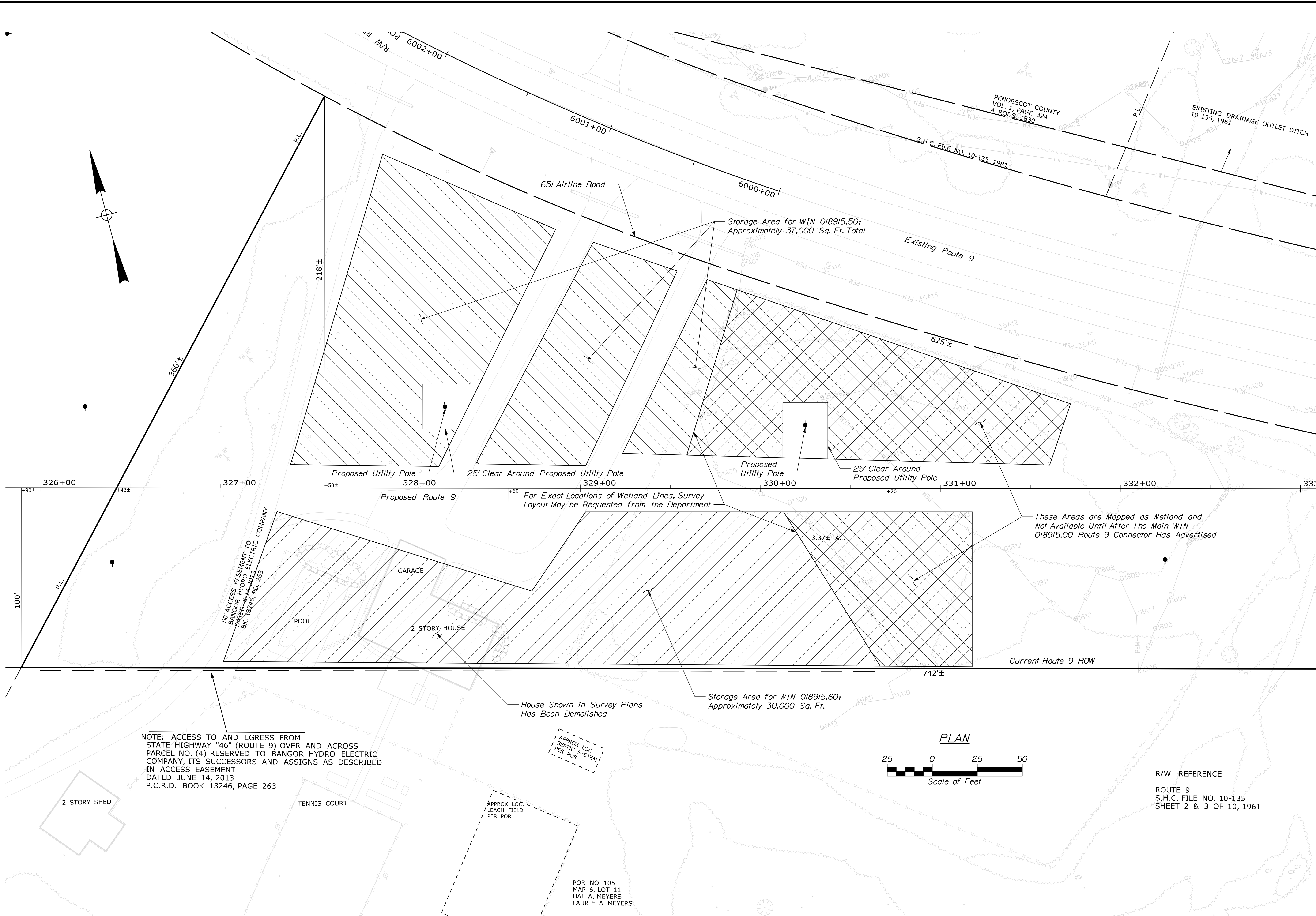
OF 7

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

| | | | |
|------------------|--------------|----------|----------|
| 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**
018915.50 BRIDGE PLANS



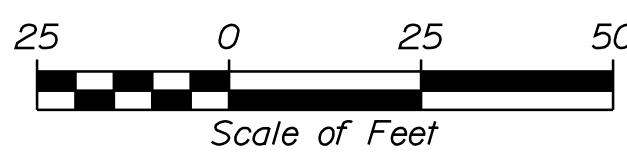
NOTE: ACCESS TO AND EGRESS FROM STATE HIGHWAY "46" (ROUTE 9) OVER AND ACROSS PARCEL NO. (4) RESERVED TO BANGOR HYDRO ELECTRIC COMPANY, ITS SUCCESSORS AND ASSIGNS AS DESCRIBED IN ACCESS EASEMENT DATED JUNE 14, 2013 P.C.R.D. BOOK 13246, PAGE 263

APPROX. LOC. SEPTIC SYSTEM PER POR

APPROX. LOC. LEACH FIELD PER POR

POR NO. 105 MAP 6, LOT 11 HAL A. MEYERS LAURIE A. MEYERS

PLAN



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 018915.50 |
| BRIDGE NO. |
| BRIDGE PLANS |

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

| |
|-----------------------------------|
| I-395/ROUTE 9 CONNECTOR |
| VARIOUS BRIDGES |
| BREWER-EDDINGTON PENOBSCOT COUNTY |
| ROUTE 9 LAYDOWN |
| AREA PLAN |

| |
|--------------|
| SHEET NUMBER |
| 7 |
| OF 7 |