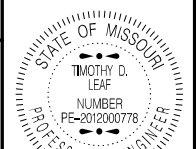
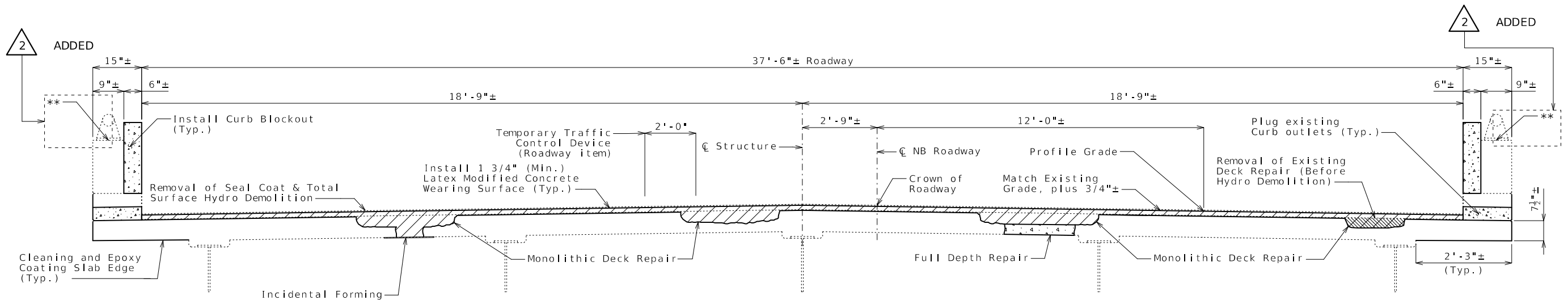


U.I.P. AND REHABILITATE EXISTING (46'-69'-69'-55') CONTINUOUS COMPOSITE WIDE FLANGE BEAM SPANS (SKEW: 20° R.A.)



DATE PREPARED: 11/25/2024
 ROUTE: I-29 STATE: MO
 DISTRICT: BR SHEET NO.: 1
 COUNTY: ANDREW
 JOB NO.: J113262
 CONTRACT ID.:
 PROJECT NO.:
 BRIDGE NO.: A12902



TYPICAL SECTION THRU EXISTING DECK

Note: For details of repairs to deck concrete, see Sheet No. 2.

Estimated Quantities		
Item	Unit	Total
Temporary Shoring	Lump sum	1
Total Surface Hydro Demolition	sq. yard	1013
Removal of Seal Coat or Polymer Wearing Surface	sq. foot	9116
Removal of Existing Deck Repair	sq. foot	100
Bridge Approach Slab (Major)	sq. yard	175
* Supplementary Wearing Surface Material	cu. yard	12
Latex Modified Concrete Wearing Surface	sq. yard	1013
Diamond Grinding	sq. yard	1013
Curb Blockout	linear foot	481
Full Depth Repair	sq. foot	250
Plugging Existing Curb Outlets	each	19
Protective Coating - Concrete Bents and Piers (Epoxy)	Lump sum	1
Cleaning and Coating Existing Bearings	each	10
Cored Slab Drain	each	26
Vertical Drain at End Bents	each	2

General Notes:

Design Specifications:
 2002 AASHTO LFD (17th Ed.) Standard Specifications
 Bridge Deck Rating = 5

Design Loading:
 HS20-44 (1961 & New Construction)

Design Unit Stresses:
 Class B-1 Concrete (Curb Blockout) f'c = 4,000 psi
 Class B-2 Concrete (Full Depth Repair) f'c = 4,000 psi

Contractor can use either Class B-1 or Class B-2 concrete or Wearing Surface material for Slab Drain plugs, same material shall be used throughout.

Concrete Protective Coatings:
 Protective Coating for Concrete Bents and Piers (Epoxy) shall be applied as shown on the bridge plans and in accordance with Sec 711.

Miscellaneous:
 Removal of Existing Bridge Approach Slab or approach pavement is considered a Roadway Item.

Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (Roadway Item).

All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

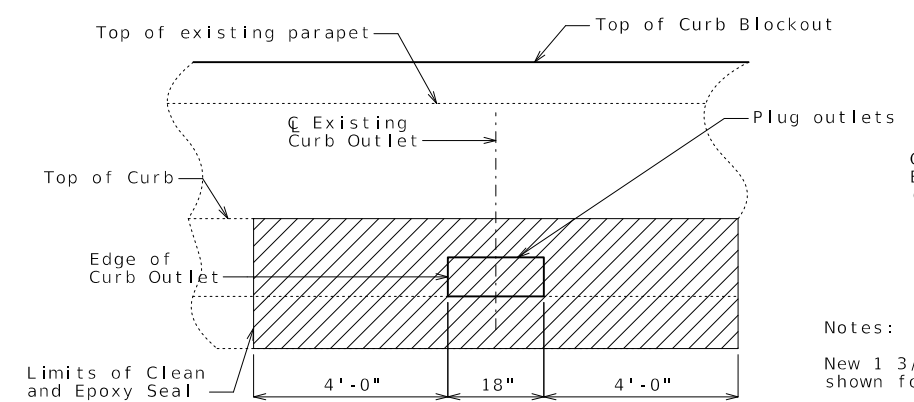
Contractor shall verify all dimensions in field before ordering new material.

In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.

** Asbestos (Friability Category 11 NF) has been detected in the insulation compound between the top of the concrete parapet and the base of the handrail posts. Removal of the handrail and posts, or leave in place is the Contractor's option. Should the Contractor elect to remove the handrail and posts, the Contractor will be required to use an Abatement Contractor during the removal. No direct payment will be made for removal of the handrail and posts and for asbestos abatement should the Contractor choose to perform this work. The described work will be considered completely covered by the contract unit price for other items in the contract.

Traffic Handling:
 Traffic to be maintained on structure during construction. See roadway plans for traffic control.

* Supplementary wearing surface material for monolithic deck repair will be paid for at the fixed unit price in accordance with Sec 109.

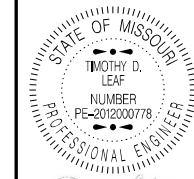


PART ELEVATION SHOWING CLEAN AND EPOXY SEAL AND PLUGGING OF CURB OUTLETS

TYPICAL SECTION THRU EDGE OF SLAB SHOWING CLEAN AND EPOXY SEAL

Notes:
 New 1 3/4" Latex Modified Concrete Overlay not shown for clarity.
 Cost of labor and materials required to plug existing curb outlets will be considered completely covered by the contract unit price for Plugging Existing Curb Outlets, per each.
 Estimated material required to fill all curb outlets is 0.4 cubic yards.

REPAIRS TO BRIDGE: ROUTE I-29 NB OVER MILL CREEK & CR 422
 ROUTE I-29 FROM ROUTE CC TO ROUTE 59 ABOUT 3.3 MILES SOUTH OF ROUTE 59 BEGINNING STATION 217+68.05± (Match Existing)



DATE PREPARED
11/25/2024

ROUTE STATE
I-29 MO

DISTRICT SHEET NO.
BR 4

COUNTY
ANDREW

JOB NO.
J113262

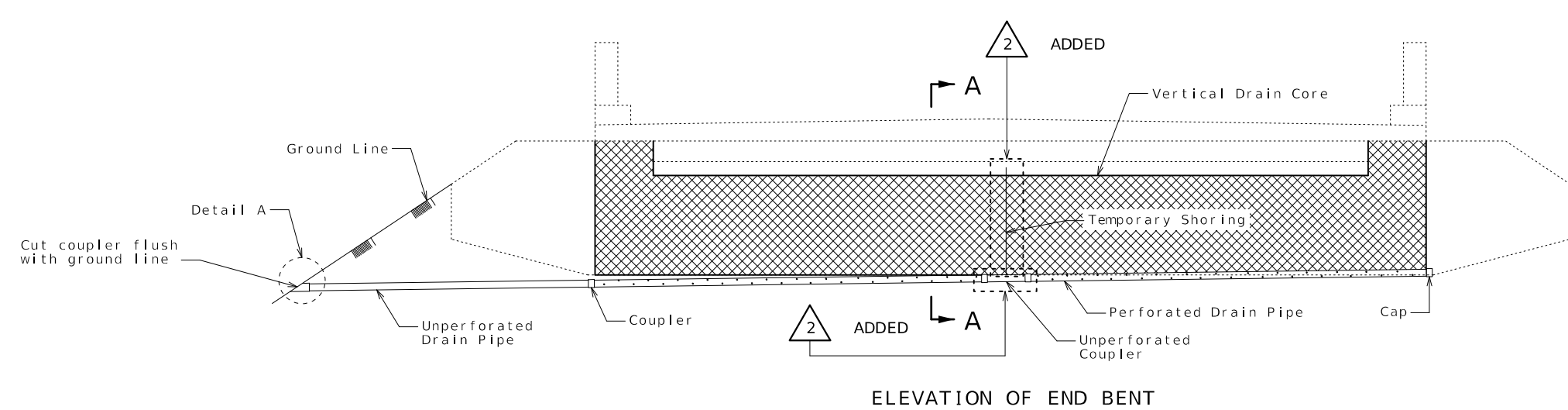
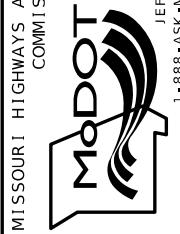
CONTRACT ID.

PROJECT NO.

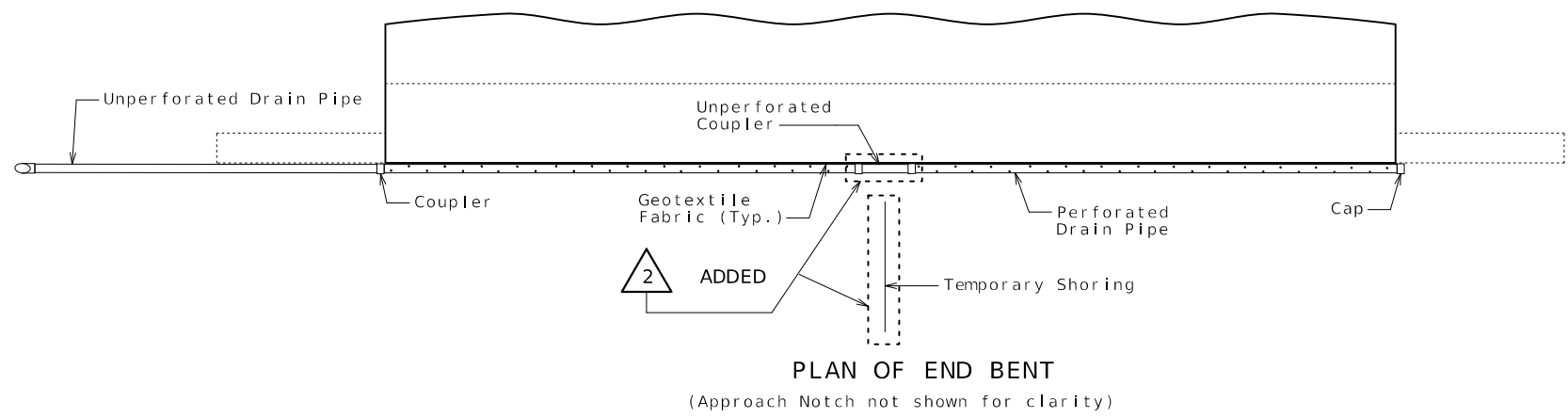
BRIDGE NO.
A12902

DESCRIPTION	DATE

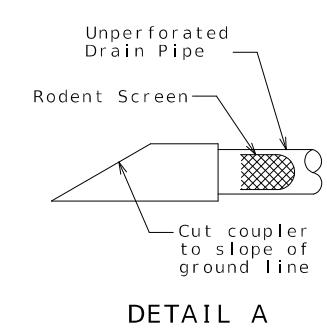
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)



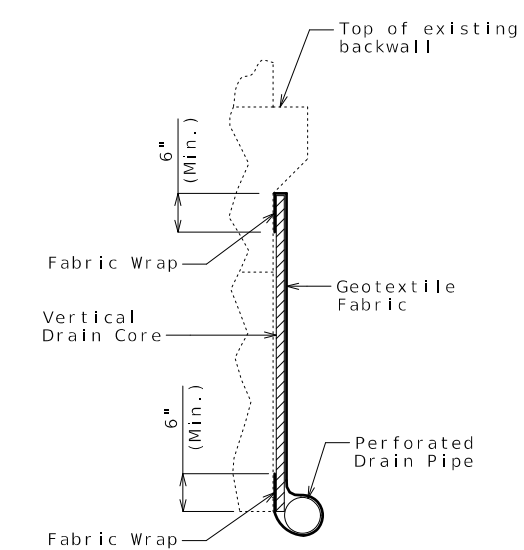
ELEVATION OF END BENT



PLAN OF END BENT
(Approach Notch not shown for clarity)



DETAIL A



PART SECTION A-A

General Notes:

- All drain pipe shall be sloped 1 to 2 percent.
- Drain pipe may be either 6-inch diameter corrugated metallic-coated steel pipe underdrain, 4-inch diameter corrugated polyvinyl chloride (PVC) drain pipe, or 4-inch diameter corrugated polyethylene (PE) drain pipe.
- Drain pipe shall be placed at fill face of end bent and inside face of wings. The pipe shall slope to lowest grade of ground line, also missing the lower beam of end bent by a minimum of 1 1/2 inches.
- Perforated pipe shall be placed at fill face side and inside face of wings at the bottom of end bent and plain pipe shall be used where the vertical drain ends to the exit at ground line.

VERTICAL DRAIN AT END BENTS
(Squared end bent shown, skewed end bent similar)

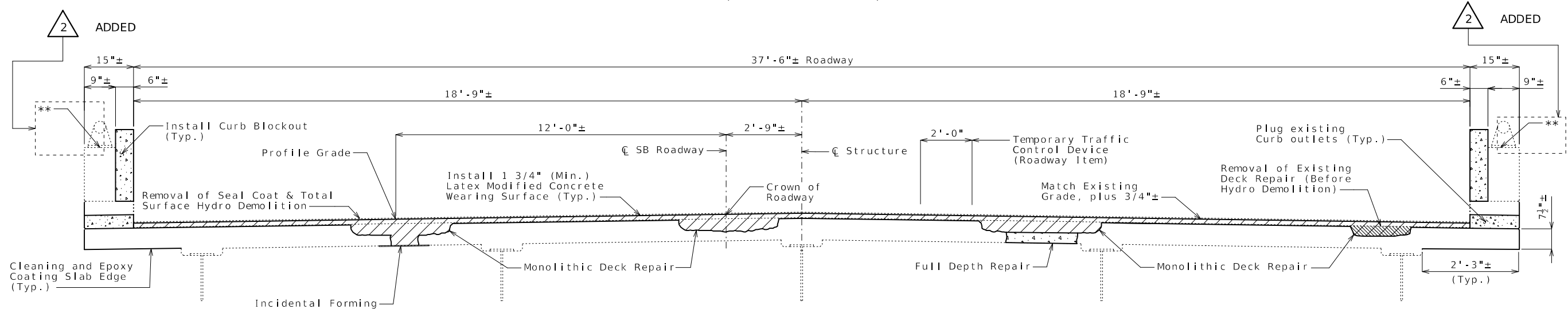
2 REVISED

U.I.P. AND REHABILITATE EXISTING (46'-69'-69'-55') CONTINUOUS COMPOSITE WIDE FLANGE BEAM SPANS
(SKEW: 20° R.A.)

SEC/SUR 15 TWP 59N RGE 36W



DATE PREPARED
11/25/2024
ROUTE 1-29 STATE MO
DISTRICT BR SHEET NO. 1
COUNTY ANDREW
JOB NO. J113262
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A12903



TYPICAL SECTION THRU EXISTING DECK

Note: For details of repairs to deck concrete, see Sheet No. 2.

Estimated Quantities		
Item		Total
Temporary Shoring	lump sum	1
Total Surface Hydro Demolition	sq. yard	1013
Removal of Seal Coat or Polymer Wearing Surface	sq. foot	9116
Removal of Existing Deck Repair	sq. foot	100
Bridge Approach Slab (Major)	sq. yard	175
* Supplementary Wearing Surface Material	cu. yard	12
Latex Modified Concrete Wearing Surface	sq. yard	1013
Diamond Grinding	sq. yard	1013
Curb Blockout	linear foot	481
Full Depth Repair	sq. foot	250
Plugging Existing Curb Outlets	each	19
Protective Coating - Concrete Bents and Piers (Epoxy)	lump sum	1
Cleaning and Coating Existing Bearings	each	10
Cored Slab Drain	each	26
Vertical Drain at End Bents	each	2

* Supplementary wearing surface material for monolithic deck repair will be paid for at the fixed unit price in accordance with Sec 109.

General Notes:

Design Specifications:
2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating = 5

Design Loading:
HS20-44 (1961 & New Construction)

Design Unit Stresses:
Class B-1 Concrete (Curb Blockout) f'c = 4,000 psi
Class B-2 Concrete (Full Depth Repair) f'c = 4,000 psi

Contractor can use either Class B-1 or Class B-2 concrete or Wearing Surface material for Slab Drain plugs, same material shall be used throughout.

Concrete Protective Coatings:
Protective Coating for Concrete Bents and Piers (Epoxy) shall be applied as shown on the bridge plans and in accordance with Sec 711.

Miscellaneous:
Removal of Existing Bridge Approach Slab or approach pavement is considered a Roadway Item.

Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (Roadway Item).

All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

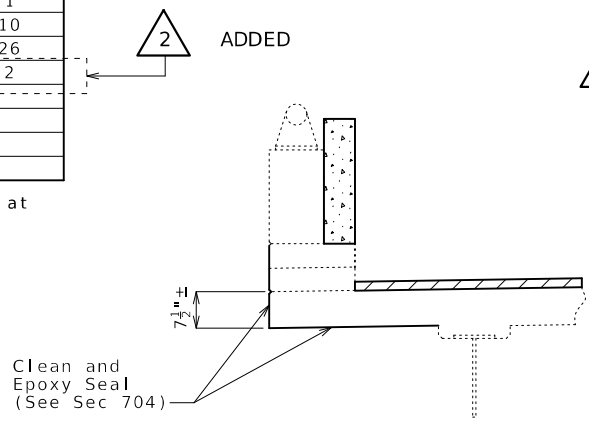
Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before ordering new material.

In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.

** Asbestos (Friability Category 11 NF) has been detected in the insulation compound between the top of the concrete parapet and the base of the handrail posts. Removal of the handrail and posts, or leave in place is the Contractor's option. Should the Contractor elect to remove the handrail and posts, the Contractor will be required to use an Abatement Contractor during the removal. No direct payment will be made for removal of the handrail and posts and for asbestos abatement should the Contractor choose to perform this work. The described work will be considered completely covered by the contract unit price for other items in the contract.

Traffic Handling:
Traffic to be maintained on structure during construction. See roadway plans for traffic control.

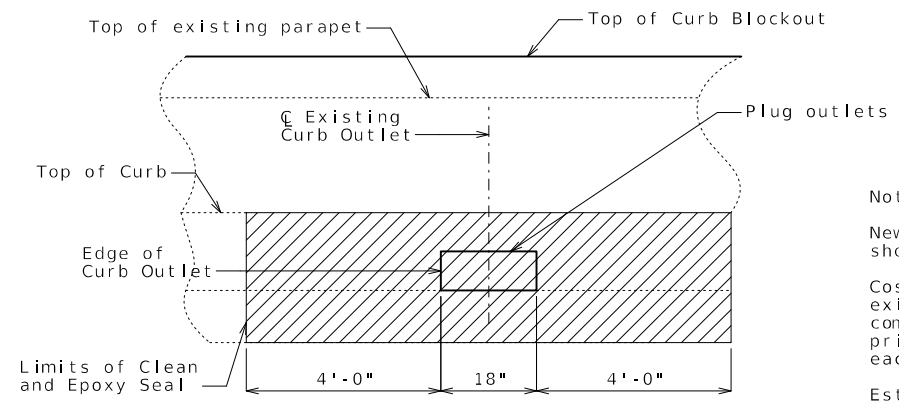


TYPICAL SECTION THRU EDGE OF SLAB SHOWING CLEAN AND EPOXY SEAL

Notes:
New 1 3/4" Latex Modified Concrete Overlay not shown for clarity.

Cost of labor and materials required to plug existing curb outlets will be considered completely covered by the contract unit price for Plugging Existing Curb Outlets, per each.

Estimated material required to fill all curb outlets is 0.4 cubic yards.



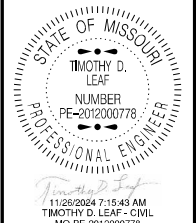
PART ELEVATION SHOWING CLEAN AND EPOXY SEAL AND PLUGGING OF CURB OUTLETS

2 REVISED

REPAIRS TO BRIDGE: ROUTE 1-29 SB
OVER MILL CREEK & CR 422
ROUTE 1-29 FROM ROUTE 59 TO ROUTE CC
ABOUT 3.3 MILES SOUTH OF ROUTE 59
BEGINNING STATION 217+98.62± (Match Existing)

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION





DATE PREPARED
11/25/2024

ROUTE STATE
I - 29 MO

DISTRICT SHEET NO.
BR 4

COUNTY
ANDREW

JOB NO.
J113262

CONTRACT ID.

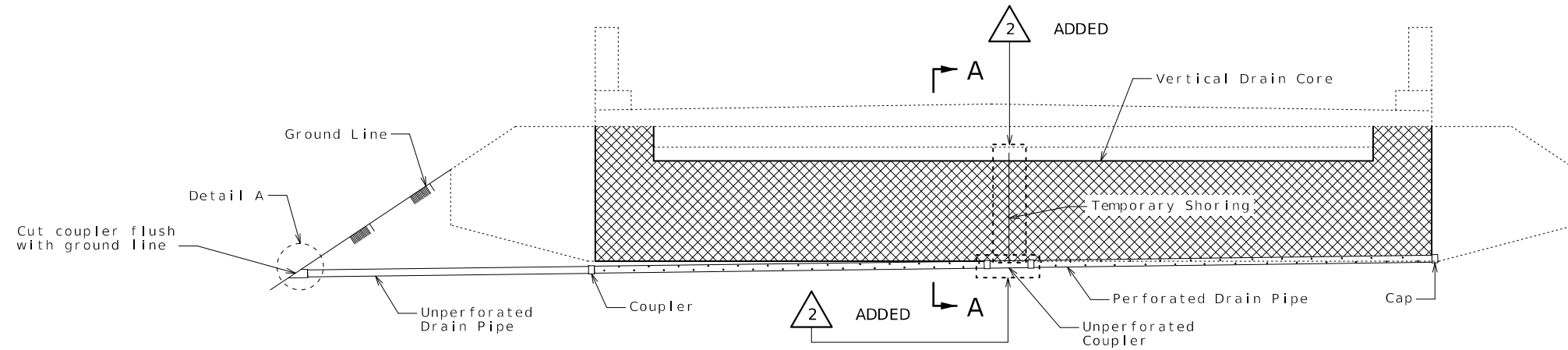
PROJECT NO.

BRIDGE NO.
A12903

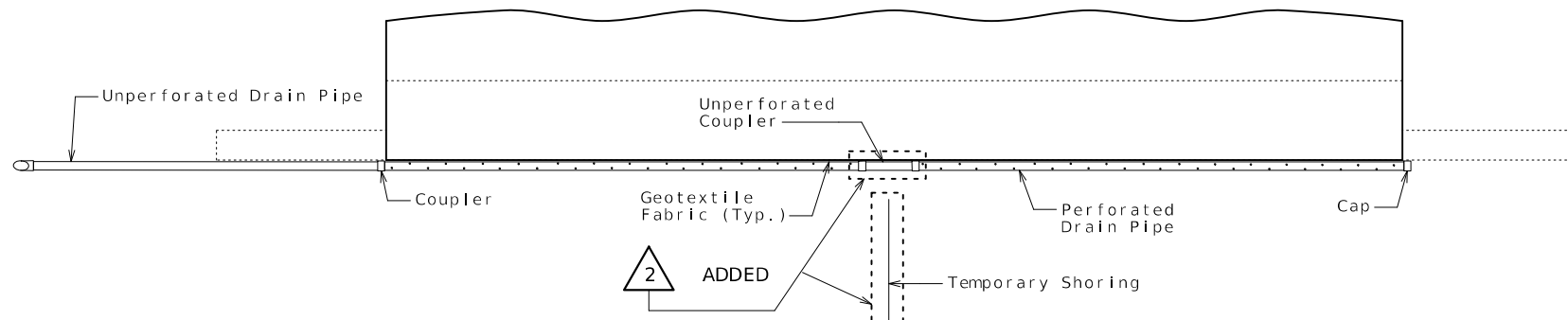
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

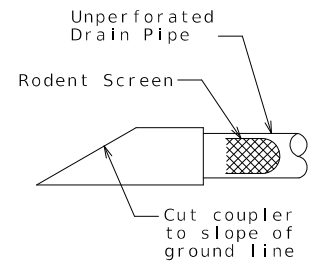
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



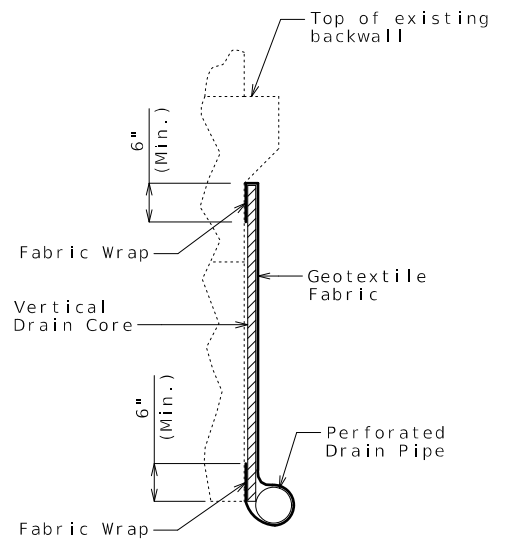
ELEVATION OF END BENT



PLAN OF END BENT
(Approach Notch not shown for clarity)



DETAIL A



PART SECTION A-A

General Notes:

- All drain pipe shall be sloped 1 to 2 percent.
- Drain pipe may be either 6-inch diameter corrugated metallic-coated steel pipe underdrain, 4-inch diameter corrugated polyvinyl chloride (PVC) drain pipe, or 4-inch diameter corrugated polyethylene (PE) drain pipe.
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- Perforated pipe shall be placed at fill face side and inside face of wings at the bottom of end bent and plain pipe shall be used where the vertical drain ends to the exit at ground line.

VERTICAL DRAIN AT END BENTS
(Squared end bent shown, skewed end bent similar)