

08-04-2023 LETTING ITEM 077

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8. ABUTMENT DETAILS
9. STEEL RAILING DETAILS
10. APPROACH PAVEMENT & DETAILS
- 11.-13. CROSS SECTIONS
- 14.-15. SWPPP

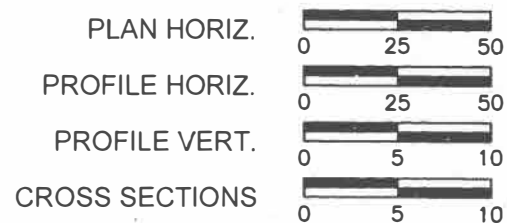
**SUMMARY OF QUANTITIES**

SEE SHEET NO. 2

**STANDARDS**

- 280001-07 TEMPORARY EROSION CONTROL
- 515001-04 NAME PLATE FOR BRIDGES
- 701306-04 TRAFFIC CONTROL DEVICES
- 701901-08 TRAFFIC CONTROL DEVICES
- BLR 21-9 TRAFFIC CONTROL

**SCALES**



ALL EXISTING UTILITIES AND LOCATIONS TO BE CONFIRMED BY J.U.L.I.E. 800-892-0123



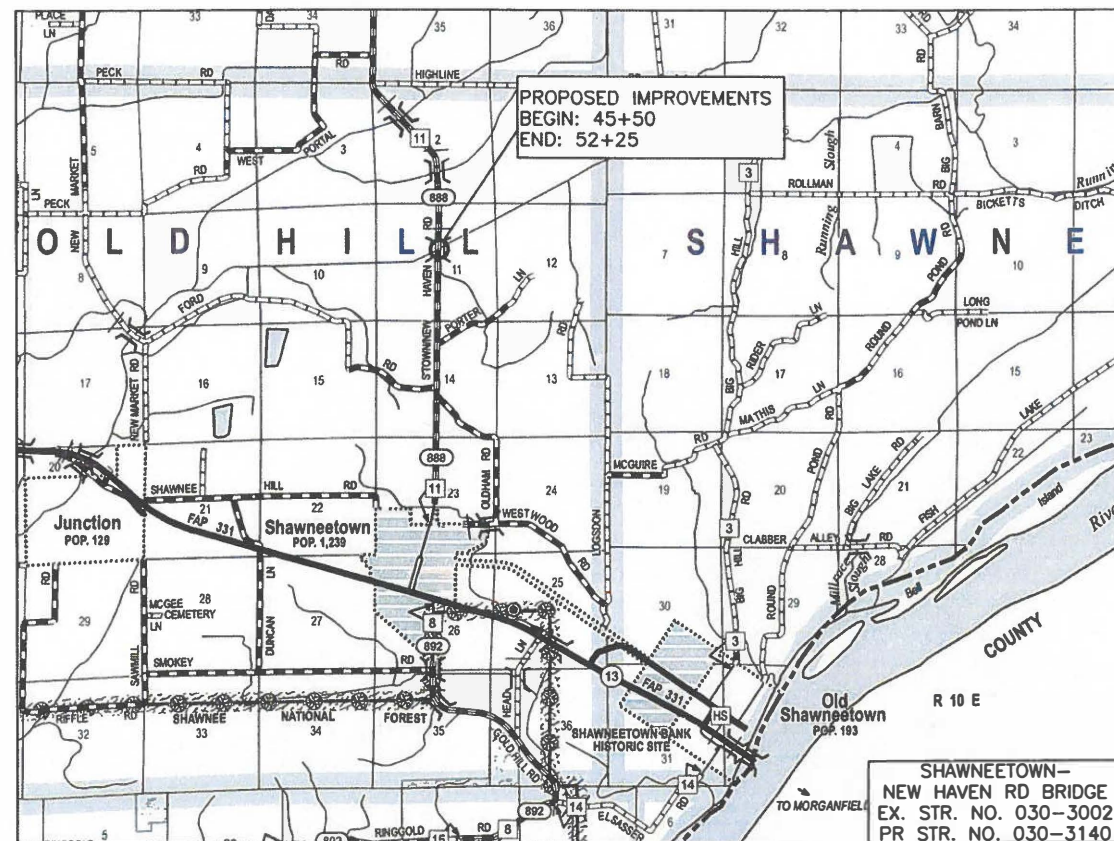
**BROWN & ROBERTS, INC.**  
CONSULTING ENGINEERS LAND SURVEYORS  
ONE WESTRIDGE ROAD HARRISBURG, IL 62946 (618) 252-8111

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLANS FOR PROPOSED**

**SHAWNEETOWN - NEW HAVEN RD  
BRIDGE REPLACEMENT  
FAS ROUTE 888**

**GALLATIN COUNTY  
SECTION NO. 19-00083-00-BR  
PROJECT NO. QMBW(783)  
JOB NO. C-99-054-20  
CONTRACT NO. 99706**



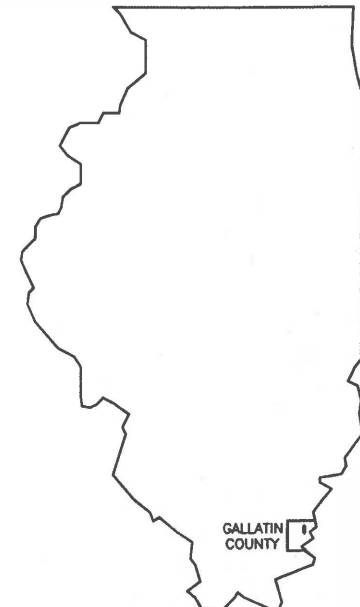
**LOCATION MAP**

Not to Scale

Length Of Improvements = 675 ft (0.128 mi)

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 888	19-00083-00-BR	GALLATIN	15	1
SHAWNEETOWN-NEW HAVEN RD		CONTRACT 99706		

**FUNCTIONAL CLASS: MAJOR COLLECTOR  
ADT (2020): 1100  
DESIGN SPEED: 55 MPH**



LOCATION OF SECTION INDICATED THUS: -

*Jim W. Brown*  
 Jim W. Brown as President of Brown & Roberts, Inc. Date 3/3/2023  
 Illinois Professional Design Firm  
 Land Survey & Prof. Eng. Corp  
 Number 184-002518  
 Expires April 30, 2023

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

APPROVED 3/3/23  
*[Signature]*  
 LOCAL AGENCY REPRESENTATIVE

PASSED 5/16/23  
*[Signature]*  
 DISTRICT 9 ENGINEER OF LOCAL ROADS & STREETS

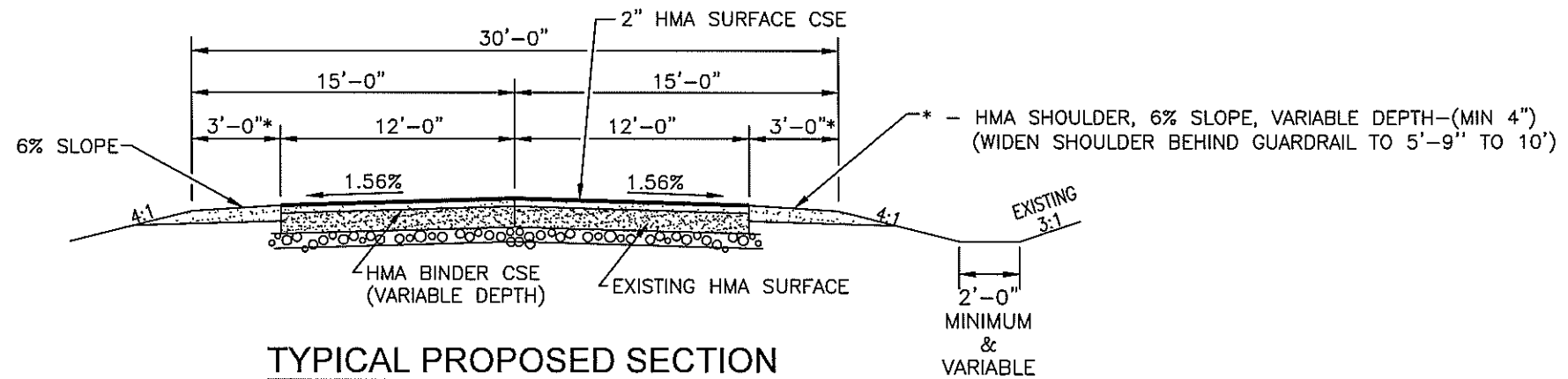
RELEASING FOR BID  
 BASED ON LIMITED  
 REVIEW 5/16/23  
*[Signature]*  
 KIRK H. BROWN, P.E.  
 REGION FIVE ENGINEER

# SUMMARY OF QUANTITIES

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 888	19-00083-00-BR	GALLATIN	15	2
SHAWNEETOWN-NEW HAVEN RD			CONTRACT 99706	

ITEM NO.	PAY ITEM	UNIT	QUANTITY
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.7
X4201400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	200
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	800
X7010238	CHANGEABLE MESSAGE SIGN (SPECIAL)	CAL MO	8
20200100	EARTH EXCAVATION	CU YD	210
20400100	BORROW EXCAVATION	CU YD	440
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	50
28000305	TEMPORARY DITCH CHECKS	FOOT	40
28000400	PERIMETER EROSION BARRIER	FOOT	600
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	330
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	2025
40602985	HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70	TON	390
40604052	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX"C", N70	TON	220
48203013	HOT-MIX ASPHALT SHOULDERS, 4"	SQ YD	690
50100200	REMOVAL OF EXISTING STRUCTURES	L SUM	1
50300225	CONCRETE STRUCTURES	CU YD	25.8
50300280	CONCRETE ENCASEMENT	CU YD	3.5
50400505	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	1800
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	14,738
*50900450	STEEL RAILING, TYPE WT	FOOT	120
51201400	FURNISHING STEEL PILES HP10X42	FOOT	1500
51202305	DRIVING PILES	FOOT	1500
51500100	NAME PLATES	EACH	1
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	200
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	540
58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	40
*63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	150
*63000005	STEEL PLATE BEAM GUARDRAIL, TYPE B	FOOT	100
*63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
67100100	MOBILIZATION	L SUM	1
*72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
*78001110	PAINT PAVEMENT MARKING LINE - 4"	FOOT	1520
*78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	10
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	10

\* SPECIALITY ITEM



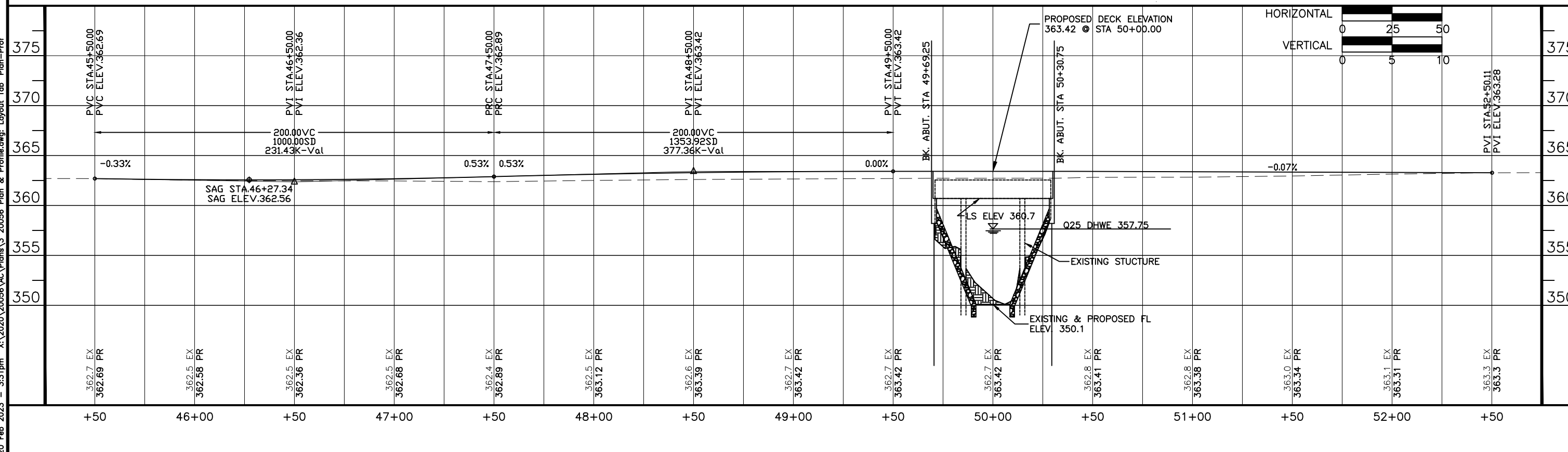
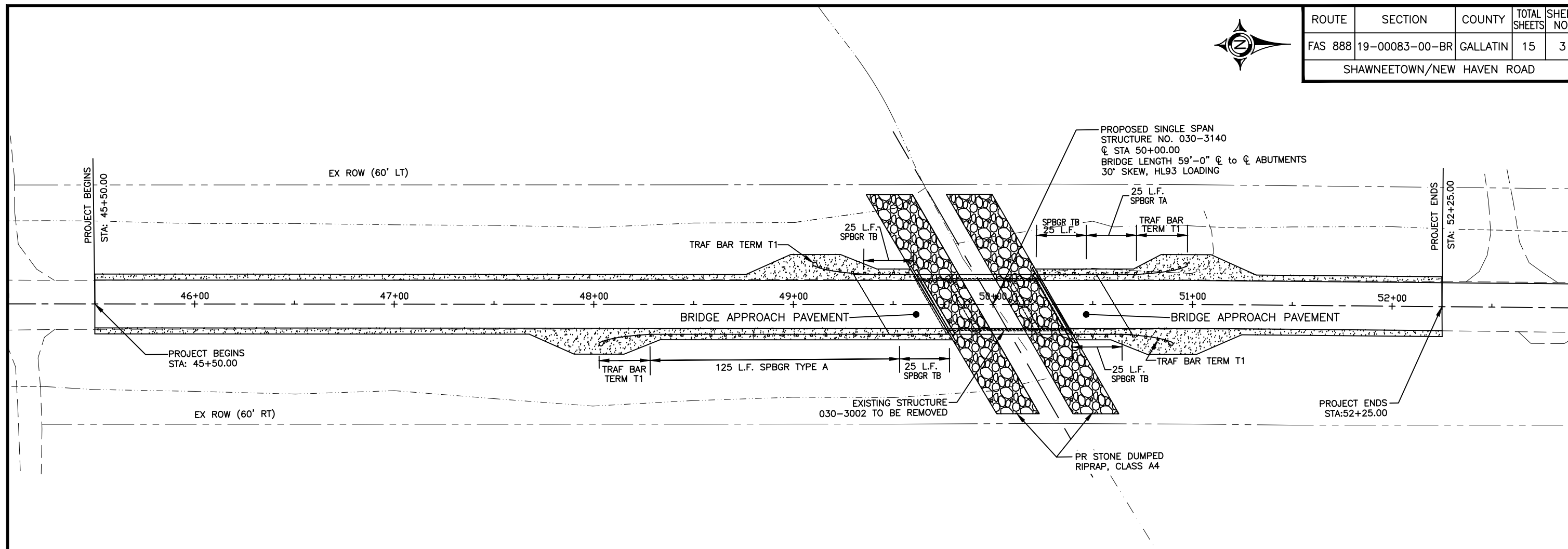
## TYPICAL PROPOSED SECTION

NO SCALE

(STA: 45+50 TO 49+39.25 & STA: 50+60.75 TO 52+25)



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 888	19-00083-00-BR	GALLATIN	15	3
SHAWNEETOWN/NEW HAVEN ROAD				



20 Feb 2023 3:31pm X:\2020\20056\AC\Plans\3 20056 Plan & Profile.dwg: Layout, Tab 'Plan-Prof'



**GENERAL NOTES**

- Concrete Structures shall be used throughout except in the deck beams.
- The Contractor shall drive  $\varnothing$  test piles, as specified, in a permanent location, as directed by the Engineer, before ordering the remaining piles.
- See Special Provisions for Boring Logs.
- BenchMark - Station 44+84.94, 27.8'LT - 8" Mag Spike - Elevation 361.55
- \*\* Channel Excavation shall be measured and paid for as Earth Excavation.

**LETTERING FOR NAME PLATE**

SEC. 19-00083-00-BR  
 STR. NO. 030-3140  
 BUILT 2023  
 GALLATIN COUNTY  
 LOADING HL93

LOCATE NAME PLATE AT  
 SOUTHWEST CORNER OF BRIDGE

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 888	19-00083-00-BR	GALLATIN	15	4
SHAWNEETOWN-NEW HAVEN RD		CONTRACT 99706		

**WATERWAY INFORMATION**

Drainage Area = 4.9 Sq. Mi.		Low Grade Elev. = 362.4							
Flood	Freq. (year)	Q (cfs)	Opening (sq ft)		Natural HWE	Head (ft)		Headwater Elev	
			Exist	Prop		Exist	Prop	Exist	Prop
Design	25	1440	221	251	357.75	1.33	1.19	359.08	358.94
Base	100	2020	241	268	358.01	2.26	2.07	360.27	360.08
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	2740	-	-	358.27	3.14	2.96	361.41	361.23

**TOTAL BILL OF MATERIAL**

ITEM	Unit	Super.	Substructure		Bridge Appr. Pavt	Total
			Piers	Abuts.		
Removal of Existing Structures	Each	1				1
Concrete Structures	Cu Yd			25.8		25.8
P.P. Con. Dk. Bm. 27" Dp.	Sq Ft	1800				1800
Steel Railing, Type WT	Foot	120				120
Reinforcement Bars, Epoxy ctd	Pound			3100	11,638	14,738
Furnish Steel Piles HP 10x42	Foot			1500		1500
Drive Steel Piles	Foot			1500		1500
Name Plate	Each			1		1
Class SI Conc. Encasement	Cu Yd			3.5		3.5
Channel Excavation **	Cu Yd					260

**DESIGN SPECIFICATIONS**

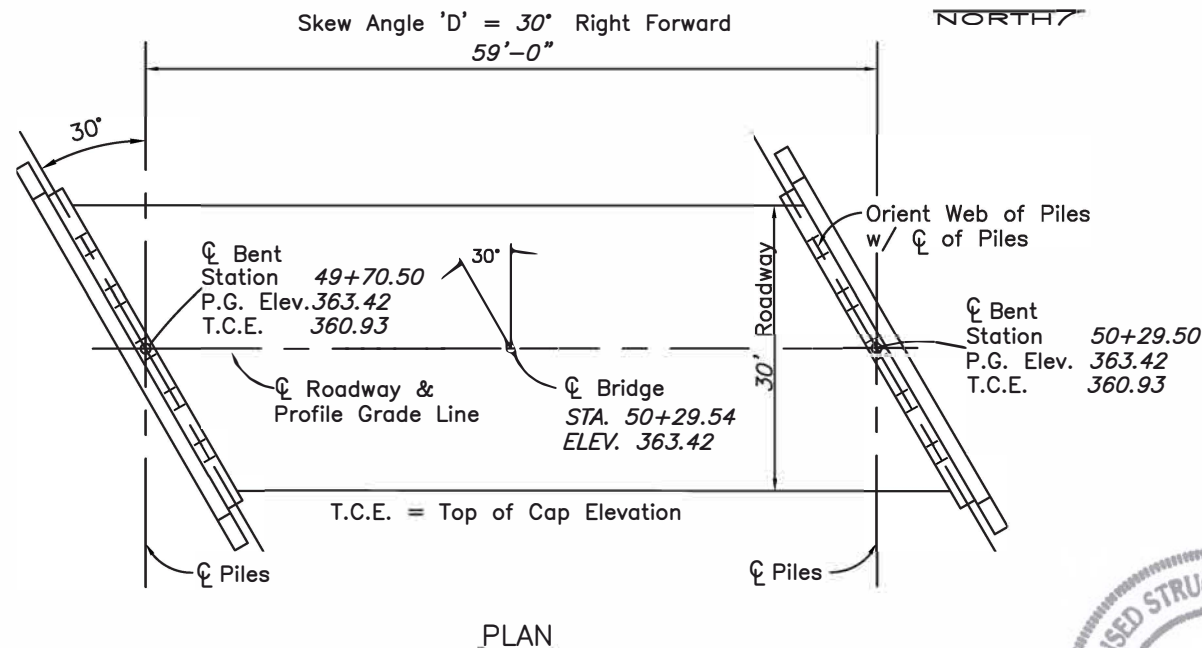
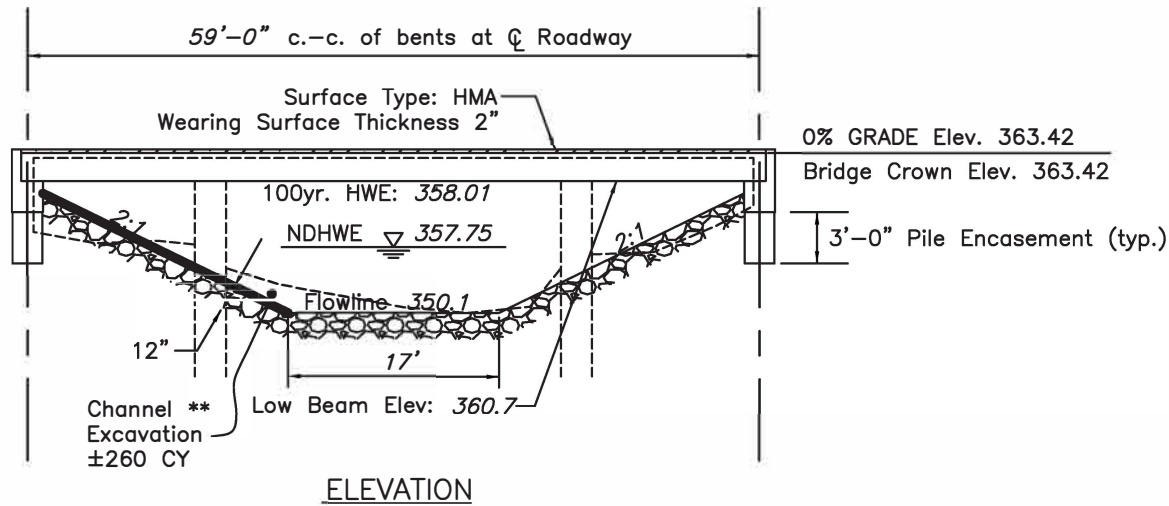
2020 LRFD Specification - 9th ed.

**SEISMIC DATA**

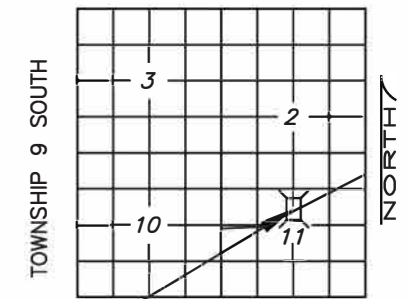
Seismic Performance Zone (SPZ) = 3  
 Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.478  
 Design Spectral Acceleration at 0.2 sec ( $S_{D5}$ ) = 0.875  
 Site Soil Class = E

**PILE DATA (2-ABUTS.)**

Type STEEL HP 10X42  
 Estimated Length 150 Feet  
 Number Required 10  
 Nominal Required Bearing 335 KIPS  
 Allowable Resistance Available 184 KIPS

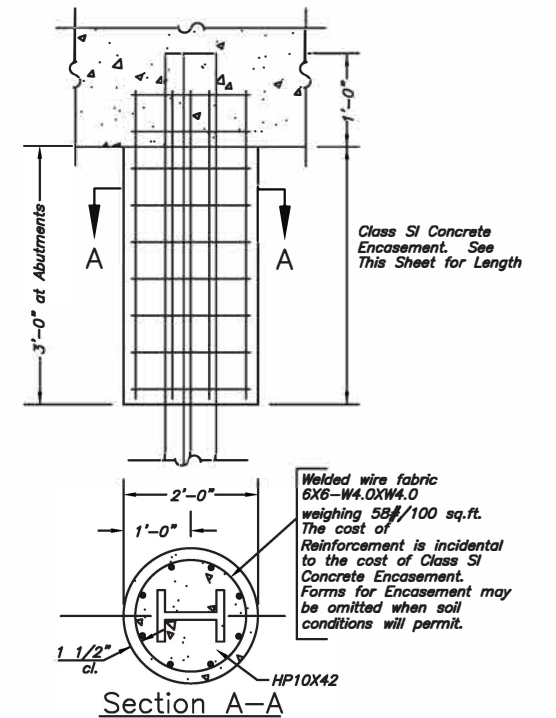


**LOCATION SKETCH**



PROPOSED BRIDGE

**DETAIL OF HP PILE ENCASEMENT**



I certify that to the best of knowledge, information and belief, this bridge/box culvert design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges.

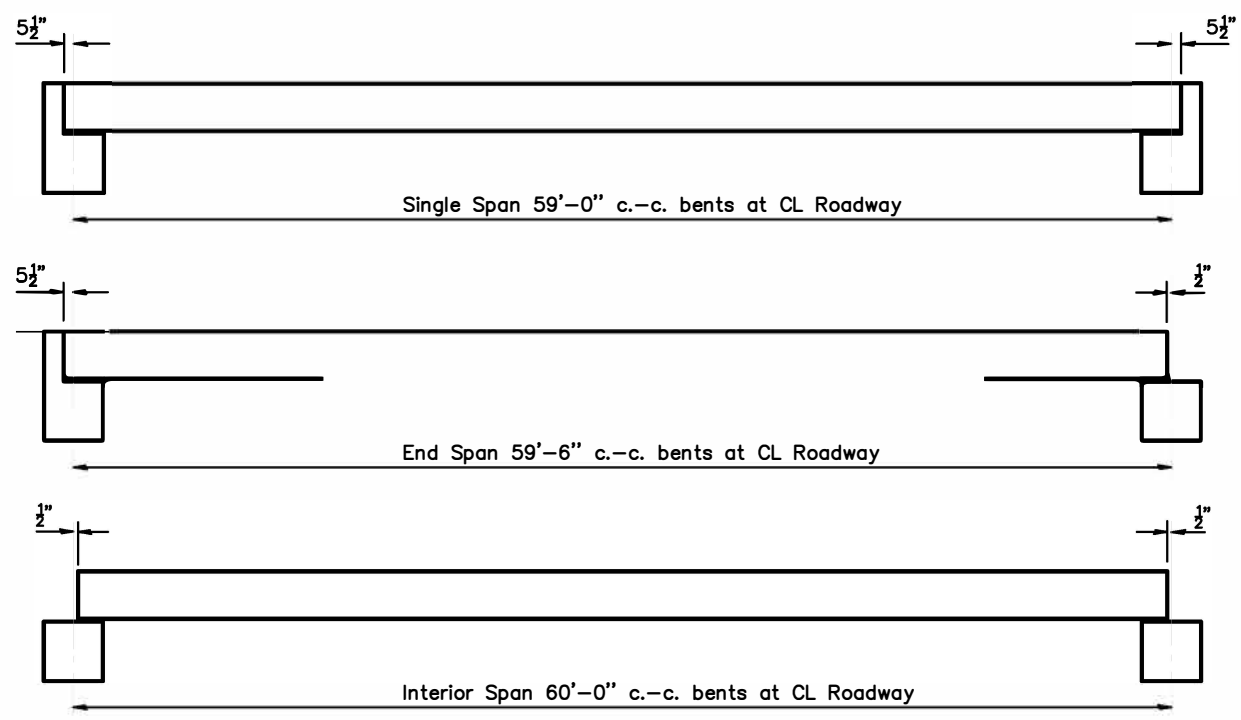
Illinois Structural No. 4745  
 Expires 11/30/2024



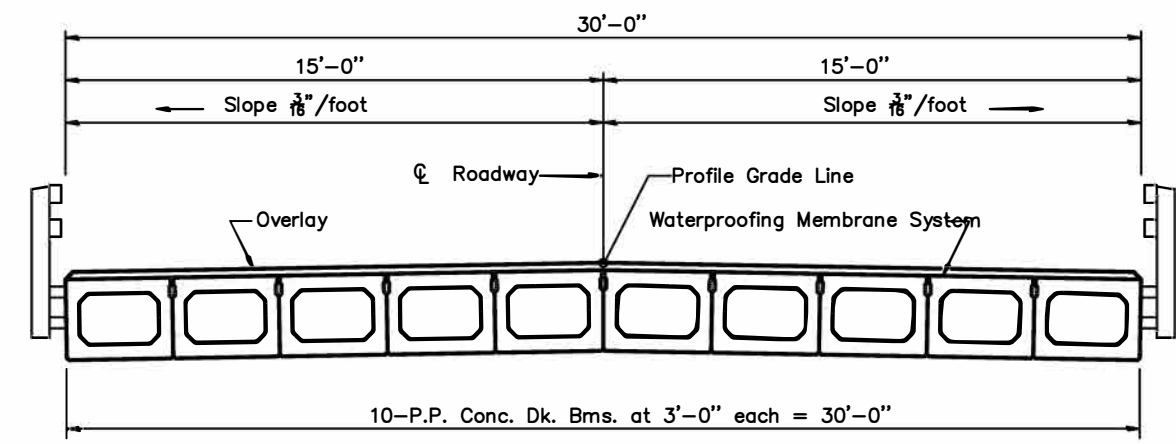
**GENERAL PLAN & ELEVATION**

STATION 50+00

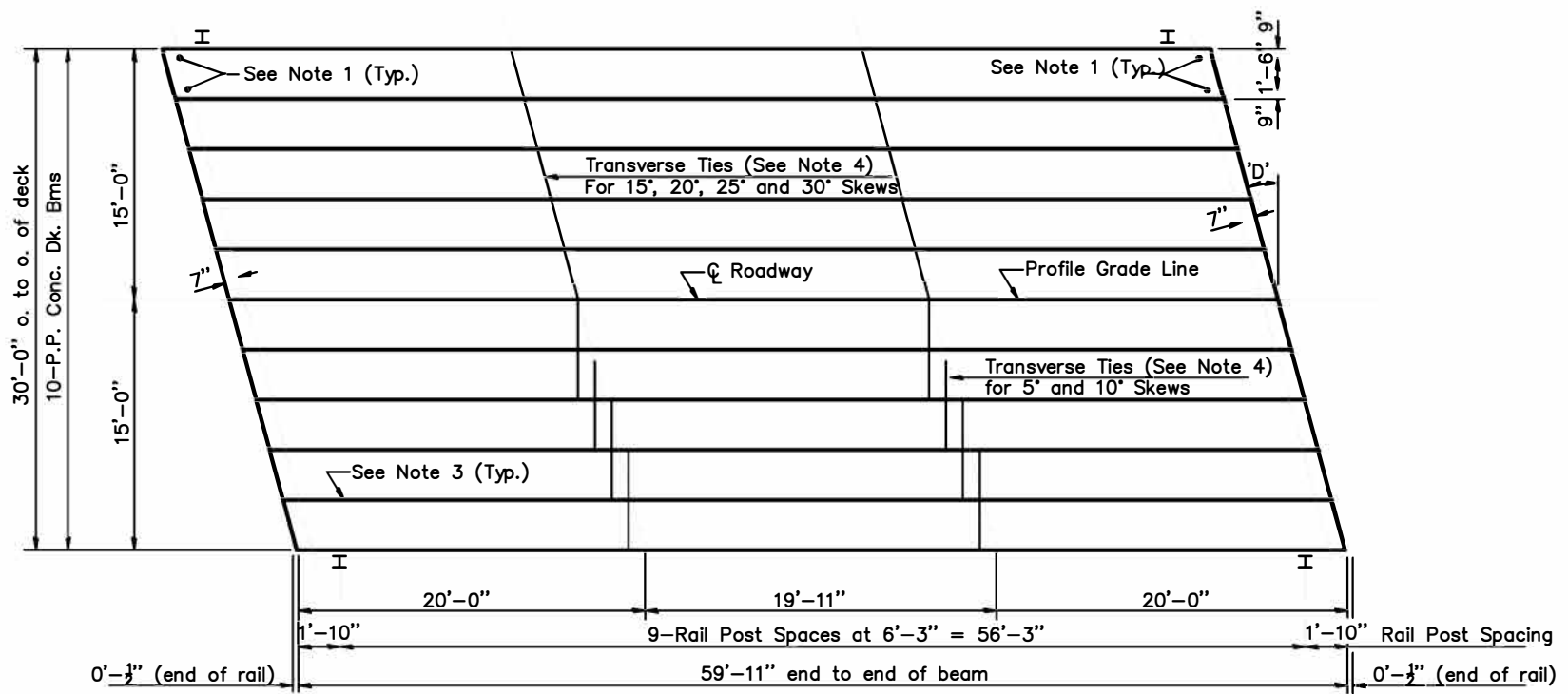
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 888	19-00083-00-BR	GALLATIN	15	5
SHAWNEETOWN-NEW HAVEN RD		CONTRACT 99706		



**TYPICAL ELEVATIONS**

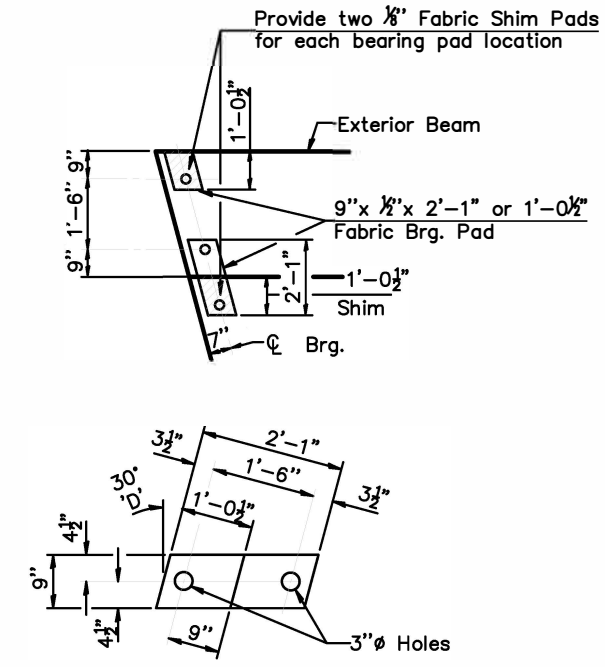


**CROSS SECTION**

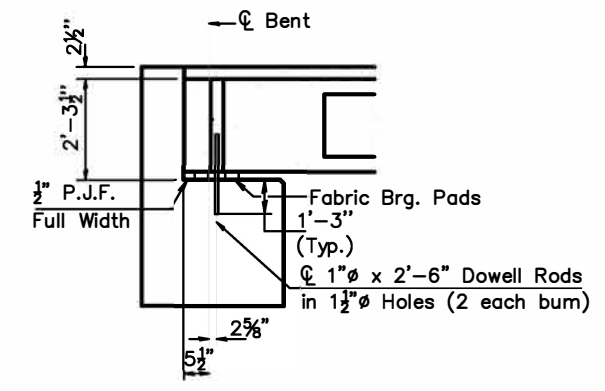


**PLAN**

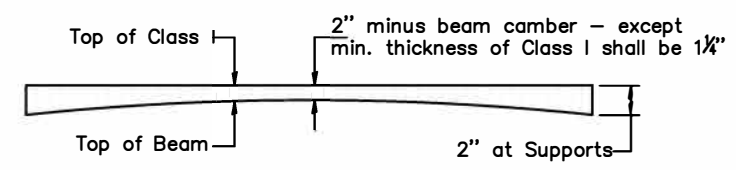
('D' = Designated Skew Angle)  
(D' = 30°)



**1/2" FABRIC BRG. PAD DETAILS**



**SECTION AT ABUTS.**  
(Along  $\phi$  Beams)



**PROFILE OF OVERLAY**

- NOTES**
- After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
  - (Nominal 1" joint at  $\phi$  Pier shall be filled with non-shrink grout.
  - Longitudinal keys shall be grouted.
  - The 1"  $\phi$  rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar outside shall be filled with grout after transverse tie assembly is in place.

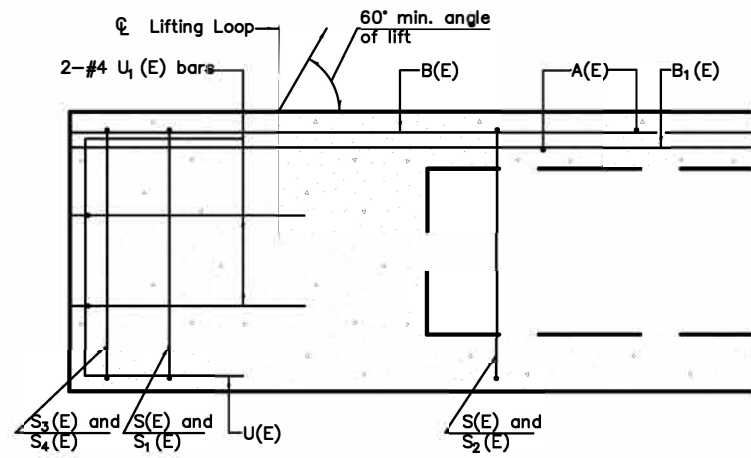
**QUANTITIES FOR ONE SPAN**

P.P. Conc. Dk. Bm. 27" Dp.	1800 Sq. Ft.
Steel Railing	120 Ft.
Waterproofing Membrane System	200.0 Sq. Yds.
Portland Cement Mortar	540 Ft.
Fairing Course	

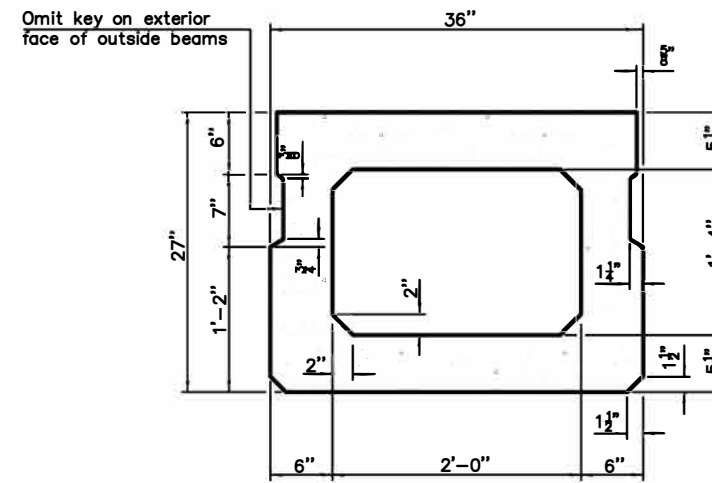
Note: Quantity of overlay for one span = 22.0 Tons

30' RDWY.	27" BMS.	60' SPAN	30' RT FWD
<b>SUPERSTRUCTURE</b>			

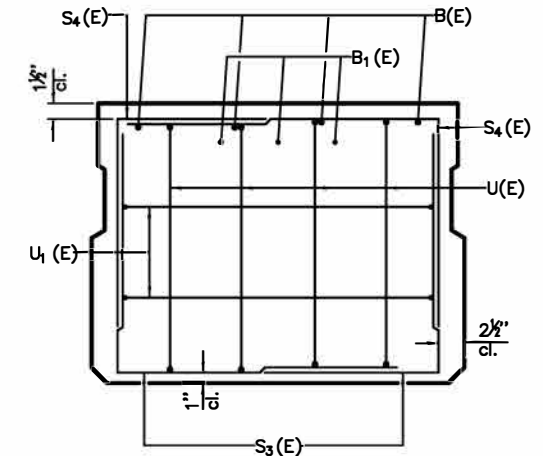
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 888	19-00083-00-BR	GALLATIN	15	6
SHAWNEETOWN-NEW HAVEN RD			CONTRACT 99706	



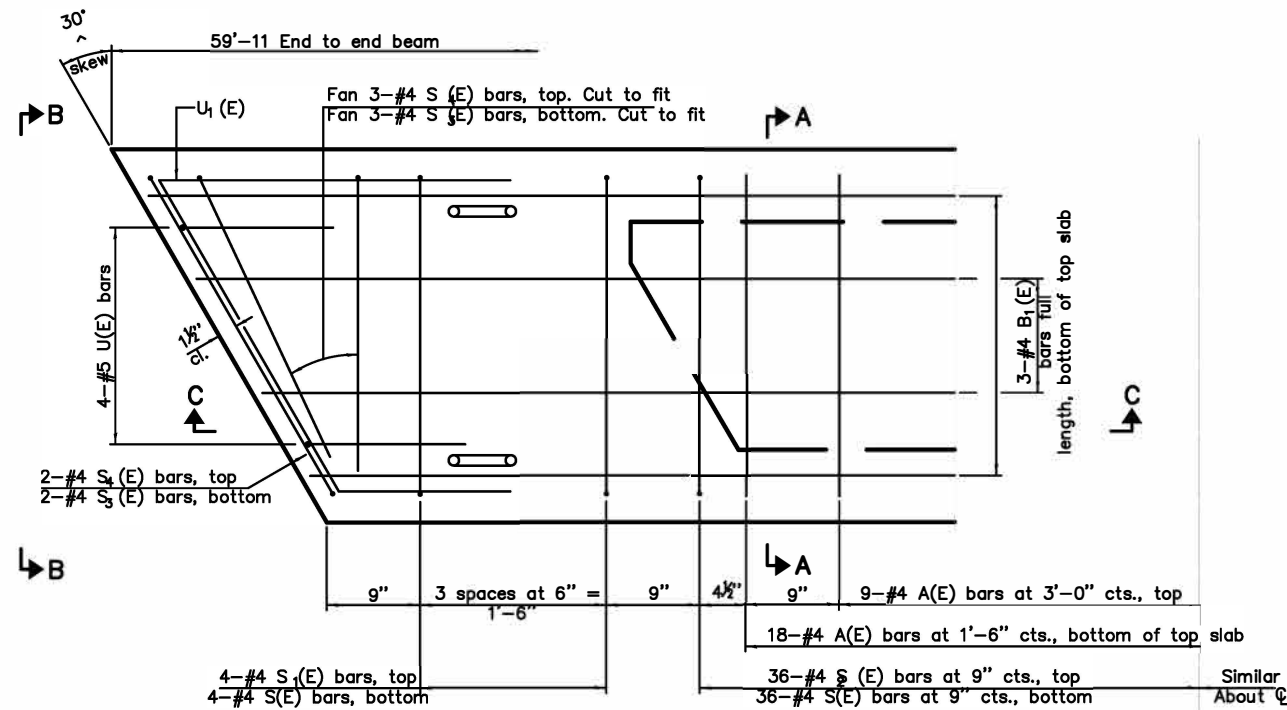
**SECTION C-C**



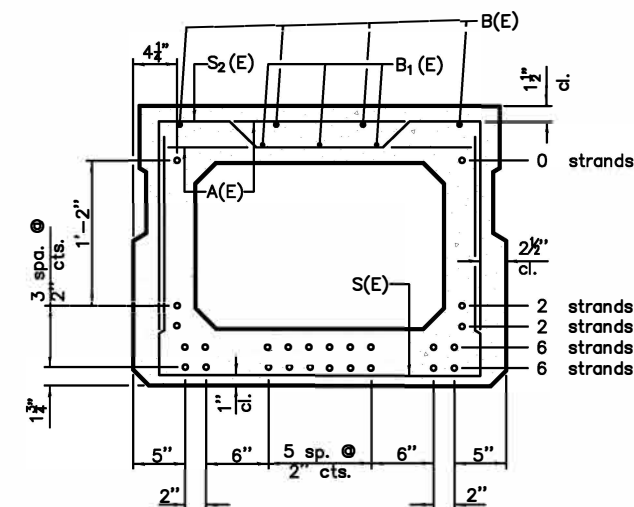
**SECTION A-A**  
(Showing dimensions)



**VIEW B-B**



**PLAN VIEW**



**SECTION A-A**  
(Showing reinforcement and permissible strand locations)  
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

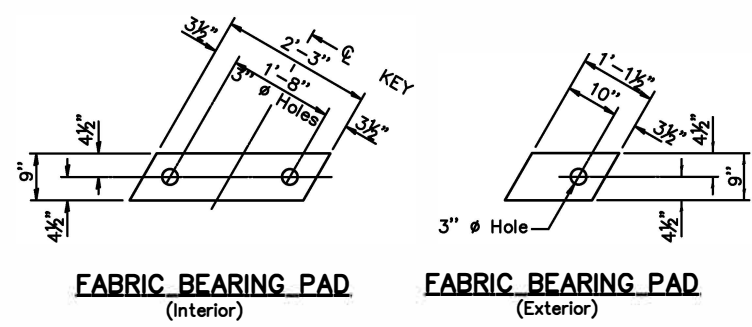
**BAR LIST**  
**ONE BEAM ONLY**  
(For information only)

Bar	No.	Size	Length	Shape
A(E)	54	#4	2'-7"	—
B(E)	8	#5	32'-0"	—
B1(E)	9	#4	22'-6"	—
S(E)	80	#4	6'-5"	—
S1(E)	8	#4	5'-11"	—
S2(E)	72	#4	6'-2"	—
S3(E)	10	#4	4'-8"	—
S4(E)	10	#4	4'-11"	—
U(E)	8	#5	4'-6"	—
U1(E)	4	#4	6'-11"	—

Note: See sheet of for additional details and Bill of Material.

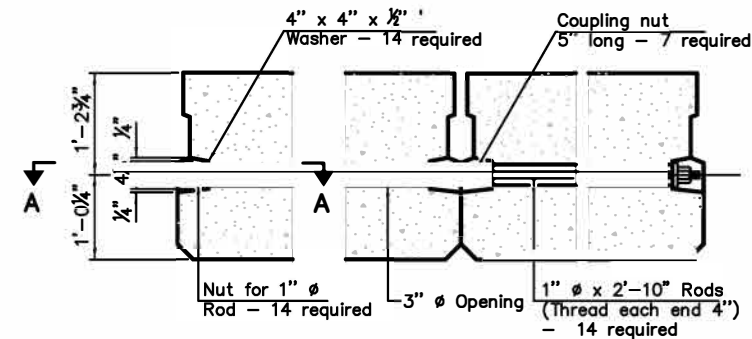
Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 888	19-00083-00-BR	GALLATIN	15	7
SHAWNEETOWN-NEW HAVEN RD			CONTRACT 99706	

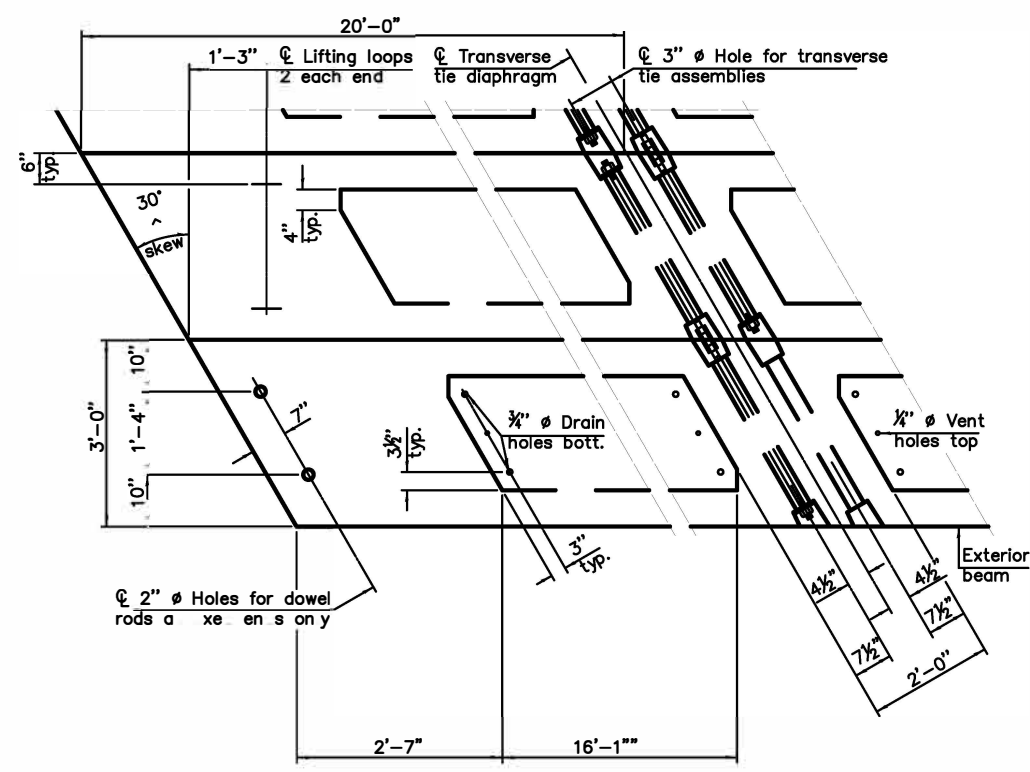


**FIXED**

Note: Omit holes when using expansion bearings.

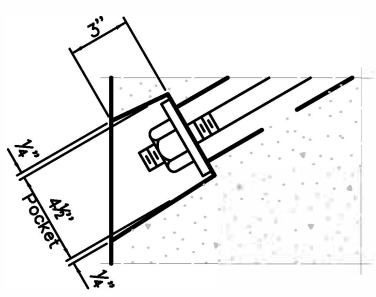


**TYPICAL TRANSVERSE TIE ASSEMBLY**

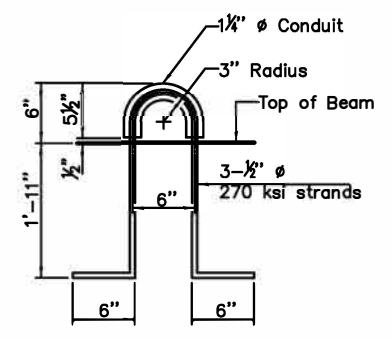


**PLAN VIEW**

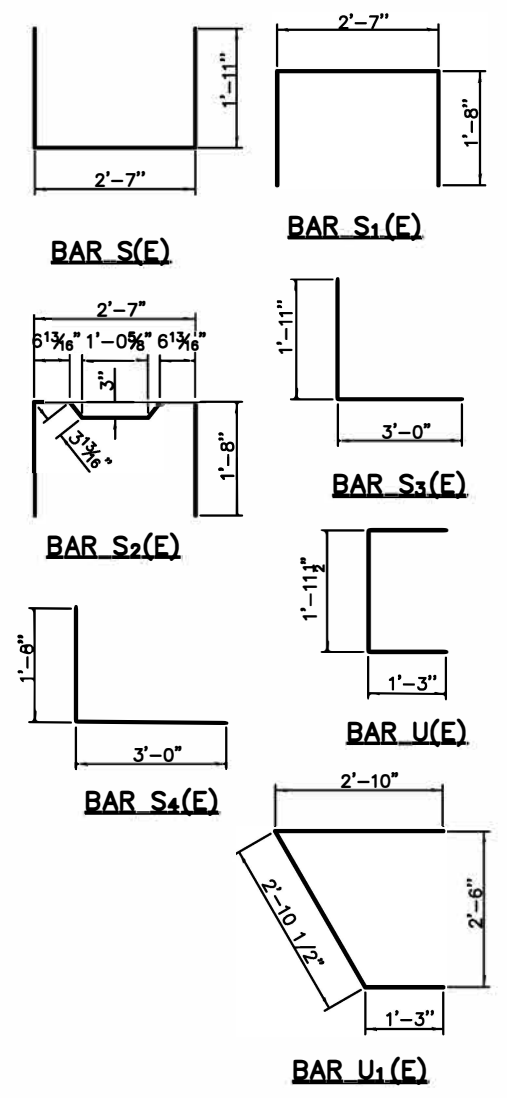
Note: Connect beams in pairs with the transverse tie configuration shown.



**SECTION A-A**



**LIFTING LOOP DETAIL**



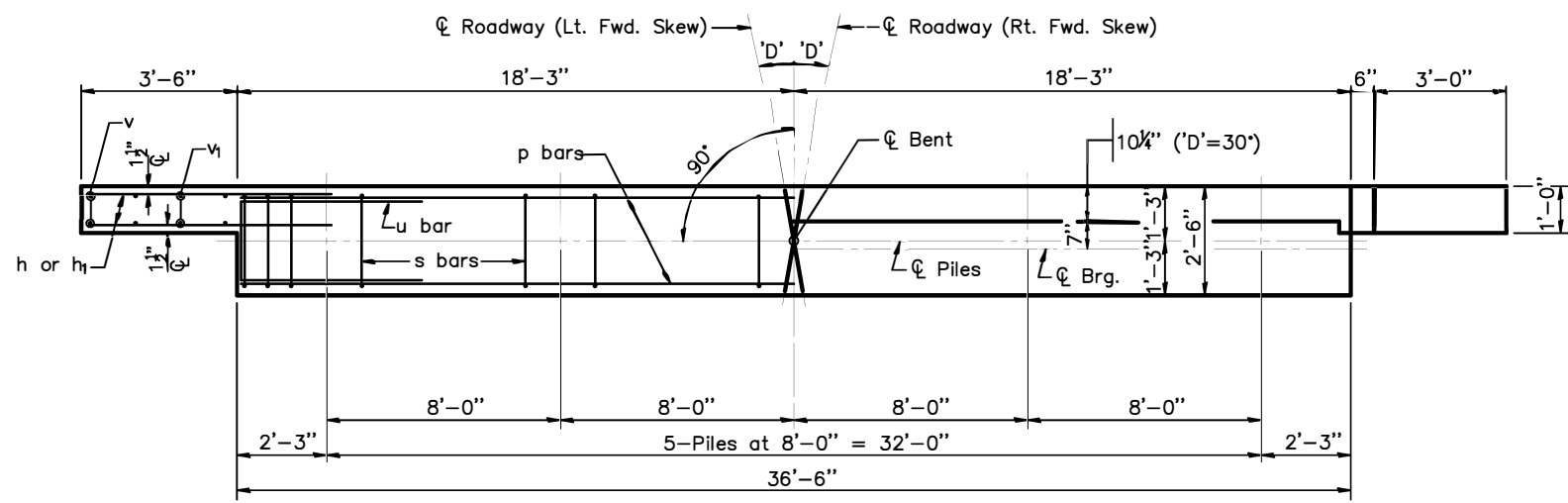
**BILL OF MATERIAL**

Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft. 1800
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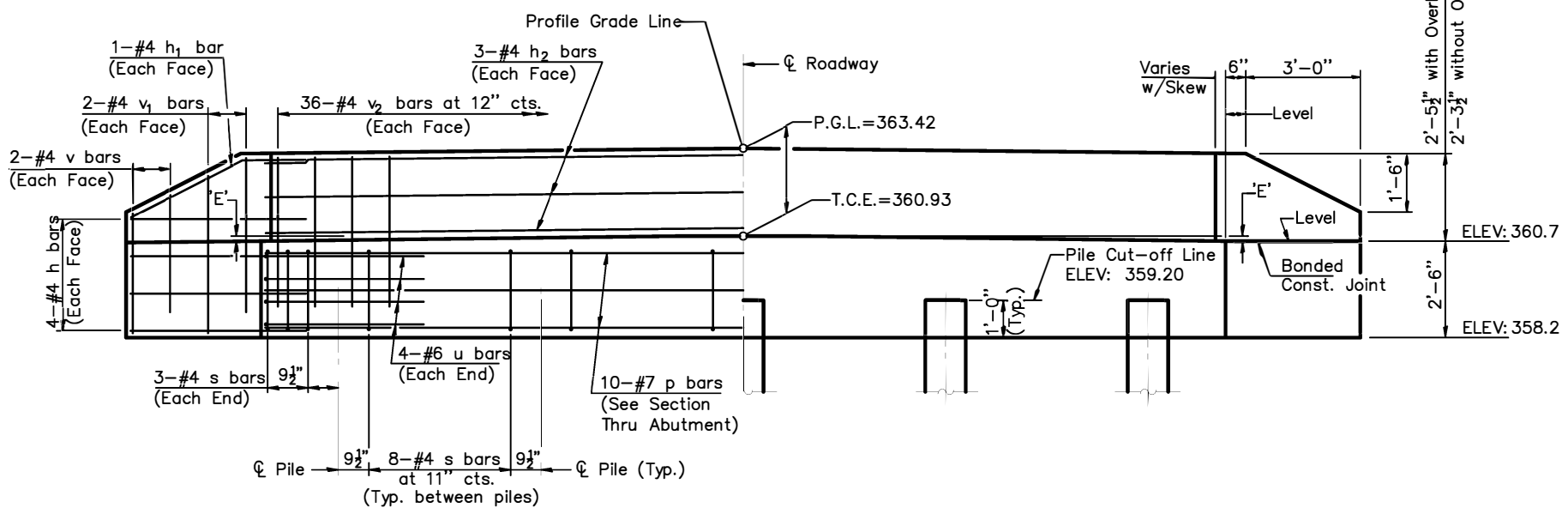
**NOTES**

- Prestressing steel shall be uncoated high-strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
- Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
- Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 888	19-00083-00-BR	GALLATIN	15	8
SHAWNEETOWN-NEW HAVEN RD			CONTRACT 99706	



**PLAN**  
(*'D'*=Designated Skew Angle)



**ELEVATION**

**DIMENSION 'E'**

GRADE	<i>'D'</i> =30°	
	UPGRADE END	DOWNGRADE END
0%	3"	3"
Over 0% to 1%	2 3/8"	3 1/2"
Over 1% to 2%	1 3/8"	4 5/8"
Over 2% to 3%	1"	5 5/8"
Over 3% to 4%	—	—

**NOTES**

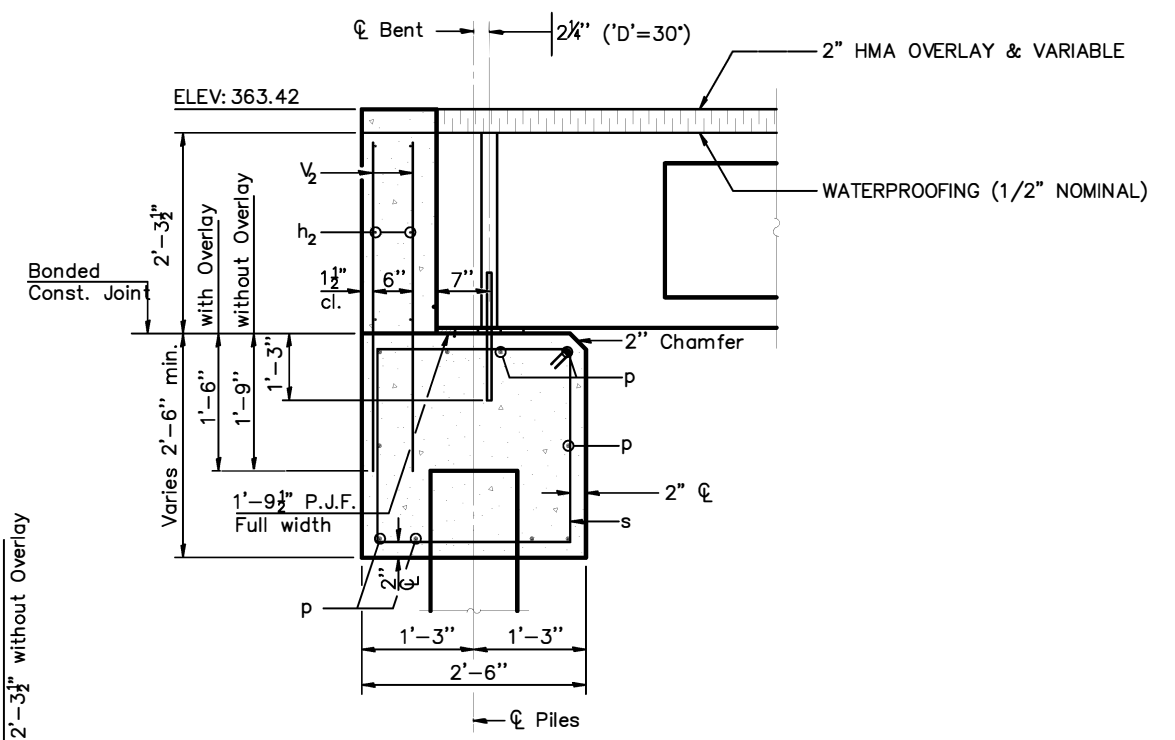
- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.
- Space reinforcement in cap to miss anchor bolts.

**MAXIMUM PILE LOADS**

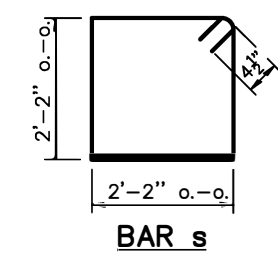
SPAN	TONS
40'	32
50'	36
60'	41

**DESIGN STRESSES**

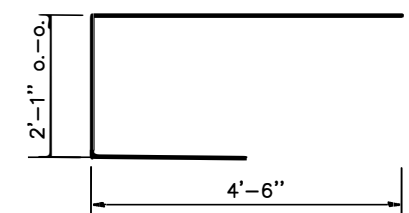
$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi



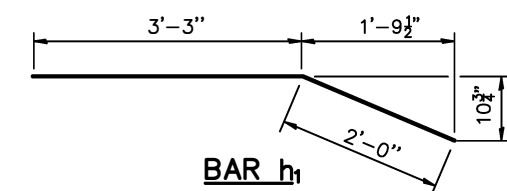
**SECTION THRU ABUTMENT**  
(At Right Angles)



**BAR s**



**BAR u**



**BAR h1**

**BILL OF MATERIAL FOR ONE ABUTMENT**

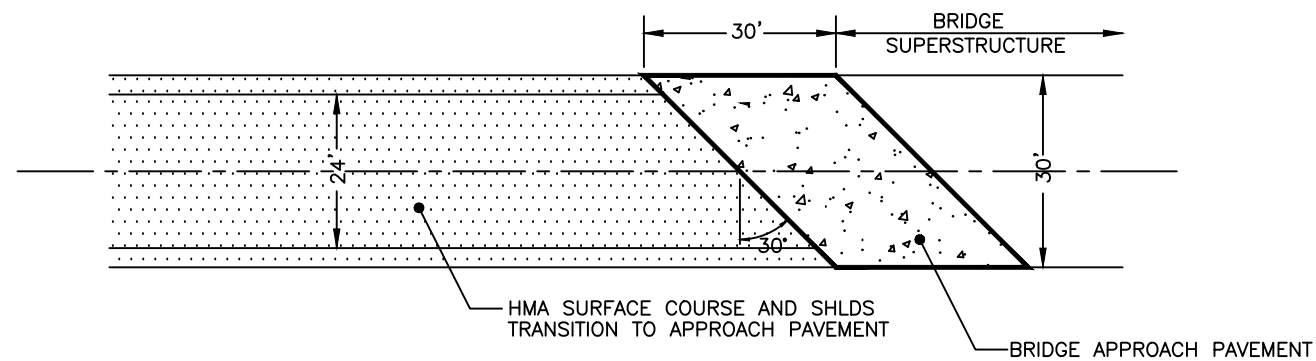
Bar	No.	Size	Length	Shape
h	16	#4	5'-0"	—
h1	4	#4	5'-3"	—
h2	6	#4	36'-2"	—
p	10	#7	36'-2"	—
s	38	#4	9'-5"	□
u	8	#6	11'-1"	U
v	8	#4	3'-2"	—
v1	8	#4	4'-2"	—
v2	72	#4	3'-11"	—
Concrete Structures			12.9 Cu. Yds.	
Reinforcement Bars			1550 Lb.	

30' RDWY.	27" BMS.	30° RT FWD
<b>ABUTMENT DETAILS</b>		



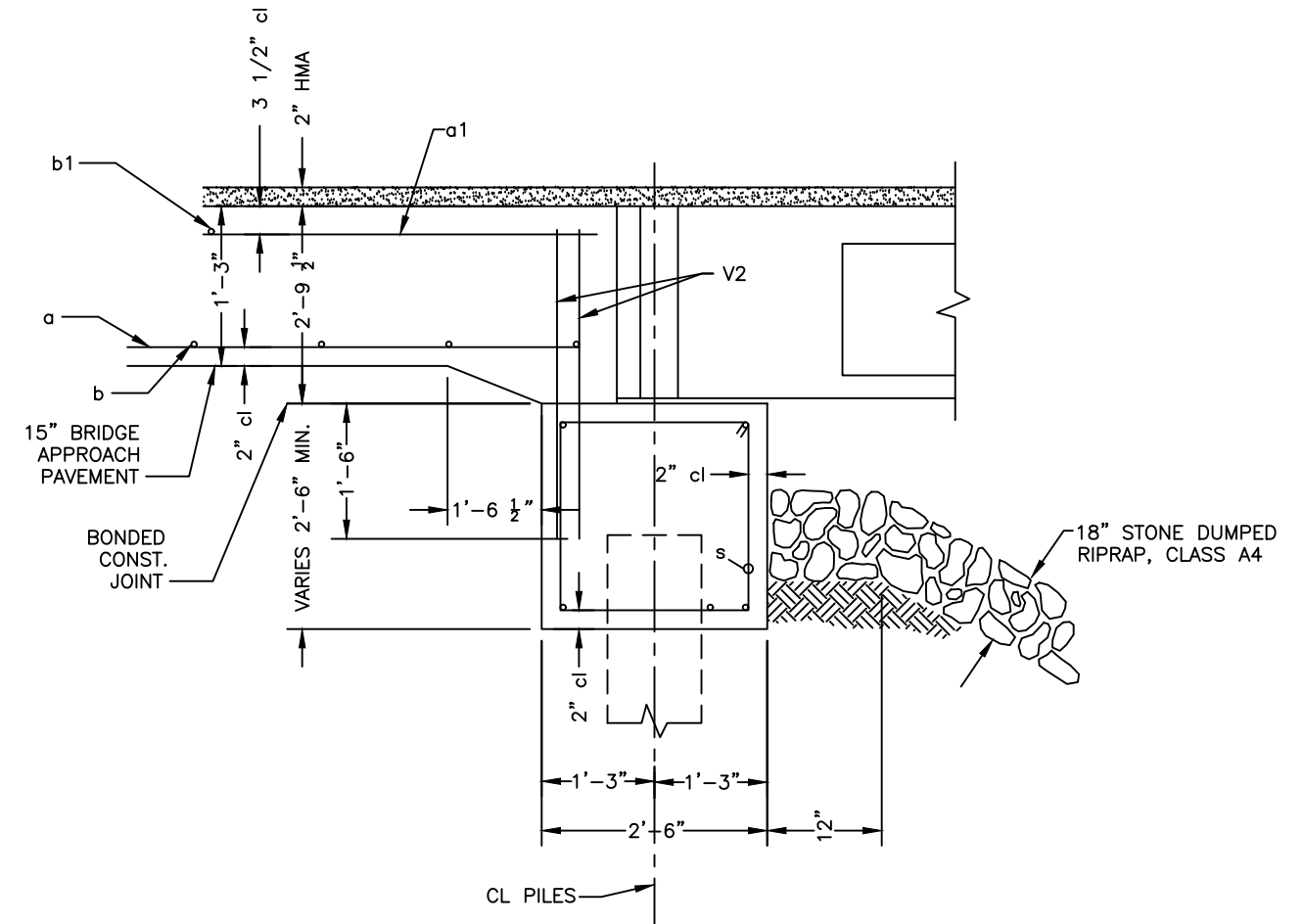


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 888	19-00083-00-BR	GALLATIN	15	10
SHAWNEETOWN-NEW HAVEN RD		CONTRACT 99706		



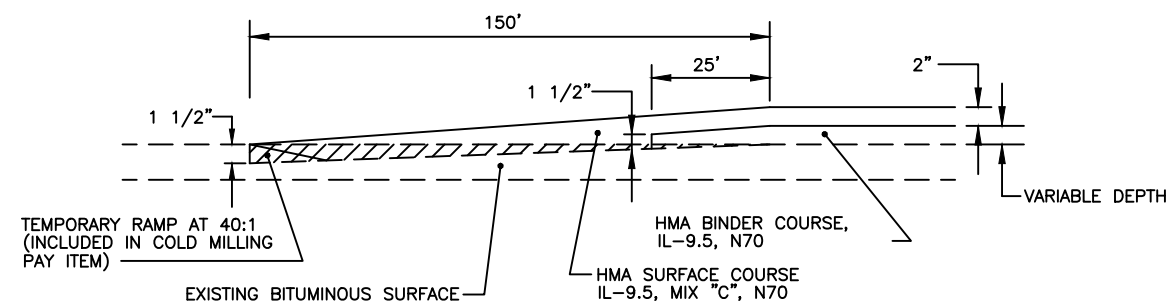
**BRIDGE APPROACH PAVEMENT - PLAN VIEW**

NO SCALE  
 STATION 49+39.25 TO 49+69.25  
 STATION 50+30.75 TO 50+60.75



**BRIDGE APPROACH PAVEMENT: SECTION THRU ABUTMENT**

(AT RIGHT ANGLES)  
 SECTION B-B  
 NO SCALE



**BUTT JOINT DETAIL**

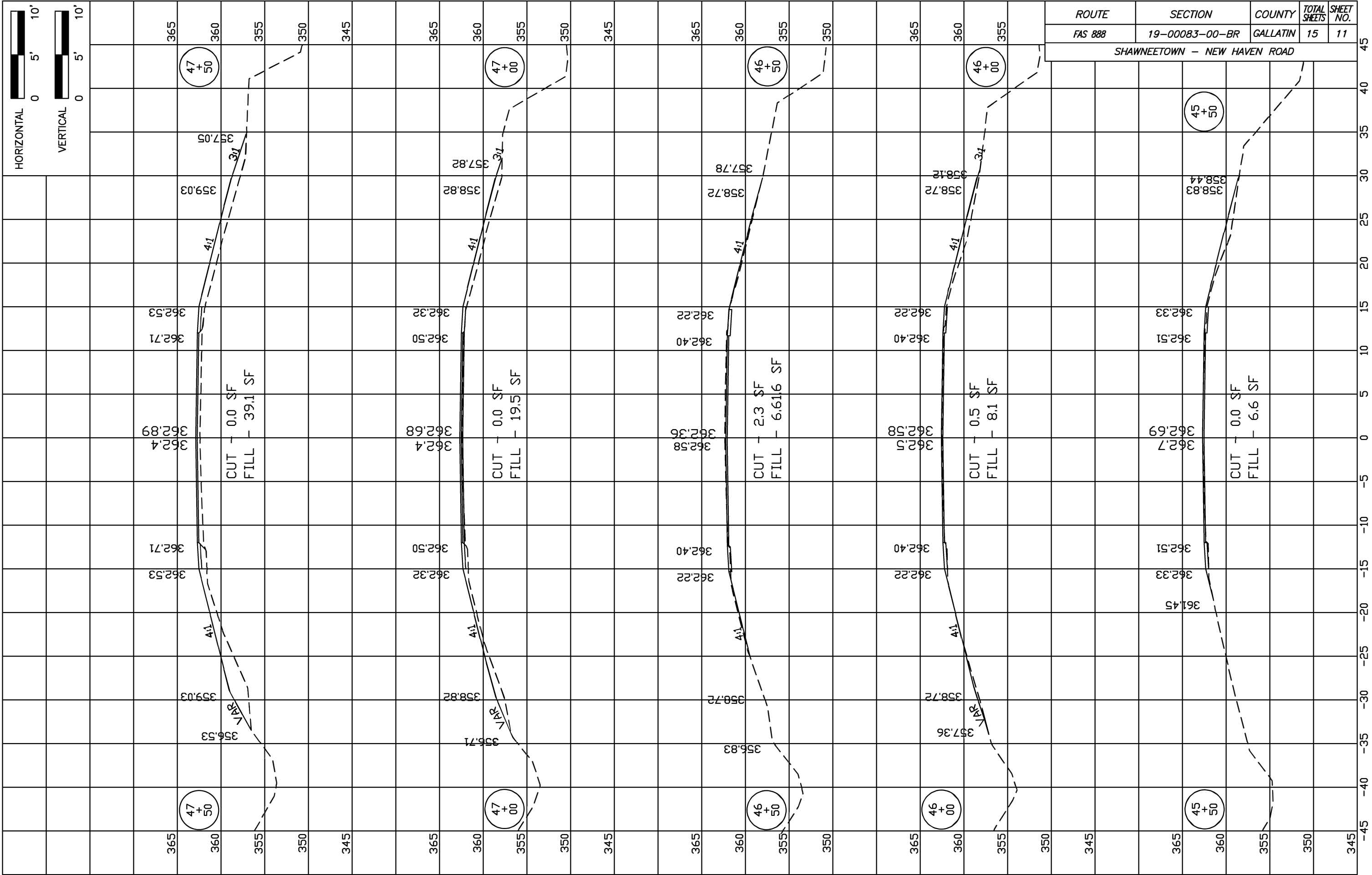
NOT TO SCALE  
 STATION 45+50 TO 47+00  
 STATION 50+75 TO 52+25

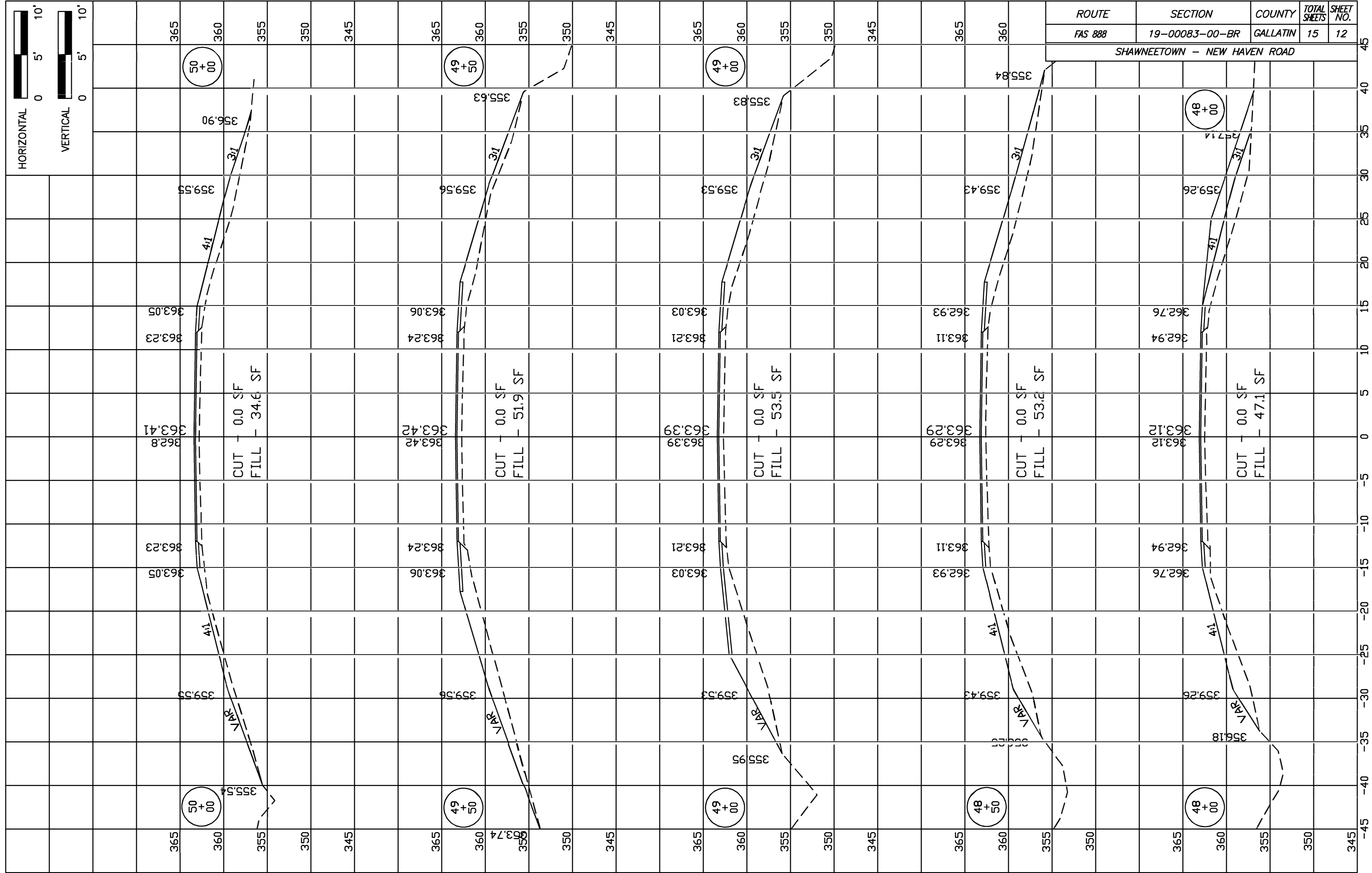
**BAR LIST FOR ONE APPROACH PAVEMENT**

BAR	NO.	SIZE	LENGTH	SHAPE
a	44	#9	29'-6"	U
a1	18	#4	29'-6"	—
b	29	#5	29'-6"	—
b1	8	#4	29'-6"	—

TOTAL REINFORCEMENT BARS, EPOXY COATED = 11,638 LBS.

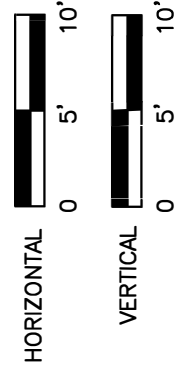
STRUCTURE NO. 030-3140  
 APPROACH PAVEMENT & DETAILS





ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 888	19-00083-00-BR	GALLATIN	15	12

SHAWNEETOWN - NEW HAVEN ROAD



Station	Ground Elevation	Proposed Elevation	Cut/Fill
50+00	355.54	355.54	CUT - 0.0 SF
49+50	355.63	355.63	FILL - 34.6 SF
48+00	355.84	355.84	
47+50	356.18	356.18	
47+00	356.26	356.26	
46+50	356.90	356.90	
46+00	359.53	359.53	
45+50	363.05	363.05	
45+00	363.23	363.23	
44+50	363.41	363.41	
44+00	362.8	362.8	
43+50	363.23	363.23	
43+00	363.05	363.05	
42+50	363.24	363.24	
42+00	363.06	363.06	
41+50	363.24	363.24	
41+00	363.06	363.06	
40+50	363.24	363.24	
40+00	363.06	363.06	
39+50	363.24	363.24	
39+00	363.06	363.06	
38+50	363.24	363.24	
38+00	363.06	363.06	
37+50	363.24	363.24	
37+00	363.06	363.06	
36+50	363.24	363.24	
36+00	363.06	363.06	
35+50	363.24	363.24	
35+00	363.06	363.06	
34+50	363.24	363.24	
34+00	363.06	363.06	
33+50	363.24	363.24	
33+00	363.06	363.06	
32+50	363.24	363.24	
32+00	363.06	363.06	
31+50	363.24	363.24	
31+00	363.06	363.06	
30+50	363.24	363.24	
30+00	363.06	363.06	
29+50	363.24	363.24	
29+00	363.06	363.06	
28+50	363.24	363.24	
28+00	363.06	363.06	
27+50	363.24	363.24	
27+00	363.06	363.06	
26+50	363.24	363.24	
26+00	363.06	363.06	
25+50	363.24	363.24	
25+00	363.06	363.06	
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21+50	363.24	363.24	
21+00	363.06	363.06	
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20+00	363.06	363.06	
19+50	363.24	363.24	
19+00	363.06	363.06	
18+50	363.24	363.24	
18+00	363.06	363.06	
17+50	363.24	363.24	
17+00	363.06	363.06	
16+50	363.24	363.24	
16+00	363.06	363.06	
15+50	363.24	363.24	
15+00	363.06	363.06	
14+50	363.24	363.24	
14+00	363.06	363.06	
13+50	363.24	363.24	
13+00	363.06	363.06	
12+50	363.24	363.24	
12+00	363.06	363.06	
11+50	363.24	363.24	
11+00	363.06	363.06	
10+50	363.24	363.24	
10+00	363.06	363.06	
9+50	363.24	363.24	
9+00	363.06	363.06	
8+50	363.24	363.24	
8+00	363.06	363.06	
7+50	363.24	363.24	
7+00	363.06	363.06	
6+50	363.24	363.24	
6+00	363.06	363.06	
5+50	363.24	363.24	
5+00	363.06	363.06	
4+50	363.24	363.24	
4+00	363.06	363.06	
3+50	363.24	363.24	
3+00	363.06	363.06	
2+50	363.24	363.24	
2+00	363.06	363.06	
1+50	363.24	363.24	
1+00	363.06	363.06	
0+50	363.24	363.24	
0+00	363.06	363.06	
-1+50	363.24	363.24	
-1+00	363.06	363.06	
-2+50	363.24	363.24	
-2+00	363.06	363.06	
-3+50	363.24	363.24	
-3+00	363.06	363.06	
-4+50	363.24	363.24	
-4+00	363.06	363.06	
-5+50	363.24	363.24	
-5+00	363.06	363.06	





## STORM WATER POLLUTION PREVENTION PLAN

The following Plan is established and incorporated in the project to direct the Contractor in the placement of temporary erosion control systems and to provide a storm water pollution prevention plan for compliance under NPDES.

The purpose of this plan is to minimize erosion within the construction site and to limit sediments leaving the construction site by utilizing proper temporary erosion control systems and providing ground cover within a reasonable amount of time.

Certain erosion control facilities shall be installed by the Contractor at the beginning of construction. Other items shall be installed as directed by the Engineer on a case by case situation depending on the Contractor's sequence of activities, time of year and expected weather conditions.

The Contractor shall construct permanent erosion control systems and seeding within a time frame specified herein and as directed by the Engineer, therefore minimizing the amount of area susceptible to erosion and reducing the amount of temporary seeding. The engineer will determine if any temporary erosion control systems shown in the plans can be deleted and if any additional temporary erosion control systems, which are not included in the plans, shall be added. The contractor shall perform all work as directed by the Engineer and as shown in STANDARD 280001.

Section 280, Temporary Erosion Control, of the Standard Specifications additionally supplements this plan.

### DESCRIPTION OF CONSTRUCTION ACTIVITIES

1. Temporary ditch checks shall be located at every 1.5 feet of fall/rise in ditch grade.

### INTENDED SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES

1. Brush removal. Trees to remain will be protected against damage.
2. Remove Existing Bridge.
3. Construct Abutments.
4. Place new Riprap.
5. Construct New Bridge Deck.
6. Construct roadway transitions and side slopes.
7. Seeding and permanent erosion control systems.

## AREA OF CONSTRUCTION SITE

1. The total area of the construction site is estimated to be 0.78 Acres of which approximately 0.50 Acres will be disturbed.

### OTHER REPORTS, STUDIES AND PLANS WHICH AID IN THE DEVELOPMENT OF THE SWPPP AS REFERENCED DOCUMENTS.

1. Information of the terrain was obtained from topographic maps.
2. Project plan documents, specifications and special provisions and plan drawings indicating the drainage patterns and location of existing drainage features were utilized in the preparation of the proposed placement of temporary erosion control systems.

### DRAINAGE TRIBUTARIES AND SENSITIVE AREAS RECEIVING RUNOFF

1. No new discharge points will be constructed.

### CONTROLS - EROSION CONTROLS AND SEDIMENT CONTROLS

1. Existing vegetation will be preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices will include temporary seeding, permanent seeding, mulching, protection of trees, preservation of mature vegetation and other appropriate measures as directed by the Engineer. Stabilization measures shall be initiated as soon as practical in those areas of the site where construction activities have ceased, but in no case more than 7 days after the construction activity for an area has temporarily or permanently ceased.
2. Areas outside the construction limits shall be protected from construction activities.
3. Dead, diseased or unsuitable vegetation within the site shall be removed as directed by the Engineer.
4. As soon as is reasonable, the temporary erosion control system shall be installed as indicated in the plans or as directed by the engineer.

This plan has been prepared with the intent to comply with the provisions of the NPDES Permit Number ILR10, issued by the Illinois Environmental Protection Agency for storm water discharges from construction site activities.

I certify under penalty of law that this plan was prepared at my direction in accordance with a system that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

  
JUSTIN HASTIE, COUNTY ENGINEER

3/3/23  
DATE:

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 888	19-00083-00-BR	GALLATIN	15	14
SHAWNEETOWN-NEW HAVEN RD		CONTRACT 99706		

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 888	19-00083-00-BR	GALLATIN	15	15
SHAWNEETOWN-NEW HAVEN RD			CONTRACT 99706	

DESCRIPTION OF STABILIZATION PRACTICES

DURING CONSTRUCTION

1. During construction, areas outside the construction limits shall be protected.
2. Within the construction limits, areas which may be susceptible to erosion as determined by the Engineer shall remain undisturbed until full scale construction is underway.
3. Earth stockpiles shall be temporary seeded if they are to remain unused for more than 14 days.
4. As soon as construction proceeds, the contractor shall institute the following as directed by the Engineer:
  - A) Place temporary erosion control facilities at locations shown in the plans.
  - B) Temporarily seed erodable bare earth on a weekly basis to minimize the amount of erodable surface area within the contract limits.
  - C) Construct roadside ditches and provide temporary erosion control systems.
5. Excavated areas shall be permanently seeded immediately after final grading. If not, they shall be temporarily seeded if no construction in the area is planned for 7 days.
6. All necessary measures shall be taken by the contractor to contain any fuel or pollutant in accordance with EPA water quality regulations. Leaking equipment or supplies shall be immediately repaired or removed from the site.
7. The Resident Engineer shall inspect the project daily during construction activities. Inspection shall also be done weekly and after rains of 0.5 inches or greater or equivalent snowfall and during any winter shutdown period.
8. Sediment collected during the construction by the various temporary erosion control systems shall be disposed of on site on a regular basis as directed by the Resident Engineer. The cost of this maintenance shall be considered incidental to the erosion control system.
9. The temporary erosion control systems shall be removed as directed by the Engineer after use is no longer needed or no longer functioning. The cost of removal shall be included in the unit bid price for various temporary erosion control pay items.

DESCRIPTION OF STRUCTURAL PRACTICES

AFTER FINAL GRADING

1. Temporary seeding shall be left in place with proper maintenance until permanent erosion control and all proposed turf areas seeded and established.
2. Once permanent erosion control systems as proposed in the plans are functional and established, temporary items shall be removed, cleaned up and disturbed turf areas reseeded.

MAINTENANCE AFTER CONSTRUCTION

1. Construction is complete after FINAL acceptance by I.D.O.T. final inspection. Maintenance up to this date will be by the contractor.

MISCELLANEOUS

1. Temporary ditch checks shall be located at every 1.5 feet of fall/rise in ditch grade.
2. Temporary erosion control seeding shall be applied at the rate of 100 lbs/acre.
3. Straw bales, hay bales, perimeter erosion control barrier and silt fences will not be permitted for temporary or permanent ditch checks. Ditch checks shall be composed of aggregate, silt panels, rolled excelsior, urethane foam geotextile (silt wedges) and/or other material approved by the erosion and sediment control coordinator.
4. All erosion control products furnished shall be specifically recommended by the manufacturer for the use specified in the erosion control plan. Prior to the approval and use of the product, the contractor shall submit to the Engineer a notarized certification by the producer stating the intended use of the product and the physical properties required for this application are met or exceeded. The contractor shall provide manufacturer installation procedures to facilitate the Engineer in construction inspection.
5. All items shall be constructed as shown on STANDARD 280001 and as directed by the Engineer. Maintenance and cleaning of erosion control items shall be considered part of the respective erosion control pay item.

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