

PROJECT	DESIGNATION NO.
1700185	1700185
CONTRACT	BRIDGE FILE
B-40434	062-69-05860 B

INDIANA DEPARTMENT OF TRANSPORTATION



BRIDGE PRESERVATION PLANS

FOR SPANS OVER 20 FEET

ROUTE: SR 62

AT: 219+21

PROJECT NO.

1700185 P.E.

1700185 R/W

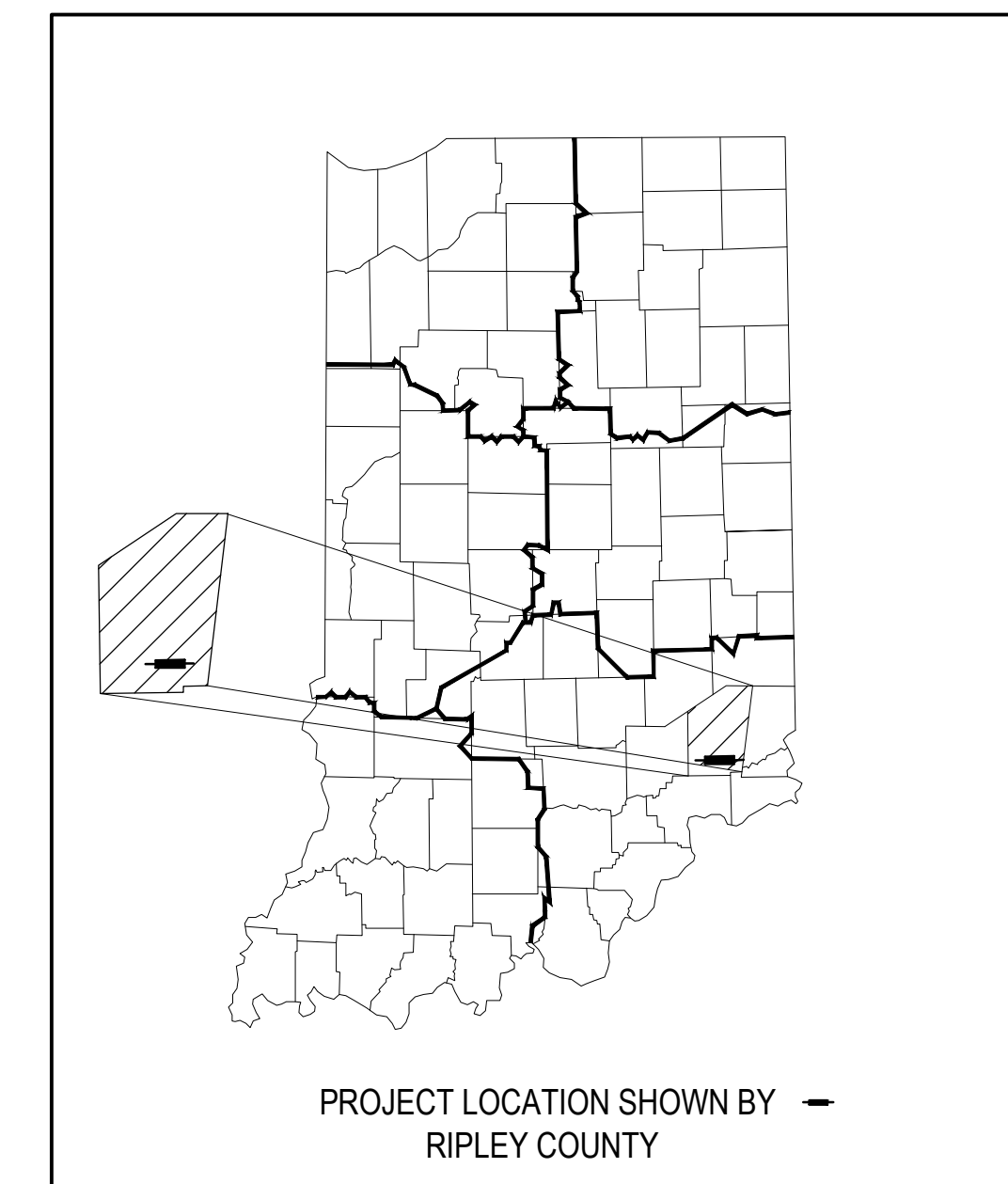
1700185 CONST.

STRUCTURE INFORMATION			
STRUCTURE	TYPE	SPAN AND SKEW	OVER
062-69-05860 B	Continuous Steel Beam Bridge	3 Spans: 66'-9", 67'-6", 66'-9", Square	Laughery Creek

TRAFFIC DATA			
A.A.D.T. (2022)		404	V.P.D.
A.A.D.T. (2042)		509	V.P.D.
D.H.V. (2042)		47	V.P.H.
DIRECTIONAL DISTRIBUTION			45.5 %
TRUCKS		21	% D.H.V.
		23	% A.A.D.T.

DESIGN DATA	
DESIGN SPEED	45 MPH
POSTED SPEED	45 MPH
PROJECT DESIGN CRITERIA	3R (Non-Freeway)
FUNCTIONAL CLASSIFICATION	Major Collector
RURAL/URBAN	Rural
TERRAIN	Level
ACCESS CONTROL	None

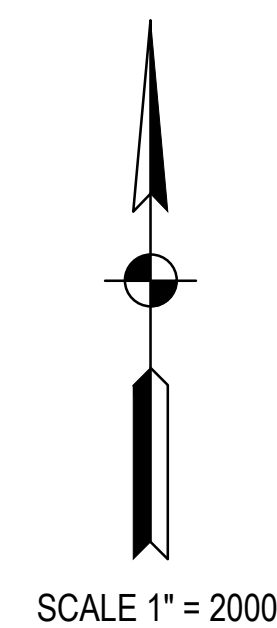
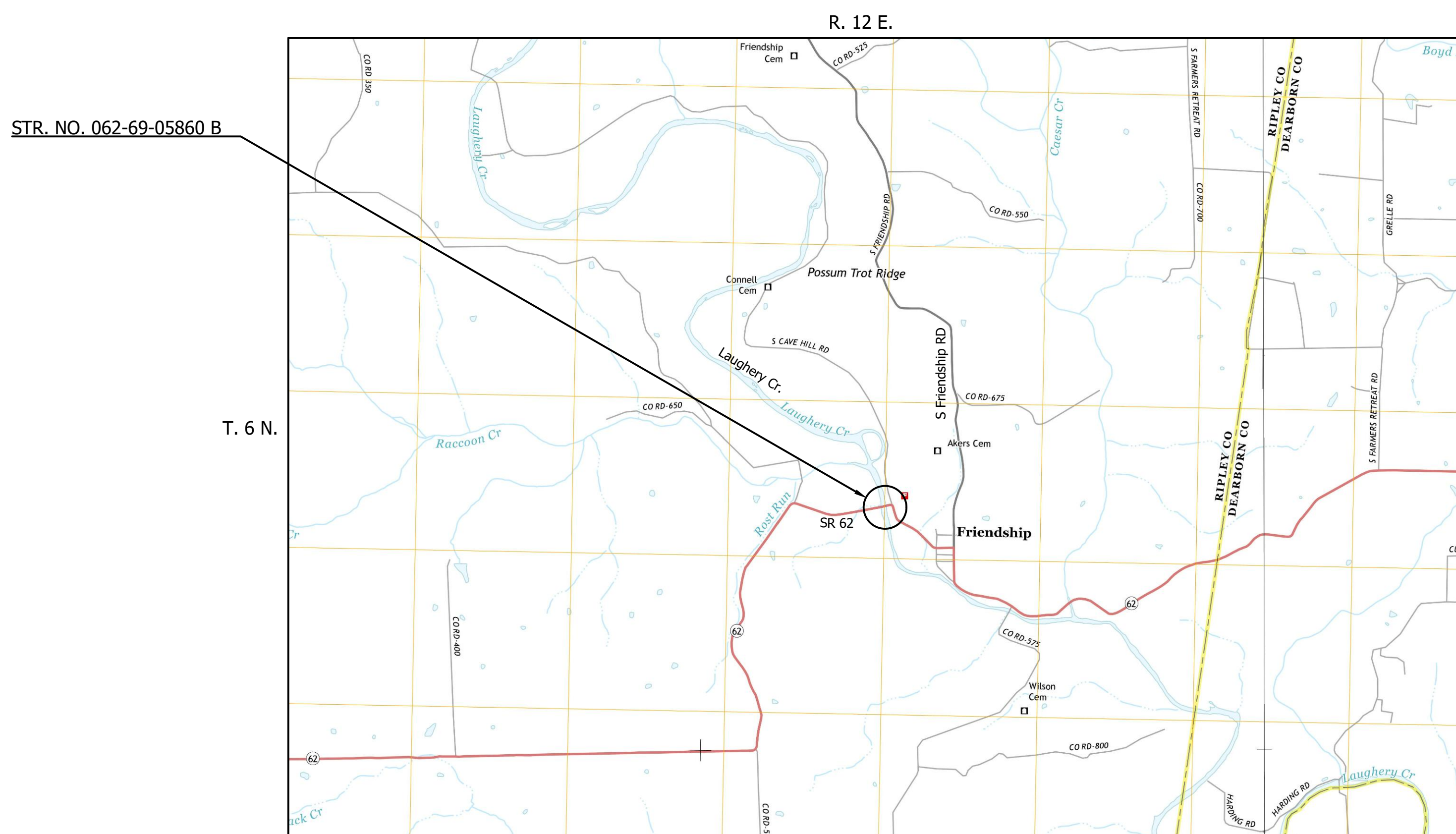
SUPERSTRUCTURE REPLACEMENT ON S.R. 62 OVER LAUGHERY CREEK. THE PROJECT IS LOCATED 3.91 MILES EAST OF SR 129, IN SECTION 14, T-6-N, R-12-E, RIPLEY COUNTY, INDIANA.



LATITUDE: 38°58'20.53" N. LONGITUDE: 85°09'11.19" W.

BRIDGE LENGTH = 0.038 mi.
ROAD LENGTH = 0.001 mi.
TOTAL LENGTH = 0.039 mi.
MAX. GRADE = +1.19%

HUC: 05090203070030



LOCATION MAP

PRELIMINARY PLANS 9-19-19

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020
TO BE USED WITH THESE PLANS



PLANS PREPARED BY:	USI Consultants, Inc.	317-544-4996
		PHONE NUMBER
CERTIFIED BY:		DATE
APPROVED FOR LETTING:		DATE
	INDIANA DEPARTMENT OF TRANSPORTATION	

BRIDGE FILE	
062-69-05860B	
DESIGNATION NO.	
1700185	
SHEETS	
1	of 12
PROJECT NO.	
1700185	
CONTRACT	B-40434

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UTILITIES

Telephone: Southeastern Indiana Rural Telephone Cooperative, Inc
PO Box 7
Dillsboro, IN 47018
PH.: 812-667-5100 ext228
FAX:812-667-8888
Contact: Randy Scudder
rscudder@seidata.com

Electric: Southeastern Indiana REMC
P.O. Box 196
Osgod, IN 47307
PH.: 812-689-4111
FAX:812-689-6987
Contact: Larry Deamron
larryd@seiremc.com

Water: Aberdeen-Pate Water Co. Inc.
6124 Hartford Ridge Rd.
Aurora, IN 47001
PH.: 812-438-3428
FAX:812-438-2295
Contact: Doug Henry
apwater@embarqmail.com

Water: Canaan Utilities Corporation
PO BOX 13, 8990 N Canaan Main St.
Canaan, IN 47224
PH:812-839-4000
FAX:812-839-3589
Contact: Kim Partin
kimp@seidata.com

INDEX

SHEET NO.	SUBJECT
1	TITLE SHEET
2	INDEX SHEET
3-6	MAINTENANCE OF TRAFFIC
7-8	LOCATION CONTROL ROUTE SURVEY
9	BRIDGE LAYOUT
10	GENERAL PLAN - EXISTING
11	GENERAL PLAN - PROPOSED
12	BRIDGE SUMMARY

REVISIONS

SHEET NO.	DATE	REVISED

**NOT FOR
CONSTRUCTION**

**INDIANA
DEPARTMENT OF TRANSPORTATION**

INDEX SHEET

HORIZONTAL SCALE	BRIDGE FILE
NONE	062-69-05860 B
VERTICAL SCALE	DESIGNATION
NONE	1700185
SURVEY BOOK	SHEETS
----	2 of 12
CONTRACT	PROJECT
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DESIGNED: <u> </u> MKT	DRAWN: <u> </u> DWB
CHECKED: <u> </u> MJH	CHECKED: <u> </u> MJH

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PHASE 1 CONSTRUCTION SEQUENCE

1. Install temporary signals as shown on plans, and close existing drive as indicated on plans.
2. Activate temporary signals. Remove existing Stop Sign.
3. Place temporary traffic barrier as shown on plan, using eastbound lane for eastbound and westbound traffic. Commence Phase 1 construction.

SIGNALIZATION NOTES:

All temporary signal equipment to remain the property of the contractor.

Temporary wood poles or Portable trailers to be placed in locations to avoid conflict with construction of bridge.

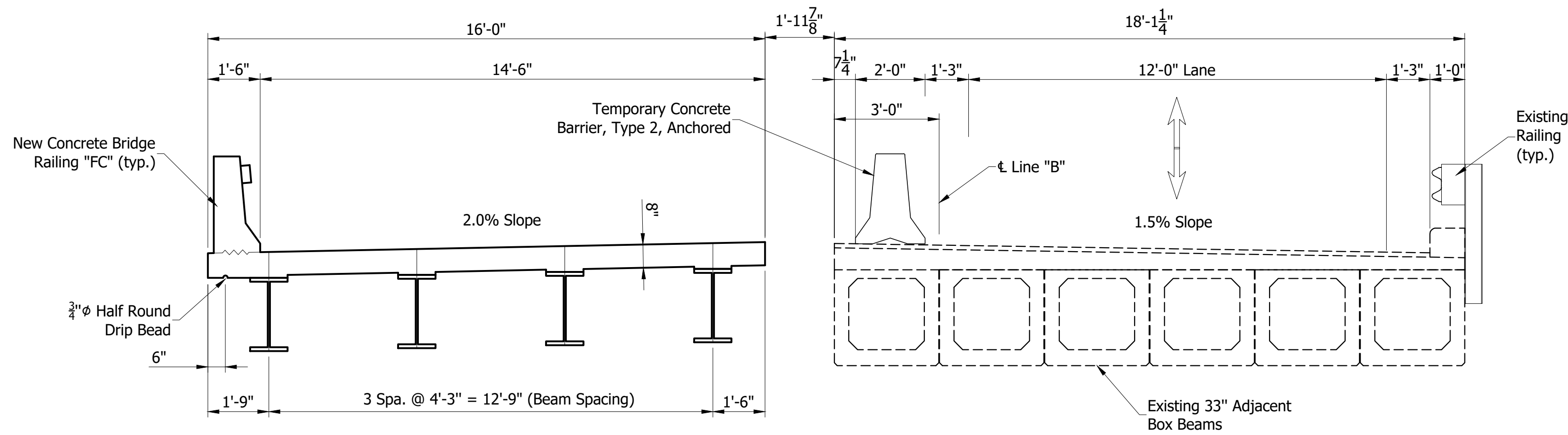
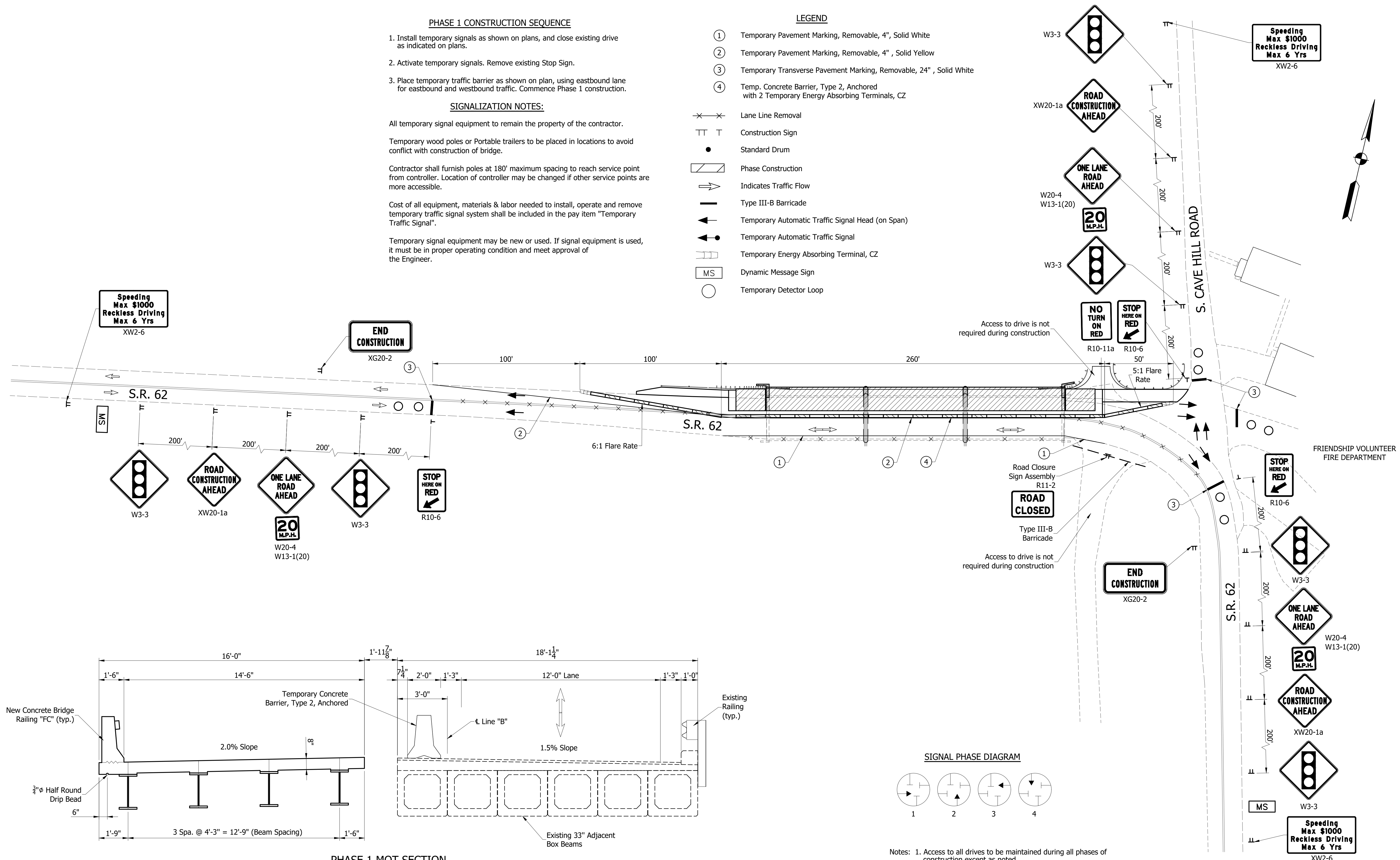
Contractor shall furnish poles at 180' maximum spacing to reach service point from controller. Location of controller may be changed if other service points are more accessible.

Cost of all equipment, materials & labor needed to install, operate and remove temporary traffic signal system shall be included in the pay item "Temporary Traffic Signal".

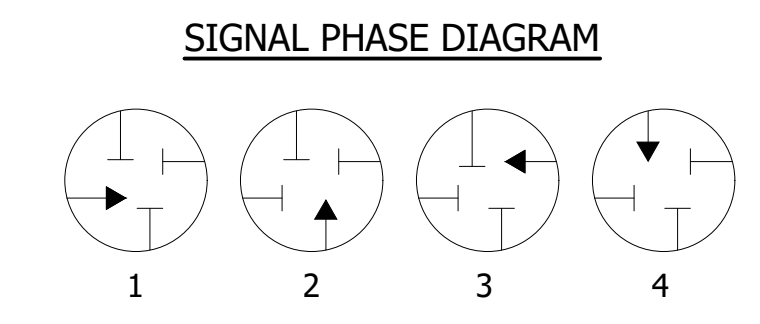
Temporary signal equipment may be new or used. If signal equipment is used, it must be in proper operating condition and meet approval of the Engineer.

LEGEND

- ① Temporary Pavement Marking, Removable, 4", Solid White
- ② Temporary Pavement Marking, Removable, 4", Solid Yellow
- ③ Temporary Transverse Pavement Marking, Removable, 24", Solid White
- ④ Temp. Concrete Barrier, Type 2, Anchored with 2 Temporary Energy Absorbing Terminals, CZ
- x—x— Lane Line Removal
- TT T Construction Sign
- Standard Drum
- ▨ Phase Construction
- ⇒ Indicates Traffic Flow
- Type III-B Barricade
- ← Temporary Automatic Traffic Signal Head (on Span)
- ←● Temporary Automatic Traffic Signal
- ▭ Temporary Energy Absorbing Terminal, CZ
- MS Dynamic Message Sign
- Temporary Detector Loop



PHASE 1 MOT SECTION
Scale: 3/8" = 1'-0"



- Notes:
1. Access to all drives to be maintained during all phases of construction except as noted.
 2. Existing conflicting pavement markings to be removed within project limits.

CONSTRUCTION ZONE DESIGN SPEED: 20 MPH

NOT FOR CONSTRUCTION

DESIGNED: MKT	DRAWN: DWB
CHECKED: MJH	CHECKED: MJH

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1"=30'	062-69-05860 B
VERTICAL SCALE	DESIGNATION
NA	1700185
SURVEY BOOK	SHEETS
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PHASE 2 CONSTRUCTION SEQUENCE

1. Move temporary traffic barrier as shown on plans utilizing flaggers as necessary.
2. Commence Phase 2 Construction
3. Preform HMA Milling and placing HMA Overlay as shown on plans utilizing flaggers as necessary.

SIGNALIZATION NOTES:

All temporary signal equipment to remain the property of the contractor.

Temporary wood poles or Portable trailers to be placed in locations to avoid conflict with construction of bridge.

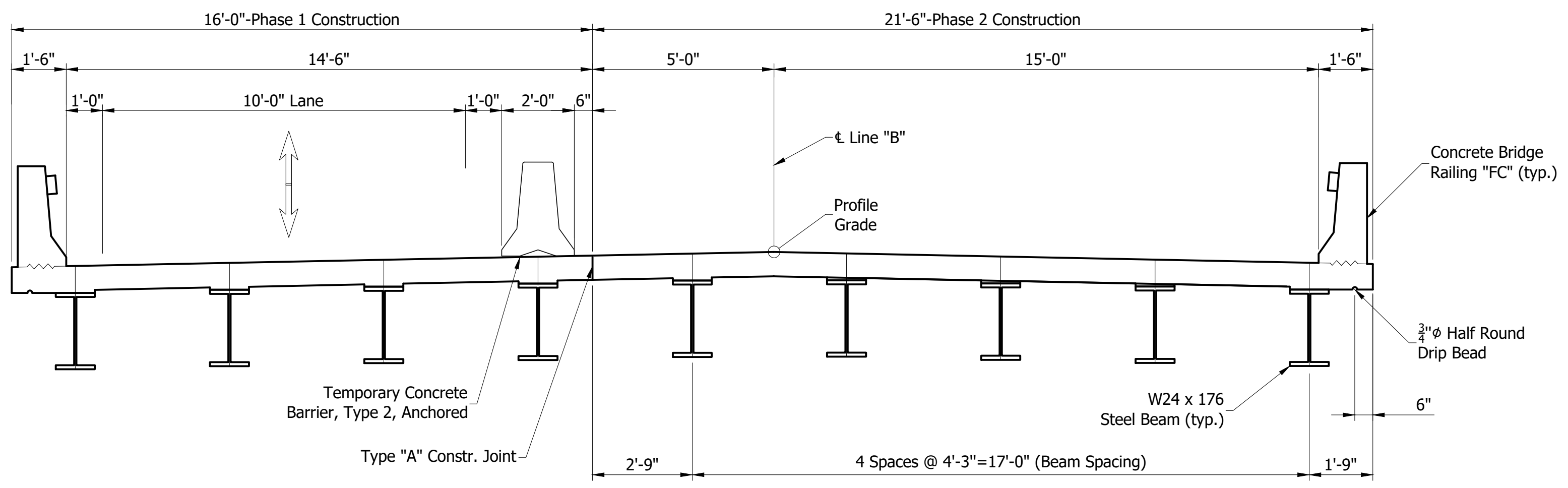
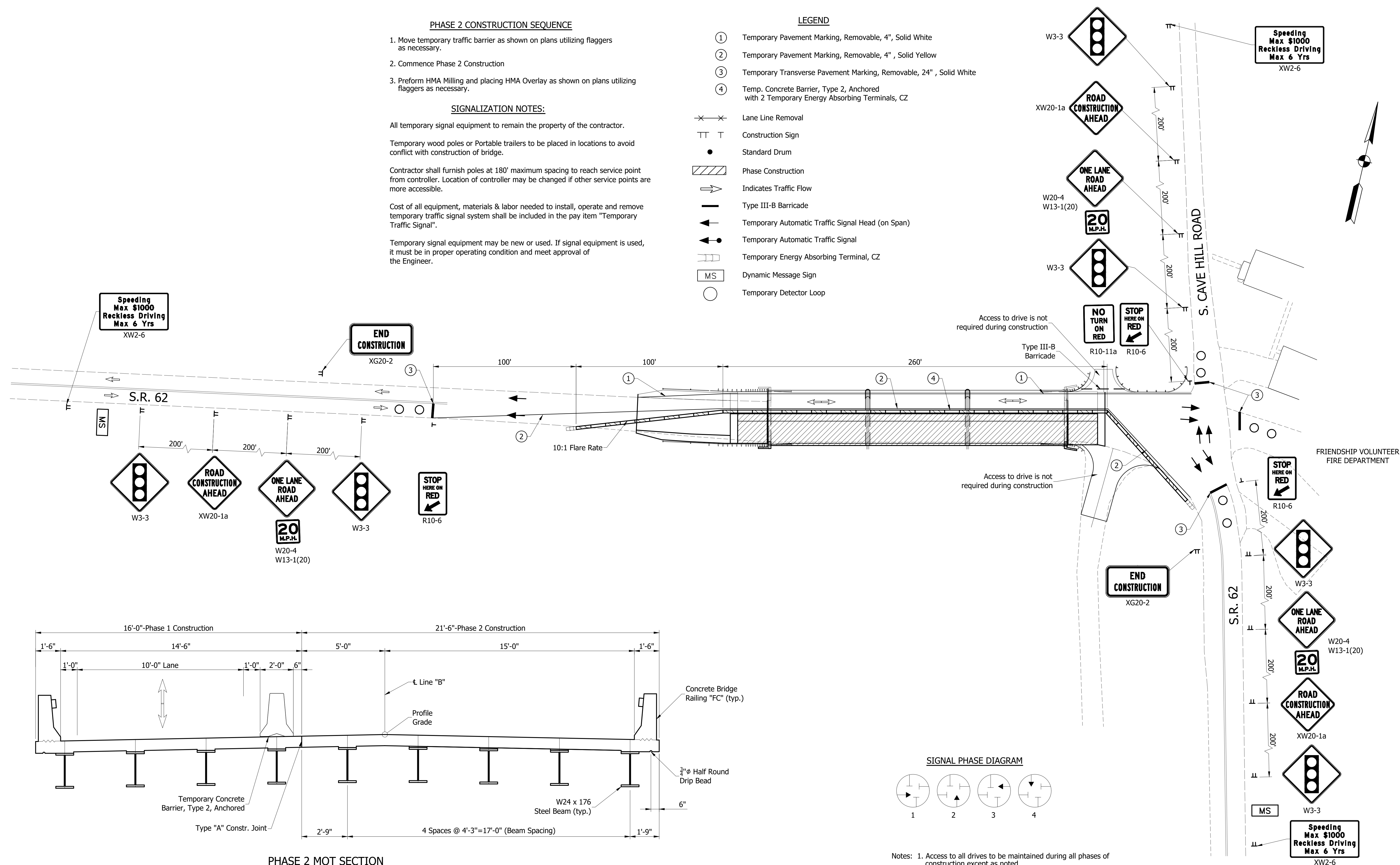
Contractor shall furnish poles at 180' maximum spacing to reach service point from controller. Location of controller may be changed if other service points are more accessible.

Cost of all equipment, materials & labor needed to install, operate and remove temporary traffic signal system shall be included in the pay item "Temporary Traffic Signal".

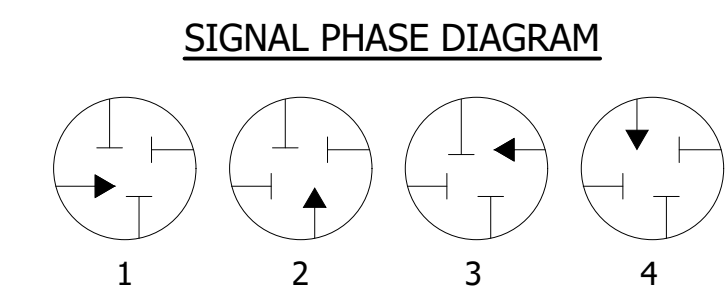
Temporary signal equipment may be new or used. If signal equipment is used, it must be in proper operating condition and meet approval of the Engineer.

LEGEND

- ① Temporary Pavement Marking, Removable, 4", Solid White
- ② Temporary Pavement Marking, Removable, 4", Solid Yellow
- ③ Temporary Transverse Pavement Marking, Removable, 24", Solid White
- ④ Temp. Concrete Barrier, Type 2, Anchored with 2 Temporary Energy Absorbing Terminals, CZ
- x—x— Lane Line Removal
- TT T Construction Sign
- Standard Drum
- ▨ Phase Construction
- ⇒ Indicates Traffic Flow
- Type III-B Barricade
- ← Temporary Automatic Traffic Signal Head (on Span)
- ← Temporary Automatic Traffic Signal
- Temporary Energy Absorbing Terminal, CZ
- MS Dynamic Message Sign
- Temporary Detector Loop



PHASE 2 MOT SECTION
Scale: 3/8" = 1'-0"



- Notes:
1. Access to all drives to be maintained during all phases of construction except as noted.
 2. Existing conflicting pavement markings to be removed within project limits.

CONSTRUCTION ZONE DESIGN SPEED: 20 MPH

NOT FOR CONSTRUCTION

DESIGNED: MKT	DRAWN: DWB
CHECKED: MJH	CHECKED: MJH

INDIANA DEPARTMENT OF TRANSPORTATION





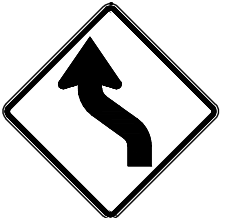
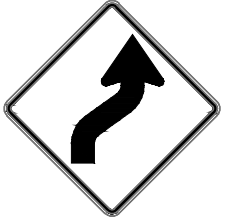
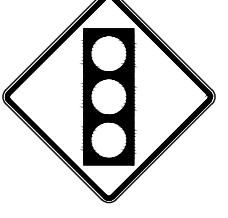



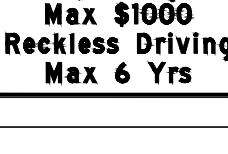
MAINTENANCE OF TRAFFIC PHASE 2

HORIZONTAL SCALE 1"=30'	BRIDGE FILE 062-69-05860 B
VERTICAL SCALE NA	DESIGNATION 1700185
SURVEY BOOK ---	SHEETS 4 of 12
CONTRACT B-40434	PROJECT 1700185

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MAINTENANCE OF TRAFFIC QUANTITIES-PHASE 1	
Construction Sign, Type "A"	x each
Construction Sign, Type "B"	x each
Construction Sign, Type "C"	x each
Road Closure Sign Assembly	x each
Dynamic Message Sign	x each
Barricade, Type III-B	xx lft.
Line, Removal	xx lft.
Temporary Concrete Barrier, Type 2, Anchored	xx lft.
Temporary Pavement Marking, Removable, 4", Solid, Yellow	xx lft.
Temporary Pavement Marking, Removable, 4", Solid, White	xx lft.
Temporary Transverse Pavement Marking, Removable, 24", Solid, White	xx lft.
Temporary Traffic Signal with Detectors	1 LSUM
Maintaining Traffic	1 LSUM

MAINTENANCE OF TRAFFIC QUANTITIES-PHASE 2	
Construction Sign, Type "A"	x each
Construction Sign, Type "B"	x each
Construction Sign, Type "C"	x each
Road Closure Sign Assembly	x each
Dynamic Message Sign	x each
Barricade, Type III-B	xx lft.
Line, Removal	xx lft.
Temporary Concrete Barrier, Type 2, Anchored	xx lft.
Temporary Pavement Marking, Removable, 4", Solid, Yellow	xx lft.
Temporary Pavement Marking, Removable, 4", Solid, White	xx lft.
Temporary Transverse Pavement Marking, Removable, 24", Solid, White	xx lft.
Temporary Traffic Signal with Detectors	1 LSUM
Maintaining Traffic	1 LSUM

DESCRIPTION	NAME	SIZE	TYPE	NO.
	XG20-2	36" X 18"	B	x
	R10-6	24" X 36"	B	x
	R10-11a	24" X 36"	B	x
	R11-2	48" X 30"	A	3
			Road Closure Assembly	3
	W1-4(L)	36" X 36"	A	x
	W1-4(R)	36" X 36"	A	x
	W3-3	36" X 36"	A	x
	W13-1(20)	24" X 24"	B	x
	XW20-4	36" X 36"	A	x
	XW20-1a	36" X 36"	A	x
	XW2-6	60" X 36"	A	x

2-XW20-6 "Lane Restrictions" Signs to be placed at site a minimum of 14 days prior to Phase 1 & Phase 2 commencement. (2-Type "A" Signs req'd.)

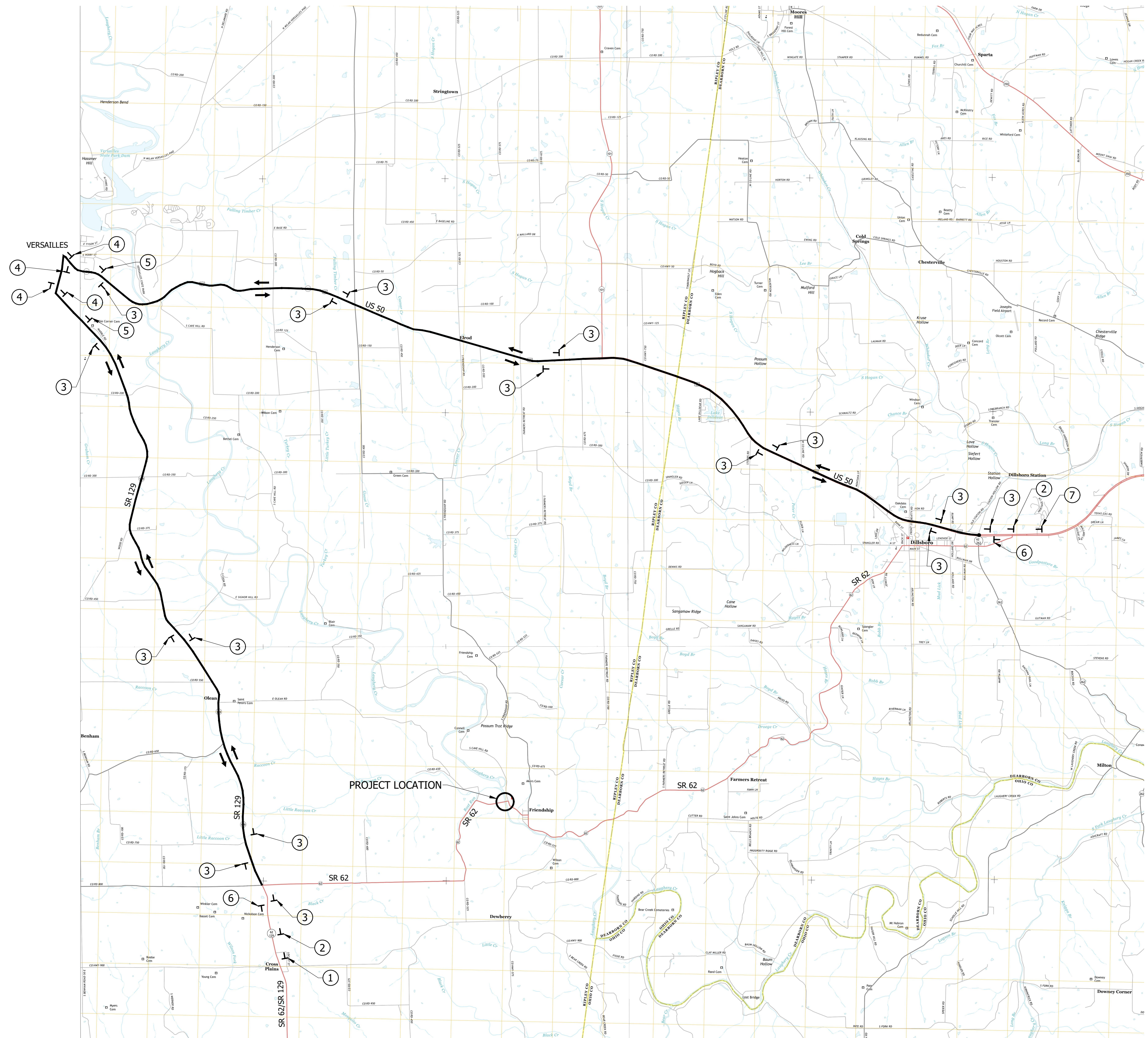
NOT FOR CONSTRUCTION

DESIGNED: _____ MKT	DRAWN: _____ DWB
CHECKED: _____ MJH	CHECKED: _____ MJH

**INDIANA
DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC
QUANTITY SCHEDULE**

HORIZONTAL SCALE	BRIDGE FILE
NONE	062-69-05860 B
VERTICAL SCALE	DESIGNATION
NONE	1700185
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LEGEND	DESCRIPTION	SIZE	TYPE	NO.	
①	ROAD CONSTRUCTION X MILES AHEAD	XW20-2 (4 Miles)	60" X 36"	A	1
②	DETOUR AHEAD	XW20-2	48" X 48"	A	2
	TRUCK ROUTE	R14-1	48" X 48"	A	2
③	TRUCK DETOUR INDIANA 11 WEST EAST ↑	M4-4(S)	24" X 12"	Detour Route Assembly	16
		XM4-8	24" X 12"		
		M1-5 (S.R. 337)	24" X 24"		
		M3-1 or M3-3	24" X 12"		
④	TRUCK DETOUR INDIANA 62 WEST EAST →	M4-4(S)	24" X 12"	Detour Route Assembly	4
		XM4-8	24" X 12"		
		M1-5 (S.R. 62)	24" X 24"		
		M3-1 or M3-3	24" X 12"		
⑤	TRUCK DETOUR INDIANA 62 WEST EAST ↘	M4-4(S)	24" X 12"	Detour Route Assembly	2
		XM4-8	24" X 12"		
		M1-5 (S.R. 62)	24" X 24"		
		M3-1 or M3-3	24" X 12"		
⑥	END DETOUR INDIANA 62 ↘ ↑	XM4-6	24" X 12"	Detour Route Assembly	2
		XM4-8	24" X 12"		
		M1-5 (S.R. 62)	24" X 24"		
		M5-1 (L or R) or M6-3	21" X 15"		
⑦	ROAD CONSTRUCTION X MILES AHEAD	XW20-2 (8 Miles)	60" X 36"	A	1

LEGEND
T Construction Sign

NOT FOR
CONSTRUCTION

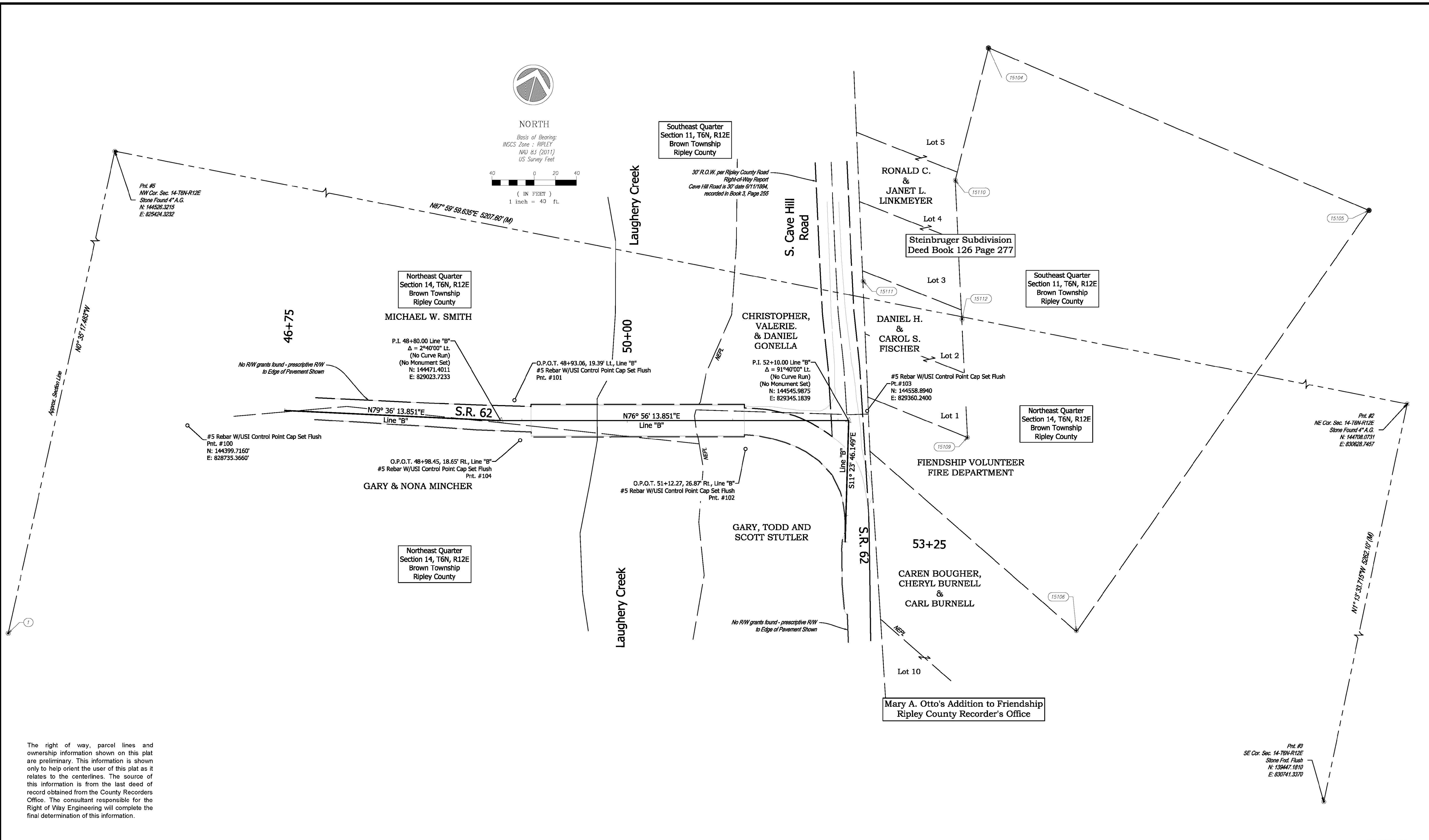
DESIGNED: MKT DRAWN: DWB
CHECKED: MJH CHECKED: MJH

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
TRUCK DETOUR

HORIZONTAL SCALE	BRIDGE FILE
1"=4000'	062-69-05860 B
VERTICAL SCALE	DESIGNATION
NA	1700185
SURVEY BOOK	SHEETS
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The right of way, parcel lines and ownership information shown on this plat are preliminary. This information is shown only to help orient the user of this plat as it relates to the centerlines. The source of this information is from the last deed of record obtained from the County Recorder's Office. The consultant responsible for the Right of Way Engineering will complete the final determination of this information.

SURVEY STARTED		
01/16/2019		
SURVEY COMPLETED		
04/09/2019		
ROUTE PLAT SHEETS		
1	OF	2

SURVEYOR STATEMENT	
This survey, to the best of my knowledge and belief, is executed according to the provisions of Title 865 IAC 1-12-20 through 1-12-26 regarding Route Surveys, except that any data shown regarding the location or description of the existing parcels is not a part of this survey.	

AFFIRMATION STATEMENT	
I affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security number in this document, unless required by law. By: Mark A. Schepers	
RECOMMENDED FOR APPROVAL AND PREPARED BY:	
SIGNATURE	DATE
MARK A. SCHEPERS, PS	XX/XX/XXXX

8415 East 56th St.
Indianapolis, IN 46216
PH. 317.544.4996
FAX 317.544.4997

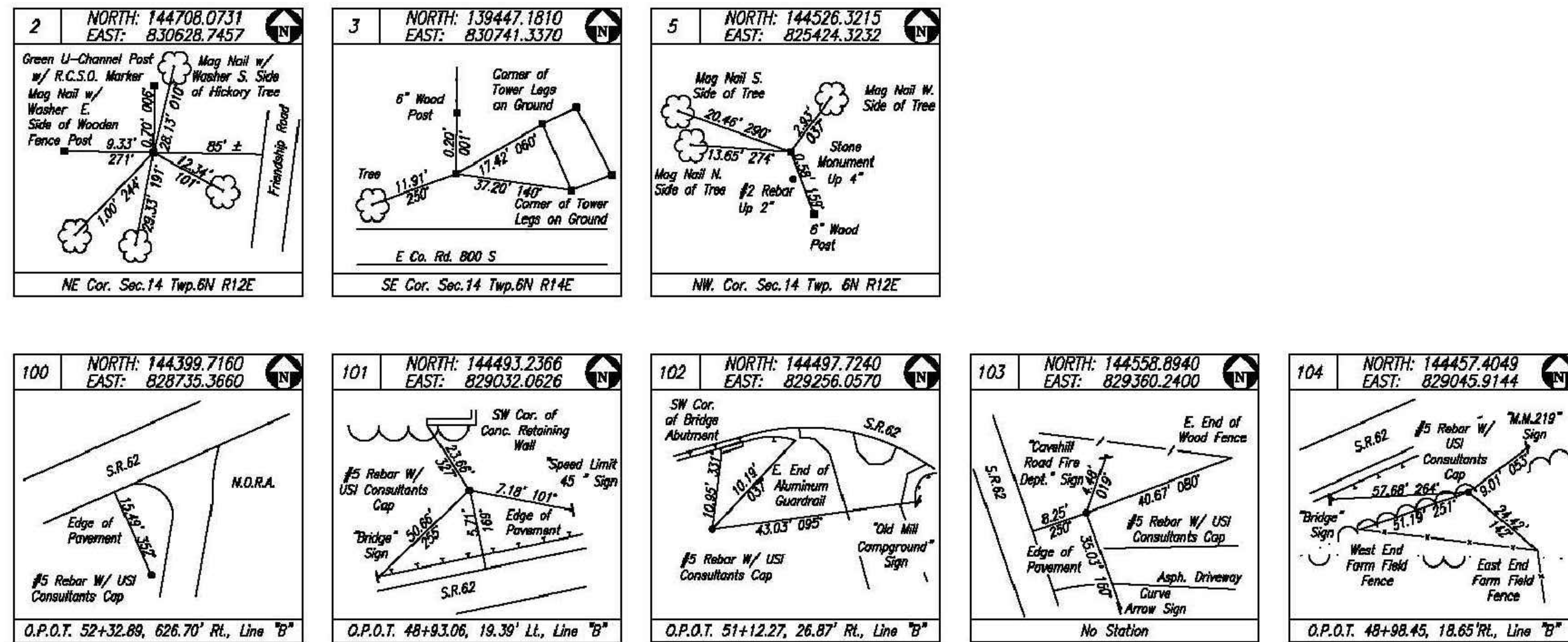
SR62 OVER LAUGHERY CREEK SUPERSTRUCTURE REPLACEMENT	
LOCATION CONTROL ROUTE SURVEY	

HORIZONTAL SCALE		BRIDGE FILE	
1" = 40'			
COUNTY		DESIGNATION	
RIPLEY		1700185	
SURVEY BOOK		PLAN SHEETS	
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CONTRACT		PROJECT	

S:\2018\proj\2018-109 BR 62 Doc 1700185 Plan\04-09-19 Route Survey Plat.dwg, Route Survey 1, 9/16/2019 4:56:00 PM

USI #2018-109

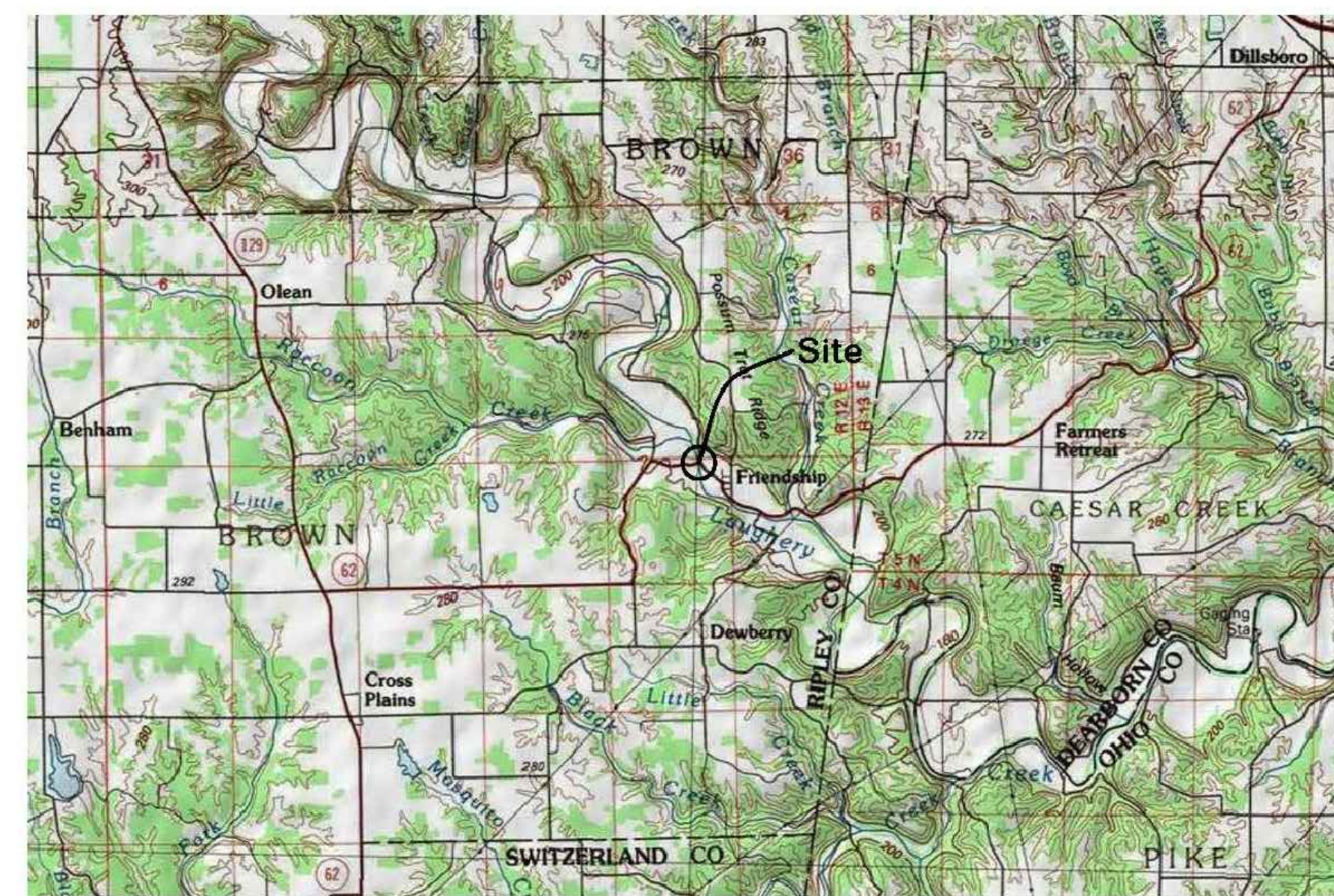
Section Corner, Control Point and Centerline References



Point Data Table

Point #	Station	Type	InGCS Northing	InGCS Easting	Latitude	Longitude
1	Section Line Evidence	#3 Rebar Fnd. 2" B.G.	138378.7690	825477.1690	38°57'28.9366"	-85°10'57.8940"
2	NE Cor. Sec. 14-T6N-R12E	Stone Found 4" A.G.	144708.0731	830628.7457	38°58'22.5328"	-85°10'52.6502"
3	SE Cor. Sec. 14-T6N-R12E	Stone Fnd. Flush	139447.1810	830741.3370	38°57'30.5340"	-85°10'51.3440"
4	Section Corner Witness	#4 Rebar 2" A.G.	144525.9786	825424.5507	38°58'20.8138"	-85°10'53.5544"
5	NW Cor. Sec. 14-T6N-R12E	Stone Found 4" A.G.	144526.3215	825424.3232	38°58'20.8172"	-85°10'53.5573"
100	Outside Alignment Stationing	#5 Rebar W/USI Control Point Cap Set Flush	144389.7160	828735.3660	38°58'19.5158"	-85°10'18.6374"
101	O.P.O.T. 48+93.06, 19.39' LL, Line "B"	#5 Rebar W/USI Control Point Cap Set Flush	144493.2366	829032.0626	38°58'20.4354"	-85°10'12.8789"
102	O.P.O.T. 51+12.27, 26.87' RL, Line "B"	#5 Rebar W/USI Control Point Cap Set Flush	144497.7240	829256.0570	38°58'20.4762"	-85°10'10.0428"
103	Outside Alignment Stationing	#5 Rebar W/USI Control Point Cap Set Flush	144558.8940	829380.2400	38°58'21.0791"	-85°10'08.7224"
104	O.P.O.T. 48+98.45, 18.65' RL, Line "B"	#5 Rebar W/USI Control Point Cap Set Flush	144457.4049	829045.9144	38°58'20.0810"	-85°10'12.7043"
15104	Boundary Evidence	3" x 2" Metal Plate Found	144920.1880	829394.4430	38°58'24.8495"	-85°10'08.2819"
15105	Boundary Evidence	"T" Post Fnd. 4" A.G.	144651.7130	829790.8071	38°58'23.9685"	-85°10'03.3914"
15106	Boundary Evidence	"T" Post Fnd.	144400.7810	829870.6350	38°58'19.5128"	-85°10'05.6832"
15108	Boundary Evidence	#2 Rebar Fnd.	144555.8480	829468.5570	38°58'21.0474"	-85°10'07.4776"
15110	Boundary Evidence	#2 Rebar Fnd.	144790.7880	829392.2230	38°58'23.3707"	-85°10'08.3127"
15111	Boundary Evidence	#2 Rebar Fnd. 4" B.G.	144677.9180	829328.7770	38°58'22.2580"	-85°10'08.1163"
15112	Boundary Evidence	#2 Rebar Fnd.	144663.8630	829428.2780	38°58'22.1165"	-85°10'07.8588"

Vicinity Map (N.T.S.)



Surveyor's Report

Located in Sections 11 & 14, Township 6 North, Range 12 East, in Brown Township, in Ripley County.

The purpose of this survey is to collect data for the preparation of construction and right of way plans. This is not a property retracement survey. Any apparent property, subdivision, or easement lines or corners are based on the last deeds of record obtained from the County Recorder's Office. These lines in no way represent property, subdivision, or easement lines that could be determined from a retracement property survey. They are preliminary and should not be used to represent a retracement property survey. No monuments were set to represent the same. In addition, any monuments depicted on this plat indicated as being found or set should be used only for the above stated purpose.

Field measurements for this survey were in accordance with the specifications outlined in IAC 865.1-14. Measurements are shown to the nearest 0.01 feet, coordinates to the nearest 0.0001 feet, and the bearings to the 0.001 seconds, not to indicate the precision of the work, but to allow for closure and adjustment by others if desired. Units are US Survey Feet unless otherwise noted.

Horizontal Control

The horizontal control for this project is based on the Indiana Geospatial Coordinate System (InGCS), Harrison Zone, North American Datum of 1983(2011) EPOCH 2010.0, US Survey Feet. Said system was ascertained by Real Time Kinematic (RTK) GPS observations from Trimble's VRS NOW Continually Operating Reference System (www.vrsnow.us). This system will govern the project for design, right of way computations and layout. Geometric datum and map projection parameters for this InGCS Zone are as follows:

Coordinate System : Indiana Geospatial Coordinate System
 Zone : Ripley
 Datum : NAD 83 (2011) EPOCH 2010.0
 Ellipsoid Name : GRS 80
 Geoid Model : Geoid12B

Zone Parameters
 Latitude of Grid Origin : 38°54'00"N
 Longitude of Grid Origin : 85°18'00"W
 Central Meridian S.F. : 1.000038
 False northing offset : 118110
 False easting offset : 787400

The Trimble VRS NOW's RTK Systems continuously operating reference stations (CORS) were used to measure dual RTK vectors on all control points and section corners. These dual vectors were compared and adjusted using Trimble Business Center software.

Reference Monumentation:

Control Points - See references and Point Data Table - Estimated relative positional accuracy of these points due to random errors in the measurement or staking of these monuments is +/- 0.10 feet.

Section Corners - See Section Corner Detail and References - Estimated relative positional accuracy of these points due to random errors in the measurement of these monuments is +/- 0.10 feet.

The following corner was found per information found in the Office of the County Surveyor. Lacking obvious evidence to the contrary, these monuments were held as prima facie evidence of the respective corners with negligible uncertainty.

- 2 - N.E. Cor. Sec. 14, T6N, R12E - Stone Found 4" A.G.

The following monuments were found to be in harmony with the surrounding features and was therefore accepted as the best evidence available for their respective corners:

- 1 - Evidence for West Line of Section 14, T6N, R12E - #3 Rebar Fnd. 2" B.G.
- 3 - S.E. Cor. Sec. 14, T6N, R12E - Stone Found Flush
- 5 - N.W. Cor. Sec. 14, T6N, R12E - Stone Found 4" A.G.

The following monuments were found to be in keeping with Reference Plats 2, 3 and 5:

- 15104 - 3" x 2" Metal Plate Found
- 15105 - "T" Post Found 4" A.G.
- 15106 - "T" Post Found
- 15109 - #2 Rebar Found
- 15110 - #2 Rebar Found
- 15111 - #2 Rebar Found 4" B.G.
- 15112 - #2 Rebar Found

Reference Plats

- Mary A. Otto Addition to Friendship, dated 25th August, 1913, and on file in the Ripley County Recorder's Office.
- "Steingruber Subdivision" dated April 1949, surveyed by Buell Wilson, and recorded in the Ripley County Recorder's Office in Deed book 126 Page 277.
- Second Copy of "Steingruber Subdivision" dated March 31, 1966 by Buell Wilson, and recorded in the Ripley County Recorder's Office.
- Boundary Survey of Property Owned by Grant Smith, made by Jerold L. Fischvogt, dated September 8th, 1980 and recorded in the Ripley County Recorder's Office.
- Survey made for Friendship Fire Department by Hoosier Consultants of Madison, dated December 11th, 1992 and recorded in the Ripley County Recorder's Office.

Alignments:

Alignment "B" was taken from plan reference 1 below, and was established based on splits of the bridge deck, and the station of the center of the bridge.

Reference Plan:

- "Bridge Plans for Spans over 20 Feet on Maintenance Contracts, Maintenance Contract No. MX-7850, Bridge File 62-V-5860" dated 7/23/1968 and provided to us by the INDOT Records office.

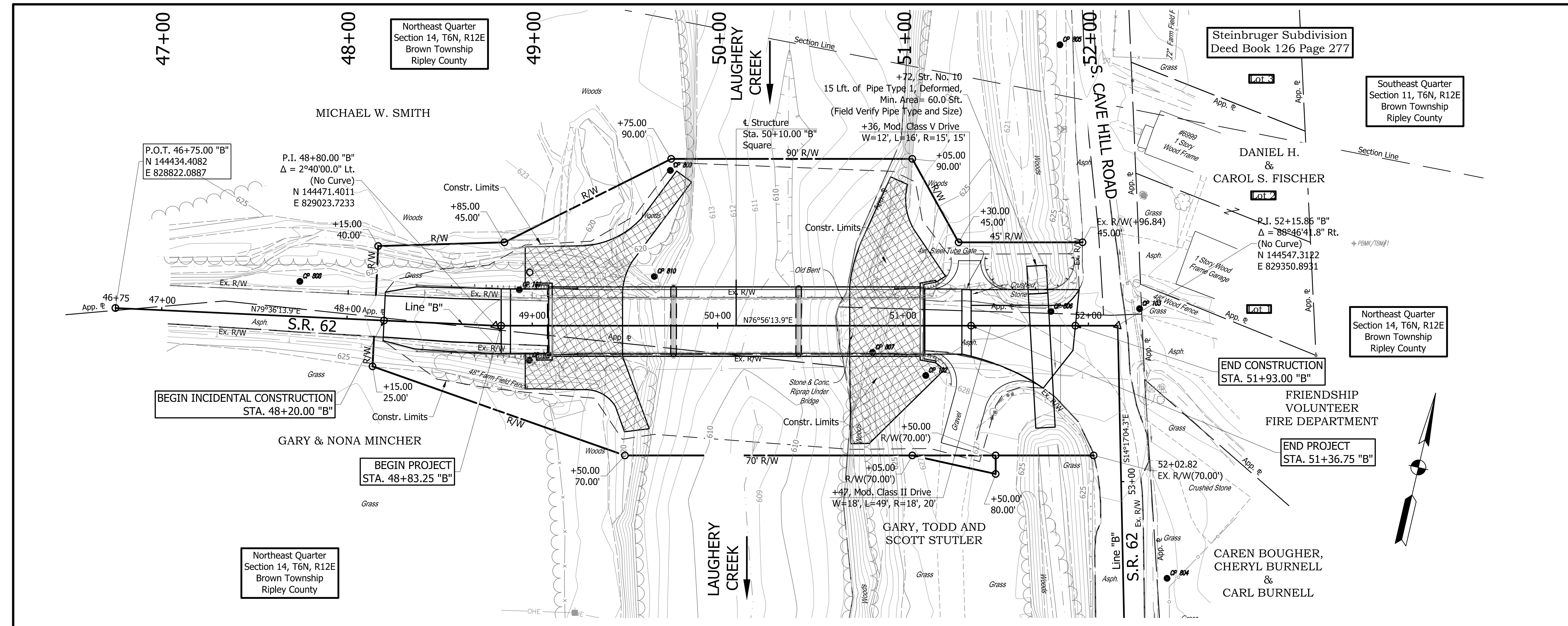
Right of Way:

There is no Right of Way information contained in Reference Plan 1. No Right of Way grants were discovered, therefore the Right of Way is also shown as being a Prescriptive Right of Way following the edge of pavement in the areas not included in the Right of Way of South Cave Hill Road. Per the Ripley County Highway Department, Cave Hill Road is a 30' Right of Way, by record dated 6/11/1884, and recorded in Book 3 Page 255.

The right of way, parcel lines and ownership information shown on this plat are preliminary. This information is shown only to help orient the user of this plat as it relates to the centerlines. The source of this information is from the last deed of record obtained from the County Recorder's Office as well as the above-mentioned plans. The consultant responsible for the Right of Way Engineering will complete the final determination of this information.

USI # 2018-109

SURVEY STARTED		SURVEYOR STATEMENT		AFFIRMATION STATEMENT		SR62 OVER LAUGHERY CREEK SUPERSTRUCTURE REPLACEMENT		HORIZONTAL SCALE		BRIDGE FILE	
01/16/2019		This survey, to the best of my knowledge and belief, is executed according to the provisions of Title 865 IAC 1-12-20 through 1-12-26 regarding Route Surveys, except that any data shown regarding the location or description of the existing parcels is not a part of this survey.		I affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security number in this document, unless required by law. By: Mark A. Schepers		8415 East 56th St. Indianapolis, IN 46216 PH. 317.544.4996 FAX 317.544.4997		COUNTY		DESIGNATION	
SURVEY COMPLETED								RIPLEY		1700185	
04/09/2019								SURVEY BOOK		PLAN SHEETS	
ROUTE PLAT SHEETS										8 OF 12	
2 OF 2								CONTRACT		PROJECT	
						LOCATION CONTROL ROUTE SURVEY					

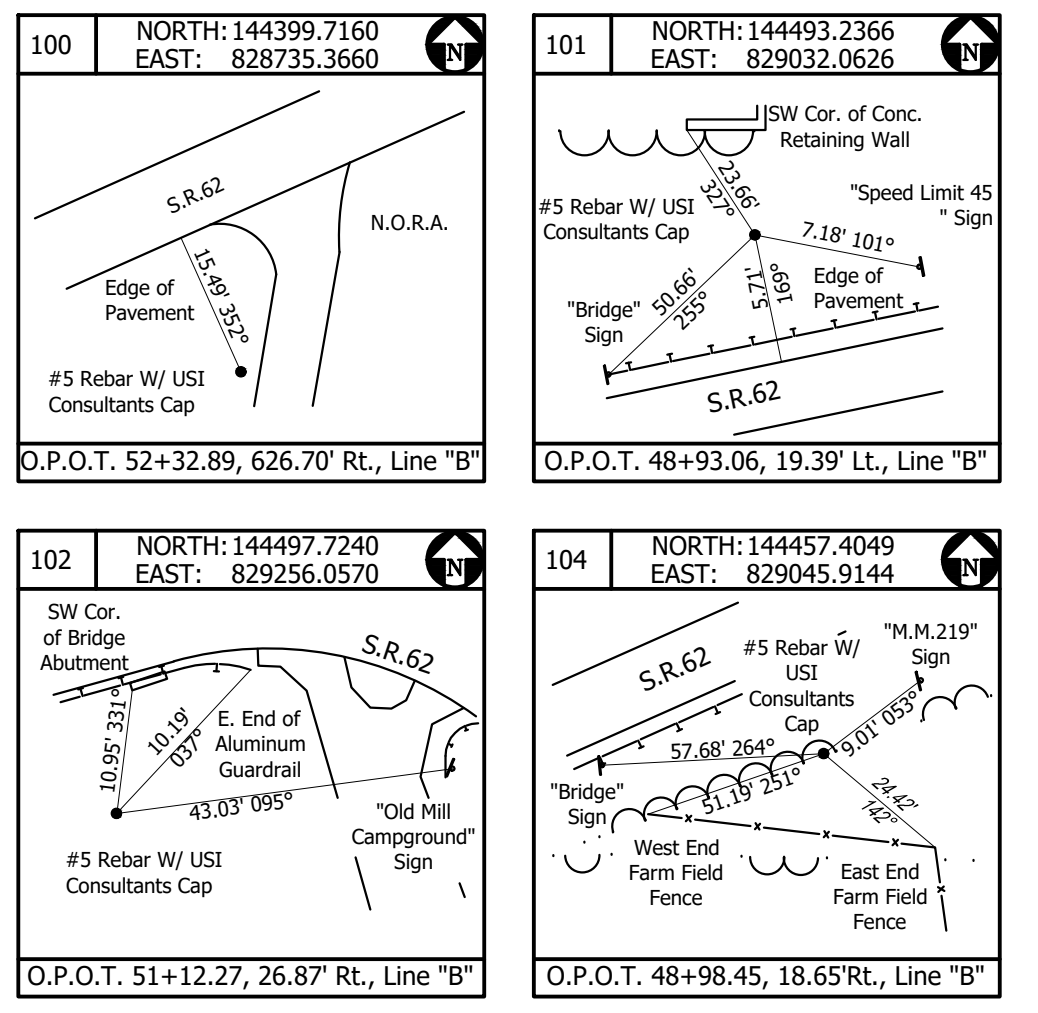


BENCHMARK INFO

TBM#1- CUT "X" IN NW BONNET BOLT OF FIRE HYDRANT THAT IS 125' E OF CAVE HILL DR AND 55' N OF S.R. 62 W EXTENDED. ON FIRE DEPARTMENT PROPERTY. N:144619.3, E:829464.9, ELEV.:634.5426'

TBM#2- RAILROAD SPIKE IN E FACE OF POWER POLE NUMBER LC-106W-50. 205' S OF CL OF S.R. 62 BRIDGE OVER LAUGHEY CREEK AND 17' W OF CL OF S.R. 6. N:144336.2, E:829385.7, ELEV.:626.4138'

TBM#3- CHISELED SQUARE IN NE CORNER OF SOUTH HEADWALL FOR CULVERT CROSSING S.R. 62. 325' WEST OF WEST EDGE OF S.R. 62 BRIDGE OVER LAUGHEY CREEK AND 13' SOUTH OF CL OF S.R. 62. 5736 HOUSE NUMBER. JUST WEST OF ENTRY DRIVE TO EASTER RISING FARM, N:144403.6, E:828727.8, ELEV.:630.6779'



HYDRAULIC DATA

SITE DATA:

Drainage Area:	= 200 sq. mile
Q100 Discharge:	= 33,800 cfs
Q500 Discharge:	= 47,320 cfs
Q100 Elevation:	= 628.13 ft.

EXISTING STRUCTURE

Q100 Headwall Elevation:	= 631.33 ft.
Existing Backwater:	= 2.55 ft.
Velocity @ Q100:	= 11.90 ft./s.
Existing Waterway Opening below Q100 Elevation (Str.):	= 1,748.38 sq. ft.
Existing Road Overflow Waterway Area:	= 1,570.46 sq. ft.
Existing Low Structure Elevation:	= 627.31 ft.
Skew:	= 0 degrees

PROPOSED STRUCTURE

Q100 Headwall Elevation:	= 630.86 ft.
Backwater:	= 2.08 ft.
Velocity At Q100:	= 12.49 ft./sec.
Gross Waterway Opening Req'd. Below Q100 Elevation (Str.):	= 1,793.56 sq. ft.
Road Overflow Waterway Area:	= 1,403.47 sq. ft.
Low Structure Elevation:	= 627.31'
Skew:	= 0 degrees

LOW FLOW SCOUR

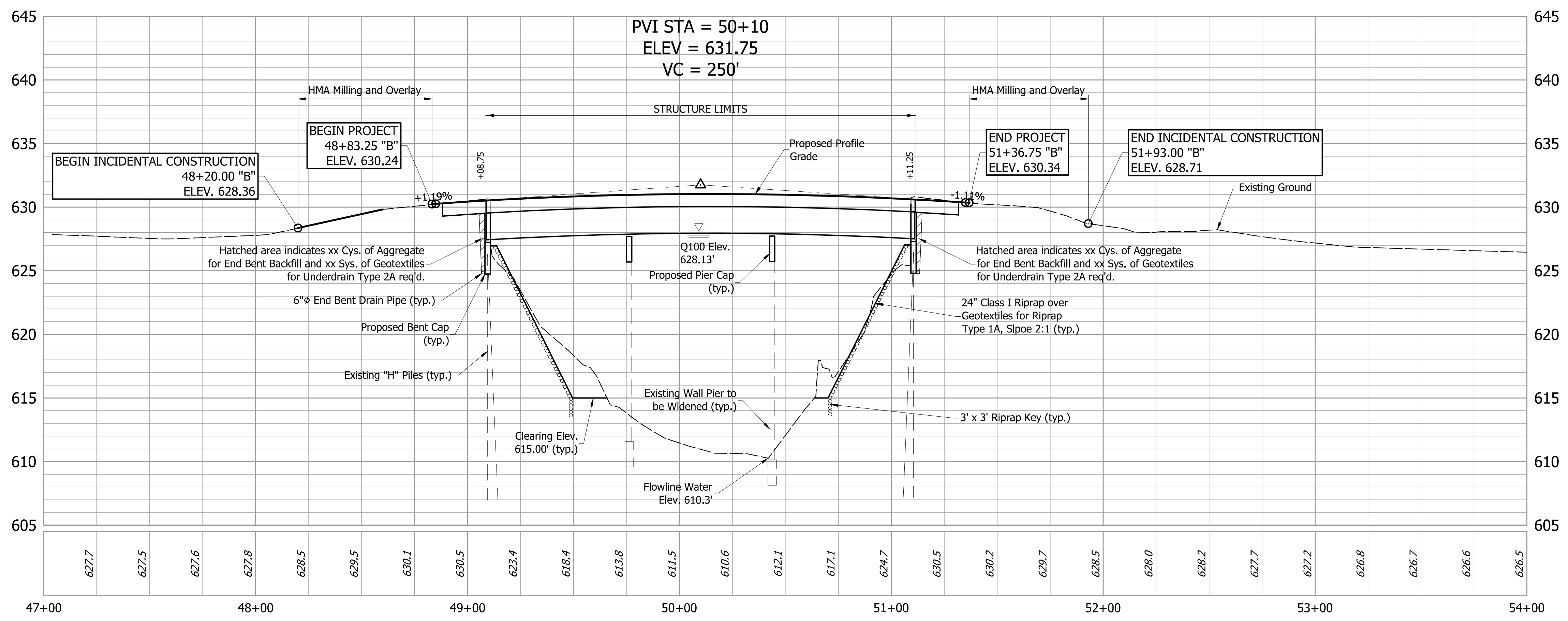
Contraction Scour Depth:	= 6.49 ft.
Pier Scour Depth:	= 4.80 ft.
Total Scour Depth:	= 11.29 ft.
Low Scour Elevation:	= 598.94 ft.
Max. Velocity:	= 14.60 ft./sec.

Q100 SCOUR

Q100 Contraction Scour:	= 4.99 ft.
Q100 Pier Scour Depth:	= 4.80 ft.
Q100 Total Scour Depth:	= 9.79 ft.
Q100 Low Scour Elevation:	= 600.44 ft.
Max. Velocity @ Q100:	= 15.98 ft./sec.

Q500 SCOUR

Q500 Contraction Scour:	= 10.63 ft.
Q500 Pier Scour Depth:	= 4.80 ft.
Q500 Total Scour Depth:	= 15.43 ft.
Q500 Low Scour Elevation:	= 594.80 ft.
Max. Velocity @ Q500:	= 16.76 ft./sec.



CONTINUOUS STEEL BEAM BRIDGE

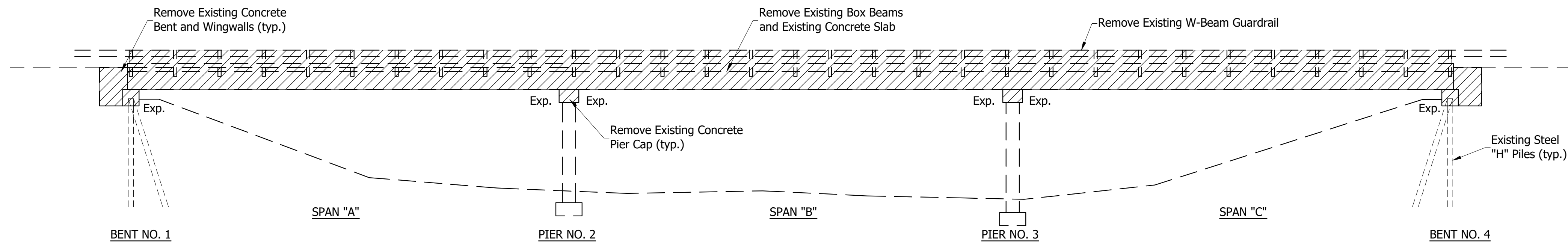
THREE SPANS @ 66'-9", 67'-6", 66'-9", SQUARE
 34'-6" CLEAR ROADWAY WIDTH
 SR 62 OVER LAUGHEY CREEK
 RIPLEY COUNTY, INDIANA

NOT FOR CONSTRUCTION

DESIGNED:	MKT	DRAWN:	DWB
CHECKED:	MJH	CHECKED:	MJH

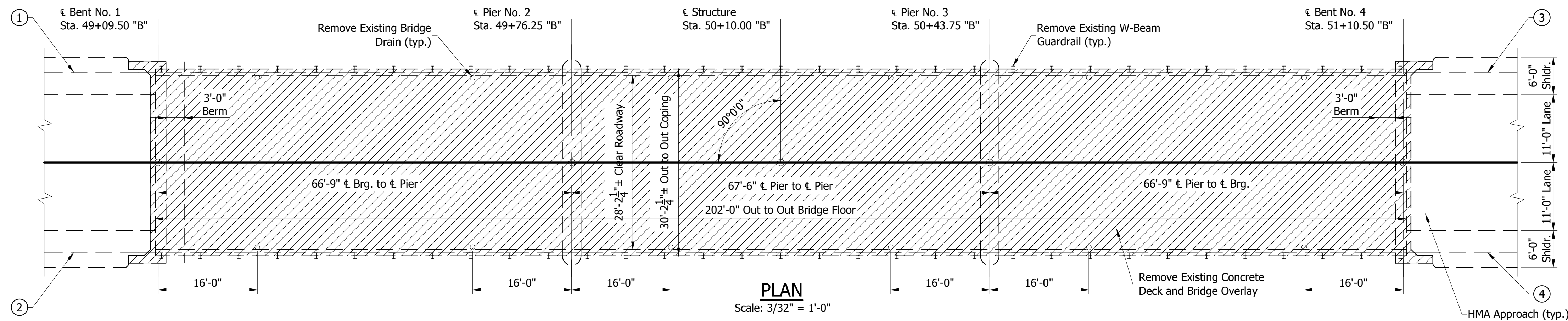
INDIANA
 DEPARTMENT OF TRANSPORTATION
BRIDGE LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1"=30'	062-69-05860 B
VERTICAL SCALE	DESIGNATION
1"=5'	1700185
SURVEY BOOK	SHEETS
----	9 of 12
CONTRACT	PROJECT
B-40434	1700185



ELEVATION
Scale: 3/32" = 1'-0"

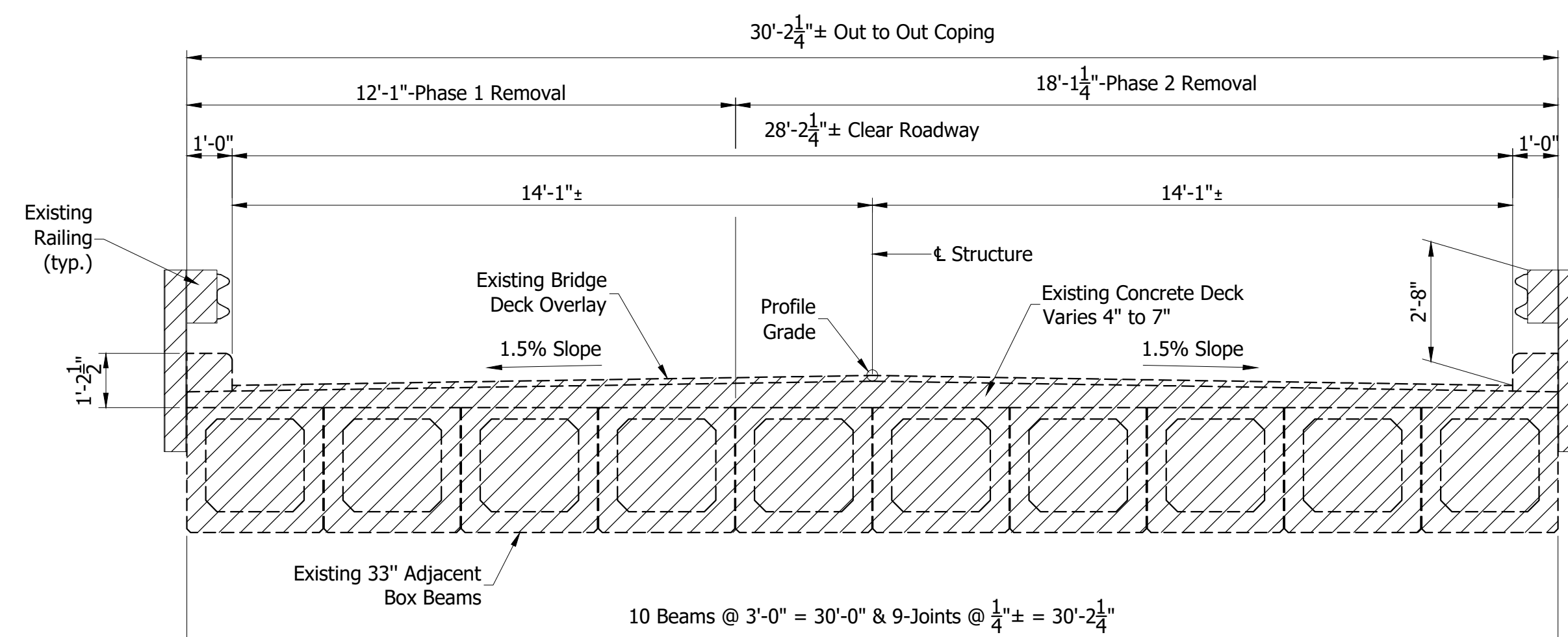
NOTE: Hatched area indicates portions to be removed



PLAN
Scale: 3/32" = 1'-0"

LEGEND

- ① Remove 62.5 Lft. Existing W-Beam Guardrail
- ② Remove 62.5 Lft. Existing W-Beam Guardrail
- ③ Remove 100 Lft. Existing W-Beam Guardrail
- ④ Remove 10 Lft. Existing W-Beam Guardrail



TYPICAL SECTION
Scale: 3/8" = 1'-0"

**EXISTING
CONTINUOUS PRESTRESSED
CONCRETE BOX BEAM BRIDGE**

THREE SPANS @ 66'-9", 67'-6", 66'-9", SQUARE
28'-2 1/4" CLEAR ROADWAY WIDTH
SR 62 OVER LAUGHERY CREEK
RIPLEY COUNTY, INDIANA

S:\2018\proj\2018-109-RR-62-Drw-1700185\Plan\Bldg_Plan\2018-109-General Plan-Existing.dwg, General Plan-Existing, 9/17/2019 10:50:10 AM

**NOT FOR
CONSTRUCTION**

DESIGNED: MKT DRAWN: DWB
CHECKED: MJH CHECKED: MJH

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
EXISTING

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	062-69-05860 B
VERTICAL SCALE	DESIGNATION
AS NOTED	1700185
SURVEY BOOK	SHEETS
----	10 of 12
CONTRACT	PROJECT
B-40434	1700185

GENERAL NOTES:

Plans for the existing structure are on file in the Central Office, Indiana Department of Transportation as Bridge File No. 062-69-05860 and are available upon request.

Portions of present structure shall be removed as noted.

Where new work is to be fitted to old work, the contractor shall check all dimensions and conditions in the field and report any errors or discrepancies to the engineer and assume responsibility for their correctness and the fit of the new part to the old.

Reinforcing steel covering shall be 2 1/2" in top and 1" min. in bottom of floor slabs, 3" in footings except bottom steel which shall be 4", and 2" in all other parts, unless noted.

Concrete in floor slab and concrete barrier railings is to be Class "C".

Surface Seal exposed surfaces of wingwalls, face of deck coping, all faces of concrete barrier railing and approach slabs. Estimated Quantity = xxx Sft.

DESIGN DATA:

Designed for HS20-44 Truck and Alternate Military Loading in accordance with the 2002 AASHTO Specifications and interim specifications.

Designed for actual dead load plus 35 lbs./sft. future wearing surface

Slab designed with 1 1/2" wearing surface.

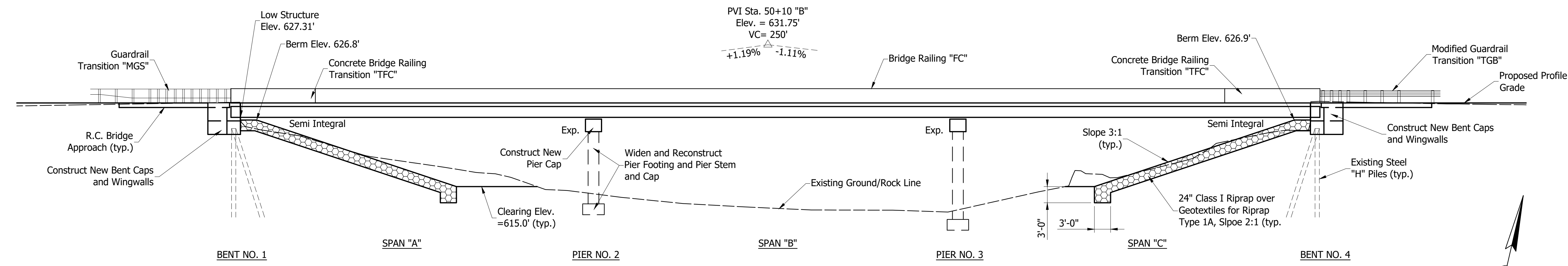
UNIT STRESSES:

Class "C" Concrete $F_c = 4000$ p.s.i.
 Class "A" Concrete $F_c = 3500$ p.s.i.
 Class "B" Concrete $F_c = 3000$ p.s.i.
 Reinforcing Steel (Grade 60) $F_y = 60,000$ p.s.i.

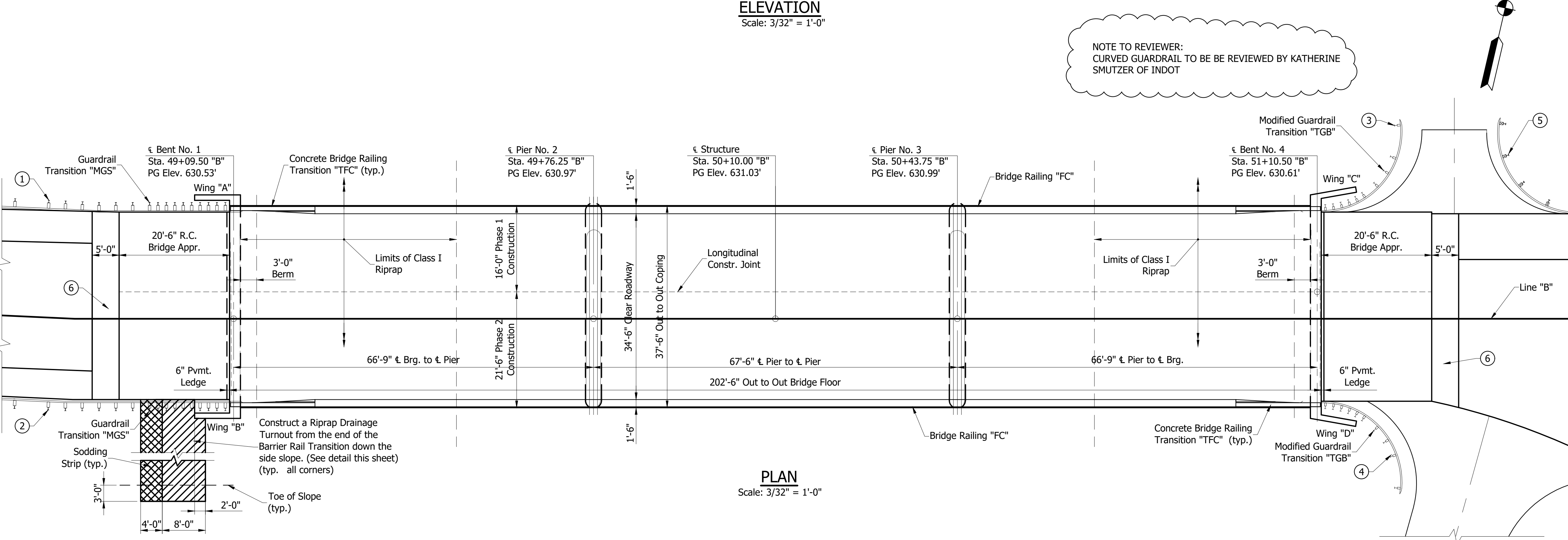
LEGEND

- ① 1-Guardrail Transition MGS, and 1-Guardrail End Treatment type OS req'd.
- ② 1-Guardrail Transition MGS, and 1-Guardrail End Treatment type OS req'd.
- ③ 1-Modified Guardrail Transition TGB (Use Thrie Beam and 15' Radius), and 1-Guardrail Curved Terminal End req'd.
- ④ 1-Modified Guardrail Transition TGB (Use Thrie Beam and 15' Radius), and 1-Guardrail Curved Terminal End req'd.
- ⑤ 1-Guardrail Curved Terminal End, 25 Lft. of Mod. W-Beam Guardrail (15' Radius), 18.75 Lft. of W-Beam Guardrail and 25 Lft. of Mod. W-Beam Guardrail (15' Radius) req'd.
- ⑥ 165 lbs/syd QC/QA HMA, 3, 70, Surface, 9.5 mm on 275 lbs/syd QC/QA HMA, 3, 64, intermediate, 19.0 mm on 330 lbs/syd QC/QA HMA, 3, 64, Base, 19.0 mm on Subgrade Treatment Type "IC"

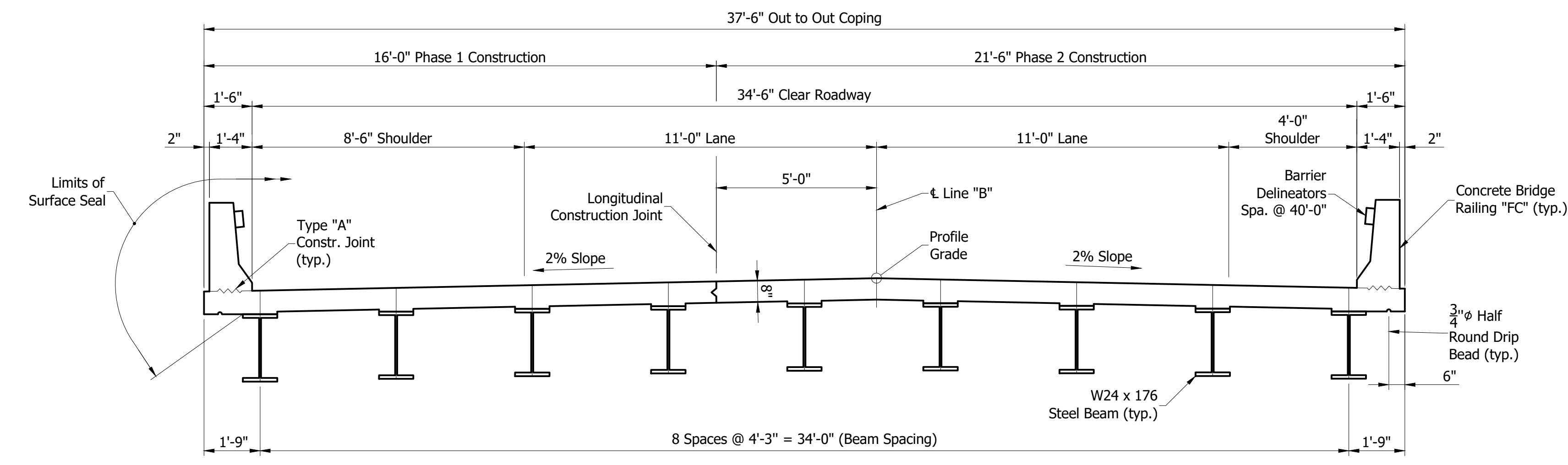
NOTE TO REVIEWER:
 ASSUMED PAVEMENT SECTION, FINAL PAVEMENT DESIGN TO BE PROVIDED BY INDOT



ELEVATION
 Scale: 3/32" = 1'-0"

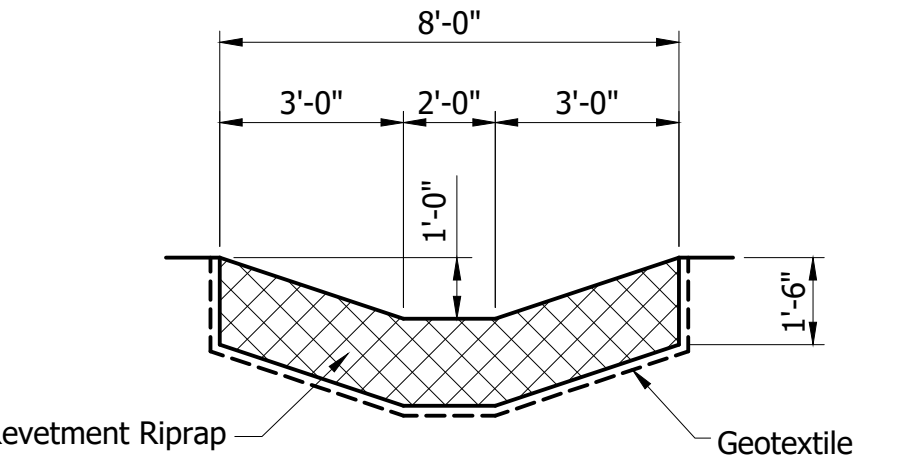


PLAN
 Scale: 3/32" = 1'-0"



TYPICAL SECTION
 Scale: 3/8" = 1'-0"

NOTE TO REVIEWER:
 SUPERSTRUCTURE TYPE CHANGED FROM SCOPING REPORT SUBMITTAL TO SATISFY HYDRAULIC REQUIREMENTS (NO ADDITIONAL BACKWATER CREATED)



RIPRAP DRAINAGE TURNOUT DETAIL
 Not to Scale

BRIDGE PRESERVATION
CONTINUOUS STEEL BEAM BRIDGE
 THREE SPANS @ 66'-9", 67'-6", 66'-9", SQUARE
 34'-6" CLEAR ROADWAY WIDTH
 SR 62 OVER LAUGHERY CREEK
 RIPLEY COUNTY, INDIANA

NOT FOR CONSTRUCTION

DESIGNED: MKT	DRAWN: DWB
CHECKED: MJH	CHECKED: MJH

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
PROPOSED

HORIZONTAL SCALE	AS NOTED	BRIDGE FILE	062-69-05860 B
VERTICAL SCALE	AS NOTED	DESIGNATION	1700185
SURVEY BOOK	----	SHEETS	11 of 12
CONTRACT	B-40434	PROJECT	1700185

SUMMARY OF BRIDGE QUANTITIES

ITEM	CONCRETE			CONCRETE RAILING CLASS C	STRUCTURAL STEEL	EPOXY COATED REINF. STEEL	PILES										SURFACE SEAL **	DENSE GRADED SUBBASE	R.C. BRIDGE APPROACH (10")	PATCHING CONCRETE STRUCTURES	CONC. STR. MEMBERS		GRATES, BASINS & FITTINGS CAST IRON	DRAIN PIPE, EXTENSION	CONC. BARRIER RAILING TRANSITION, WFC	CONC. BARRIER RAILING TRANSITION, TFC	EPOXY COATED THREADED TIE BAR ASSEMBLIES	
	CLASS C	CLASS A	CLASS B				14"Ø CONC. STEEL SHELL ENCASED	14"Ø CONC. STEEL SHELL ENCASED EPOXY COAT.	STEEL H HP12 x 53		STEEL H REINF. CONC. ENCASED	PILE TIP STEEL H	CORED HOLES IN ROCK	BULB-TEE 48" X 49"	I-BEAMS TYPE XX													
	SUPERSTR	SUBSTR	IN FTG.						no.	lft.						no.					lft.	no.						lft.
	cys	cys	cys				cys	lft.	lbs.	lbs.	no.	lft.	no.	lft.	no.	lft.					each	no.						lft.
SUPERSTRUCTURE	X			X		X																						X
BENT NO. 1		X				X			X	X				X														
PIER NO. 2		X	X			X			X	X				X				X										
PIER NO. 3		X	X			X			X	X				X				X										
BENT NO. 4		X				X			X	X				X														
WEST APPROACH SLAB						X												X							X			
EAST APPROACH SLAB						X												X							X			
TOTALS	X	X	X	X		X			X	X				X				X		X				X	X		X	

** ESTIMATED QUANTITY

PAVEMENT QUANTITIES AND APPROACH TABLE

LOCATION	DESCRIPTION (APPROACH TYPE OR CLASS)	EXCAVATION		CLEAR ZONE AT DRIVE	QC/QA HMA, 2, MATERIALS						HMA MATERIALS-TYPE "B"						BITUMINOUS MATERIAL FOR		COMPACTED AGGREGATE FOR BASE NO. 53		COMPACTED AGGREGATE FOR SURFACE NO. 73		SUBGRADE TREATMENT TYPE "IC"	TRANSITION MILLING	JOINT ADHESIVE, SURFACE	JOINT ADHESIVE, INTERMEDIATE	JOINT SEALANT	MULCHED SEEDING, "R"	TEMPORARY SEED MIXTURE	TEMPORARY MULCHING
		CUT	FILL		SURFACE 9.5 mm	INTERMD. 19.0 mm	BASE 25.0 mm	SURFACE 9.5 mm	INTERMD. 19.0 mm	BASE 25.0 mm	HMA SURFACE 9.5 mm, SHLDR.	HMA BASE 25.0 mm, SHLDR.	PRIME COAT	TACK COAT	DEPTH (in.) 6	DEPTH (in.) 8	DEPTH (in.)													
		cys	cys															ft.	lbs./syd.	tons	lbs./syd.	tons								
		ft.	ft.		ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.								
Sta. XX+XX to XX+XX "B"	Mainline				165	X	275	X	330	X								X			X	X	X	X	X	X	X	X	X	
Sta. XX+XX to XX+XX "B"																														
TOTALS						X		X		X								X		X	X	X	X	X	X	X	X	X	X	

APPROACH STRUCTURES

STRUCTURE NUMBER	LOCATION			DESCRIPTION		FLOW LINE										REMARKS					
	STATION	LEFT	RIGHT	SIZE	TYPE	KIND	LENGTH	SKEW	COVER	UP STREAM	DOWN STREAM	BACKFILL TYPE	STRUCTURE BACKFILL	REVEMENT RIPRAP	CONCRETE CLASS "A"		PIPE END SECTION	AGGREGATE FOR END BENT BACKFILL	GEOTEXTILES FOR UNDERDRAIN TYPE 2A	GRATED BOX END SECTION	CONNECT TO STR.
	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.	ft.		ft.	ft.	ft.	ft.	ft.
10	XX+XX		X	6	3	End Bent Drain Pipe	X										X	X			
11	XX+XX		X	6	3	End Bent Drain Pipe	X										X	X			
TOTAL							X										X	X			

GUARDRAIL SUMMARY TABLE

LOCATION												
FROM STATION	TO STATION	LEFT	MEDIAN LEFT	MEDIAN RIGHT	RIGHT	GUARDRAIL, MGS. W-BEAM @ 6.25 FT. POST SPA.	GUARDRAIL, MGS. HEIGHT TRANSITION	GUARDRAIL TRANSITION TYPE WGB	MOD. GUARDRAIL TRANSITION TYPE WGB	CURVED W-BEAM GUARDRAIL TERMINAL SYSTEM TYPE 3	GUARDRAIL END TREATMENT, TYPE "OS"	MODIFIED GUARDRAIL TRANSITION, TGB (30' RADIUS)
XX+XX	XX+XX	X										
XX+XX	XX+XX	X										
XX+XX	XX+XX	X										
XX+XX	XX+XX				X							
XX+XX	XX+XX				X							
TOTALS												

PAVEMENT MARKING SUMMARY

Description	Location	Length
Line, Paint, Solid, Yellow, 4"	Sta. XX+XX to Sta. XX+XX, Centerline Lt.	XX ft.
	Sta. XX+XX to Sta. XX+XX, Centerline Rt.	XX ft.
	Total	XX ft.
Line, Paint, Solid, White, 4"	Sta. XX+XX to Sta. XX+XX, Lt. Lane Line	XX ft.
	Sta. XX+XX to Sta. XX+XX, Rt. Lane Line	XX ft.
	Total	XX ft.
Snowplowable Raised Pavement Marker	Sta. XX+XX to Sta. XX+XX, Centerline Lt.	X each

MONUMENTS

LOCATION POINT TYPE	STATION	LINE	TYPE B	TYPE C	SECTION CORNER MONUMENT
BEGIN PROJECT	xx	"B"	1		
END PROJECT	xx	"B"	1		
TOTAL			2		

NOT FOR CONSTRUCTION

DESIGNED: MKT DRAWN: DWB
 CHECKED: MJH CHECKED: MJH

INDIANA
DEPARTMENT OF TRANSPORTATION

BRIDGE SUMMARY

HORIZONTAL SCALE	BRIDGE FILE
NONE	062-69-05860 B
VERTICAL SCALE	DESIGNATION
NONE	1700185
SURVEY BOOK	SHEETS
----	12 of 12
CONTRACT	PROJECT
B-40434	1700185