

PROJECT 180067	DESIGNATION 1703011
CONTRACT R-41441	BRIDGE FILE 912-45-02815

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
912-45-02815	CONTINUOUS COMPOSITE BRIDGE	6 Spans: 89'-0" @ 9'-0", 3 @ 104'-0", 103'-0" Skew: Square 1 Span D *PR-1*, 91'-3 3/4" Skew Variable	SR 912, Norfolk Southern Railroad, and Wisconsin Central LTD	13+48.94 *PR-A*

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	TYPE
1703012	SR 912 on Ramp B over Ramp B	Bridge
1700105	SR 912 on Ramp H over Ramp H	Bridge
1700369	SR 912 Ramp I	Bridge
1700370	SR 912 Ramp NEC over RR & Ramp NER	Bridge
1700300	SR 912 Pedestrian Bridge over RR	Bridge
1800533	SR 912 over IHB & NSRR, 0.19 Mi. E. of US 20	Bridge
2000039	SR 912 over CSX RR, Amoco Service Rd, 0.45 Mi. W. of US 12/ US 20	Bridge
*1800067	SR 912 Concrete Pavement Restoration	Roadway

* Lead Des Number

INDIANA DEPARTMENT OF TRANSPORTATION



BRIDGE PLANS

Excerpts

FOR SPANS OVER 20 FEET

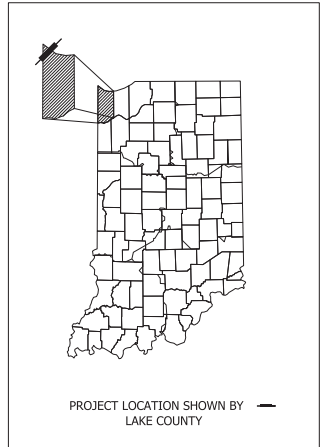
ROUTE: MICHIGAN AVENUE AT: RP 4+53.5

PROJECT NO. 1703011 P.E.
1703011 R/W
1703011 CONST.

Bridge Replacement for Bridge on Michigan Avenue over SR 912, Norfolk Southern Railroad, and Wisconsin Central LTD
Located 1.34 Miles West of US 12
Sections 22 & 15, T-37-N, R-9-W, North Township, Lake County, Indiana

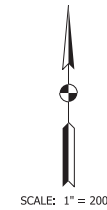
TRAFFIC DATA (See Index Sheet)

DESIGN DATA (See Index Sheet)



LATITUDE: 41° 39' 11" LONGITUDE: 87° 26' 34"

BRIDGE LENGTH: 0.12 MI.
ROADWAY LENGTH: 0.21 MI.
TOTAL LENGTH: 0.33 MI.
MAX. GRADE: +5.12 %



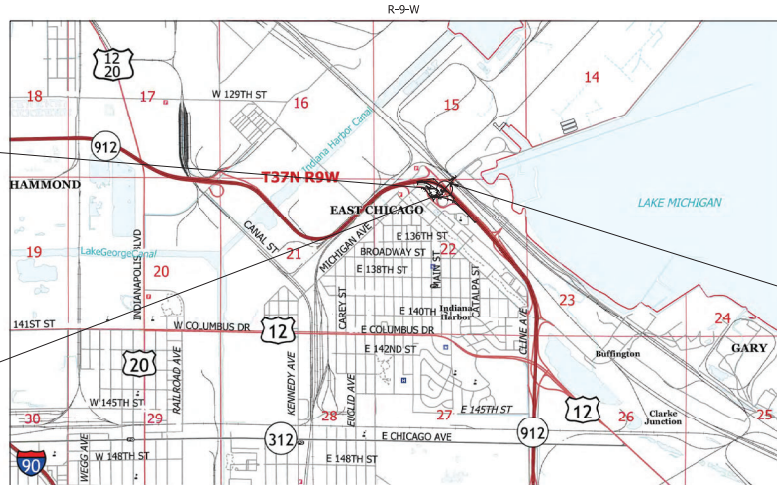
Structure 912-45-02815
Over SR 912, Norfolk Southern Railroad,
and Wisconsin Central LTD
13+48.94 *PR-A*

Norfolk Southern Railway
Dearborn Division
DOT #960896C
MP CD 0502.740

Wisconsin Central LTD.
Chicago Division
DOT #260684R
MP 0008.770

Begin Project
10+00.00 "PR-A"

End Project
17+18.56 "PR-A"



INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2022
TO BE USED WITH THESE PLANS.

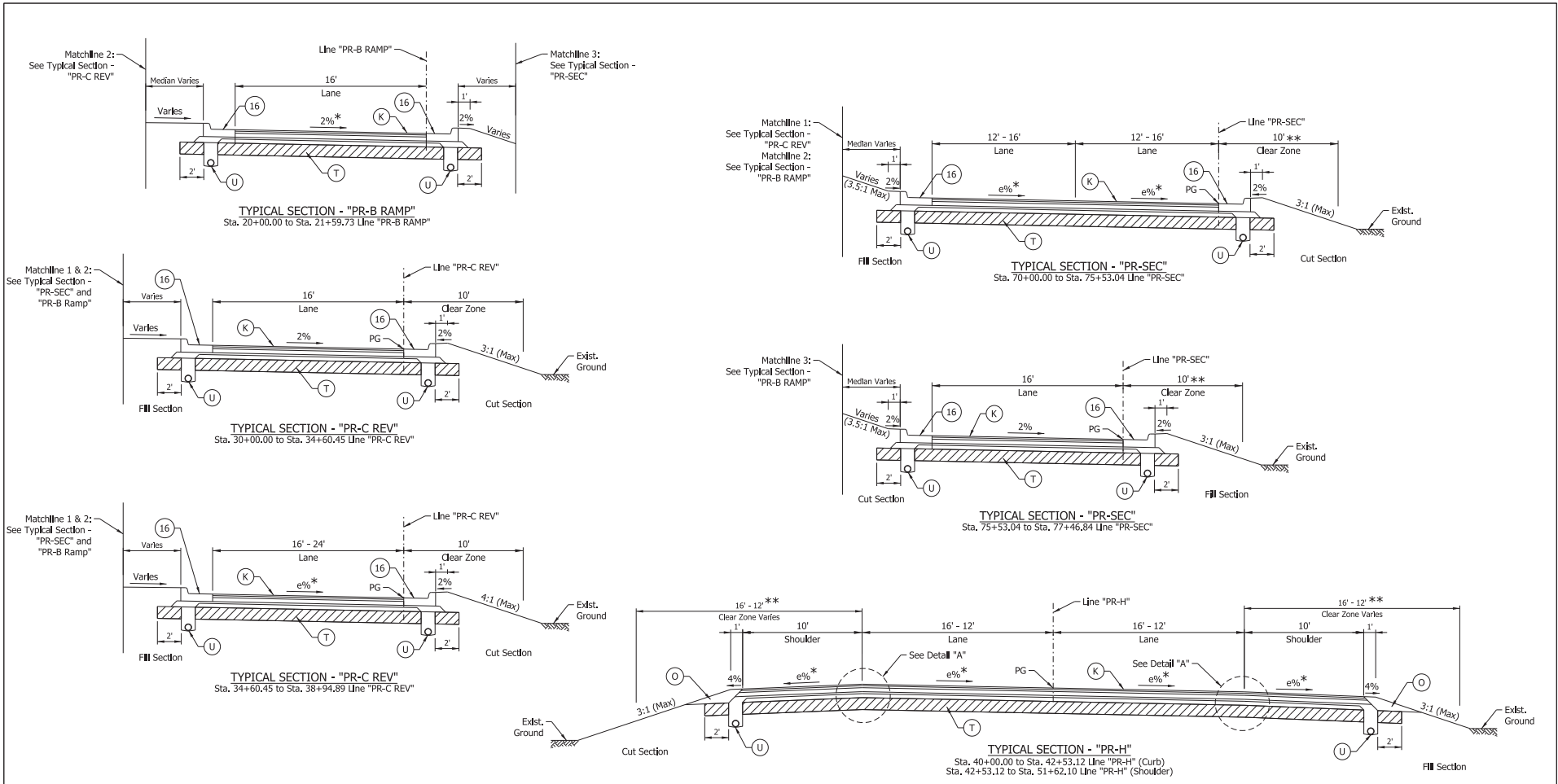
PARSONS

101 W. Ohio St., Suite 2121
Indianapolis, IN 46204
Bus (317) 616-1000
Fax (317) 616-1033

IP_PWP\pms39733\SR912_BR_1\bk_Sheet.dgn
05-APR-2022

PLANS PREPARED BY: PARSONS 317-616-1000 PHONE NUMBER
CERTIFIED BY: DATE
APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE	
912-45-02815	
DESIGNATION	
1703011	
SURVEY BOOK	SHEETS
ELECTRONIC	1 of 82
CONTRACT	PROJECT
R-41441	1800067



Notes to Reviewer:
1. 5' Shelf for Future Sidewalk is not Provided, in Curbed Sections. No Future Pedestrian Activity is Expected Within Interchange.

* For Superlevation Details, Refer to Profile Sheets
** Portions of Clear Zone within the 3:1 slopes will be met at the toe of slope as the existing ground is relative flat

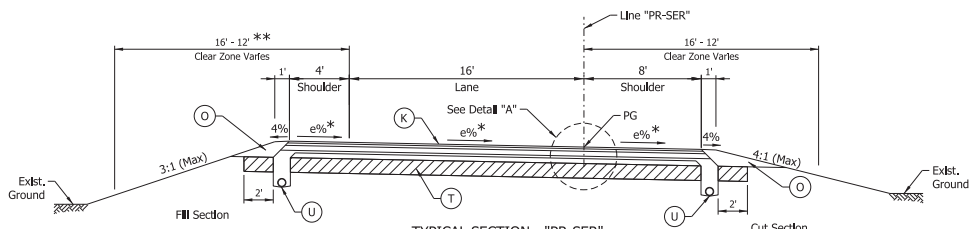
(A) PCCP for Truck Apron (TBD)	(U) Underdrain, TBD	(16) Combined Concrete Curb and Gutter
(K) Full Depth HMA Pavement, TBD	(13) Curb Integral, Concrete	
(O) Compacted Aggregate, No. 53	(15) Combined Concrete Curb and Gutter, Type B (Sloping)	
(T) Subgrade Treatment, TBD		

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CP	DRAWN: DH	
CHECKED: TJK	CHECKED: TJK	

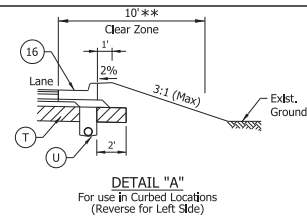
INDIANA DEPARTMENT OF TRANSPORTATION	
TYPICAL SECTIONS	

HORIZONTAL SCALE	BRIDGE FILE
3/4" = 1'-0"	912-45-02815
VERTICAL SCALE	DESIGNATION
N/A	1703011
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 81
CONTRACT	PROJECT
R-41441	1800067

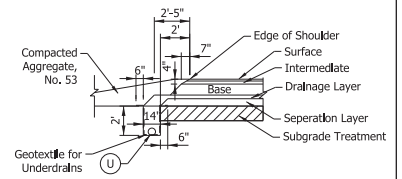
IP_PWRdms39755/SR 912_Sk_Typ_03.dgn



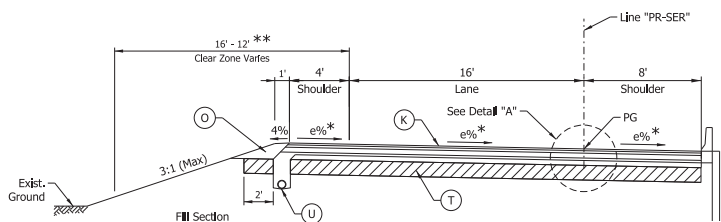
TYPICAL SECTION - "PR-SER"
 Sta. 80+00.00 to Sta. 81+10.00 Line "PR-SER"
 Sta. 83+25.00 to Sta. 88+48.29 Line "PR-SER"



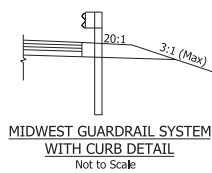
DETAIL "A"
 For use in Curbed Locations
 (Reverse for Left Side)



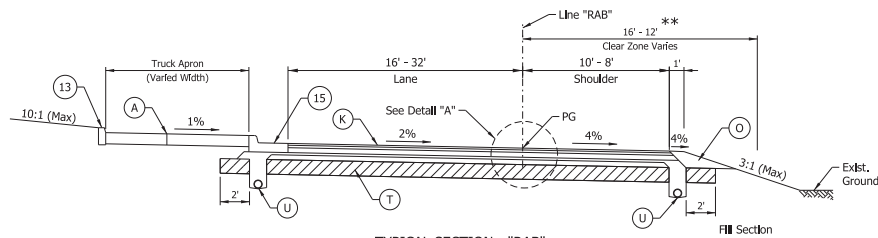
SAFETY EDGE ON HMA PAVEMENT
 Not to Scale
 A safety edge shall be constructed where curb is not present



TYPICAL SECTION - "PR-SER"
 Sta. 81+10.00 to Sta. 83+25.00 Line "PR-SER"



**MIDWEST GUARDRAIL SYSTEM
 WITH CURB DETAIL**
 Not to Scale



TYPICAL SECTION - "RAB"
 Sta. 100+00.00 to Sta. 100+21.00 Line "RAB" (Shoulder)
 Sta. 100+21.00 to Sta. 106+24.00 Line "RAB" (Curb)

* For Superlevation Details, Refer to Profile Sheets
 ** Portions of Clear Zone within the 3:1 slopes will be met at the toe of slope as the existing ground is relative flat

- (A) PCCP for Truck Apron (TBD)
- (K) Full Depth HMA Pavement, TBD
- (O) Compacted Aggregate, No. 53
- (T) Subgrade Treatment, TBD
- (U) Underdrain, TBD
- (13) Curb Integral, Concrete
- (15) Combined Concrete Curb and Gutter, Type B (Sloping)
- (16) Combined Concrete Curb and Gutter

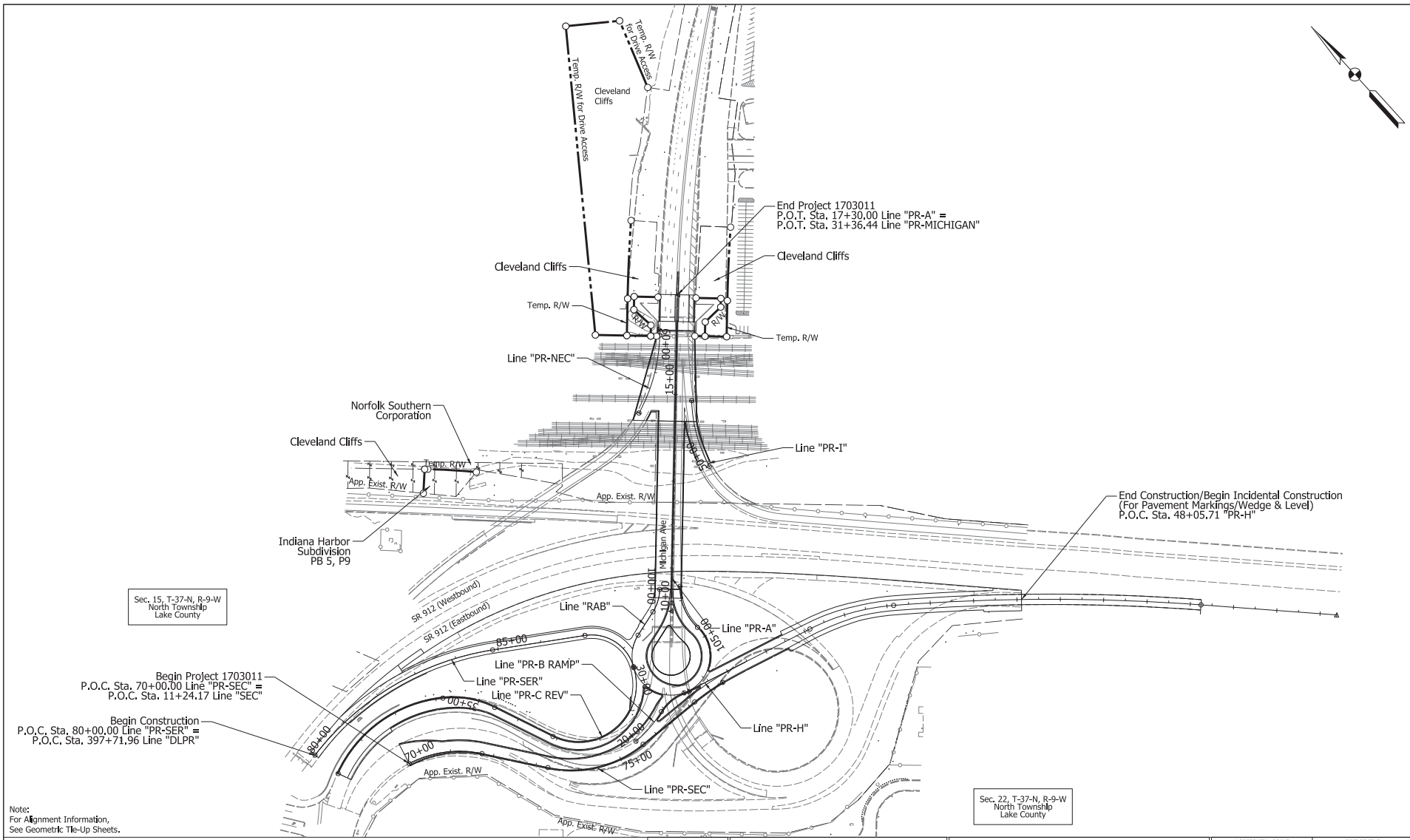
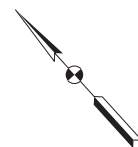
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CP	DRAWN: DH	
CHECKED: TJK	CHECKED: TJK	

INDIANA
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1/4" = 1'-0"	912-45-02815
VERTICAL SCALE	DESIGNATION
N/A	1703011
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 81
CONTRACT	PROJECT
R-41441	1800067

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Sec. 15, T-37-N, R-9-W
North Township
Lake County

Sec. 22, T-37-N, R-9-W
North Township
Lake County

Note:
For Alignment Information,
See Geometric Tie-Up Sheets.

Begin Project 1703011
P.O.C. Sta. 70+00.00 Line "PR-SEC" =
P.O.C. Sta. 11+24.17 Line "SEC"

Begin Construction
P.O.C. Sta. 80+00.00 Line "PR-SER" =
P.O.C. Sta. 397+71.96 Line "DLPR"

End Project 1703011
P.O.T. Sta. 17+30.00 Line "PR-A" =
P.O.T. Sta. 31+36.44 Line "PR-MICHIGAN"

End Construction/Begin Incidental Construction
(For Pavement Markings/Wedge & Level)
P.O.C. Sta. 48+05.71 "PR-H"

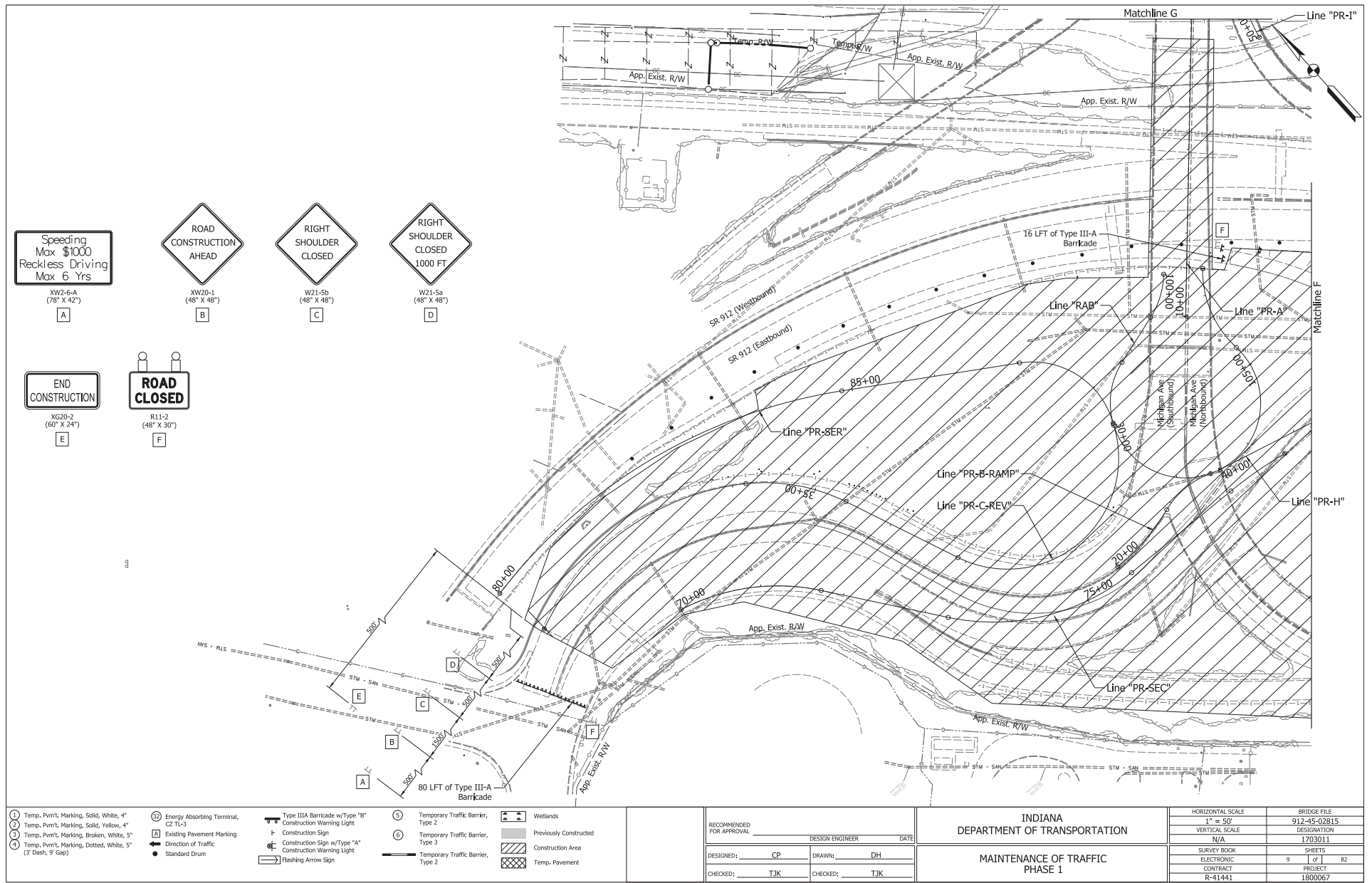
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CP	DRAWN: DH	
CHECKED: TJK	CHECKED: TJK	

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAT NO. 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 100'	912-45-02815
VERTICAL SCALE	DESIGNATION
N/A	1703011
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 82
CONTRACT	PROJECT
R-41441	1800067

IP_PWR\dms39755\SR 912_Sht_01.dgn



Speeding
Max \$1000
Reckless Driving
Max 6 Yrs

XW2-6-A
(78" X 42")
A

ROAD
CONSTRUCTION
AHEAD

XW20-1
(48" X 48")
B

RIGHT
SHOULDER
CLOSED

W21-5b
(48" X 48")
C

RIGHT
SHOULDER
CLOSED
1000 FT

W21-5a
(48" X 48")
D

END
CONSTRUCTION

XG20-2
(60" X 24")
E

ROAD
CLOSED

R11-2
(48" X 30")
F

- ① Temp. Pvm't. Marking, Solid, White, 4"
- ② Temp. Pvm't. Marking, Solid, Yellow, 4"
- ③ Temp. Pvm't. Marking, Broken, White, 5"
- ④ Temp. Pvm't. Marking, Dotted, White, 5"
(3' Dash, 9' Gap)
- Ⓜ Energy Absorbing Terminal, CZ TL-3
- Ⓜ Existing Pavement Marking
- Direction of Traffic
- Standard Drum
- Ⓜ Type IIIA Barricade w/Type "B" Construction Warning Light
- Ⓜ Construction Sign
- Ⓜ Construction Sign w/Type "A" Construction Warning Light
- Ⓜ Flashing Arrow Sign
- Ⓜ Temporary Traffic Barrier, Type 2
- Ⓜ Temporary Traffic Barrier, Type 3
- Ⓜ Temporary Traffic Barrier, Type 2
- Ⓜ Wetlands
- Ⓜ Previously Constructed
- Ⓜ Construction Area
- Ⓜ Temp. Pavement

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CP	DRAWN: DH	
CHECKED: TJK	CHECKED: TJK	

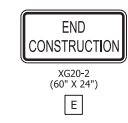
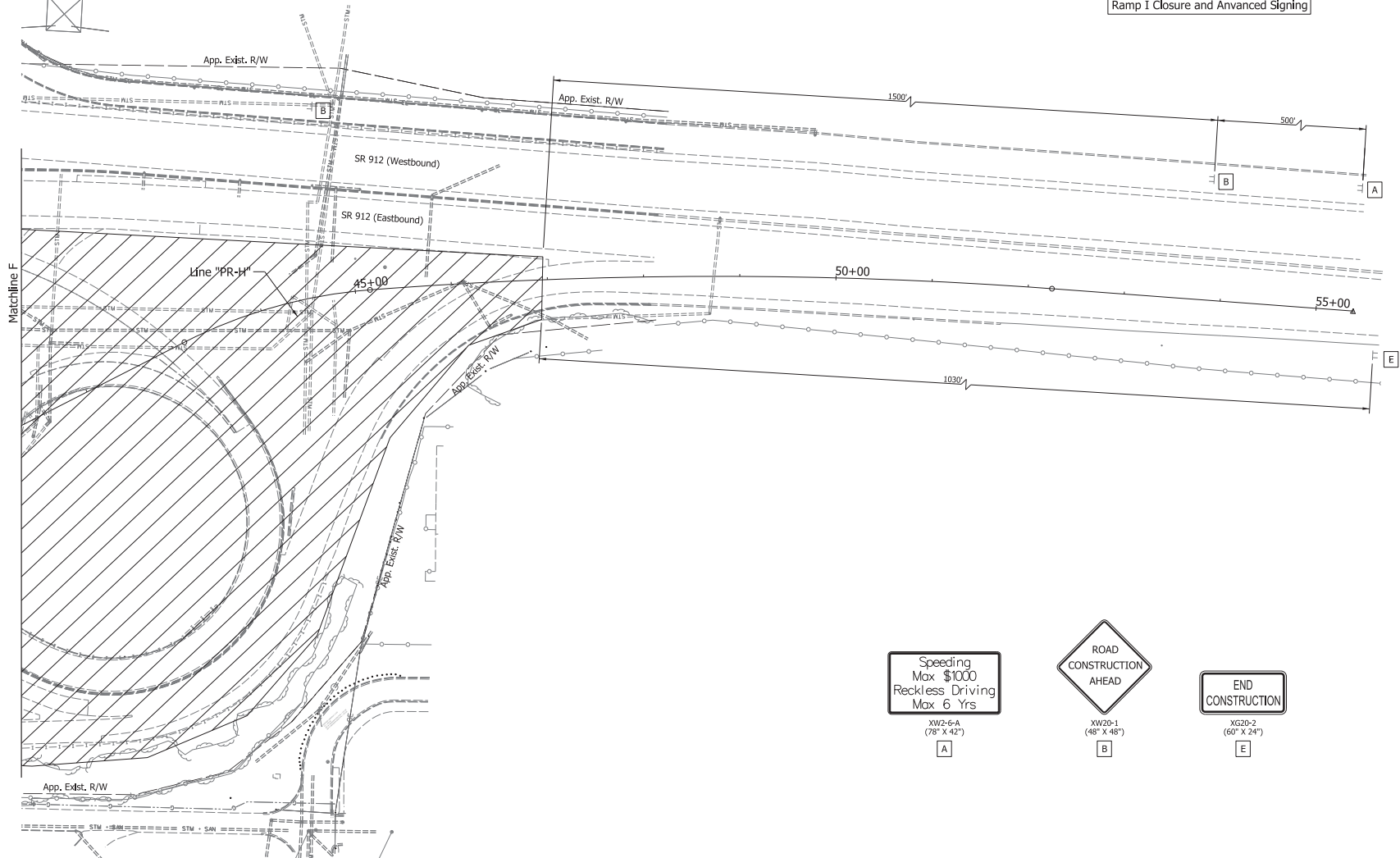
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

HORIZONTAL SCALE 1" = 50'	BRIDGE FILE 912-45-02815
VERTICAL SCALE N/A	DISIGNATION 1703011
SURVEY BOOK	SHEETS
ELECTRONIC CONTRACT R-41441	9 of 82 PROJECT 1800067

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Note To Reviewer:
Reference DES 1800067 for the
Ramp I Closure and Advanced Signing



- ① Temp. Pvm't. Marking, Solid, White, 4"
- ② Temp. Pvm't. Marking, Solid, Yellow, 4"
- ③ Temp. Pvm't. Marking, Broken, White, 5"
- ④ Temp. Pvm't. Marking, Dotted, White, 5" (3' Dash, 9' Gap)
- ⑤ Energy Absorbing Terminal, CZ TL-3
- Ⓐ Existing Pavement Marking
- ➔ Direction of Traffic
- Standard Drum
- Ⓜ Type IIIA Barricade w/Type "B" Construction Warning Light
- Ⓝ Construction Sign
- Ⓞ Construction Sign w/Type "A" Construction Warning Light
- Ⓟ Flashing Arrow Sign
- Ⓠ Temporary Traffic Barrier, Type 2
- Ⓡ Temporary Traffic Barrier, Type 3
- Ⓢ Temporary Traffic Barrier, Type 2
- Ⓣ Wetlands
- Ⓤ Previously Constructed
- Ⓥ Construction Area
- Ⓦ Temp. Pavement

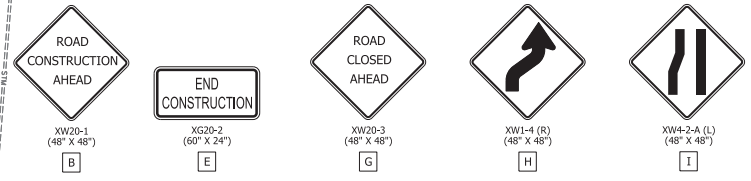
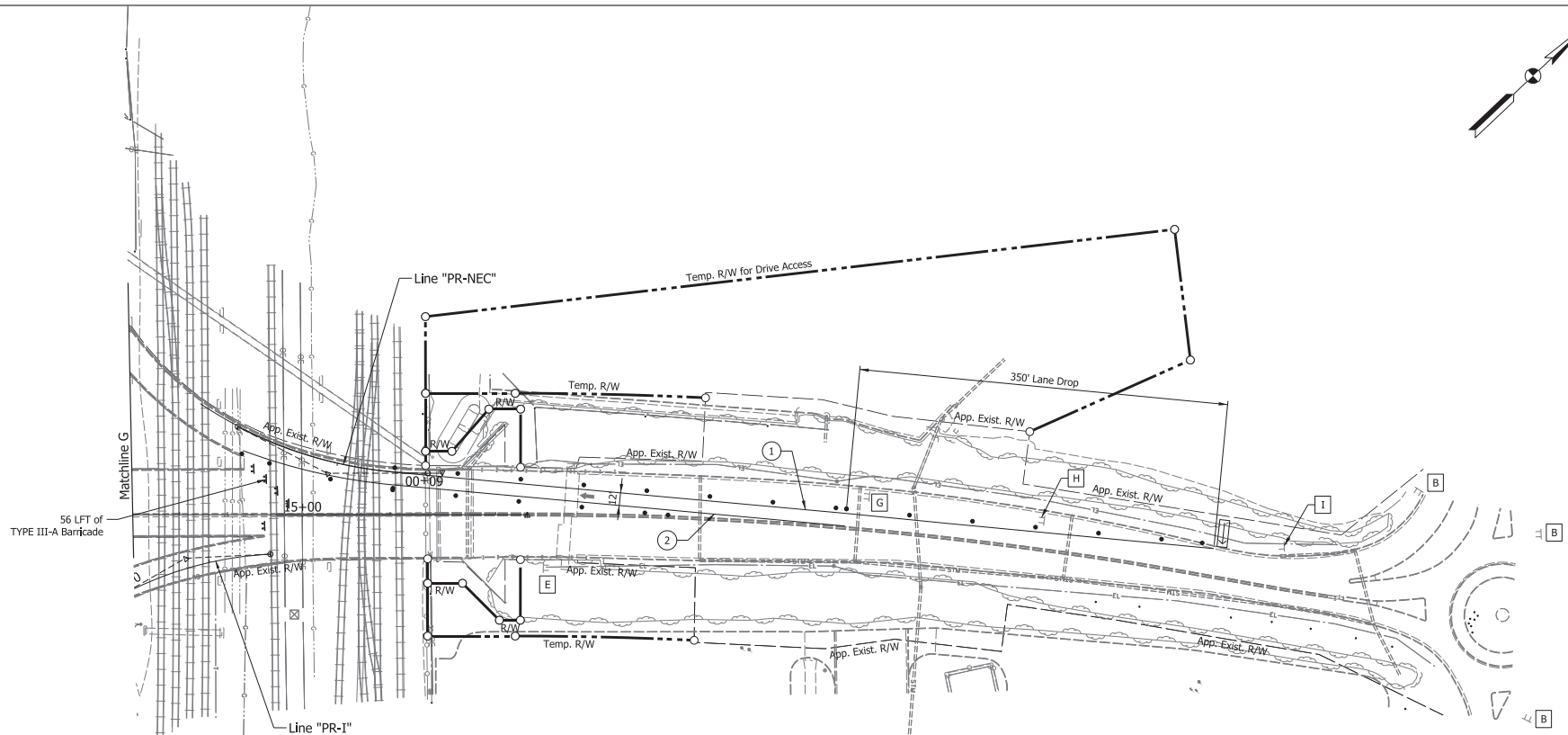
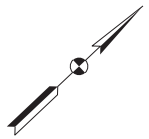
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CP	DRAWN: DH	
CHECKED: TJK	CHECKED: TJK	

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	912-45-02815
VERTICAL SCALE	DESIGNATION
N/A	1703011
SURVEY BOOK	SHEETS
ELECTRONIC	10 of 82
CONTRACT	PROJECT
R-41441	1800067

IP_PWR\dms39755\SR 912 SHL_MGT_03.dgn



① Temp. Pvm't. Marking, Solid, White, 4"	② Energy Absorbing Terminal, CZ TL-3	⊣ Type IIIA Barricade w/Type "B" Construction Warning Light	Ⓞ Temporary Traffic Barrier, Type 2	Wetlands
② Temp. Pvm't. Marking, Solid, Yellow, 4"	A Existing Pavement Marking	⊣ Construction Sign	Ⓞ Temporary Traffic Barrier, Type 3	Previously Constructed
③ Temp. Pvm't. Marking, Broken, White, 5"	➔ Direction of Traffic	⊣ Construction Sign w/Type "A" Construction Warning Light	— Temporary Traffic Barrier, Type 2	Construction Area
④ Temp. Pvm't. Marking, Dotted, White, 5" (3' Dash, 9' Gap)	● Standard Drum	➔ Flashing Arrow Sign		Temp. Pavement

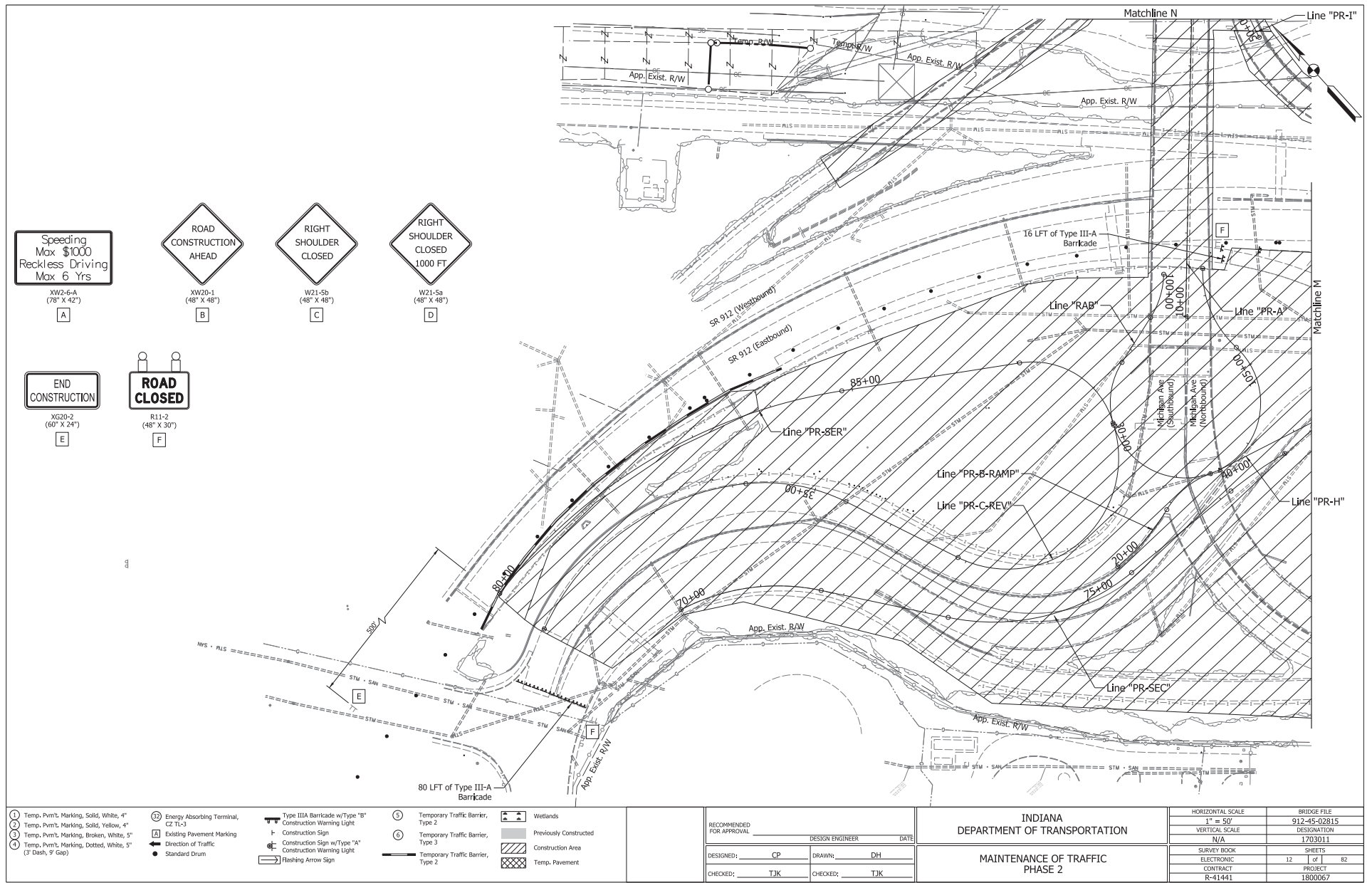
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CP	DRAWN: DH	
CHECKED: TJK	CHECKED: TJK	

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	912-45-02815
VERTICAL SCALE	DISIGNATION
N/A	1703011
SURVEY BOOK	SHEETS
ELECTRONIC	11 of 82
CONTRACT	PROJECT
R-41441	1800067

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Speeding
Max \$1000
Reckless Driving
Max 6 Yrs

XW2-6-A
(78" X 42")
A

ROAD
CONSTRUCTION
AHEAD

XW20-1
(48" X 48")
B

RIGHT
SHOULDER
CLOSED

W21-5b
(48" X 48")
C

RIGHT
SHOULDER
CLOSED
1000 FT

W21-5a
(48" X 48")
D

END
CONSTRUCTION

XG20-2
(60" X 24")
E

ROAD
CLOSED

R11-2
(48" X 30")
F

- ① Temp. Pvm't. Marking, Solid, White, 4"
- ② Temp. Pvm't. Marking, Solid, Yellow, 4"
- ③ Temp. Pvm't. Marking, Broken, White, 5"
- ④ Temp. Pvm't. Marking, Dotted, White, 5"
(3' Dash, 9' Gap)
- Ⓜ Energy Absorbing Terminal, CZ TL-3
- Ⓜ Existing Pavement Marking
- Direction of Traffic
- Standard Drum
- Ⓜ Type IIIA Barricade w/Type "B" Construction Warning Light
- Ⓜ Construction Sign
- Ⓜ Construction Sign w/Type "A" Construction Warning Light
- Ⓜ Flashing Arrow Sign
- Ⓜ Temporary Traffic Barrier, Type 2
- Ⓜ Temporary Traffic Barrier, Type 3
- Ⓜ Temporary Traffic Barrier, Type 2
- Ⓜ Wetlands
- Ⓜ Previously Constructed
- Ⓜ Construction Area
- Ⓜ Temp. Pavement

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CP	DRAWN: DH	
CHECKED: TJK	CHECKED: TJK	

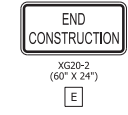
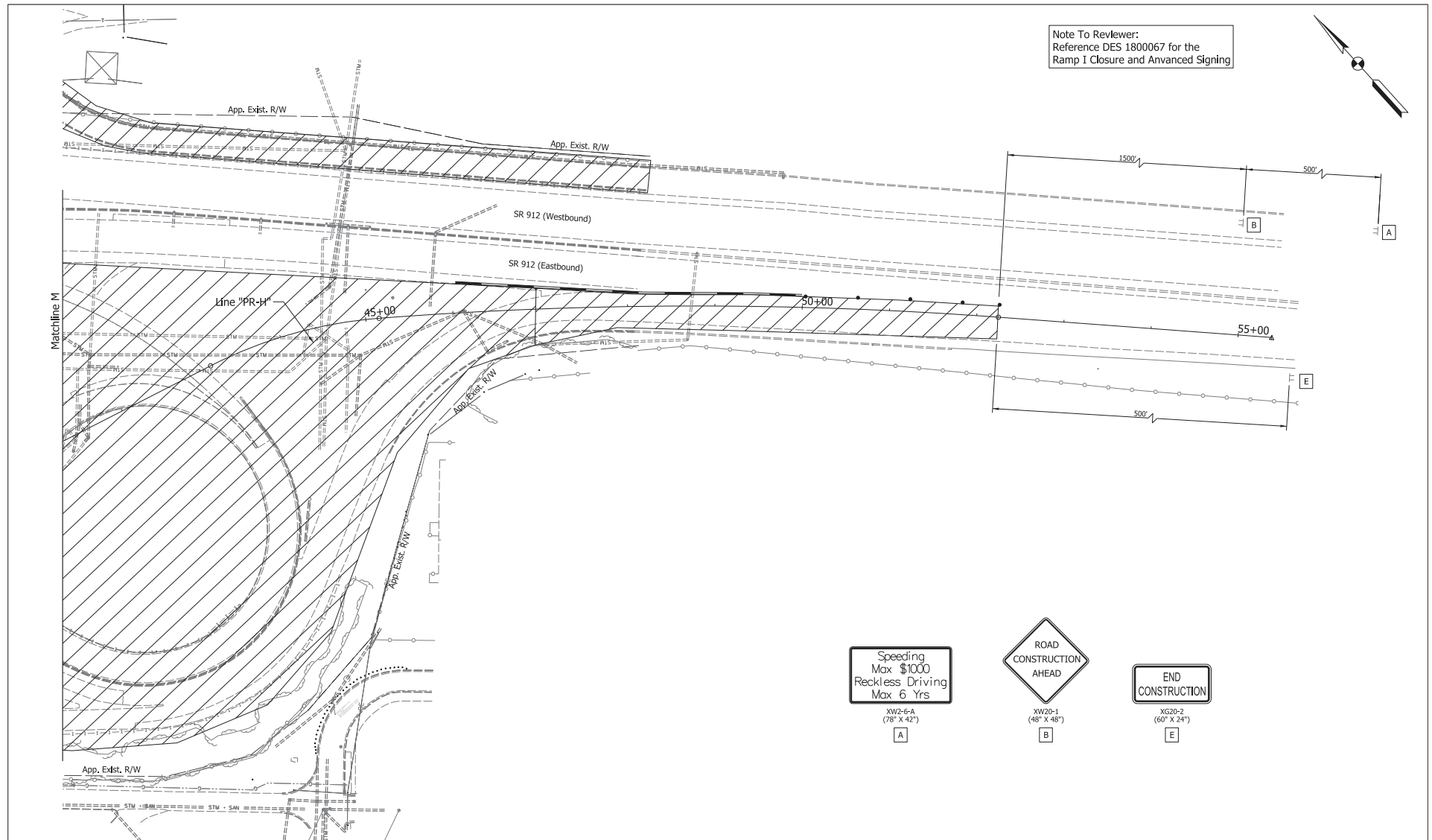
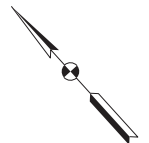
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2

HORIZONTAL SCALE 1" = 50'	BRIDGE FILE 912-45-02815
VERTICAL SCALE N/A	DISIGNATION 1703011
SURVEY BOOK	SHEETS
ELECTRONIC	12 of 82
CONTRACT R-41441	PROJECT 1800067

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Note To Reviewer:
Reference DES 1800067 for the
Ramp I Closure and Advanced Signing



- ① Temp. Pvm't. Marking, Solid, White, 4"
- ② Temp. Pvm't. Marking, Solid, Yellow, 4"
- ③ Temp. Pvm't. Marking, Broken, White, 5"
- ④ Temp. Pvm't. Marking, Dotted, White, 5" (3' Dash, 9' Gap)
- ⑤ Energy Absorbing Terminal, CZ TL-3
- Ⓐ Existing Pavement Marking
- ➔ Direction of Traffic
- Standard Drum
- Ⓜ Type IIIA Barricade w/Type "B" Construction Warning Light
- Ⓝ Construction Sign
- Ⓞ Construction Sign w/Type "A" Construction Warning Light
- ➡ Flashing Arrow Sign
- Ⓟ Temporary Traffic Barrier, Type 2
- Ⓠ Temporary Traffic Barrier, Type 3
- Ⓡ Temporary Traffic Barrier, Type 2
- Ⓢ Wetlands
- Ⓣ Previously Constructed
- Ⓤ Construction Area
- Ⓥ Temp. Pavement

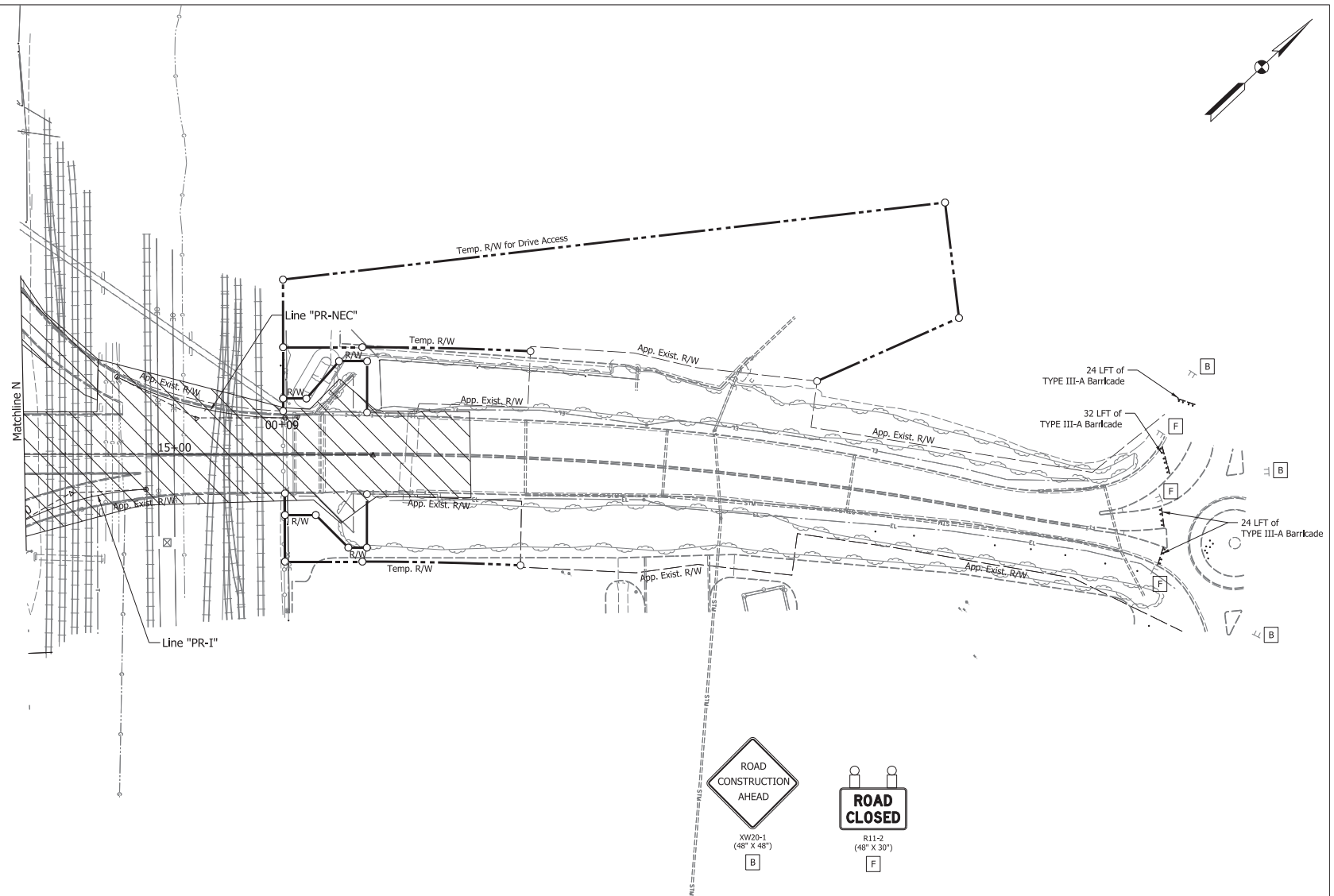
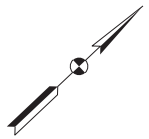
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CP	DRAWN: DH	
CHECKED: TJK	CHECKED: TJK	

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	912-45-02815
VERTICAL SCALE	DESIGNATION
N/A	1703011
SURVEY BOOK	SHEETS
ELECTRONIC	13 of 82
CONTRACT	PROJECT
R-41441	1800067

IP_PWR\dms39755\SR 912 SHL_MOT_DS.dgn



<ul style="list-style-type: none"> ① Temp. Pvm't. Marking, Solid, White, 4" ② Temp. Pvm't. Marking, Solid, Yellow, 4" ③ Temp. Pvm't. Marking, Broken, White, 5" ④ Temp. Pvm't. Marking, Dotted, White, 5" (3' Dash, 9' Gap) 	<ul style="list-style-type: none"> Ⓜ Energy Absorbing Terminal, CZ TL-3 Ⓐ Existing Pavement Marking ➔ Direction of Traffic ● Standard Drum ➔ Flashing Arrow Sign 	<ul style="list-style-type: none"> Ⓢ Type IIIA Barricade w/Type "B" Construction Warning Light Ⓡ Construction Sign Ⓢ Construction Sign w/Type "A" Construction Warning Light Ⓡ Flashing Arrow Sign 	<ul style="list-style-type: none"> Ⓢ Temporary Traffic Barrier, Type 2 Ⓡ Temporary Traffic Barrier, Type 3 Ⓢ Temporary Traffic Barrier, Type 2 	<ul style="list-style-type: none"> Ⓢ Wetlands Ⓢ Previously Constructed Ⓢ Construction Area Ⓢ Temp. Pavement 	<p>RECOMMENDED FOR APPROVAL _____</p> <p>DESIGN ENGINEER _____ DATE _____</p> <p>DESIGNED: CP DRAWING: DH</p> <p>CHECKED: TJK CHECKED: TJK</p>	<p style="text-align: center;">INDIANA DEPARTMENT OF TRANSPORTATION</p> <p style="text-align: center;">MAINTENANCE OF TRAFFIC PHASE 2</p>	<table border="1"> <tr> <td>HORIZONTAL SCALE</td> <td>BRIDGE FILE</td> </tr> <tr> <td>1" = 50'</td> <td>912-45-02815</td> </tr> <tr> <td>VERTICAL SCALE</td> <td>DESIGNATION</td> </tr> <tr> <td>N/A</td> <td>1703011</td> </tr> <tr> <td>SURVEY BOOK</td> <td>SHEETS</td> </tr> <tr> <td>ELECTRONIC</td> <td>14 of 82</td> </tr> <tr> <td>CONTRACT</td> <td>PROJECT</td> </tr> <tr> <td>R-41441</td> <td>1800067</td> </tr> </table>	HORIZONTAL SCALE	BRIDGE FILE	1" = 50'	912-45-02815	VERTICAL SCALE	DESIGNATION	N/A	1703011	SURVEY BOOK	SHEETS	ELECTRONIC	14 of 82	CONTRACT	PROJECT	R-41441	1800067
HORIZONTAL SCALE	BRIDGE FILE																						
1" = 50'	912-45-02815																						
VERTICAL SCALE	DESIGNATION																						
N/A	1703011																						
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ELECTRONIC	14 of 82																						
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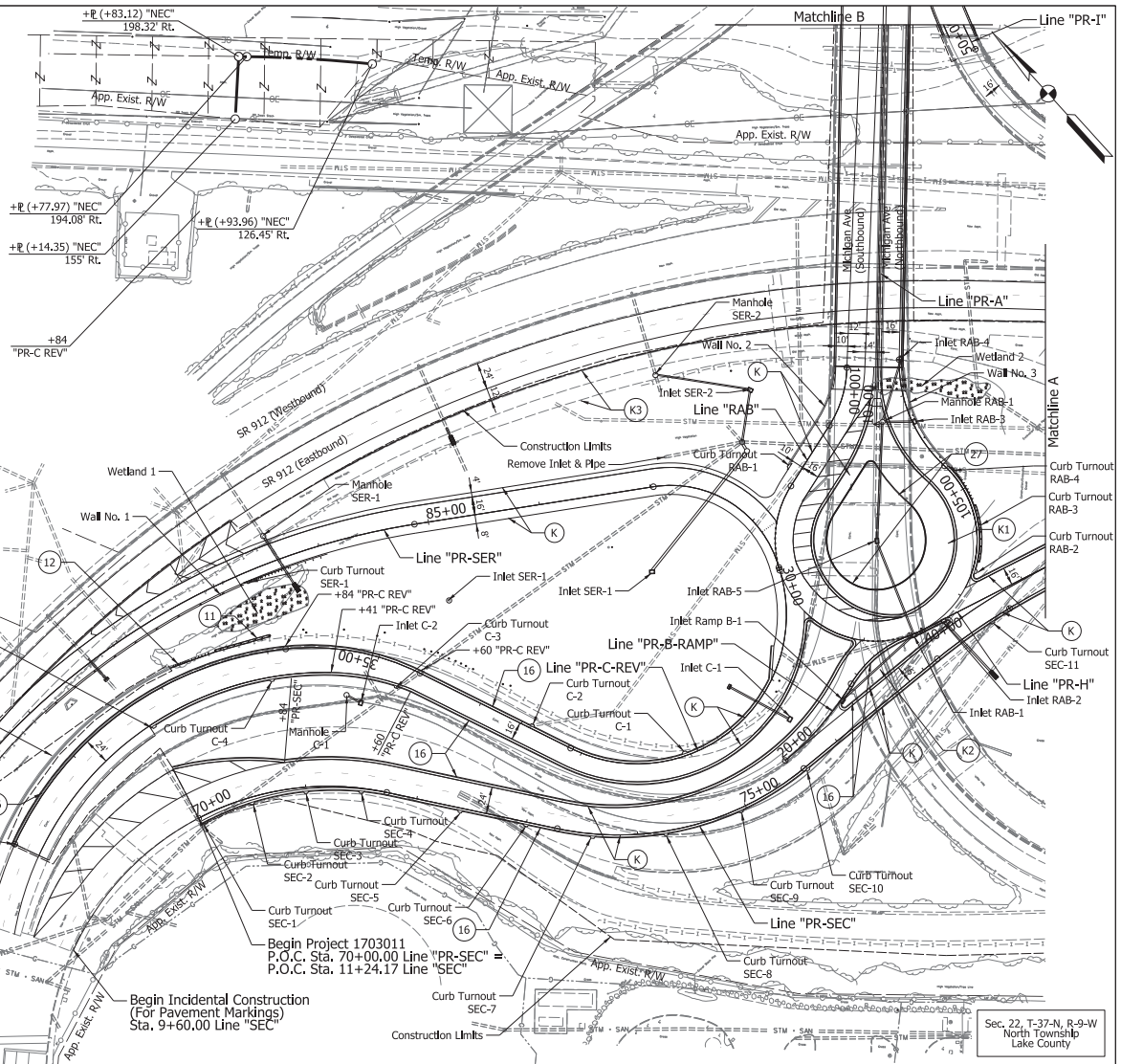
Note To Reviewer:
Pavement Design in Progress.
Pavement Details to be Finalized
at Next Submittal

Sec. 15, T-37-N, R-9-W
North Township
Lake County

Begin Construction
P.O.C. Sta. 80+00.00 Line "PR-SER"
P.O.C. Sta. 397+71.96 Line "DLPR"

End Construction/Begin Incidental Construction
(For Pavement Markings)
P.O.C. Sta. 38+94.89 Line "PR-C REV"
P.O.C. Sta. 11+05.01 Line "C-REV"

End Incidental Construction
(For Pavement Markings)
Sta. 11+85.00 Line "C-REV"



- Notes:
1. For Alignment Information, See Geometric Tie-up Sheets.
 2. All R/W Described from "NEC" Unless Otherwise Noted.

(K)	Pavement, TBD	(10)	Guardrail (To be Detailed at Next Submittal)	(17)	Combined Concrete Curb and Gutter, Type B
(K1)	Pavement, TBD	(11)	Guardrail OS End Treatment, 31"	(18)	Barrier Curb, Concrete
(K2)	Pavement, TBD	(12)	Guardrail, MGS Treatment	(27)	See Mixture, U
(K3)	Milling, Asphalt 6" (Leave Millings In Place)	(16)	Combined Concrete Curb and Gutter		Retaining Wall

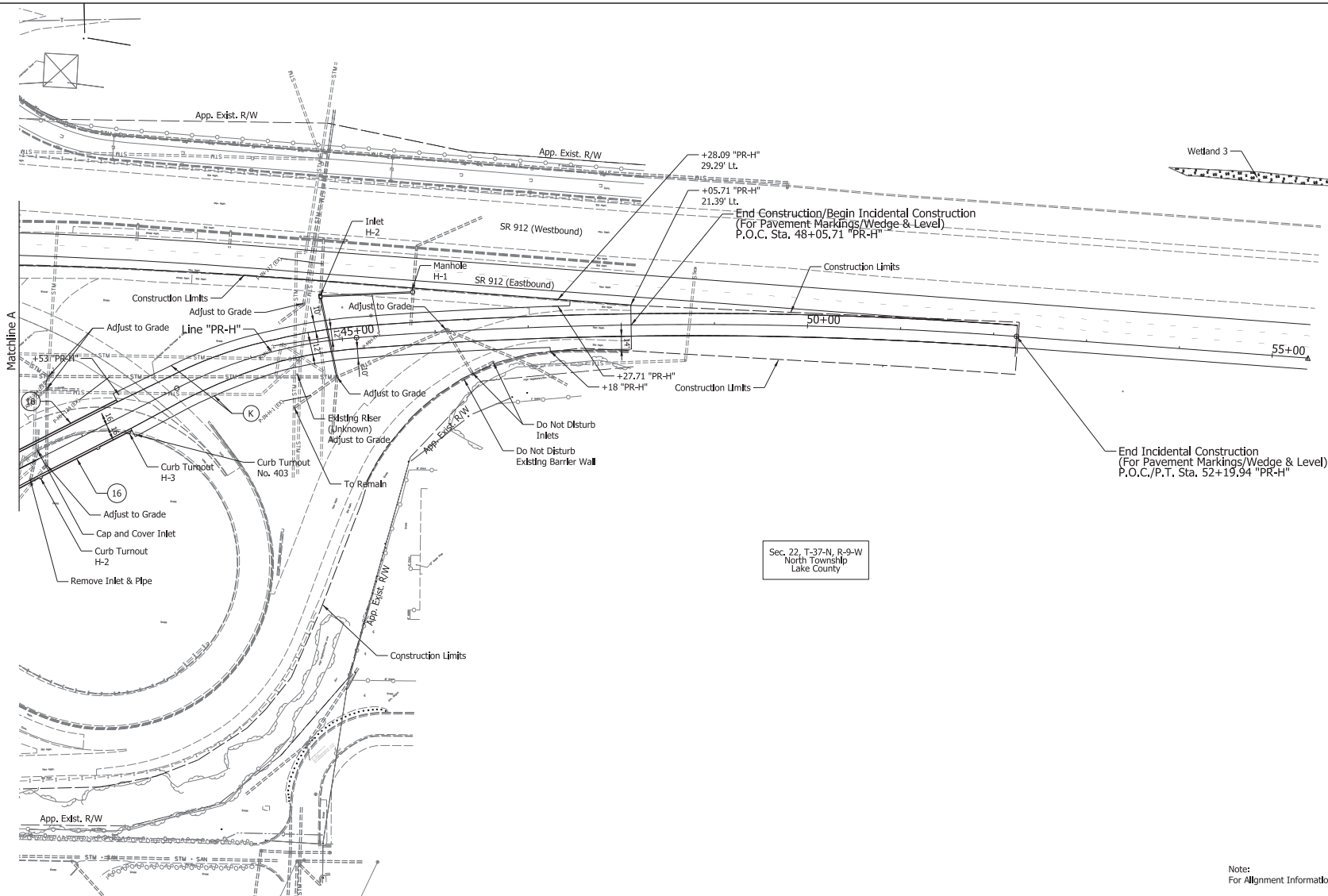
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CP	DRAWING: DH	
CHECKED: TJK	CHECKED: TJK	

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN SHEET

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	912-45-02815
VERTICAL SCALE	DESIGNATION
N/A	1703011
SURVEY BOOK	SHEETS
ELECTRONIC	15 of 82
CONTRACT	PROJECT
R-41441	1800067

IP_PWR.dms39755\SR 912_Sht_Plan_03.dgn



Sec. 22, T-37-N, R-9-W
North Township
Lake County

Note:
For Alignment Information, See Geometric Tie-up Sheets.

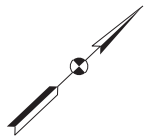
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(K1) Pavement, TBD	(11) Guardrail OS End Treatment, 31"	(18) Barrier Curb, Concrete
(K2) Pavement, TBD	(12) Guardrail, MGS Treatment	(27) See Mixture, U
(K3) Milling, Asphalt 6" (Leave Millings In Place)	(16) Combined Concrete Curb and Gutter	Retaining Wall

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CP	DRAWN: DH	
CHECKED: TJK	CHECKED: TJK	

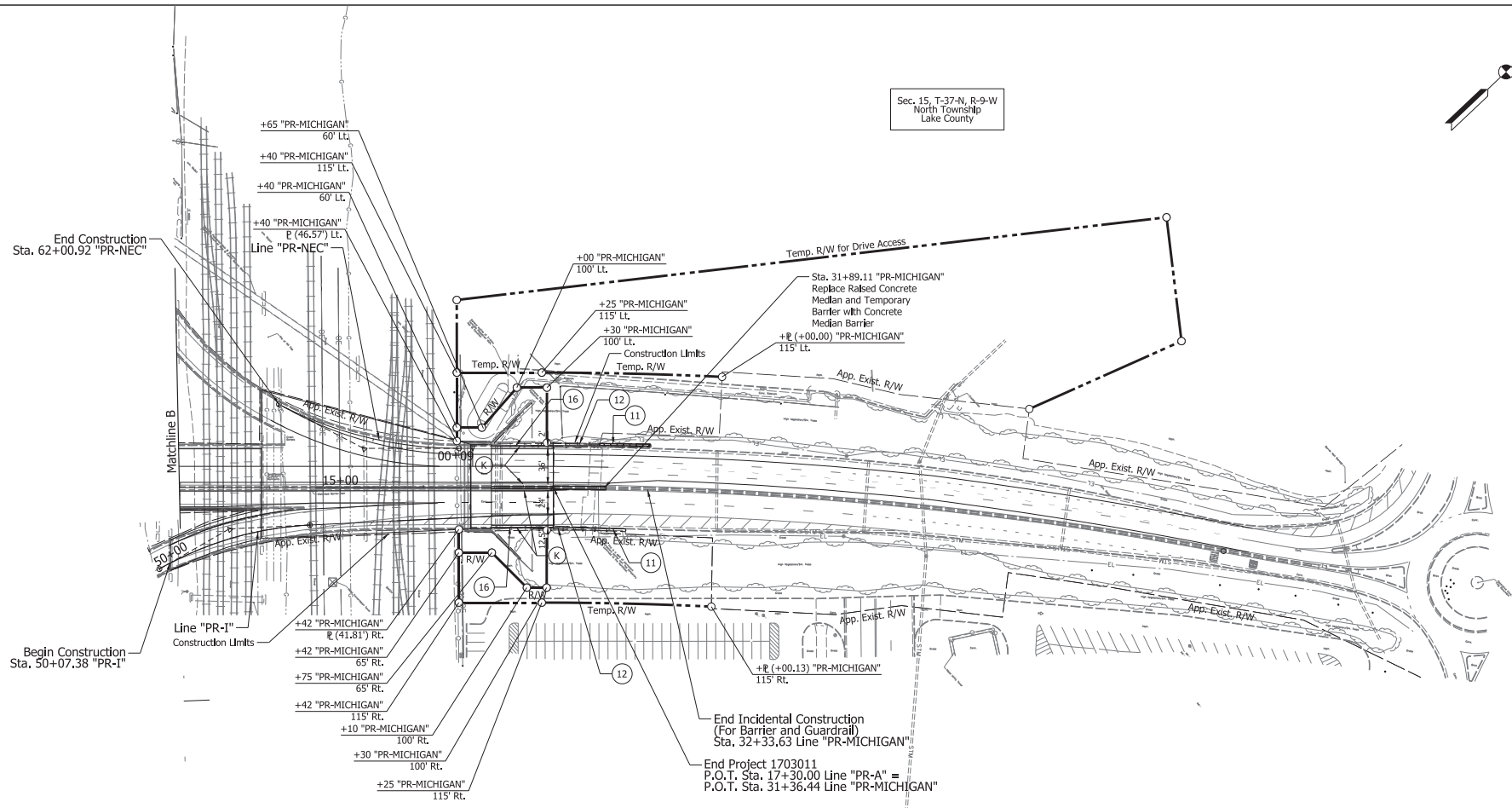
INDIANA DEPARTMENT OF TRANSPORTATION	
PLAN SHEET	

HORIZONTAL SCALE 1" = 50'	BRIDGE FILE 912-45-02815
VERTICAL SCALE N/A	DESIGNATION 1703011
SURVEY BOOK ELECTRONIC	SHEETS 16 of 82
CONTRACT R-41441	PROJECT 1800067

IP_PWP\dms39755\SR 912_Sht_Rln_02.dgn



Sec. 15, T-37-N, R-9-W
North Township
Lake County



- Notes:
1. For Alignment Information, See Geometric Tie-up Sheets.
 2. All R/W Described from "PR-MICHIGAN" Unless Otherwise Noted.

(K) Pavement, TBD	(10) Guardrail (To be Detailed at Next Submittal)	(17) Combined Concrete Curb and Gutter, Type B
(K1) Pavement, TBD	(11) Guardrail OS End Treatment, 31"	(18) Barrier Curb, Concrete
(K2) Pavement, TBD	(12) Guardrail, MGS Treatment	(27) See Mixture, U
(K3) Milling, Asphalt 6" (Leave Millings In Place)	(16) Combined Concrete Curb and Gutter	Retaining Wall

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CP	DRAWING: DH	
CHECKED: TJK	CHECKED: TJK	

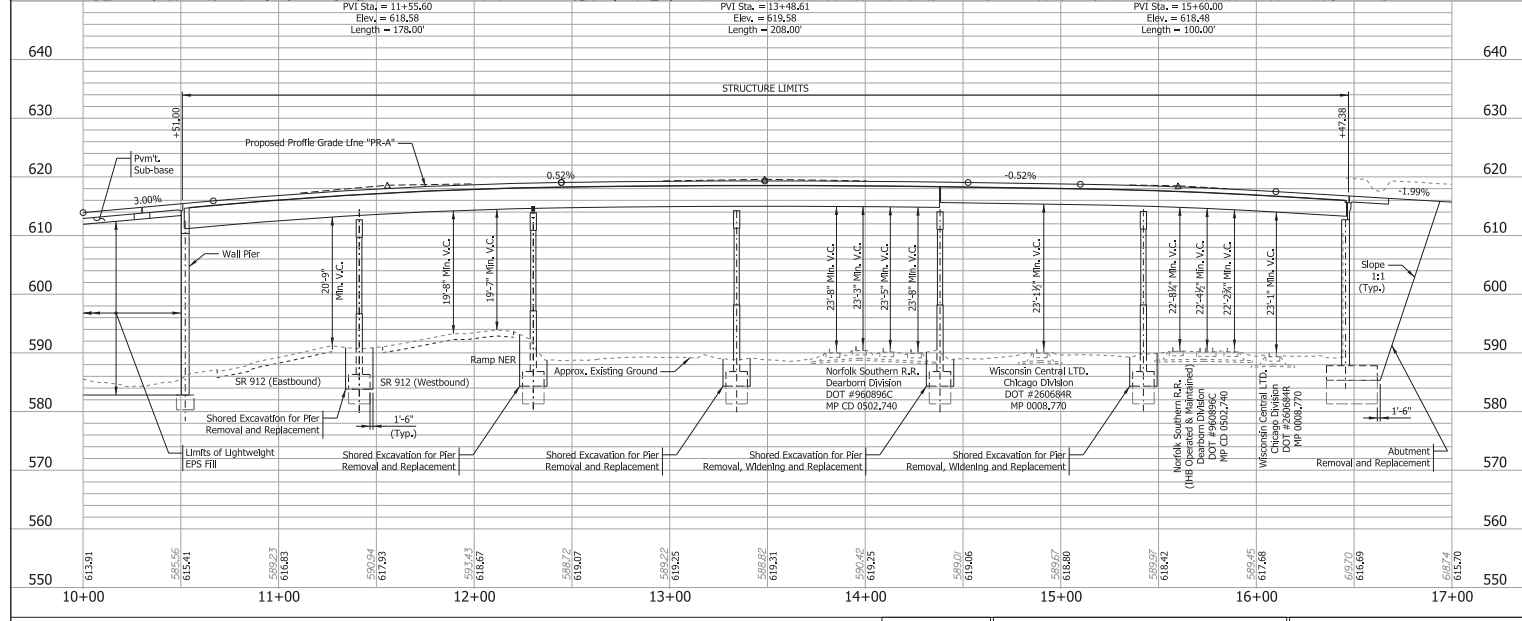
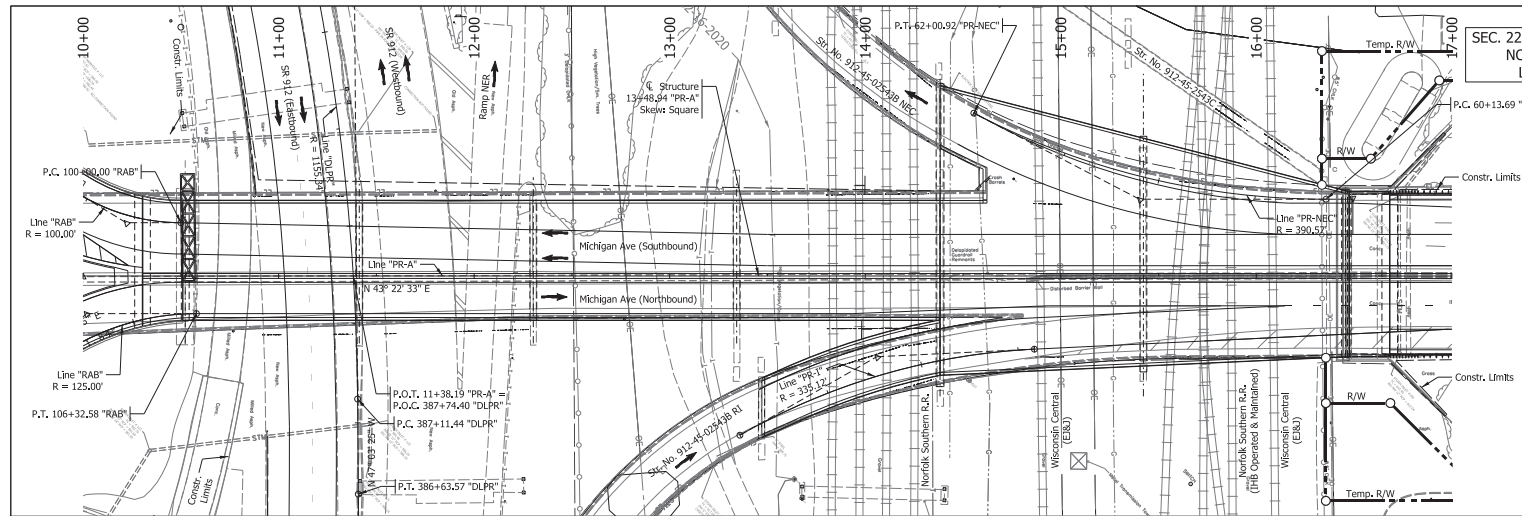
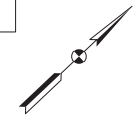
INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN SHEET

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	912-45-02815
VERTICAL SCALE	DESIGNATION
N/A	1703011
SURVEY BOOK	SHEETS
ELECTRONIC	17 of 82
CONTRACT	PROJECT
R-41441	1800067

IP_PWR.dms39755/SR 912_Sht_Plan_03.dgn

SEC. 22, T-37-N, R-9-W
NORTH TWP.
LAKE CO.



EXISTING STRUCTURE

The existing steel beam bridge was built in 1959 and modified in 1980 to remove existing and add new ramp bridges 912-45-02543A RI and 912-45-02543 A NEC. The existing structure to be removed and structures 912-45-02543 A RI and 912-45-02543 A NEC will be rehabilitated.

EARTHWORK TABULATION

- Fill + 20% = Cys
- Common Excavation = Cys
- Usable Waterway Excavation (70%) = Cys
- Surplus Foundation Excavation (70%) = Cys
- Borrow = Cys

- Total Waterway Excavation = Cys
- Excavation Unclassified = Cys
- Benching (Estimated) = Cys

No direct payment for Benchng. Benchng will not be paid for as Common Excavation.

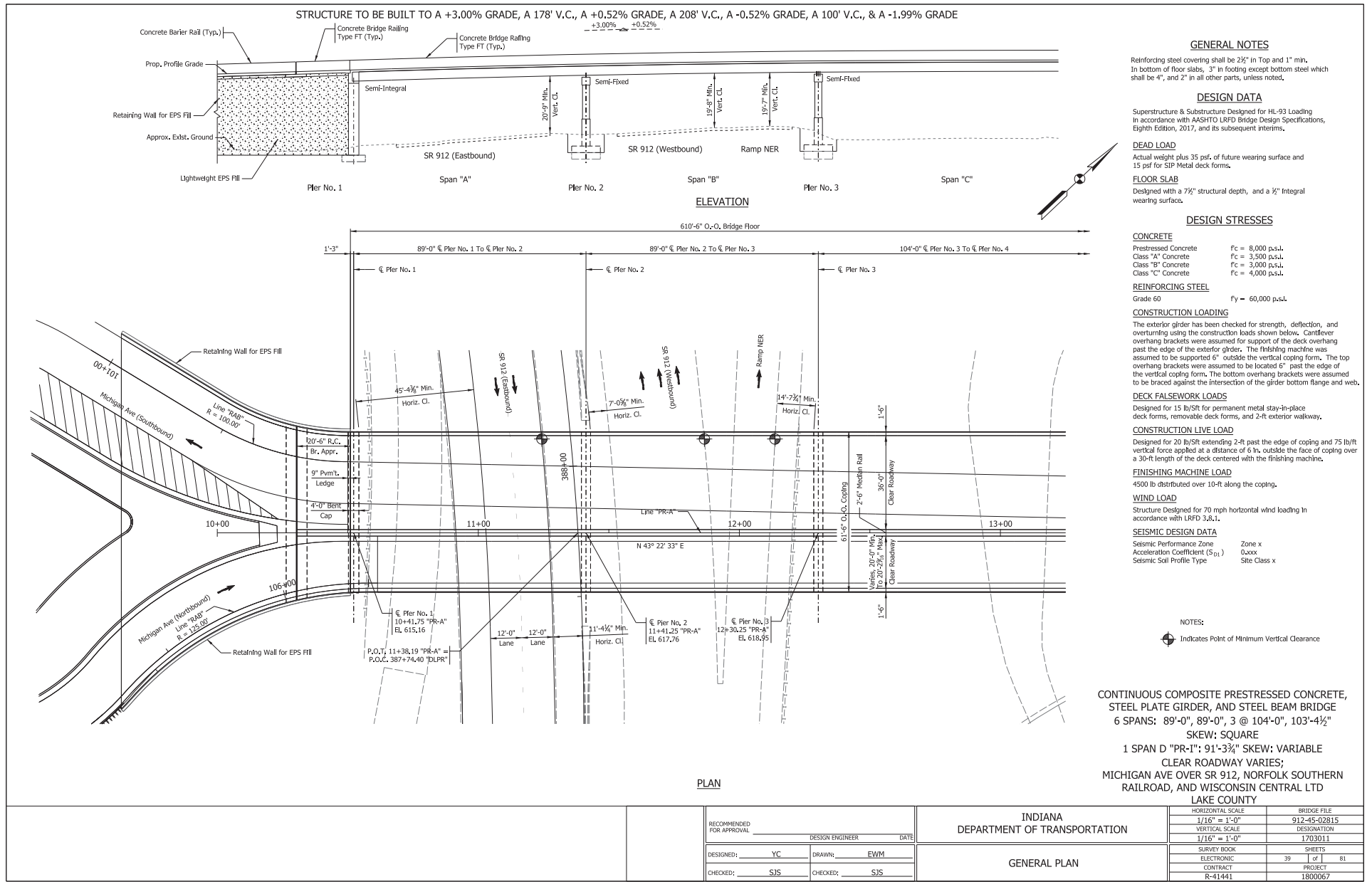
NOTES:

For R/W and Additional Information see Plan & Profile sheets.
For Utility Contacts see Index Sheet No.2.

**CONTINUOUS COMPOSITE PRESTRESSED CONCRETE,
STEEL PLATE GIRDER, AND STEEL BEAM BRIDGE**
6 SPANS: 89'-0", 89'-0", 3 @ 104'-0", 103'-4 1/2"
SKEW: SQUARE
1 SPAN D "PR-1": 91'-3 3/4" SKEW: VARIABLE
CLEAR ROADWAY VARIES;
MICHIGAN AVE OVER SR 912, NORFOLK SOUTHERN
RAILROAD, AND WISCONSIN CENTRAL LTD
LAKE COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER		DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
					1" = 30'	912-45-02815
DESIGNED: YC	DRAWN: EWM			LAYOUT	VERTICAL SCALE	DESIGNATION
CHECKED: SJS	CHECKED: SJS				1" = 10'	1703011
					SURVEY BOOK	SHEETS
					ELECTRONIC	38 of 81
					CONTRACT	PROJECT
					R-41441	1800067

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25-JUN-2021



GENERAL NOTES

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

DESIGN DATA

Superstructure & Substructure Designed for HL-93 Loading in accordance with AASHTO LRFD Bridge Design Specifications, Eighth Edition, 2017, and its subsequent interims.

DEAD LOAD
Actual weight plus 35 pcf. of future wearing surface and 15 pcf for SIP Metal deck forms.

FLOOR SLAB
Designed with a 7/8" structural depth, and a 1/2" Integral wearing surface.

DESIGN STRESSES

CONCRETE
Prestressed Concrete $f_c = 8,000$ p.s.i.
Class "A" Concrete $f_c = 3,500$ p.s.i.
Class "B" Concrete $f_c = 3,000$ p.s.i.
Class "C" Concrete $f_c = 4,000$ p.s.i.

REINFORCING STEEL
Grade 60 $f_y = 60,000$ p.s.i.

CONSTRUCTION LOADING
The exterior girder has been checked for strength, deflection, and overturning using the construction loads shown below. Cantilever overhang brackets were assumed for support of the deck overhang past the edge of the exterior girder. The finishing machine was assumed to be supported 6" outside the vertical coping form. The top overhang brackets were assumed to be located 6" past the edge of the vertical coping form. The bottom overhang brackets were assumed to be braced against the intersection of the girder bottom flange and web.

DECK FALSEWORK LOADS
Designed for 15 lb/SF for permanent metal stay-in-place deck forms, removable deck forms, and 2-ft exterior walkway.

CONSTRUCTION LIVE LOAD
Designed for 20 lb/SF extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 ft, outside the face of coping over a 30-ft length of the deck centered with the finishing machine.

FINISHING MACHINE LOAD
4500 lb distributed over 10-ft along the coping.

WIND LOAD
Structure Designed for 70 mph horizontal wind loading in accordance with LRFD 3.8.1.

SEISMIC DESIGN DATA
Seismic Performance Zone Zone x
Acceleration Coefficient (S_{D1}) 0.0xx
Seismic Soil Profile Type Site Class x

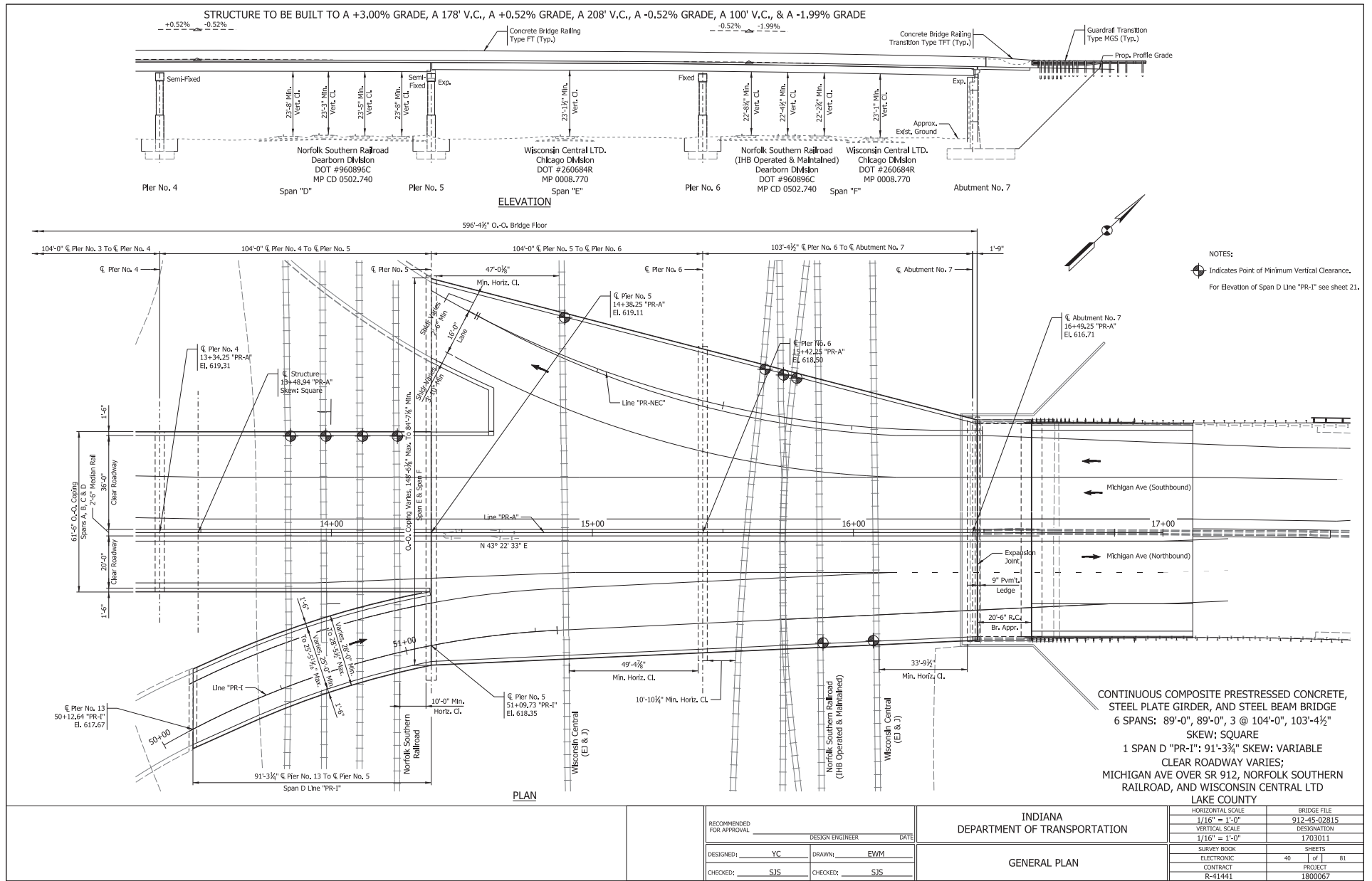
NOTES:
Indicates Point of Minimum Vertical Clearance

CONTINUOUS COMPOSITE PRESTRESSED CONCRETE, STEEL PLATE GIRDER, AND STEEL BEAM BRIDGE
6 SPANS: 89'-0", 89'-0", 3 @ 104'-0", 103'-4 1/2"
SKEW: SQUARE
1 SPAN D "PR-1": 91'-3 3/4" SKEW: VARIABLE
CLEAR ROADWAY VARIES;
MICHIGAN AVE OVER SR 912, NORFOLK SOUTHERN RAILROAD, AND WISCONSIN CENTRAL LTD LAKE COUNTY

PLAN

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER		DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
	DESIGNED: YC		DRAWN: EWM		1/16" = 1'-0"	912-45-02815
CHECKED: SJS	CHECKED: SJS			GENERAL PLAN	VERTICAL SCALE	DESIGNATION
					1/16" = 1'-0"	1703011
					SURVEY BOOK	SHEETS
					ELECTRONIC	39 of 81
					CONTRACT	PROJECT
					R-41441	1800067

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25-JUN-2021



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25-JUN-2021

PROJECT	DESIGNATION
180067	1700359
CONTRACT	BRIDGE FILE
R-41441	912-45-02543 B RI

INDIANA DEPARTMENT OF TRANSPORTATION

Note to Reviewer: INDOT and FHWA agreed to preliminary traffic counts for design (refer to Correspondence.pdf) with the intent of getting real time traffic counts in summer of 2021. This table will be populated for all corridors once those counts have been taken.

TRAFFIC DATA	
A.A.D.T. (2022)	6,648 V.P.D.
A.A.D.T. (2042)	6,890 V.P.D.
D.H.V. (2042)	3,527 V.P.H.
DIRECTIONAL DISTRIBUTION	100%
TRUCKS	51% A.A.D.T. 47% D.H.V.

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
912-45-02543 B RI	CONTINUOUS COMPOSITE PRESTRESSED CONCRETE I-BEAM BRIDGE	12 Spans: 8 @ 75'-0" 4 @ 55'-0" Skews: Variable	Elevation Change-Up Ramp	18+06.30 *PR-1*



BRIDGE PREVENTIVE MAINTENANCE PLANS

FOR SPANS OVER 20 FEET

ROUTE: SR 912 RAMP INLAND AT: RP 4+67

PROJECT NO. 1800067 P.E. 1800067
R/W CONST.

Excerpts

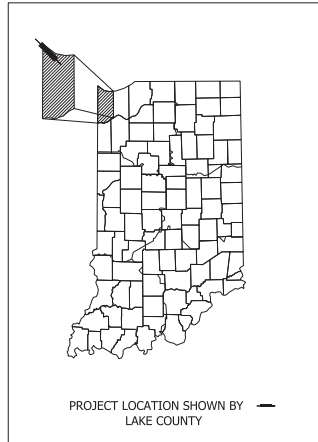
KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	TYPE
1700105	SR 912 on Ramp H over Ramp B	Bridge
1700370	SR 912 Ramp NEC Over RR Yard, Ramp NER & Road	Bridge
1703000	SR 912 Pedestrian Bridge over RR	Bridge
1703011	Michigan Avenue over SR 912, NSRR & Wisconsin Central LTD	Bridge
1703012	SR 912 on Ramp B over Ramp B	Bridge
*1800067	SR 912 Concrete Pavement Restoration	Roadway
1800533	SR 912 over IHB & NSRR	Bridge
2000039	SR 912 over CSX RR, Amoco Service Rd	Bridge

* Lead Des. Number

Des. 1800067 is no longer associated with this project. The new lead Des. is 1703011.

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

Bridge Rigid Deck Overlay for Bridge on SR 912 Ramp Inland at Elevation Change-Up Ramp Located 1.17 Miles West of US 12 Sections 22 , T-37-N, R-9-W, North Township, Lake County, Indiana



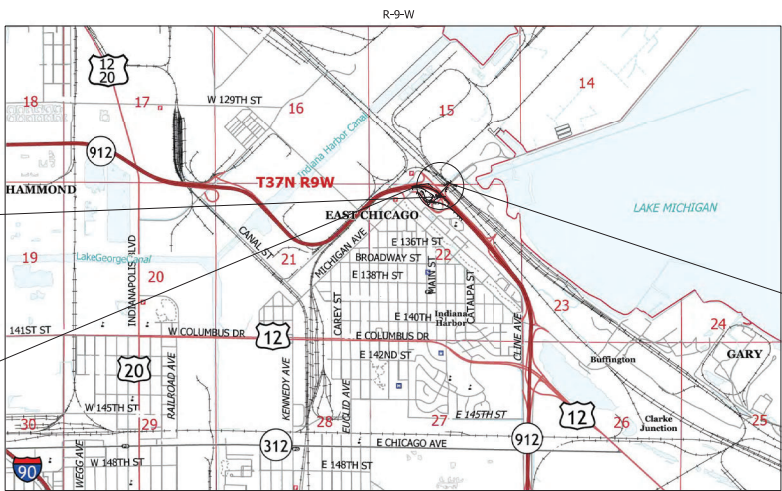
LATITUDE: 41° 39' 08" N LONGITUDE: 87° 26' 31" W

BRIDGE LENGTH: 0.155 MI.
ROADWAY LENGTH: 0.012 MI.
TOTAL LENGTH: 0.167 MI.
MAX. GRADE: 3.00 %

Structure 912-45-02543 B RI
Elevation Change-Up Ramp
18+06.30 "I"
Norfolk Southern Railway
Dearborn DMson
DOT #960896C
MP CD 0502,740

Begin Project
13+35.77 "I"

End Project
22+16.33 "I"



SCALE: 1" = 2000'

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

PARSONS

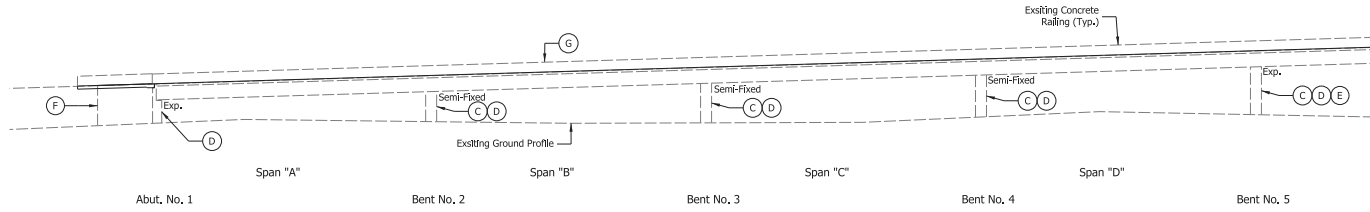
101 W. Ohio St., Suite 2121
Indianapolis, IN 46204
Bus (317) 616-1000
Fax (317) 616-1033

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06-MAY-2021

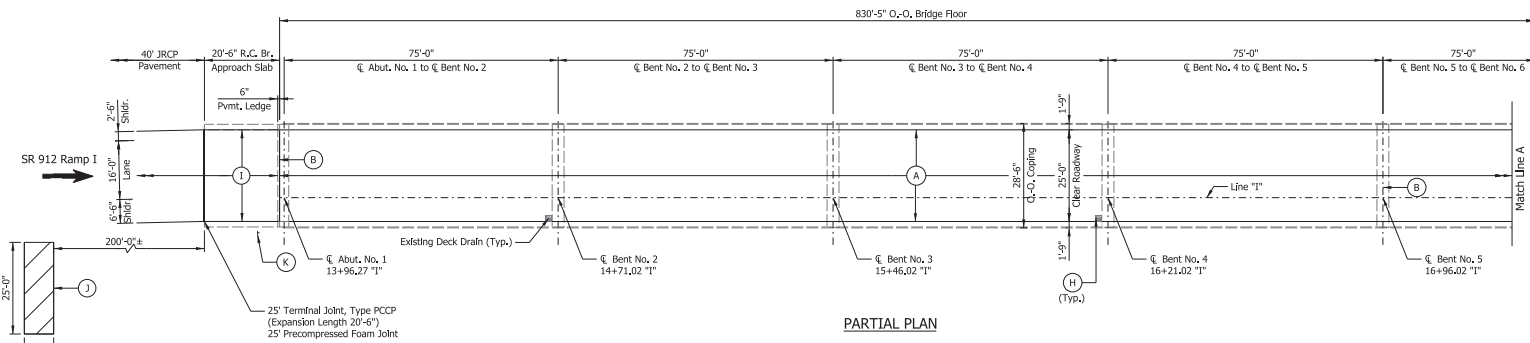
PLANS PREPARED BY:	PARSONS	317-616-1000	PHONE NUMBER
CERTIFIED BY:			DATE
APPROVED FOR LETTING:			DATE

BRIDGE FILE	
912-45-02543 B RI	
DESIGNATION	
1700359	
SURVEY BOOK	
ELECTRONIC 1 of 1 6	
CONTRACT	
R-41441	
PROJECT	
1800067	

STRUCTURE IS BUILT ON A +3.0% GRADE, 40' VERTICAL CURVE, +2.53% GRADE, 40' VERTICAL CURVE, 3% GRADE, 140' VERTICAL CURVE, 0.4% GRADE, 40' VERTICAL CURVE, 0.98 GRADE AND A 28° HORIZONTAL CURVE



PARTIAL ELEVATION



PARTIAL PLAN

GENERAL NOTES

Reinforcing steel covering shall be 2 1/2" in Top and 1" min. in bottom of floor slabs.
 All reinforcing steel shall be epoxy coated unless otherwise noted.
 Existing plans for Bridge File 912-45-02543 RI are on file with the Indiana Department of Transportation and are available upon request.

DESIGN DATA

Designed for HS20-44 Loading, in accordance with AASHTO 1974 Specifications and Susequent Interim Specification.

DESIGN STRESSES

CONCRETE
 Class "A" Concrete $f_c = 3,500$ p.s.i.
 Class "C" Concrete $f_c = 4,000$ p.s.i.

REINFORCING STEEL
 Grade 60 $f_y = 60,000$ p.s.i.

MATERIAL NOTES
 Bridge Rigid Deck Overlay
 Latex Modified Portland Cement (LMC) or Silica Fume Modified Structural Concrete (See special provisions for detail, see plans for thickness)

LEGEND

- (A) Remove Existing overlay, Hydromedolition and 1/2" surface milling. Place 2" minimum rigid deck overlay maintaining existing road surface elevation.
- (B) Replace existing type SS expansion Joints with pre-compressed foam joints. Patch concrete beam ends at Abutment No. 1, Bent No. 5, Bent No. 9, and Bent No. 13. Fiber Wrap exterior beam at Abutment No. 1.
- (C) Fiber Wrap substructure components and beam ends facing SR 912.
- (D) Patch concrete substructure.
- (E) Patch, place anodes, and Fiber Wrap Bent No. 5's concrete bent cap and columns.
- (F) Grout and Seal approach retaining CIP concrete retaining wall.
- (G) Patch concrete barrier delamination and spalling, Surface Seal all existing concrete barrier.
- (H) Replace deck drainage pipe system, Patch Superstructure at drains.
- (I) Replace reinforced concrete approach slab (RCBA) and terminal joint. See Standard Drawings E 503-BAT3-01 & -02 for additional terminal joint details. See Standard Drawings E 609-RCBA series for additional approach slab details.
- (J) Place new revetment riprap at the end of the impact attenuator on the SE quadrant.
- (K) Place RP marker.

NOTES:

Remove and replace pavement markings on bridge deck, approach slabs, and approach pavement to be replaced.
 For additional approach roadway details see Std. Dwg.'s E503-BAT3-01 & -02.
 For specific locations and dimensions of fiber wrap repairs, see sheets.

CONTINUOUS COMPOSITE PRESTRESSED CONCRETE I-BEAM BRIDGE
 Spans: 8 @ 75'-0", 4 @ 55'-0"
 SKEW: VARIABLE
 25'-0" CLEAR ROADWAY-CURVED END
 SR 912 RAMP (INLAND), Elevation Change-up Ramp LAKE COUNTY

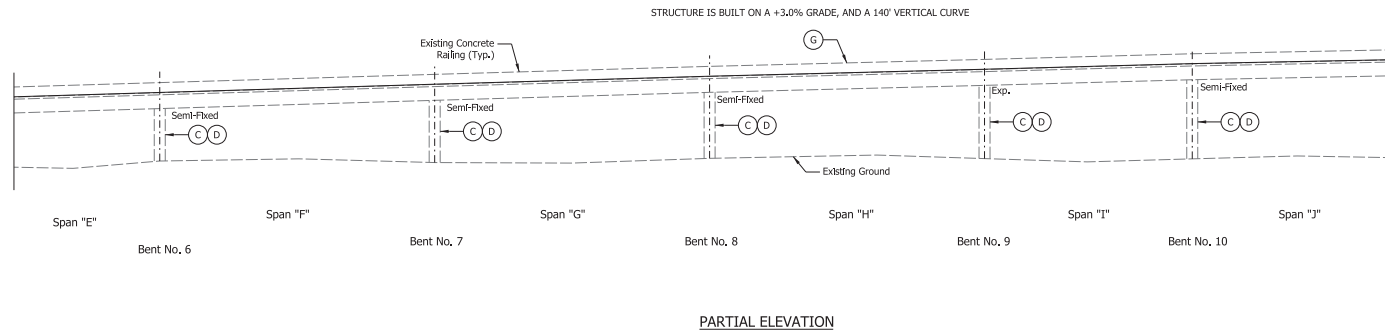
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: YC	DRAWN: TYW	
CHECKED: SJS	CHECKED: SJS	

INDIANA DEPARTMENT OF TRANSPORTATION

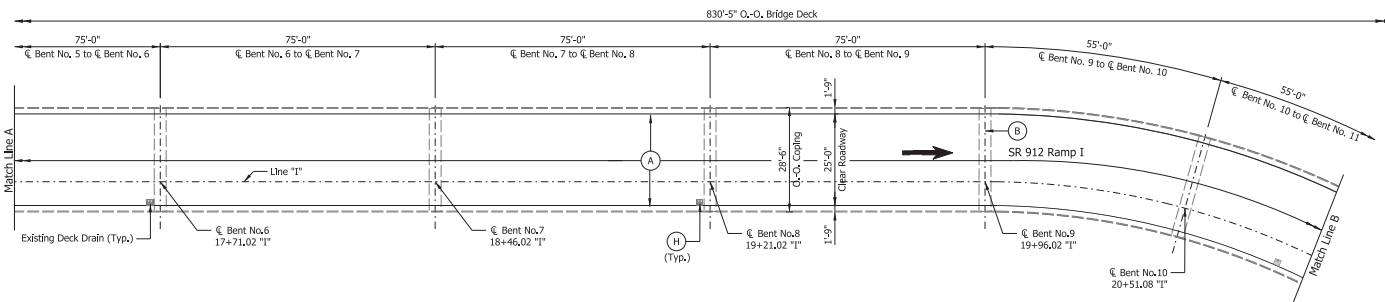
GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1/16" = 1'-0"	912-45-02543 B RI
VERTICAL SCALE	DESIGNATION
1/16" = 1'-0"	1700359
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 6
CONTRACT	PROJECT
R-41441	1800067

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PARTIAL ELEVATION



PARTIAL PLAN



LEGEND

- (A) Remove existing overlay, Hydrodemolition and 1/2" surface milling. Place 2" minimum rigid deck overlay maintaining existing road surface elevation.
- (B) Replace existing type SS expansion joints with pre-compressed foam joints. Patch concrete beam ends at Abutment No. 1, Bent No. 5, Bent No. 9, and Bent No. 13. Fiber Wrap exterior beam at Abutment No. 1.
- (C) Fiber Wrap substructure components and beam ends facing SR 912.
- (D) Patch Concrete substructure.
- (E) Patch, place anodes, and Fiber Wrap Bent No. 5's concrete bent cap and columns.
- (F) Grout and Seal approach retaining CIP concrete retaining wall.
- (G) Patch concrete barrier delamination and spalling, Surface Seal all existing concrete barrier.
- (H) Replace deck drainage pipe system. Patch Superstructure at drains.
- (I) Replace reinforced concrete approach slab (RCBA) and terminal joint. See Standard Drawings E 503-BAT1-01 & -02 for additional terminal joint details. See Standard Drawings E 609-RCBA series for additional approach slab details.
- (J) Place new reversion strip at the end of the impact attenuator on the SE quadrant.
- (K) Place RP marker.

NOTES:
Remove and replace pavement markings on bridge deck, approach slabs, and approach pavement to be replaced.

CONTINUOUS COMPOSITE PRESTRESSED
CONCRETE I-BEAM BRIDGE
Spans: 8 @ 75'-0", 4 @ 55'-0"
SKEW: VARIABLE
25'-0" CLEAR ROADWAY-CURVED ENDS
SR 912 RAMP (INLAND), Elevation Change-up Ramp
LAKE COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: YC	DRAWN: TYW	
CHECKED: SJS	CHECKED: SJS	

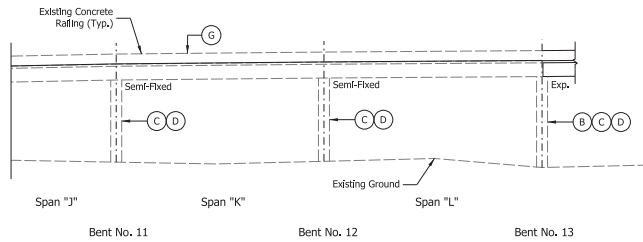
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

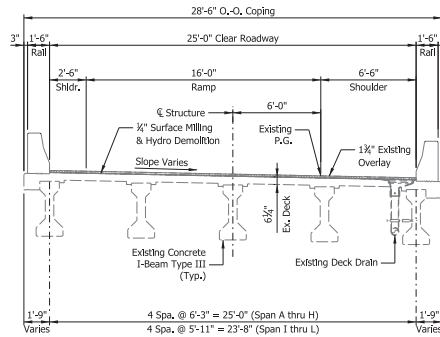
HORIZONTAL SCALE	BRIDGE FILE
1/16" = 1'-0"	912-45-02543 B RI
VERTICAL SCALE	DESIGNATION
1/16" = 1'-0"	1700359
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 6
CONTRACT	PROJECT
R-41441	1800067

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07-MAY-2021

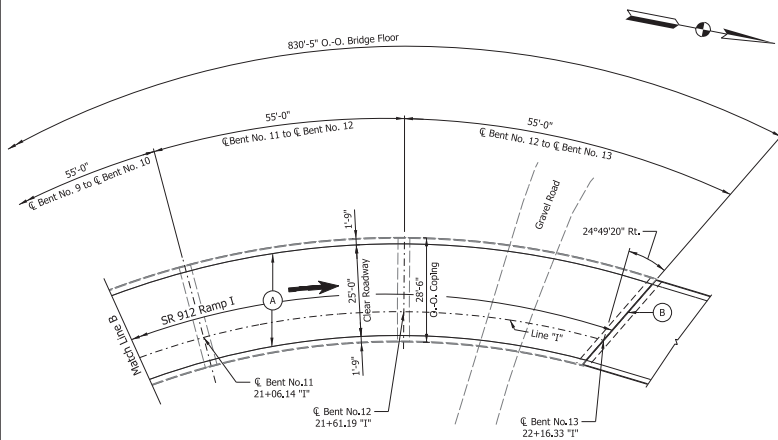
STRUCTURE IS BUILT ON A +3.0% GRADE, AND A 140' VERTICAL CURVE



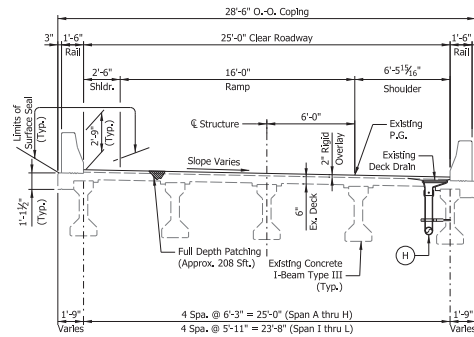
PARTIAL ELEVATION
Scale: 1/16" = 1'-0"



EXISTING TYPICAL SECTION
Scale: 1/4" = 1'-0"



PARTIAL PLAN
Scale: 1/16" = 1'-0"



PROPOSED TYPICAL SECTION
Scale: 1/4" = 1'-0"

LEGEND

- (A) Remove Existing overlay, Hydrodemolition and 1/2" surface milling. Place 2" minimum rigid deck overlay maintaining existing road surface elevation.
- (B) Replace existing type SS expansion joints with pre-compressed foam joints. Patch concrete beam ends at Abutment No. 1, Bent No. 5, Bent No. 9, and Bent No. 13. Fiber Wrap exterior beam at Abutment No. 1.
- (C) Fiber Wrap substructure components and beam ends facing SR 912.
- (D) Patch Concrete substructure.
- (E) Patch, place anodes, and Fiber Wrap Bent No. 5's concrete bent cap and columns.
- (F) Grout and Seal approach retaining CIP concrete retaining wall.
- (G) Patch concrete barrier delamination and spalling, Surface Seal all existing concrete barriers.
- (H) Replace deck drainage pipe system. Patch Superstructure at drains.
- (I) Replace reinforced concrete approach slab (RCBA) and terminal joints. See Standard Drawings E 503-BATJ-01 & -02 for additional terminal joint details. See Standard Drawings E 609-RCBA series for additional approach slab details.
- (J) Place new reversion riprap at the end of the impact attenuator on the SE quadrant.
- (K) Place RP marker.

NOTES:

Remove and replace pavement markings on bridge deck, approach slabs, and approach pavement to be replaced.

**CONTINUOUS COMPOSITE PRESTRESSED
CONCRETE I-BEAM BRIDGE**
Spans: 8 @ 75'-0", 4 @ 55'-0"
SKEW: VARIABLE
25'-0" CLEAR ROADWAY-CURVED END
SR 912 RAMP (INLAND), Elevation Change-up Ramp
LAKE COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: YC	DRAWN: TYW	
CHECKED: SJS	CHECKED: SJS	

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	912-45-02543 B RI
VERTICAL SCALE	DESIGNATION
AS NOTED	1700359
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 6
CONTRACT	PROJECT
R-41441	1800067

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07-MAY-2021

PROJECT	DESIGNATION
180067	1700370
CONTRACT	BRIDGE FILE
R-41441	912-45-02543 B NEC

INDIANA DEPARTMENT OF TRANSPORTATION

Note to Reviewer: INDOT and FHWA agreed to preliminary traffic counts for design (refer to Correspondence.pdf) with the intent of getting real time traffic counts in summer of 2021. This table will be populated for all corridors once those counts have been taken.

TRAFFIC DATA	
A.A.D.T. (2022)	5,865 V.P.D.
A.A.D.T. (2042)	5,826 V.P.D.
D.H.V. (2042)	530 V.P.H.
DIRECTIONAL DISTRIBUTION	100%
TRUCKS	9% A.A.D.T. 67% D.H.V.
DESIGN DATA	
DESIGN SPEED	25 M.P.H.
PROJECT DESIGN CRITERIA	Expressway/Freeway (Ramp Design)
FUNCTIONAL CLASSIFICATION	Principal Arterial
RURAL/URBAN	Urban (Intermediate)
TERRAIN	Level
ACCESS CONTROL	Partial

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
912-45-02543 B NEC	CONTINUOUS COMPOSITE STEEL GIRDER BRIDGE	4 Spans: 111'-8 3/8" 97'-5", 97'-5", 96'-3" Skew: Variable	RR Yard, Ramp NER, RD	14+26.15 "NEC"



BRIDGE PREVENTIVE MAINTENANCE PLANS

FOR SPANS OVER 20 FEET

ROUTE: SR 912 RAMP NEC AT: RP 4+44

PROJECT NO. 1800067 P.E. R/W
1800067 CONST.

Excerpts

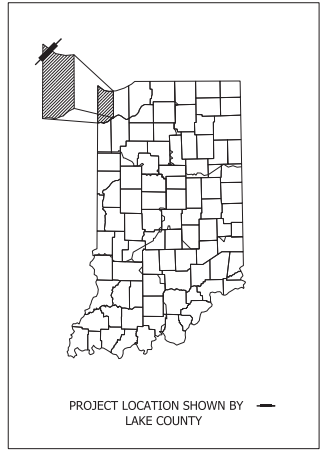
KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	TYPE
1700105	SR 912 on Ramp H over Ramp B	Bridge
1700359	SR 912 Ramp I	Bridge
1703000	SR 912 Pedestrian Bridge over RR	Bridge
1703011	Michigan Avenue over SR 912, NSRR & Wisconsin Central LTD	Bridge
1703012	SR 912 on Ramp B over Ramp B	Bridge
*1800067	SR 912 Concrete Pavement Restoration	Roadway
1800533	SR 912 over IHB & NSRR	Bridge
2000039	SR 912 over CSX RR, Amoco Service Rd	Bridge

* - Lead Des. Number

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

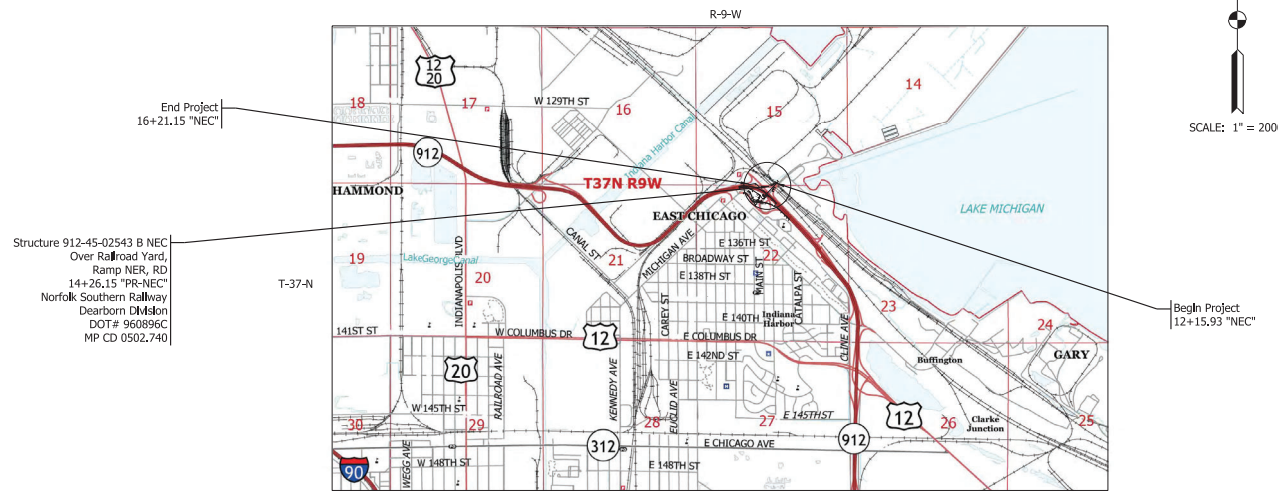
Des. 1800067 is no longer associated with this project. The new lead Des. is 1703011.

Bridge Rigid Deck Overlay for Bridge on SR 912 Ramp NEC over RR Yard, Ramp NER, RD Located 1.4 Miles West of US 12 Sections 15 & 22, T-37-N, R-9-W, North Township, Lake County, Indiana



LATITUDE: 41° 39' 13" N LONGITUDE: 87° 26' 37" W

BRIDGE LENGTH: 0.078 MI.
ROADWAY LENGTH: 0.008 MI.
TOTAL LENGTH: 0.086 MI.
MAX. GRADE: -2.75 %



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

PARSONS

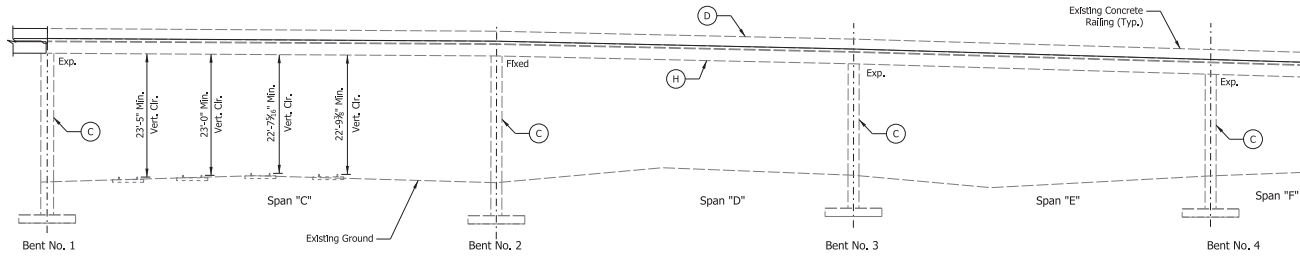
101 W. Ohio St., Suite 2121
Indianapolis, IN 46204
Bus (317) 616-1000
Fax (317) 616-1033

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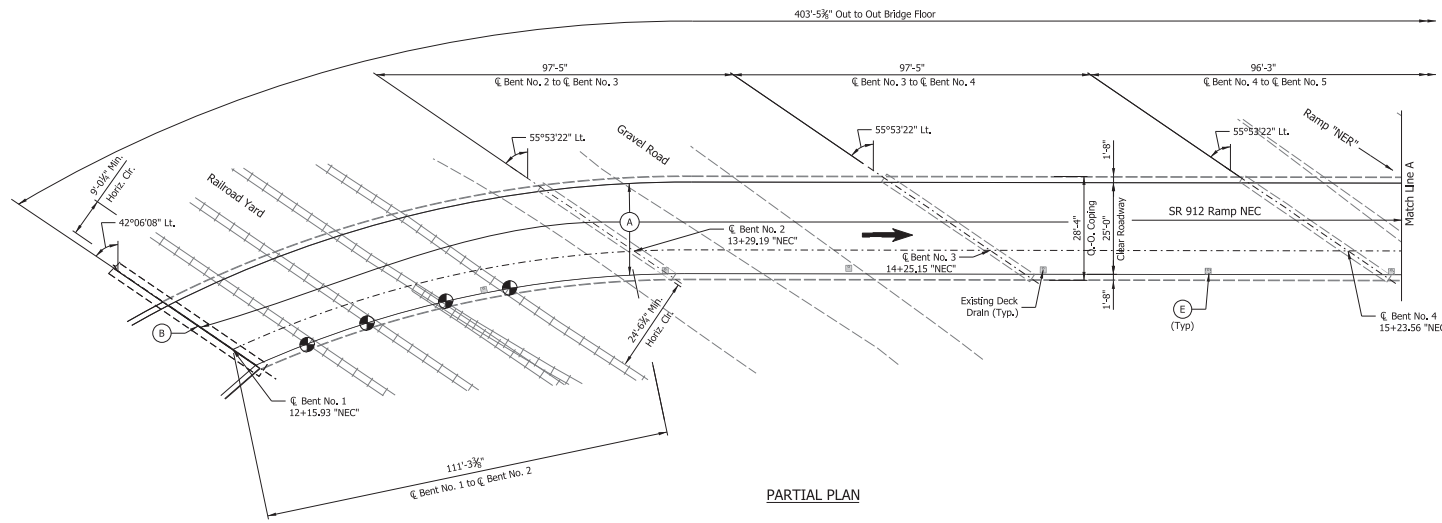
PLANS PREPARED BY:	PARSONS	317-616-1000	PHONE NUMBER
CERTIFIED BY:			DATE
APPROVED FOR LETTING:			DATE

BRIDGE FILE	
912-45-02543 B NEC	
DESIGNATION	
1700370	
SURVEY BOOK	SHEETS
ELECTRONIC	1 of 6
CONTRACT	PROJECT
R-41441	1800067

STRUCTURE BUILT TO A 150' V.C., A +0.26% GRADE, A 200' V.C., AND A -2.75% GRADE.



PARTIAL ELEVATION



PARTIAL PLAN

GENERAL NOTES

Reinforcing steel covering shall be 2 1/2" in Top and 1" min. in bottom of floor slabs.
 All reinforcing steel shall be epoxy coated unless otherwise noted.
 Existing plans for Bridge File 912-45-02543 are on file with the Indiana Department of Transportation and are available upon request.

DESIGN DATA

Designed for HS20-44 Loading, in accordance with AASHTO 1973 Specifications and Subsequent Interim Specification.

DESIGN STRESSES

CONCRETE
 Class "A" Concrete $f_c = 3,500$ p.s.i.
 Class "C" Concrete $f_c = 4,000$ p.s.i.

REINFORCING STEEL
 Grade 60 $f_y = 60,000$ p.s.i.

MATERIAL NOTES
 Bridge Rt/dg Deck Overlay:
 Latex Modified Portland Cement (LMC) or Silica Fume Modified Structural Concrete (See special provisions for detail, see plans for thickness)

LEGEND

- (A) Remove existing rigid deck overlay, Mill 1/4" of existing deck and perform hydrodemolition to remove all unsound concrete. Apply Full depth patching of bridge deck as required (approximately 50 sq. ft.). Place minimum new 2" rigid deck overlay to match existing profile grade.
- (B) Replace existing SS joints with pre-compressed foam joints at Bents No. 1 and No. 5.
- (C) Patch Concrete Substructure
- (D) Patch concrete barrier delamination and spalling. Surface Seal all existing concrete barrier.
- (E) Replace deck drainage system in kind with PVC or similar material.
- (F) Remove and Replace Reinforced Concrete Bridge Approach (RCBA) and terminal joints. See E503-BAT-01 & 02 for terminal joint and see E509-RCBA for approach slab.
- (G) Replace curb turnout on the SW quadrant.
- (H) Clean and coat the existing steel plate girders. See sheet 6.
- (I) MGS guardrail transition, 75' MGS guardrail MGS assembly cable terminal anchor system
- (J) MGS guardrail transition MGS W-Beam guardrail height transition

NOTES:

Remove and replace pavement markings on bridge deck, approach slabs, and approach pavement to be replaced.
 ● Indicates Point of Min. Vertical Clearance.

**CONTINUOUS COMPOSITE
 STEEL PLATE GIRDER BRIDGE**
 4 Spans: 111'-8 3/8", 97'-5", 97'-5", 96'-3"
 SKEW: VARIABLE
 CLEAR ROADWAY 25'-0"
 SR 912 OVER RAILROAD YARD, RAMP NEC
 AND ROAD
 LAKE COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: YC	DRAWN: TYW	
CHECKED: SJS	CHECKED: SJS	

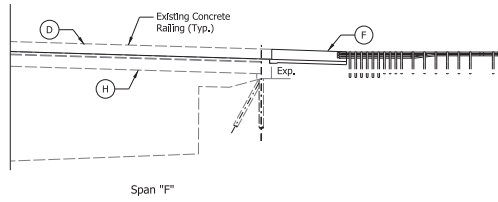
INDIANA
 DEPARTMENT OF TRANSPORTATION

 GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1/16" = 1'-0"	912-45-02543 B NEC
VERTICAL SCALE	DESIGNATION
1/16" = 1'-0"	1700370
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 6
CONTRACT	PROJECT
R-41441	1800067

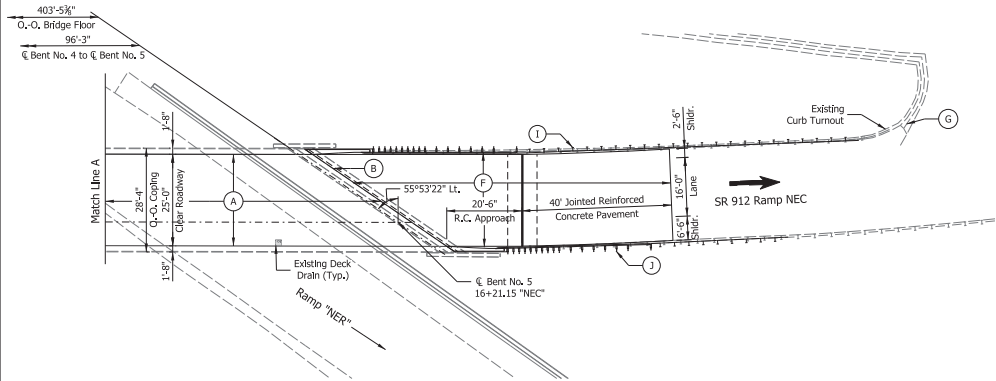
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 06-MAY-2021

STRUCTURE BUILT TO A 150' V.C., A +0.26% GRADE, A 200' V.C. AND A -2.75% GRADE.



Bent No. 5

PARTIAL ELEVATION



PARTIAL PLAN



LEGEND

- (A) Remove existing rigid deck overlay, Mill 1/4" of existing deck and perform hydrodemolition to remove all unsound concrete, Preform Full depth patching of bridge deck as required (approximately 50 sq. ft.). Place minimum new 2" rigid deck overlay to match existing profile grade.
- (B) Replace existing SS joints with pre-compressed foam joints at Bents No. 1 and No. 5.
- (C) Patch Concrete Substructure
- (D) Patch concrete barrier delamination and spalling. Surface Seal all existing concrete barrier.
- (E) Replace deck drainage system in kind with PVC or similar material.
- (F) Remove and Replace Reinforced Concrete Bridge Approach (RCBA) and terminal joint. See E503-BATJ-01 & 02 for terminal joint and see E609-RCBA for approach slab.
- (G) Replace curb turnout on the SW quadrant.
- (H) Clean and coat the existing steel plate girders. See sheet 6.
- (I) MGS guardrail transition, 75' MGS guardrail MGS assembly cable terminal anchor system
- (J) MGS guardrail transition MGS W-Beam guardrail height transition

NOTE:
For additional approach roadway details see Std. Dwg.'s E503-BATJ-01 & -02.

CONTINUOUS COMPOSITE
STEEL PLATE GIRDER BRIDGE
4 Spans: 111'-8 3/8", 97'-5", 97'-5", 96'-3"
SKEW: VARIABLE
CLEAR ROADWAY 25'-0"
SR 912 OVER RAILROAD YARD, RAMP NER
AND ROAD
LAKE COUNTY

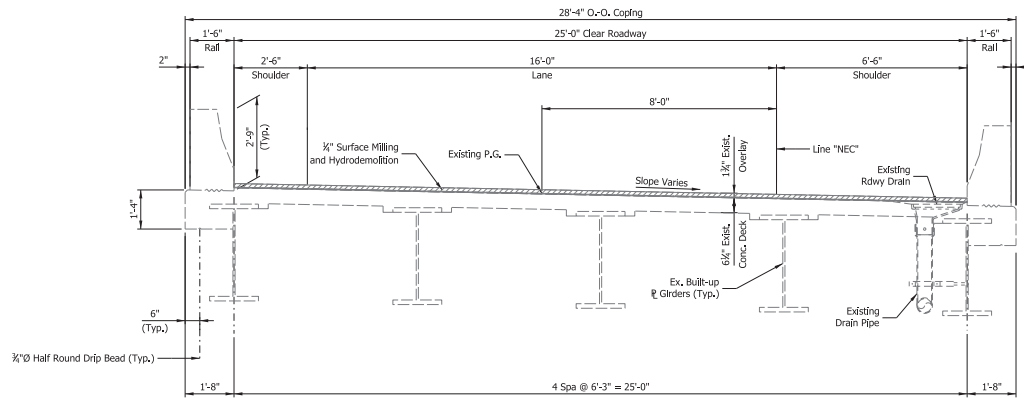
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED BY: YC	DRAWN BY: TYW	
CHECKED BY: SJS	CHECKED BY: SJS	

INDIANA
DEPARTMENT OF TRANSPORTATION

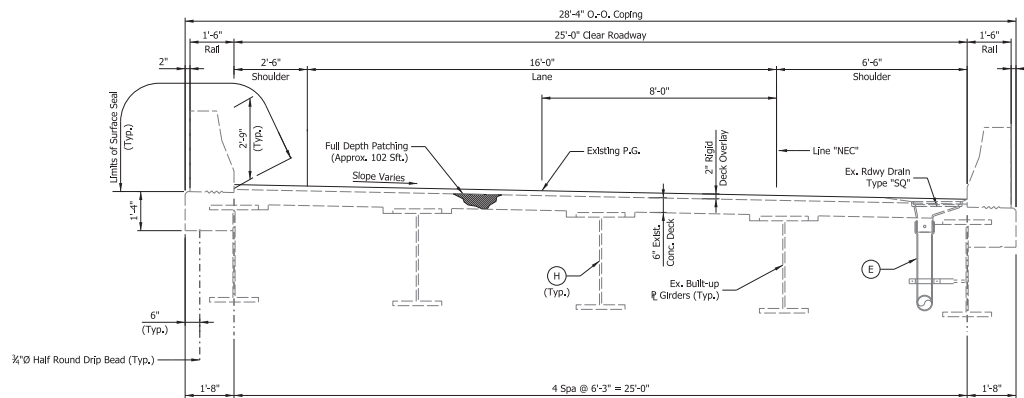
GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1/16" = 1'-0"	912-45-02543 B NEC
VERTICAL SCALE	DISSEMINATION
1/16" = 1'-0"	1700370
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 6
CONTRACT	PROJECT
R-41441	1800067

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06MAY-2021



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

LEGEND

- (A) Remove existing rigid deck overlay, Mill 1/4" of existing deck and perform hydrodemolition to remove all unsound concrete, Preform Full depth patching of bridge deck as required (approximately 50 sq. ft.), Place minimum new 2" rigid deck overlay to match existing profile grade.
- (B) Replace existing SS joints with pre-compressed foam joints at Bents No. 1 and No. 5.
- (C) Patch Concrete Substructure
- (D) Patch concrete barrier delamination and spalling, Surface Seal all existing concrete barrier.
- (E) Replace deck drainage system in kind with PVC or similar material.
- (F) Remove and Replace Reinforced Concrete Bridge Approach (RCBA) and terminal joint. See E503-BAT1-01 & 02 for terminal joint and see E609-RCBA for approach slab.
- (G) Replace curb turnout on the SW quadrant.
- (H) Clean and coat the existing steel plate girders. See sheet 6.
- (I) MGS guardrail transition, 75' MGS guardrail MGS assembly cable terminal anchor system
- (J) MGS guardrail transition MGS W-Beam guardrail height transition

CONTINUOUS COMPOSITE
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SR 912 OVER RAILROAD YARD, RAMP NER
AND ROAD
LAKE COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED BY: YC	DRAWN BY: TYW	
CHECKED BY: SJS	CHECKED BY: SJS	

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1/2" = 1'-0"	912-45-02543 B NEC
VERTICAL SCALE	DESIGNATION
1/2" = 1'-0"	1700370
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 6
CONTRACT	PROJECT
R-41441	1800067

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06-MAY-2021