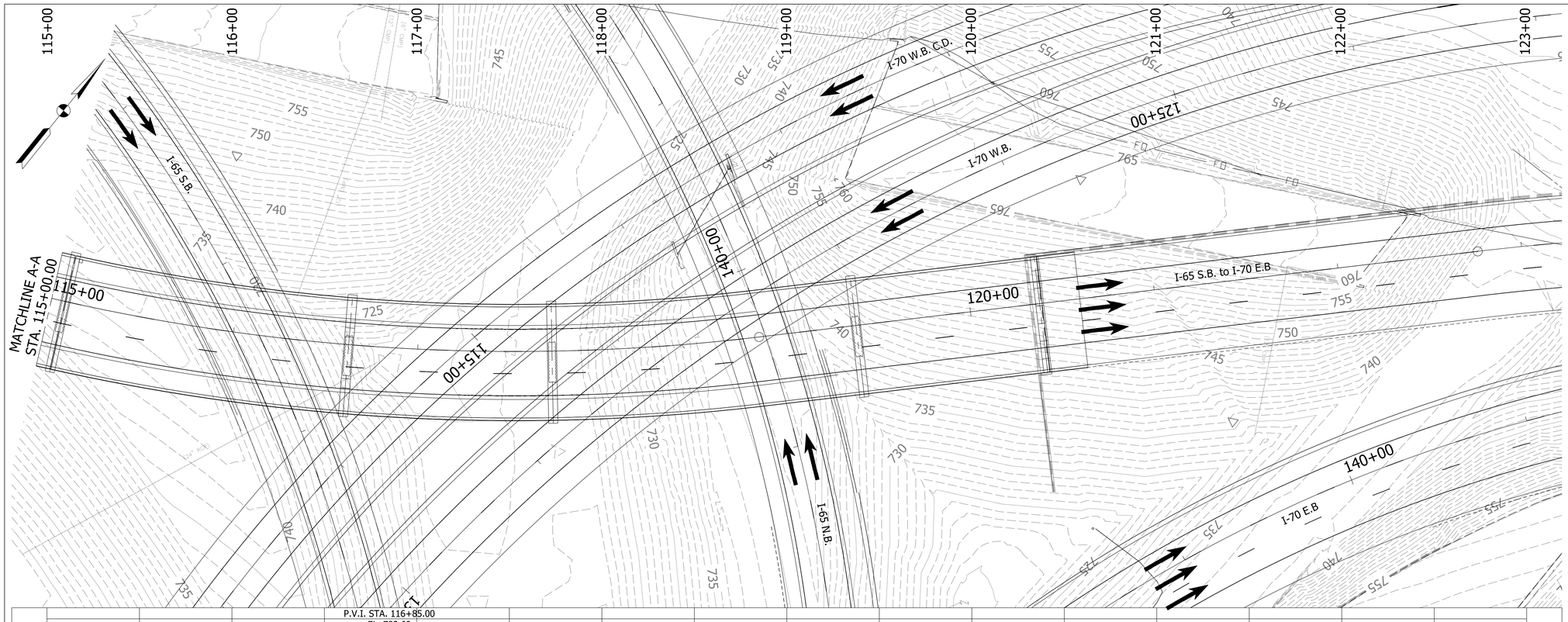


EXISTING STRUCTURES

I-65-113-5741

I-70 E.B. over I-65 N.B.:
The existing structure was built in 1974, had a rehabilitation in 1989 and 2003. The structure is 3 span continuous composite 36" WF steel beams or plate girders. Span lengths are 64'-6", 96'-0", & 75'-0". Clear roadway width is 39'-9". Total structure length varies. The existing structure is to be removed. Existing plans are on file with the Indiana D epartment of Transportation under Bridge File No. I -65-113-5741, I-65-113-5741a and I-65-113-5741b.

I-65-113-5743

Ramp I-65 S.B./I-70 E.B. over I-70 W.B. & C.D.:
The existing structure was built in 1974, had a rehabilitation in 1989 and 2003. The structure is 2 span continuous composite 36" WF steel beams. Span lengths are 78'-0" & 100'-0". Clear roadway width varies. Total structure length is 182'-1⅛". The existing structure is to be removed. Existing plans are on file with the Indiana Department of Transportation under Bridge File No. I-65-113-5743, I-65-113-5743a and I -65-113-5743b.

I-65-113-5745

Ramp I-65 S.B/I-70 E.B. over College Ave.:
The existing structure was built in 1969, had a rehabilitation in 1989. The structure is 3 span continuous composite 36" WF steel beams. Span lengths are 26'-9", 86'-0" & 37'-4". Clear roadway width varies. Total structure length is 154'-0". The existing structure is to be removed. Existing plans are on file with the Indiana Department of Transportation under Bridge File No. I-65-113-5745 and I -65-113-5745a.

NOTES:

1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
4. There shall be no clearing of trees beyond construction limits.
5. All topography is existing.
6. All r/w described from line "R_S65_E70", except as noted.
7. For vertical profile and horizontal curve data on line "R_S65_CDS65", "R_S65", "R_W70_CDS65", "R_W70", and "R_N65", see sheet no. 6 thru 8.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
9 SPANS: 100'-0", 150'-0", 150'-0",
150'-0", 155'-0", 150'-0"
115'-0", 165'-0" & 100'-0"
SKEW: NONE (RADIAL)
CLEAR ROADWAY: VARIES
FROM 64'-2¼" TO 60'-0"
I-65 S.B. TO I-70 E.B OVER
COLLEGE AVE. AND 5 RAMPS
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: SL DRAWN: JNR

CHECKED: CML CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

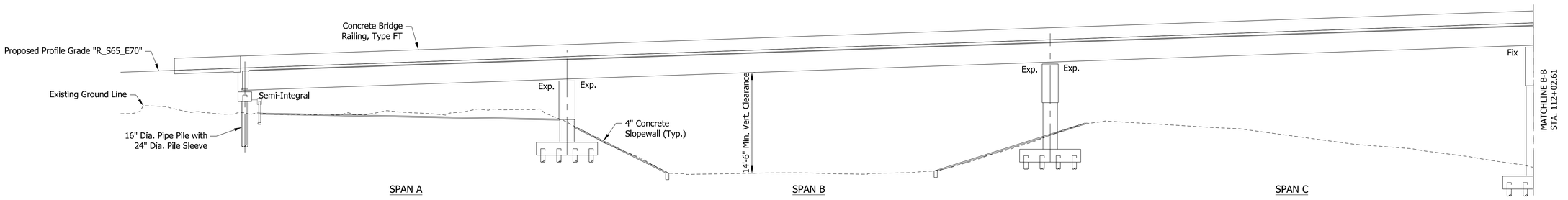
LAYOUT
2 OF 2

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
1" = 10'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 30
CONTRACT	PROJECT
B-36910	1600808

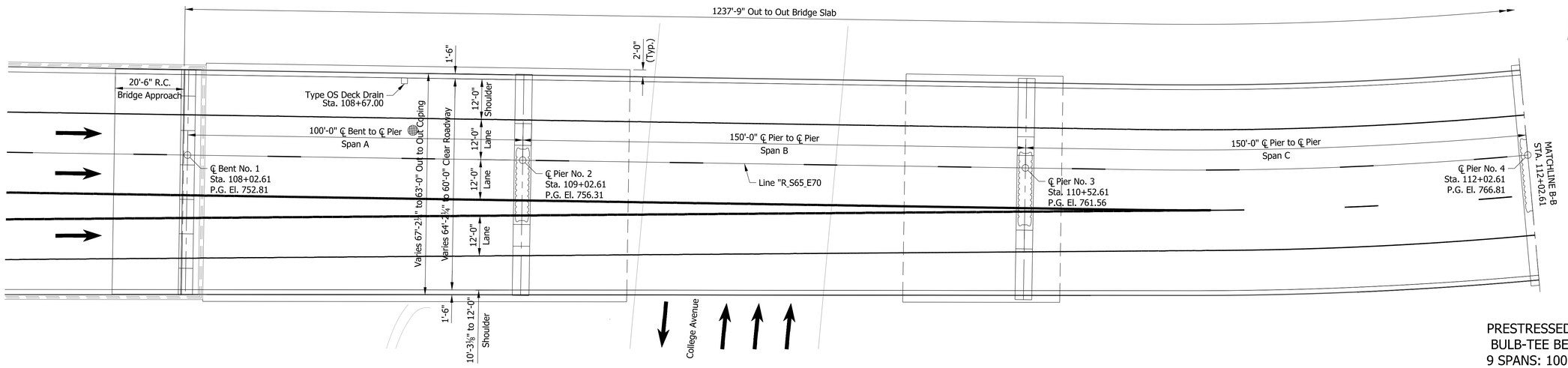
Plot: 2/25/2020 5:39:34 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_05 - Layout.dgn

Structure to be Built to a 800' Vertical Curve
Line "R_S65_E70"
PVI Sta. 116+85.00
El. 783.69
800' VC
3.50% -3.50%



ELEVATION



PLAN

NOTES:

1. For additional Concrete Slopewall Details, see Std. Dwg. E616-SWCO-01 to -07.

NOTES:

1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
4. There shall be no clearing of trees beyond construction limits.
5. All topography is existing.
6. All R/W described from line "R_E70", except as noted.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
9 SPANS: 100'-0", 150'-0", 150'-0",
150'-0",
150'-0", 155'-0", 150'-0"
115'-0", 165'-0" & 100'-0"
SKEW: NONE (RADIAL)
CLEAR ROADWAY: VARIES
FROM 64'-2¼" TO 60'-0"
I-65 S.B. TO I-70 E.B OVER
COLLEGE AVE. AND 5 RAMPS
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

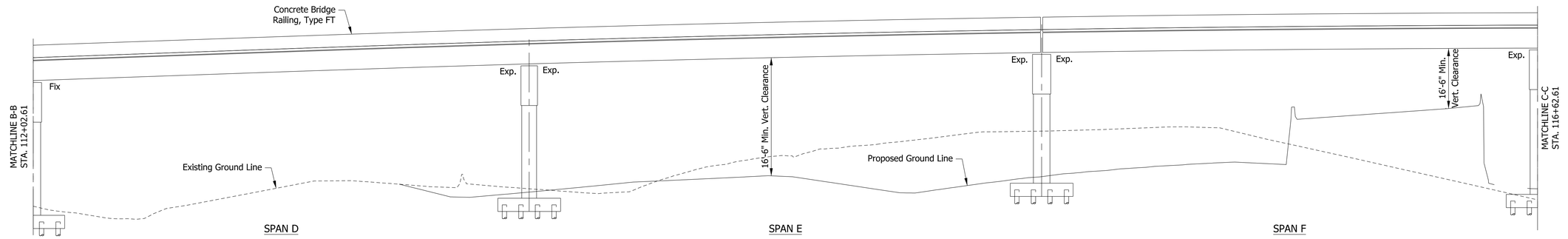
GENERAL PLAN
1 OF 3

HORIZONTAL SCALE	BRIDGE FILE
1/16" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
1/16" = 1'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 30
CONTRACT	PROJECT
B-36910	1600808

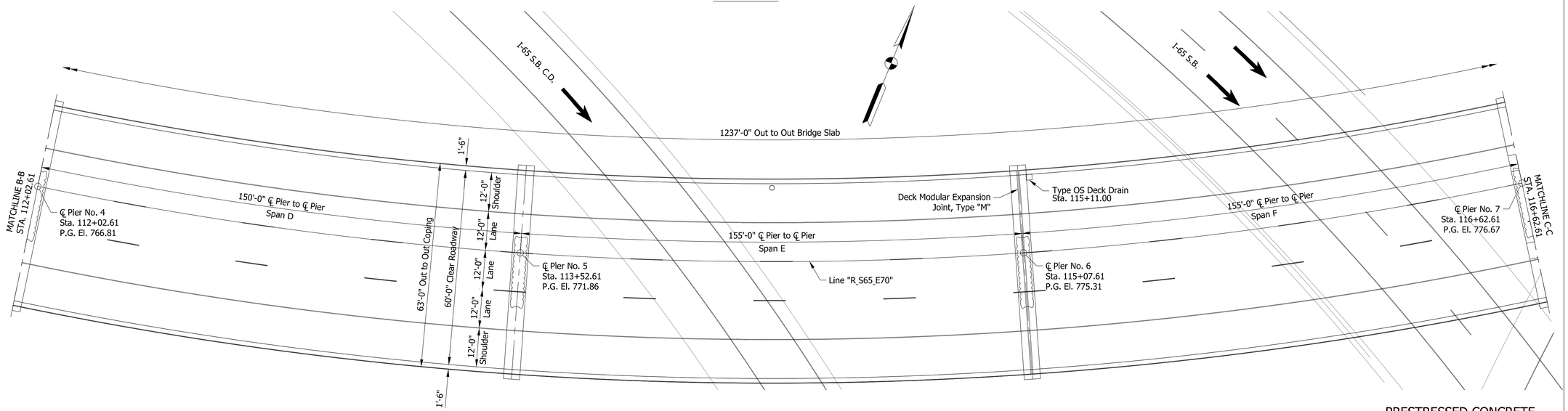
Plot: 2/25/2020 5:40:18 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_06 - General Plan.dgn

Structure to be Built to a 800' Vertical Curve
Line "R_S65_E70"
PVI Sta. 116+85.00
El. 783.69
800' VC
3.50% -3.50%



ELEVATION



PLAN

NOTES:

1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
4. There shall be no clearing of trees beyond construction limits.
5. All topography is existing.
6. All R/W described from line "R_E70", except as noted.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
9 SPANS: 100'-0", 150'-0", 150'-0",
150'-0", 155'-0", 150'-0"
115'-0", 165'-0" & 100'-0"
SKEW: NONE (RADIAL)
CLEAR ROADWAY: VARIES
FROM 64'-2¼" TO 60'-0"
I-65 S.B. TO I-70 E.B OVER
COLLEGE AVE. AND 5 RAMPS
MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: SL DRAWN: JNR

CHECKED: CML CHECKED: SL

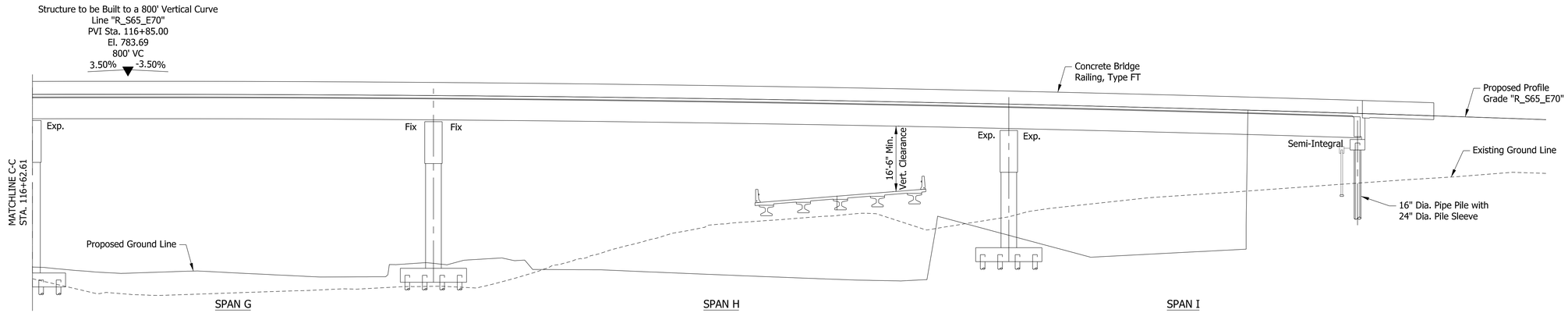
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
2 OF 3

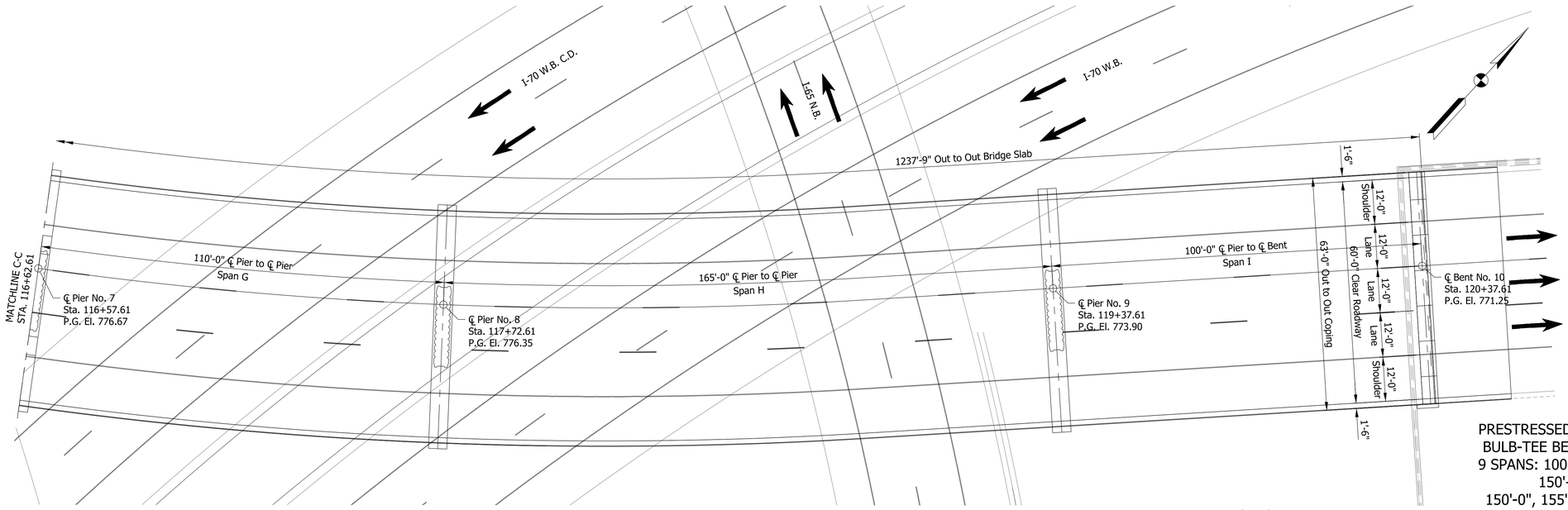
HORIZONTAL SCALE	BRIDGE FILE
1/16" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
1/16" = 1'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	7 of 30
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:40:20 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_07 - General Plan.dgn



ELEVATION



PLAN

NOTES:

1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
4. There shall be no clearing of trees beyond construction limits.
5. All topography is existing.
6. All R/W described from line "R_E70", except as noted.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
9 SPANS: 100'-0", 150'-0", 150'-0",
150'-0", 155'-0", 150'-0"
115'-0", 165'-0" & 100'-0"
SKEW: NONE (RADIAL)
CLEAR ROADWAY: VARIES
FROM 64'-2¼" TO 60'-0"
I-65 S.B. TO I-70 E.B OVER
COLLEGE AVE. AND 5 RAMPS
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

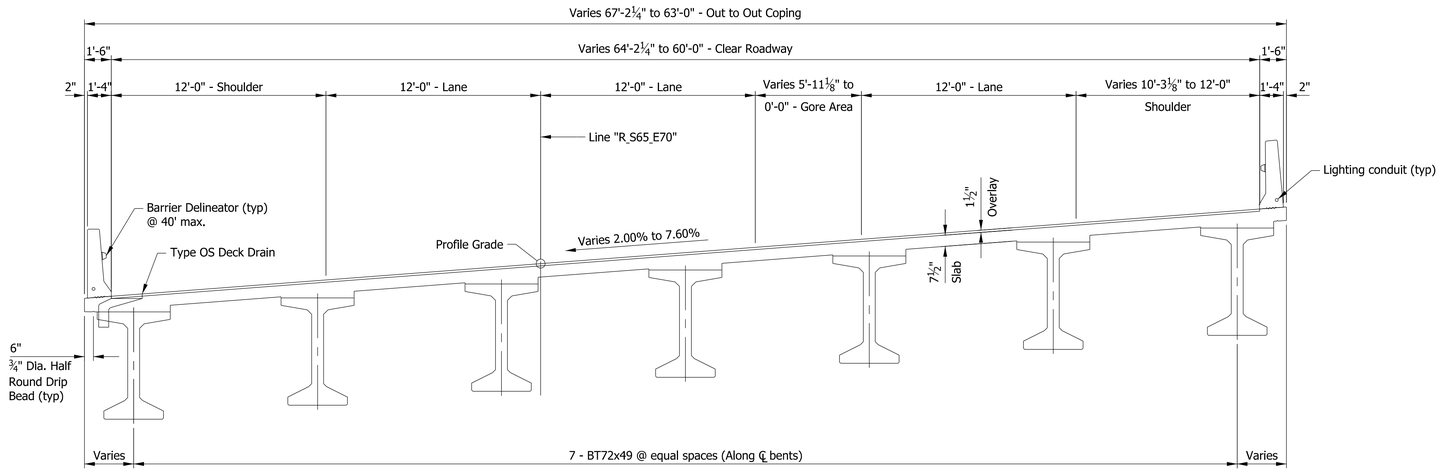
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
3 OF 3

HORIZONTAL SCALE	BRIDGE FILE
1/16" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
1/16" = 1'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	8 of 30
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:40:22 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_08 - General Plan.dgn



TYPICAL SECTION

GENERAL NOTES

Reinforcing bar cover shall be 2" min. in top and 1" min. in bottom of floor slabs, 3" min. in footing except bottom bars which shall be 4" min, and 2" min. in al other parts, unless noted.

All dimensions and elevations are in feet (FT) unless otherwise noted.

Concrete in floor slab, diaphragms, barrier, approach slab, and end bents shall be and alternative class "C" in accordance with the technical provisions. Reinforcing bars in deck, barrier, and end bent diaphragm extending into the deck shall be stainless steel. reinforcing bars in end bent diaphragm not extending into the deck and in the cap shall be epoxy coated.

Anti-graffiti coating shall be placed on all exposed surfaces of new retaining walls and new bridge structures excluding top of deck or overlay and interior beams.

For aesthetics associated with the bridge opening, see Bridge Opening Aesthetics Plan package.

DESIGN DATA

Live Load
Superstructure and Substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications Eight Edition, 2017 & subsequent interim.

Dead Load
Designed for actual dead load plus 15 PSF for SIP metal deck forms.

Slab designed with a 7½" structural depth and a 1½" very early strength LMC overlay.

SEISMIC DESIGN DATA

Seismic Performance Zone = 1
Acceleration Coefficient = 0.061
Seismic Soil Profile Type = Site Class C

DESIGN STRENGTHS

Prestressed Concrete	f'c = 10,000 psi @ 28 Days
Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,000 psi
Class "C" Concrete	f'c = 4,000 psi
Rienforcing Bars	fy = 60,000 psi (barrier)
Reinforcing Bars	fy = 75,000 psi (all other locations)

CONSTRUCTION LOADING

The exterior beam must be 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 beam. The finishing machine was assumed to be supported 6" past the edge of 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 beam bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/sft for permanent metal stay in place deck forms, removable deck forms, and 2-ft exterior walkway.
Construction Live Load:	Designed 20 lb/sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of 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 AASHTO LRFD3.8.1.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
9 SPANS: 100'-0", 150'-0", 150'-0",
150'-0", 155'-0", 150'-0"
115'-0", 165'-0" & 100'-0"
SKEW: NONE (RADIAL)
CLEAR ROADWAY: VARIES FROM 64'-2¼" TO 60'-0"
I-65 S.B. TO I-70 E.B OVER COLLEGE AVE. AND 5 RAMPS
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: SL | DRAWN: JNR | CHECKED: CML | CHECKED: SL

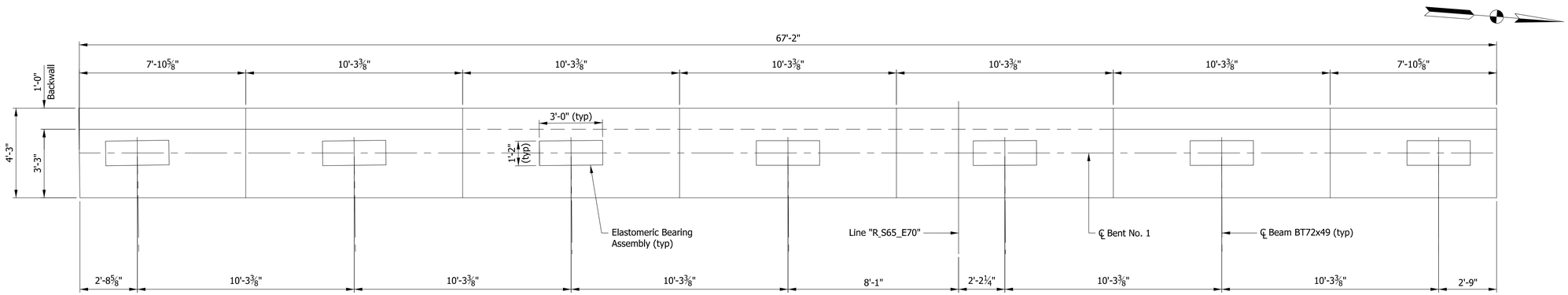
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
TYPICAL SECTIONS

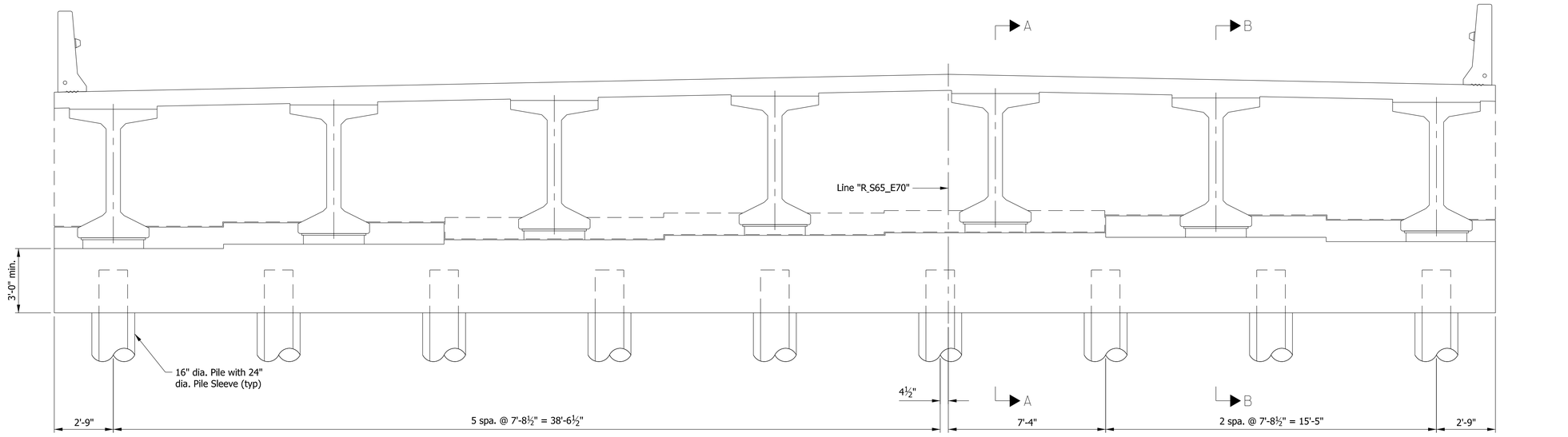
HORIZONTAL SCALE	BRIDGE FILE
¼" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
¼" = 1'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 30
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:40:24 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_09 - Typical Sections.dgn



PLAN



ELEVATION

Plot: 2/25/2020 5:40:26 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_10 - Bent No 1.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

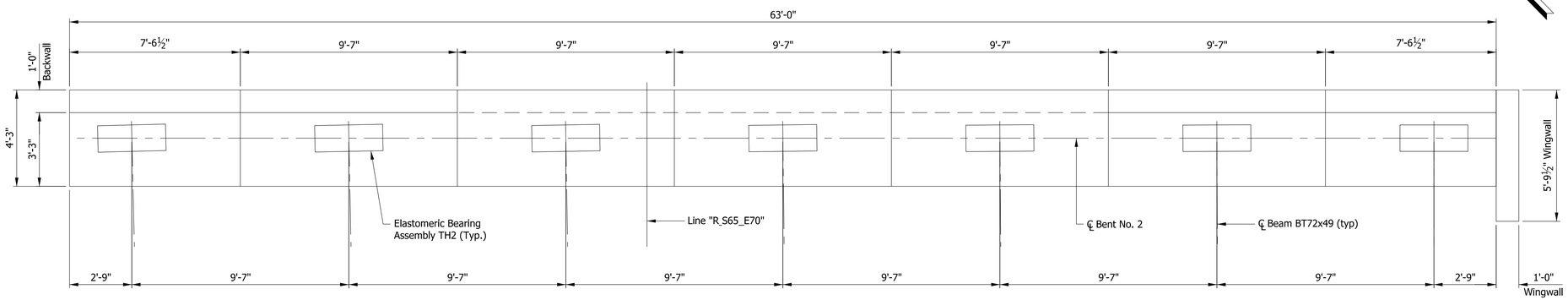
DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

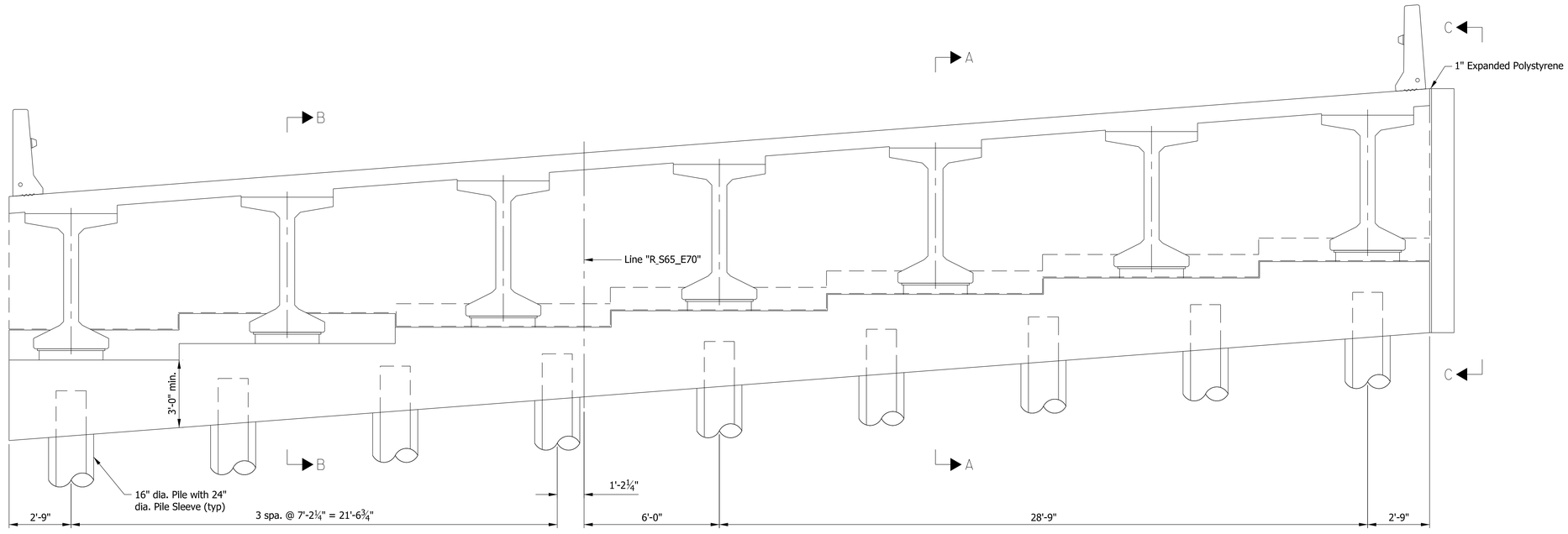
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 1 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
⅜" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
⅜" = 1'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	10 of 30
CONTRACT	PROJECT
B-36910	1600808



PLAN

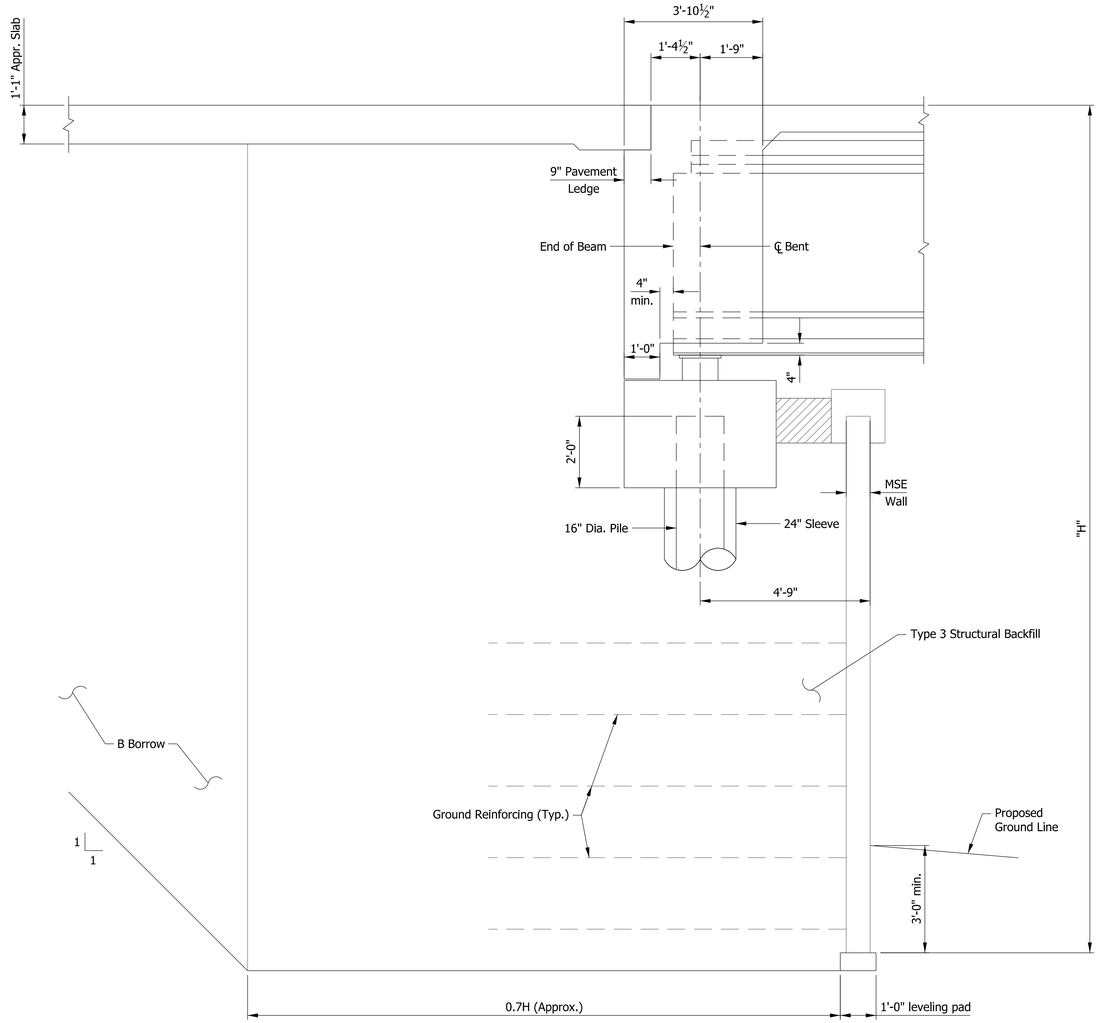


ELEVATION

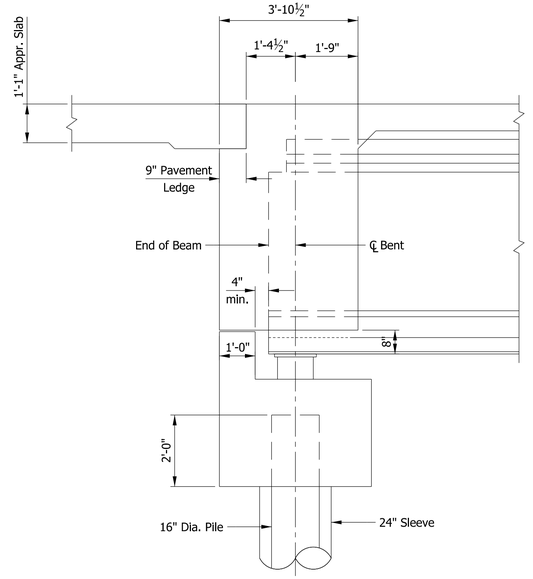
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
		⅜" = 1'-0"	I65-112-10631 SBL
		VERTICAL SCALE	DESIGNATION
		⅜" = 1'-0"	1901918
DESIGNED: SL DRAWN: JNR	BENT NO. 10 DETAILS	SURVEY BOOK	SHEETS
		ELECTRONIC	11 of 30
CHECKED: CML CHECKED: SL		CONTRACT	PROJECT
		B-36910	1600808

Plot: 2/25/2020 5:40:28 PM

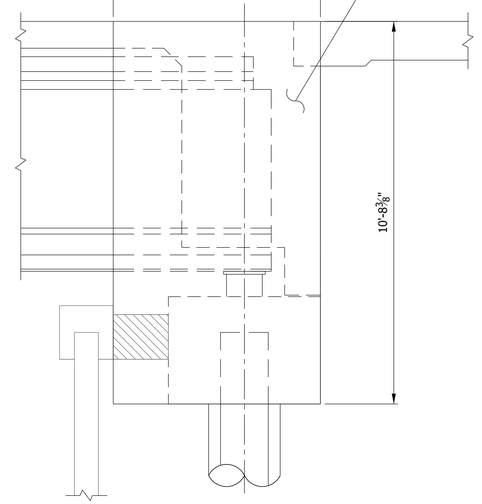
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_11 - Bent No 10.dgn



SECTION A-A



(MSE Wall not shown for clarity)

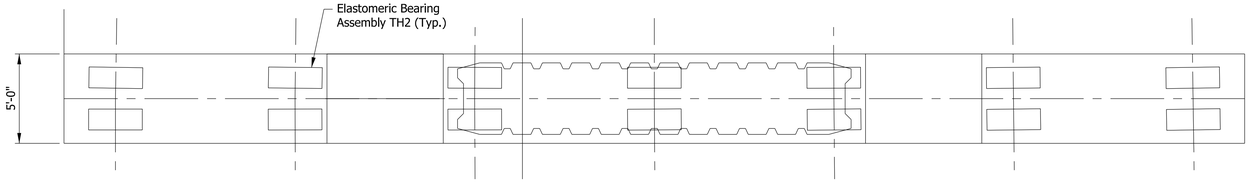


SECTION C-C

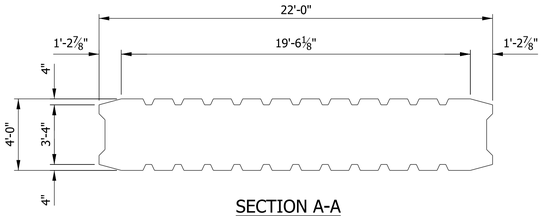
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: ½" = 1'-0" / BRIDGE FILE: I65-112-10631 SBL
DESIGNED: ZGC	DRAWN: JNR		VERTICAL SCALE: ½" = 1'-0" / DESIGNATION: 1901918
CHECKED: CML	CHECKED: ZGC	BENT NO. 1 AND 10 DETAILS	SURVEY BOOK / SHEETS: ELECTRONIC 12 of 30
			CONTRACT: B-36910 / PROJECT: 1600808

Plot: 3/4/2020 7:30:35 AM

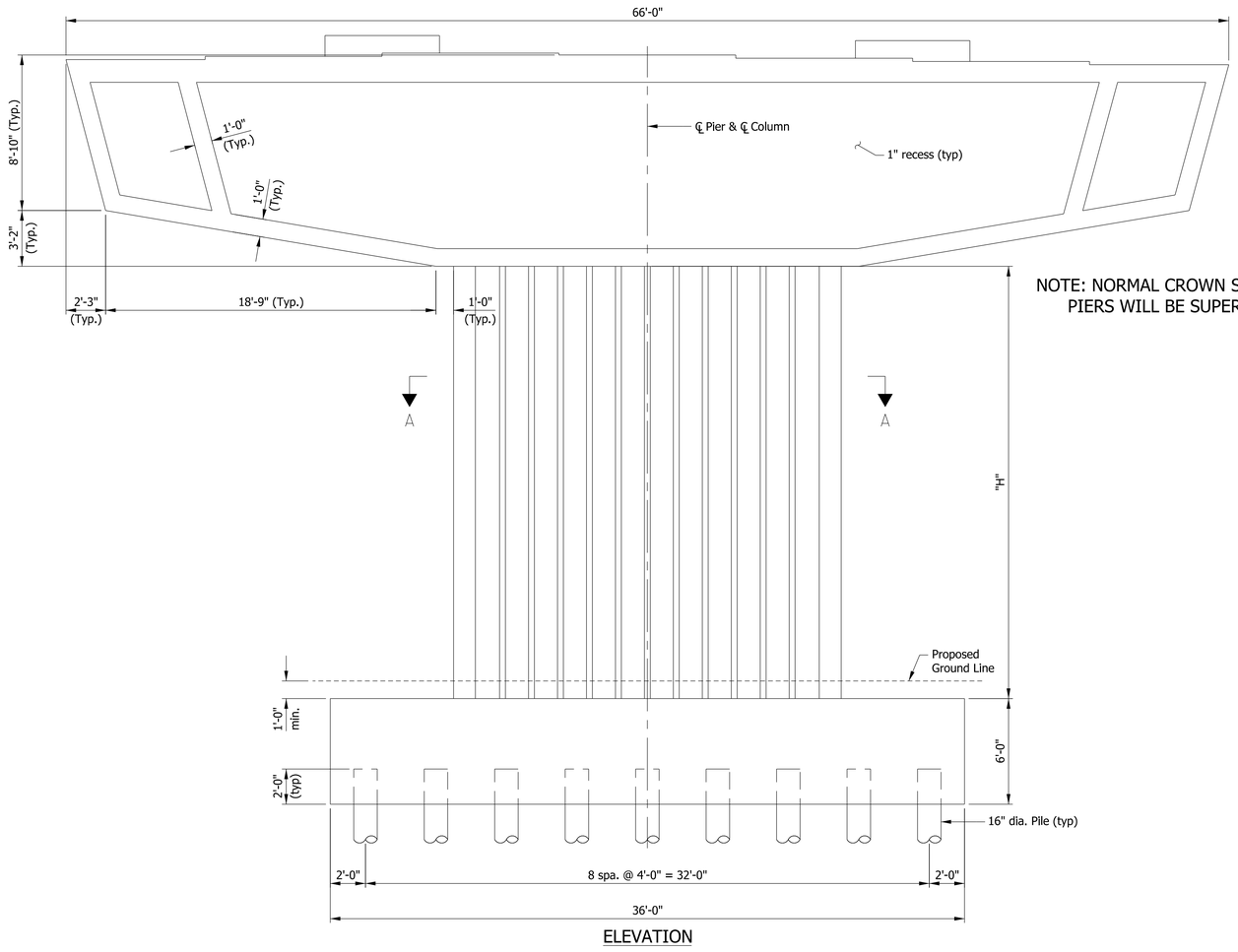
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_12 - Bent Details.dgn



PLAN



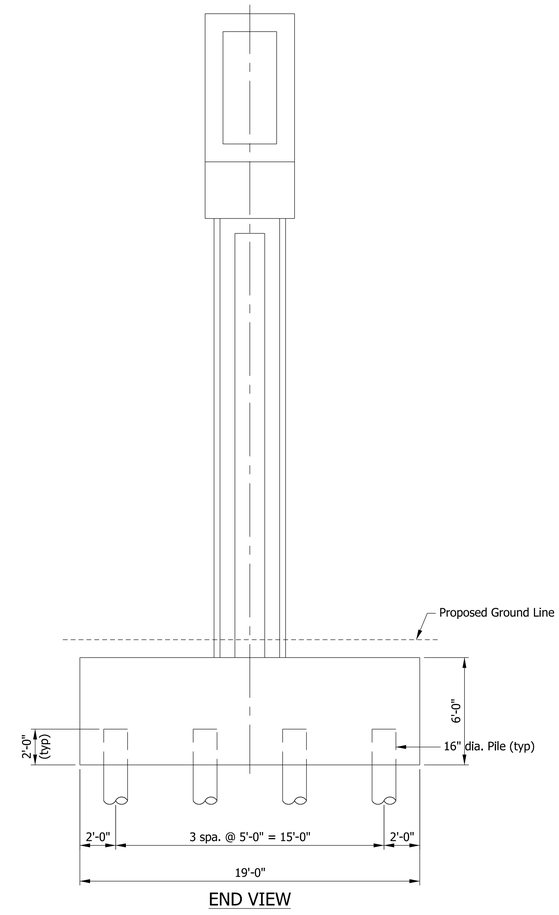
SECTION A-A



ELEVATION

NOTE: NORMAL CROWN SHOWN & SOME PIERS WILL BE SUPER-ELEVATED

PIER HEIGHTS	
Pier	"H"
Pier No. 2	7'-8"
Pier No. 3	15'-1"
Pier No. 4	28'-8"
Pier No. 5	28'-7"
Pier No. 6	27'-6"
Pier No. 7	32'-3
Pier No. 8	30'-7"
Pier No. 9	22'-2"



END VIEW

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

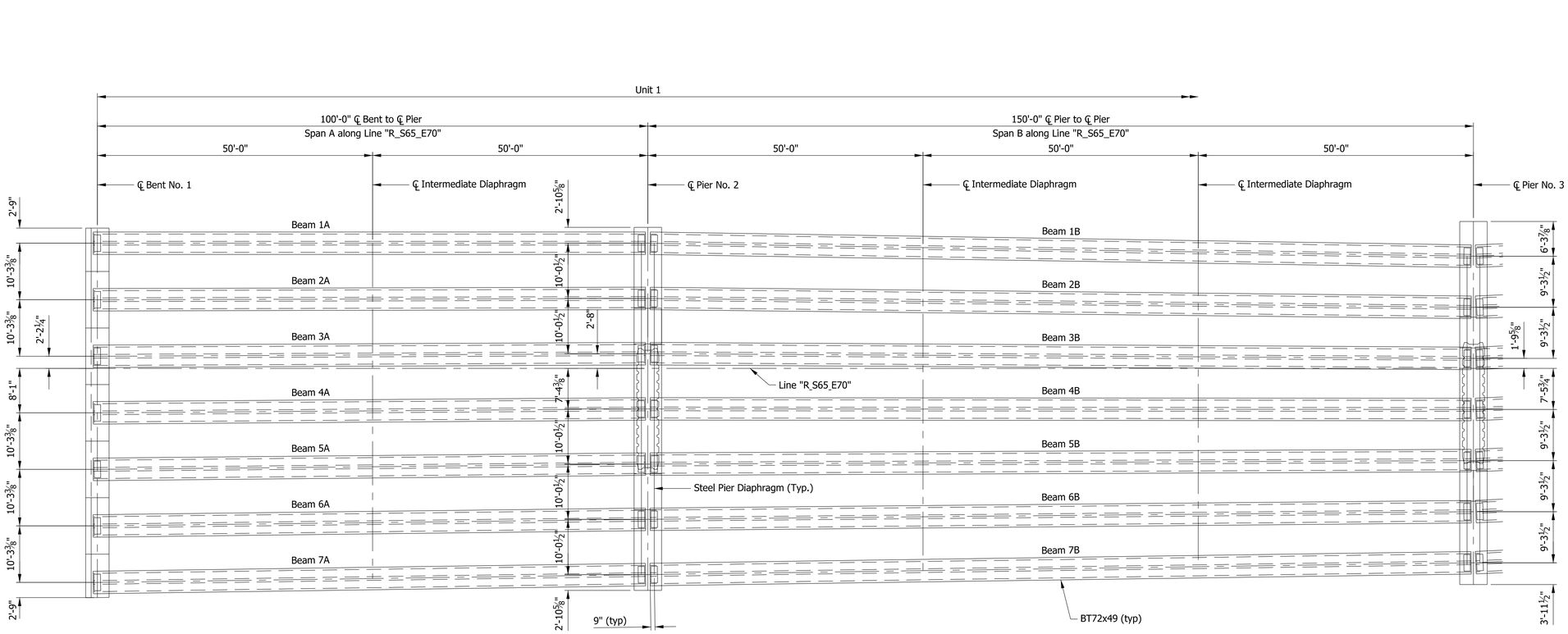
INDIANA
DEPARTMENT OF TRANSPORTATION

PIER DETAILS

HORIZONTAL SCALE	BRIDGE FILE
¼" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
¼" = 1'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	13 of 30
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:40:31 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_13 - Pier 2-9 Details.dgn



FRAMING PLAN

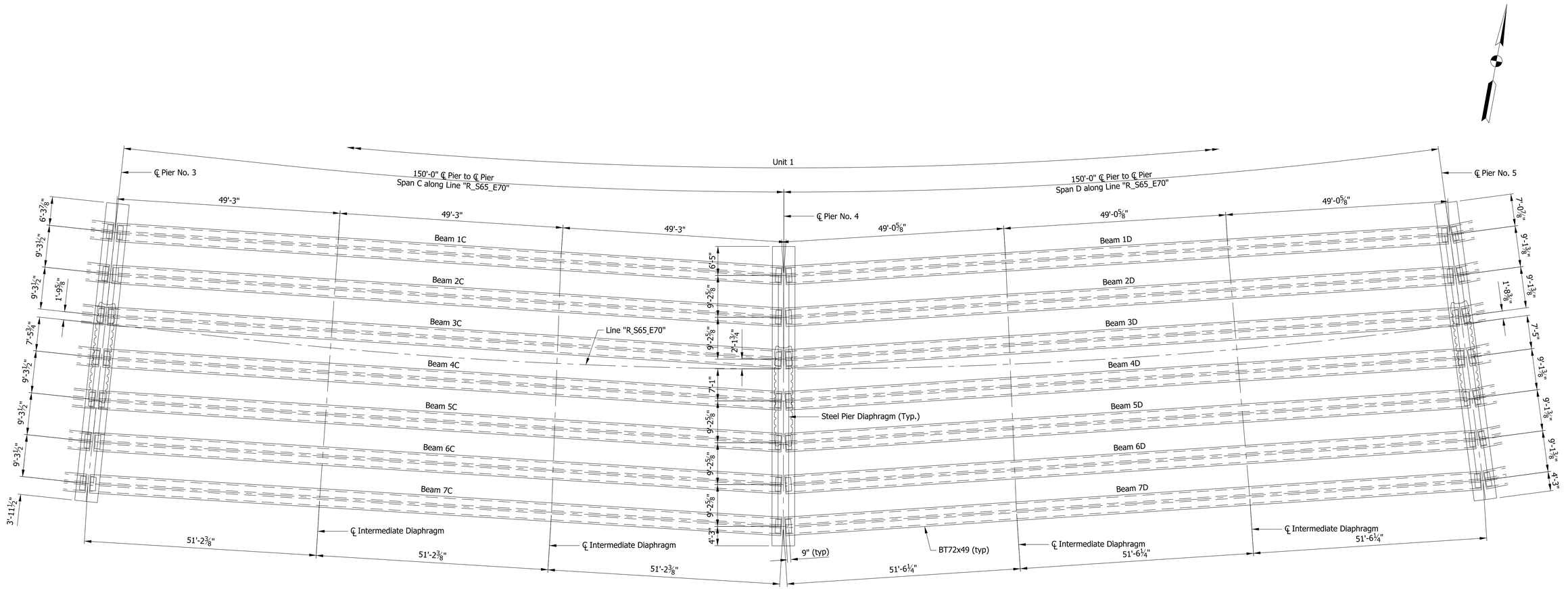
NOTES:

1. For Intermediate Diaphragm Details, see Std. Dwg. E707-SDPC-01.

Plot: 2/25/2020 5:40:34 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 3/32" = 1'-0" / VERTICAL SCALE: 3/32" = 1'-0" / BRIDGE FILE: I65-112-10631 SBL / DESIGNATION: 1901918
DESIGNED: SL / DRAWN: JNR / CHECKED: CML / CHECKED: SL	FRAMING PLAN 1 OF 5	SURVEY BOOK / SHEETS: ELECTRONIC 14 of 30 / CONTRACT / PROJECT: B-36910 / 1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_14 - Framing Plan.dgn



FRAMING PLAN

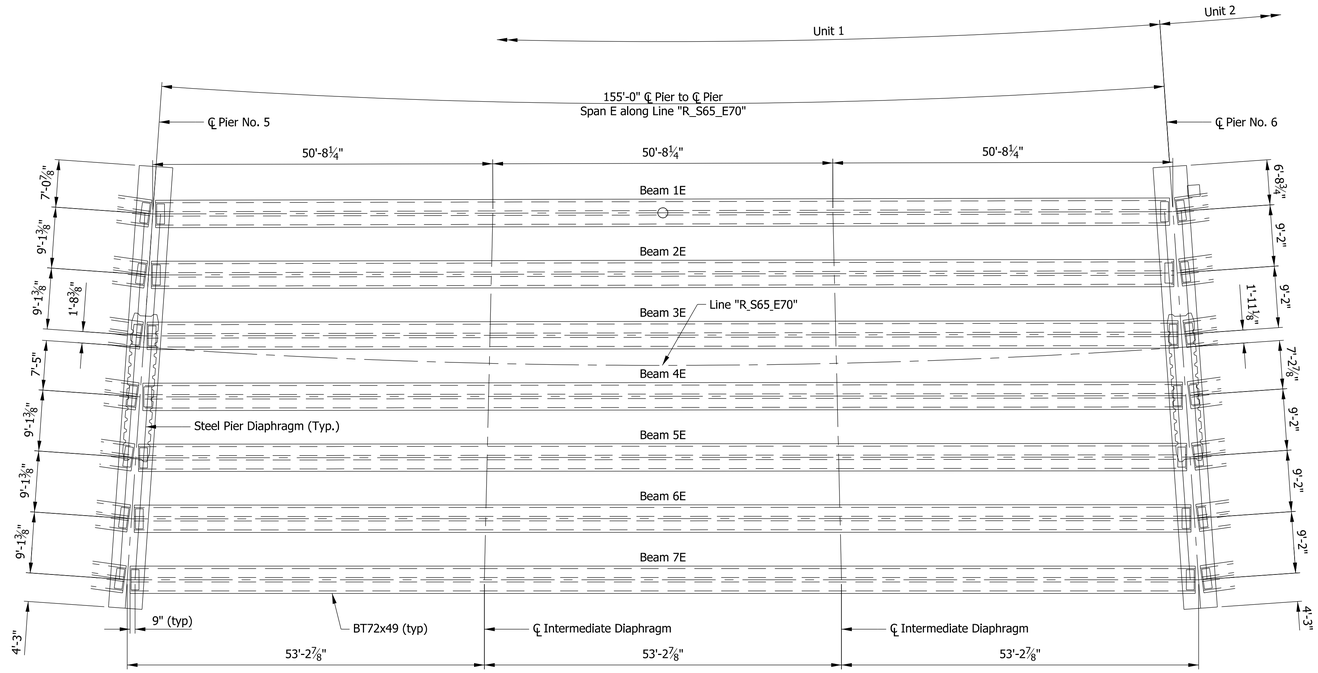
NOTES:

1. For Intermediate Diaphragm Details, see Std. Dwg. E707-SDPC-01.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
		3/32" = 1'-0"	I65-112-10631 SBL
		VERTICAL SCALE	DESIGNATION
		3/32" = 1'-0"	1901918
DESIGNED: SL / DRAWN: JNR	FRAMING PLAN 2 OF 5	SURVEY BOOK	SHEETS
		ELECTRONIC	15 of 30
CHECKED: CML / CHECKED: SL		CONTRACT	PROJECT
		B-36910	1600808

Plot: 2/25/2020 5:40:36 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_15 - Framing Plan.dgn



FRAMING PLAN

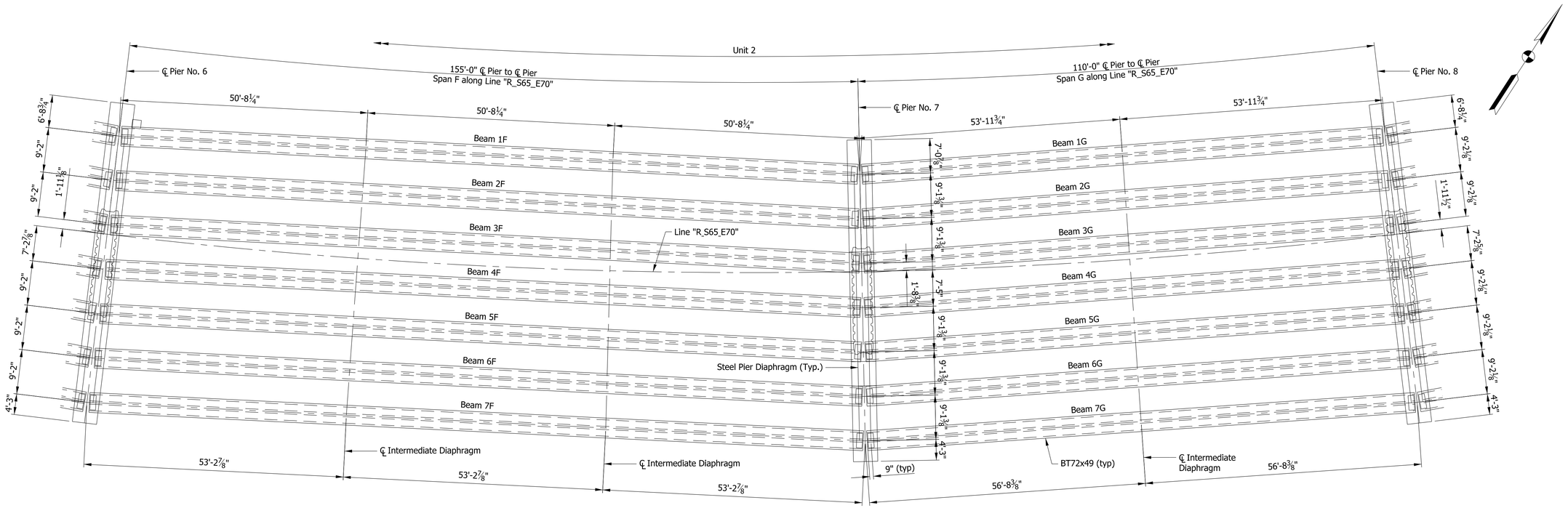
NOTES:

1. For Intermediate Diaphragm Details, see Std. Dwg. E707-SDPC-01.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
		3/32" = 1'-0"	I65-112-10631 SBL
		VERTICAL SCALE	DESIGNATION
		3/32" = 1'-0"	1901918
DESIGNED: SL / DRAWN: JNR	FRAMING PLAN 3 OF 5	SURVEY BOOK	SHEETS
		ELECTRONIC	16 of 30
CHECKED: CML / CHECKED: SL		CONTRACT	PROJECT
		B-36910	1600808

Plot: 2/25/2020 5:40:39 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_16 - Framing Plan.dgn



FRAMING PLAN

NOTES:

1. For Intermediate Diaphragm Details, see Std. Dwg. E707-SDPC-01.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

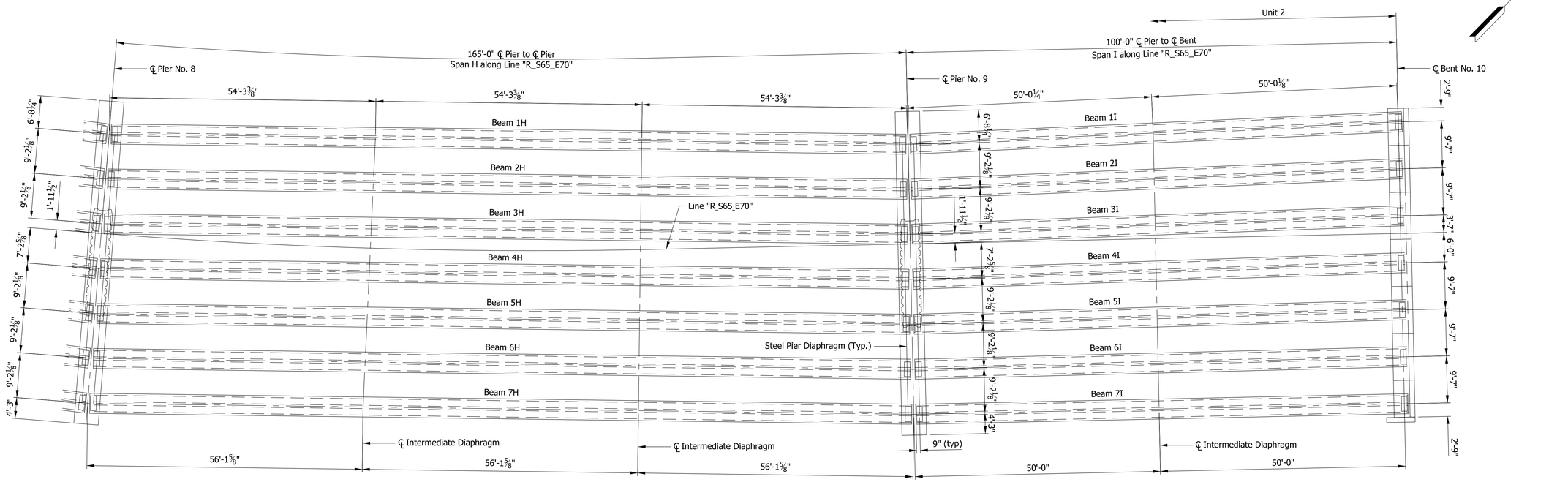
INDIANA
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
4 OF 5

HORIZONTAL SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
3/32" = 1'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	17 of 30
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:40:41 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_17 - Framing Plan.dgn



FRAMING PLAN

NOTES:

1. For Intermediate Diaphragm Details, see Std. Dwg. E707-SDPC-01.

Plot: 2/25/2020 5:40:44 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

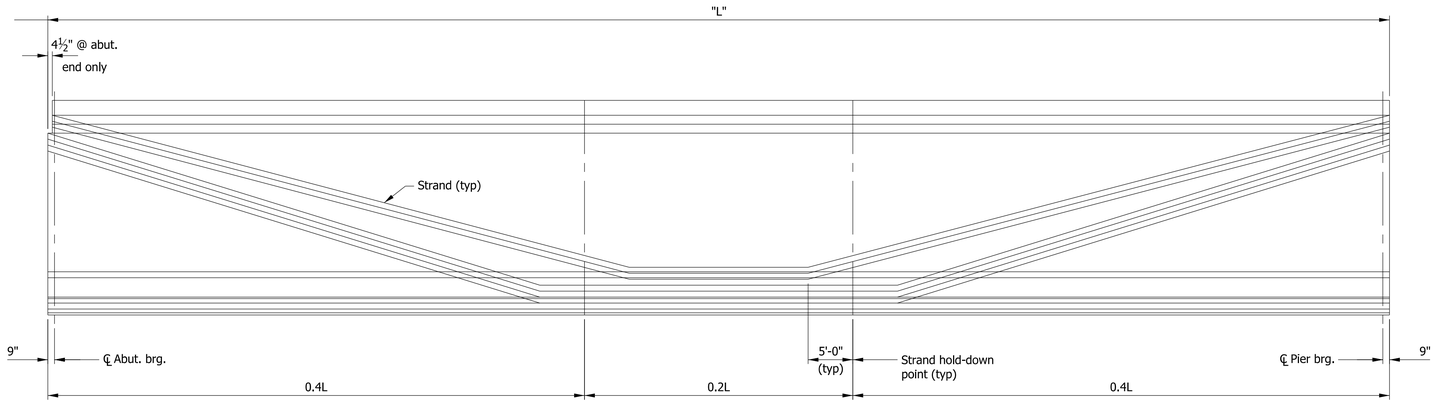
FRAMING PLAN
5 OF 5

HORIZONTAL SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
3/32" = 1'-0"	1901918

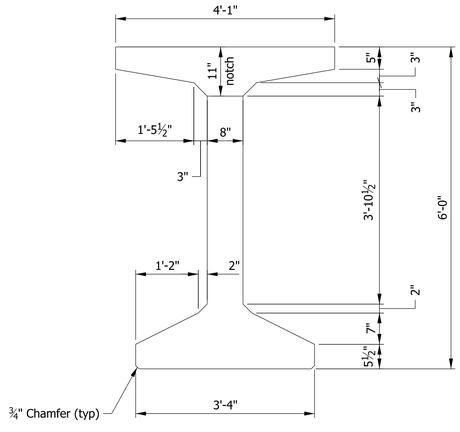
SURVEY BOOK	SHEETS
ELECTRONIC	18 of 30
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_18 - Framing Plan.dgn

BEAM PLAN
Scale: ⅛" = 1'-0"



BEAM ELEVATION
Horizontal Scale: ⅛" = 1'-0"
Vertical Scale: ½" = 1'-0"



TYPICAL SECTION
Scale: ¾" = 1'-0"

BEAM LENGTHS									
SPAN A		SPAN B		SPAN C		SPAN D		SPAN E	
Beam	"L"	Beam	"L"	Beam	"L"	Beam	"L"	Beam	"L"
Beam 1A	100'-4"	Beam 1B	149'-2¼"	Beam 1C	146'-11"	Beam 1D	146'-3⅞"	Beam 1E	151'-1⅞"
Beam 2A	100'-4"	Beam 2B	149'-2⅛"	Beam 2C	147'-10⅝"	Beam 2D	147'-6⅝"	Beam 2E	152'-5⅛"
Beam 3A	100'-4"	Beam 3B	149'-2"	Beam 3C	148'-10⅜"	Beam 3D	148'-9½"	Beam 3E	153'-8⅜"
Beam 4A	100'-4"	Beam 4B	149'-2"	Beam 4C	149'-10"	Beam 4D	150'-0¼"	Beam 4E	154'-11⅝"
Beam 5A	100'-4"	Beam 5B	149'-2"	Beam 5C	150'-9⅝"	Beam 5D	151'-3⅛"	Beam 5E	156'-3"
Beam 6A	100'-4⅛"	Beam 6B	149'-2⅛"	Beam 6C	151'-9⅜"	Beam 6D	152'-6"	Beam 6E	157'-6¼"
Beam 7A	100'-4⅛"	Beam 7B	149'-2⅛"	Beam 7C	152'-9"	Beam 7D	153'-8¾"	Beam 7E	158'-9½"

NOTES:

1. Prestressing reinforcement shall be 0.6" dia., uncoated, seven wire, low relaxation 270 ksi with strand area = 0.217 sq. in.
2. Beam shall be cast a minimum of 120 days before deck is poured.

Plot: 2/25/2020 5:40:46 PM

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: SL
DRAWN: JNR
CHECKED: CML
CHECKED: SL

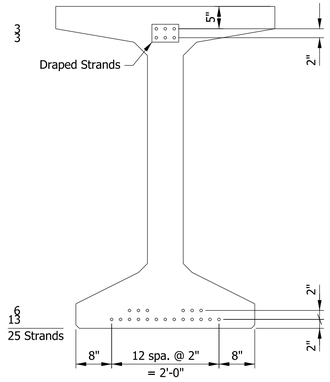
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS - UNIT 1
1 OF 2

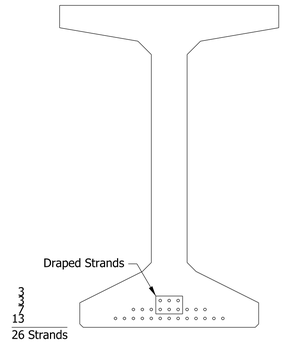
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
	1901918

SURVEY BOOK	SHEETS
ELECTRONIC	19 of 30
CONTRACT	PROJECT
B-36910	1600808

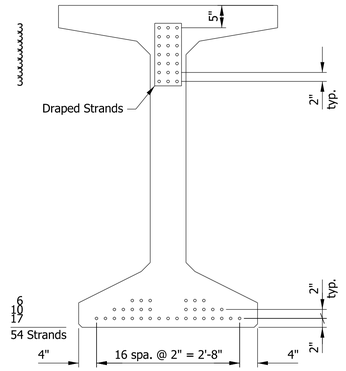
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_19 - Beam Details.dgn



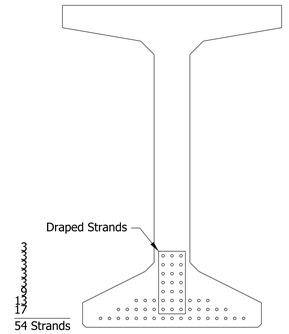
STRAND PATTERN AT
SPAN A BEAM END



STRAND PATTERN AT
SPAN A MIDSPAN

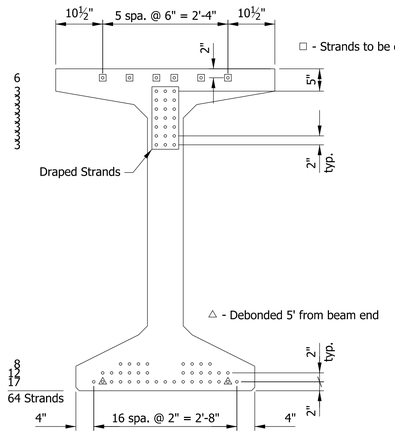


STRAND PATTERN AT
SPAN B BEAM END

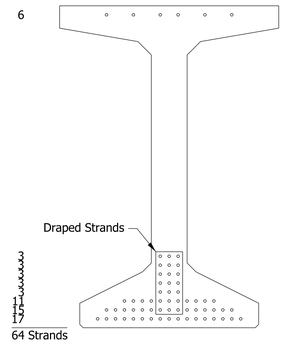


STRAND PATTERN AT
SPAN B MIDSPAN

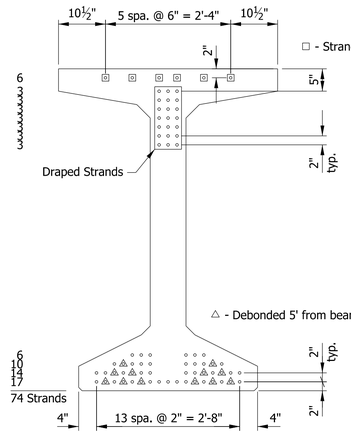
ADD DEBONDING SYMBOLS



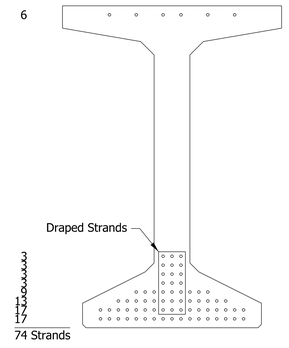
STRAND PATTERN AT
SPAN C & D BEAM END



STRAND PATTERN AT
SPAN C & D MIDSPAN



STRAND PATTERN AT
SPAN E BEAM END



STRAND PATTERN AT
SPAN E MIDSPAN

NOTES:

1. Prestressing reinforcement shall be 0.6" dia., uncoated, seven wire, low relaxation 270 ksi with strand area = 0.217 sq. in.
2. Beam shall be cast a minimum of 120 days before deck is poured.

Plot: 2/25/2020 5:40:48 PM

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

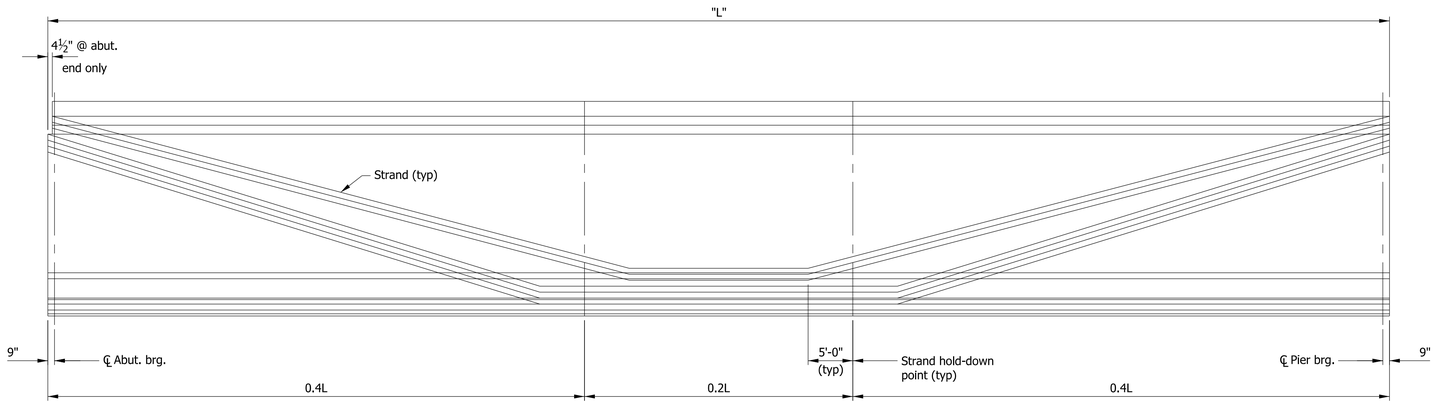
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS - UNIT 1
2 OF 2

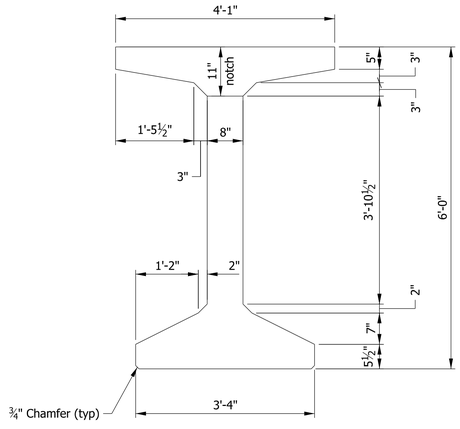
HORIZONTAL SCALE	BRIDGE FILE
	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	20 of 30
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_20 - Beam Details.dgn

BEAM PLAN
Scale: ⅛" = 1'-0"



BEAM ELEVATION
Horizontal Scale: ⅛" = 1'-0"
Vertical Scale: ½" = 1'-0"



TYPICAL SECTION
Scale: ¾" = 1'-0"

BEAM LENGTHS							
SPAN F		SPAN G		SPAN H		SPAN I	
Beam	"L"	Beam	"L"	Beam	"L"	Beam	"L"
Beam 1F	151'-1⅞"	Beam 1G	107'-1⅝"	Beam 1H	162'-0¼"	Beam 1I	100'-4⅜"
Beam 2F	152'-5⅛"	Beam 2G	108'-0⅜"	Beam 2H	162'-11⅜"	Beam 2I	100'-4¼"
Beam 3F	153'-8⅜"	Beam 3G	108'-11¼"	Beam 3H	163'-10½"	Beam 3I	100'-4⅛"
Beam 4F	154'-11⅝"	Beam 4G	109'-10⅛"	Beam 4H	164'-9⅝"	Beam 4I	100'-4⅛"
Beam 5F	156'-3"	Beam 5G	110'-9"	Beam 5H	165'-8⅝"	Beam 5I	100'-4"
Beam 6F	157'-6¼"	Beam 6G	111'-7¾"	Beam 6H	166'-7¾"	Beam 6I	100'-4"
Beam 7F	158'-9½"	Beam 7G	112'-6⅞"	Beam 7H	167'-6⅞"	Beam 7I	100'-4"

NOTES:

1. Prestressing reinforcement shall be 0.6" dia., uncoated, seven wire, low relaxation 270 ksi with strand area = 0.217 sq. in.
2. Beam shall be cast a minimum of 120 days before deck is poured.

Plot: 2/25/2020 5:40:49 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL DRAWN: JNR

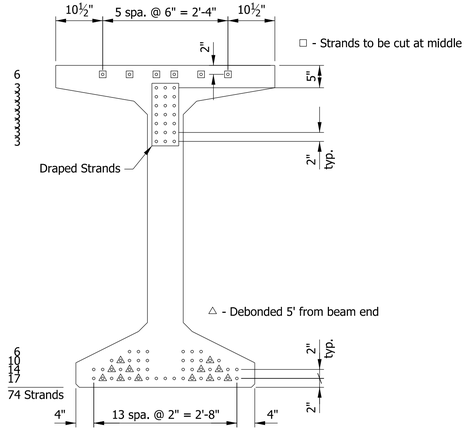
CHECKED: CML CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

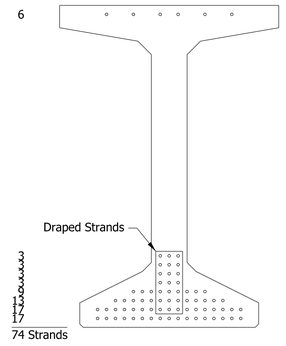
BEAM DETAILS - UNIT 2
1 OF 2

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	21 of 30
CONTRACT	PROJECT
B-36910	1600808

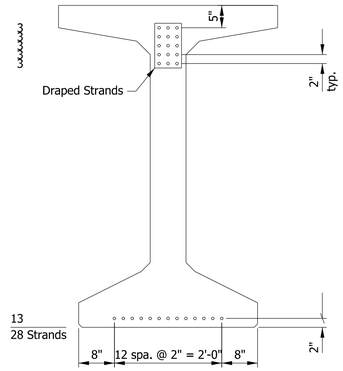
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_21 - Beam Details.dgn



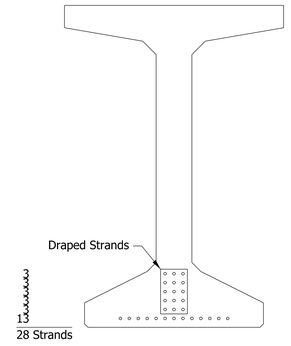
STRAND PATTERN AT
SPAN F BEAM END



STRAND PATTERN AT
SPAN F MIDSPAN

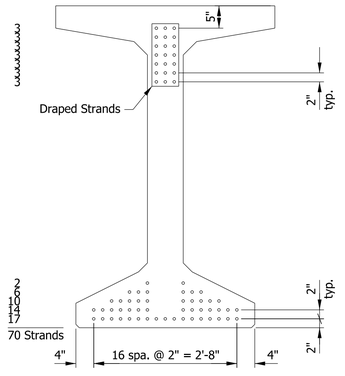


STRAND PATTERN AT
SPAN G BEAM END

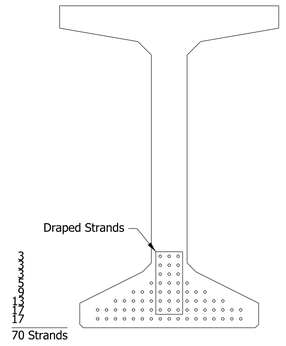


STRAND PATTERN AT
SPAN G MIDSPAN

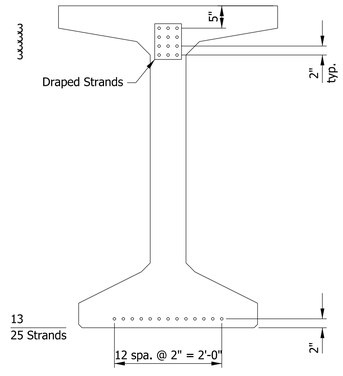
ADD DEBONDING SYMBOLS



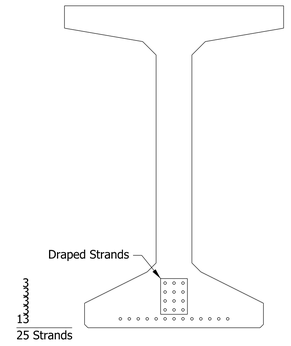
STRAND PATTERN AT
SPAN H BEAM END



STRAND PATTERN AT
SPAN H MIDSPAN



STRAND PATTERN AT
SPAN I BEAM END



STRAND PATTERN AT
SPAN I MIDSPAN

NOTES:

1. Prestressing reinforcement shall be 0.6" dia., uncoated, seven wire, low relaxation 270 ksi with strand area = 0.217 sq. in.
2. Beam shall be cast a minimum of 120 days before deck is poured.

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: SL
DRAWN: JNR
CHECKED: CML
CHECKED: SL

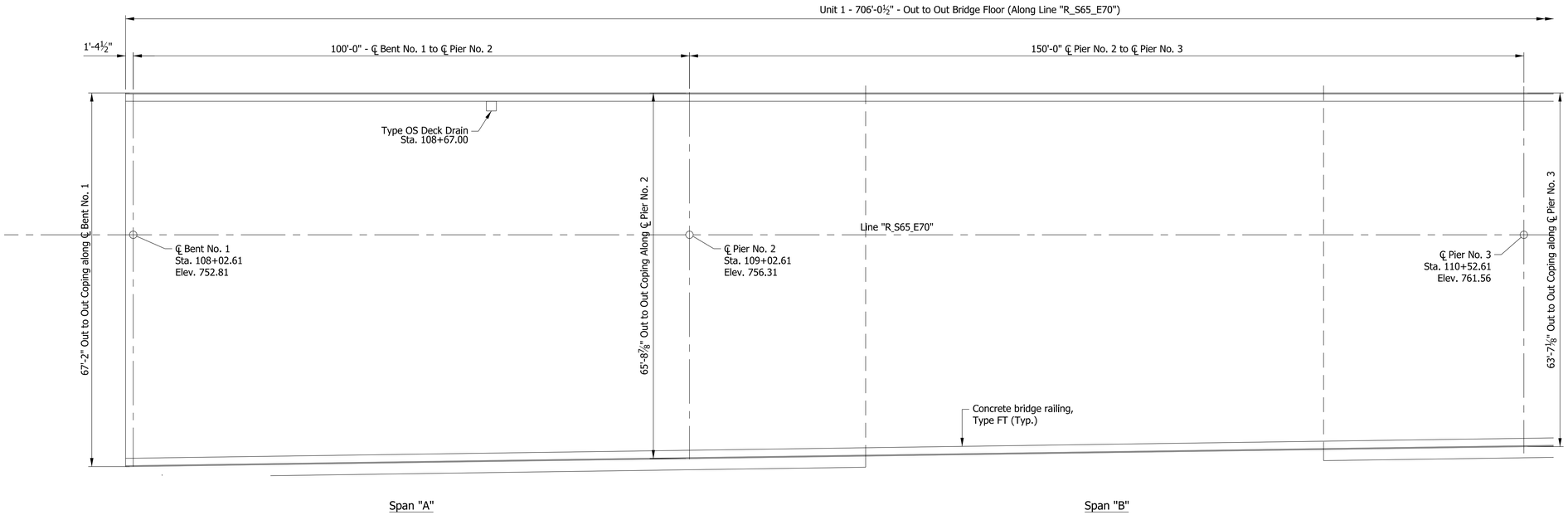
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS - UNIT 2
2 OF 2

HORIZONTAL SCALE	BRIDGE FILE
	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	22 of 30
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:40:51 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_22 - Beam Details.dgn

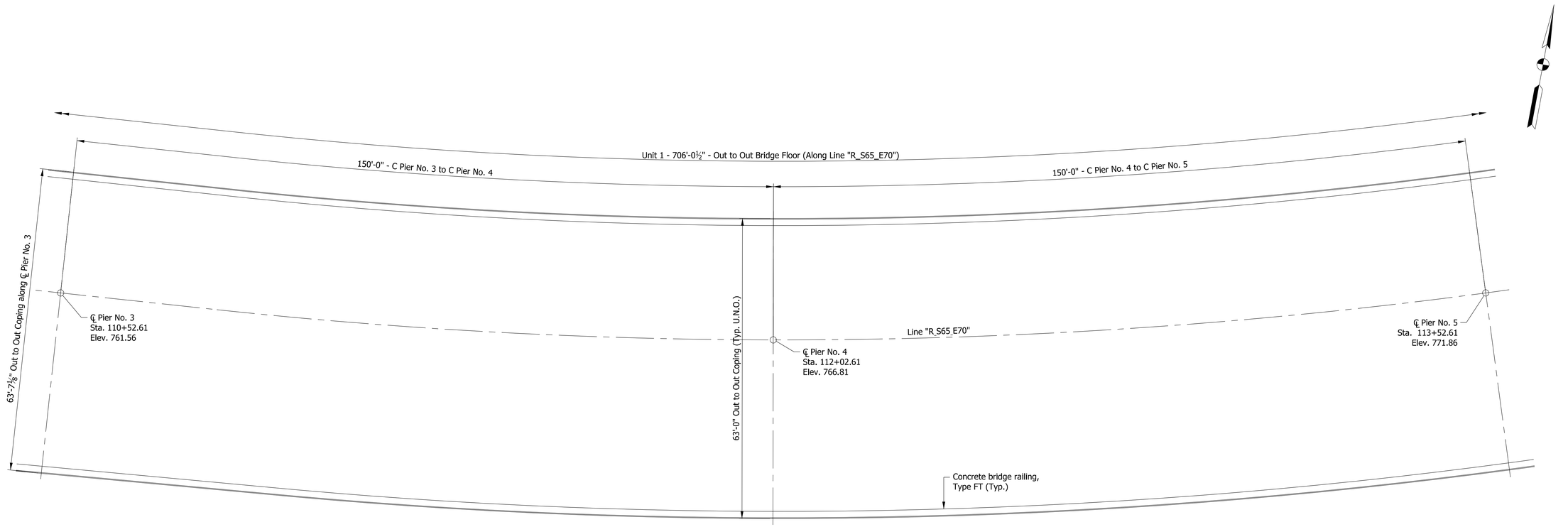


FLOOR PLAN

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 3/32" = 1'-0" / BRIDGE FILE: I65-112-10631 SBL
DESIGNED: SL	DRAWN: JNR	SUPERSTRUCTURE DETAILS 1 OF 5	VERTICAL SCALE: 3/32" = 1'-0" / DESIGNATION: 1901918
CHECKED: CML	CHECKED: SL		SURVEY BOOK / SHEETS: ELECTRONIC 23 of 30; CONTRACT / PROJECT: B-36910 / 1600808

Plot: 2/25/2020 5:40:53 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_23 - Deck Plan.dgn



FLOOR PLAN

Plot: 2/25/2020 5:40:54 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_24 - Deck Plan.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

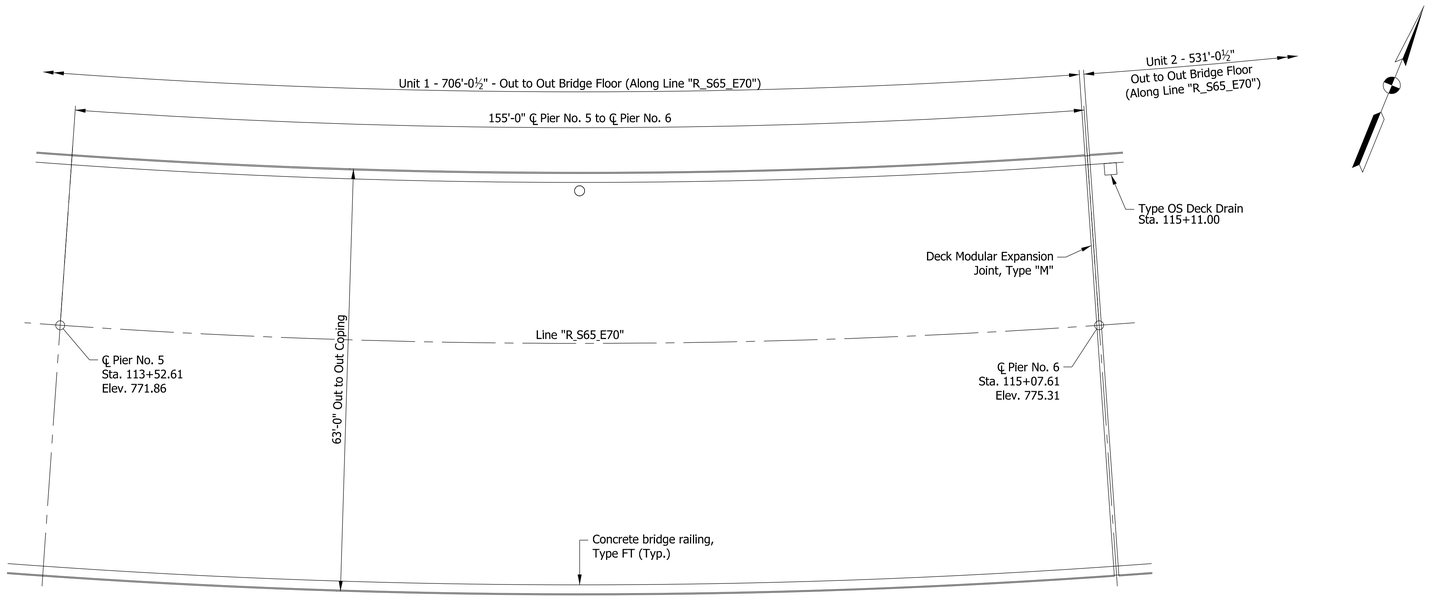
DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
2 OF 5

HORIZONTAL SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
3/32" = 1'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	24 of 30
CONTRACT	PROJECT
B-36910	1600808



Span "E"

FLOOR PLAN

NOTES:

1. Deck Modular Expansion Joint, Type "M" to be DS Brown D-160 or equivalent.

Plot: 2/25/2020 5:40:55 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

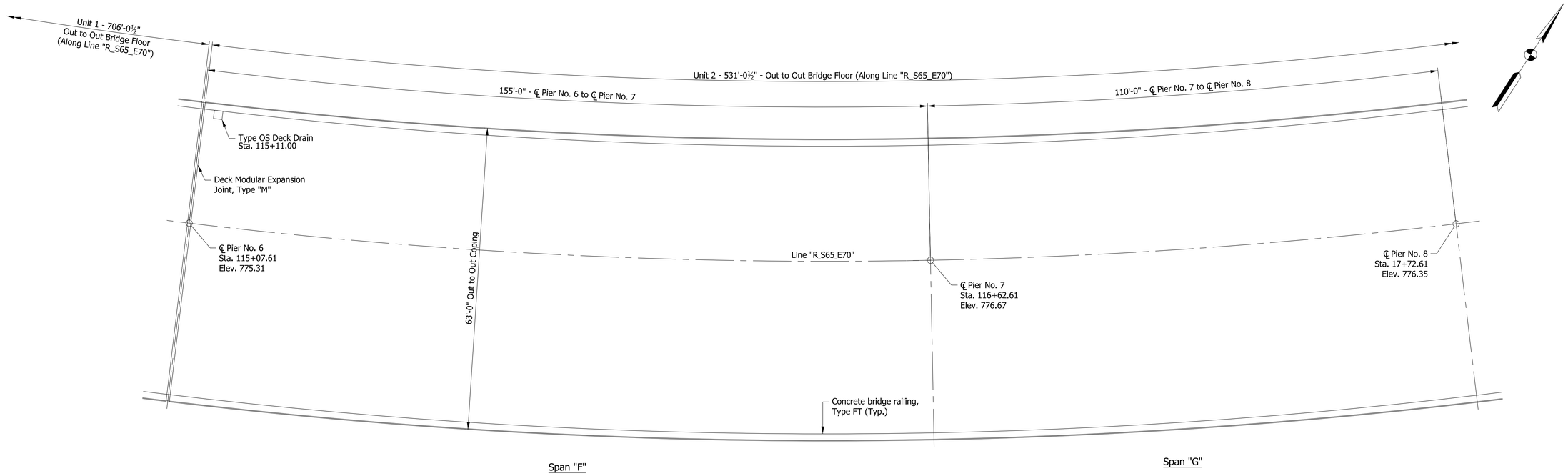
CHECKED: CML | CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
3 OF 5

HORIZONTAL SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
3/32" = 1'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	25 of 30
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_25 - Deck Plan.dgn



FLOOR PLAN

NOTES:

1. Deck Modular Expansion Joint, Type "M" to be DS Brown D-160 or equivalent.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

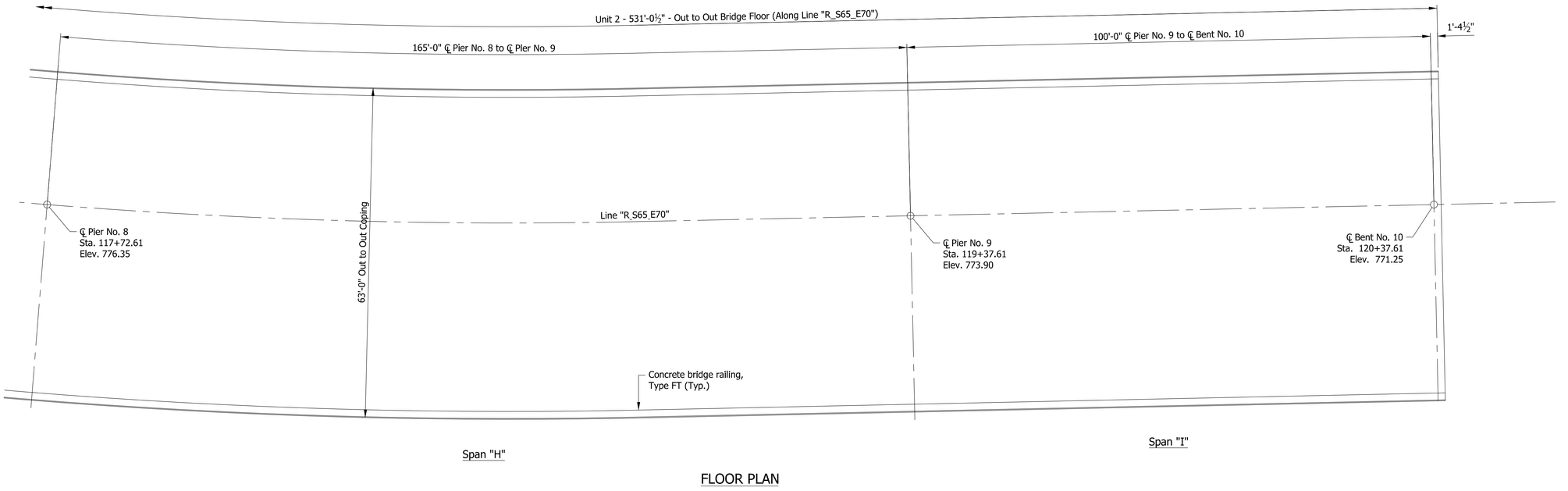
INDIANA
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
4 OF 5

HORIZONTAL SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
3/32" = 1'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	26 of 30
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:40:56 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_26 - Deck Plan.dgn



FLOOR PLAN

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: SL DRAWN: JNR

CHECKED: CML CHECKED: SL

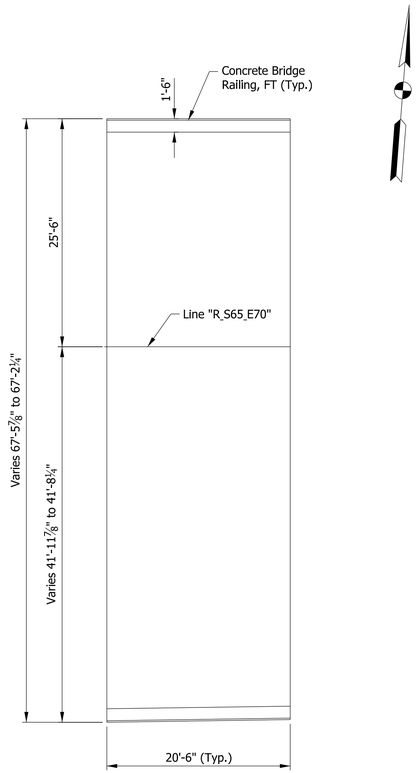
INDIANA
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
5 OF 5

HORIZONTAL SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
3/32" = 1'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	27 of 30
CONTRACT	PROJECT
B-36910	1600808

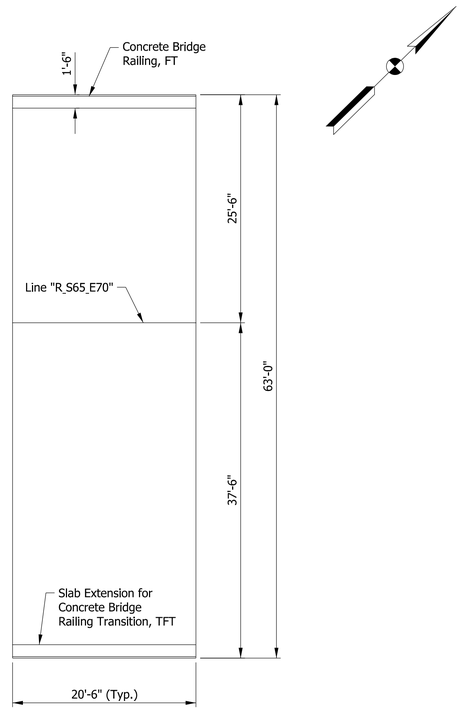
Plot: 2/25/2020 5:41:02 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_27 - Deck Plan.dgn



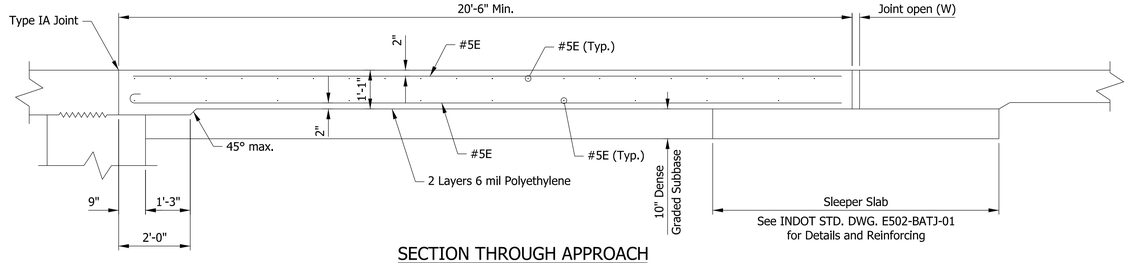
APPROACH SLAB AT END BENT NO. 1

Scale: ⅛" = 1'-0"



APPROACH SLAB AT END BENT NO. 2

Scale: ⅛" = 1'-0"



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTES:

1. For additional Terminal Joint information, see USP. Terminal Joint Details, Type CRCP.
2. Concrete Bridge Railing, Type FT sits on slab extension.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: SRR

CHECKED: CML | CHECKED: SL

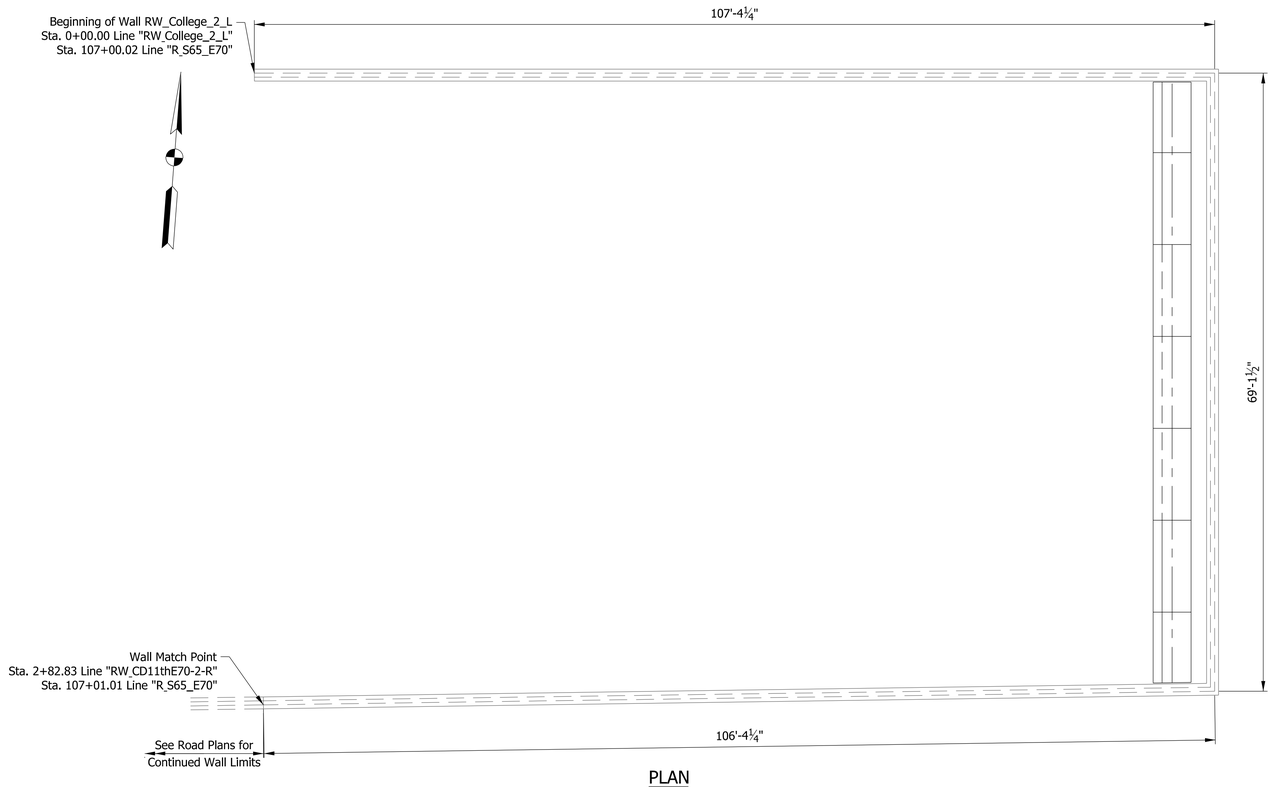
INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS

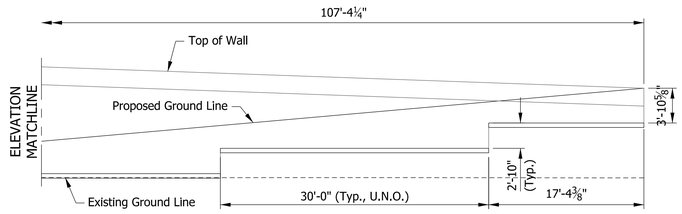
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
AS NOTED	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	28 of 30
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:41:03 PM

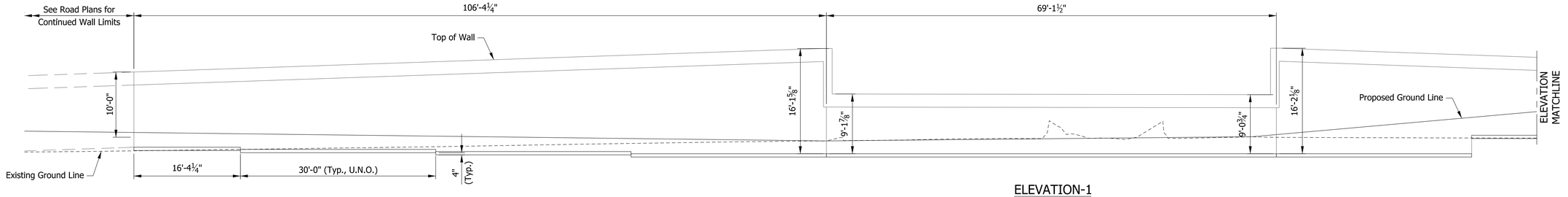
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_28 - Approach Slabs.dgn



PLAN



ELEVATION-2

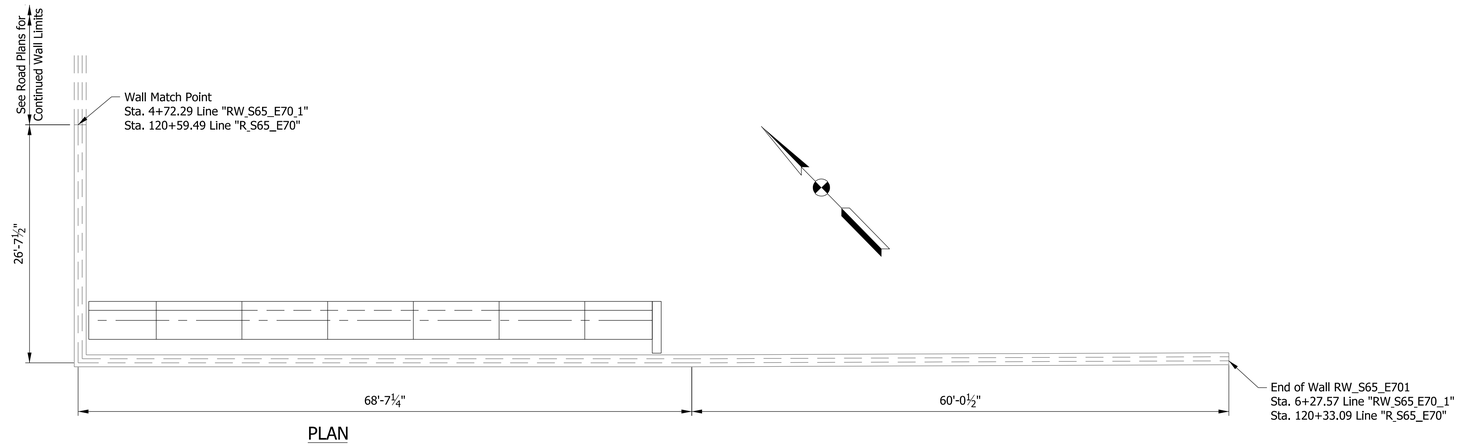


ELEVATION-1

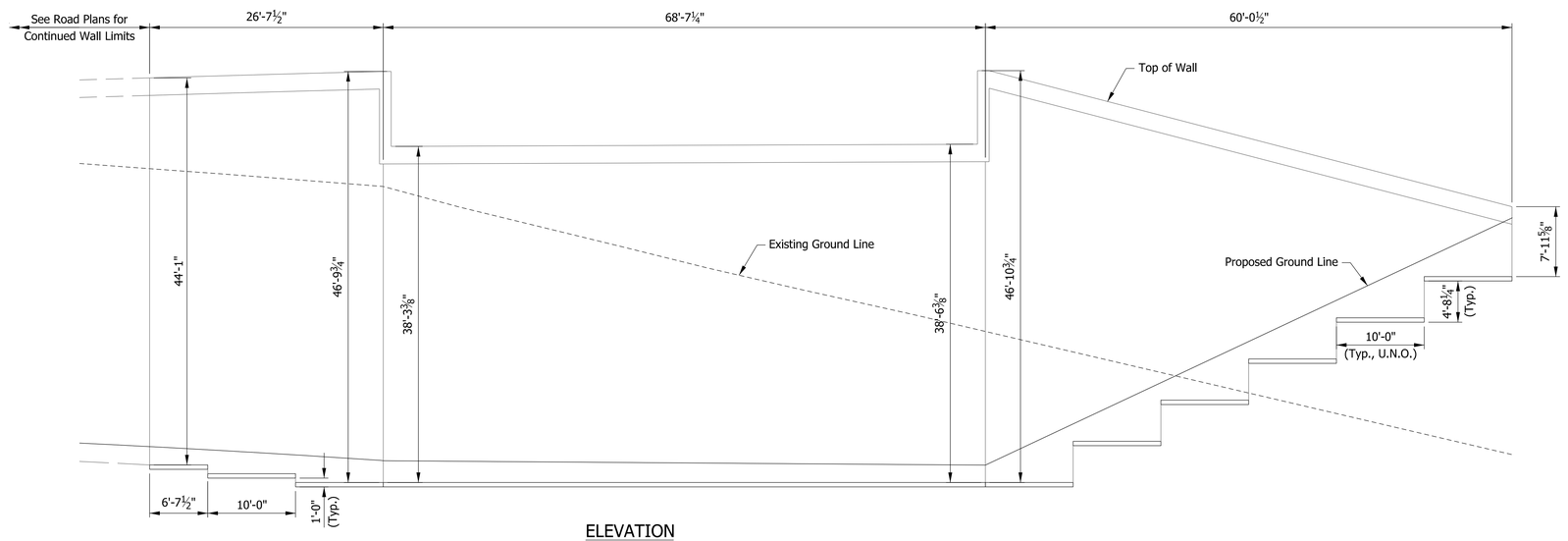
Plot: 2/25/2020 5:41:05 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE ⅛" = 1'-0"	BRIDGE FILE I65-112-10631 SBL
		VERTICAL SCALE ⅛" = 1'-0"	DESIGNATION 1901918
DESIGNED: SL / DRAWN: JNR	MSE WALL DETAILS BENT NO. 1	SURVEY BOOK	SHEETS
CHECKED: CML / CHECKED: SL		ELECTRONIC	29 of 30
		CONTRACT	PROJECT
		B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_29 - MSE Wall.dgn



PLAN



ELEVATION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

MSE WALL DETAILS
BENT NO. 10

HORIZONTAL SCALE	BRIDGE FILE
⅛" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
⅛" = 1'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	30 of 30
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:41:07 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_30 - MSE Wall.dgn

PROJECT	DESIGNATION
1600808	1901919
CONTRACT	BRIDGE FILE
B-36910	I65-112-10632 DNBL

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-65 N.B. AT: RP 111+72

PROJECT NO. 1600808 (P.E. & CONSTR.)

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACMENT ON I-65 N.B. OVER I-70 E.B. RAMP, LOCATED 1.43 MILES NORTH OF I-70 (SOUTH SPLIT) INTERCHANGE, IN SECTION 1, OF TOWNSHIP 15 NORTH, RANGE 3 EAST, CENTER TOWNSHIPS, IN MARION COUNTY INDIANA.

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I65-112-10632 DNBL	CONTINUOUS COMPOSITE PRESTRESSED CONC. BULB TEE	1 SPAN: 179'-8" SKEW: VARIES	I-70 W.B. & I-70 W.B. C.D.	120+23.50 Line "R_N65"

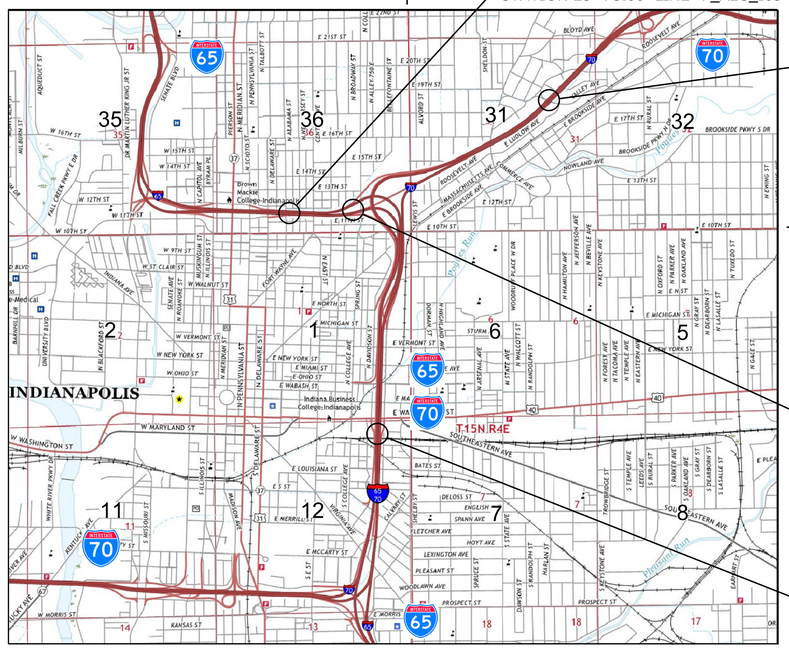
KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVENUE	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	BRIDGE REPLACEMENT ON I-65 SB TO I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE) - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER VERMONT STREET	

R-3-E R-4-E

END PROJECT NO. 1600808
STATION 25+75.00 LINE "P_ALG_I65"

END CONSTRUCTION PROJECT NO. 1600808
STATION 43+87.40 LINE "P_ALG_I70"

T-16-N
T-15-N



LOCATION MAP
(MARION COUNTY)

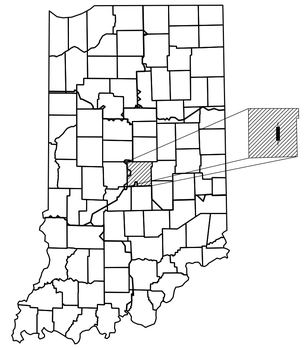
T-16-N
T-15-N

SCALE: 1" = 2000'

BRIDGE FILE NO. I65-112-10632 DNBL
I-65 N.B. OVER I-70 W.B. CD & S.B. CD

BEGIN PROJECT NO. 1600808
STATION 113+00.00 LINE "P_ALG_I65/I70"

TRAFFIC DATA		I-65 N.B.	I-70 W.B.	I-70 W.B. C.D.
A.A.D.T.	(2021)	34,480 V.P.D.	36,289 V.P.D.	26,092 V.P.D.
A.A.D.T.	(2041)	41,090 V.P.D.	43,111 V.P.D.	25,100 V.P.D.
D.H.V	(2041)	4,109 V.P.H.	3,880 V.P.H.	3,012 V.P.H.
DIRECTIONAL DISTRIBUTION		100 %	0 %	0 %
TRUCKS		3 % D.H.V.	15% D.H.V.	4 % D.H.V.
DESIGN DATA				
DESIGN SPEED		50 M.P.H.	55 M.P.H	50
PROJECT DESIGN CRITERIA		4R (FREEWAY)	4R (FREEWAY)	4R (FREEWAY)
FUNCTIONAL CLASSIFICATION		FREEWAY	FREEWAY	FREEWAY
RURAL/URBAN		URBAN	URBAN	URBAN
TERRAIN		LEVEL	LEVEL	LEVEL
ACCESS CONTROL		FULL CONTROL	FULL CONTROL	FULL CONTROL



PROJECT LOCATION SHOWN BY MARION COUNTY

LATITUDE: XXX LONGITUDE: XXX

BRIDGE LENGTH:	.034	MI.
ROADWAY LENGTH:	SEE ROAD PLANS	MI.
TOTAL LENGTH:	SEE ROAD PLANS	MI.
MAX. GRADE:	8.00	%

HYDROLOGIC UNIT CODE: 05120201130020

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

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: JANSSEN AND SPAANS ENGINEERING, INC. 317-254-9686 PHONE NUMBER

CERTIFIED BY: _____ DATE

RECOMMENDED FOR LETTING: _____ INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE
I65-112-10632 DNBL
DESIGNATION
1901919

SURVEY BOOK	SHEETS
ELECTRONIC	1 of 16
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 1:36:13 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_01 - Title.dgn

UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE SHEET
2	INDEX SHEET
3	MAINTENANCE OF TRAFFIC LAYOUT OVER THE BRIDGE
4	LAYOUT SHEET
5	GENERAL PLAN
6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 3 DETAILS
9	BENT NO. 1 & 3 DETAILS
10	PIER NO. 2 DETAILS
11	FRAMING PLAN
12	BEAM DETAILS
13	SUPERSTRUCTURE DETAILS
14	APPROACH SLAB DETAILS
15	MSE WALL DETAILS - BENT NO. 1
16	MSE WALL DETAILS - BENT NO. 3

REVISIONS

SHEET NO.	DATE	REVISED

811 Know what's below. Call before you dig.

INDIANA UNDERGROUND
1-800-382-5544 OR CALL 811
24 HOURS A DAY 7 DAYS A WEEK

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: JNR

CHECKED: CML CHECKED: ZGC

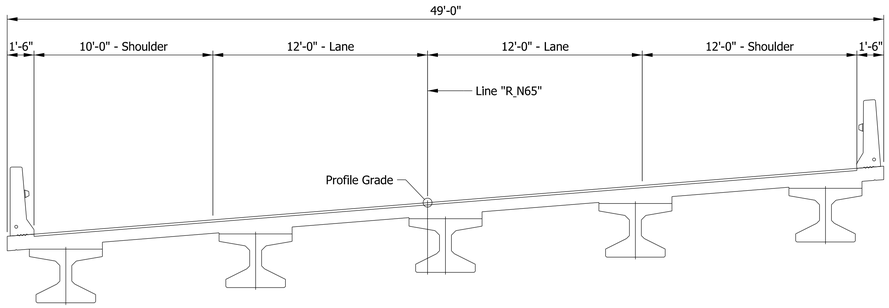
INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

SCALE	BRIDGE FILE
	I65-112-10632 DNBL
	DESIGNATION
	1901919
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 16
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 1:36:17 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_02 - Index.dgn



TYPICAL SECTION - PHASE 2B CONSTRUCTION

Plot: 2/26/2020 1:36:18 PM

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: JNR

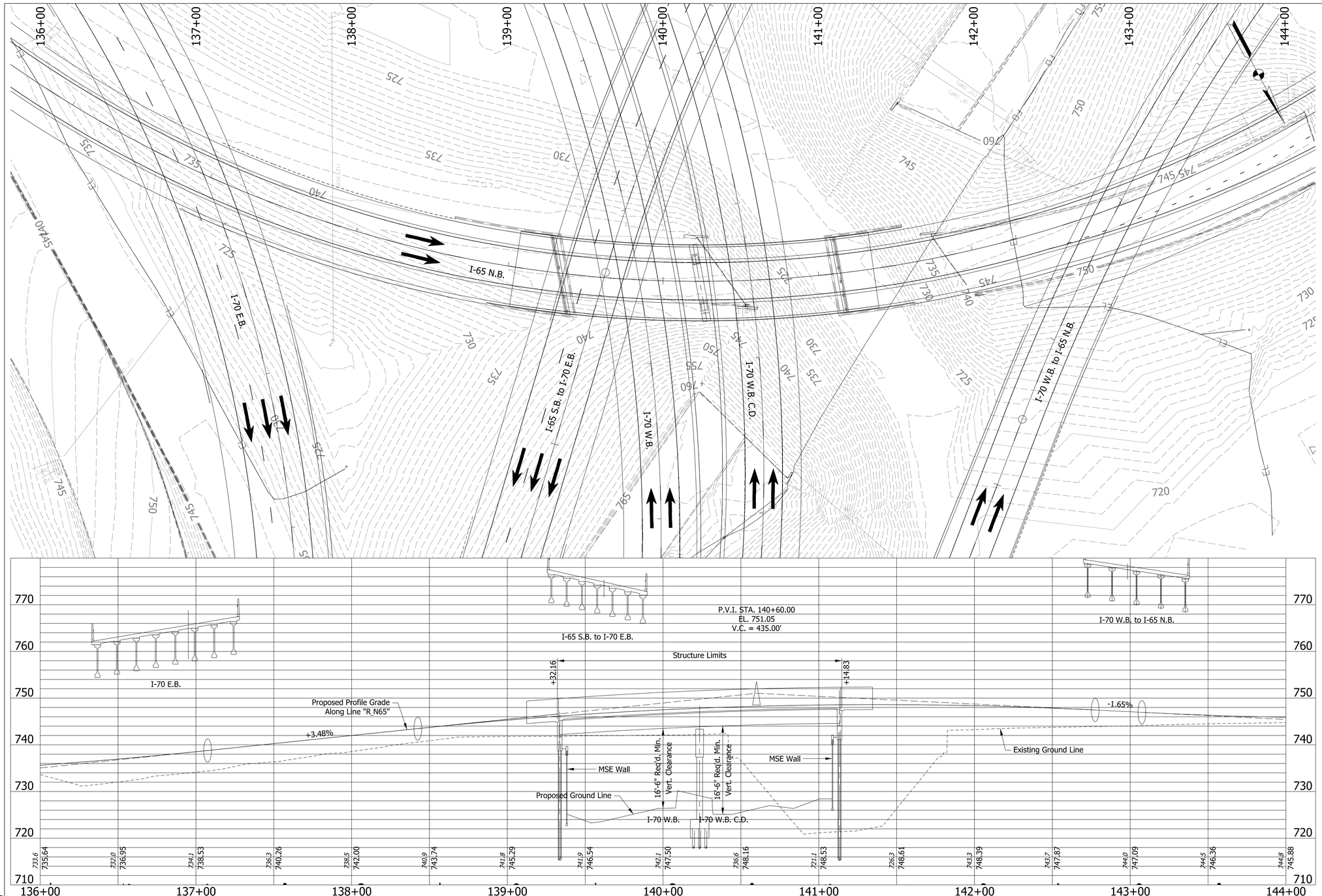
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
¼" = 1'-0"	I65-112-10632 DNBL
VERTICAL SCALE	DESIGNATION
¼" = 1'-0"	1901919
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 16
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_03 - MOT Sections.dgn



EXISTING STRUCTURE:

The existing structure was built in 1974, had a rehabilitation in 1989 & 2003. It had fire damage repair in 2016. The structure is 2 span continuous composite 33" WF steel beam bridge. Span lengths are 82'-0" & 82'-0". Clear roadway width is 39'-6". Total structure length is 168'-3⅛". The existing structure is to be removed. Existing plans are on file with the Indiana D epartment of Transportation under bridge file no. I -65-113-5747, I-65-113-5747a, I-65-113-5747b and I -65-113-5747c.

EARTHWORK TABULATION

FILL +20%	(See Road Plans)
COMMON EXCAVATION	(See Road Plans)
EXCAVATION, FOUNDATION, UNCLASSIFIED (70%)	(See Road Plans)
WASTE-	(See Road Plans)

HORIZONTAL CURVE DATA FOR LINE "R_N65"

P.I. = STA. 145+01.92
P.R.C. = STA. 131+49.74
P.T. = STA. 147+74.07
R = 772.00
L = 1624.33
△ = 120°33'12" Lt.
T = 1352.18

NOTES:

1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
3. There shall be no clearing of trees beyond construction limits.
4. All topography is existing.
5. All r/w described from line "R_N65", except as noted.
6. For vertical profile and horizontal curve data on lines "R_W70_CDS65" and "R_W70", see sheet no. 5.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
2 SPANS: 89'-10" & 89'-10"
SKEW: VARIES
CLEAR ROADWAY: 46'-0"
I-65 N.B. OVER I-70 W.B. & I-70 W.B. C.D. RAMP
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

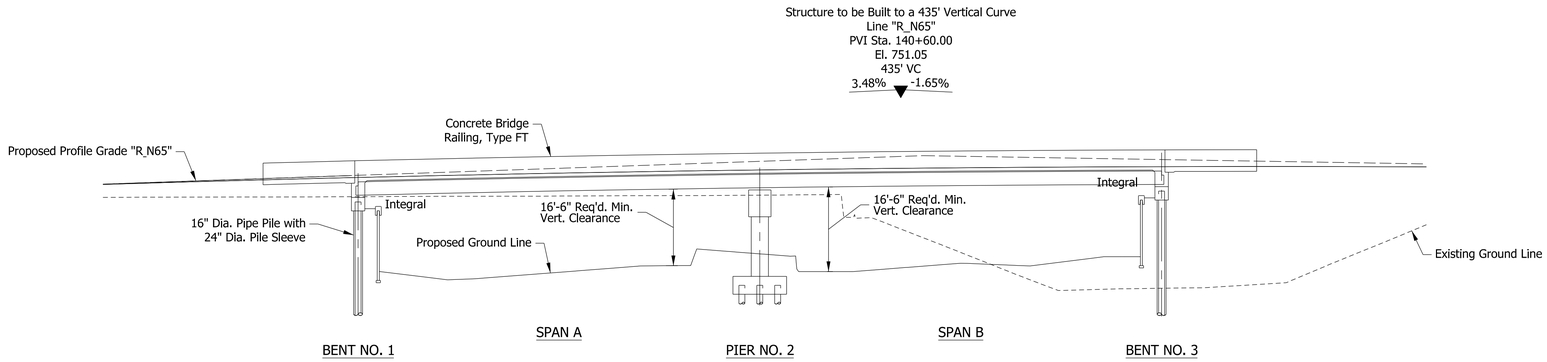
INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT
1 OF 2

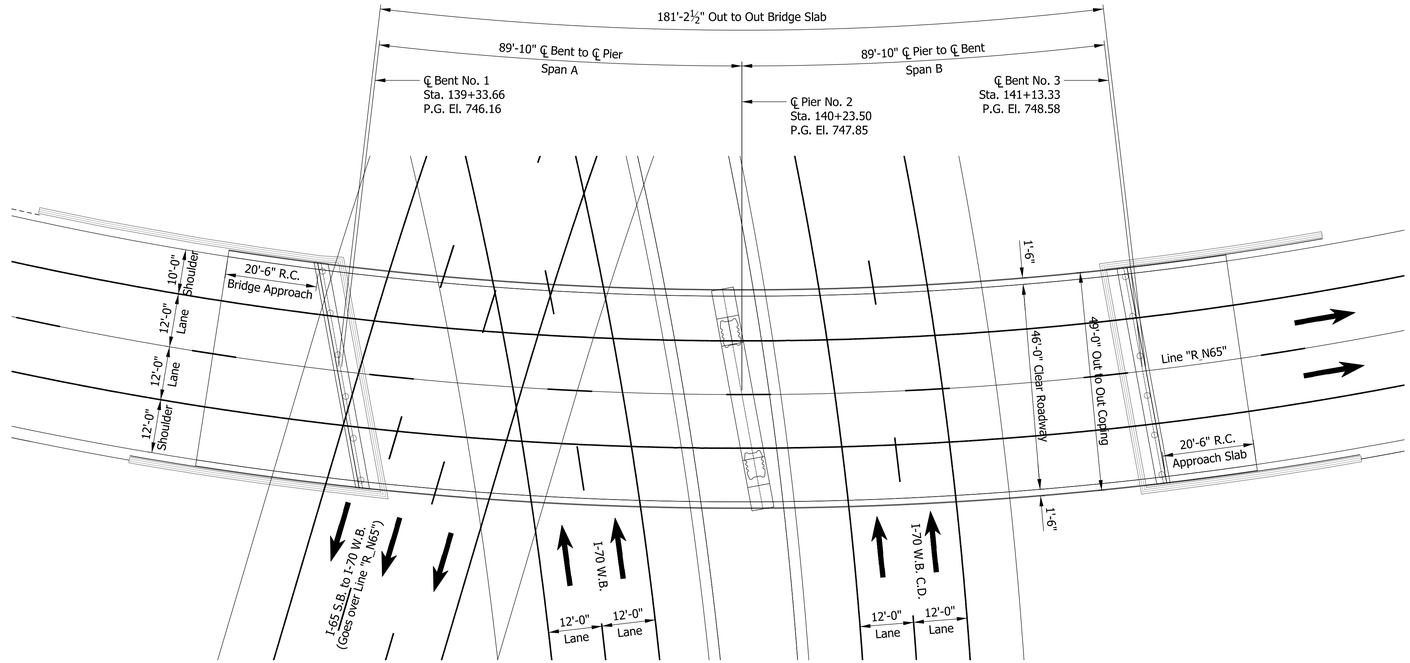
HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	I65-112-10632 DNBL
VERTICAL SCALE	DESIGNATION
1" = 10'-0"	1901919
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 16
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 1:36:27 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_04 - Layout.dgn



ELEVATION



PLAN

NOTES:

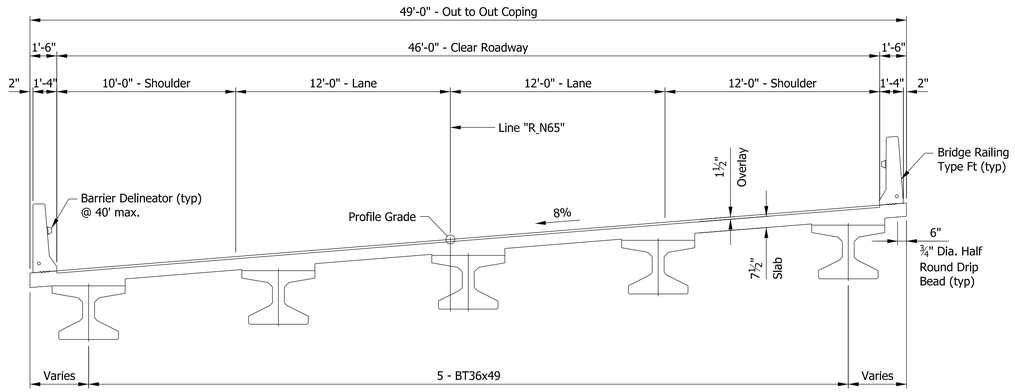
1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
4. There shall be no clearing of trees beyond construction limits.
5. All topography is existing.
6. All R/W described from line "R_E70", except as noted.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
2 SPANS: 89'-10" & 89'-10"
SKEW: VARIES
CLEAR ROADWAY: 46'-0"
I-65 N.B. OVER I-70 W.B. & I-70
W.B. C.D. RAMP
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
		1/16" = 1'-0"	I65-112-10632 DNBL
		VERTICAL SCALE	DESIGNATION
		1/16" = 1'-0"	1901919
DESIGNED: ZGC DRAWN: JNR	GENERAL PLAN	SURVEY BOOK	SHEETS
		ELECTRONIC	5 of 16
CHECKED: CML CHECKED: ZGC		CONTRACT	PROJECT
		B-36910	1600808

Plot: 2/26/2020 1:37:16 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_05 - General Plan.dgn



TYPICAL SECTION

GENERAL NOTES

Reinforcing bar cover shall be 2" min. in top and 1" min. in bottom of floor slabs, 3" min. in footing except bottom bars which shall be 4" min, and 2" min. in al other parts, unless noted.

All dimensions and elevations are in feet (FT) unless otherwise noted.

Concrete in floor slab, diaphragms, barrier, approach slab, and end bents shall be and alternative class "C" in accordance with the technical provisions. Reinforcing bars in deck, barrier, and end bent diaphragm extending into the deck shall be stainless steel. reinforcing bars in end bent diaphragm not extending into the deck and in the cap shall be epoxy coated.

Anti-graffiti coating shall be placed on all exposed surfaces of new retaining walls and new bridge structures excluding top of deck or overlay and interior beams.

For aesthetics associated with the bridge opening, see Bridge Opening Aesthetics Plan package.

DESIGN DATA

Live Load
Superstructure and Substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications Eight Edition, 2017 & subsequent interim.

Dead Load
Designed for actual dead load plus 15 PSF for SIP metal deck forms.

Slab designed with a 7½" structural depth and a 1½" very early strength LMC overlay.

SEISMIC DESIGN DATA

Seismic Performance Zone = 1
Acceleration Coefficient = 0.061
Seismic Soil Profile Type = Site Class C

DESIGN STRENGTHS

Prestressed Concrete	f'c = 10,000 psi @ 28 Days
Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,000 psi
Class "C" Concrete	f'c = 4,000 psi
Rienforcing Bars	fy = 60,000 psi (barrier)
Reinforcing Bars	fy = 75,000 psi (all other locations)

CONSTRUCTION LOADING

The exterior beam must be 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 beam. The finishing machine was assumed to be supported 6" past the edge of 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 beam bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/sft for permanent metal stay in place deck forms, removable deck forms, and 2-ft exterior walkway.
Construction Live Load:	Designed 20 lb/sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of 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 AASHTO LRFD3.8.1.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
2 SPANS: 89'-10" & 89'-10"
SKEW: VARIES
CLEAR ROADWAY: 46'-0"
I-65 N.B. OVER I-70 W.B. & I-70 W.B. C.D. RAMP
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

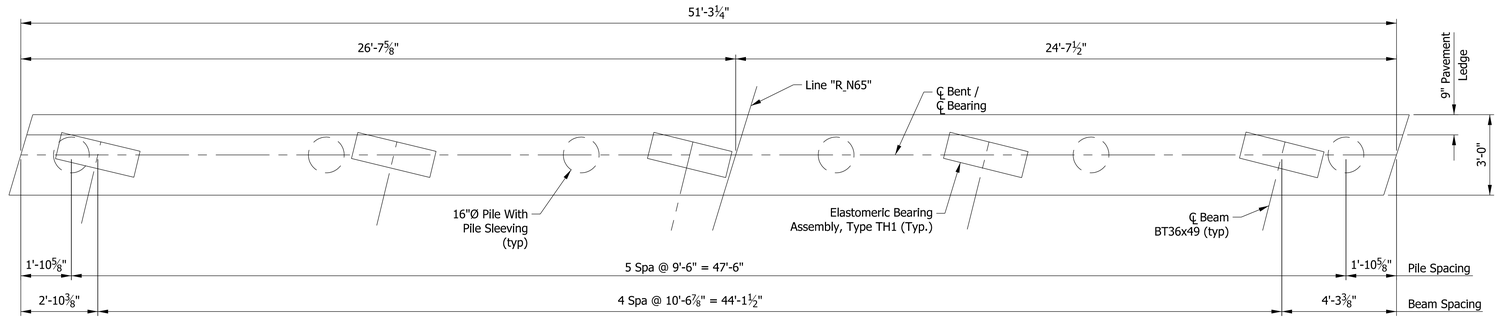
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
TYPICAL SECTION

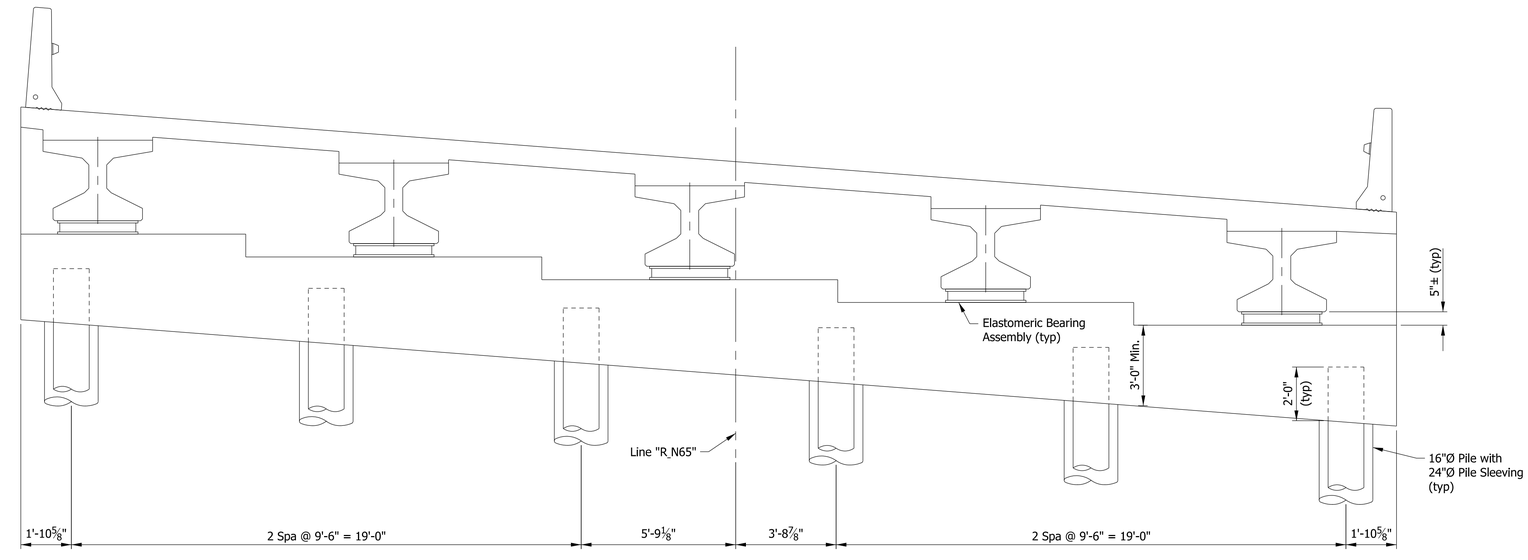
HORIZONTAL SCALE	BRIDGE FILE
¼" = 1'-0"	I65-112-10632 DNBL
VERTICAL SCALE	DESIGNATION
¼" = 1'-0"	1901919
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 16
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 1:37:17 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_06 - General Plan.dgn



PLAN

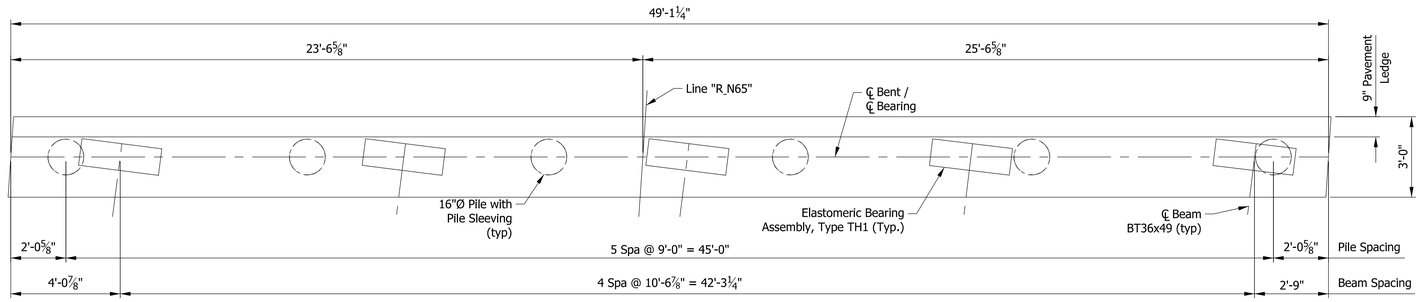


SECTION ALONG ℄ BENT

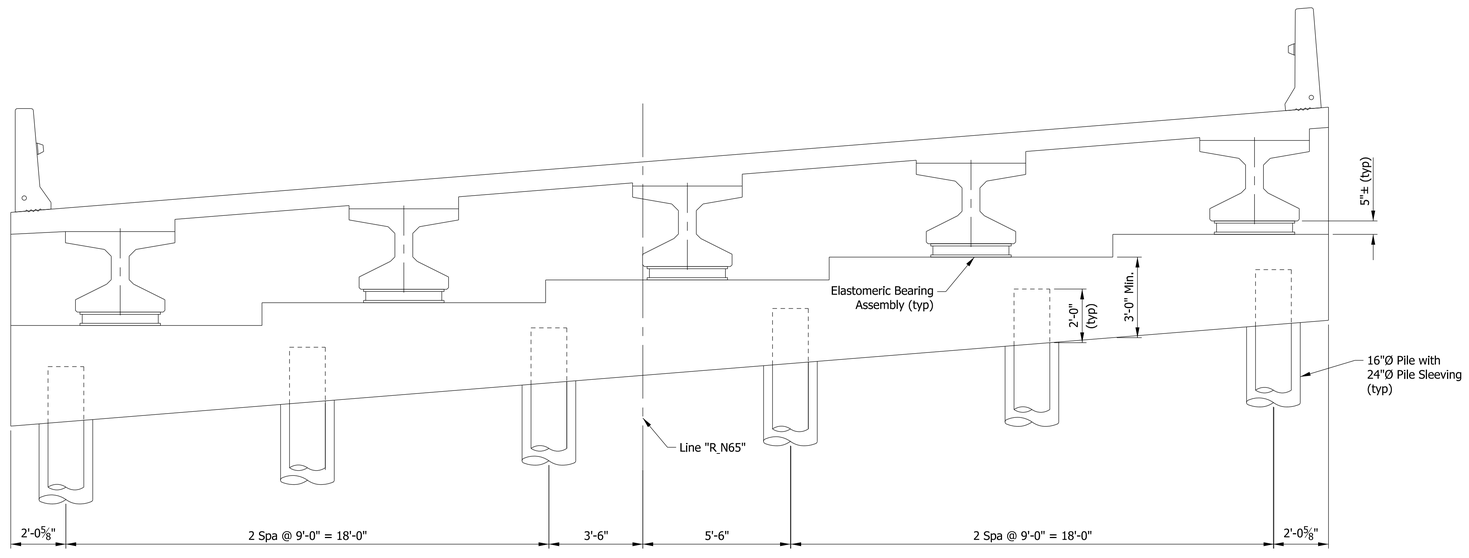
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
		⅜" = 1'-0"	I65-112-10632 DNBL
		VERTICAL SCALE	DESIGNATION
		⅜" = 1'-0"	1901919
DESIGNED: ZGC DRAWN: SRR	BENT NO. 1 DETAILS	SURVEY BOOK	SHEETS
		ELECTRONIC	7 of 16
CHECKED: CML CHECKED: ZGC		CONTRACT	PROJECT
		B-36910	1600808

Plot: 2/26/2020 1:37:19 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_07 - Bent No. 1.dgn



PLAN

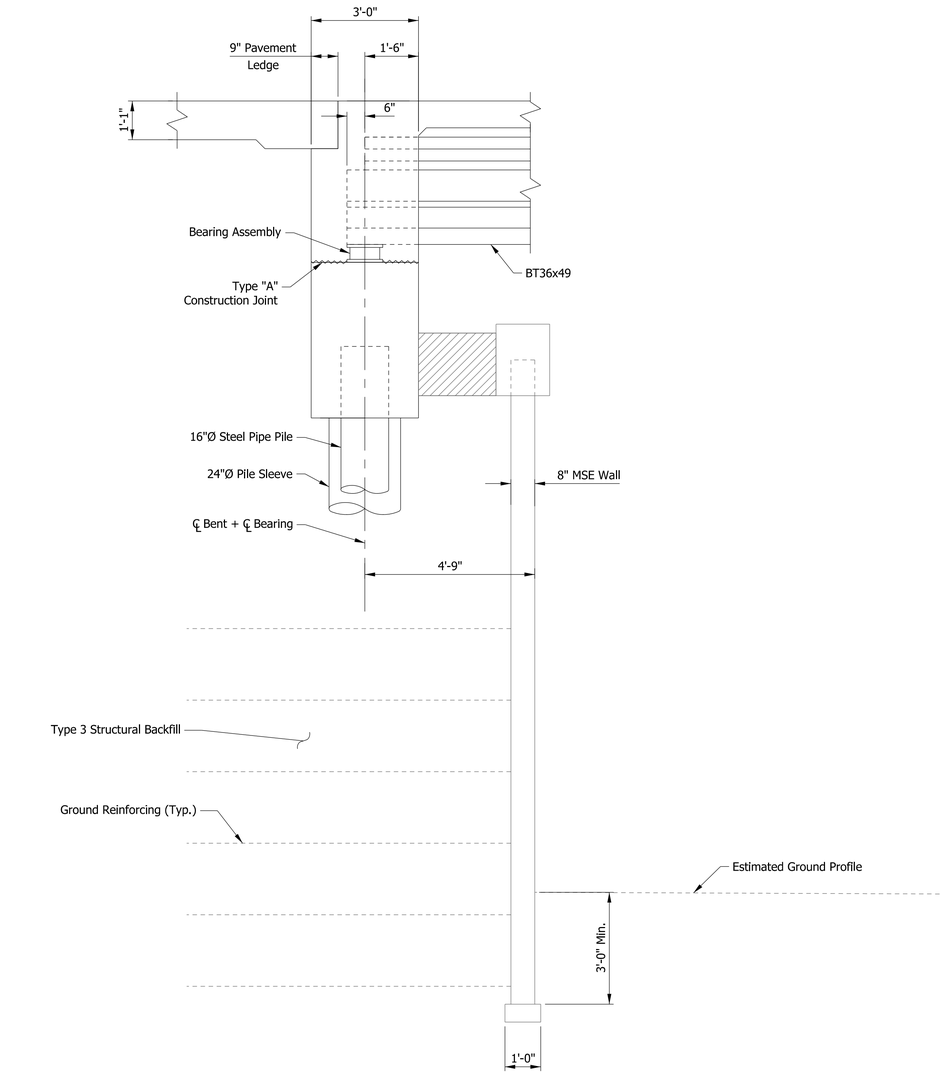


Section Along ℄ Bent

		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
				⅜" = 1'-0"	I65-112-10632 DNBL
				VERTICAL SCALE	DESIGNATION
				⅜" = 1'-0"	1901919
		DESIGNED: ZGC / DRAWN: SRR	BENT NO. 3 DETAILS	SURVEY BOOK	SHEETS
				ELECTRONIC	8 of 16
		CHECKED: CML / CHECKED: ZGC		CONTRACT	PROJECT
				B-36910	1600808

Plot: 2/26/2020 1:37:21 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_08 - Bent No. 3.dgn



TYPICAL SECTION

Plot: 2/26/2020 1:37:22 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_09 - Bent No. 1 & 3.dgn

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

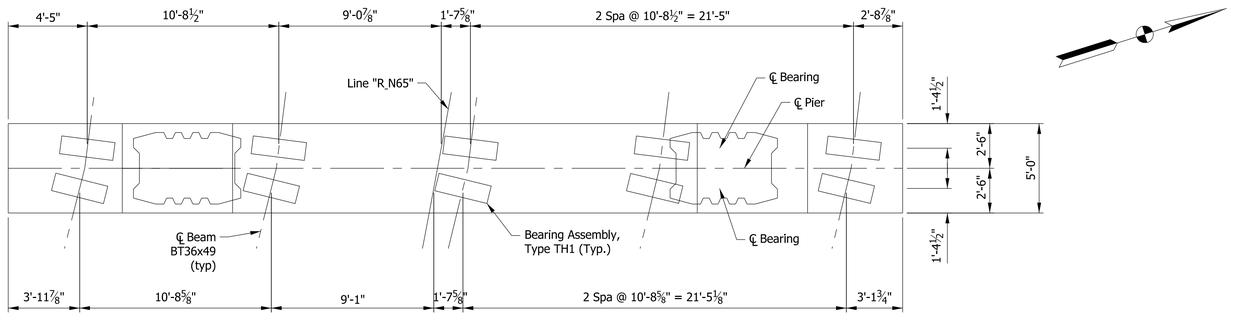
DESIGNED: ZGC DRAWN: SRR

CHECKED: CML CHECKED: ZGC

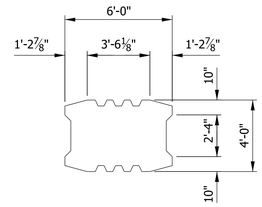
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 1 & 3 DETAILS

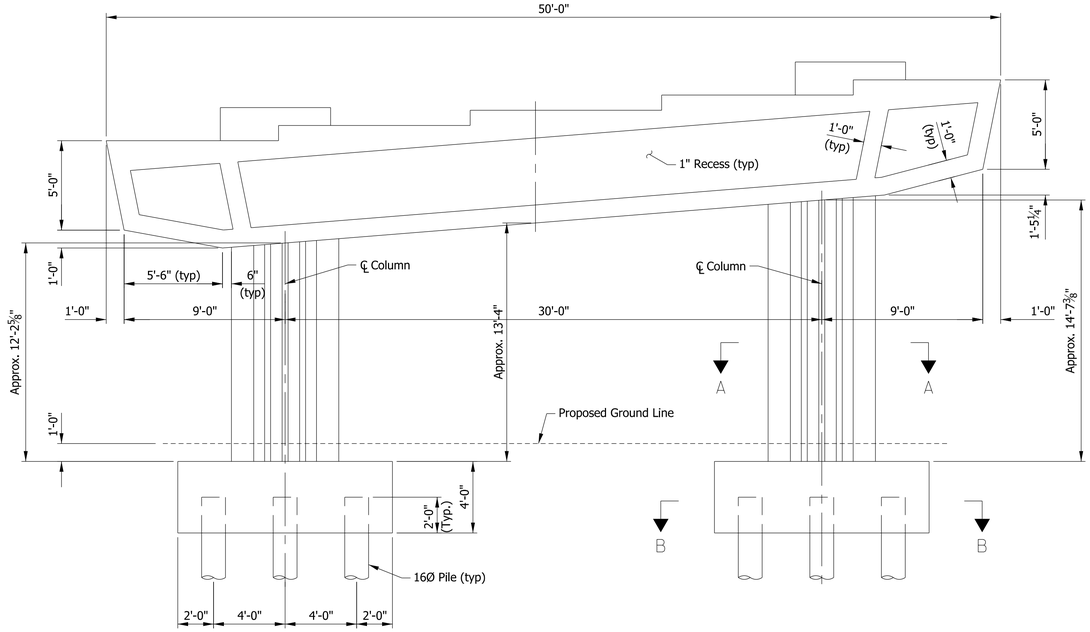
HORIZONTAL SCALE	BRIDGE FILE
½" = 1'-0"	I65-112-10632 DNBL
VERTICAL SCALE	DESIGNATION
½" = 1'-0"	1901919
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 16
CONTRACT	PROJECT
B-36910	1600808



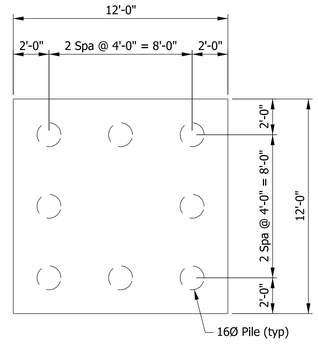
PLAN



SECTION A-A



ELEVATION

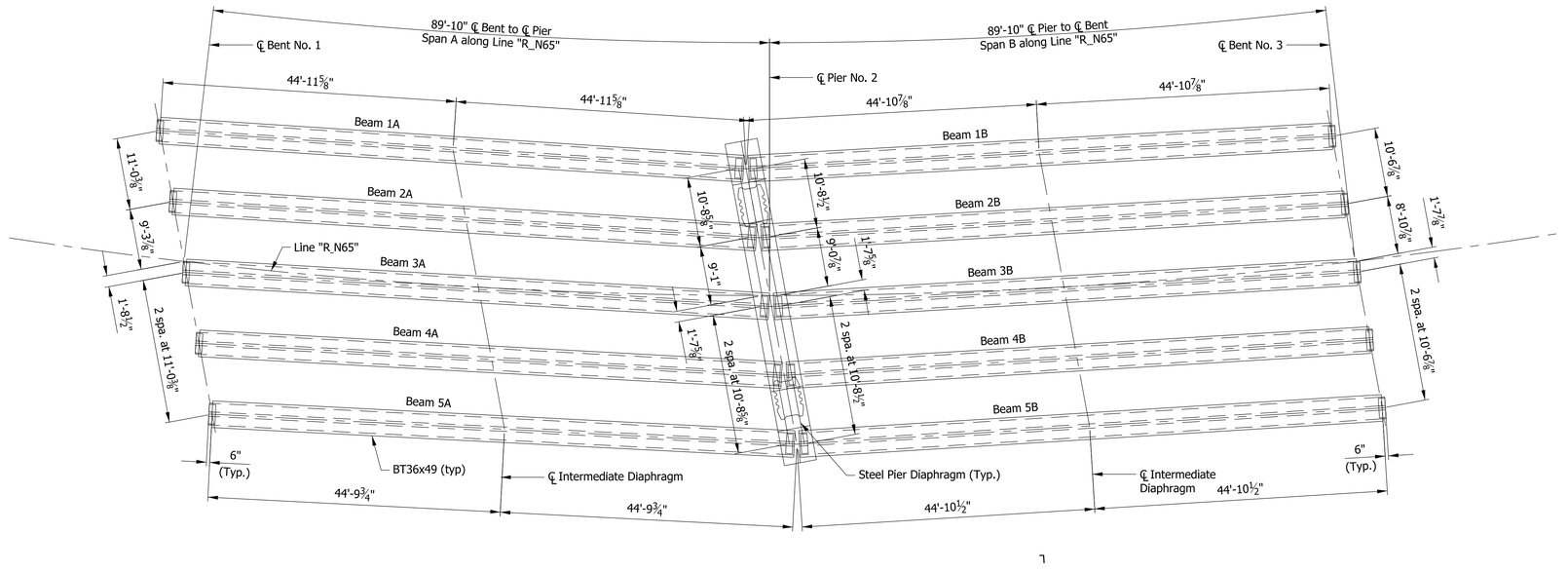


SECTION B-B

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: ¼" = 1'-0" / BRIDGE FILE: I65-112-10632 DNBL
DESIGNED: ZGC	DRAWN: SRR		VERTICAL SCALE: ¼" = 1'-0" / DESIGNATION: 1901919
CHECKED: CML	CHECKED: ZGC	PIER NO. 2 DETAILS	SURVEY BOOK / SHEETS
			ELECTRONIC: 10 of 16
			CONTRACT: B-36910 / PROJECT: 1600808

Plot: 2/26/2020 1:37:24 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_10 - Pier No. 2.dgn



FRAMING PLAN

NOTES:

1. For Intermediate Diaphragm Details, see Std. Dwg. E707-SDPC-01.

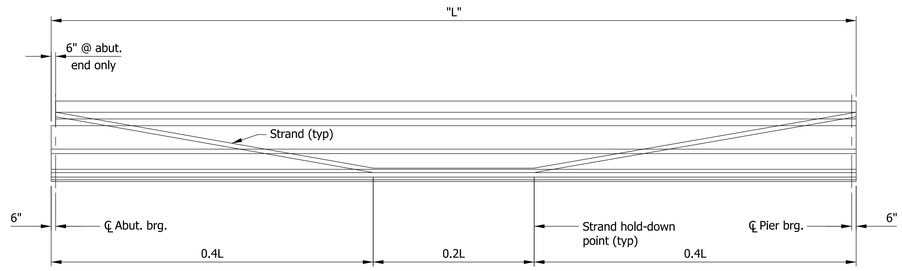
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	
DESIGNED: ZGC	DRAWN: JNR	FRAMING PLAN	
CHECKED: CML	CHECKED: ZGC		

HORIZONTAL SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10632 DNBL
VERTICAL SCALE	DESIGNATION
3/32" = 1'-0"	1901919
SURVEY BOOK	SHEETS
ELECTRONIC	11 of 16
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 1:37:26 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_11 - Framing.dgn

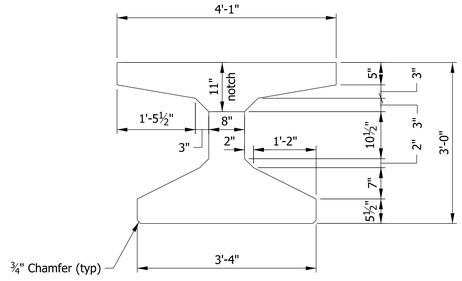
BEAM PLAN
Scale: ⅛" = 1'-0"



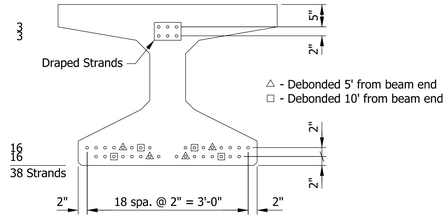
BEAM ELEVATION
Horizontal Scale: ⅛" = 1'-0"
Vertical Scale: ⅜" = 1'-0"

SPAN A BEAM LENGTHS	
Beam	"L"
Beam 1A	90'-0¼"
Beam 2A	89'-11⅜"
Beam 3A	89'-10½"
Beam 4A	89'-9⅝"
Beam 5A	89'-8⅝"

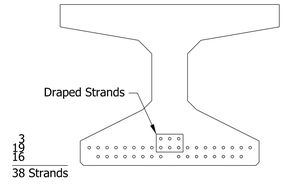
SPAN B BEAM LENGTHS	
BEAM	"L"
Beam 1B	89'-11⅛"
Beam 2B	89'-11"
Beam 3B	89'-10¾"
Beam 4B	89'-10½"
Beam 5B	89'-10⅜"



TYPICAL SECTION
Scale: ¾" = 1'-0"



STRAND PATTERN AT BEAM END
Scale: ¾" = 1'-0"



STRAND PATTERN AT MIDSPAN
Scale: ¾" = 1'-0"

NOTES:

1. Prestressing reinforcement shall be 0.6" dia., uncoated, seven wire, low relaxation 270 ksi with strand area = 0.217 sq. in.
2. Beam shall be cast a minimum of 120 days before deck is poured.

Plot: 2/26/2020 1:37:33 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: JNR

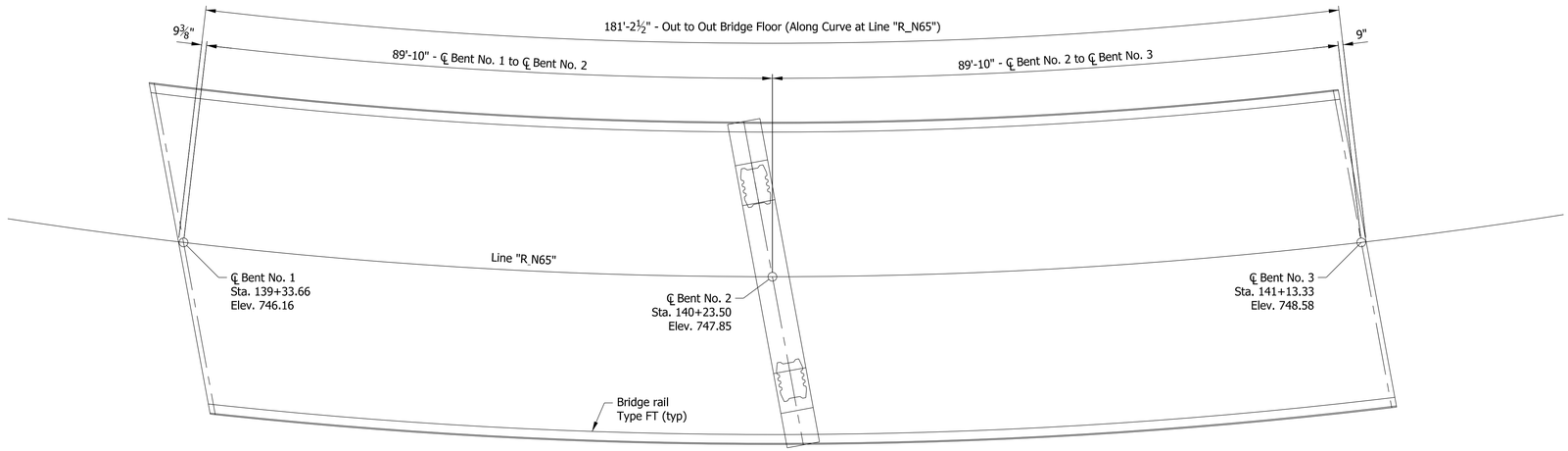
CHECKED: CML | CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I65-112-10632 DNBL
VERTICAL SCALE	DESIGNATION
	1901919
SURVEY BOOK	SHEETS
ELECTRONIC	12 of 16
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_12 - Beam Details.dgn



FLOOR PLAN

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

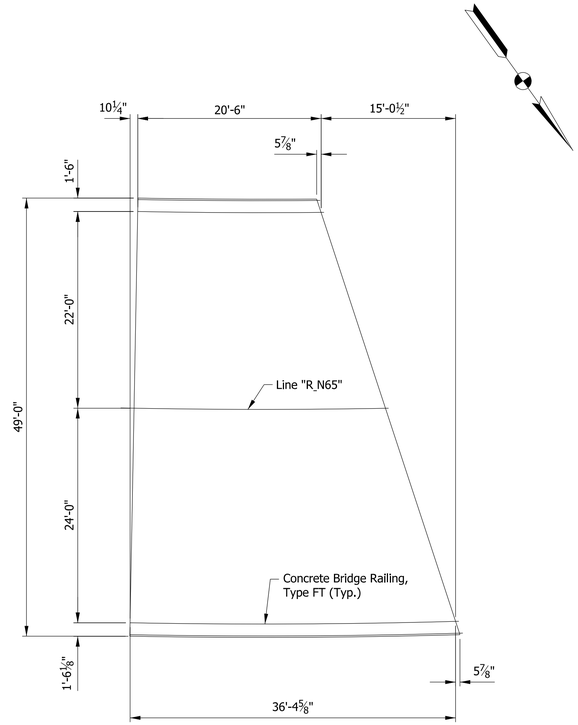
INDIANA
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

HORIZONTAL SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10632 DNBL
VERTICAL SCALE	DESIGNATION
3/32" = 1'-0"	1901919
SURVEY BOOK	SHEETS
ELECTRONIC	11 of 16
CONTRACT	PROJECT
B-36910	1600808

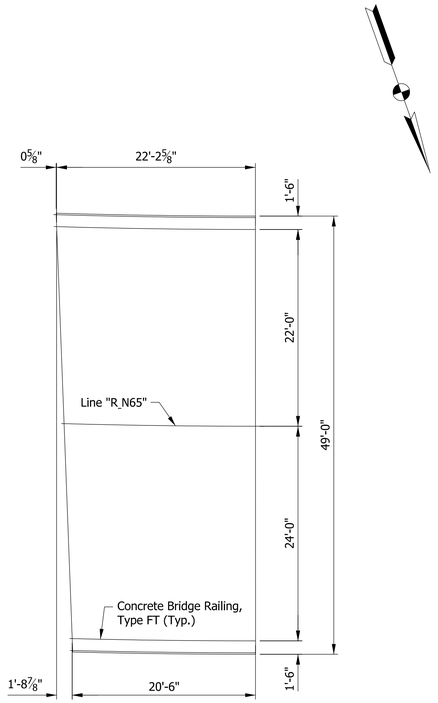
Plot: 2/26/2020 1:37:34 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_13 - Deck Plan.dgn



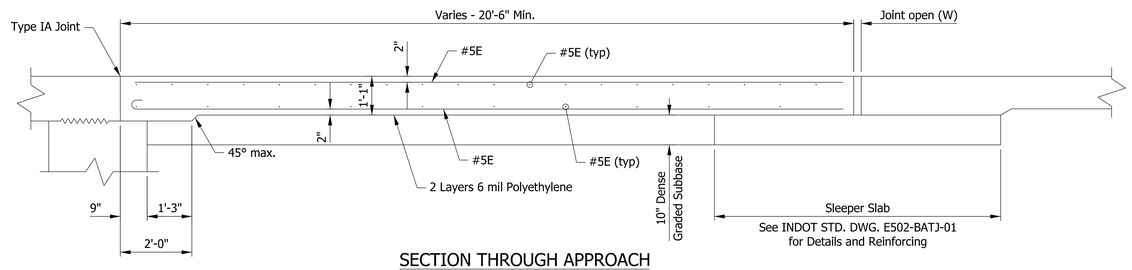
APPROACH SLAB AT END BENT NO. 1

Scale: ⅛" = 1'-0"



APPROACH SLAB AT END BENT NO. 2

Scale: ⅛" = 1'-0"



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTES:

1. For additional Terminal Joint information, see USP. Terminal Joint Details, Type CRCP.
2. Concrete Bridge Railing, Type FT sits on slab extension.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC | DRAWN: SRR

CHECKED: CML | CHECKED: ZGC

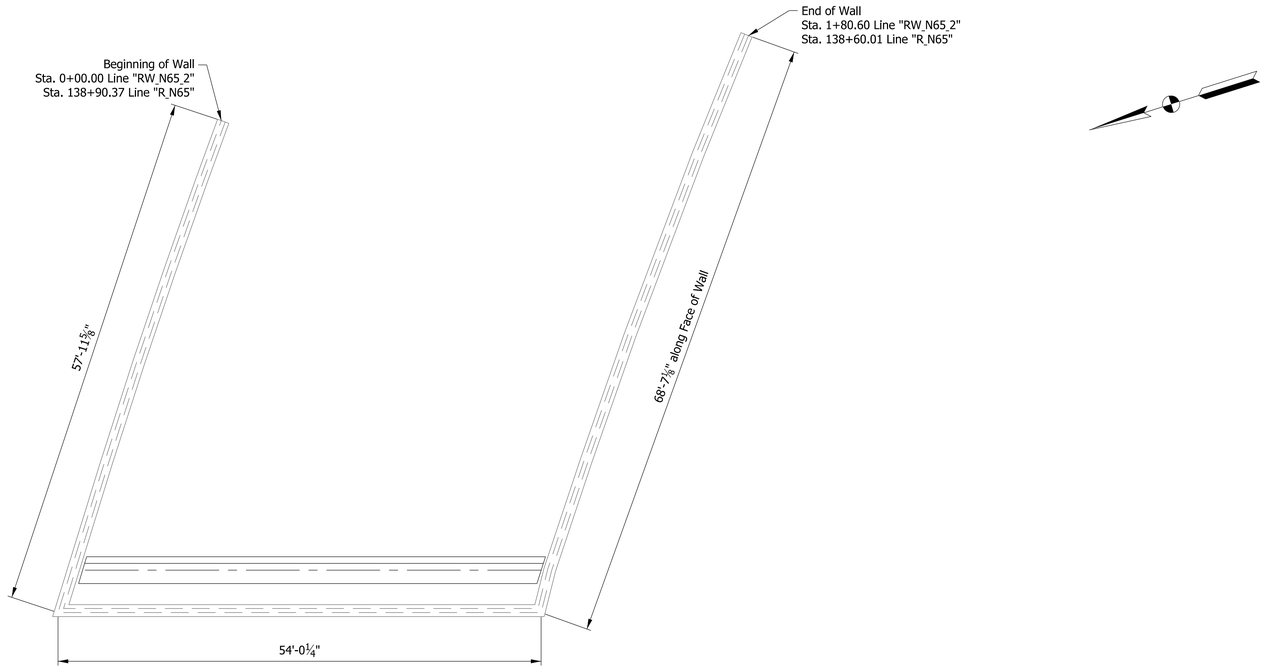
INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB
DETAILS

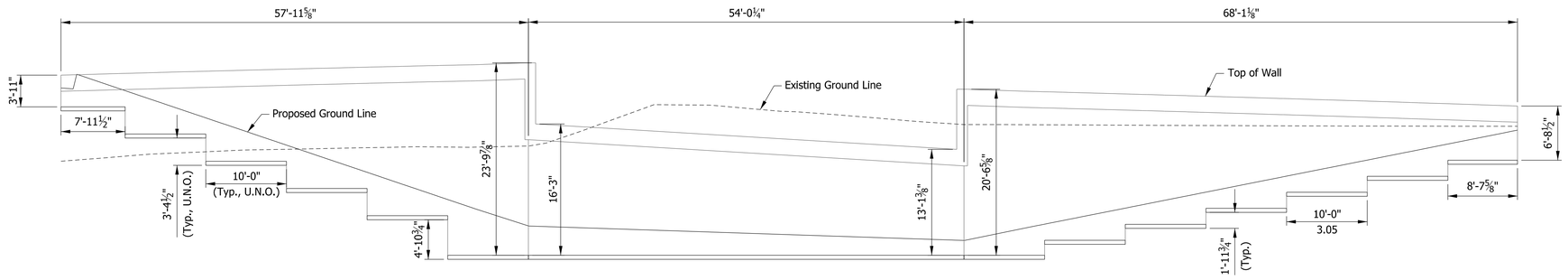
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I65-112-10632 DNBL
VERTICAL SCALE	DESIGNATION
AS NOTED	1901919
SURVEY BOOK	SHEETS
ELECTRONIC	14 of 16
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 1:37:35 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_14 - Approach Slabs.dgn



PLAN

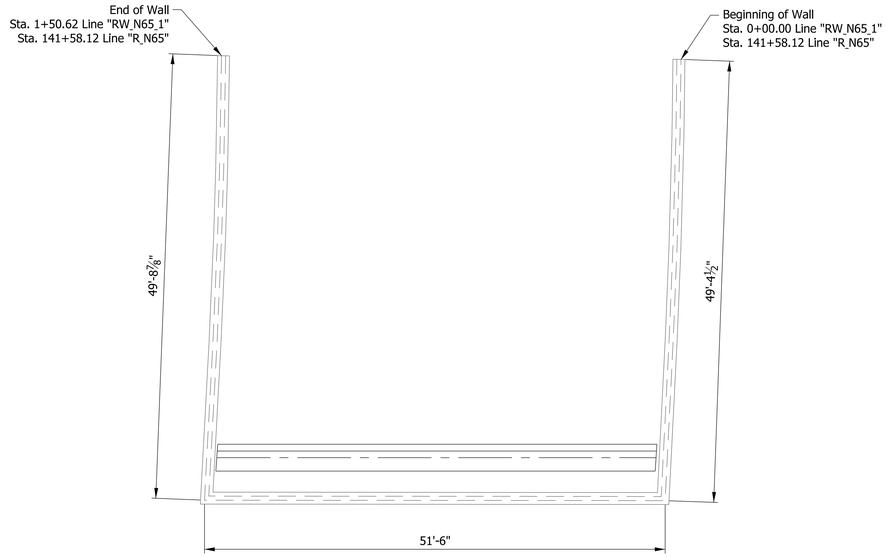


ELEVATION

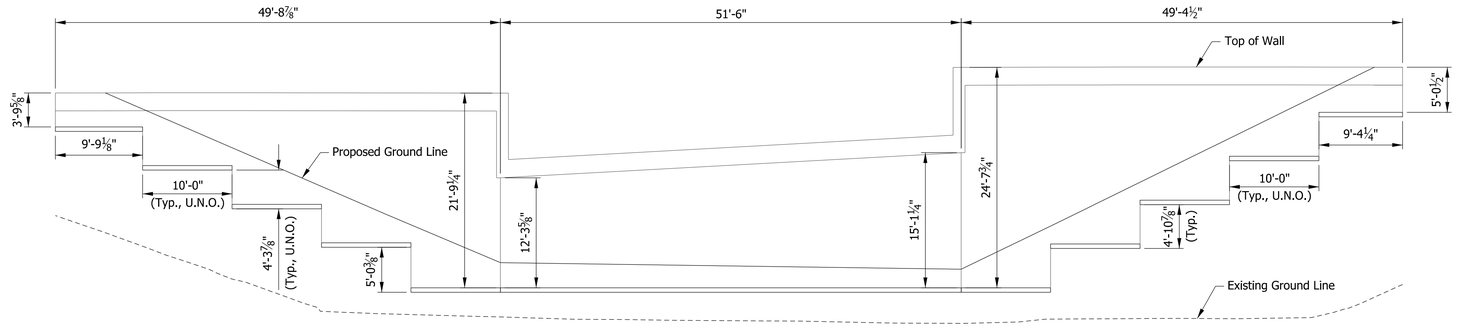
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: ⅛" = 1'-0"	BRIDGE FILE: I65-112-10632 DNBL
		VERTICAL SCALE: ⅛" = 1'-0"	DESIGNATION: 1901919
DESIGNED: ZGC / DRAWN: JNR / CHECKED: CML / CHECKED: ZGC	MSE WALL DETAILS BENT NO. 1	SURVEY BOOK	SHEETS: ELECTRONIC 15 of 16
		CONTRACT	PROJECT: B-36910 / 1600808

Plot: 2/26/2020 1:37:39 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_15 - MSE Wall.dgn



PLAN



ELEVATION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
		⅛" = 1'-0"	I65-112-10632 DNBL
		VERTICAL SCALE	DESIGNATION
		⅛" = 1'-0"	1901919
DESIGNED: ZGC / DRAWN: JNR	MSE WALL DETAILS BENT NO. 3	SURVEY BOOK	SHEETS
		ELECTRONIC	16 of 16
CHECKED: CML / CHECKED: ZGC		CONTRACT	PROJECT
		B-36910	1600808

Plot: 2/26/2020 1:37:42 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 35 I65 NB over I70 WB & SB CD\1901919_16 - MSE Wall.dgn

PROJECT	DESIGNATION
1600808	1901920
CONTRACT	BRIDGE FILE
B-36910	I65-112-10633 NBL

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I65-112-10633 NBL	CONTINUOUS COMPOSITE PRESTRESSED CONC. BULB TEE	1 SPAN: 126'-10" SKEW: VARIES	I-65 N.B.	121+96.54 Line "R_W70_N65"

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVENUE	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	BRIDGE REPLACEMENT ON I-65 SB TO I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE) - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER VERMONT STREET	

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

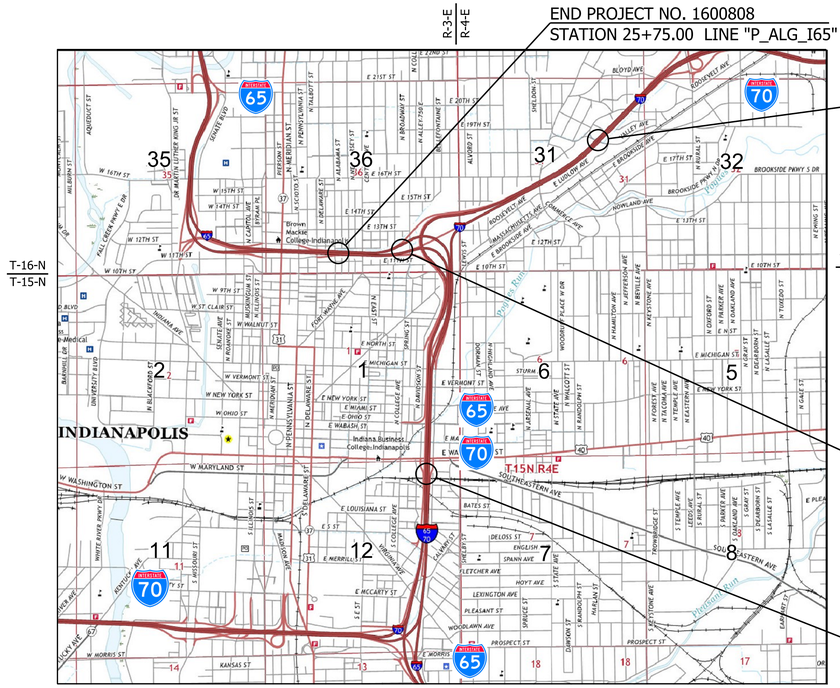
FOR SPANS OVER 20 FEET

ROUTE: I-70 W.B. AT: RP 111+72

PROJECT NO. 1600808 (P.E. & CONSTR.)

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACMENT ON I-65 N.B. OVER I-70 E.B. RAMP, LOCATED 1.43 MILES NORTH OF I-70 (SOUTH SPLIT) INTERCHANGE, IN SECTION 1, OF TOWNSHIP 15 NORTH, RANGE 3 EAST, CENTER TOWNSHIPS, IN MARION COUNTY INDIANA.



LOCATION MAP
(MARION COUNTY)

END PROJECT NO. 1600808
STATION 25+75.00 LINE "P_ALG_I65"

END CONSTRUCTION PROJECT NO. 1600808
STATION 43+87.40 LINE "P_ALG_I70"

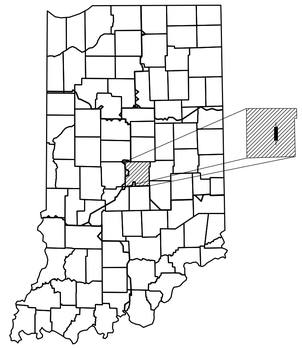
BRIDGE FILE NO. I65-112-10633 NBL
I-70 W.B. to I-65 OVER S.B. CD & I-70 W.B.

BEGIN PROJECT NO. 1600808
STATION 113+00.00 LINE "P_ALG_I65/I70"

T-16-N
T-15-N

SCALE: 1" = 2000'

TRAFFIC DATA		I-65 N.B.	I-70 W.B. to I-65 N.B.
A.A.D.T.	(2021)	34,480 V.P.D.	31,350 V.P.D.
A.A.D.T.	(2041)	41,090 V.P.D.	32,513 V.P.D.
D.H.V	(2041)	4,109 V.P.H.	2,601 V.P.H.
DIRECTIONAL DISTRIBUTION		100 %	100 %
TRUCKS		3 % D.H.V.	6 % D.H.V.
DESIGN DATA			
DESIGN SPEED		55 M.P.H.	55 M.P.H
PROJECT DESIGN CRITERIA		4R (FREEWAY)	4R (FREEWAY)
FUNCTIONAL CLASSIFICATION		FREEWAY	FREEWAY
RURAL/URBAN		URBAN	URBAN
TERRAIN		LEVEL	LEVEL
ACCESS CONTROL		FULL CONTROL	FULL CONTROL



PROJECT LOCATION SHOWN BY MARION COUNTY

LATITUDE: XXX LONGITUDE: XXX

BRIDGE LENGTH: 0.32 MI.
ROADWAY LENGTH: SEE ROAD PLANS MI.
TOTAL LENGTH: SEE ROAD PLANS MI.
MAX. GRADE: 7.60 %

HYDROLOGIC UNIT CODE: 05120201130020

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

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: JANSSEN AND SPAANS ENGINEERING, INC. 317-254-9686 PHONE NUMBER

CERTIFIED BY: _____ DATE

RECOMMENDED FOR LETTING: _____ INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE
I65-112-10633 NBL
DESIGNATION
1901920

SURVEY BOOK	SHEETS
ELECTRONIC	1 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:46:03 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_01 - Title.dgn

UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE SHEET
2	INDEX SHEET
3	MAINTENANCE OF TRAFFIC LAYOUT OVER THE BRIDGE
4	LAYOUT SHEET
5	GENERAL PLAN
6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 2 DETAILS
9	BENT NO. 1 & 2 DETAILS
10	FRAMING PLAN
11	BEAM DETAILS
12	SUPERSTRUCTURE DETAILS
13	APPROACH SLAB DETAILS
14	MSE WALL DETAILS - BENT NO. 1
15	MSE WALL DETAILS - BENT NO. 2

REVISIONS

SHEET NO.	DATE	REVISED

811 Know what's below. Call before you dig.

INDIANA UNDERGROUND
1-800-382-5544 OR CALL 811
24 HOURS A DAY 7 DAYS A WEEK

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: ZGC
DRAWN: JNR
CHECKED: CML
CHECKED: ZGC

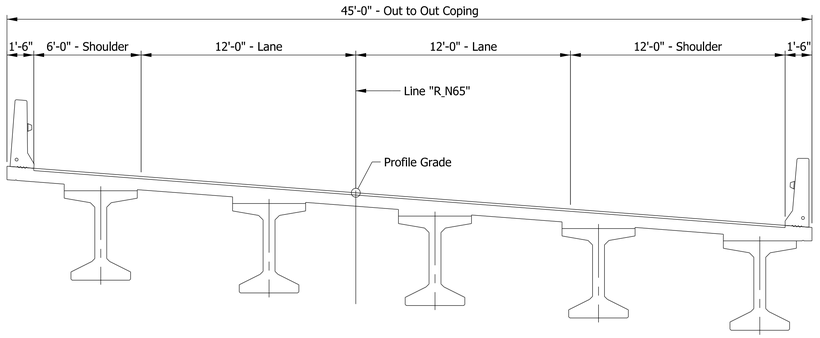
INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

SCALE	BRIDGE FILE
	I65-112-10633 NBL
	DESIGNATION
	1901920
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:46:06 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_02 - Index.dgn



TYPICAL SECTION - PHASE 1 CONSTRUCTION

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: JNR

CHECKED: CML CHECKED: ZGC

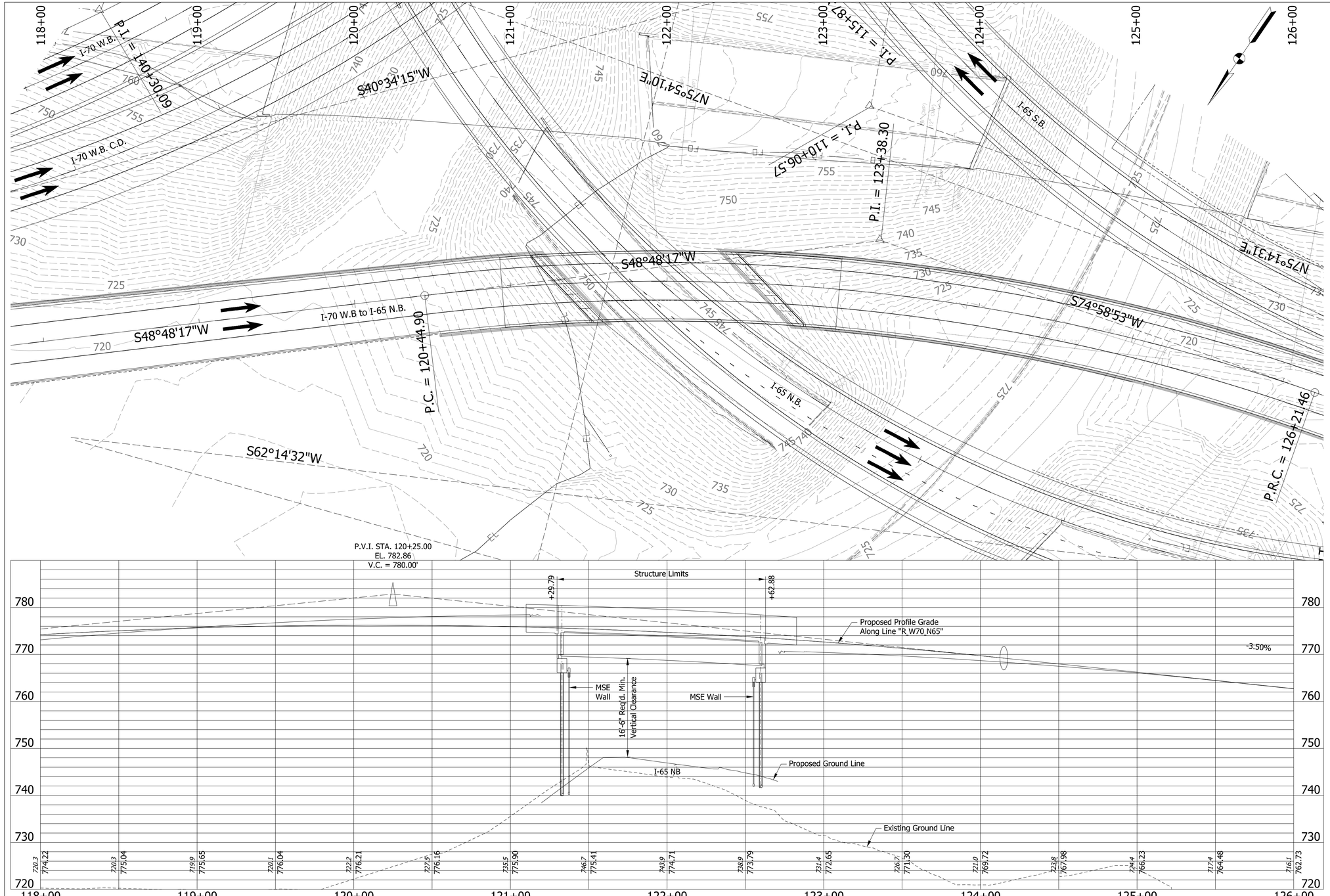
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
¼" = 1'-0"	I65-112-10633 NBL
VERTICAL SCALE	DESIGNATION
¼" = 1'-0"	1901920
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:46:09 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_03 - MOT Sections.dgn



EXISTING STRUCTURE:

No existing structure.

EARTHWORK TABULATION

FILL +20%	(See Road Plans)
COMMON EXCAVATION	(See Road Plans)
EXCAVATION, FOUNDATION, UNCLASSIFIED (70%)	(See Road Plans)
WASTE-	(See Road Plans)

HORIZONTAL CURVE DATA FOR LINE "R_W70_N65"

P.I. = STA. 123+38.30
P.C. = STA. 120+44.90
P.R.C. = STA. 126+21.46
R = 1262.00
L = 576.57
△ = 26°10'36" Rt.
T = 293.41

NOTES:

1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
3. There shall be no clearing of trees beyond construction limits.
4. All topography is existing.
5. All r/w described from line "R_W70_N65", except as noted.
6. For vertical profile and horizontal curve data on lines "R_N65", "R_W70", and "R_W70_CDS65", see sheet no. 5.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
1 SPANS: 126'-10"
SKEW: VARIES
CLEAR ROADWAY: 42'-0"
I-70 W.B. TO I-65 N.B.
OVER I-70 N.B.
MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: JNR
CHECKED: CML CHECKED: ZGC

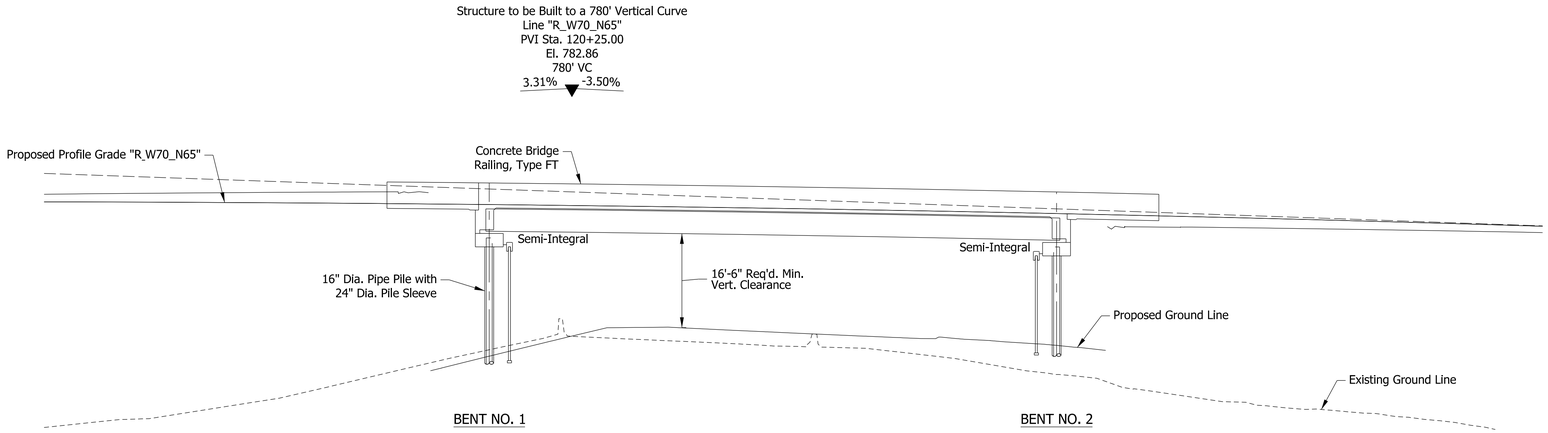
INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT
1 OF 2

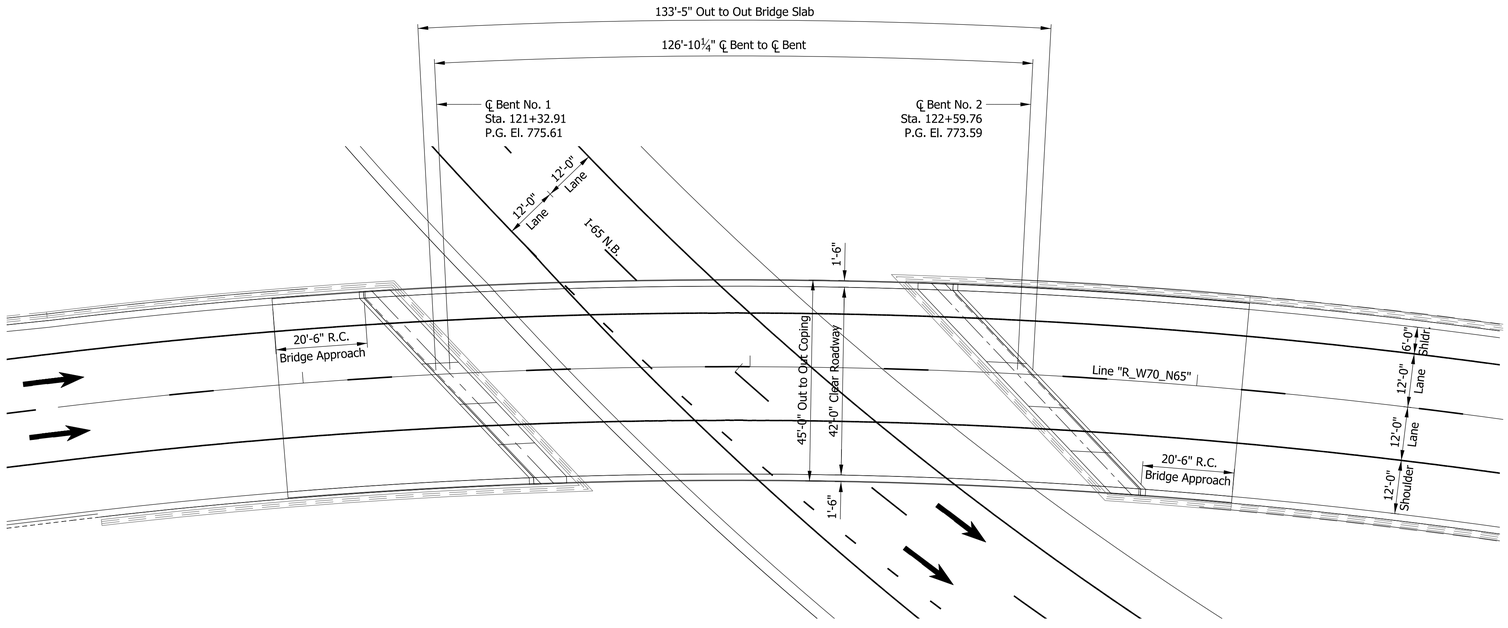
HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	I65-112-10633 NBL
VERTICAL SCALE	DESIGNATION
1" = 10'-0"	1901920
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:46:17 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_04 - Layout.dgn



ELEVATION



PLAN

NOTES:

1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
4. There shall be no clearing of trees beyond construction limits.
5. All topography is existing.
6. All R/W described from line "R_E70", except as noted.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
1 SPANS: 126'-10"
SKEW: VARIES
CLEAR ROADWAY: 42'-0"
I-70 W.B. TO I-65 N.B.
OVER I-70 N.B.
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

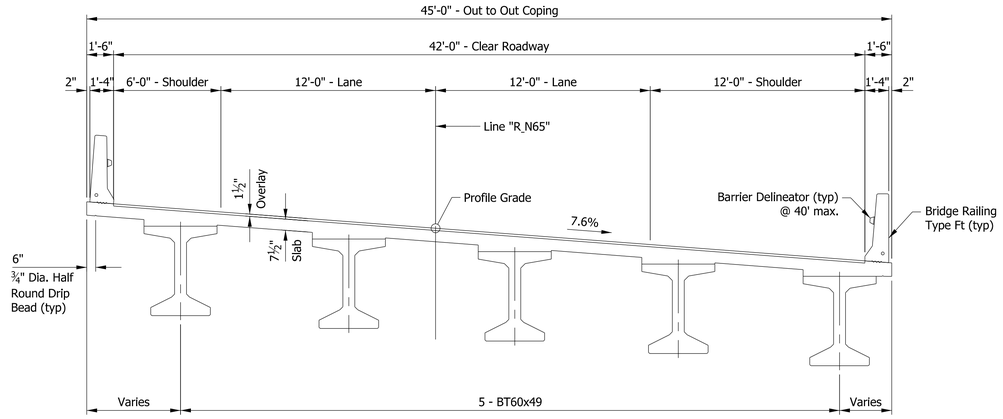
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10633 NBL
VERTICAL SCALE	DESIGNATION
3/32" = 1'-0"	1901920
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:47:06 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_05 - General Plan.dgn



TYPICAL SECTION

GENERAL NOTES

Reinforcing bar cover shall be 2" min. in top and 1" min. in bottom of floor slabs, 3" min. in footing except bottom bars which shall be 4" min, and 2" min. in al other parts, unless noted.

All dimensions and elevations are in feet (FT) unless otherwise noted.

Concrete in floor slab, diaphragms, barrier, approach slab, and end bents shall be and alternative class "C" in accordance with the technical provisions. Reinforcing bars in deck, barrier, and end bent diaphragm extending into the deck shall be stainless steel. reinforcing bars in end bent diaphragm not extending into the deck and in the cap shall be epoxy coated.

Anti-graffiti coating shall be placed on all exposed surfaces of new retaining walls and new bridge structures excluding top of deck or overlay and interior beams.

For aesthetics associated with the bridge opening, see Bridge Opening Aesthetics Plan package.

DESIGN DATA

Live Load
Superstructure and Substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications Eight Edition, 2017 & subsequent interim.

Dead Load
Designed for actual dead load plus 15 PSF for SIP metal deck forms.

Slab designed with a 7½" structural depth and a 1½" very early strength LMC overlay.

SEISMIC DESIGN DATA

Seismic Performance Zone = 1
Acceleration Coefficient = 0.061
Seismic Soil Profile Type = Site Class C

DESIGN STRENGTHS

Prestressed Concrete	f'c = 10,000 psi @ 28 Days
Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,000 psi
Class "C" Concrete	f'c = 4,000 psi
Rienforcing Bars	fy = 60,000 psi (barrier)
Reinforcing Bars	fy = 75,000 psi (all other locations)

CONSTRUCTION LOADING

The exterior beam must be 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 beam. The finishing machine was assumed to be supported 6" past the edge of 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 beam bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/sft for permanent metal stay in place deck forms, removable deck forms, and 2-ft exterior walkway.
Construction Live Load:	Designed 20 lb/sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of 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 AASHTO LRFD3.8.1.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
1 SPANS: 126'-10"
SKEW: VARIES
CLEAR ROADWAY: 42'-0"
I-70 W.B. TO I-65 N.B.
OVER I-70 N.B.
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

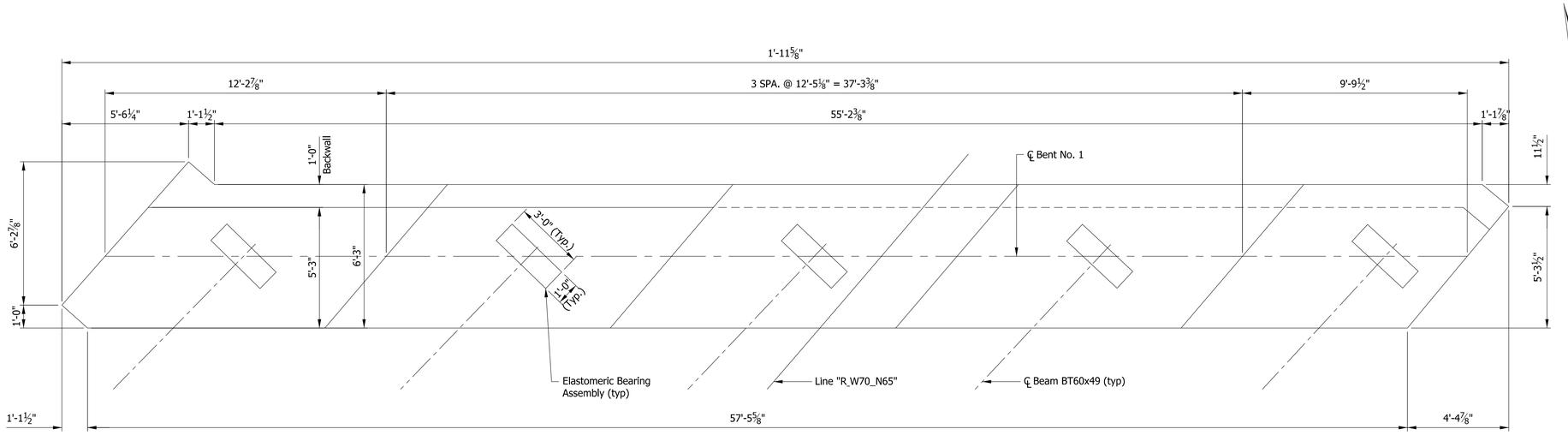
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
TYPICAL SECTION

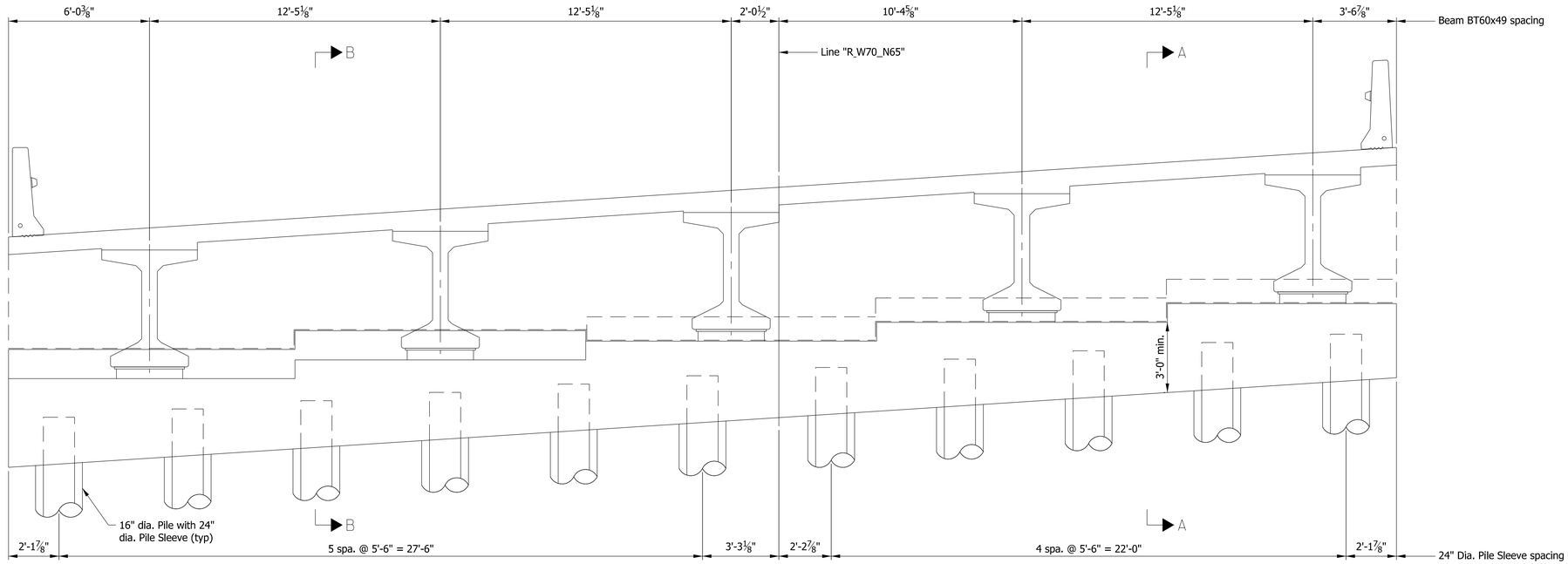
HORIZONTAL SCALE	BRIDGE FILE
¼" = 1'-0"	I65-112-10633 NBL
VERTICAL SCALE	DESIGNATION
¼" = 1'-0"	1901920
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:47:07 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_06 - General Plan.dgn



PLAN



ELEVATION

Plot: 2/25/2020 5:47:09 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_07 - Bent No 1.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

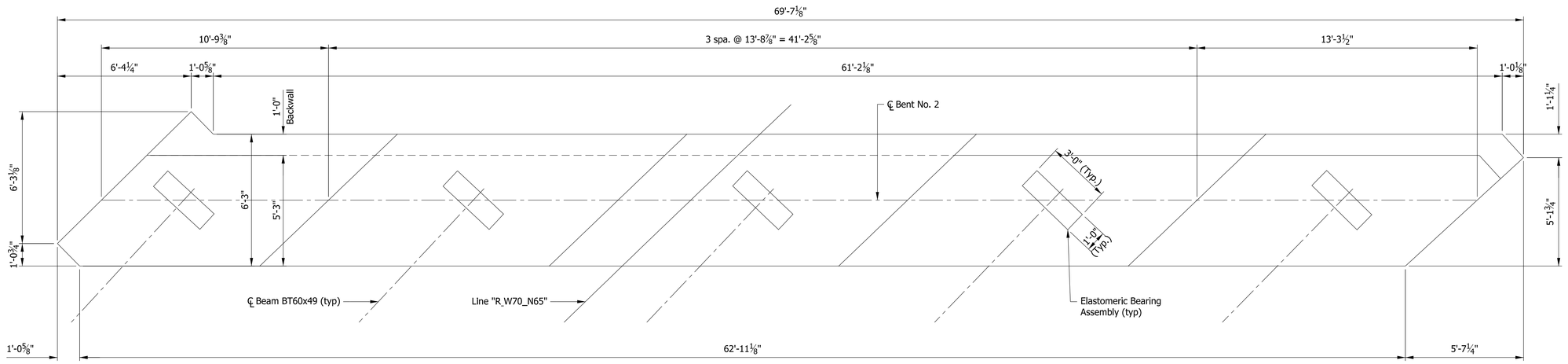
DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

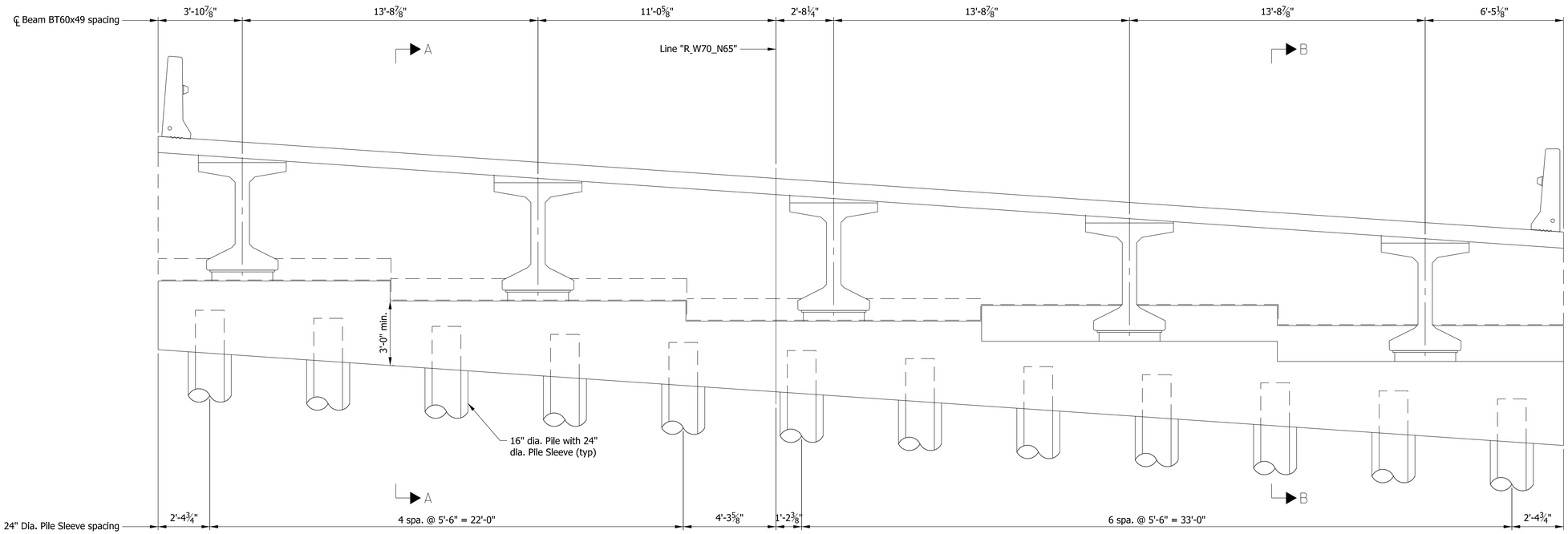
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 1 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
3/8" = 1'-0"	I65-112-10633 NBL
VERTICAL SCALE	DESIGNATION
3/8" = 1'-0"	1901920
SURVEY BOOK	SHEETS
ELECTRONIC	7 of 15
CONTRACT	PROJECT
B-36910	1600808



PLAN



ELEVATION

Plot: 2/25/2020 5:47:12 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_08 - Bent No 2.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

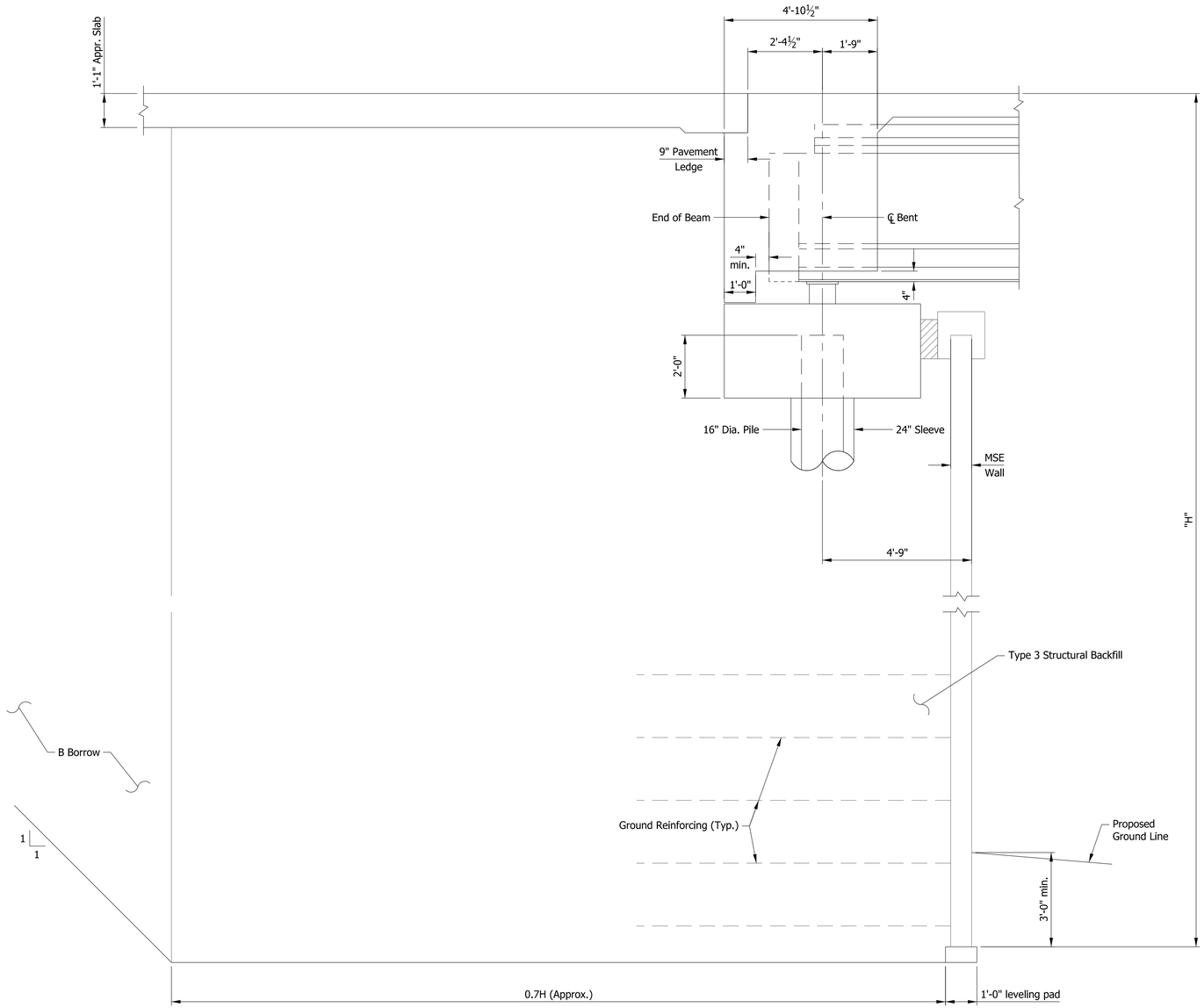
DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

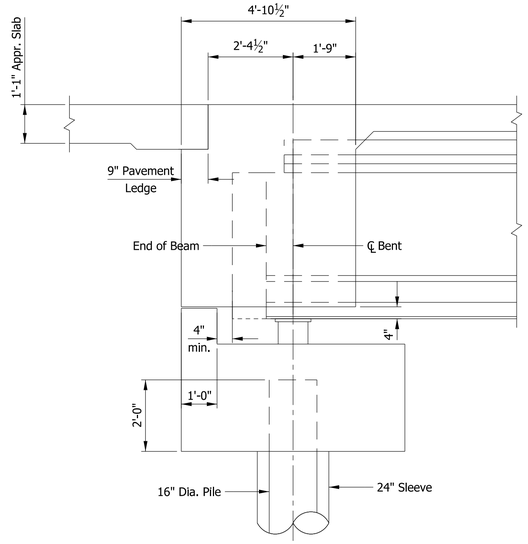
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 2 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
⅜" = 1'-0"	I65-112-10633 NBL
VERTICAL SCALE	DESIGNATION
⅜" = 1'-0"	1901920
SURVEY BOOK	SHEETS
ELECTRONIC	8 of 15
CONTRACT	PROJECT
B-36910	1600808



SECTION A-A



SECTION B-B
(MSE Wall not shown for clarity)

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

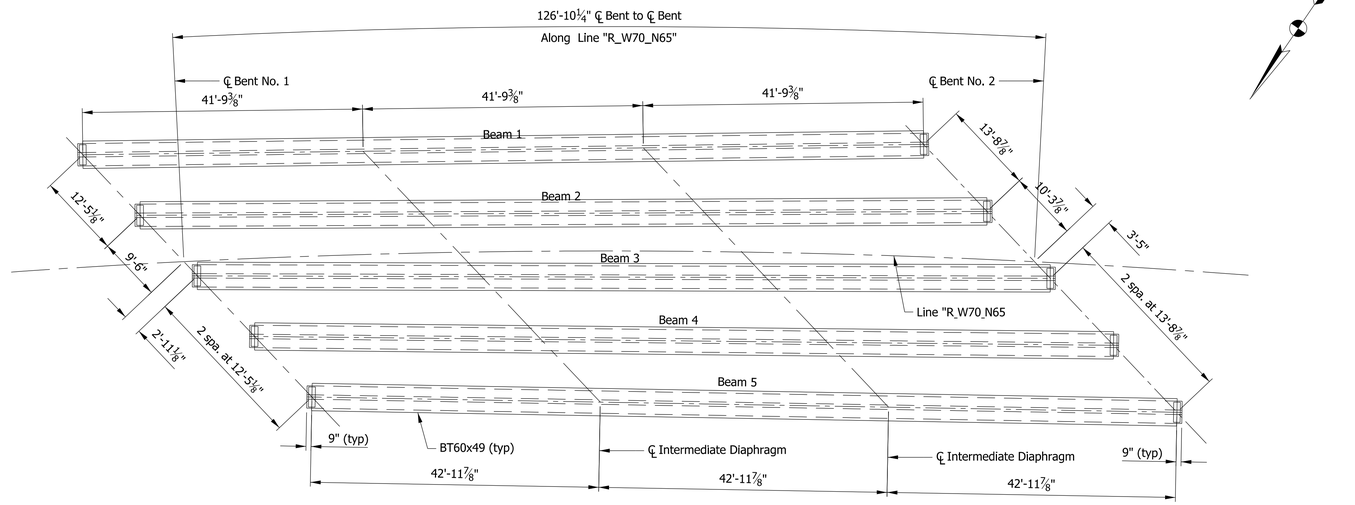
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 1 AND 2 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
½" = 1'-0"	I65-112-10633 NBL
VERTICAL SCALE	DESIGNATION
½" = 1'-0"	1901920
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:47:14 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_09 - Bent Details.dgn



FRAMING PLAN

NOTES:

1. For Intermediate Diaphragm Details, see Std. Dwg. E707-SDPC-01.

Plot: 2/25/2020 5:47:16 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: JNR

CHECKED: CML CHECKED: ZGC

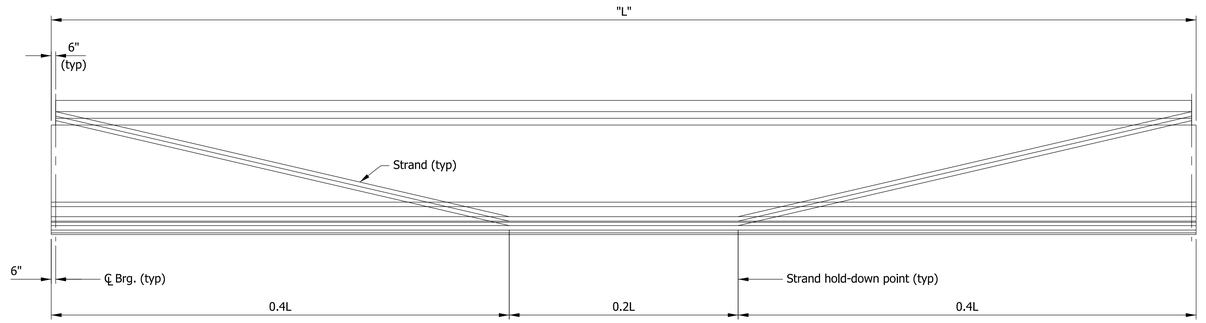
INDIANA
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN

HORIZONTAL SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10633 NBL
VERTICAL SCALE	DESIGNATION
3/32" = 1'-0"	1901920
SURVEY BOOK	SHEETS
ELECTRONIC	10 of 15
CONTRACT	PROJECT
B-36910	1600808

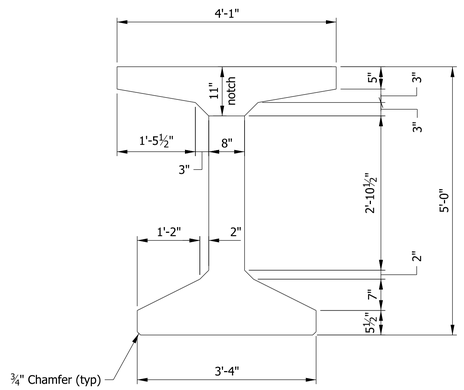
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_10 - Framing.dgn

BEAM PLAN
Scale: ⅛" = 1'-0"

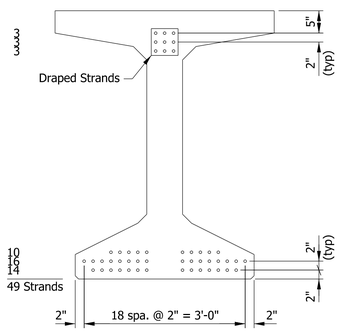


BEAM ELEVATION
Horizontal Scale: ⅛" = 1'-0"
Vertical Scale: ⅜" = 1'-0"

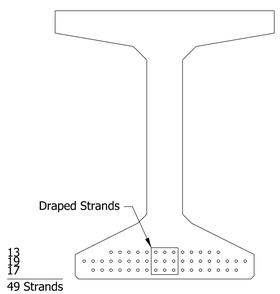
BEAM LENGTHS	
Beam	"L"
Beam 1A	126'-10⅛"
Beam 2A	127'-8⅞"
Beam 3A	128'-7⅝"
Beam 4A	129'-6⅝"
Beam 5A	130'-5⅝"



TYPICAL SECTION
Scale: ¾" = 1'-0"



STRAND PATTERN AT BEAM END
Scale: ¾" = 1'-0"



STRAND PATTERN AT MIDSPAN
Scale: ¾" = 1'-0"

NOTES:

1. Prestressing reinforcement shall be 0.6" dia., uncoated, seven wire, low relaxation 270 ksi with strand area = 0.217 sq. in.
2. Beam shall be cast a minimum of 120 days before deck is poured.

Plot: 2/25/2020 5:47:22 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC | DRAWN: JNR

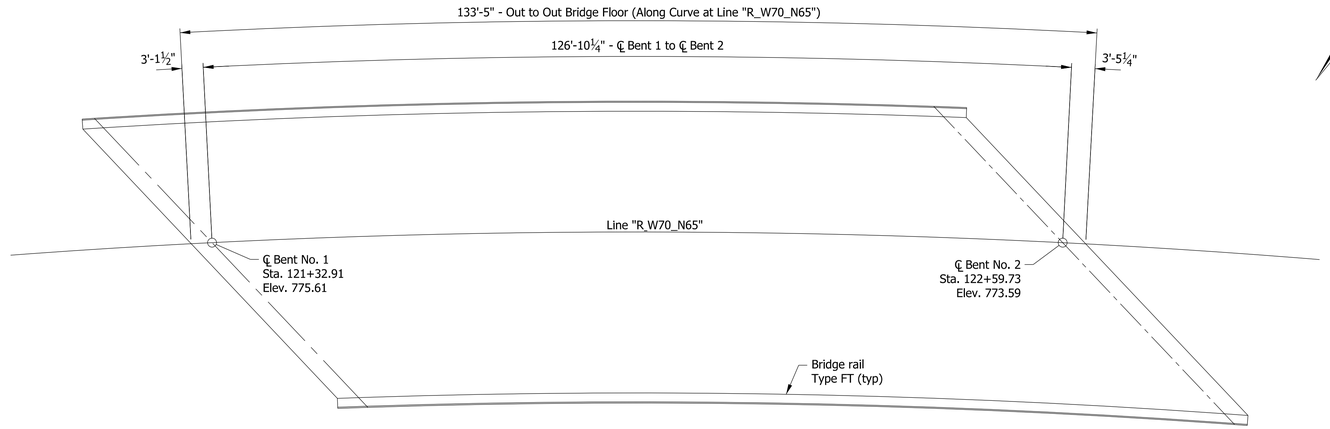
CHECKED: CML | CHECKED: ZGC

INDIANA DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I65-112-10633 NBL
VERTICAL SCALE	DESIGNATION
	1901920
SURVEY BOOK	SHEETS
ELECTRONIC	11 of 15
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_11 - Beam Details.dgn



FLOOR PLAN

Plot: 2/25/2020 5:47:23 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_12 - Deck Plan.dgn

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

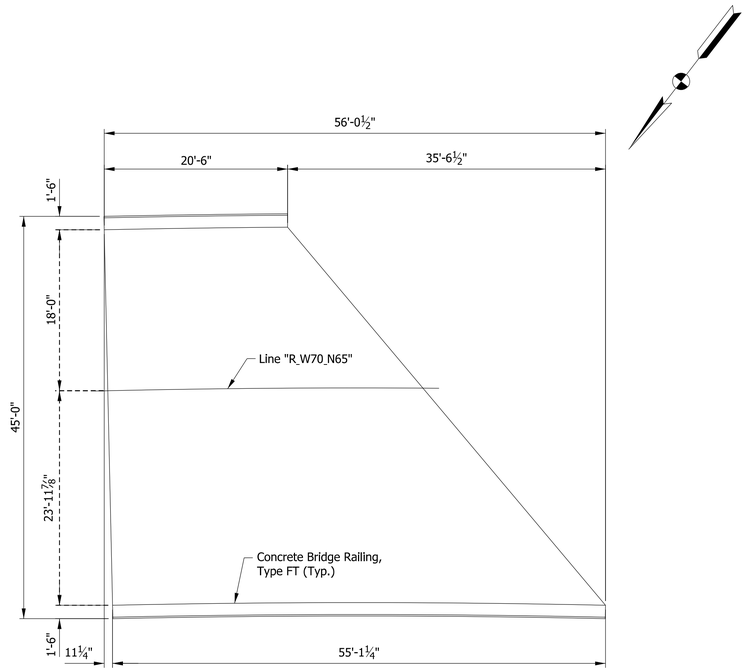
DESIGNED: ZGC DRAWN: JNR

CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

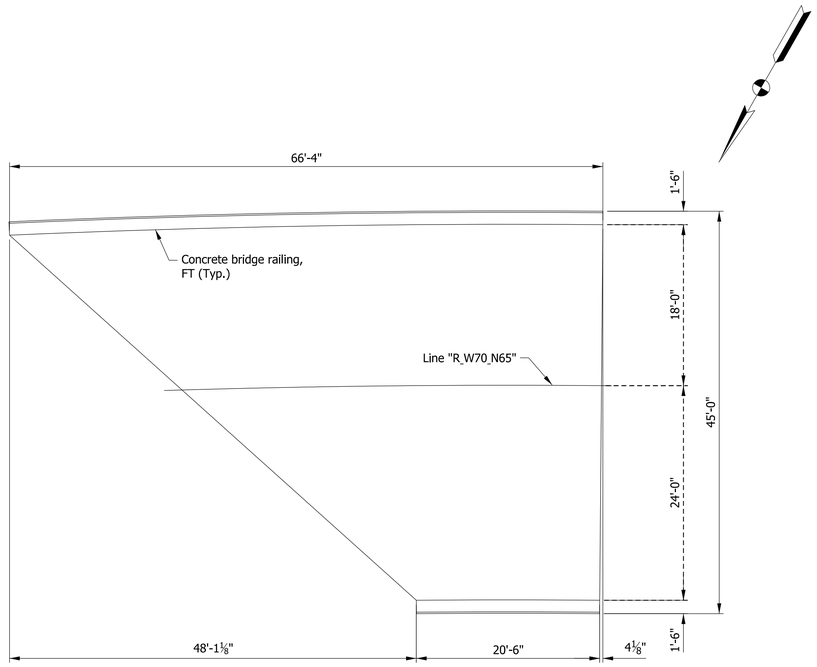
SUPERSTRUCTURE DETAILS

HORIZONTAL SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10633 NBL
VERTICAL SCALE	DESIGNATION
3/32" = 1'-0"	1901920
SURVEY BOOK	SHEETS
ELECTRONIC	12 of 15
CONTRACT	PROJECT
B-36910	1600808



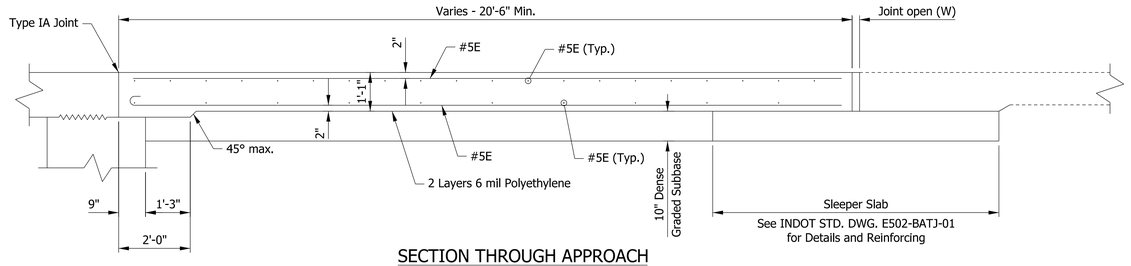
APPROACH SLAB AT END BENT NO. 1

Scale: 3/16" = 1'-0"



APPROACH SLAB AT END BENT NO. 2

Scale: 3/16" = 1'-0"



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTES:

1. For additional Terminal Joint information, see USP. Terminal Joint Details, Type CRCP.
2. Concrete Bridge Railing, Type FT sits on slab extension.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: SRR

CHECKED: CML CHECKED: ZGC

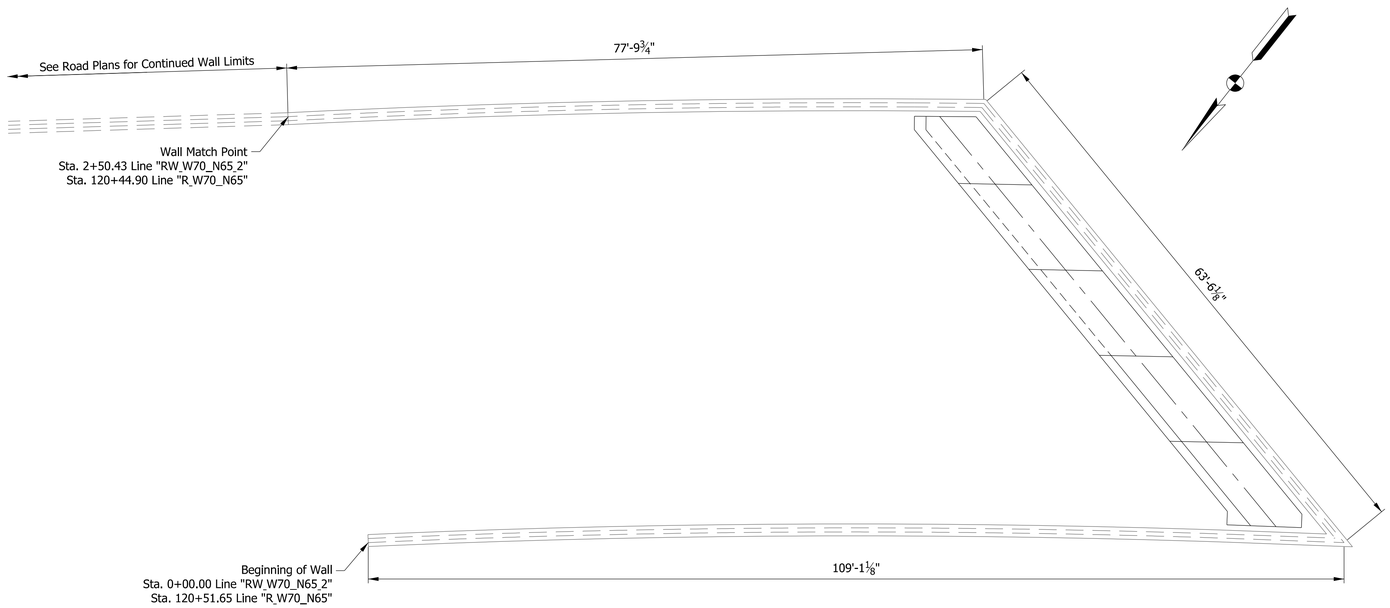
INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS

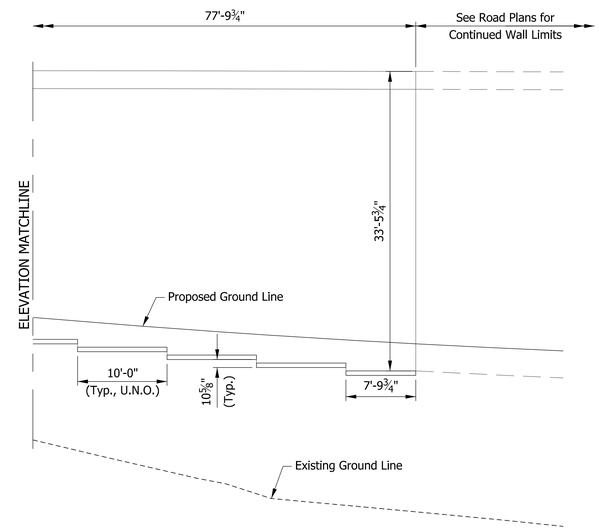
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I65-112-10633 NBL
VERTICAL SCALE	DESIGNATION
AS NOTED	1901920
SURVEY BOOK	SHEETS
ELECTRONIC	13 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:47:25 PM

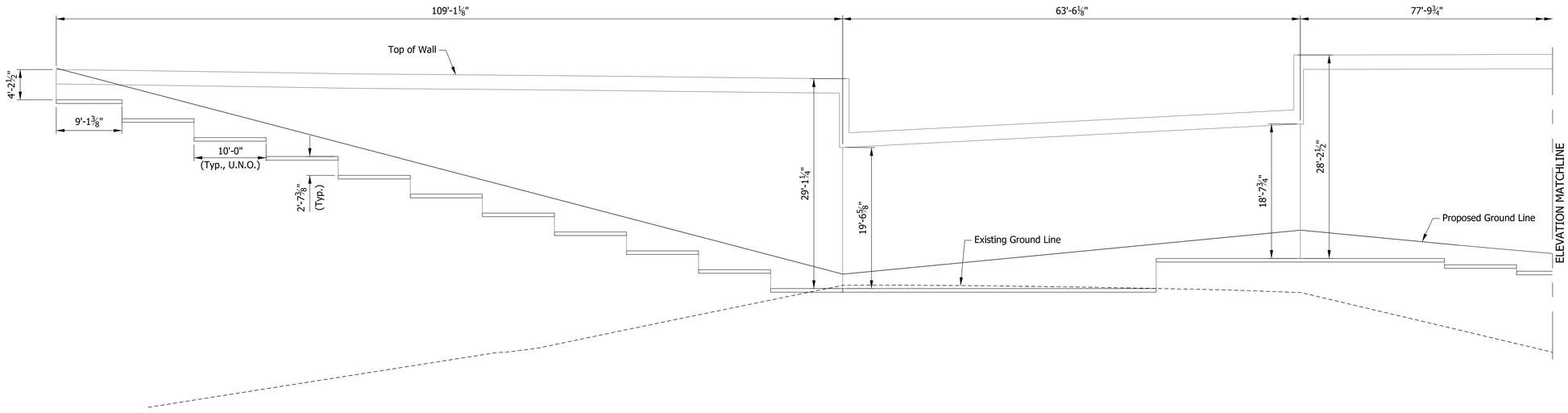
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_13 - Approach Slabs.dgn



PLAN



ELEVATION-2

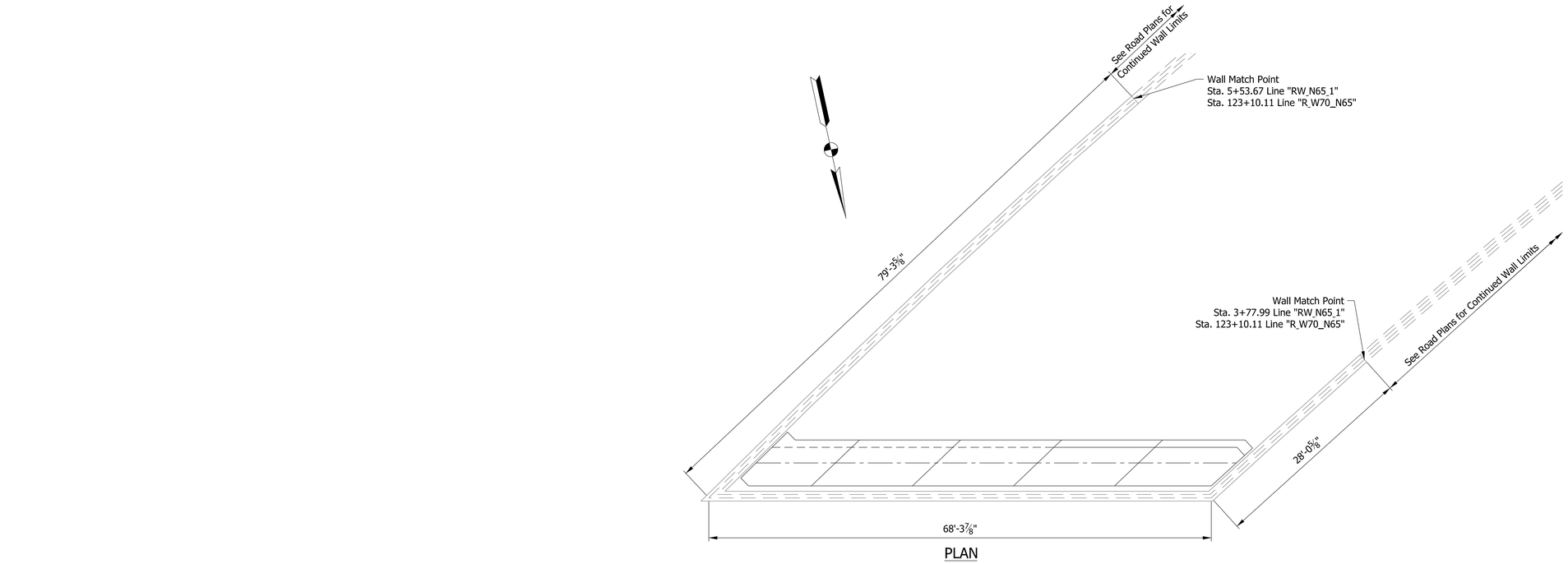


ELEVATION-1

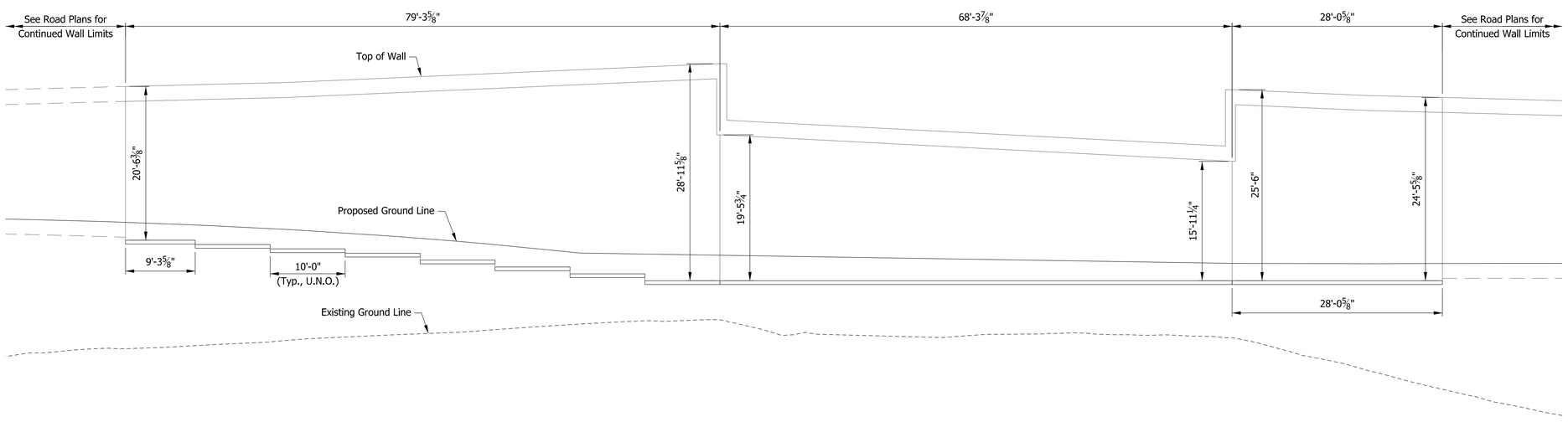
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: ⅛" = 1'-0" / VERTICAL SCALE: ⅛" = 1'-0" / BRIDGE FILE: I65-112-10633 NBL / DESIGNATION: 1901920
DESIGNED: ZGC	DRAWN: JNR	MSE WALL DETAILS BENT NO. 1	SURVEY BOOK / ELECTRONIC: SHEETS 14 of 15 / CONTRACT: B-36910 / PROJECT: 1600808
CHECKED: CML	CHECKED: ZGC		

Plot: 2/25/2020 5:47:27 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_14 - MSE Wall.dgn



PLAN



ELEVATION

Plot: 2/25/2020 5:47:31 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 36 I70 WB to I65 NB over I65 NB, SB CD & I70 WB\1901920_15 - MSE Wall.dgn

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: JNR

CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

MSE WALL DETAILS
BENT NO. 2

HORIZONTAL SCALE	BRIDGE FILE
⅛" = 1'-0"	I65-112-10633 NBL
VERTICAL SCALE	DESIGNATION
⅛" = 1'-0"	1901920
SURVEY BOOK	SHEETS
ELECTRONIC	14 of 15
CONTRACT	PROJECT
B-36910	1600808

PROJECT	DESIGNATION
1600808	1901921
CONTRACT	BRIDGE FILE
B-36910	I65-112-10634 CSBL

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-65 S.B. AT: RP 111+72

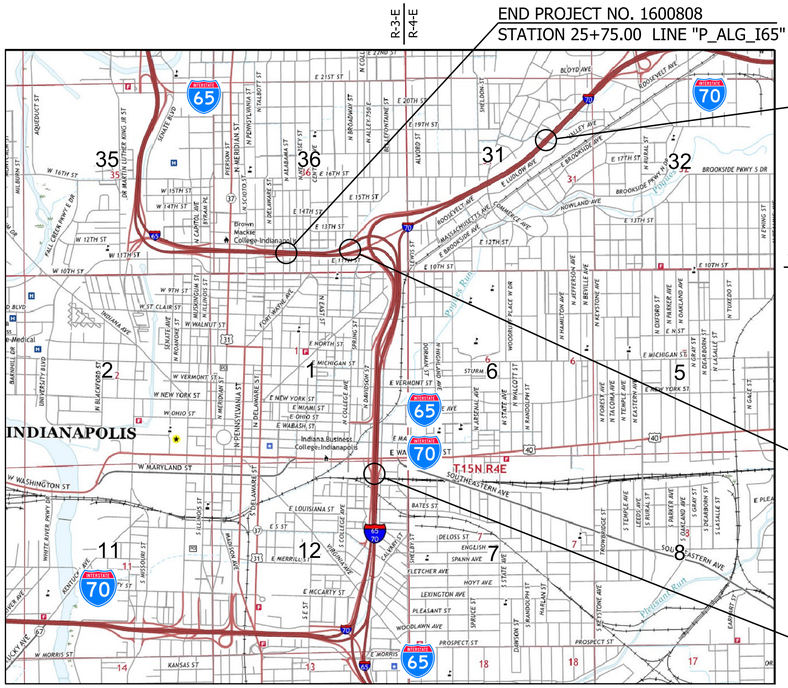
PROJECT NO. 1600808 (P.E. & CONSTR.)

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACMENT ON I-65 N.B. OVER I-70 E.B. RAMP, LOCATED 1.43 MILES NORTH OF I-70 (SOUTH SPLIT) INTERCHANGE, IN SECTION 1, OF TOWNSHIP 15 NORTH, RANGE 3 EAST, CENTER TOWNSHIPS, IN MARION COUNTY INDIANA.

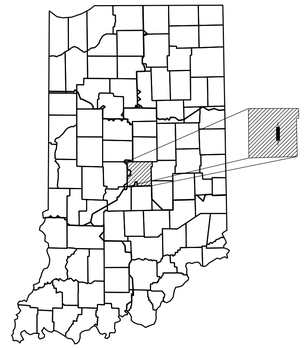
STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I65-112-10634 CSBL	CONTINUOUS COMPOSITE PRESTRESSED CONC. BULB TEE	2 SPAN: 108'-2", 108'-2" SKEW: VARIES	SB CD & I-70 WB	118+73.09 LINE "R_S65"

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVENUE	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	BRIDGE REPLACEMENT ON I-65 SB TO I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE) - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER VERMONT STREET	



LOCATION MAP
(MARION COUNTY)

TRAFFIC DATA		I-65 S.B.	I-70 W.B.	I-70 W.B. C.D.
A.A.D.T.	(2021)	18,925 V.P.D.	36,289 V.P.D.	26,092 V.P.D.
A.A.D.T.	(2041)	19,100 V.P.D.	43,111 V.P.D.	25,100 V.P.D.
D.H.V	(2041)	1,528 V.P.H.	3,880 V.P.H.	3,012 V.P.H.
DIRECTIONAL DISTRIBUTION		0 %	0 %	0 %
TRUCKS		7 % D.H.V.	15% D.H.V.	4 % D.H.V.
DESIGN DATA				
DESIGN SPEED		50 M.P.H.	55 M.P.H	50
PROJECT DESIGN CRITERIA		4R (FREEWAY)	4R (FREEWAY)	4R (FREEWAY)
FUNCTIONAL CLASSIFICATION		FREEWAY	FREEWAY	FREEWAY
RURAL/URBAN		URBAN	URBAN	URBAN
TERRAIN		LEVEL	LEVEL	LEVEL
ACCESS CONTROL		FULL CONTROL	FULL CONTROL	FULL CONTROL



PROJECT LOCATION SHOWN BY MARION COUNTY

LATITUDE: XXX LONGITUDE: XXX

BRIDGE LENGTH: 0.042 MI.
ROADWAY LENGTH: SEE ROAD PLANS MI.
TOTAL LENGTH: SEE ROAD PLANS MI.
MAX. GRADE: 8.00 %

HYDROLOGIC UNIT CODE: 05120201130020

T-16-N
T-15-N

SCALE: 1" = 2000'

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

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: JANSSEN AND SPAANS ENGINEERING, INC. 317-254-9686 PHONE NUMBER

CERTIFIED BY: _____ DATE

RECOMMENDED FOR LETTING: _____ INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE
I65-112-10634 CSBL
DESIGNATION
1901921

SURVEY BOOK	SHEETS
ELECTRONIC	1 of 16
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:48:39 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_01 - Title.dgn

UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE SHEET
2	INDEX SHEET
3	MAINTENANCE OF TRAFFIC LAYOUT OVER THE BRIDGE
4	LAYOUT SHEET
5	GENERAL PLAN
6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 3 DETAILS
9	BENT NO. 1 & 3 DETAILS
10	PIER NO. 2 DETAILS
11	FRAMING PLAN
12	BEAM DETAILS - 1 OF 2
13	SUPERSTRUCTURE DETAILS
14	APPROACH SLAB DETAILS
15	MSE WALL DETAILS - BENT NO. 1
16	MSE WALL DETAILS - BENT NO. 3

REVISIONS

SHEET NO.	DATE	REVISED

811 Know what's below. Call before you dig.

INDIANA UNDERGROUND
1-800-382-5544 OR CALL 811
24 HOURS A DAY 7 DAYS A WEEK

Plot: 2/25/2020 5:48:42 PM

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

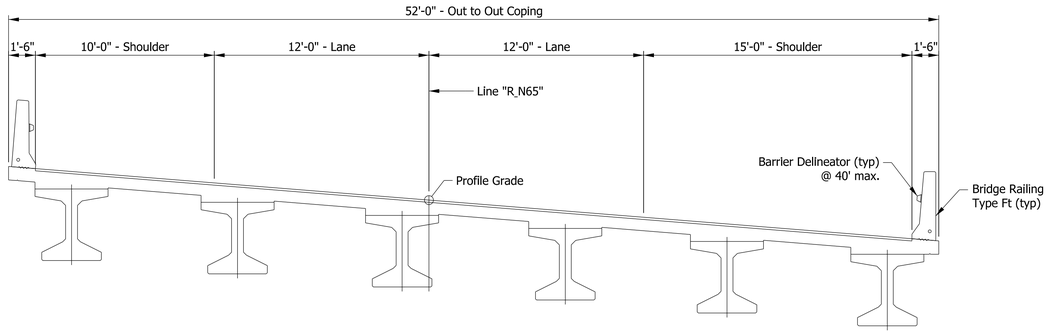
DESIGNED: ZGC
DRAWN: JNR
CHECKED: CML
CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

SCALE	BRIDGE FILE
	I65-112-10634 CSBL
	DESIGNATION
	1901921
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 16
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_02 - Index.dgn



TYPICAL SECTION - PHASE 1 CONSTRUCTION

Prestressed Concrete
Bulb-Tee Beam
2 Spans: 108'-2", 108'-2"
Skew: Varies
Clear Roadway: 49'-0"
I-65 S.B. Over S.B. & I-70 W.B.
Marion County

Plot: 2/25/2020 5:48:44 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: JNR

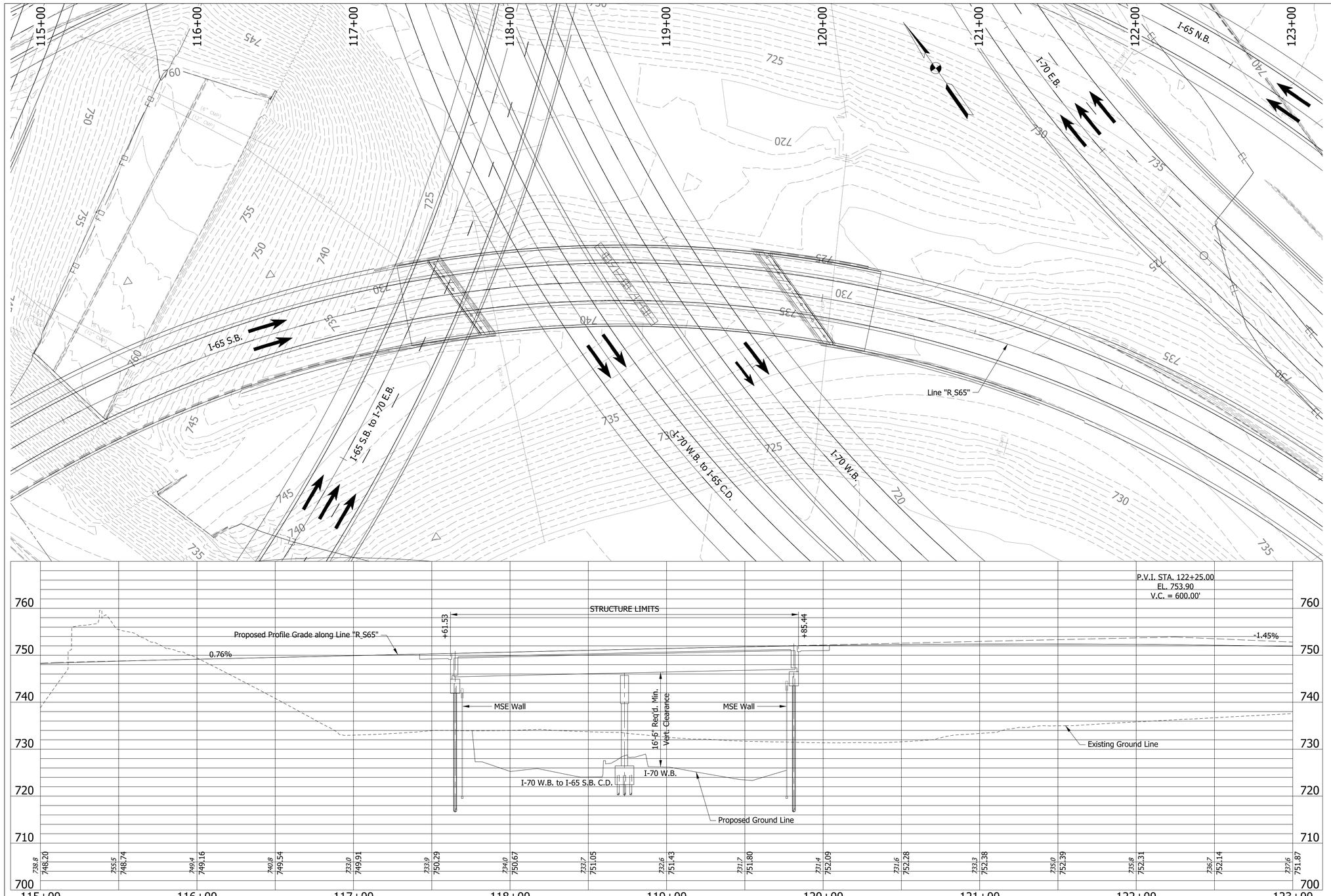
CHECKED: CML | CHECKED: ZGC

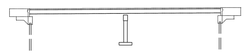
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
TYPICAL SECTION

HORIZONTAL SCALE	BRIDGE FILE
¼" = 1'-0"	I65-112-10634 CSBL
VERTICAL SCALE	DESIGNATION
¼" = 1'-0"	1901921
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 16
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_03 - MOT Sections.dgn





EXISTING STRUCTURE:

The existing structure was built in 1974, had a rehabilitation in 1989, 2000 & 2003. The structure is 2 span continuous composite 33" WF steel beam bridge. Span lengths are 78'-0" & 86'-0". Clear roadway width is 39'-6". Total structure length is 168'-2¼". The existing structure is to be removed. Existing plans are on file with the Indiana Department of Transportation under bridge file no. I-65-113-5744, I-65-113-5744a and I-65-113-5744b.

EARTHWORK TABULATION

FILL +20%	(See Road Plans)
COMMON EXCAVATION	(See Road Plans)
EXCAVATION, FOUNDATION, UNCLASSIFIED (70%)	(See Road Plans)
WASTE-	(See Road Plans)

HORIZONTAL CURVE DATA FOR LINE "R_S65"

P.I. = STA. 121+98.51
P.C. = STA. 112+08.86
P.T. = STA. 126+11.31
R = 772.00
L = 1402.45
△ = 104°05'10" Rt.
T = 989.64

NOTES:

1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
3. There shall be no clearing of trees beyond construction limits.
4. All topography is existing.
5. All r/w described from line "R_S65", except as noted.
6. For vertical profile and horizontal curve data on lines "R_W70_CDS65" and "R_W70", see sheet no. 5.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
2 SPANS: 108'-2" & 108'-2"
SKEW: VARIES
CLEAR ROADWAY: 49'-0"
I-65 S.B. OVER S.B. & I-70 W.B.
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC DRAWN: JNR

CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

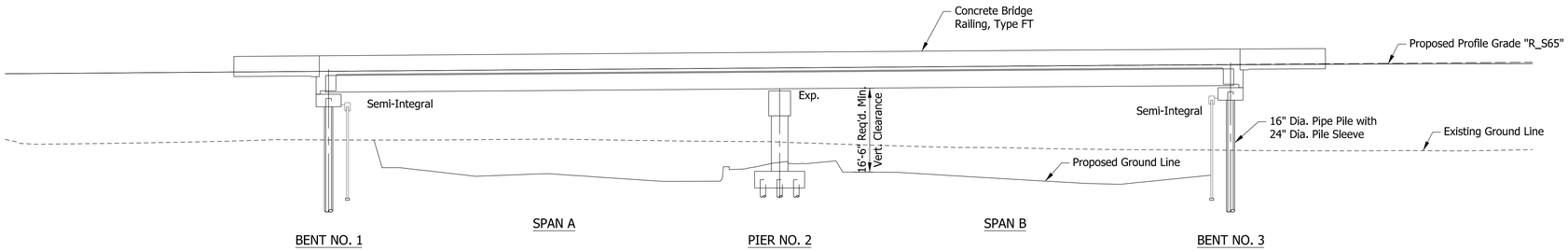
LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	I65-112-10634 CSBL
VERTICAL SCALE	DESIGNATION
1" = 10'-0"	1901921
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 16
CONTRACT	PROJECT
B-36910	1600808

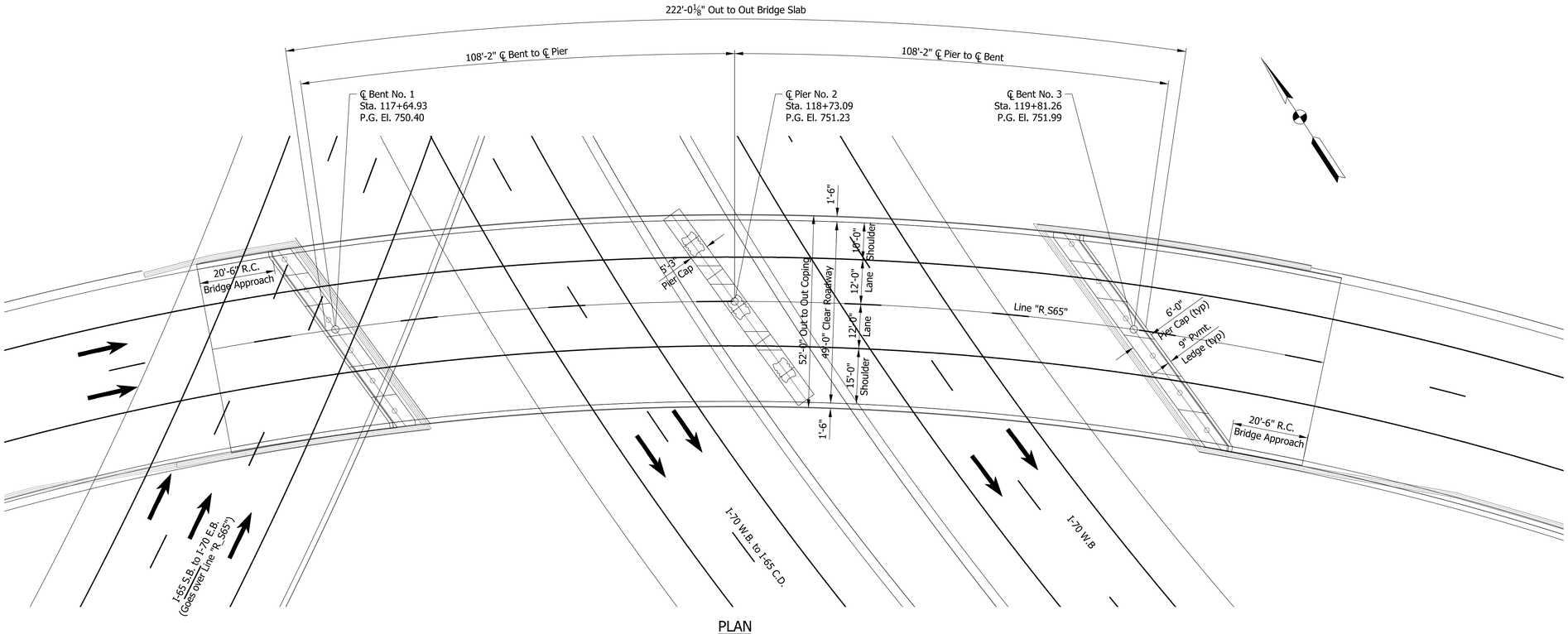
Plot: 2/25/2020 5:48:53 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_04 - Layout.dgn

Structure to be Built to a 600' Vertical Curve
Line "R_S65"
PVI Sta. 122+25.00
El. 753.90
600' VC
0.76% -1.45%



ELEVATION



PLAN

NOTES:

1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
4. There shall be no clearing of trees beyond construction limits.
5. All topography is existing.
6. All R/W described from line "R_E70", except as noted.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
2 SPANS: 108'-2" & 108'-2"
SKEW: VARIES
CLEAR ROADWAY: 49'-0"
I-65 S.B. OVER S.B. & I-70 W.B.
MARION COUNTY

Plot: 2/25/2020 5:49:35 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_05 - General Plan.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

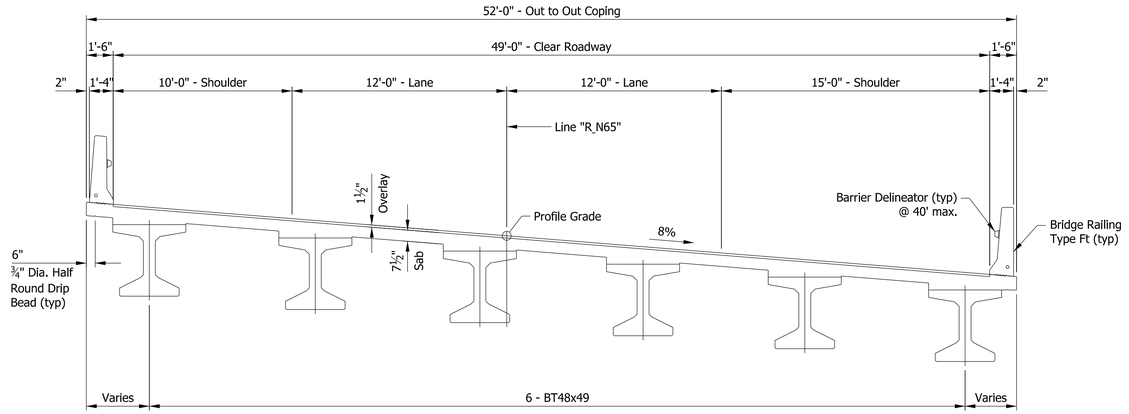
DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1/16" = 1'-0"	I65-112-10634 CSBL
VERTICAL SCALE	DESIGNATION
1/16" = 1'-0"	1901921
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 16
CONTRACT	PROJECT
B-36910	1600808



TYPICAL SECTION

GENERAL NOTES

Reinforcing bar cover shall be 2" min. in top and 1" min. in bottom of floor slabs, 3" min. in footing except bottom bars which shall be 4" min, and 2" min. in al other parts, unless noted.

All dimensions and elevations are in feet (FT) unless otherwise noted.

Concrete in floor slab, diaphragms, barrier, approach slab, and end bents shall be and alternative class "C" in accordance with the technical provisions. Reinforcing bars in deck, barrier, and end bent diaphragm extending into the deck shall be stainless steel. reinforcing bars in end bent diaphragm not extending into the deck and in the cap shall be epoxy coated.

Anti-graffiti coating shall be placed on all exposed surfaces of new retaining walls and new bridge structures excluding top of deck or overlay and interior beams.

For aesthetics associated with the bridge opening, see Bridge Opening Aesthetics Plan package.

DESIGN DATA

Live Load
Superstructure and Substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications Eight Edition, 2017 & subsequent interim.

Dead Load
Designed for actual dead load plus 15 PSF for SIP metal deck forms.

Slab designed with a 7½" structural depth and a 1½" very early strength LMC overlay.

SEISMIC DESIGN DATA

Seismic Performance Zone = 1
Acceleration Coefficient = 0.061
Seismic Soil Profile Type = Site Class C

DESIGN STRENGTHS

Prestressed Concrete	f'c = 10,000 psi @ 28 Days
Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,000 psi
Class "C" Concrete	f'c = 4,000 psi
Rienforcing Bars	fy = 60,000 psi (barrier)
Reinforcing Bars	fy = 75,000 psi (all other locations)

CONSTRUCTION LOADING

The exterior beam must be 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 beam. The finishing machine was assumed to be supported 6" past the edge of 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 beam bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/sft for permanent metal stay in place deck forms, removable deck forms, and 2-ft exterior walkway.
Construction Live Load:	Designed 20 lb/sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of 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 AASHTO LRFD3.8.1.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
2 SPANS: 108'-2" & 108'-2"
SKEW: VARIES
CLEAR ROADWAY: 49'-0"
I-65 S.B. OVER S.B. & I-70 W.B.
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

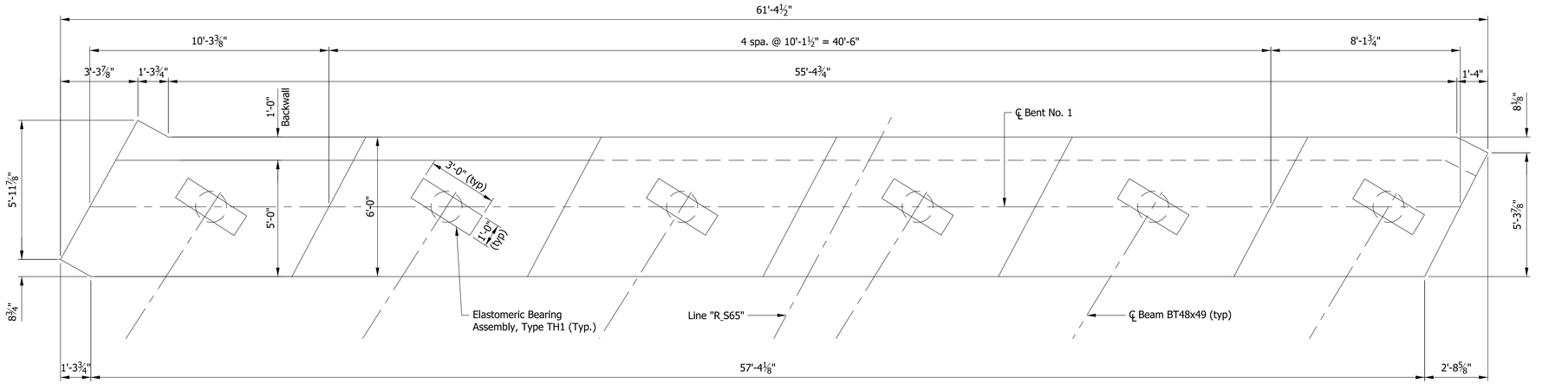
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
TYPICAL SECTION

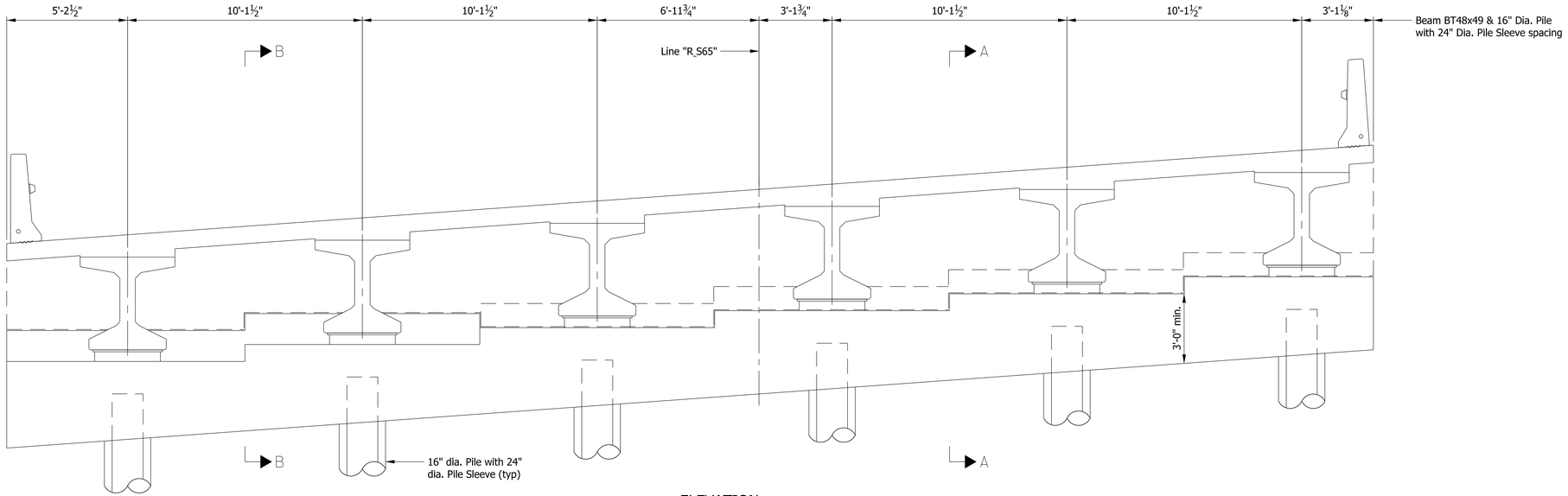
HORIZONTAL SCALE	BRIDGE FILE
¼" = 1'-0"	I65-112-10634 CSBL
VERTICAL SCALE	DESIGNATION
¼" = 1'-0"	1901921
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 16
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:49:37 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_06 - General Plan.dgn



PLAN

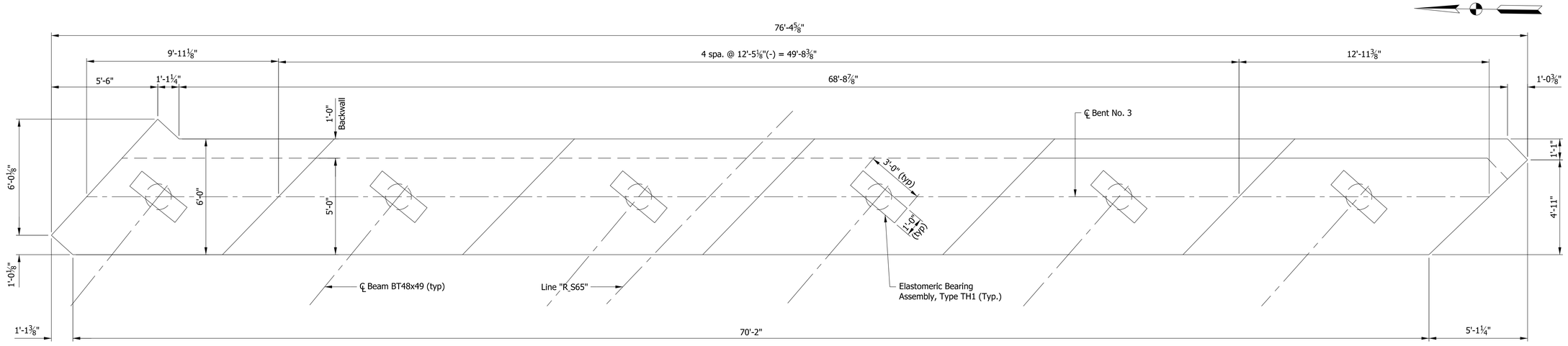


ELEVATION

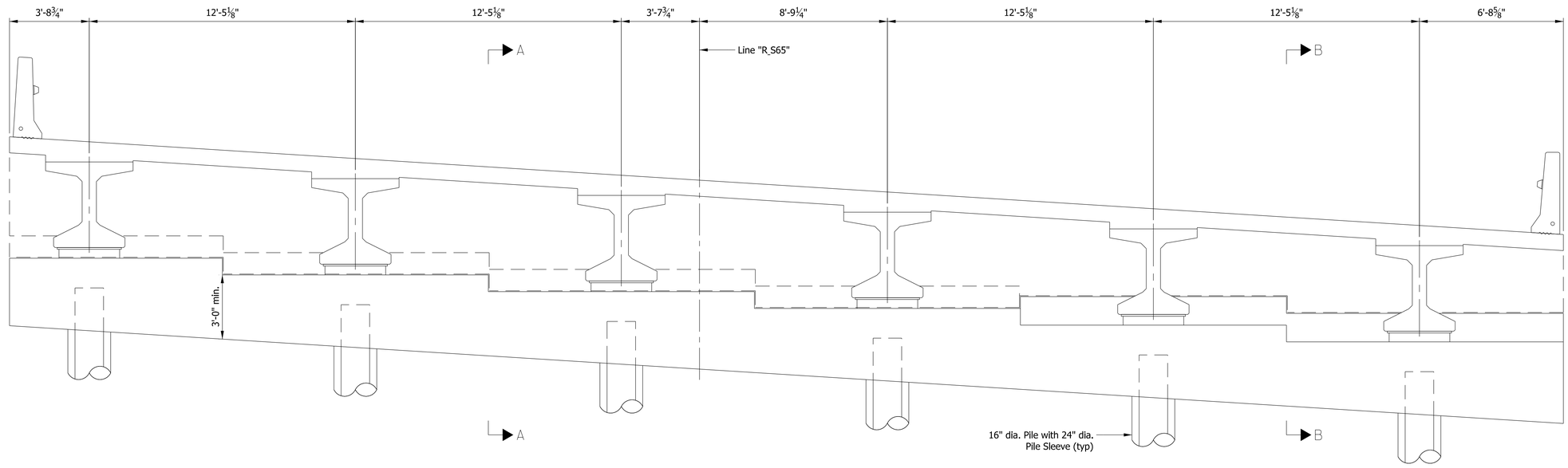
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE ⅜" = 1'-0"	BRIDGE FILE I65-112-10634 CSBL
		VERTICAL SCALE ⅜" = 1'-0"	DESIGNATION 1901921
DESIGNED: ZGC DRAWN: JNR	BENT NO. 1 DETAILS	SURVEY BOOK	SHEETS
		ELECTRONIC	7 of 16
CHECKED: CML CHECKED: ZGC		CONTRACT	PROJECT
		B-36910	1600808

Plot: 2/25/2020 5:49:39 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_07 - Bent No 1.dgn



PLAN

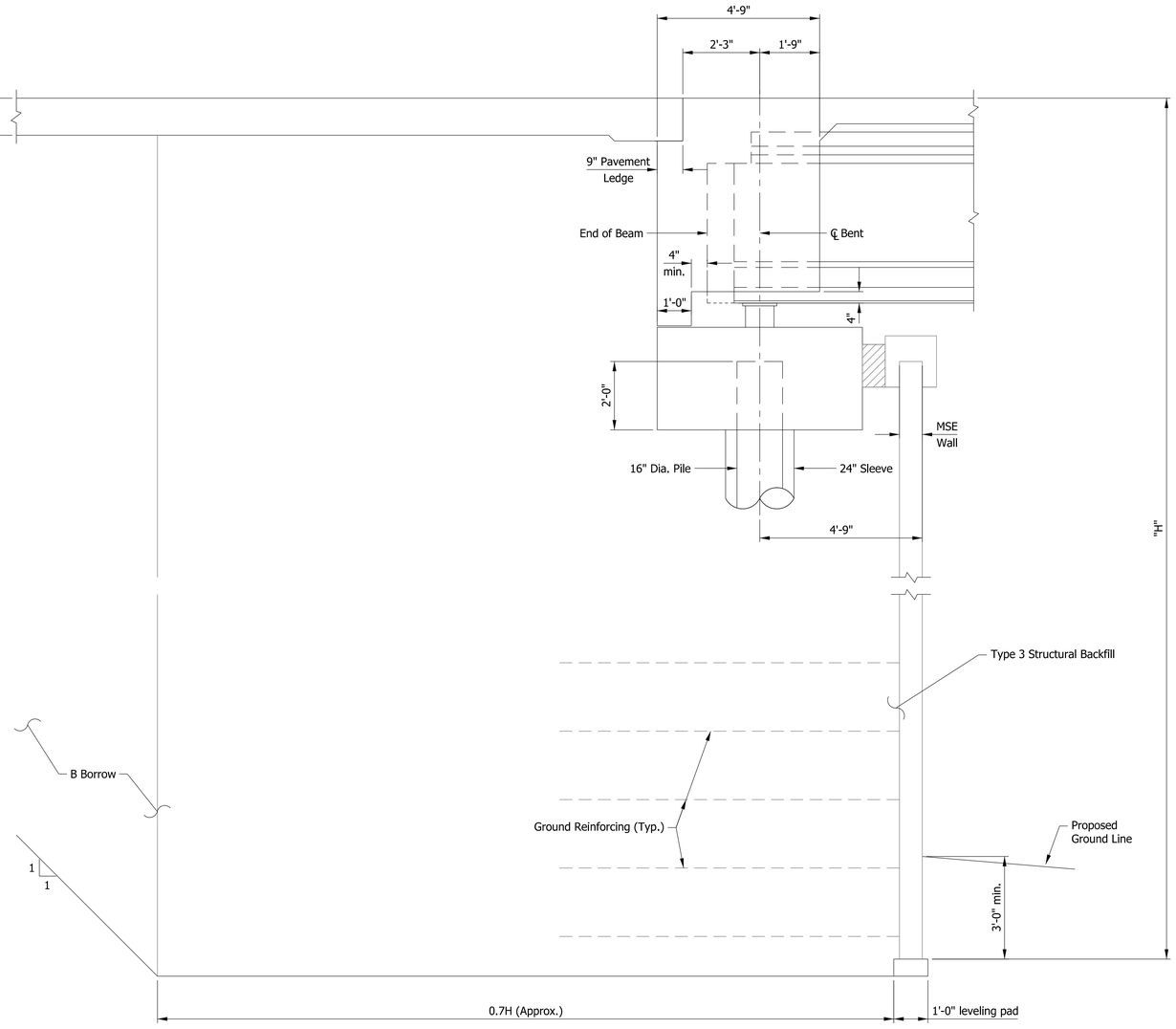


ELEVATION

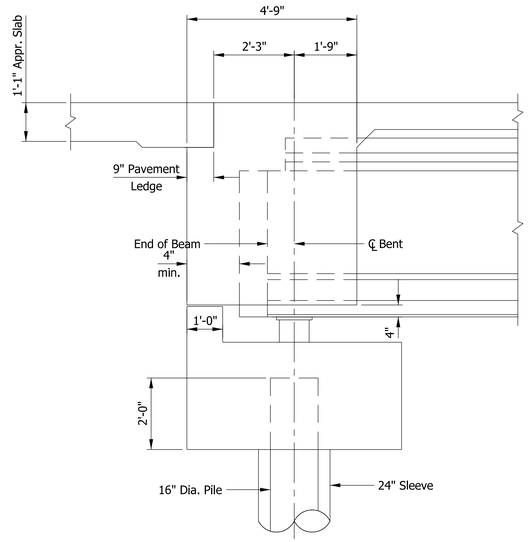
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
		⅜" = 1'-0"	I65-112-10634 CSBL
		VERTICAL SCALE	DESIGNATION
		⅜" = 1'-0"	1901921
DESIGNED: ZGC DRAWN: JNR	BENT NO. 3 DETAILS	SURVEY BOOK	SHEETS
		ELECTRONIC	8 of 16
CHECKED: CML CHECKED: ZGC		CONTRACT	PROJECT
		B-36910	1600808

Plot: 2/25/2020 5:49:41 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_08 - Bent No 3.dgn



SECTION A-A



SECTION B-B
(MSE Wall not shown for clarity)

Plot: 2/25/2020 5:49:43 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: JNR

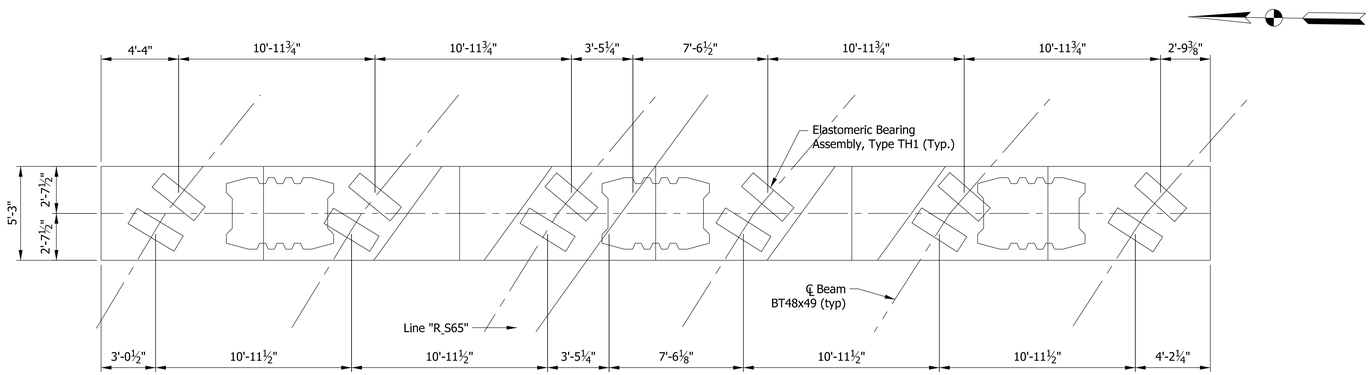
CHECKED: CML | CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

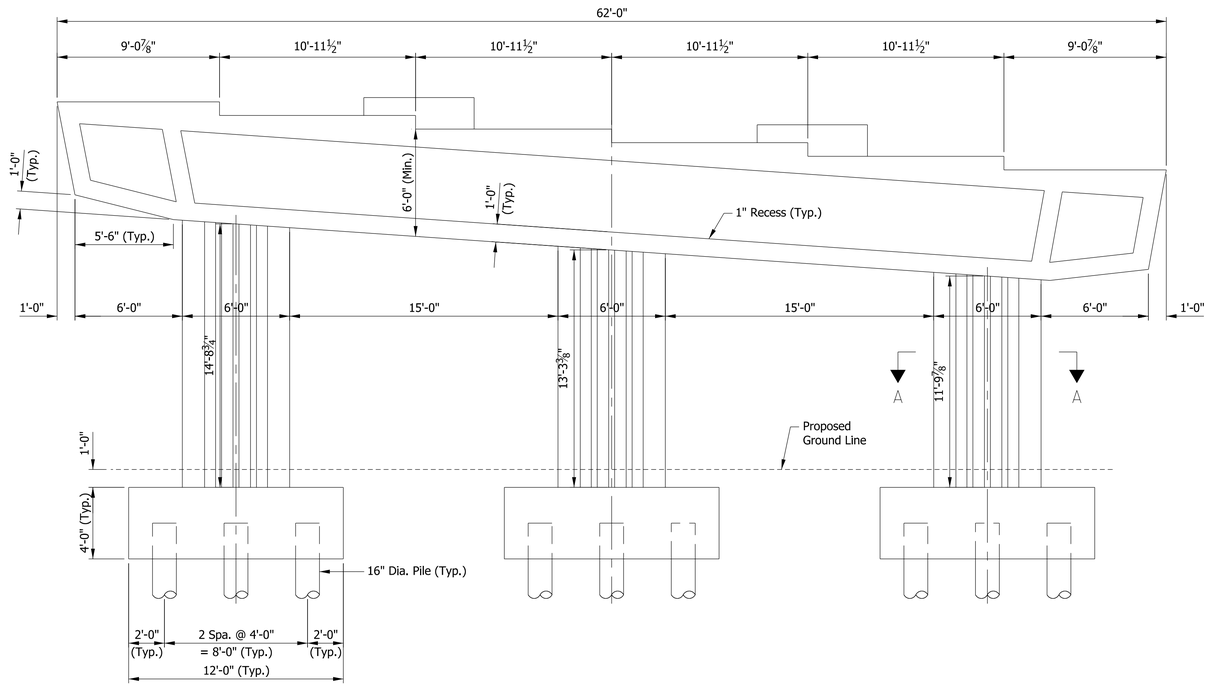
BENT NO. 1 AND 3 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
½" = 1'-0"	I65-112-10634 CSBL
VERTICAL SCALE	DESIGNATION
½" = 1'-0"	1901921
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 16
CONTRACT	PROJECT
B-36910	1600808

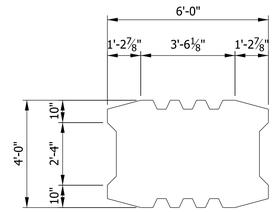
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_09 - Bent Details.dgn



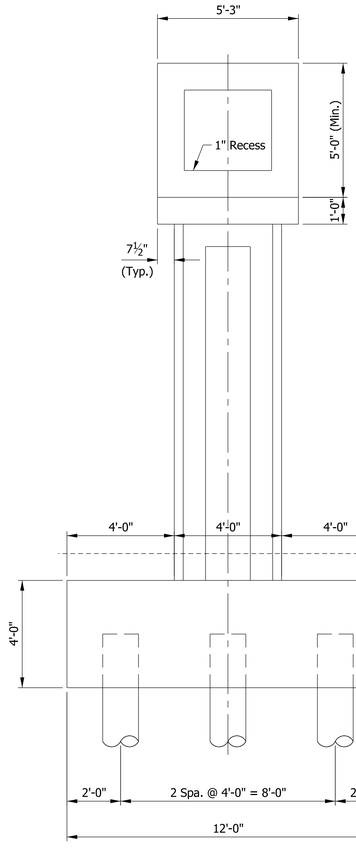
PLAN
Scale: ¼" = 1'-0"



SECTION
Scale: ¼" = 1'-0"



SECTION A-A
Scale: ⅜" = 1'-0"



END VIEW
Scale: ⅜" = 1'-0"

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

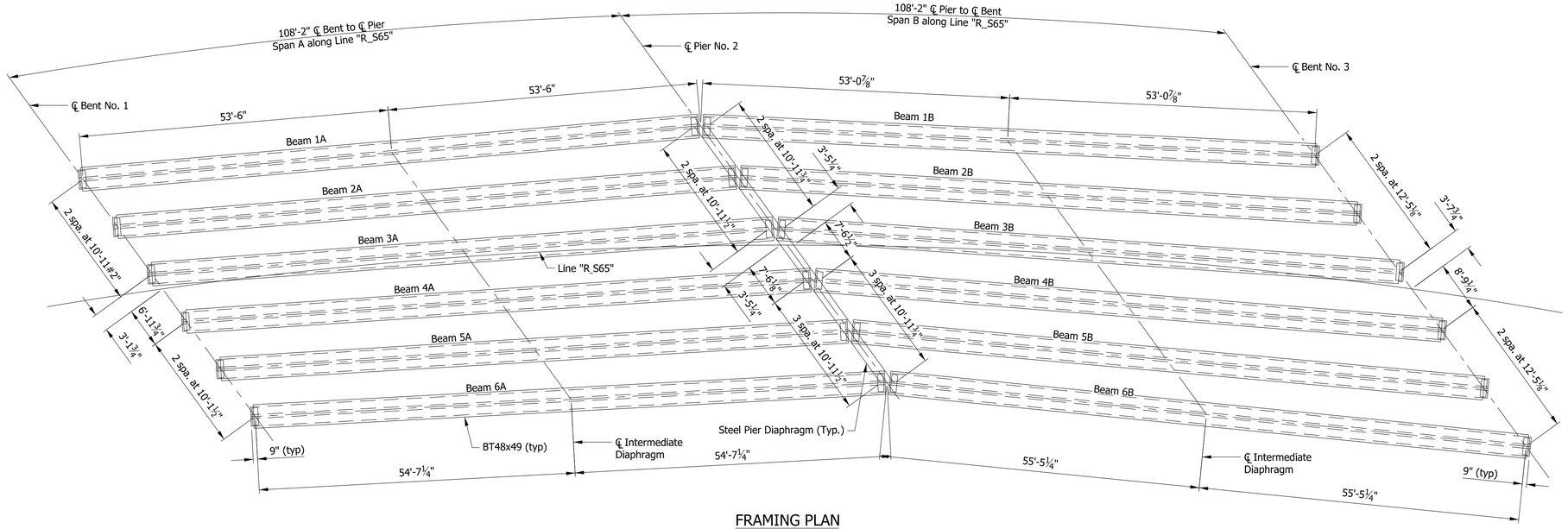
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 2 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I65-112-10634 CSBL
VERTICAL SCALE	DESIGNATION
	1901921
SURVEY BOOK	SHEETS
ELECTRONIC	10 of 16
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:49:46 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_10 - Pier No 2.dgn



FRAMING PLAN

NOTES:

1. For Intermediate Diaphragm Details, see Std. Dwg. E707-SDPC-01.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

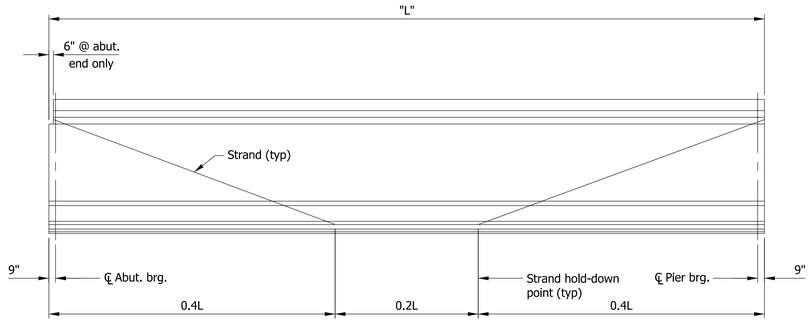
FRAMING PLAN

HORIZONTAL SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10634 CSBL
VERTICAL SCALE	DESIGNATION
3/32" = 1'-0"	1901921
SURVEY BOOK	SHEETS
ELECTRONIC	11 of 16
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:49:53 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_11 - Framing.dgn

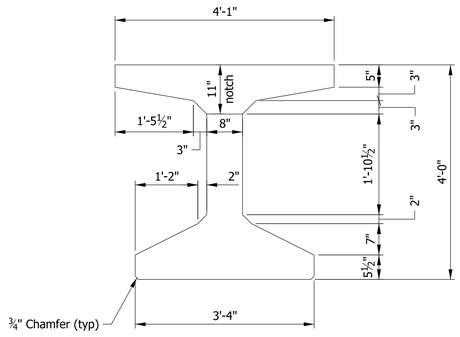
BEAM PLAN
Scale: ⅛" = 1'-0"



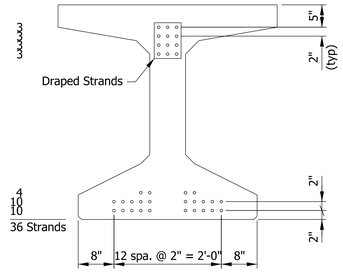
BEAM ELEVATION
Horizontal Scale: ⅛" = 1'-0"
Vertical Scale: ⅜" = 1'-0"

SPAN A BEAM LENGTHS	
Beam	"L"
Beam 1A	107'-5¼"
Beam 2A	107'-10⅜"
Beam 3A	108'-3½"
Beam 4A	108'-8¾"
Beam 5A	109'-2⅛"
Beam 6A	109'-7½"

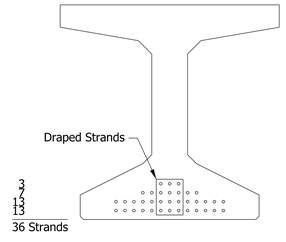
SPAN B BEAM LENGTHS	
BEAM	"L"
Beam 1B	106'-5¾"
Beam 2B	107'-4⅝"
Beam 3B	108'-3¾"
Beam 4B	109'-3"
Beam 5B	110'-2¼"
Beam 6B	111'-1¾"



TYPICAL SECTION
Scale: ¾" = 1'-0"



STRAND PATTERN AT
BEAM END
Scale: ¾" = 1'-0"



STRAND PATTERN AT
MIDSPAN
Scale: ¾" = 1'-0"

NOTES:

1. Prestressing reinforcement shall be 0.6" dia., uncoated, seven wire, low relaxation 270 ksi with strand area = 0.217 sq. in.
2. Beam shall be cast a minimum of 120 days before deck is poured.

Plot: 2/25/2020 5:49:55 PM

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

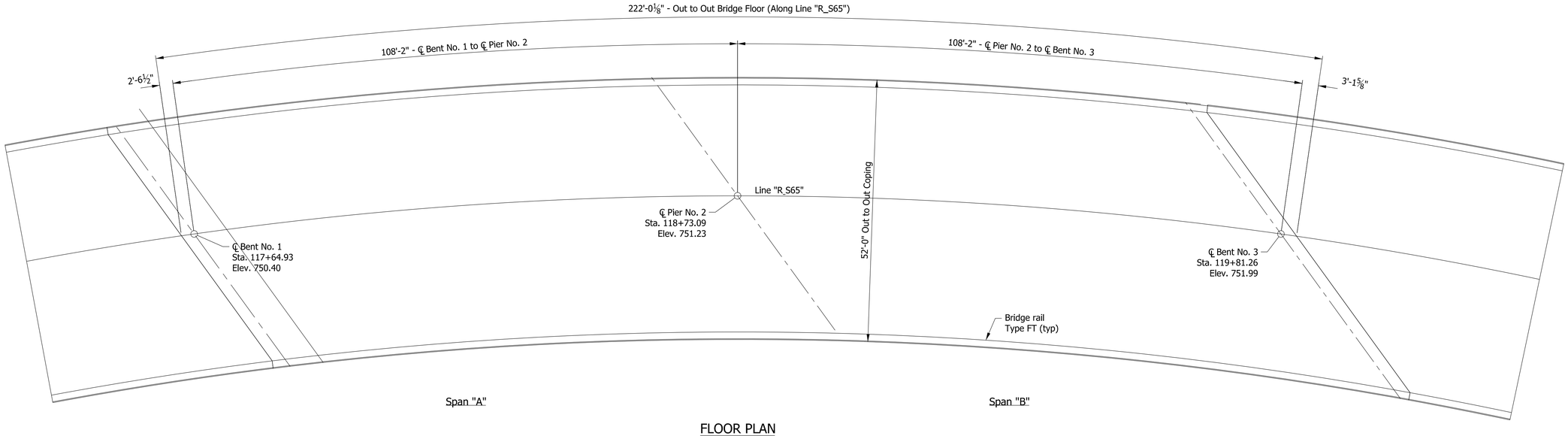
DESIGNED: ZGC
DRAWN: JNR
CHECKED: CML
CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I65-112-10634 CSBL
VERTICAL SCALE	DESIGNATION
	1901921
SURVEY BOOK	SHEETS
ELECTRONIC	12 of 16
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_12 - Beam Details.dgn



FLOOR PLAN

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

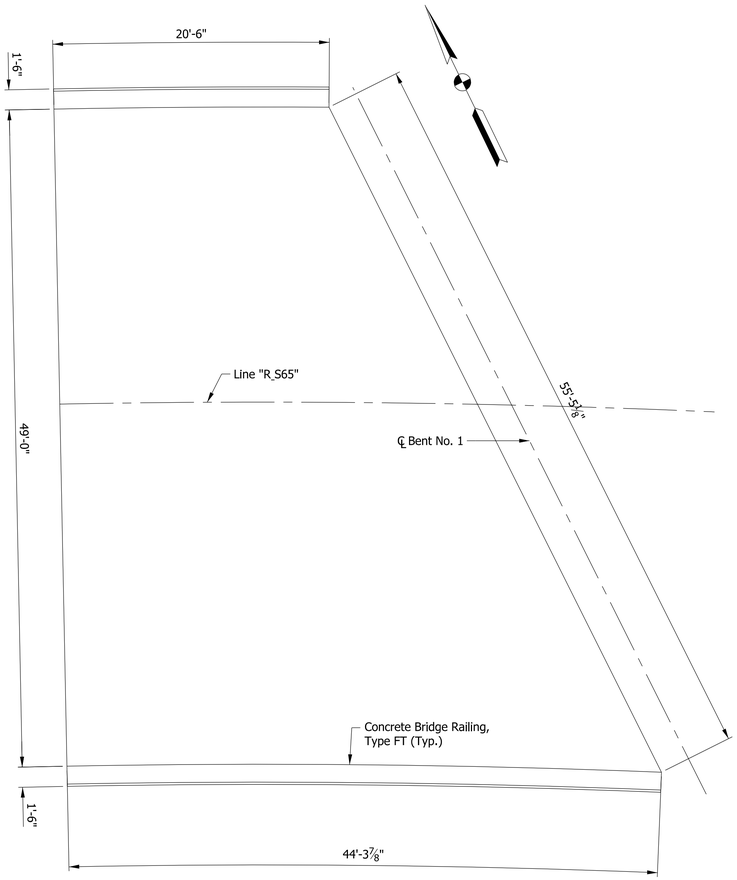
INDIANA
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

HORIZONTAL SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10634 CSBL
VERTICAL SCALE	DESIGNATION
3/32" = 1'-0"	1901921
SURVEY BOOK	SHEETS
ELECTRONIC	13 of 16
CONTRACT	PROJECT
B-36910	1600808

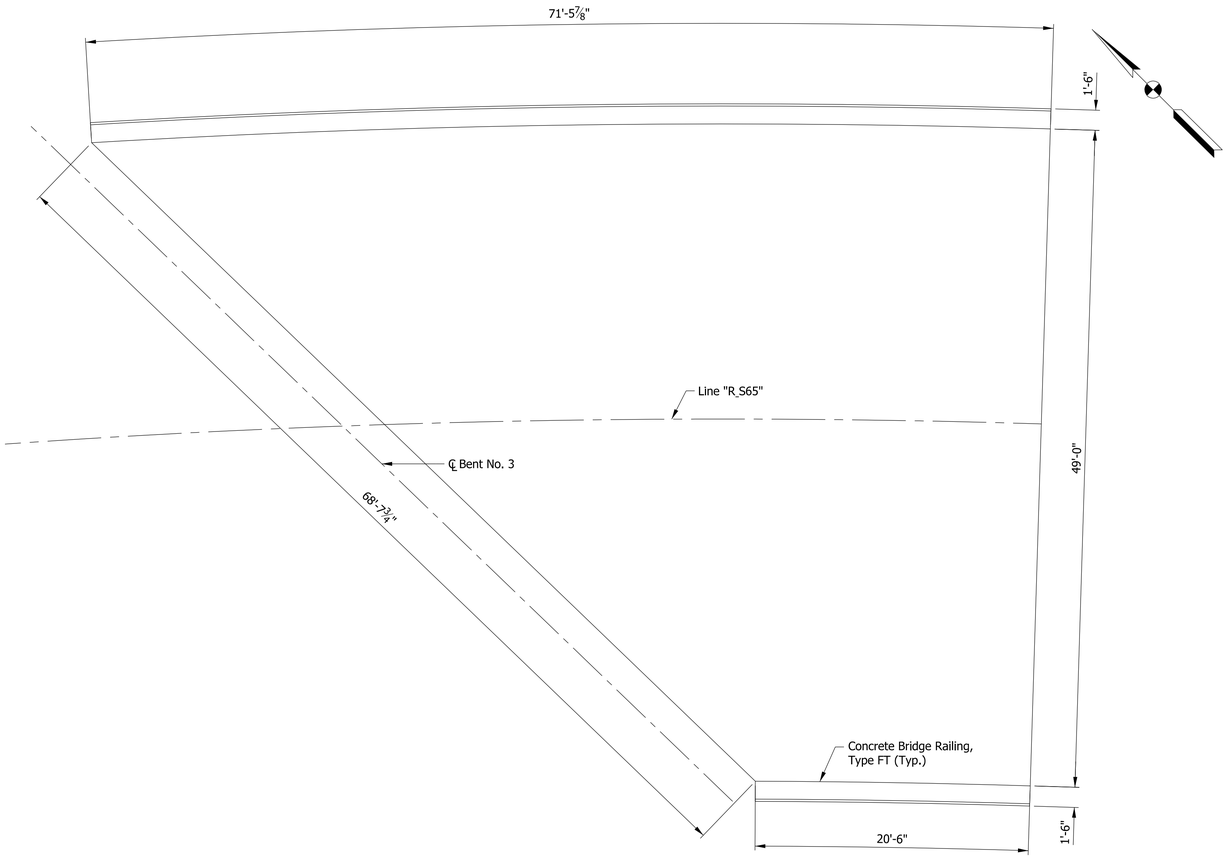
Plot: 2/25/2020 5:49:57 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_13 - Deck Plan.dgn



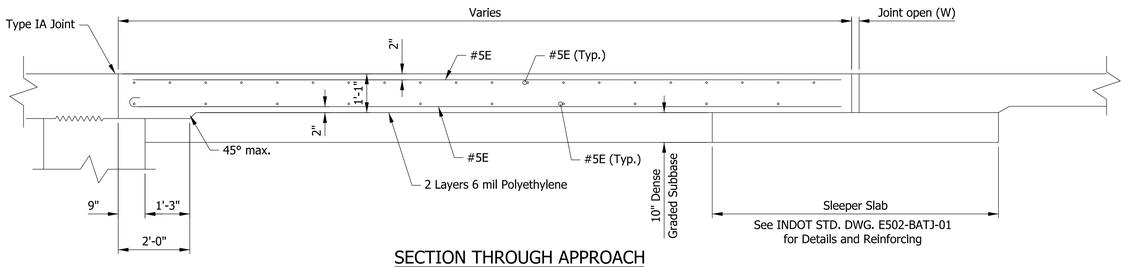
APPROACH SLAB AT BENT NO. 1

Scale: $\frac{3}{16}$" = 1'-0"



APPROACH SLAB AT BENT NO. 3

Scale: $\frac{3}{16}$" = 1'-0"



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTES:

1. For additional Terminal Joint information, see USP. Terminal Joint Details, Type CRCP.
2. Concrete Bridge Railing, Type FT sits on slab extension.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC | DRAWN: JNR

CHECKED: CML | CHECKED: ZGC

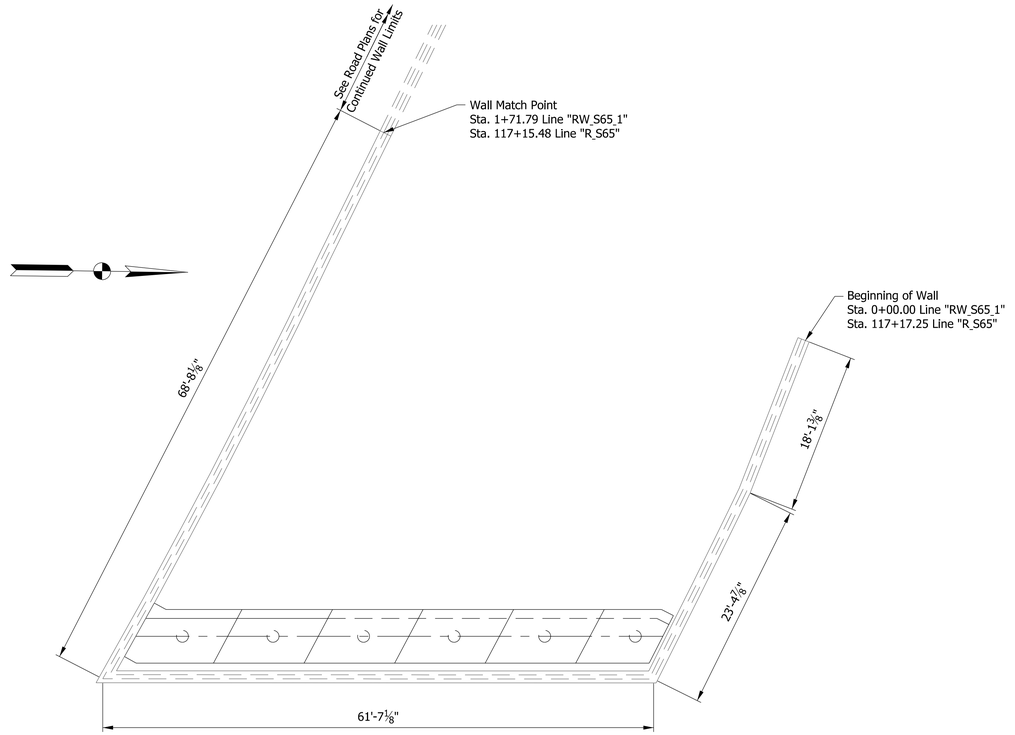
INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS

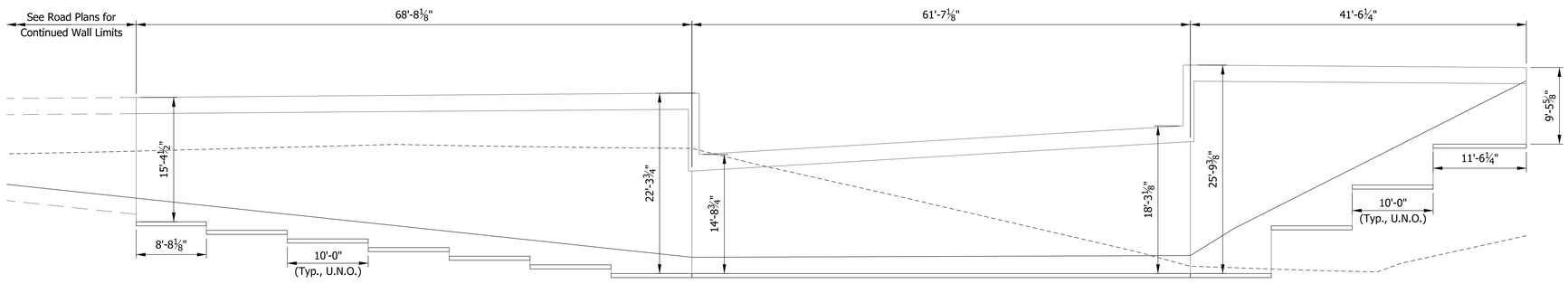
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I65-112-10634 CSBL
VERTICAL SCALE	DESIGNATION
	1901921
SURVEY BOOK	SHEETS
ELECTRONIC	14 of 16
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:49:58 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_14 - Approach.dgn



PLAN

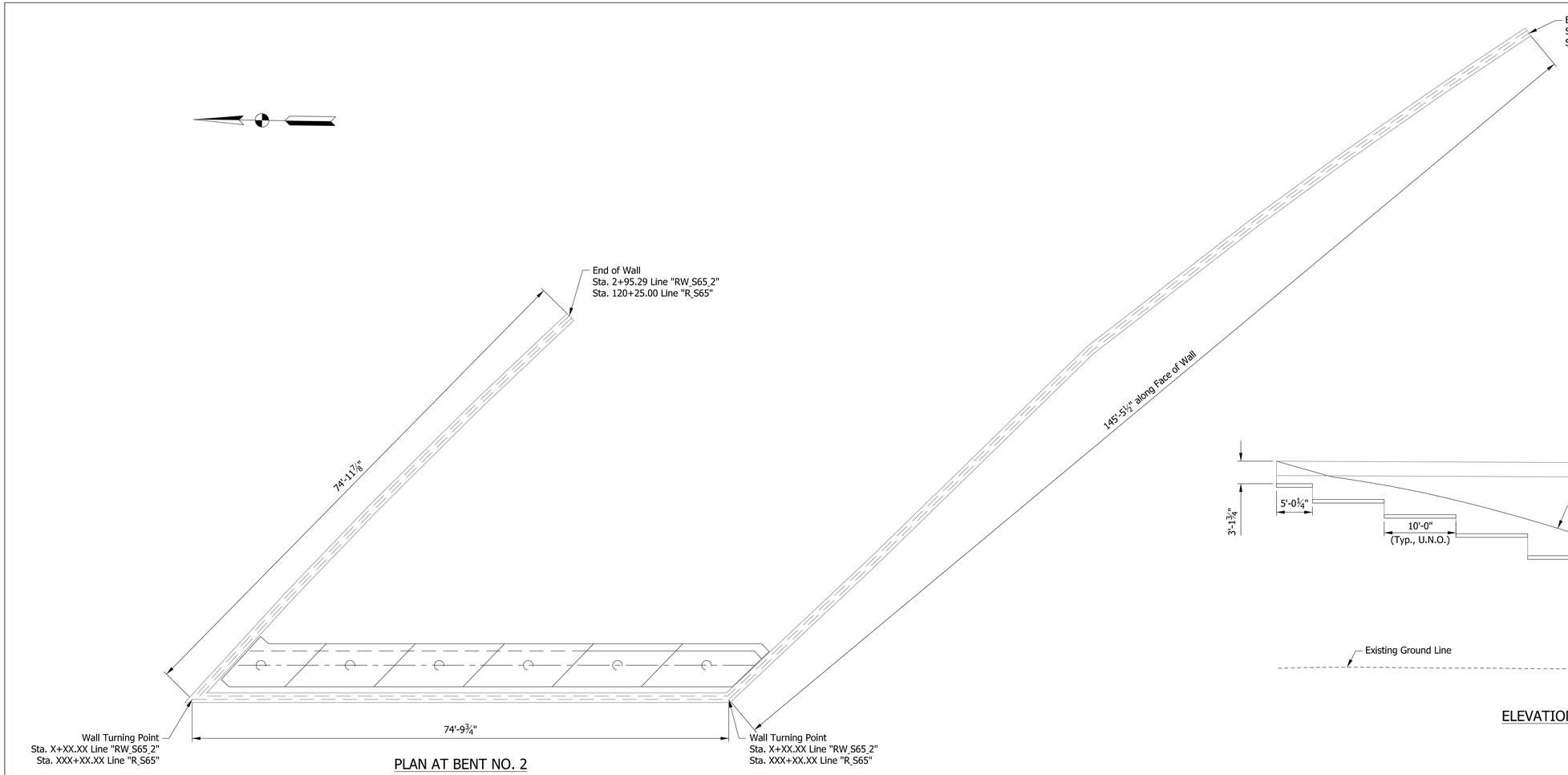


ELEVATION

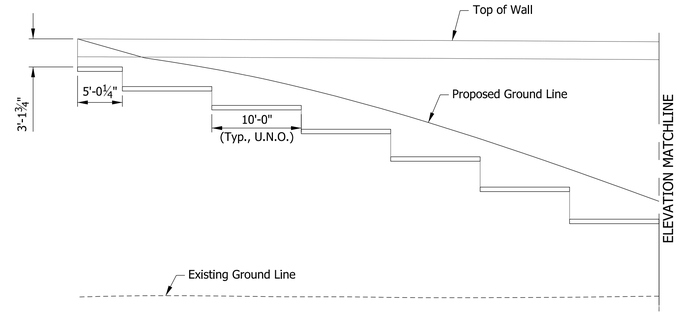
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
		⅛" = 1'-0"	I65-112-10633 NBL
		VERTICAL SCALE	DESIGNATION
		⅛" = 1'-0"	1901920
DESIGNED: ZGC DRAWN: JNR	MSE WALL DETAILS BENT NO. 1	SURVEY BOOK	SHEETS
		ELECTRONIC	14 of 15
CHECKED: CML CHECKED: ZGC		CONTRACT	PROJECT
		B-36910	1600808

Plot: 2/25/2020 5:50:00 PM

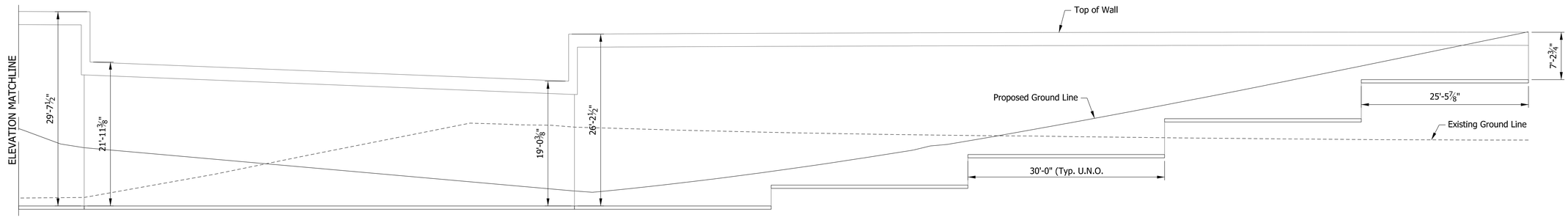
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_15 - MSE Wall.dgn



PLAN AT BENT NO. 2



ELEVATION 1



ELEVATION 2

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
		⅛" = 1'-0"	I65-112-10633 NBL
		VERTICAL SCALE	DESIGNATION
		⅛" = 1'-0"	1901920
DESIGNED: ZGC / DRAWN: JNR	MSE WALL DETAILS BENT NO. 3	SURVEY BOOK	SHEETS
		ELECTRONIC	14 of 15
CHECKED: CML / CHECKED: ZGC		CONTRACT	PROJECT
		B-36910	1600808

Plot: 2/25/2020 5:50:02 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 37 I65 SB over SB CD & I70 WB\1901921_16 - MSE Wall.dgn

PROJECT	DESIGNATION
1600808	1901922
CONTRACT	BRIDGE FILE
B-36910	I70-083-10635 EBL

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I70-083-10635 NBL	COMPOSITE PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE	SPAN: 173"-3 1/4" SKEW: 46°30'00" RT.	I-65 NB	136+65.44

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVENUE	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	BRIDGE REPLACEMENT ON I-65 SB TO I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE) - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER VERMONT STREET	

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

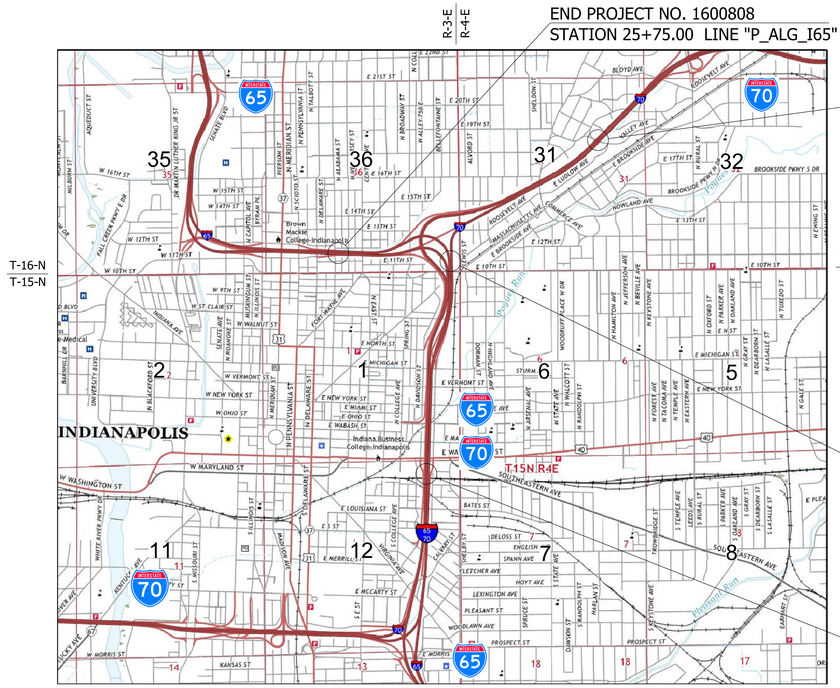
FOR SPANS OVER 20 FEET

ROUTE: I-70 E.B. AT: RP 136+65.44

PROJECT NO. 1600808 (P.E. & CONSTR.)

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

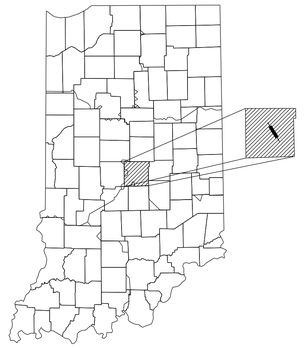
NEW BRIDGE ON I-70 EASTBOUND OVER I-65 NORTHBOUND
LOCATED 2.04 MILES NORTH OF I-70 (SOUTH SPLIT) INTERCHANGE
IN SECTION 1, T-15-N, R-3-E, CENTER TOWNSHIP, MARION COUNTY, INDIANA



LOCATION MAP
(MARION COUNTY)

TRAFFIC DATA		I-65 NORTHBOUND	I-70 EASTBOUND
A.A.D.T.	(2021)	34,480 V.P.D.	48,680 V.P.D.
A.A.D.T.	(2041)	41,090 V.P.D.	57,330 V.P.D.
D.H.V	(2041)	4,109 V.P.H.	5,733 V.P.H.
DIRECTIONAL DISTRIBUTION		100 %	100 %
TRUCKS		3 % D.H.V.	13 % D.H.V.

DESIGN DATA	
DESIGN SPEED	50 M.P.H.
PROJECT DESIGN CRITERIA	COMPLETE RECONSTRUCTION (FREEWAY)
FUNCTIONAL CLASSIFICATION	URBAN FREEWAY
RURAL/URBAN	URBAN (BUILT-UP)
TERRAIN	LEVEL
ACCESS CONTROL	FULL



PROJECT LOCATION SHOWN BY
MARION COUNTY

LATITUDE: 39°46'59" N LONGITUDE: 86°08'28" W

HYDROLOGIC UNIT CODE: 05120201130020

BRIDGE LENGTH:	0.034	MI.
ROADWAY LENGTH:	SEE ROAD PLANS	MI.
TOTAL LENGTH:	SEE ROAD PLANS	MI.
MAX. GRADE:	3.50	%

SCALE: 1" = 2000'

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

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: _____ PHONE NUMBER

_____ DATE

APPROVED FOR LETTING: _____ INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE
I65-112-10635 EBL
DESIGNATION
1901922

SURVEY BOOK	SHEETS
ELECTRONIC	1 of 17
CONTRACT	PROJECT
B-36910	1600808

PLOT_DATE$ $PLOT_TIME$

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_01 - Title.dgn

UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE SHEET
2	INDEX SHEET
3	MAINTENANCE OF TRAFFIC LAYOUT OVER THE BRIDGE
4	LAYOUT SHEET
5	GENERAL PLAN
6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 2 DETAILS
9	BENT NO. 1 & 2 DETAILS
10	FRAMING PLAN
11	BEAM DETAILS
12	SUPERSTRUCTURE DETAILS
13	APPROACH SLAB DETAILS
14	RETAINING WALL 1 LAYOUT
15	RETAINING WALL 1 ELEVATION
16	RETAINING WALL 2 LAYOUT
17	RETAINING WALL 2 ELEVATION

REVISIONS

SHEET NO.	DATE	REVISED

811 Know what's below. Call before you dig.

INDIANA UNDERGROUND
1-800-382-5544 OR CALL 811
24 HOURS A DAY 7 DAYS A WEEK

PLOT_DATE$ $PLOT_TIME$

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TLH

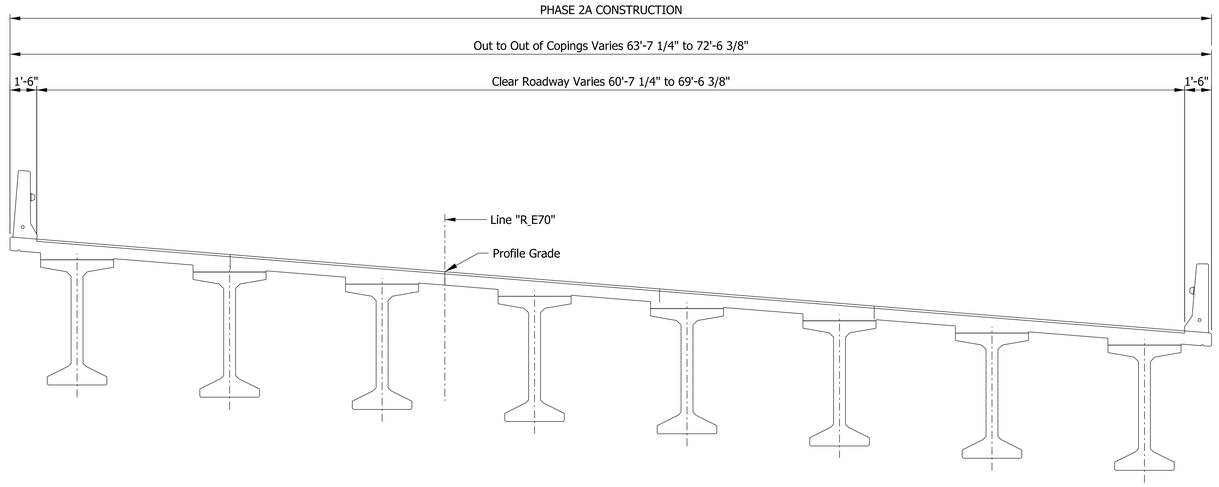
CHECKED: CML CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

SCALE	BRIDGE FILE
	I65-112-10635 EBL
	DESIGNATION
	1901922
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 17
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_02 - Index.dgn

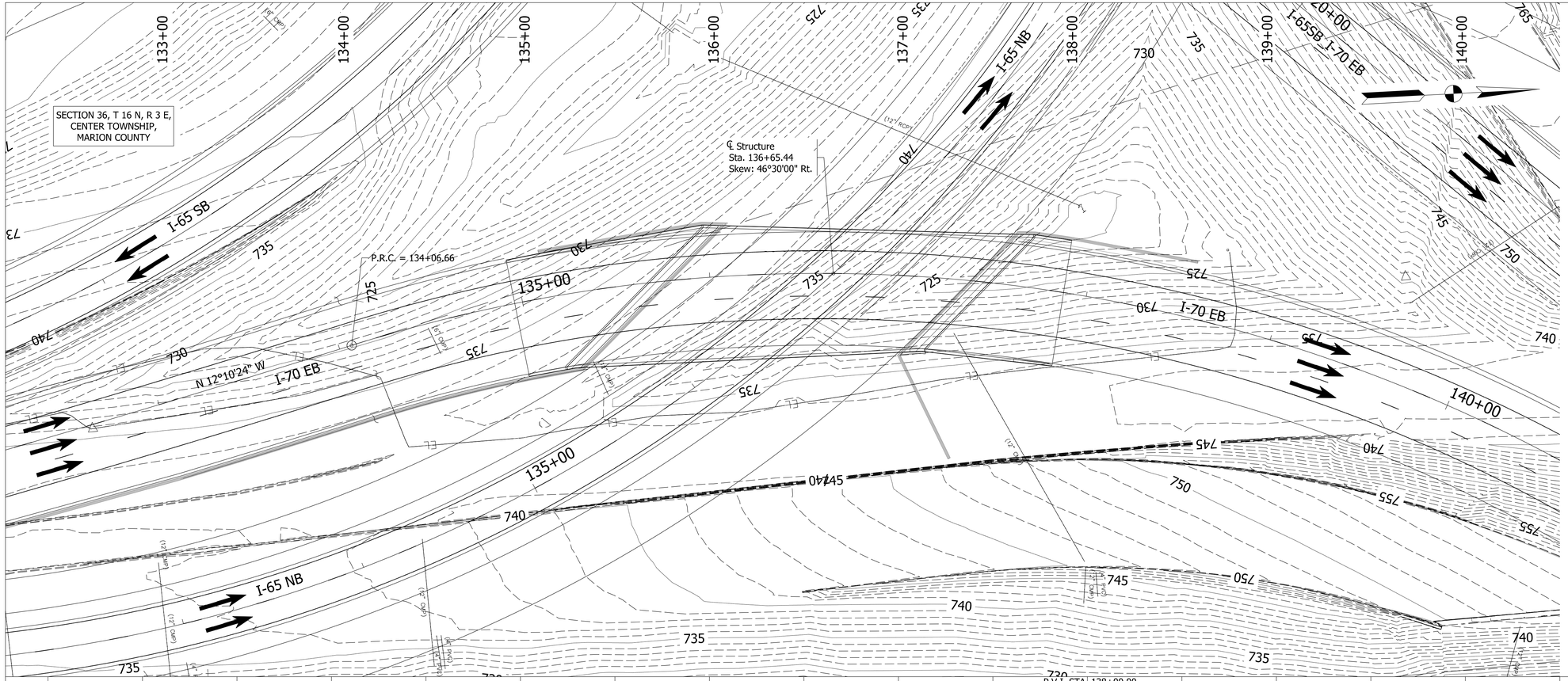


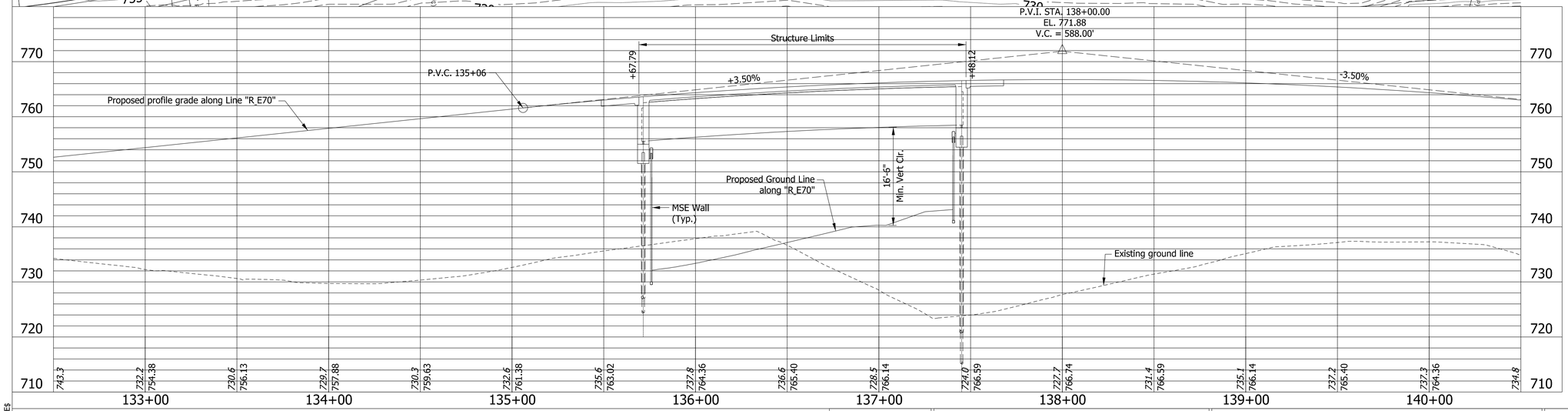
PHASE 2A

		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1/16"=1'-0"	BRIDGE FILE I65-112-10635 EBL
				VERTICAL SCALE 1/16"=1'-0"	DESIGNATION 1901922
		DESIGNED: ZGC / DRAWN: TLH / CHECKED: CML / CHECKED: CML	MAINTENANCE OF TRAFFIC	SURVEY BOOK	SHEETS
				ELECTRONIC	3 of 17
				CONTRACT	PROJECT
				B-36910	1600808

PLOT_DATE$ $PLOT_TIME$

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_03 - Traffic Maintenance.dgn





EXISTING STRUCTURE:

No existing structure at current location.

EARTHWORK TABULATION

Fill +20%	(See Road Plans)
Common excavation	(See Road Plans)
Excavation, foundation, Unclassified (70%)	(See Road Plans)
Waste	(See Road Plans)

HORIZONTAL CURVE DATA FOR LINE "R_E70"

CURVE DATA4
PI = 141+02.47
Delta = 78°54'26"Rt.
R = 824.00 ft.
T = 695.81 ft.
L = 1067.42 ft.
E = 254.48 ft.

HORIZONTAL CURVE DATA FOR LINE "R_N65"

PI = 129+55.17
Delta = 2°44'11"Rt.
R = 8150.00 ft.
T = 194.65 ft.
L = 389.22 ft.
E = 2.32 ft.

PI = 145+01.92
Delta = 120°33'12"Rt.
R = 772.00 ft.
T = 1352.18 ft.
L = 1624.33 ft.
E = 785.04 ft.

NOTES:

1. See sheet 2 for utility owners.
2. All R/W shall be as shown.
3. There shall be no clearing of trees beyond construction limits.
4. All topography is existing.
5. All R/W described from line "R_E70", except as noted.
6. Proposed lighting, traffic sign structures and drainage not shown and shall be the responsibility of the Design-Build Contractor during final design.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN @ 173'-3 1/4"
SKEW: 46°30'00" RT.
CLEAR ROADWAY: VARIES
60'-7 1/4" to 69'-6 3/8"
I-70 E.B. OVER I-65 N.B.
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: JTE DRAWN: TLH

CHECKED: HDA CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

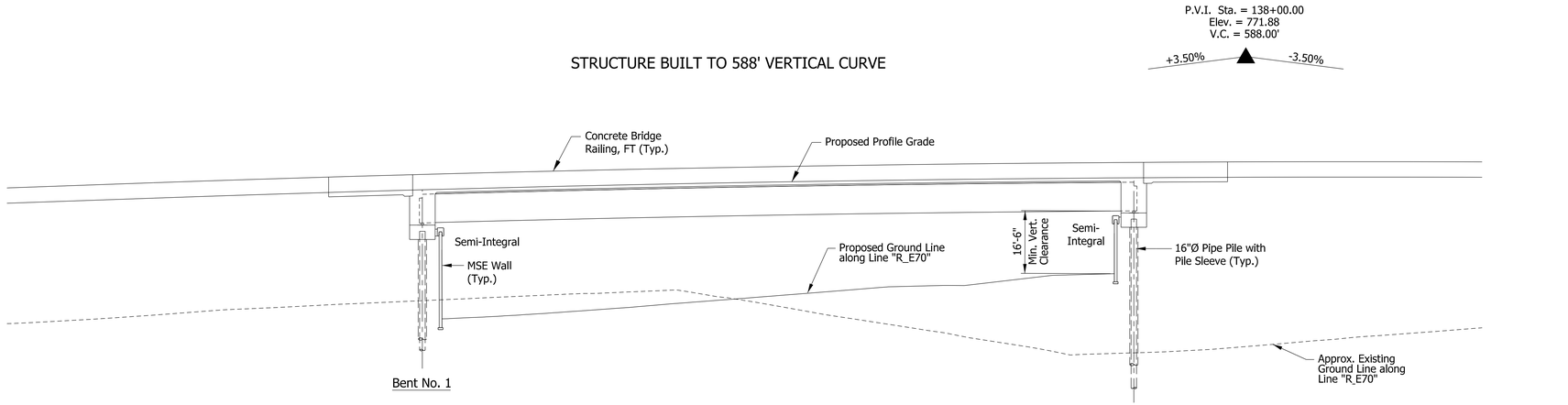
HORIZONTAL SCALE	BRIDGE FILE
1"=30'-0"	I65-112-10635 EBL
VERTICAL SCALE	DESIGNATION
1"=10'-0"	1901922

SURVEY BOOK	SHEETS
ELECTRONIC	4 of 17
CONTRACT	PROJECT
B-36910	1600808

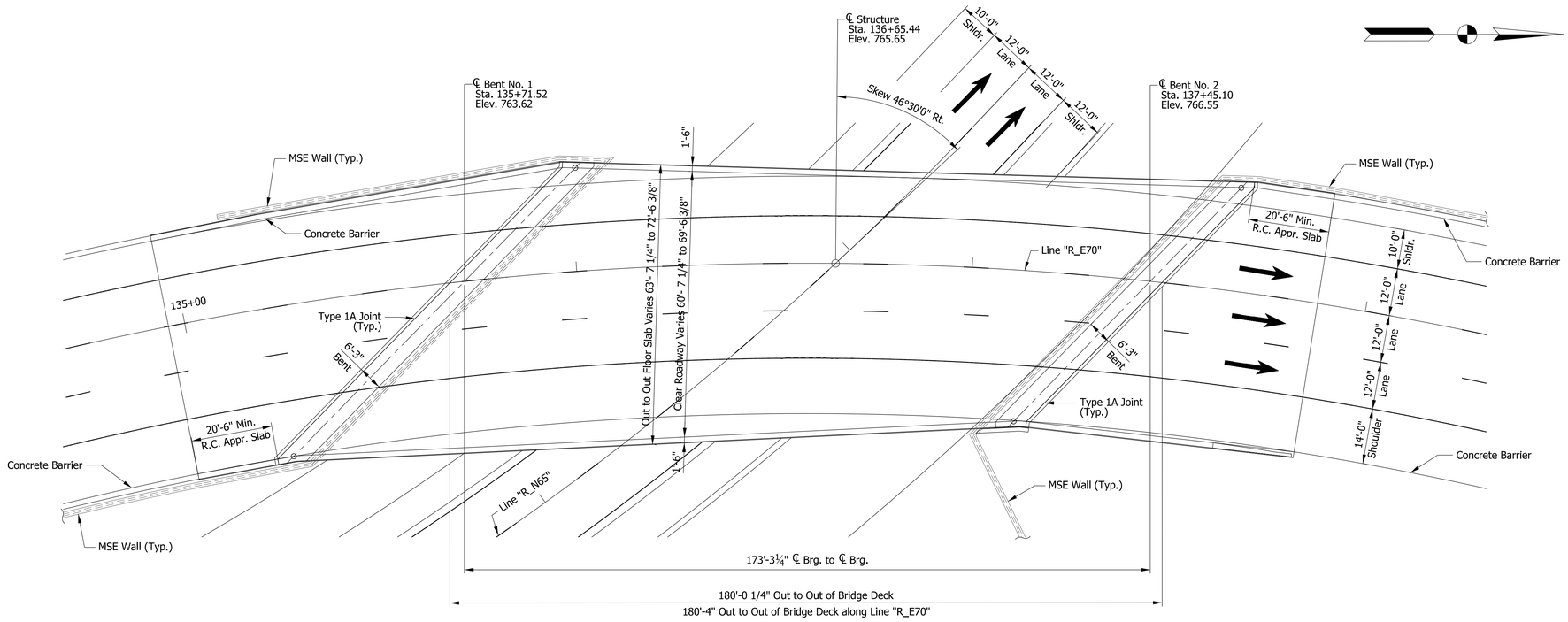
PLOT_DATE$ $PLOT_TIME$

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_04 - Layout.dgn

STRUCTURE BUILT TO 588' VERTICAL CURVE



ELEVATION



PLAN

GENERAL NOTES

Reinforcing bar cover shall be 2" min. in top and 1" min. in bottom of floor slabs, 3" min. in footing except bottom bars which shall be 4" min., and 2" min. in all other parts, unless noted.

All dimensions and elevations are in feet (ft) unless otherwise noted.

Concrete in floor slab, diaphragms, barrier approach slab and end bents shall be an alternate Class "C" in accordance with the technical provisions. Reinforcing bars in deck, barrier, and end bent diaphragm extending into the deck shall be stainless steel. Reinforcing bars in end bent diaphragm not extending into the deck and in the cap shall be epoxy coated.

Anti-graffiti coating shall be placed on all exposed surfaces of new retaining walls and new bridge structures excluding top of deck or overlay and interior beams.

DESIGN DATA

LIVE LOAD
Superstructure and substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications Eighth Edition, 2017 and subsequent interim.

DEAD LOAD
Designed for actual Dead Load plus 15 psf for SIP metal deck forms.

Slab designed with a 7½" structural depth and a 1½" very early strength LMC overlay.

SEISMIC DESIGN DATA

Seismic Performance Zone = 1
Acceleration Coefficient = 0.061
Seismic Soil Profile Type = Site Class C

DESIGN STRENGTHS

Prestressed Concrete	f'c = 10,000 psi @ 28 DAYS
Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,500 psi
Class "C" Concrete	f'c = 4,000 psi
Reinforcing Bars	fy = 60,000 psi (barrier)
	fy = 75,000 psi (all other locations)

CONSTRUCTION LOADING

The exterior beam 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 beam. The finishing machine was assumed to be supported 6 inches past the edge of the vertical coping form. The top overhang brackets were assumed to be located 6 inches past the edge of the vertical coping form. The bottom overhang brackets were assumed to be braced against the intersection of the beam bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/sft for permanent metal stay in place deck forms, removable deck forms, and 2-ft exterior walkway.
Construction Live Load:	Designed for 20 lb/sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of 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 AASHTO LRFD 3.8.1.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN @ 173'-3 1/4"
SKEW: 46°30'00" RT.
CLEAR ROADWAY: VARIES
60'-7 1/4" to 69'-6 3/8
I-70 E.B. OVER I-65 N.B.
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC | DRAWN: TLH

CHECKED: CML | CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

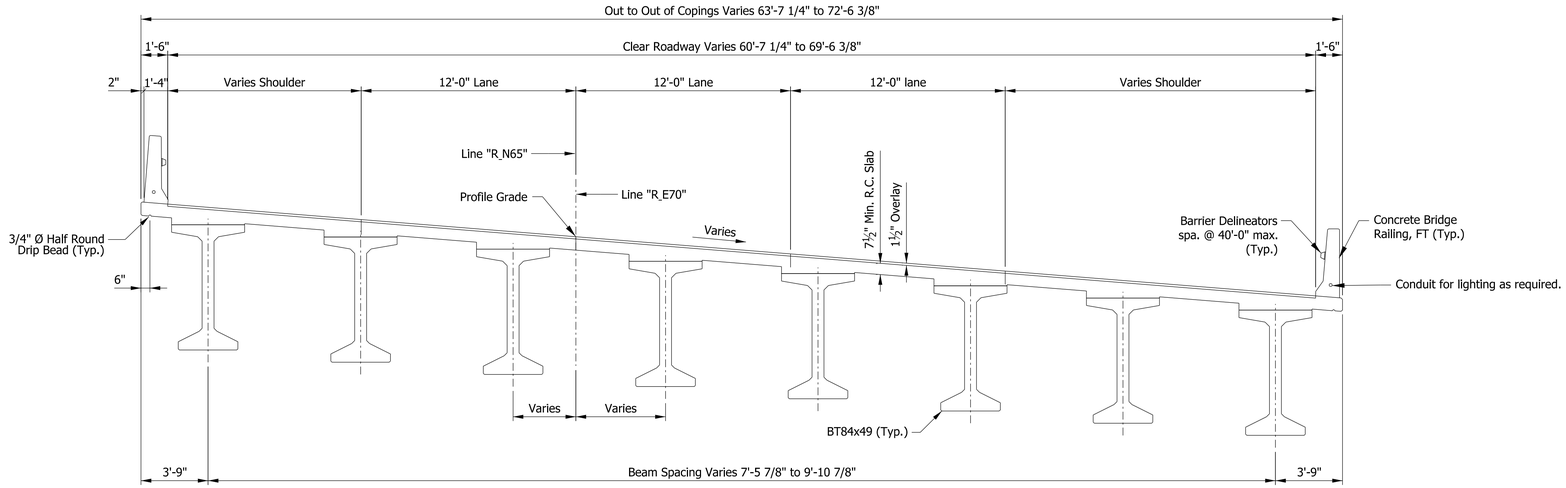
GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1/16"=1'-0"	I65-112-10635 EBL
VERTICAL SCALE	DESIGNATION
1/16"=1'-0"	1901922

SURVEY BOOK	SHEETS
ELECTRONIC	5 of 17
CONTRACT	PROJECT
B-36910	1600808

PLOT_DATE$ $PLOT_TIME$

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_05 - Gen plan.dgn



TYPICAL BRIDGE SECTION

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN @ 173'-3 1/4"
SKEW: 46°30'00" RT.
CLEAR ROADWAY: VARIES
60'-7 1/4" to 69'-6 3/8"
I-70 E.B. OVER I-65 N.B.
MARION COUNTY

PLOT_DATE$ $PLOT_TIME$

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

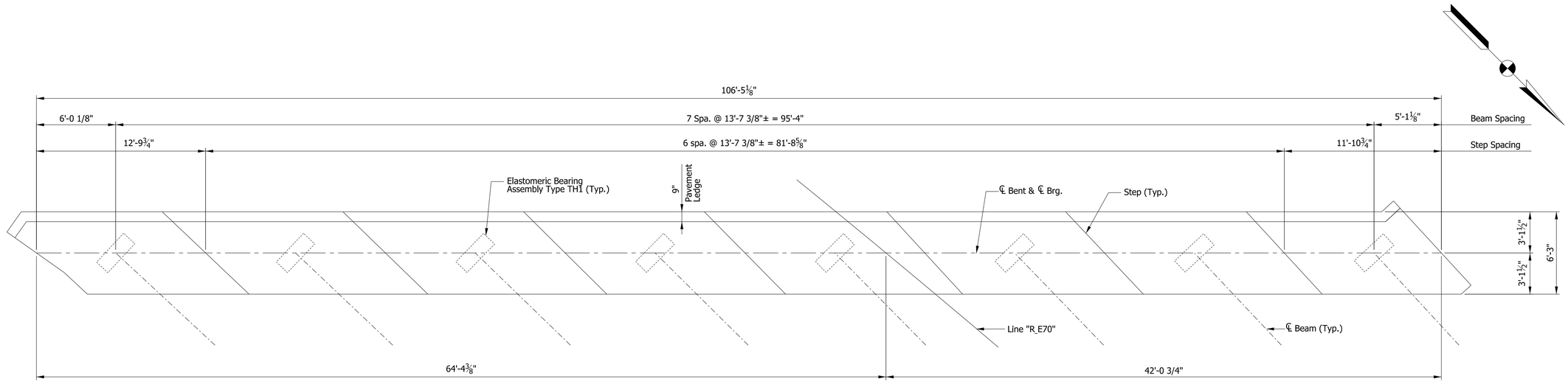
DESIGNED: ZGC
DRAWN: TLH
CHECKED: CML
CHECKED: CML

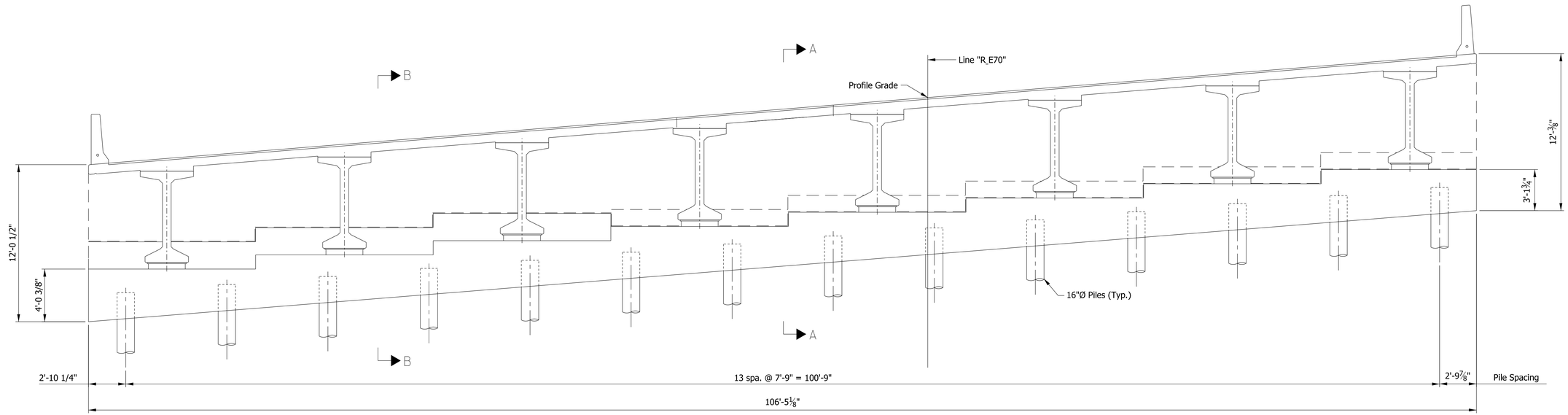
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
TYPICAL SECTION

HORIZONTAL SCALE	BRIDGE FILE
1/16"=1'-0"	I65-112-10635 EBL
VERTICAL SCALE	DESIGNATION
1/16"=1'-0"	1901922
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 17
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_06 - Typical Section.dgn





ELEVATION

NOTES:

1. For Section A-A, see sheet 9.
2. For Elostomeric Bearing Pad Type TH1, see Std. Dwg. E726-BEBP-03.

PLOT_DATE$ $PLOT_TIME$

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_07 - Bent No.1.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

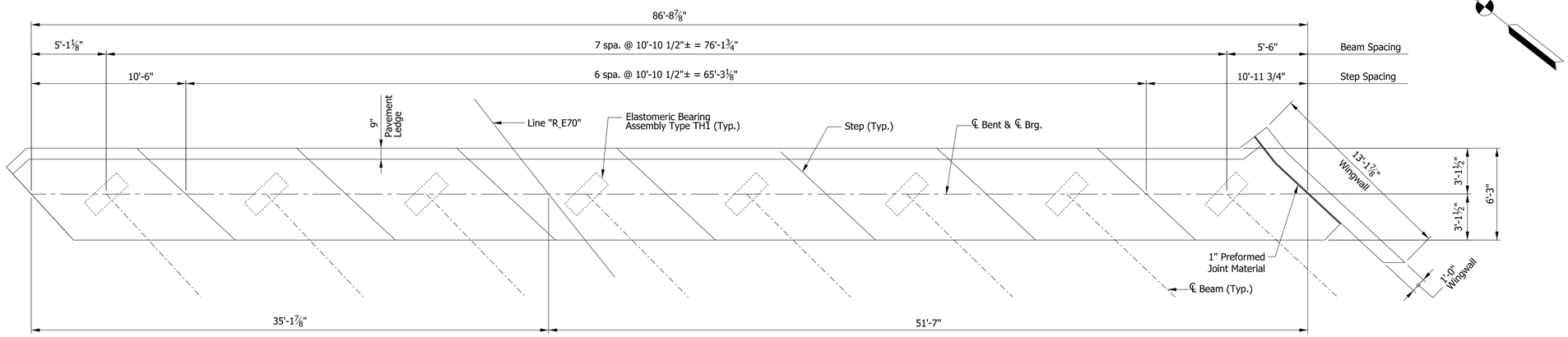
DESIGNED: ZGC DRAWN: TLH

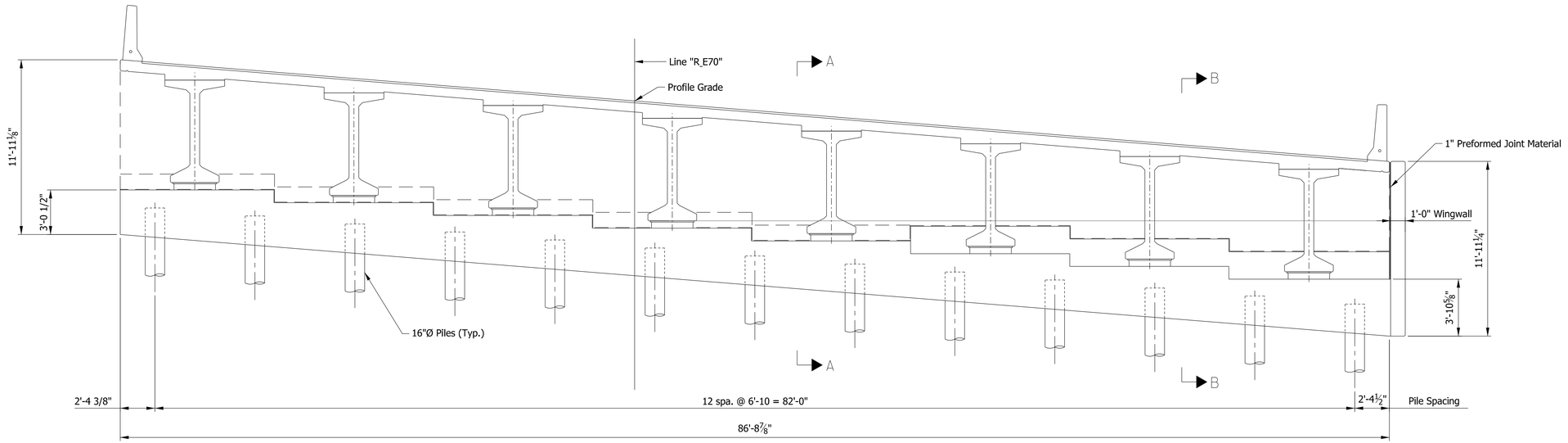
CHECKED: CML CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO.1 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1/4"=1'-0"	I65-112-10635 EBL
VERTICAL SCALE	DESIGNATION
1/4"=1'-0"	1901922
SURVEY BOOK	SHEETS
ELECTRONIC	7 of 17
CONTRACT	PROJECT
B-36910	1600808





ELEVATION

NOTES:

1. For Section A-A, see sheet 9.
2. For Elostomeric Bearing Pad Type TH1, see Std. Dwg. E726-BEBP-03.

PLOT_DATE$ $PLOT_TIME$

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TLH

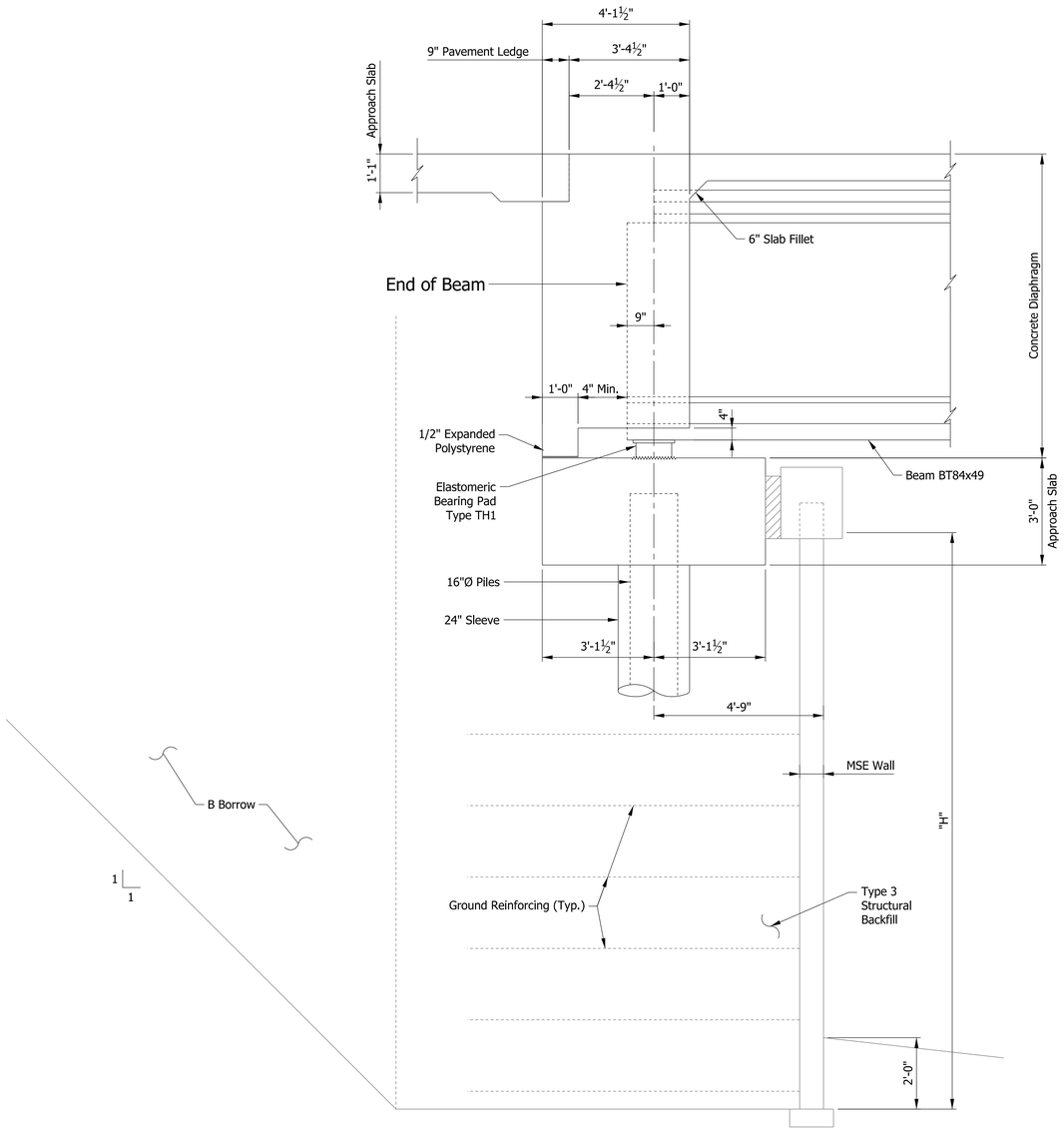
CHECKED: CML CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

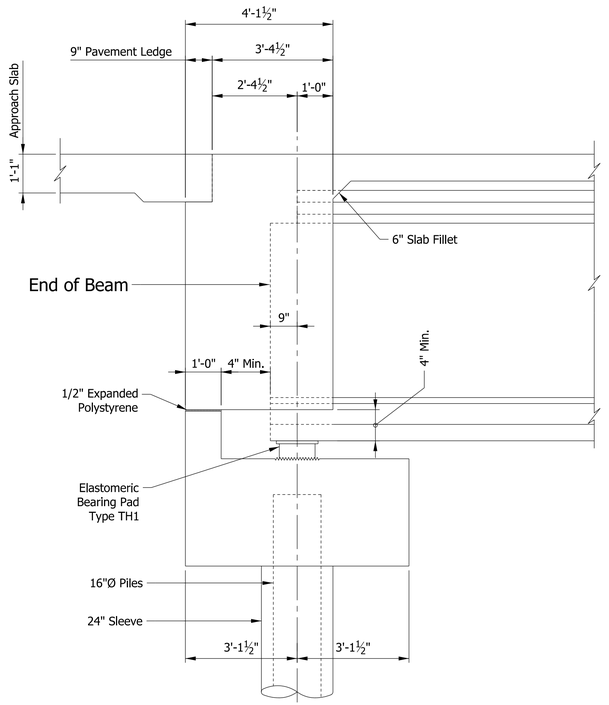
BENT NO.2 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1/4"=1'-0"	I65-112-10635 EBL
VERTICAL SCALE	DESIGNATION
1/4"=1'-0"	1901922
SURVEY BOOK	SHEETS
ELECTRONIC	8 of 17
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_08 - Bent No.2.dgn



SECTION A-A



SECTION B-B

NOTES:

1. For Elostomeric Bearing Pad Type TH1, see Std. Dwg. E726-BEBP-03.

PLOT_DATE$ $PLOT_TIME$

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: TLH

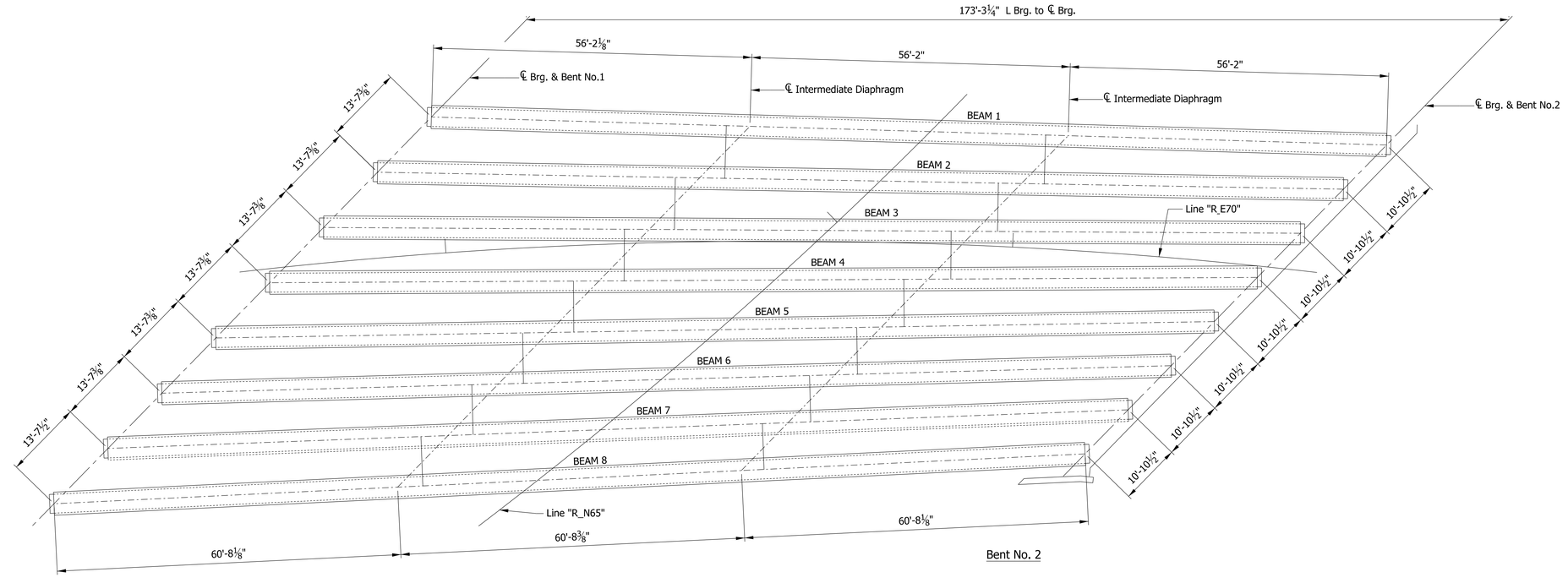
CHECKED: CML | CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

BENTS NO.1 AND 2 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1/4"=1'-0"	I65-112-10635 EBL
VERTICAL SCALE	DESIGNATION
1/4"=1'-0"	1901922
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 17
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_09 - Bent Details.dgn



FRAMING PLAN

NOTES:

1. For Intermediate Diaphragm details, see Std. Dwg. E707-SDPC-05 & 06.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: TLH

CHECKED: CML | CHECKED: CML

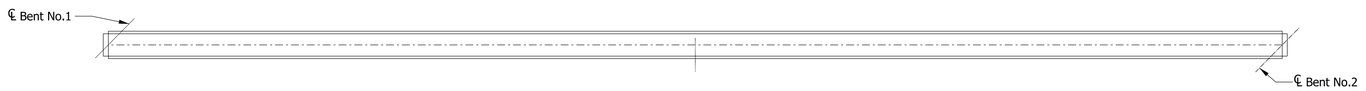
INDIANA
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN

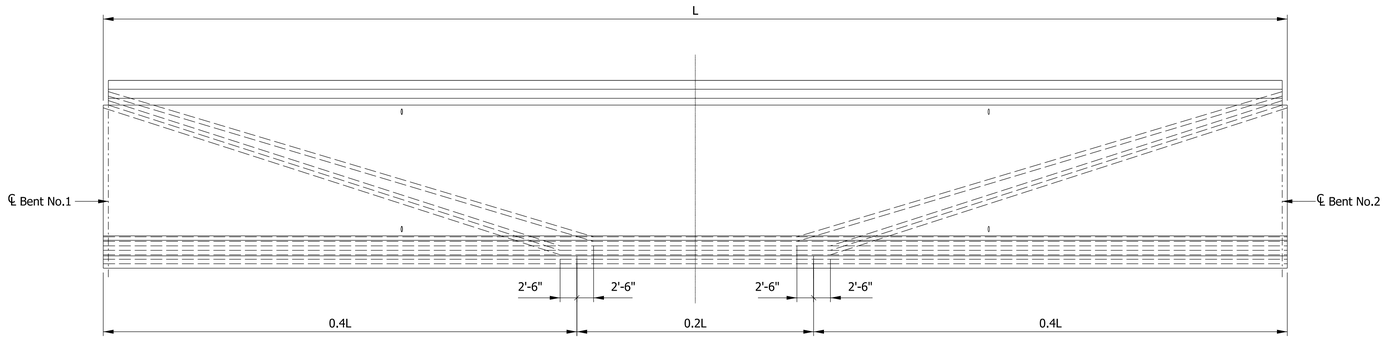
HORIZONTAL SCALE	BRIDGE FILE
1/16"=1'-0"	I65-112-10635 EBL
VERTICAL SCALE	DESIGNATION
1/16"=1'-0"	1901922
SURVEY BOOK	SHEETS
ELECTRONIC	10 of 17
CONTRACT	PROJECT
B-36910	1600808

PLOT_DATE$ $PLOT_TIME$

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_010 - Framing Plan.dgn

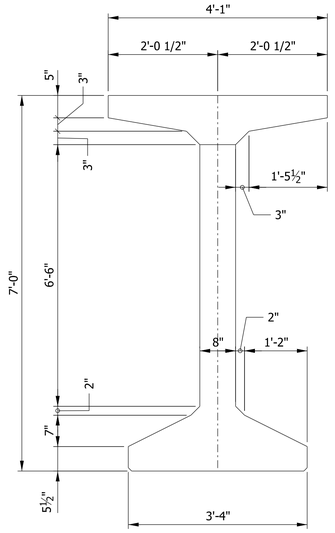


BEAM PLAN
Scale: 3/32" = 1'-0"

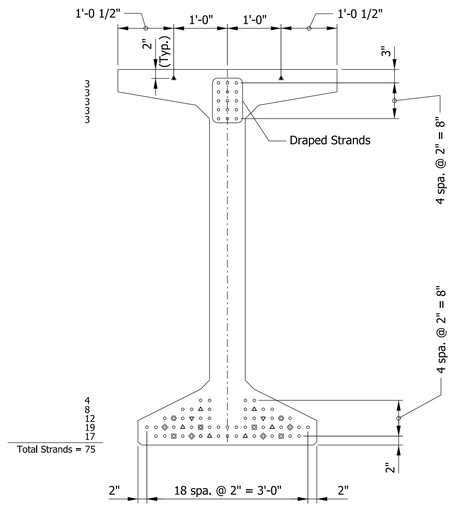


BEAM ELEVATION
Horizontal Scale: 3/32" = 1'-0"
Vertical Scale: 3/8" = 1'-0"

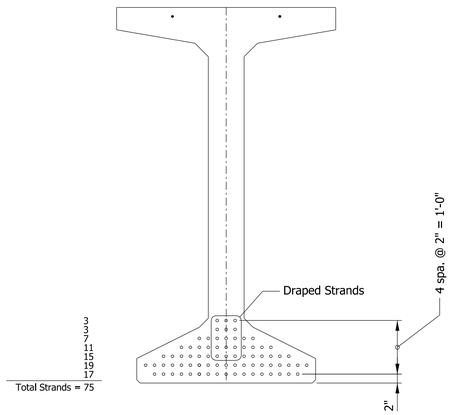
SPAN A BEAM LENGTHS	
Beam	"L"
Beam 1	168'-6 1/8"
Beam 2	170'-4 1/2"
Beam 3	172'-3 1/4"
Beam 4	174'-2 1/4"
Beam 5	176'-1 3/8"
Beam 6	178'-0 7/8"
Beam 7	180'-0 5/8"
Beam 8	182'-0 5/8"



TYPICAL SECTION
Scale: 3/4" = 1'-0"



STRAND PATERN AT BEAM END
Scale: 3/4" = 1'-0"



STRAND PATERN AT MIDSPAN
Scale: 3/4" = 1'-0"

NOTES:

1. Prestressing reinforcement shall be a 0.6" Ø uncoated seven wire low relaxation 270 ksi with strand area = 0.217 in².
2. Beams shall be cast a minimum of 120 days before deck is poured.

LEGEND

- △ Debond Strand 5' from end.
- ▫ Debond Strand 10' from end.
- ◇ Debond Strand 15' from end.
- ▽ Debond Strand 20' from end.
- ○ Debond Strand 25' from end.
- ▲ Transportation Strands to be debonded over middle 50'-0" of beam and cut after erection.

PLOT_DATE$ $PLOT_TIME$

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TLH

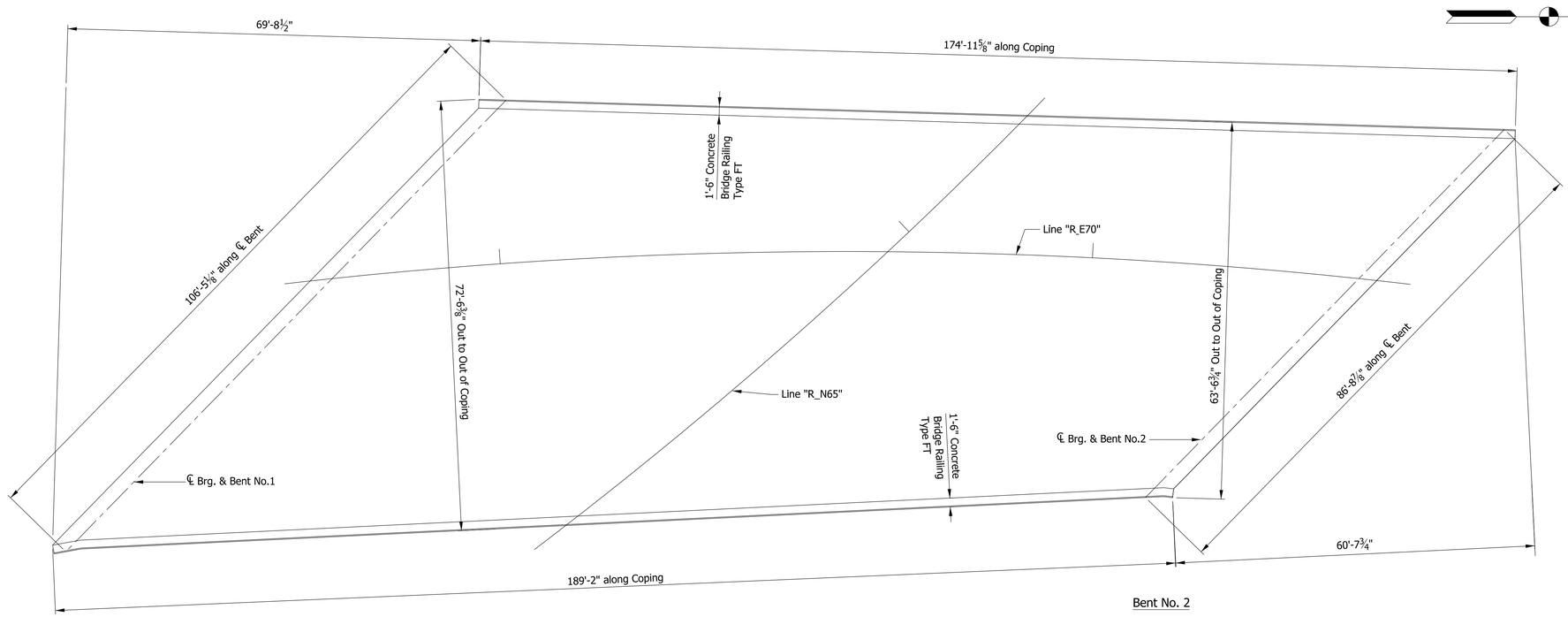
CHECKED: CML CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN

HORIZONTAL SCALE	BRIDGE FILE
1/16"=1'-0"	I65-112-10635 EBL
VERTICAL SCALE	DESIGNATION
1/16"=1'-0"	1901922
SURVEY BOOK	SHEETS
ELECTRONIC	11 of 17
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_011 - Beam Details.dgn



FLOOR PLAN

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TLH

CHECKED: CML CHECKED: CML

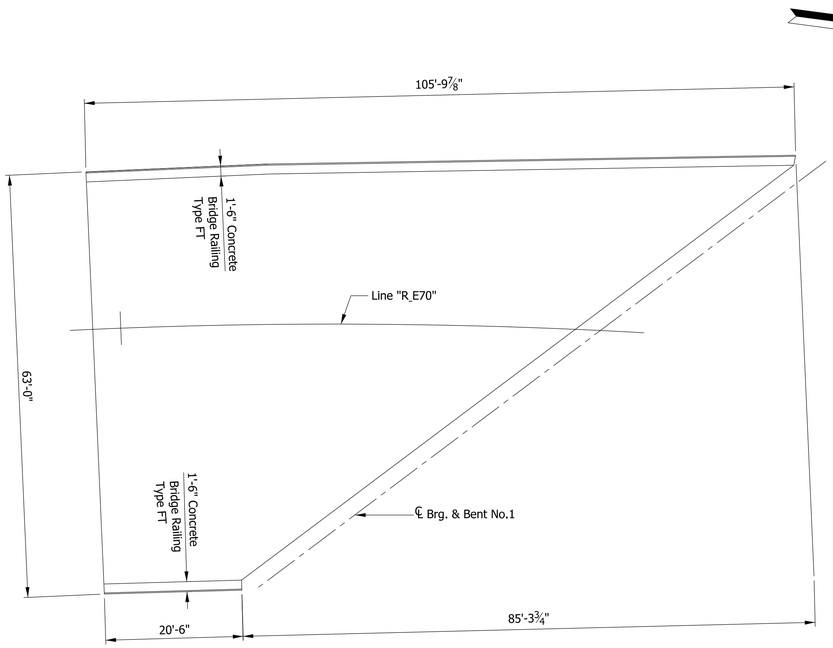
INDIANA
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

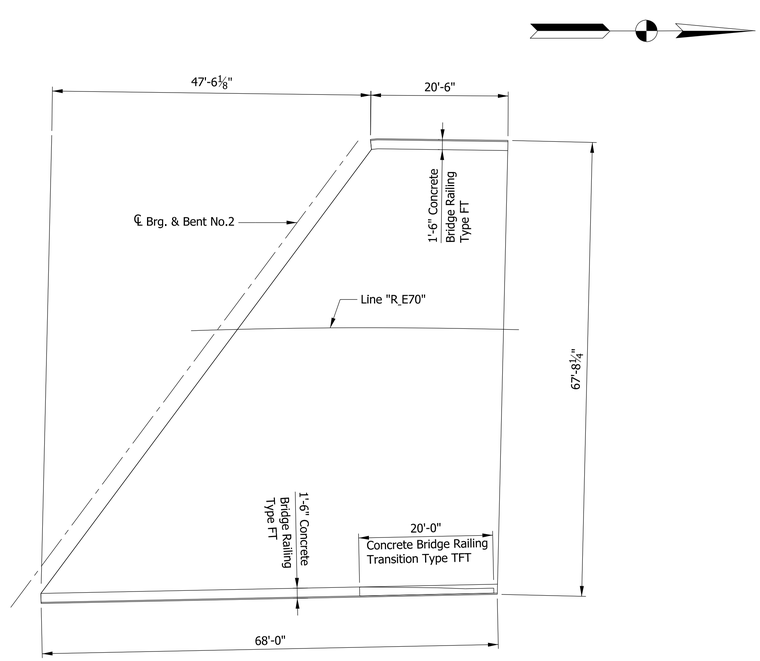
HORIZONTAL SCALE	BRIDGE FILE
3/32"=1'-0"	I65-112-10635 EBL
VERTICAL SCALE	DESIGNATION
N/A	1901922
SURVEY BOOK	SHEETS
ELECTRONIC	12 of 17
CONTRACT	PROJECT
B-36910	1600808

PLOT_DATE$ $PLOT_TIME$

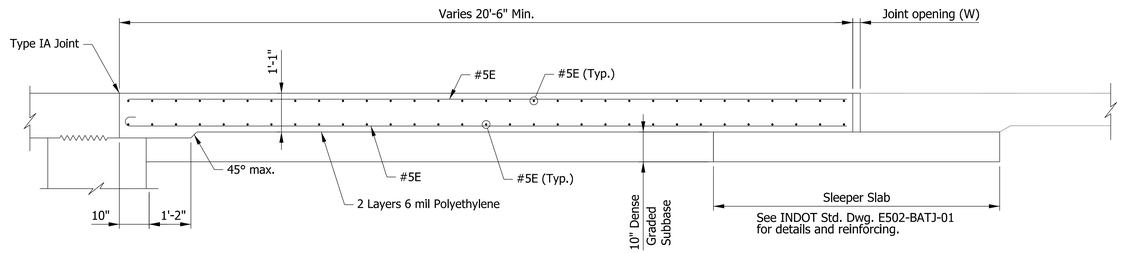
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_012 - Superstructure Details.dgn



APPROACH SLAB PLAN @ BENT NO.1



APPROACH SLAB PLAN @ BENT NO.2



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTE:

1. For additional Terminal Joint information, see USP. Terminal Joint Details: Type CRCP
2. Concrete Railing Type FT & Concrete Railing Transition Type TFT sit on Slab Extensions.

PLOT_DATE$ $PLOT_TIME$

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_013 - Approach Slab Details.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

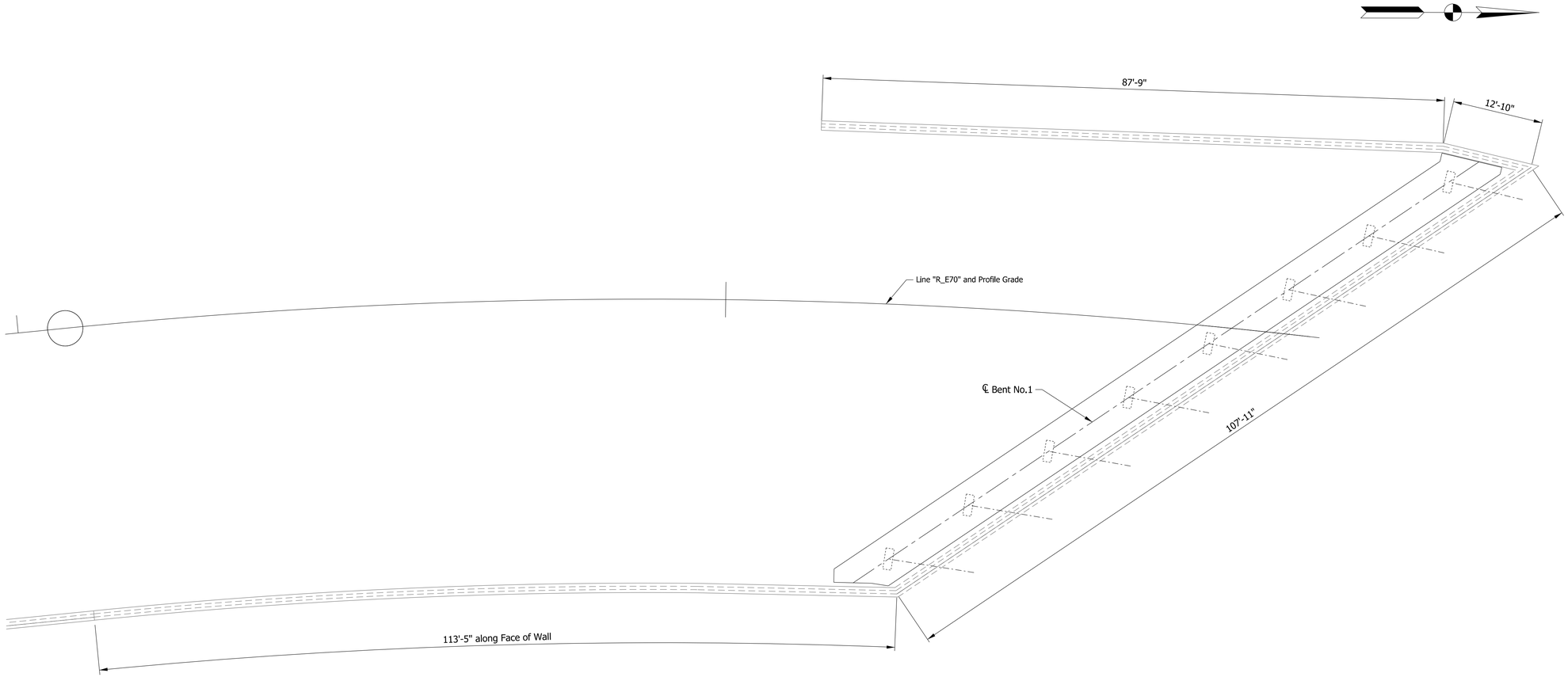
DESIGNED: ZGC DRAWN: TLH

CHECKED: CML CHECKED: CML

INDIANA DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS

HORIZONTAL SCALE	BRIDGE FILE
3/32"=1'-0"	I65-112-10635 EBL
VERTICAL SCALE	DESIGNATION
N/A	1901922
SURVEY BOOK	SHEETS
ELECTRONIC	13 of 17
CONTRACT	PROJECT
B-36910	1600808



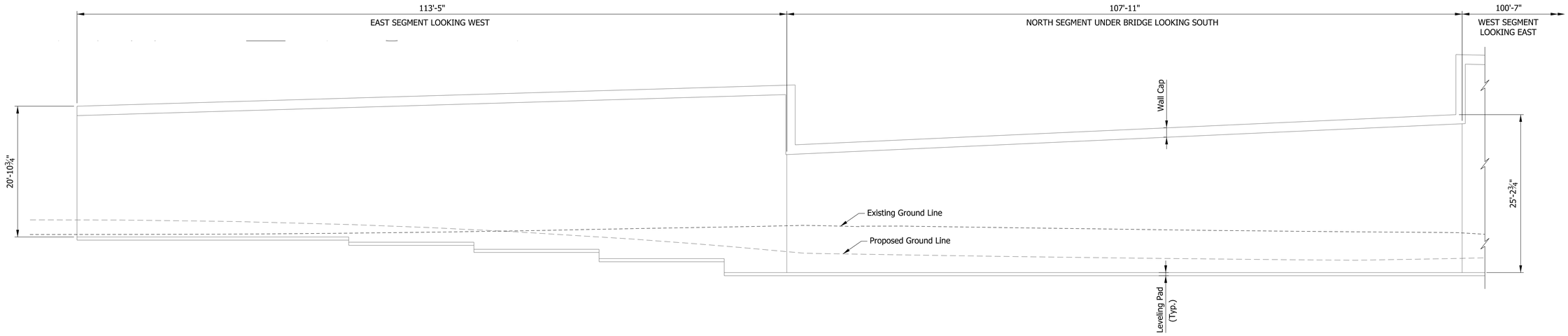
NOTES:

1. For additional details, see sheet 15.

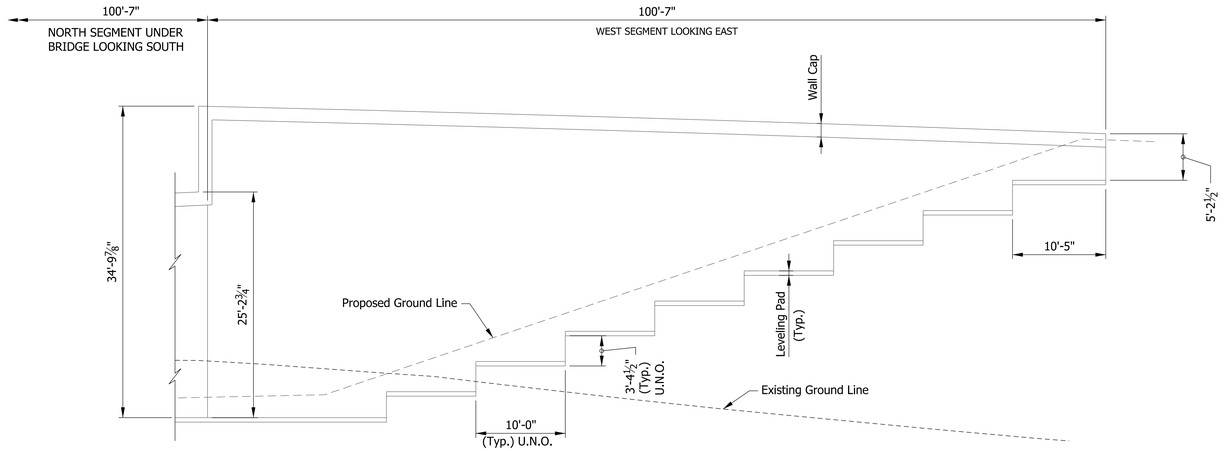
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1/8"=1'-0" / BRIDGE FILE: I65-112-10635 EBL
			VERTICAL SCALE: 1/8"=1'-0" / DESIGNATION: 1901922
DESIGNED: ZGC	DRAWN: TLH	MSE WALL DETAILS AT BENT NO.1 SHEET 1 OF 2	SURVEY BOOK / SHEETS: ELECTRONIC 14 of 17
CHECKED: CML	CHECKED: CML		CONTRACT: B-36910 / PROJECT: 1600808

PLOT_DATE$ $PLOT_TIME$

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_014 - Retaining Wall 1.dgn



ELEVATION

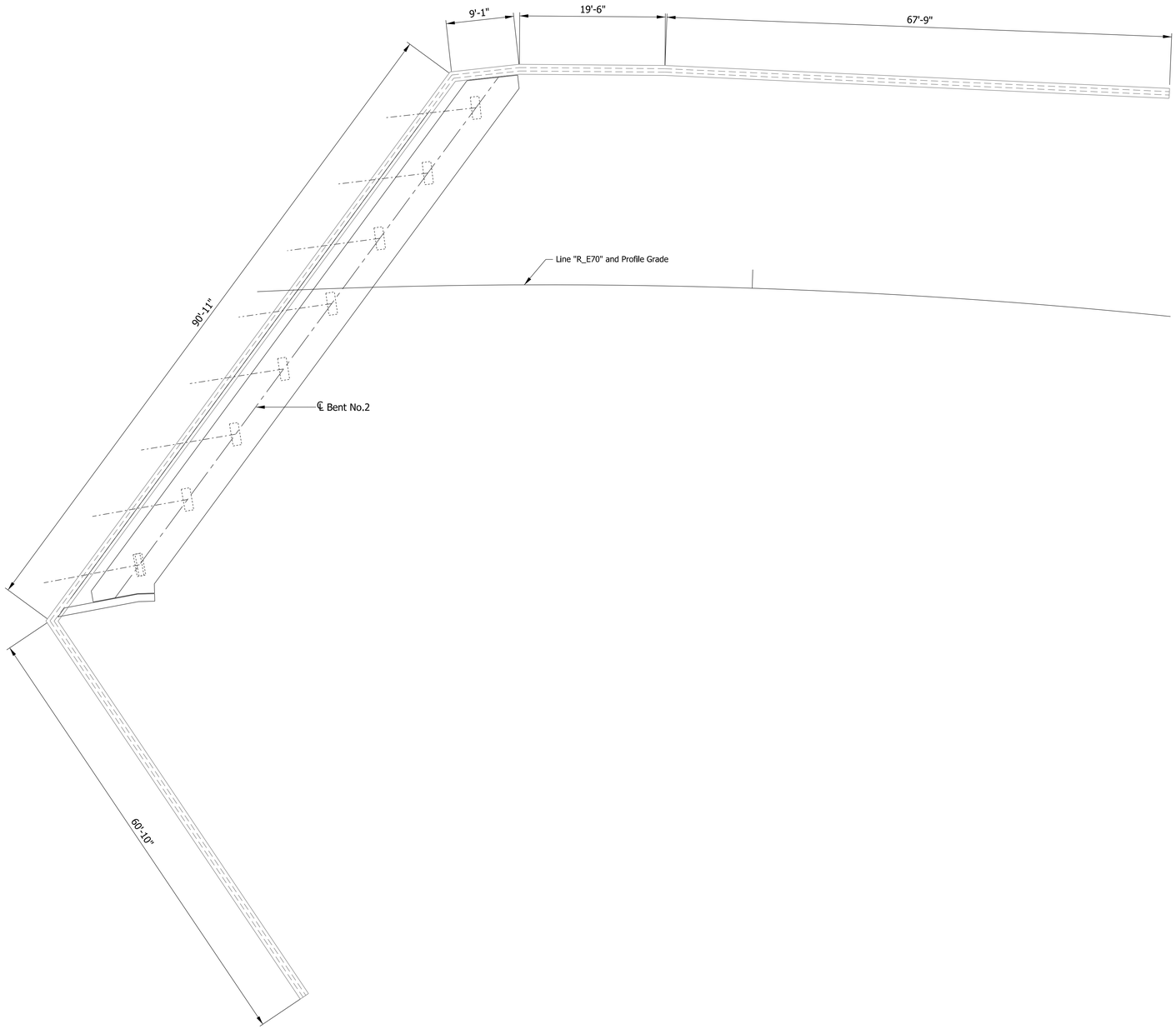


ELEVATION

PLOT_DATE$ $PLOT_TIME$

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_015 - Retaining Wall 1.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1/8"=1'-0"	BRIDGE FILE I65-112-10635 EBL
		VERTICAL SCALE 1/8"=1'-0"	DESIGNATION 1901922
DESIGNED: ZGC DRAWN: TLH	MSE WALL DETAILS AT BENT NO.1 SHEET 2 OF 2	SURVEY BOOK	SHEETS
CHECKED: CML CHECKED: CML		ELECTRONIC	15 of 17
		CONTRACT B-36910	PROJECT 1600808



NOTES:

1. For additional details, see sheet 17.

PLOT_DATE$ $PLOT_TIME$

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_016 - Retaining Wall 2.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

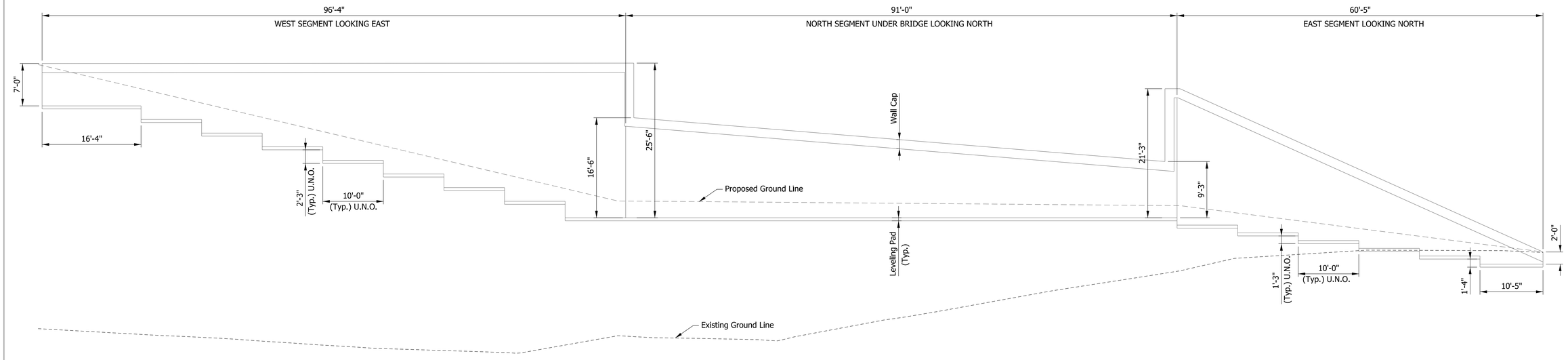
DESIGNED: ZGC | DRAWN: TLH

CHECKED: CML | CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

MSE WALL DETAILS AT BENT NO.2
SHEET 1 OF 2

HORIZONTAL SCALE	BRIDGE FILE
1/8"=1'-0"	I65-112-10635 EBL
VERTICAL SCALE	DESIGNATION
1/8"=1'-0"	1901922
SURVEY BOOK	SHEETS
ELECTRONIC	16 of 17
CONTRACT	PROJECT
B-36910	1600808



ELEVATION

		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1/8"=1'-0"	BRIDGE FILE I65-112-10635 EBL
				VERTICAL SCALE 1/8"=1'-0"	DESIGNATION 1901922
		DESIGNED: ZGC / DRAWN: TLH	MSE WALL DETAILS AT BENT NO.2 SHEET 2 OF 2	SURVEY BOOK	SHEETS
		CHECKED: CML / CHECKED: CML		ELECTRONIC	17 of 17
				CONTRACT B-36910	PROJECT 1600808

PLOT_DATE$ $PLOT_TIME$

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 38 I70 EB over I65 NB\1901922_017 - Retaining Wall 2.dgn

PROJECT	DESIGNATION
1600808	1901923
CONTRACT	BRIDGE FILE
B-36910	I70-083-10636 DWBL

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I70-083-10636 DWBL	COMPOSITE PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE	2 SPAN: 77'-0", 78'-7⅛" SKEW: VARIES	LEWIS STREET & MONON TRAIL	LINE "R_W70" 119+36.73 LINE "R_W70_CDS65" 104+90.36

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVENUE	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	BRIDGE REPLACEMENT ON I-65 SB TO I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE) - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER VERMONT STREET	

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

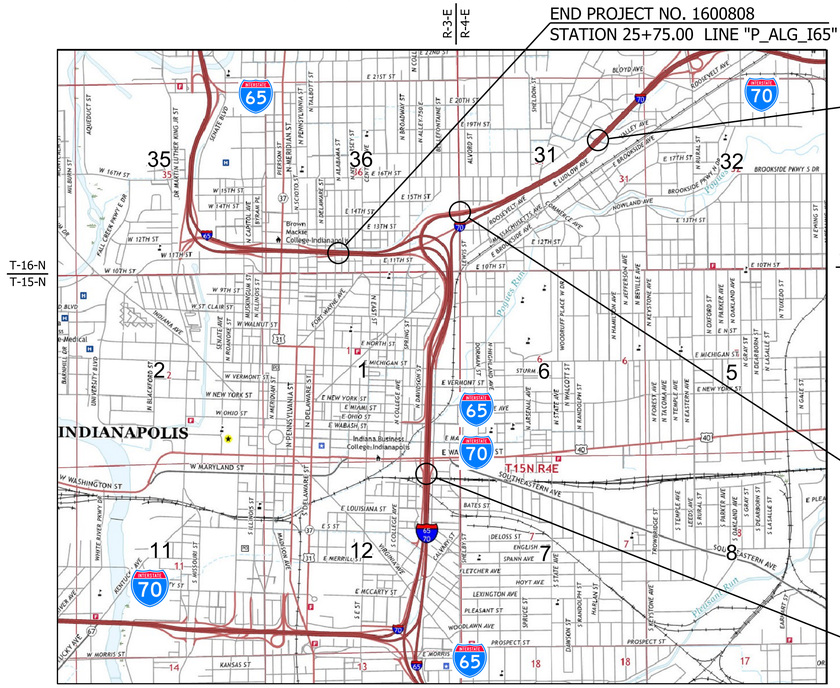
FOR SPANS OVER 20 FEET

ROUTE: I-70 AT: RP 83+24

PROJECT NO. 1600808 (P.E. & CONSTR.)

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACEMENT ON I-70 WESTBOUND & I-70 WB TO I-65 SB CD OVER LEWIS STREET & MONON TRAIL
LOCATED 0.15 MILES EAST OF I-70 (NORTH SPLIT) INTERCHANGE
IN SECTION 36, T-16-N, R-3-E, CENTER TOWNSHIP, MARION COUNTY, INDIANA



LOCATION MAP
(MARION COUNTY)

END PROJECT NO. 1600808
STATION 25+75.00 LINE "P_ALG_I65"

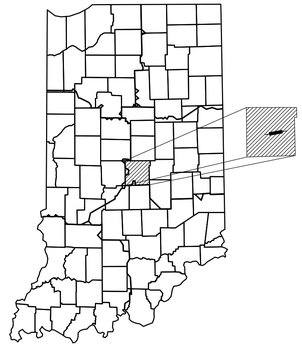
END CONSTRUCTION PROJECT NO. 1600808
STATION 43+87.40 LINE "P_ALG_I70"

PROJECT LOCATION
BRIDGE FILE NO. I70-083-10636 DWBL
I-70 WESTBOUND OVER LEWIS ST. & MONON TRAIL

BEGIN PROJECT NO. 1600808
STATION 113+00.00 LINE "P_ALG_I65/I70"

SCALE: 1" = 2000'

TRAFFIC DATA		I-70 WESTBOUND TO I-65 SB CD	I-70 WESTBOUND	LEWIS STREET
A.A.D.T.	(2021)	26,092 V.P.D.	36,289 V.P.D.	N/A V.P.D.
A.A.D.T.	(2041)	25,100 V.P.D.	43,111 V.P.D.	N/A V.P.D.
D.H.V	(2041)	3,012 V.P.H.	3,880 V.P.H.	N/A V.P.H.
DIRECTIONAL DISTRIBUTION		0 %	0 %	N/A %
TRUCKS		4 % D.H.V.	15 % D.H.V.	N/A % D.H.V.
DESIGN DATA				
DESIGN SPEED		50 M.P.H.	55 M.P.H.	25 M.P.H.
PROJECT DESIGN CRITERIA		COMPLETE RECONSTRUCTION (FREEWAY)		N/A
FUNCTIONAL CLASSIFICATION		URBAN FREEWAY		LOCAL ROAD
RURAL/URBAN		URBAN (BUILT-UP)		URBAN
TERRAIN		LEVEL		LEVEL
ACCESS CONTROL		FULL		NONE



PROJECT LOCATION SHOWN BY
MARION COUNTY

LATITUDE: 39°47'07" N LONGITUDE: 86°08'24" W

HYDROLOGIC UNIT CODE: 05120201130020

BRIDGE LENGTH:	0.027	MI.
ROADWAY LENGTH:	SEE ROAD PLANS	MI.
TOTAL LENGTH:	SEE ROAD PLANS	MI.
MAX. GRADE:	-3.5	%

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

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: Janssen & Spaans Engineering (317) 254-9686
PHONE NUMBER

CERTIFIED BY: _____ DATE

RECOMMENDED FOR LETTING: _____ DATE
INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE FILE
I70-083-10636 DWBL
DESIGNATION
1901923

SURVEY BOOK	SHEETS
ELECTRONIC	1 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2023 2:29 PM $AM_PNS

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 39 I70 WB & SB CD over Lewis St & Monon Trail\1901923_01 - Title.dgn

UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE SHEET
2	INDEX SHEET
3	MAINTENANCE OF TRAFFIC LAYOUT OVER THE BRIDGE
4	LAYOUT SHEET
5	GENERAL PLAN
6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 3 DETAILS
9	BENT NO. 1 & 3 DETAILS
10	BENT NO. 2 DETAILS
11	FRAMING PLAN
12	BEAM DETAILS
13	SUPERSTRUCTURE DETAILS
14	APPROACH SLAB DETAILS
15	MSE WALL RW_LEWIS_1_L DETAILS 1 OF 2
16	MSE WALL RW_LEWIS_1_L DETAILS 2 OF 2
17	MSE WALL RW_LEWIS_1_R DETAILS 1 OF 2
18	MSE WALL RW_LEWIS_1_R DETAILS 2 OF 2

REVISIONS

SHEET NO.	DATE	REVISED

811 Know what's below. Call before you dig.

INDIANA UNDERGROUND
1-800-382-5544 OR CALL 811
24 HOURS A DAY 7 DAYS A WEEK

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP

CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

SCALE	BRIDGE FILE
	I70-083-10636 DWBL
	DESIGNATION
	1901923

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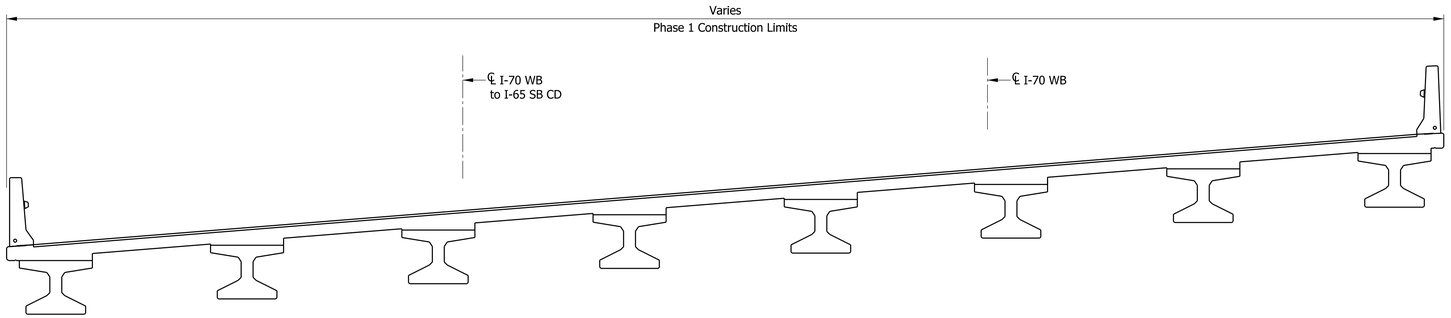
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 1:52:32 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 39 I70 WB & SB CD over Lewis St & Monon Trail\1901923_02 - Index.dgn



PHASE 1

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP

CHECKED: CML CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

MAITENANCE OF TRAFFIC

SCALE	BRIDGE FILE
1/4"=1'-0"	I70-083-10636 DWBL
	DESIGNATION
	1901923

SURVEY BOOK	SHEETS
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CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 1:52:33 PM

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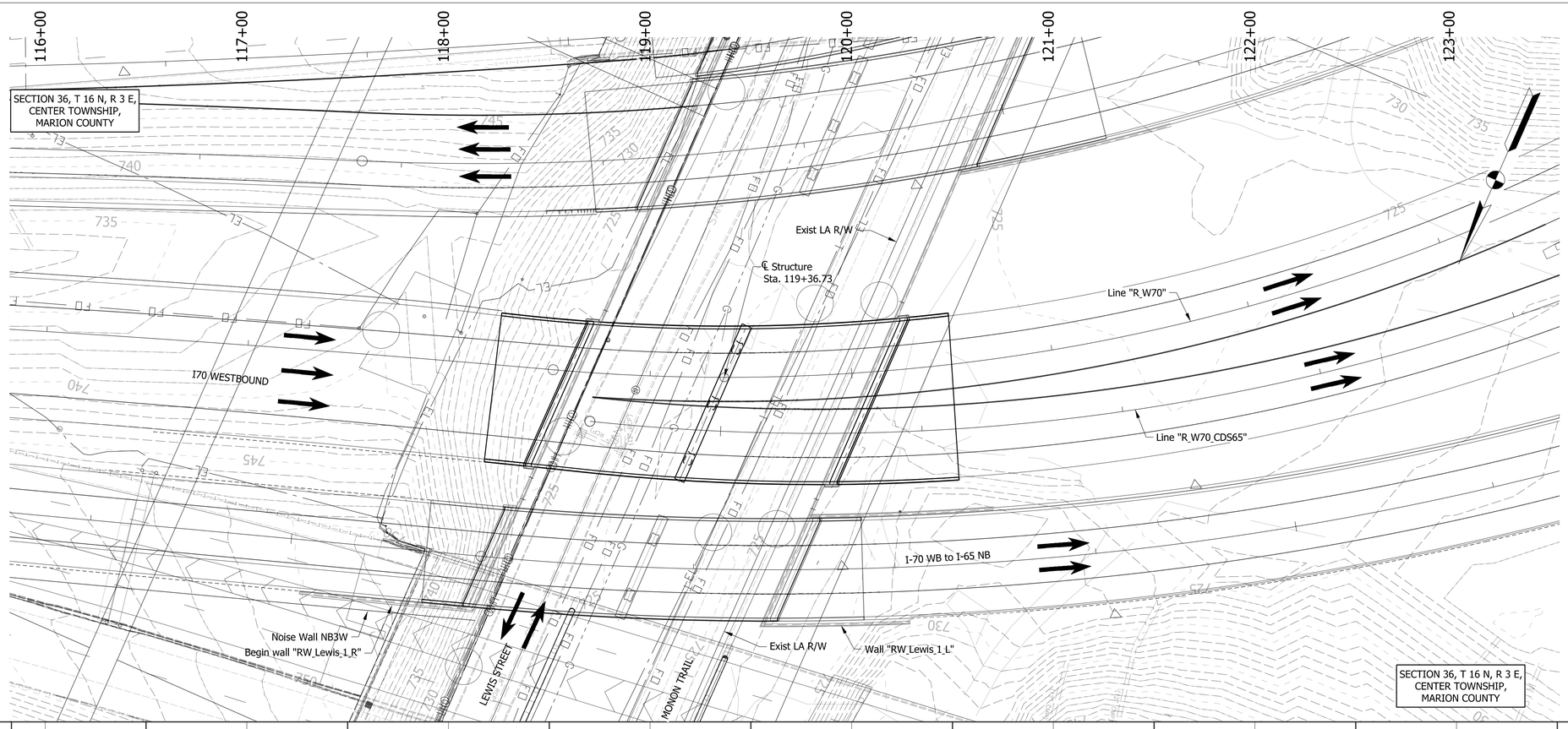
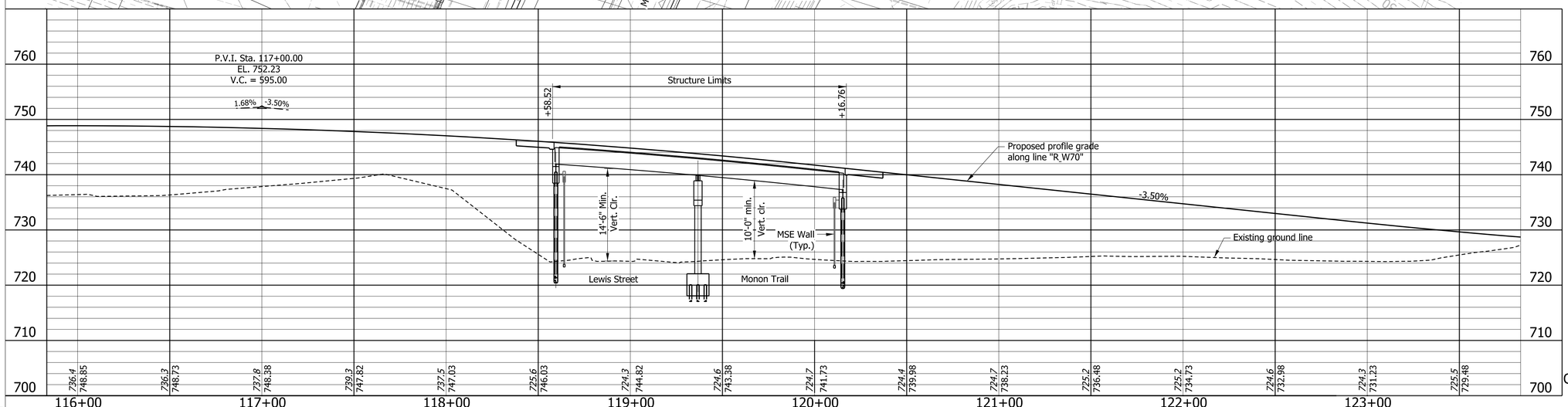




EXISTING STRUCTURE:

The existing structure was built in 1974 and had a rehabliation in 1985 & 2003. The structure is a 4 span continuous composite 36" WF steel beam bridge, with span lengths of 97'-0", 68'-0", 79'-6", & 78'-6". It has a clear roadway width of 114'-5" and a total length of 327'-3⅜". The existing structure is to be removed. Existing plans are on file with the indiana department of transportation under Bridge File No. I70-083-02434 DWBL.

EARTHWORK TABULATION

Fill +20%	See Road Plans
Common Excavation	See Road Plans
Excavation, Foundation, unclassified (70%)	See Road Plans
Waste	See Road Plans

HORIZONTAL CURVE DATA

LINE: "R_W70"

PI = 128+49.33
Delta = 91°29'8.5"Lt.
R = 972.00 ft.
T = 997.53 ft.
L = 1552.01 ft.
E = 420.79 ft.

LINE: "R_W70_CDS65"

PI = 107+37.88
Delta = 31°48'36"Lt.
R = 1062.99 ft.
T = 302.90 ft.
L = 590.16 ft.
E = 42.31 ft.

NOTES:

1. See sheet 2 for Utility owners.
2. All R/W shall be as shown.
3. There shall be no clearing of trees beyond construction limits.
4. All topography is existing.
5. All R/W described from line "R_W70", except as noted.
6. Proposed lighting, traffic sign structures and drainage not shown and shall be the responsibility of the Design-Build contractor during final design.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
2 SPAN: 77'-0", 78'-7⅛"
SKEW: VARIES
CLEAR ROADWAY:
VARIES FROM 71'-11" TO 77'-3¼"
I-70 WB & I-70 WB TO I-65 SB CD
OVER LEWIS STREET & MONON TRAIL
MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1"=30'-0"	I70-083-10636 DWBL
VERTICAL SCALE	DESIGNATION
1"=10'-0"	1901923

SURVEY BOOK	SHEETS
ELECTRONIC	4 of 18
CONTRACT	PROJECT
B-36910	1600808

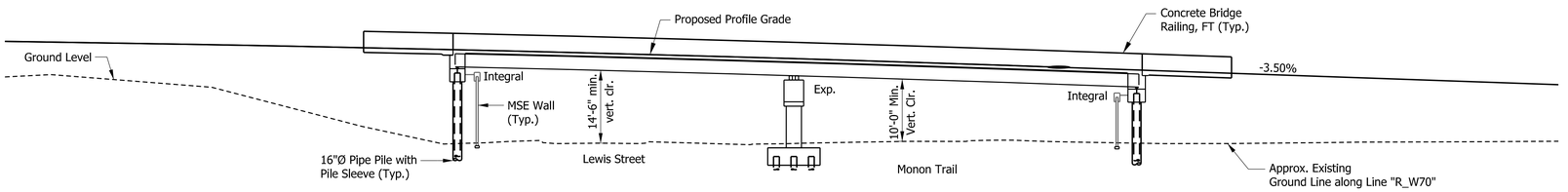
Plot: 2/27/2020 1:52:55 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 39 I70 WB & SB CD over Lewis St & Monon Trail\1901923_04 - Layout.dgn

VERTICAL CURVE
P.V.I. Sta. 117+00.00
EL. 752.23
V.C. = 595.00

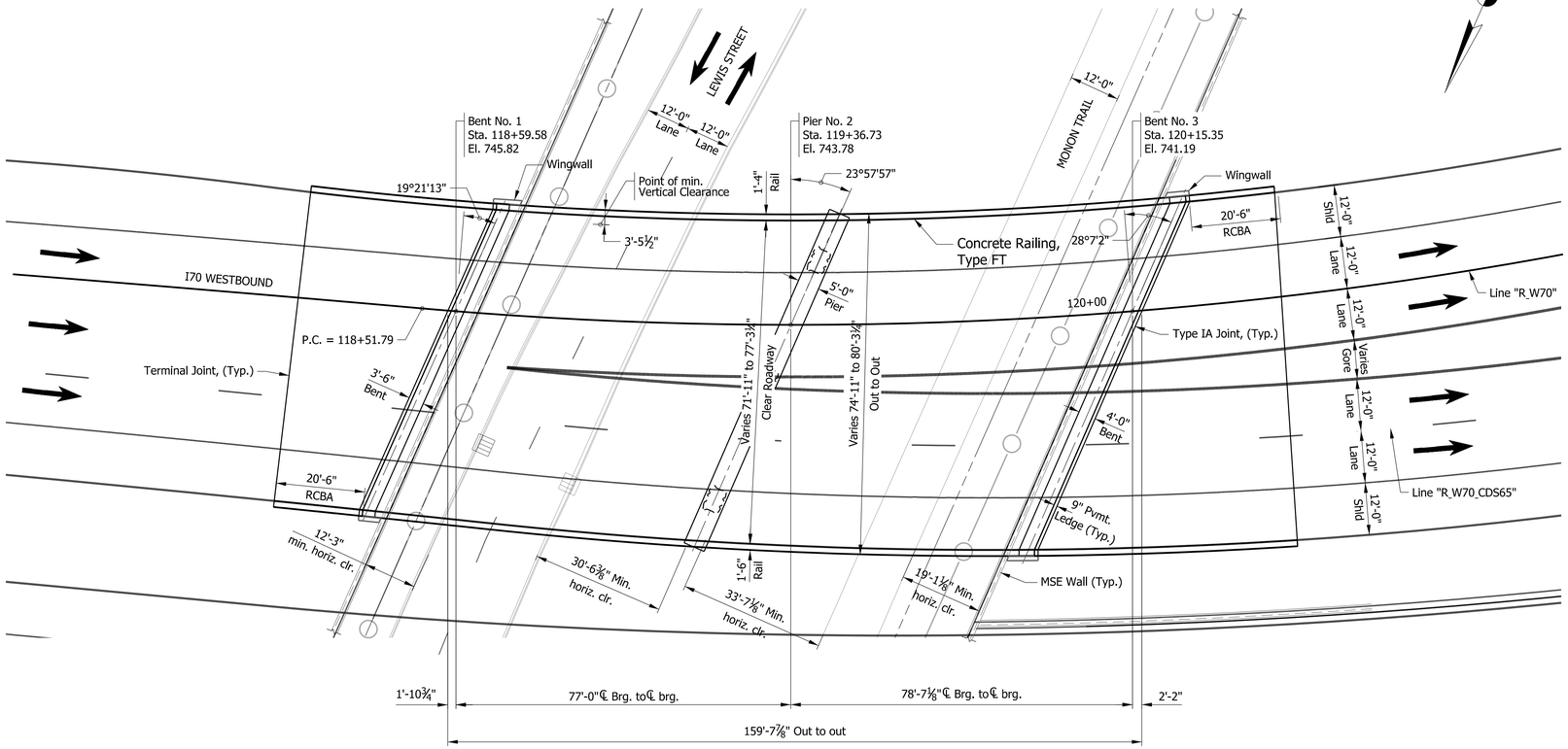
1.68% -3.50%

STRUCTURE BUILT TO A 595' VERTICAL CURVE



Bent No. 1 | Pier No. 2 | Bent No. 3

ELEVATION



PLAN

GENERAL NOTES

Reinforcing bar cover shall be 2" min. in top and 1" min. in bottom of floor slabs, 3" min. in footing except bottom bars which shall be 4" min, and 2" min. in all other parts, unless noted.

All dimensions and elevations are in feet (FT) unless otherwise noted.

Concrete in floor slab, diaphragms, barrier, approach slab, and end bents shall be and alternative class "C" in accordance with the technical provisions. Reinforcing bars in deck, barrier, and end bent diaphragm extending into the deck shall be stainless steel. reinforcing bars in end bent diaphragm not extending into the deck and in the cap shall be epoxy coated.

Anti-graffiti coating shall be placed on all exposed surfaces of new retaining walls and new bridge structures excluding top of deck or overlay and interior beams.

For aesthetics associated with the bridge opening, see Bridge Opening Aesthetics Plan package.

DESIGN DATA

LIVE LOAD
Superstructure and Substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications Eight Edition, 2017 & subsequent interim.

DEAD LOAD
Designed for actual dead load plus 15 PSF for SIP metal deck forms.
Slab designed with a 7½" structural depth and a 1½" very early strength LMC overlay.

SEISMIC DESIGN DATA

Seismic Performance Zone = 1
Acceleration Coefficient = 0.061
Seismic Soil Profile Type = Site Class C

DESIGN STRENGTHS

Prestressed Concrete	f'c = 10,000 psi @ 28 Days
Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,000 psi
Class "C" Concrete	f'c = 4,000 psi
Rienforcing Bars (Barrier)	fy = 60,000 psi
Reinforcing Bars	fy = 75,000 psi (all other locations)

CONSTRUCTION LOADING

The exterior beam must be 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 beam. The finishing machine was assumed to be supported 6" past the edge of 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 beam bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/sft for permanent metal stay in place deck forms, removable deck forms,and 2-ft exterior walkway.
Construction Live Load:	Designed 20 lb/sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of 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 AASHTO LRFD3.8.1.

PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE
2 SPAN: 77'-0", 78'-7⅛"
SKEW: VARIES
CLEAR ROADWAY:
VARIES FROM 71'-11" TO 77'-3¼"
I-70 WB & I-70 WB TO I-65 SB CD
OVER LEWIS STREET & MONON TRAIL
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC | DRAWN: KNP
CHECKED: CML | CHECKED: CML

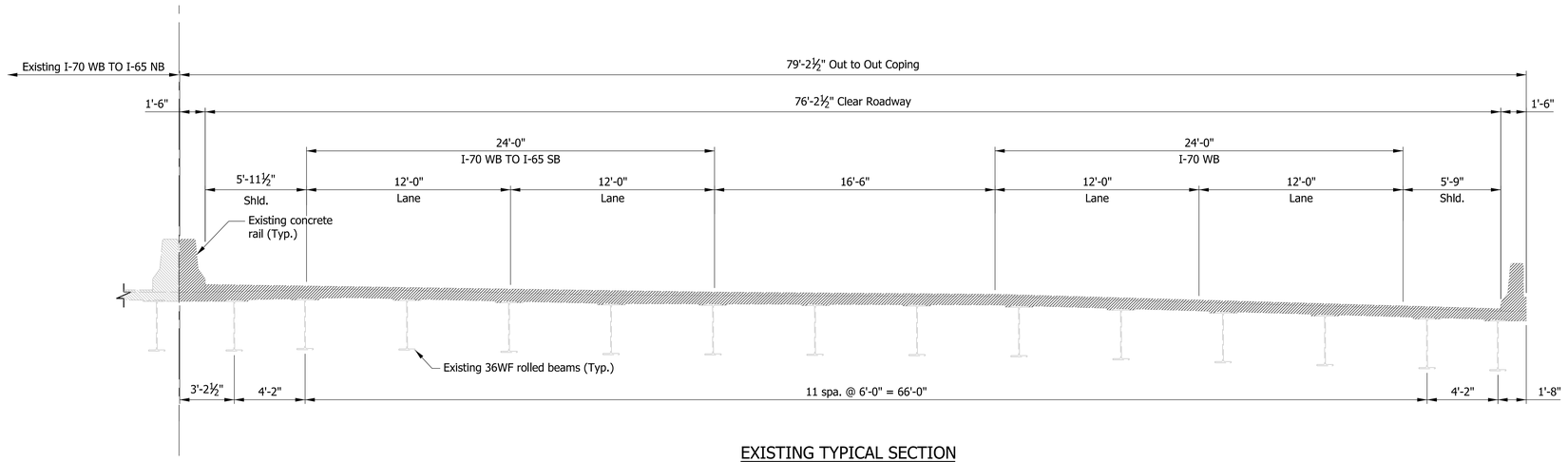
INDIANA DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

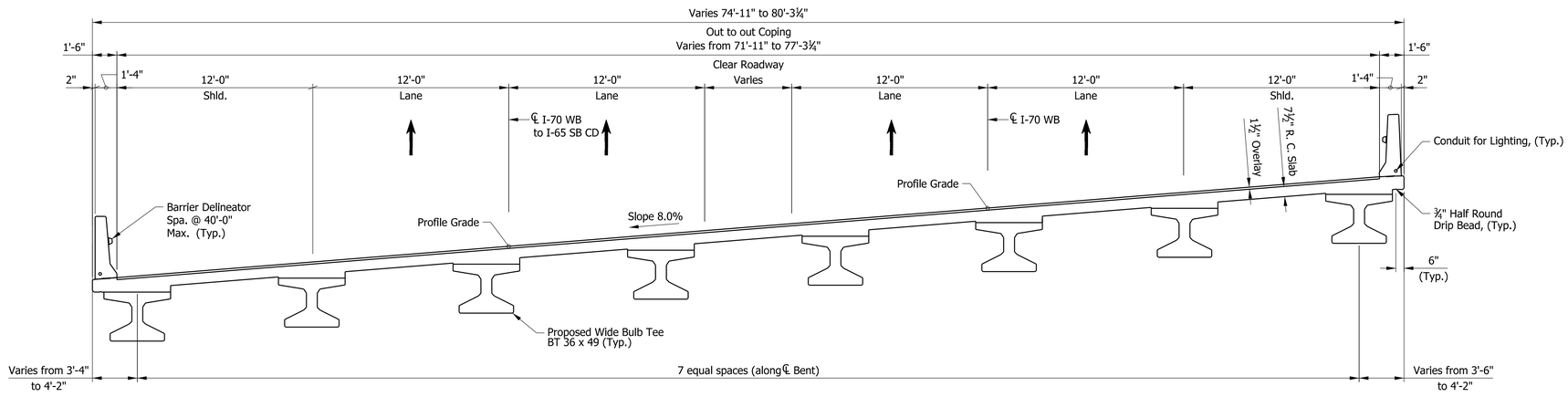
SCALE	BRIDGE FILE
1/16"=1'-0"	I70-083-10636 DWBL
	DESIGNATION
	1901923
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 1:52:58 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 39 I70 WB & SB CD over Lewis St & Monon Trail\1901923_05 - Gen plan.dgn



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
2 SPAN: 77'-0", 78'-7⅛"
SKEW: VARIES
CLEAR ROADWAY:
VARIES FROM 71'-11" TO 77'-3¼"
I-70 WB & I-70 WB TO I-65 SB CD
OVER LEWIS STREET & MONON TRAIL
MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP

CHECKED: CML CHECKED: CML

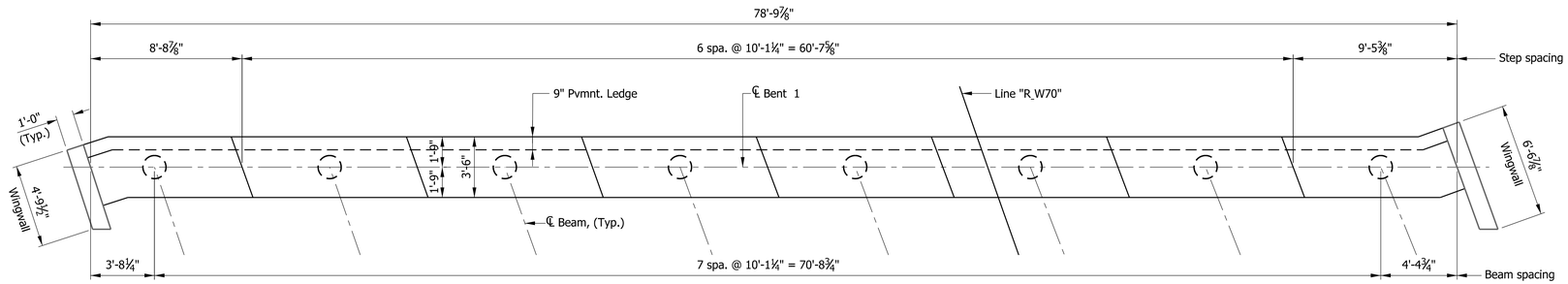
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
TYPICAL SECTION

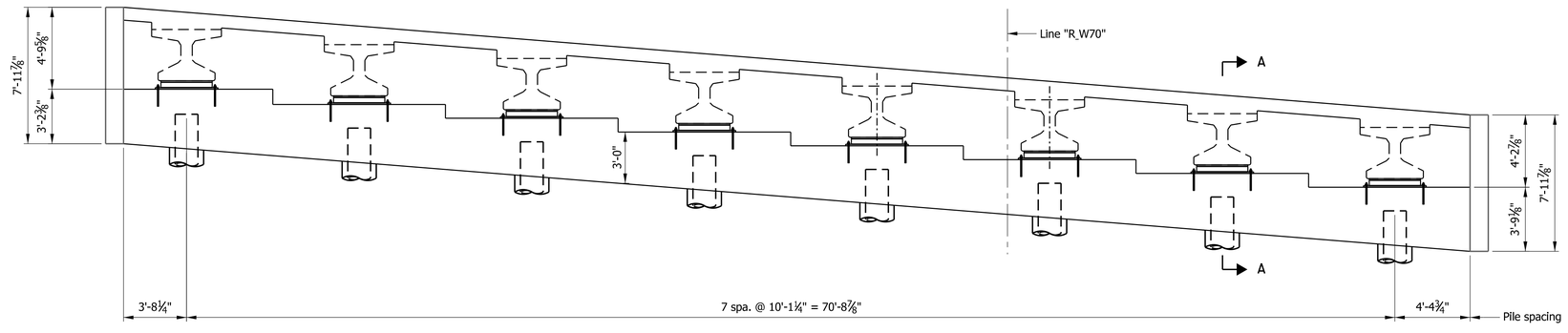
SCALE	BRIDGE FILE
1/4"=1'-0"	I70-083-10636 DWBL
	DESIGNATION
	1901923
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 1:53:00 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 39 I70 WB & SB CD over Lewis St & Monon Trail\1901923_06 - Gen plan 2.dgn



PLAN
Scale: 1/4" = 1'-0"



ELEVATION
Scale: 1/4" = 1'-0"

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 1

SCALE	BRIDGE FILE
AS NOTED	I70-083-10636 DWBL
	DESIGNATION
	1901923
SURVEY BOOK	SHEETS
ELECTRONIC	7 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 1:53:02 PM
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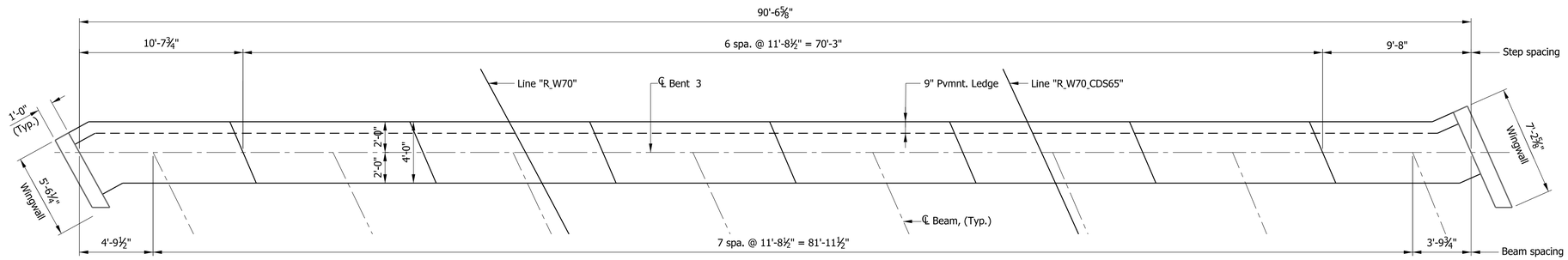
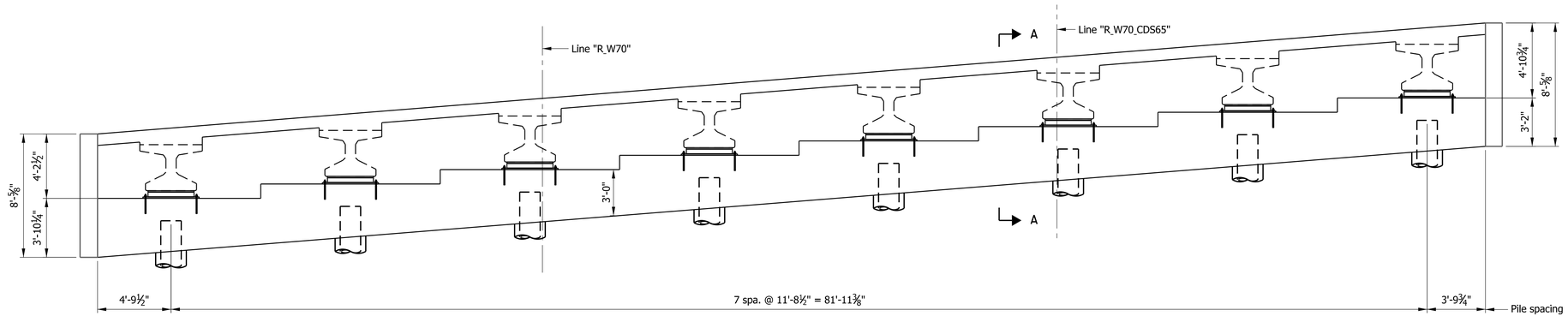


PLAN
Scale: 1/4" = 1'-0"



ELEVATION
Scale: 1/4" = 1'-0"

	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED; BRIDGE FILE: I70-083-10636 DWBL; DESIGNATION: 1901923
	DESIGNED: ZGC DRAWN: KNP CHECKED: CML CHECKED: ZGC	BENT NO. 3	SURVEY BOOK; SHEETS: ELECTRONIC 8 of 18; CONTRACT: B-36910; PROJECT: 1600808

Plot: 2/27/2020 1:53:04 PM

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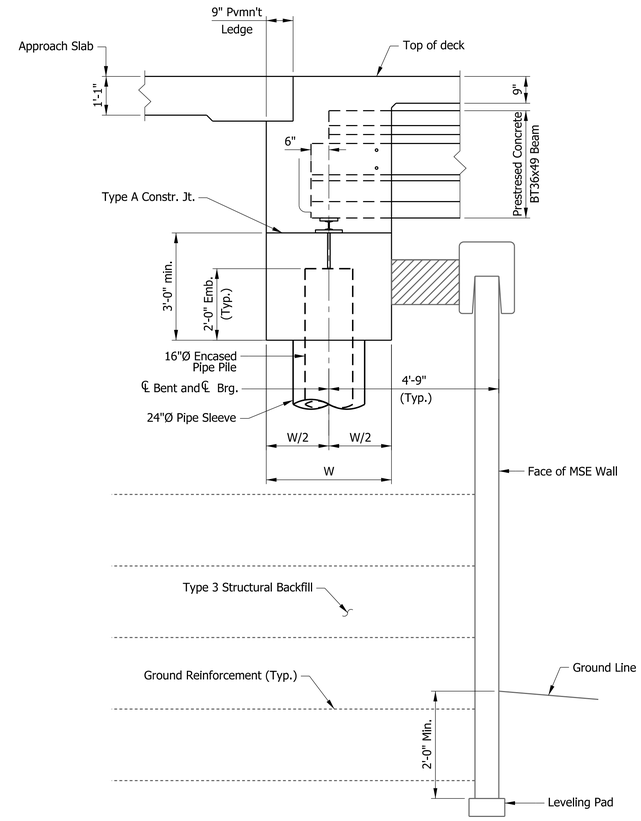

SECTION A-A
Scale: 1/2" = 1'-0"

Note:

For MSE wall details, see sheets 15 thru 18.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED; BRIDGE FILE: I70-083-10636 DWBL; DESIGNATION: 1901923
DESIGNED: ZGC	DRAWN: KNP	BENT NO. 1 AND 3 DETAILS	SURVEY BOOK; SHEETS: ELECTRONIC 9 of 18
CHECKED: CML	CHECKED: ZGC		CONTRACT: B-36910; PROJECT: 1600808

Plot: 2/27/2020 1:53:05 PM

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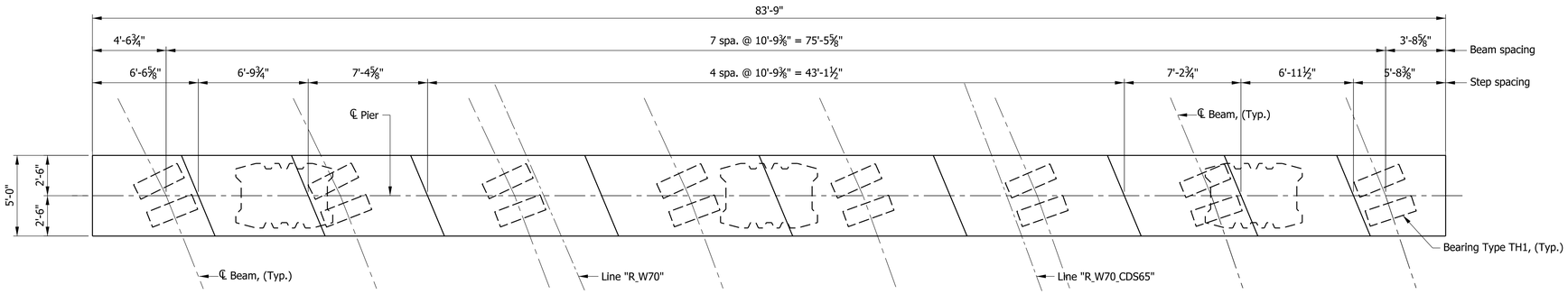

PLAN
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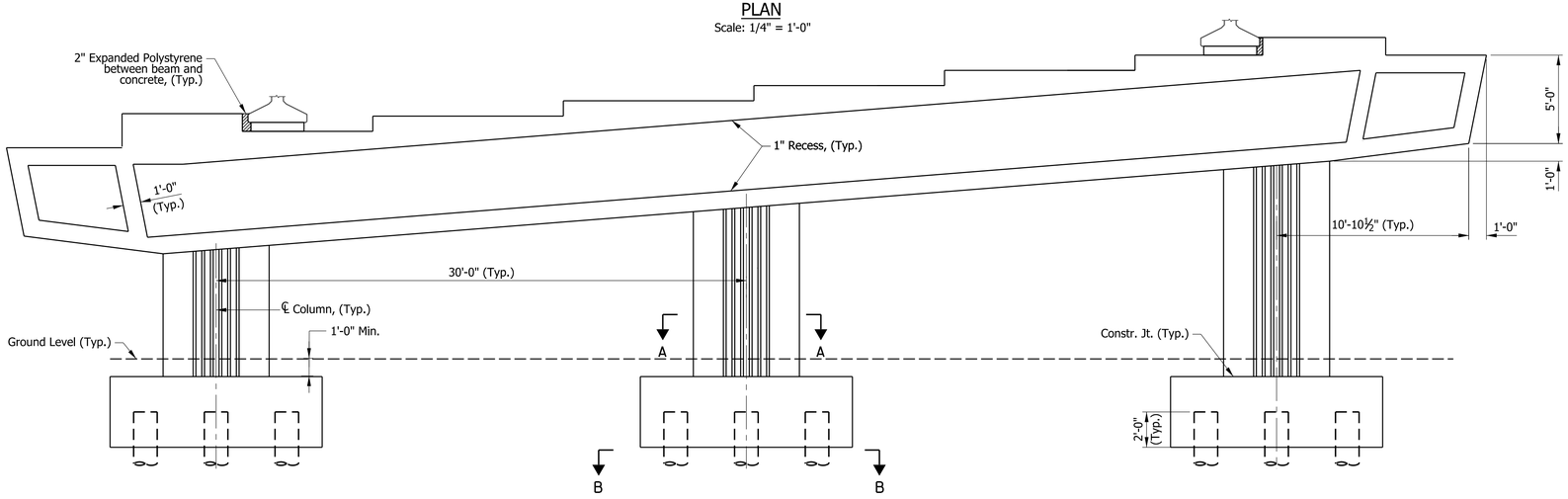

ELEVATION
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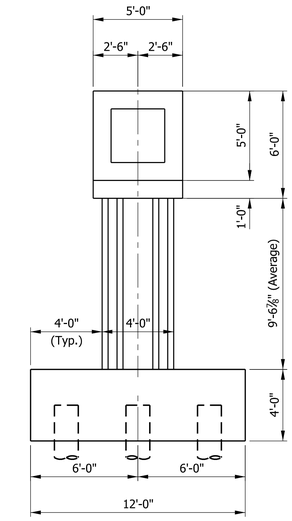

END VIEW
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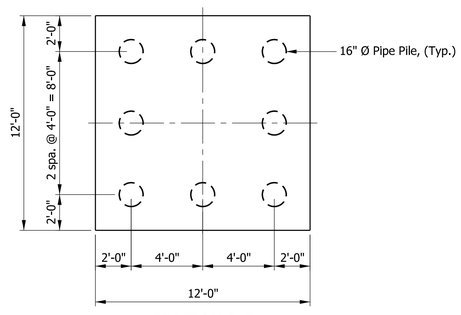

SECTION B-B
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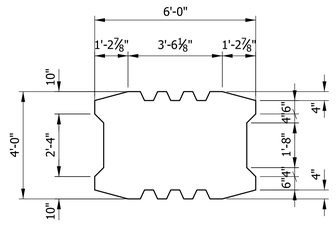


SECTION A-A
Scale: 1/4" = 1'-0"

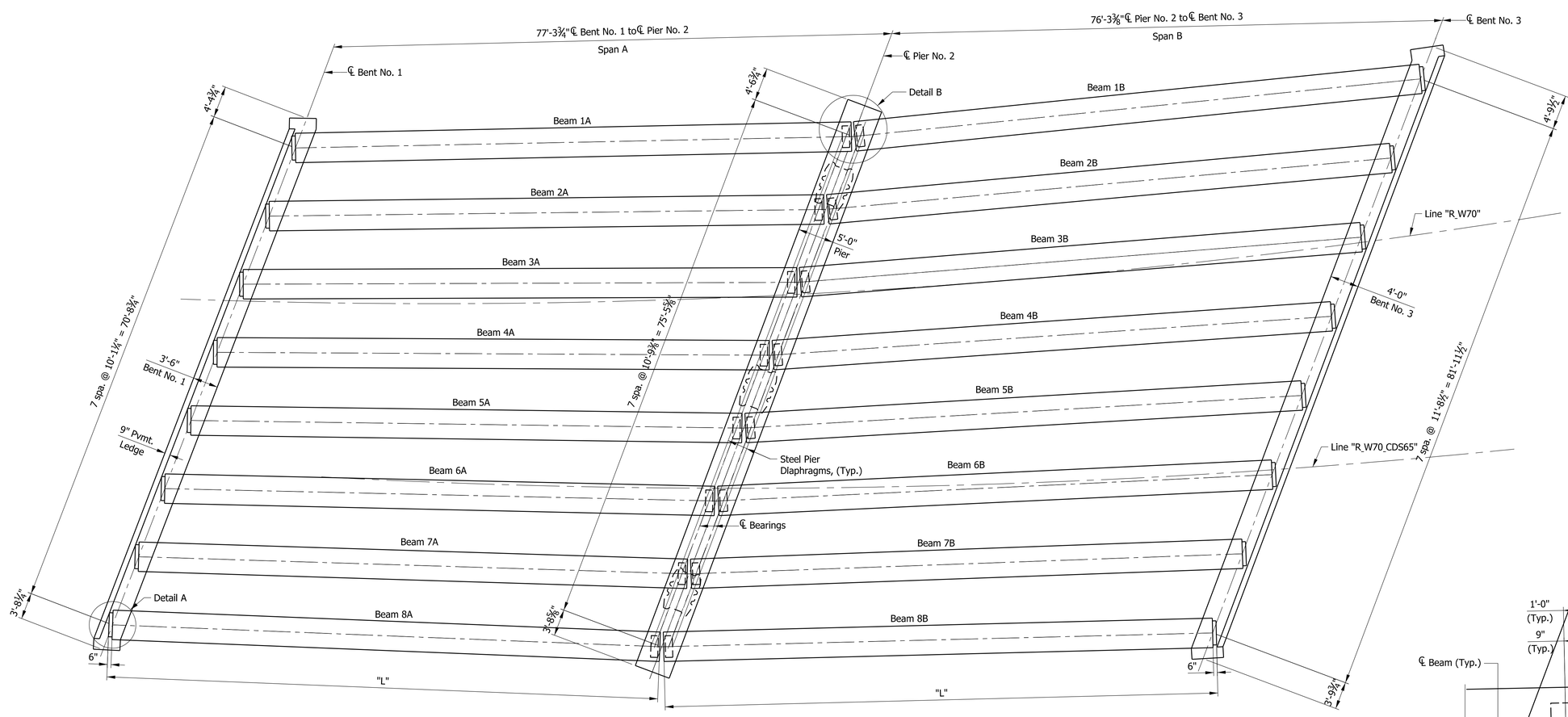
Note:

For Bearing Pad details see Std. Dwg. E 726-BEBP-03.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED; BRIDGE FILE: I70-083-10636 DWBL; DESIGNATION: 1901923
DESIGNED: ZGC	DRAWN: KNP	PIER NO. 2	SURVEY BOOK: ELECTRONIC; SHEETS: 10 of 18; CONTRACT: B-36910; PROJECT: 1600808
CHECKED: CML	CHECKED: ZGC		

Plot: 2/27/2020 1:53:07 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 39 I70 WB & SB CD over Lewis St & Monon Trail\1901923_10 - Bent 2.dgn



FRAMING PLAN
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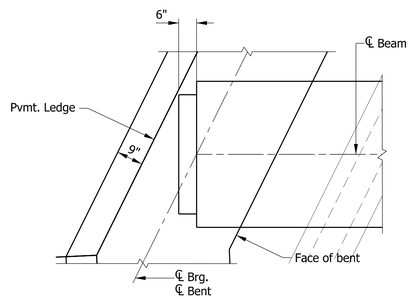

DETAIL A
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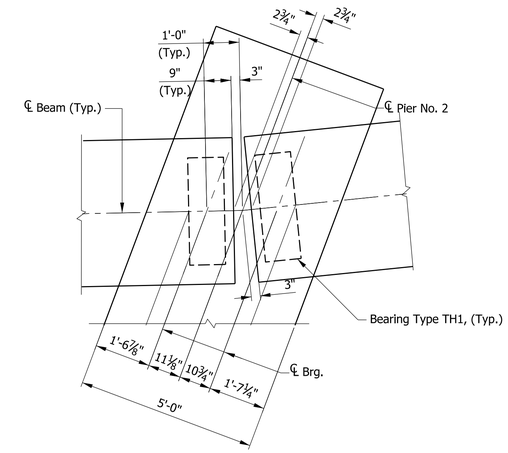


Note:

For Bearing details, see Std. Dwg. E 726-BEBP-03.

DETAIL B
Scale: 1/2" = 1'-0"

Plot: 2/27/2020 1:53:08 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 39 I70 WB & SB CD over Lewis St & Monon Trail\1901923_11 - Framing plan.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC DRAWN: KNP

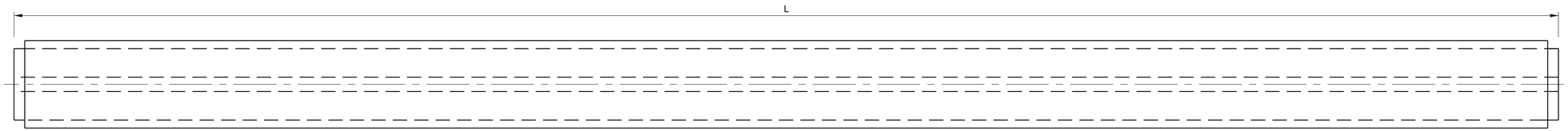
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

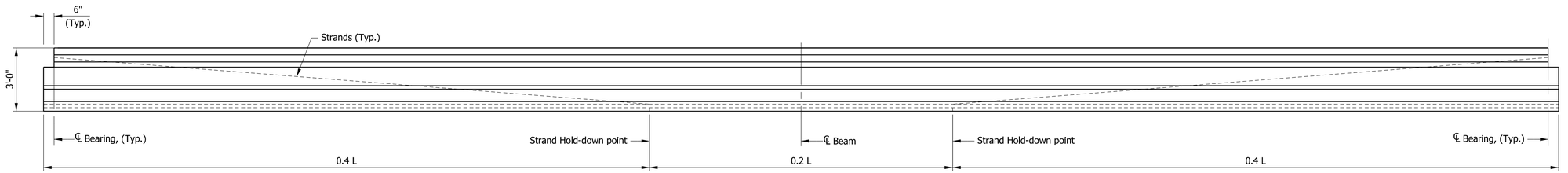
FRAMING PLAN

SCALE	BRIDGE FILE
AS NOTED	I70-083-10636 DWBL
	DESIGNATION
	1901923

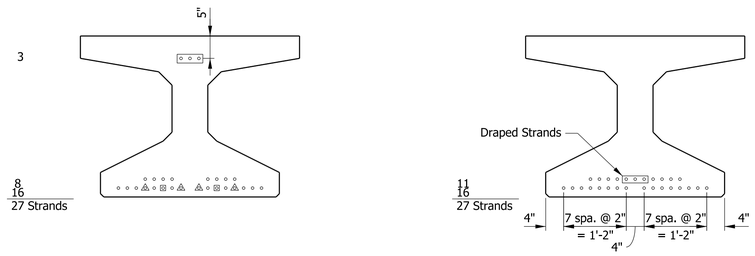
SURVEY BOOK	SHEETS
ELECTRONIC	11 of 18
CONTRACT	PROJECT
B-36910	1600808



PLAN
Scale: 3/8" = 1'-0"



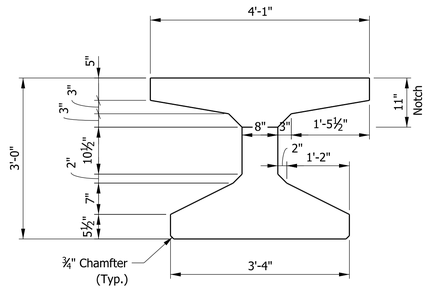
BEAM ELEVATION
Scale: 3/8" = 1'-0"



△ - Debonded at 5' from end
□ - Debonded at 10' from end

STRAND PATTERN AT BEAM END
Scale: 3/4" = 1'-0"

STRAND PATTERN AT MIDSPAN
Scale: 3/4" = 1'-0"



TYPICAL SECTION
Scale: 3/4" = 1'-0"

Span "A"	
Beam Mark	"L"
1A	77'-5⅞"
2A	77'-3½"
3A	77'-2"
4A	76-11⅜"
5A	76'-9½"
6A	76'-7⅝"
7A	76'-5¾"
8A	76'-4⅛"

Span "B"	
Beam Mark	"L"
1B	79'-2⅝"
2B	78'-9⅜"
3B	78'-4⅝"
4B	78'-0"
5B	77'-7½"
6B	77'-3"
7B	76'-10¾"
8B	76'-6½"

Notes:

1. Prestressing reinforcement shall be 0.6 "dia. uncoated seven wire low relaxation 270 ksi with strand area = 0.217 in².
2. Beam shall be cast a minimum of 120 days before deck is pour.

2/27/2020 1:53:10 PM

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS
BT 36x49

SCALE	BRIDGE FILE
AS NOTED	I70-083-10636 DWBL
	DESIGNATION
	1901923
SURVEY BOOK	SHEETS
ELECTRONIC	12 of 18
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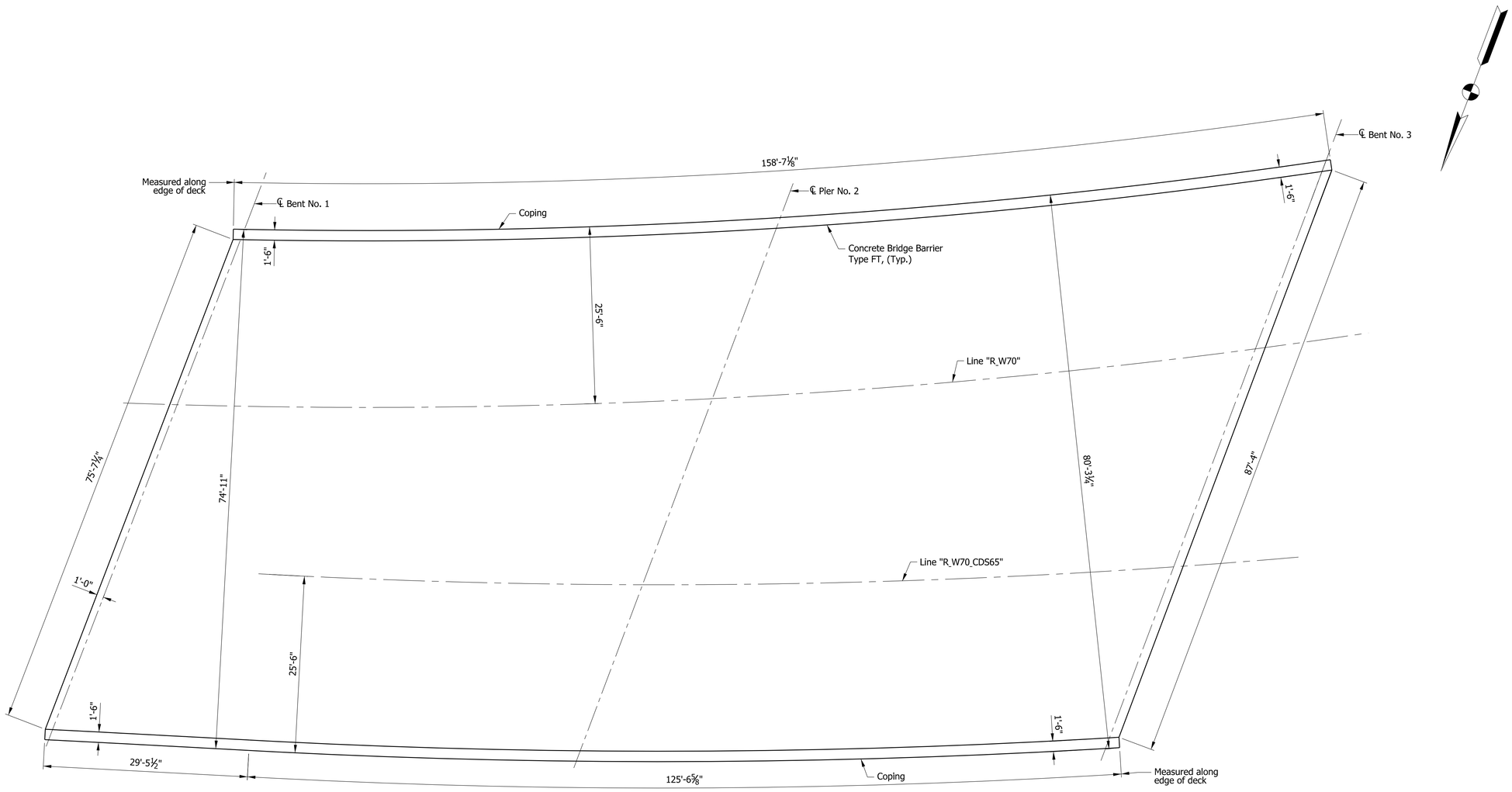
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 39 I70 WB & SB CD over Lewis St & Monon Trail\1901923_12 - Beam details.dgn



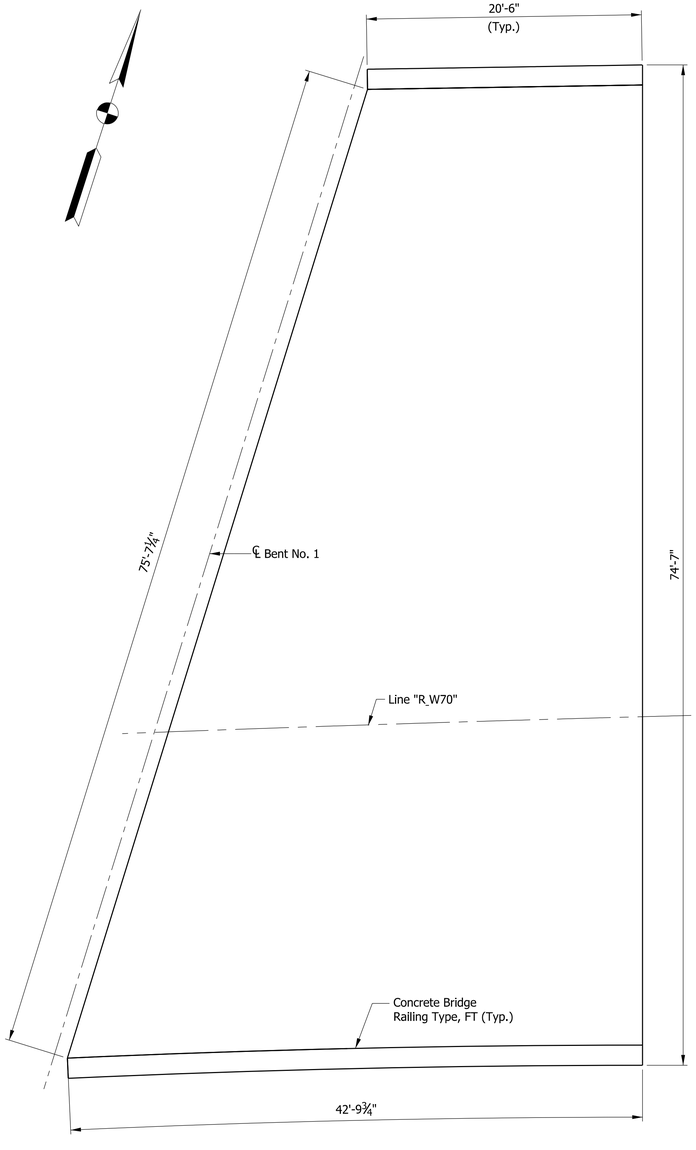
DECK PLAN

Scale: 1/8" = 1'-0"

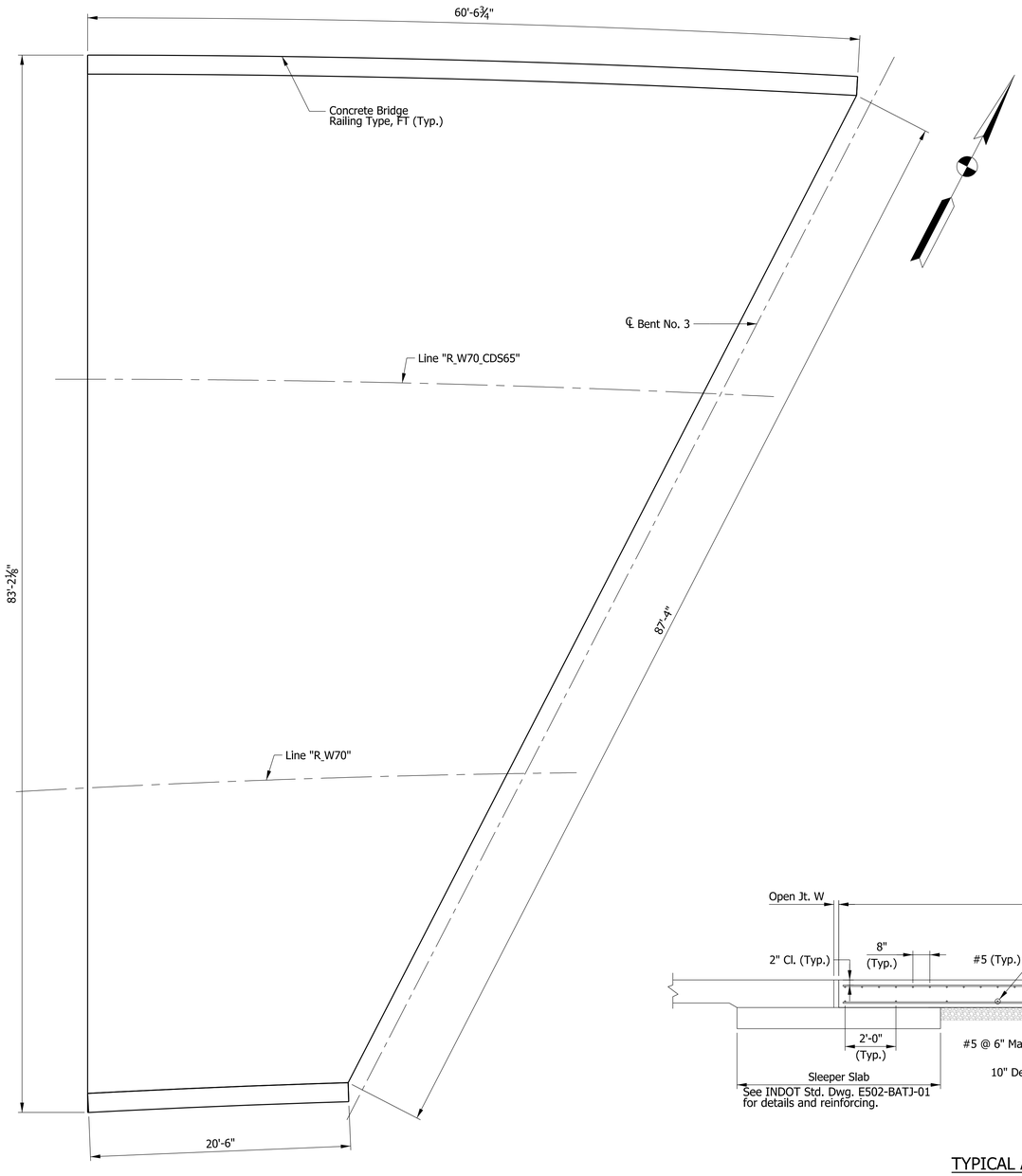
Plot: 2/27/2020 1:53:17 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED; BRIDGE FILE: I70-083-10636 DWBL; DESIGNATION: 1901923
DESIGNED: ZGC	DRAWN: KNP	SUPERSTRUCTURE DETAILS	SURVEY BOOK; SHEETS; ELECTRONIC 13 of 18; CONTRACT; PROJECT B-36910 1600808
CHECKED: CML	CHECKED: ZGC		

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 39 I70 WB & SB CD over Lewis St & Monon Trail\1901923_13 - Deck plan.dgn



EAST APPROACH
Scale: 3/16" = 1'-0"

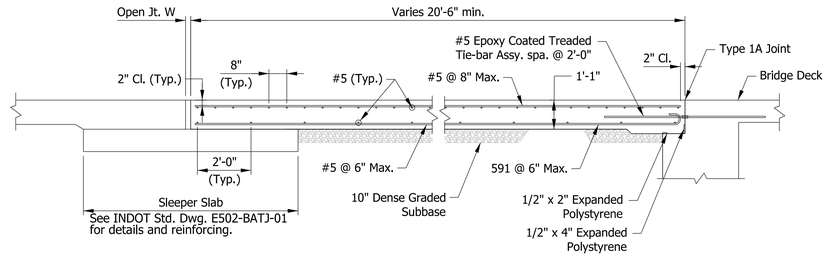


WEST APPROACH
Scale: 3/16" = 1'-0"

NOTE:

For additional Terminal Joint information, see USP. Terminal Joint Details: Type CRCP.

Concrete Railing FT TFT sit on slab extension. for more details, see Std. Dwg. E-609-TBAE-02 & 04.



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

Plot: 2/27/2020 1:53:19 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP

CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLABS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I70-083-10636 DWBL
VERTICAL SCALE	DESIGNATION
	1901923
SURVEY BOOK	SHEETS
ELECTRONIC	14 of 18
CONTRACT	PROJECT
B-36910	1600808

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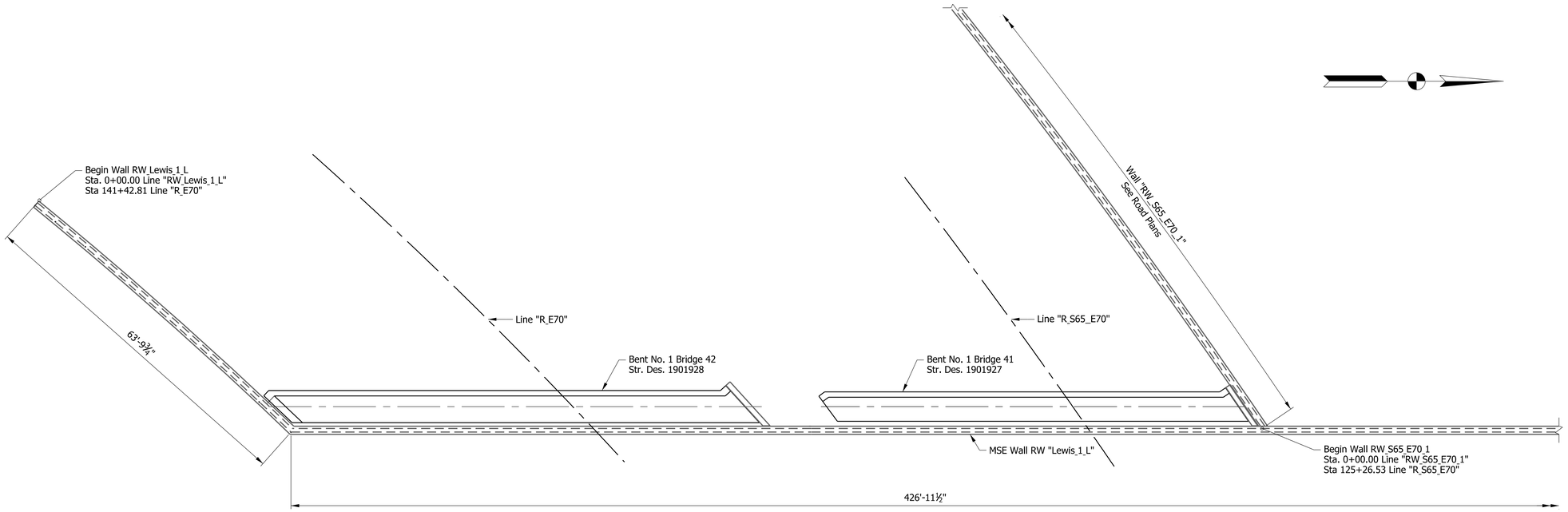
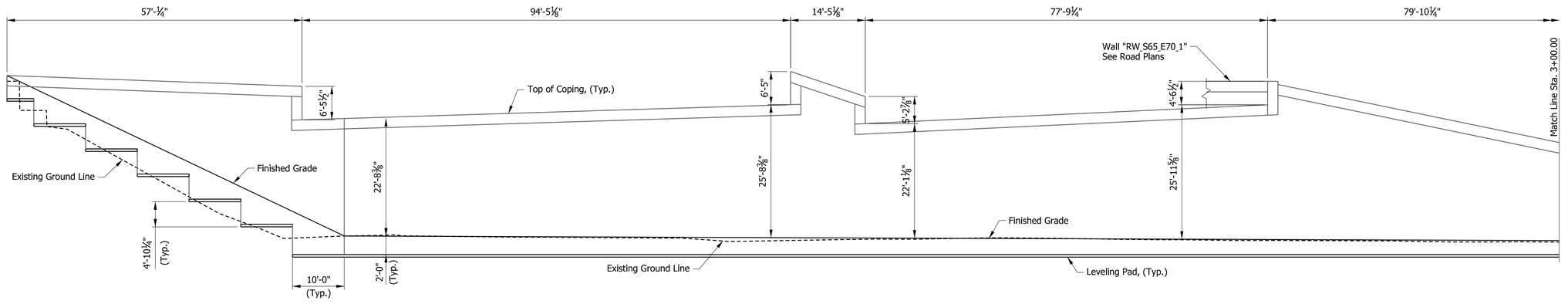


PLAN VIEW
Scale: 3/32" = 1'-0"



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

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED; BRIDGE FILE: I70-083-10636 DWBL; DESIGNATION: 1901923
DESIGNED: ZGC	DRAWN: KNP	MSE WALL RW LEWIS_1_L DETAILS 1 OF 2	SURVEY BOOK; ELECTRONIC; SHEETS: 15 of 18; CONTRACT; PROJECT: B-36910; 1600808
CHECKED: CML	CHECKED: ZGC		

Plot: 2/24/2020 10:29:43 AM

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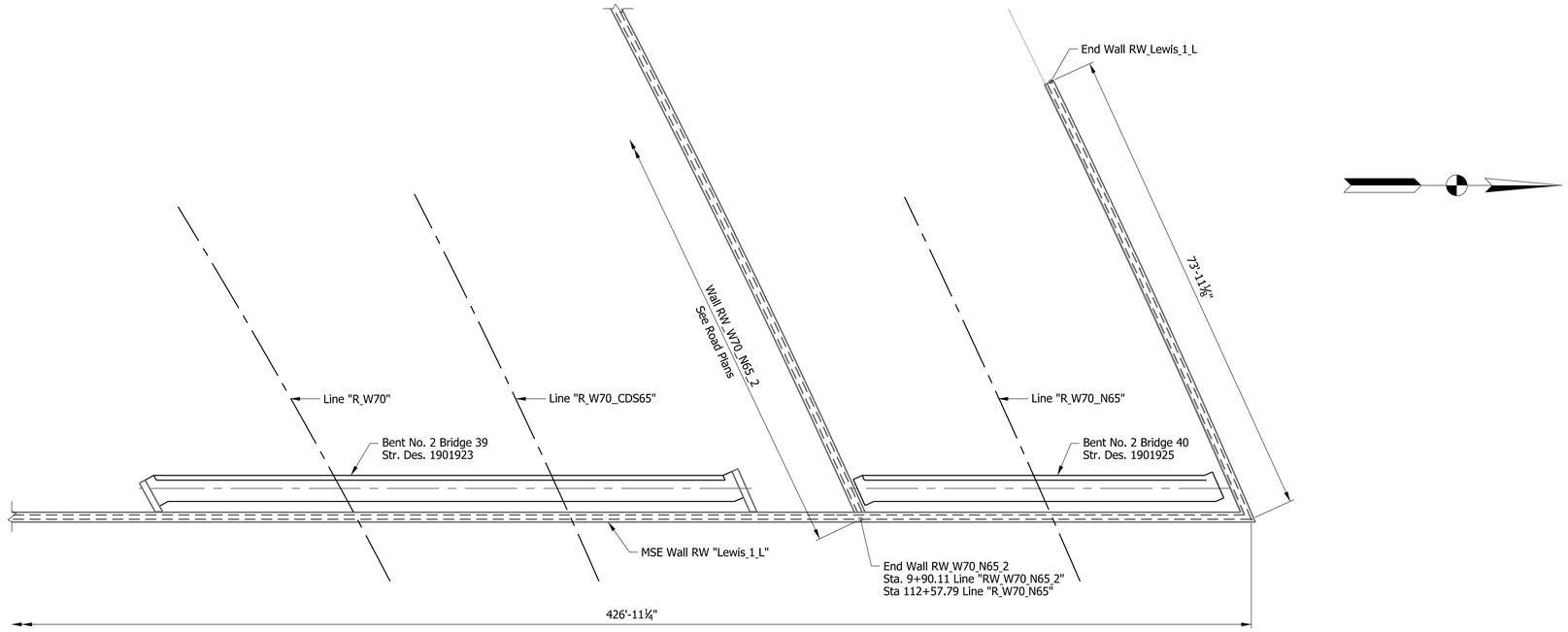
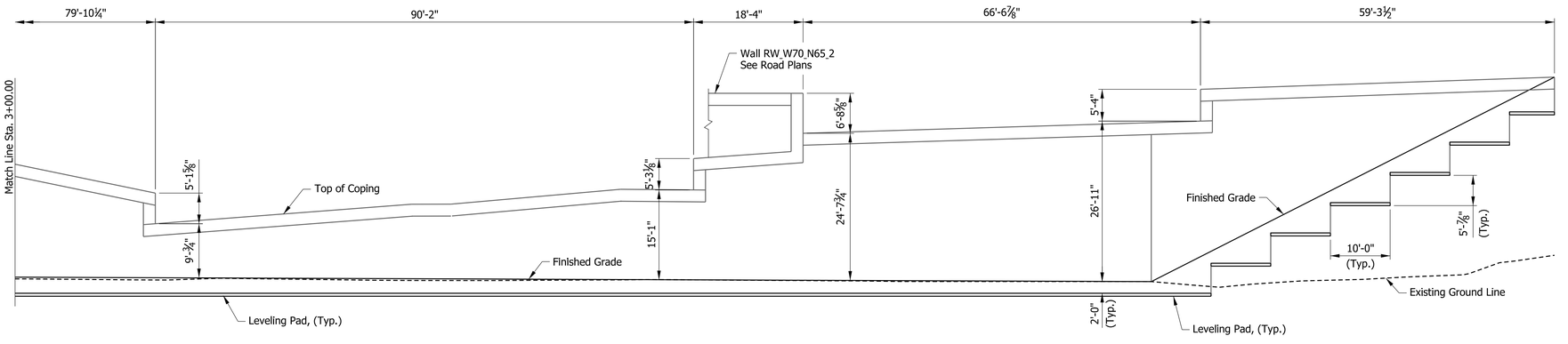


PLAN VIEW

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



ELEVATION

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

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP

CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

MSE WALL RW LEWIS_1_L
DETAILS 2 OF 2

SCALE	BRIDGE FILE
AS NOTED	I70-083-10636 DWBL
	DESIGNATION
	1901923
SURVEY BOOK	SHEETS
ELECTRONIC	16 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/24/2020 10:29:44 AM

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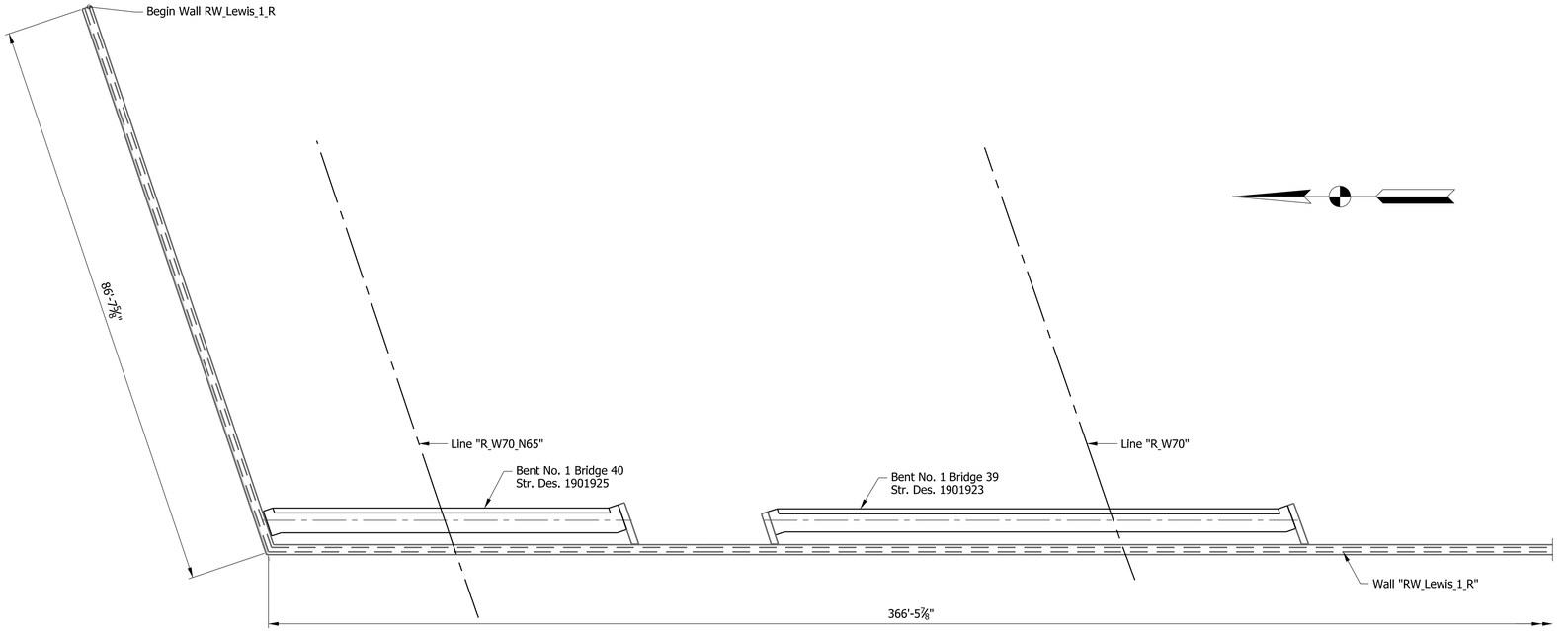
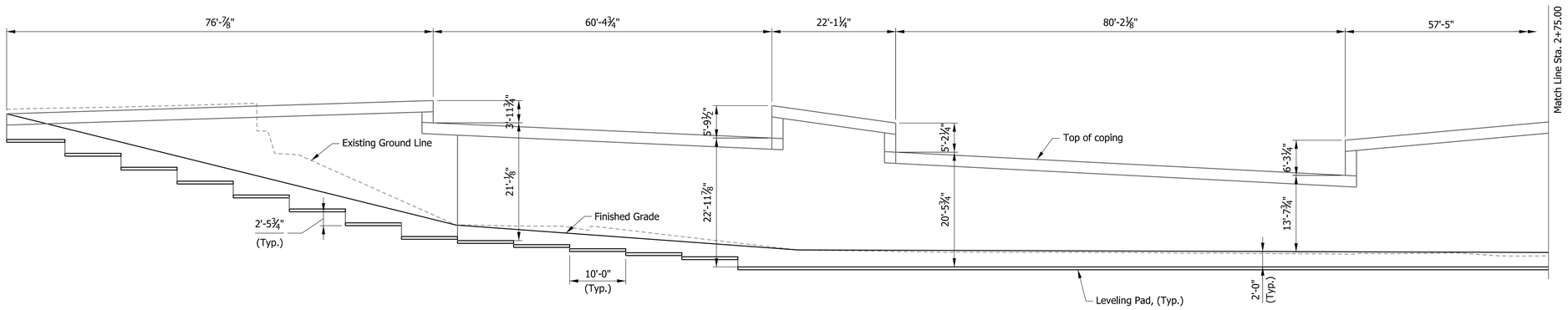


PLAN VIEW
Scale: 3/32" = 1'-0"



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

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP
CHECKED: CML CHECKED: ZGC

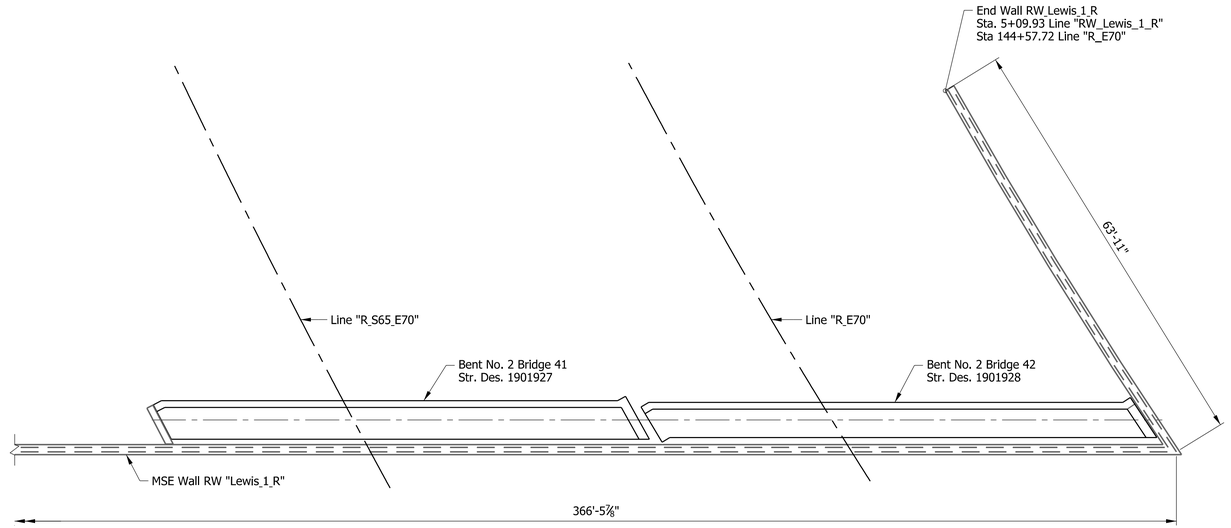
INDIANA
DEPARTMENT OF TRANSPORTATION

MSE WALL RW LEWIS_1_R
DETAILS 1 OF 2

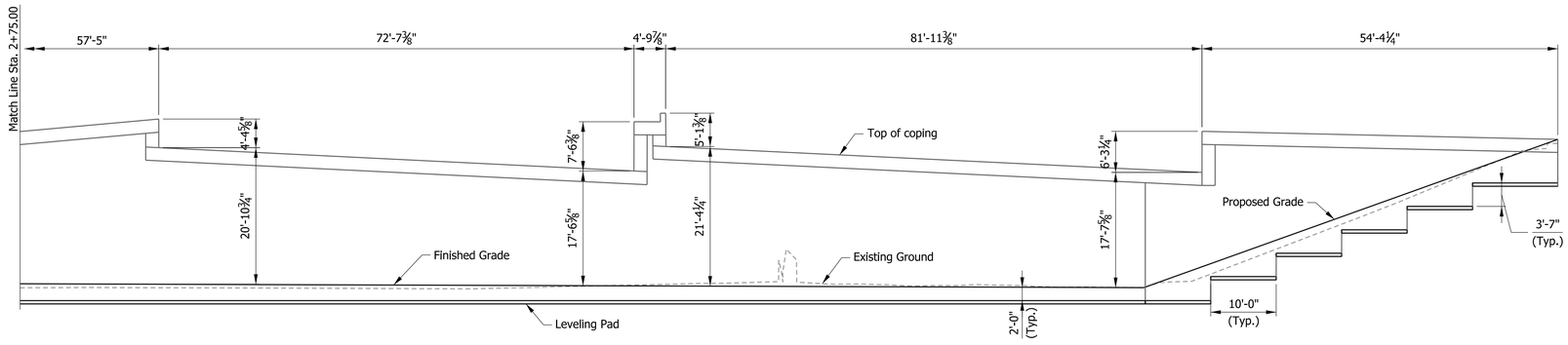
SCALE	BRIDGE FILE
AS NOTED	I70-083-10636 DWBL
	DESIGNATION
	1901923
SURVEY BOOK	SHEETS
ELECTRONIC	17 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/24/2020 10:29:47 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 39 I70 WB & SB CD over Lewis St & Monon Trail\1901923_17_18 - MSE Wall East.dgn



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



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

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP

CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

MSE WALL RW LEWIS_1_R
DETAILS 2 OF 2

SCALE	BRIDGE FILE
AS NOTED	I70-083-10636 DWBL
	DESIGNATION
	1901923
SURVEY BOOK	SHEETS
ELECTRONIC	18 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/24/2020 10:29:48 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 39 I70 WB & SB CD over Lewis St & Monon Trail\1901923_17_18 - MSE Wall East.dgn

PROJECT	DESIGNATION
1600808	1901925
CONTRACT	BRIDGE FILE
B-36910	I70-083-10637 WBL

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-70 AT: RP 83+24

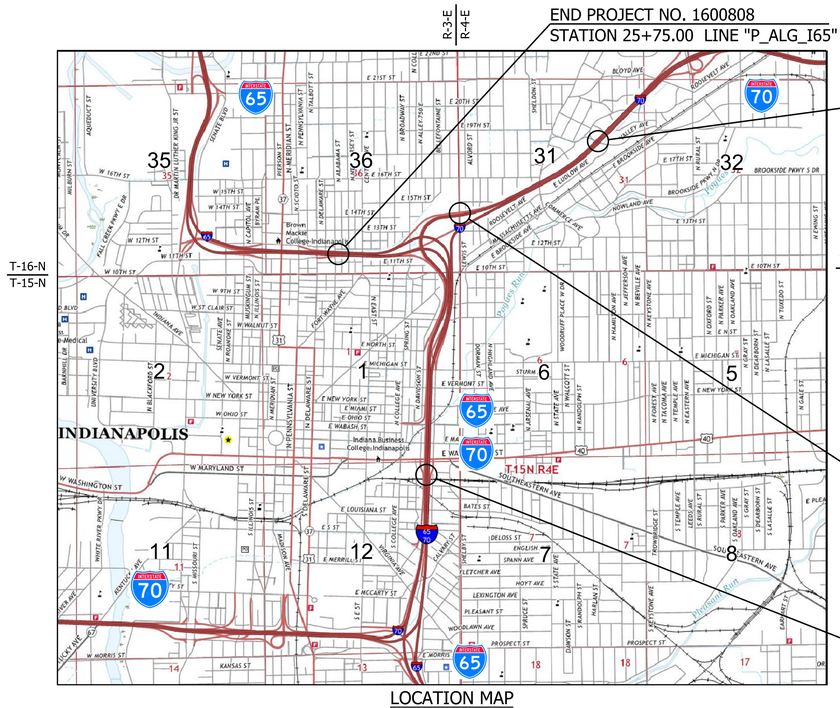
PROJECT NO. 1600808 (P.E. & CONSTR.)

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I70-083-10637 WBL	COMPOSITE PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE	2 SPAN: 77'-1⅛", 76'-7" SKEW: VARIES	LEWIS STREET & MONON TRAIL	111+74.26

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVENUE	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901927	BRIDGE REPLACEMENT ON I-65 SB TO I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE) - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER VERMONT STREET	

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

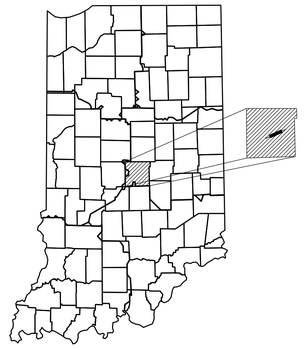
BRIDGE REPLACEMENT ON I-70 WESTBOUND TO I-65 NORTHBOUND OVER LEWIS STREET & MONON TRAIL
LOCATED 0.15 MILES EAST OF I-70 (NORTH SPLIT) INTERCHANGE IN
SECTION 36, T-16-N, R-3-E, CENTER TOWNSHIP, MARION COUNTY, INDIANA



LOCATION MAP
(MARION COUNTY)

SCALE: 1" = 2000'

TRAFFIC DATA		I-70 WESTBOUND	LEWIS STREET
A.A.D.T.	(2021)	31,350 V.P.D.	N/A V.P.D.
A.A.D.T.	(2041)	32,513 V.P.D.	N/A V.P.D.
D.H.V	(2041)	2,601 V.P.H.	N/A V.P.H.
DIRECTIONAL DISTRIBUTION		100 %	N/A %
TRUCKS		6 % D.H.V.	N/A % D.H.V.
DESIGN DATA			
DESIGN SPEED		55 M.P.H.	25 M.P.H.
PROJECT DESIGN CRITERIA		COMPLETE RECONSTRUCTION (FREEWAY)	N/A
FUNCTIONAL CLASSIFICATION		URBAN FREEWAY	LOCAL ROAD
RURAL/URBAN		URBAN (BUILT-UP)	URBAN
TERRAIN		LEVEL	LEVEL
ACCESS CONTROL		FULL	NONE



PROJECT LOCATION SHOWN BY
MARION COUNTY

LATITUDE: 39°47'06" N LONGITUDE: 86°08'24" W

HYDROLOGIC UNIT CODE: 05120201130020

BRIDGE LENGTH:	0.030	MI.
ROADWAY LENGTH:	SEE ROAD PLANS	MI.
TOTAL LENGTH:	SEE ROAD PLANS	MI.
MAX. GRADE:	2.633	%

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

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: Janssen & Spaans Engineering (317) 254-9686 PHONE NUMBER

CERTIFIED BY: SIG_DT DATE

RECOMMENDED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE
I70-083-10637 WBL
DESIGNATION
1901925

SURVEY BOOK	SHEETS		
ELECTRONIC	1	of	14
CONTRACT	PROJECT		
B-36910	1600808		

Plot: 2/26/2020

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 40 I70 WB to I65 NB over Lewis St & Monon Trail\1901925_01 - Title.dgn

UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE SHEET
2	INDEX SHEET
3	MAINTENANCE OF TRAFFIC
4	LAYOUT SHEET
5	GENERAL PLAN
6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 3 DETAILS
9	BENT NO. 1 & 3 DETAILS
10	BENT NO. 2 DETAILS
11	FRAMING PLAN
12	BEAM DETAILS
13	SUPERSTRUCTURE DETAILS
14	APPROACH SLAB DETAILS

REVISIONS

SHEET NO.	DATE	REVISED

811 Know what's below. Call before you dig.

INDIANA UNDERGROUND
1-800-382-5544 OR CALL 811
24 HOURS A DAY 7 DAYS A WEEK

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: KNP

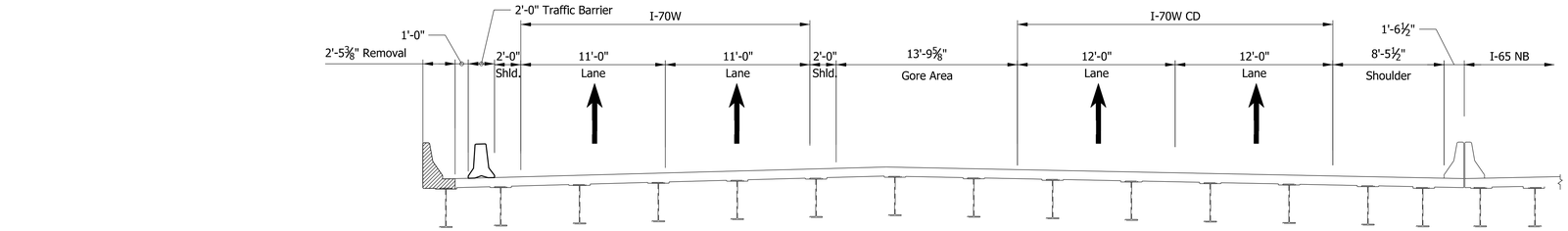
CHECKED: CML | CHECKED: ZGC

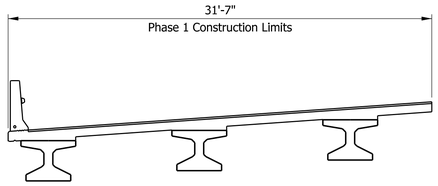
INDIANA
DEPARTMENT OF TRANSPORTATION

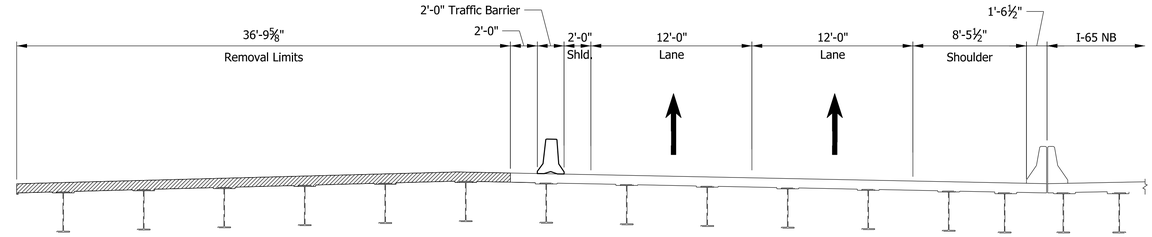
INDEX

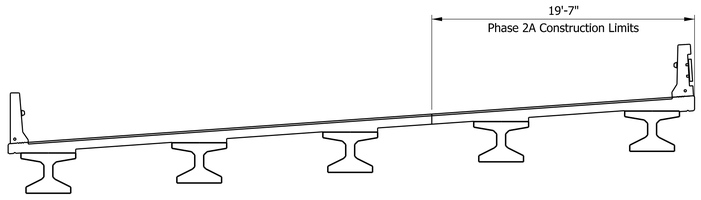
HORIZONTAL SCALE	BRIDGE FILE
NA	I70-083-10637 WBL
VERTICAL SCALE	DESIGNATION
NA	1901925

SURVEY BOOK	SHEETS
ELECTRONIC	2 of 14
CONTRACT	PROJECT
B-36910	1600808









PHASE 2A

LIMITS OF REMOVAL

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP

CHECKED: HDA CHECKED: HDA

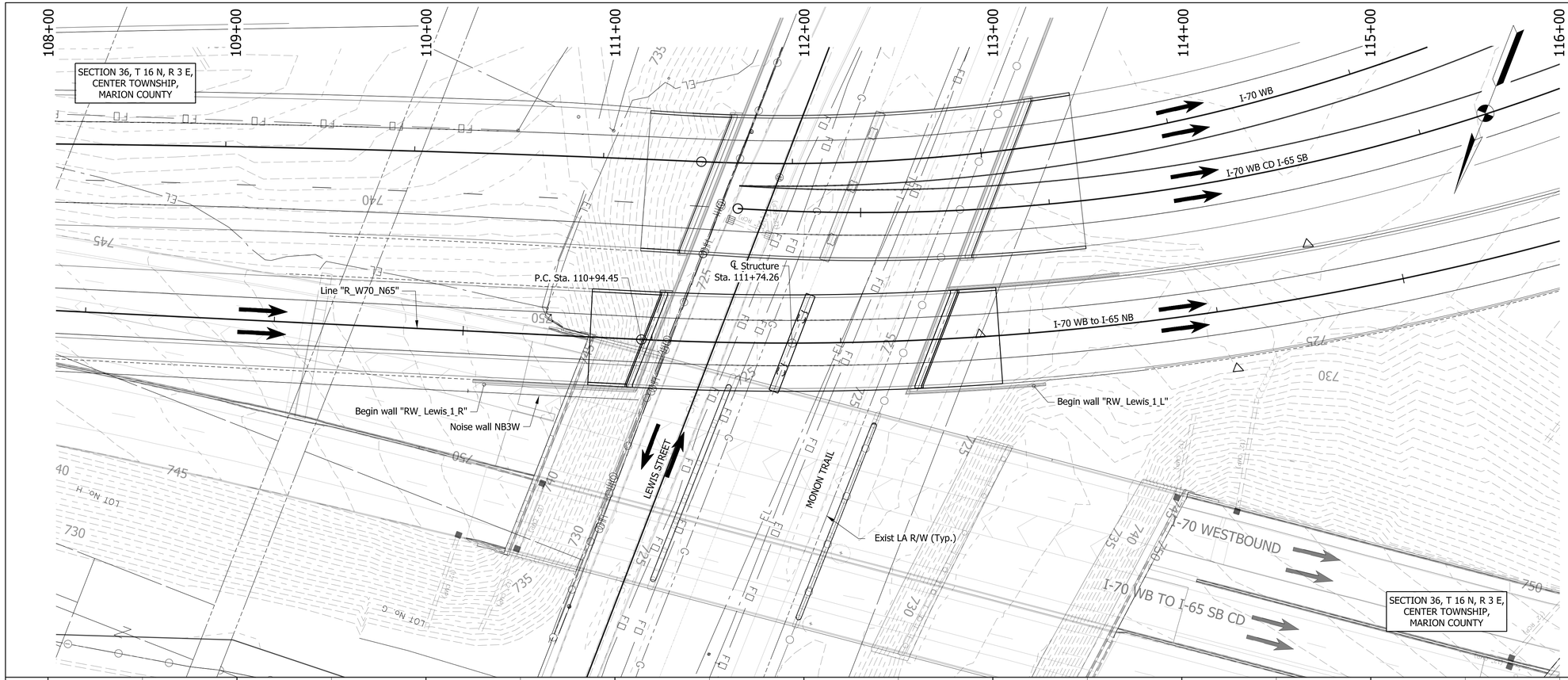
INDIANA
DEPARTMENT OF TRANSPORTATION

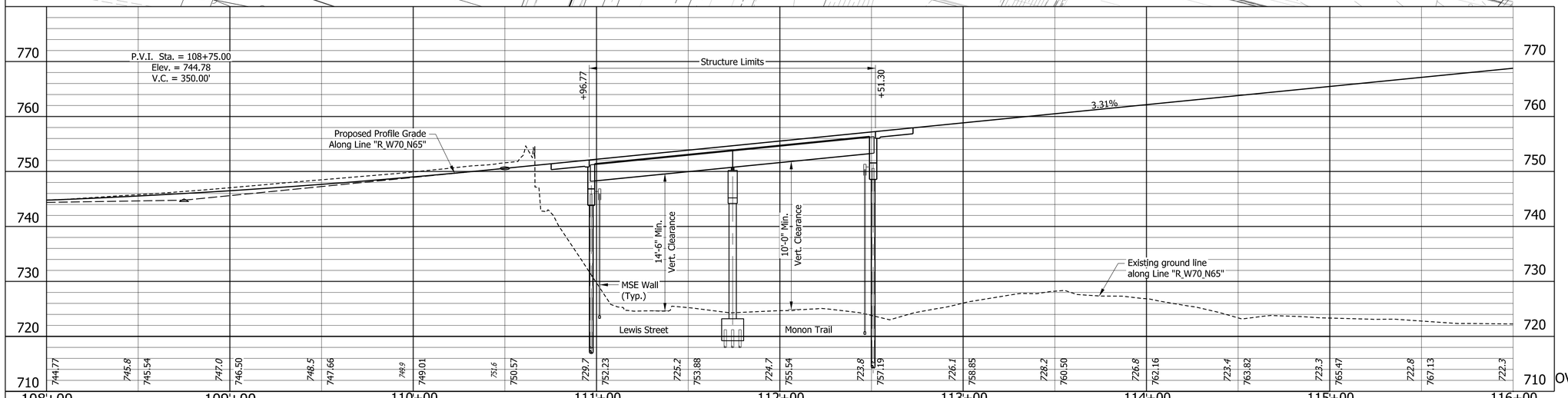
GENERAL PLAN
TYPICAL SECTION

SCALE	BRIDGE FILE
3/16"=1'-0"	I70-083-10637 WBL
	DESIGNATION
	1901925
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 14
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 10:22:22 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 40 I70 WB to I65 NB over Lewis St & Monon Trail\1901925_03 - MOT.dgn





EXISTING STRUCTURE:

The existing structure was built in 1974 and had a rehabliation in 1985 & 2003. The structure is a 4 span continuous composite 36" wf steel beam bridge, with span lengths of 97'-0", 68'-0", 79'-6", & 78'-6". it has a clear roadway width of 114'-5" and a total length of 327'-3¾". The existing structure is to be removed. existing plans are on file with the Indiana Department of Transportation under Bridge File No. I70-083-02434 DWBL.

EARTHWORK TABULATION

Fill +20%	See Road Plans
Common Excavation	See Road Plans
Excavation, Foundation, unclassified (70%)	See Road Plans
Waste	See Road Plans

HORIZONTAL CURVE DATA

LINE "R W70" N65

CURVE DATA
PI = 114+11.22
Delta = 22°47'10.3"Lt.
R = 1572.00 ft.
T = 316.77 ft.
L = 625.17 ft.
E = 31.59 ft.

NOTES:

1. See Sheet 2 for Utility owners.
2. All R/W shall be as shown.
3. There shall be no clearing of trees beyond construction limits.
4. All topography is existing.
5. All R/W described from Line "R_W70_N65", except as noted.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
2 SPAN: 77'-1⅛", 76'-7"
SKEW: VARIES
CLEAR ROADWAY: 48'-0"
I-70 WB TO I-65 NB
OVER LEWIS STREET & MONON TRAIL
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC DRAWN: KNP

CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

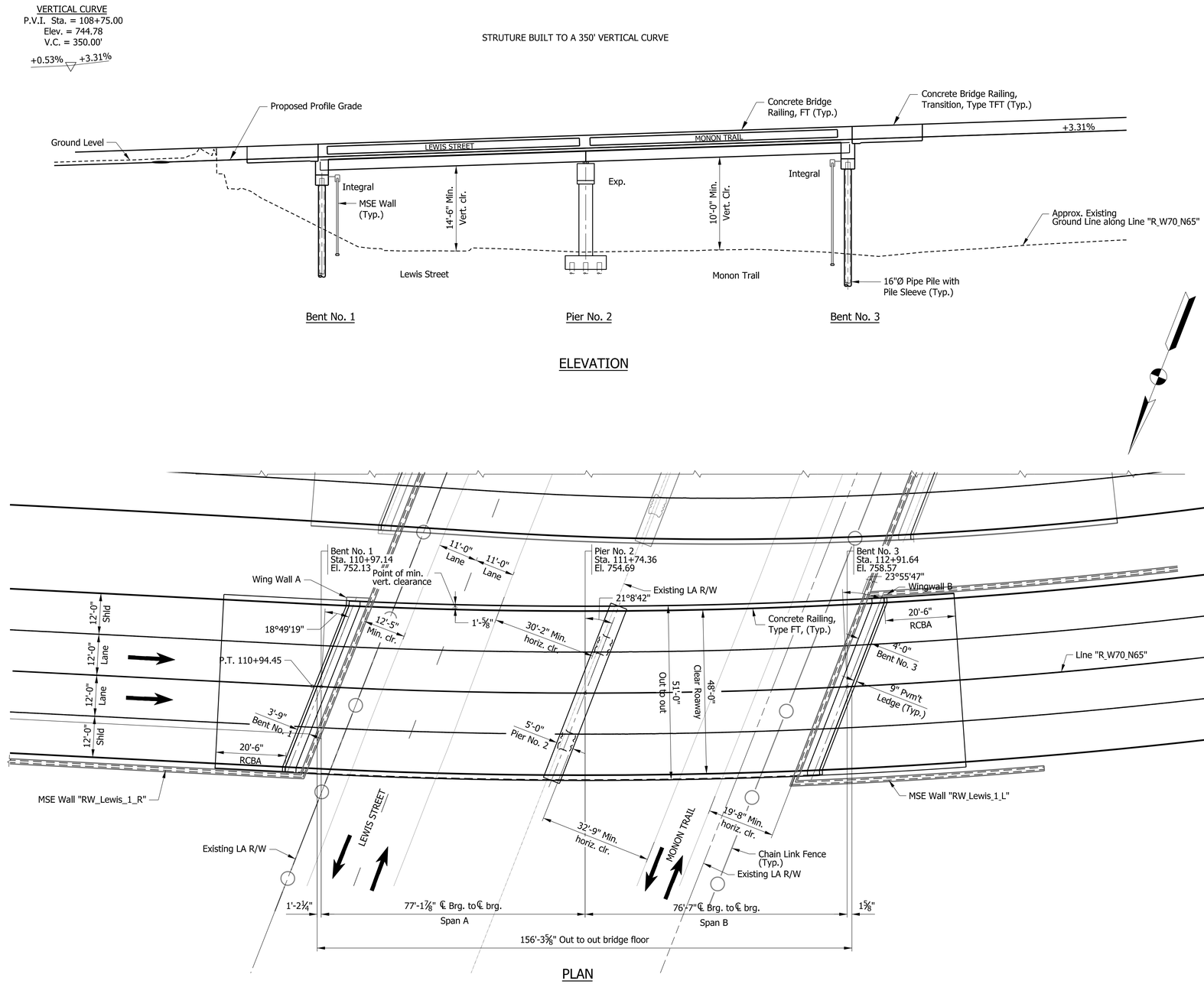
LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1"=30'-0"	I70-083-10637 WBL
VERTICAL SCALE	DESIGNATION
1"=10'-0"	1901925

SURVEY BOOK	SHEETS
ELECTRONIC	4 of 14
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2021 2:27 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 40 I70 WB to I65 NB over Lewis St & Monon Trail\1901925_04 - Layout.dgn



GENERAL NOTES

Reinforcing bar cover shall be 2" min. in top and 1" min. in bottom of floor slabs, 3" min. in footing except bottom bars which shall be 4" min, and 2" min. in all other parts, unless noted.

All dimensions and elevations are in feet (FT) unless otherwise noted.

Concrete in floor slab, diaphragms, barrier, approach slab, and end bents shall be and alternative class "C" in accordance with the technical provisions. Reinforcing bars in deck, barrier, and end bent diaphragm extending into the deck shall be stainless steel. reinforcing bars in end bent diaphragm not extending into the deck and in the cap shall be epoxy coated.

Anti-graffiti coating shall be placed on all exposed surfaces of new retaining walls and new bridge structures excluding top of deck or overlay and interior beams.

For aesthetics associated with the bridge opening, see Bridge Opening Aesthetics Plan package.

DESIGN DATA

LIVE LOAD

Superstructure and Substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications Eight Edition, 2017 & subsequent interim.

DEAD LOAD

Designed for actual dead load plus 15 PSF for SIP metal deck forms.

Slab designed with a 7½" structural depth and a 1½" very early strength LMC overlay.

SEISMIC DESIGN DATA

Seismic Performance Zone = 1
Acceleration Coefficient = 0.061
Seismic Soil Profile Type = Site Class C

DESIGN STRENGTHS

Prestressed Concrete	f'c = 10,000 psi @ 28 Days
Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,000 psi
Class "C" Concrete	f'c = 4,000 psi
Rienforcing Bars (Barrier)	fy = 60,000 psi
Reinforcing Bars	fy = 75,000 psi (all other locations)

CONSTRUCTION LOADING

The exterior beam must be 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 beam. The finishing machine was assumed to be supported 6" past the edge of 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 beam bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/sft for permanent metal stay in place deck forms, removable deck forms,and 2-ft exterior walkway.
Construction Live Load:	Designed 20 lb/sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of 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 AASHTO LRFD3.8.1.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
2 SPAN: 77'-1⅛", 76'-7"
SKEW: VARIES
CLEAR ROADWAY: 48'-0"
I-70 WB TO I-65 NB
OVER LEWIS STREET & MONON TRAIL
MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP
CHECKED: CML CHECKED: ZGC

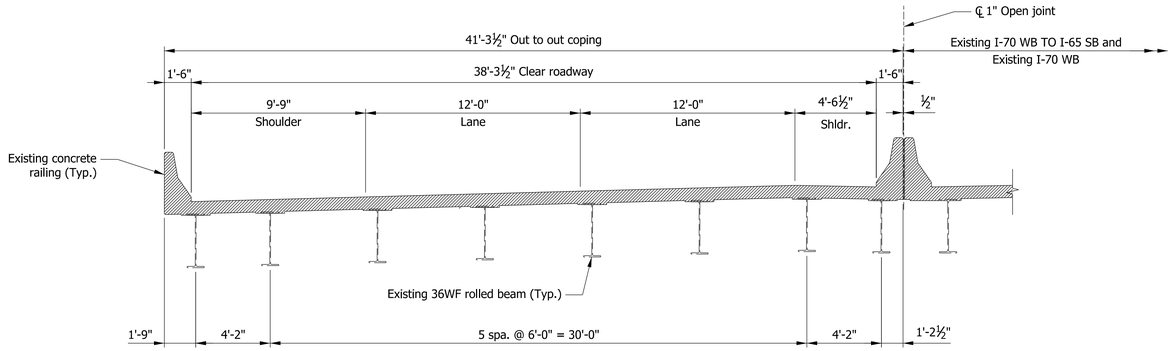
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

SCALE	BRIDGE FILE
1/16"=1'-0"	I70-083-10637 WBL
	DESIGNATION
	1901925
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 14
CONTRACT	PROJECT
B-36910	1600808

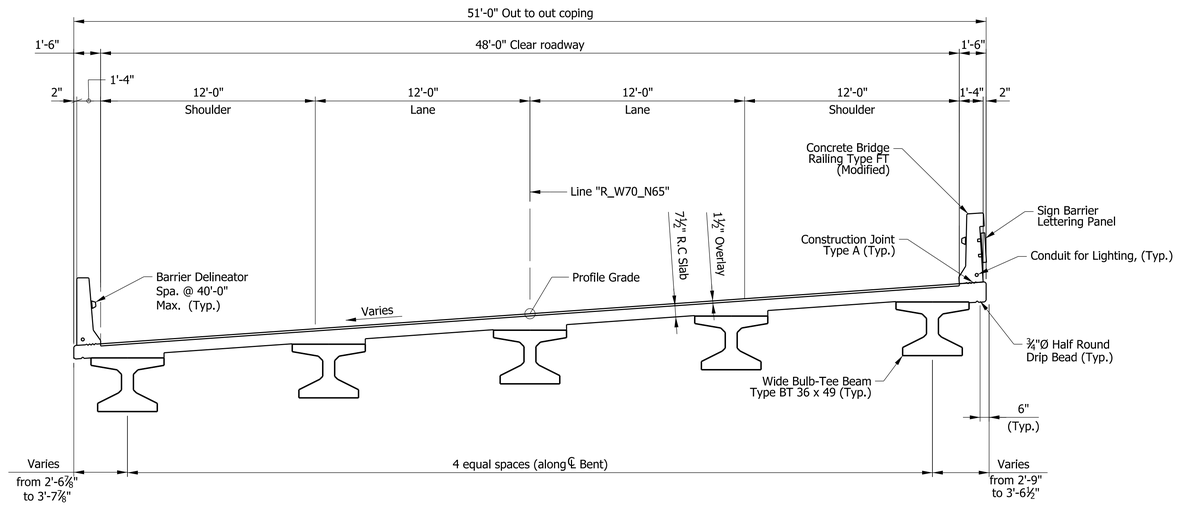
Plot: 2/26/2020 10:22:29 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 40 I70 WB to I65 NB over Lewis St & Monon Trail\1901925_05 - Gen plan.dgn



EXISTING TYPICAL SECTION

▨ LIMITS OF REMOVAL



PROPOSED TYPICAL SECTION

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
2 SPAN: 77'-1⅛", 76'-7"
SKEW: VARIES
CLEAR ROADWAY: 48'-0"
I-70 WB TO I-65 NB
OVER LEWIS STREET & MONON TRAIL
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC | DRAWN: KNP

CHECKED: HDA | CHECKED: HDA

INDIANA
DEPARTMENT OF TRANSPORTATION

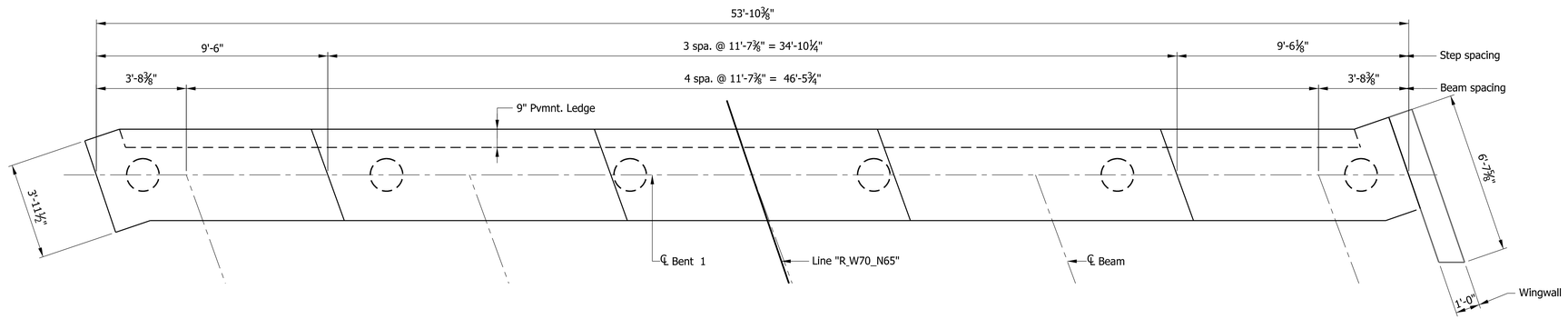
GENERAL PLAN
TYPICAL SECTION

SCALE	BRIDGE FILE
1/4"=1'-0"	I70-083-10637 WBL
	DESIGNATION
	1901925

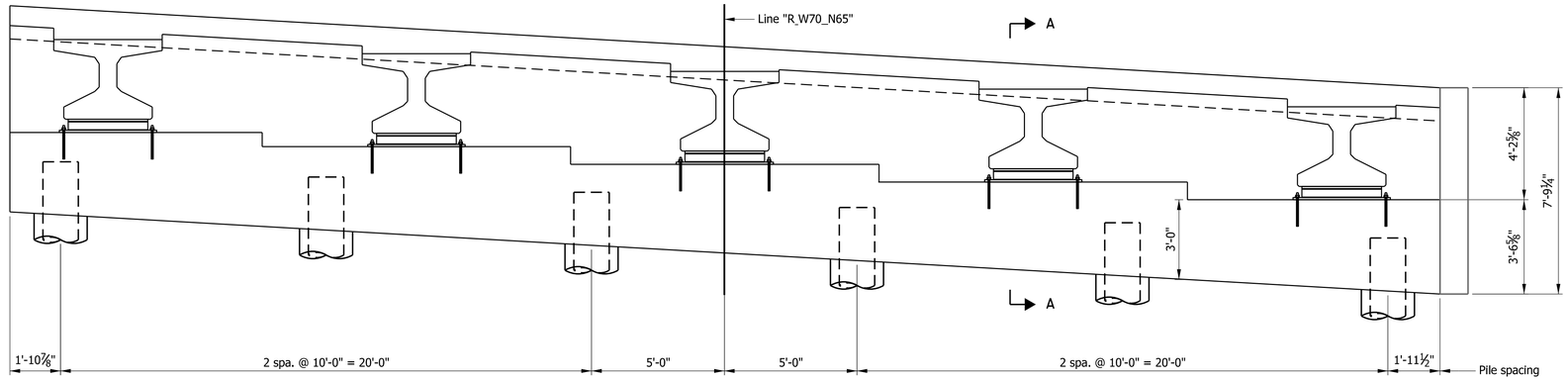
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 14
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 10:22:31 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 40 I70 WB to I65 NB over Lewis St & Monon Trail\1901925_06 - Gen plan 2.dgn



PLAN
Scale: 3/8" = 1'-0"

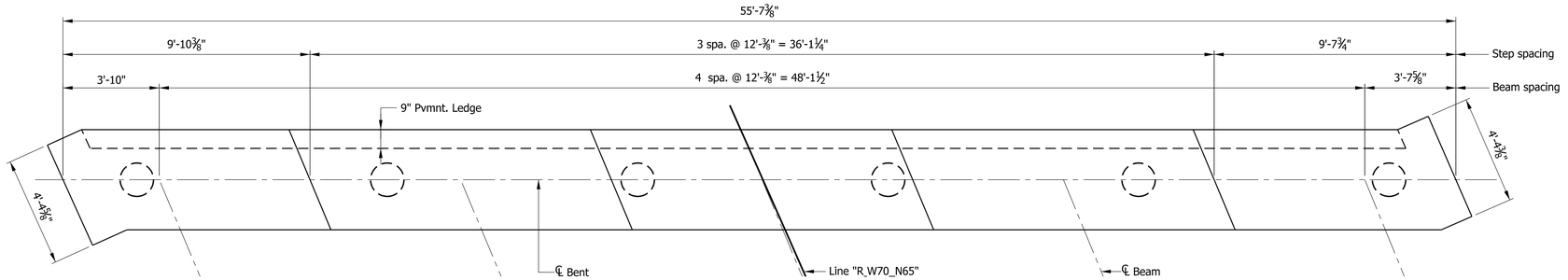


ELEVATION
Scale: 3/8" = 1'-0"

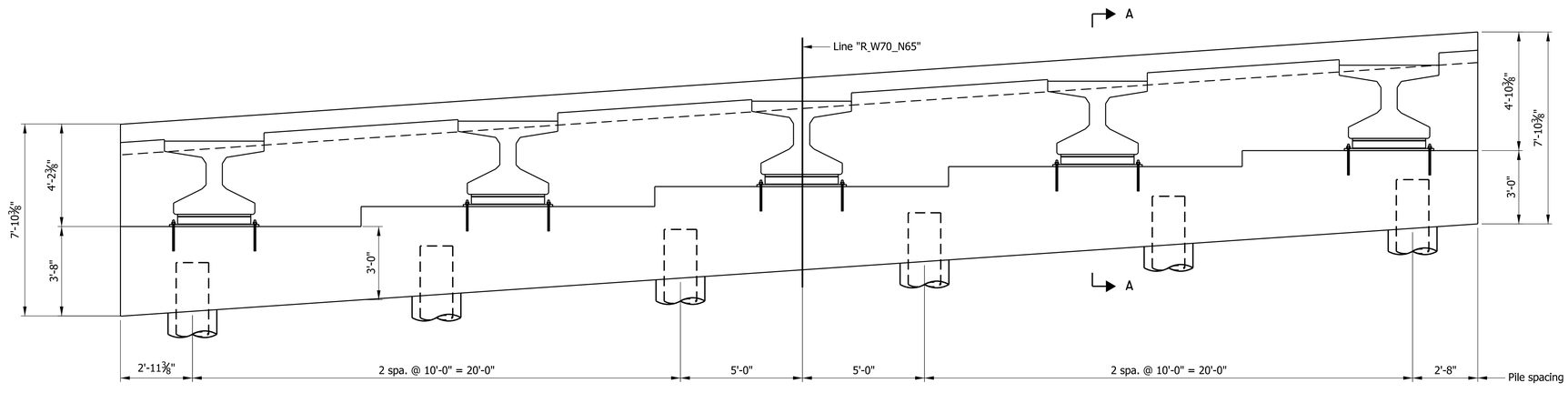
	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 3/8" = 1'-0" / BRIDGE FILE: I70-083-10637 WBL / DESIGNATION: 1901925
	DESIGNED: ZGC DRAWN: KNP CHECKED: CML CHECKED: ZGC	BENT NO.1	SURVEY BOOK / SHEETS ELECTRONIC: 7 of 14 CONTRACT / PROJECT: B-36910 / 1600808

Plot: 2/26/2020 10:22:32 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 40 I70 WB to I65 NB over Lewis St & Monon Trail\1901925_07 - Bent 1.dgn



PLAN
Scale: 3/8" = 1'-0"

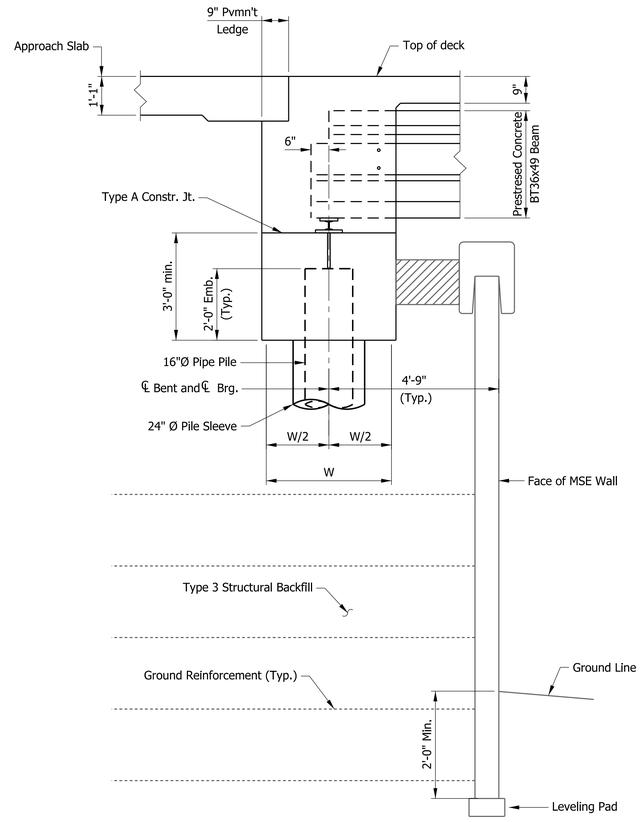


ELEVATION
Scale: 3/8" = 1'-0"

Plot: 2/26/2020 10:22:34 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 40 I70 WB to I65 NB over Lewis St & Monon Trail\1901925_08 - Bent 3.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 3/8" = 1'-0" / BRIDGE FILE: I70-083-10637 WBL / DESIGNATION: 1901925
DESIGNED: ZGC	DRAWN: KNP	BENT NO. 3	SURVEY BOOK / SHEETS: ELECTRONIC 8 of 14
CHECKED: CML	CHECKED: ZGC		CONTRACT: B-36910 / PROJECT: 1600808



SECTION A-A
Scale: 1/2" = 1'-0"

Note:

For MSE wall details, see plan Des. 1901923 sheets 15 thru 18.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED; BRIDGE FILE: I70-083-10637 WBL; DESIGNATION: 1901925
DESIGNED: ZGC	DRAWN: KNP	BENT NO. 1 AND 3 DETAILS	SURVEY BOOK; SHEETS: ELECTRONIC 9 of 14
CHECKED: CML	CHECKED: ZGC		CONTRACT: B-36910; PROJECT: 1600808

Plot: 2/26/2020 10:22:35 AM

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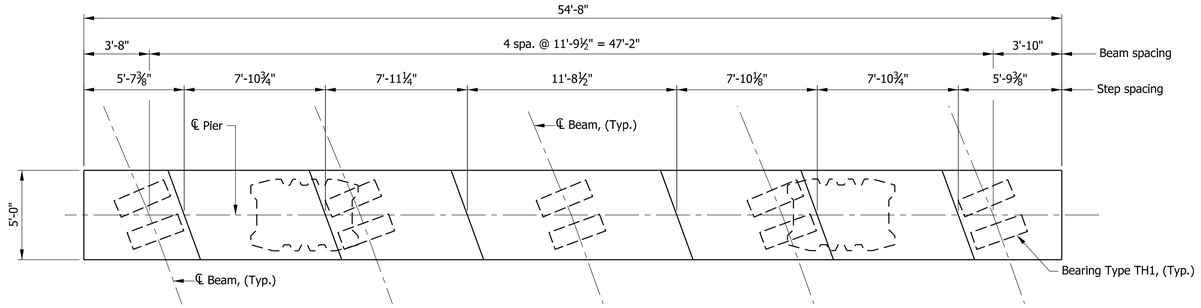
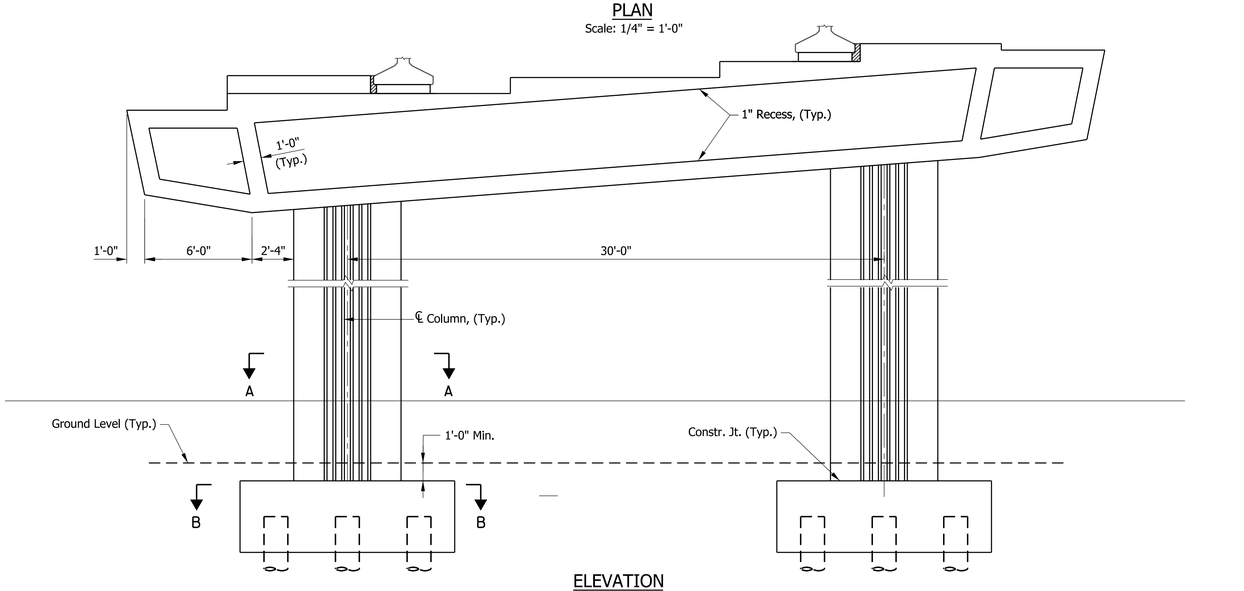
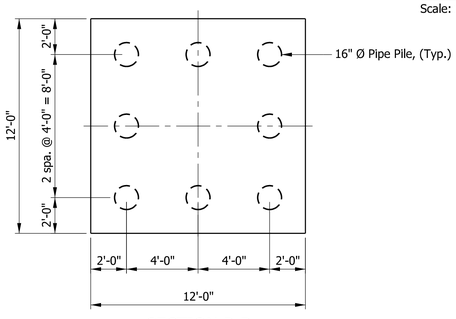


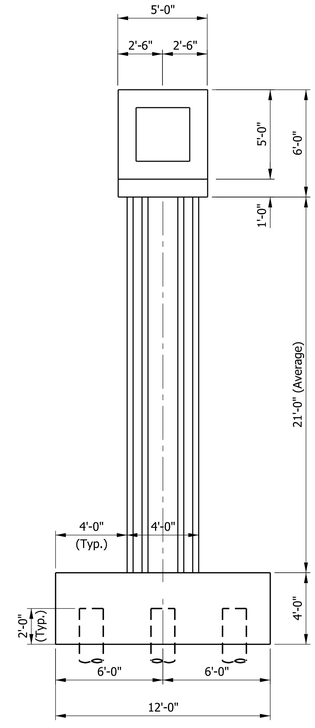
PLAN
Scale: 1/4" = 1'-0"



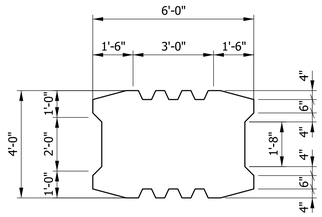
ELEVATION
Scale: 1/4" = 1'-0"



SECTION B-B
Scale: 1/4" = 1'-0"



END VIEW
Scale: 1/4" = 1'-0"



SECTION A-A
Scale: 1/4" = 1'-0"

Note:
For Bearing Pad details see Std. Dwg. E-726-BEBP-03

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

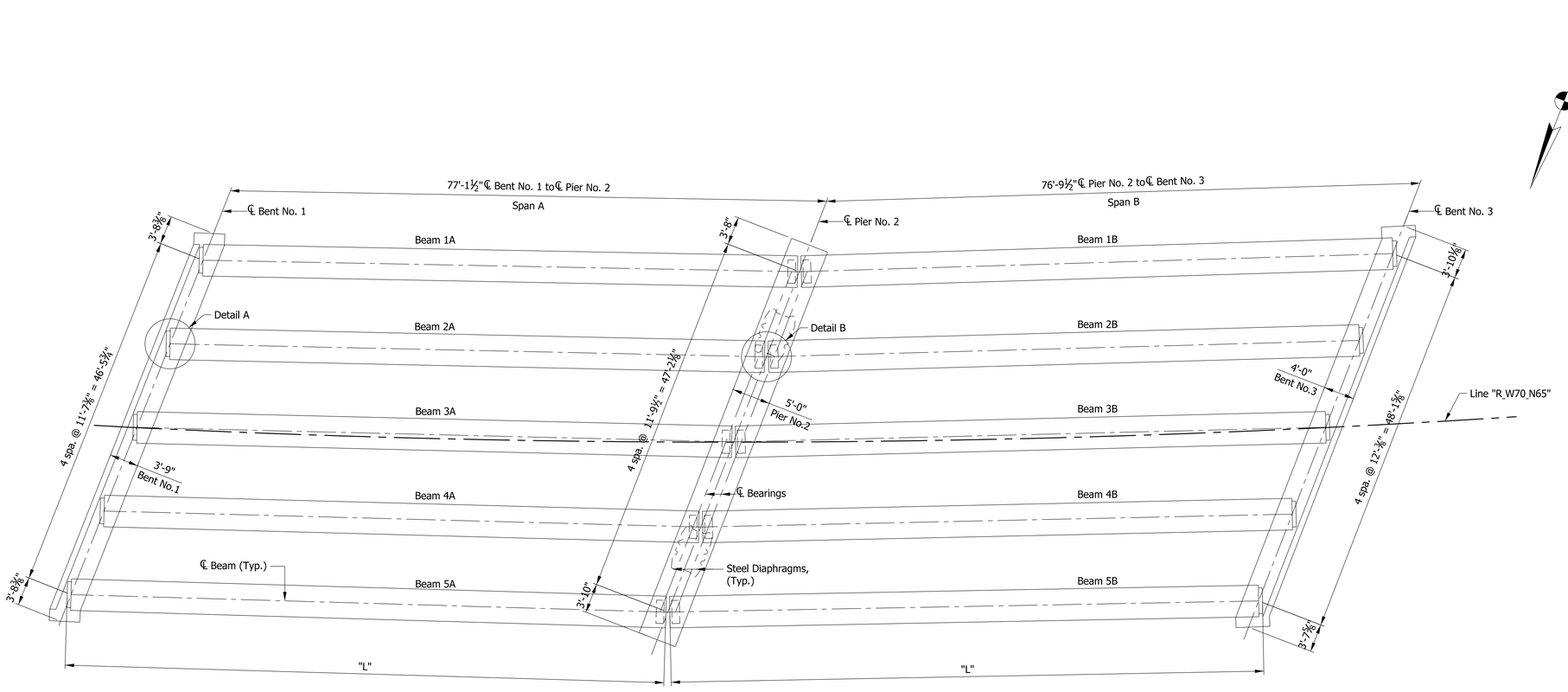
DESIGNED: ZGC DRAWN: KNP
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

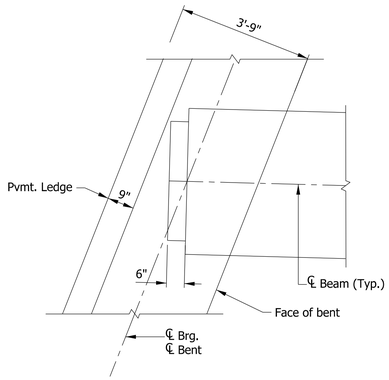
PIER NO.2

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I70-083-10637 WBL
	DESIGNATION
	1901925
SURVEY BOOK	SHEETS
ELECTRONIC	10 of 14
CONTRACT	PROJECT
B-36910	1600808

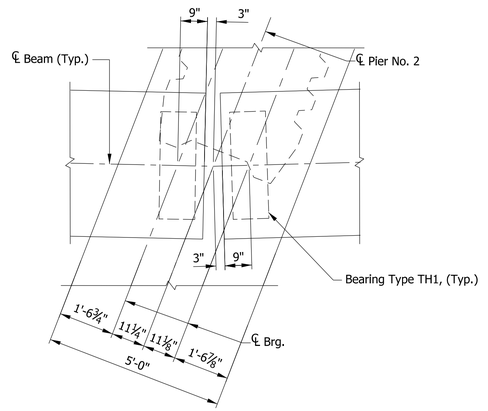
Plot: 2/26/2020 10:22:36 AM
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 40 I70 WB to I65 NB over Lewis St & Monon Trail\1901925_10 - Bent 2.dgn



FRAMING PLAN



DETAIL A
Scale: 1/2" = 1'-0"



DETAIL B
Scale: 1/2" = 1'-0"

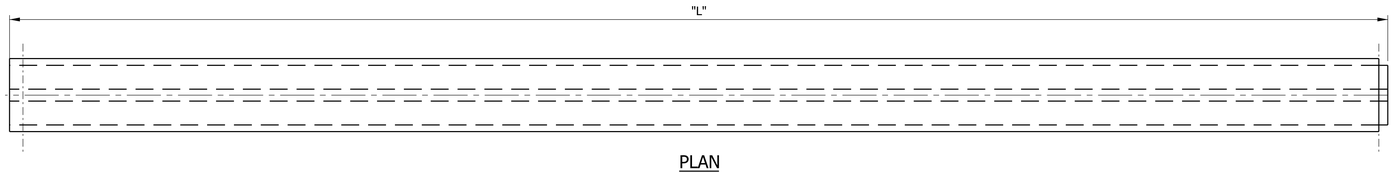
Note:

For Bearing details, see Std. Dwg. E 726-BEBP-03.

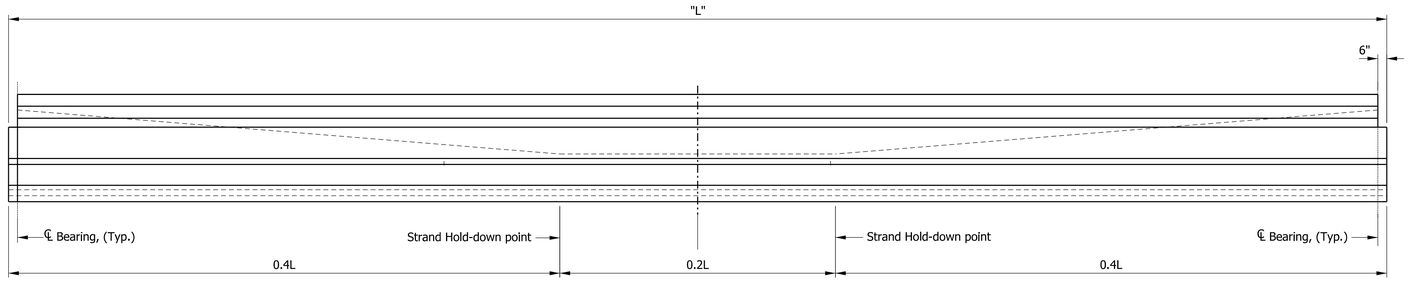
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/8"=1'-0" / BRIDGE FILE: I70-083-10637 WBL / DESIGNATION: 1901925
DESIGNED: ZGC	DRAWN: KNP	FRAMING PLAN	SURVEY BOOK / SHEETS: ELECTRONIC 11 of 14 / CONTRACT / PROJECT: B-36910 / 1600808
CHECKED: CML	CHECKED: ZGC		

Plot: 2/26/2020 10:22:38 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 40 I70 WB to I65 NB over Lewis St & Monon Trail\1901925_11 - Frame plan.dgn



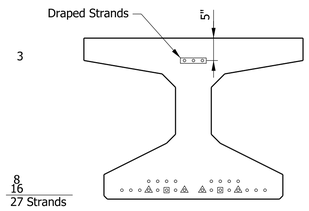
PLAN
Scale: ¼" = 1'-0"



BEAM ELEVATION
Vertical Scale: ½" = 1'-0"
Horizontal Scale: ¼" = 1'-0"

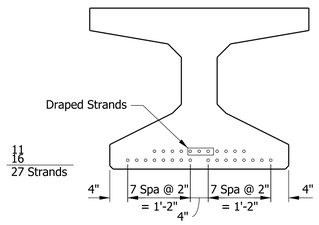
Span "A"	
Beam Mark	"L"
1A	77'-4¾"
2A	77'-5"
3A	77'-5¼"
4A	77'-5½"
5A	77'-5⅝"

Span "B"	
Beam Mark	"L"
1B	77'-½"
2B	76'-11⅜"
3B	76'-10¼"
4B	76'-9⅛"
5B	76'-8⅛"

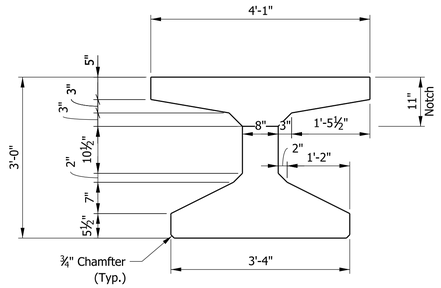


STRAND PATTERN
AT BEAM END
Scale: 3/4" = 1'-0"

△ - Debonded at 5' from end
□ - Debonded at 10' from end



STRAND PATTERN
AT MIDSPAN
Scale: 3/4" = 1'-0"



TYPICAL SECTION
Scale: 3/4" = 1'-0"

Notes:

1. Prestressing reinforcement shall be 0.6 "dia. uncoated seven wire low relaxation 270 ksi with strand area = 0.217 in².
2. Beam shall be cast a minimum of 120 days before deck is pour.

Plot: 2/26/2020 10:22:40 AM

RECOMMENDED FOR APPROVAL SIG_DT
DESIGN ENGINEER DATE

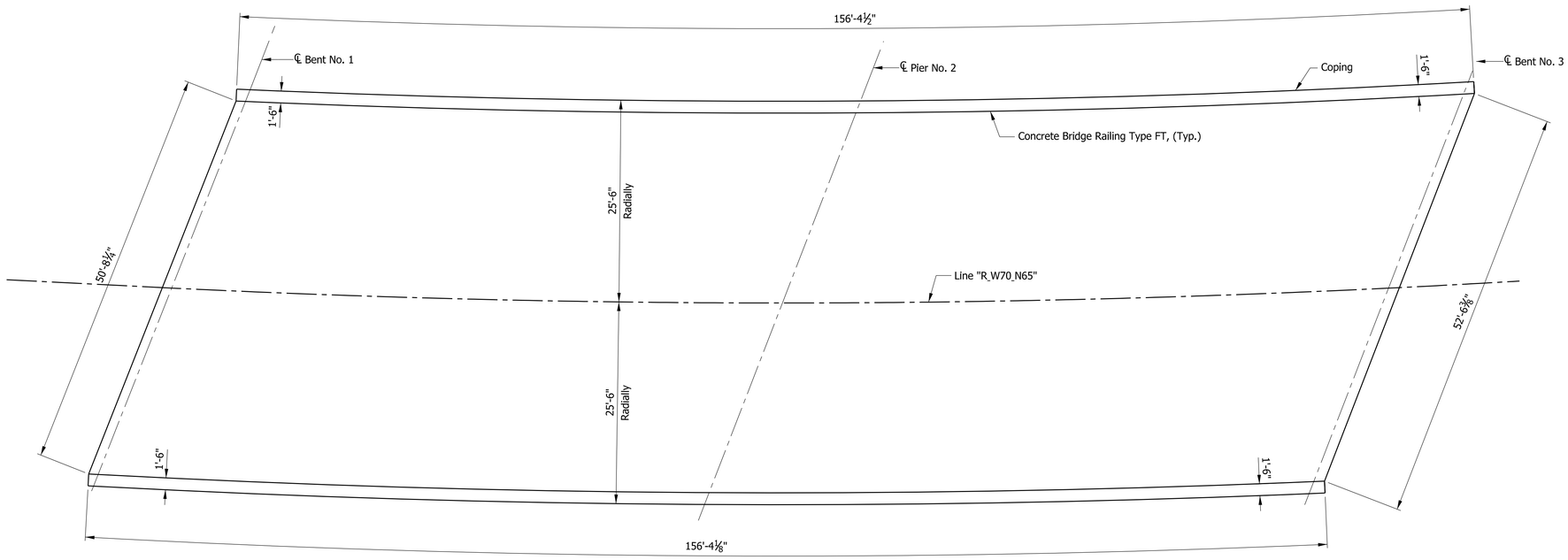
DESIGNED: ZGC DRAWN: KNP
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS
BT 36 x 49

SCALE	BRIDGE FILE
1/4" = 1'-0"	I70-083-10637 WBL
	DESIGNATION
	1901925
SURVEY BOOK	SHEETS
ELECTRONIC	12 of 14
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 40 I70 WB to I65 NB over Lewis St & Monon Trail\1901925_12 - Beam details.dgn

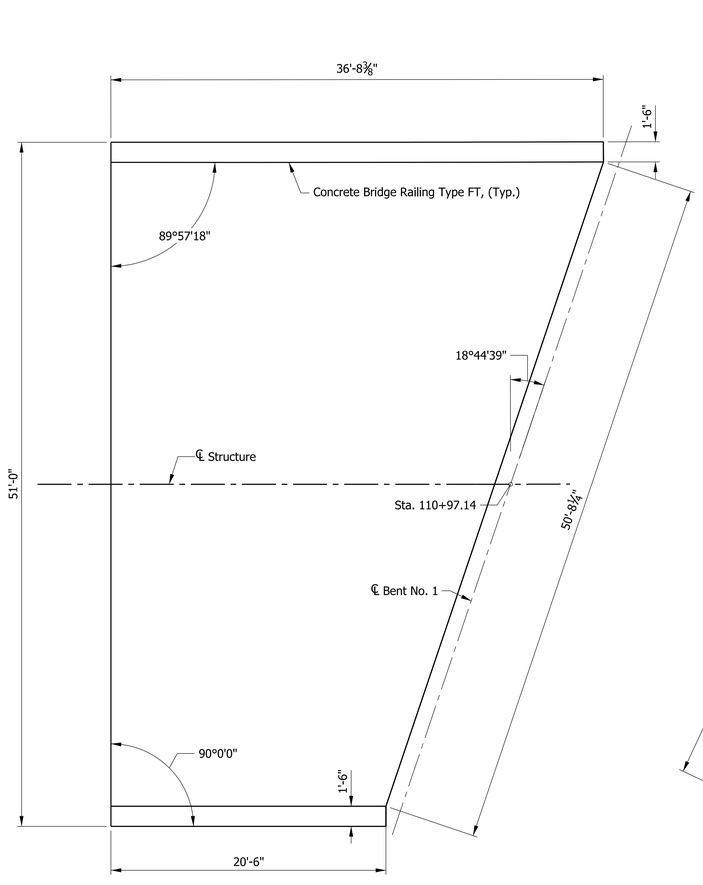


DECK PLAN
Scale 1/8" = 1'-0"

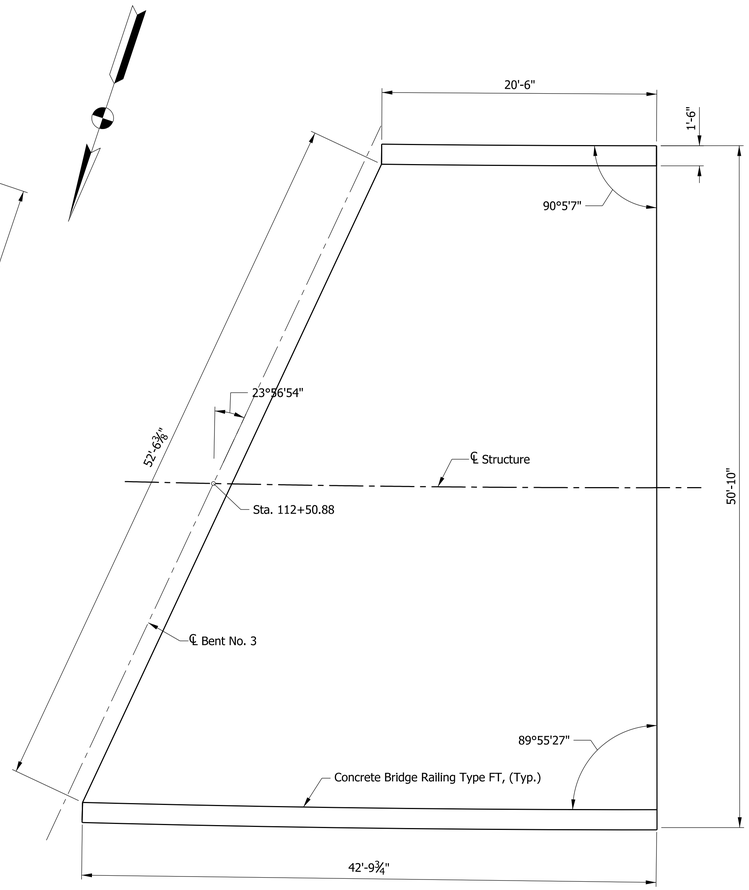
		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/8"=1'-0" | BRIDGE FILE: I70-083-10637 WBL
				DESIGNATION: 1901925
		DESIGNED: ZGC | DRAWN: KNP	SUPERSTRUCTURE DETAILS	SURVEY BOOK | SHEETS
		CHECKED: CML | CHECKED: ZGC		ELECTRONIC: 13 of 14
				CONTRACT: B-36910 | PROJECT: 1600808

Plot: 2/26/2020 10:22:41 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 40 I70 WB to I65 NB over Lewis St & Monon Trail\1901925_13 - Deck plan.dgn



EAST APPROACH SLAB

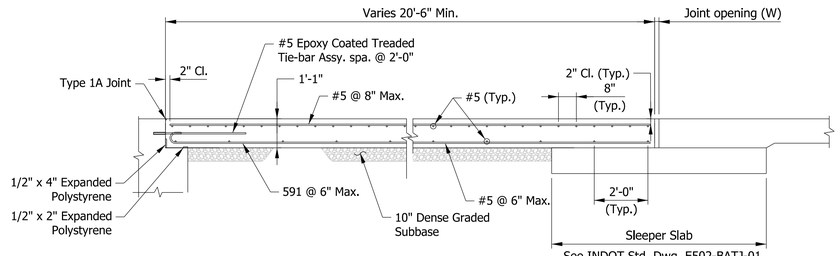


WEST APPROACH SLAB

NOTE:

For additional Terminal Joint information, see USP. Terminal Joint Details: Type CRCP.

Concrete Railing FT TFT sit on slab extension. for more details, see Std. Dwg. E-609-TBAE-02 & 04.



TYPICAL SECTION

Scale: ⅜" = 1'-0"

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED; BRIDGE FILE: I70-083-10637 WBL; DESIGNATION: 1901925
DESIGNED: ZGC	DRAWN: KNP	APPROACH SLABS DETAILS	SURVEY BOOK; SHEETS
CHECKED: CML	CHECKED: ZGC		ELECTRONIC: 14 of 14; CONTRACT: B-36910; PROJECT: 1600808

Plot: 2/26/2020 10:22:42 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 40 I70 WB to I65 NB over Lewis St & Monon Trail\1901925_14 - Approach Slabs.dgn

PROJECT	DESIGNATION
1600808	1901927
CONTRACT	BRIDGE FILE
B-36910	I65-112-10638 SBL

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I65-112-10638 SBL	COMPOSITE PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE	2 SPAN: 84'-6⅞", 81'-7⅜" SKEW: VARIES	LEWIS STREET & MONON TRAIL	125+88.00

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVENUE	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE) - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER VERMONT STREET	

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

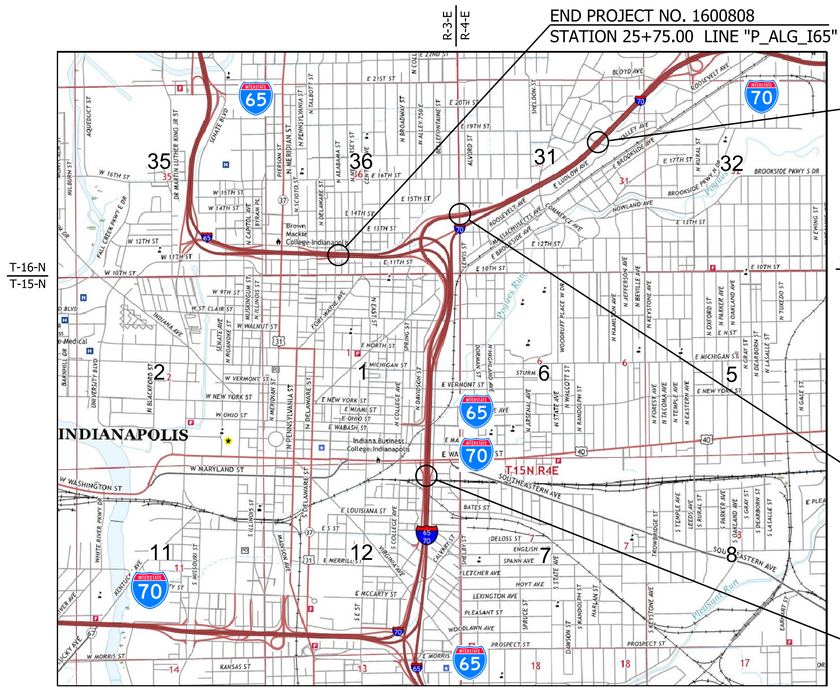
FOR SPANS OVER 20 FEET

ROUTE: I-65/I-70 AT: RP 83+24

PROJECT NO. 1600808 (P.E. & CONSTR.)

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACEMENT ON I-65 SOUTHBOUND TO I-70 EASTBOUND OVER LEWIS STREET & MONON TRAIL
LOCATED 0.15 MILES EAST OF I-70 (NORTH SPLIT) INTERCHANGE
IN SECTION 36, T-16-N, R-3-E, CENTER TOWNSHIP, MARION COUNTY, INDIANA



END PROJECT NO. 1600808
STATION 25+75.00 LINE "P_ALG_I65"

END CONSTRUCTION PROJECT NO. 1600808
STATION 43+87.40 LINE "P_ALG_I70"

PROJECT LOCATION
BRIDGE FILE NO. I70-083-10636 DWBL
I-70 WESTBOUND OVER LEWIS ST. & MONON TRAIL

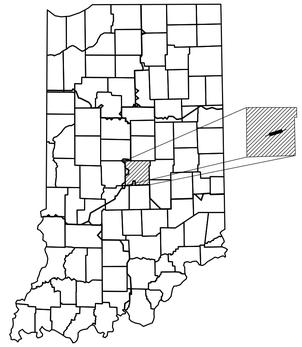
BEGIN PROJECT NO. 1600808
STATION 113+00.00 LINE "P_ALG_I65/I70"

T-16-N
T-15-N

SCALE: 1" = 2000'

LOCATION MAP
(MARION COUNTY)

TRAFFIC DATA		I-70 EASTBOUND	LEWIS STREET
A.A.D.T.	(2021)	48,680 V.P.D.	N/A V.P.D.
A.A.D.T.	(2041)	57,330 V.P.D.	N/A V.P.D.
D.H.V	(2041)	5,733 V.P.H.	N/A V.P.H.
DIRECTIONAL DISTRIBUTION		100 %	N/A %
TRUCKS		13 % D.H.V.	N/A % D.H.V.
DESIGN DATA			
DESIGN SPEED		50 M.P.H.	25 M.P.H.
PROJECT DESIGN CRITERIA		COMPLETE RECONSTRUCTION (FREEWAY)	N/A
FUNCTIONAL CLASSIFICATION		URBAN FREEWAY	LOCAL ROAD
RURAL/URBAN		URBAN (BUILT-UP)	URBAN
TERRAIN		LEVEL	LEVEL
ACCESS CONTROL		FULL	NONE



PROJECT LOCATION SHOWN BY
MARION COUNTY

LATITUDE: 39°47'05" N LONGITUDE: 86°08'24" W

HYDROLOGIC UNIT CODE: 05120201130020

BRIDGE LENGTH:	0.029	MI.
ROADWAY LENGTH:	SEE ROAD PLANS	MI.
TOTAL LENGTH:	SEE ROAD PLANS	MI.
MAX. GRADE:	-3.50	%

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

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: Jannsen & Spaans Engineering (317) 254-9686
PHONE NUMBER

CERTIFIED BY: SIG_DT
DATE

RECOMMENDED FOR LETTING:
INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE
I65-112-10638 SBL
DESIGNATION
1901927

SURVEY BOOK	SHEETS
ELECTRONIC	1 of 14
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 41 I65 SB to I70 EB over Lewis St & Monon Trail\1901927_01 - Title.dgn

UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE SHEET
2	INDEX SHEET
3	MAINTENANCE OF TRAFFIC
4	LAYOUT SHEET
5	GENERAL PLAN
6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 3 DETAILS
9	BENT NO. 1 & 3 DETAILS
10	BENT NO. 2 DETAILS
11	FRAMING PLAN
12	BEAM DETAILS
13	SUPERSTRUCTURE DETAILS
14	APPROACH SLAB DETAILS

REVISIONS

SHEET NO.	DATE	REVISED

811 Know what's below. Call before you dig.

INDIANA UNDERGROUND
1-800-382-5544 OR CALL 811
24 HOURS A DAY 7 DAYS A WEEK

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP

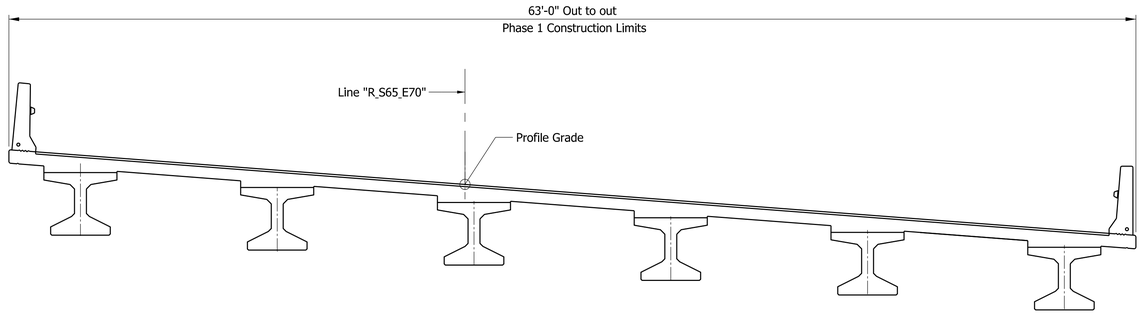
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

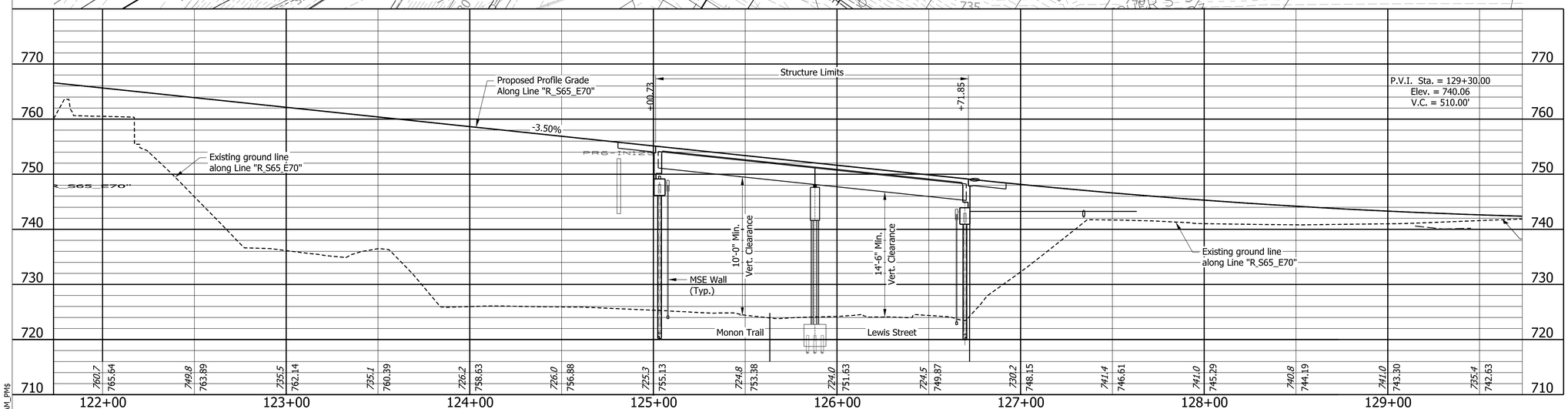
HORIZONTAL SCALE	BRIDGE FILE
NA	I65-112-10638 SBL
VERTICAL SCALE	DESIGNATION
NA	1901927

SURVEY BOOK	SHEETS
ELECTRONIC	2 of 14
CONTRACT	PROJECT
B-36910	1600808



PHASE 1

		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE	BRIDGE FILE
				¼" = 1'-0"	I65-112-10638 SBL
					DESIGNATION
					1901927
		DESIGNED: ZGC / DRAWN: KNP	MAINTENANCE OF TRAFFIC	SURVEY BOOK	SHEETS
				ELECTRONIC	3 of 14
		CHECKED: CML / CHECKED: ZGC		CONTRACT	PROJECT
				B-36910	1600808



EXISTING STRUCTURE:

The existing structure was built in 1974 and had a rehabliation in 1989, 1995 & 2003. The structure is a 9 span continuous composite 36" WF steel beam bridge, with span lengths of 50'-0", 68'-0", 58'-0", 68'-0", 74'-0", 85'-0", 99'-6", 77'-0"& 64'-0". It has a clear roadway width of 93'-2 " and a total length of 459'-8". The existing structure is to be removed. Existing plans are on file with the Indiana Department of Transportation under Bridge File No. I70-083-02432 CEBL.

EARTHWORK TABULATION

Fill +20%	See Road Plans
Common Excavation	See Road Plans
Excavation, Foundation, unclassified (70%)	See Road Plans
Waste	See Road Plans

HORIZONTAL CURVE DATA FOR LINE "R_S65_E70"

P.I. = Sta. 125+52.05
R = 1274.00'
L = 543.37'
Delta = 24°26'13.9" RT
Dc = 4°29'50"
T = 275.88'

NOTES:

1. See Sheet 2 for Utility owners.
2. All R/W shall be as shown.
3. There shall be no clearing of trees beyond construction limits.
4. All topography is existing.
5. All R/W described from Line "R_S65_E70", except as noted.

PRESTRESSED
CONCRETE BULB-TEE BEAM BRIDGE
2 SPANS: 84'-6⅞", 81'-7⅜"
SKEW: VARIES
60'-0" CLEAR ROADWAY
I-65 SB TO I-70 EB OVER
MONON TRAIL AND LEWIS STREET
MARION COUNTY

Plot: 2/26/2025 11:11 AM AM_PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 41 I65 SB to I70 EB over Lewis St & Monon Trail\1901927_04 - Layout.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP

CHECKED: CML CHECKED: ZGC

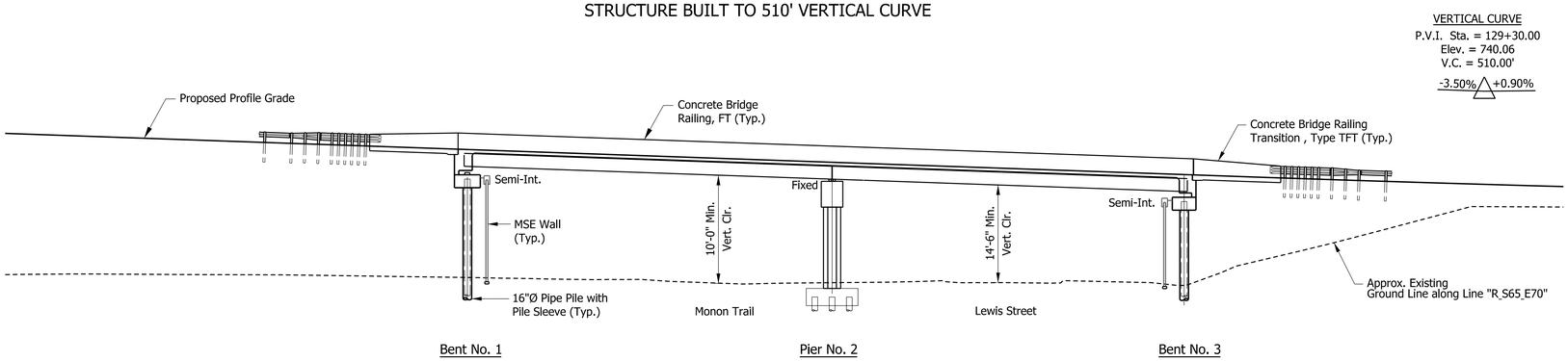
INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

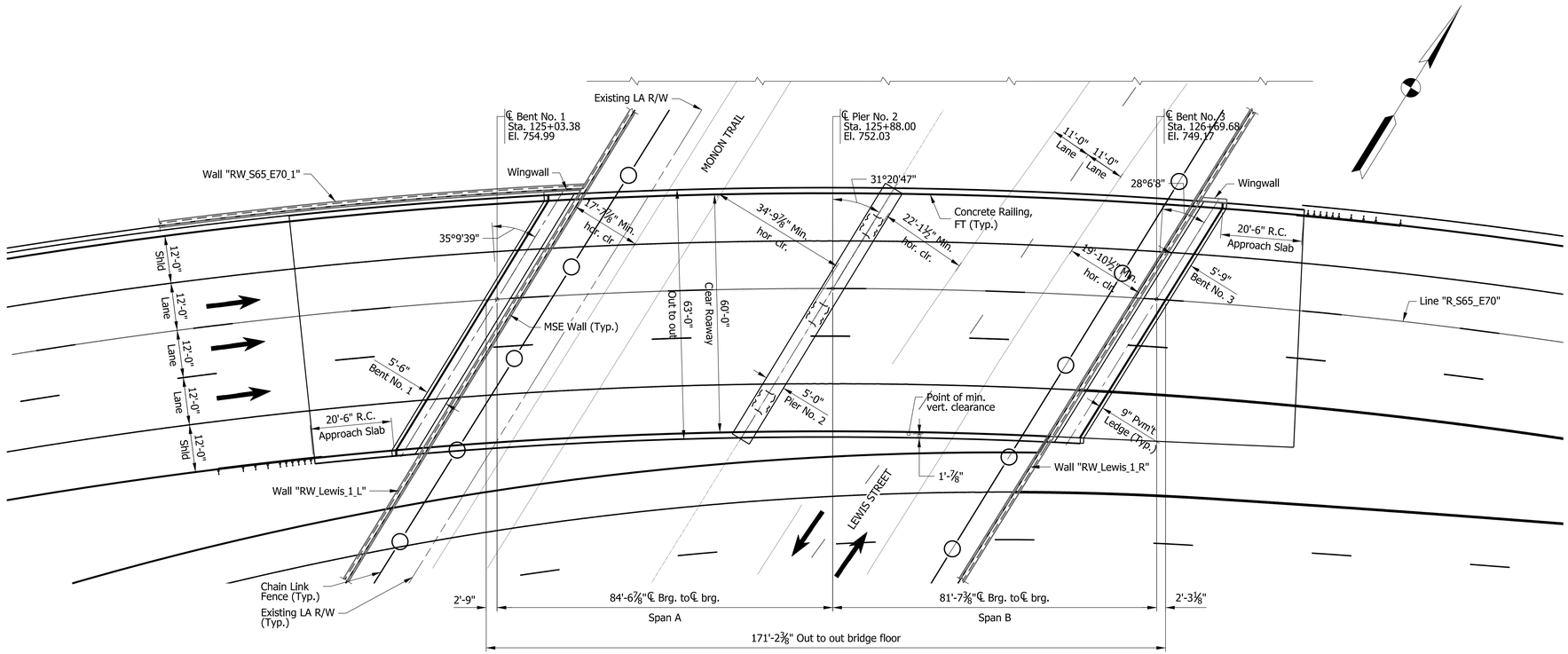
HORIZONTAL SCALE	BRIDGE FILE
1"=30'-0"	I65-112-10638 SBL
VERTICAL SCALE	DESIGNATION
1"=10'-0"	1901927

SURVEY BOOK	SHEETS
ELECTRONIC	4 of 14
CONTRACT	PROJECT
B-36910	1600808

STRUCTURE BUILT TO 510' VERTICAL CURVE



ELEVATION



PLAN

GENERAL NOTES

Reinforcing bar cover shall be 2" min. in top and 1" min. in bottom of floor slabs, 3" min. in footing except bottom bars which shall be 4" min, and 2" min. in all other parts, unless noted.

All dimensions and elevations are in feet (ft) unless otherwise noted.

Concrete in floor slab, diaphragms, barrier and end bents shall be an alternate Class "C" in accordance with the technical provisions. Reinforcing bars in deck, barrier, and end bent diaphragm extending into the deck shall be stainless steel. Reinforcing bars in end bent diaphragm not extending into the deck and in the cap shall be epoxy coated.

Anti-graffiti coating shall be placed on all exposed surfaces of new retaining walls and new bridge structures excluding top of deck or overlay and interior beams.

For aesthetics associated with the bridge opening, see Bridge Opening Aesthetics Plan package.

DESIGN DATA

LIVE LOAD
Superstructure and substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications Eighth Edition, 2017.

DEAD LOAD
Designed for actual Dead Load plus 15 psf for SIP metal deck forms.

Slab designed with a 7½" structural depth and a 1½" integral wearing surface.

SEISMIC DESIGN DATA

Seismic Performance Zone = 1
Acceleration Coefficient = 0.061
Seismic Soil Profile Type = Site Class C

DESIGN STRENGTHS

Prestressed Concrete	f'c = 10,000 psi @ 28 Days
Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,000 psi
Class "C" Concrete	f'c = 4,000 psi
Rienforcing Bars (Barrier)	fy = 60,000 psi
Reinforcing Bars	fy = 75,000 psi (all other locations)

CONSTRUCTION LOADING

The exterior beam 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 beam. The finishing machine was assumed to be supported 6 inches outside the vertical coping form. The top overhang brackets were assumed to be located 6 inches past the edge of the vertical coping form. The bottom overhang brackets were assumed to be braced against the intersection of the beam bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/sft for permanent metal stay in place deck forms, removable deck forms, and 2-ft exterior walkway.
Construction Live Load:	Designed for 20 lb/sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of 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 AASHTO LRFD 3.8.1.

PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE
2 SPANS: 84'-6⅞", 81'-7⅜"
SKEW: VARIES
60'-0" CLEAR ROADWAY
I-65 SB TO I-70 EB OVER MONON TRAIL AND LEWIS STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC DRAWN: KNP

CHECKED: CML CHECKED: ZGC

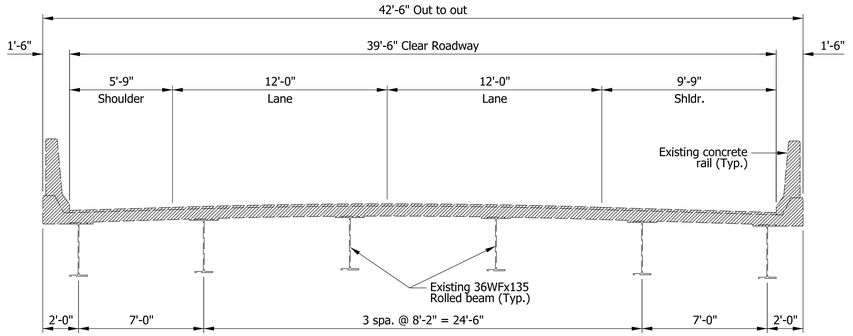
INDIANA DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

SCALE	BRIDGE FILE
1/16"=1'-0"	I65-112-10638 SBL
	DESIGNATION
	1901927
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 14
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 10:25:14 AM

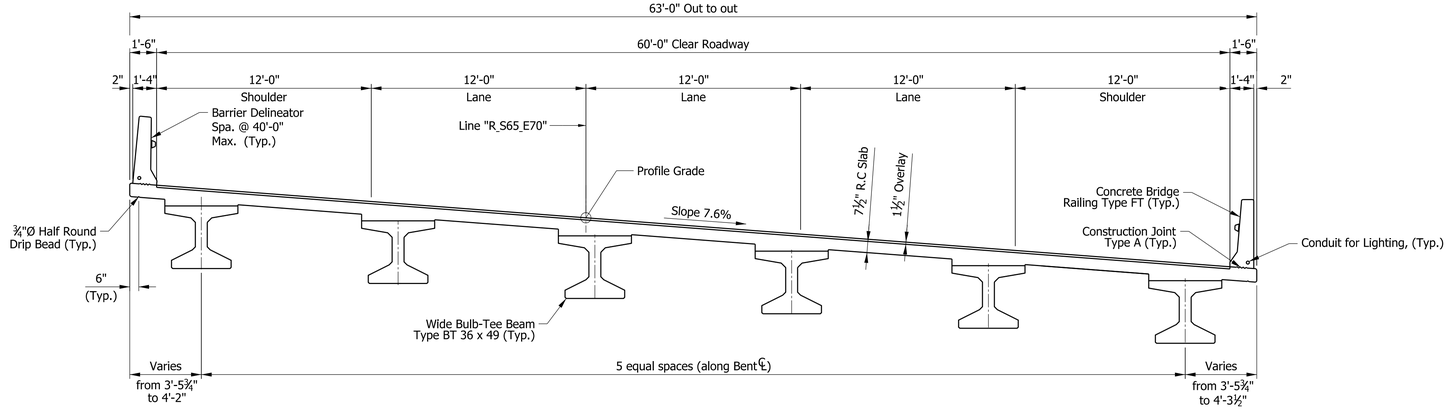
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 41 I65 SB to I70 EB over Lewis St & Monon Trail\1901927_05 - Gen plan.dgn



EXISTING TYPICAL SECTION

LEGEND

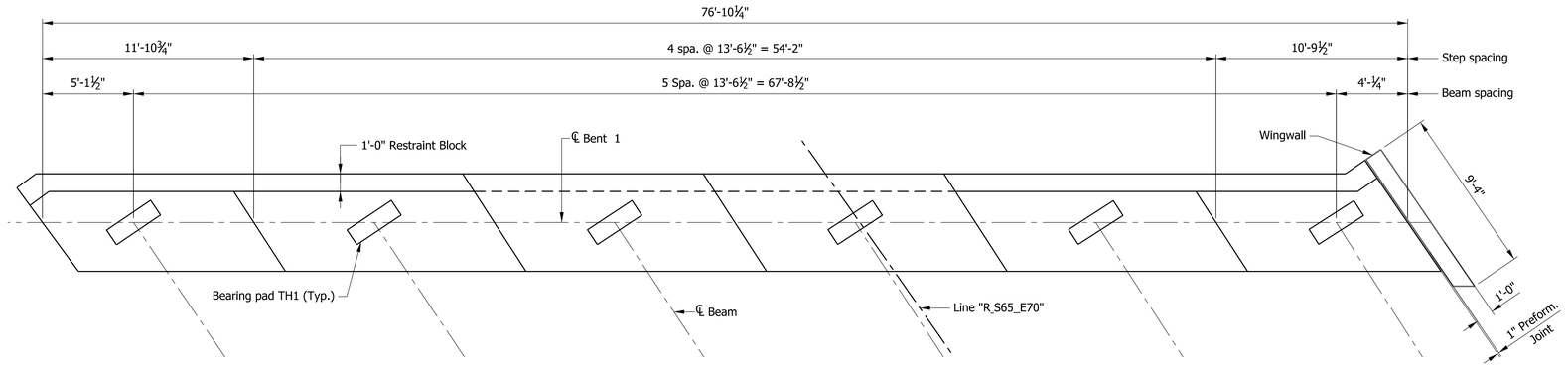
Limits of Removal



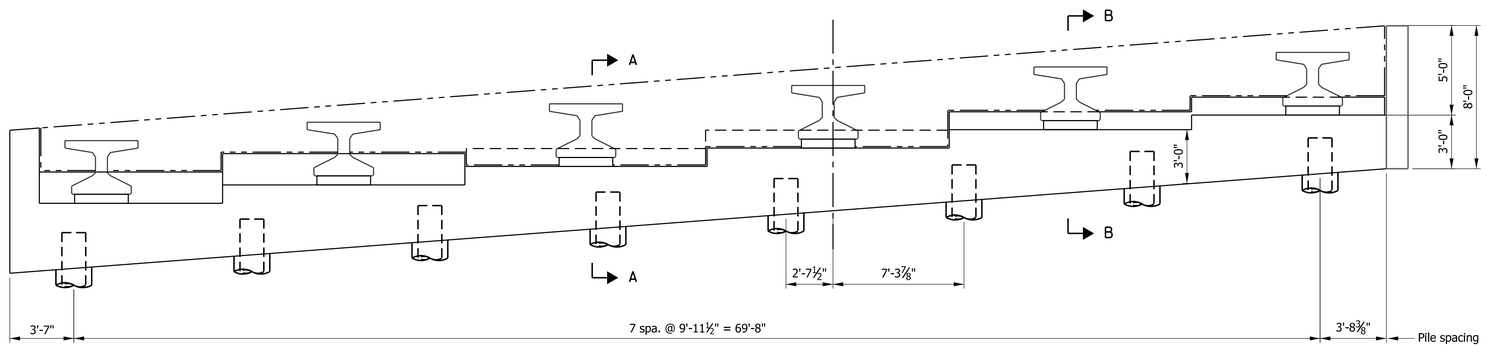
PROPOSED TYPICAL SECTION

PRESTRESSED
CONCRETE BULB-TEE BEAM BRIDGE
2 SPANS: 84'-6⅞", 81'-7⅜"
SKEW: VARIES
60'-0" CLEAR ROADWAY
I-65 SB TO I-70 EB OVER
MONON TRAIL AND LEWIS STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: ½" =1'-0"	BRIDGE FILE: I65-112-10638 SBL
			DESIGNATION: 1901927
DESIGNED: ZGC / DRAWN: KNP	GENERAL PLAN TYPICAL SECTIONS	SURVEY BOOK	SHEETS
CHECKED: CML / CHECKED: ZGC		ELECTRONIC	6 of 14
		CONTRACT	PROJECT
		B-36910	1600808



PLAN
Scale: 1/4" = 1'-0"

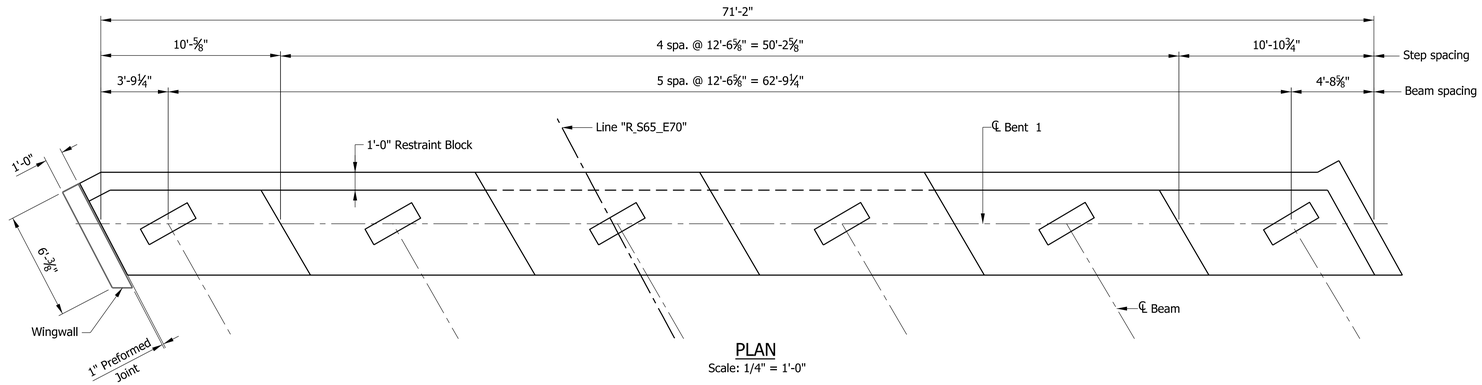


ELEVATION
Scale: 1/4" = 1'-0"

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED; BRIDGE FILE: I65-112-10638 SBL; DESIGNATION: 1901927
DESIGNED: ZGC	DRAWN: KNP	BENT NO.1	SURVEY BOOK; SHEETS: ELECTRONIC 7 of 14
CHECKED: CML	CHECKED: ZGC		CONTRACT: B-36910; PROJECT: 1600808

Plot: 2/26/2020 10:25:18 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 41 I65 SB to I70 EB over Lewis St & Monon Trail\1901927_07 - Bent 1.dgn



PLAN
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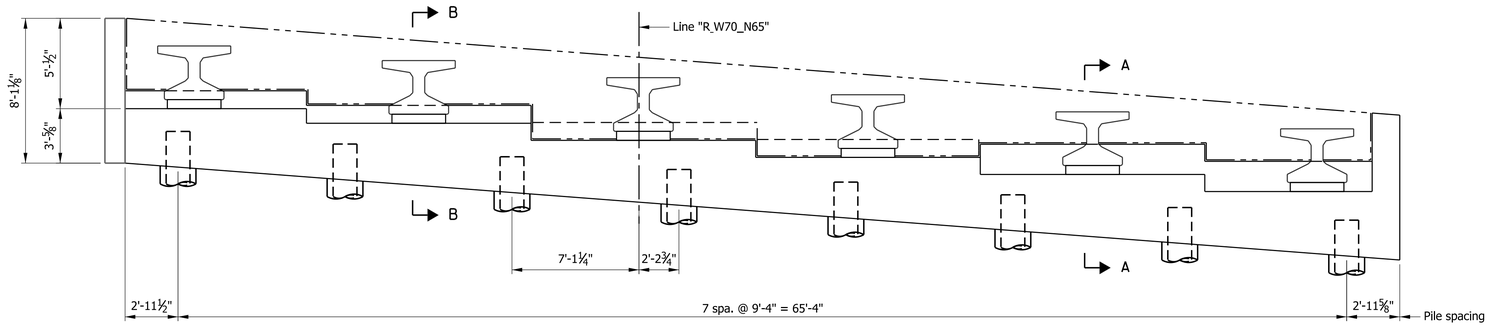
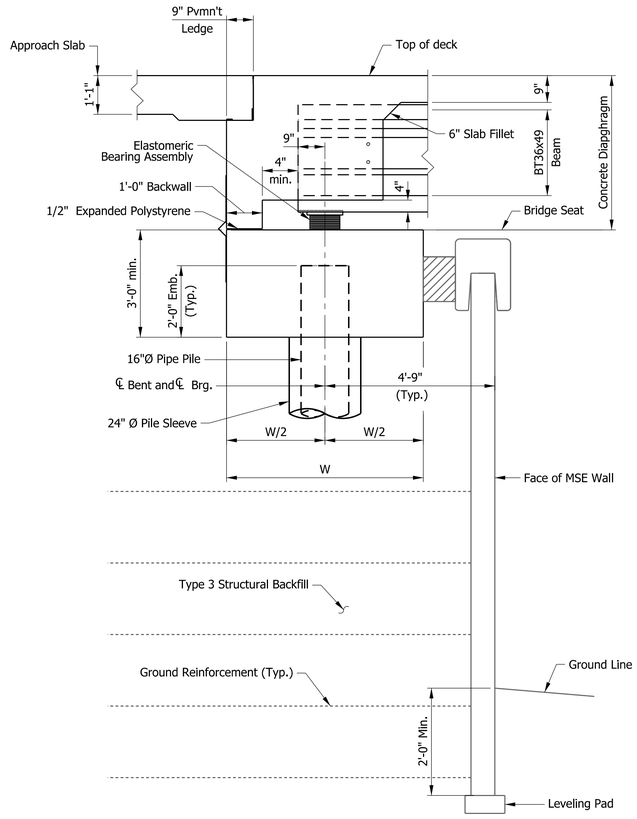


ELEVATION
Scale: 1/4" = 1'-0"

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/4" = 1'-0"
DESIGNED: ZGC	DRAWN: KNP	BENT NO. 3	BRIDGE FILE: I65-112-10638 SBL
CHECKED: CML	CHECKED: ZGC		DESIGNATION: 1901927
			SURVEY BOOK / ELECTRONIC: SHEETS 8 of 14
			CONTRACT: B-36910 / PROJECT: 1600808

Plot: 2/26/2020 10:25:19 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 41 I65 SB to I70 EB over Lewis St & Monon Trail\1901927_08 - Bent 3.dgn



SECTION A-A
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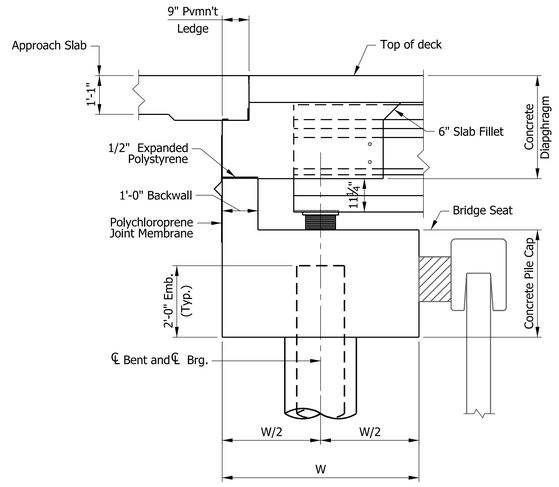

SECTION B-B
Scale: 1/2" = 1'-0"

Note:

For MSE wall details, see plan Des. 1901923 sheets 15 thru 18.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: AS NOTED; BRIDGE FILE: I65-112-10638 SBL; DESIGNATION: 1901927
DESIGNED: ZGC	DRAWN: KNP	BENT NO. 1 AND 3 DETAILS	SURVEY BOOK; SHEETS; ELECTRONIC: 9 of 14
CHECKED: CML	CHECKED: ZGC		CONTRACT: B-36910; PROJECT: 1600808

Plot: 2/26/2020 10:25:20 AM

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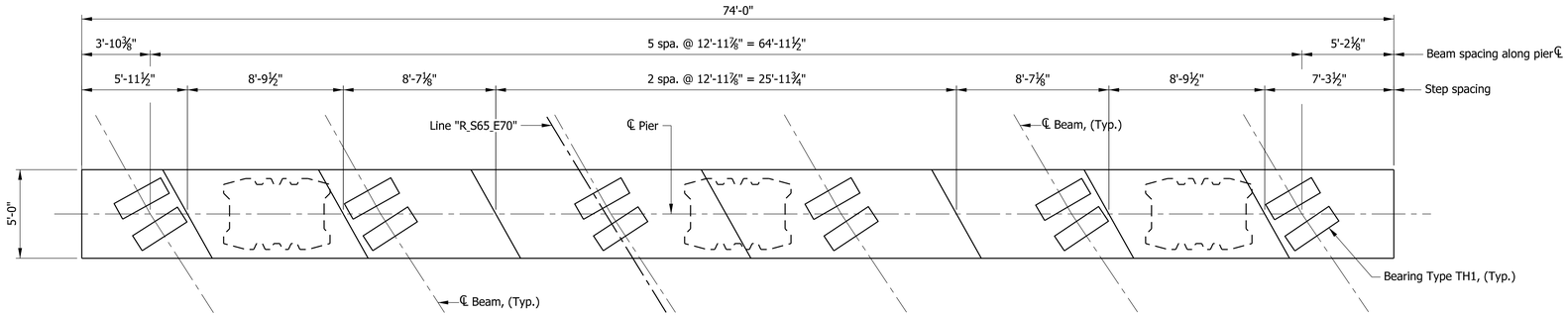
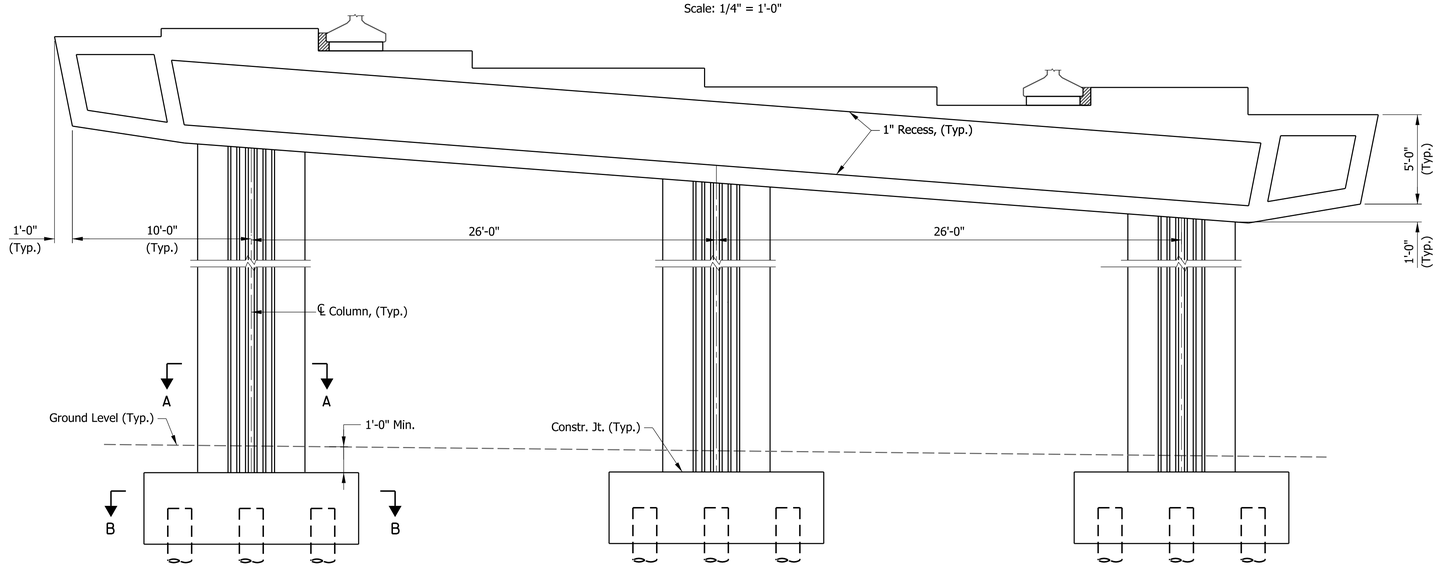


PLAN
Scale: 1/4" = 1'-0"



ELEVATION
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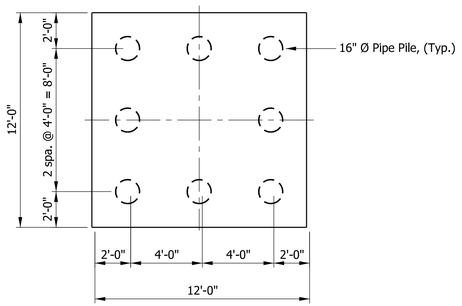

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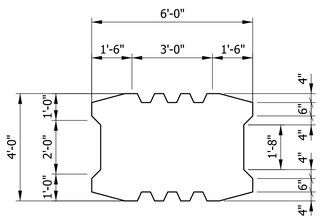

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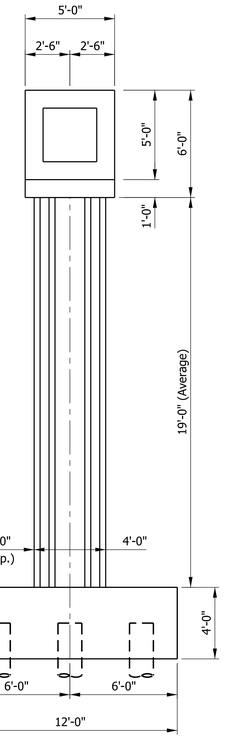


END VIEW
Scale: 1/4" = 1'-0"

Note:
For Bearing Pad details see Std. Dwg. E-726-BEBP-03

Plot: 2/26/2020 10:25:22 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 41 I65 SB to I70 EB over Lewis St & Monon Trail\1901927_10 - Bent 2.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: KNP

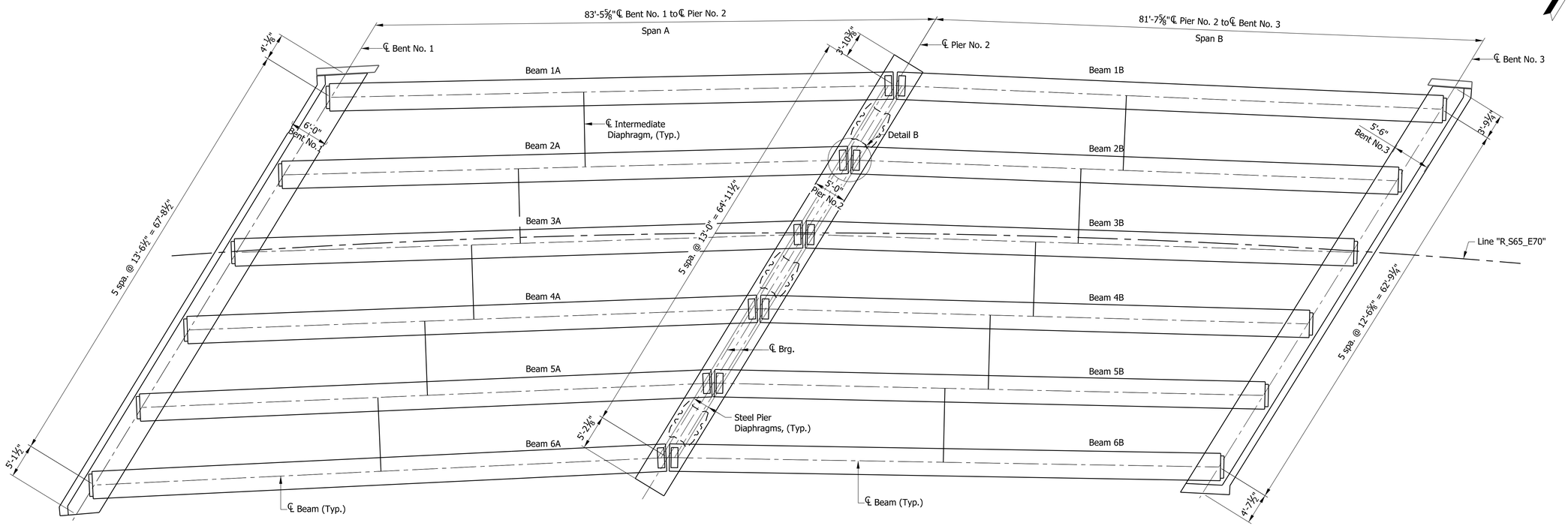
CHECKED: CML | CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

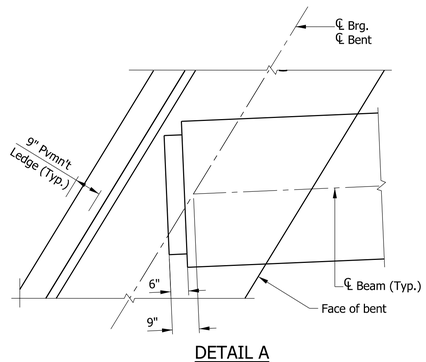
PIER NO.2

SCALE	BRIDGE FILE
AS NOTED	I65-112-10638 SBL
	DESIGNATION
	1901927

SURVEY BOOK	SHEETS
ELECTRONIC	10 of 14
CONTRACT	PROJECT
B-36910	1600808

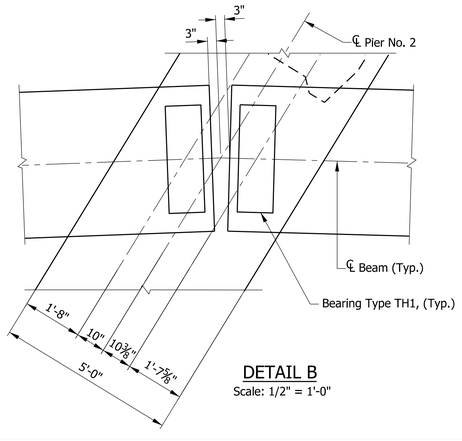


FRAMING PLAN



DETAIL A

Scale: 1/2" = 1'-0"



DETAIL B

Scale: 1/2" = 1'-0"

Note:

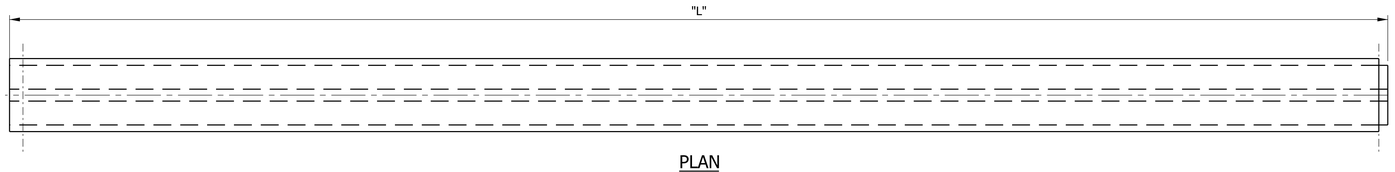
For Bearing details, see Std. Dwg. E 726-BEBP-03.

For Intermediate Diaphragm details, see Std. Dwg. E 707-SDPC-01.

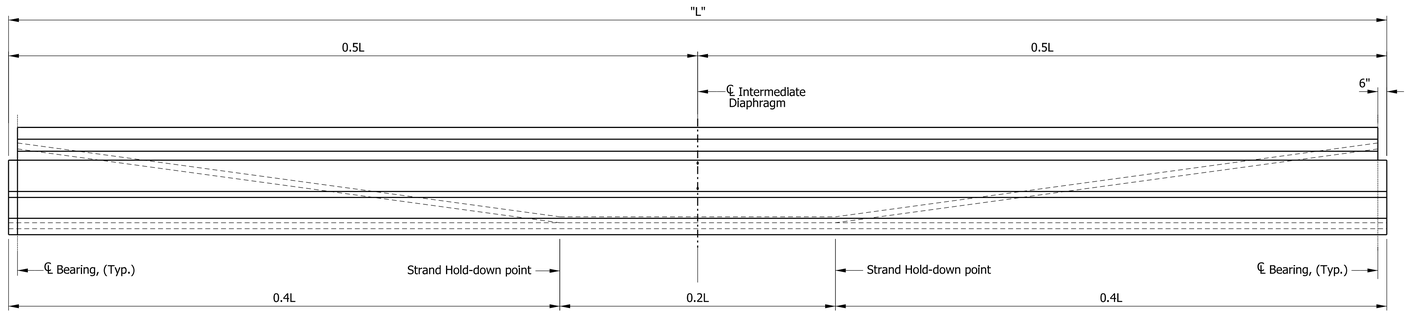
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: AS NOTED; VERTICAL SCALE: ; BRIDGE FILE: I65-112-10638 SBL; DESIGNATION: 1901927
DESIGNED: ZGC	DRAWN: KNP	FRAMING PLAN	SURVEY BOOK: ; SHEETS: ELECTRONIC 11 of 14
CHECKED: CML	CHECKED: ZGC		CONTRACT: B-36910; PROJECT: 1600808

Plot: 2/26/2020 10:25:24 AM

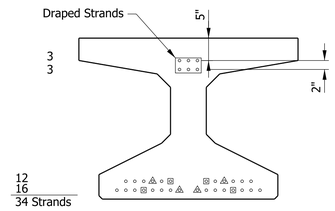
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 41 I65 SB to I70 EB over Lewis St & Monon Trail\1901927_11 - Frame plan.dgn



PLAN
Scale: ¼" = 1'-0"

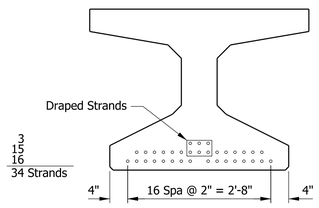


BEAM ELEVATION
Vertical Scale: ½" = 1'-0"
Horizontal Scale: ¼" = 1'-0"

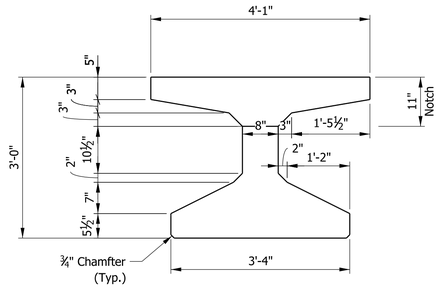


STRAND PATTERN
AT BEAM END
Scale: 3/4" = 1'-0"

△ - Debonded at 5' from end
□ - Debonded at 10' from end



STRAND PATTERN
AT MIDSPAN
Scale: 3/4" = 1'-0"



TYPICAL SECTION
Scale: 3/4" = 1'-0"

Span "A"	
Beam Mark	"L"
1A	84'-6"
2A	84'-9⅜"
3A	85'-1¼"
4A	85'-4⅞"
5A	85'-8½"
6A	86'-¼"

Span "B"	
Beam Mark	"L"
1B	81'-10⅞"
2B	82'-½"
3B	82'-2⅛"
4B	82'-3¾"
5B	82'-6"
6B	82'-7⅛"

Notes:

1. Prestressing reinforcement shall be 0.6 "dia. uncoated seven wire low relaxation 270 ksi with strand area = 0.217 in².
2. Beam shall be cast a minimum of 120 days before deck is pour.

Plot: 2/26/2020 10:25:25 AM

RECOMMENDED FOR APPROVAL SIG_DT
DESIGN ENGINEER DATE

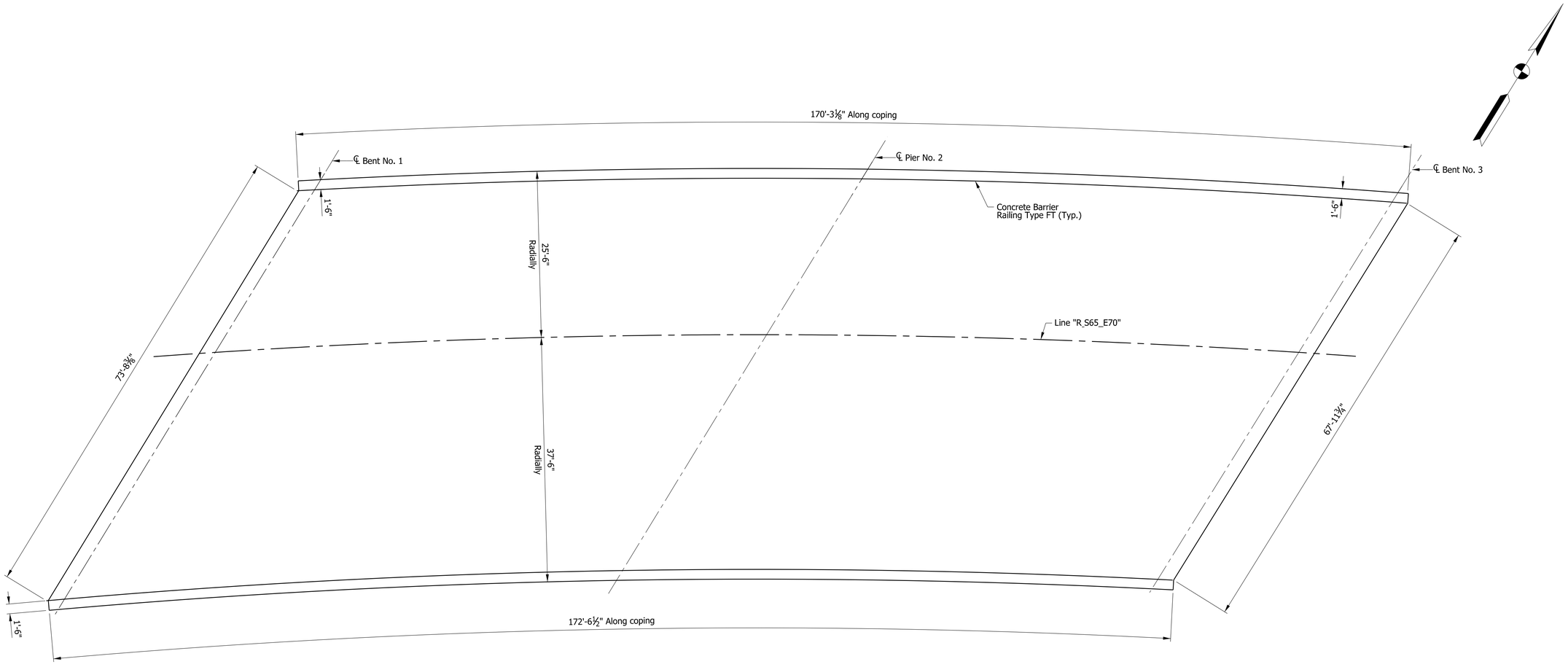
DESIGNED: ZGC DRAWN: KNP
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS
BT 36 x 49

SCALE	BRIDGE FILE
1/4" = 1'-0"	I65-112-10638 SBL
	DESIGNATION
	1901927
SURVEY BOOK	SHEETS
ELECTRONIC	12 of 14
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 41 I65 SB to I70 EB over Lewis St & Monon Trail\1901927_12 - Beam details.dgn



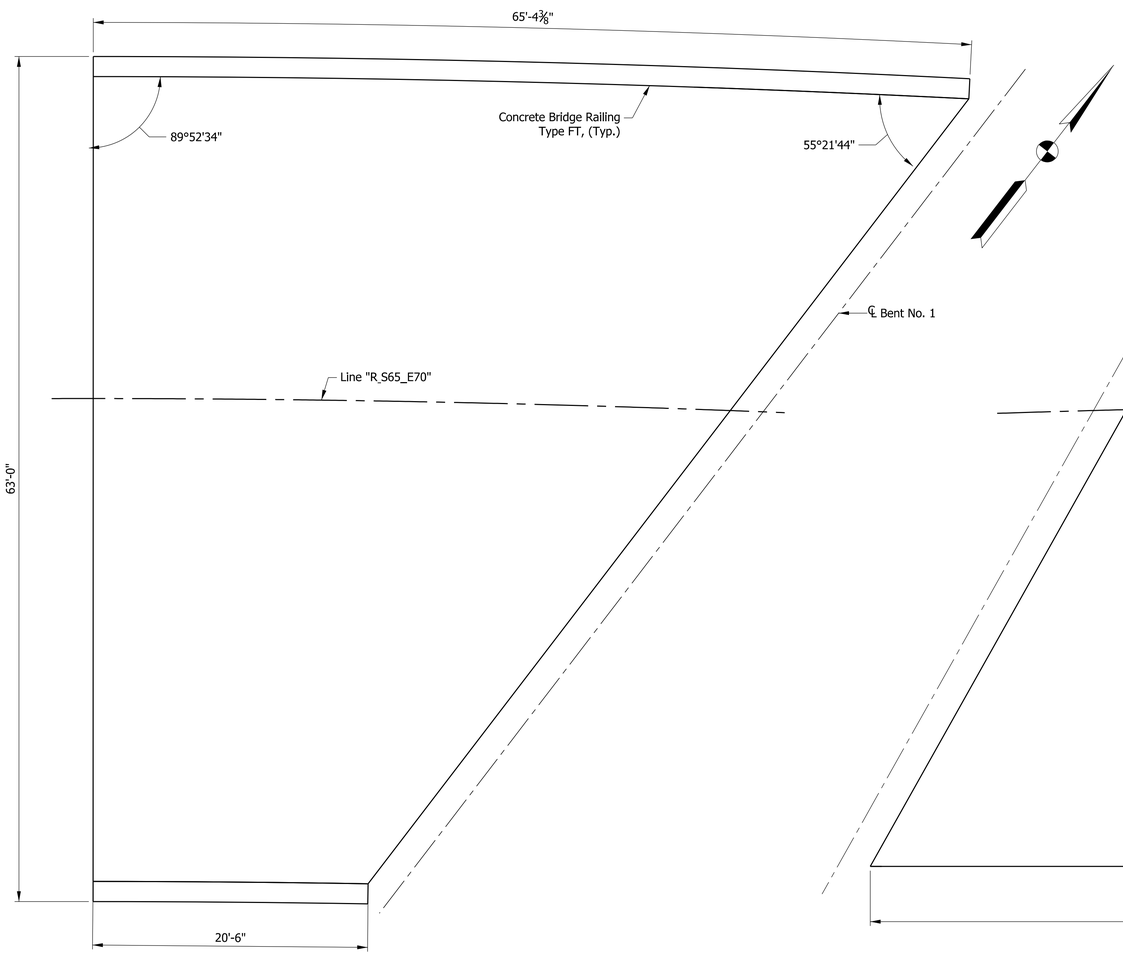
DECK PLAN

Scale 1/8" = 1'-0"

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: AS NOTED; BRIDGE FILE: I65-112-10638 SBL
DESIGNED: ZGC	DRAWN: KNP	SUPERSTRUCTURE DETAILS	VERTICAL SCALE: AS NOTED; DESIGNATION: 1901927
CHECKED: CML	CHECKED: ZGC		SURVEY BOOK; SHEETS: ELECTRONIC 13 of 14; CONTRACT: B-36910; PROJECT: 1600808

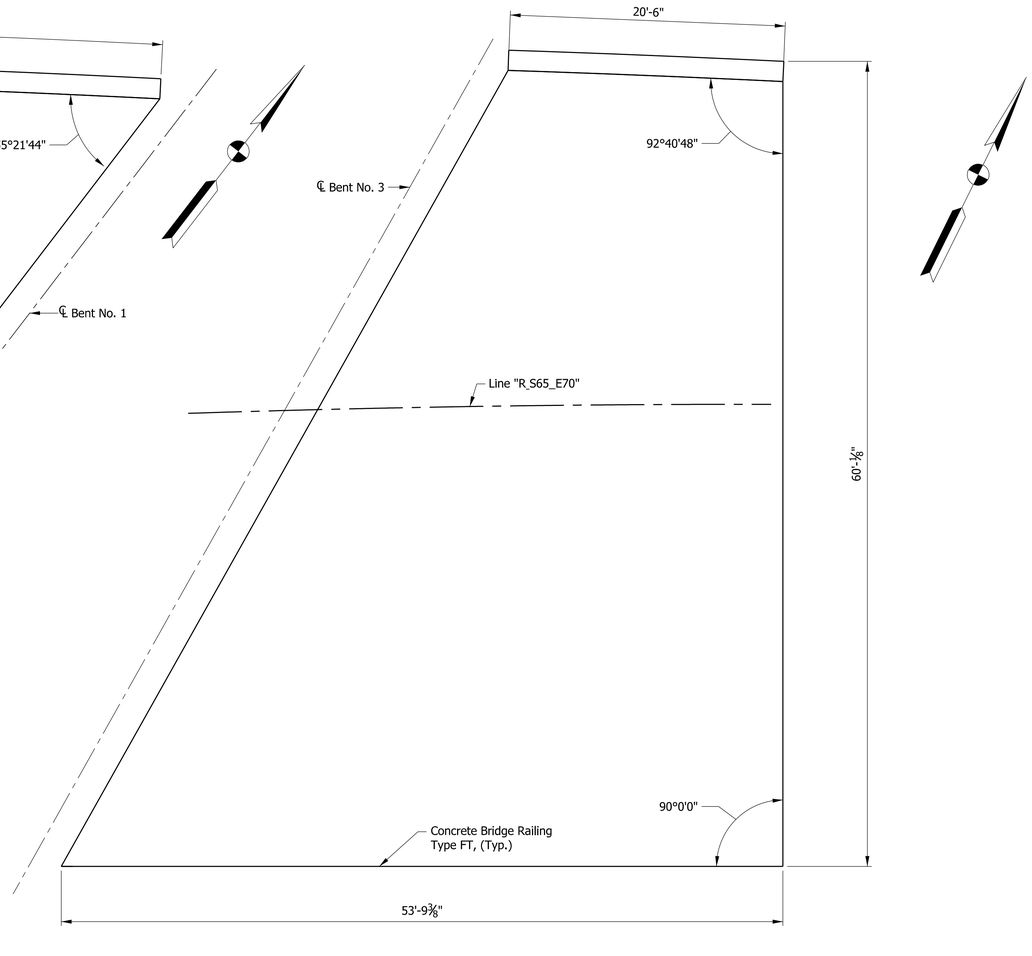
Plot: 2/26/2020 10:25:27 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 41 I65 SB to I70 EB over Lewis St & Monon Trail\1901927_13 - Deck plan.dgn



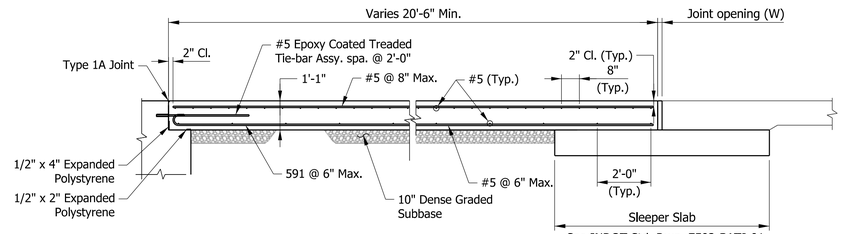
WEST APPROACH SLAB

Scale 3/16" = 1'-0"



EAST APPROACH SLAB

Scale 3/16" = 1'-0"



TYPICAL SECTION

Scale: ⅜" = 1'-0"

See INDOT Std. Dwg. E502-BATJ-01
for details and reinforcing.

NOTE:

For additional Terminal Joint information, see USP. Terminal Joint Details: Type CRCP.

Concrete Railing FT TFT sit on slab extension. for more details, see Std. Dwg. E-609-TBAE-02 & 04.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: KNP

CHECKED: CML | CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLABS
DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I65-112-10638 SBL
VERTICAL SCALE	DESIGNATION
AS NOTED	1901927

SURVEY BOOK	SHEETS
ELECTRONIC	14 of 14
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 10:25:28 AM

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