PROJECT	DESIGNATION
1383332	1383490
CONTRACT	BRIDGE FILE
R-37053	(I69)238-29-05317C

INDEX				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
(I69)238-29-05317C	CONTINUOUS COMPOSITE STEEL BEAM	FOUR SPANS: 46'-0", 79'-6", 79'-6", 46'-0" SKEW 35°00'00" Right	I-69	71+70.55 "C"

KIN DESIGNATION NUMBERS		
DESIGNATION	DESCRIPTION	TYPE
1383332	I-69 ADDED TRAVEL LANES FROM 116TH ST. TO 0.56 MILE EAST OF CAMPUS PKWY/SOUTHEASTERN PKWY	ROADWAY
1383486 & 1383487	I-69 OVER SAND CREEK	BRIDGE
1383488	BROOKSCHOOL ROAD OVER I-69	BRIDGE
1383336	I-69 ADDED TRAVEL LANES FROM 0.56 MILE EAST OF CAMPUS PKWY/SOUTHEASTERN PKWY TO 0.42 MILE EAST OF S.R. 13	ROADWAY
1383509 & 1383510	I-69 OVER MUD CREEK	BRIDGE
1383512 & 1383513	I-69 OVER THORPE CREEK	BRIDGE
1383514 & 1383515	I-69 OVER S.R. 13	BRIDGE
1383337	I-69 ADDED TRAVEL LANES FROM 0.42 MILE EAST OF S.R. 13 TO LAPEL ROAD	ROADWAY
1383623	C.R. 650 W. OVER I-69	BRIDGE
1383624 & 1383625	I-69 OVER FOSTERS BRANCH	BRIDGE

R-37053
SET 7 OF 12

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE REHABILITATION PLANS

FOR SPANS OVER 20 FEET
CAMPUS PARKWAY
OVER
I-69

PROJECT NO. 1383332 P.E.

RP 210+13

Bridge Rehabilitation and Widening Project on Structure (I69)238-29-05317C over Interstate 69 Located in Section 23, of Township 18 North, Range 5 East, in Fall Creek Township, Hamilton County Indiana.

TRAFFIC DATA	CAMPUS PARKWAY
A.D.T. (2015)	24,730 V.P.D.
A.D.T. (2035)	30,980 V.P.D.
D.H.V. (2035)	3,060 V.P.H.
DIRECTIONAL DISTRIBUTION	46% NB/54% SB
TRUCKS	2.7% A.A.D.T.
	1.5% D.H.V.

DESIGN DATA	CAMPUS PARKWAY
DESIGN SPEED	45 M.P.H.
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN (INTERMEDIATE)
TERRAIN	LEVEL
ACCESS CONTROL	PARTIAL

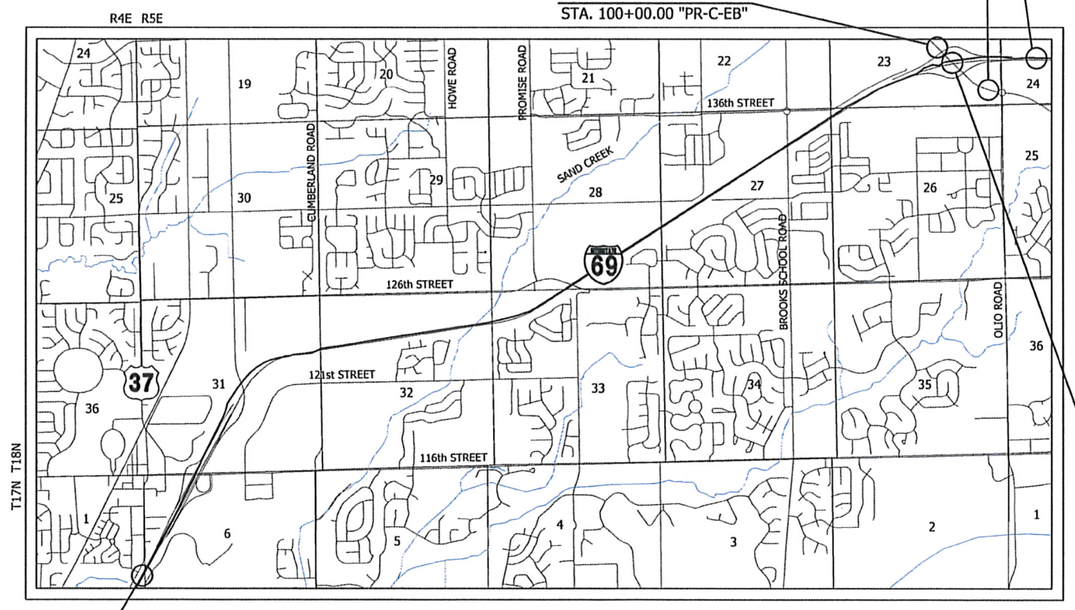
LATITUDE: 39°59'27"N LONGITUDE: 85°55'27"W

BRIDGE LENGTH :	0.048 MI.
ROADWAY LENGTH :	SEE ROAD PLANS
TOTAL LENGTH :	SEE ROAD PLANS
MAX GRADE :	+3.61%

END PROJECT 1383332
STA. 590+00.00 "A"

END PROJECT 1383489
STA. 121+93.00 "PR-C-EB"

BEGIN PROJECT 1383489
STA. 100+00.00 "PR-C-EB"



Scale 1" = 2000'

PROJECT LOCATION
BRIDGE FILE
No. (I69)238-29-05317C

BEGIN PROJECT 1383332
STA. 263+40.00 "A"

LOCATION MAP
HAMILTON COUNTY

CERTIFIED TRUE COPY
SET 6 of 6

[INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2016 TO BE USED WITH THESE PLANS]

MajorMoves 2020

UNITED Consulting
1625 N. Post Road
Indianapolis, Indiana 46219
Phone: 317-895-2585
Fax: 317-895-2596 Web: www.ucindy.com

PLANS PREPARED BY: UNITED CONSULTING (317) 895-2585 PHONE NUMBER
CERTIFIED BY: Michael A. Rowe 9-17-15 DATE
APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

MICHAEL A. ROWE REGISTERED No. 10001062 STATE OF INDIANA PROFESSIONAL ENGINEER

SURVEY BOOK	SHEETS
	1 of 9
CONTRACT	PROJECT
R-37053	1383332

BRIDGE FILE
(I69)238-29-05317C
DESIGNATION
1383490

UTILITIES

Communication
AT&T Indiana
5858 N. College Ave.
Indianapolis, IN 46220
Brian Cravens 317-252-5003
bc3785@att.com

Storm Sewer
City of Noblesville
16 S. 10th St., Suite 155
Noblesville, IN 46060
John Beery 317-776-6330

Lighting
City of Fishers
1 Municipal Drive
Fishers, Indiana 46038
Tami Otto 317-595-3160
ottot@fishers.in.us

City of Noblesville
16 S. 10th St., Suite 155
Noblesville, IN 46060
John Beery 317-776-6330

Gas
Vectren Energy
16000 Allisonville Road - PO Box 1700
Noblesville, IN 46204
Brian Harger 317-776-5534
bharger@vectren.com

Electric
Duke Energy Indiana, Inc.
1619 W. Deffenbaugh St.
Kokomo, IN 46902
Connie Maus 765-454-6180
connie.maus@duke-energy.com

Water
Indiana American Water Company
555 E. County Line Road, Suite 201
Greenwood, IN 46142
Ezat Nayeri 317-885-2447
Ezat.Nayeri@amwater.com

Miscellaneous
ITS Technology Deployment Division
Konstantin Veygman 317-899-8606
kveygman@indot.in.gov

GENERAL NOTES

INDEX

SHEET NO.	DESCRIPTION
1	TITLE
2	INDEX
3	MAINTENANCE OF TRAFFIC
4	LAYOUT
5-6	GENERAL PLAN
7	END BENT DETAILS
8	PIER DETAILS
9	SUBSTRUCTURE DETAILS

REVISIONS

SHEET No.	DATE	REVISION

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RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE 9/17/15

DESIGNED: NJK | DRAWN: RSJ
CHECKED: JNR | CHECKED: NJK

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX
CAMPUS PARKWAY OVER I-69

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	(169)238-29-05317C
VERTICAL SCALE	DESIGNATION
AS NOTED	1383490
SURVEY BOOK	SHEETS
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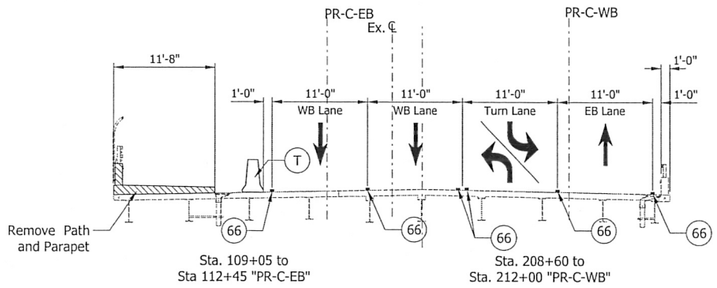
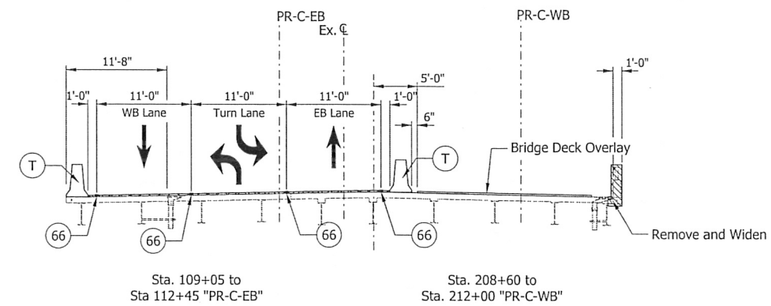
CONTRACT	PROJECT
R-37053	1383332

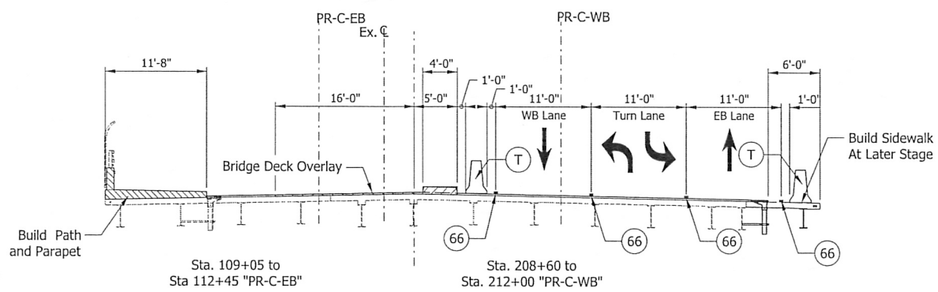
File Name: P:\CSD\MK15-469\Bridge\Campus Pkwy over I-69\Dwg\Plans\Index.dwg Plot Date: 9/17/2015 Plotted By: Moffatt, Andrew J.



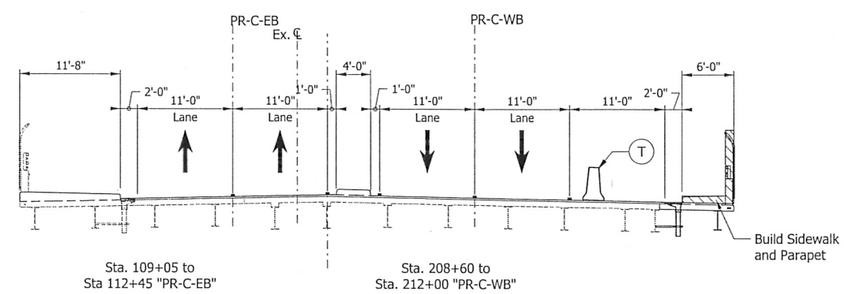
CAMPUS PARKWAY BRIDGE OVER I-69
PHASE I



CAMPUS PARKWAY BRIDGE OVER I-69
PHASE II



CAMPUS PARKWAY BRIDGE OVER I-69
PHASE III



CAMPUS PARKWAY BRIDGE OVER I-69
PHASE IV

LEGEND

- (66) Temporary Pavement Marking, Removable, 4"
- (67) Energy Absorbing Terminal, CZ, TL-2
- [A] Existing Pavement Marking To Remain
- Temporary Pavement
- Construction Area
- Flashing Arrow Sign
- Direction of Traffic
- (T) Temporary Traffic Barrier, Type 2
- Pavement Completed in Previous Stage (s)
- Type III-A Barricades
- Standard Drum
- Construction Sign w/Type "A" Construction Warning Light
- Ground Mounted Panel Sign
- Typical Sign Standard

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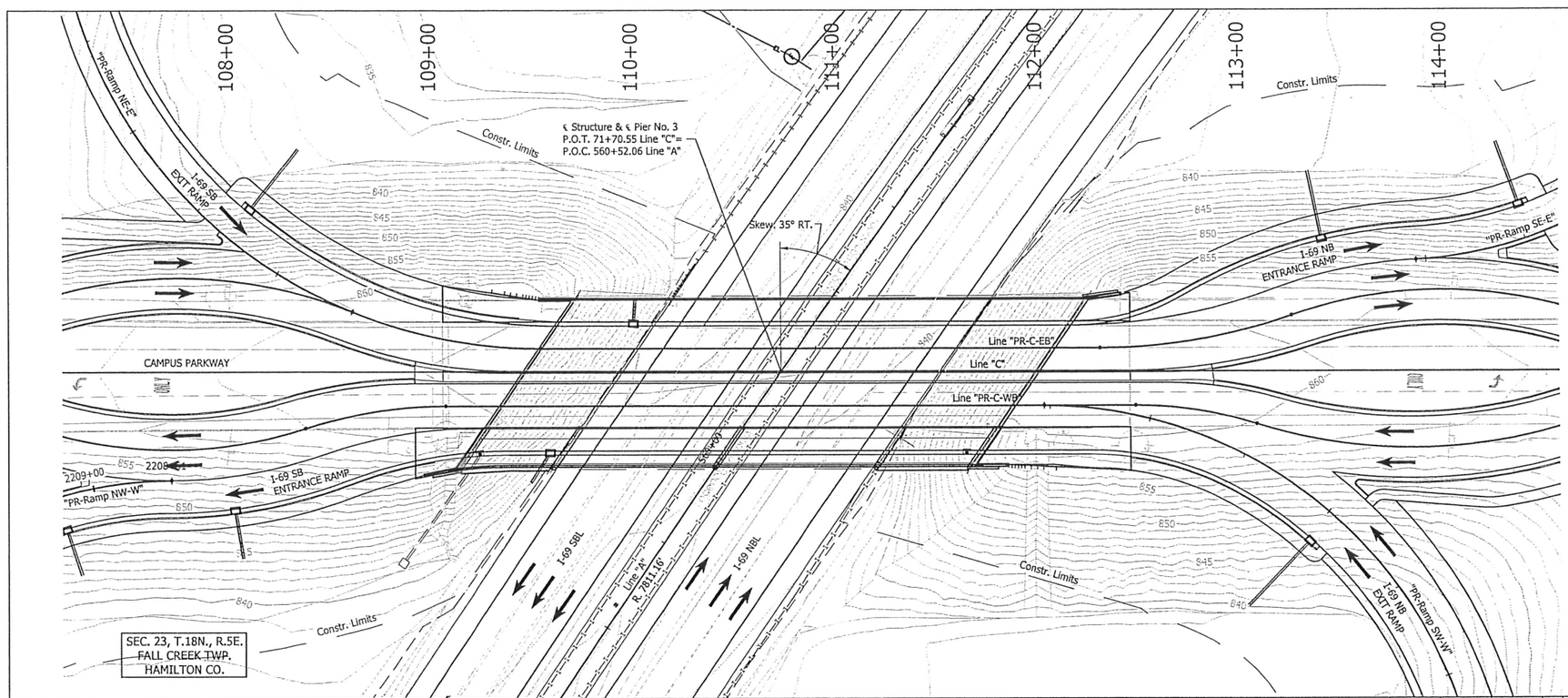
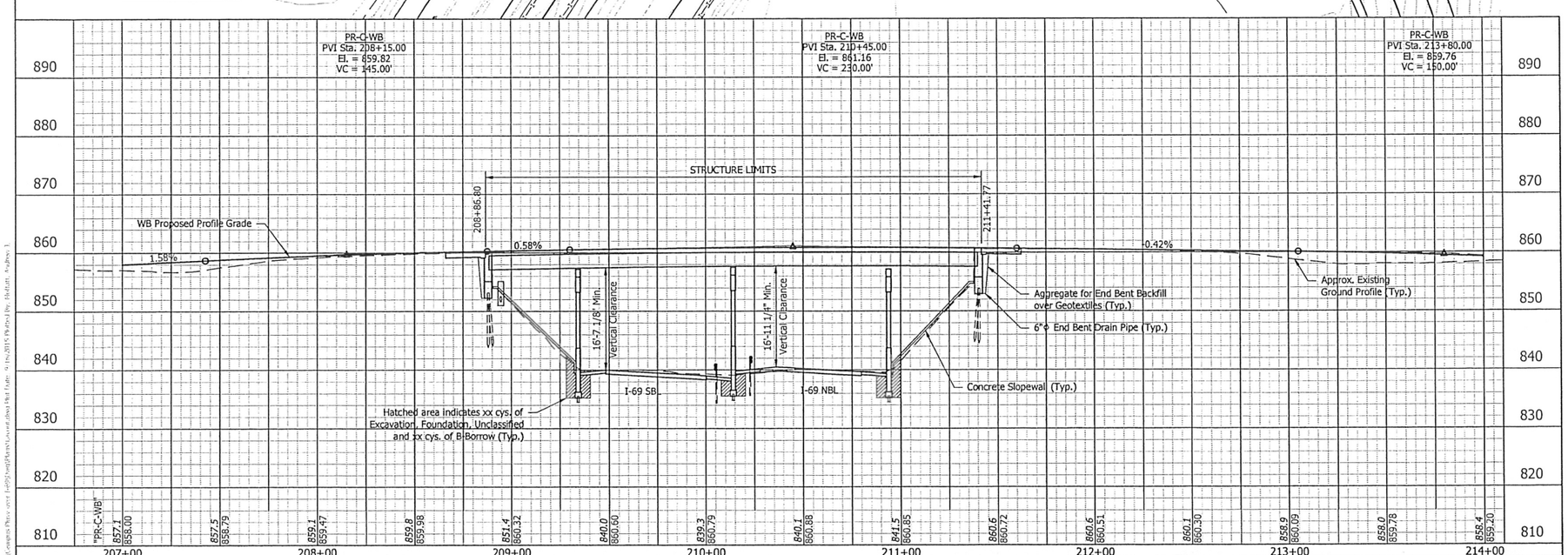
INDIANA
DEPARTMENT OF TRANSPORTATION

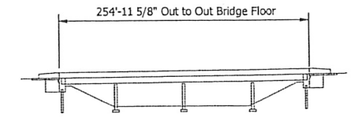
MAINTENANCE OF TRAFFIC
CAMPUS PARKWAY OVER I-69

HORIZONTAL SCALE	BRIDGE FILE
NOT TO SCALE	(I69)238-29-05317C
VERTICAL SCALE	DESIGNATION
NOT TO SCALE	1383490
SURVEY BOOK	SHEETS
-	3 of 9
CONTRACT	PROJECT
R-37053	1383332

File Name: P:\C3D\MK15-469\Bridge\Campus Pkwy over I-69\Dwg\Plans\MOT.dwg Plot Date: 9/17/2015 Plotted By: Moffatt, Andrew J.







Existing Clear Roadway = 51'-8"

EXISTING STRUCTURE

Existing Bridge Deck & Portion of End Bents
To Be Removed
Not To Scale

NOTES:

For R/W, Earthwork Summary and Additional information see Roadway Plans, Des. No. 1383332 & 1383489.

For WB & EB Horizontal & EB Vertical Curve Data, see Roadway Plans, Des. No. 1383332 & 1383489.

For Utility Contacts, see Index Sheet No. 2.

For Minimum Vertical Clearance Information, See General Plan.

CAMPUS PARKWAY OVER I-69
CONTINUOUS COMPOSITE STEEL BEAM BRIDGE
4 SPANS: 46'-0", 2 @ 79'-6", 46'-0"
SKEW: 35°00'00" RIGHT
25'-0" CLEAR ROADWAY EB
36'-0" TO 37'-7 5/8" CLEAR ROADWAY WB
HAMILTON COUNTY

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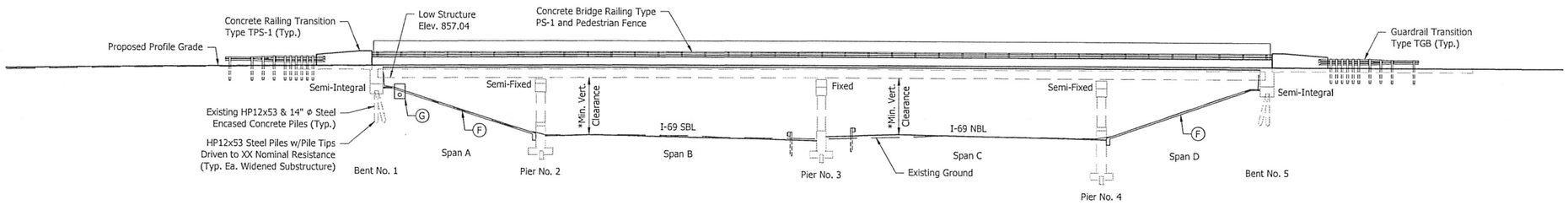
INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT
CAMPUS PARKWAY OVER I-69

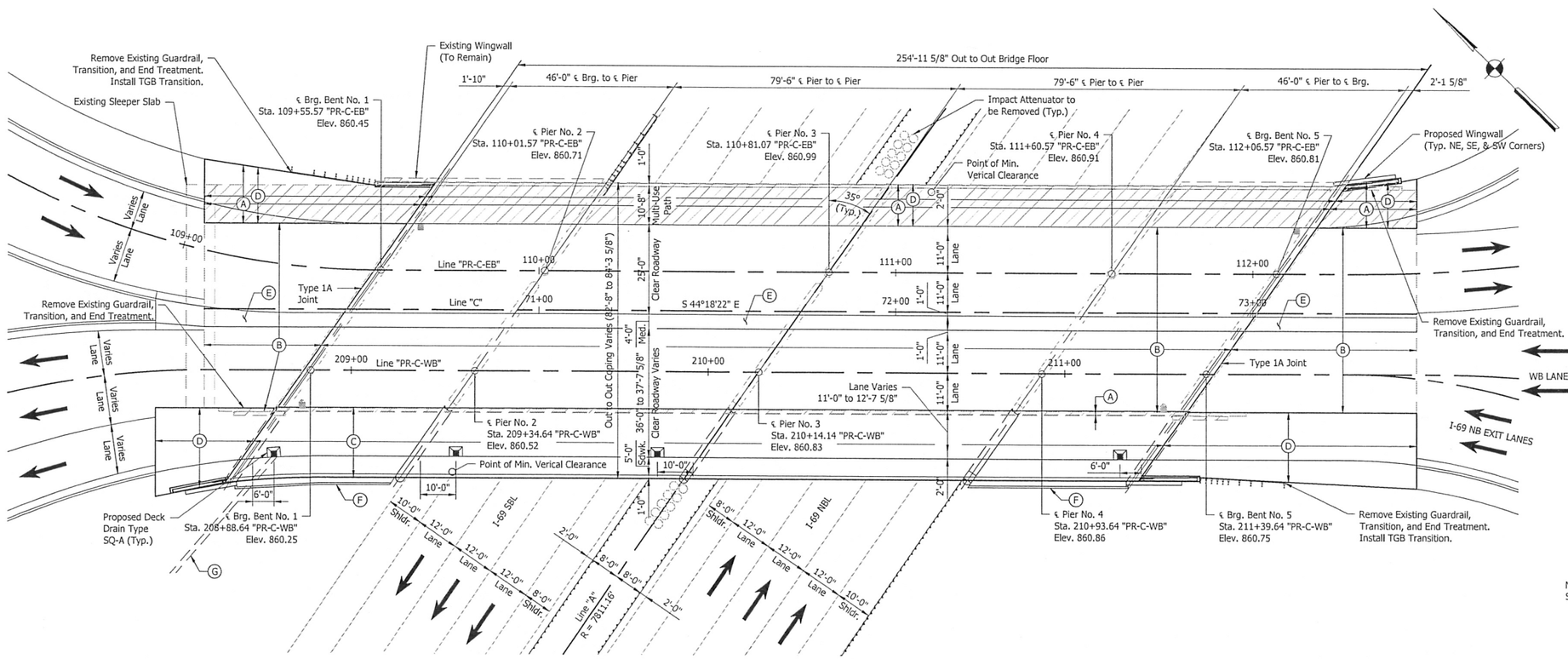
HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	(169)238-29-05317C
VERTICAL SCALE	DESIGNATION
1" = 10'	1383490
SURVEY BOOK	SHEETS
-	4 of 9
CONTRACT	PROJECT
R-37053	1383332

STRUCTURE TO BE BUILT TO:
A 145' VERTICAL CURVE, A 0.58% GRADE, AND A 230' VERTICAL CURVE (PR-C-WB)
A 135' VERTICAL CURVE, A 0.51% GRADE, A 135' VERTICAL CURVE, A 0.05% GRADE, AND A 135' VERTICAL CURVE (PR-C-EB)



Min. Vertical Clearance Table		
	NB	SB
Existing*	16'-10 1/2"	16'-10 1/2"
Proposed*	16'-11 1/4"	16'-7 1/8"

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



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

GENERAL NOTES

Reinforcing steel covering shall be 2½" in Top and 1" min. in bottom of floor slabs, 3" in footing except bottom steel which shall be 4", and 2" in all other parts, unless noted.

All New Reinforcement Shall be Epoxy Coated.

Surface Seal Shall be Applied to the Approach Slabs, All Exposed Surfaces of Concrete Railings and Railing Transitions, Sidewalk, and Deck Copings. (Est. Quantity = xx)

Plans for the Existing Structure are on file in the Central Office, Indiana Dept. of Transportation as Bridge File No. (I69)238-D9-5317, 238-29-5317A, 238-29-5317B and are available upon request.

Paint new structural steel, steel rails, and pedestrian fence with Federal Color Standard 595c, Color 14062 (Deep Hemlock Green)

DESIGN DATA

Superstructure & Substructure Designed for HS-20 Loading in accordance with AASHTO Standard Specifications Seventeenth Edition, 2002, and subsequent interims. Designed for actual dead load plus 35 psf. of future wearing surface.

SEISMIC DESIGN DATA

Seismic Performance Zone = Zone 1
Seismic Response (S_{D1}) = 0.114
Seismic Soil Profile Type = Site Class D

DESIGN STRENGTHS

Class "A" Concrete	f'c = 3,500 p.s.i.
Class "B" Concrete	f'c = 3,000 p.s.i.
Class "C" Concrete	f'c = 4,000 p.s.i.
Reinforcing Steel (Grade 60)	fy = 60,000 p.s.i.

LEGEND

(A) Remove Existing Wingwalls (as shown), Bridge Approach Railing, Partial Approach Slab, Sidewalk, Railing and Remove Concrete to Expose Reinforcing at Right Concrete Coping.

(B) Perform 1/4" Surface Milling with Partial Depth Patching. Place Bridge Deck Overlay, Variable Depth.

(C) Construct Lengthened Piers and End Bents as well as Proposed Beamlines and 18'-4" Width Bridge Deck, Sidewalk, Deck Drains Type SQ-A, Deck Drain System, and New PS-1 Railing with Pedestrian Fence to Accommodate New Clear Roadway Width.

(D) Construct Semi-Integral End Bents, Widened R.C. Bridge Approach Slabs, Sidewalk, Slab Extensions and Bridge Railing Transitions.

(E) Construct 4'-0" Width Raised Median.

(F) Construct Concrete Slopewall to 2'-0" Outside Widened Structure.

(G) Place Inlet, Type U Grate and 12" ϕ Min. Pipe Under Deck Drain. Place Outlet Pipe to Riprap Splashpad.

Limits of Removal

NOTES:
See Typical Sections and Substructure Details, for Additional Information.

CONTINUOUS COMPOSITE STEEL BEAM BRIDGE
4 SPANS: 46'-0", 79'-6", 79'-6", 46'-0"
SKEW: 35°00'00" RT
25'-0" CLEAR ROADWAY EB
36'-0" TO 37'-7 5/8" CLEAR ROADWAY WB
CAMPUS PARKWAY OVER I-69
HAMILTON COUNTY

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1625 N. Post Road
Indianapolis, IN 46219
Phone 317-895-2585
Fax 317-895-2596
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CHECKED: JNR | CHECKED: NJK

INDIANA DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
CAMPUS PARKWAY OVER I-69

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	(I69)238-29-05317C
VERTICAL SCALE	DESIGNATION
AS NOTED	1383490
SURVEY BOOK	SHEETS
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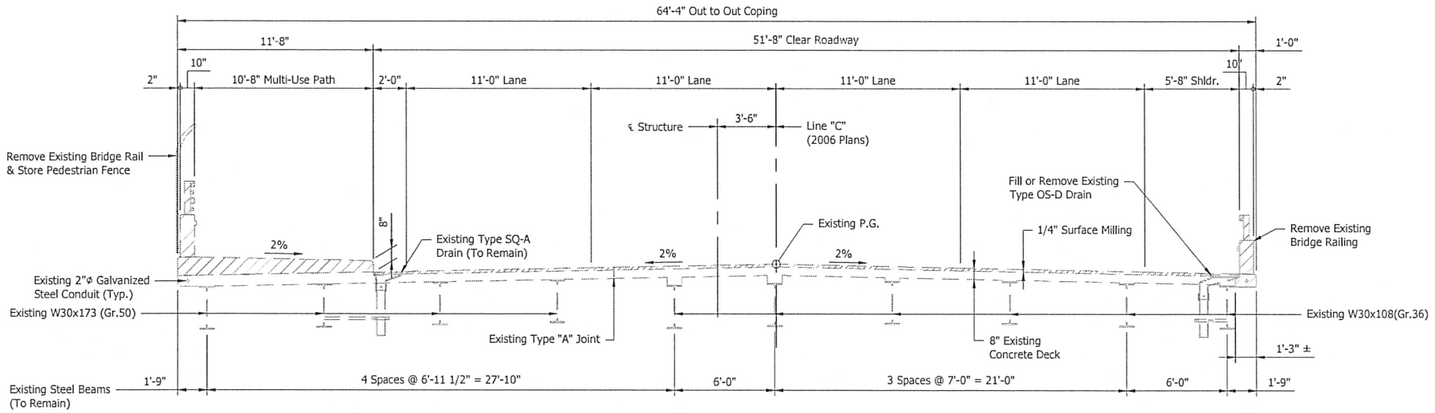
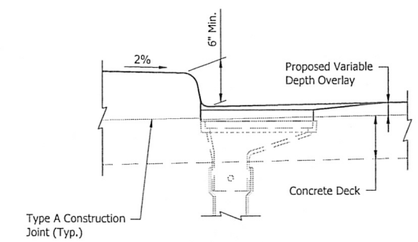
CONTRACT	PROJECT
R-37053	1383332

File Name: P:\CTD\I-69\15-469\Bridge\Campus Pkwy over I-69\Dwg\Plans\GP.dwg Plot Date: 9/17/2015 Plotted By: Moffatt, Andrew J.



EXISTING TYPICAL SECTION

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

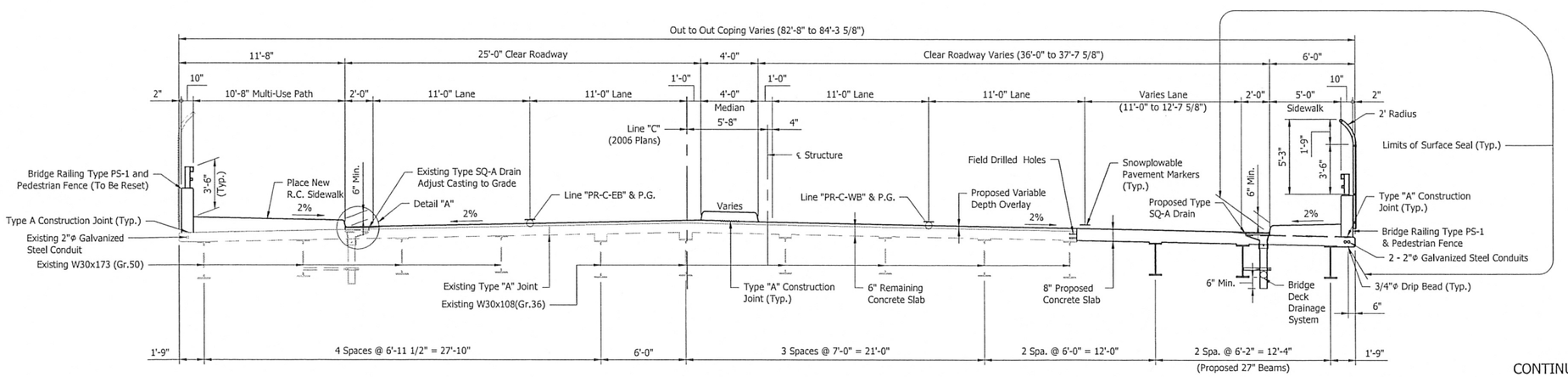


DETAIL "A'

Scale: 1" = 1'-0"

LEGEND

Limits of Removal



PROPOSED TYPICAL SECTION

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

CONTINUOUS COMPOSITE STEEL BEAM BRIDGE
4 SPANS: 46'-0", 79'-6", 79'-6", 46'-0"
SKEW: 35°00'00" RT
25'-0" CLEAR ROADWAY EB
36'-0" TO 37'-7 5/8" CLEAR ROADWAY WB
CAMPUS PARKWAY OVER I-69
HAMILTON COUNTY

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GENERAL PLAN
CAMPUS PARKWAY OVER I-69

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	(169)238-29-05317C
VERTICAL SCALE	DESIGNATION
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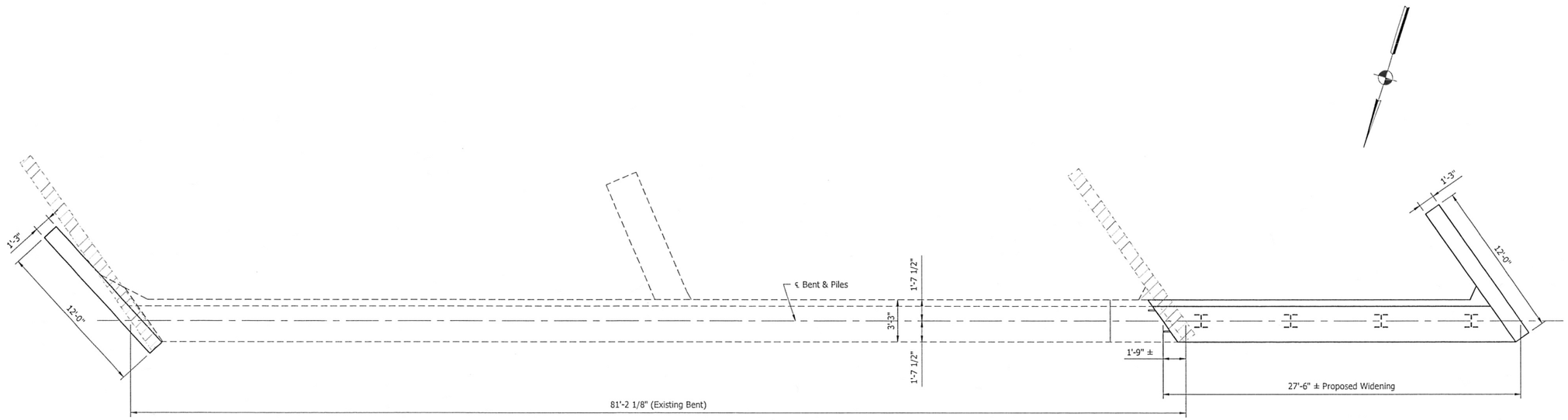
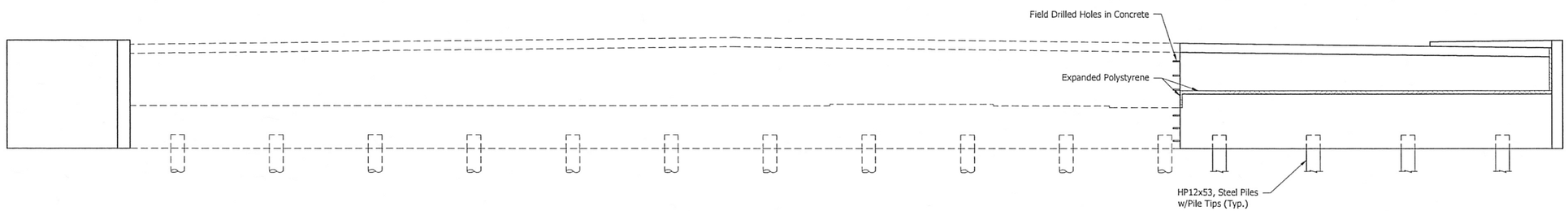


PLAN - BENT NO. 5

(BENT NO. 1 SIMILAR)
Scale: 1/4" = 1'-0"



ELEVATION - BENT NO. 5

(BENT NO. 1 SIMILAR)
Scale: 1/4" = 1'-0"

LEGEND

Indicates Limits of Removal

NOTE
For additional End Bent Details, see Substructure Detail Sheet.

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END BENT DETAILS
CAMPUS PARKWAY OVER I-69

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	(169)238-29-05317C
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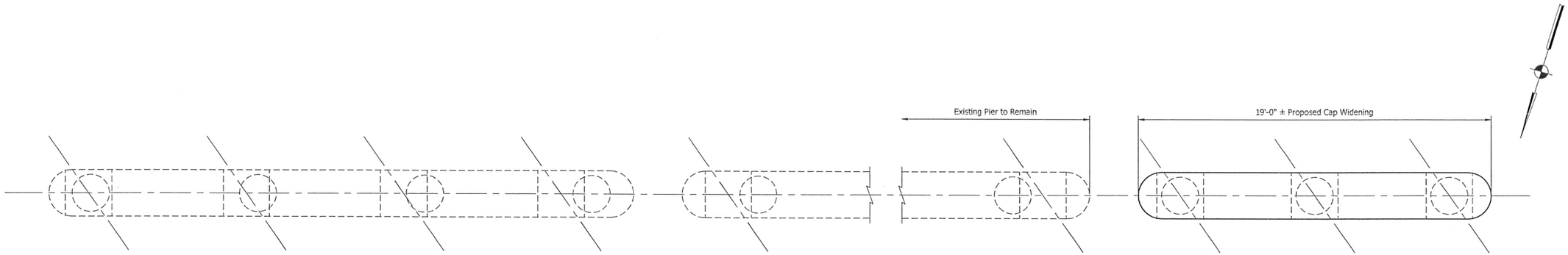
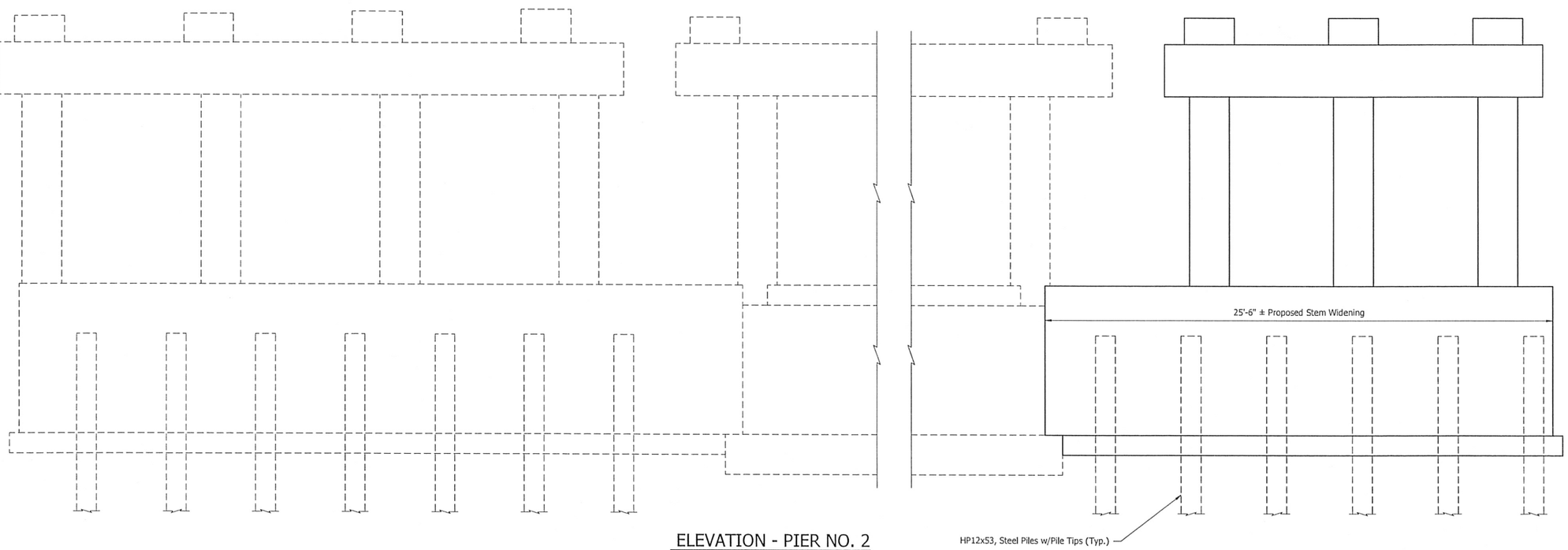


PLAN - PIER NO. 2

(PIER NO. 3 & 4 SIMILAR)
Scale: 3/8" = 1'-0"



ELEVATION - PIER NO. 2

(PIER NO. 3 & 4 SIMILAR)
Scale: 3/8" = 1'-0"

NOTE
For additional End Bent Details, see Substructure Detail Sheet.

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DEPARTMENT OF TRANSPORTATION

PIER DETAILS
CAMPUS PARKWAY OVER I-69

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	(169)238-29-05317C
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS
-	8 of 9
CONTRACT	PROJECT
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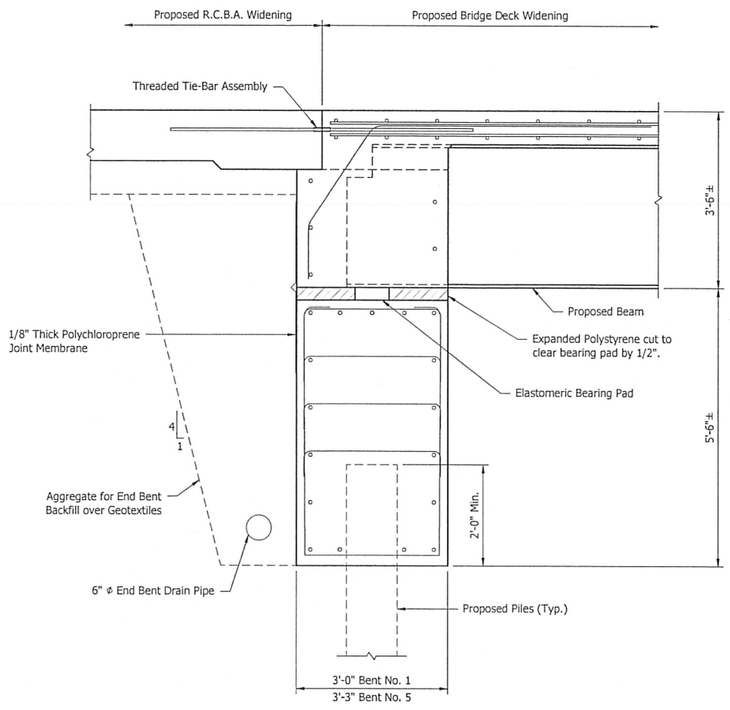
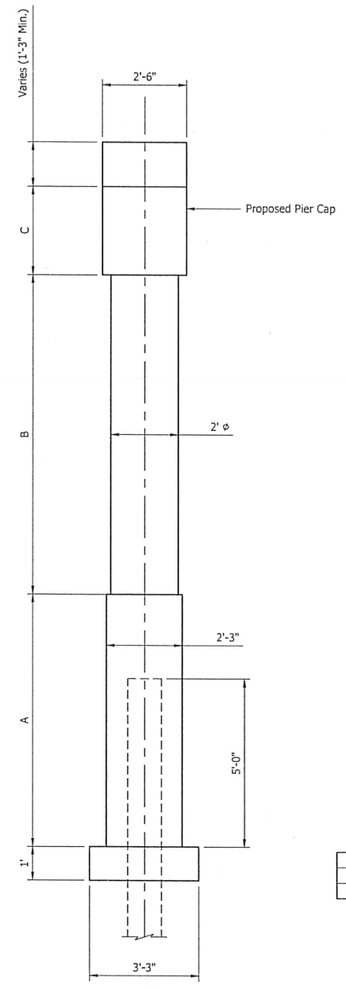


TYPICAL SECTION - PROPOSED END BENT WIDENING

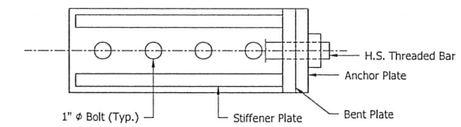
Scale: 3/4" = 1'-0"



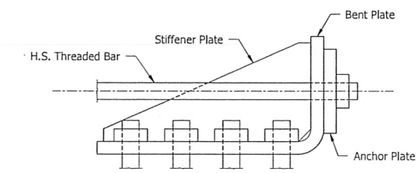
TYPICAL SECTION
PROPOSED PIER WIDENING

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

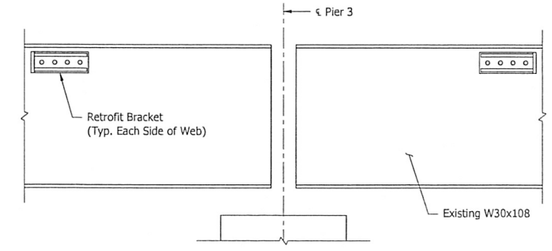
	PIER		
	No. 2	No. 3	No. 4
A	7'-6"	5'-7"	7'-0"
B	9'-6"	10'-10"	9'-5"
C	2'-7 1/2"	2'-6 1/2"	2'-6"



PLAN VIEW



ELEVATION VIEW



EXISTING BEAM RETROFIT DETAIL

Not to Scale

NOTE
For additional Substructure Details, see End Bent & Pier Detail sheets.

UNITED Consulting
1625 N. Post Road
Indianapolis, IN 46219
Phone 317-895-2585
Fax 317-895-2596
www.ucindy.com

JAY N. RIDENS REGISTERED No. 10403475 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE 9/17/15

DESIGNED: NJK | DRAWN: RSJ
CHECKED: JNR | CHECKED: NJK

INDIANA
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE DETAILS
CAMPUS PARKWAY OVER I-69

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	(169)238-29-05317C
VERTICAL SCALE	DESIGNATION
AS NOTED	1383490
SURVEY BOOK	SHEETS
-	9 of 9
CONTRACT	PROJECT
R-37053	1383332

File Name: P:\C3D\MK15-469\Bridge\Campus Pkwy over I-69\Dwg\Plans\Substructure.dwg Plot Date: 9/17/2015 Plotted By: Moffatt, Andrew J.