PROJECT	DESIGNATION
1383332	1383624 & 1383625
CONTRACT	BRIDGE FILE
R-37053	I69-216-05324 CNBL & CSBL

INDEX				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I69-216-05324 CNBL & CSBL	TWIN CONTINUOUS R.C. SLAB BRIDGES	THREE SPANS: 29'-3", 38'-0", 29'-3" SKEW 30°00'00" RIGHT	FOSTERS BRANCH	933+35 "A"

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
1383488	BROOKS SCHOOL RD OVER I-69	BRIDGE
1383489 & 1383490	CAMPUS PARKWAY INTERCHANGE	ROADWAY/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
1383486 & 1383487	I-69 OVER SAND CREEK	BRIDGE
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

R-37053
SET 12 OF 12

INDIANA DEPARTMENT
OF TRANSPORTATION

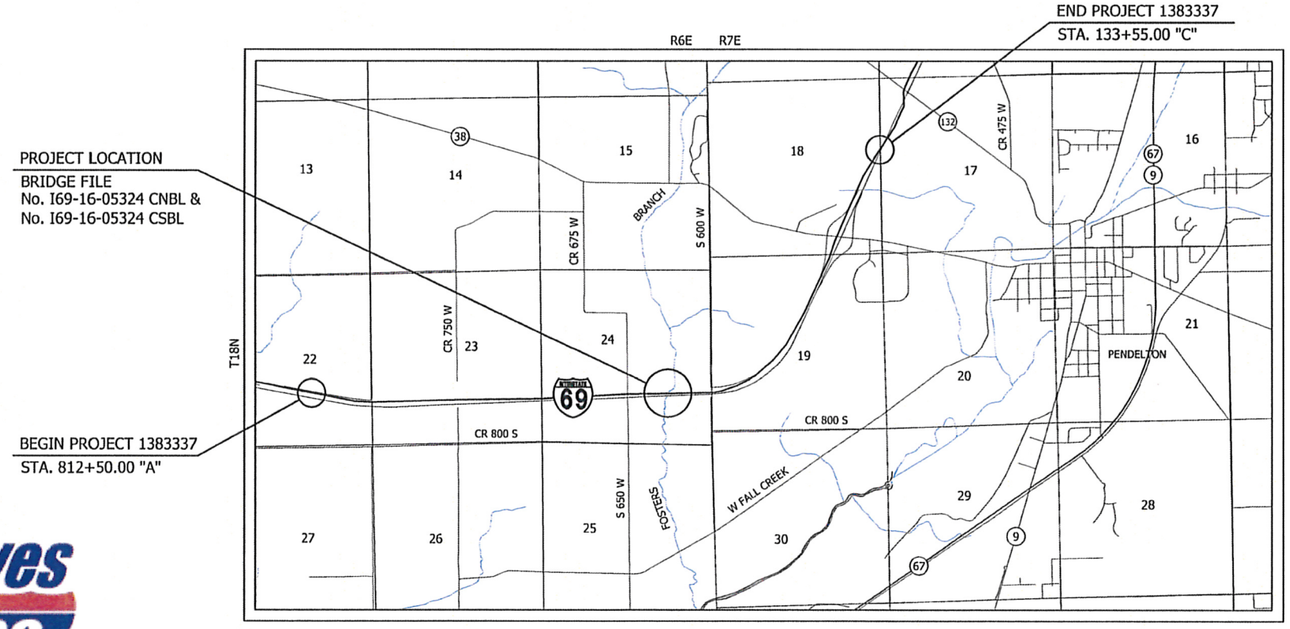
BRIDGE REHABILITATION PLANS

FOR SPANS OVER 20 FEET
I-69
OVER
FOSTERS BRANCH

PROJECT NO. 1383332 P.E.

RP 217+17

Bridge Rehabilitation and Widening Project on Structure I69-216-05324 CNBL & CSBL over Foster's Branch Located in Section 24, of Township 18 North, Range 6 East, in Green Township, Madison County Indiana.



LOCATION MAP
MADISON COUNTY

Scale 1" = 2000'

TRAFFIC DATA	I-69
A.D.T. (2015)	60,446 V.P.D.
A.D.T. (2035)	74,785 V.P.D.
D.H.V. (2035)	4,580 V.P.H.
DIRECTIONAL DISTRIBUTION	54% NB/46% SB
TRUCKS	18% A.A.D.T.
	28% D.H.V.
DESIGN DATA	I-69
DESIGN SPEED	70 M.P.H.
PROJECT DESIGN CRITERIA	PARTIAL RECONSTRUCTION 4R (FREEWAY)
FUNCTIONAL CLASSIFICATION	INTERSTATE
RURAL/URBAN	RURAL
TERRAIN	LEVEL
ACCESS CONTROL	FULL

LATITUDE: 39°59'31"N LONGITUDE: 85°47'30"W

BRIDGE LENGTH :	0.018 MI.
ROADWAY LENGTH :	SEE ROAD PLANS
TOTAL LENGTH :	SEE ROAD PLANS
MAX GRADE :	1.42%

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: Mark A. Rowe 9.17.20 DATE
APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

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

	BRIDGE FILE: I69-216-05324 CNBL & CSBL
	DESIGNATION: 1383624 & 1383625
SURVEY BOOK	SHEETS: 1 of 9
CONTRACT: R-37053	PROJECT: 1383332

UTILITIES

Communication

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Jim Highsmith 585-697-5145
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Indiana Fiber Network, LLC
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Tracey Trimpe
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Fall Creek Regional Waste District
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Vectren Energy
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Mike Johnson 765-648-3205
mejohnson@vectren.com

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Dave Wisner 419-421-2211
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Tami Otto 317-595-3160
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sritter@citizensenergygroup.com

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Lou Savka 317-377-5230
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Joel McKinney 770-335-9816
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kveygman@indot.in.gov

Traffic Structures

HERE
425 West Randolph
Chicago, IL 60606
Alexandra Archer 773-747-4247
Alexandra.Archer@HERE.com

REVISIONS

SHEET No.	DATE	REVISION

INDEX

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

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

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

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

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX
I-69 OVERS FOSTERS BRANCH

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I69-216-05324 CNBL & CSBL
VERTICAL SCALE	DESIGNATION
AS NOTED	1383624 & 1383625
SURVEY BOOK	SHEETS
-	2 of 9
CONTRACT	PROJECT
R-37053	1383332

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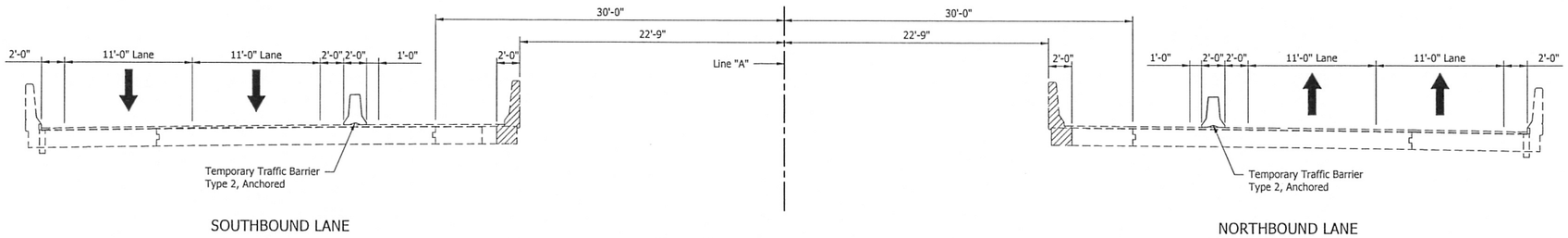
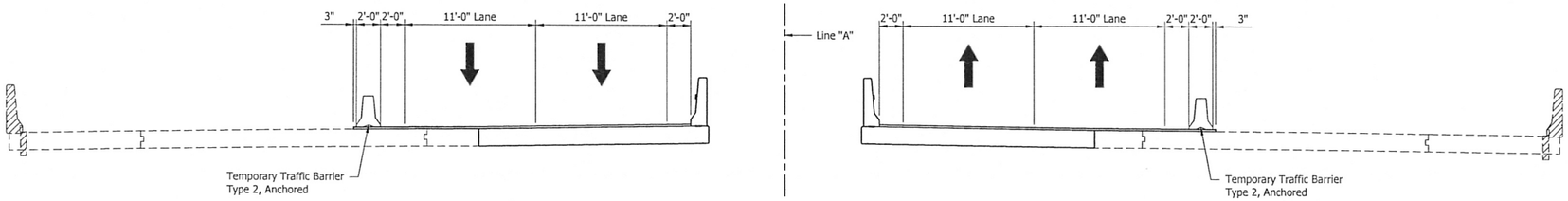


SOUTHBOUND LANE

NORTHBOUND LANE

TRAFFIC MAINTENANCE SECTION - PHASE II

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



SOUTHBOUND LANE

NORTHBOUND LANE

TRAFFIC MAINTENANCE SECTION - PHASE III

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

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DATE	REVISION

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

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

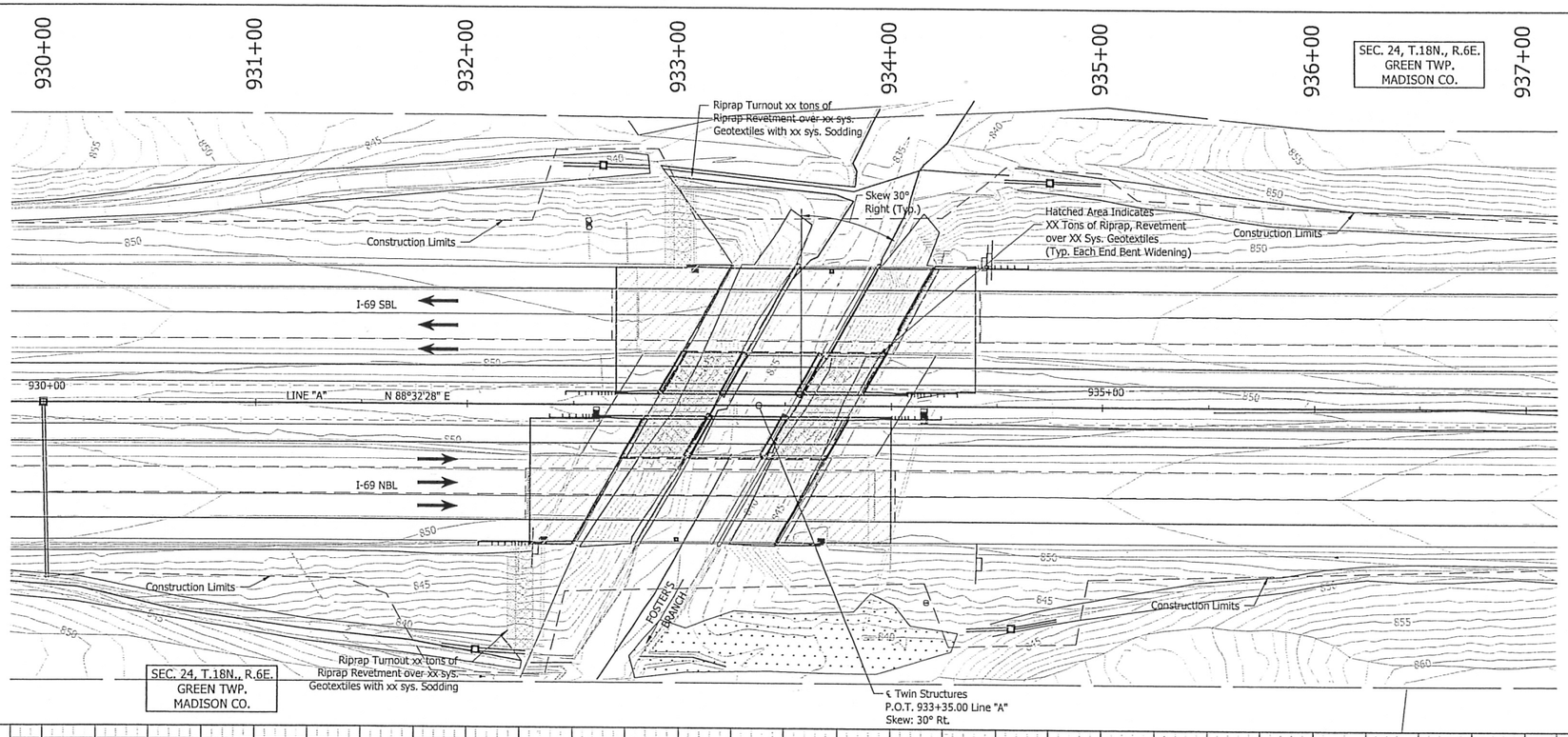
DESIGNED: NJK DRAWN: RSJ

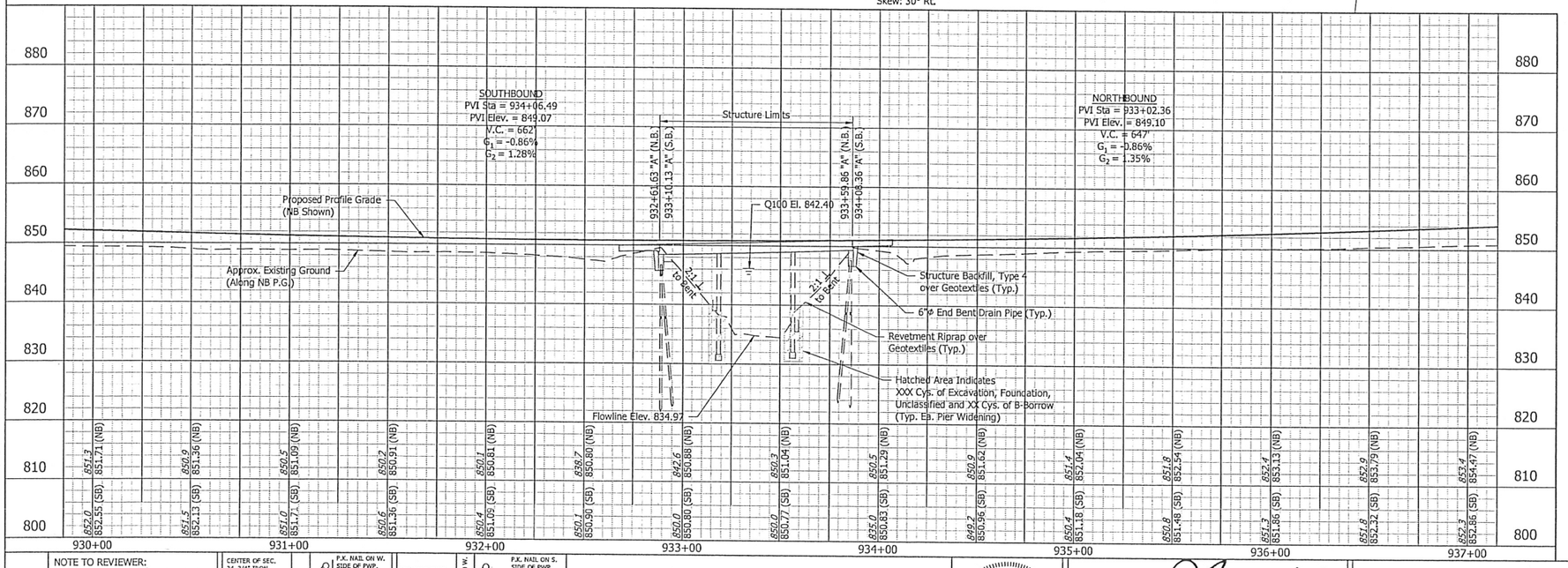
CHECKED: JNR CHECKED: NJK

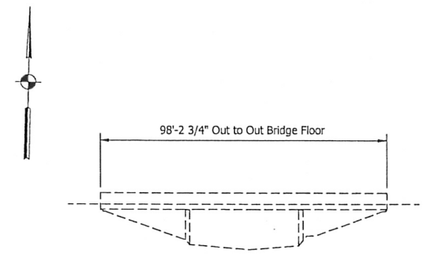
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINENANCE OF TRAFFIC
I-69 OVERS FOSTERS BRANCH

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I69-216-05324 CNBL & CSBL
VERTICAL SCALE	DESIGNATION
AS NOTED	1383624 & 1383625
SURVEY BOOK	SHEETS
-	3 of 9
CONTRACT	PROJECT
R-37053	1383332



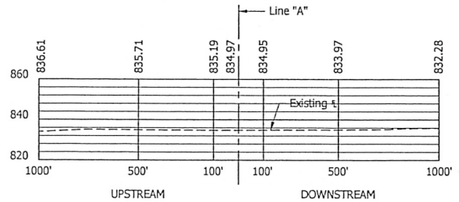




Existing Clear Roadway = 39'-3 1/4"
Portions of Existing Bridge Deck, End Bents, & Piers To Be Removed

EXISTING STRUCTURE

No Scale



EXISTING STREAM PROFILE

NO SCALE

HYDRAULIC DATA (NAVD 1988 DATUM)

Drainage Area = X.XX Sq. Mi.
Discharge (Q100) = XX Cfs.
Q100 Elev. = 842.4 Ft.
Velocity @ Q100 = X.XX Ft./Sec.
Gross Waterway Opening Required = XXX Sft. (Below Elev. Q100)
Waterway Opening Provided = XXX Sft. (Below Elev. Q100)
Q100 Scour Elevation = XX.XX Ft.
Q500 Scour Elevation = N/A
Min. Low Structure Elevation = 848.14 Ft.

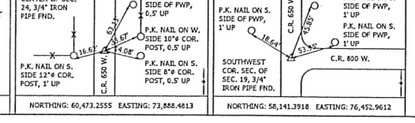
NOTES:

For R/W, Earthwork Summary and Additional information see Roadway Plans, Des. No. 1383337.

For Utility Contacts, see Index Sheet No. 2.

I-69 OVER FOSTER'S BRANCH
CONTINUOUS R.C. SLAB BRIDGE
3 SPANS: 29'-3", 38'-0", 29'-3"
SKEW: 30°00'00" RT
57'-3" CLEAR ROADWAY
MADISON COUNTY

NOTE TO REVIEWER:
Hydraulic data to be completed after scour analysis submittal.



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

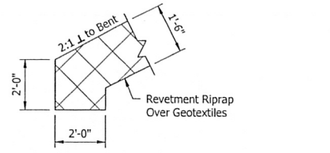
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER 9/17/15 DATE

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

INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT
I-69 OVERS FOSTERS BRANCH

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	I69-216-05324 CNBL & CSBL
VERTICAL SCALE	DESIGNATION
1" = 10'	1383624 & 1383625
SURVEY BOOK	SHEETS
-	4 of 9
CONTRACT	PROJECT
R-37053	1383332



RIPRAP KEY DETAIL
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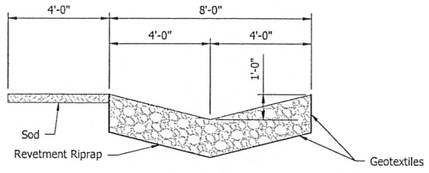

RIPRAP DRAINAGE TURNOUT
TYPICAL SECTION
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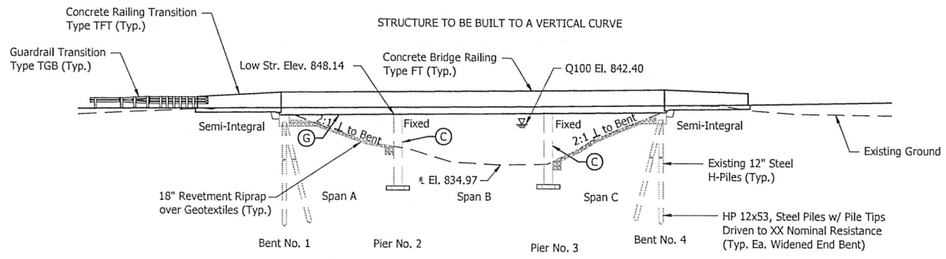
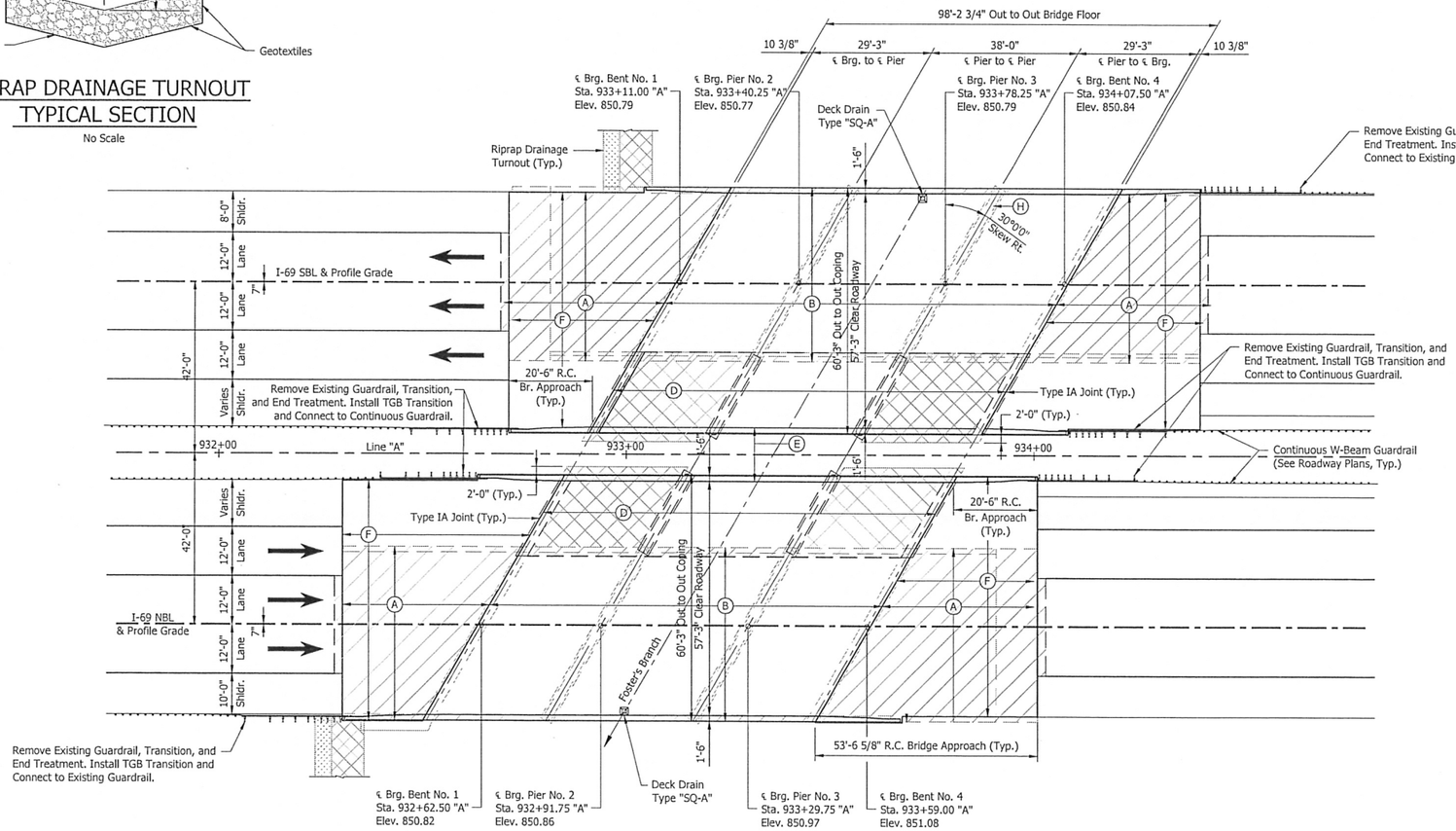


ELEVATION
Scale: 1/16" = 1'-0"



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

GENERAL NOTES

Reinforcing steel covering shall be 2½" in Top and 1" minimum. 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, and Deck Copings & Bridge Concrete (Estimated Quantity = xx,xxx per Bridge)

Plans for the Existing Structure are on file in the Central Office, Indiana Dept. of Transportation as Bridge File No.'s I69-16-5324, I69-16-5324A, I69-16-5324B and are available upon request.

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
Acceleration Coefficient (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 Roadway Pavement, Bridge Approach Railings, Approach Slabs, Joint material, Terminal Joints, Portions of Existing Deck Coping and both Railings.

(B) Perform Variable Depth Deck scarification and Hydraulic Demolition.

(C) Remove Median Side Pier Noses to Facilitate Widening.

(D) Construct Lengthened Piers and End Bents as Well as Full Depth Concrete Slab, to Accomodate New Clear Roadway Width.

(E) Install New Modified Type FT Concrete Bridge Railings.

(F) Construct New R.C. Bridge Approach Slabs, Slab Extensions, Bridge Railing Transitions and Terminal Joints.

(G) Remove Unsound Concrete and Place Pneumatically Placed Mortar on Underside of Decks.

(H) Place Pneumatically Placed Mortar on Piers as needed.

Limits of Removal

Limits of Additional Revetment Riprap

Limits of Sodding

I-69 OVER FOSTER'S BRANCH
CONTINUOUS R.C. SLAB BRIDGE
3 SPANS: 29'-3", 38'-0", 29'-3"
SKEW: 30°00'00" RIGHT
57'-3" CLEAR ROADWAY
MADISON COUNTY

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

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JA Y. N. RIDENS REGISTERED No. 10403475 STATE OF INDIANA PROFESSIONAL ENGINEER

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

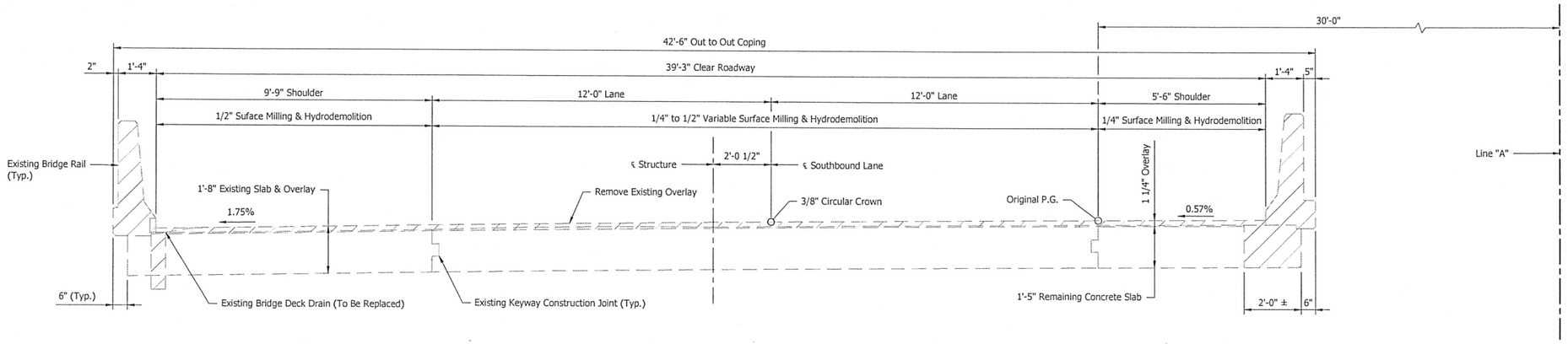
DESIGNED: NJK DRAWN: RSJ
CHECKED: JNR CHECKED: NJK

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
I-69 OVERS FOSTERS BRANCH

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I69-216-05324 CNBL & CSBL
VERTICAL SCALE	DESIGNATION
AS NOTED	1383624 & 1383625
SURVEY BOOK	SHEETS
-	5 of 9
CONTRACT	PROJECT
R-37053	1383332

File Name: P:\CDO\MK15-469\Bridge\I-69 over Fosters Branch\Dwg\Plans\GP.dwg Plot Date: 9/17/2015 Plotted By: Moffatt, Andrew J.

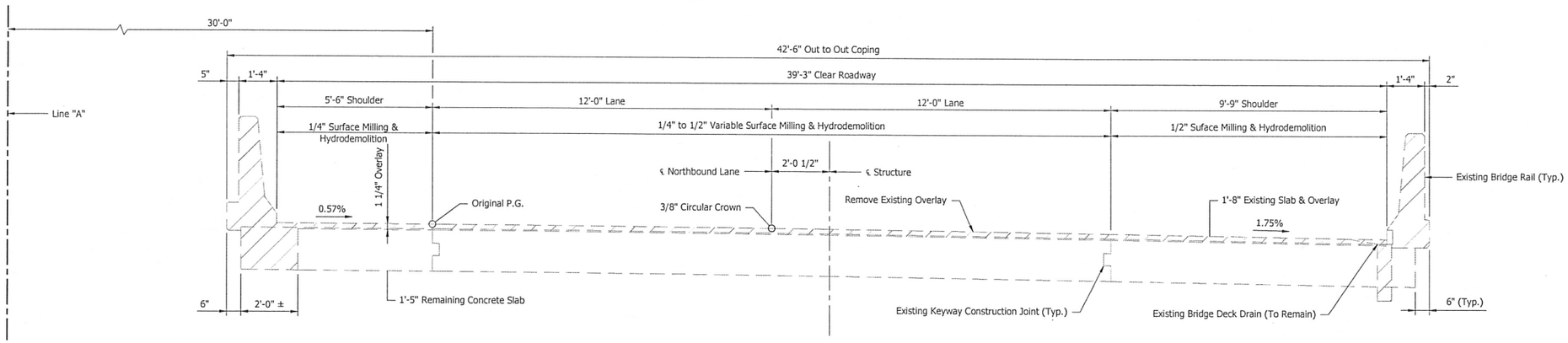


EXISTING SB TYPICAL SECTION

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

LEGEND

Limits of Removal



EXISTING NB TYPICAL SECTION

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

I-69 OVER FOSTER'S BRANCH
CONTINUOUS R.C. SLAB BRIDGE
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DESIGNED: NJK | DRAWN: RSJ | CHECKED: JNR | CHECKED: NJK

INDIANA DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
I-69 OVERS FOSTERS BRANCH

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I69-216-05324 CNBL & CSBL
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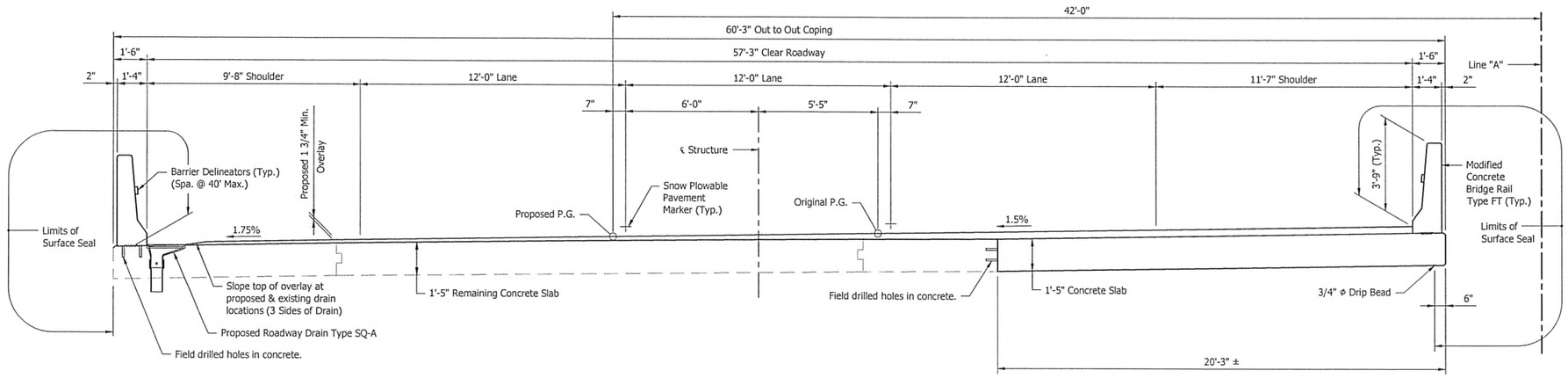
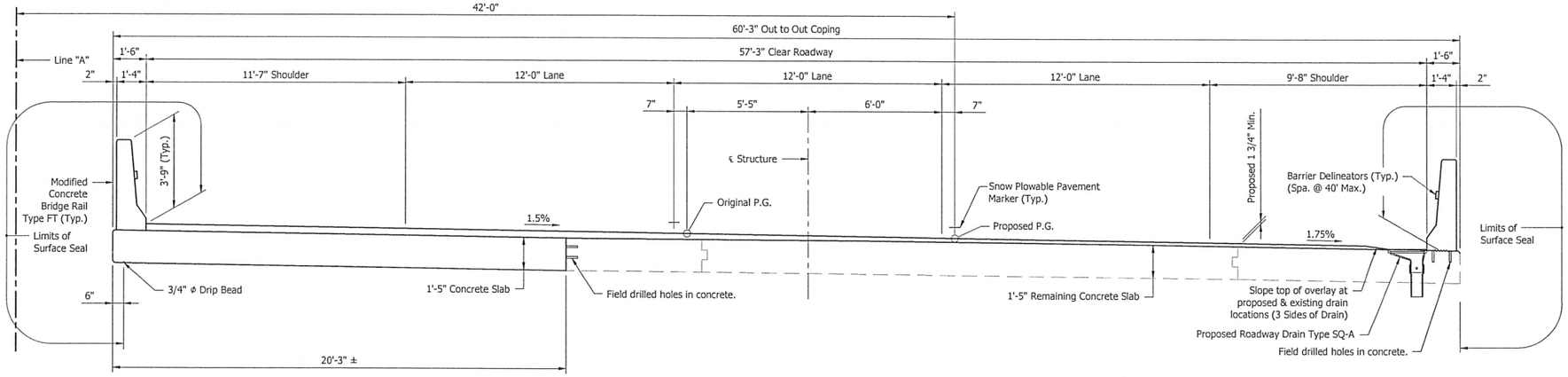


PROPOSED SB TYPICAL SECTION

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



PROPOSED NB TYPICAL SECTION

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

I-69 OVER FOSTER'S BRANCH
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INDIANA DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
I-69 OVERS FOSTERS BRANCH

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VERTICAL SCALE	DESIGNATION
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-	7 of 9
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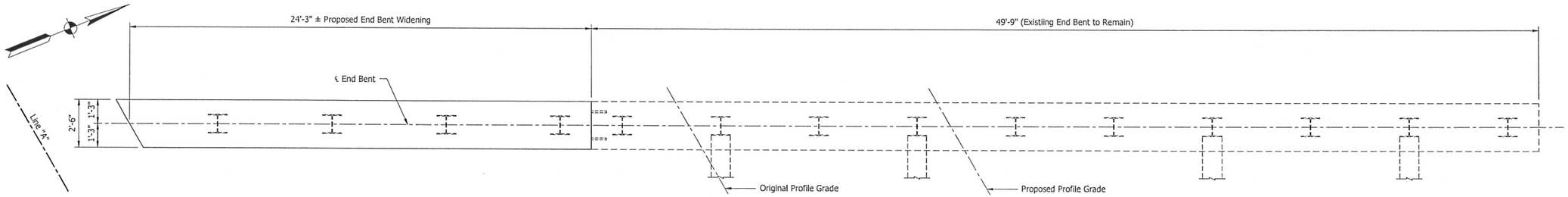
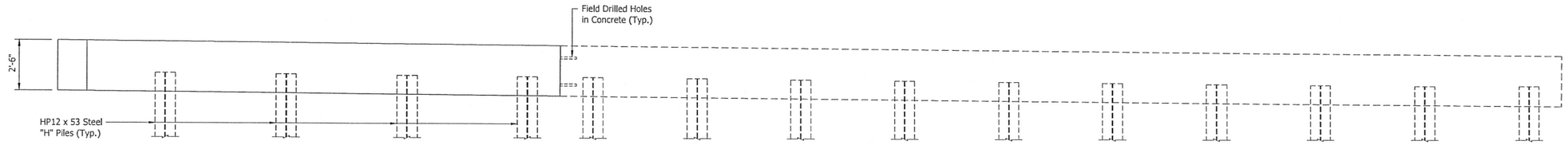
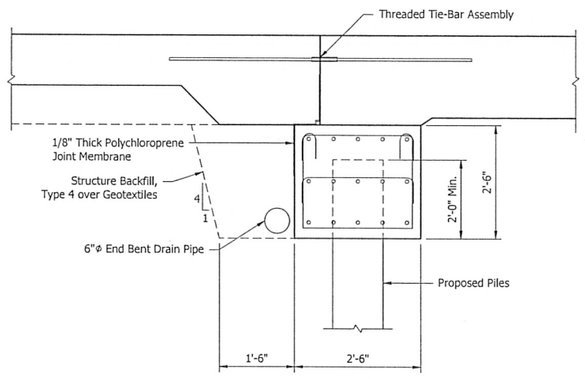


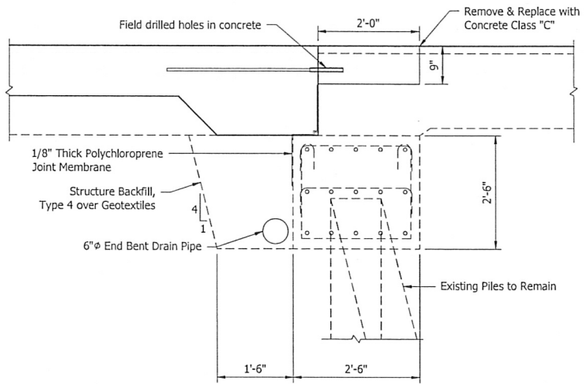
PLAN - TYPICAL END BENT WIDENING
(SOUTHBOUND END BENT NO. 1 SHOWN)
Scale: 3/8" = 1'-0"



ELEVATION - TYPICAL END BENT WIDENING
(SOUTHBOUND END BENT NO. 1 SHOWN)
Scale: 3/8" = 1'-0"



TYPICAL SECTION - PROPOSED END BENT WIDENING
Scale: 3/4" = 1'-0"



TYPICAL SECTION - EXISTING END BENT TO REMAIN
Scale: 3/4" = 1'-0"

UNITED Consulting
1625 N. Post Road
Indianapolis, IN 46219
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JAY N. RIDENS — REGISTERED — No. 10403475 — STATE OF INDIANA — PROFESSIONAL ENGINEER

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

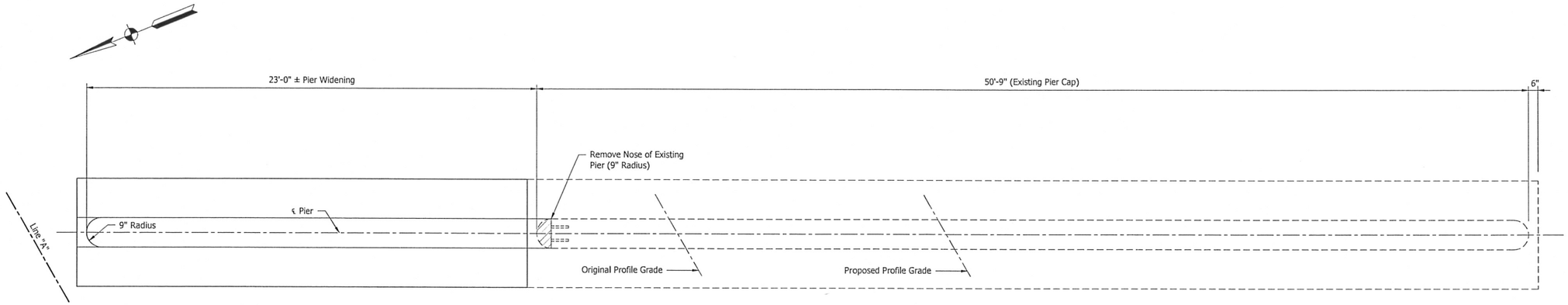
DESIGNED: NJK | DRAWN: RSJ
CHECKED: JNR | CHECKED: NJK

INDIANA
DEPARTMENT OF TRANSPORTATION

END BENT DETAILS
I-69 OVERS FOSTERS BRANCH

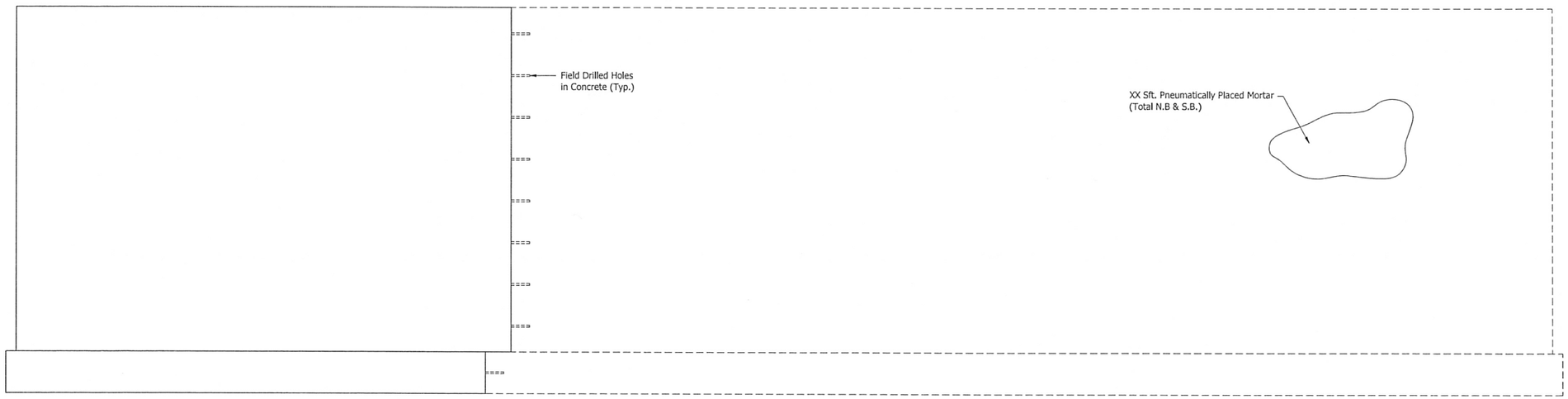
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I69-216-05324 CNBL & CSBL
VERTICAL SCALE	DESIGNATION
AS NOTED	1383624 & 1383625
SURVEY BOOK	SHEETS
-	8 of 9
CONTRACT	PROJECT
R-37053	1383332

File Name: P:\CAD\R37-0693\Bridge\I-69 over Fosters Branch\Sheets\Sheet Files\I-69 over Fosters Branch End Bent Details.dgn Plot Date: 9/17/2015 Plotted By: Mallett, Matthew J.

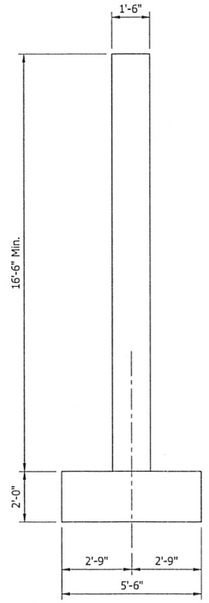


PLAN - TYPICAL PIER WIDENING
(NORTHBOUND PIER NO. 2 SHOWN)
Scale: 3/8" = 1'-0"

Indicates Limits of Removal



ELEVATION - TYPICAL PIER WIDENING
(NORTHBOUND PIER NO. 2 SHOWN)
Scale: 3/8" = 1'-0"



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

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

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

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

INDIANA
DEPARTMENT OF TRANSPORTATION

PIER DETAILS
I-69 OVERS FOSTERS BRANCH

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	169-216-05324 CNBL & CSBL
VERTICAL SCALE	DESIGNATION
AS NOTED	1383624 & 1383625
SURVEY BOOK	SHEETS
-	9 of 9
CONTRACT	PROJECT
R-37053	1383332

File Name: P:\CAD\R37053-I69SBHP\dgn\I-69 over Fosters Branch\Dwg\Plans\Substructure.dwg Plot Date: 9/17/2015 Plotted By: MoffattL Antiview 1.