PROJECT	DESIGNATION
1592481	1592481, 0100482, 9250260,
	0200633, 0200636, 0200635,
	0622634, 1298275
CONTRACT	BRIDGE FILE
B-33539	----

INDIANA DEPARTMENT OF TRANSPORTATION

ROADWAY PLANS
U.S. 41 FROM CHEATAM SLOUGH TO EAGLE CREEK
PROJECT NO. 1592481

Road reconstruction and overlay on US 41 Northbound and Southbound from Cheatam Slough to Eagle Creek. In Sections 4, 8, and 9, Township 7 South, Range 10 West, and in Section 31, in Knight and Pigeon Townships, Vanderburgh County, Indiana.

GROSS LENGTH: 1.20 mi
NET LENGTH: 1.20 mi
SCALES:
PLAN { LONG: 1" = 30' TRANS: 1" = 30'
PROFILE { HORIZ: 1" = 30' VERT: 1" = 5'

TRAFFIC DATA	SB	NB
A.A.D.T. (2017)	21,260 V.P.D.	20,380 V.P.D.
A.A.D.T. (2037)	26,720 V.P.D.	25,630 V.P.D.
DIRECTIONAL DISTRIBUTION	100 %	100 %
TRUCKS	9 % A.A.D.T.	11.6 % A.A.D.T.
DESIGN DATA		
DESIGN SPEED	50 M.P.H.	50 M.P.H.
POSTED SPEED	50 M.P.H.	50 M.P.H.
PROJECT DESIGN CRITERIA	3R NON-FREEWAY	3R NON-FREEWAY
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN	URBAN
TERRAIN	LEVEL	LEVEL
ACCESS CONTROL	NONE	NONE

KIN PROJECT INFORMATION	
DESIGNATION	PROJECT DESCRIPTION
0100482	U.S. 41 over SB Cheatam Slough
9620260	U.S. 41 over NB Cheatam Slough
0200633	U.S. 41 over SB Ohio River Overflow
0200636	U.S. 41 over NB Ohio River Overflow
0200635	U.S. 41 over SB Eagle Creek
0200634	U.S. 41 over NB Eagle Creek
1298275	U.S. 41 over SB Ohio River
1592481	Roadway Plans from Cheatam Slough to Eagle Creek

PROJECT LOCATION SHOWN BY
VANDERBURGH COUNTY
VINCENNES DISTRICT

LATITUDE: 37°55'23" N. & LONGITUDE: 87°32'55" W.

END PROJECT 1592481
STA. 194+30.50 "D"

PAVING EXCEPTION
STA. 181+79.00 TO STA. 194+30.00
U.S.41 OVER EAGLE CREEK
SB STRUCTURE: 041-82-4999JB
NB STRUCTURE: 041-82-4999B

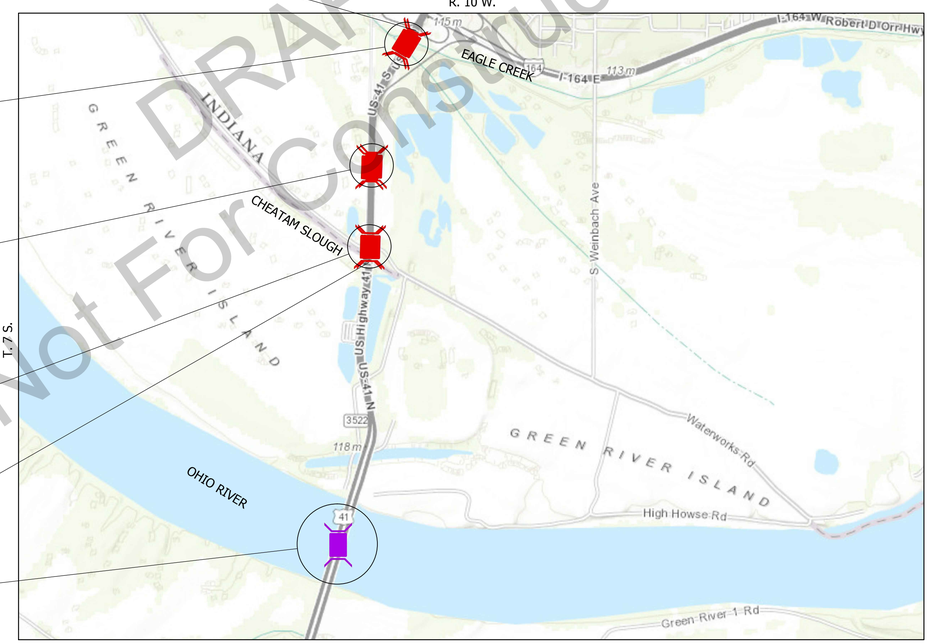
PAVING EXCEPTION
STA. 157+03.35 TO STA. 162+32.85
U.S.41 OVER OHIO RIVER OVERFLOW
SB STRUCTURE: 041-82-0877E
NB STRUCTURE: 041-82-4998C

PAVING EXCEPTION
STA. 132+84.15 TO STA. 137+13.15
U.S.41 OVER CHEATAM SLOUGH
SB STRUCTURE: 041-82-0876E
NB STRUCTURE: 041-82-4997C

BEGIN PROJECT 1592481
STA. 132+84.15 "D"

BRIDGE REHABILITATION
STA. 38+51.29 TO STA. 92+78.17
SB U.S.41 OVER OHIO RIVER
SB STRUCTURE: 051B00007L

R. 10 W.
T. 7 S.



SCALE: NONE

VICINITY MAP
VANDERBURGH COUNTY

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES.

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

DRAFT
Not For Construction

PLANS PREPARED BY: Butler Fairman and Seufert Inc. (317)713-4615 PHONE
CERTIFIED BY: 10/31/16 DATE
APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

MICHAEL MALEY REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

SURVEY BOOK	SHEET
	1 OF 164
CONTRACT	PROJECT
B-33539	1592481

BRIDGE FILE: ----
DESIGNATION: 1592481
5605
BFS NO.

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UTILITIES

COMMUNICATIONS:

AT&T
134 NW Sixth Street
Evansville, Indiana 47708
ATTN: Marc Clark
P. (812) 464-6050
E. mc3429@att.com

AT&T
134 NW Sixth Street
Evansville, Indiana 47708
ATTN: Andy Folz
P. (812) 464-6055
E. af1896@att.com

WINDSTREAM COMMUNICATIONS
5020 Smythe Drive
Evansville, Indiana 47715
ATTN: Daniel Leskinen
E. Daniel.leskinen@windstream.com
P. (812) 759-2833
P. (812) 455-9558 (CELL)

TIME WARNER CABLE
1900 N. Fares Avenue
Evansville, Indiana 47711
ATTN: Daryl Hulsey
E. daryl.hulsey@twcable.com
P. (812) 253-2755
P. (812) 305-8348 (CELL)

ELECTRIC:

KENERGY CORPORATION
ATTN: Kyle Hart
P. (270) 831-4602
E. khart@kenergycorp.com

VECTREN
Jody Chapman
1 North Main Street
Evansville, Indiana 47711
E. jwchapman@vectren.com

INDOT:

SIGNALS & LIGHTING
ATTN: Robert Horton
E. rhorton@indot.in.gov
P. (812) 699-0643
P. (812) 698-4743 (CELL)

ITS TECHNOLOGY
ATTN: Konstantin Veygman
E. kveygman@indot.in.gov
P. (317) 899-8606

WEIGHT STATION:

JACK MANN SCALES, INC.
2073 Mercer Road
Lexington, Kentucky 40511
ATTN: Larry Stagner
E. larry@jackmannscales.com
P. (859) 233-0322

KYTC
ATTN: David Cornett
E. davidp.cornett@ky.gov
P. (502) 564-4556

REVISIONS

SHEET NO.	DATE	REVISED

INDEX

SHEET NO.	DESIGNATION
1	TITLE SHEET
2	INDEX SHEET
3-8	TYPICAL SECTIONS
9-13	MAINTENANCE OF TRAFFIC PHASE 00
14-24	MAINTENANCE OF TRAFFIC PHASE 01
25-26	MAINTENANCE OF TRAFFIC PHASE 1A
27-33	MAINTENANCE OF TRAFFIC PHASE 2
34-37	MAINTENANCE OF TRAFFIC PHASE 2A
38-44	MAINTENANCE OF TRAFFIC PHASE 2B
45-48	MAINTENANCE OF TRAFFIC PHASE 2C
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56-60	DETOURS
61-68	BRIDGE TYPICAL MOT SECTIONS
69-74	SOIL BORINGS
75-77	TEMPORARY BRIDGE STRUCTURE
78-85	EROSION CONTROL
86-93	PLAN & PROFILE LINES "PR-D-NB" & "PR-D-SB"
94	SUPERELEVATION DIAGRAM
95-100	CONSTRUCTION DETAILS
101	SPOT ELEVATION DETAIL
102	WEIGH-IN-MOTION (WIM)
103-123	ITS CAMERA DETAILS
124-127	PAVEMENT MARKINGS & SIGNAGE
128	TEMPORARY EROSION CONTROL TABLE
129	GUARDRAIL SUMMARY TABLE
130	STRUCTURE DATA TABLE
131-132	UNDERDRAIN TABLES
133	PCCP TABLE
134	HMA TABLE
135	SIGN SUMMARY TABLE
136-149	CROSS SECTIONS LINE 'D'; REHABILITATION SECTION (CHEATAM SLOUGH STR. TO OHIO RIVER OVERFLOW STR.)
150-164	CROSS SECTIONS LINE 'D'; RECONSTRUCTION SECTION (OHIO RIVER OVERFLOW STR. TO EAGLE CREEK STR.)

DRAFT
Not For Construction

MICHAEL MATEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: DS
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX SHEET

HORIZONTAL SCALE	BRIDGE FILE
NONE	-
VERTICAL SCALE	DESIGNATION
NONE	1592481
SURVEY BOOK	SHEET
	2 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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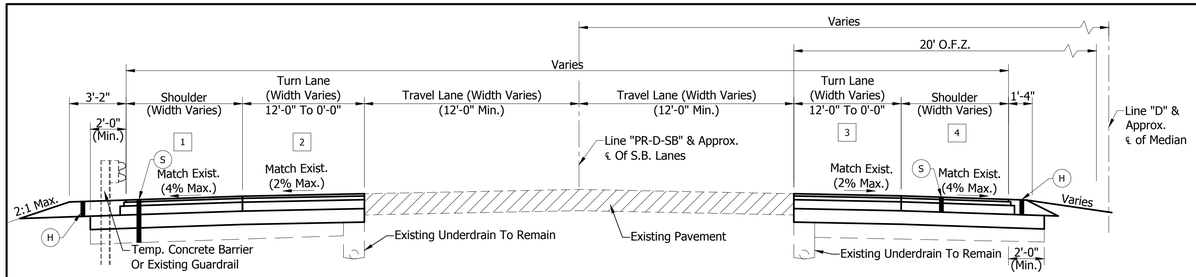


Shoulder Reconstruction Sta. 141+96.43 "PR-D-SB" To 154+46.45 "PR-D-SB"

1 Varies 4'-3" To 6'4" From Sta. 141+96.43 "PR-D-SB" To Sta. 144+96.54 "PR-D-SB"
Varies 6'-4" To 3'-0" From Sta. 144+96.54 "PR-D-SB" To Sta. 145+90.93 "PR-D-SB"
Varies 3'-0" To 12'-0" From Sta. 145+90.93 "PR-D-SB" To Sta. 146+96.54 "PR-D-SB"
12'-0" From Sta. 146+96.54 "PR-D-SB" To Sta. 154+46.49 "PR-D-SB"

2 Varies 14'-3" To 12'-2" From Sta. 141+96.43 "PR-D-SB" To Sta. 144+96.54 "PR-D-SB"
Varies 12'-2" To 12'-5" From Sta. 144+96.54 "PR-D-SB" To Sta. 145+90.93 "PR-D-SB"
Varies 12'-5" To 0'-0" From Sta. 145+90.93 "PR-D-SB" To Sta. 146+96.54 "PR-D-SB"

Shoulder Reconstruction Sta. 141+45.00 "PR-D-SB" To 158+03.35 "PR-D-SB"

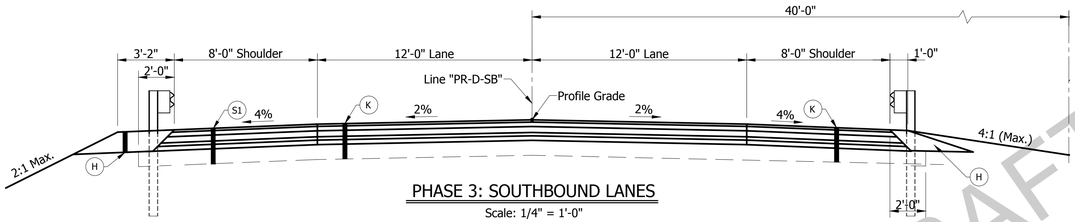
3 9'-0" From 141+45.00 "PR-D-SB" To 144+96.54 "PR-D-SB"
Varies 9'-0" To 0'-0" From Sta. 144+96.54 "PR-D-SB" To Sta. 146+96.54 "PR-D-SB"

4 3'-0" From 141+45.00 "PR-D-SB" To 144+96.54 "PR-D-SB"
Varies 3'-0" To 12'-0" From Sta. 144+96.54 "PR-D-SB" To Sta. 146+96.54 "PR-D-SB"
12'-0" From 146+96.54 "PR-D-SB" To 156+46.46 "PR-D-SB"
Varies 12'-0" To 8'-0" From 156+46.46 To 158+03.35 "PR-D-SB"

PHASE I - SOUTHBOUND LANES (REFER TO PHASE I M.O.T. PLANS)

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

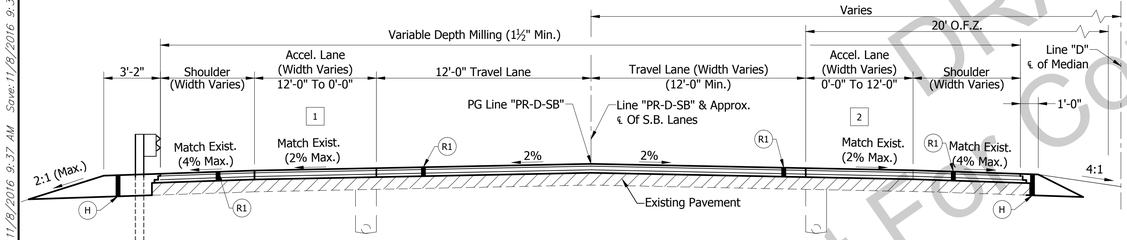
STA. 141+45.00 "PR-D-SB" TO STA. 158+03.35 "PR-D-SB"



PHASE 3: SOUTHBOUND LANES

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

STA. 137+13.15 "PR-D-SB" TO STA. 137+19.15 "PR-D-SB"



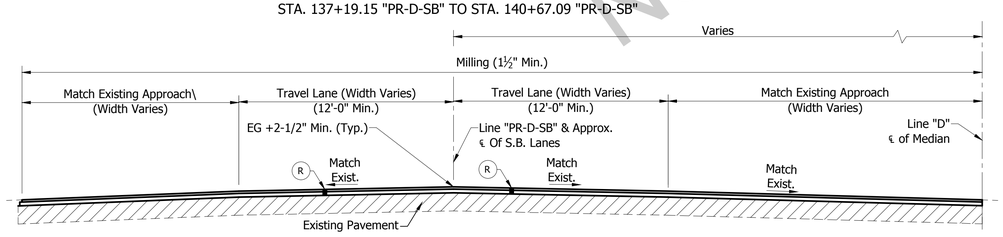
1 Varies 0'-0" To 12'-0" From Sta. 137+19.15 "PR-D-SB" To Sta. 139+00.75 "PR-D-SB"
12'-0" From Sta. 139+00.75 "PR-D-SB" To Sta. 140+67.09 "PR-D-SB"

2 Varies 0'-0" To 12'-0" From Sta. 139+36.98 "PR-D-SB" To Sta. 140+67.09 "PR-D-SB"

PHASE 3 - SOUTHBOUND LANES

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

STA. 137+19.15 "PR-D-SB" TO STA. 140+67.09 "PR-D-SB"



PHASE 3 - SOUTHBOUND LANES

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

STA. 140+67.09 "PR-D-SB" TO STA. 141+45.00 "PR-D-SB"

LEGEND

(R) HMA OVERLAY:
165#/SYD. QC/QA HMA, 4, 76, SURFACE, 9.5mm - SMA
275#/SYD. QC/QA HMA, 4, 76, INTER., 19.0mm on
EXISTING HMA PAVEMENT

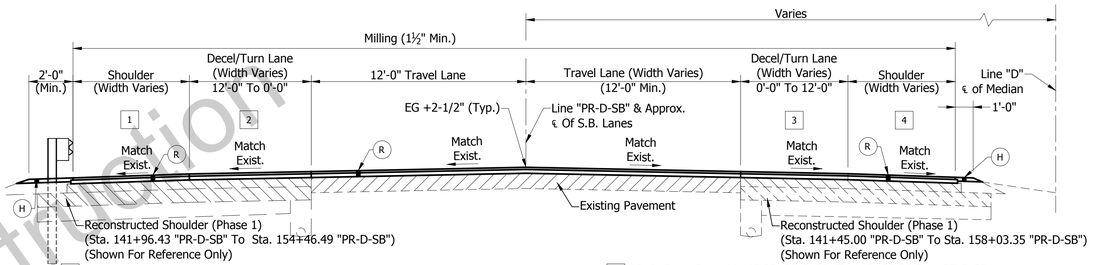
(R1) HMA WEDGE & OVERLAY:
165#/SYD. QC/QA HMA, 4, 76, SURFACE, 9.5mm - SMA
275#/SYD. QC/QA HMA, 4, 76 INTER., 19.0mm on
WEDGE COURSE ON
EXISTING HMA PAVEMENT

(K) ALTERNATE BID HMA DESIGN:
165#/SYD. QC/QA HMA, 4, 76, SURFACE, 9.5mm SMA, on
330#/SYD. QC/QA HMA, 4, 76, INTER., 19.0mm on
385#/SYD. QC/QA HMA, 4, 64, BASE, 19.0mm on
250#/SYD. QC/QA HMA, 5, 76, INTER, OG19mm on
385#/SYD. QC/QA HMA, 4, 64, BASE, 19.0mm on
TYPE IB SUBGRADE TREATMENT (14" CHEMICAL MODIFICATION)

(S) HMA SHOULDER PAVEMENT:
165#/SYD. QC/QA HMA, 3, 70, SURFACE, 9.5mm on
275#/SYD. QC/QA HMA, 3, 70, INTER., 19.0mm on
660#/SYD. QC/QA HMA, 2, 64, BASE, 19.0mm on
TYPE IC SUBGRADE TREATMENT

(S1) HMA OUTSIDE SHOULDER PAVEMENT:
165#/SYD. QC/QA HMA, 2, 64, SURFACE, 9.5mm on
330#/SYD. QC/QA HMA, 2, 64, INTER., 19.00mm on
385#/SYD. QC/QA HMA, 1, 64, BASE, 19.0mm on
250#/SYD. QC/QA HMA, 5, 76, INTER., OG 19mm on
385#/SYD. QC/QA HMA, 1, 64, BASE, 19.0mm on
TYPE IB SUBGRADE TREATMENT (14" CHEMICAL MODIFICATION)

(H) COMPACTED AGG. NO. 53 (DEPTH TO MATCH SHOULDER DEPTH)



1 6'-6" From Sta. 141+45.00 "PR-D-SB" To Sta. 144+96.54 "PR-D-SB"
Varies 6'-6" To 12'-0" From Sta. 144+96.54 "PR-D-SB" To Sta. 146+96.54 "PR-D-SB"
12'-0" From Sta. 146+96.54 "PR-D-SB" To Sta. 153+76.54 "PR-D-SB"

2 12'-0" From Sta. 141+45.00 "PR-D-SB" To Sta. 144+96.54 "PR-D-SB"
Varies 12'-0" To 0'-0" From Sta. 144+96.54 "PR-D-SB" To Sta. 146+96.54 "PR-D-SB"

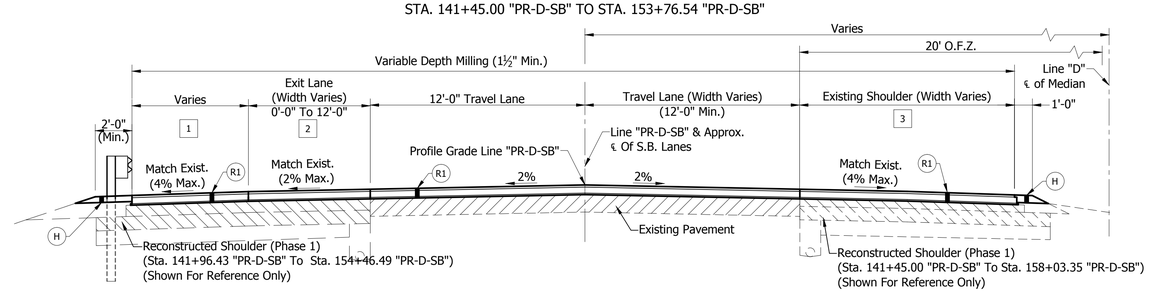
3 12'-0" From Sta. 141+45.00 "PR-D-SB" To 143+96.54 Sta. "PR-D-SB"
Varies 12'-0" To 0'-0" From Sta. 143+96.54 "PR-D-SB" To Sta. 146+96.54 "PR-D-SB"

4 3'-0" From Sta. 141+45.00 "PR-D-SB" To Sta. 143+96.54 "PR-D-SB"
Varies 3'-0" To 12'-0" From Sta. 143+96.54 "PR-D-SB" To Sta. 146+96.54 "PR-D-SB"
12'-0" From Sta. 146+96.54 "PR-D-SB" To Sta. 153+76.54 "PR-D-SB"

PHASE 3 - SOUTHBOUND LANES

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

STA. 141+45.00 "PR-D-SB" TO STA. 153+76.54 "PR-D-SB"



1 12'-0" From Sta. 153+76.54 "PR-D-SB" To Sta. 155+21.50 "PR-D-SB"
Varies 12'-0" To 10'-0" From Sta. 155+21.50 "PR-D-SB" To Sta. 157+46.63 "PR-D-SB"
10'-0" From Sta. 157+46.63 "PR-D-SB" To Sta. 158+03.35 "PR-D-SB"

2 Varies 0'-0" To 12'-0" From Sta. 155+21.50 "PR-D-SB" To Sta. 157+46.63 "PR-D-SB"
12'-0" From Sta. 157+46.43 "PR-D-SB" To Sta. 158+03.35 "PR-D-SB"

3 12'-0" From Sta. 153+76.54 "PR-D-SB" To Sta. 156+46.42 "PR-D-SB"
Varies 12'-0" To 8'-0" From Sta. 156+46.42 "PR-D-SB" To Sta. 158+03.35 "PR-D-SB"

PHASE 3 - SOUTHBOUND LANES

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

STA. 153+76.54 "PR-D-SB" TO STA. 158+03.35 "PR-D-SB"

Note: All Station Calls Reference Line "PR-D-SB" Unless Noted Otherwise

DRAFT
Not For Construction

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
SOUTHBOUND U.S. 41 REHABILITATION BETWEEN
CHEATAM SLOUGH & OHIO RIVER OVERFLOW

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	3 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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LEGEND

(K) ALTERNATE BID HMA DESIGN:
165#/SYD. QC/QA HMA, 4, 76, SURFACE, 9.5mm SMA, on
330#/SYD. QC/QA HMA, 4, 76, INTER., 19.0mm on
385#/SYD. QC/QA HMA, 4, 64, BASE, 19.0mm on
250#/SYD. QC/QA HMA, 5, 76, INTER, OG19mm on
385#/SYD. QC/QA HMA, 4, 64, BASE, 19.0mm on
TYPE IB SUBGRADE TREATMENT (14" CHEMICAL MODIFICATION)

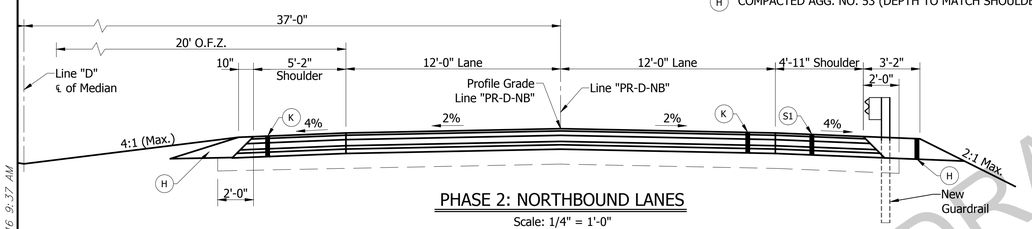
(R) HMA OVERLAY:
165#/SYD. QC/QA HMA, 4, 76, SURFACE, 9.5mm - SMA
275#/SYD. QC/QA HMA, 4, 76, INTER., 19.0mm on
EXISTING HMA PAVEMENT

(R1) HMA WEDGE & OVERLAY:
165#/SYD. QC/QA HMA, 4, 76, SURFACE, 9.5mm - SMA
275#/SYD. QC/QA HMA, 4, 76 INTER., 19.0mm on
WEDGE COURSE ON
EXISTING HMA PAVEMENT

(S) HMA SHOULDER PAVEMENT:
165#/SYD. QC/QA HMA, 3, 70, SURFACE, 9.5mm on
275#/SYD. QC/QA HMA, 3, 70, INTER., 19.0mm on
660#/SYD. QC/QA HMA, 2, 64, BASE, 19.0mm on
TYPE IC SUBGRADE TREATMENT

(S1) HMA OUTSIDE SHOULDER PAVEMENT:
165#/SYD. QC/QA HMA, 2, 64, SURFACE, 9.5mm on
330#/SYD. QC/QA HMA, 2, 64, INTER., 19.00mm on
385#/SYD. QC/QA HMA, 1, 64, BASE, 19.0mm on
250#/SYD. QC/QA HMA, 5, 76, INTER., OG 19mm on
385#/SYD. QC/QA HMA, 1, 64, BASE, 19.0mm on
TYPE IB SUBGRADE TREATMENT (14" CHEMICAL MODIFICATION)

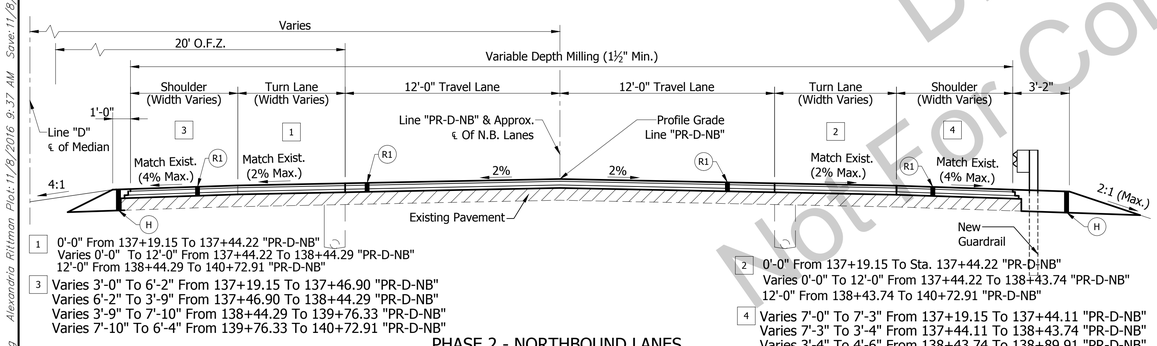
(H) COMPACTED AGG. NO. 53 (DEPTH TO MATCH SHOULDER DEPTH)



PHASE 2: NORTHBOUND LANES

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

STA. 137+13.15 "PR-D-NB" TO STA. 137+19.15 "PR-D-NB"



1 0'-0" From 137+19.15 To 137+44.22 "PR-D-NB"
Varies 0'-0" To 12'-0" From 137+44.22 To 138+44.29 "PR-D-NB"
12'-0" From 138+44.29 To 140+72.91 "PR-D-NB"

2 0'-0" From 137+19.15 To Sta. 137+44.22 "PR-D-NB"
Varies 0'-0" To 12'-0" From 137+44.22 To 138+43.74 "PR-D-NB"
12'-0" From 138+43.74 To 140+72.91 "PR-D-NB"

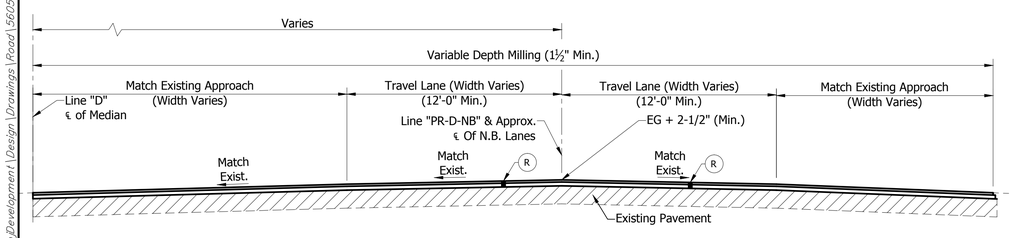
3 Varies 3'-0" To 6'-2" From 137+19.15 To 137+46.90 "PR-D-NB"
Varies 6'-2" To 3'-9" From 137+46.90 To 138+44.29 "PR-D-NB"
Varies 3'-9" To 7'-10" From 138+44.29 To 139+76.33 "PR-D-NB"
Varies 7'-10" To 6'-4" From 139+76.33 To 140+72.91 "PR-D-NB"

4 Varies 7'-0" To 7'-3" From 137+19.15 To 137+44.11 "PR-D-NB"
Varies 7'-3" To 3'-4" From 137+44.11 To 138+43.74 "PR-D-NB"
Varies 3'-4" To 4'-6" From 138+43.74 To 138+89.91 "PR-D-NB"
Varies 4'-6" To 4'-0" From 138+89.91 To 140+72.91 "PR-D-NB"

PHASE 2 - NORTHBOUND LANES

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

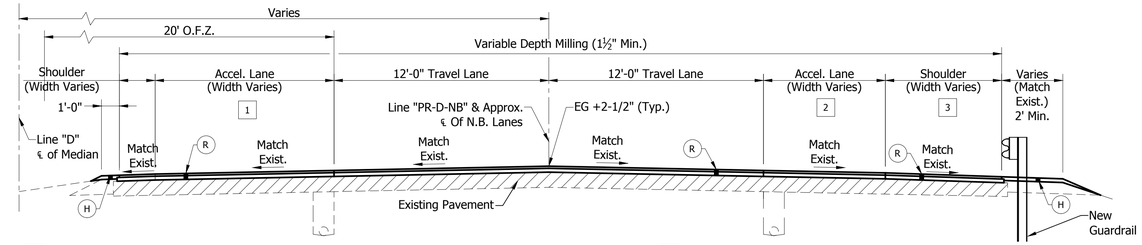
STA. 137+19.15 "PR-D-NB" TO STA. 140+72.91 "PR-D-NB"



PHASE 2 - NORTHBOUND LANES

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

STA. 140+72.91 "PR-D-NB" TO STA. 142+52.62 "PR-D-NB"



1 Varies 16'-0" To 11'-0" From Sta. 141+52.62 "PR-D-NB" To Sta. 142+52.62 "PR-D-NB"

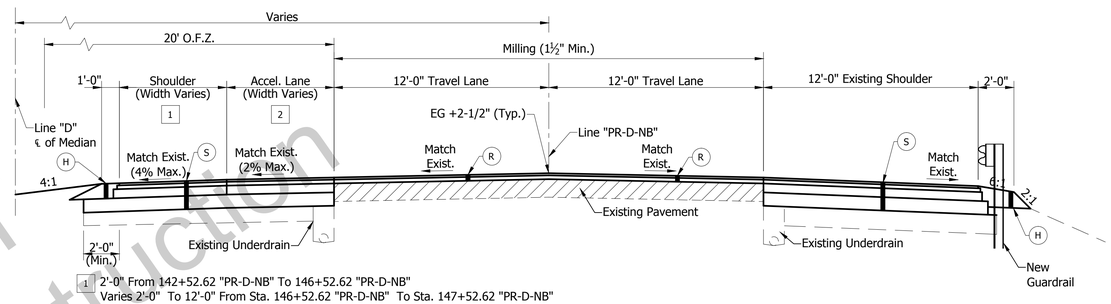
2 Varies 12'-0" To 3'-9" From Sta. 141+52.62 "PR-D-NB" To Sta. 142+52.62 "PR-D-NB"

3 Varies 5'-0" To 8'-11" From Sta. 141+52.62 "PR-D-NB" To Sta. 142+52.62 "PR-D-NB"

PHASE 2 - NORTHBOUND LANES

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

STA. 141+52.62 "PR-D-NB" TO STA. 142+52.62 "PR-D-NB"



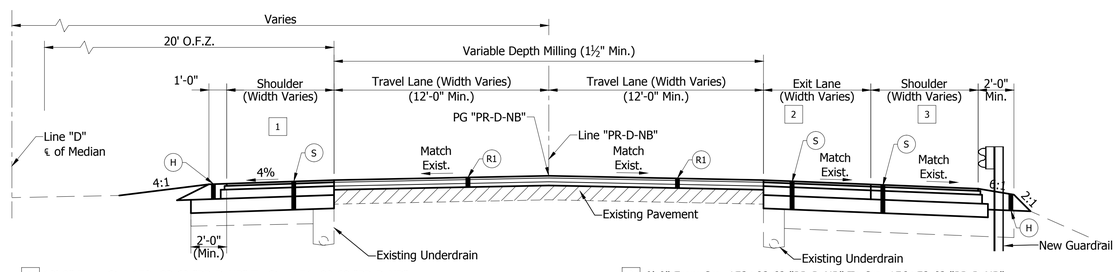
1 2'-0" From 142+52.62 "PR-D-NB" To 146+52.62 "PR-D-NB"
Varies 2'-0" To 12'-0" From Sta. 146+52.62 "PR-D-NB" To Sta. 147+52.62 "PR-D-NB"
12'-0" From Sta. 147+52.62 "PR-D-NB" To Sta. 153+82.62 "PR-D-NB"

2 Varies 11'-0" To 10'-0" From Sta. 142+52.62 "PR-D-NB" To Sta. 143+02.62 "PR-D-NB"
10'-0" From Sta. 143+02.62 "PR-D-NB" To Sta. 146+52.62 "PR-D-NB"
Varies 10'-0" To 0'-0" From Sta. 146+52.62 "PR-D-NB" To Sta. 147+52.62 "PR-D-NB"

PHASE 2: NORTHBOUND LANES

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

STA. 142+52.62 "PR-D-NB" TO STA. 153+82.62 "PR-D-NB"



1 12'-0" From Sta. 153+82.62 "PR-D-NB" To Sta. 154+02.60 "PR-D-NB"
Varies 12'-0" To 5'-0" From Sta. 154+02.60 "PR-D-NB" To Sta. 158+03.35

2 0'-0" From Sta. 153+82.62 "PR-D-NB" To Sta. 156+52.63 "PR-D-NB"
Varies 0'-0" To 12'-0" From Sta. 156+52.63 "PR-D-NB" To Sta. 157+65.00 "PR-D-NB"
12'-0" From Sta. 157+65.00 "PR-D-NB" To Sta. 158+03.35 "PR-D-NB"

3 12'-0" From Sta. 153+82.62 "PR-D-NB" To Sta. 156+52.63 "PR-D-NB"
Varies 12'-0" To 7'-5" From Sta. 156+52.63 "PR-D-NB" To Sta. 157+65.00 "PR-D-NB"
Varies 7'-5" to 9'-9" From Sta. 157+65.00 "PR-D-NB" To Sta. 158+03.35 "PR-D-NB"

PHASE 2: NORTHBOUND LANES

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

STA. 153+82.62 "PR-D-NB" To 158+03.35 "PR-D-NB"

Note: All Station Calls Reference Line "PR-D-NB" Unless Noted Otherwise

DRAFT
Not For Construction

MICHAEL MAHELI REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

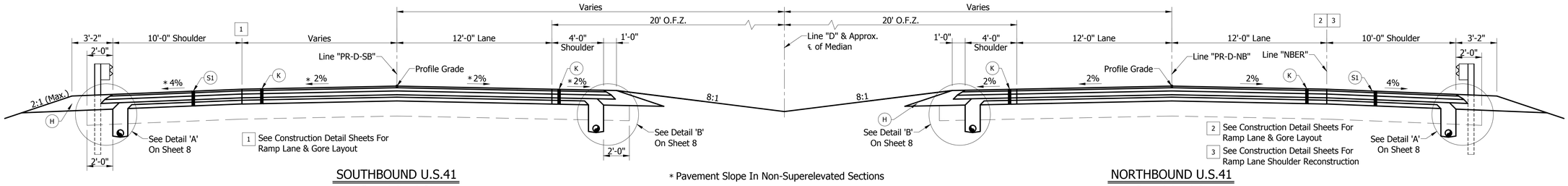
INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
NORTHBOUND U.S. 41 REHABILITATION BETWEEN
CHEATUM SLOUGH TO OHIO RIVER OVERFLOW

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	4 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

U:\5605\Pro\Development\Design\Drawings\Road\5605R211.dwg Alexandria Rittman Plot: 11/8/2016 9:37 AM Save: 11/8/2016 9:37 AM



SOUTHBOUND U.S.41

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

STA. 162+32.85 "PR-D-SB" TO STA. 181+79.00 "PR-D-SB"

* Pavement Slope In Non-Superelevated Sections

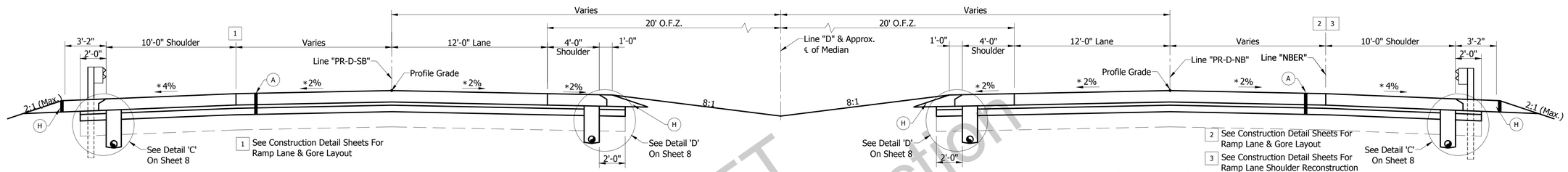
NORTHBOUND U.S.41

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

STA. 162+32.85 "PR-D-NB" TO STA. 181+79.00 "PR-D-NB"

NORTH OF OHIO RIVER OVERFLOW BRIDGE TO SOUTH OF EAGLE CREEK BRIDGE

HMA PAVEMENT ALTERNATE SECTION



SOUTHBOUND U.S.41

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

STA. 162+32.85 "PR-D-SB" TO STA. 181+79.00 "PR-D-SB"

* Pavement Slope In Non-Superelevated Sections

NORTHBOUND U.S.41

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

STA. 162+32.85 "PR-D-NB" TO STA. 181+79.00 "PR-D-NB"

NORTH OF OHIO RIVER OVERFLOW BRIDGE TO SOUTH OF EAGLE CREEK BRIDGE

PCCP PAVEMENT ALTERNATE SECTION

LEGEND

(A) ALTERNATE BID PCCP DESIGN (MAINLINE & SHOULDERS):
QC/QA PCCP, 10.5" on SUBBASE FOR PCCP CONSISTING OF:
3" OF COARSE AGG. NO. 8 on
6" OF COARSE AGG. NO. 53 on
TYPE IB SUBGRADE TREATMENT (14" CHEMICAL MODIFICATION)

(K) ALTERNATE BID HMA DESIGN:
165#/SYD. QC/QA HMA, 4, 76, SURFACE, 9.5mm SMA, on
330#/SYD. QC/QA HMA, 4, 76, INTER., 19.0mm on
385#/SYD. QC/QA HMA, 4, 64, BASE, 19.0mm on
250#/SYD. QC/QA HMA, 5, 76, INTER, OG19mm on
385#/SYD. QC/QA HMA, 4, 64, BASE, 19.0mm on
TYPE IB SUBGRADE TREATMENT (14" CHEMICAL MODIFICATION)

(S1) HMA OUTSIDE SHOULDER PAVEMENT:
165#/SYD. QC/QA HMA, 2, 64, SURFACE, 9.5mm on
330#/SYD. QC/QA HMA, 2, 64, INTER., 19.00mm on
385#/SYD. QC/QA HMA, 1, 64, BASE, 19.0mm on
250#/SYD. QC/QA HMA, 5, 76, INTER., OG 19mm on
385#/SYD. QC/QA HMA, 1, 64, BASE, 19.0mm on
TYPE IB SUBGRADE TREATMENT (14" CHEMICAL MODIFICATION)

(H) COMPACTED AGG. NO. 53 (DEPTH TO MATCH SHOULDER DEPTH)

DRAFT
Not For Construction

U:\5605\Pro_Development\Design\Drawings\Road\5605R211.dwg Alexandria Rittman Plot: 11/8/2016 9:37 AM Save: 11/8/2016 9:37 AM

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK

CHECKED: MM CHECKED: BZ

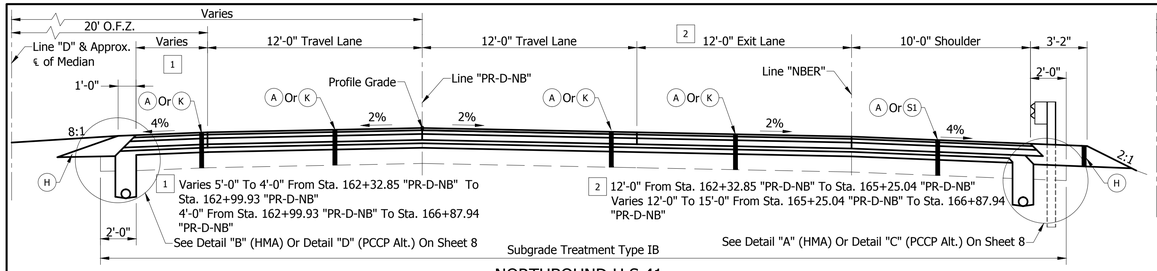
INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
U.S. 41 RECONSTRUCTION BETWEEN
OHIO RIVER OVERFLOW AND EAGLE CREEK

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
1" = 10'	1592481
SURVEY BOOK	SHEET
	5 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605

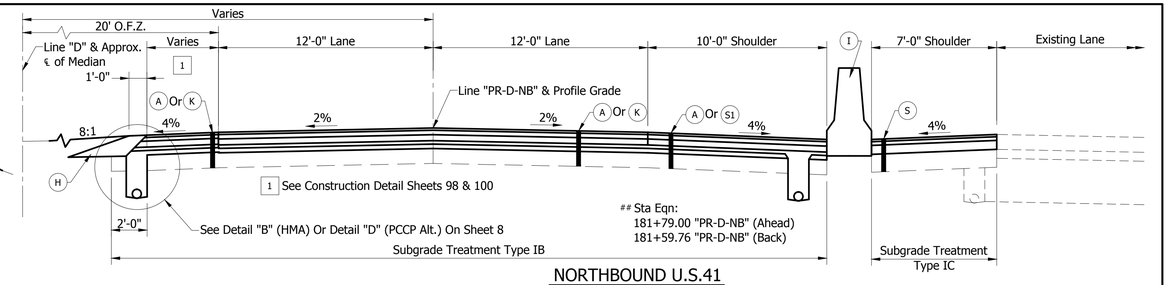
BFS NO.



NORTHBOUND U.S.41

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

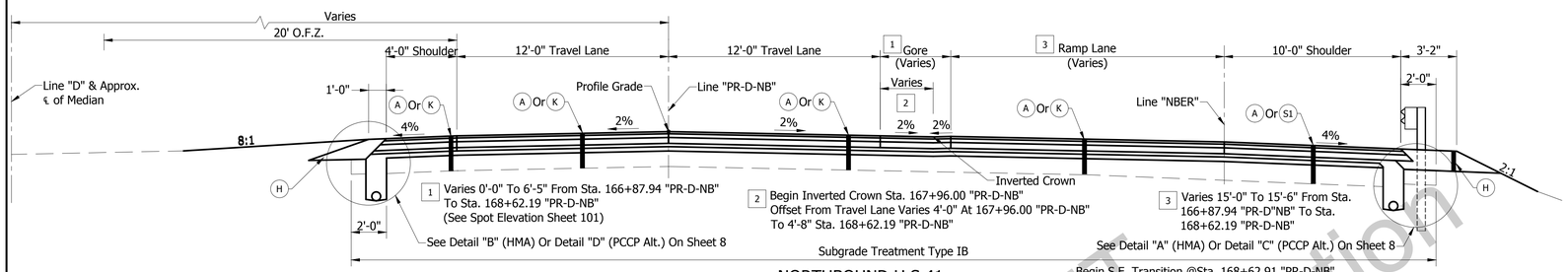
STA. 162+32.85 "PR-D-NB" TO STA. 166+87.94 "PR-D-NB"



NORTHBOUND U.S.41

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

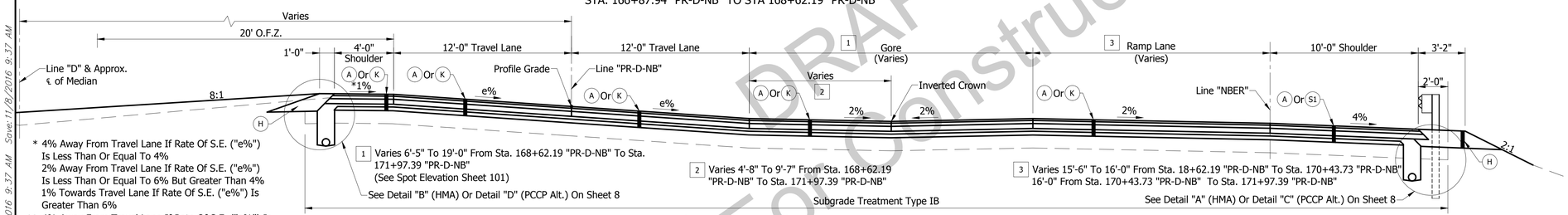
STA. 181+51.63 "PR-D-NB" TO 181+79.00 "PR-D-NB"



NORTHBOUND U.S.41

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

STA. 166+87.94 "PR-D-NB" TO STA 168+62.19 "PR-D-NB"



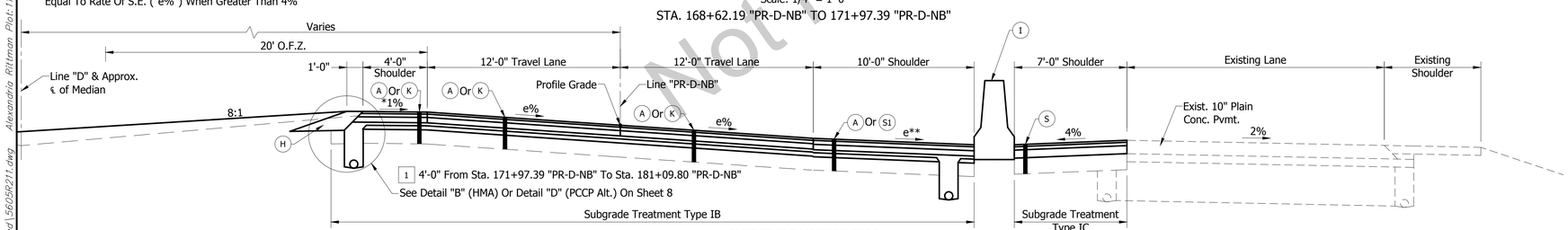
* 4% Away From Travel Lane If Rate Of S.E. ("e%") Is Less Than Or Equal To 4%
2% Away From Travel Lane If Rate Of S.E. ("e%") Is Less Than Or Equal To 6% But Greater Than 4%
1% Towards Travel Lane If Rate Of S.E. ("e%") Is Greater Than 6%

** 4% Away From Travel Lane If Rate Of S.E. ("e%") Is Less Than Or Equal To 4%
Equal To Rate Of S.E. ("e%") When Greater Than 4%

NORTHBOUND U.S.41

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

STA. 168+62.19 "PR-D-NB" TO 171+97.39 "PR-D-NB"



End S.E. Transition @Sta. 181+51.63 "PR-D-NB"

NORTHBOUND U.S.41

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

STA. 171+97.39 "PR-D-NB" TO 181+51.63 "PR-D-NB"

LEGEND

(A) ALTERNATE BID PCCP DESIGN (MAINLINE & SHOULDERS):
QC/QA PCCP, 10.5" on SUBBASE FOR PCCP CONSISTING OF:
3" OF COARSE AGG. NO. 8 on
6" OF COARSE AGG. NO. 53 on
TYPE IB SUBGRADE TREATMENT (14" CHEMICAL MODIFICATION)

(K) ALTERNATE BID HMA DESIGN:
165#/SYD. QC/QA HMA, 4, 76, SURFACE, 9.5mm SMA, on
330#/SYD. QC/QA HMA, 4, 76, INTER., 19.0mm on
385#/SYD. QC/QA HMA, 4, 64, BASE, 19.0mm on
250#/SYD. QC/QA HMA, 5, 76, INTER, OG19mm on
385#/SYD. QC/QA HMA, 4, 64, BASE, 19.0mm on
TYPE IB SUBGRADE TREATMENT (14" CHEMICAL MODIFICATION)

(S) HMA SHOULDER PAVEMENT:
165#/SYD. QC/QA HMA, 3, 70, SURFACE, 9.5mm on
275#/SYD. QC/QA HMA, 3, 70, INTER., 19.0mm on
660#/SYD. QC/QA HMA, 2, 64, BASE, 19.0mm on
TYPE IC SUBGRADE TREATMENT

(S1) HMA OUTSIDE SHOULDER PAVEMENT:
165#/SYD. QC/QA HMA, 2, 64, SURFACE, 9.5mm on
330#/SYD. QC/QA HMA, 2, 64, INTER., 19.00mm on
385#/SYD. QC/QA HMA, 1, 64, BASE, 19.0mm on
250#/SYD. QC/QA HMA, 5, 76, INTER., OG 19mm on
385#/SYD. QC/QA HMA, 1, 64, BASE, 19.0mm on
TYPE IB SUBGRADE TREATMENT (14" CHEMICAL MODIFICATION)

(H) COMPACTED AGG. NO. 53 (DEPTH TO MATCH SHOULDER DEPTH)

(I) CONCRETE MEDIAN BARRIER

Note: All Station Calls Reference Line "PR-D-NB" Unless Noted Otherwise

MICHAEL MAKEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Michael Makel 10/31/16
DESIGN ENGINEER DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
NORTHBOUND U.S. 41 RECONSTRUCTION BETWEEN OHIO RIVER OVERFLOW AND EAGLE CREEK

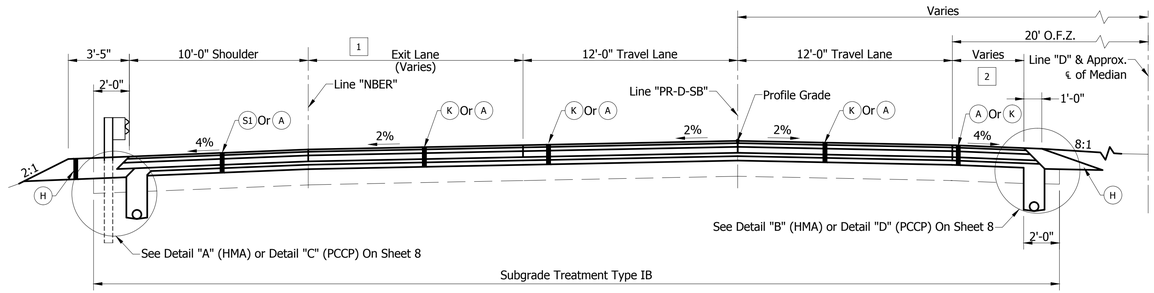
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	6 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605

BFS NO.

DRAFT Not For Construction

U:\5605\ProDevelopment\Design\Drawings\Road\5605ts211.dwg Alexandria Rittman Plot:11/8/2016 9:37 AM Save:11/8/2016 9:37 AM



1 12'-0" From Sta. 162+32.85 "PR-D-SB" To Sta. 164+99.98 "PR-D-SB"

Varies 12'-0" To 13'-0" From Sta. 164+99.98 "PR-D-SB" To Sta. 167+99.91 "PR-D-SB"

Varies 13'-0" To 13'-6" From Sta. 167+99.91 "PR-D-SB" To Sta. 168+64.21 "PR-D-SB"

(See Spot Elevation Sheet 101)

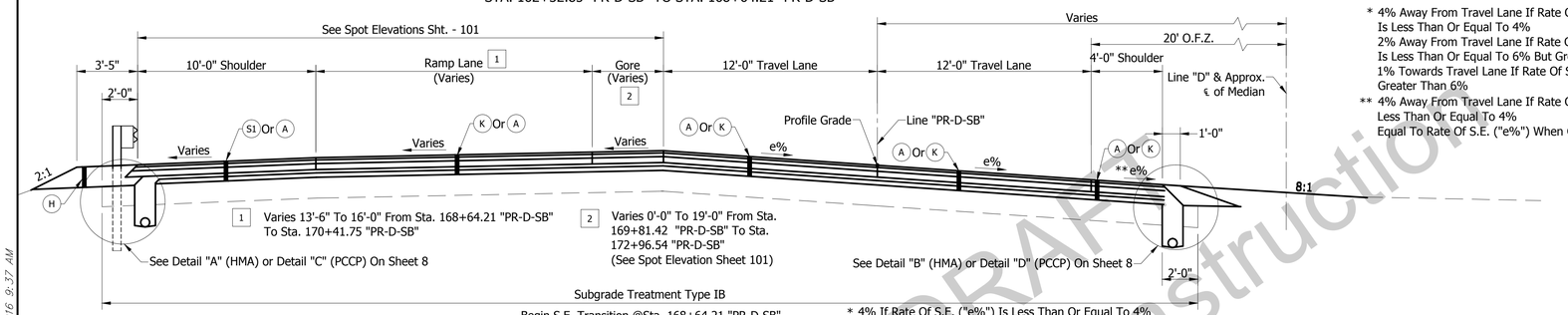
2 Varies 8'-0" To 4'-0" From Sta. 162+32.85 "PR-D-SB" To Sta. 163+00.06 "PR-D-SB"

4'-0" From Sta. 163+00.06 "PR-D-SB" To Sta. 168+64.21 "PR-D-SB"

SOUTHBOUND U.S.41

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

STA. 162+32.85 "PR-D-SB" TO STA. 168+64.21 "PR-D-SB"



* 4% Away From Travel Lane If Rate Of S.E. ("e%") Is Less Than Or Equal To 4%
2% Away From Travel Lane If Rate Of S.E. ("e%") Is Less Than Or Equal To 6% But Greater Than 4%
1% Towards Travel Lane If Rate Of S.E. ("e%") Is Greater Than 6%

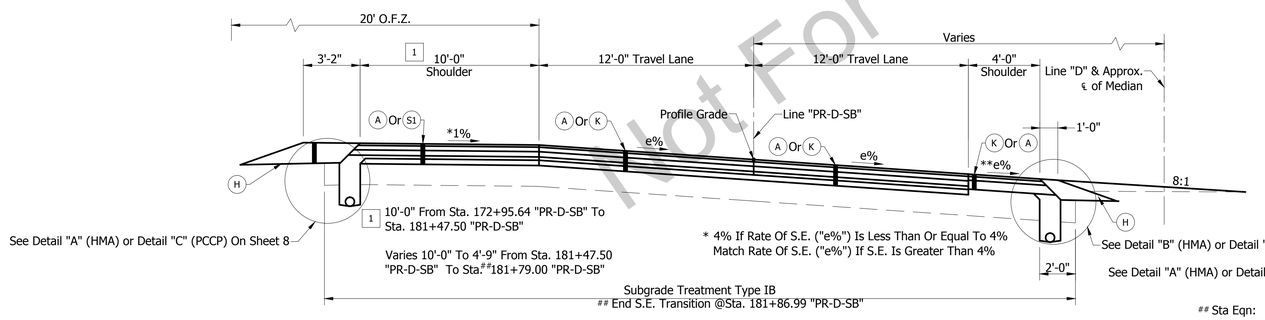
** 4% Away From Travel Lane If Rate Of S.E. ("e%") Is Less Than Or Equal To 4%
Equal To Rate Of S.E. ("e%") When Greater Than 4%

* 4% If Rate Of S.E. ("e%") Is Less Than Or Equal To 4%
Match Rate Of S.E. ("e%") If S.E. Is Greater Than 4%

SOUTBOUND U.S.41

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

STA. 168+64.21 "PR-D-SB" TO STA. 172+95.64 "PR-D-SB"

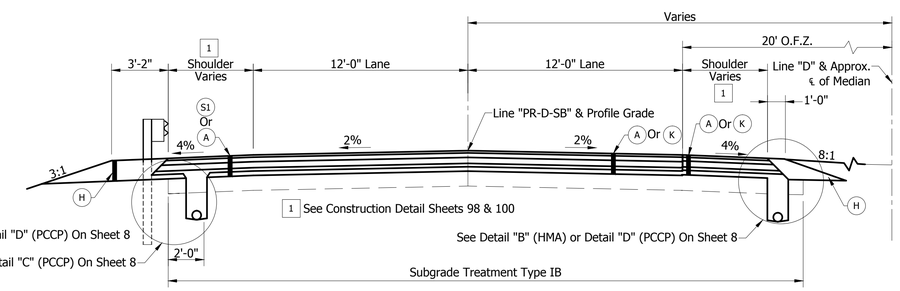


* 4% If Rate Of S.E. ("e%") Is Less Than Or Equal To 4%
Match Rate Of S.E. ("e%") If S.E. Is Greater Than 4%

SOUTHBOUND U.S.41

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

STA 172+95.64 "PR-D-SB" TO STA. 181+86.99 "PR-D-SB"



SOUTHBOUND U.S.41

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

STA. 181+86.99 "PR-D-SB" TO STA. 181+79.00 "PR-D-SB"

Sta Eqn:
181+79.00 "PR-D-SB" (Ahead)
181+97.57 "PR-D-SB" (Back)

LEGEND

(A) ALTERNATE BID PCCP DESIGN (MAINLINE & SHOULDERS):
QC/QA PCCP, 10.5" on SUBBASE FOR PCCP CONSISTING OF:
3" OF COARSE AGG. NO. 8 on
6" OF COARSE AGG. NO. 53 on
TYPE IB SUBGRADE TREATMENT (14" CHEMICAL MODIFICATION)

(K) ALTERNATE BID HMA DESIGN:
165#/SYD. QC/QA HMA, 4, 76, SURFACE, 9.5mm SMA, on
330#/SYD. QC/QA HMA, 4, 76, INTER., 19.0mm on
385#/SYD. QC/QA HMA, 4, 64, BASE, 19.0mm on
250#/SYD. QC/QA HMA, 5, 76, INTER, OG19mm on
385#/SYD. QC/QA HMA, 4, 64, BASE, 19.0mm on
TYPE IB SUBGRADE TREATMENT (14" CHEMICAL MODIFICATION)

(S1) HMA OUTSIDE SHOULDER PAVEMENT:
165#/SYD. QC/QA HMA, 2, 64, SURFACE, 9.5mm on
330#/SYD. QC/QA HMA, 2, 64, INTER., 19.00mm on
385#/SYD. QC/QA HMA, 1, 64, BASE, 19.0mm on
250#/SYD. QC/QA HMA, 5, 76, INTER., OG 19mm on
385#/SYD. QC/QA HMA, 1, 64, BASE, 19.0mm on
TYPE IB SUBGRADE TREATMENT (14" CHEMICAL MODIFICATION)

(H) COMPACTED AGG. NO. 53 (DEPTH TO MATCH SHOULDER DEPTH)

Note: All Station Calls Reference Line "PR-D-SB" Unless Noted Otherwise

MICHAEL MALEK REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
SOUTHBOUND U.S. 41 RECONSTRUCTION BETWEEN OHIO RIVER OVERFLOW AND EAGLE CREEK

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	7 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

DRAFT
Not For Construction

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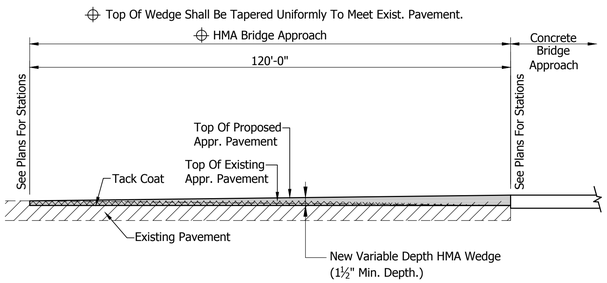
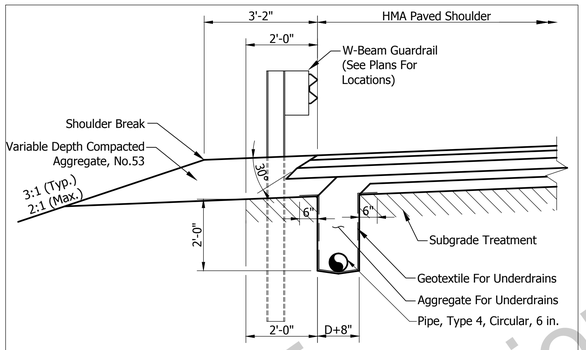


HMA WEDGE APPR SECTION ALONG CENTERLINE of ROADWAY

INCIDENTAL CONSTRUCTION

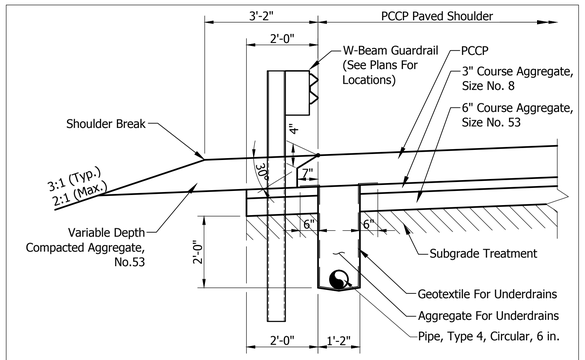
Not to Scale



DETAIL 'A'

(HMA OUTSIDE SHOULDER)

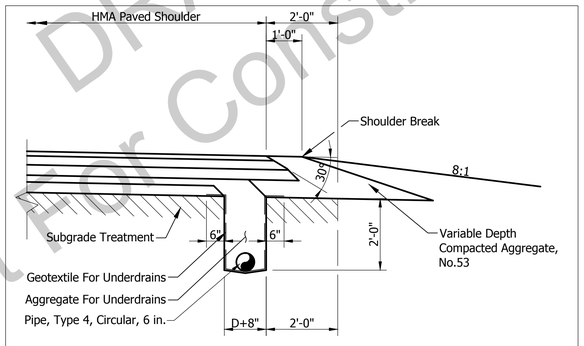
Scale: 1/2"= 1'-0"



DETAIL 'C'

(PCCP OUTSIDE SHOULDER)

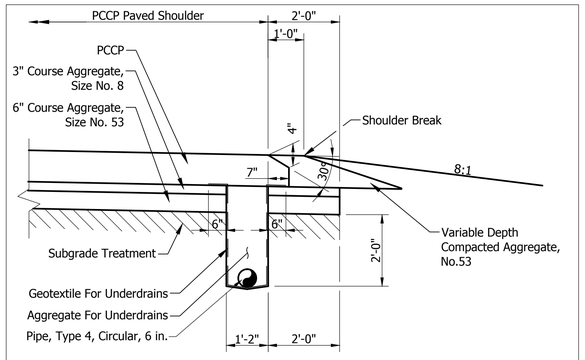
Scale: 1/2"= 1'-0"



DETAIL 'B'

(HMA INSIDE SHOULDER)

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



DETAIL 'D'

(PCCP INSIDE SHOULDER)

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

DRAFT
Not For Construction

U:\5605\ProDevelopment\Design\Drawings\Road\5605R211.dwg Lawrence Kirsch Plot: 11/8/2016 3:37 PM Save: 11/8/2016 3:34 PM

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: M. Mael 10/31/16
DESIGN ENGINEER DATE

DESIGNED: BZ DRAWN: LK

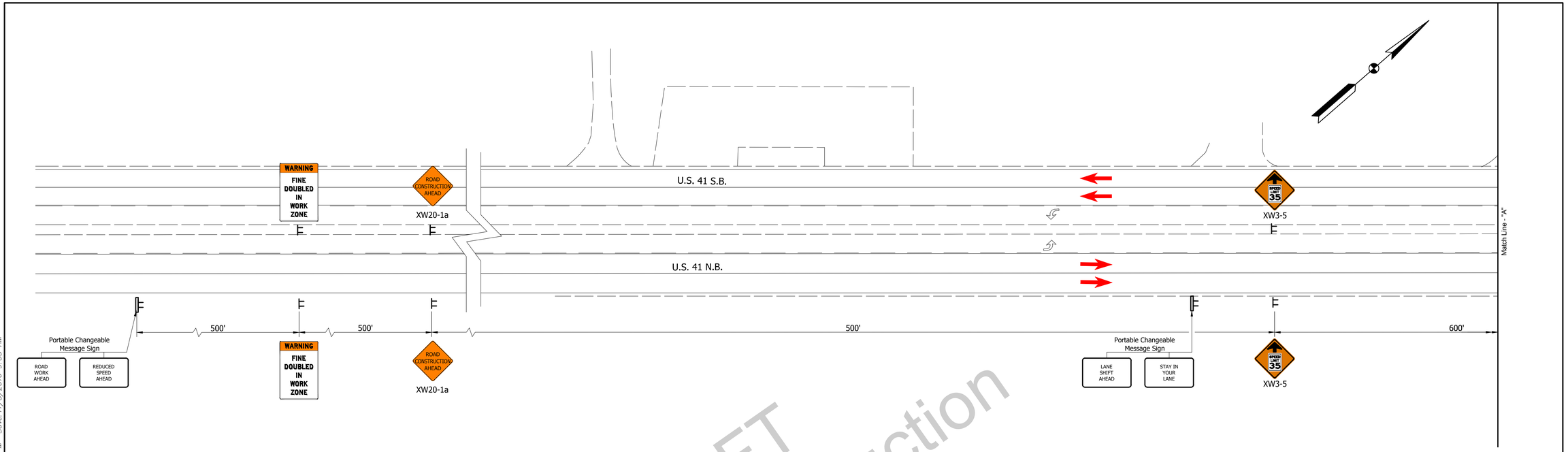
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
DETAILS

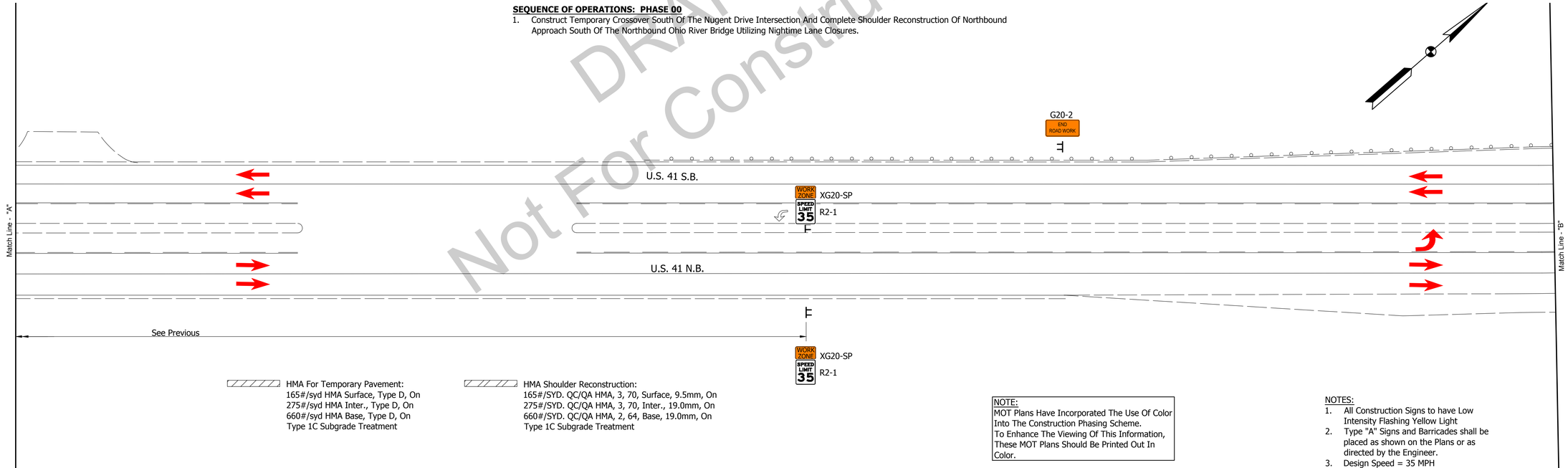
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	8 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605



SEQUENCE OF OPERATIONS: PHASE 00

1. Construct Temporary Crossover South Of The Nugent Drive Intersection And Complete Shoulder Reconstruction Of Northbound Approach South Of The Northbound Ohio River Bridge Utilizing Nightime Lane Closures.



HMA For Temporary Pavement:
165#/syd HMA Surface, Type D, On
275#/syd HMA Inter., Type D, On
660#/syd HMA Base, Type D, On
Type 1C Subgrade Treatment

HMA Shoulder Reconstruction:
165#/SYD. QC/QA HMA, 3, 70, Surface, 9.5mm, On
275#/SYD. QC/QA HMA, 3, 70, Inter., 19.0mm, On
660#/SYD. QC/QA HMA, 2, 64, Base, 19.0mm, On
Type 1C Subgrade Treatment

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

NOTES:
1. All Construction Signs to have Low Intensity Flashing Yellow Light
2. Type "A" Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
3. Design Speed = 35 MPH

LEGEND

- Permanent Construction This Phase
- Temporary Construction This Phase
- Direction Of Traffic
- Construction Drum
- Construction Sign
- Portable Changeable Message Sign

MICHAEL MAHEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 00

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	---
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	9 OF 164
CONTRACT	PROJECT
B-33539	1592481

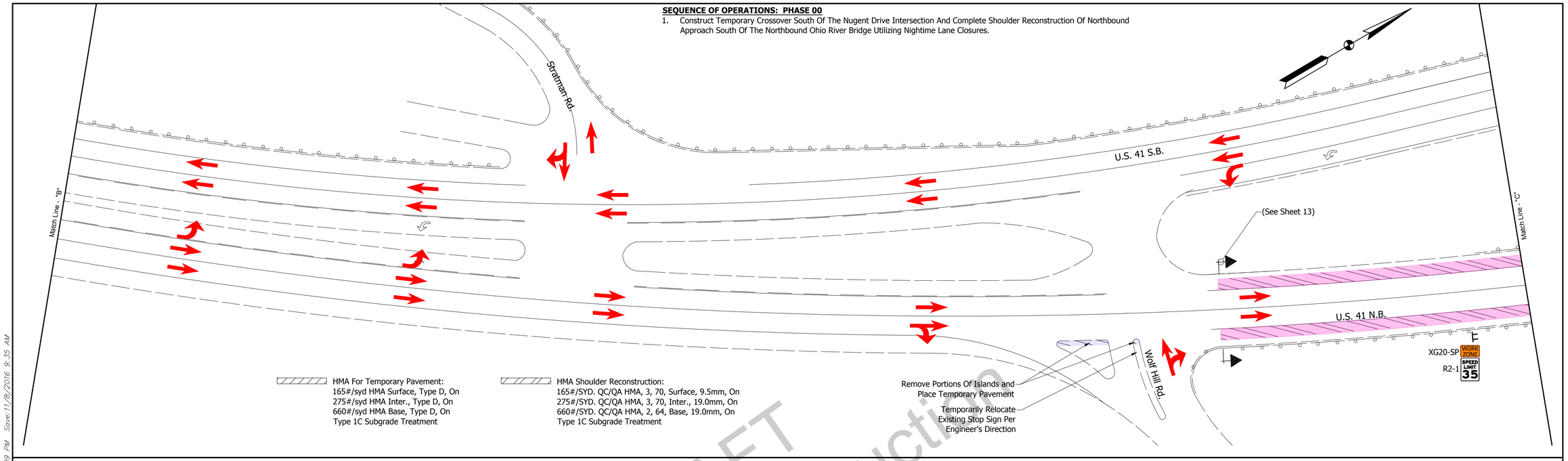
BFS NO. 5605

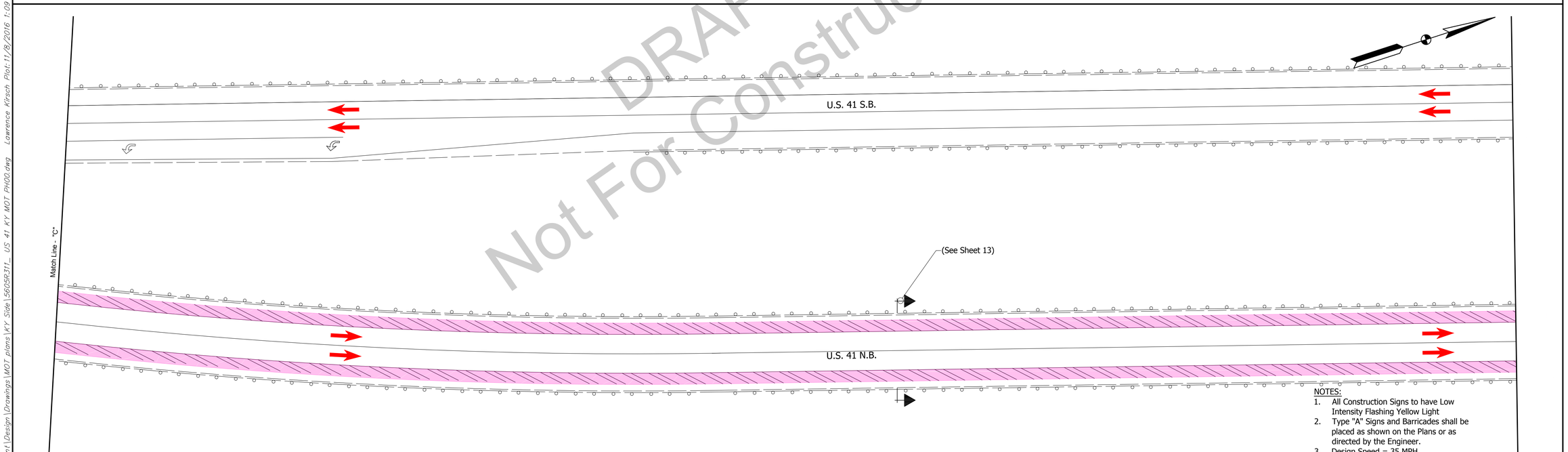
DRAFT
Not For Construction

U:\5605\Pro_Development\Design\Drawings\MOT plans\KY Side\5605R31_ US 41 KY MOT PH00.dwg Lawrence Kirsch Plot:11/8/2016 1:09 PM Save:11/8/2016 9:35 AM

SEQUENCE OF OPERATIONS: PHASE 00

1. Construct Temporary Crossover South Of The Nugent Drive Intersection And Complete Shoulder Reconstruction Of Northbound Approach South Of The Northbound Ohio River Bridge Utilizing Nightime Lane Closures.





NOTES:

1. All Construction Signs to have Low Intensity Flashing Yellow Light
2. Type "A" Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
3. Design Speed = 35 MPH

DRAFT
Not For Construction

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

LEGEND

- Permanent Construction This Phase
- Temporary Construction This Phase
- Direction Of Traffic
- Construction Drum
- Construction Sign
- Portable Changeable Message Sign

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

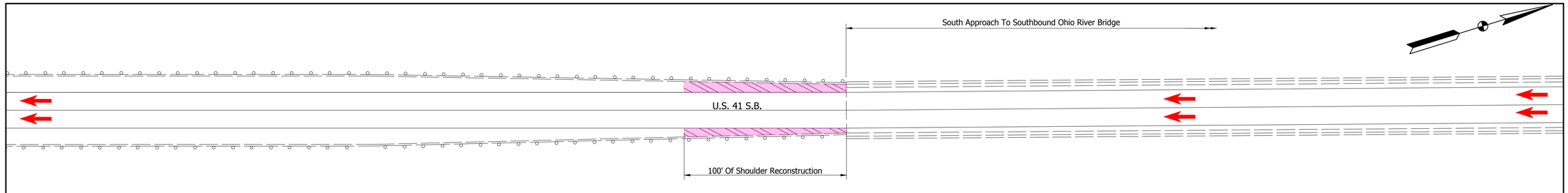
INDIANA
DEPARTMENT OF TRANSPORTATION

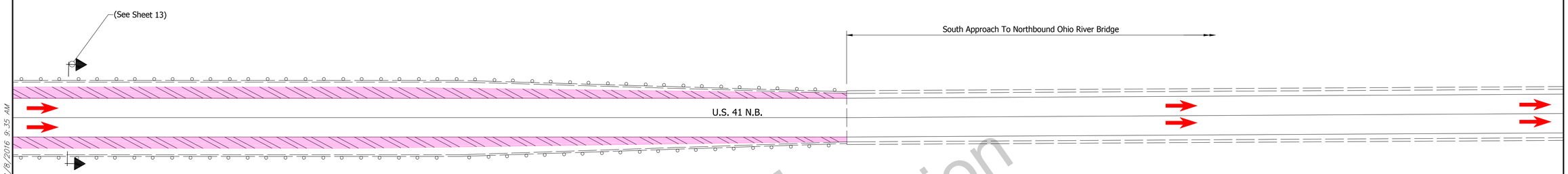
MAINTENANCE OF TRAFFIC
PHASE 00

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	---
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	10 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

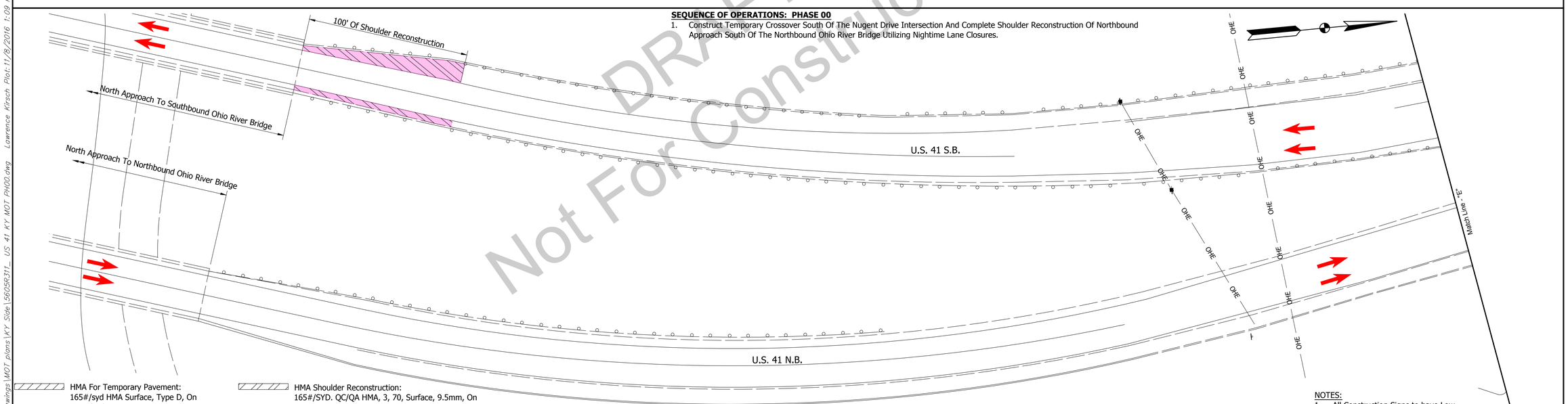
U:\5605\Pre Development\Design\Drawings\MOT plans\KY Side\5605R31_ US 41 KY MOT PH00.dwg Lawrence Kirsch Plot:11/8/2016 1:09 PM Save:11/8/2016 9:35 AM





SEQUENCE OF OPERATIONS: PHASE 00

1. Construct Temporary Crossover South Of The Nugent Drive Intersection And Complete Shoulder Reconstruction Of Northbound Approach South Of The Northbound Ohio River Bridge Utilizing Nightime Lane Closures.



HMA For Temporary Pavement:
165#/syd HMA Surface, Type D, On
275#/syd HMA Inter., Type D, On
660#/syd HMA Base, Type D, On
Type 1C Subgrade Treatment

HMA Shoulder Reconstruction:
165#/SYD. QC/QA HMA, 3, 70, Surface, 9.5mm, On
275#/SYD. QC/QA HMA, 3, 70, Inter., 19.0mm, On
660#/SYD. QC/QA HMA, 2, 64, Base, 19.0mm, On
Type 1C Subgrade Treatment

NOTES:
1. All Construction Signs to have Low Intensity Flashing Yellow Light
2. Type "A" Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
3. Design Speed = 35 MPH

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

LEGEND

Permanent Construction This Phase
Temporary Construction This Phase
Direction Of Traffic
Construction Drum
Construction Sign
Portable Changeable Message Sign

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

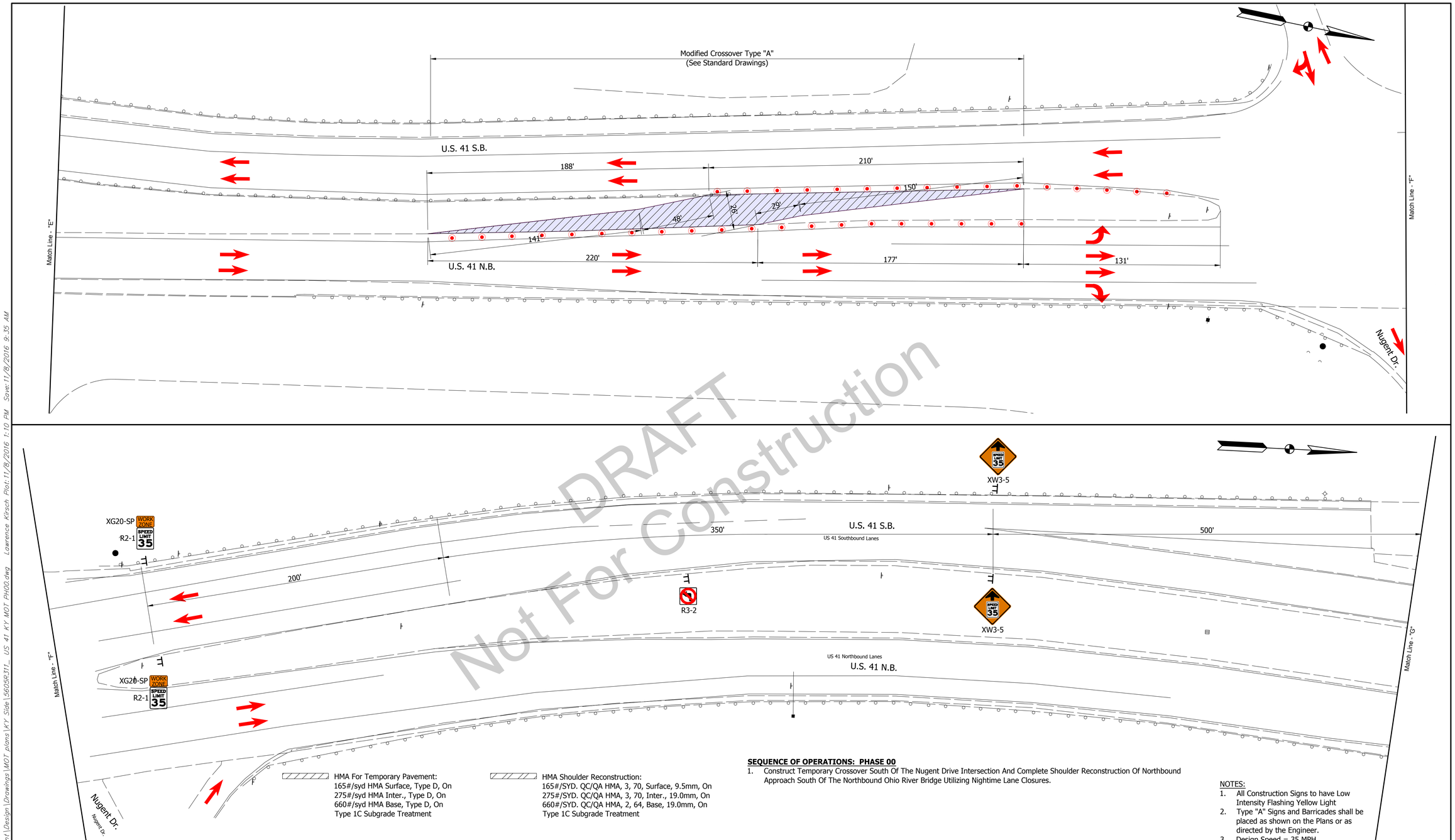
MAINTENANCE OF TRAFFIC
PHASE 00

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	---
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	11 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

DRAFT
Not For Construction

U:\5605\Pro Development\Design\Drawings\MOT plans\KY Side\5605R31_ US 41 KY MOT PH00.dwg Lawrence Kirsch Plot:11/8/2016 1:09 PM Save:11/8/2016 9:35 AM



DRAFT
Not For Construction

HMA For Temporary Pavement:
165#/syd HMA Surface, Type D, On
275#/syd HMA Inter., Type D, On
660#/syd HMA Base, Type D, On
Type 1C Subgrade Treatment

HMA Shoulder Reconstruction:
165#/SYD. QC/QA HMA, 3, 70, Surface, 9.5mm, On
275#/SYD. QC/QA HMA, 3, 70, Inter., 19.0mm, On
660#/SYD. QC/QA HMA, 2, 64, Base, 19.0mm, On
Type 1C Subgrade Treatment

SEQUENCE OF OPERATIONS: PHASE 00

1. Construct Temporary Crossover South Of The Nugent Drive Intersection And Complete Shoulder Reconstruction Of Northbound Approach South Of The Northbound Ohio River Bridge Utilizing Nightime Lane Closures.

NOTES:

1. All Construction Signs to have Low Intensity Flashing Yellow Light
2. Type "A" Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
3. Design Speed = 35 MPH

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

LEGEND

- Permanent Construction This Phase
- Temporary Construction This Phase
- Direction Of Traffic
- Construction Drum
- Construction Sign
- Portable Changeable Message Sign

MICHAEL MATEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 00

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	---
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	12 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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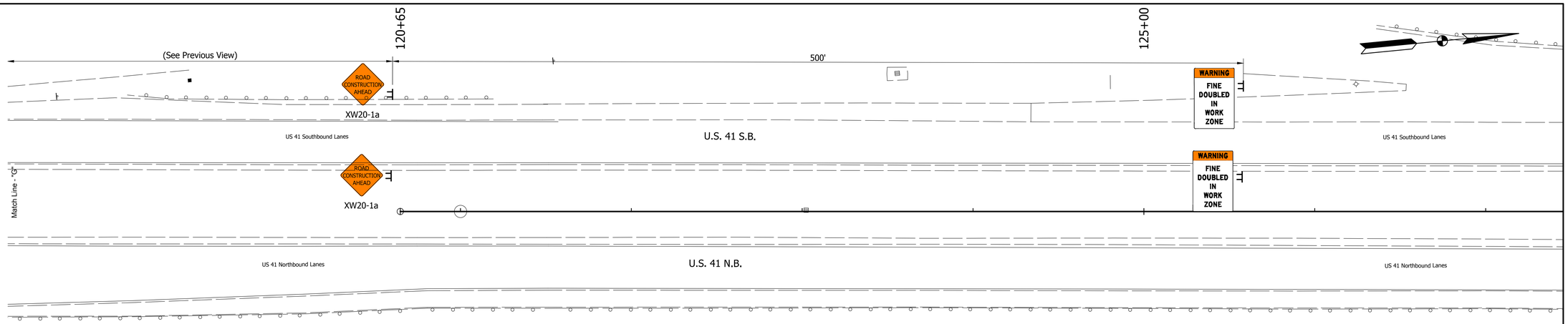
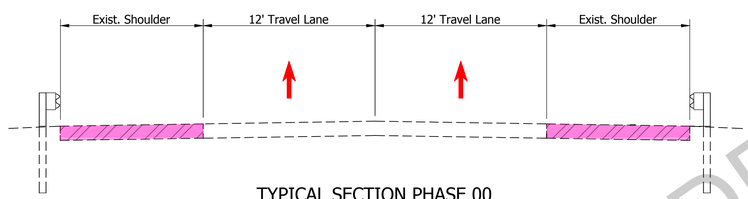
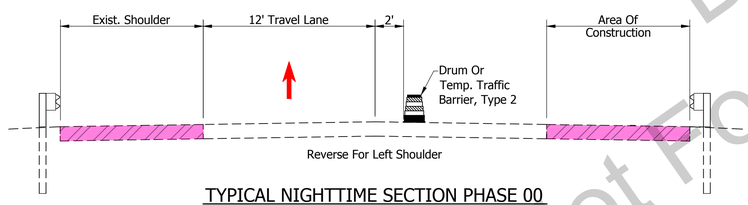


SEQUENCE OF OPERATIONS: PHASE 00

1. Construct Temporary Crossover South Of The Nugent Drive Intersection And Complete Shoulder Reconstruction Of Northbound Approach South Of The Northbound Ohio River Bridge Utilizing Nightime Lane Closures.



TYPICAL SECTION PHASE 00
Scale: Not To Scale



TYPICAL NIGHTTIME SECTION PHASE 00
Scale: Not To Scale

DRAFT
Not For Construction

HMA For Temporary Pavement:
165#/syd HMA Surface, Type D, On
275#/syd HMA Inter., Type D, On
660#/syd HMA Base, Type D, On
Type 1C Subgrade Treatment

HMA Shoulder Reconstruction:
165#/SYD. QC/QA HMA, 3, 70, Surface, 9.5mm, On
275#/SYD. QC/QA HMA, 3, 70, Inter., 19.0mm, On
660#/SYD. QC/QA HMA, 2, 64, Base, 19.0mm, On
Type 1C Subgrade Treatment

NOTES:
1. All Construction Signs to have Low Intensity Flashing Yellow Light
2. Type "A" Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
3. Design Speed = 35 MPH

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

LEGEND

- Permanent Construction This Phase
- Temporary Construction This Phase
- Direction Of Traffic
- Construction Drum
- Construction Sign
- Portable Changeable Message Sign

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

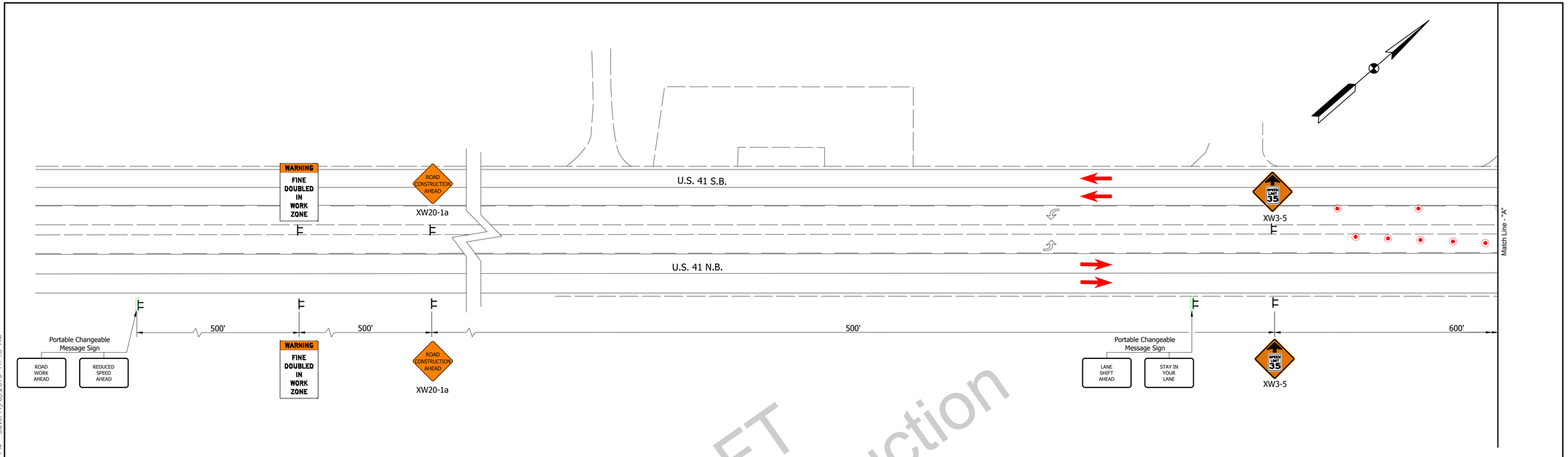
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 00

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	---
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	13 OF 164
CONTRACT	PROJECT
B-33539	1592481

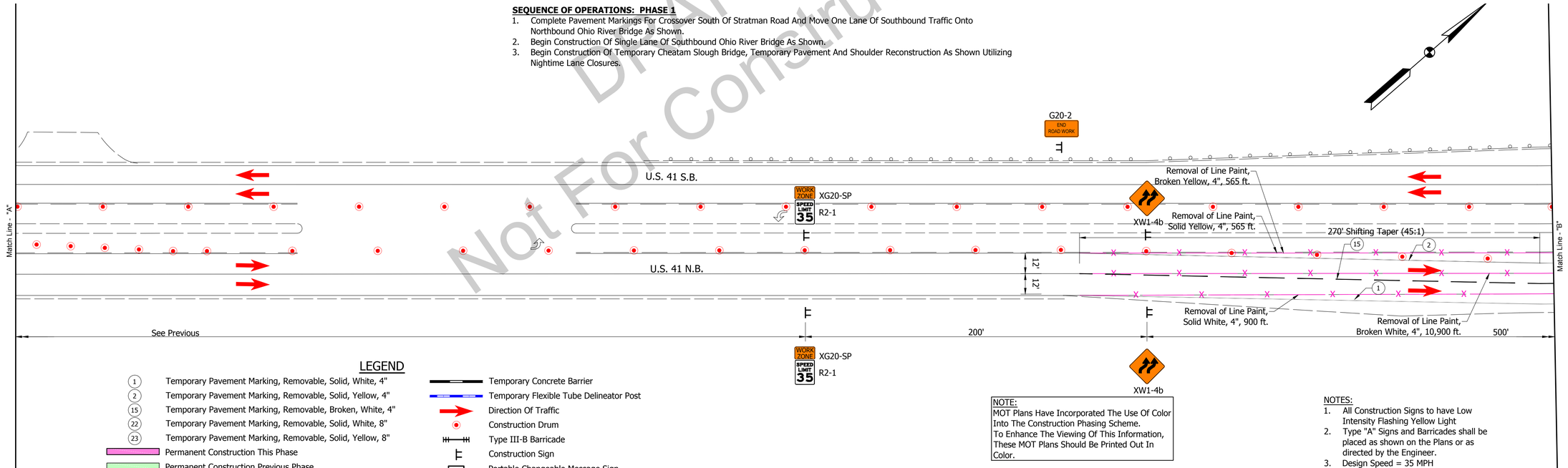
5605
BFS NO.

U:\5605\Pro_Development\Design\Drawings\MOT plans\KY Side\5605R311_ US 41 KY MOT PH00.dwg Lawrence Kirsch Plot:11/8/2016 1:10 PM Save:11/8/2016 9:35 AM



SEQUENCE OF OPERATIONS: PHASE 1

1. Complete Pavement Markings For Crossover South Of Stratman Road And Move One Lane Of Southbound Traffic Onto Northbound Ohio River Bridge As Shown.
2. Begin Construction Of Single Lane Of Southbound Ohio River Bridge As Shown.
3. Begin Construction Of Temporary Cheatam Slough Bridge, Temporary Pavement And Shoulder Reconstruction As Shown Utilizing Nightime Lane Closures.



LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"
- Permanent Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Energy Absorbing Terminal, Type 2
- Temporary Concrete Barrier
- Temporary Flexible Tube Delineator Post
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign
- Arrow Board Display
- Line Removal

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

NOTES:

1. All Construction Signs to have Low Intensity Flashing Yellow Light
2. Type "A" Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
3. Design Speed = 35 MPH

MICHAEL MAHER REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: M. Maher 10/31/16
DESIGN ENGINEER DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	---
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	14 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

DRAFT
Not For Construction

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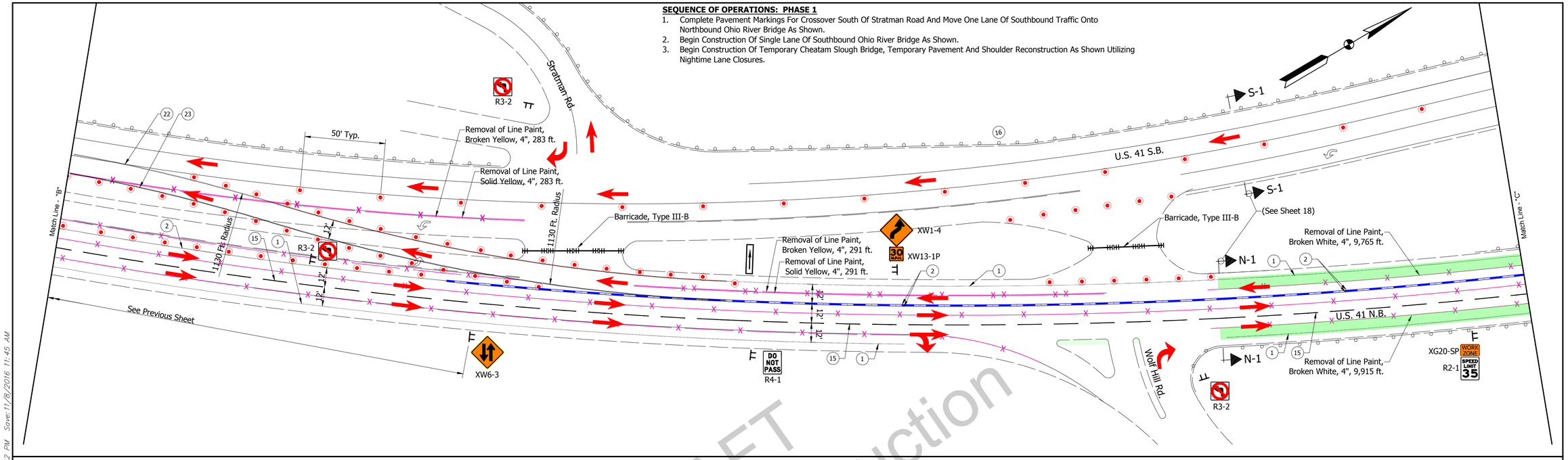
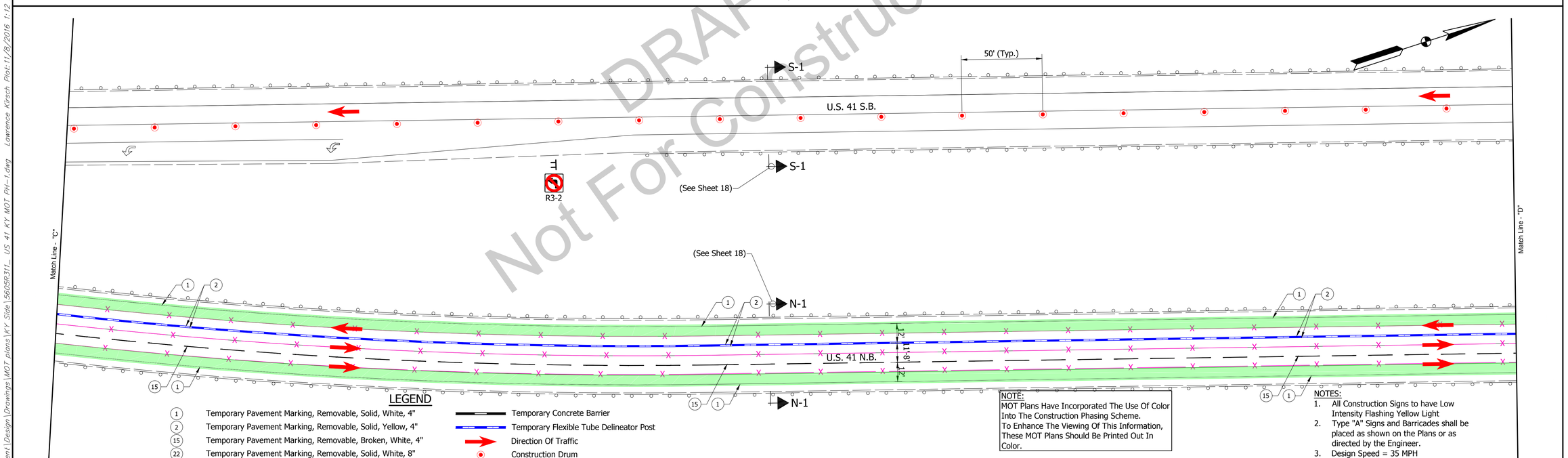
SEQUENCE OF OPERATIONS: PHASE 1

1. Complete Pavement Markings For Crossover South Of Stratman Road And Move One Lane Of Southbound Traffic Onto Northbound Ohio River Bridge As Shown.
2. Begin Construction Of Single Lane Of Southbound Ohio River Bridge As Shown.
3. Begin Construction Of Temporary Cheatam Slough Bridge, Temporary Pavement And Shoulder Reconstruction As Shown Utilizing Nightime Lane Closures.





DRAFT
Not For Construction

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"
- Permanent Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Energy Absorbing Terminal, Type 2
- Temporary Concrete Barrier
- Temporary Flexible Tube Delineator Post
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign
- Arrow Board Display
- Line Removal

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

NOTES:
1. All Construction Signs to have Low Intensity Flashing Yellow Light
2. Type "A" Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
3. Design Speed = 35 MPH

MICHAEL MAHEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	---
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	15 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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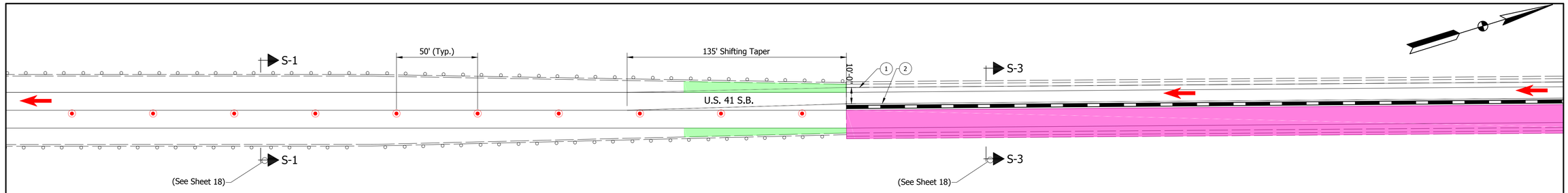
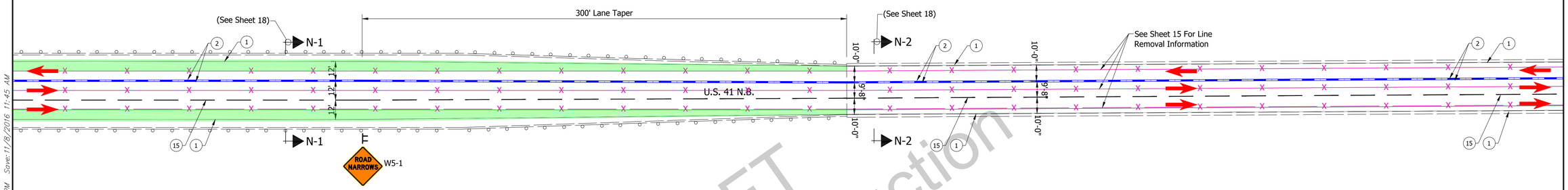
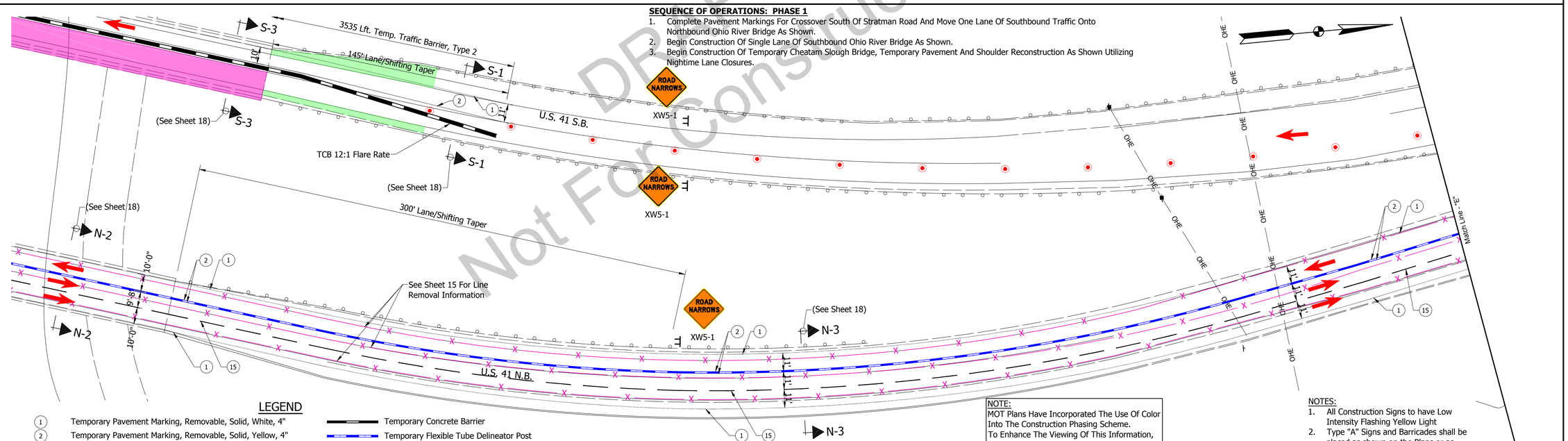




SEQUENCE OF OPERATIONS: PHASE 1

1. Complete Pavement Markings For Crossover South Of Stratman Road And Move One Lane Of Southbound Traffic Onto Northbound Ohio River Bridge As Shown.
2. Begin Construction Of Single Lane Of Southbound Ohio River Bridge As Shown.
3. Begin Construction Of Temporary Cheatam Slough Bridge, Temporary Pavement And Shoulder Reconstruction As Shown Utilizing Nightime Lane Closures.



LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"
- Permanent Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Energy Absorbing Terminal, Type 2
- Temporary Concrete Barrier
- Temporary Flexible Tube Delineator Post
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign
- Arrow Board Display
- Line Removal

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

NOTES:
1. All Construction Signs to have Low Intensity Flashing Yellow Light
2. Type "A" Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
3. Design Speed = 35 MPH

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	---
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	16 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

DRAFT Not For Construction

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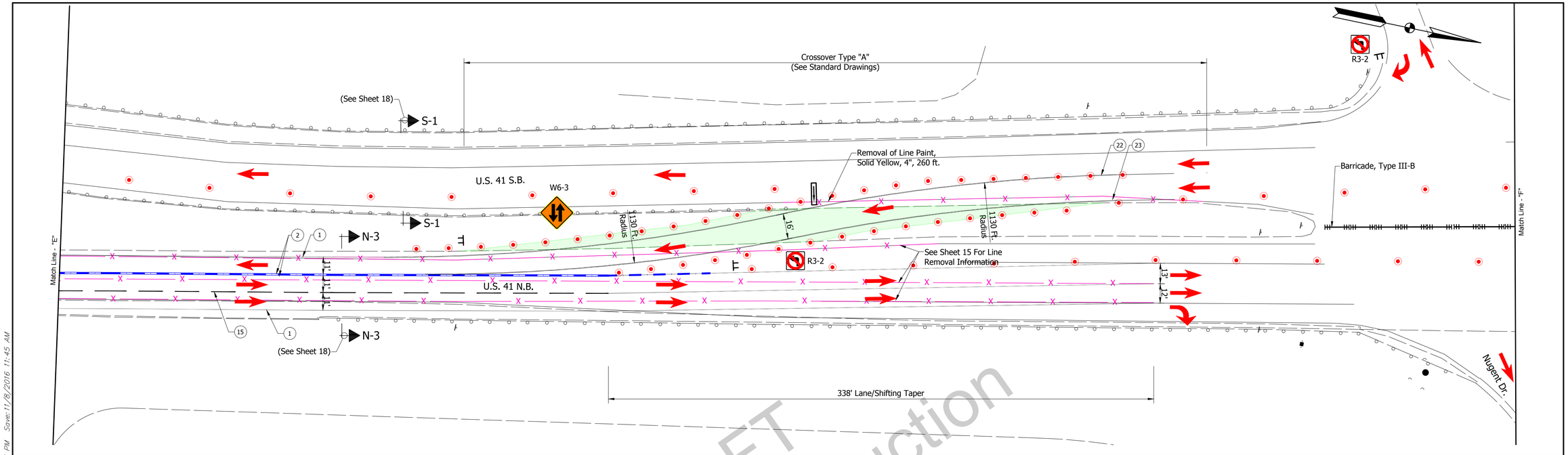
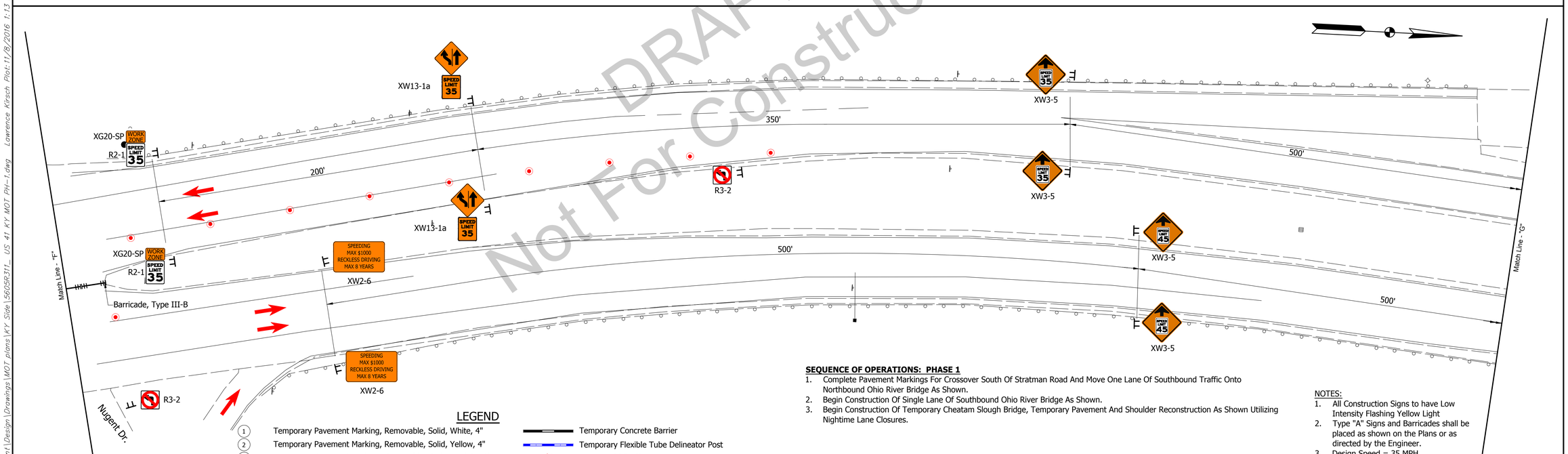




DRAFT
Not For Construction

SEQUENCE OF OPERATIONS: PHASE 1

1. Complete Pavement Markings For Crossover South Of Stratman Road And Move One Lane Of Southbound Traffic Onto Northbound Ohio River Bridge As Shown.
2. Begin Construction Of Single Lane Of Southbound Ohio River Bridge As Shown.
3. Begin Construction Of Temporary Cheatam Slough Bridge, Temporary Pavement And Shoulder Reconstruction As Shown Utilizing Nightime Lane Closures.

NOTES:

1. All Construction Signs to have Low Intensity Flashing Yellow Light
2. Type "A" Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
3. Design Speed = 35 MPH

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"
- Permanent Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Energy Absorbing Terminal, Type 2
- Temporary Concrete Barrier
- Temporary Flexible Tube Delineator Post
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign
- Arrow Board Display
- Line Removal

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

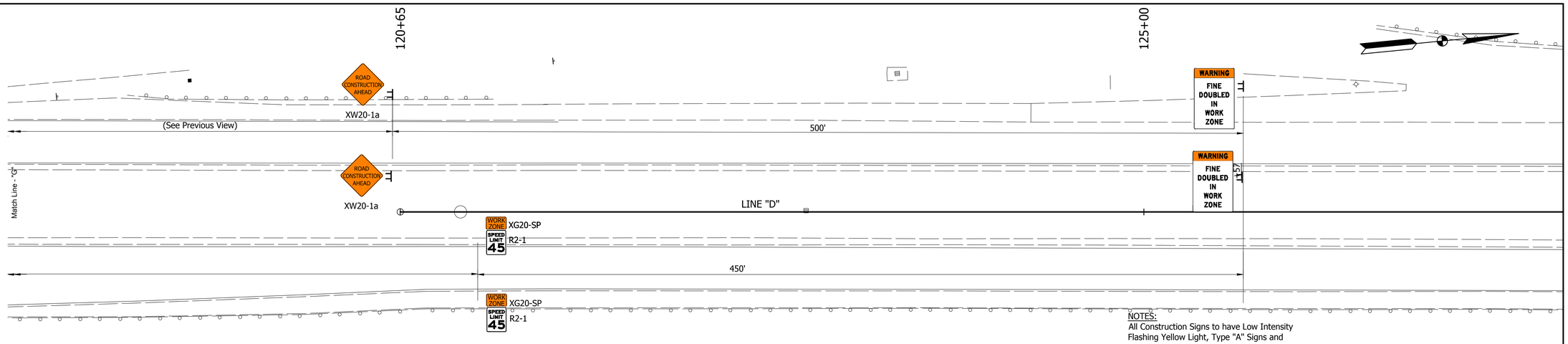
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	---
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	17 OF 164
CONTRACT	PROJECT
B-33539	1592481

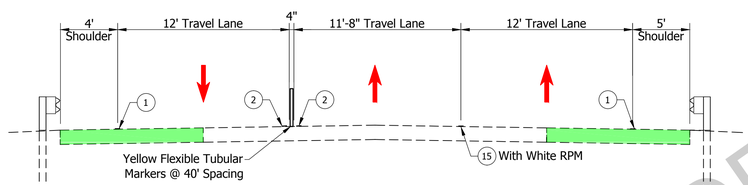
BFS NO. 5605

U:\5605\ProjDevelopment\Design\Drawings\MOT plans\KY Side\5605R31_ US 41 KY MOT PH-1.dwg Lawrence Kirsch Plot:11/8/2016 1:13 PM Save:11/8/2016 11:45 AM

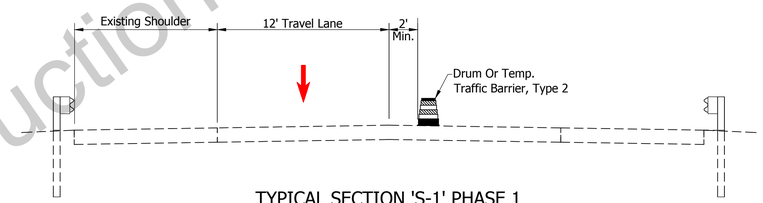


NOTES:
All Construction Signs to have Low Intensity Flashing Yellow Light, Type "A" Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.

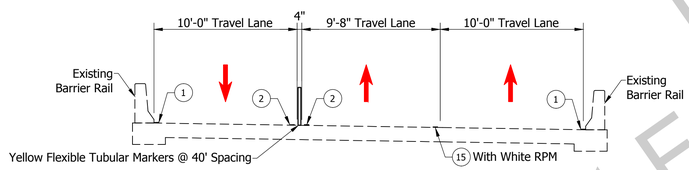
Design Speed = 45 MPH



TYPICAL SECTION 'N-1' PHASE 1
Scale: Not To Scale



TYPICAL SECTION 'S-1' PHASE 1
Scale: Not To Scale



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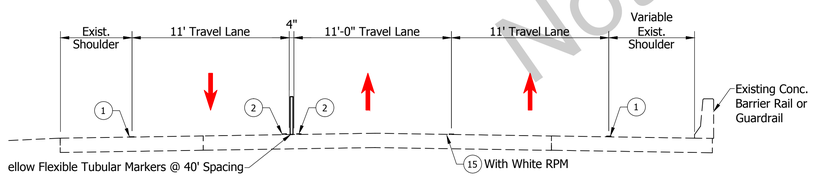

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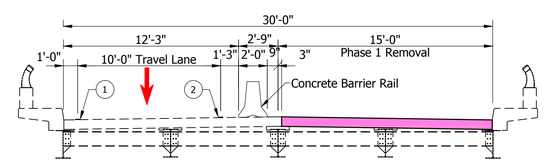
Scale: Not To Scale



TYPICAL SECTION 'S-3' PHASE 1
Scale: Not To Scale

NOTES:
1. All Construction Signs to have Low Intensity Flashing Yellow Light
2. Type "A" Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
3. Design Speed = 35 MPH

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"
- Permanent Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Energy Absorbing Terminal, Type 2
- Temporary Concrete Barrier
- Temporary Flexible Tube Delineator Post
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign
- Arrow Board Display
- Line Removal

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

DRAFT
Not For Construction

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

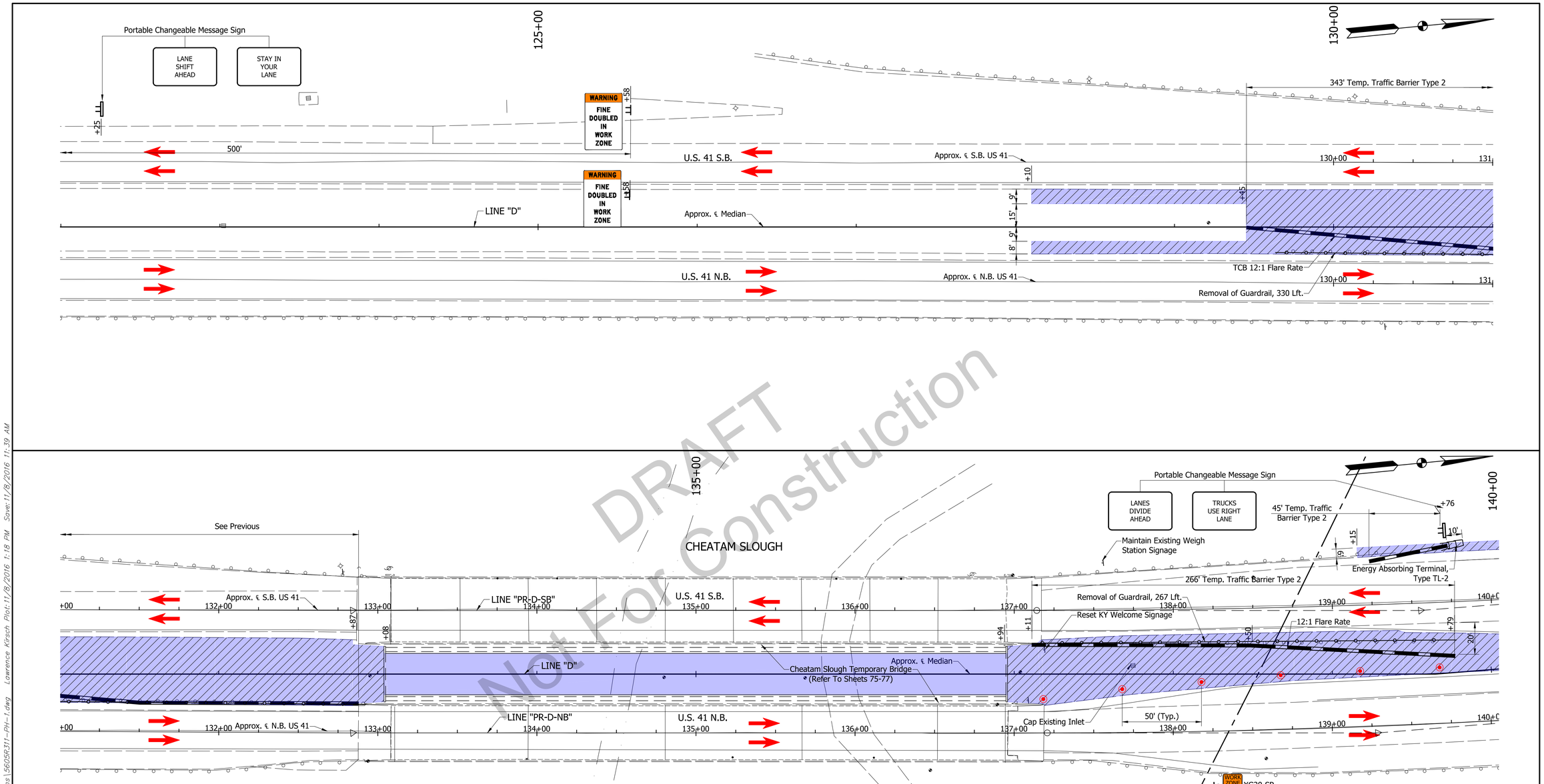
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	---
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	18 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

U:\5605\Pro_Development\Design\Drawings\MOT plans\KY Side\5605R31_ US 41 KY MOT PH-1.dwg Lawrence Kirsch Plot:11/8/2016 1:14 PM Save:11/8/2016 11:45 AM



DRAFT
Not For Construction

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"
- Energy Absorbing Terminal, Type 2
- Bridge Structure (Refer To Bridge Plans)
- Permanent Construction This Phase
- Temporary Construction This Phase
- Permanant Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Marker Post, Yellow, 40' Spacing
- Direction Of Traffic
- Construction Drum
- Line Removal
- Guardrail Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign
- Arrow Board Display
- HMA For Temporary Pavement: 165#/syd HMA Surface, Type D, On 275#/syd HMA Inter., Type D, On 660#/syd HMA Base, Type D, On Type 1C Subgrade Treatment

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

NOTES:
1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs to have Low Intensity Flashing Yellow Light, Type "A"
3. Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
4. Design Speed = 45 MPH

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET 19 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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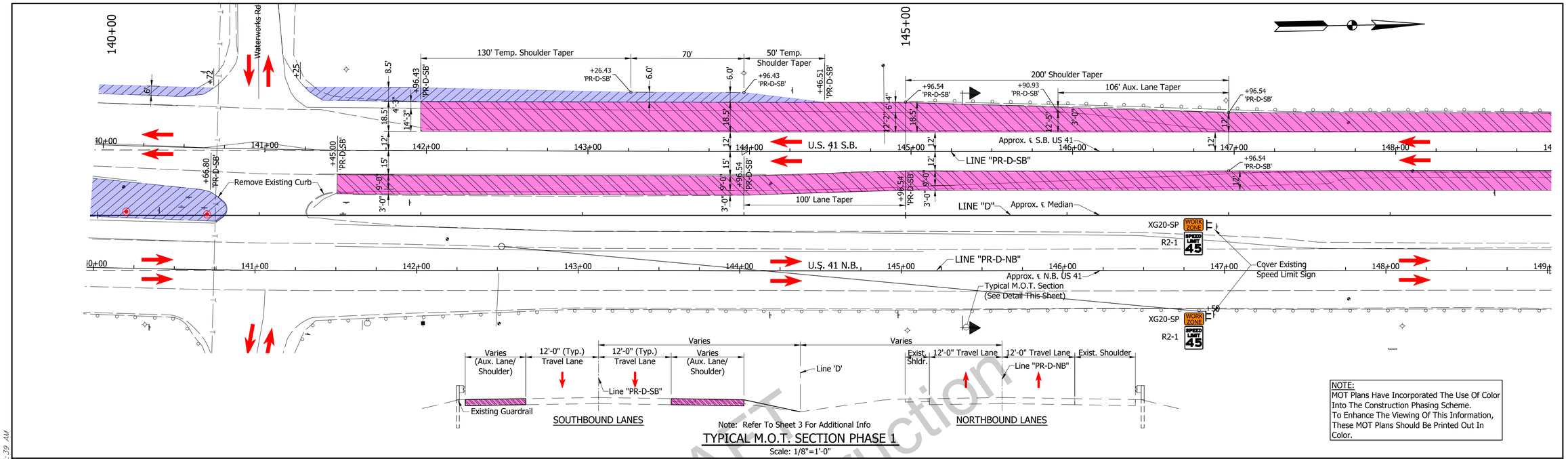

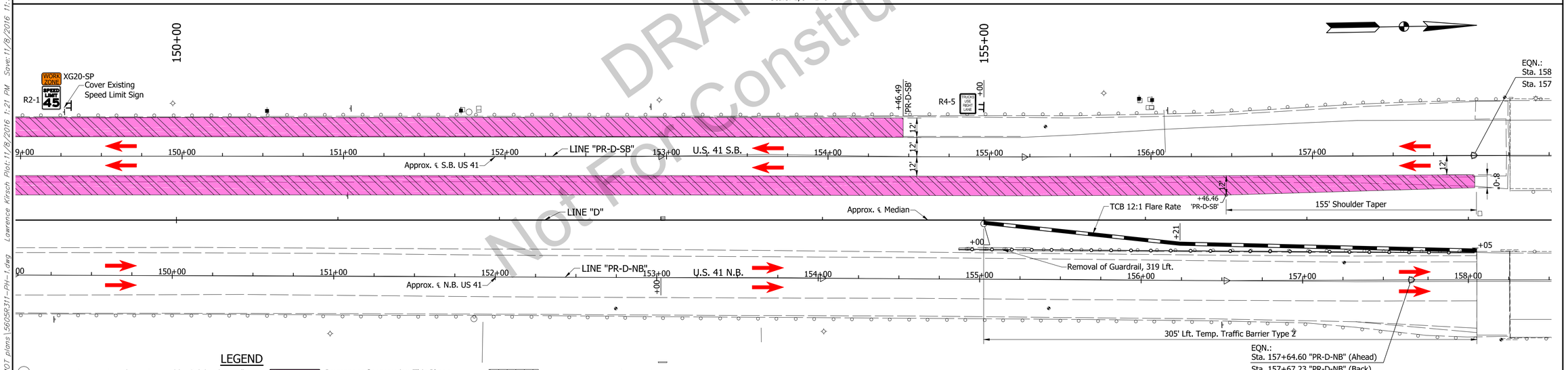

LEGEND

1. Temporary Pavement Marking, Removable, Solid, White, 4"
2. Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15. Temporary Pavement Marking, Removable, Broken, White, 4"
22. Temporary Pavement Marking, Removable, Solid, White, 8"
23. Temporary Pavement Marking, Removable, Solid, Yellow, 8"

Energy Absorbing Terminal, Type 2

Bridge Structure (Refer To Bridge Plans)

Permanent Construction This Phase
Temporary Construction This Phase
Permanant Construction Previous Phase
Temporary Concrete Barrier
Flexible Tubular Marker Post, Yellow, 40' Spacing
Direction Of Traffic
Construction Drum
Line Removal
Guardrail Removal
Type III-B Barricade
Construction Sign
Portable Changeable Message Sign
Arrow Board Display

HMA For Temporary Pavement:
165#/syd HMA Surface, Type D, On
275#/syd HMA Inter., Type D, On
660#/syd HMA Base, Type D, On
Type 1C Subgrade Treatment

HMA Shoulder Reconstruction:
165#/SYD. QC/QA HMA, 3, 70, Surface, 9.5mm, On
275#/SYD. QC/QA HMA, 3, 70, Inter., 19.0mm, On
660#/SYD. QC/QA HMA, 2, 64, Base, 19.0mm, On
Type 1C Subgrade Treatment

SEQUENCE OF OPERATIONS: PHASE 1

1. Move One Lane Of Southbound Traffic Onto Northbound Ohio River Bridge As Shown.
2. Begin Construction Of Temporary Bridge, Temporary Pavement And Shoulder Reconstruction As Shown.
3. Upon Completion Of Rehab On The Southbound Ohio River Bridge Remove Signs South Of The River And Restore Traffic To Original Condidtion. Set Signs Up For Northbound Traffic Between The Ohio River Bridge And Cheatam Slough For Continued Work For Phase 1 As Shown In Phase 2 Plans.

NOTES:

1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs to have Low Intensity Flashing Yellow Light, Type "A"
3. Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
4. Design Speed = 45 MPH

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	20 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

DRAFT Not For Construction

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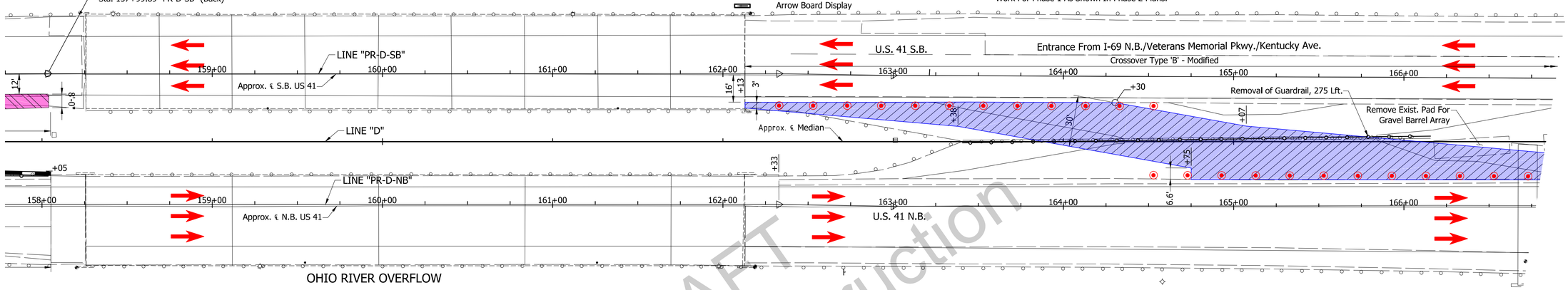
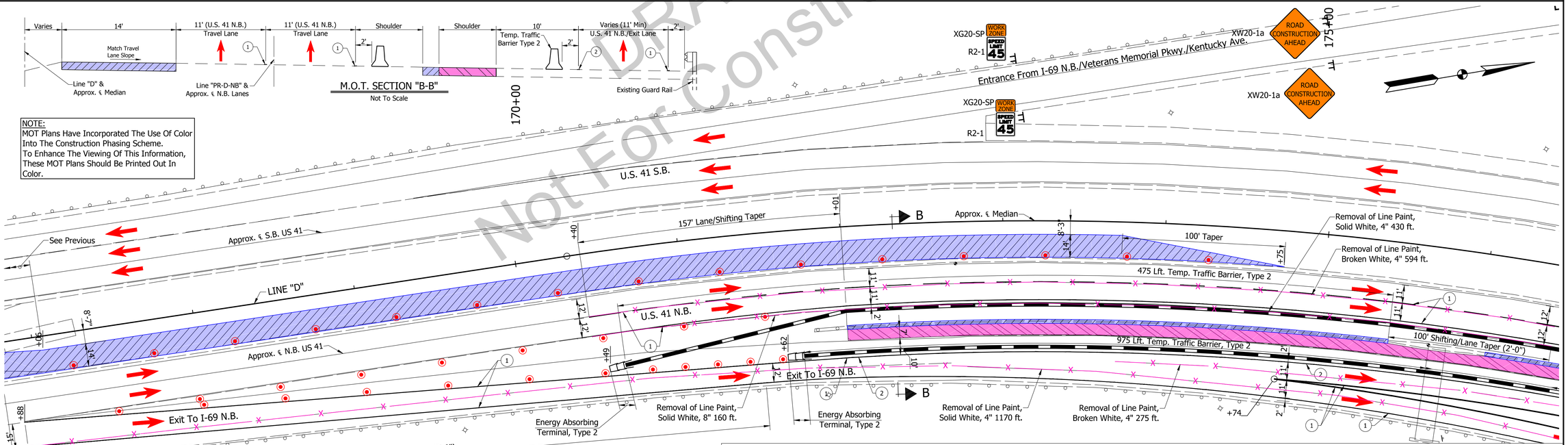
LEGEND

- HMA Shoulder Reconstruction: 165#/SYD. QC/QA HMA, 3, 70, Surface, 9.5mm, On 275#/SYD. QC/QA HMA, 3, 70, Inter., 19.0mm, On 660#/SYD. QC/QA HMA, 2, 64, Base, 19.0mm, On Type 1C Subgrade Treatment
- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"
- Energy Absorbing Terminal, Type 2
- Bridge Structure (Refer To Bridge Plans)
- Permanent Construction This Phase
- Temporary Construction This Phase
- Permanant Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Marker Post, Yellow, 40' Spacing
- Direction Of Traffic
- Construction Drum
- Line Removal
- Guardrail Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign
- Arrow Board Display

NOTES:
1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs to have Low Intensity Flashing Yellow Light, Type "A"
3. Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
4. Design Speed = 45 MPH

SEQUENCE OF OPERATIONS: PHASE 1
1. Move One Lane Of Southbound Traffic Onto Northbound Ohio River Bridge As Shown.
2. Begin Construction Of Temporary Bridge, Temporary Pavement And Shoulder Reconstruction As Shown.
3. Upon Completion Of Rehab On The Southbound Ohio River Bridge Remove Signs South Of The River And Restore Traffic To Original Condidtion. Set Signs Up For Northbound Traffic Between The Ohio River Bridge And Cheatam Slough For Continued Work For Phase 1 As Shown In Phase 2 Plans.





NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

DRAFT
Not For Construction

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	21 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605

BFS NO.

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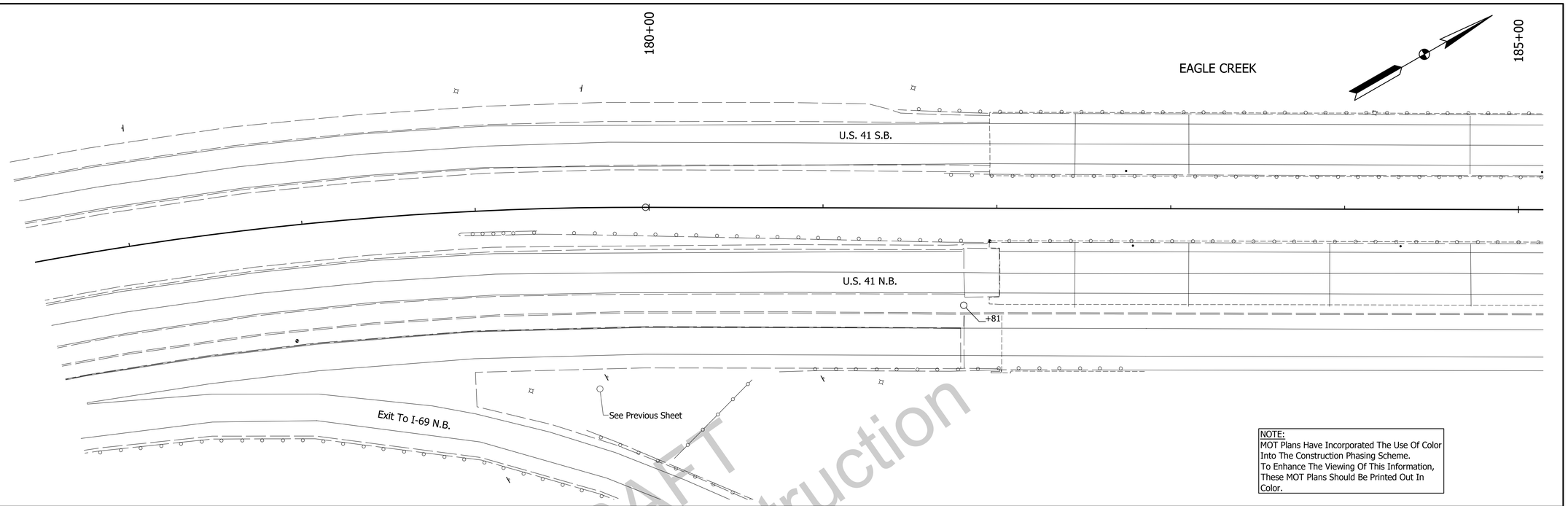
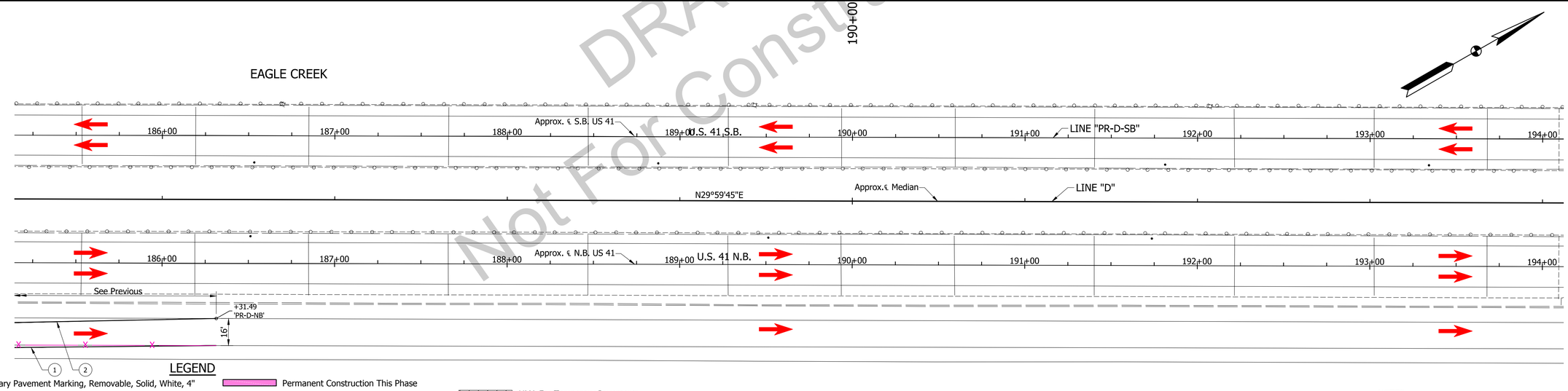


NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

DRAFT
Not For Construction



LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"
- Energy Absorbing Terminal, Type 2
- Bridge Structure (Refer To Bridge Plans)
- Permanent Construction This Phase
- Temporary Construction This Phase
- Permanant Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Marker Post, Yellow, 40' Spacing
- Direction Of Traffic
- Construction Drum
- Line Removal
- Guardrail Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign
- Arrow Board Display
- HMA For Temporary Pavement: 165#/syd HMA Surface, Type D, On 275#/syd HMA Inter., Type D, On 660#/syd HMA Base, Type D, On Type 1C Subgrade Treatment
- HMA Shoulder Reconstruction: 165#/SYD. QC/QA HMA, 3, 70, Surface, 9.5mm, On 275#/SYD. QC/QA HMA, 3, 70, Inter., 19.0mm, On 660#/SYD. QC/QA HMA, 2, 64, Base, 19.0mm, On Type 1C Subgrade Treatment

SEQUENCE OF OPERATIONS: PHASE 1

1. Move One Lane Of Southbound Traffic Onto Northbound Ohio River Bridge As Shown.
2. Begin Construction Of Temporary Bridge, Temporary Pavement And Shoulder Reconstruction As Shown.
3. Upon Completion Of Rehab On The Southbound Ohio River Bridge Remove Signs South Of The River And Restore Traffic To Original Condidtion. Set Signs Up For Northbound Traffic Between The Ohio River Bridge And Cheatam Slough For Continued Work For Phase 1 As Shown In Phase 2 Plans.

NOTES:

1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs to have Low Intensity Flashing Yellow Light, Type "A"
3. Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
4. Design Speed = 45 MPH

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	22 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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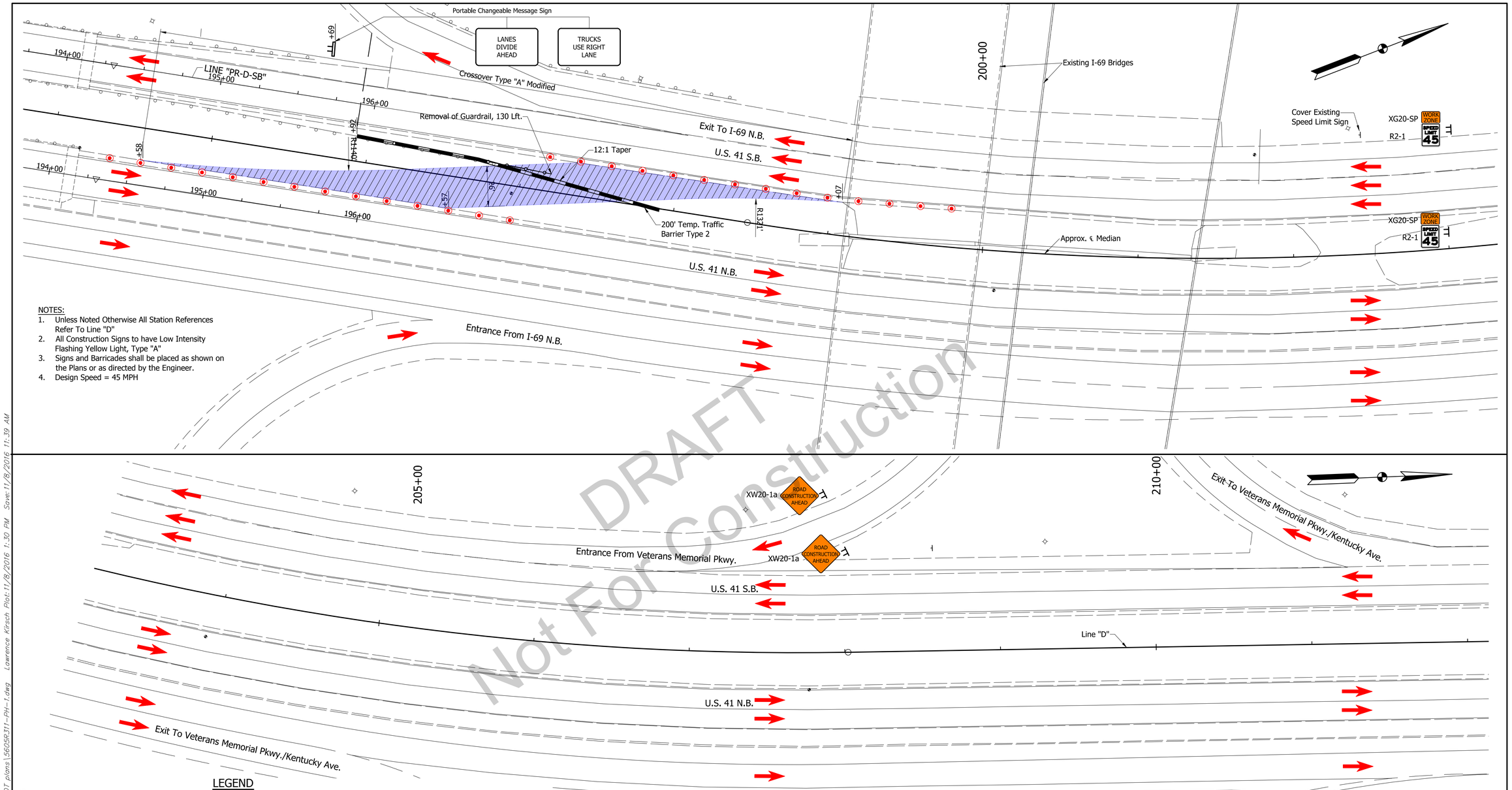

NOTES:
1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs to have Low Intensity Flashing Yellow Light, Type "A"
3. Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
4. Design Speed = 45 MPH

DRAFT
Not For Construction

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"
- Energy Absorbing Terminal, Type 2
- Bridge Structure (Refer To Bridge Plans)
- Permanent Construction This Phase
- Temporary Construction This Phase
- Permanant Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Marker Post, Yellow, 40' Spacing
- Direction Of Traffic
- Construction Drum
- Line Removal
- Guardrail Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign
- Arrow Board Display
- HMA For Temporary Pavement: 165#/syd HMA Surface, Type D, On 275#/syd HMA Inter., Type D, On 660#/syd HMA Base, Type D, On Type 1C Subgrade Treatment

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

SEQUENCE OF OPERATIONS: PHASE 1
1. Move One Lane Of Southbound Traffic Onto Northbound Ohio River Bridge As Shown.
2. Begin Construction Of Temporary Bridge, Temporary Pavement And Shoulder Reconstruction As Shown.
3. Upon Completion Of Rehab On The Southbound Ohio River Bridge Remove Signs South Of The River And Restore Traffic To Original Condidtion. Set Signs Up For Northbound Traffic Between The Ohio River Bridge And Cheatam Slough For Continued Work For Phase 1 As Shown In Phase 2 Plans.

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	23 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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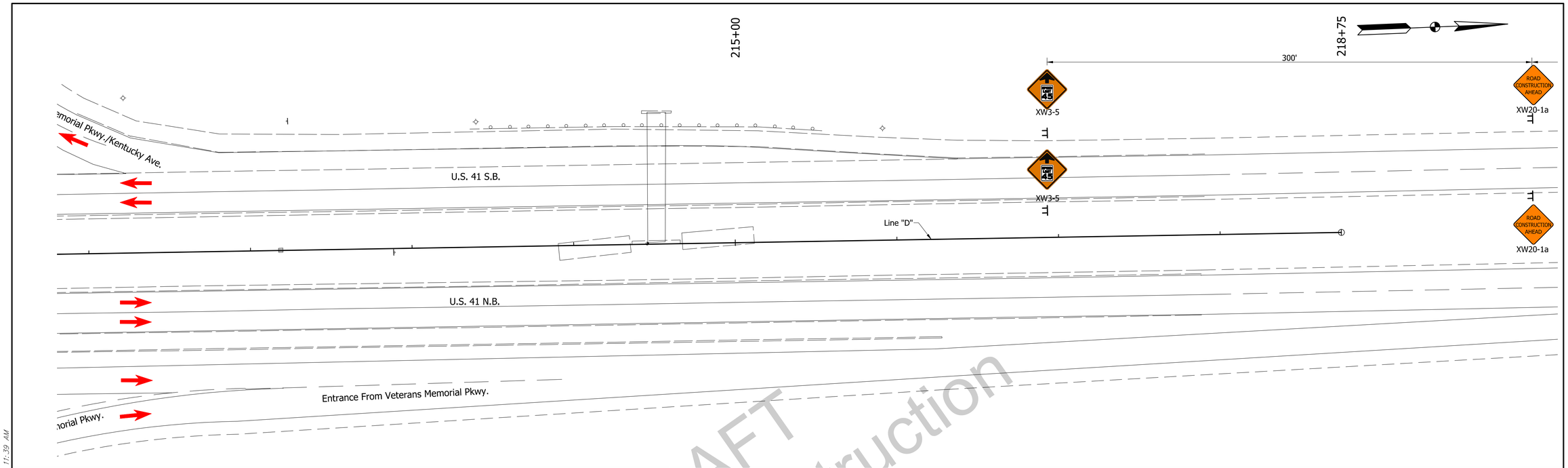

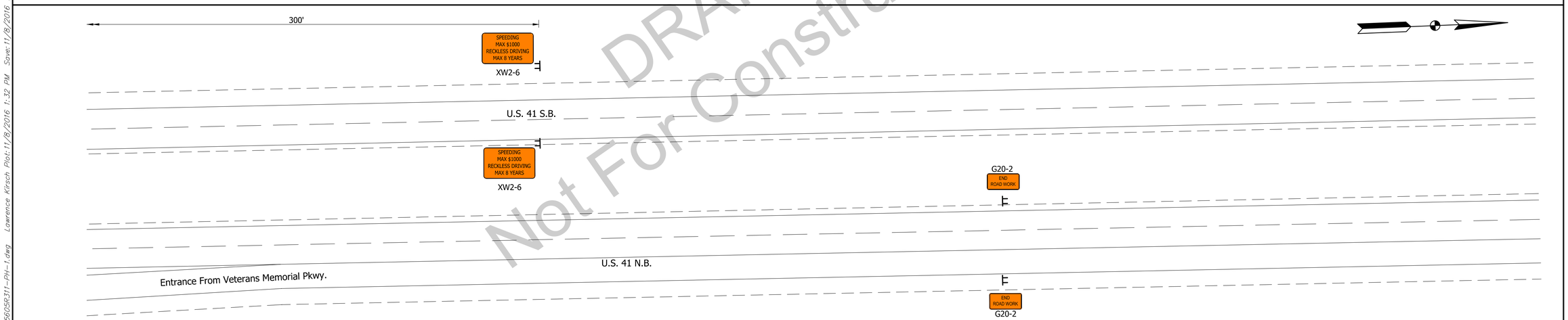

DRAFT
Not For Construction

LEGEND

1	Temporary Pavement Marking, Removable, Solid, White, 4"
2	Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15	Temporary Pavement Marking, Removable, Broken, White, 4"
22	Temporary Pavement Marking, Removable, Solid, White, 8"
23	Temporary Pavement Marking, Removable, Solid, Yellow, 8"
	Energy Absorbing Terminal, Type 2
	Bridge Structure (Refer To Bridge Plans)
	Permanent Construction This Phase
	Temporary Construction This Phase
	Permanant Construction Previous Phase
	Temporary Concrete Barrier
	Flexible Tubular Marker Post, Yellow, 40' Spacing
	Direction Of Traffic
	Construction Drum
	Line Removal
	Guardrail Removal
	Type III-B Barricade
	Construction Sign
	Portable Changeable Message Sign
	Arrow Board Display

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

SEQUENCE OF OPERATIONS: PHASE 1

1. Move One Lane Of Southbound Traffic Onto Northbound Ohio River Bridge As Shown.
2. Begin Construction Of Temporary Bridge, Temporary Pavement And Shoulder Reconstruction As Shown.
3. Upon Completion Of Rehab On The Southbound Ohio River Bridge Remove Signs South Of The River And Restore Traffic To Original Condidtion. Set Signs Up For Northbound Traffic Between The Ohio River Bridge And Cheatam Slough For Continued Work For Phase 1 As Shown In Phase 2 Plans.

NOTES:

1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs to have Low Intensity Flashing Yellow Light, Type "A"
3. Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
4. Design Speed = 45 MPH

MICHAEL M. AYEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET 24 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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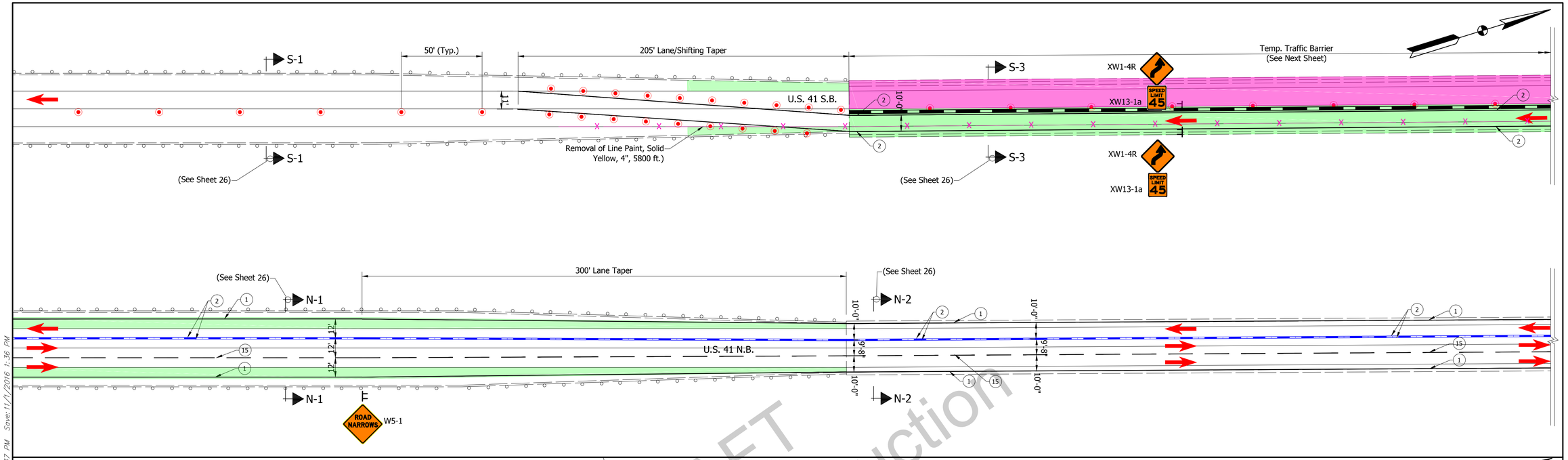
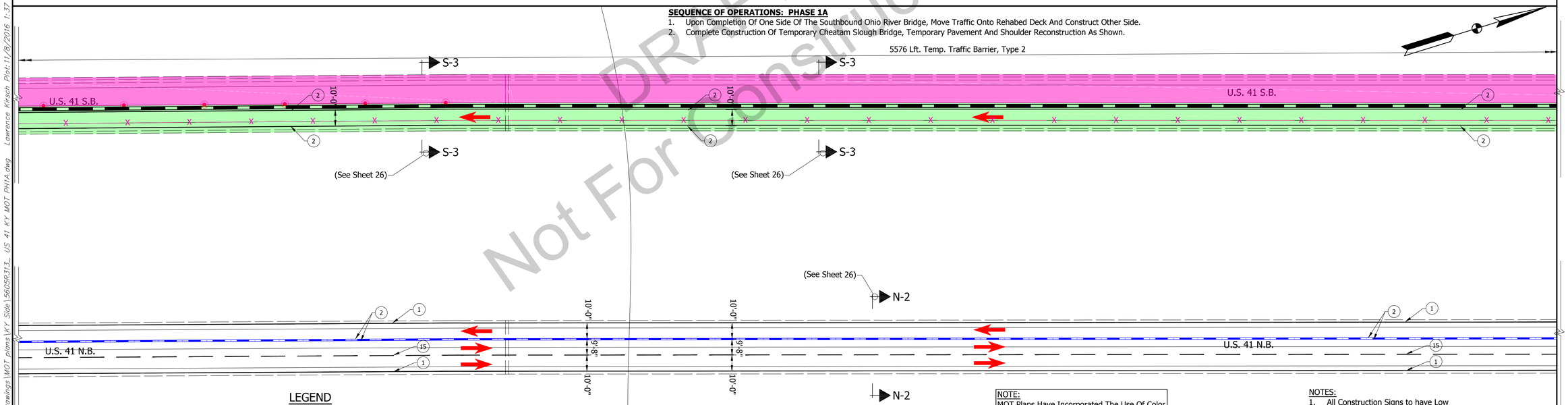


SEQUENCE OF OPERATIONS: PHASE 1A

1. Upon Completion Of One Side Of The Southbound Ohio River Bridge, Move Traffic Onto Rehabed Deck And Construct Other Side.
2. Complete Construction Of Temporary Cheatam Slough Bridge, Temporary Pavement And Shoulder Reconstruction As Shown.



DRAFT
Not For Construction

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4".
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4".
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- Permanent Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Energy Absorbing Terminal, Type 2
- Temporary Concrete Barrier
- Temporary Flexible Tube Delineator Post
- Direction Of Traffic
- Construction Drum
- Construction Sign
- Portable Changeable Message Sign
- Arrow Board Display
- Indicates Line Removal

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

NOTES:
1. All Construction Signs to have Low Intensity Flashing Yellow Light
2. Type "A" Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
3. Design Speed = 35 MPH

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1A

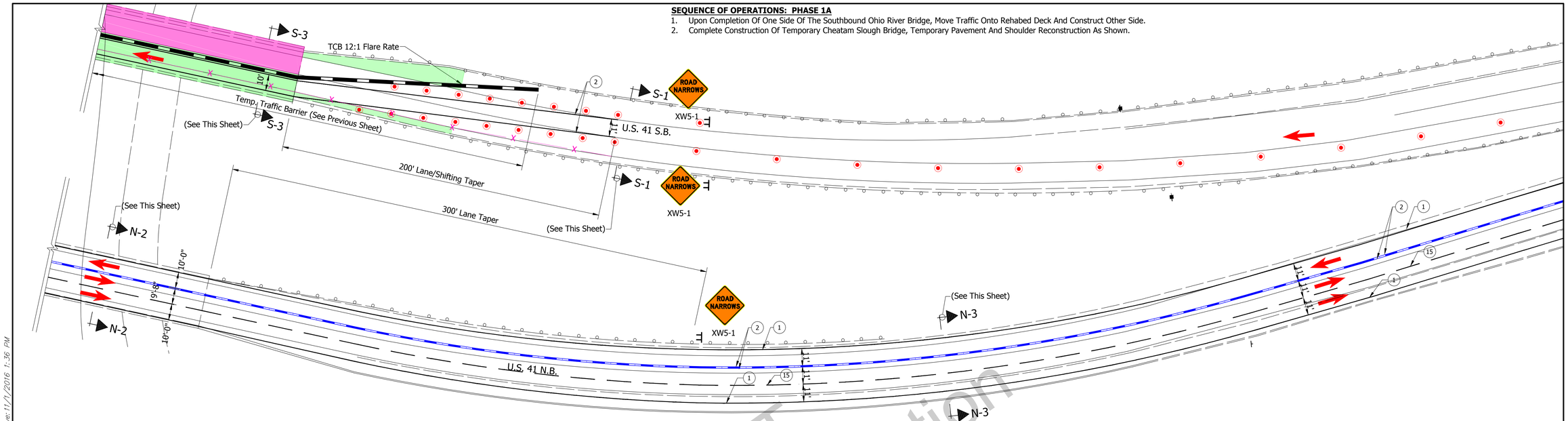
HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0" Unless Noted Otherwise	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	SEE BRIDGE PLANS
SURVEY BOOK	SHEET 25 OF 164
CONTRACT	PROJECT
B-33539	1592481

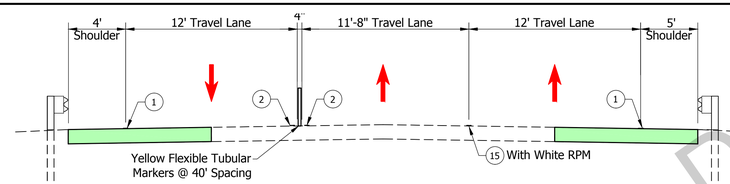
BFS NO. 5605

U:\5605\ProDevelopment\Design\Drawings\MOT plans\KY Side\5605R313_US 41 KY MOT PH1A.dwg Lawrence Kirsch Plot:11/8/2016 1:37 PM Save:11/1/2016 1:36 PM

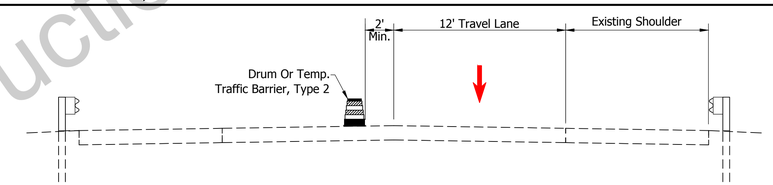
SEQUENCE OF OPERATIONS: PHASE 1A

1. Upon Completion Of One Side Of The Southbound Ohio River Bridge, Move Traffic Onto Rehabed Deck And Construct Other Side.
2. Complete Construction Of Temporary Cheatam Slough Bridge, Temporary Pavement And Shoulder Reconstruction As Shown.

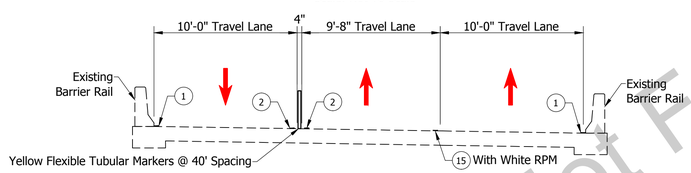




TYPICAL SECTION 'N-1' PHASE 1A
Scale: Not To Scale

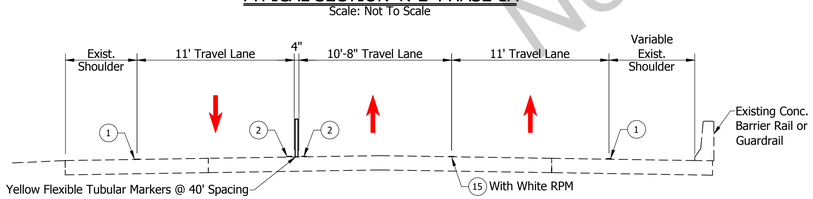


TYPICAL SECTION 'S-1' PHASE 1A
Scale: Not To Scale

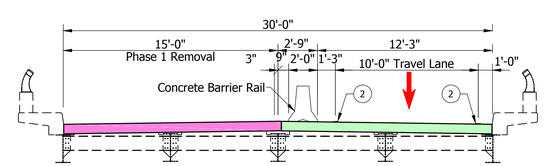


TYPICAL SECTION 'N-2' PHASE 1A
Scale: Not To Scale

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.



TYPICAL SECTION 'N-3' PHASE 1A
Scale: Not To Scale



TYPICAL SECTION 'S-3' PHASE 1A
Scale: Not To Scale

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4".
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4".
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- Permanent Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Energy Absorbing Terminal, Type 2
- Temporary Concrete Barrier
- Temporary Flexible Tube Delineator Post
- Direction Of Traffic
- Construction Drum
- Construction Sign
- Portable Changeable Message Sign
- Arrow Board Display
- Indicates Line Removal

NOTES:
1. All Construction Signs to have Low Intensity Flashing Yellow Light
2. Type "A" Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
3. Design Speed = 35 MPH

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE 1A

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0" Unless Noted Otherwise	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
N/A	SEE BRIDGE PLANS
SURVEY BOOK	SHEET
	26 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

DRAFT Not For Construction

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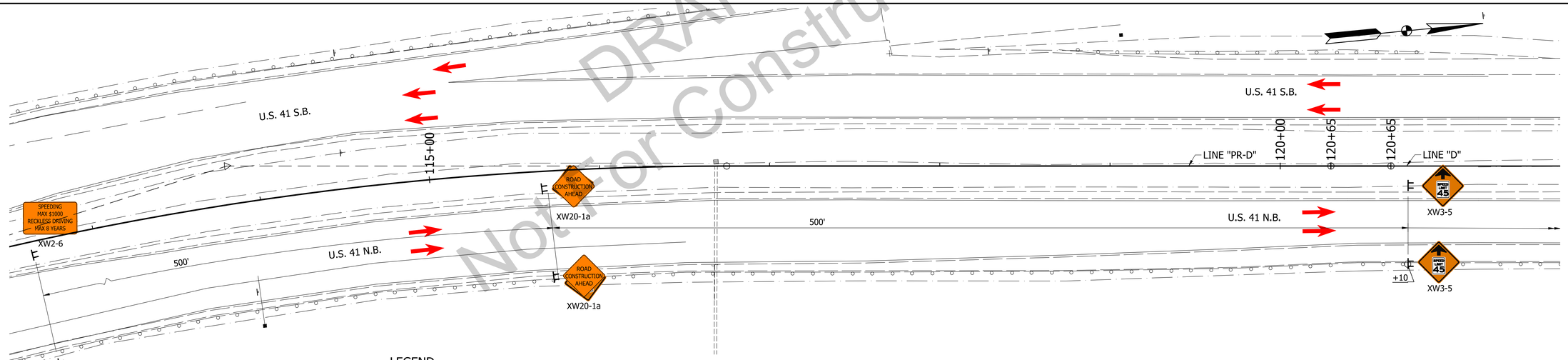

DRAFT
Not For Construction

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Line Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

SEQUENCE OF OPERATIONS: PHASE 2

1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Restrict Turning Movements At Shawnee Drive And Waterworks Road.
3. Construct Northbound Bridges And Pavement As Shown.

NOTES:

1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	27 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
B/S NO.

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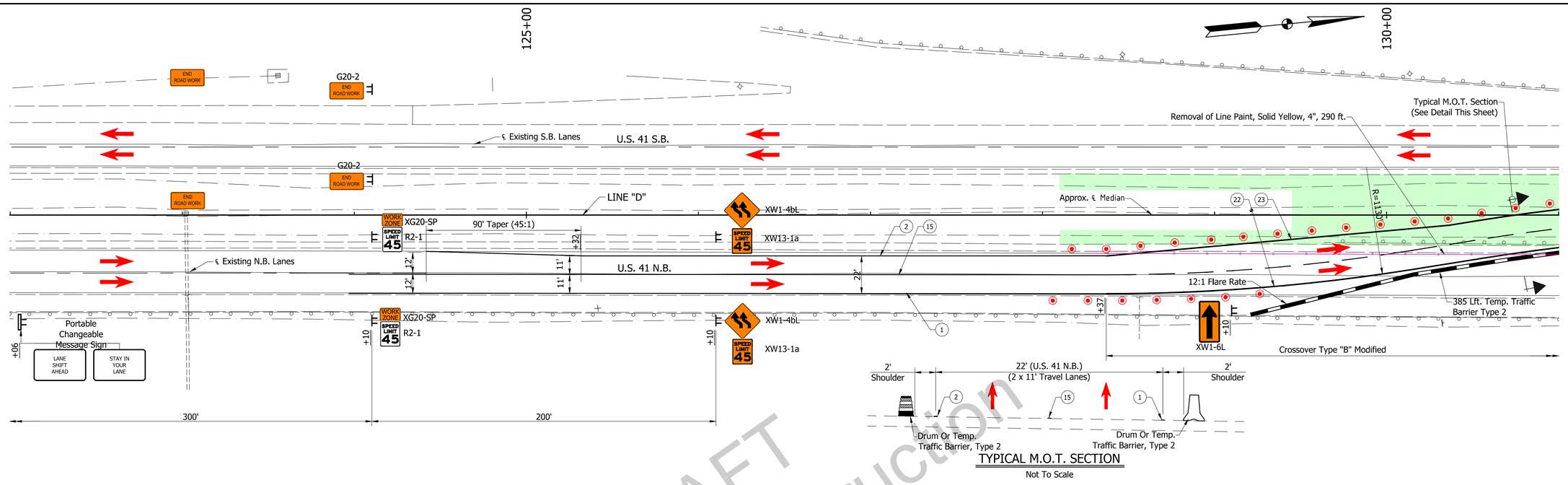

DRAFT
Not For Construction

LEGEND

1. Temporary Pavement Marking, Removable, Solid, White, 4"
2. Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15. Temporary Pavement Marking, Removable, Broken, White, 4"
22. Temporary Pavement Marking, Removable, Solid, White, 8"
23. Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Line Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

NOTES:
1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

SEQUENCE OF OPERATIONS: PHASE 2
1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Restrict Turning Movements At Shawnee Drive And Waterworks Road.
3. Construct Northbound Bridges And Pavement As Shown.

MICHAEL MAYEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET 28 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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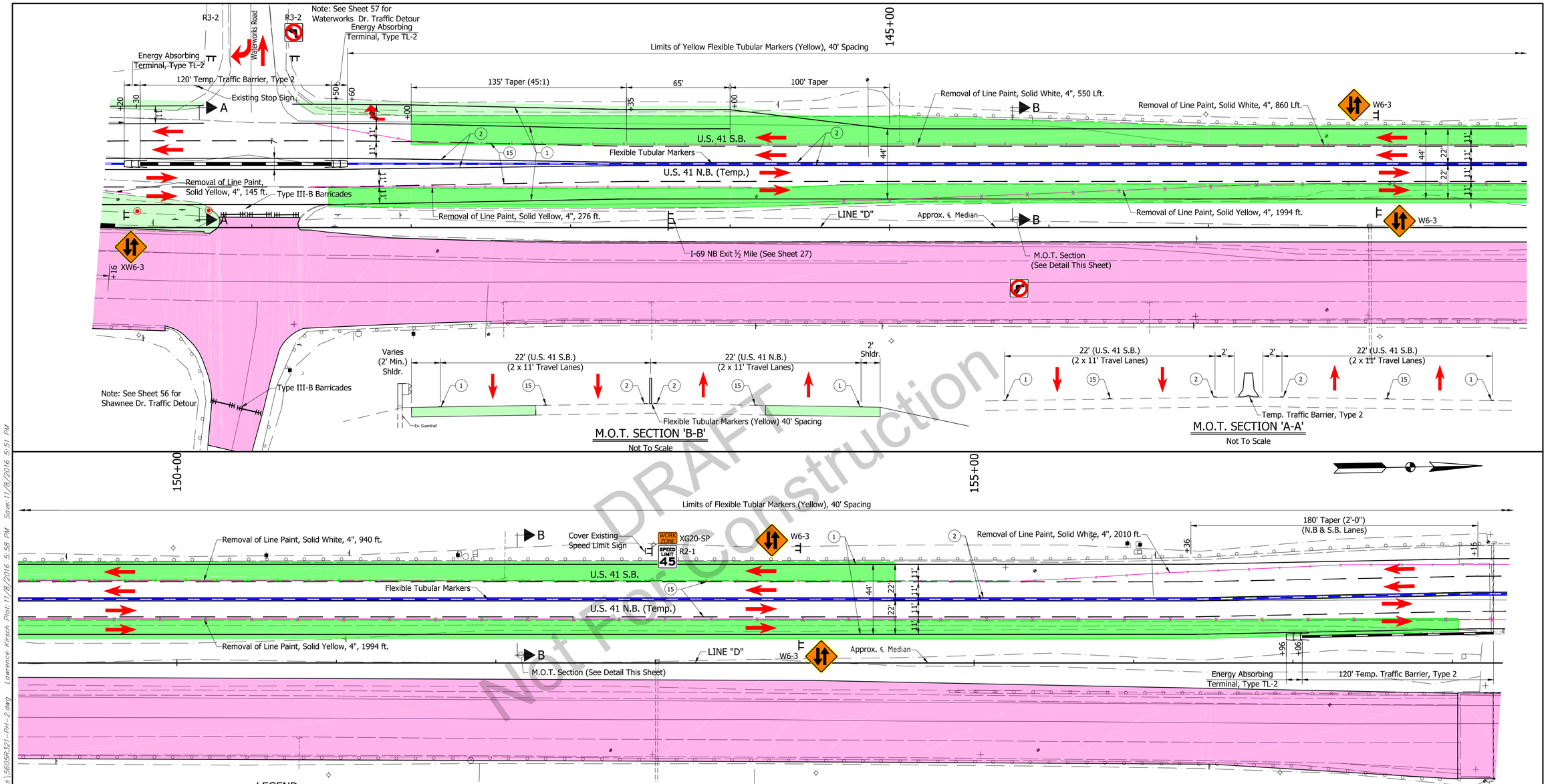

DRAFT
Not For Construction

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Line Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

SEQUENCE OF OPERATIONS: PHASE 2
1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Restrict Turning Movements At Shawnee Drive And Waterworks Road.
3. Construct Northbound Bridges And Pavement As Shown.

NOTES:
1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	29 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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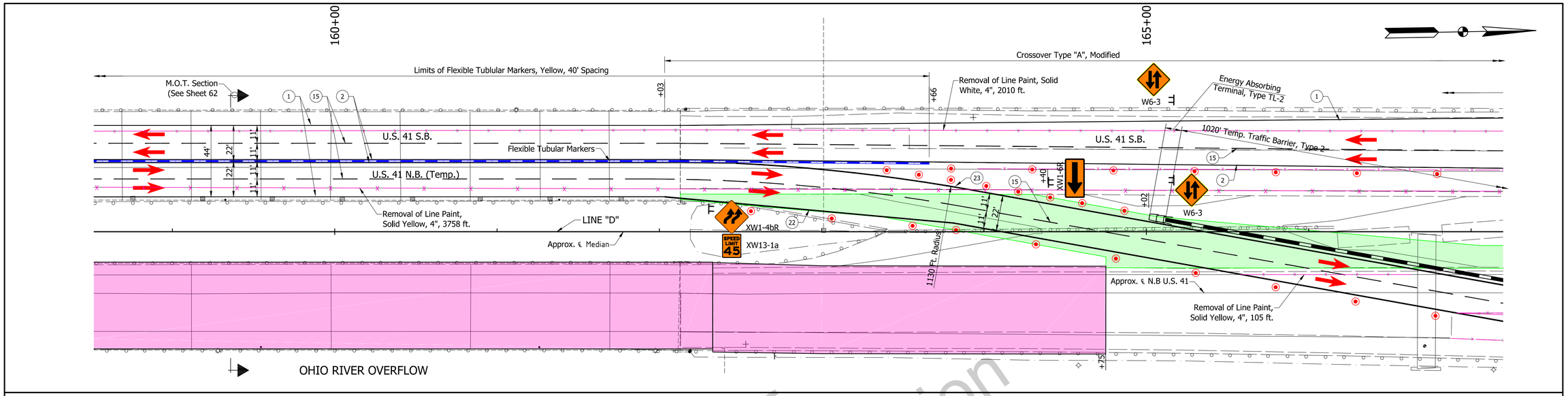


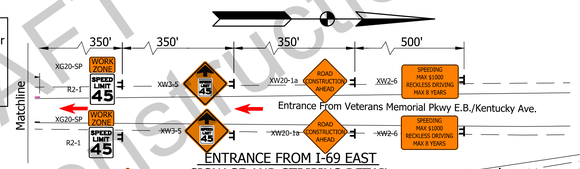
LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"
- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Line Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

SEQUENCE OF OPERATIONS: PHASE 2

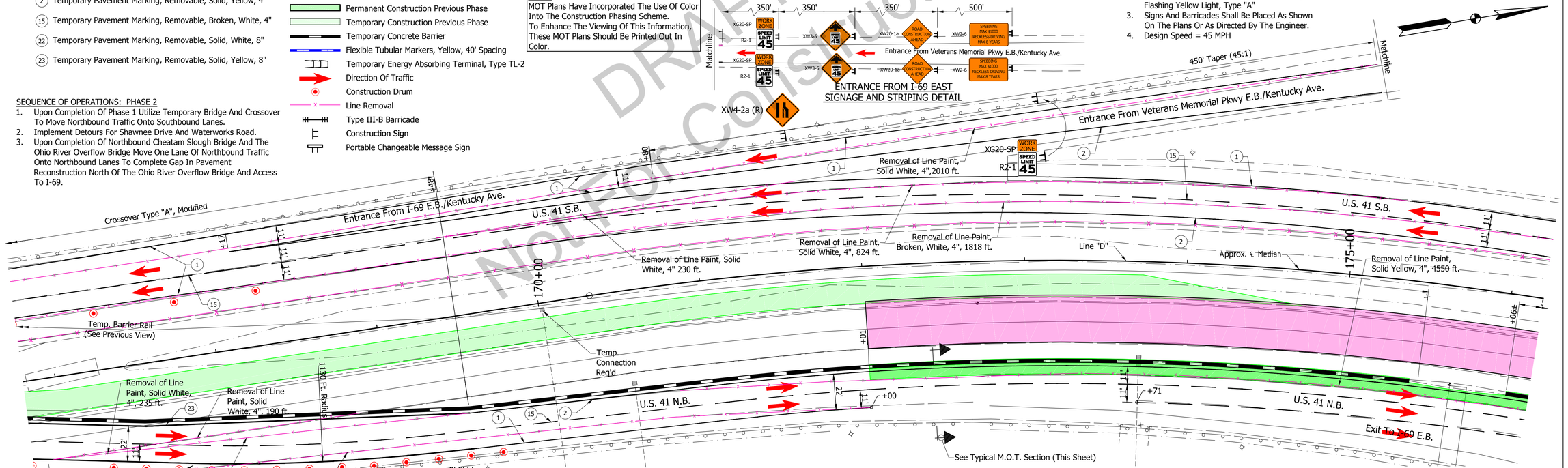
1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Implement Detours For Shawnee Drive And Waterworks Road.
3. Upon Completion Of Northbound Cheatam Slough Bridge And The Ohio River Overflow Bridge Move One Lane Of Northbound Traffic Onto Northbound Lanes To Complete Gap In Pavement Reconstruction North Of The Ohio River Overflow Bridge And Access To I-69.

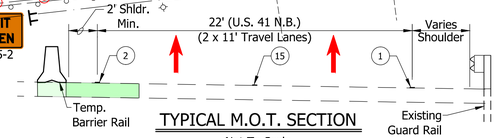


ENTRANCE FROM I-69 EAST
SIGNAGE AND STRIPING DETAIL

NOTES:

1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH





TYPICAL M.O.T. SECTION
Not To Scale

DRAFT
Not For Construction

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER	RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1" = 30'-0" / BRIDGE FILE ---- / VERTICAL SCALE N/A / DESIGNATION 1592481
	DESIGNED: BZ DRAWN: LK	MAINTENANCE OF TRAFFIC PHASE 2	SURVEY BOOK / SHEET 30 OF 164
	CHECKED: MM CHECKED: BZ		CONTRACT B-33539 / PROJECT 1592481

BFS NO. 5605

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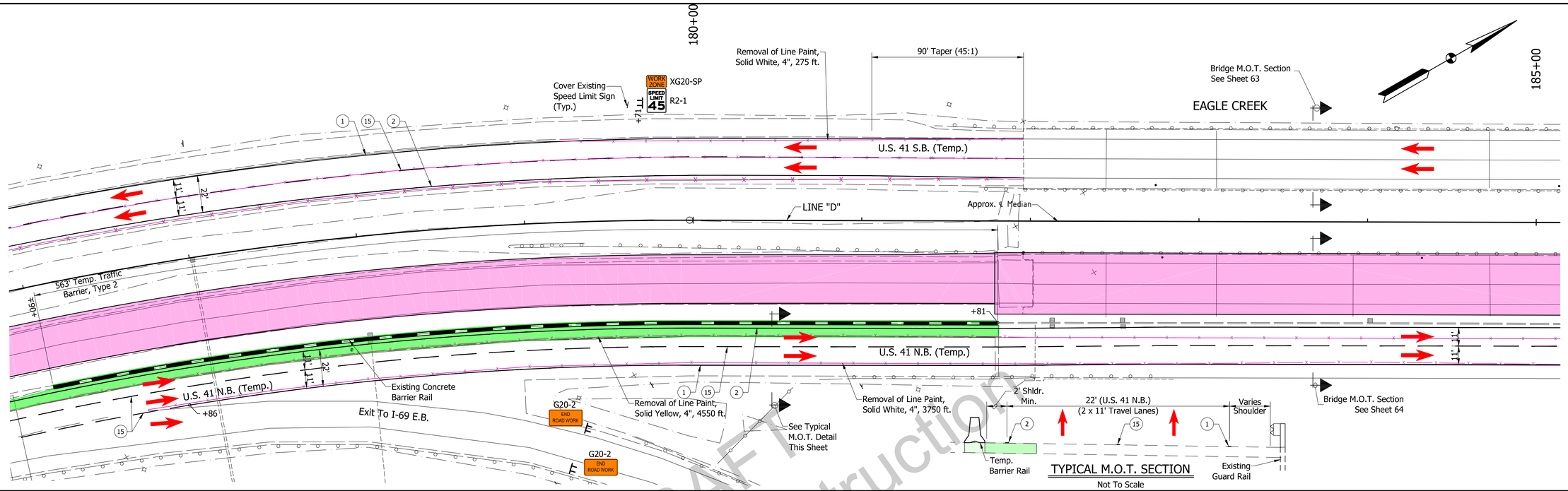

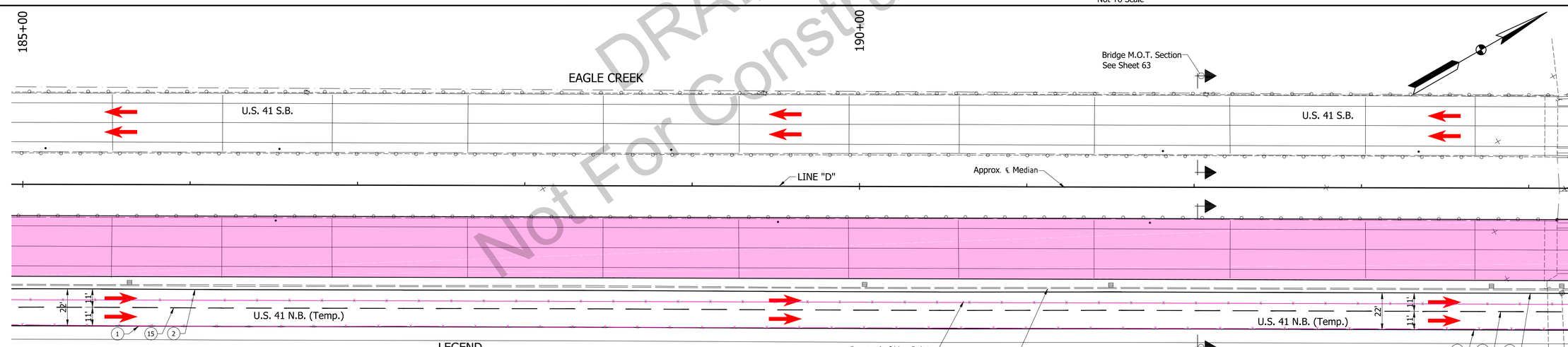

DRAFT
Not For Construction

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Line Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

SEQUENCE OF OPERATIONS: PHASE 2
1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Restrict Turning Movements At Shawnee Drive And Waterworks Road.
3. Construct Northbound Bridges And Pavement As Shown.

NOTES:
1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET 31 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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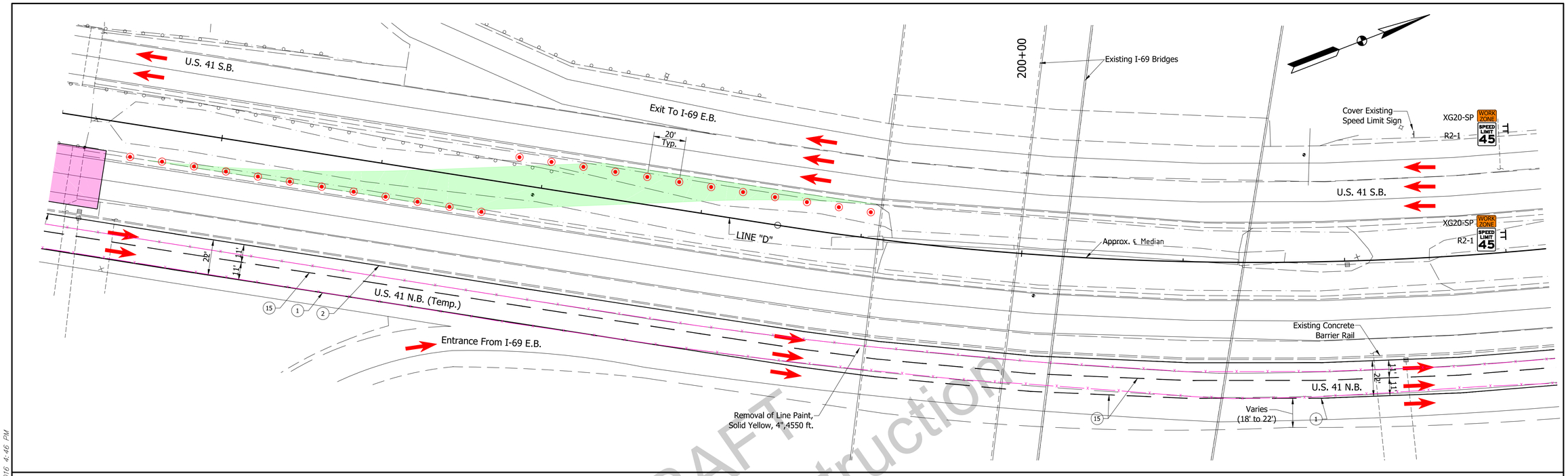

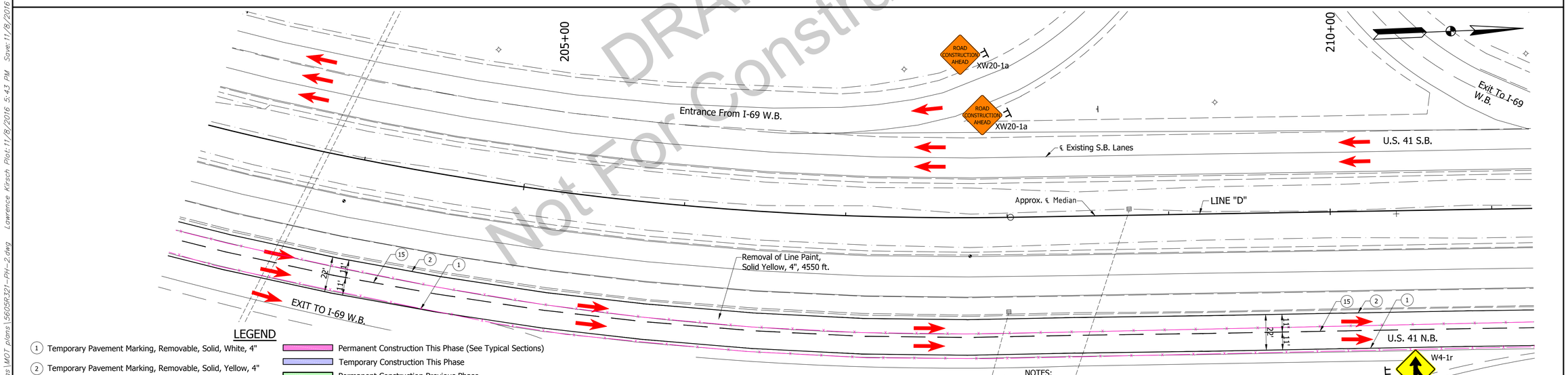

DRAFT
Not For Construction

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"
- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Line Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

SEQUENCE OF OPERATIONS: PHASE 2

1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Restrict Turning Movements At Shawnee Drive And Waterworks Road.
3. Construct Northbound Bridges And Pavement As Shown.

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

NOTES:

1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET 32 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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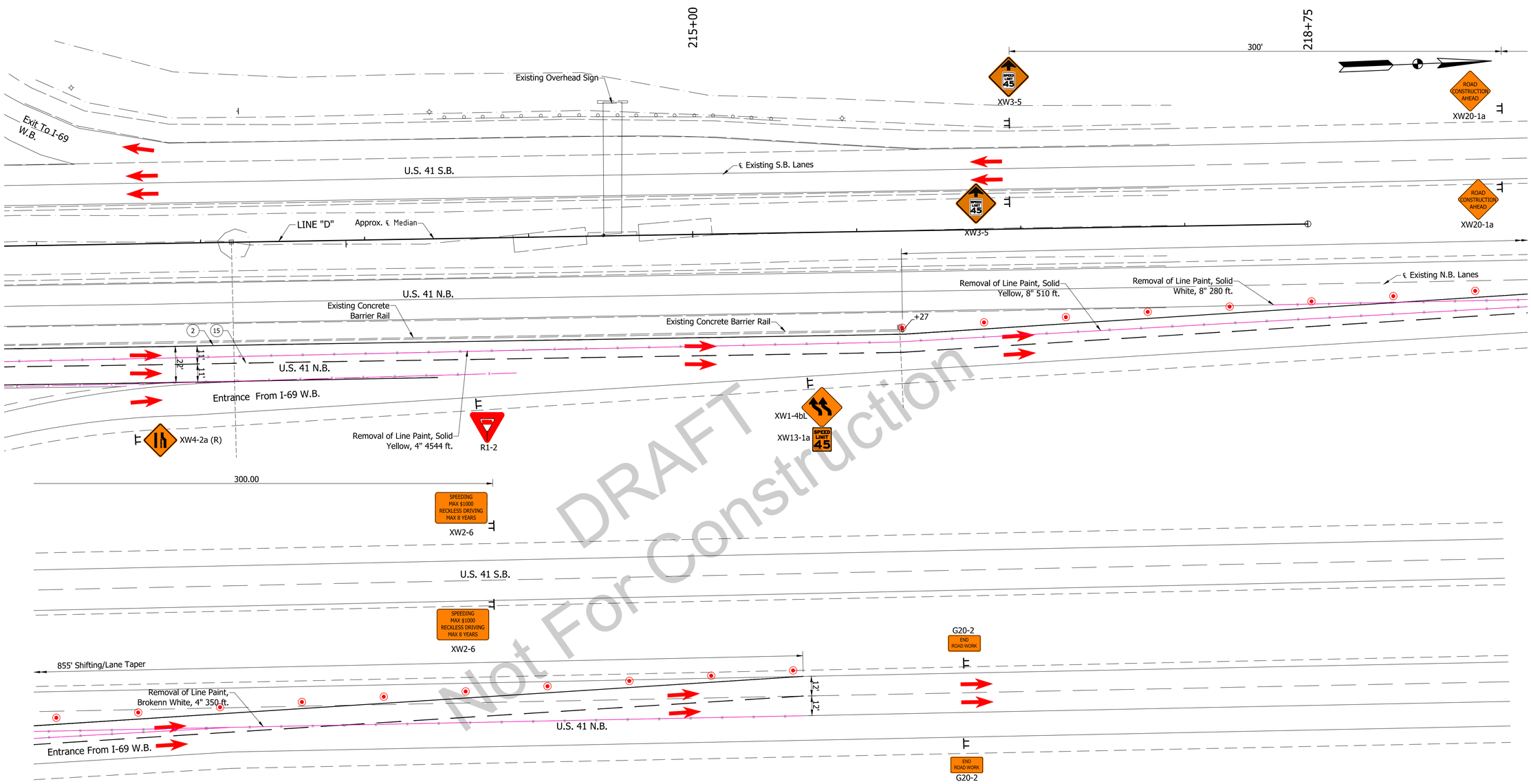

DRAFT
Not For Construction

LEGEND

1. Temporary Pavement Marking, Removable, Solid, White, 4"
2. Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15. Temporary Pavement Marking, Removable, Broken, White, 4"
22. Temporary Pavement Marking, Removable, Solid, White, 8"
23. Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Line Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

SEQUENCE OF OPERATIONS: PHASE 2
1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Restrict Turning Movements At Shawnee Drive And Waterworks Road.
3. Construct Northbound Bridges And Pavement As Shown.

NOTES:
1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	33 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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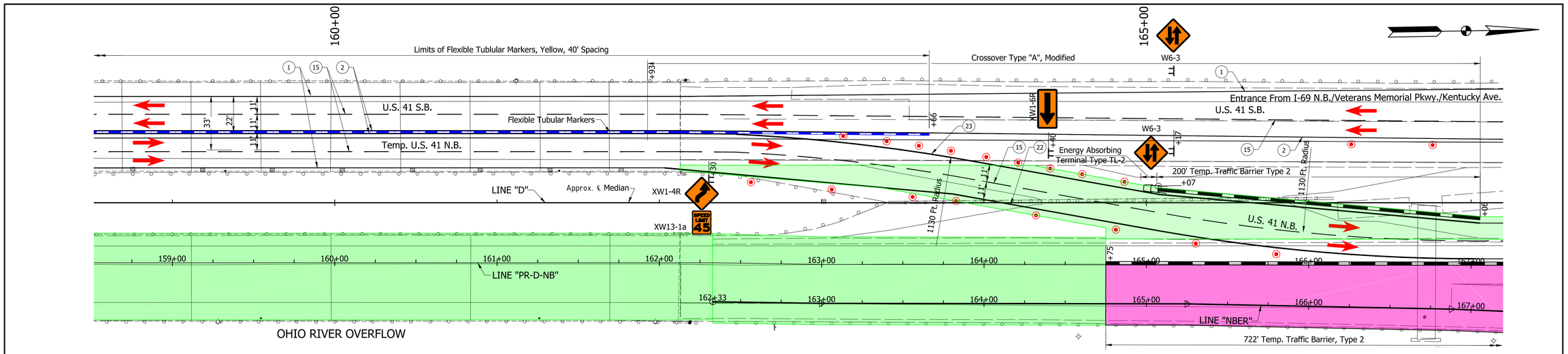


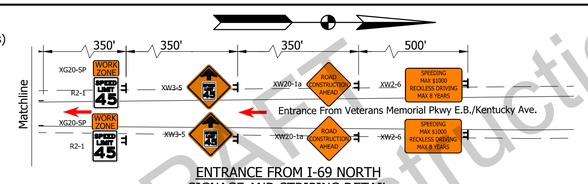
LEGEND

1. Temporary Pavement Marking, Removable, Solid, White, 4"
2. Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15. Temporary Pavement Marking, Removable, Broken, White, 4"
22. Temporary Pavement Marking, Removable, Solid, White, 8"
23. Temporary Pavement Marking, Removable, Solid, Yellow, 8"

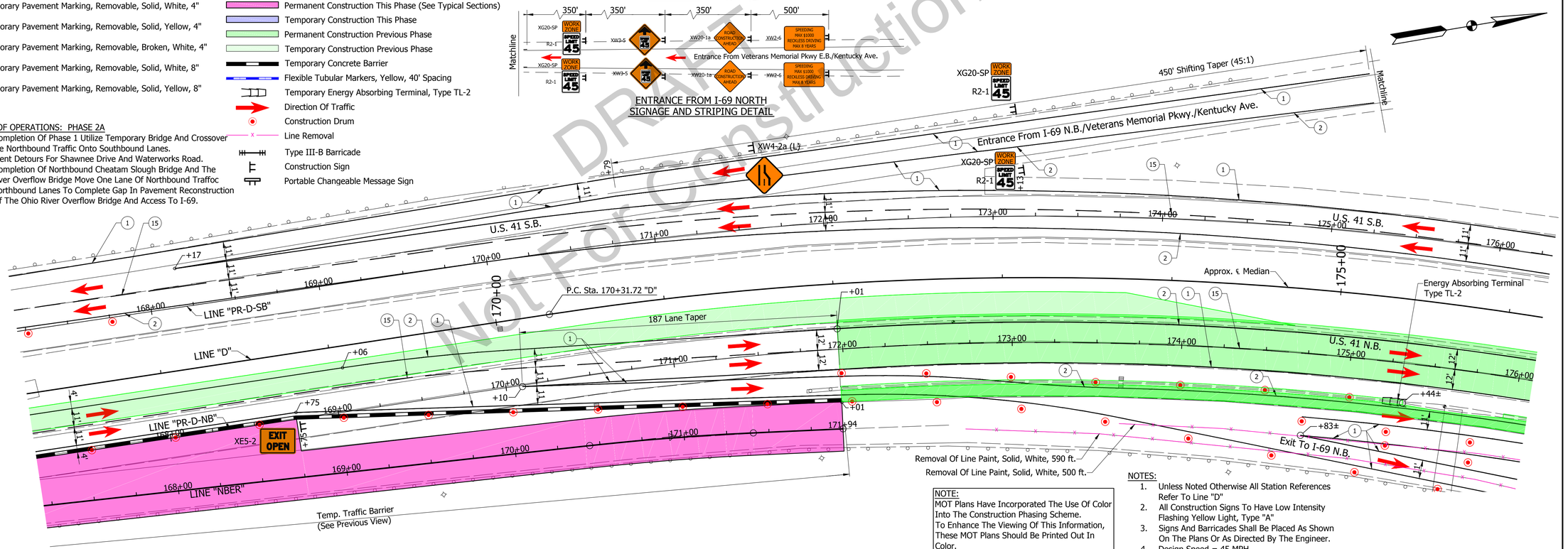
- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Line Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

SEQUENCE OF OPERATIONS: PHASE 2A

1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Implement Detours For Shawnee Drive And Waterworks Road.
3. Upon Completion Of Northbound Cheatam Slough Bridge And The Ohio River Overflow Bridge Move One Lane Of Northbound Traffoc Onto Northbound Lanes To Complete Gap In Pavement Reconstruction North of The Ohio River Overflow Bridge And Access To I-69.



ENTRANCE FROM I-69 NORTH
SIGNAGE AND STRIPING DETAIL



NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

NOTES:

1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

DRAFT
Not For Construction

MICHAEL MAEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER — 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

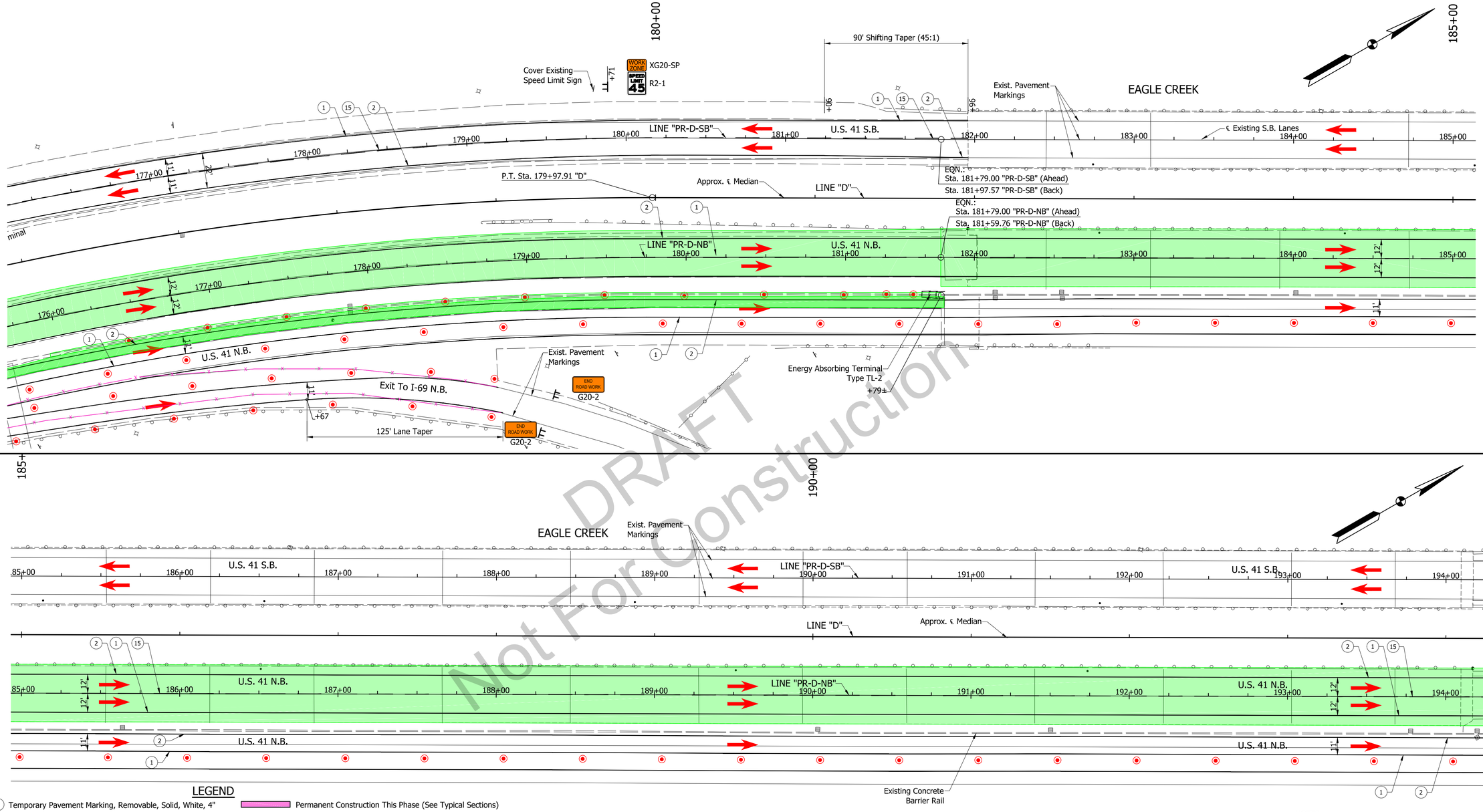
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2A

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	34 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

U:\5605\ProDevelopment\Design\Drawings\MOT plans\5605R322-PH-2a.dwg Lawrence Kirsch Plot:11/8/2016 1:52 PM Save:11/8/2016 1:09 PM



LEGEND

1. Temporary Pavement Marking, Removable, Solid, White, 4"
2. Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15. Temporary Pavement Marking, Removable, Broken, White, 4"
22. Temporary Pavement Marking, Removable, Solid, White, 8"
23. Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Line Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

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SEQUENCE OF OPERATIONS: PHASE 2A

1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Implement Detours For Shawnee Drive And Waterworks Road.
3. Upon Completion Of Northbound Cheatam Slough Bridge And The Ohio River Overflow Bridge Move One Lane Of Northbound Traffoc Onto Northbound Lanes To Complete Gap In Pavement Reconstruction North of The Ohio River Overflow Bridge And Access To I-69.

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MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2A

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	35 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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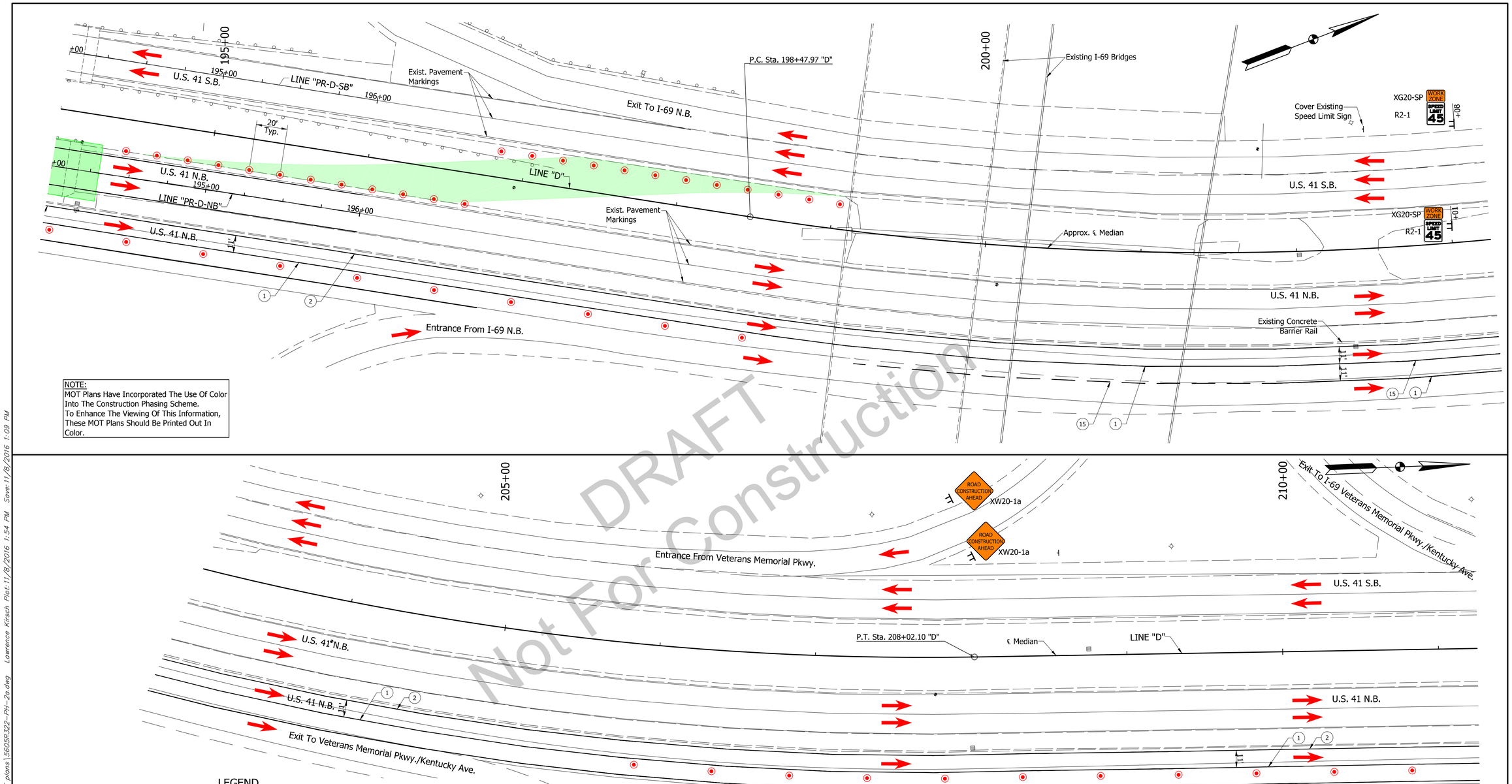

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DRAFT
Not For Construction

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Line Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTES:
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4. Design Speed = 45 MPH

SEQUENCE OF OPERATIONS: PHASE 2A
1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Implement Detours For Shawnee Drive And Waterworks Road.
3. Upon Completion Of Northbound Cheatam Slough Bridge And The Ohio River Overflow Bridge Move One Lane Of Northbound Traffoc Onto Northbound Lanes To Complete Gap In Pavement Reconstruction North of The Ohio River Overflow Bridge And Access To I-69.

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE
DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2A

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	36 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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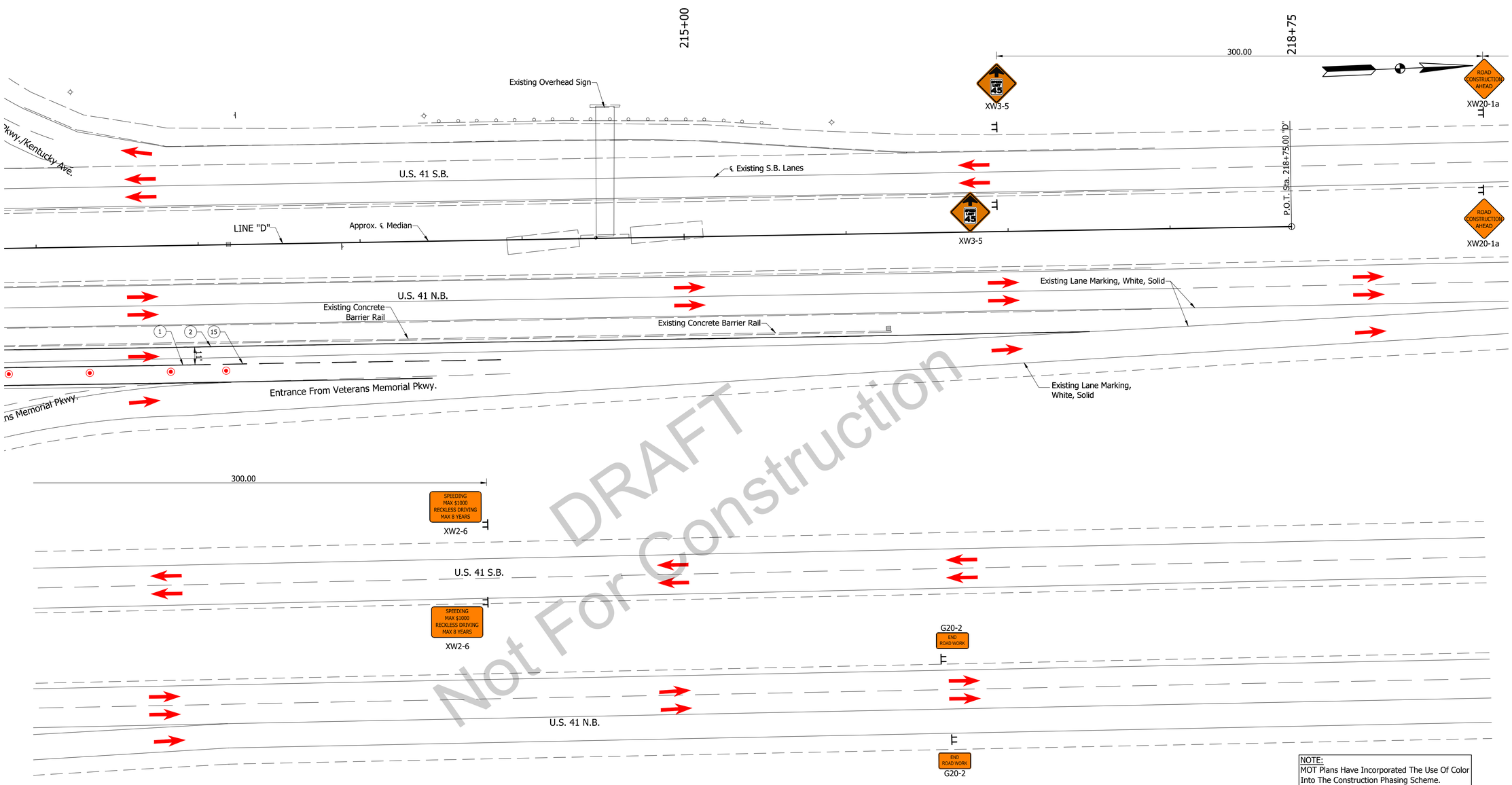

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Line Removal
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTES:
All Construction Signs to have Low Intensity Flashing Yellow Light, Type "A"
Signs and Barricades shall be placed as shown on the Plans or as directed by the Engineer.
Design Speed = 45 MPH

NOTE:
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SEQUENCE OF OPERATIONS: PHASE 2A
1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Implement Detours For Shawnee Drive And Waterworks Road.
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MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2A

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	37 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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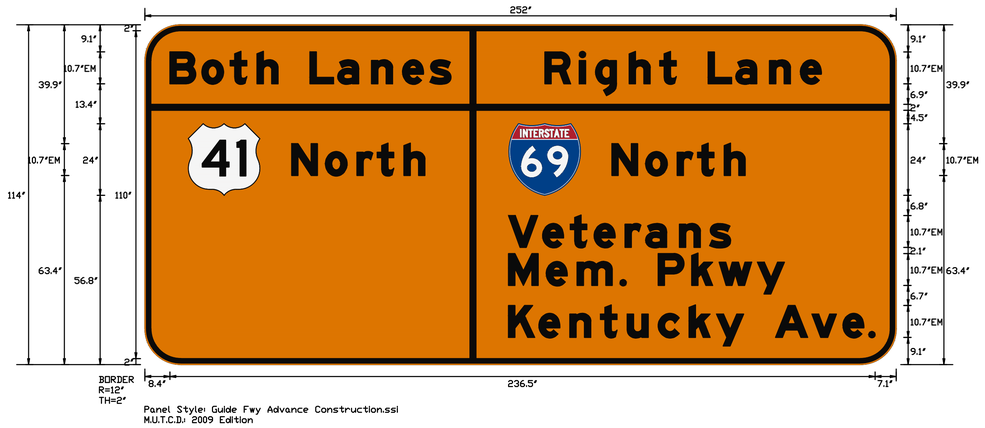

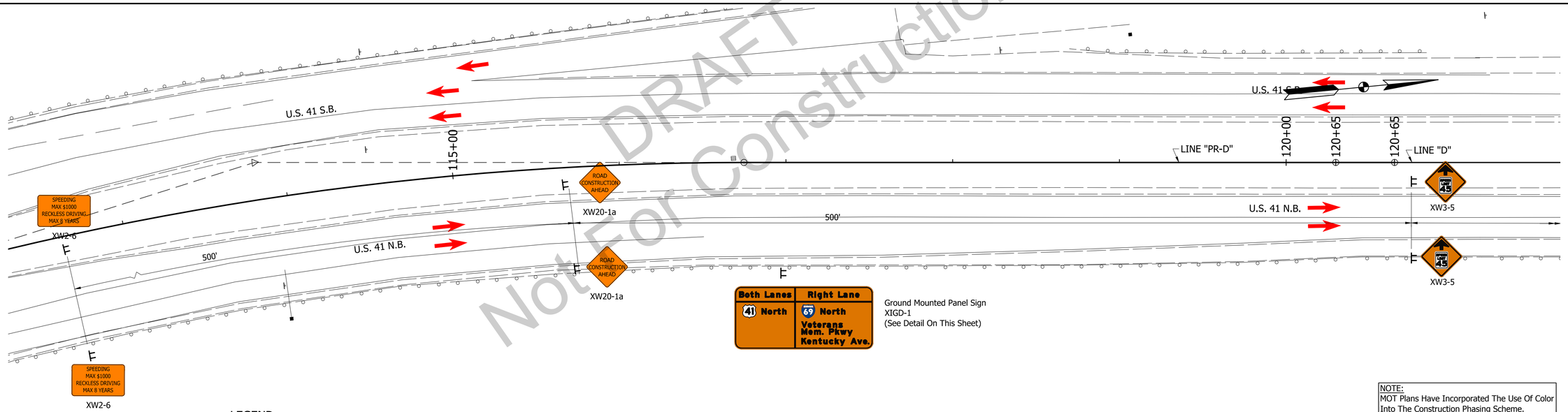

DRAFT
Not For Construction

LEGEND

1. Temporary Pavement Marking, Removable, Solid, White, 4"
2. Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15. Temporary Pavement Marking, Removable, Broken, White, 4"
22. Temporary Pavement Marking, Removable, Solid, White, 8"
23. Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTE:
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SEQUENCE OF OPERATIONS: PHASE 2B

1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Implement Detours For Shawnee Drive And Waterworks Road.
3. Upon Completion Of Northbound Cheatam Slough Bridge And The Ohio River Overflow Bridge Move One Lane Of Northbound Traffic Onto Northbound Lanes To Complete Gap In Pavement Reconstruction North of The Ohio River Overflow Bridge And Access To I-69.

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MICHAEL MAHEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK

CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2B

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	38 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

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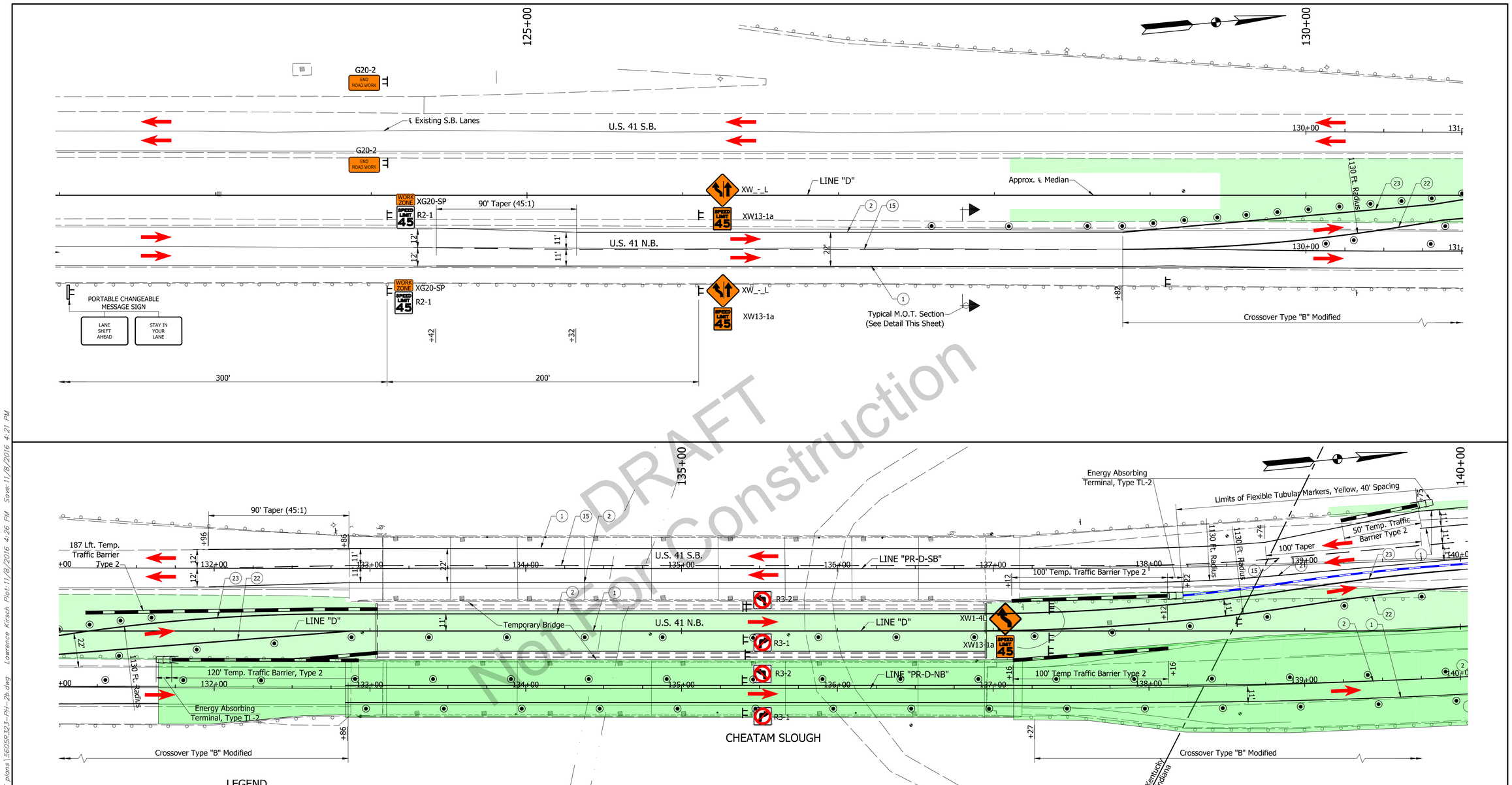

DRAFT
Not For Construction

LEGEND

1. Temporary Pavement Marking, Removable, Solid, White, 4"
2. Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15. Temporary Pavement Marking, Removable, Broken, White, 4"
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- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
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SEQUENCE OF OPERATIONS: PHASE 2B

1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Implement Detours For Shawnee Drive And Waterworks Road.
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NOTE:
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MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2B

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	39 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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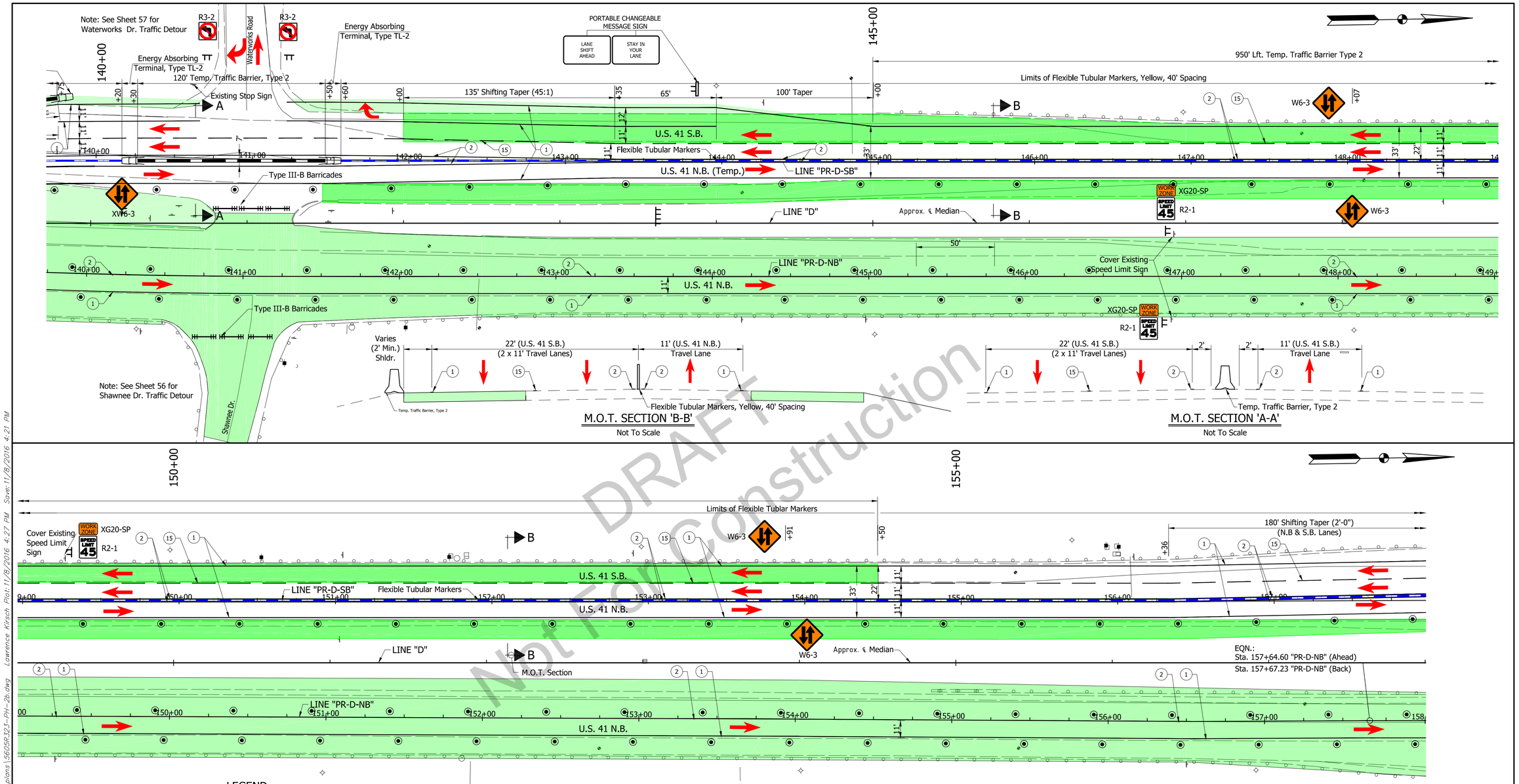

DRAFT
Not For Construction

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
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- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
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- Temporary Construction Previous Phase
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SEQUENCE OF OPERATIONS: PHASE 2B
1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Implement Detours For Shawnee Drive And Waterworks Road.
3. Upon Completion Of Northbound Cheatam Slough Bridge And The Ohio River Overflow Bridge Move One Lane Of Northbound Traffic Onto Northbound Lanes To Complete Gap In Pavement Reconstruction North of The Ohio River Overflow Bridge And Access To I-69.

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE 2B

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	40 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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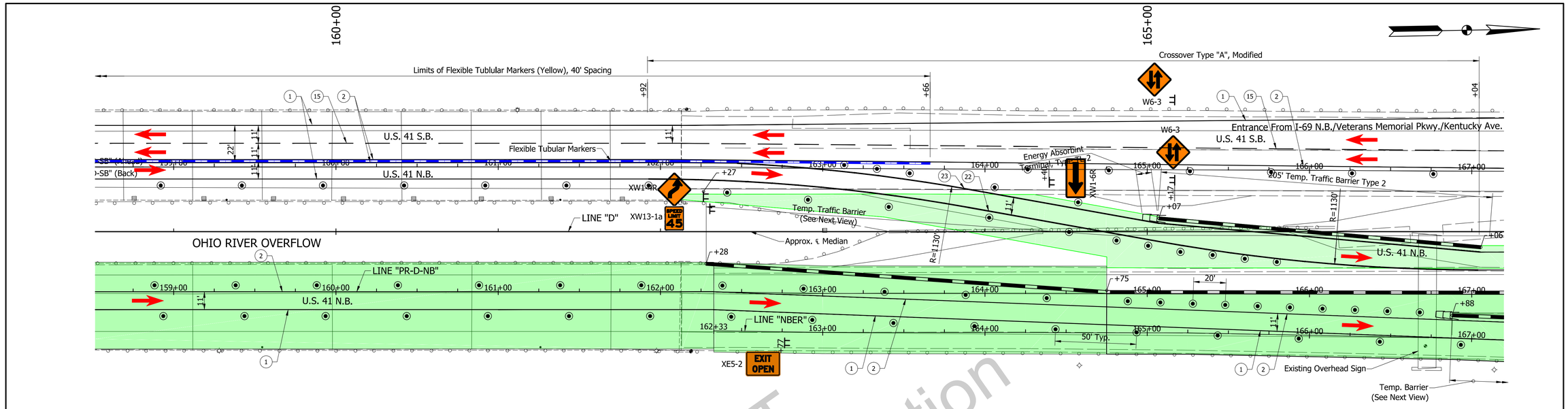

LEGEND

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15. Temporary Pavement Marking, Removable, Broken, White, 4"
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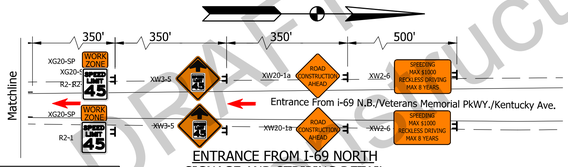

ENTRANCE FROM I-69 NORTH
SIGNAGE AND STRIPING DETAIL

NOTES:

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2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
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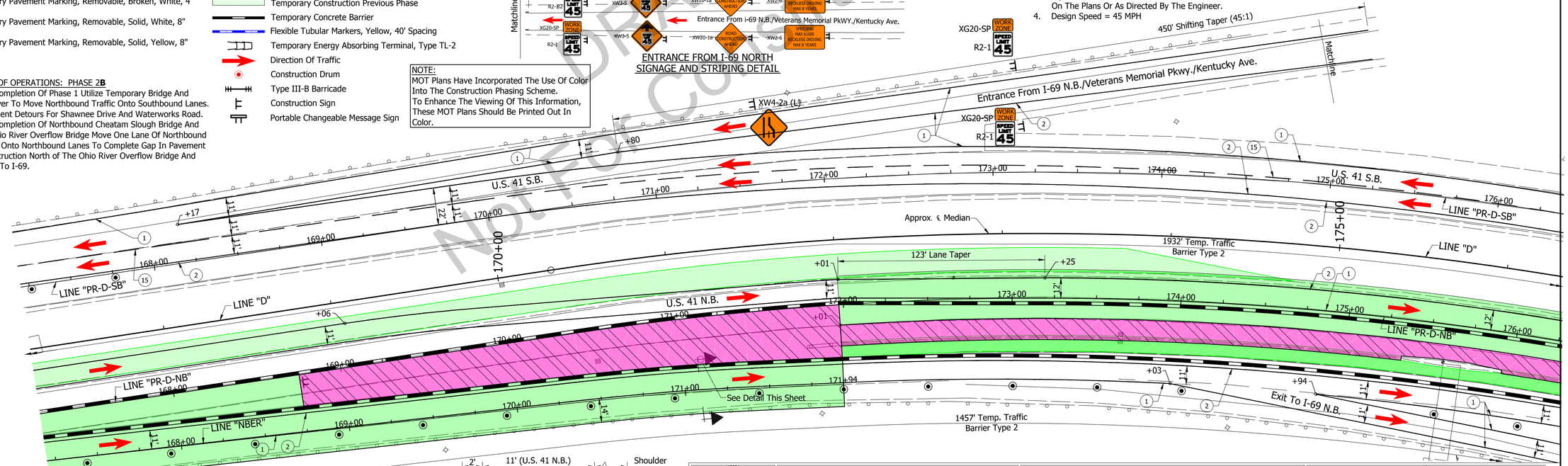
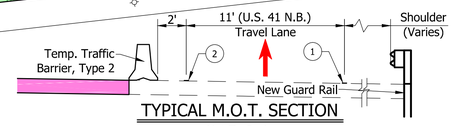
SEQUENCE OF OPERATIONS: PHASE 2B

1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Implement Detours For Shawnee Drive And Waterworks Road.
3. Upon Completion Of Northbound Cheatam Slough Bridge And The Ohio River Overflow Bridge Move One Lane Of Northbound Traffoc Onto Northbound Lanes To Complete Gap In Pavement Reconstruction North of The Ohio River Overflow Bridge And Access To I-69.





TYPICAL M.O.T. SECTION
Not To Scale

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2B

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	41 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

DRAFT
Not For Construction

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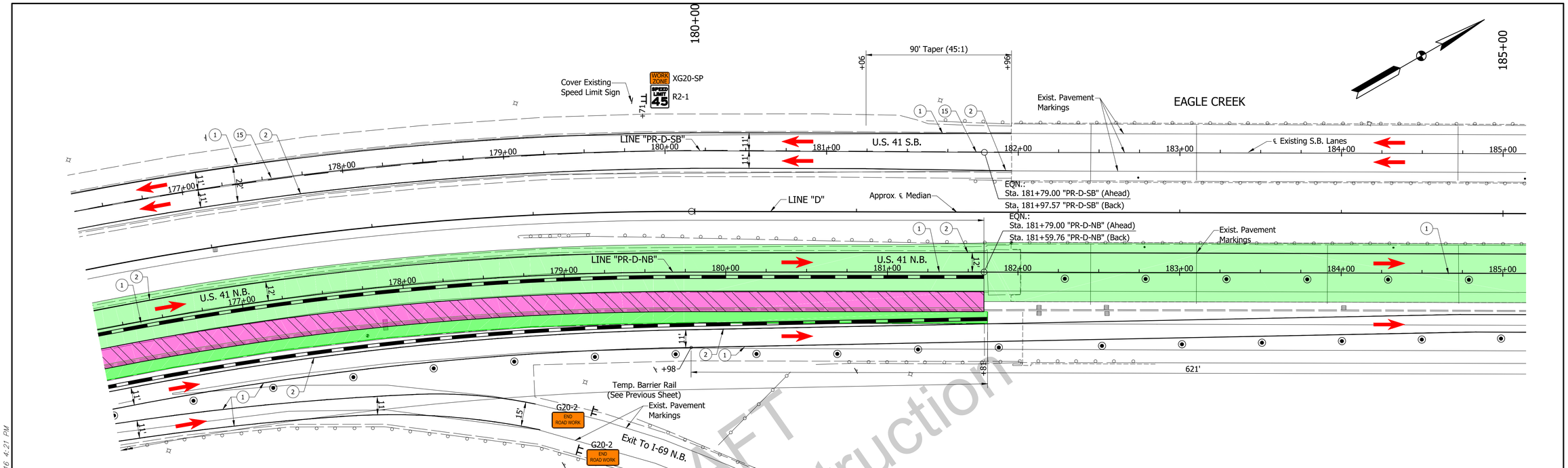

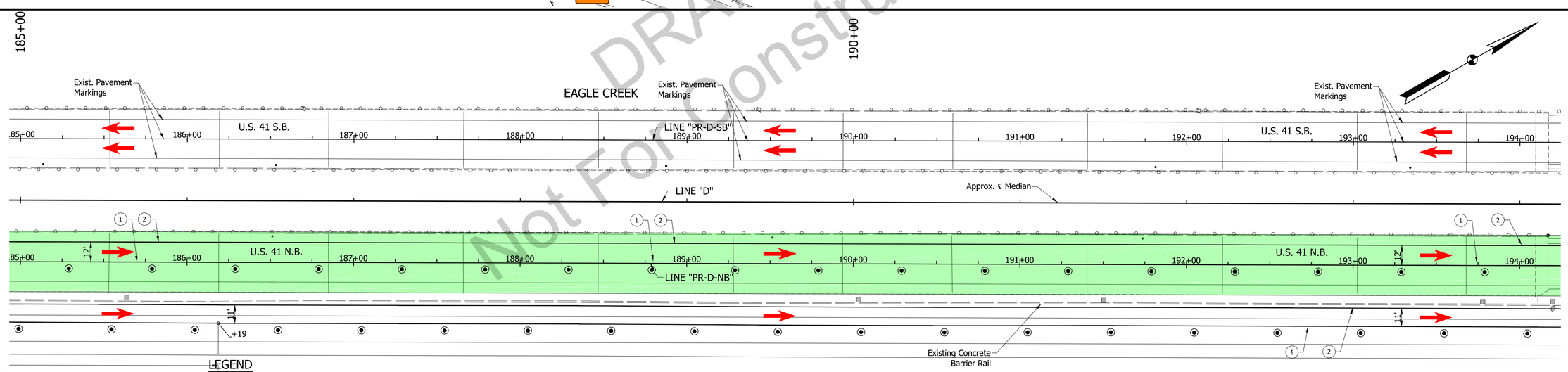

DRAFT
Not For Construction

LEGEND

1. Temporary Pavement Marking, Removable, Solid, White, 4"
2. Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15. Temporary Pavement Marking, Removable, Broken, White, 4"
22. Temporary Pavement Marking, Removable, Solid, White, 8"
23. Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

NOTES:
1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

SEQUENCE OF OPERATIONS: PHASE 2B
1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Implement Detours For Shawnee Drive And Waterworks Road.
3. Upon Completion Of Northbound Cheatam Slough Bridge And The Ohio River Overflow Bridge Move One Lane Of Northbound Traffic Onto Northbound Lanes To Complete Gap In Pavement Reconstruction North of The Ohio River Overflow Bridge And Access To I-69.

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE 2B

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	42 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

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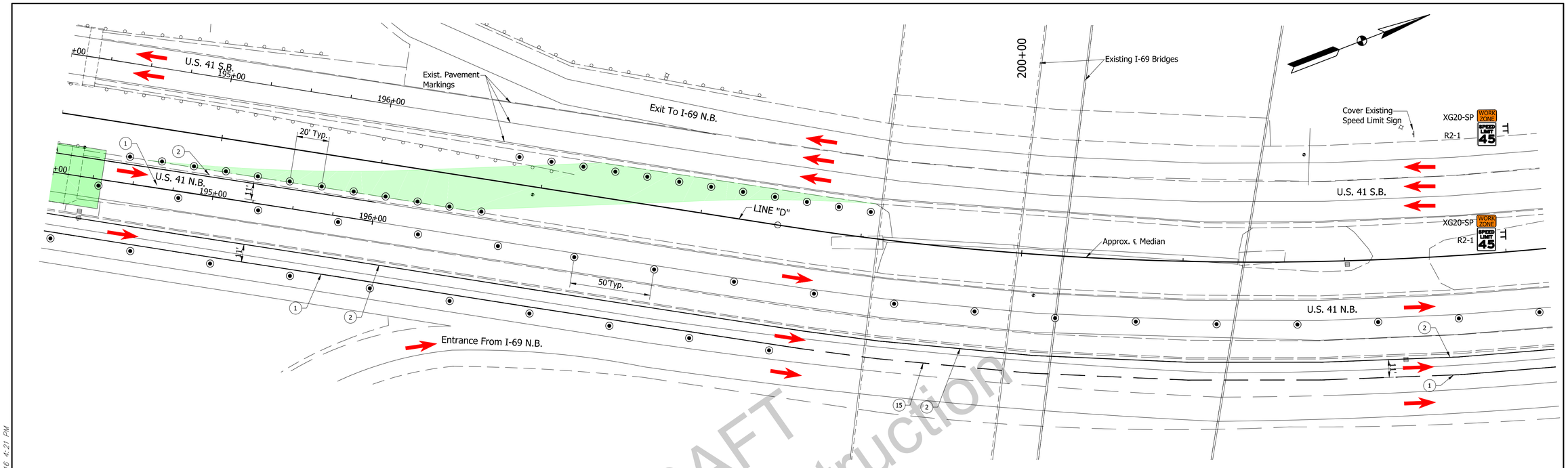
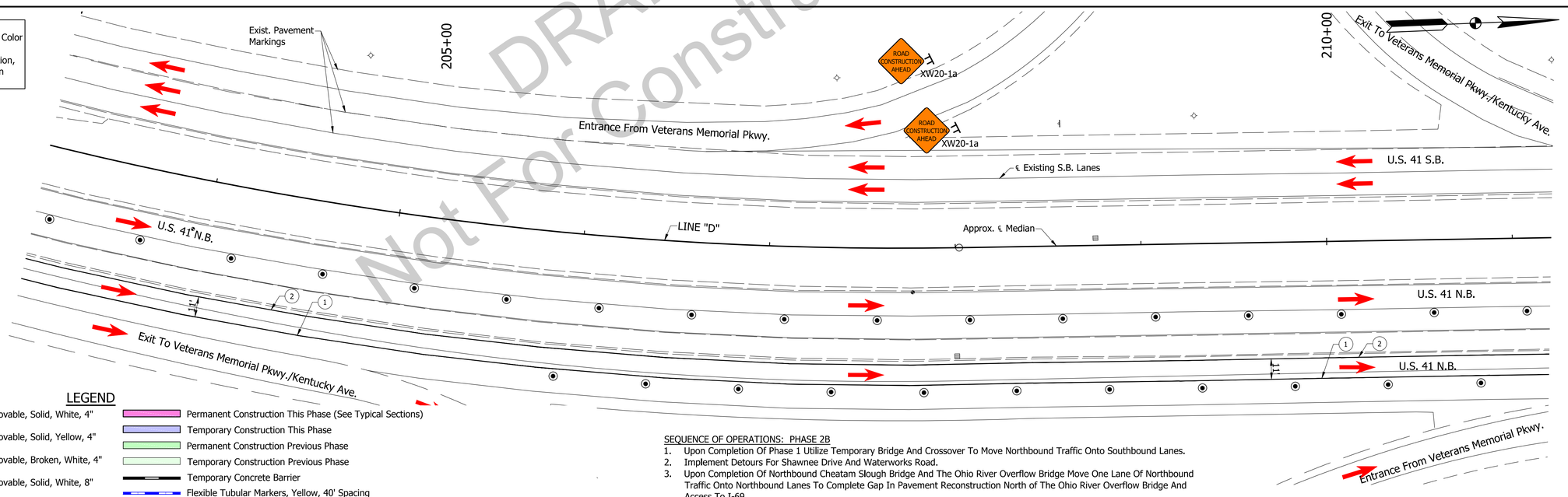


NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.



DRAFT
Not For Construction

LEGEND

1	Temporary Pavement Marking, Removable, Solid, White, 4"
2	Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15	Temporary Pavement Marking, Removable, Broken, White, 4"
22	Temporary Pavement Marking, Removable, Solid, White, 8"
23	Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTES:
1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

SEQUENCE OF OPERATIONS: PHASE 2B
1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Implement Detours For Shawnee Drive And Waterworks Road.
3. Upon Completion Of Northbound Cheatam Slough Bridge And The Ohio River Overflow Bridge Move One Lane Of Northbound Traffic Onto Northbound Lanes To Complete Gap In Pavement Reconstruction North of The Ohio River Overflow Bridge And Access To I-69.

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2B

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	43 OF 164
CONTRACT	PROJECT
B-33539	1592481

B/S NO. 5605

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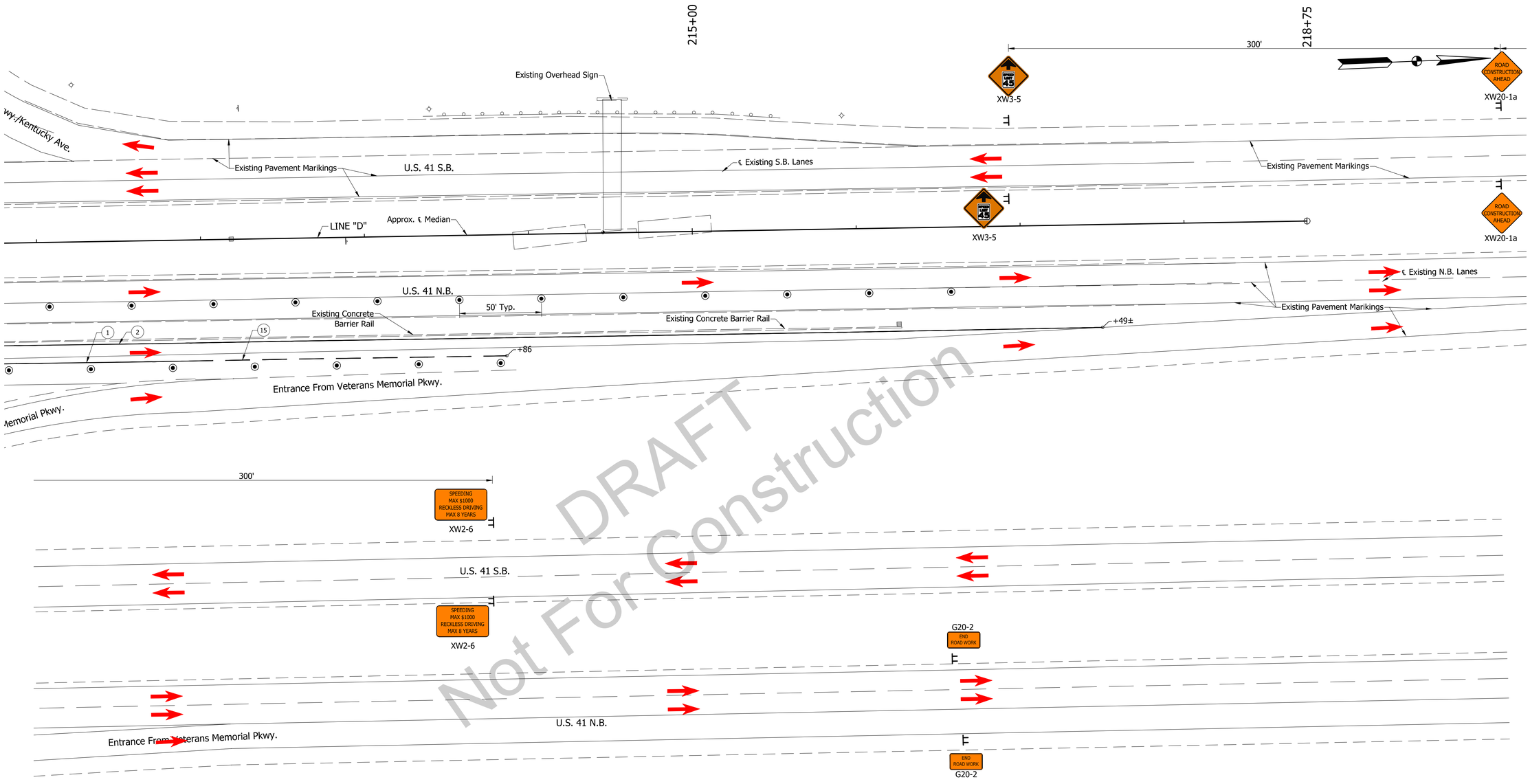

DRAFT
Not For Construction

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTES:

1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

SEQUENCE OF OPERATIONS: PHASE 2B

1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Implement Detours For Shawnee Drive And Waterworks Road.
3. Upon Completion Of Northbound Cheatam Slough Bridge And The Ohio River Overflow Bridge Move One Lane Of Northbound Traffic Onto Northbound Lanes To Complete Gap In Pavement Reconstruction North of The Ohio River Overflow Bridge And Access To I-69.

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2B

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	44 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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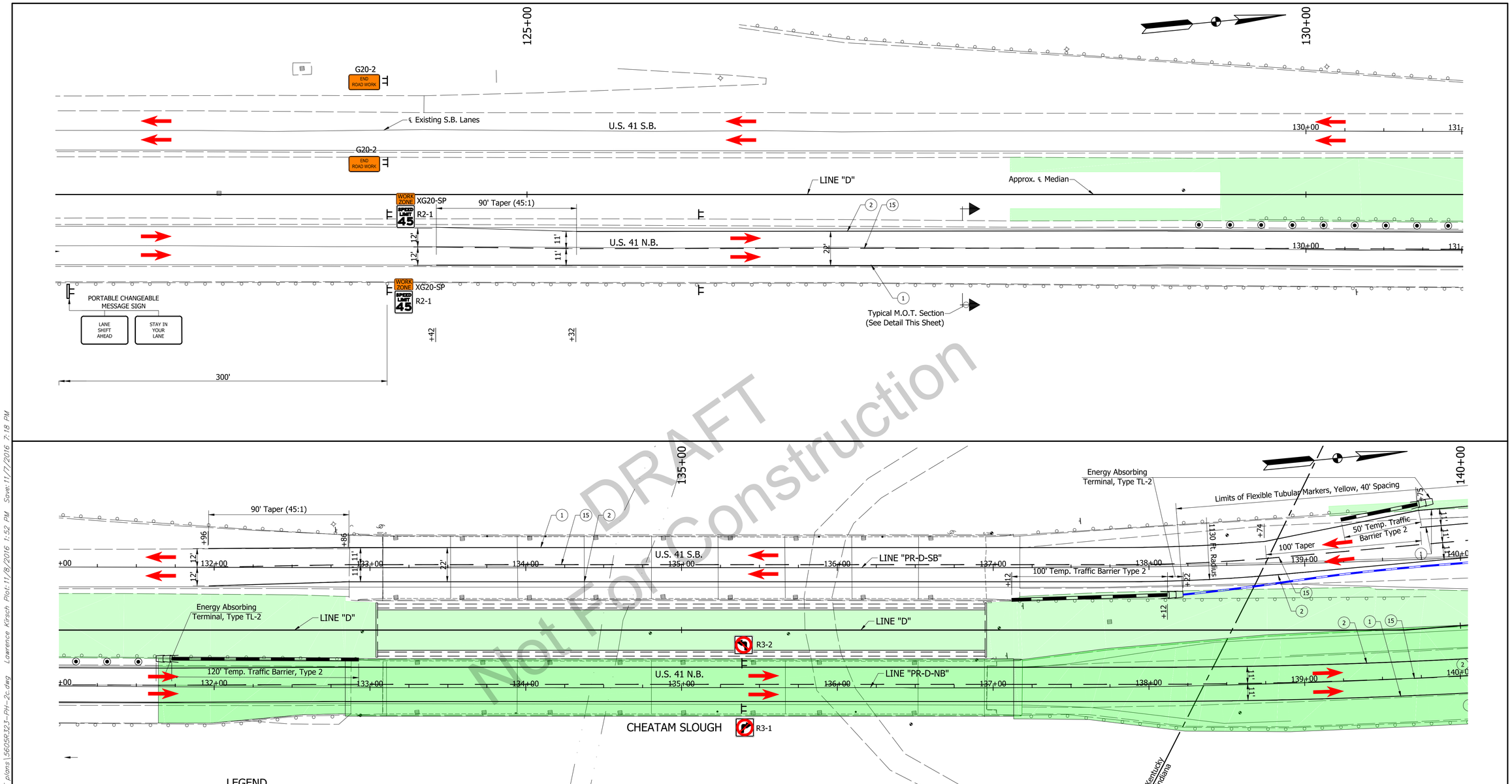

DRAFT
Not For Construction

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTES:

1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

SEQUENCE OF OPERATIONS: PHASE 2C

1. Upon Completion Of Phase 2B Reconstruction Work Move Both Lanes Of Northbound Traffic Onto Northbound Lanes.
2. Complete Remaining Northbound Pavement Reconstruction Work Including Concrete Barrier.

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2C

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	----
VERTICAL SCALE	DESIGNATION
----	1592481
SURVEY BOOK	SHEET 45 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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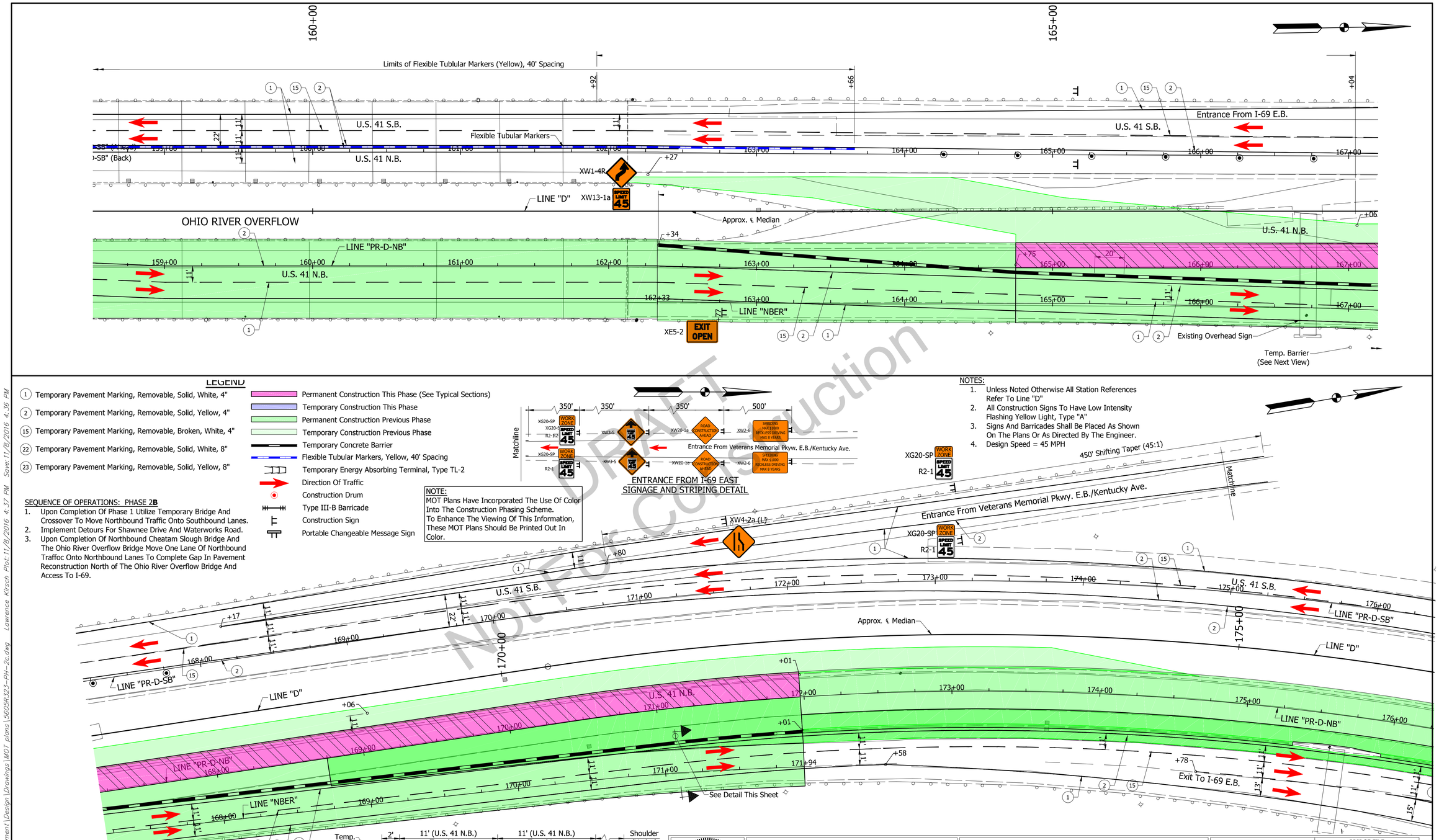

LEGEND

1. Temporary Pavement Marking, Removable, Solid, White, 4"
2. Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15. Temporary Pavement Marking, Removable, Broken, White, 4"
22. Temporary Pavement Marking, Removable, Solid, White, 8"
23. Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme. To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

SEQUENCE OF OPERATIONS: PHASE 2**B**

1. Upon Completion Of Phase 1 Utilize Temporary Bridge And Crossover To Move Northbound Traffic Onto Southbound Lanes.
2. Implement Detours For Shawnee Drive And Waterworks Road.
3. Upon Completion Of Northbound Cheatam Slough Bridge And The Ohio River Overflow Bridge Move One Lane Of Northbound Traffoc Onto Northbound Lanes To Complete Gap In Pavement Reconstruction North of The Ohio River Overflow Bridge And Access To I-69.

NOTES:

1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

DRAFT
Not For Construction

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2C

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	----
VERTICAL SCALE	DESIGNATION
----	1592481
SURVEY BOOK	SHEET 46 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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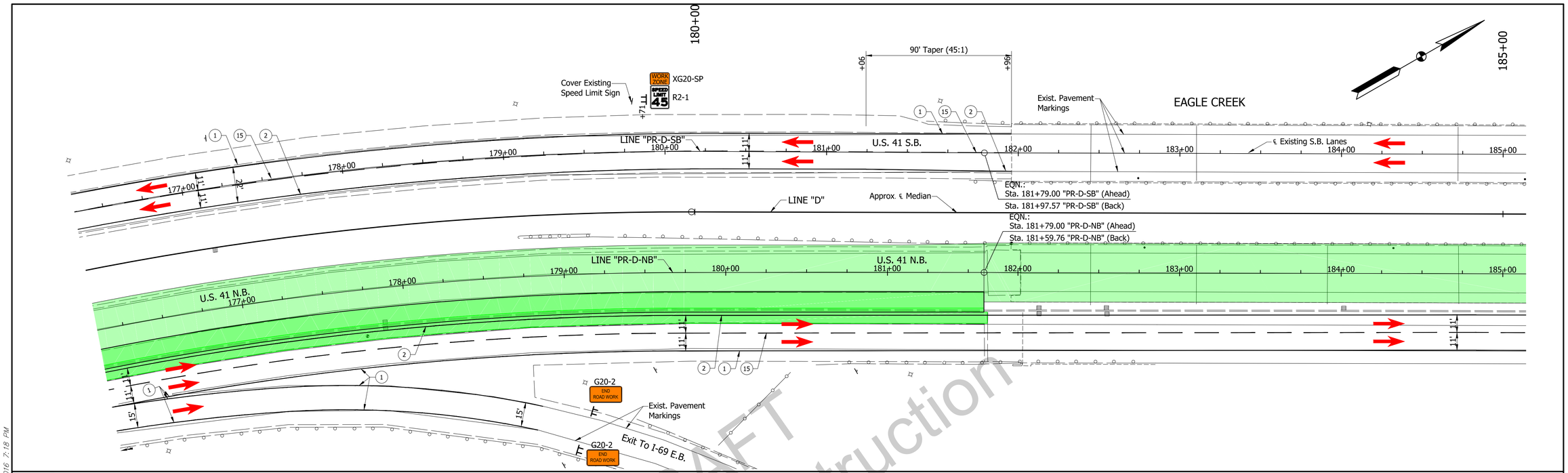

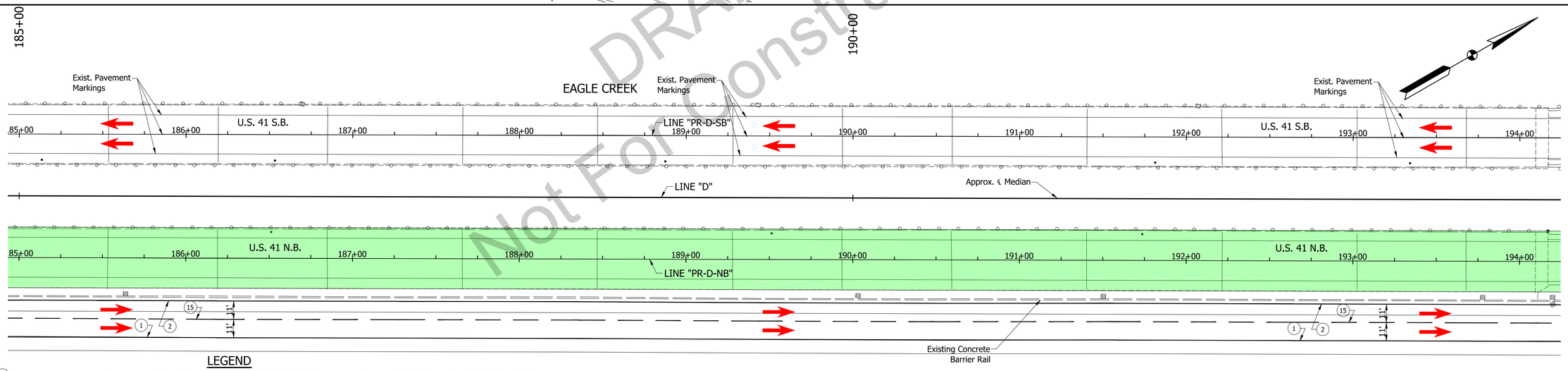

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"
- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTE:
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NOTES:
1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

SEQUENCE OF OPERATIONS: PHASE 2C
1. Upon Completion Of Phase 2B Reconstruction Work Move Both Lanes Of Northbound Traffic Onto Northbound Lanes.
2. Complete Remaining Northbound Pavement Reconstruction Work Including Concrete Barrier.

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2C

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	----
VERTICAL SCALE	DESIGNATION
----	1592481
SURVEY BOOK	SHEET
	47 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

DRAFT
Not For Construction

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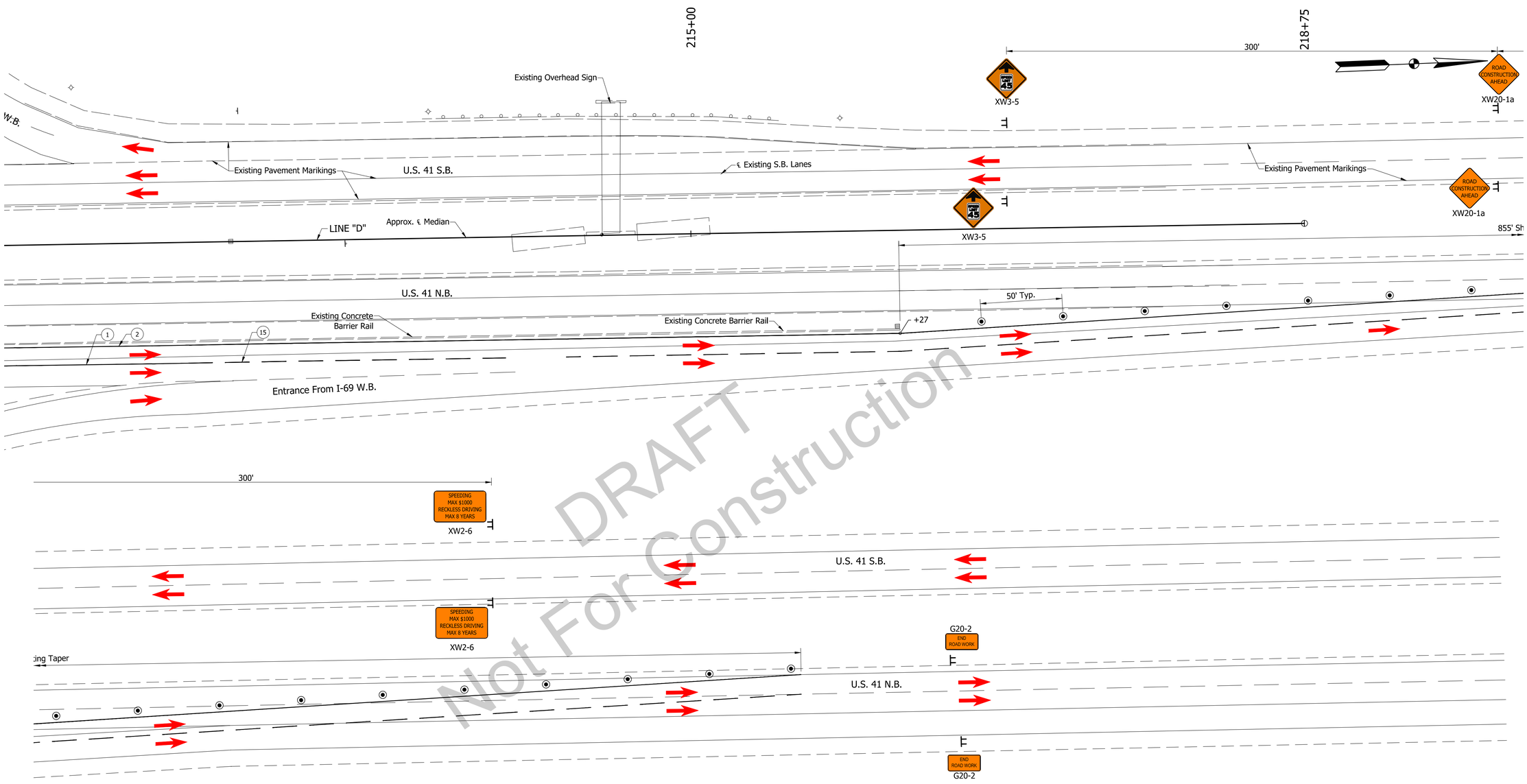

DRAFT
Not For Construction

LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTES:
1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

SEQUENCE OF OPERATIONS: PHASE 2C
1. Upon Completion Of Phase 2B Reconstruction Work Move Both Lanes Of Northbound Traffic Onto Northbound Lanes.
2. Complete Remaining Northbound Pavement Reconstruction Work Including Concrete Barrier.

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2C

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	----
VERTICAL SCALE	DESIGNATION
----	1592481
SURVEY BOOK	SHEET
	48 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

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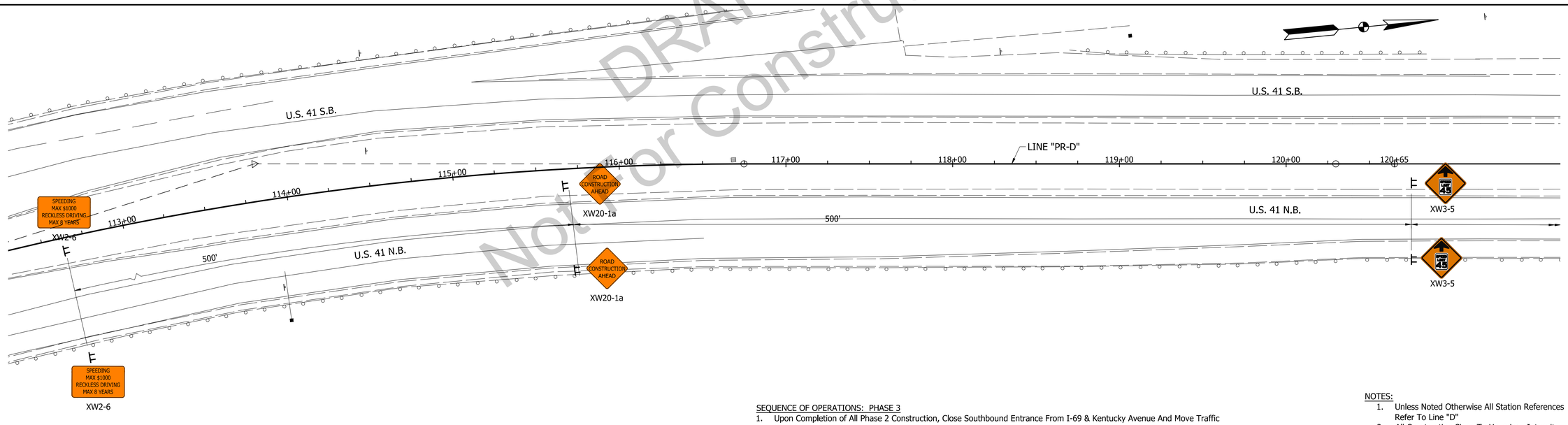
LEGEND

- (1) Temporary Pavement Marking, Removable, Solid, White, 4"
- (2) Temporary Pavement Marking, Removable, Solid, Yellow, 4"
- (15) Temporary Pavement Marking, Removable, Broken, White, 4"
- (22) Temporary Pavement Marking, Removable, Solid, White, 8"
- (23) Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

DRAFT
Not For Construction



SEQUENCE OF OPERATIONS: PHASE 3

1. Upon Completion of All Phase 2 Construction, Close Southbound Entrance From I-69 & Kentucky Avenue And Move Traffic Onto Northbound Lane As Shown.
2. Construct All Pavement & Bridges On Southbound Lanes.

NOTES:

1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

MICHAEL MAEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	49 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BRS NO.

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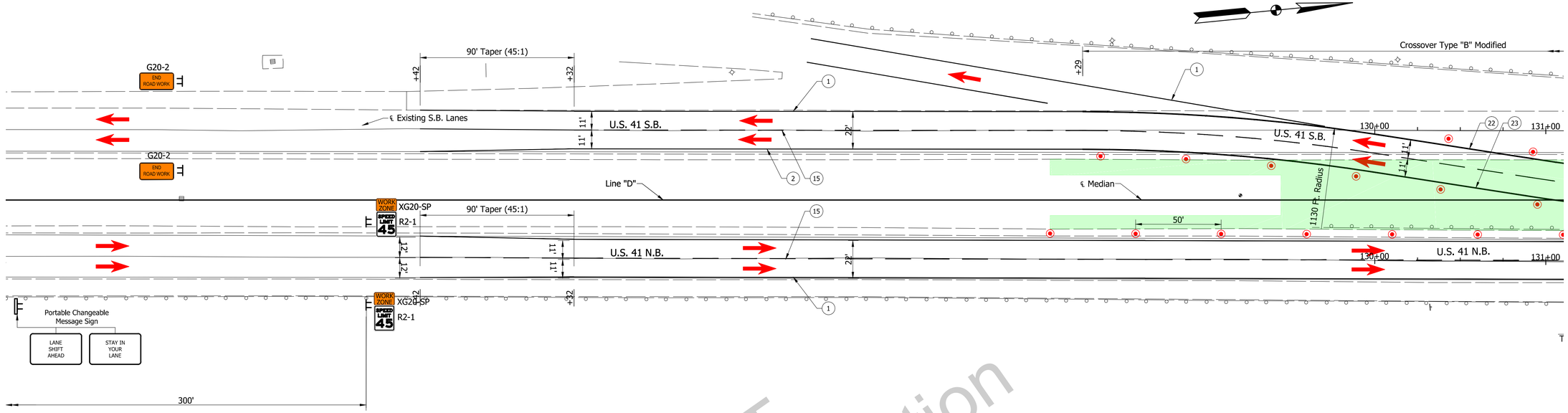

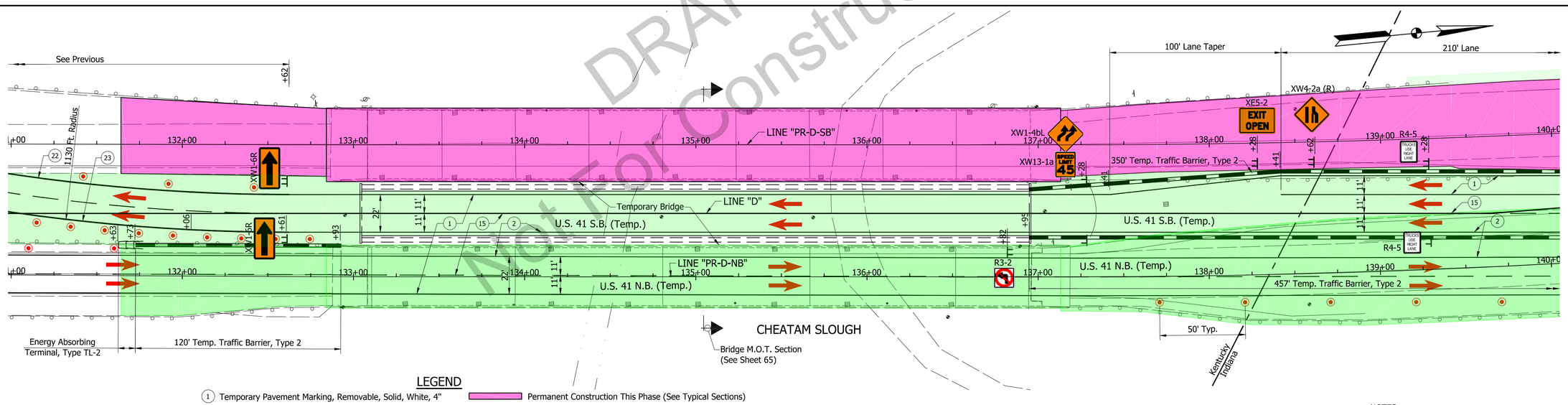

DRAFT
Not For Construction

LEGEND

1. Temporary Pavement Marking, Removable, Solid, White, 4"
2. Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15. Temporary Pavement Marking, Removable, Broken, White, 4"
22. Temporary Pavement Marking, Removable, Solid, White, 8"
23. Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

SEQUENCE OF OPERATIONS: PHASE 3

1. Upon Completion of All Phase 2 Construction, Close Southbound Entrance From I-69 & Kentucky Avenue And Move Traffic Onto Northbound Lane As Shown.
2. Construct All Pavement & Bridges On Southbound Lanes.

NOTES:

1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	50 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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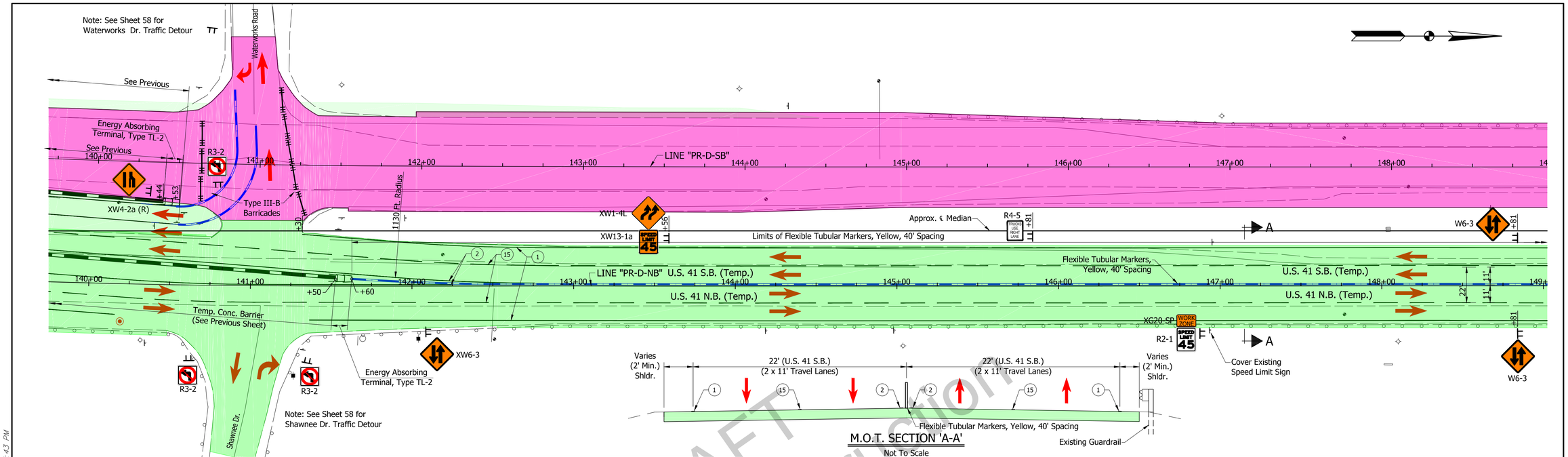
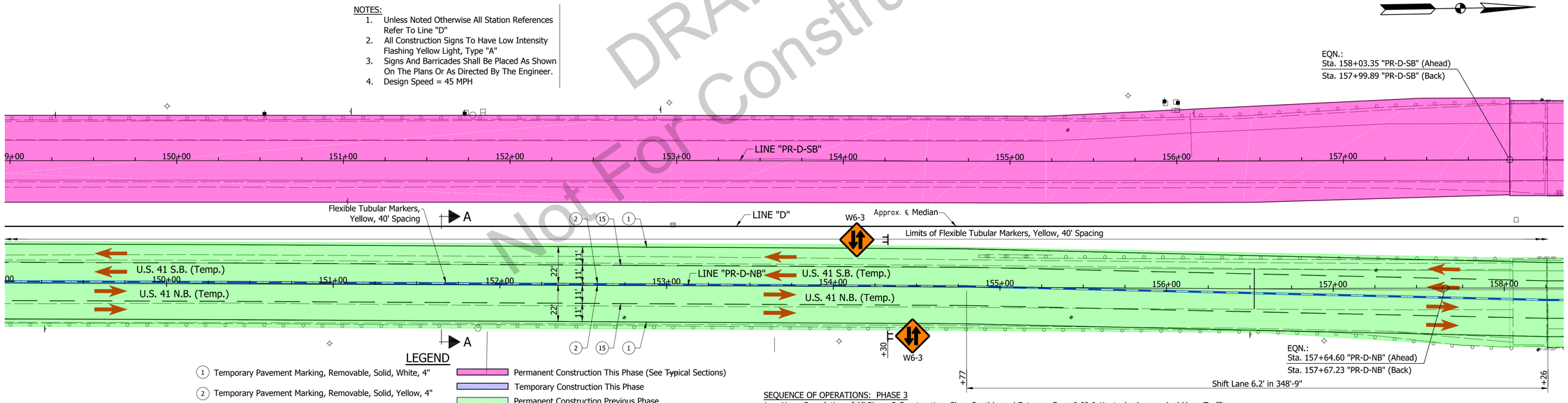


NOTES:

1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH



LEGEND

1. Temporary Pavement Marking, Removable, Solid, White, 4"
2. Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15. Temporary Pavement Marking, Removable, Broken, White, 4"
22. Temporary Pavement Marking, Removable, Solid, White, 8"
23. Temporary Pavement Marking, Removable, Solid, Yellow, 8"

- Permanent Construction This Phase (See Typical Sections)
- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
- Temporary Concrete Barrier
- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

SEQUENCE OF OPERATIONS: PHASE 3

1. Upon Completion of All Phase 2 Construction, Close Southbound Entrance From I-69 & Kentucky Avenue And Move Traffic Onto Northbound Lane As Shown.
2. Construct All Pavement & Bridges On Southbound Lanes.

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	51 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

DRAFT
Not For Construction

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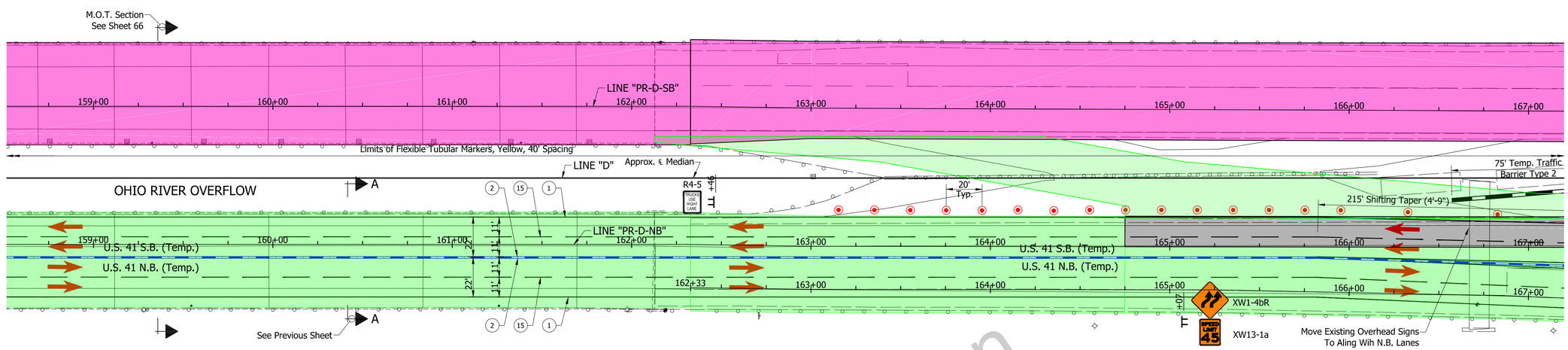
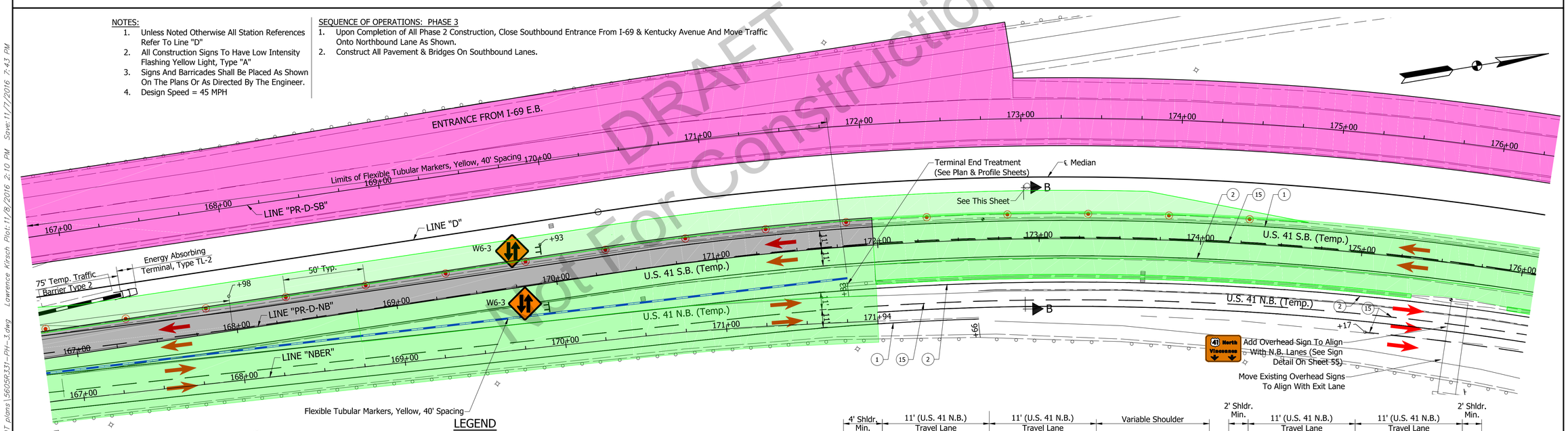


NOTES:

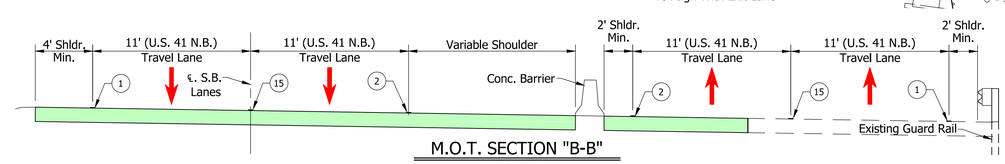
1. Unless Noted Otherwise All Station References Refer To Line "D"
2. All Construction Signs To Have Low Intensity Flashing Yellow Light, Type "A"
3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

SEQUENCE OF OPERATIONS: PHASE 3

1. Upon Completion of All Phase 2 Construction, Close Southbound Entrance From I-69 & Kentucky Avenue And Move Traffic Onto Northbound Lane As Shown.
2. Construct All Pavement & Bridges On Southbound Lanes.



DRAFT
Not For Construction



M.O.T. SECTION "B-B"

Not To Scale

LEGEND

1	Temporary Pavement Marking, Removable, Solid, White, 4"
2	Temporary Pavement Marking, Removable, Solid, Yellow, 4"
15	Temporary Pavement Marking, Removable, Broken, White, 4"
22	Temporary Pavement Marking, Removable, Solid, White, 8"
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- Temporary Construction This Phase
- Permanent Construction Previous Phase
- Temporary Construction Previous Phase
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- Flexible Tubular Markers, Yellow, 40' Spacing
- Temporary Energy Absorbing Terminal, Type TL-2
- Direction Of Traffic
- Construction Drum
- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

NOTE:
MOT Plans Have Incorporated The Use Of Color Into The Construction Phasing Scheme.
To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

MICHAEL MALEK REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	52 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

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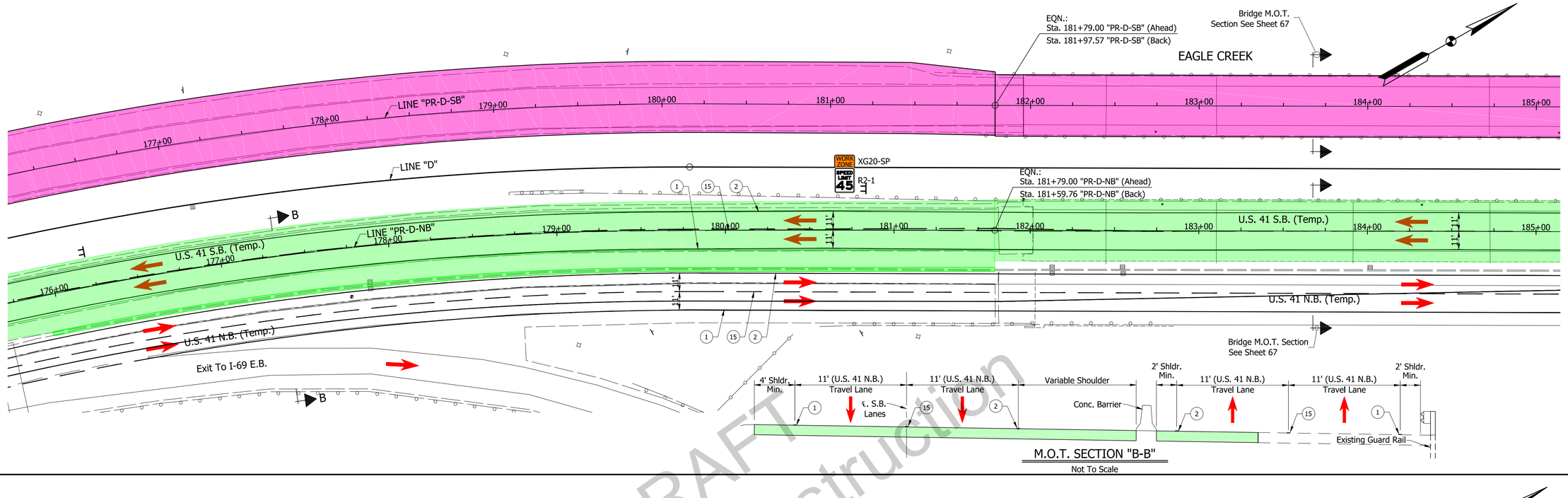

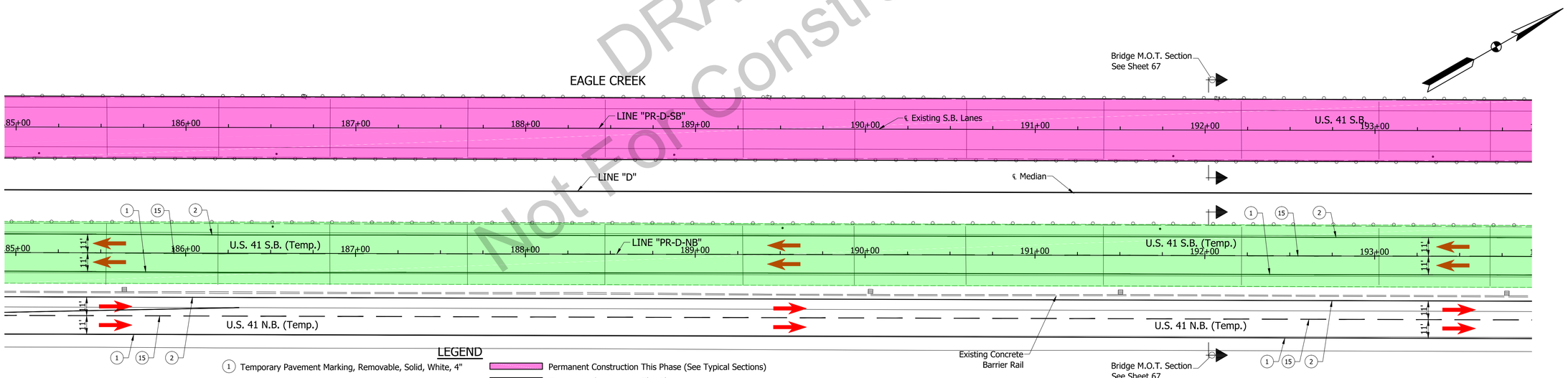

DRAFT
Not For Construction

NOTE:
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To Enhance The Viewing Of This Information, These MOT Plans Should Be Printed Out In Color.

LEGEND

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- Construction Drum
- Type III-B Barricade
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SEQUENCE OF OPERATIONS: PHASE 3

1. Upon Completion of All Phase 2 Construction, Close Southbound Entrance From I-69 & Kentucky Avenue And Move Traffic Onto Northbound Lane As Shown.
2. Construct All Pavement & Bridges On Southbound Lanes.

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3. Signs And Barricades Shall Be Placed As Shown On The Plans Or As Directed By The Engineer.
4. Design Speed = 45 MPH

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	53 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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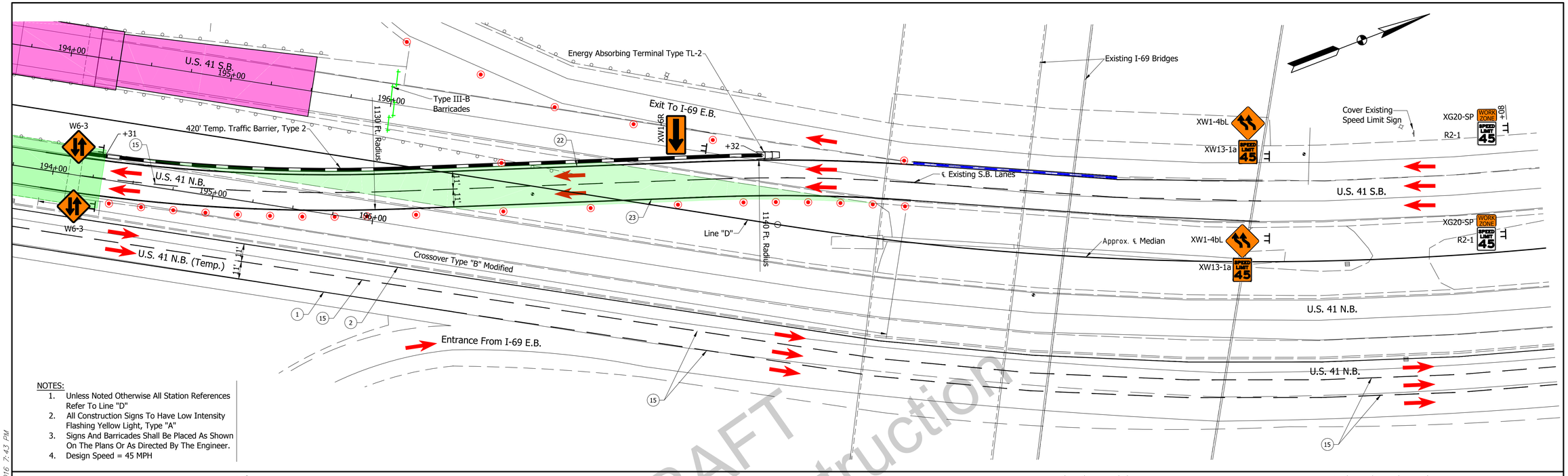

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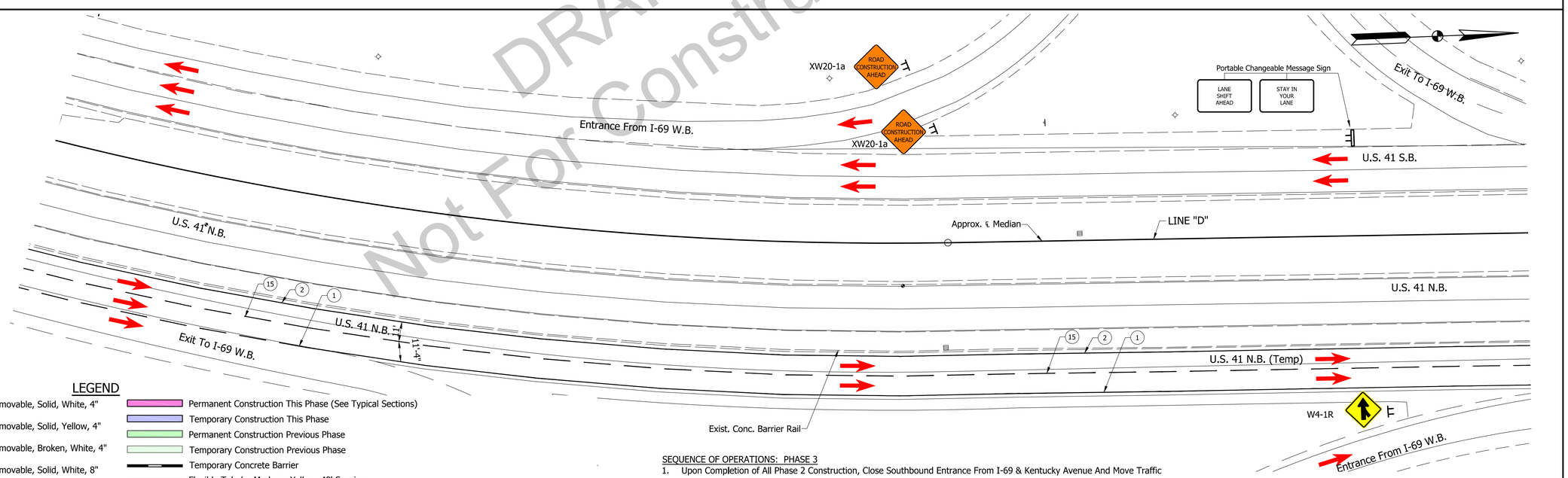

LEGEND

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- Type III-B Barricade
- Construction Sign
- Portable Changeable Message Sign

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SEQUENCE OF OPERATIONS: PHASE 3

1. Upon Completion of All Phase 2 Construction, Close Southbound Entrance From I-69 & Kentucky Avenue And Move Traffic Onto Northbound Lane As Shown.
2. Construct All Pavement & Bridges On Southbound Lanes.

MICHAEL MAYEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER — 10/31/16 DATE

DESIGNED: BZ DRAWN: LK

CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET 54 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

DRAFT
Not For Construction

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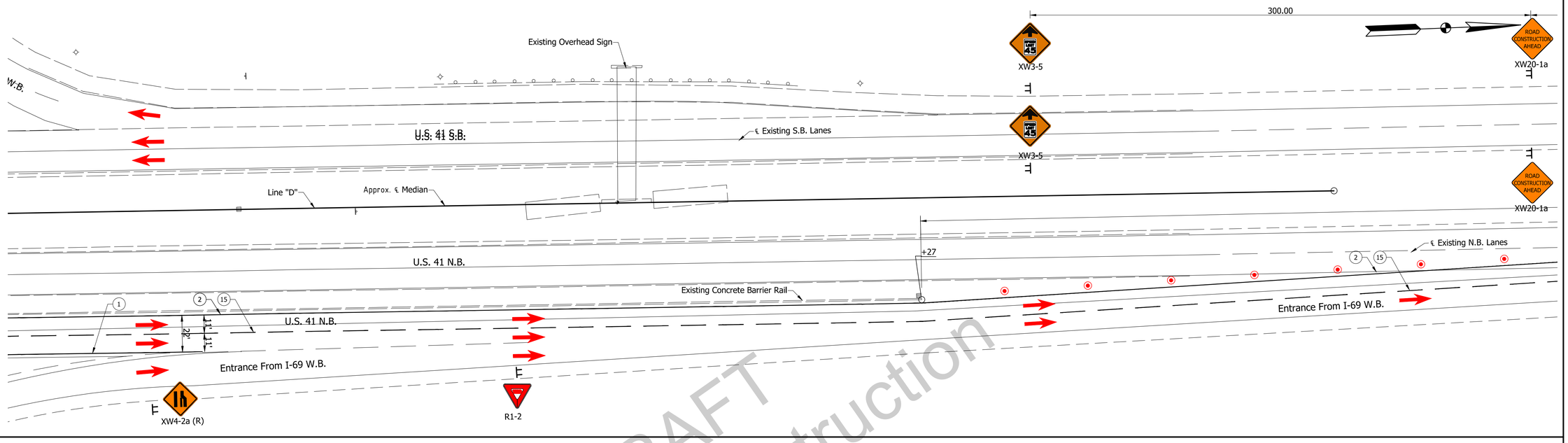

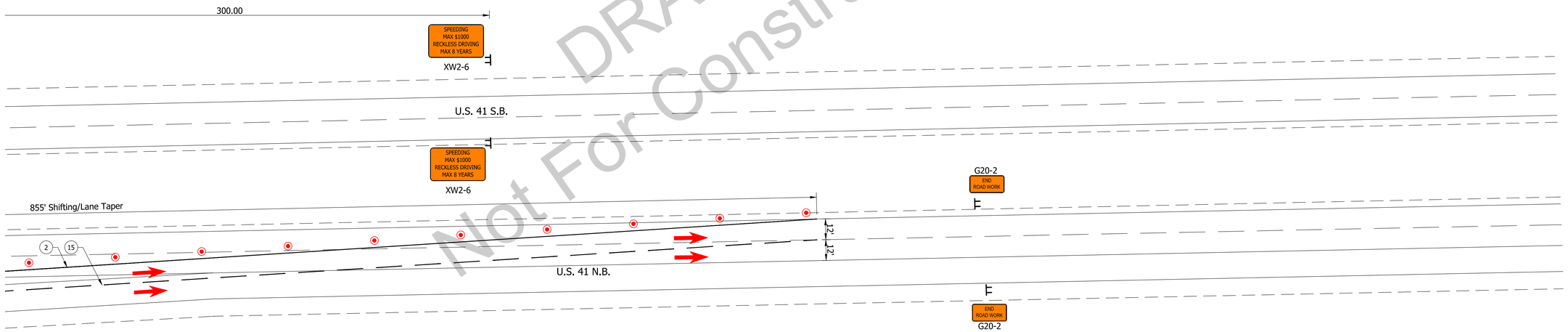

DRAFT
Not For Construction

LEGEND

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4. Design Speed = 45 MPH

MICHAEL MAYEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	55 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

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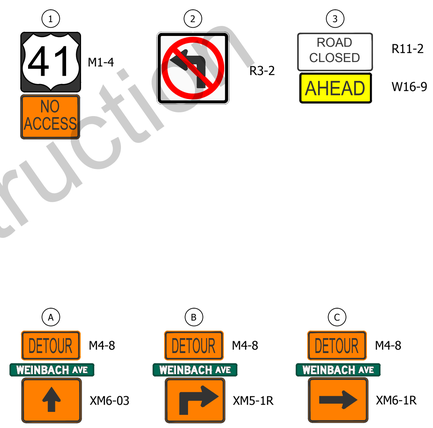
LOCAL TRAFFIC CONTROL PLAN - PHASE 2 & 3

SHAWNEE DRIVE

Scale: None



SIGN LEGEND				
SYMBOL	MESSAGE	NUMBER	TYPE	QTY
1	U.S. 41	M1-4	B	2
	NO ACCESS		D	2
2	NO LEFT TURN	R3-2	A	1
3	ROAD CLOSED	R11-2	A	1
	AHEAD	W16-9	A	1
5	STANDARD BARRICADE (TYPE III-B) (12'-0" SECTION)			4
	ROAD CLOSURE SIGN ASSEMBLY (R11-2)			2
N-B	DETOUR ROUTE MARKER ASSEMBLY (DIRECTIONAL DETOUR) U.S. 41			2
A	DETOUR ROUTE MARKER ASSEMBLY (CONFIRMING DETOUR) WEINBACH AVE			3
B	DETOUR ROUTE MARKER ASSEMBLY (ADVANCE TURN DETOUR) WEINBACH AVE			1
C	DETOUR ROUTE MARKER ASSEMBLY (DIRECTIONAL DETOUR) WEINBACH AVE			1

PHASE 2 & 3

ACCESS TO U.S. 41 AT SHAWNEE DRIVE WILL NOT BE AVAILABLE. TRAFFIC WANTING TO USE WEINBACH AVENUE WILL BE DIRECTED NORTH ON U.S. 41

LEGEND

- DETOUR ROUTE - NB/SB U.S. 41
- AREA OF CONSTRUCTION
- TYPE III-B BARRICADE
- TRAFFIC FLOW
- CONSTRUCTION SIGN TYPE AS SHOWN w/ TYPE "A" WARNING LIGHT

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: B. ZOBRIST DRAWN: D. SHEETZ

CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION

DETOURS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	56 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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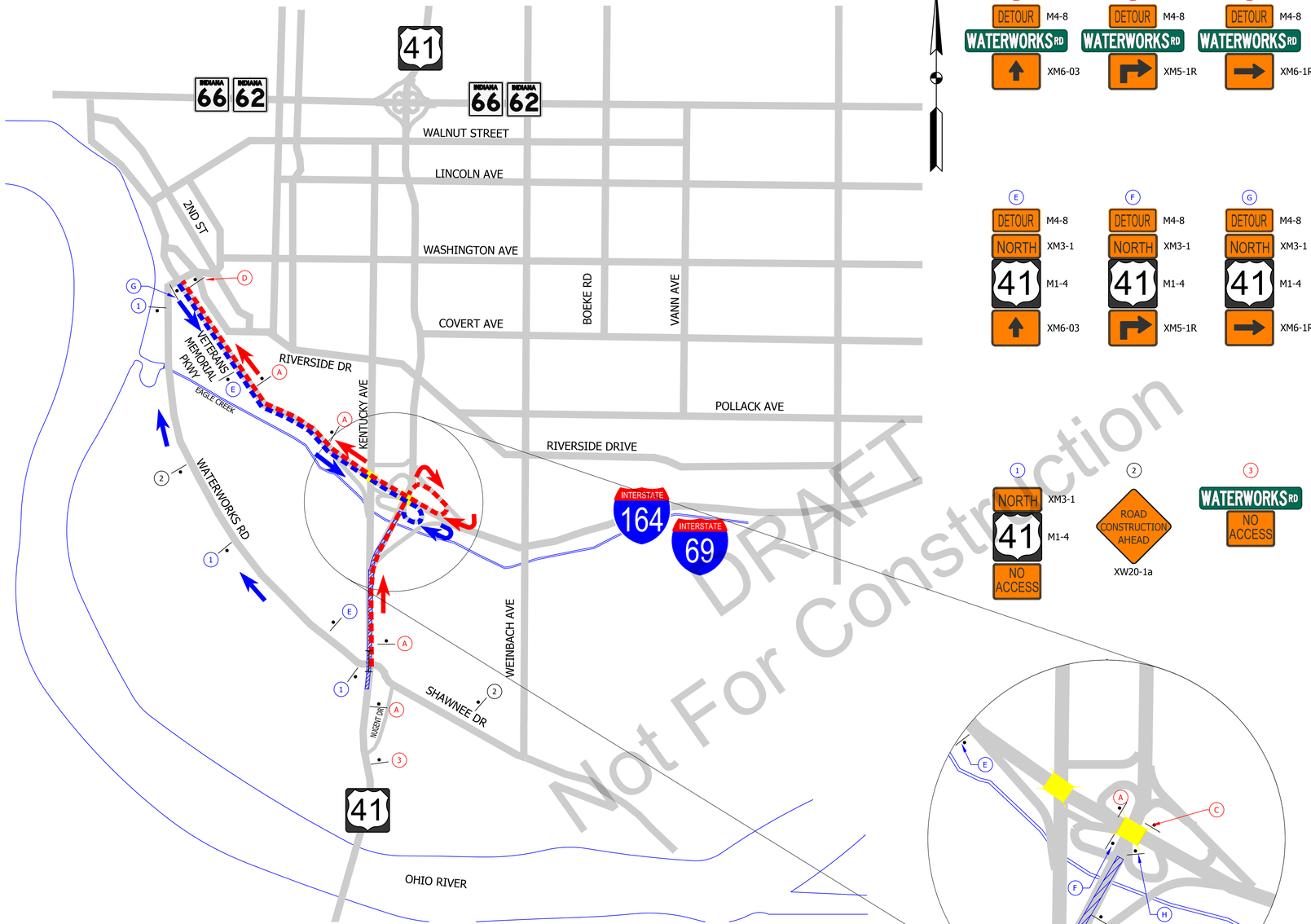
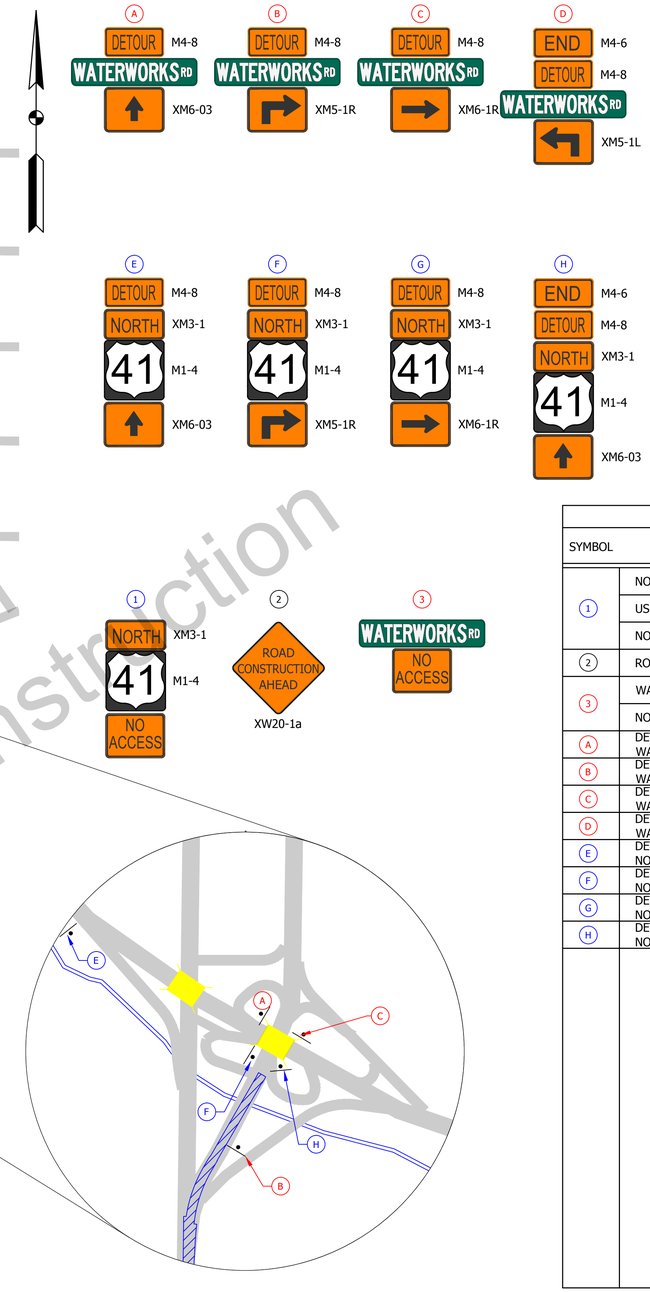


LOCAL TRAFFIC CONTROL PLAN - PHASE 2 & 3

WATERWORKS DRIVE

Scale: None



SIGN LEGEND				
SYMBOL	MESSAGE	NUMBER	TYPE	QTY
1	NORTH	XM-3-1	B	3
	US 41	M1-4	B	3
	NO ACCESS		D	3
2	ROAD CONSTRUCTION AHEAD	XW20-1a	B	2
3	WATERWORKS DRIVE	D3-1	B	1
	NO ACCESS		D	1
A	DETOUR ROUTE MARKER ASSEMBLY (CONFIRMING DETOUR) WATERWORKS DRIVE			5
B	DETOUR ROUTE MARKER ASSEMBLY (ADVANCE TURN DETOUR) WATERWORKS DRIVE			1
C	DETOUR ROUTE MARKER ASSEMBLY (DIRECTIONAL DETOUR) WATERWORKS DRIVE			1
D	DETOUR ROUTE MARKER ASSEMBLY (END DETOUR) WATERWORKS DRIVE			1
E	DETOUR ROUTE MARKER ASSEMBLY (CONFIRMING DETOUR) NORTHBOUND U.S. 41			3
F	DETOUR ROUTE MARKER ASSEMBLY (ADVANCE TURN DETOUR) NORTHBOUND U.S. 41			1
G	DETOUR ROUTE MARKER ASSEMBLY (DIRECTIONAL DETOUR) NORTHBOUND U.S. 41			1
H	DETOUR ROUTE MARKER ASSEMBLY (END DETOUR) NORTHBOUND U.S. 41			1

PHASE 2 & 3

Northbound U.S. 41 Traffic Intending To Go Northbound On Waterworks Road Will Be Directed North Onto Veterans Memorial Parkway Then To Waterworks Road Off Veterans Memorial Parkway

LEGEND

- DETOUR ROUTE - WATERWORKS DRIVE
- DETOUR ROUTE - U.S. 41 NB
- AREA OF CONSTRUCTION
- TYPE III-B BARRICADE
- TRAFFIC FLOW - WATERWORKS DRIVE DETOUR
- TRAFFIC FLOW - U.S. 41 NB DETOUR
- CONSTRUCTION SIGN TYPE AS SHOWN w/ TYPE "A" WARNING LIGHT

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: M. Mael 10/31/16
DESIGN ENGINEER DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

DETOURS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	57 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605

BFS NO.

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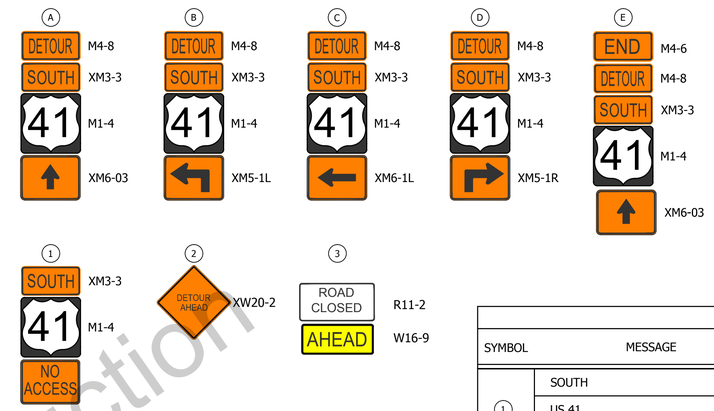
LOCAL TRAFFIC CONTROL PLAN - PHASE 3

KENTUCKY AVENUE / S.B. US 41

Scale: None



SIGN LEGEND				
SYMBOL	MESSAGE	NUMBER	TYPE	QTY
1	SOUTH	XM-3-3	B	1
	US 41	M1-4	B	1
	NO ACCESS		D	1
2	DETOUR AHEAD	XW20-2	A	1
3	ROAD CLOSED AHEAD	R11-2	A	1
4	STANDARD BARRICADE (TYPE III-B) (12'-0" SECTION)			4
	ROAD CLOSURE SIGN ASSEMBLY (R11-2)			2
A	DETOUR ROUTE MARKER ASSEMBLY (CONFIRMING DETOUR) U.S. 41 SOUTHBOUND			2
B D	DETOUR ROUTE MARKER ASSEMBLY (ADVANCE TURN DETOUR) U.S. 41 SOUTHBOUND			4
C	DETOUR ROUTE MARKER ASSEMBLY (DIRECTIONAL DETOUR) U.S. 41 SOUTHBOUND			2
E	DETOUR ROUTE MARKER ASSEMBLY (END DETOUR) U.S. 41 SOUTHBOUND			1

PHASE 3

Southeastbound Veterans Memorial Parkway Traffic Intending To Go Southbound On U.S. Highway 41 Will Be Directed Through Multiple Ramps In The Interchange To Access Southbound U.S. Highway 41.

PHASE 3

Southbound Kentucky Avenue Will Be Detoured East Onto Riverside Drive Then To Southbound U.S. Highway 41.

LEGEND

- DETOUR ROUTE - KENTUCKY AVENUE
- AREA OF CONSTRUCTION
- TYPE III-A BARRICADE
- TRAFFIC FLOW
- CONSTRUCTION SIGN TYPE AS SHOWN w/ TYPE "A" WARNING LIGHT

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: B. ZOBRIST DRAWN: D. SHEETZ

CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION

DETOURS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	58 OF 164
CONTRACT	PROJECT
B-33539	1592481

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BFS NO.

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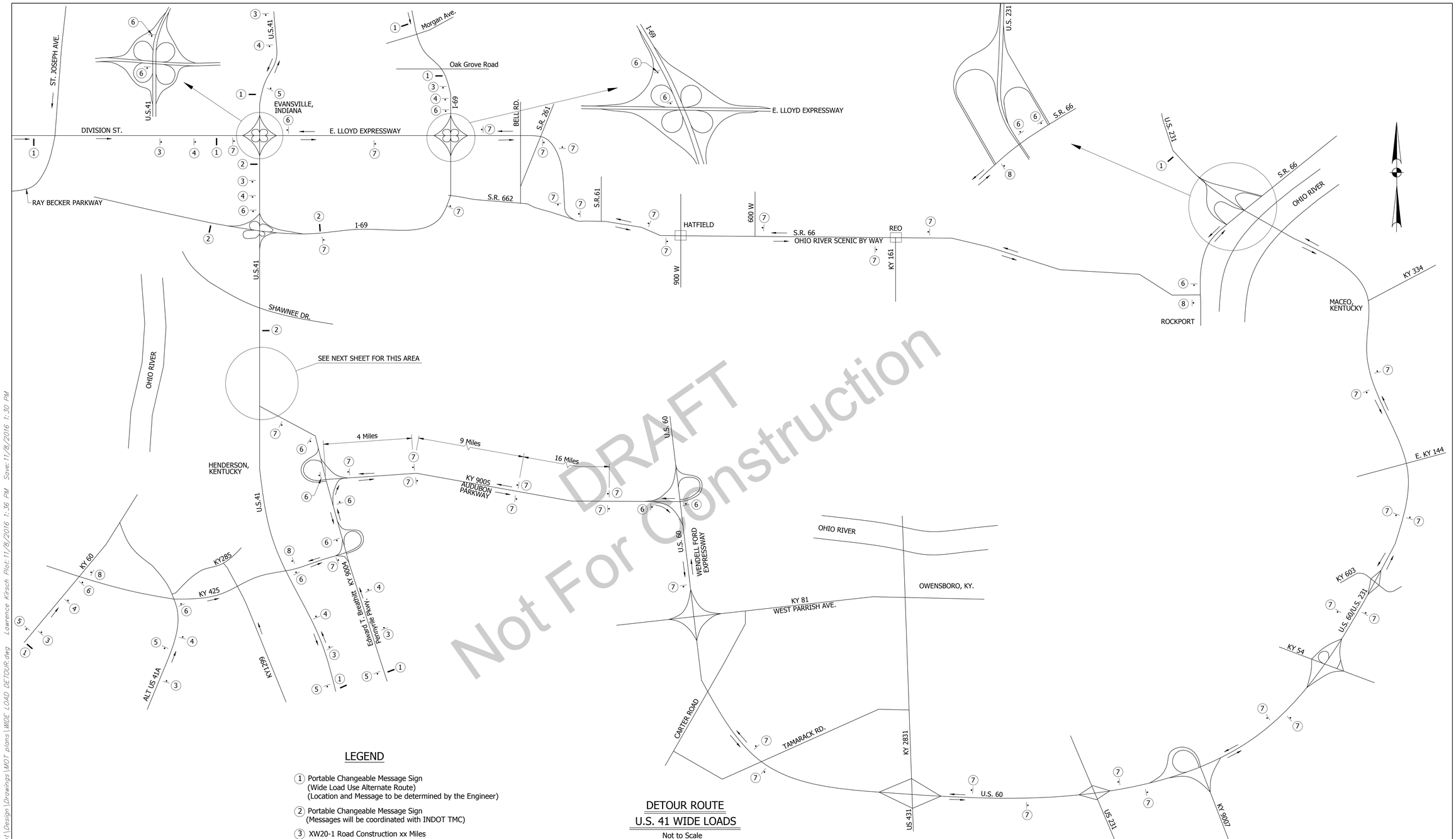

DRAFT
Not For Construction

LEGEND

1. Portable Changeable Message Sign (Wide Load Use Alternate Route) (Location and Message to be determined by the Engineer)
2. Portable Changeable Message Sign (Messages will be coordinated with INDOT TMC)
3. XW20-1 Road Construction xx Miles
4. XW20-2 Detour Ahead
5. End Detour Route Marker Assembly
6. Directional Detour Route Marker Assembly (Right)
7. Confirming Detour Route Marker Assembly (Straight)
8. Directional Detour Route Marker Assembly (Left)

→ Direction of Traffic

DETOUR ROUTE
U.S. 41 WIDE LOADS

Not to Scale

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: E. CALDERIN DRAWN: D. SHEETZ
CHECKED: D. SHEETZ CHECKED: E. CALDERIN

INDIANA
DEPARTMENT OF TRANSPORTATION

U.S.41 WIDE LOADS
DETOUR ROUTE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET 59 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

U:\5605\ProjDevelopment\Design\Drawings\MOT plans\WIDE LOAD DETOUR.dwg Lawrence Kirsch Plot:11/8/2016 1:36 PM Save:11/8/2016 1:30 PM

DRAFT
Not For Construction

LEGEND

1. Portable Changeable Message Sign (Wide Load Use Alternate Route) (Location and Message to be determined by the Engineer)
2. Portable Changeable Message Sign (Messages will be coordinated with INDOT TMC)
3. XW20-1 Road Construction xx Miles
4. XW20-2 Detour Ahead
5. End Detour Route Marker Assembly
6. Directional Detour Route Marker Assembly (Right)
7. Confirming Detour Route Marker Assembly (Straight)
8. Directional Detour Route Marker Assembly (Left)

→ Direction of Traffic

DETOUR ROUTE
U.S. 41 WIDE LOADS

Not to Scale

MICHAEL MAEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: E. CALDERIN DRAWN: D. SHEETZ

CHECKED: D. SHEETZ CHECKED: E. CALDERIN

INDIANA
DEPARTMENT OF TRANSPORTATION

U.S.41 WIDE LOADS
DETOUR ROUTE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	60 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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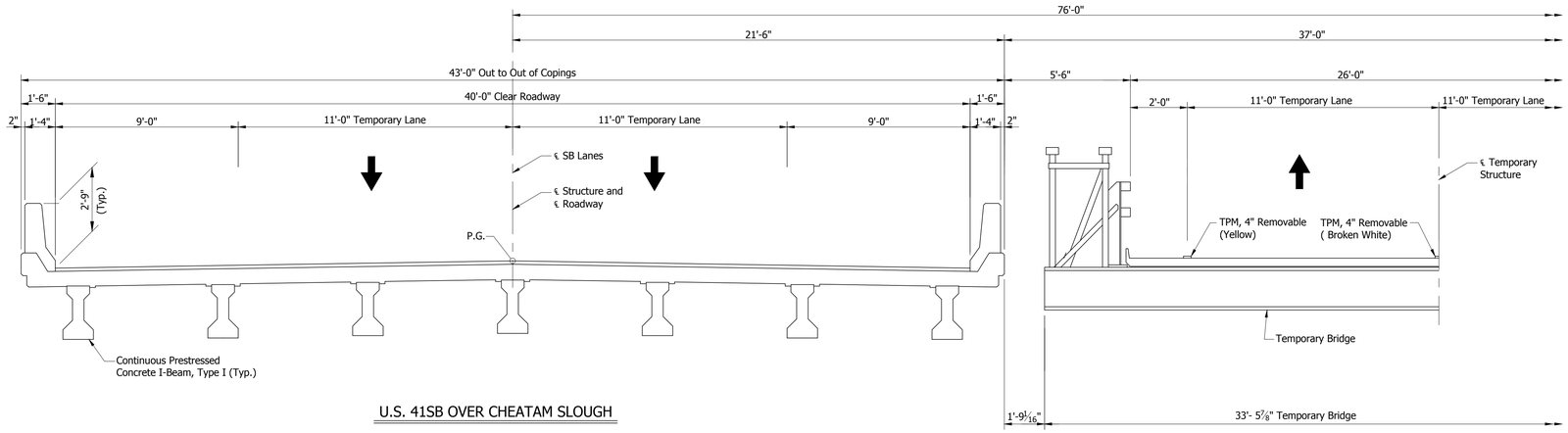
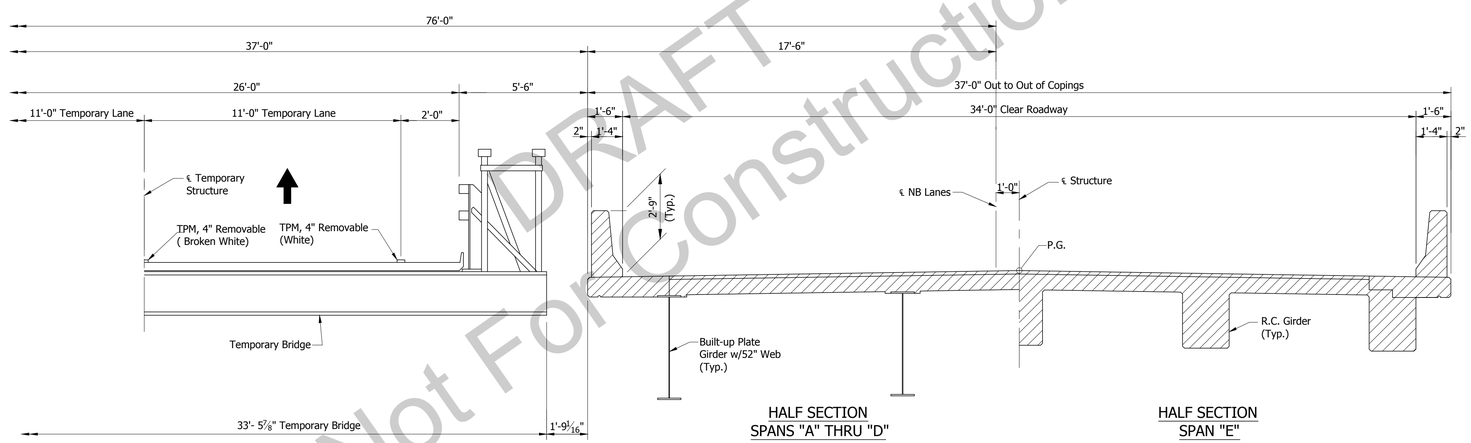


U.S. 41SB OVER CHEATAM SLOUGH

Note: Hatched Areas indicate
Portions to be Removed.



HALF SECTION
SPANS "A" THRU "D"

HALF SECTION
SPAN "E"

U.S. 41NB OVER CHEATAM SLOUGH

PHASE 2-LOOKING NORTH
U.S. 41 OVER CHEATAM SLOUGH
NORTHBOUND LANE CONSTRUCTION

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

DRAFT
Not For Construction

MICHAEL MATEL
REGISTERED
No.
860186
STATE OF
INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: M. Matel 10/31/16
DESIGN ENGINEER DATE

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	61 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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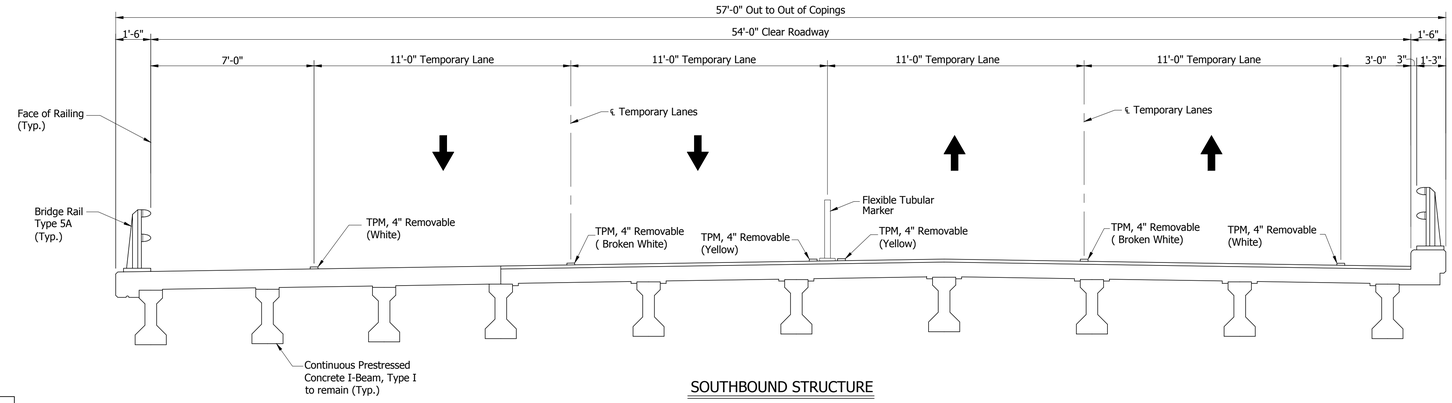
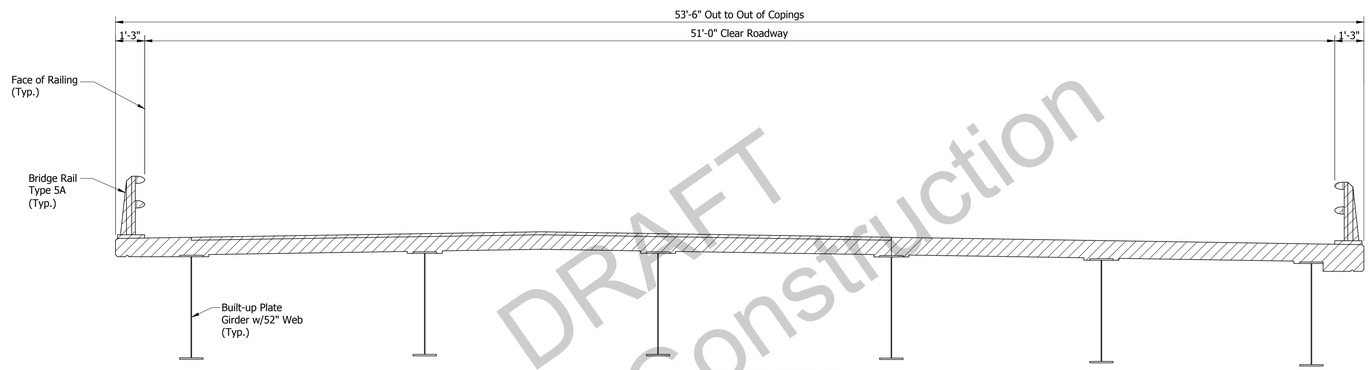
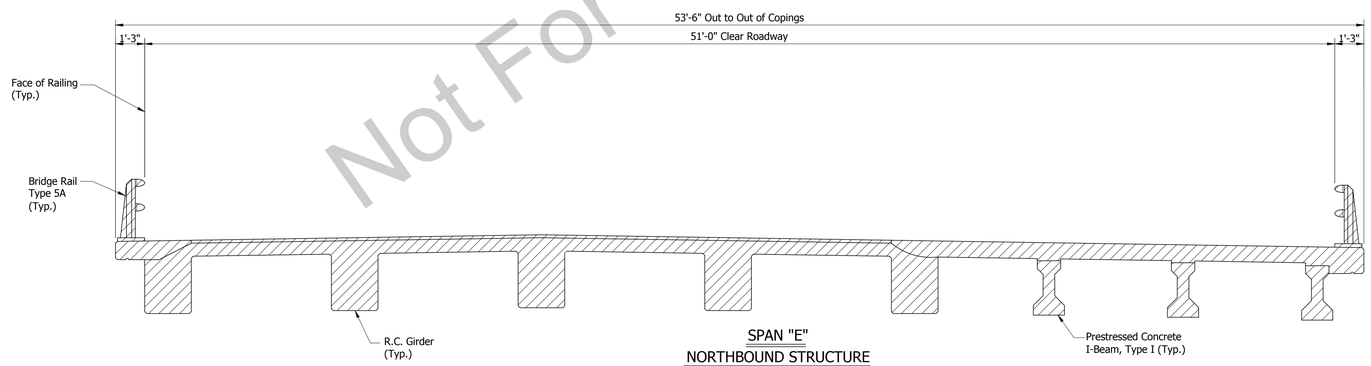


SOUTHBOUND STRUCTURE

Note: Hatched Areas indicate Portions to be Removed.



SPANS "A" THRU "D"
NORTHBOUND STRUCTURE



SPAN "E"
NORTHBOUND STRUCTURE

PHASE 2-LOOKING NORTH
U.S. 41 OVER OHIO RIVER OVERFLOW
NORTHBOUND LANE CONSTRUCTION

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

DRAFT
Not For Construction

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	62 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

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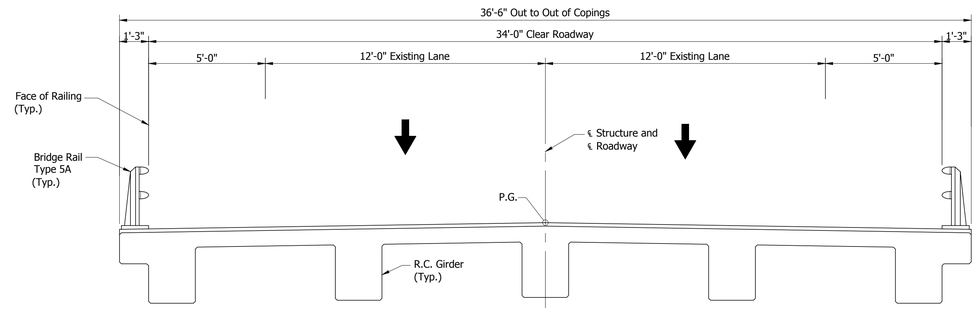
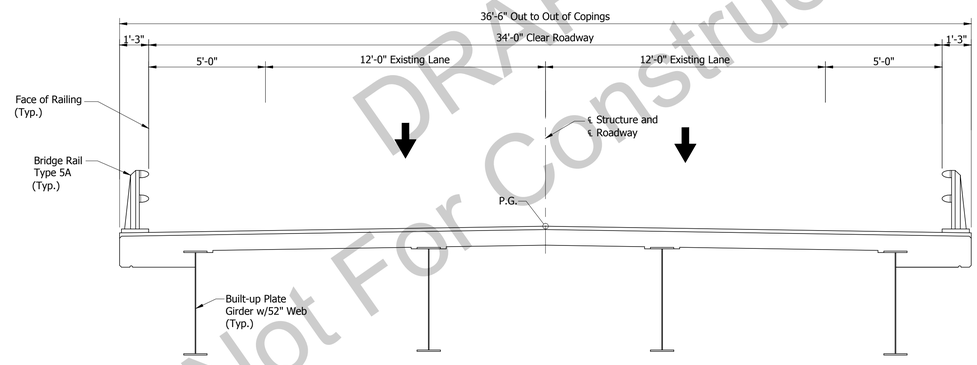


SPANS "A" AND "S"
SOUTHBOUND STRUCTURE



SPANS "B" THRU "R"
SOUTHBOUND STRUCTURE

DRAFT
Not For Construction

PHASE 2-LOOKING NORTH
U.S. 41 OVER EAGLE CREEK
NORTHBOUND LANE CONSTRUCTION

Scale: ⅜"=1'-0"

U:\5605\ProDevelopment\Design\Drawings\EAGLE CREEK\5605B31-EAGLE IA.dwg Lawrence Kirsch Plot: 11/8/2016 1:50 PM Save: 11/8/2016 4:31 AM

MICHAEL MATEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER — DATE 10/31/16

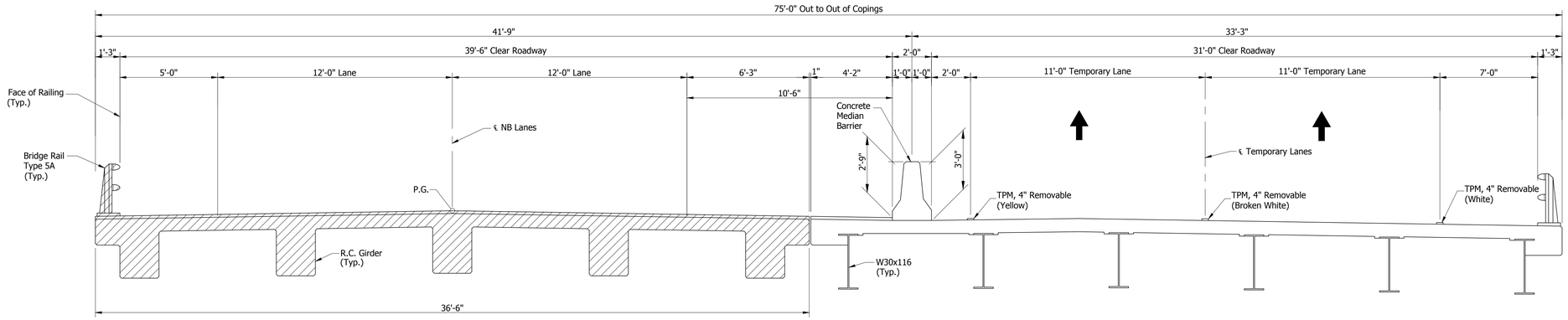
DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	63 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

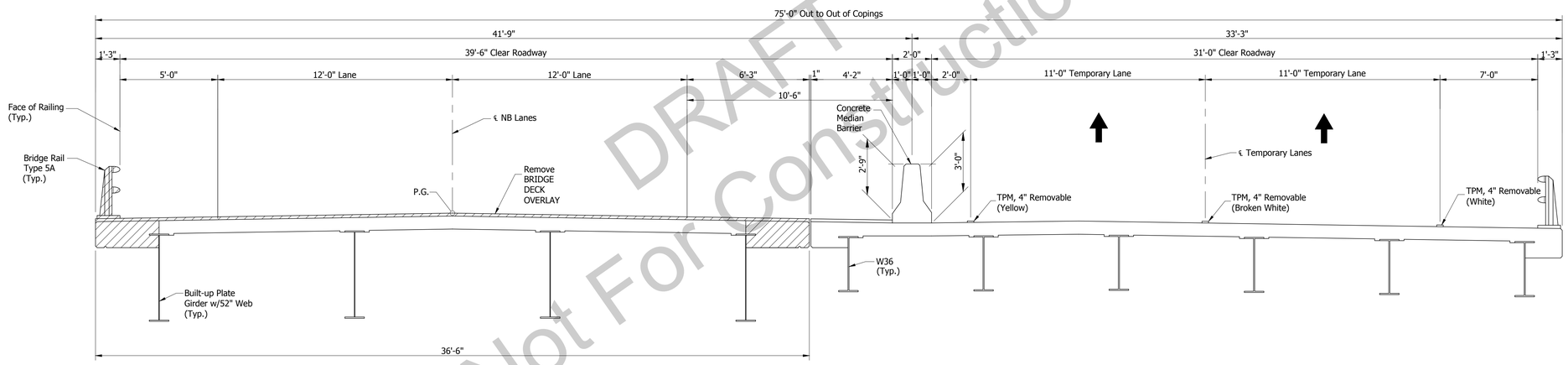


EAGLE CREEK STRUCTURE

SPANS "A" AND "S"
NORTHBOUND STRUCTURE

COLLECTOR-DISTRIBUTOR STRUCTURE
I-164-21-7206

Note: Hatched Areas indicate Portions to be Removed.



Note: Bridge Deck will be removed in Spans "B" and "R" and portions of Spans "C" and "Q".

EAGLE CREEK STRUCTURE

SPANS "B" THRU "R"
NORTHBOUND STRUCTURE

COLLECTOR-DISTRIBUTOR STRUCTURE
I-164-21-7206

DRAFT
Not For Construction

PHASE 2-LOOKING NORTH
U.S. 41 OVER EAGLE CREEK
NORTHBOUND LANE CONSTRUCTION

Scale: $\frac{3}{8}$"=1'-0"

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: M. Matel 10/31/16
DESIGN ENGINEER DATE

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	64 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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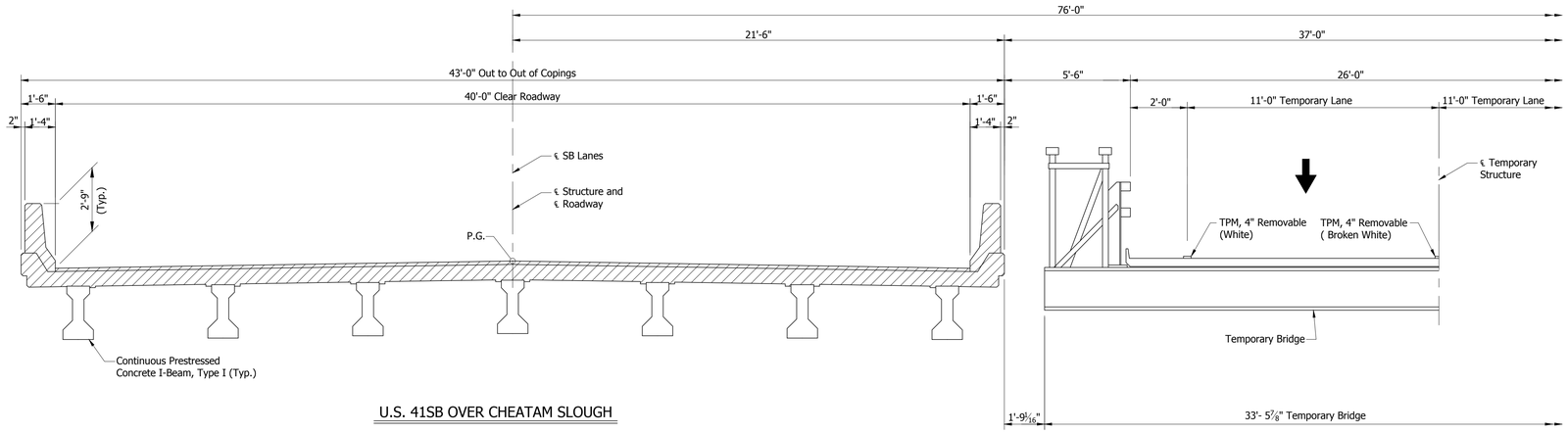
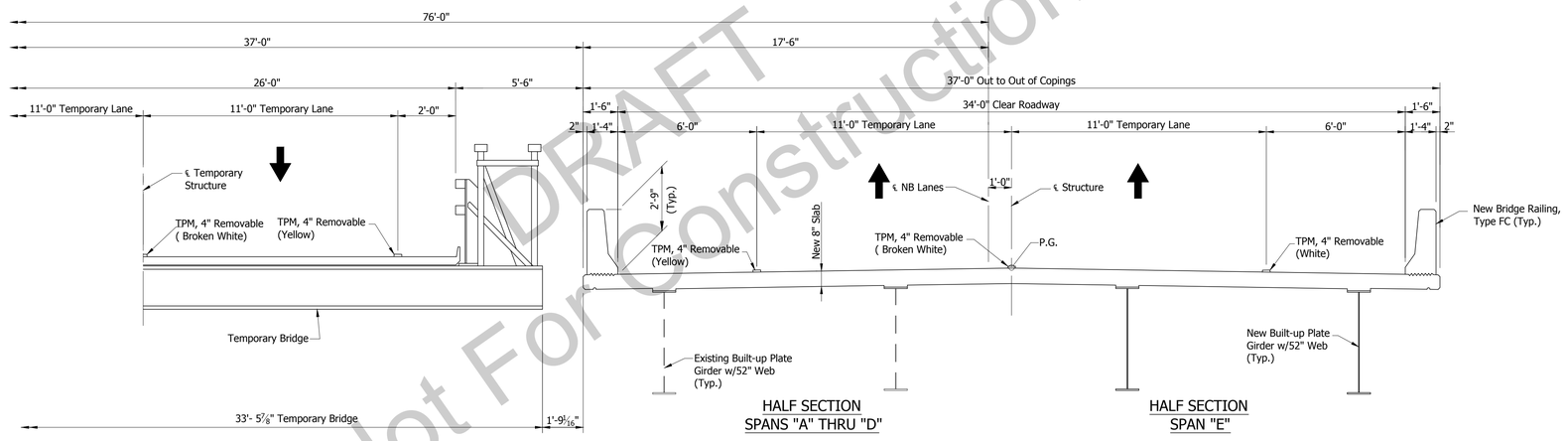


U.S. 41SB OVER CHEATAM SLOUGH

Note: Hatched Areas indicate
Portions to be Removed.



HALF SECTION
SPANS "A" THRU "D"

HALF SECTION
SPAN "E"

U.S. 41NB OVER CHEATAM SLOUGH

DRAFT
Not For Construction

PHASE 3-LOOKING NORTH
U.S. 41 OVER CHEATAM SLOUGH
SOUTHBOUND LANE CONSTRUCTION

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

U:\5605\ProDevelopment\Design\Drawings\CHEATAM SLOUGH\5605B312-CHEATAM II.dwg Lawrence Kirsch Plot:11/8/2016 1:59 PM Save:11/8/2016 4:31 AM

MICHAEL MATEL
REGISTERED
No.
860186
STATE OF
INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ

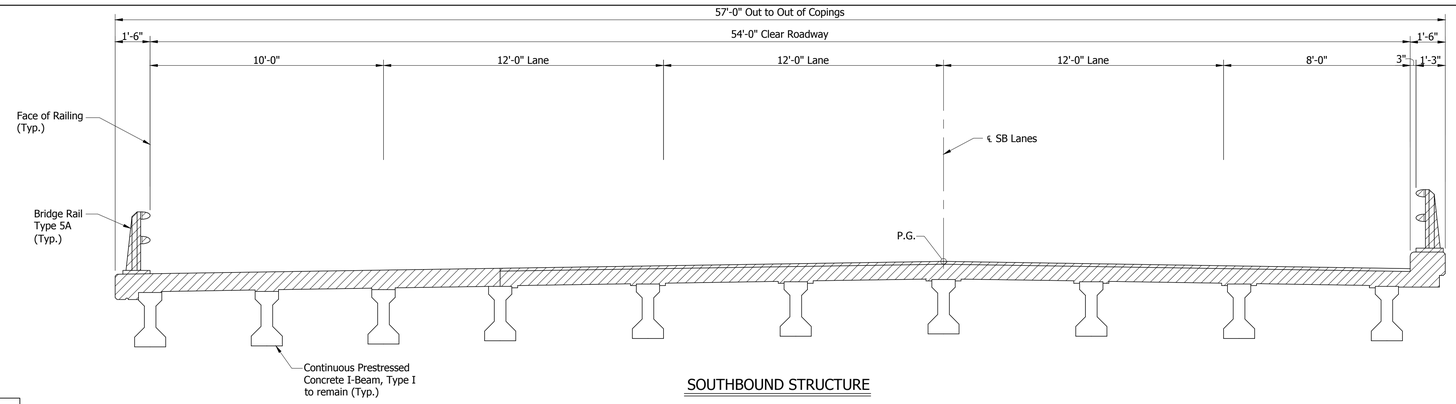
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

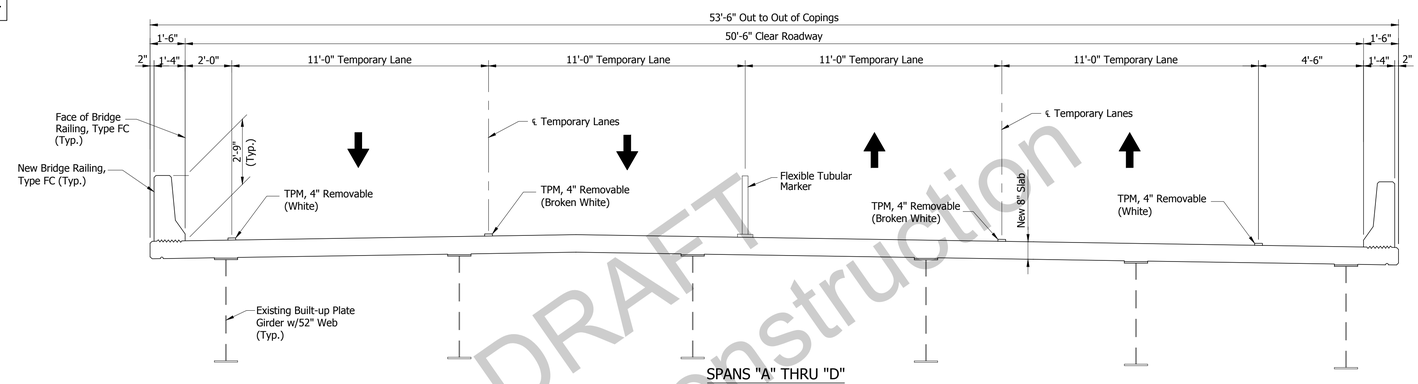
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	65 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

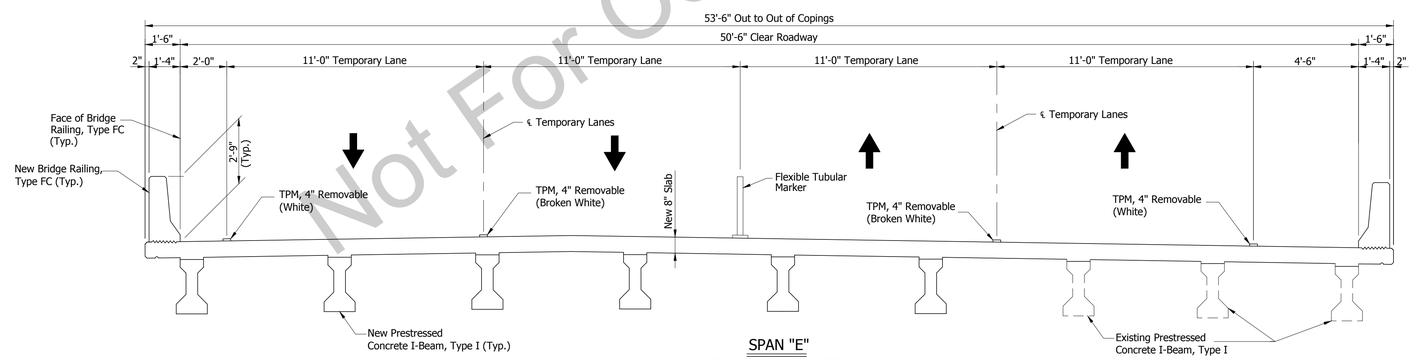


SOUTHBOUND STRUCTURE

Note: Hatched Areas indicate Portions to be Removed.



SPANS "A" THRU "D"
NORTHBOUND STRUCTURE



SPAN "E"
NORTHBOUND STRUCTURE

PHASE 3-LOOKING NORTH
U.S. 41 OVER OHIO RIVER OVERFLOW
SOUTHBOUND LANE CONSTRUCTION

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

DRAFT
Not For Construction

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	66 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

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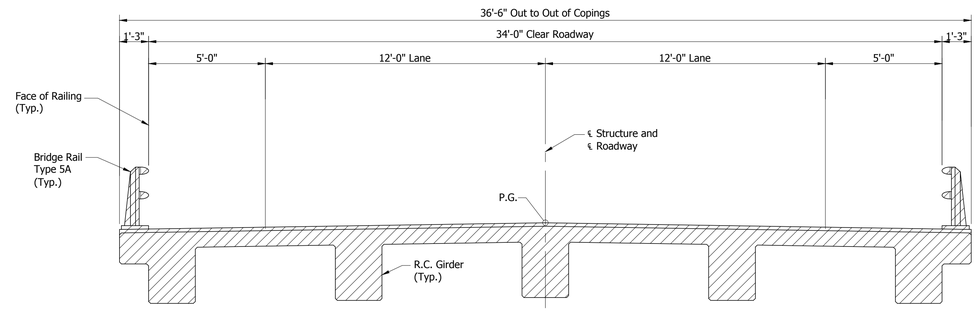
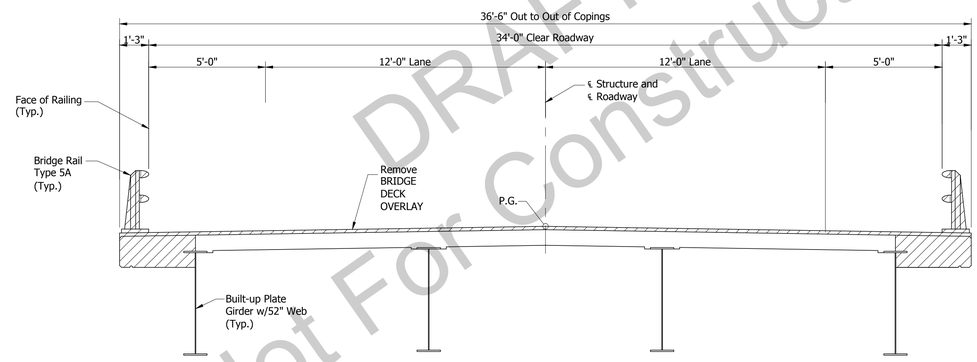


SPANS "A" AND "S"
SOUTHBOUND STRUCTURE

Note: Hatched Areas indicate Portions to be Removed.



Note: Bridge Deck will be removed in Spans "B" and "R" and portions of Spans "C" and "Q".

SPANS "B" THRU "R"
SOUTHBOUND STRUCTURE

DRAFT
Not For Construction

PHASE 3-LOOKING NORTH
U.S. 41 OVER EAGLE CREEK
SOUTHBOUND LANE CONSTRUCTION

Scale: $\frac{3}{8}$"=1'-0"

MICHAEL MATEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: M. Matel 10/31/16
DESIGN ENGINEER DATE

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	67 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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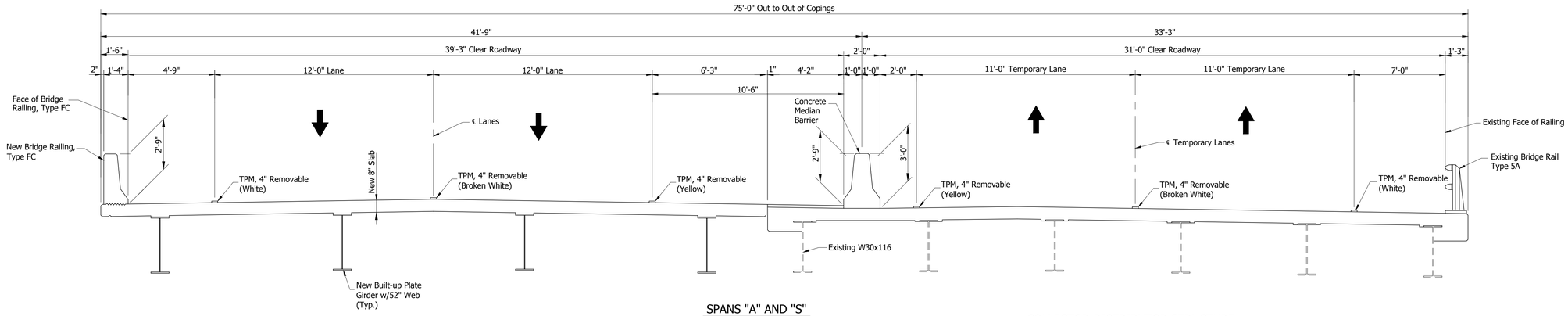
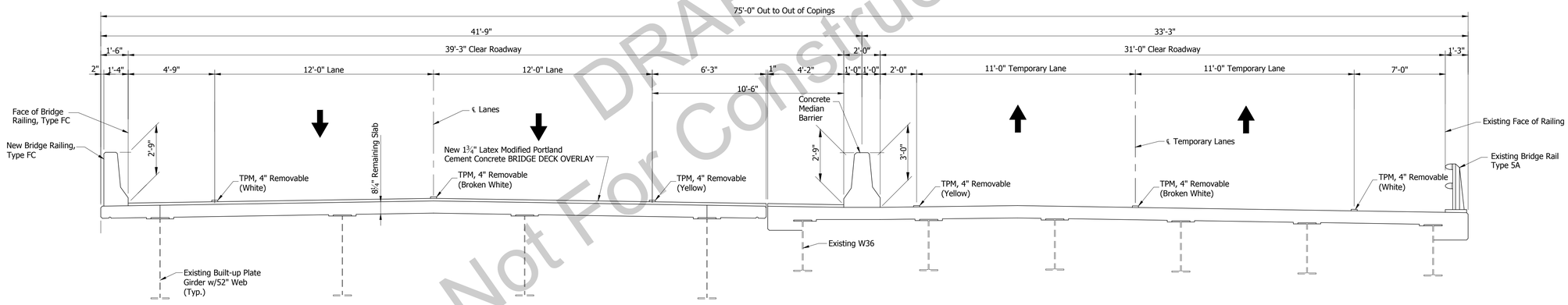


EAGLE CREEK STRUCTURE

SPANS "A" AND "S"
NORTHBOUND STRUCTURE

COLLECTOR-DISTRIBUTOR STRUCTURE
I-164-21-7206

DRAFT
Not For Construction



EAGLE CREEK STRUCTURE

SPANS "B" THRU "R"
NORTHBOUND STRUCTURE

COLLECTOR-DISTRIBUTOR STRUCTURE
I-164-21-7206

Note: A New 8" Slab will be Constructed in Spans "B" and "R" and portions of Spans "C" and "Q".

PHASE 3-LOOKING NORTH
U.S. 41 OVER EAGLE CREEK
SOUTHBOUND LANE CONSTRUCTION

Scale: ⅜"=1'-0"

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ

CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	68 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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LOG OF TEST BORING

EARTH EXPLORATION

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. TB-1
Elevation 381
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 1 of 3

Project No. 9620260 & 0100482 | Station 132+96 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 90° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
					380	TOPSOIL							
SS-1		20	16-6-12			SILTY LOAM, very stiff, moist, dark brown, A-6, Lab No. 17980SL (fill)	>4½			13.2			
SS-2		35	3-7-7	5	375	SILTY CLAY, stiff to medium stiff, moist, brown, A-6(13), Lab No. 17984SL (fill)	>4½			20.1			
SS-3		45	3-3-7				2½			24.4	38	22	16
SS-4		45	3-4-7	10			½			23.5			
SS-5		55	4-4-7		370	SANDY LOAM, medium dense, moist, brown, with clay loam seams (fill)							
SS-6		55	3-4-5	15		SILTY CLAY LOAM, medium stiff, moist, brown, A-6, Lab No. 17978SL (fill)	3¼			20.4			
SS-7		90	3-3-5		365								
SS-8		90	4-5-5	20	360								
SS-9		90	4-3-3	25	355	SAND, loose to medium dense, moist to wet, brown, with sandy loam seams near 16 ft, 19 ft, 34 ft and 65 ft, A-3(0), Lab No. 17985SL							
SS-10		35	2-3-3	30	350								
SS-11		35	2-3-3	35	345								

Continued Next Page

WATER LEVEL OBSERVATIONS

Depth ft	While Drilling	Upon Completion	After Drilling
To Water	29	17½	BF
To Cave-in		33	

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

GENERAL NOTES

Start 6/18/15 End 6/18/15 Rig CME 55
Drilling Method 3¼" I.D. HSA ATV
Remarks Backfilled with auger cuttings and bentonite chip plug near surface.

LOG OF TEST BORING

EARTH EXPLORATION

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. TB-1
Elevation 381
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 2 of 3

Project No. 9620260 & 0100482 | Station 132+96 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 90° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
SS-12		100	4-3-3	40	340						NP	NP	NP
SS-13		65	3-4-5	45	335								
SS-14		100	2-4-5	50	330								
SS-15		90	4-5-5	55	325	SAND, loose to medium dense, moist to wet, brown, with sandy loam seams near 16 ft, 19 ft, 34 ft and 65 ft, A-3(0), Lab No. 17985SL							
SS-16		100	2-4-5	60	320								
SS-17		100	3-4-5	65	315								
SS-18		100	8-8-12	70	310								
SS-19		100	8-9-10	75	305	SAND, medium dense, wet, gray, A-3, Lab No. 17988SL							

Continued Next Page

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

LOG OF TEST BORING

EARTH EXPLORATION

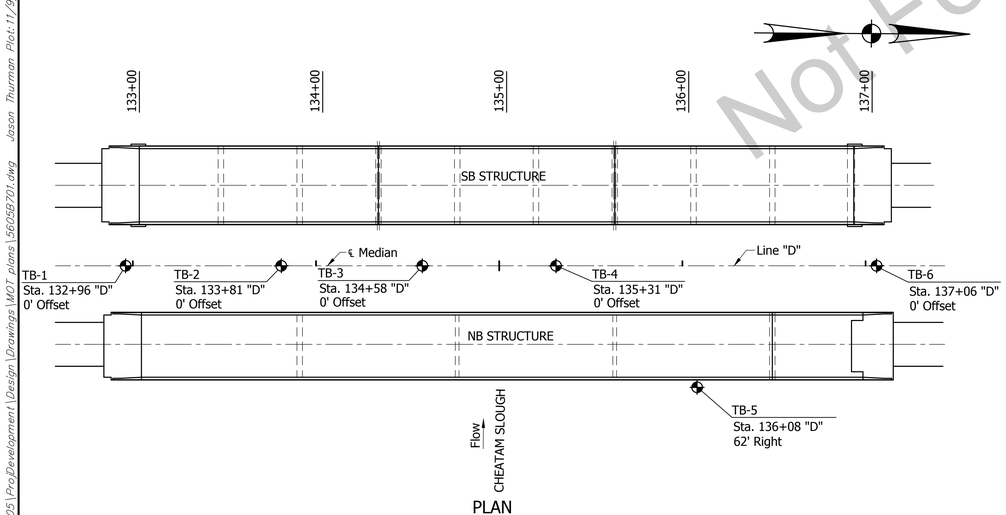
Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. TB-1
Elevation 381
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 3 of 3

Project No. 9620260 & 0100482 | Station 132+96 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 90° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
SS-20		35	10-10-10	80	300	SAND, medium dense, wet, gray, A-3, Lab No. 17988SL							
SS-21		100	8-8-9	85	295								
SS-22		100	7-10-10	90									
						End of Boring at 90 ft<<C>>							

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.



PLAN
Not to Scale

TEMPORARY BRIDGE PILE LOADING FOR GEOTECHNICAL TESTING

SUBSTRUCTURE	SOUTH ABUTMENT	PIERS NO.1 THRU NO.3	NORTH ABUTMENT
FACTORED DESIGN SOIL RESISTANCE, R_R(KIPS)	145	200	145
RESISTANCE FACTOR, φ dyn	0.55	0.55	0.55
DOWNDRAG LOAD, DD (KIPS)	*	*	*
NOMINAL SOIL RESISTANCE, R_n(KIPS)	264	364	264
DOWNDRAG FRICTION, R sdd (KIPS)	*	*	*
SCOUR ZONE FRICTION, Rs scour (KIPS)	N/A	N/A	N/A
NOMINAL DRIVING RESISTANCE, R ndr (KIPS)	* 264	* 364	* 264
TESTING METHOD	VERIFICATION OF PILE RESISTANCE TO BE DETERMINED BY ISS 701.05(a)		

* DOES NOT INCLUDE LIQUEFACTION

Note: All Piles shall be Restruck 24 Hours after Initial Driving.

STANDARD PENETRATION TEST
Driving 2" O.D. Sampler 1'-6" with 140# Hammer falling 30". Count made at 6" intervals. First 6" for seating sampler. "N" is the Sum of the Hammer Blows of the Second and Third 6" intervals of an 1'-6" Drive.

NOTES
The entire Geotechnical Report developed by Earth Exploration, Inc. will be made available to the Contractor upon request.
See Sheets 70 thru 74 for Additional Borings.

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE
DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NONE	---
VERTICAL SCALE	DESIGNATION
NONE	1594281
SURVEY BOOK	SHEET 69 OF 164
CONTRACT B-33539	PROJECT 1592481

BFS NO. 5605

DRAFT Not For Construction

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LOG OF TEST BORING

EARTH EXPLORATION

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. TB-2
Elevation 359
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 1 of 3

Project No. 9620260 & 0100482 | Station 133+81 | Weather Cloudy | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 80° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
						TOPSOIL							
SS-1		100	7-7-8			SILTY CLAY LOAM, stiff to medium stiff, moist, brown, A-6, Lab No. 17978SL (fill)	3½			15.2			
SS-2		100	2-2-4	5	355		2			20.4			
SS-3		100	0-0-0			SILTY CLAY LOAM, medium stiff to very soft, moist, brown and gray, with loam layer near 5 ft and 10 ft, A-4(6), Lab No. 17986SL, SS-5T: LOI = 3.8 percent, CaCO3 = 5.8 percent	½			32.5	30	22	8
SS-4		20	0-0-0	10	350		¼			26.3			
SS-5		100	0-0-3				½ ?			32.8 33.7			
SS-6		100	0-0-1	15	345	SILTY CLAY LOAM, very soft, moist, brown and gray, A-6(12), Lab No. 17987SL	1			37.4	39	22	17
SS-7		90	0-1-2				½			34.2			
SS-8		100	0-0-0	20	340		¼			33.3			
						SILTY CLAY LOAM, very soft, moist, brown and gray, A-4, Lab No. 17986SL							
SS-9		45	0-0-0	25	335		¼			26.9			
SS-10		45	1-2-1	30	330	SANDY LOAM, very soft, moist, brown and gray, with loam layer near 25 ft, with silty loam layer near 30 ft (visual)	¼			25.5			
SS-11		35	5-5-7	35	325	SAND, medium dense, wet, brown and gray, with sand and gravel layer from 34.5 to 40 ft, with occasional cobbles, A-3, Lab No. 17988SL							

Continued Next Page

WATER LEVEL OBSERVATIONS

Depth ft	While Drilling	Upon Completion	24 hrs After Drilling
To Water	9	4	4
To Cave-in		6	5

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

GENERAL NOTES

Start 6/19/15 End 6/19/15 Rig CME 55
Drilling Method 3¼" I.D. HSA ATV
Remarks Backfilled with auger cuttings and bentonite chip plug near surface.

LOG OF TEST BORING

EARTH EXPLORATION

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. TB-2
Elevation 359
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 2 of 3

Project No. 9620260 & 0100482 | Station 133+81 | Weather Cloudy | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 80° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
SS-12		35	5-7-8	40	320	SAND, medium dense, wet, brown and gray, with sand and gravel layer from 34.5 to 40 ft, with occasional cobbles, A-3, Lab No. 17988SL							
SS-13		35	7-9-10	45	315								
SS-14		45	5-6-7	50	310								
SS-15		35	5-7-12	55	305								
SS-16		5	7-7-7	60	300								
SS-17		35	7-7-6	65	295								
SS-18		35	9-7-6	70	290								
SS-19		35	9-12-12	75	285								

Continued Next Page

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

LOG OF TEST BORING

EARTH EXPLORATION

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. TB-2
Elevation 359
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 3 of 3

Project No. 9620260 & 0100482 | Station 133+81 | Weather Cloudy | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 80° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
SS-20		35	7-12-12	80	280	SAND, medium dense, wet, brown and gray, with sand and gravel layer from 34.5 to 40 ft, with occasional cobbles, A-3, Lab No. 17988SL							
~~SS-21~~		~~100~~	~~50/.1~~	85	275								
SS-22		65	9-9-10	90	270								
SS-23		65	10-11-11	95	265								
~~SS-24~~		~~100~~	~~50/.1~~		260								

End of Boring at 99.5 ft<<C>>

Auger refusal at 99.5 ft on probable bedrock

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

DRAFT
Not For Construction

STANDARD PENETRATION TEST
Driving 2" O.D. Sampler 1'-6" with 140# Hammer falling 30". Count made at 6" intervals. First 6" for seating sampler. "N" is the Sum of the Hammer Blows of the Second and Third 6" intervals of an 1'-6" Drive.

NOTES
The entire Geotechnical Report developed by Earth Exploration, Inc. will be made available to the Contractor upon request.
See Sheet 69 for Additional Soil Borings, Pile Loading Table and Boring Location Plan.
See Sheets 71 thru 74 for Additional Soil Borings.

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NONE	---
VERTICAL SCALE	DESIGNATION
NONE	1592481
SURVEY BOOK	SHEET
	70 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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EARTH EXPLORATION

LOG OF TEST BORING

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. TB-3
Elevation 360
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 1 of 3

Project No. 9620260 & 0100482 | Station 134+58 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 75° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
						TOPSOIL							
						SILTY CLAY, stiff, gray (visual)							
SS-1	X	45	20-7-4			SAND AND GRAVEL, medium dense, moist, gray and black (fill; visual)							
SS-2	X	45	2-2-3			SILTY LOAM, stiff, moist, brown, A-6, Lab No. 17980SL	1¼			35.2			
					355	SILTY CLAY, soft, moist, brown, A-7-6, Lab No. 17982SL							
SS-3	X	35	0-0-0			SANDY LOAM, very loose, wet, brown and gray (visual)							
SS-4	X	45	2-1-2										
				10	350	SILTY CLAY LOAM, very soft, moist, gray, with organic matter and trace marl, SS-4B: LOI = 7.9 percent, CaCO3 = 3.2 percent, A-4, Lab No. 17986SL	½			68.4			
SS-5	X	100	2-2-2										
SS-6	X	100	2-3-7										
				15	345								
SS-7	X	100	3-2-2			SAND, very loose to loose, wet, brown and gray, A-3(0), Lab No. 17988SL							
SS-8	X	100	2-3-3								NP	NP	NP
				20	340								
SS-9	X	100	1-2-1				½			---			
				25	335								
SS-10	X	100	0-1-2			SILTY CLAY LOAM, very soft to very stiff, moist, gray, with silty loam seam near 25 ft, A-6(18), Lab No. 17989SL	1			36.9	41	22	19
				30	330								
SS-11	X	100	3-7-9				?	0.65	82.0	39.5			
				35	325								

Continued Next Page

WATER LEVEL OBSERVATIONS

Depth ft	While Drilling	Upon Completion	24 hrs After Drilling
To Water	5½	2	3½
To Cave-in		8	5

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

GENERAL NOTES

Start 6/12/15 End 6/12/15 Rig CME 55
Drilling Method 3¼" I.D. HSA ATV
Remarks Backfilled with auger cuttings and bentonite chip plug near surface.

EARTH EXPLORATION

LOG OF TEST BORING

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. TB-3
Elevation 360
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 2 of 3

Project No. 9620260 & 0100482 | Station 134+58 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 75° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
SS-12	X	45	7-14-17	40	320	GRAVELLY SAND, loose to dense, wet, gray, with sand layer from 34.5 to 39.5 ft, with silty loam layer, with gravel layer near 45 ft (visual)							
SS-13	X	35	10-10-12	45	315								
SS-14	X	35	5-3-5	50	310								
SS-15	X	35	4-3-5	55	305								
SS-16	X	35	5-8-9	60	300	SAND, loose to very dense, wet, gray, with occasional gravel seams and cobbles, A-3, Lab No. 17988SL							
SS-17	X	45	5-3-7	65	295								
SS-18	X	45	10-10-9	70	290								
SS-19	X	45	9-5-10	75	285								

Continued Next Page

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

EARTH EXPLORATION

LOG OF TEST BORING

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. TB-3
Elevation 360
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 3 of 3

Project No. 9620260 & 0100482 | Station 134+58 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 75° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
SS-20	X	35	7-7-9	80	280	SAND, loose to very dense, wet, gray, with occasional gravel seams and cobbles, A-3, Lab No. 17988SL							
SS-21	X	35	20-27-27	85	275								
SS-22	X	45	9-9-7	90	270								
						End of Boring at 90 ft<<C>>							

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

DRAFT
Not For Construction

STANDARD PENETRATION TEST
Driving 2" O.D. Sampler 1'-6" with 140# Hammer falling 30". Count made at 6" intervals. First 6" for seating sampler. "N" is the Sum of the Hammer Blows of the Second and Third 6" intervals of an 1'-6" Drive.

NOTES
The entire Geotechnical Report developed by Earth Exploration, Inc. will be made available to the Contractor upon request.
See Sheet 69 for Additional Soil Borings, Pile Loading Table and Boring Location Plan.
See Sheets 70 and 72 thru 74 for Additional Soil Borings.

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: D. SHEETZ | DRAWN: D. SHEETZ
CHECKED: M. MATEL | CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NONE	---
VERTICAL SCALE	DESIGNATION
NONE	1592481
SURVEY BOOK	SHEET
	71 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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LOG OF TEST BORING

EARTH EXPLORATION

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street - Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (fax)

Boring No. TB-4
Elevation 360
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 1 of 3

Project No. 9620260 & 0100482 | Station 135+31 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 75° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
						TOPSOIL							
SS-1		65	3-3-3			SILTY CLAY LOAM, medium stiff, moist, brown, A-4, Lab No. 17986SL	2¼			23.3			
SS-2		45	1-2-3	5	355	SILTY CLAY LOAM, very soft to soft, moist, gray, with organic matter and trace marl, with silty loam layer near 9 ft, A-6(11), Lab No. 17990SL, SS-3: LOI = 3.7 percent, CaCO3 = 5.5 percent, SS-5: LOI = 6.5 percent, CaCO3 = 6.2 percent	?			30.2			
SS-3		90	0-0-0				?			33.9			
SS-4		90	0-0-0	10	350		1	0.67	85.8	36.0	33	22	11
SS-5		100	0-0-2				1¼	0.89	88.2	34.1			
SS-6		100	0-0-2	15	345		1¼ 1½	1.01	85.8	36.0 39.0			
SS-7		100	0-1-2				¼			35.3			
SS-8		100	0-0-2	20	340	SILTY CLAY LOAM, very soft, moist, gray, with organic matter and trace marl, SS-7B: LOI = 4.5 percent, CaCO3 = 4.7 percent, A-6, Lab No. 17986SL	¼			36.0			
SS-9		35	4-7-9	25	335	SAND, medium dense, wet, gray, with sand and gravel layer near 44 ft, A-3, Lab No. 17988SL							
SS-10		35	4-7-14	30	330								
SS-11		35	9-7-14	35	325								

Continued Next Page

WATER LEVEL OBSERVATIONS

Depth ft	While Drilling	Upon Completion	24 hrs After Drilling
To Water	10	3	4½
To Cave-in		9	5

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

GENERAL NOTES

Start 6/11/15 End 6/11/15 Rig CME 55
Drilling Method 3¼" I.D. HSA ATV
Remarks Backfilled with auger cuttings and bentonite chip plug near surface.

LOG OF TEST BORING

EARTH EXPLORATION

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street - Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (fax)

Boring No. TB-4
Elevation 360
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 2 of 3

Project No. 9620260 & 0100482 | Station 135+31 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 75° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
SS-12		35	5-7-9	40	320	SAND, medium dense, wet, gray, with sand and gravel layer near 44 ft, A-3, Lab No. 17988SL							
SS-13		45	9-7-16	45	315								
SS-14		45	5-7-11	50	310								
SS-15		35	7-5-8	55	305								
SS-16		45	7-7-16	60	300								
SS-17		45	7-7-10	65	295								
SS-18		45	16-7-7	70	290	SAND AND GRAVEL, medium dense, wet, gray (visual)							
SS-19		45	10-9-8	75	285								

Continued Next Page

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

LOG OF TEST BORING

EARTH EXPLORATION

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street - Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (fax)

Boring No. TB-4
Elevation 360
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 3 of 3

Project No. 9620260 & 0100482 | Station 135+31 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 75° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
SS-20		35	10-7-7	80	280	SAND AND GRAVEL, medium dense, wet, gray (visual)							
SS-21		45	9-10-10	85	275	SAND, medium dense to dense, wet, gray, A-3, Lab No. 17988SL							
SS-22		45	16-15-16	90	270								
SS-23		45	15-16-15	95	265	SAND AND GRAVEL, dense, wet, gray (visual)							
SS-24		20	4-6-7	100	260	SAND, medium dense, wet, brown, A-3, Lab No. 17985SL							
~~SS-25~~		~~10~~	~~50/0~~										

End of Boring at 103.5 ft<<C>>

Auger refusal at 103.5 ft on probable bedrock

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

DRAFT
Not For Construction

STANDARD PENETRATION TEST
Driving 2" O.D. Sampler 1'-6" with 140# Hammer falling 30". Count made at 6" intervals. First 6" for seating sampler. "N" is the Sum of the Hammer Blows of the Second and Third 6" intervals of an 1'-6" Drive.

NOTES
The entire Geotechnical Report developed by Earth Exploration, Inc. will be made available to the Contractor upon request.
See Sheet 69 for Additional Soil Borings, Pile Loading Table and Boring Location Plan.
See Sheets 70 thru 71 and 73 thru 74 for Additional Soil Borings.

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: M. Matel 10/31/16
DESIGN ENGINEER DATE

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NONE	---
VERTICAL SCALE	DESIGNATION
NONE	1592481
SURVEY BOOK	SHEET
	72 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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LOG OF TEST BORING

EARTH EXPLORATION

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. TB-5
Elevation 362
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 1 of 3

Project No. 9620260 & 0100482 | Station 136+08 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset 62 ft Rt. "D" | Temp. 90° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
						TOPSOIL							
						SAND, brown (fill; visual)							
						SILTY LOAM, stiff, moist, brown, with trace roots, A-6, Lab No. 17980SL							
SS-1		35	4-4-7		360		1			20.4			
						SAND, very loose to medium dense, moist, brown, A-3, Lab No. 17985SL							
SS-2		40	3-2-4	5			1½			23.6			
						SILTY CLAY LOAM, medium stiff to soft, moist, brown and gray, A-4, Lab No. 17986SL							
SS-3		35	0-2-2		355		?			31.6			
						SILTY CLAY, soft to very soft, moist, brown and gray, SS-4B: LOI = 3.2 percent, CaCO3 = 4.5 percent, A-7-6, Lab No. 17982SL							
SS-4		100	0-1-2	10			1	0.76	86.6	33.0			
							?			29.6			
						SILTY CLAY LOAM, very soft to medium stiff, moist, brown and gray, with loam layer near 12 ft, with silty clay loam layer near 14 ft, SS-5T: LOI = 4.2 percent, CaCO3 = 6.6 percent, SS-6B: LOI = 5.4 percent, CaCo3 = 4.5 percent, A-4, Lab No. 17986SL							
SS-5		55	0-0-1		350		½			31.4			
							½			32.8			
SS-6		55	0-0-1	15			½	0.62	84.5	37.6			
							½			35.0			
SS-7		100	0-3-7		345		¼			40.3			
SS-8		100	10-10-10	20									
						SAND, loose to dense, wet, brown and gray to gray, with sandy loam layer near 10 ft, with sand and gravel layer near 50 ft, A-3, Lab No. 17988SL							
SS-9		45	9-14-22	25	340								
SS-10		45	7-12-14	30	335								
SS-11		45	10-12-14	35	330								

Continued Next Page

WATER LEVEL OBSERVATIONS

Depth ft	While Drilling	Upon Completion	24 hrs After Drilling
To Water	17	NW	4
To Cave-in		5	5

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

GENERAL NOTES

Start 6/15/15 End 6/15/15 Rig CME 55
Drilling Method 3¼" I.D. HSA ATV
Remarks Backfilled with auger cuttings and bentonite chip plug near surface.

LOG OF TEST BORING

EARTH EXPLORATION

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. TB-5
Elevation 362
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 2 of 3

Project No. 9620260 & 0100482 | Station 136+08 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset 62 ft Rt. "D" | Temp. 90° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
SS-12		45	12-14-14	40	320								
SS-13		45	12-12-14	45	315								
						SAND, loose to dense, wet, brown and gray to gray, with sandy loam layer near 10 ft, with sand and gravel layer near 50 ft, A-3, Lab No. 17988SL							
SS-14		100	9-9-14	50	310								
SS-15		45	7-10-12	55	305								
SS-16		45	6-6-7	60	300								
SS-17		45	7-7-8	65	295								
						SAND AND GRAVEL, medium dense, wet, gray, with sand layer from 64.5 to 69.5 ft, with sandy loam layer near 75 ft (visual)							
SS-18		35	12-11-12	70	290								
SS-19		100	50/.1										

Continued Next Page

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

LOG OF TEST BORING

EARTH EXPLORATION

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (Fax)

Boring No. TB-5
Elevation 362
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 3 of 3

Project No. 9620260 & 0100482 | Station 136+08 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset 62 ft Rt. "D" | Temp. 90° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ_d pcf	W %	LL %	PL %	PI %
				75	285	SAND AND GRAVEL, medium dense, wet, gray, with sand layer from 64.5 to 69.5 ft, with sandy loam layer near 75 ft (visual)							
SS-20		65	14-12-12	80	280		1¼			26.1			
						SILTY CLAY LOAM, very stiff, moist, gray, A-4, Lab No. 17986SL							
SS-21		90	9-9-9	85	275								
SS-22		90	11-9-11	90	270								
						SAND, medium dense to very dense, wet, gray, with sand and gravel layer near 90 ft, A-3, Lab No. 17988SL							
SS-23		45	9-14-17	95	265								
SS-24		65	16-24-27	100	260								
SS-25		0	50/0										
						End of Boring at 103.5 ft<<C>>							
						Auger refusal at 103.5 ft on probable bedrock							

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

DRAFT
Not For Construction

STANDARD PENETRATION TEST
Driving 2" O.D. Sampler 1'-6" with 140# Hammer falling 30". Count made at 6" intervals. First 6" for seating sampler. "N" is the Sum of the Hammer Blows of the Second and Third 6" intervals of an 1'-6" Drive.

NOTES
The entire Geotechnical Report developed by Earth Exploration, Inc. will be made available to the Contractor upon request.
See Sheet 69 for Additional Soil Borings, Pile Loading Table and Boring Location Plan.
See Sheets 70 thru 72 and 74 for Additional Soil Borings.

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NONE	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
NONE	SEE BRIDGE PLANS
SURVEY BOOK	SHEET 73 OF 164
CONTRACT	PROJECT
B-33539	SEE BRIDGE PLANS

BFS NO. 5605

U:\5605\Pro_Development\Design\Drawings\MOT plans\5605B705.dwg Lawrence Kirsch Plot:11/8/2016 5:34 PM Save:11/8/2016 4:58 AM

LOG OF TEST BORING

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (fax)

Boring No. TB-6
Elevation 381
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 1 of 3

Project No. 9620260 & 0100482 | Station 137+06 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 88° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ pcf	W %	LL %	PL %	PI %
					380	TOPSOIL							
SS-1		45	9-4-4			SILTY LOAM, medium stiff, moist, brown, with organic matter to 1 ft, A-6, Lab No. 17980SL (fill)	>4½			18.9			
SS-2		100	4-6-7	5	375	SILTY CLAY LOAM, medium stiff, moist, brown, A-4, Lab No. 17986SL (fill)	2½			21.0			
SS-3		65	4-6-6			SILTY CLAY, stiff to soft, moist, brown, A-6, Lab No. 17984SL (fill)	2¼			23.9			
SS-4		90	1-2-3	10			4			20.1			
SS-5		100	1-2-3		370	SILTY CLAY LOAM, soft, moist, brown and gray, with silty clay loam layer near 10 ft, A-4, Lab No. 17986SL (fill)	2¼			21.6			
SS-6		45	3-3-3	15			3?			22.3			
SS-7		100	4-3-4		365	SILTY LOAM, soft to medium stiff, moist, brown and gray, A-6, Lab No. 17980SL (fill)	>4½	3.71	109.2	18.2			
SS-8		55	1-2-3	20	360		>4½ ?			24.3 24.7			
SS-9		55	1-2-1	25	355	SILTY CLAY LOAM, very soft to very stiff, moist, brown and gray, SS-10B: LOI = 5.6 percent, CaCO3 = 4.8 percent, A-4, Lab No. 17986SL	½ 1¼			25.5 32.2			
SS-10		55	0-0-0	30	350		½ ½			35.6 35.8			
SS-11		55	0-0-2	35	345		¼ ½	0.48	79.9	36.7 41.5			

Continued Next Page

WATER LEVEL OBSERVATIONS

Depth ft	While Drilling	Upon Completion	24 hrs After Drilling
To Water	27	21	19½
To Cave-in	27	27	25

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

GENERAL NOTES

Start 6/18/15 End 6/18/15 Rig CME 55
Drilling Method 3¼" I.D. HSA ATV
Remarks Backfilled with auger cuttings and bentonite chip plug near surface.

LOG OF TEST BORING

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (fax)

Boring No. TB-6
Elevation 381
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 2 of 3

Project No. 9620260 & 0100482 | Station 137+06 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 88° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ pcf	W %	LL %	PL %	PI %
SS-12		45	10-11-10	40	340								
SS-13		45	12-13-12	45	335								
SS-14		45	12-14-14	50	330	SAND, medium dense, wet, brown and gray, A-3, Lab No. 17988SL							
SS-15		45	12-12-12	55	325								
SS-16		35	12-13-13	60	320								
SS-17		35	7-18-12	65	315								
SS-18		35	5-5-6	70	310	SAND AND GRAVEL, medium dense, wet, brown and gray, with occasional cobbles (visual)							
SS-19		35	5-7-6	75	305								

Continued Next Page

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

LOG OF TEST BORING

Project: US 41 Corridor Maint. of Traffic
Location: Evansville, Vanderburgh County, Indiana
Client: Butler, Fairman & Seufert, Inc.
7770 West New York Street – Indianapolis, Indiana 46214
317-273-1690 / 317-273-2250 (fax)

Boring No. TB-6
Elevation 381
Datum NAVD 88
EEI Proj. No. 1-15-244
Sheet 3 of 3

Project No. 9620260 & 0100482 | Station 137+06 | Weather Sunny | Driller J.S.
Struct. No. --- | Offset C.L. "D" | Temp. 88° F | Inspector C.B.

SAMPLE No.	Type	Rec %	Blow Counts	Depth ft	Elev	DESCRIPTION/CLASSIFICATION and REMARKS	q_p tsf	q_u tsf	γ pcf	W %	LL %	PL %	PI %
~~SS-20~~		~~10~~	~~50/.1~~										
				80	300	SAND AND GRAVEL, medium dense, wet, brown and gray, with occasional cobbles (visual)							
SS-21		50	5-5-6	85	295								
SS-22		35	5-8-7	90		GRAVELLY SAND, medium dense, wet, brown and gray (visual)							
						End of Boring at 90 ft<<C>>							

The stratification lines represent the approximate boundary between soil/rock types and the transition may be gradual.

DRAFT
Not For Construction

STANDARD PENETRATION TEST
Driving 2" O.D. Sampler 1'-6" with 140# Hammer falling 30". Count made at 6" intervals. First 6" for seating sampler. "N" is the Sum of the Hammer Blows of the Second and Third 6" intervals of an 1'-6" Drive.

NOTES
The entire Geotechnical Report developed by Earth Exploration, Inc. will be made available to the Contractor upon request.
See Sheet 69 for Additional Soil Borings, Pile Loading Table and Boring Location Plan.
See Sheets 70 thru 73 for Additional Soil Borings.

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: D. SHEETZ | DRAWN: D. SHEETZ
CHECKED: M. MATEL | CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NONE	SEE BRIDGE PLANS
VERTICAL SCALE	DESIGNATION
NONE	SEE BRIDGE PLANS
SURVEY BOOK	SHEET 74 OF 164
CONTRACT	PROJECT
B-33539	SEE BRIDGE PLANS

BRS NO. 5605

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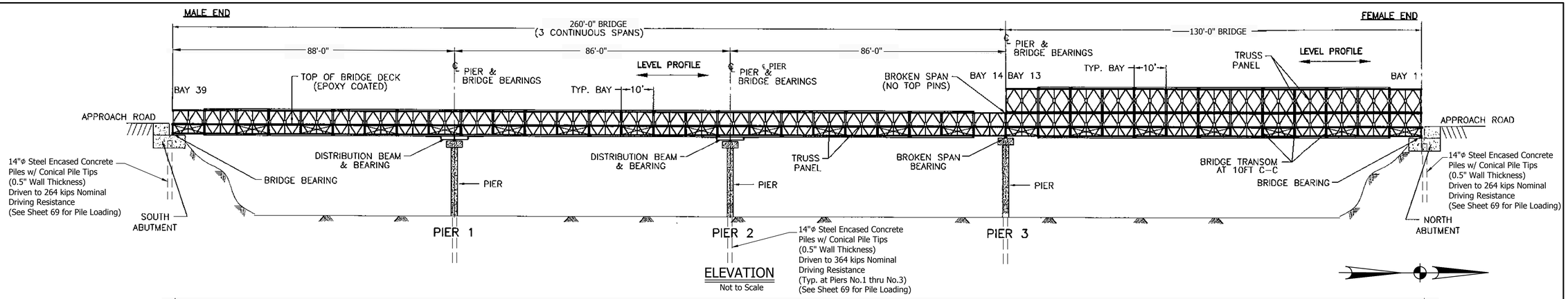

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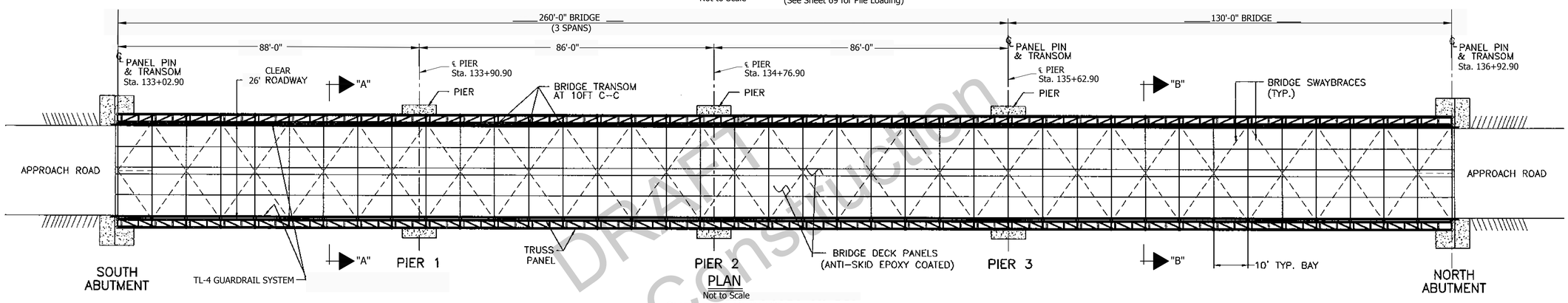
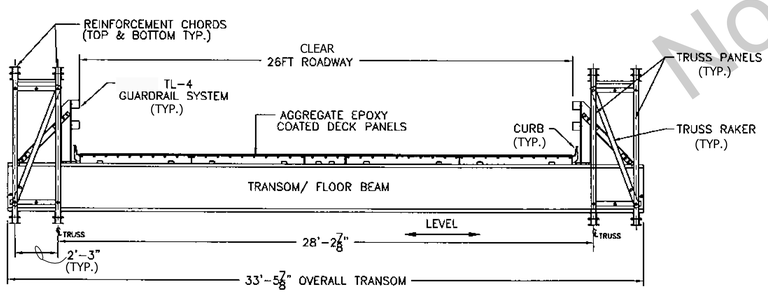
Not to Scale



PLAN
Not to Scale

CHEATAM SLOUGH

NOTE: IF THE CONTRACTOR ELECTS TO BRACE THEIR COPING FORMS OFF OF THE TEMPORARY STRUCTURE, THE CONTRACTOR SHALL COORDINATE WITH THE SUPPLIER PRIOR TO SETTING FORMS. (SEE SPECIAL PROVISIONS)



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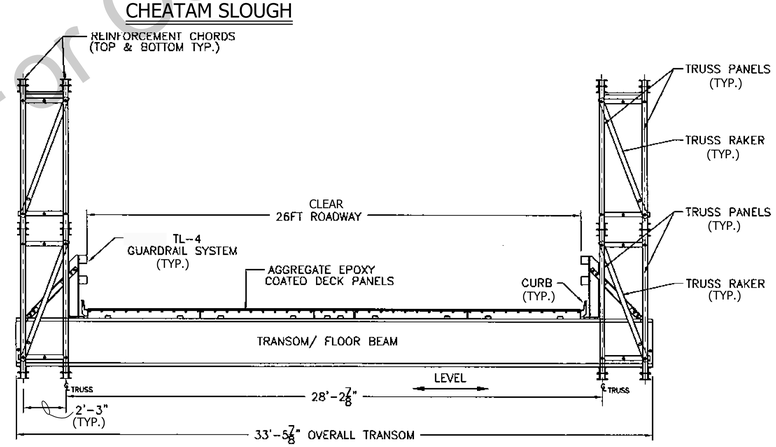

SECTION "B-B"
Not to Scale

GENERAL NOTES

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6TH EDITION, 2012 AND CURRENT ADDENDUMS.

LIVE LOAD
2-LANES OF HL93

DEAD LOAD
TL-4 GUARDRAIL SYSTEM

BRIDGE
(A) PANEL CHORDS, DIAGONALS & VERTICALS, RAKER, DIAGONAL CHORD, REINFORCING CHORDS
AASHTO M223 Gd 65
(B) DECKING, RAKER BRACE, TRANSOM, TOP CHORD BRACE, SWAYBRACE, TRANSOM BRACE
AASHTO M223 Gd 50
(C) PANEL PINS
ASTM A 193 Gd B7
(D) BOLTS
AASHTO M164M – A325

FINISH
ALL MAJOR COMPONENTS GALVANIZED TO AASHTO M111-ASTM A123
ALL BOLTS, ARE HOT DIPPED GALVANIZED.
PINS ARE ELECTRO GALVANIZED.

DRAFT
Not For Construction

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
TEMPORARY BRIDGE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	75 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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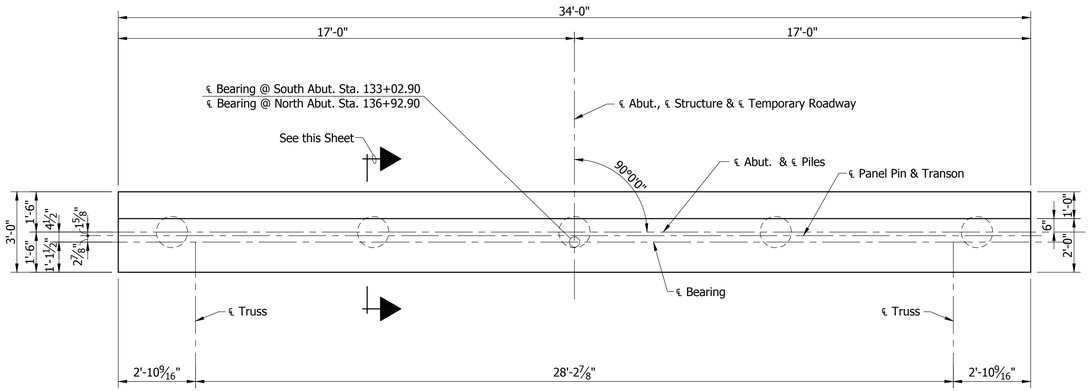
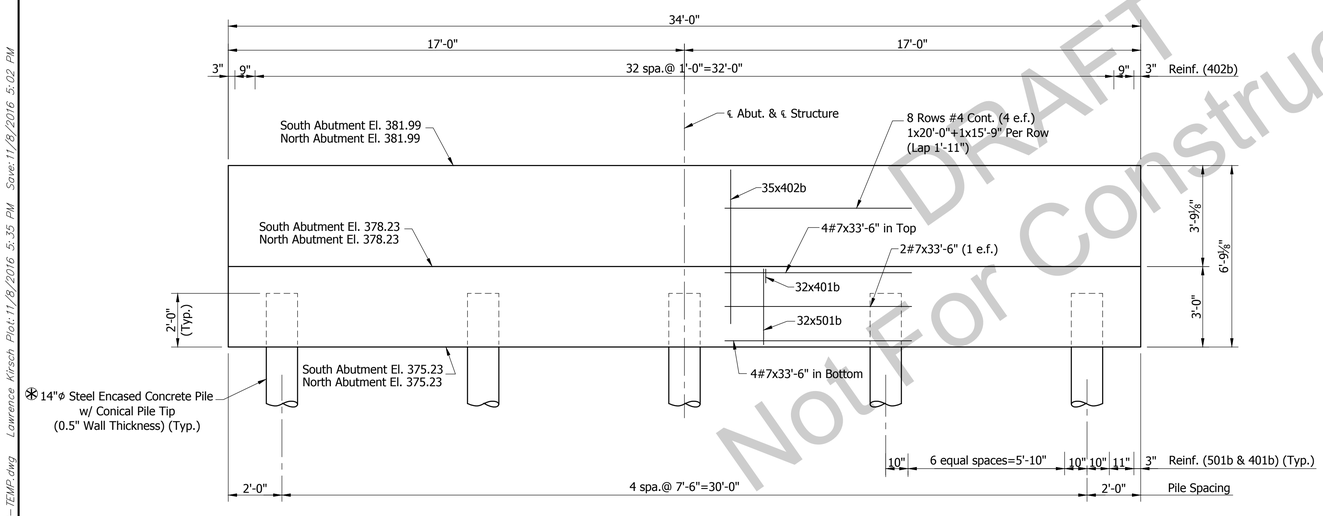


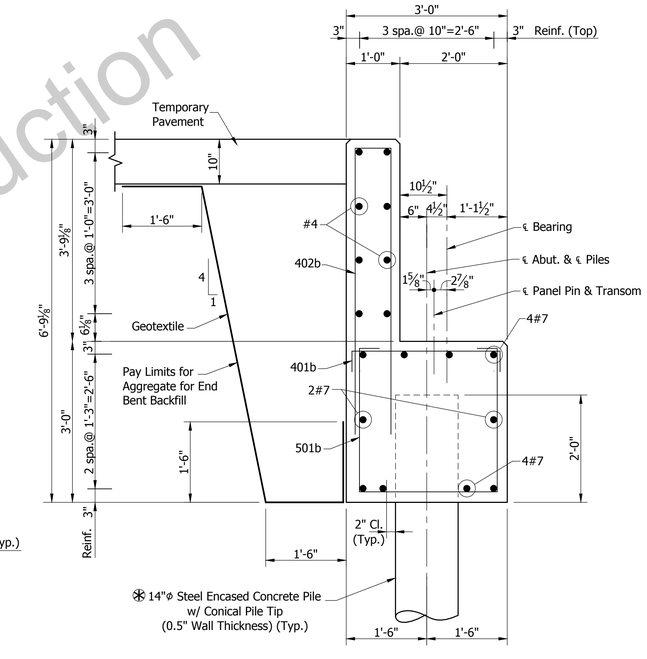
PLAN

Scale: ⅜"=1'-0"



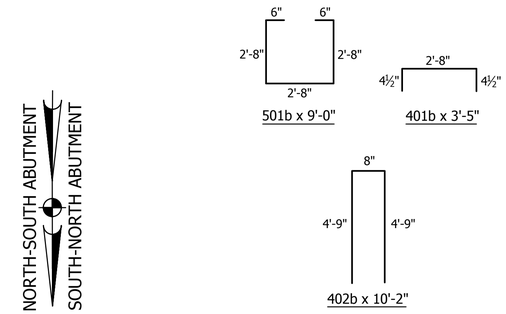
ELEVATION

Scale: ⅜"=1'-0"



SECTION

Scale: ¾"=1'-0"



BAR BENDING DETAILS

Not to Scale

BILL OF MATERIALS
SOUTH ABUTMENT
(NORTH ABUTMENT SAME)

REINFORCING BARS			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
#7	10	33'-6"	
Total #7 (Plain)			685
501b	32	9'-0"	
Total #5 (Plain)			300
401b	32	3'-5"	
402b	35	10'-2"	
#4	8	20'-0"	
#4	8	15'-9"	
Total #4 (Plain)			502
Total Steel (Plain)			1487

CONCRETE	
Class "A" in Substructure	16.1 Cys.

MISCELLANEOUS	
5-14"ø Steel Encased Concrete Piles (0.5" Wall Thickness) @ 65' Each	325 Lft.
Conical Pile Tips	5 Each
Foundation Excavation Unclassified	18 Cys.
Aggregate for End Bent Backfill	18 Cys.
Geotextile	40 Sys.

⊕ A.S.T.M. A615, Grade 60

✻ All Piles shall be Restruck 24 hours after Initial Driving.

NOTE
See Sheet 69 for Pile Loadings.

DRAFT
Not For Construction

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MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: B. WRIGHT DRAWN: D. SHEETZ
CHECKED: M. EICHENAUER CHECKED: M. MATEL

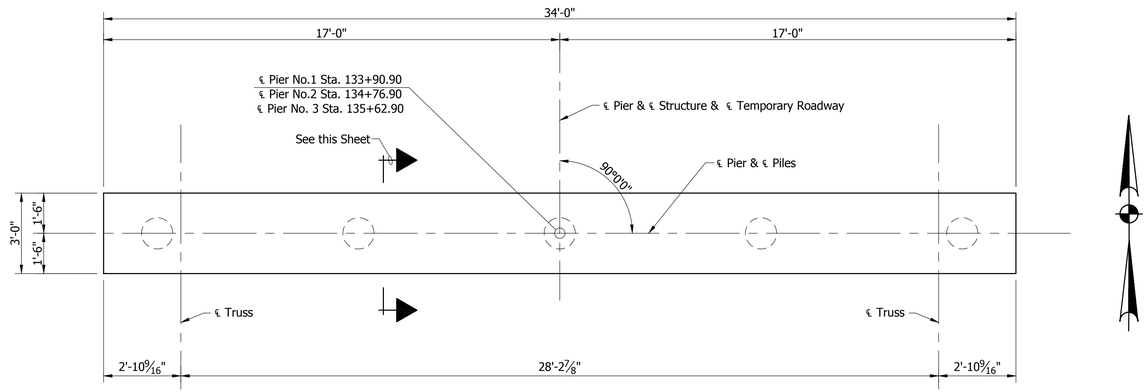
INDIANA
DEPARTMENT OF TRANSPORTATION

SOUTH AND NORTH ABUTMENT DETAILS
TEMPORARY BRIDGE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	---
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET
	76 OF 164
CONTRACT	PROJECT
B-33539	1592481

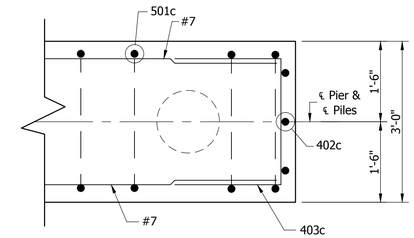
5605

BFS NO.



CAP PLAN

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



PLAN-SECTION

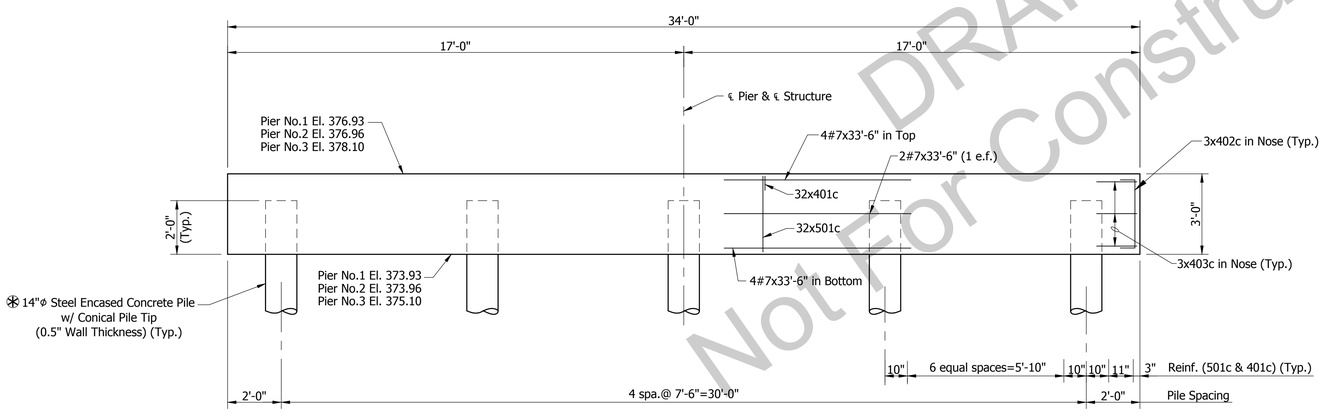
CAP NOSE

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

BILL OF MATERIALS
PIER NO.1
(PIER NO.2 AND NO.3 SAME)

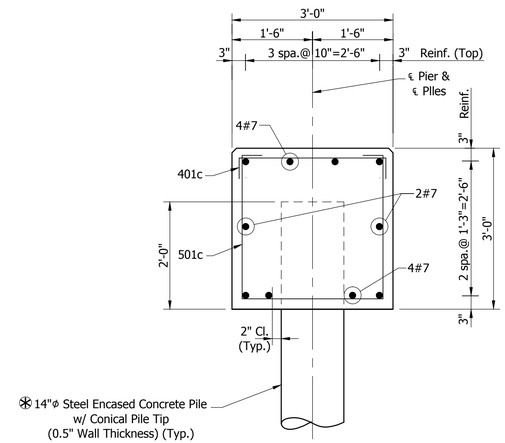
REINFORCING BARS			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
#7	10	33'-6"	
Total #7 (Plain)			685
501c	32	9'-0"	
Total #5 (Plain)			300
401c	32	3'-5"	
402c	6	3'-4"	
403c	6	6'-7"	
Total #4 (Plain)			113
Total Steel (Plain)			1098
CONCRETE			
Class "A" in Substructure			11.3 Cys.
MISCELLANEOUS			
5-14"ø Steel Encased Concrete Piles (0.5" Wall Thickness) @ 95' Each			475 Lft.
Conical Pile Tips			5 Each

⊕ A.S.T.M. A615, Grade 60



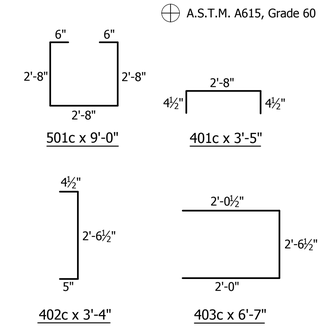
ELEVATION

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



SECTION

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



BAR BENDING DETAILS

Not to Scale

⊛ All Piles shall be Restruck 24 hours after Initial Driving.

NOTE
See Sheet 69 for Pile Loadings.

DRAFT
Not For Construction

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: B. WRIGHT DRAWN: D. SHEETZ
CHECKED: M. EICHENAUER CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

PIERS NO.1, NO.2 AND NO.3 DETAILS
TEMPORARY BRIDGE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	---
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET 77 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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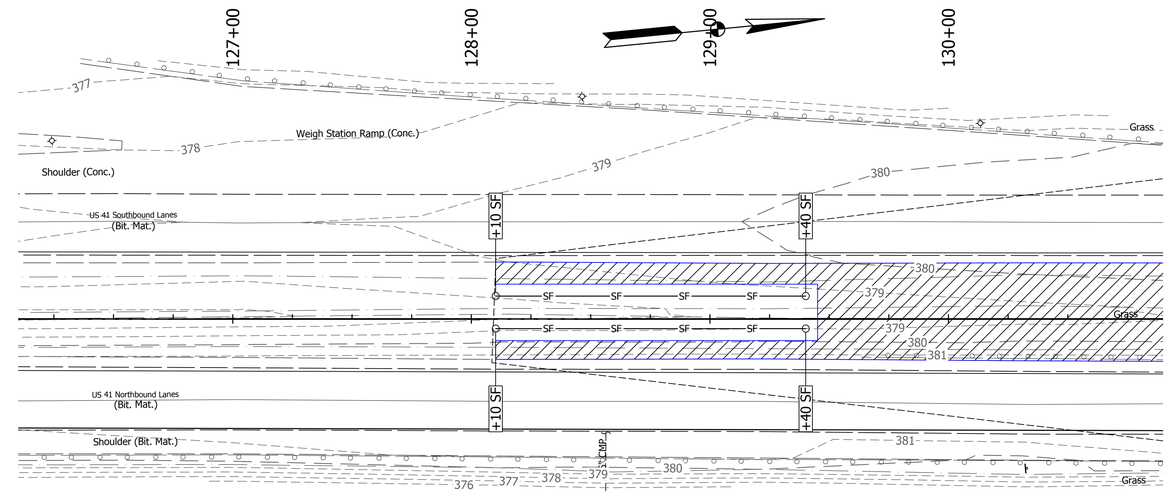
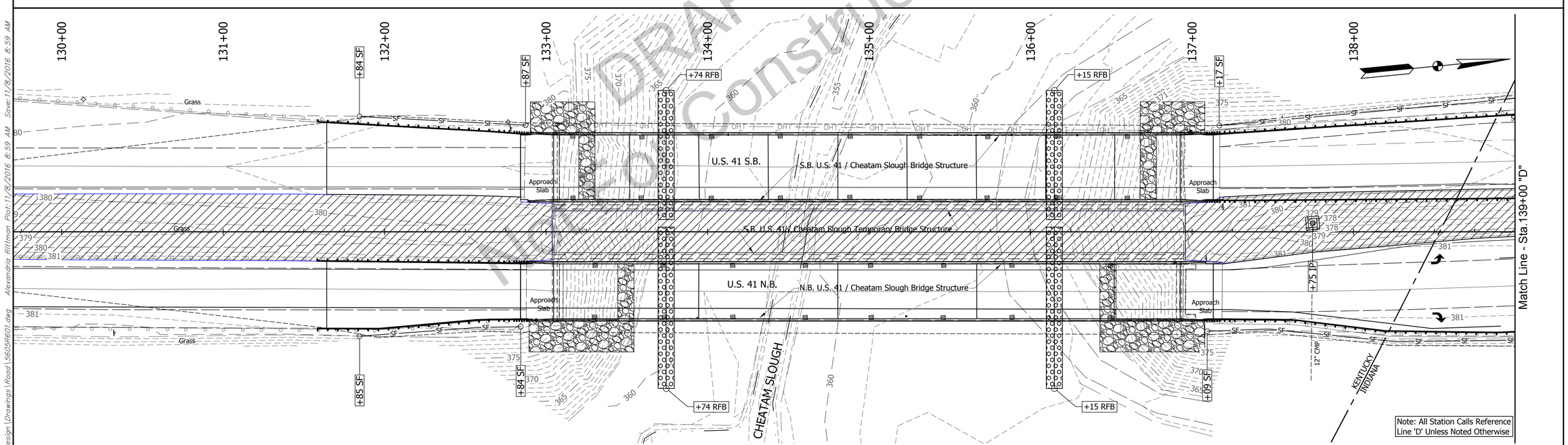
Equipment Access

Bridge	Temp. Rock Filter Berm. (LFT)	No. 2 Stone (TON)	Temp. Seed Mix (LBS)	Temp. Mulch (TON)	Temp. Geotexile (SYS)
SB CHEATEM SLOUGH	160	100	5	0.1	145
NB CHEATAM SLOUGH	200	140	5	0.1	215
SB OHIO RIVER OVERFLOW	280	90	5	0.1	135
NB OHIO RIVER OVERFLOW	220	90	5	0.1	135
SB EAGLE CREEK	80	150	7	0.1	225
NB EAGLE CREEK	80	150	7	0.1	225
TOTALS:	1,020	720	34	0.6	1,080





Note: All Station Calls Reference Line 'D' Unless Noted Otherwise

DRAFT
Not for Construction

SYMBOL LEGEND

========	EXISTING STORM SEWER		CONSTRUCTION LIMITS	SF	SILT FENCE (SF)
▩	EXISTING STORM STRUCTURE		TEMPORARY PAVEMENT CONSTRUCTION		INLET PROTECTION (IP)
(Grass)	EXISTING VEGETATION COVER		NO. 2 STONE EQUIPMENT ACCESS		CHECK DAM TRAVERSABLE (CKD)
					ROCK FILTER BERM (RFB)

MICHAEL MATEI
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	78 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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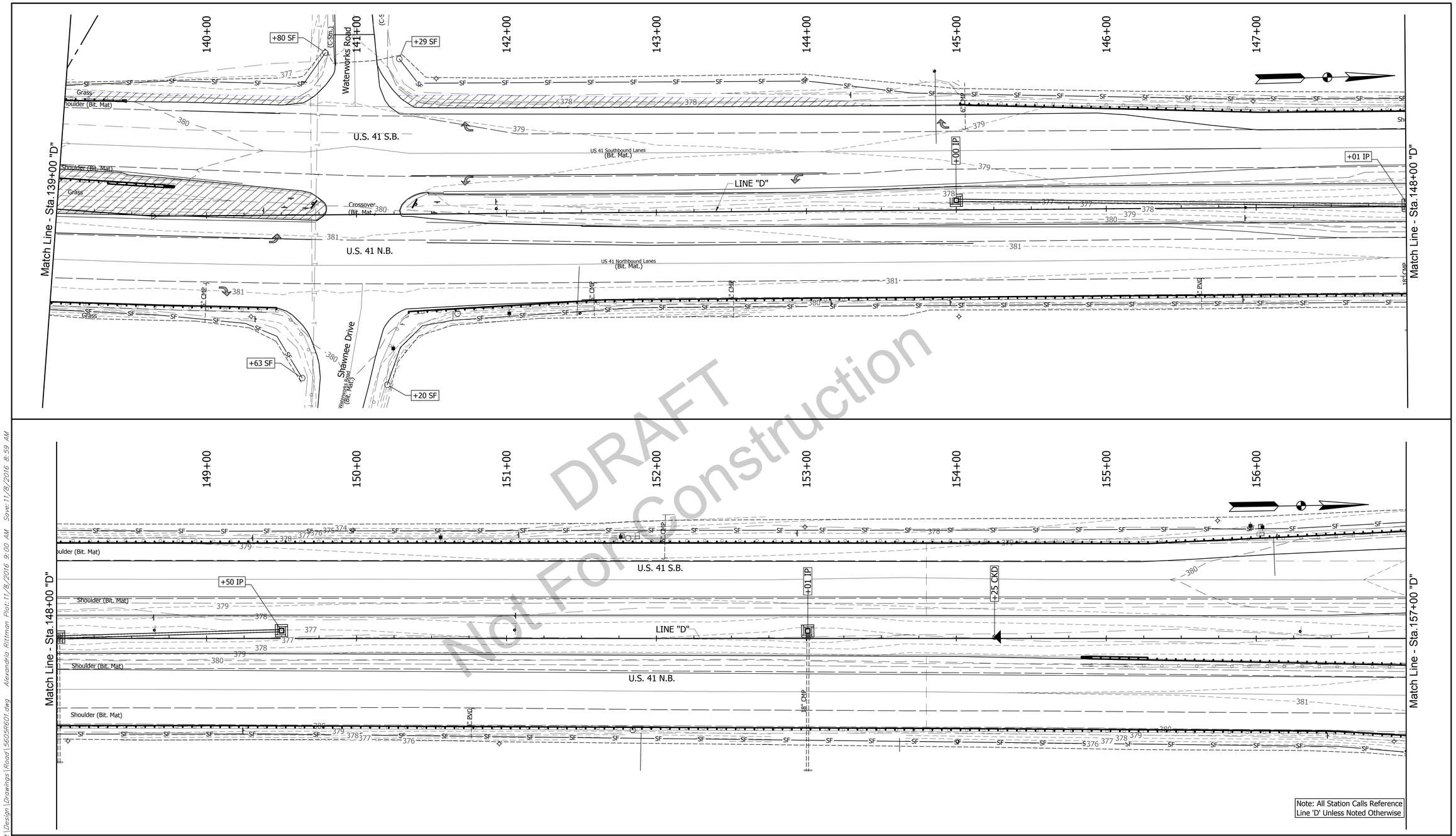

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SYMBOL LEGEND

	EXISTING STORM SEWER		CONSTRUCTION LIMITS	SF	SILT FENCE (SF)
	EXISTING STORM STRUCTURE		TEMPORARY PAVEMENT CONSTRUCTION		INLET PROTECTION (IP)
(Grass)	EXISTING VEGETATION COVER		NO. 2 STONE EQUIPMENT ACCESS		CHECK DAM TRAVERSABLE (CKD)
					ROCK FILTER BERM (RFB)

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	79 OF 164
CONTRACT	PROJECT
B-33539	1592481

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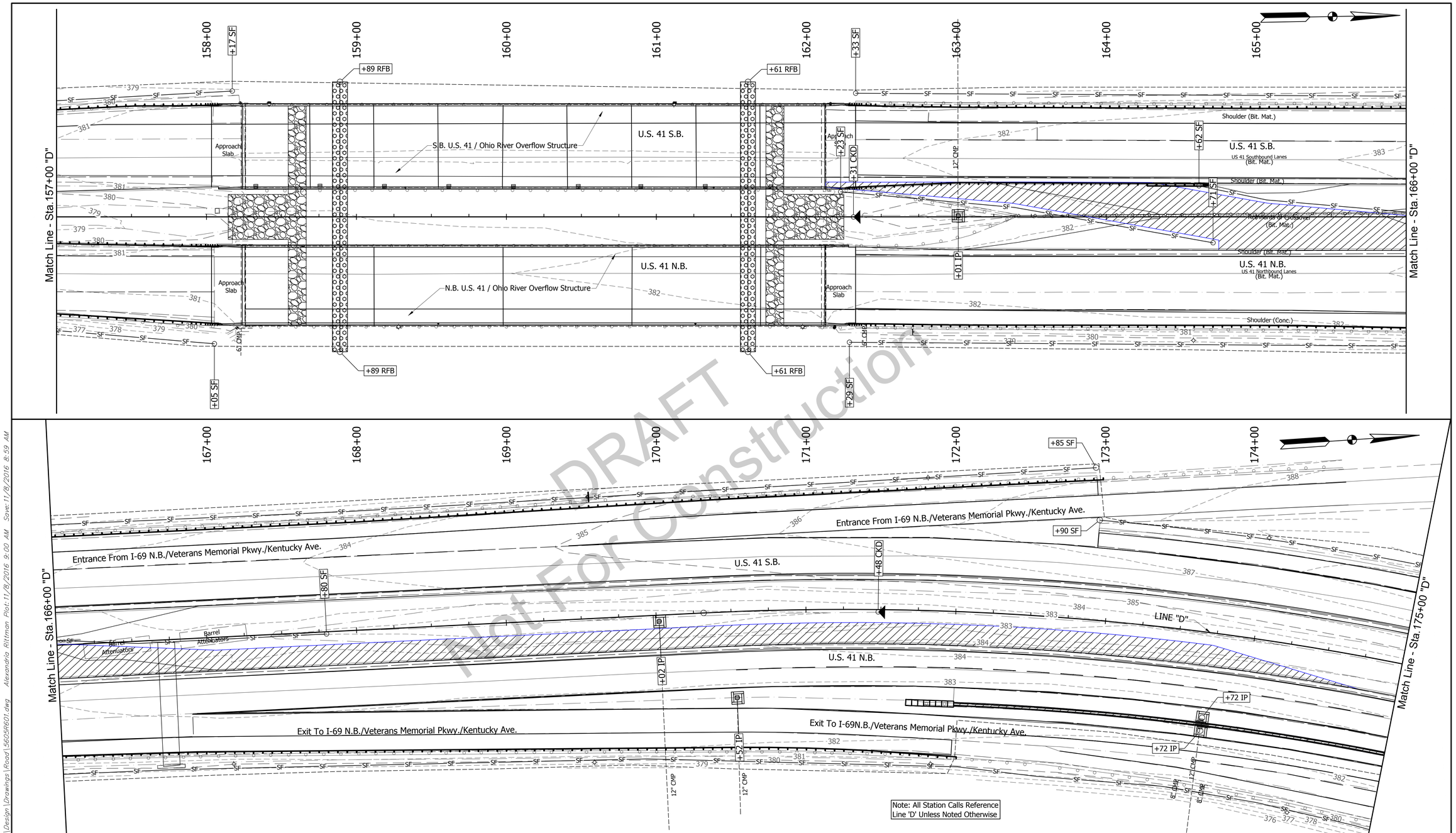

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SYMBOL LEGEND

	EXISTING STORM SEWER		CONSTRUCTION LIMITS	SF	SILT FENCE (SF)
	EXISTING STORM STRUCTURE		TEMPORARY PAVEMENT CONSTRUCTION		INLET PROTECTION (IP)
(Grass)	EXISTING VEGETATION COVER		NO. 2 STONE EQUIPMENT ACCESS		CHECK DAM TRAVERSABLE (CKD)
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INDIANA DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEET
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CONTRACT	PROJECT
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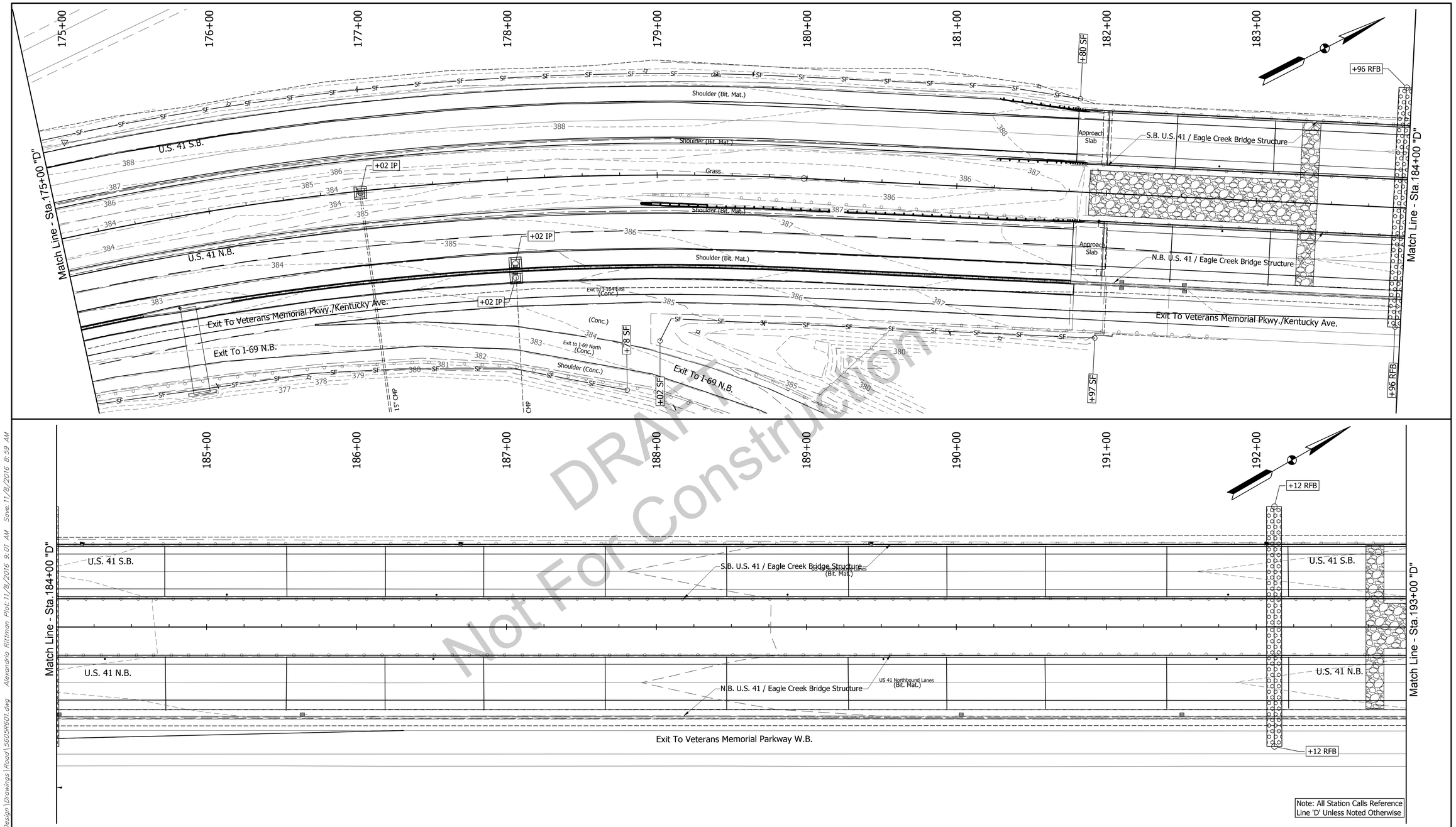

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SYMBOL LEGEND

========	EXISTING STORM SEWER	----------	CONSTRUCTION LIMITS	—SF—	SILT FENCE (SF)
■	EXISTING STORM STRUCTURE		TEMPORARY PAVEMENT CONSTRUCTION		INLET PROTECTION (IP)
(Grass)	EXISTING VEGETATION COVER		NO. 2 STONE EQUIPMENT ACCESS		CHECK DAM TRAVERSABLE (CKD)
					ROCK FILTER BERM (RFB)

MICHAEL MAEL
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No. 860186
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RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
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CONTRACT	PROJECT
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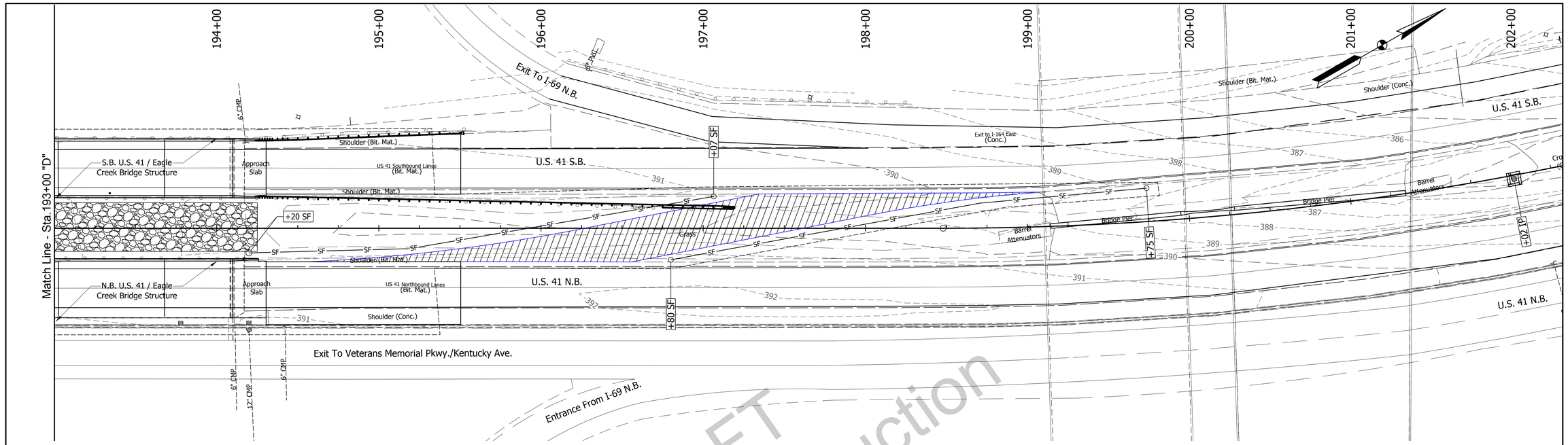

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Note: All Station Calls Reference Line 'D' Unless Noted Otherwise

SYMBOL LEGEND

	EXISTING STORM SEWER		CONSTRUCTION LIMITS	SF	SILT FENCE (SF)
	EXISTING STORM STRUCTURE		TEMPORARY PAVEMENT CONSTRUCTION		INLET PROTECTION (IP)
(Grass)	EXISTING VEGETATION COVER		NO. 2 STONE EQUIPMENT ACCESS		CHECK DAM TRAVERSABLE (CKD)
					ROCK FILTER BERM (RFB)

MICHAEL MAIER
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RECOMMENDED FOR APPROVAL: Michael Maier 10/31/16
DESIGN ENGINEER DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	----
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEET
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CONTRACT	PROJECT
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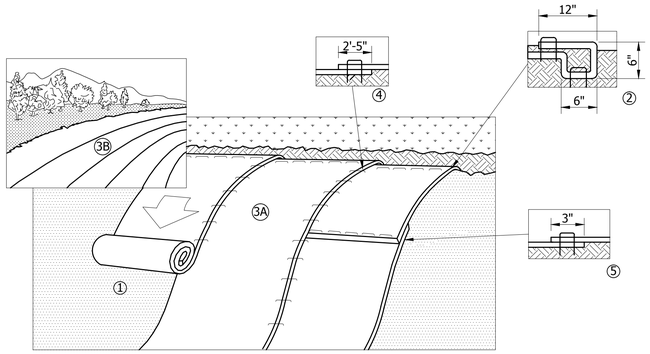


① Prepare Soil Before Installing Blankets, Including Any Necessary Application Of Lime, Fertilizer, And Seed.

② Begin At The Top Of The Slope By Anchoring The Blanket In A 6 Inch Deep By 6 Inch Wide Trench With Approximately 12 Inches Of Blanket Extended Beyond The Upslope Portion Of The Trench. Anchor The Blanket With A Row Of Staples/Stakes Approximately 12 Inches Apart In The Bottom Of The Trench. Backfill And Compact The Trench After Stapling. Apply Seed To Compacted Soil And Fold Remaining 12 Inch Portion Of Blanket Back Over Seed And Compacted Soil. Secure Blanket Over Compacted Soil With A Row Of Staples/Stakes Spaced Approximately 12 Inches Apart Across The Width Of The Blanket.

③ Roll The Blankets (A.) Down Or (B.) Horizontally Across The Slope. Blankets Will Unroll With Appropriate Side Against The Soil Surface. All Blankets Must Be Securely Fastened To Soil Surface By Placing Staples/Stakes In Appropriate Locations As Shown In The Staple Pattern Guide. When Using Optional Dot System, Staples/Stakes Should Be Placed Through Each Of The Colored Dots Corresponding To The Appropriate Staple Pattern.

④ The Edges Of Parallel Blankets Must Be Stapled With Approximately 2-5 Inches Overlap Depending On Blanket Type. To Ensure Proper Seam Alignment, Place The Edge Of The Overlapping Blanket (Blanket Being Installed On Top) Even With The Colored Seam Stitch On The Previously Installed Blanket.

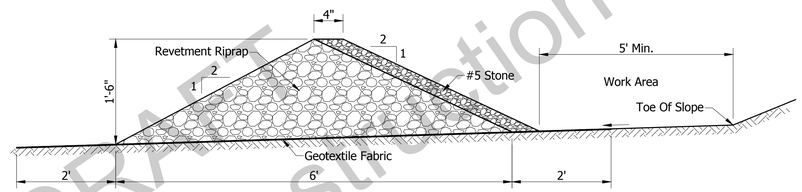
⑤ Consecutive Blankets Spliced Down The Slope Must Be Placed End Over End (Shingle Style) With An Approximate 3 Inch Overlap. Staple Through Overlapped Area, Approximately 12 Inches Apart Across Entire Blanket Width.

Overlap The Blankets With The Direction Of The Flow Of The Water

NOTE:
* In Loose Soil Conditions, The Use Of Staple Or Stake Lengths Greater Than 6 Inches May Be Necessary To Properly Secure The Blankets.

EROSION CONTROL BLANKET - SLOPE APPLICATION DETAIL

NOT TO SCALE



SECTION

ROCK FILTER BERM DETAIL

NOT TO SCALE

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MICHAEL MAIER REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

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CHECKED: MM CHECKED: BZ

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DEPARTMENT OF TRANSPORTATION

EROSION CONTROL DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
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EROSION CONTROL NOTES

GENERAL:
Take Measures To Control Erosion And Sedimentation To Assure That Sediment Is Not Transported From The Site By Storm Events. Practices Such As Silt Traps Or Filters Shall Be Installed Prior To Land Disturbing Activities. New Drainage Swales Shall Be Seeded And/Or Sodded, Or Other Protective Practices Applied, Immediately Following Construction. All Practices Shall Be Maintained To Remove Sediment From Runoff Leaving The Site As Long As Unstabilized Soil Conditions Exist.

After Land Disturbing Activities Cease And The Soil Is Stabilized, Temporary Erosion Control Measures May Be Eliminated If Their Purpose Has Been Fulfilled. Any Disturbed Soil Resulting From Removal Of Such Practices Shall Be Stabilized By Approved Methods.

Dispose Properly All Waste And Unused Building Materials Including, But Not Limited To, Garbage, Debris, Cleaning Wastes, Water, Toxic Materials, And Hazardous Substances. Do Not Allow Substances To Be Carried By Runoff Into A Receiving Channel Or Storm Sewer System.

Clean Public Or Private Roadways Daily And After Major Storms Using Acceptable Methods To Remove Any Accumulated Sediment. The Developer's Contractors Are Responsible For Supervision Of The Construction Activity Within The Development And Shall Take All Necessary Actions To Remove Sediment From The Streets.

For Construction Sequence, Maintenance, And Other Soil Erosion Requirements, See Specifications For Site Clearing, Slope Protection, Erosion Control, Landscaping, And Seeding.

Erosion And Sediment Control Practices Must Adhere To, Or Exceed Those Shown On The Erosion Control Plan, (And Rule 5 327 IAC 15-5) And Shall Be In Accordance With The Indiana Storm Water Quality Manual, Indiana Department Of Environmental Management.

SURFACE STABILIZATION:
Cut Slopes Which Are To Be Topsoiled Should Be Scarified To A Minimum Depth Of 4 Inches Prior To Placement Of Topsoil. Install Erosion Control Blankets On All Slopes Of 3 (Horizontal) To 1 (Vertical).

Stabilize All Disturbed Ground Left Inactive For Fifteen Or More Days By Seeding, Sodding, Mulching, Or By Other Equivalent Erosion Control Practices. See The Landscape Plan For Permanent Ground Cover Requirements Adjacent To The Building And Parking Areas.

EROSION CONTROL NOTES (Con't)

Minimize Changes In The Drainage Pattern. Avoid Putting Fill Over The Root System.

Prune Low Hanging Limbs That Could Otherwise Be Broken Off By Equipment.

Repair Wounds Simply By Removing Damaged Bark And Wood Tissue (Do Not Use Tree Paint).

EROSION CONTROL BLANKETS:
Use Machine Produced Mat Of Straw Fiber Matrix Or Curled Wood Excelsior Of 80 Percent, 6 Inch Or Longer Fiber Length.

Evenly Distribute Fibers Over Entire Area Of Blanket To Provide Consistent Thickness.

Provide Blanket With Top Side Covered With Biodegradable Extruded Plastic Mesh.

Treat Blankets To Impart Smolder Resistance Without Use Of Chemical Additives.

EROSION CONTROL BLANKET STAPLES:
Use Minimum 0.091 Inch Diameter Steel Wire "U" Shape With Legs 6 Inches In Length With 1 Inch Crown.

Potential Storm Water Pollutants Material Handling and Spill Prevention

Trade Name /Material	Source	Chemical/Physical Description	Storm Water Pollutants	Remedial Action
Fertilizer	Landscaping Activities	Liquid or Solid Grains	Nitrogen, Phosphorus	(1), (2), (3)
Cleaning Solvents	Normal Business Operation	Colorless, Blue Or Yellow-Green Liquid	Percholoroethylene, Methylene Chloride, Trichloroethylene, Petroleum Distillates	Seal Drains & Inlets w/Plastic And Or Tape And Collect Excess, (1), (2), (3), (4)
Asphalt	Site Construction	Black Solid	Oil, Petroleum Distillates	(1), (2) Due To Contamination Of Runoff Before Curing Is Complete
Concrete	Bridge Construction	White Solid	Limestone, Sand	Concrete Washout Areas Shall Be Utilized & Concrete Disposed Of Properly Once Hardened (2).
Paints	Roadway Striping	Various Colored Liquids	Metal Oxides, Stoddard Solvent, Talc, Calcium Carbonate, Arsenic	Care Should Be Taken To Minimize Overspray (1), (2), (3), (4)
Curing Compounds	Site Construction	Creamy White Liquid	Naphtha	(1), (2), (3), (4)
Wastewater From Constr. Equipment Washing	Construction Equipment	Water	Soil, Oil, Grease, Solids	Equipment Washing Shall Be Executed In A Location Which Does Not Cause Wastewater To Drain Directly To Storm Sewers Or Ditches (i.e. Flat Vegetated Area) (2)
Hydraulic Oil/Fluids	Construction Equipment, Cars	Brown Oily Petroleum Hydrocarbon	Mineral Oil	Storm Structures Incorporate A Hooded Outlet Preventing Floatables From Exiting Site, (3), (4)
Gasoline	On Site Storage Tanks, Cars, Construction Equipment, Fueling Operations	Colorless, Pale Brown Or Pink Petroleum Hydrocarbon	Benzene, Ethyl Benzene, Toluene, Xylene, MTBE	Storage Tanks Shall Have Emergency Storage Capacity Below Tank In Case Of Rupture, 3'x3'x6" Spill Pans Shall Be Used During Fueling. (3), (4)
Diesel Fuel	On Site Storage Tanks, Cars, Construction Equipment, Fueling Operations	Clear, Blue-Green To Yellow Liquid	Bpetroleum Distillate, Oil And Grease, Naphthalene, Xylenes	Storage tanks shall have emergency storage capacity below tank in case of rupture, 3'x3'x6" spill pans shall be used during fueling. (3), (4)
Kerosene	Cleaning Operations, Heaters	Pale Yellow Liquid Petroleum Hydrocarbon	Coal Oil, Petroleum Distillates, Arsenic, Copper	3'x3'x6" Spill Pans Shall Be Used During Fueling Operations And Cleaning Of Equip. To Catch Excess, (1), (2), (3), (4)
Antifreeze Coolant	Construction Equipment, Cars	Clear Green/Yellow Liquid	Ethylene Glycol, Propylene Glycol, Heavy Metals (Copper, Lead, Zinc)	(1), (2), (3), (4)
Soil Erosion	Exposed Soil	Solid Particles	Soil Sediment	Erosion Control Measures (This Sht.)
Solid Waste Trash	Normal Business Operation	Trash, Debris, Refuse	Trash, Debris, Refuse	Trash Cans Shall Be Utilized On Site During And After Construction

This Table Was Provided For General Information Only To Supplement Information Used In The Rule 5 Permitting Process. The Contractor Is Responsible For Material Handling And Spill Mitigation Procedures.

Notes:
1. All Excess Materials Shall Be Collected And Disposed Of In Accordance With All Federal, State And Local Regulations.
2. Material Shall Not Be Applied Immediately Preceding, During Or Following Rainfall (When Applicable).
3. Spillage Should Be Cleaned Immediately By A Trained Individual And Disposed Of Per Note (2).
4. Store In Sealed Containers Appropriate For Specific Use.

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MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: AR
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL NOTES

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	84 OF 164
CONTRACT	PROJECT
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Rule 5 Checklist - Section A:
Construction Plan Elements

A1. Index Showing Locations Of Required Plan Elements
See The Index Sheet (Sheet 2).

A2. 11x17 Inch Plat With Building, Lots, Boundaries, Road Layout Names
See The Erosion Control Sheets (Sheets 78-82).

A3. Narrative Describing Nature And Purpose Of Project
The Indiana Department Of Transportation (INDOT) Proposes A Project To Rehabilitate Three Bridge Pairs (Six Bridges In Total) Carrying U.S. 41 Over Eagle Creek And Ohio River Overflow In Vanderburgh County, Indiana, And Carrying U.S. 41 Over Cheatam Slough Into Henderson County, Kentucky. The Primary Purpose Of This Project Is To Address Ongoing Deterioration Occurring On The Decks Of These Bridges. The Need Comes From The Heavy Use And Resulting Wear Occuring On The Bridges, Including The Cracking And Delamination Of The Deck Areas. U.S. 41 Services Around 40,000 Vehicles Per Fay And Has A Functional Classification Of Principal Urban Arterial Between Evansville, Indiana And Henderson, Kentucky. These Bridges Help Provide An Important Link Between The Two States, As The Next Nearest Crossing Of The Ohio River Is Located Approximately 25 Miles To The East (IN-161/KY-2262). In Addition To Bridge Rehabilitation Work, The Project Proposes Roadway And Shoulder Reconstruction Work From The Indiana/Kentucky State Line North To The South Ends OF The Bridges Carrying U.S. 41 Over Eagle Creek.

This Application Only Applies To Work Occurring Within The Limits Of The State Of Indiana. The Permit For The Work Within The Limits Of The State Of Kentucky Will Be Coordinated Under A Separate Application To Be Processed By Kentucky's Division Of Water.

A4. Vicinity Map Showing Project Location
See The Title Sheet (Sheet 1).

A5. Legal Description Of The Project Site
Beginning- Latitude: 39°31'38" N, Longitude: 85°45'55" W; Ending- Latitude: 39°31'55" N, Longitude: 85°44'47" W; The Project Is Located Approximately 150 Miles Southwest Of Indianapolis, Indiana, Approximately 2 Miles Southeast Of Downtown Evansville, Indiana, And Approximately 6 Miles Northeast Of Henderson, Kentucky; In Sections 4, 8, And 9; Township 7S, Range 10W, On The U.S.G.S. Evansville South Quadrangle; In Knight And Pigeon Townships, Vanderburgh County, Indiana. The Project Runs Northbound And Southbound Along U.S. 41 From Eagle Creek To Cheatam Slough.

A6. Location Of All Site Improvements
Rehabilitation Work Shall Be Contained To The Superstructures And End Bents Of The Six Bridges. Roadway And Shoulder Reconstruction Shall Be Contained Within The Construction Limits, As Shown On The Erosion Control Sheets (Sheets 78-82).

A7. Hydrologic Unit Code
05140202010020 And 15140202010010.

A8. Note Any State Or Federal Water Quality Permits
An IDEM Rule 5 Erosion Control Permit Is Required For This Project.

A9. Specific Points Where Stormwater Discharge Will Leave The Site
The Majority Of Stormwater Will Leave The Site As Sheet Flow. Stormwater Will Leave The Medians Primarily Through Existing Inlets And Outlet Pipes At 148+00, 153+00, 163+00, 173+72, And 178+00.

A10. Location And Name Of All Wetlands, Lakes And Water Courses On And Adjacent To The Site
Wetland Code PSS1A Is Located Northwest Of The U.S. 41 Bridge Over Eagle Creek. Wetland Codes PFO1A And PFO1C Are Located East Of The U.S. 41 Bridge Over Eagle Creek. Wetland Code PUBGx Is Located West Of The U.S. 41 Bridge Over Eagle Creek. Wetland Code PUBGx Is Located Southwest Of The U.S. 41 Bridge Over Eagle Creek. Wetland Code PFO1A Is Located Northwest Of The U.S. 41 Bridge Over Ohio River Overflow. Wetland Code PUBGh Is Located West Of The U.S. 41 Bridge Over Ohio River Overflow. Wetland Code PUBH Is Located West Of The U.S. 41 Bridge Over Cheatam Slough. The Project Crosses Cheatam Slough, A UNT To Cheatam Slough, Ohio River Overflow, Eagle Creek, And A UNT To Eagle Creek.

A11. Identification Of All Receiving Waters
Stormwater Will Discharge To Cheatam Slough, A UNT To Cheatam Slough, Ohio River Overflow, Eagle Creek, And A UNT To Eagle Creek.

A12. Identification Of Potential Discharges To Ground Water (Abandoned Well, Sinkholes, Etc.)
No Potential Discharges To Ground Water Are Known To Exist For This Project.

A13. 100 Year Floodplains, Floodways, And Floodway Fringes
See The Attached Flood Insurance Rate Maps.

A14. Pre-Construction And Post Construction Estimate Of Peak Discharge (10 Year Storm Event)

Location	Pre-Construction	Post Construction
148+00	4.87 cfs	5.43 cfs
153+00	3.10 cfs	3.46 cfs
163+00	5.31 cfs	5.93 cfs
173+12	6.64 cfs	7.41 cfs
178+00	4.87 cfs	5.43 cfs

A15. Adjacent Land Use, Including Upstream Watershed
The Land Use Within, And Adjacent To, The Project Limits Mostly Consists Of Forested And Agricultural Lands. Commercial And Residential Land Uses Occur To The West Of U.S. 41 At The Cheatam Slough Crossing.

A16. Construction Limits
Rehabilitation Work Shall Be Contained To The Superstructures And End Bents Of The Bridges. Roadway And Shoulder Reconstruction Shall Be Contained Within The Construction Limits, As Shown On The Erosion Control Sheets (Sheets 78-82).

A17. Identification Of Existing Vegetative Cover
The Existing Vegetative Cover For This Project Consists Of Impervious Surfaces And Grass. Cultivated Crops And Woods Surround The Project Limits.

Rule 5 Checklist - Section A: (Continued)

A18. Soils Map Including Soil Descriptions And Limitations
See The Attached Soils Map.

Br	Borrow Pits	10.6%
Gn	Ginat Silt Loam	0.0%
Ht	Huntington Silty Clay Loam	24.8%
Ln	Lindside Silty Clay Loam	13.2%
Nw	Newark Silty Clay Loam	21.4%
ScA	Sciotoville Silt Loam, 0 To 2% Slopes	0.4%
W	Water	8.8%
Wb	Weinbach Silt Loam	12.1%
Total For Vanderburgh County, Indiana Portion Of Project		91.3%

A19. Locations, Size And Dimensions Of Proposed Stormwater Systems (e.g. Pipes, Swales, And Channels)
N/A.

A20. Plans For Any Off Site Construction Activities Associated With This Project (Sewer/Water Tie-ins)
There Are No Offsite Construction Activities Associated With This Project.

A21. Locations Of Proposed Soil Stockpiles And/or Borrow Disposal Areas
The Contractor Shall Determine The Location Of Stockpiles, Borrow And/Or Disposal Areas Used During Construction. The Determined Locations Shall Be Approved By INDOT. Proposed Borrow Or Disposal Sites Shall Be Identified By The Contractor Before The Material Is Excavated Or Disposed Of Within Or Outside The R/W In Accordance With Sections 203.08, 203.09, And 212. The Contractor Shall Comply With Section 108.04 Of The INDOT Standard Specifications And Special Provision 108-C-192d Storm Water, Erosion, And Sediment Control Inspection Report.

A22. Existing Site Topography At An Interval Appropriate To Indicate Drainage Patterns
See The Erosion Control Sheets (Sheets 78-82) For Existing Topography.

A23. Proposed Final Topography At An Interval Appropriate To Indicate Drainage Patterns
The Site Shall Be Graded Back To Existing Contours. See The Erosion Control Sheets (Sheets 78-82) For Existing Topography.

Rule 5 Checklist - Section B:
Stormwater Pollution Prevention Plan-Construction Component

B1. Description Of Potential Pollutant Sources Associated With Construction Activities.
The Following Could Generate Potential Pollutants Associated With Construction Activities:
- A. Fueling Of Vehicles
- B. Leaking Equipment Or Vehicles
- C. Material Storage
- D. Site Demolition
- E. Excavation Of Materials
- F. Exposed Soils
- G. Construction Waste And Litter
- H. Sanitary Waste
- I. Concrete Waste And Washout
- J. Tracking Of Soils Offsite

See The Potential Stormwater Pollutants And Spill Prevention Handling Table Located On The Erosion Control Notes (Sheet 84).

B2. Sequence Describing Stormwater Quality Measure Implementation Relative To Land Disturbing Activities.
Preconstruction:
- A. Notify The Project Owner.
- B. Contact The Indiana Underground Plant Protection Systems, Inc. To Verify The Location Of Any And All Underground Utilities.
- C. Exhibit Rule 5 Information At The Job Site. Designate A Person To Be Responsible For Onsite Inspections And For Providing The SWPPP Onsite.
- D. Install Temporary Construction Entrances At All Necessary Access Points.
- E. Install Filter Berms, Silt Fence, Check Dams, And Inlet Protections For Existing Inlets.

Construction:
- A. Construct Concrete Washouts. Coordinate Location Of Concrete Washouts With The Owner And Engineer.
- B. Install Staging Areas, Material Storage Areas, And Fueling Stations.
- C. Install Erosion Control Measures As Each New Item Of The Project Is Installed As Required, Which May Include, But Is Not Limited To, Silt Fence, Filter Berms, Check Dams, And Inlet Protections.
- D. Begin Bridge Rehabilitation Operations.
- E. Temporarily Seed Disturbed Areas Which Will Not Be Permanently Restored In More Than 7 Days.
- F. Install Pavement And Incidental Improvements.
- G. Install Erosion Control Blankets And Permanent Seeding.

B3. Stable Construction Entrance Locations And Specifications (At All Points Of Ingress And Egress)
The Contractor Shall Utilize Existing Streets And Drives As Much As Possible For Construction Ingress And Egress. The Contractor Shall Keep Public Roads And Private Drives Clear And Remove All Dust, Dirt, And Debris As A Result Of Construction Activities. Temporary Construction Entrances Shall Meet The Requirements Of INDOT Standard Drawing E 205-TECP-01.

Cheatam Slough: Due To The Presence Of The Temporary Bridge, The Underside Of The Structure Cannot Be Accessed Via The Median. It Is Anticipated That The Contractor Shall Utilize One Of Two Potential Entrances To Access The Underside Of The Bridge, Either The Entrance Under Shawnee Drive Or The Small Access Road Off Of Waterworks Road. A Temporary Construction Entrance Shall Be Established To Access Either Of These Haul Roads.

Ohio River Overflow: The Contractor Shall Access The Underside Of The Structure Via The Center Median. The Contractor Shall Establish A Stable Construction Entrance Off The Shoulder Of The Corridor, Which Is Not Currently Carrying Traffic. The Contractor May Choose To Use Both The North And South Medians To Access The Underside. If Both Entrances Are Used, Both Shall Be Stabilized.

Eagle Creek: The Contractor Shall Access The Underside Of The Structure Via The Center Median. The North And South Terminus Of Each Bridge Shall Be Utilized As A Construction Entrance.

Rule 5 Checklist - Section B: (Continued)

B4. Sediment Control Measures For Sheet Flow Areas
Sediment Control In Areas Of Sheet Flow Shall Be Handled Via Silt Fence, Erosion Control Blankets, Temporary And Permanent Seeding, And Filter Berms. See The Erosion Control Sheets (Sheets 78-82), The Erosion Control Details (Sheet 83), The Erosion Control Notes (Sheet 84), And INDOT Standard Drawing No. E 205-TECP-02.

B5. Sediment Control Measures For Concentrated Flow Areas
Sediment Control In Areas Of Concentrated Flow Shall Be Handled Via Inlet Protections And Traversable Check Dams. See The Erosion Control Sheets (Sheets 78-82), The Erosion Control Details (Sheet 83), And INDOT Standard Drawings No. E 205-TECD-02 And E 205-TECI-02.

B6. Storm Sewer Inlet Protection Measure Locations And Specifications
Inlets Shall Be Protected From Sediment During Construction Using INDOT Approved Temporary Inlet Protections. See The Erosion Control Sheets (Sheets 78-82) And The Applicable INDOT Standard Drawings.

B7. Runoff Control Measures (e.g. Diversions, Rock Check Dams, Slope Drains, Etc.)
Runoff Shall Be Controlled By Traversable Check Dams. See The Erosion Control Sheets (Sheets 78-82) And INDOT Standard Drawing No. E 205-TECD-02.

B8. Stormwater Outlet Protection Specifications
Stormwater Outlet Protection Shall Be Handled Via Existing Outlet Protections.

B9. Grade Stabilization Structure Locations And Specifications.
A Grade Stabilization Structure Will Not Be Required For This Project.

B10. Location, Dimensions, Specifications, And Construction Details Of Each Stormwater Quality Measure.
See The Erosion Control Sheets (Sheets 78-82), The Erosion Control Details (Sheet 83), The Erosion Control Notes (Sheet 84), And The Applicable INDOT Standard Specifications And Drawings.

B11. Temporary Surface Stabilization Methods Appropriate For Each Season.
Temporary Seeding Shall Be Implemented For All Disturbed Land Left Inactive For A Period Of 7 Days. See The Erosion Control Sheets (Sheets 78-82) And The Applicable INDOT Standard Specifications.

B12. Permanent Surface Stabilization Specifications.
Permanent Seeding, And Erosion Control Blankets On Slopes Steeper Than 3:1, Shall Be Implemented For All Disturbed Land And Shall Occur Once Final Grading Has Been Completed. See The Erosion Control Sheets (Sheets 78-82), The Erosion Control Details (Sheet 83), The Erosion Control Notes (Sheet 84), And The Applicable INDOT Standard Specifications.

B13. Material Handling And Spill Prevention Plan
Vehicle And Equipment Maintenance: Onsite Vehicle And Equipment Maintenance Shall Only Be Used Where It Is Impractical To Send Vehicles And Equipment Offsite For Maintenance And Repair. For Onsite Maintenance, Locate Maintenance Area AT Least Fifty (50) Feet From Storm Drains, Open Ditches, Or Bodies Of Water. Use Drip Pans And Absorbent Pads During Vehicle And Equipment Maintenance Work That Involves Fluids, Unless The Maintenance Is Performed Over An Impermeable Surface In A Designated Maintenance Area. Properly Dispose Of Used Oils, Fluid, Lubricants, And Spill Cleanup Materials. Do Not Place Used Oil In A Dumpster Or Pour Into A Storm Drain Or Watercourse. Inspect Onsite Vehicles And Equipment Daily At The Startup For Leaks, And Repair Immediately.

Vehicle Fueling: Onsite Vehicle And Equipment Fueling Shall Only Be Used Where It Is Impractical To Send Vehicles And Equipment Offsite For Fueling. For Onsite Fueling, Locate Fueling Area At Least Fifty (50) Feet From Storm Drains, Open Ditches, Or Bodies Of Water. Use Drip Pans And Absorbent Pads During Vehicle And Equipment Fueling, Unless The Fueling Is Performed Over An Impermeable Surface In A Dedicated Fueling Area. Nozzles Used In Vehicle And Equipment Fueling Shall Be Equipped With An Automatic Shutoff To Control Drips. Fueling Operations Shall Not Be Left Unattended. Observe Federal, State, And Local Requirements For Any Stationary Above Ground Storage Tanks.

Debris Collection: Litter And Debris Removal From Drainage Grates, Trash, Rocks, And Ditch Lines Shall Be A Priority To Prevent Clogging Of The Storm Drainage System. Remove Construction Debris And Waste From The Site Biweekly Or More Frequently As Needed. Store Construction Material Visible To The Public In An Orderly Manner. Prevent Stormwater From Contacting Store Solid Waste.

Concrete Washout: Perform Washout Of Concrete Trucks Offsite Or In Designated Areas Only. For An Onsite Washout, Locate Washout Area At Least Fifty (50) Feet From Storm Drains, Open Ditches, Or Bodies Of Water. Do Not Allow Runoff From This Area By Constructing A Temporary Berm Or Holding Area Large Enough For Liquid And Solid Waste. Wash Out Waste Into Designated Area Where The Concrete Can Set And Be Broken Up And Then Disposed Of Properly. Do Not Wash Out Concrete Trucks Into Storm Drains, Open Ditches, Streets, Or Streams. Do Not Allow Excess Concrete To Be Dumped Onsite, Except In Designated Areas.

Alert Procedure For Spills: In The Event Of A Material Spill (Fuel, Oil, Fluids, Lubricants, Etc.), Barricade The Area To Keep Vehicles From Entering Or Leaving The Spill Zone. Notify The Indiana Department Of Environmental Management (IDEM), Office Of Emergency Response, By Calling The Appropriate Phone Number: Office 317-233-7745 Or Toll Free: 800-233-7745. Also, The National Response Center Can Be Contacted At 800-424-8802. Provide The Following Information: Time Of Observation Of The Spill, Location Of The Spill, Identify The Material Spilled, Probable Time And Source Of Spill, Weather Conditions, Personnel At Scene, And Action Initiated By Personnel. Notify The Local Fire Department And Police Department. Coordinate And Monitor Cleanup Until The Situation Has Been Stabilized And The Spill Has Been Eliminated.

See The Potential Storm Water Pollutants And Spill Prevention Handling Table Located On The Erosion Control Notes (Sheet 84).

Rule 5 Checklist - Section B: (Continued)

14. Monitoring And Maintenance Guidelines For Each Proposed Stormwater Quality Measure.
The Contractor Shall Maintain All Water Quality Measures During Construction To Prevent Any Blockages From Accumulating Sediment. Monitoring Of The Protective Measures Shall Be Done On A Weekly Basis And Again Within 24 Hours Of Every Half-Inch Rain Event. Maintenance Shall Include A Written Record Of Each Inspection By Filling Out The Storm Water, Erosion, And Sediment Control Inspection Report Included In INDOT RSP 108-C-192d. The Written Record Shall Be Made Available Upon Request.

Temporary Construction Entrance:
- A. Inspect Weekly, Within 24 Hours Of Every Half-Inch Rain Event, And After Heavy Use.
- B. Reshape Pad As Needed.
- C. Top Dress Pad As Needed.
- D. Immediately Remove Any Mud And Sediment Tracked Or Washed Onto The Street Using Brushing Or Sweeping. Flush Area Only If Runoff Will Be Flowing Through A Sediment Trap.
- E. Repair Any Damaged Pavement Immediately.

Temporary Inlet Protection:
- A. Inspect Daily And Following Each Storm Event.
- B. Remove Accumulated Sediment As Needed To Maintain Drainage And To Prevent Large Flows From Displacing Sediment.
- C. Add Aggregate As Needed To Maintain Design Height And Cross Section.

Silt Fence:
- A. Replace If Torn, Starts To Degrade, Or Becomes Ineffective In Anyway.
- B. Remove Sediment When It Reaches Half Of The Fence Height, Taking Care Not To Undermine.
- C. Remove Trash And Other Debris From Riser, Emergency Spillway, And Pool Area.
- D. Clean Or Replace Aggregate Around The Riser If The Sediment Pool Does Not Dewater Within 48 To 72 Hours Following A Stormwater Runoff Event.

Erosion Control Blankets:
- A. Repack And Reseed As Needed.
- B. Reattach And Anchor As Needed.

Seeding:
- A. Monitor Until It Reaches 70% Coverage.
- B. Reseed As Needed.
- C. Install Additional Erosion Control To Help Establish Cover.

Traversable Check Dams:
- A. Sediment Shall Be Removed Once It Reaches Half Of The Height Of The Check Dam.
- B. Rebuild Or Repair Damaged Check Dam To Maintain The Design Height, Cross Section, And Erosion Control Function.

Filter Berms:
- A. Inspect To Ensure Filter Berm Is Holding Its Shape And Allowing Adequate Flow.
- B. Sediment Shall Be Removed Once It Reaches One Quarter Of The Height Of The Filter Berm.
- C. Rebuild Or Repair Eroded And Damaged Areas.

Concrete Washout:
- A. Inspect Weekly, Within 24 Hours Of Every Half-Inch Rain Event, And After Heavy Use.
- B. Repair Or Replace Leaks, Spills, And Tears As Needed.
- C. Ensure Each Containment System Maintains Adequate Capacity.

Check And Maintain Any Additional Erosion Control Measures As Needed.

15. Erosion & Sediment Control Specifications For Individual Building Lots.
N/A.

Rule 5 Checklist - Section C:
Stormwater Pollution Prevention Plan-Post Construction Component

C1. Description Of Pollutants And Their Sources Associated With The Proposed Land Use.
The Pollutants From The Proposed Land Use Will Be The Same As The Pollutants From The Existing Land Use; Vehicular Traffic, Litter, And Its Associated Pollutants. See The Potential Storm Water Pollutants And Spill Prevention Handling Table Located On The Erosion Control Notes (Sheet 84).

C2. Sequence Describing Stormwater Quality Measure Implementation.
Typical Construction Sequence Schedule:
- A. All Disturbed Ground Shall Be Permanently Seeded Immediately After Final Grading Or When The Project Is Substantially Complete.
- B. Silt Fence, Check Dams, And Inlet Protections Shall Be Removed After Disturbed Soil Areas Have Been Stabilized.

C3. Description Of Proposed Post Construction Stormwater Quality Measures.
Seed Shall Be Used In All Disturbed Areas To Help Stabilize Slopes And Soils. Erosion Control Blankets Shall Also Be Used On Slopes That Are Steeper Than 3:1. See The Erosion Control Details (Sheet 83), The Erosion Control Notes (Sheet 84), And The Applicable INDOT Standard Specifications For Surface Stabilization Details.

C4. Location, Dimensions, Specifications, And Construction Details Of Each Stormwater Quality Measure.
See The Erosion Control Sheets (Sheets 78-82), The Erosion Control Details (Sheet 83), And The Erosion Control Notes (Sheet 84), And The Applicable INDOT Standard Specifications And Drawings.

C5. Description Of Maintenance Guidelines For Post Construction Stormwater Quality Measures.
The Contractor Shall Ensure That Revegetated Areas Become Fully Established And Shall Water And Reseed As Necessary. The Owner Shall Clean Up Trash And Shall Perform Maintenance On The Storm Sewer System At Regularly Scheduled Intervals.

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MICHAEL MALEY
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Michael Maley 10/31/16
DESIGN ENGINEER DATE

DESIGNED: BZ DRAWN: AR
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	85 OF 164
CONTRACT	PROJECT
B-33539	1592481

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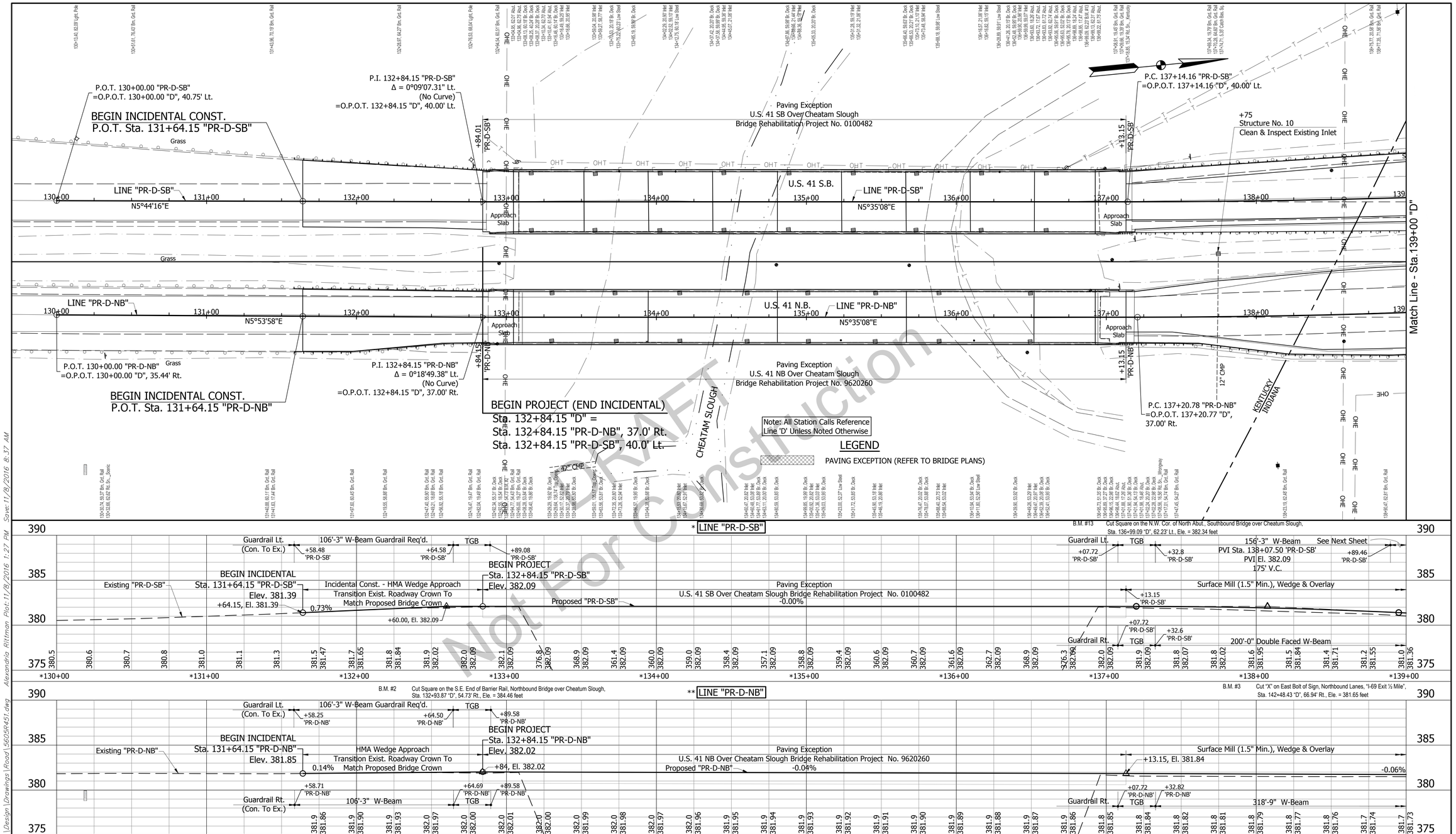

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N: 973886.689
E: 2818517.454
P.O.T. Sta. 128+00.00 "D"
5/8" Rebar w/Cap, Flush (Set 8/15/2016)

S.E. Cor. 6th Wd. G-Rail Post 27.03' 230° Az. S.B. US. #41 N.E. Cor. 1st Wd. G-Rail Post 24.36' 320° Az. S.W. Cor. "Mile Mkr. Post 46.82' 350° Az. Median Line "D" N.B. US. #41 S.W. Cor. "Do Not Enter" Post 72.95' 0° Az.
N: 975045.793
E: 2818630.813
P.I. Sta. 139+64.63 "D"
Mag Nail, Flush (Set 8/15/2016)

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE
LINES "PR-D-NB" & "PR-D-SB"

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1" = 30'	----
VERTICAL SCALE	DESIGNATION
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B-33539	1592481

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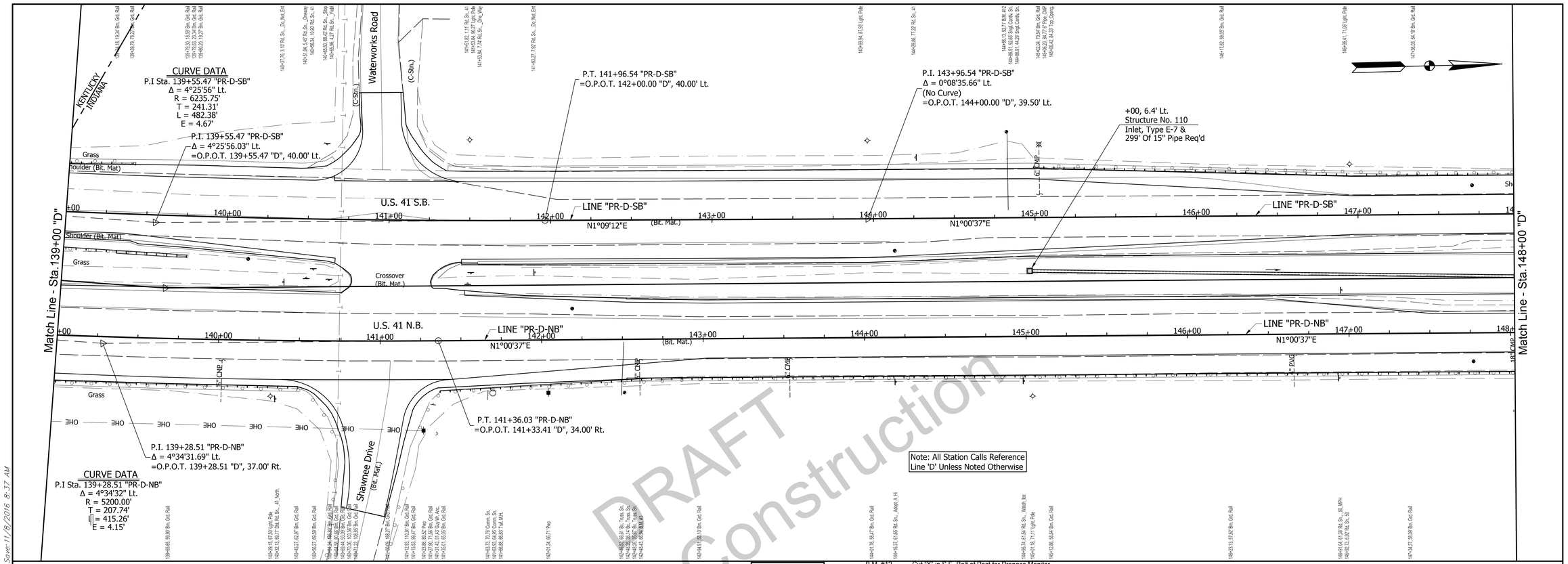

S.E. Cor. 6th Wd.
G-Rail Post
27.03'
230° Az.
S.B. US. #41
N.E. Cor. 1st Wd. G-Rail Post
24.36'
320° Az.
S.W. Cor.
Mile Mkr. Post
46.82'
300° Az.
Median
Line "D"
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S.W. Cor.
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Post
72.95'
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N: 975045.793
E: 2818630.813
P.I. Sta. 139+64.63 "D"
Mag Nail, Flush (Set 8/15/2016)

S.E. Cor.
"Waterworks Rd."
Supp. Post
96.10'
200° Az.
S.B. US. #41
Mag Nail E.P.
24.96'
280° Az.
Line "D"
Median
Mag Nail E.P.
19.14'
90° Az.
N.B. US. #41
S.W. Cor.
Inlet #3633
99.96'
10° Az.
N: 976260.967
E: 2818652.993
P.O.T. Sta. 152+00.00 "D"
5/8" Rebar w/Cap, Flush (Set 8/15/2016)

MICHAEL MAHL
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CHECKED: MM | CHECKED: BZ

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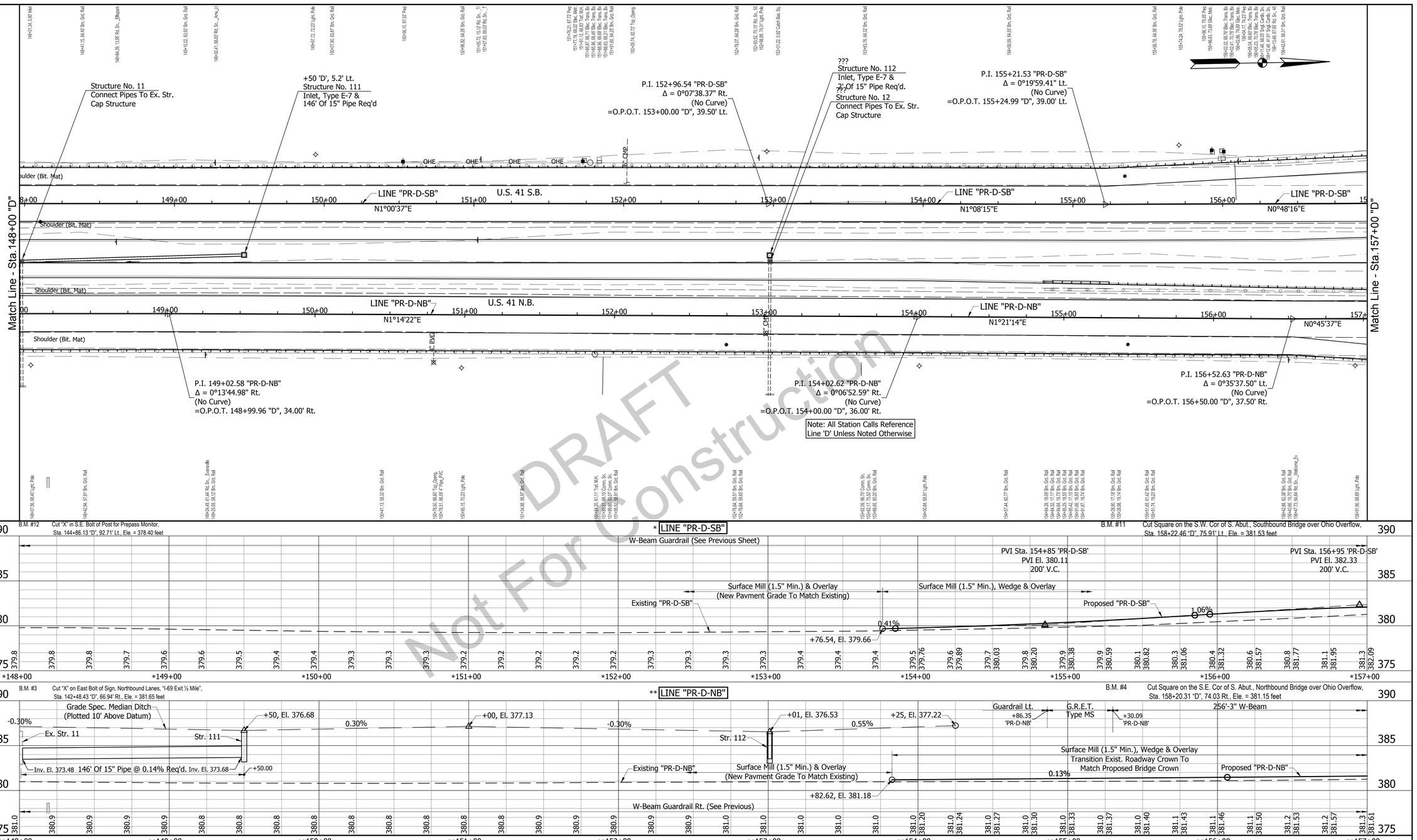

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MICHAEL MALEK
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No. 860186
STATE OF INDIANA
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RECOMMENDED FOR APPROVAL: Michael Malek 10/31/16
DESIGN ENGINEER DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

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DEPARTMENT OF TRANSPORTATION

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VERTICAL SCALE	DESIGNATION
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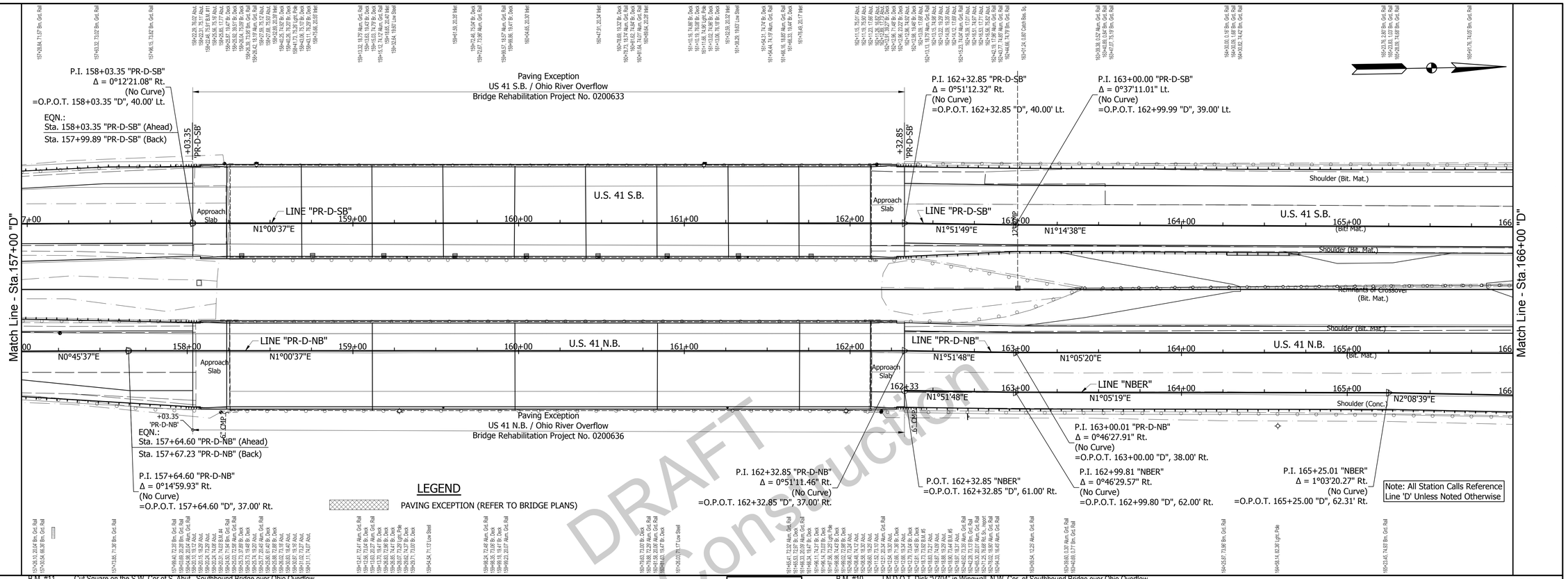

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N: 976280.967
E: 2818652.593
P.O.T. Sta. 152+00.00 "D"
5/8" Rebar w/Cap, Flush (Set 8/15/2016)

Mag Nail E.P. 29.00' 250° Az. — S.B. US. #41 — Mag Nail E.P. 34.36' 330° Az. — Line "D" — Median — Mag Nail E.P. 27.53' 130° Az. — N.B. US. #41 — Mag Nail E.P. 32.90' 60° Az.
N: 977580.765
E: 2818675.513
P.O.T. Sta. 165+00.00 "D"
5/8" Rebar w/Cap, Flush (Set 8/15/2016)

S.E. Cor. "Wrong Way" Sn. Post 65.96' 230° Az. — On Ramp US. #41 — Mag Nail E.P. 49.07' 290° Az. — Mag Nail E.P. 4.03' 110° Az. — S.B. US. #41 — S.E. Bolt Light 109.70' 20° Az.
N: 978605.996
E: 2818993.591
P.I. Sta. 175+25.39 "D"
5/8" Rebar w/Cap, Flush (Set 8/15/2016)

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

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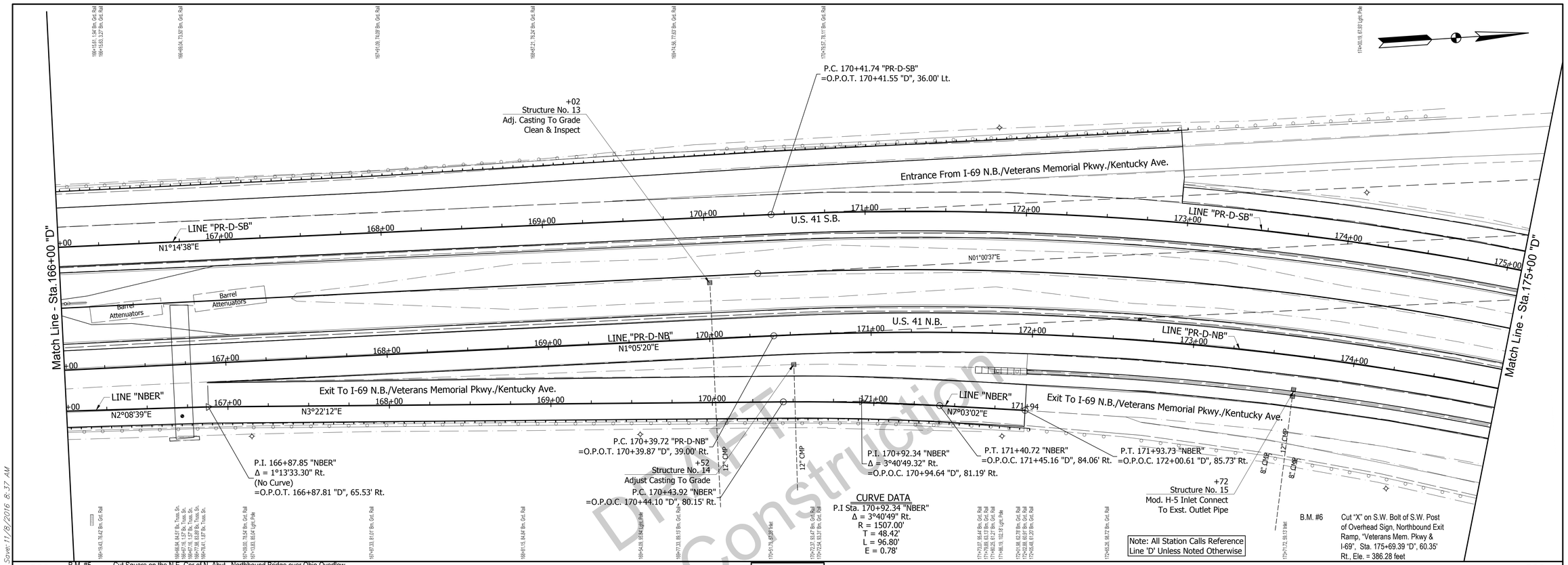

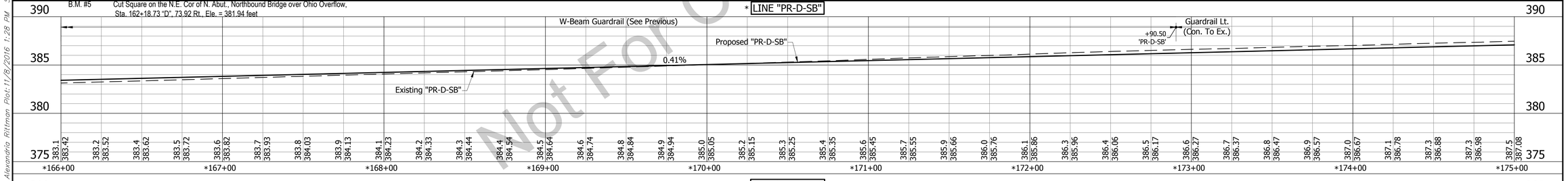

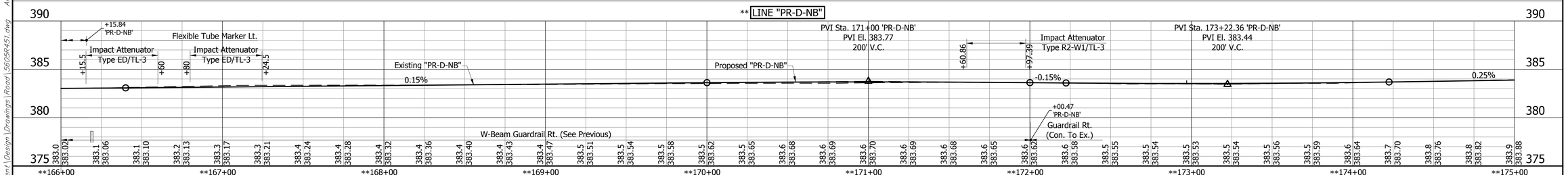

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E: 2818675.513
P.O.T. Sta. 165+00.00 "D"
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N: 978605.996
E: 2818693.591
P.I. Sta. 175+25.39 "D"
5/8" Rebar w/Cap, Flush (Set 8/15/2016)

MICHAEL MATEI
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ | DRAWN: LK
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INDIANA
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VERTICAL SCALE	DESIGNATION
1" = 5'	1592481
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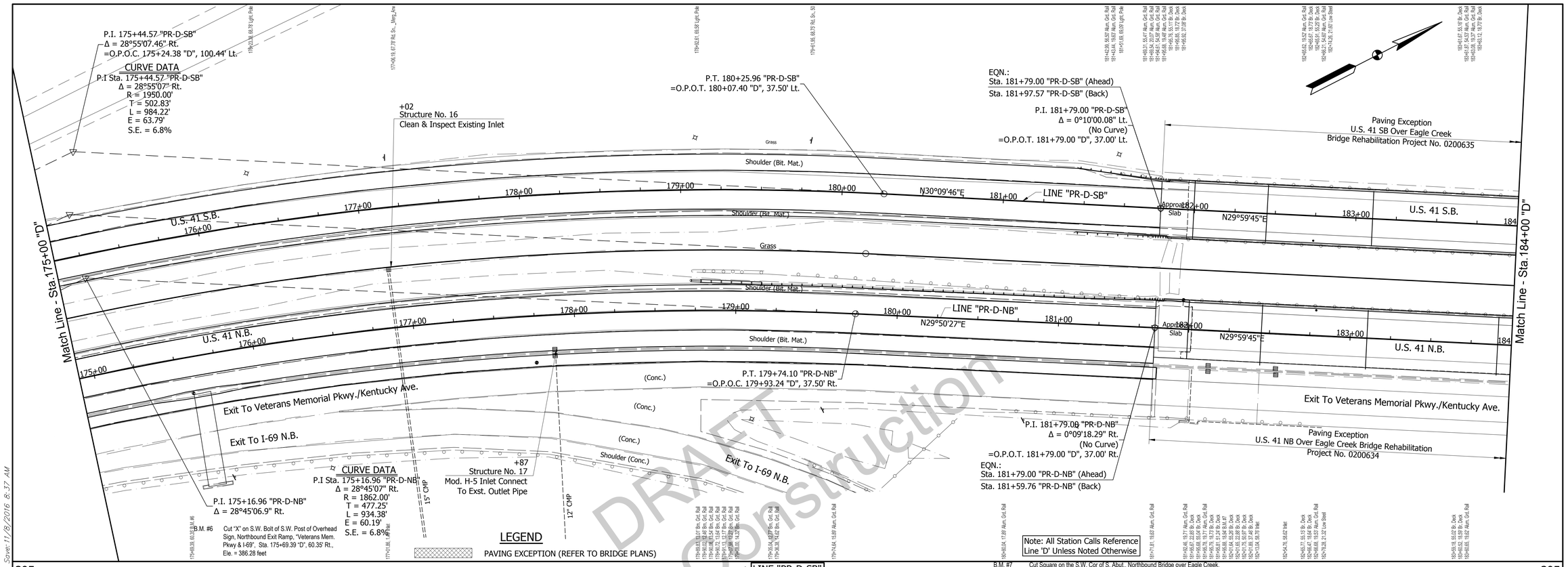

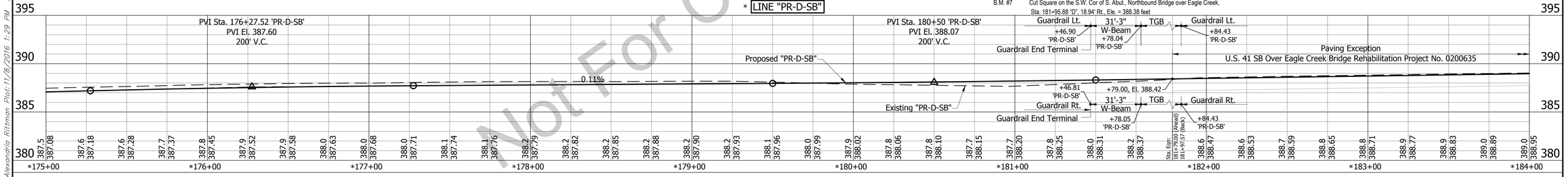

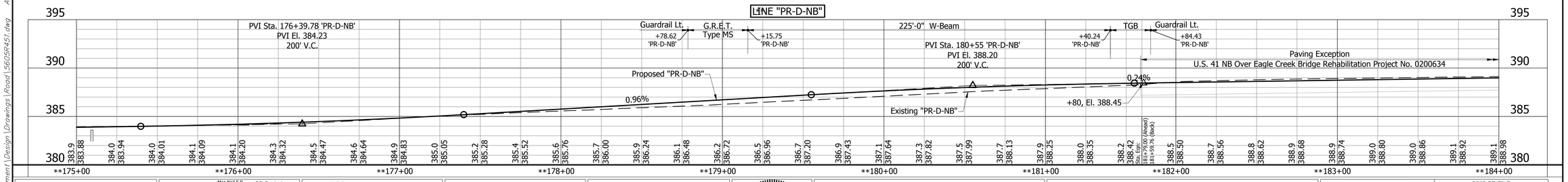

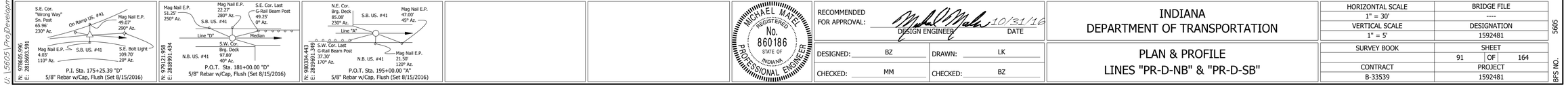

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ — DRAWN: LK

CHECKED: MM — CHECKED: BZ

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VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEET
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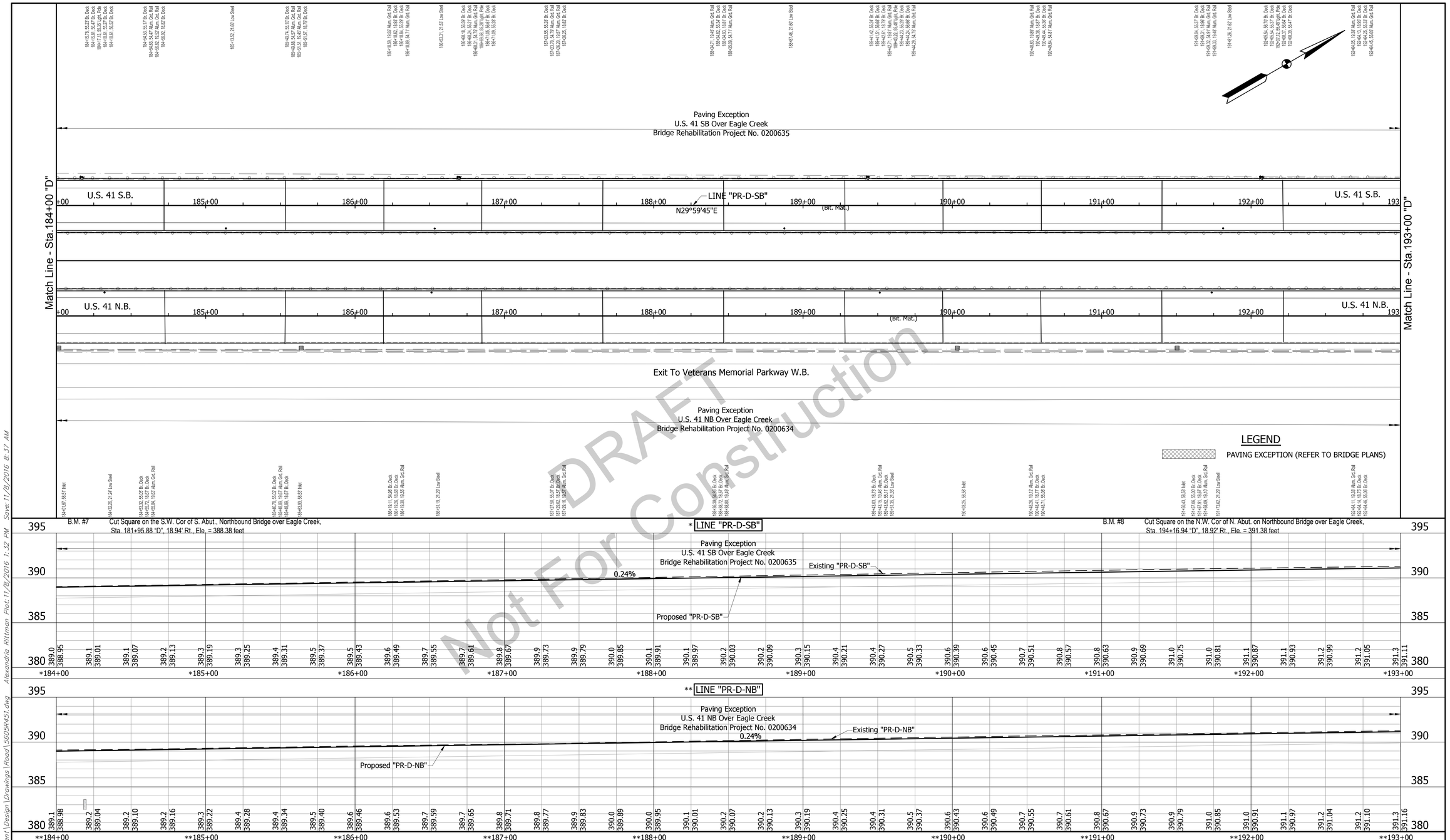

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Mag Nail E.P. 51.25' 250° Az. | Mag Nail E.P. 22.27' 280° Az. | S.E. Cor. Last G-Rail Beam Post 49.25' 0° Az. | S.B. US. #41 | Line "D" | Median | S.W. Cor. Brg. Deck 97.80' 40° Az. | N.B. US. #41
N: 979121.958
E: 2818991.434
P.O.T. Sta. 181+00.00 "D"
5/8" Rebar w/Cap, Flush (Set 8/15/2016)

N.E. Cor. Brg. Deck 85.08' 230° Az. | S.B. US. #41 | Mag Nail E.P. 47.00' 45° Az. | Line "A" | S.W. Cor. Last G-Rail Beam Post 37.30' 170° Az. | N.B. US. #41 | Mag Nail E.P. 21.50' 120° Az.
N: 980334.463
E: 2819691.349
P.O.T. Sta. 195+00.00 "A"
5/8" Rebar w/Cap, Flush (Set 8/15/2016)

MICHAEL MALEK REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

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INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE
LINES "PR-D-NB" & "PR-D-SB"

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	----
VERTICAL SCALE	DESIGNATION
1" = 5'	1592481
SURVEY BOOK	SHEET
	92 OF 164
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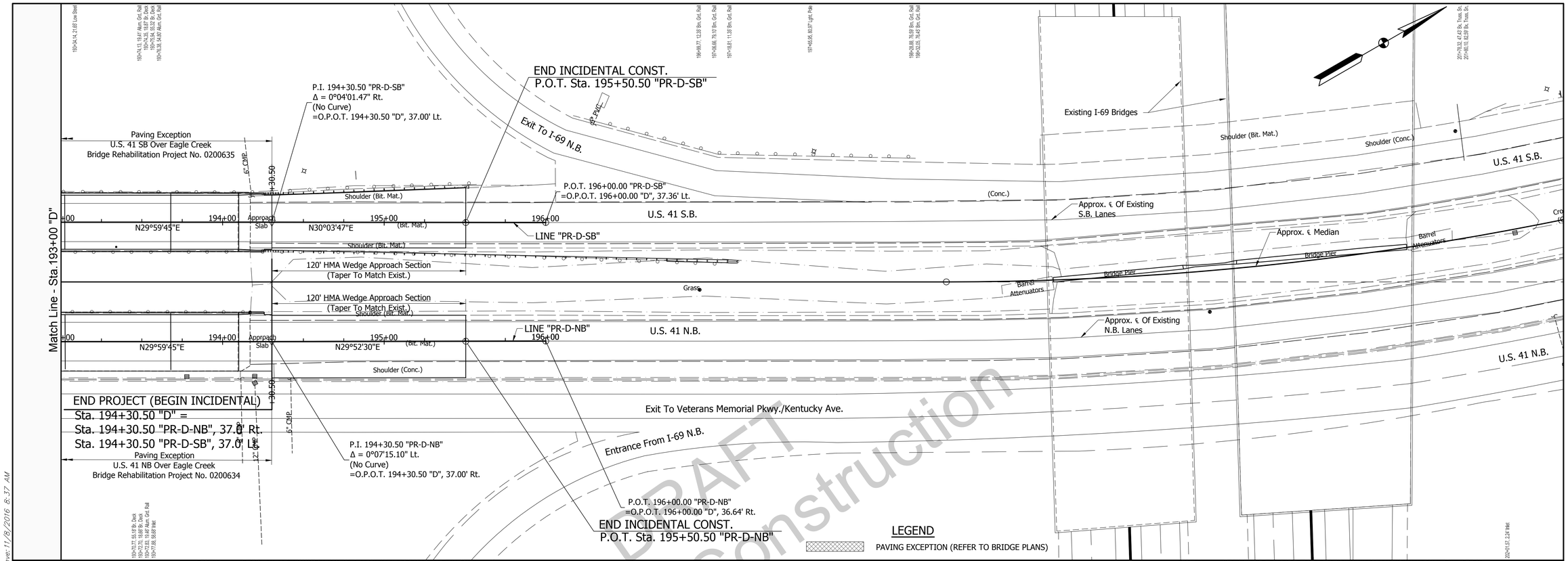
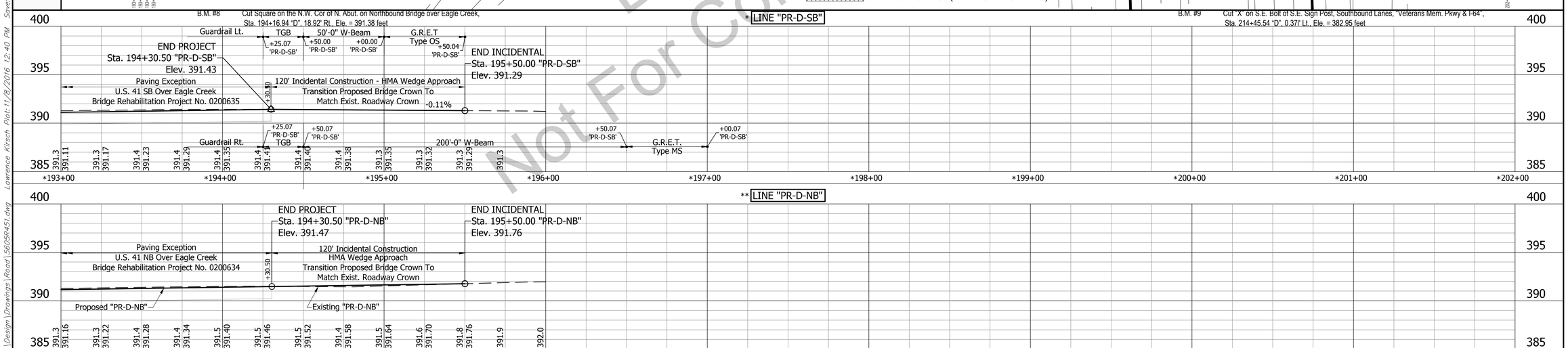
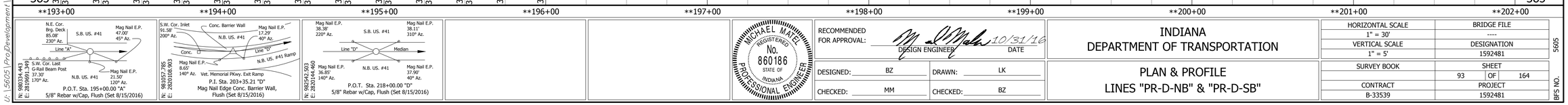
5605
BFS NO.







MICHAEL MAEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ | DRAWN: LK
CHECKED: MM | CHECKED: BZ

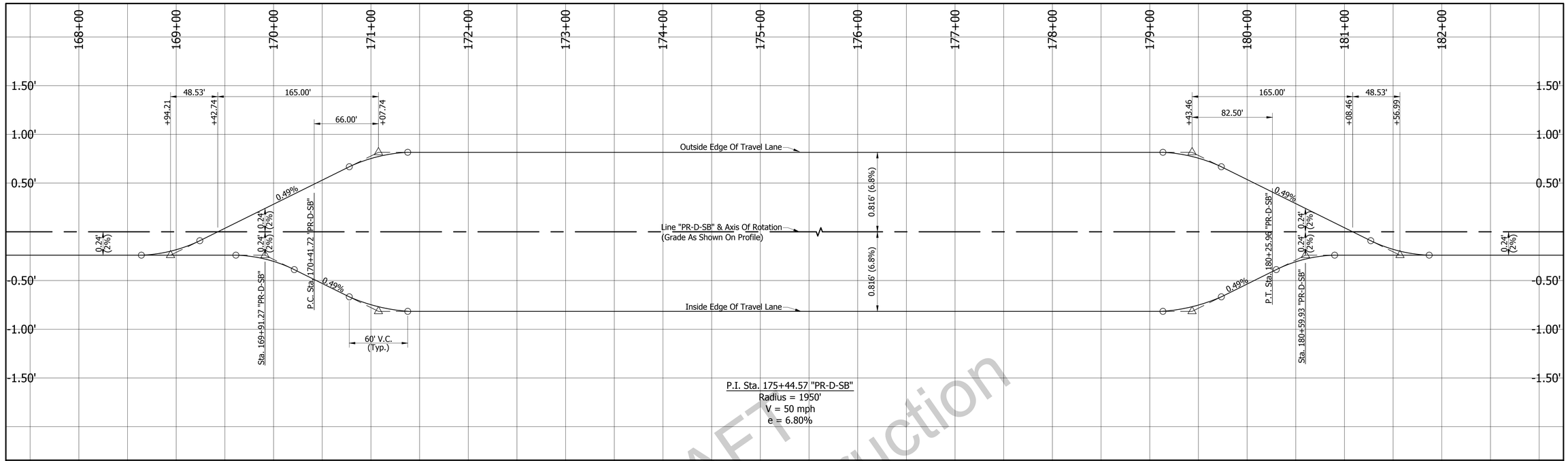
INDIANA
DEPARTMENT OF TRANSPORTATION

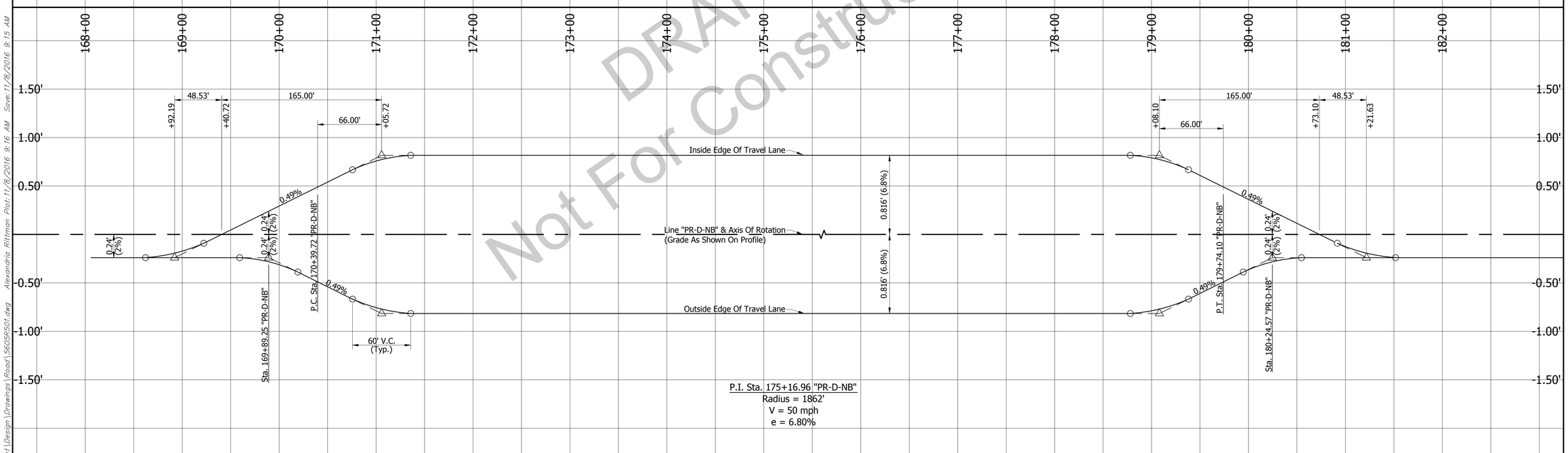
PLAN & PROFILE
LINES "PR-D-NB" & "PR-D-SB"

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	----
VERTICAL SCALE	DESIGNATION
1" = 5'	1592481
SURVEY BOOK	SHEET
	93 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

U:\5605\Pro_Development\Design\Drawings\Road\5605R451.dwg Lawrence Kirsch Plot: 11/8/2016 12:40 PM Save: 11/8/2016 8:37 AM





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Not For Construction

U:\5605\ProDevelopment\Design\Drawings\Road\5605R501.dwg Alexandria Rittman Plot:11/8/2016 9:16 AM Save:11/8/2016 9:15 AM

MICHAEL MATEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: BH

CHECKED: MM CHECKED: BZ

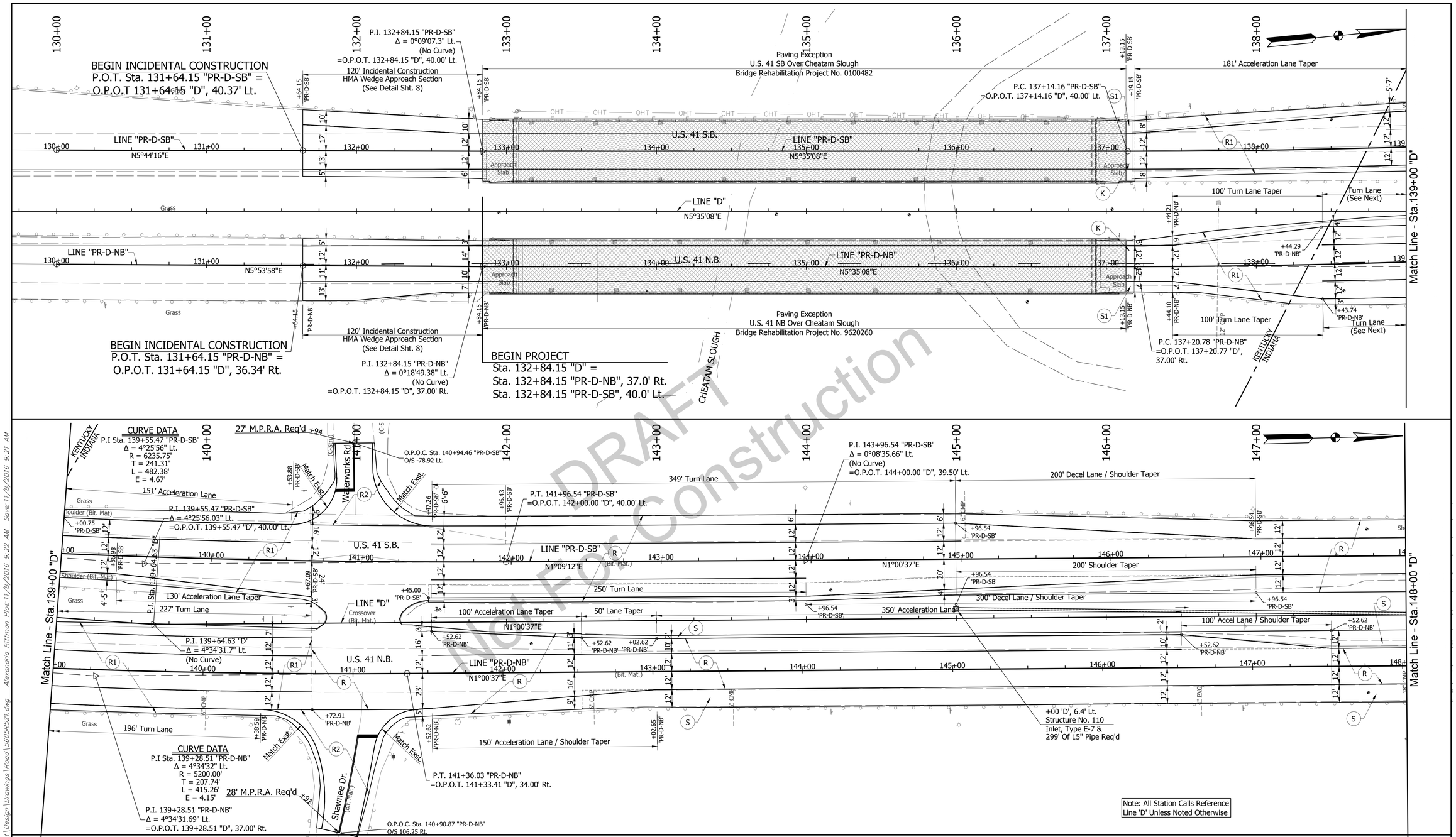
INDIANA
DEPARTMENT OF TRANSPORTATION

SUPERELEVATION DIAGRAM

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	----
VERTICAL SCALE	DESIGNATION
AS NOTED	1592481
SURVEY BOOK	SHEET 94 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605

BFS NO.



Not For Construction
DRAFT

LEGEND

- (K) ALTERNATE BID HMA PAVEMENT
- (S) HMA SHOULDER PAVEMENT
- (S1) HMA OUTSIDE SHOULDER PAVEMENT
- (R) HMA OVERLAY
- (R1) HMA WEDGE OVERLAY
- (R2) HMA FOR APPROACHES
- SOUTHBOUND SHOULDER AREAS CONSTRUCTED AS (S) FOR MOT PURPOSES IN PHASE 1 ARE MILLED AND OVERLAY w/ MAINLINE PAVEMENT IN PHASE 3
- PAVING EXCEPTION (REFER TO BRIDGE PLANS)

MICHAEL MAEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ | DRAWN: LK
CHECKED: MM | CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	95 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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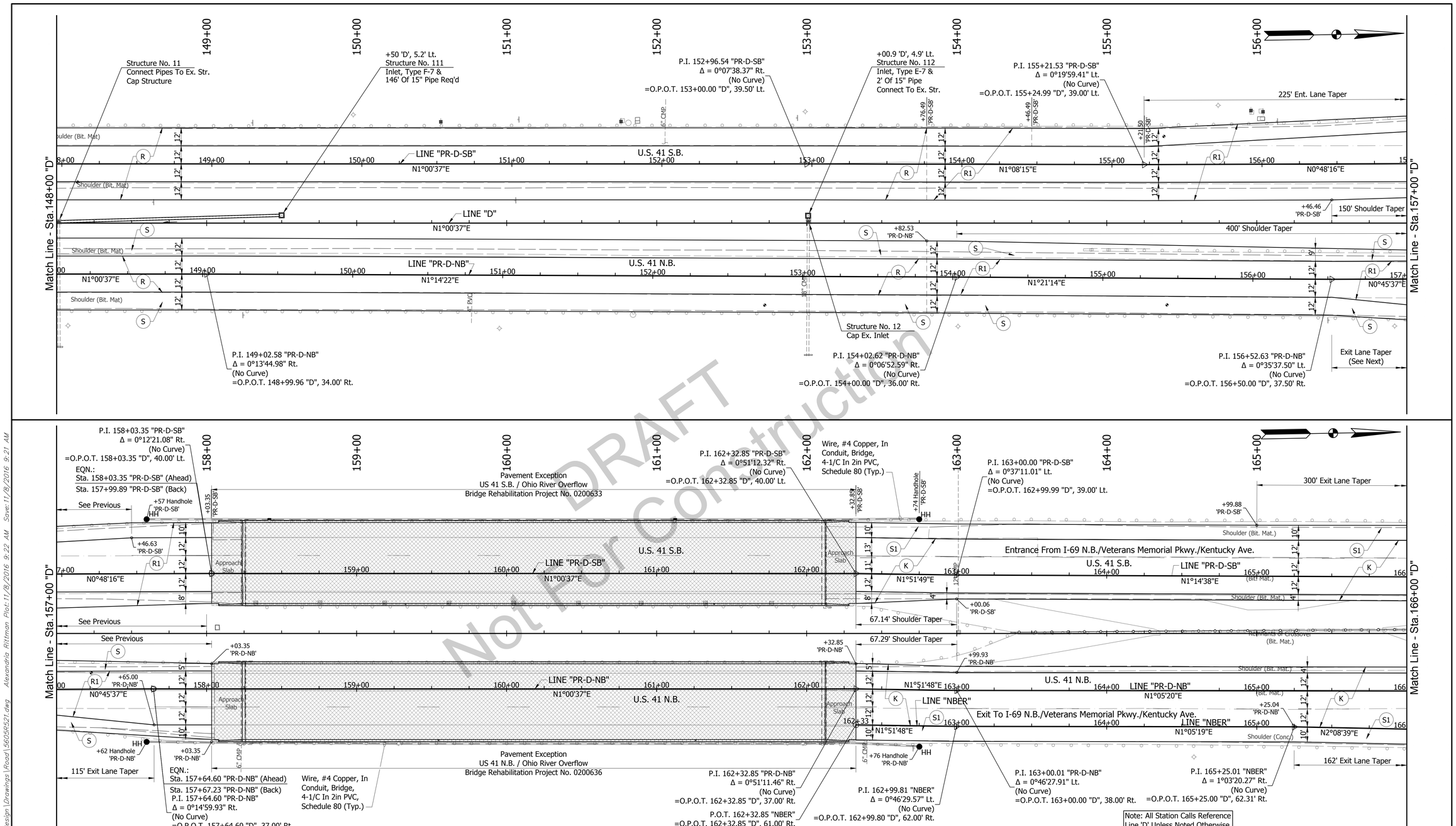

DRAFT
Not For Construction

LEGEND

- (K) ALTERNATE BID HMA PAVEMENT
- (S) HMA SHOULDER PAVEMENT
- (S1) HMA OUTSIDE SHOULDER PAVEMENT
- (R) ALTERNATE BID HMA PAVEMENT
- (R1) HMA WEDGE OVERLAY
- CONDUIT, PVC, 2IN, SCHEDULE 80
- WIRE, #4 COPPER, IN CONDUIT, BRIDGE, 4-1/C
- HH HANDHOLE
- PAVING EXCEPTION (REFER TO BRIDGE PLANS)
- ≠ SOUTHBOUND SHOULDER AREAS CONSTRUCTED AS (S) FOR MOT PURPOSES IN PHASE 1 ARE MILLED AND OVERLAY w/ MAINLINE PAVEMENT IN PHASE 3

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ | DRAWN: LK
CHECKED: MM | CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	96 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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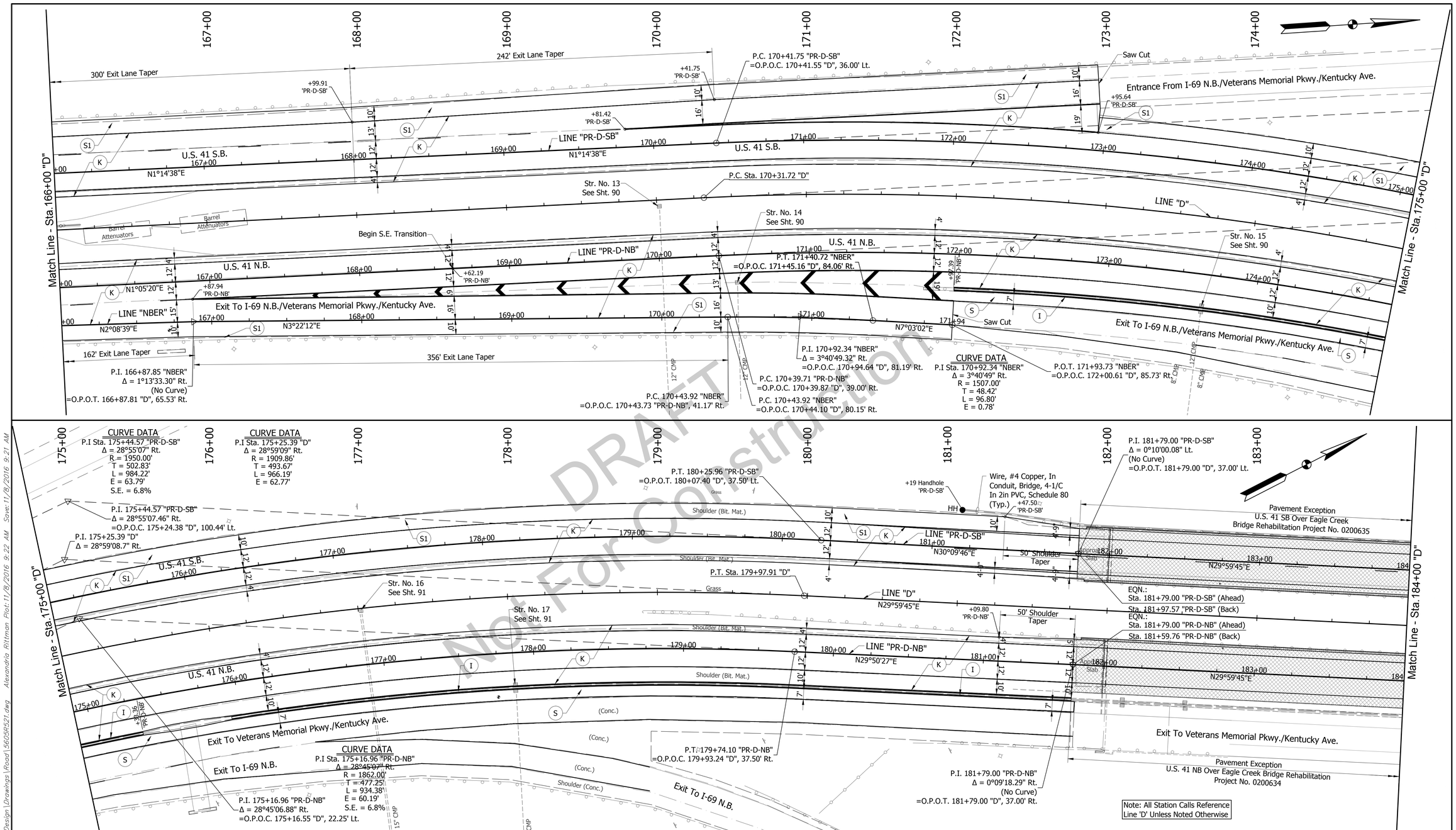


LEGEND

(I)	CONCRETE MEDIAN BARRIER	(S)	HMA SHOULDER PAVEMENT
(K)	ALTERNATE BID HMA PAVEMENT	(S1)	HMA OUTSIDE SHOULDER PAVEMENT

CONDUIT, PVC, 2IN, SCHEDULE 80
WIRE, #4 COPPER, IN CONDUIT, BRIDGE, 4-1/C
HH HANDHOLE
PAVING EXCEPTION (REFER TO BRIDGE PLANS)

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

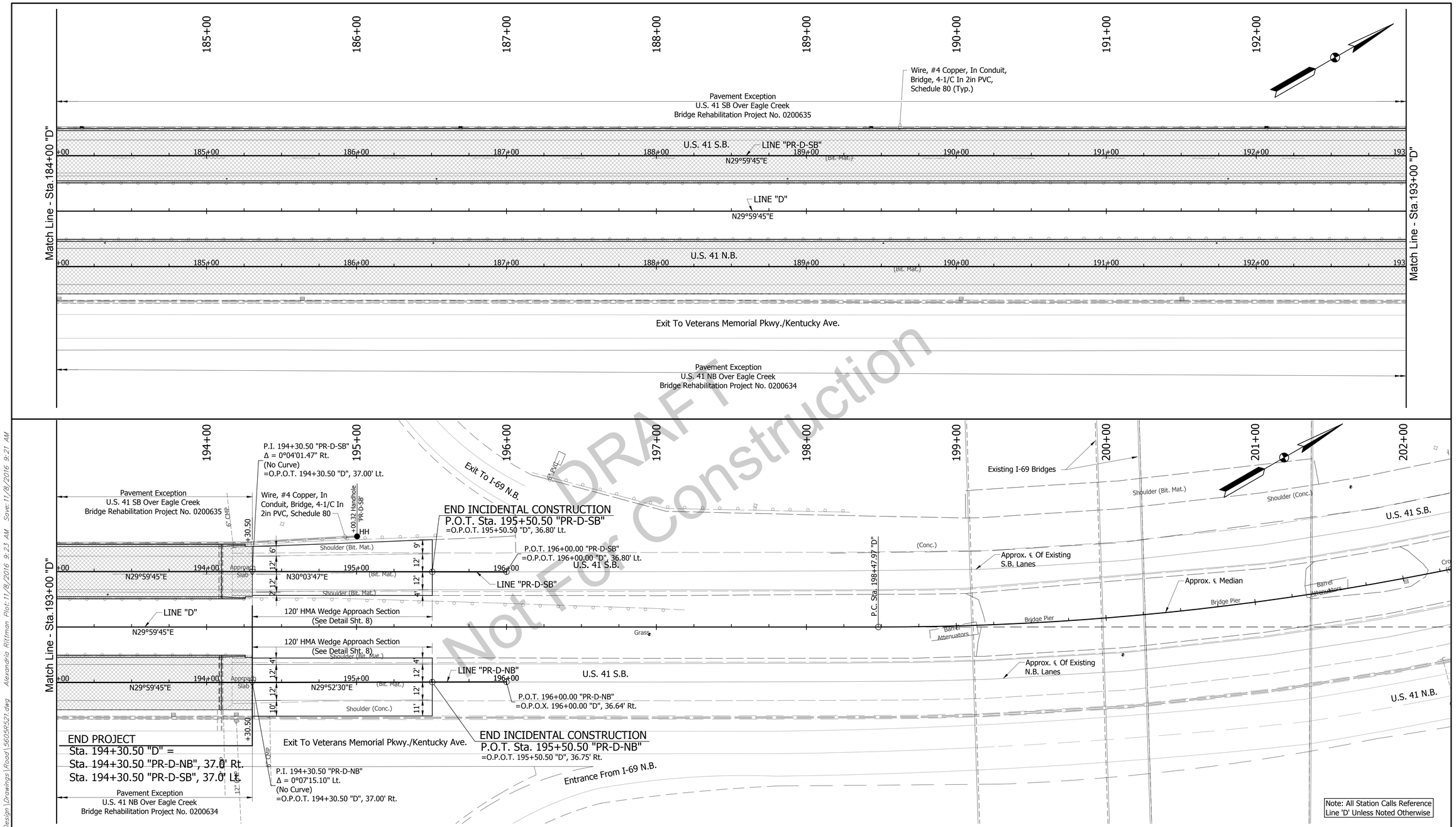
INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	97 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

U:\5605\Pro\Development\Design\Drawings\Road\5605R521.dwg Alexandria Rittman Plot: 11/8/2016 9:22 AM Save: 11/8/2016 9:21 AM



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Not For Construction

LEGEND

- PAVING EXCEPTION (REFER TO BRIDGE PLANS)
- CONDUIT, PVC, 2IN, SCHEDULE 80
- WIRE, #4 COPPER, IN CONDUIT, BRIDGE, 4-1/C
- HH HANDHOLE

MICHAEL MAHLL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ | DRAWN: LK
CHECKED: MM | CHECKED: BZ

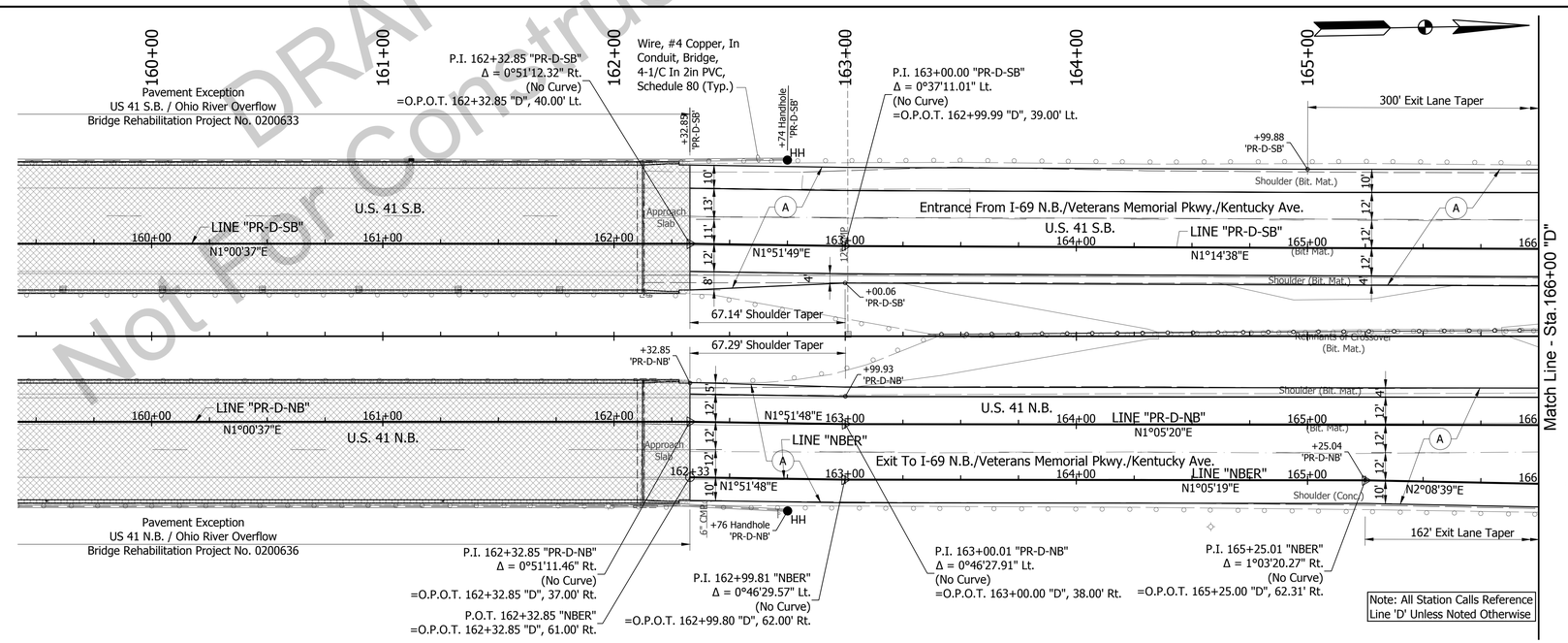
INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	98 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

U:\5605\Proj\Development\Design\Drawings\Road\5605R521.dwg Alexandria Rittman Plot:11/8/2016 9:23 AM Save:11/8/2016 9:21 AM



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Not For Construction

LEGEND

- (A) ALTERNATE BID PCCP PAVEMENT
- CONDUIT, PVC, 2IN, SCHEDULE 80
- WIRE, #4 COPPER, IN CONDUIT, BRIDGE, 4-1/C
- HH HANDHOLE

MICHAEL M. MAHER
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ | DRAWN: LK
CHECKED: MM | CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
PCCP ALTERNATE

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	99 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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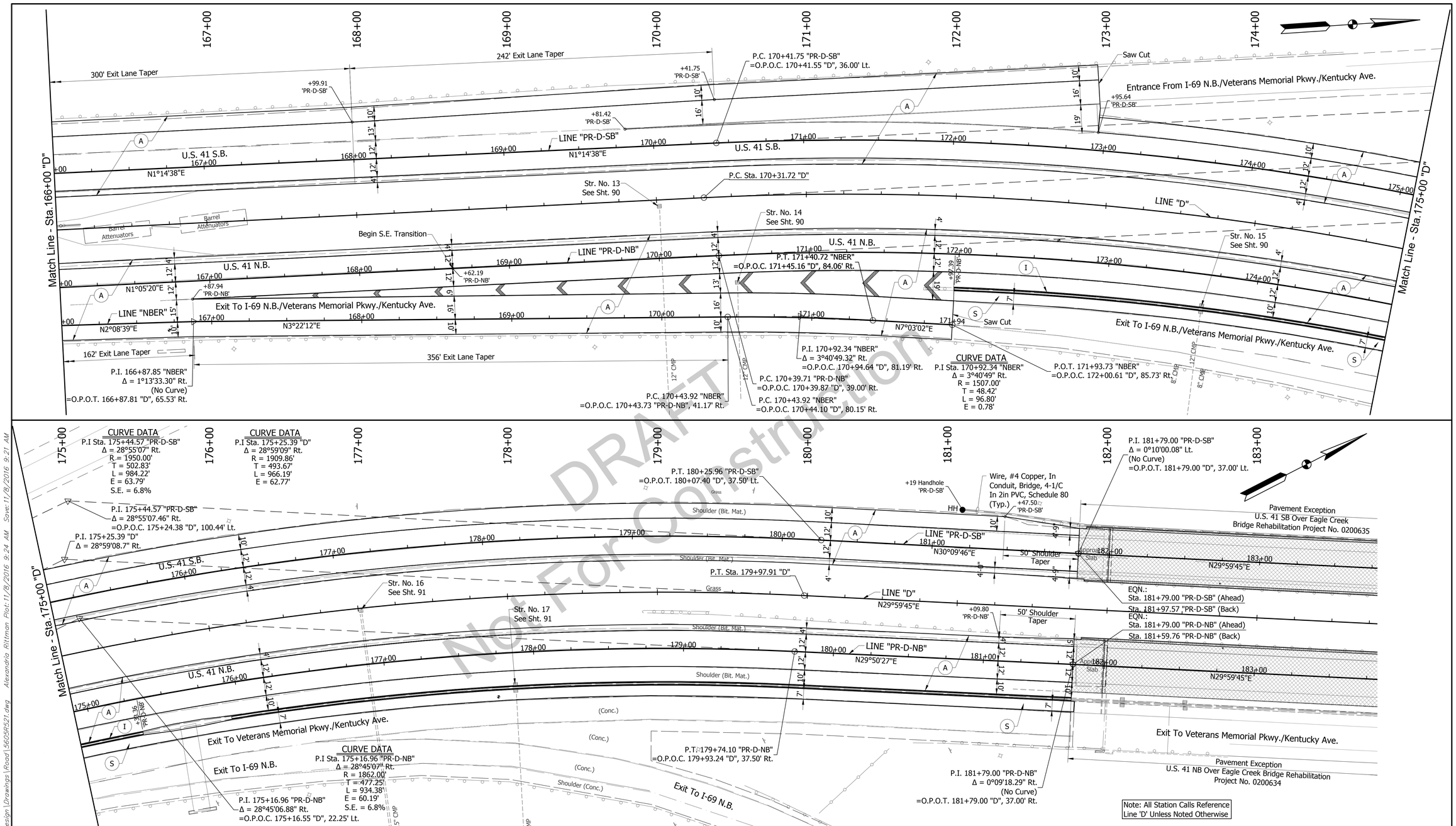

Note: All Station Calls Reference Line 'D' Unless Noted Otherwise

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LEGEND

- (A) ALTERNATE BID PCCP PAVEMENT
- CONDUIT, PVC, 2IN, SCHEDULE 80
- WIRE, #4 COPPER, IN CONDUIT, BRIDGE, 4-1/C
- HH HANDHOLE
- (I) CONCRETE MEDIAN BARRIER
- (S) HMA SHOULDER PAVEMENT

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ | DRAWN: LK
CHECKED: MM | CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
PCCP ALTERNATE

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	100 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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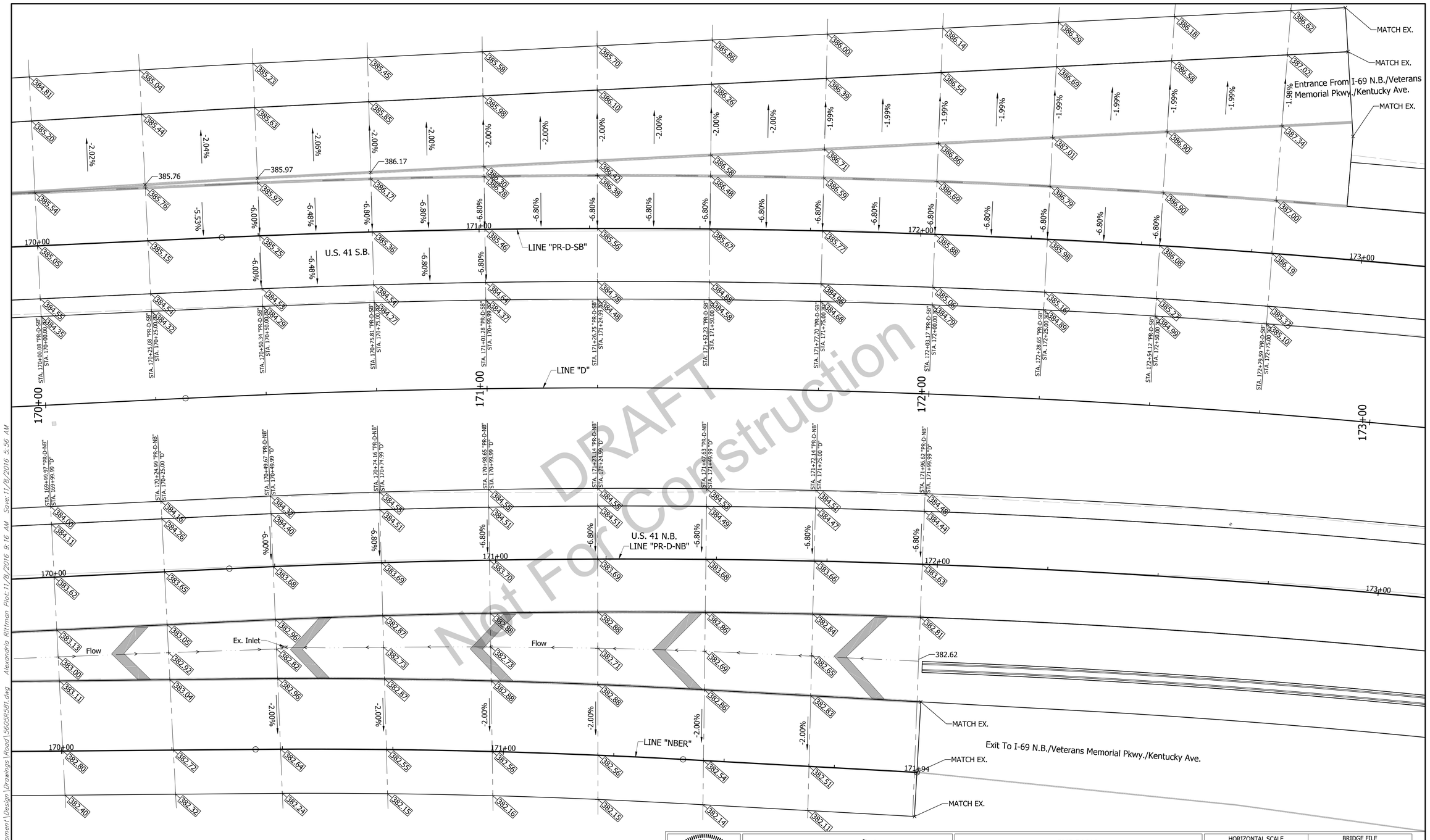

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Not For Construction

MICHAEL MAEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: 10/31/16
DESIGN ENGINEER DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

SPOT ELEVATION DETAIL

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	101 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

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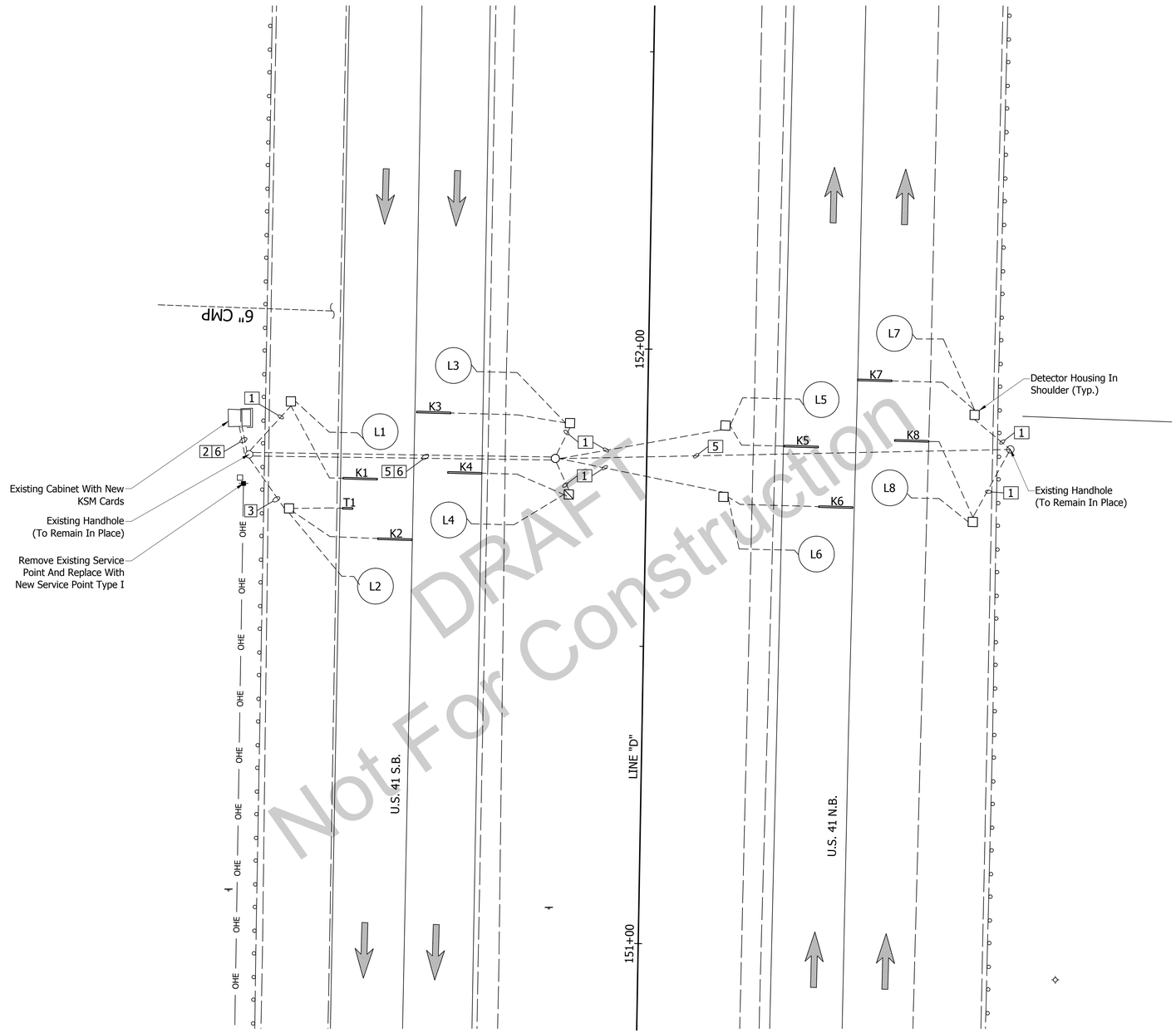

DRAFT
Not For Construction

LEGEND

L Inductive Loop
K Quartz Detector
T Temperature Sensor
1 Signal Conduit

SIGNAL CONDUITS

1 2" Conduit
1 - Loop Lead
1 - Quartz Lead

2 3" Conduit
4 - Loop Leads
4 - Quartz Leads
1 - Temperature Sensor Lead

3 2" Conduit
1 - Loop Lead
1 - Quartz Lead
1 - Temperature Sensor Lead

5 2" Conduit
2 - Loop Leads
2 - Quartz Leads

6 3" Conduit
4 - Loop Leads
4 - Quartz Leads

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

WEIGH-IN-MOTION (WIM)

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	102 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

U:\5605\ProjDevelopment\Design\Drawings\Road\5605R641-WIM.dwg Alexandria Rittman Plot:11/8/2016 9:16 AM Save:11/8/2016 9:15 AM

SEQUENCE OF OPERATIONS

1. Place Maintenance of Traffic Devices.
2. Maintain Operation of Left Turn Lane at All Times.

LEGEND

- AREA OF CONSTRUCTION
- DRUM w/ WARNING LIGHT
- TRAFFIC SIGNS

THOMAS S. VANDERVEEN REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vanderveen 10/31/16
DESIGN ENGINEER DATE

DESIGNED: TV DRAWN: BM
CHECKED: CW CHECKED: TV

INDIANA
DEPARTMENT OF TRANSPORTATION

US 41 ITS CAMERA SITE
MAINTENANCE OF TRAFFIC
SOUTH OF OHIO RIVER

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	----
VERTICAL SCALE	DESIGNATION
----	1592481
SURVEY BOOK	SHEET
	103 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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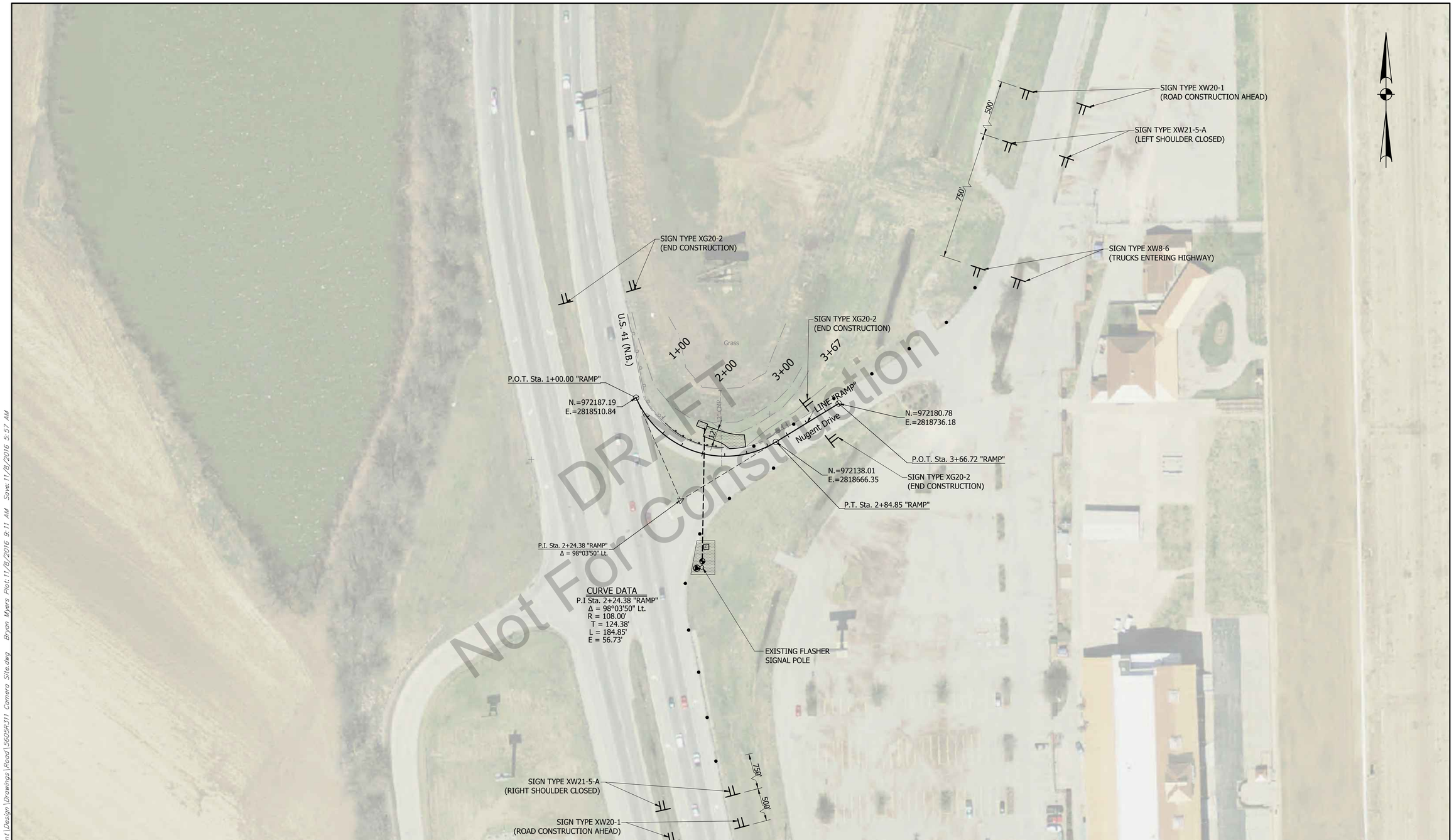

DRAFT
Not For Construction

SEQUENCE OF OPERATIONS

1. Place Maintenance of Traffic Devices.
2. Place Shop Curve W-Beam Guardrail.

LEGEND

- AREA OF CONSTRUCTION
- DRUM w/ WARNING LIGHT
- TRAFFIC SIGNS

THOMAS S. VANDERBERG REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vanderberg 10/31/16
DESIGN ENGINEER DATE

DESIGNED: TV DRAWN: BM
CHECKED: CW CHECKED: TV

INDIANA
DEPARTMENT OF TRANSPORTATION

US 41 ITS CAMERA SITE
MAINTENANCE OF TRAFFIC
NORTH OF OHIO RIVER

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	----
VERTICAL SCALE	DESIGNATION
----	1592481
SURVEY BOOK	SHEET
	104 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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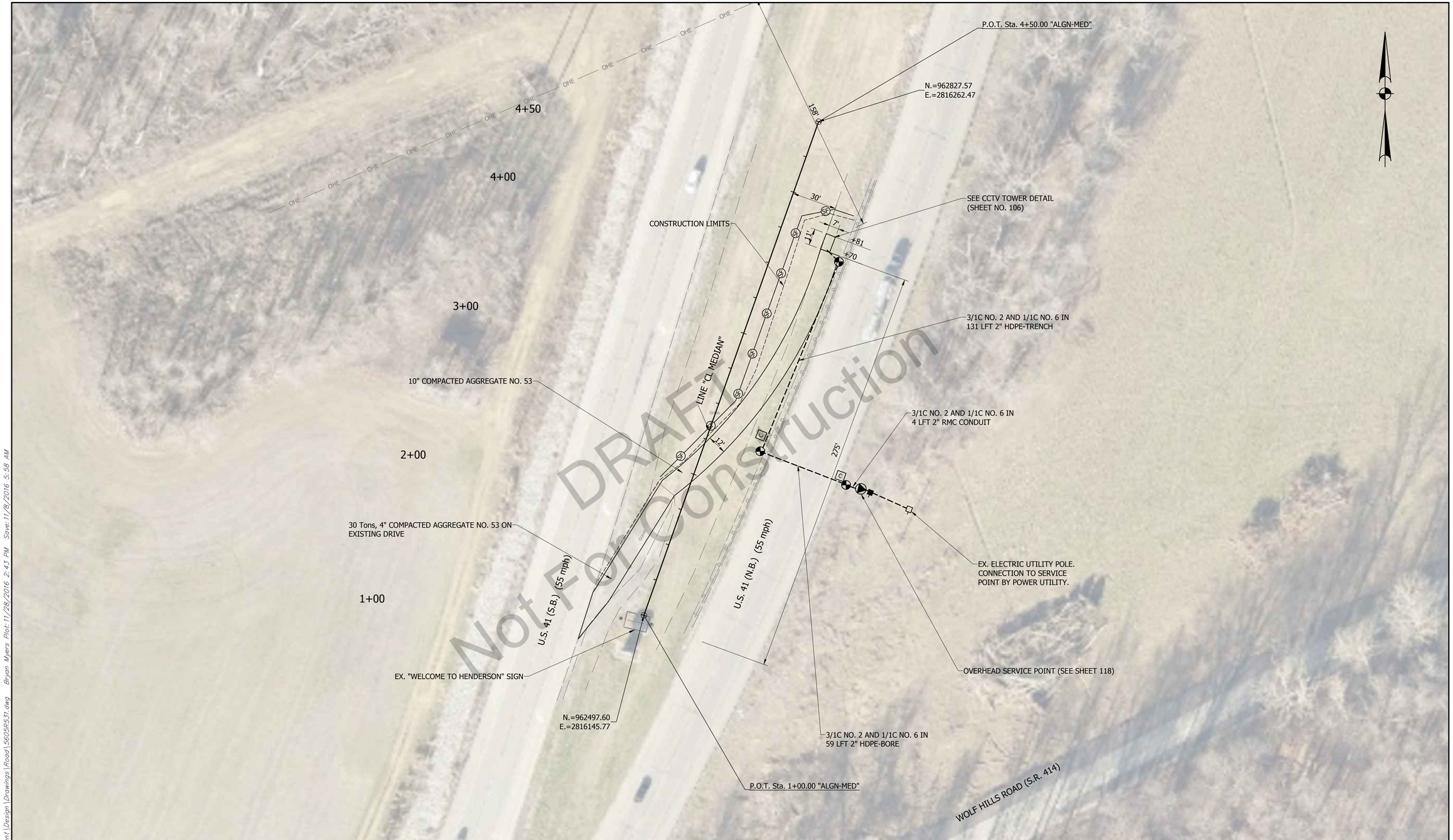


U:\5605\Proj\Development\Design\Drawings\Road\5605R531.dwg Bryan Myers Plot:11/28/2016 2:43 PM Save:11/8/2016 5:58 AM

OHE	EX. OVERHEAD ELECTRIC
	ITS CONDUIT (PLAN NOTE FOR TYPE)
	EX. GUARDRAIL
SF	SILT FENCE
C	CONCRETE CABLE DUCT MARKER
	EX. UTILITY POLE
	WOOD UTILITY POLE
	SERVICE POINT, TYPE I (120/240V)
	HANDHOLE

CONTACT KYTC PRIOR TO DIGGING TO VERIFY IF KYTC HAS ANY UNDERGROUND FACILITIES IN THE AREA.

THOMAS S. VANDERBURG REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vanderburg 10/31/16
DESIGN ENGINEER DATE

DESIGNED: TV DRAWN: BM
CHECKED: CW CHECKED: TV

INDIANA
DEPARTMENT OF TRANSPORTATION

US 41 ITS CAMERA SITE
CONSTRUCTION DETAILS
SOUTH OF OHIO RIVER

HORIZONTAL SCALE	BRIDGE FILE
1"=30'	----
VERTICAL SCALE	DESIGNATION
----	1592481
SURVEY BOOK	SHEET
	105 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

NOTE:
The contractor shall provide structural designs, calculations, and engineering drawings signed and sealed by a professional engineer registered in the state of Indiana for each new tower and tower foundation. The foundation design shall be based on site-specific soil boring results and shall consider the existing and proposed site conditions as shown on the plans for each individual tower site. A tower foundation shall not interfere with natural or constructed drainage or runoff. Each tower shall be designed in accordance with ANSI requirements.

ITS CONDUIT (PLAN NOTE FOR TYPE)
EX. GUARDRAIL
CONCRETE CABLE DUCT MARKER
ITS CABINET
CCTV ASSEMBLY
HANDHOLE
60' MONOTUBE TOWER ON 4' DIAMETER FOUNDATION
SECONDARY SERVICE DISCONNECT ON 4' SIGNAL PEDESTAL AND FOUNDATION TYPE A
SIGN TYPE R5-11

CONTACT KYTC PRIOR TO DIGGING TO VERIFY IF KYTC HAS ANY UNDERGROUND FACILITIES IN THE AREA.

THOMAS S. VANDERVEEN REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vanderveen 10/31/16
DESIGN ENGINEER DATE

DESIGNED: TV DRAWN: BM
CHECKED: CW CHECKED: TV

INDIANA
DEPARTMENT OF TRANSPORTATION

US 41 ITS CAMERA SITE
CCTV TOWER DETAIL
SOUTH OF OHIO RIVER

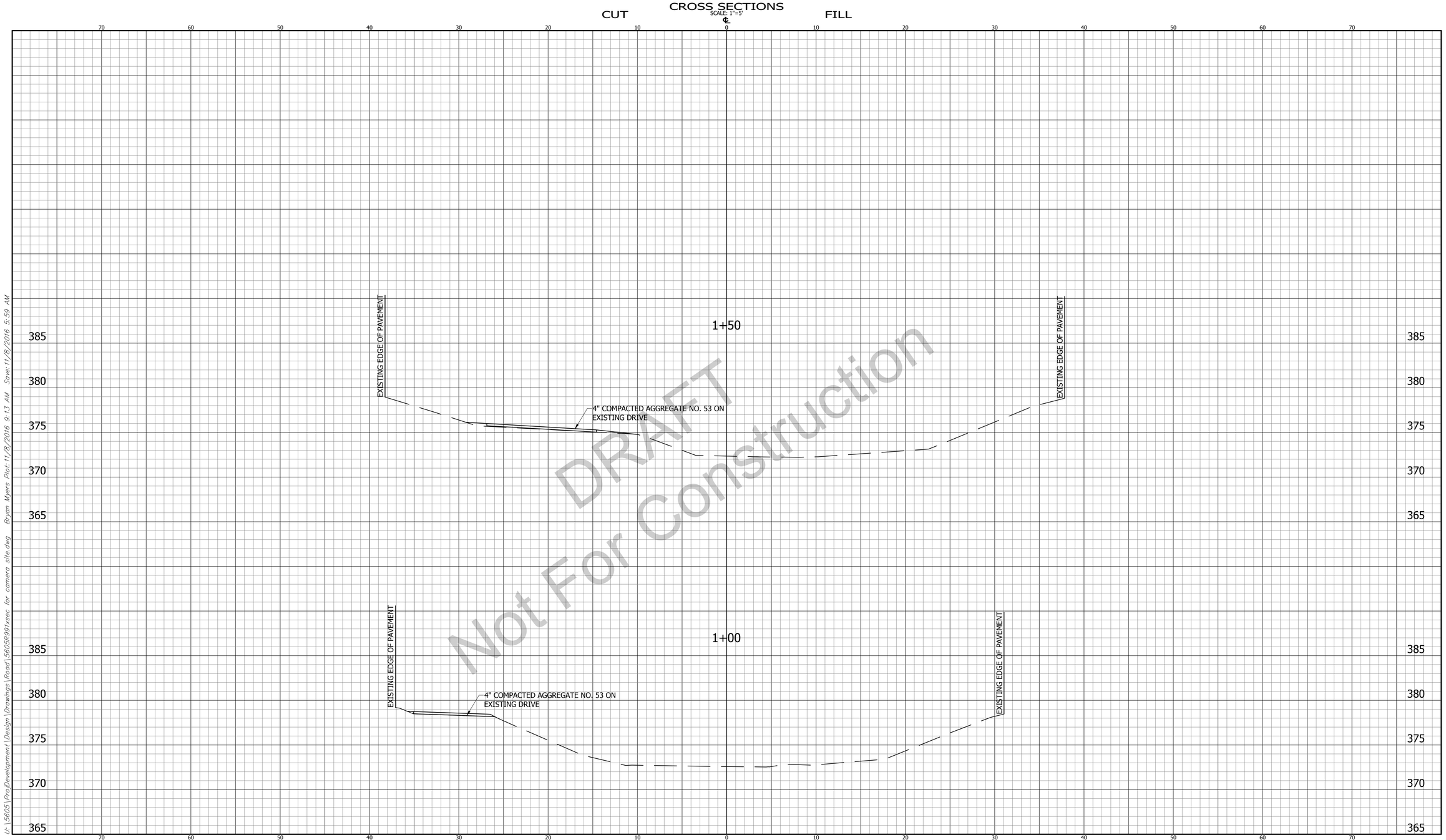
HORIZONTAL SCALE	BRIDGE FILE
1"=5'	----
VERTICAL SCALE	DESIGNATION
----	1592481
SURVEY BOOK	SHEET
	106 OF 164
CONTRACT	PROJECT
B-33539	1592481

BRS NO. 5605

U:\5605\ProjDevelopment\Design\Drawings\Road\5605R532.dwg Bryan Myers Plot:11/28/2016 2:55 PM Save:11/28/2016 2:52 PM

CROSS SECTIONS

SCALE: 1"=5'



DRAFT
Not For Construction

U:\5605\Proj\Development\Design\Drawings\Road\5605R991sec for camera site.dwg Bryan Myers Plot:11/8/2016 9:13 AM Save:11/8/2016 5:59 AM

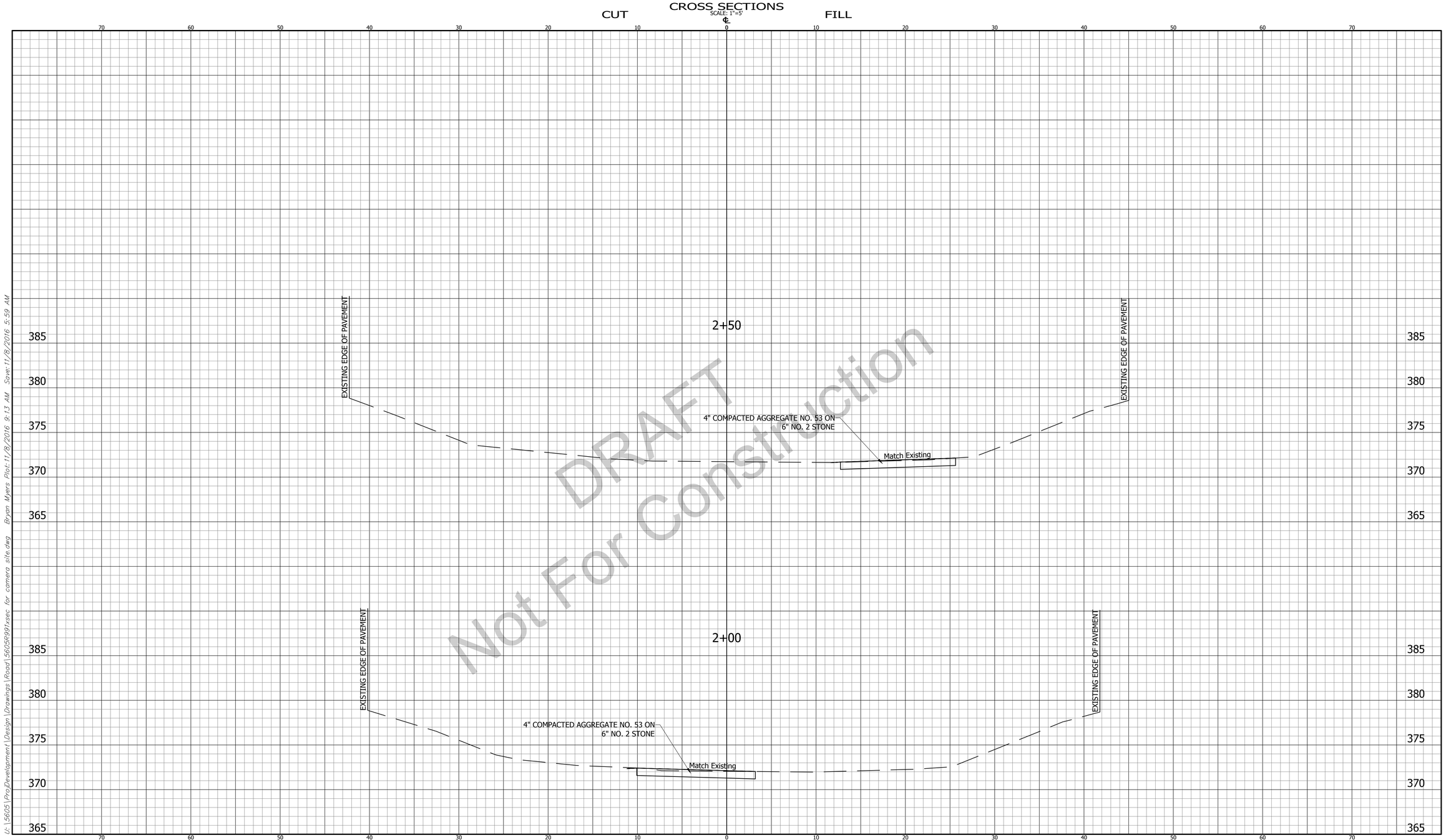
CROSS SECTIONS LINE "CL MEDIAN"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1"=5'	BRIDGE FILE ----
		VERTICAL SCALE 1"=5'	DESIGNATION 1592481
DESIGNED: TV / DRAWN: BM	US 41 ITS CAMERA SITE CCTV TOWER CROSS SECTIONS SOUTH OF OHIO RIVER	SURVEY BOOK	SHEET 107 OF 164
CHECKED: CW / CHECKED: TV		CONTRACT B-33539	PROJECT 1592481

5605

BFS NO.

CROSS SECTIONS

SCALE: 1"=5'



DRAFT
Not For Construction

U:\5605\Proj\Development\Design\Drawings\Road\5605R991sec for camera site.dwg Bryan Myers Plot:11/8/2016 9:13 AM Save:11/8/2016 5:59 AM

CROSS SECTIONS LINE "CL MEDIAN"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1"=5'	BRIDGE FILE ----
		VERTICAL SCALE 1"=5'	DESIGNATION 1592481
DESIGNED: TV / DRAWN: BM	US 41 ITS CAMERA SITE CCTV TOWER CROSS SECTIONS SOUTH OF OHIO RIVER	SURVEY BOOK	SHEET 108 OF 164
CHECKED: CW / CHECKED: TV		CONTRACT B-33539	PROJECT 1592481

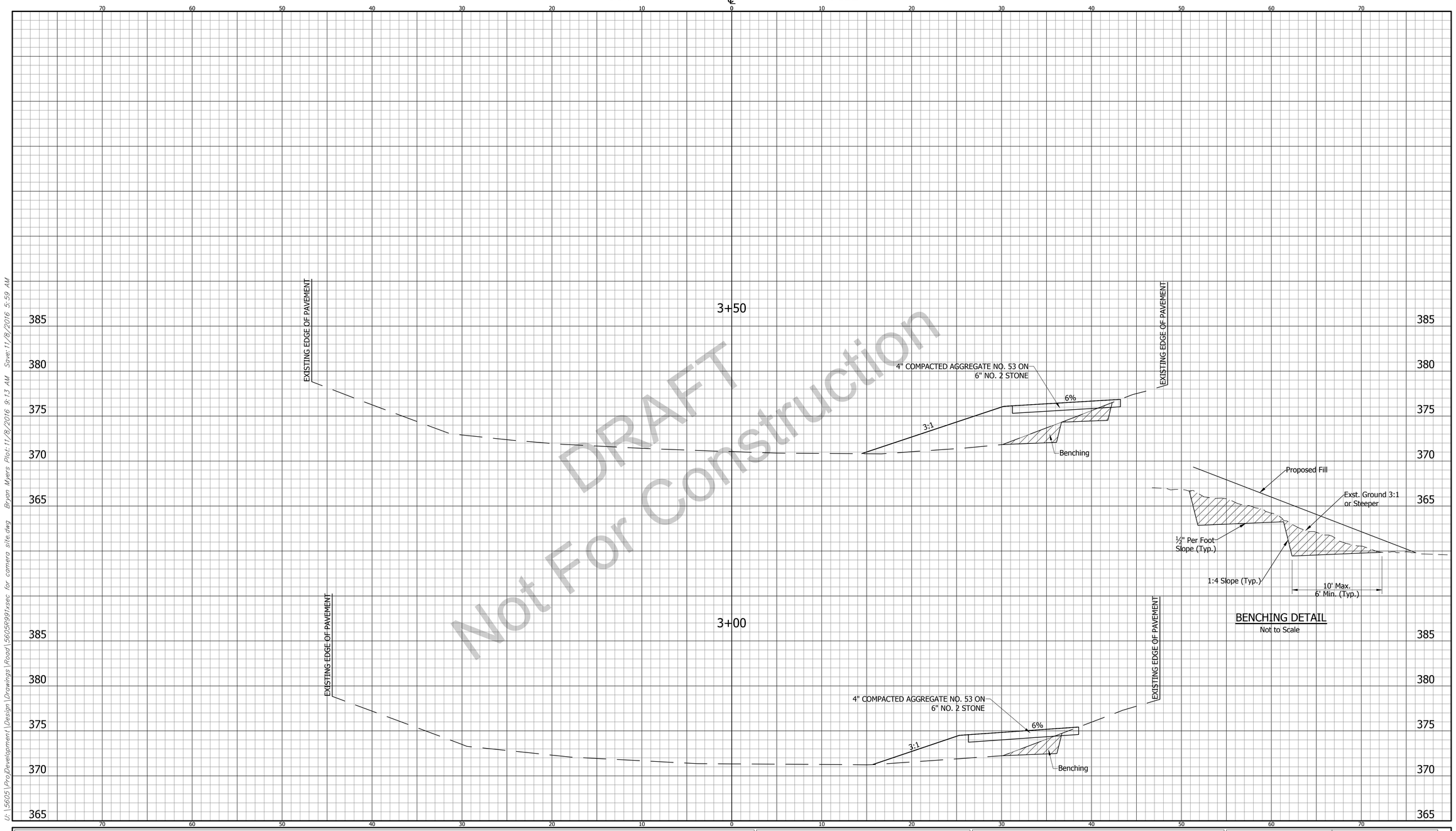
5605

BFS NO.

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



DRAFT
Not For Construction

U:\5605\Proj\Development\Design\Drawings\Road\5605R991xsec for camera site.dwg Bryan Myers Plot:11/8/2016 9:13 AM Save:11/8/2016 5:59 AM

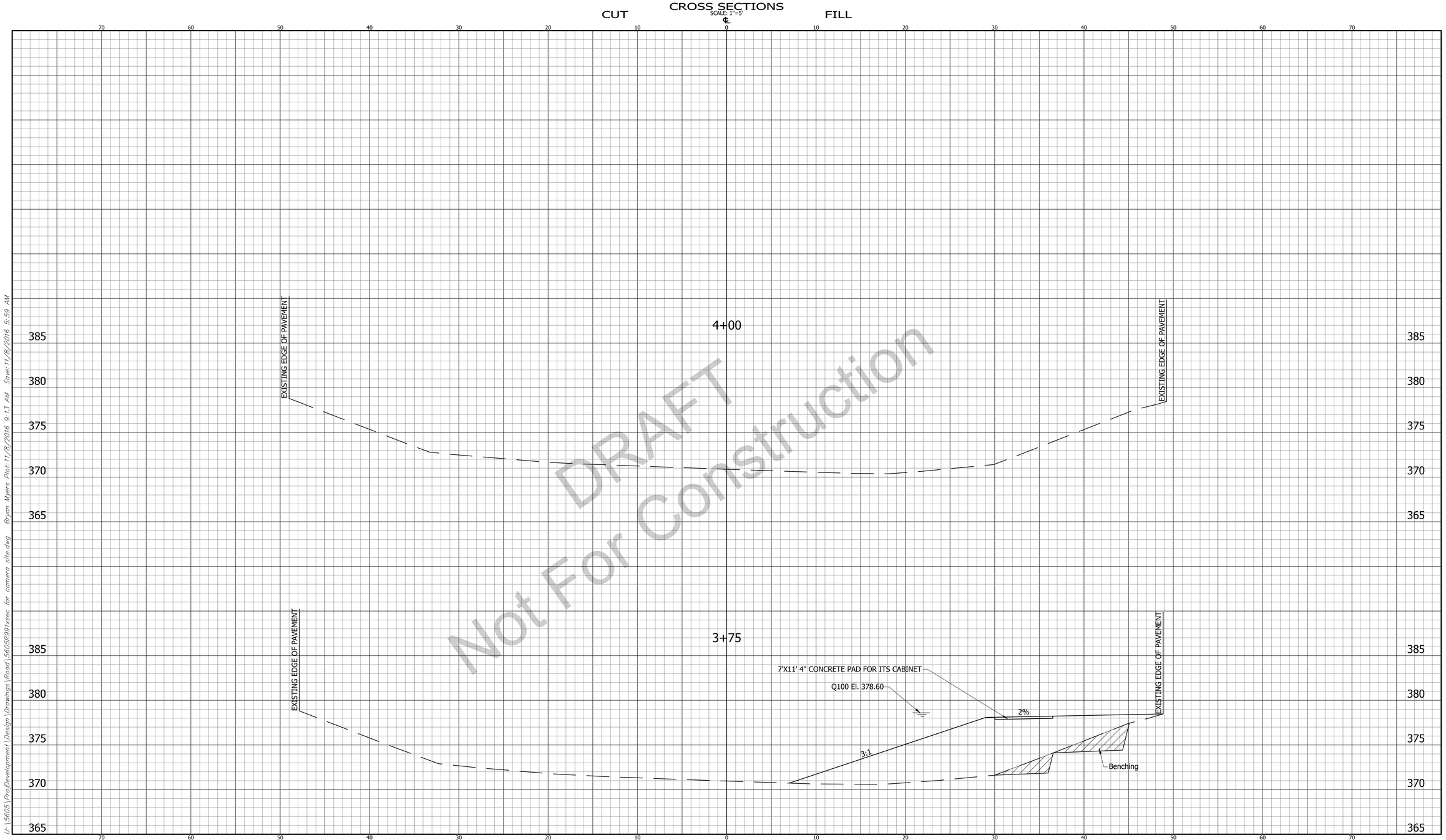
CROSS SECTIONS LINE "CL MEDIAN"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1"=5'	BRIDGE FILE ----
		VERTICAL SCALE 1"=5'	DESIGNATION 1592481
DESIGNED: TV / DRAWN: BM	US 41 ITS CAMERA SITE CCTV TOWER CROSS SECTIONS SOUTH OF OHIO RIVER	SURVEY BOOK	SHEET 109 OF 164
CHECKED: CW / CHECKED: TV		CONTRACT B-33539	PROJECT 1592481

5605

BFS NO.

CROSS SECTIONS

SCALE: 1"=5'



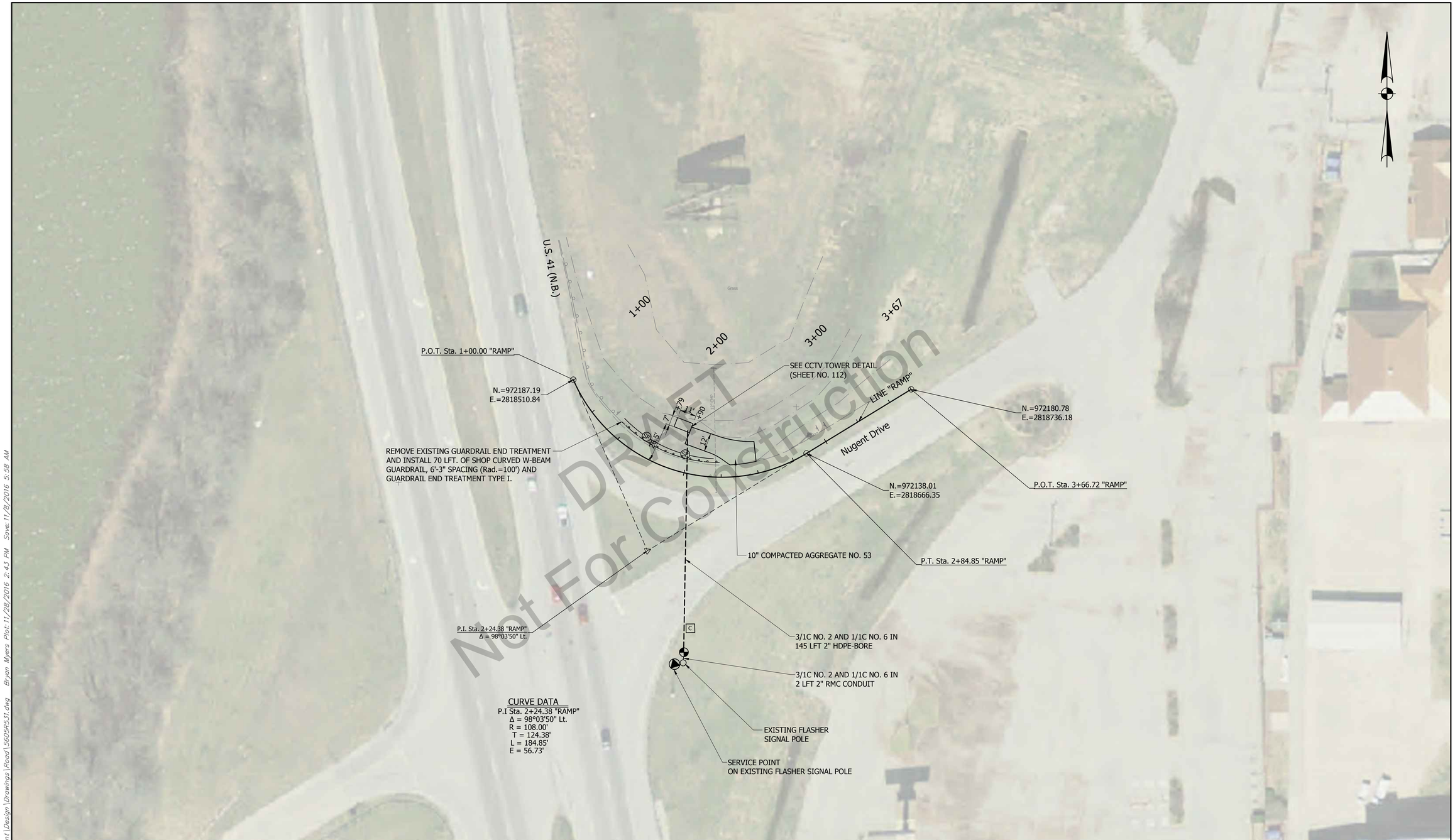
DRAFT
Not For Construction

U:\5605\Proj\Development\Design\Drawings\Road\5605R991sec for camera site.dwg Bryan Myers Plot:11/8/2016 9:13 AM Save:11/8/2016 5:59 AM

CROSS SECTIONS LINE "CL MEDIAN"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1"=5'	BRIDGE FILE: ----
		VERTICAL SCALE: 1"=5'	DESIGNATION: 1592481
DESIGNED: TV / DRAWN: BM	US 41 ITS CAMERA SITE CCTV TOWER CROSS SECTIONS SOUTH OF OHIO RIVER	SURVEY BOOK	SHEET: 110 OF 164
CHECKED: CW / CHECKED: TV		CONTRACT: B-33539	PROJECT: 1592481

5605

BFS NO.



ITS CONDUIT (PLAN NOTE FOR TYPE)
EX. GUARDRAIL
NEW GUARDRAIL
SILT FENCE
CONCRETE CABLE DUCT MARKER
EX. FLASHER SIGNAL POLE
SERVICE POINT, TYPE I (120/240V)
HANDHOLE

CONTACT KYTC PRIOR TO DIGGING TO VERIFY IF KYTC HAS ANY UNDERGROUND FACILITIES IN THE AREA.

THOMAS S. VANDERBERG REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vanderberg 10/31/16
DESIGN ENGINEER DATE

DESIGNED: TV DRAWN: BM
CHECKED: CW CHECKED: TV

INDIANA
DEPARTMENT OF TRANSPORTATION

US 41 ITS CAMERA SITE
CONSTRUCTION DETAILS
NORTH OF OHIO RIVER

HORIZONTAL SCALE	BRIDGE FILE
1"=30	----
VERTICAL SCALE	DESIGNATION
----	1592481
SURVEY BOOK	SHEET
	111 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

U:\5605\Pro_Development\Design\Drawings\Road\5605R531.dwg Bryan Myers Plot: 11/28/2016 2:43 PM Save: 11/8/2016 5:58 AM

NOTE:
The contractor shall provide structural designs, calculations, and engineering drawings signed and sealed by a professional engineer registered in the state of Indiana for each new tower and tower foundation. The foundation design shall be based on site-specific soil boring results and shall consider the existing and proposed site conditions as shown on the plans for each individual tower site. A tower foundation shall not interfere with natural or constructed drainage or runoff. Each tower shall be designed in accordance with ANSI requirements.

ITS CONDUIT (PLAN NOTE FOR TYPE)
EX. GUARDRAIL
NEW GUARDRAIL
CONCRETE CABLE DUCT MARKER
ITS CABINET
CCTV ASSEMBLY
HANDHOLE
60' MONOTUBE TOWER ON 4' DIAMETER FOUNDATION
SECONDARY SERVICE DISCONNECT ON 4' SIGNAL PEDESTAL AND FOUNDATION TYPE A
SIGN TYPE R5-11

CONTACT KYTC PRIOR TO DIGGING TO VERIFY IF KYTC HAS ANY UNDERGROUND FACILITIES IN THE AREA.

THOMAS S. VANDERBURG REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vanderburg 10/31/16
DESIGN ENGINEER DATE

DESIGNED: TV DRAWN: BM
CHECKED: CW CHECKED: TV

INDIANA
DEPARTMENT OF TRANSPORTATION

US 41 ITS CAMERA SITE
CCTV TOWER DETAIL
NORTH OF OHIO RIVER

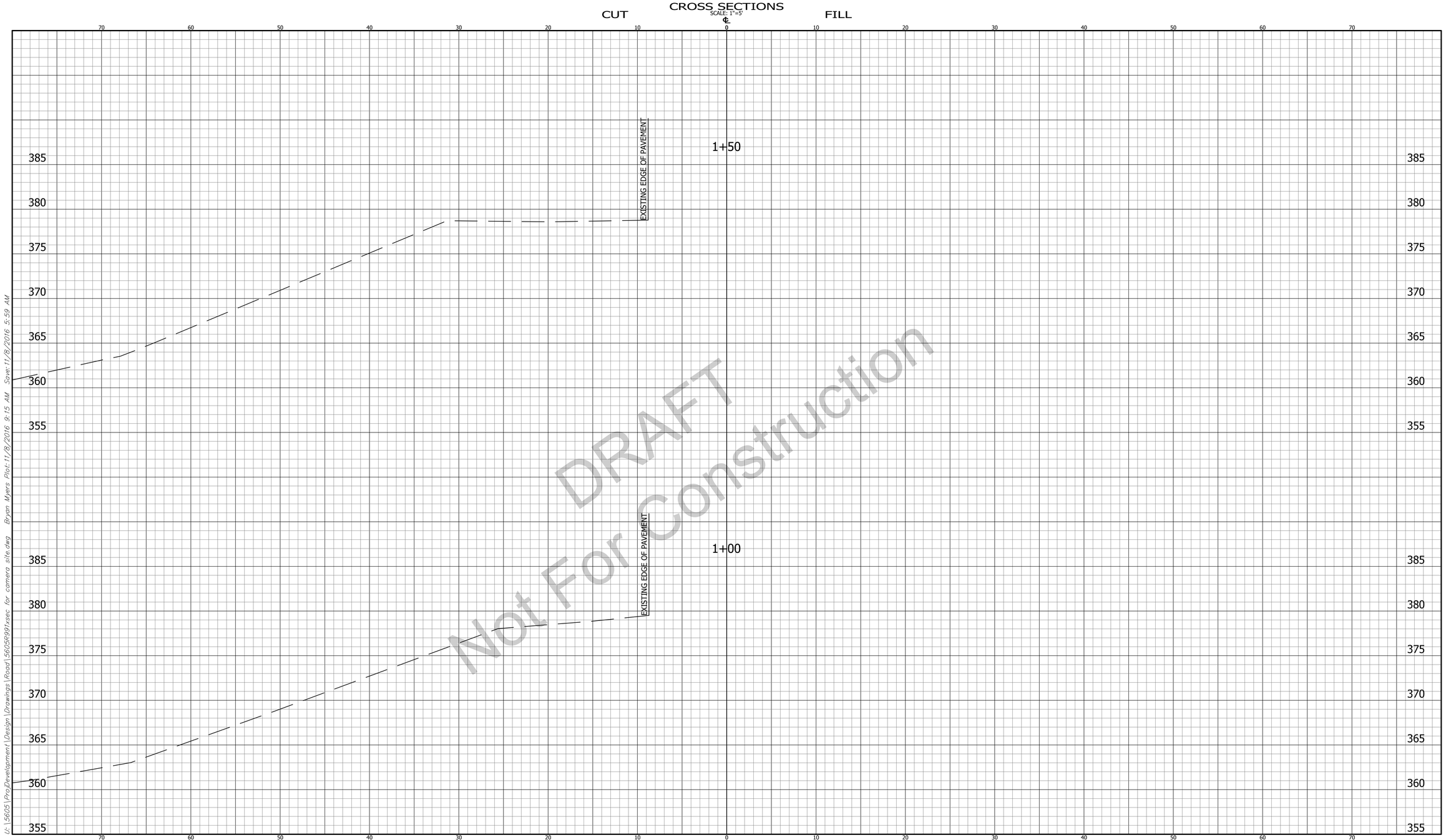
HORIZONTAL SCALE	BRIDGE FILE
1"=5'	----
VERTICAL SCALE	DESIGNATION
----	1592481
SURVEY BOOK	SHEET
	112 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

U:\5605\ProDevelopment\Design\Drawings\Road\5605R5.32.dwg Bryan Myers Plot:11/28/2016 2:55 PM Save:11/28/2016 2:52 PM

CROSS SECTIONS

SCALE: 1"=5'



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Not For Construction

U:\5605\Proj\Development\Design\Drawings\Road\5605R991sec for camera site.dwg Bryan Myers Plot:11/8/2016 9:15 AM Save:11/8/2016 5:59 AM

CROSS SECTIONS LINE "RAMP"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1"=5'	BRIDGE FILE: ----
		VERTICAL SCALE: 1"=5'	DESIGNATION: 1592481
DESIGNED: TV / DRAWN: BM	US 41 ITS CAMERA SITE CCTV TOWER CROSS SECTIONS NORTH OF OHIO RIVER	SURVEY BOOK	SHEET: 113 OF 164
CHECKED: CW / CHECKED: TV		CONTRACT: B-33539	PROJECT: 1592481

5605

BFS NO.

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL

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Not For Construction

U:\5605\Proj\Development\Design\Drawings\Road\5605R991sec for camera site.dwg Bryan Myers Plot:11/8/2016 9:15 AM Save:11/8/2016 5:59 AM

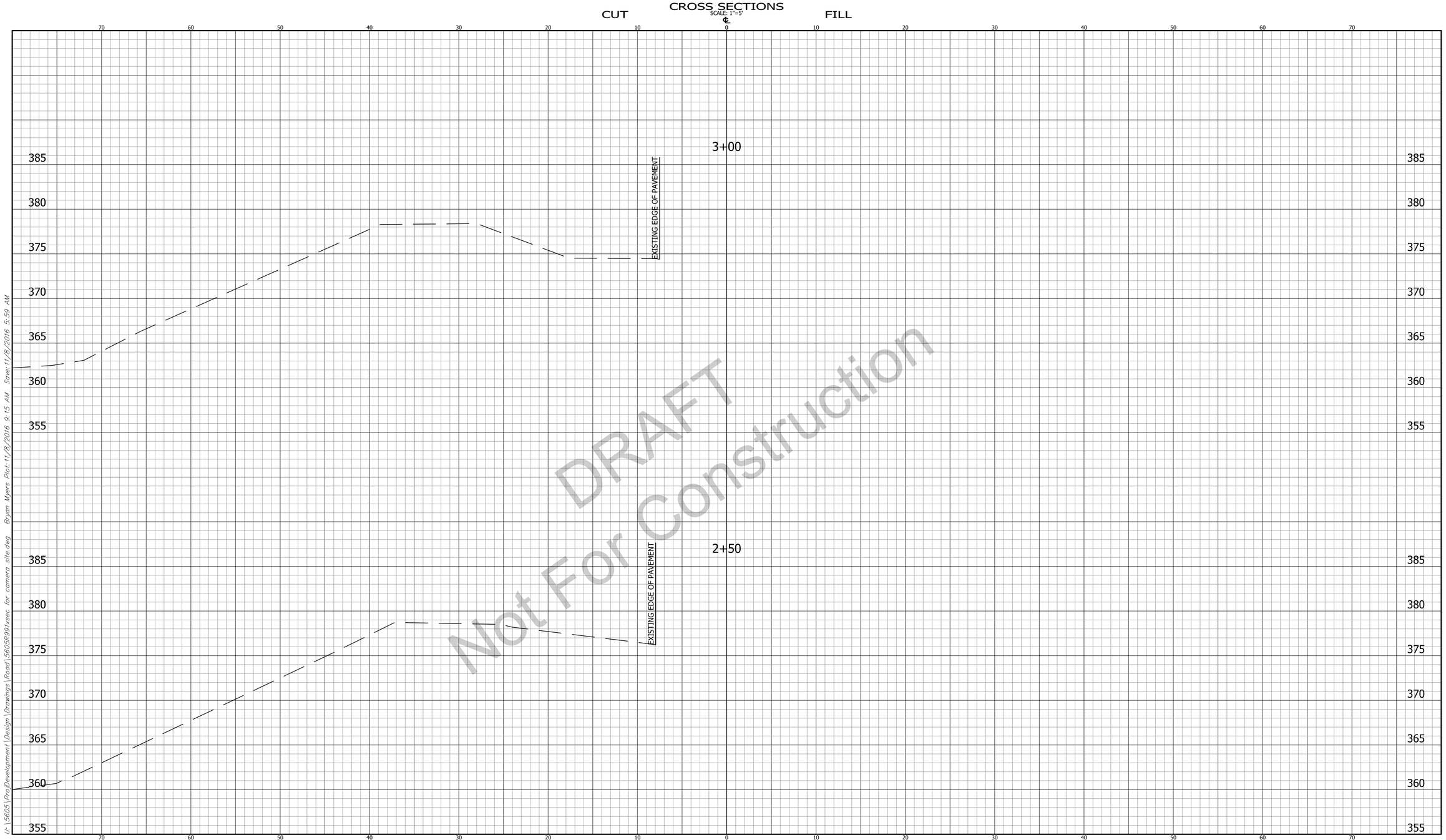
CROSS SECTIONS LINE "RAMP"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1"=5'	BRIDGE FILE ----
		VERTICAL SCALE 1"=5'	DESIGNATION 1592481
DESIGNED: TV / DRAWN: BM	US 41 ITS CAMERA SITE CCTV TOWER CROSS SECTIONS NORTH OF OHIO RIVER	SURVEY BOOK	SHEET 114 OF 164
CHECKED: CW / CHECKED: TV		CONTRACT B-33539	PROJECT 1592481

5605

BFS NO.

CROSS SECTIONS

SCALE: 1"=5'



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Not For Construction

U:\5605\Proj\Development\Design\Drawings\Road\5605R991sec for camera site.dwg Bryan Myers Plot:11/8/2016 9:15 AM Save:11/8/2016 5:59 AM

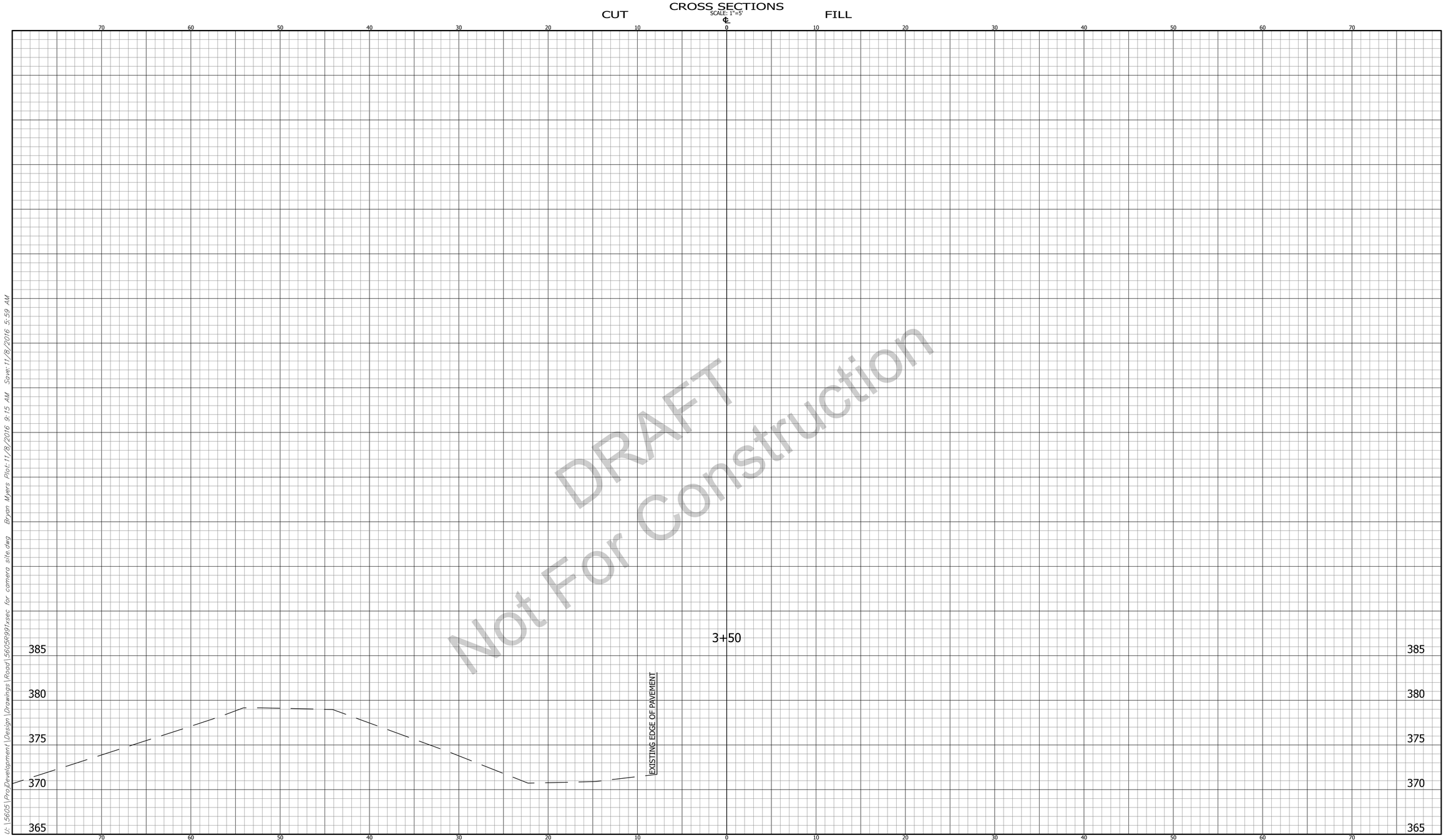
CROSS SECTIONS LINE "RAMP"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1"=5'	BRIDGE FILE ----
		VERTICAL SCALE 1"=5'	DESIGNATION 1592481
DESIGNED: TV / DRAWN: BM	US 41 ITS CAMERA SITE CCTV TOWER CROSS SECTIONS NORTH OF OHIO RIVER	SURVEY BOOK	SHEET 115 OF 164
CHECKED: CW / CHECKED: TV		CONTRACT B-33539	PROJECT 1592481

5605

BFS NO.

CROSS SECTIONS

SCALE: 1"=5'



U:\5605\Proj\Development\Design\Drawings\Road\5605R991sec for camera site.dwg Bryan Myers Plot:11/8/2016 9:15 AM Save:11/8/2016 5:59 AM

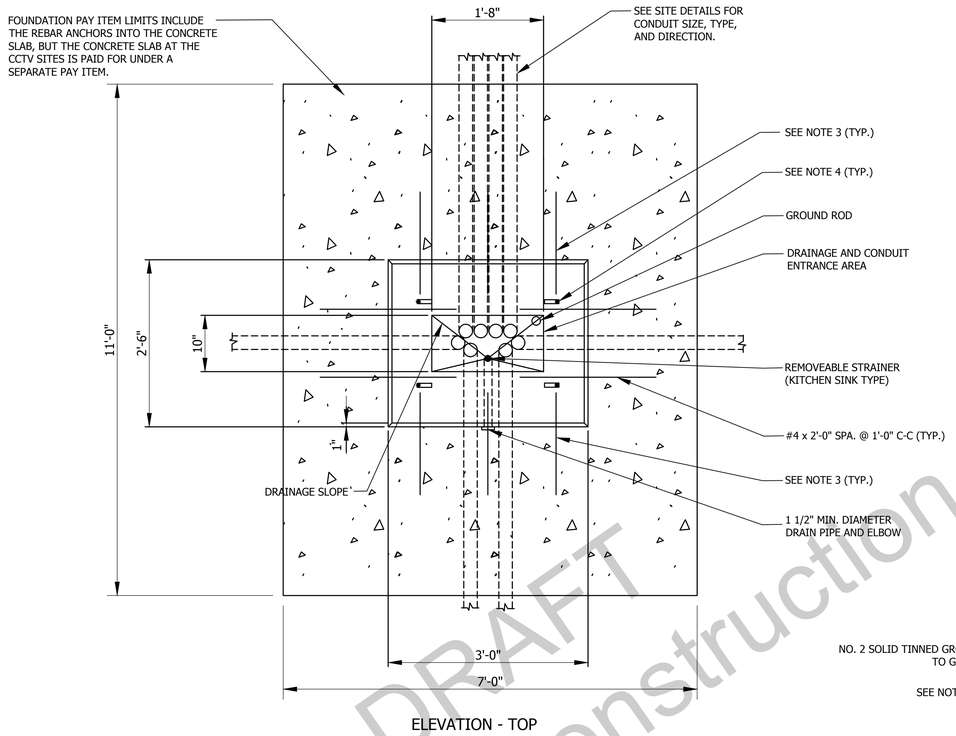
CROSS SECTIONS LINE "RAMP"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1"=5'	BRIDGE FILE ----
		VERTICAL SCALE 1"=5'	DESIGNATION 1592481
DESIGNED: TV / DRAWN: BM	US 41 ITS CAMERA SITE CCTV TOWER CROSS SECTIONS NORTH OF OHIO RIVER	SURVEY BOOK	SHEET 116 OF 164
CHECKED: CW / CHECKED: TV		CONTRACT B-33539	PROJECT 1592481

5605

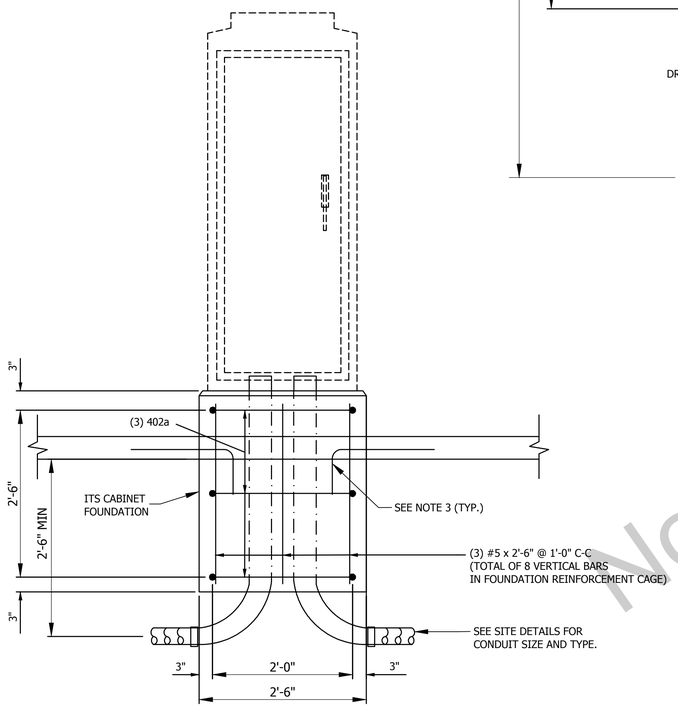
BFS NO.

NOTES:

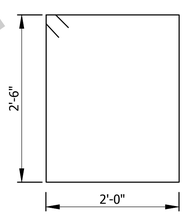
1. BOND GROUND ROD TO FOUNDATION REINFORCING STEEL USING NO. 2 SOLID TINNED GROUND WIRE.
2. SEE INDOT STANDARD DRAWINGS NO. 809-ITSC-01 THROUGH 07 FOR ITS CABINET DETAILS.
3. #4 X 2'-10" @ 1'-0" C-C, 90 DEGREE HOOK SEE STD. DWG. E-703-BRST-01
4. SEE INDOT STANDARD DRAWING NO. 805-SGCF-01 FOR CABINET ANCHOR BOLT DETAIL.



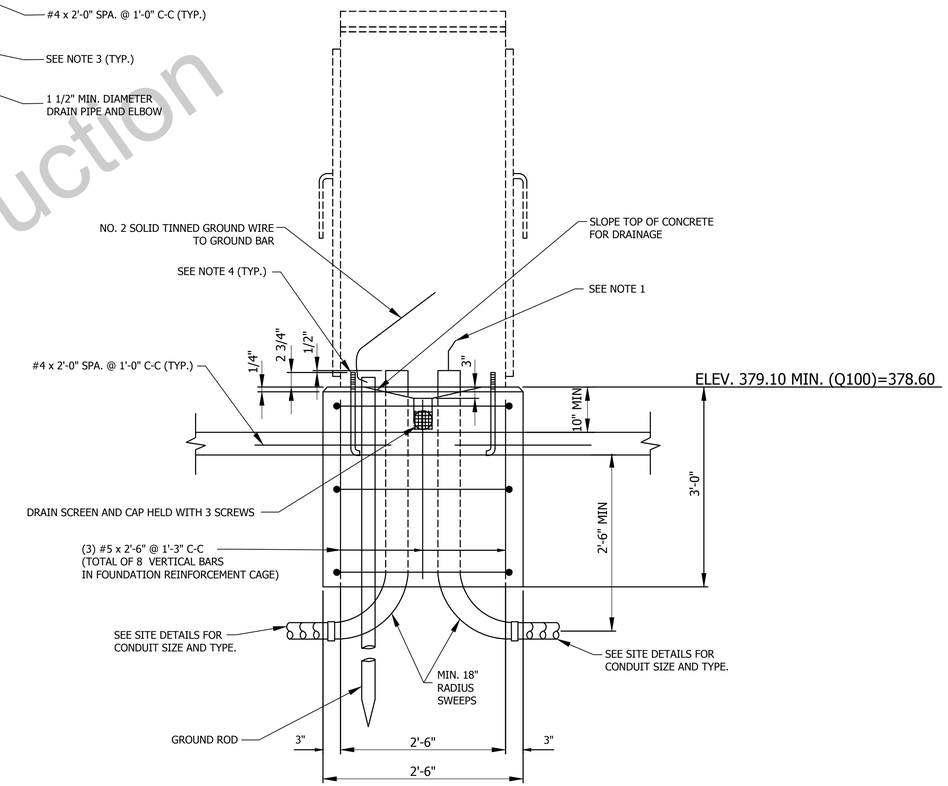
ELEVATION - TOP



ELEVATION - FRONT



402a x 9'-10



ELEVATION - SIDE

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Not For Construction

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THOMAS S. VANDENBERG REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vandenberg 10/31/16
DESIGN ENGINEER DATE

DESIGNED: TV DRAWN: JT
CHECKED: CW CHECKED: TV

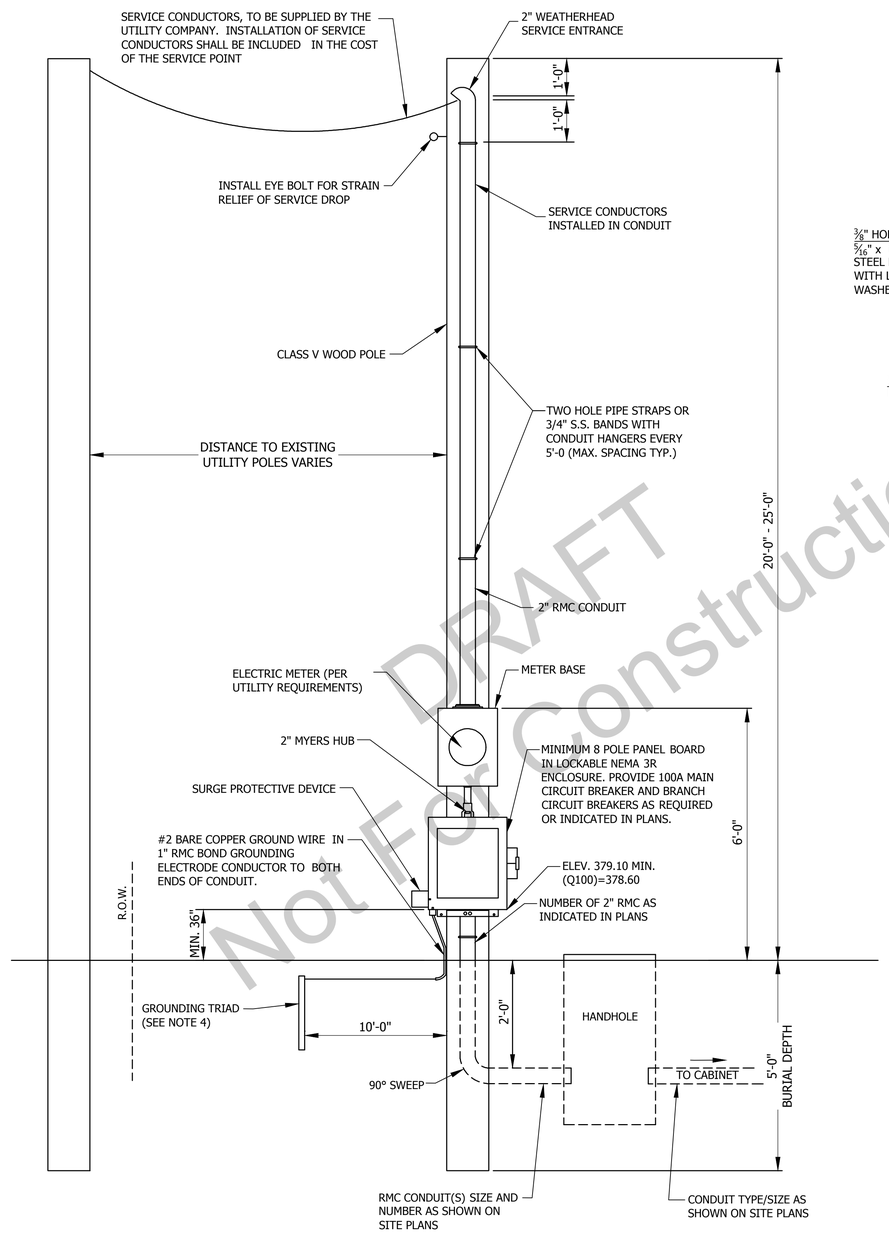
INDIANA
DEPARTMENT OF TRANSPORTATION

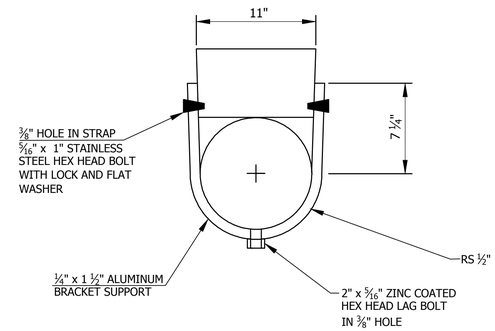
US 41 ITS CAMERA SITE
ITS CABINET FOUNDATION DETAIL

HORIZONTAL SCALE	BRIDGE FILE
NA	----
VERTICAL SCALE	DESIGNATION
NA	1592481
SURVEY BOOK	SHEET
	117 OF 164
CONTRACT	PROJECT
B-33539	1592481

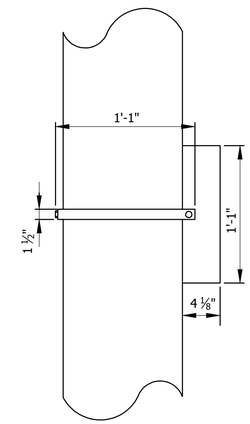
5605

BFS NO.





TOP VIEW
CONDUIT ATTACHMENT DETAIL



SIDE VIEW
CONDUIT ATTACHMENT DETAIL

NOTE:
1. ALL SERVICE INSTALLATIONS SHALL COMPLY W ITH NEC AND UTILITY REQUIREMENTS.
2. INSTALLATION OF SERVICE CONDUCTORS SHALL BE INCLUDED IN THE COST OF THE SERVICE POINT PAY ITEM.
3. TRIAD GROUND SHALL CONSIST OF THREE 5/8" X 10' COPPER CLAD GROUND RODS SPACED 10' APART. EXOTHERMICALLY WELD THE GROUND RODS TO THE #2 GROUND ELECTRODE CONDUCTOR.
4. THE CONTRACTOR SHALL COORDINATE WITH TRACY BENSON AT KINERGY: (270)-724-9907

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U:\5605\Proj\Development\Design\Drawings\Road\5605R650-CAMERA DETAILS.dwg Bryan Myers Plot: 11/8/2016 9:16 AM Save: 11/8/2016 6:00 AM

THOMAS S. VANDERBERG REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vanderberg 10/31/16
DESIGN ENGINEER DATE

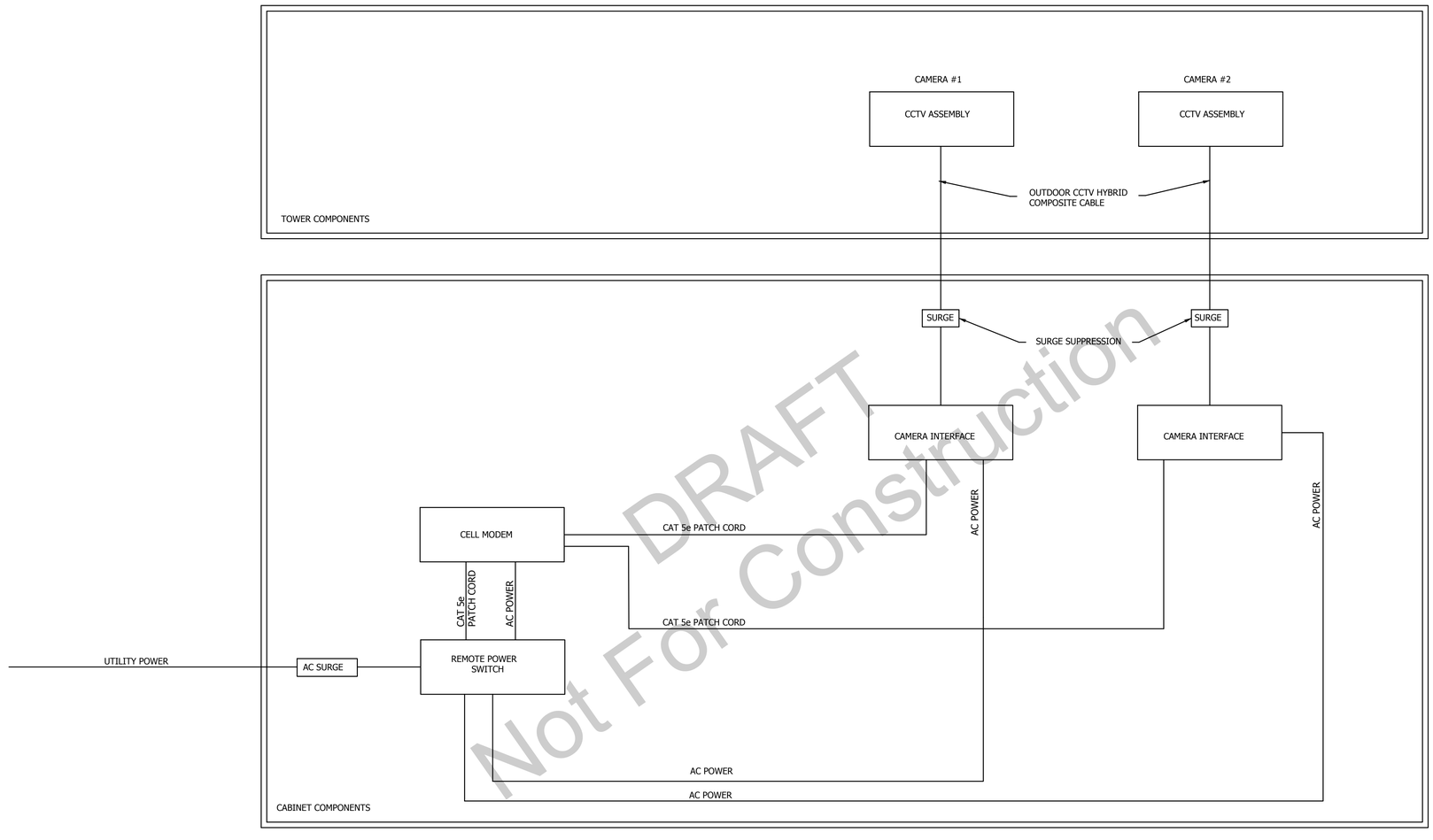
DESIGNED: TV DRAWN: JT
CHECKED: CW CHECKED: TV

INDIANA
DEPARTMENT OF TRANSPORTATION

US 41 ITS CAMERA SITE
SERVICE POINT DETAILS

HORIZONTAL SCALE	BRIDGE FILE
NA	----
VERTICAL SCALE	DESIGNATION
NA	1592481
SURVEY BOOK	SHEET
	118 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605



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NOTES:

1. ALL GROUNDING, LIGHTNING, AND SURGE PROTECTION SHALL CONFORM TO UL-96A AND NFPA 780 CLASS II STANDARDS.
2. SEAL ALL CONDUIT ENTRANCE AND EXIT POINTS WITH DUCT SEAL AFTER INSTALLATION IS COMPLETE.
3. CONNECT BOTH LEGS OF THE 120/240V POWER TO THE BREAKER PANEL.

THOMAS S. VANDERWEG REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vanderweg 10/31/16
DESIGN ENGINEER DATE

DESIGNED: TV DRAWN: JT
CHECKED: CW CHECKED: TV

INDIANA
DEPARTMENT OF TRANSPORTATION

US 41 ITS CAMERA SITE
ITS COMPONENT WIRING DIAGRAM

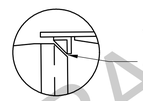
HORIZONTAL SCALE	BRIDGE FILE
NA	----
VERTICAL SCALE	DESIGNATION
NA	1592481
SURVEY BOOK	SHEET
	119 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

U:\5605\Pro_Development\Design\Drawings\Road\5605R650-CAMERA DETAILS.dwg Bryan Myers Plot:11/8/2016 9:16 AM Save:11/8/2016 6:00 AM

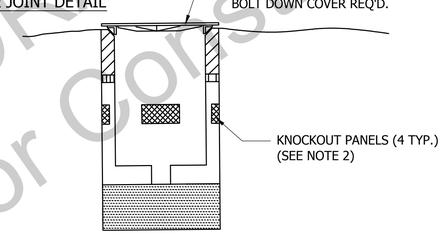
NOTES:

1. COVER SHALL WITHSTAND AASHTO H 20 LOADING AND SHALL BOLT DOWN TO PREVENT FLIPPING FROM TRAFFIC (INCLUDING FROM TRAFFIC FROM LAWNMOWER TRACTOR)
2. ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION OR PUNCH DRIVEN AT THE TIME OF PLACEMENT.
3. SURFACE GRADE SHALL BE MADE LEVEL AT ATMS HANDHOLE LOCATIONS.
4. REFER TO SPECIAL PROVISIONS FOR CABLE SLACK VALUES AT ATMS HANDHOLES.
5. PRECAST CONCRETE ADJUSTING RING WITH STEP AS NEEDED (MINIMUM OF ONE-12" RING ON EACH)



APPLY A BUTYL SEALANT BETWEEN IRON RING & CONCRETE STRUCTURE.

HANDHOLE JOINT DETAIL



ATMS HANDHOLE DETAILS

(MODIFIES INDOT STD. DRAW. 805-SGCF-04)

HANDHOLE & VAULT COVER DETAIL

NOT TO SCALE

LABEL COVERS ENCLOSING POWER DISTRIBUTION CABLES AS "TRAFFIC MANAGEMENT POWER" ALL OTHER HANDHOLES SHALL BE LABELED "TRAFFIC MANAGEMENT SYSTEM"

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U:\5605\ProjDevelopment\Design\Drawings\Road\5605R650-CAMERA DETAILS.dwg Bryan Myers Plot:11/8/2016 9:16 AM Save:11/8/2016 6:00 AM

THOMAS S. VANDERBURG REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vanderburg 10/31/16
DESIGN ENGINEER DATE

DESIGNED: TV DRAWN: JT
CHECKED: CW CHECKED: TV

INDIANA
DEPARTMENT OF TRANSPORTATION

US 41 ITS CAMERA SITE
HANDHOLE DETAIL

HORIZONTAL SCALE	BRIDGE FILE
NA	----
VERTICAL SCALE	DESIGNATION
NA	1592481
SURVEY BOOK	SHEET
	120 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

TEMPORARY EROSION CONTROL TABLE

FROM STATION	TO STATION	LOCATION			TEMPORARY SILT FENCE	TEMPORARY DROP INLET PROTECTION	TEMPORARY STRAW BALE DITCH CHECK	TEMPORARY FILTER BERM	TEMPORARY NO. 2 STONE	TEMPORARY SEED MIXTURE	TEMPORARY MULCH	TEMPORARY GEOTEXTILE	REMARKS
		LEFT	MEDIAN	RIGHT	LFT	EACH	LFT	LFT	TON	LBS	TON	SYS	
Line "CL-MEDIAN"													
01+90.00	03+97.00	X			225								
Line "RAMP"													
01+45.00	02+20.00	X			75								
TOTAL					**300**								

GUARDRAIL SUMMARY TABLE

FROM (STATION)	TO (STATION)	LEFT	RIGHT	MEDIAN LEFT	MEDIAN RIGHT	W-BEAM GUARDRAIL LENGTH								GUARDRAIL TRANSITION TGB	GUARDRAIL END TREATMENT MS	GUARDRAIL END TREATMENT OS	GUARDRAIL END TREATMENT TYPE I	REMARKS
						6'-3" STANDARD POST AT 3" SPA.	3'-1 1/2" STANDARD POST AT 1 1/2" SPA.	1'-6 3/4" STANDARD POST AT 6 3/4" SPA.	6'-3" DOUBLE FACED AT 3" SPA.	LONG POST AT 6'-3" SPA.	LONG POST AT 3'-1 1/2" SPA.	SHOP CURVED AT 6'-3" SPA.	NESTED GUARDRAIL					
						LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	EACH	EACH	EACH	EACH	
Line "RAMP"																		
1+45.00		X															1	
1+45.00	2+23.00	X										70						
TOTAL												**70**					**1**	

SHEET SIGN & POST SUMMARY

SIGN LOCATION	SIGN CODE	SIGN SIZE (IN. X IN.)	GROUND-MOUNTED SIGN AREA (SFT)			MOUNTED ON PANEL SIGN, AREA (SFT)	POST: U CHANNEL				POST: SQUARE 2 1/4" x 2 1/4" x 12 GA. (TYPE 1)			POST: SQUARE 2" x 2" x 12 GA. (TYPE 2)	
							POST LENGTH		POST LENGTH		REINFORCED ANCHOR			REINFORCED ANCHOR	
							1	1	TYPE A	TYPE B	POST LENGTH (FT)			POST LENGTH (FT)	
			0.080	0.100	0.125	0.080	FT	FT	FT	FT	1	2	TOTAL	1	TOTAL
Line "CL-MEDIAN"															
03+68	R5-11	30 X 24	5.00								9.00		9.00		
Line "RAMP"															
01+97	R5-11	30 X 24	5.00								9.00		9.00		
TOTAL			**10.00**										**18.00**		

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THOMAS S. VANDENBERG REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vandenberg 10/31/16
DESIGN ENGINEER DATE

DESIGNED: TV DRAWN: BM
CHECKED: CW CHECKED: TV

INDIANA
DEPARTMENT OF TRANSPORTATION

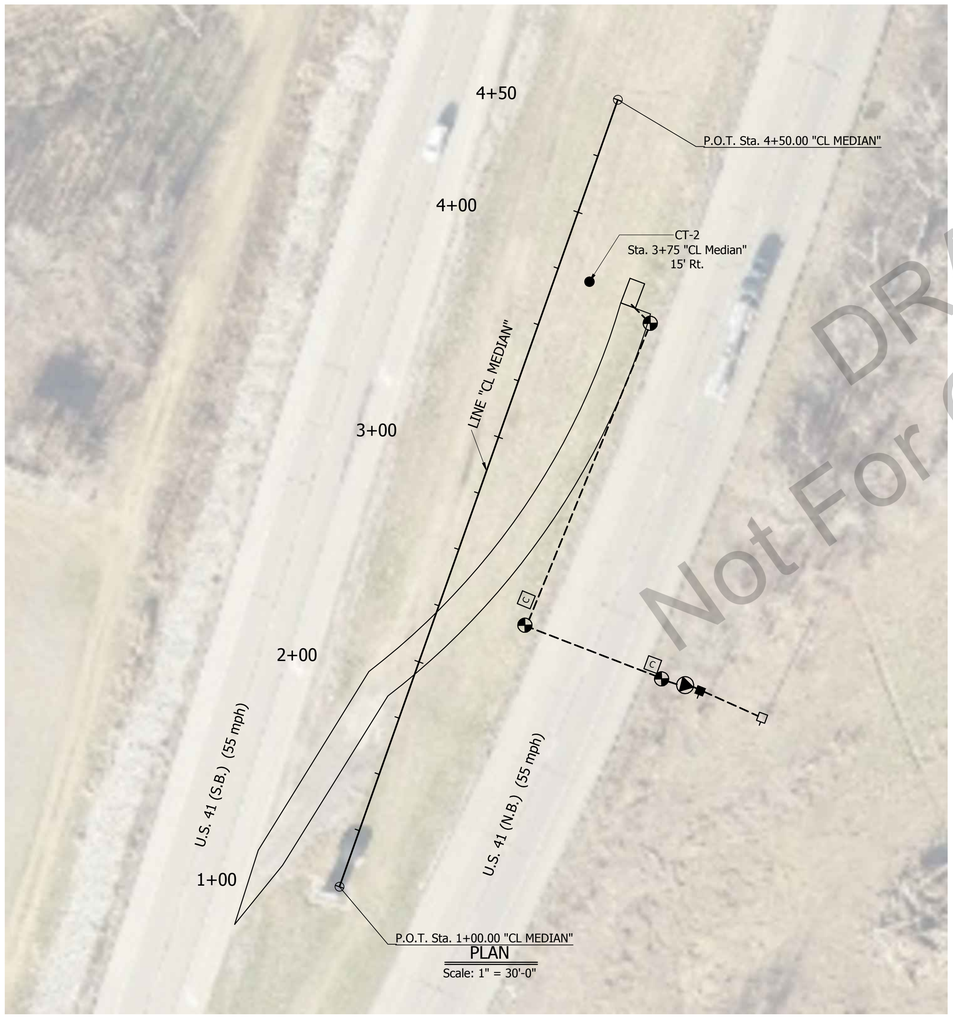
US 41 ITS CAMERA SITE
MISCELLANOUS TABLES

HORIZONTAL SCALE	BRIDGE FILE
NA	----
VERTICAL SCALE	DESIGNATION
NA	1592481
SURVEY BOOK	SHEET
	121 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605

BFS NO.

U:\5605\ProDevelopment\Design\Drawings\Road\5605R985 Camera Site.dwg Bryan Myers Plot:11/8/2016 9:16 AM Save:11/8/2016 6:00 AM



PLAN
Scale: 1" = 30'-0"

LOG OF TEST BORING

Earth Exploration

CLIENT : Butler, Fairman & Seufert, Inc.
DES NO. : 1592481 STRUCTURE #:
PROJECT TYPE:
LOCATION : US 41 Camera Towers
COUNTY : Henderson, KY PROJECT NO.: 1-16-424

BORING NO.: CT-2
SHEET 1 OF 2
NORTHING : 962752
EASTING : 2816252
DATUM : NAD 83 - INWEST
DATE STARTED : 09-08-16
DATE COMPLETED : 09-08-16

ELEVATION :
STATION : 3+75
OFFSET : 15.0 ft Right
LINE : "CL Median"
DEPTH : 35.0 ft

BORING METHOD : Hollow Stem Auger
RIG TYPE : CME 750X
CASING DIA. : ---
CORE SIZE : ---

HAMMER : Auto
DRILLER/INSP : C. Hutcheson
TEMPERATURE : 82 °F
WEATHER : Partly Cloudy

GROUNDWATER: Encountered at 11.0 ft At completion 15.0 ft Caved in at 29.0 ft.

ELEVATION	SAMPLE DEPTH	SOIL/MATERIAL DESCRIPTION	SAMPLE NUMBER	SPT per 6"	% RECOVERY/ MOISTURE CONTENT	DRY DENSITY, pcf	POCKET PEN., tsf	UNCONF. COMP., tsf	ATTERBERG LIMITS LL	PL	PI	REMARKS
		Topsoil, 0.2										
	2.5	**Sandy Loam,** loose, moist, brown, (fill) 2.0	SS 1	3-3-3	100							
	5.0	**Silty Clay Loam,** medium stiff to very soft, moist, brown, with roots near 2 ft, A-6, Lab No. 17986	SS 2	1-1-1	100	32.8		0.25				
			SS 3	1-1-1	100	26.3	96.6	0.5	0.32			
	7.5	9.5	SS 4	1-1-1	100	28.1		0.5				
	10.0	**Silty Clay Loam,** very soft to soft, moist, brown, A-6, Lab No. 17990	SS 5	1-2-2	100	25.1		2.25				
	12.5	14.5	SS 6	1-3-5	100	22.0	106.2	2.0	2.46			
	15.0		SS 7	2-4-4	100	26.0		1.5				
	17.5	**Silty Loam,** medium stiff to soft, moist, brown to gray near 24 ft, with black and gray sand seam near 24 ft, A-6, Lab No. 17980	SS 8	2-2-3	100	27.9	96.6	0.75	0.72			
	20.0	24.5	SS 9	1-1-1	100	42.9		0.75				
	22.5	**Silty Clay Loam,** very soft, moist, black and gray, A-6, Lab No. 17978 26.0										
	25.0	**Silty Loam,** very soft to soft, moist, gray, A-6, Lab No. 17980										
	27.5		SS 10	0-1-1	100	33.3	89.2	0.5	0.66			
	30.0											

Continued on next page

EE BORING LOG (INDOT FORMAT) 1-16-424.GPJ IN_DOT1.GDT 12/6/16

LOG OF TEST BORING

Earth Exploration

CLIENT : Butler, Fairman & Seufert, Inc.
DES NO. : 1592481 STRUCTURE #:
PROJECT TYPE:

BORING NO.: CT-2
SHEET 2 OF 2
NORTHING : 962752
EASTING : 2816252
DATUM : NAD 83 - INWEST

ELEVATION	SAMPLE DEPTH	SOIL/MATERIAL DESCRIPTION	SAMPLE NUMBER	SPT per 6"	% RECOVERY/ MOISTURE CONTENT	DRY DENSITY, pcf	POCKET PEN., tsf	UNCONF. COMP., tsf	ATTERBERG LIMITS LL	PL	PI	REMARKS
	32.5	**Silty Loam,** very soft to soft, moist, gray, A-6, Lab No. 17980 35.0	SS 11	1-2-2	100	31.0		0.5				
	35.0	Bottom of Boring at 35.0 ft										
	37.5											
	40.0											
	42.5											
	45.0											
	47.5											
	50.0											
	52.5											
	55.0											
	57.5											
	60.0											
	62.5											
	65.0											

EE BORING LOG (INDOT FORMAT) 1-16-424.GPJ IN_DOT1.GDT 12/6/16

DRAFT
Not For Construction

STANDARD PENETRATION TEST

Driving 2" O.D. Sampler 1'-6" with 140# Hammer falling 30". Count made at 6" intervals. First 6" for seating sampler.

TABLE 1. GEOTECHNICAL PARAMETERS FOR DESIGN AT BORING CT-2

Depth Interval (ft)	Soil Type	Variation of Horizontal Subgrade Modulus (lbs/cu in.)[1]	Angle of Internal Friction (ø')	Elastic Modulus (E_s) lbs/sq in.[1]	Undrained Shear Strength (lbs/sq ft)	Unconfined Rock Compressive Strength (q_u) (tons/sq ft), RQD (%)	Strain (ε_{50}) at 50 percent of the Ultimate Stress	Allowable Skin Resistance (lbs/sq ft) FS=2	Effective/ Buoyant Unit Weight (lb/cu ft)
0-3	Neglect								55
3-11	Silty Clay Loam	40, --	--	--	300	--, --	0.02	60	50
11-17½	Silty Clay Loam	600, 250	--	--	2,000	--, --	0.006	400	65
17½-25	Silty Loam	100, 70	--	--	750	--, --	0.01	150	60
25-35	Silty Loam	60, 40	--	--	500	--, --	0.02	100	55

[1] Static, cyclic conditions

Note:

The entire geotechnical report developed by earth exploration Inc. will be made available to the contractor upon request.

THOMAS S. VANDENBERG REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vandenberg 10/31/16
DESIGN ENGINEER DATE

DESIGNED: TV DRAWN: BM
CHECKED: CW CHECKED: TV

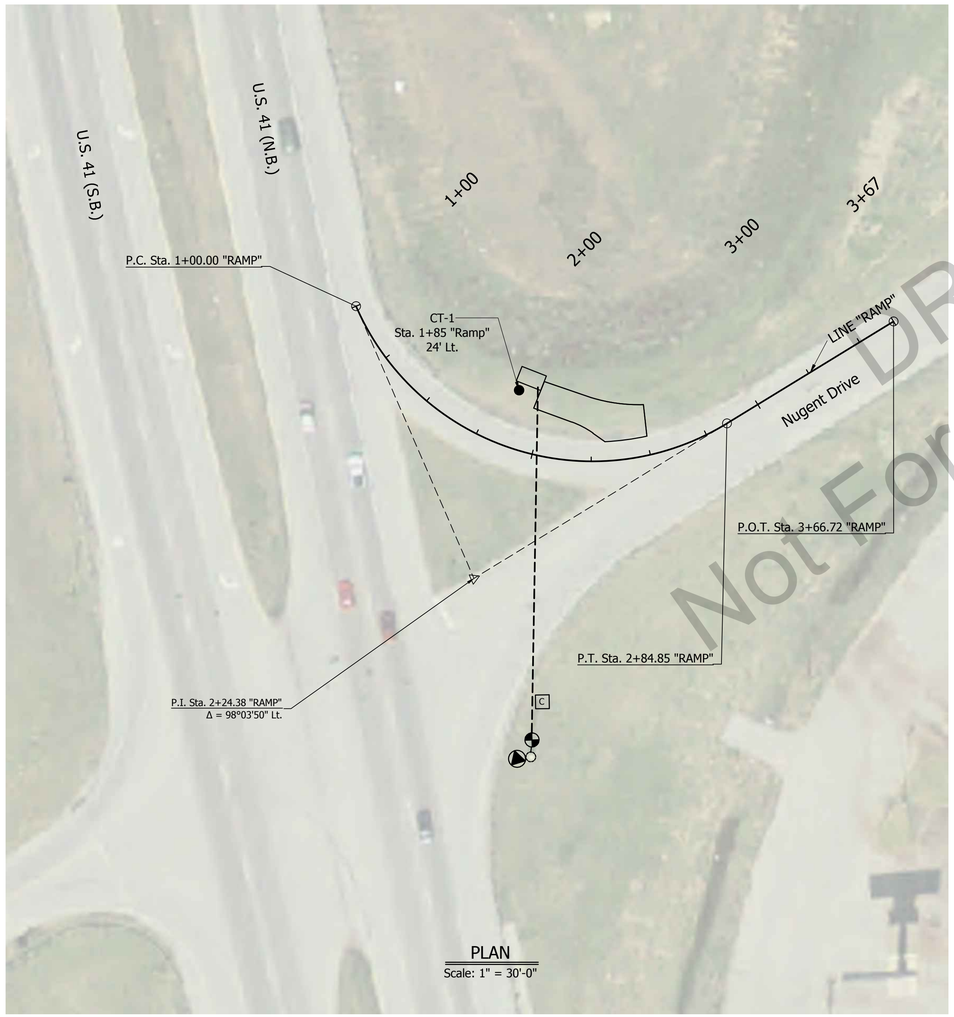
INDIANA
DEPARTMENT OF TRANSPORTATION

US 41 ITS CAMERA SITE
SOIL BORING LOG

HORIZONTAL SCALE	BRIDGE FILE
1"=30'	----
VERTICAL SCALE	DESIGNATION
NA	1592481
SURVEY BOOK	SHEET
	122 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

U:\5605\ProDevelopment\Design\Drawings\Road\5605R701 Camera Site.dwg Bryan Myers Plot:11/8/2016 9:17 AM Save:11/8/2016 6:00 AM



PLAN
Scale: 1" = 30'-0"

LOG OF TEST BORING

Earth Exploration

CLIENT : Butler, Fairman & Seufert, Inc.
DES NO. : 1592481 STRUCTURE #:
PROJECT TYPE:
LOCATION : US 41 Camera Towers
COUNTY : Henderson, KY PROJECT NO.: 1-16-424

BORING NO.: CT-1
SHEET 1 OF 1
NORTHING : 972152
EASTING : 2818579
DATUM : NAD 83 - INWEST
DATE STARTED : 09-08-16
DATE COMPLETED : 09-08-16

ELEVATION :
STATION : 1+85
OFFSET : 24.0 ft Left
LINE : 'RAMP'
DEPTH : 30.0 ft

BORING METHOD : Hollow Stem Auger
RIG TYPE : CME 750X
CASING DIA. : ---
CORE SIZE : ---

HAMMER : Auto
DRILLER/INSP : C. Hutcheson
TEMPERATURE : 81 °F
WEATHER : Partly Cloudy

GROUNDWATER: Encountered at NW At completion NW Caved in at 25.0 ft.

EEI BORING LOG (INDOT FORMAT) 1-16-424.GPJ IN_DOT1.GDT 10/4/16

ELEVATION	SAMPLE DEPTH	SOIL/MATERIAL DESCRIPTION	SAMPLE NUMBER	SPT, per 6"	% RECOVERY	MOISTURE CONTENT	DRY DENSITY, pcf	POCKET PEN., tsf	UNCONF. COMP., tsf	ATTERBERG LIMITS LL	PL	PI	REMARKS
		Topsoil, 0.3'											
	2.5		SS 1	4-4-4	89	21.4		>4.5					
	5.0		SS 2	5-5-7	100	25.7		2.5					
	7.5		SS 3	6-6-8	100	22.7	104.7	>4.5	5.07				
	10.0		SS 4	4-4-8	100	24.6		3.5					
	12.5	**Silty Clay Loam,** medium stiff to stiff, moist, brown, (fill), A-6, Lab No. 17978	SS 5	5-7-8	100	27.2		3.25					
	15.0		SS 6	5-6-8	100	20.4	107.9	4.0	5.09				
	17.5		SS 7	4-5-9	100	26.2		3.5					
	20.0		SS 8	4-5-7	100	27.8	96.1	3.5	4.06				
	22.5												
	25.0	**Silty Clay Loam,** medium stiff, moist, brown, A-6, Lab No. 17990 24.5 26.0	SS 9	2-2-4	100	28.5		1.0					
	27.5	**Silty Loam,** soft, moist, brown, A-6, Lab No. 17980											
	30.0	30.0	SS 10	2-2-3	100	26.6		0.75					
		Bottom of Boring at 30.0 ft											

STANDARD PENETRATION TEST
Driving 2" O.D. Sampler 1'-6" with 140# Hammer falling 30". Count made at 6" intervals. First 6" for seating sampler.

Notes:

1. The entire geotechnical report developed by earth exploration Inc. will be made available to the contractor upon request.
2. See geotechnical report for standard minimum geotechnical parameters for the foundation design at boring CT-1.

DRAFT
Not For Construction

THOMAS S. VANDERWALL REGISTERED No. 10606544 State of INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Thomas S. Vanderwalls 10/31/16
DESIGN ENGINEER DATE

DESIGNED: TV DRAWN: BM
CHECKED: CW CHECKED: TV

INDIANA
DEPARTMENT OF TRANSPORTATION

US 41 ITS CAMERA SITE
SOIL BORING LOGS

HORIZONTAL SCALE	BRIDGE FILE
1"=30'	----
VERTICAL SCALE	DESIGNATION
NA	1592481
SURVEY BOOK	SHEET
	123 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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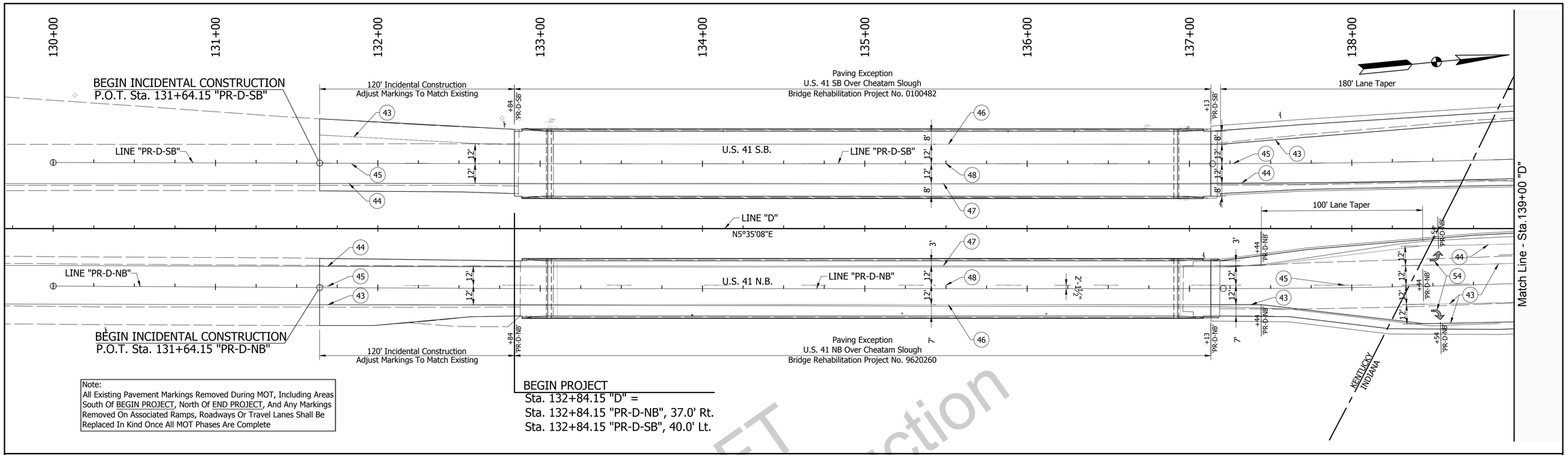
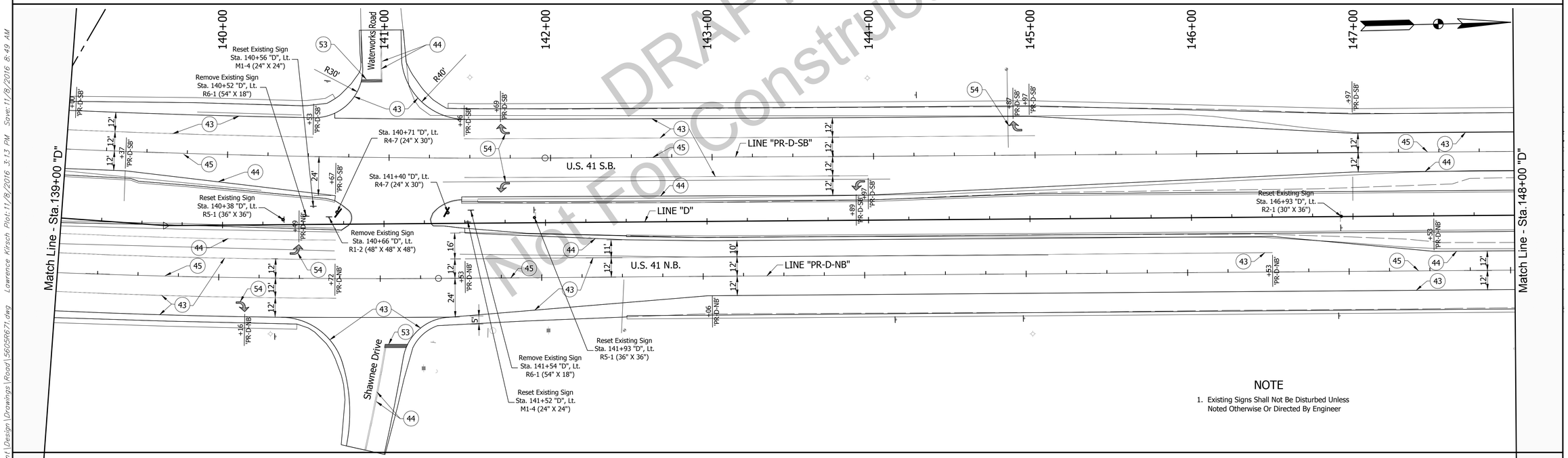


Note:
All Existing Pavement Markings Removed During MOT, Including Areas South Of BEGIN PROJECT, North Of END PROJECT, And Any Markings Removed On Associated Ramps, Roadways Or Travel Lanes Shall Be Replaced In Kind Once All MOT Phases Are Complete

BEGIN PROJECT
Sta. 132+84.15 "D" =
Sta. 132+84.15 "PR-D-NB", 37.0' Rt.
Sta. 132+84.15 "PR-D-SB", 40.0' Lt.



NOTE

1. Existing Signs Shall Not Be Disturbed Unless Noted Otherwise Or Directed By Engineer

DRAFT
Not For Construction

LEGEND

43 Line, Thermoplastic, Solid, White, 4"	47 Line, Multi-Component, Solid, Yellow, 4"	51 Line, Multi-Component, Solid, White, 8", RPMs @ 40ft Sp.
44 Line, Thermoplastic, Solid, Yellow, 4"	48 Line, Multi-Component, Broken, White, 5", RPMs @ 80ft Sp.	52 Transverse Marking, Multi-Component, Solid, White, Crosshatch Line, 24"
45 Line, Thermoplastic, Broken, White, 4", RPMs @ 80ft Sp.	49 Line, Thermoplastic, Solid, White, 8", RPMs @ 40 ft Sp.	53 Transverse Marking, Thermoplastic, Solid, White, Stop Bar, 24"
46 Line, Multi-Component, Solid, White, 4"	50 Transverse Marking, Thermoplastic, Solid, White, Crosshatch Line, 24"	54 Pavement Message Marking, Thermoplastic, Lane Indication Arrow

MICHAEL MAYEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ | DRAWN: LK
CHECKED: MM | CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS & SIGNAGE

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	124 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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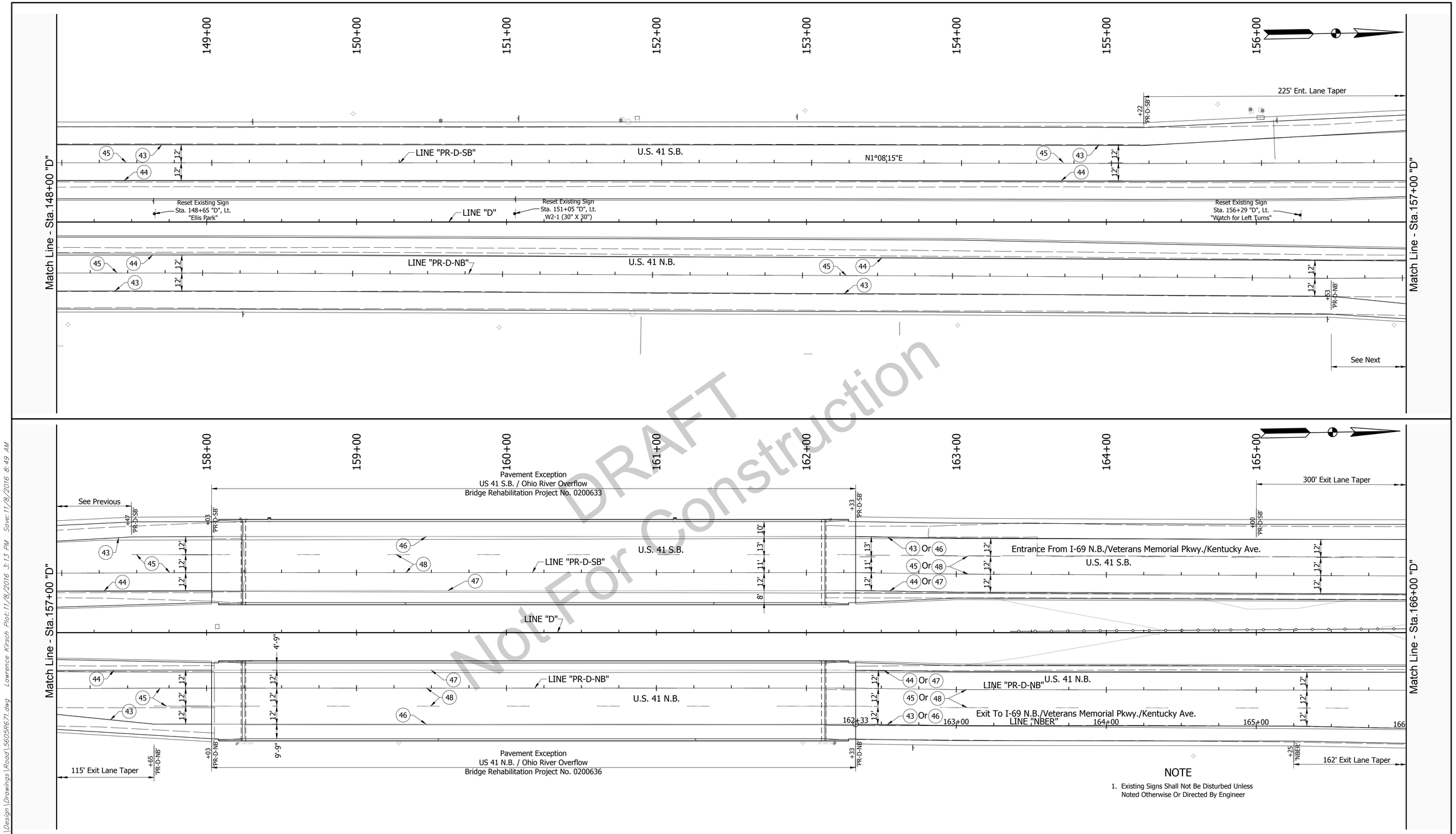

DRAFT
Not For Construction

NOTE

1. Existing Signs Shall Not Be Disturbed Unless Noted Otherwise Or Directed By Engineer

LEGEND

43 Line, Thermoplastic, Solid, White, 4"	47 Line, Multi-Component, Solid, Yellow, 4"	51 Line, Multi-Component, Solid, White, 8", RPMs @ 40ft Sp.
44 Line, Thermoplastic, Solid, Yellow, 4"	48 Line, Multi-Component, Broken, White, 5", RPMs @ 80ft Sp.	52 Transverse Marking, Multi-Component, Solid, White, Crosshatch Line, 24"
45 Line, Thermoplastic, Broken, White, 4", RPMs @ 80ft Sp.	49 Line, Thermoplastic, Solid, White, 8", RPMs @ 40 ft Sp.	53 Transverse Marking, Thermoplastic, Solid, White, Stop Bar, 24"
46 Line, Multi-Component, Solid, White, 4"	50 Transverse Marking, Thermoplastic, Solid, White, Crosshatch Line, 24"	54 Pavement Message Marking, Thermoplastic, Lane Indication Arrow

MICHAEL MAHL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER — DATE 10/31/16

DESIGNED: BZ — DRAWN: LK
CHECKED: MM — CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS & SIGNAGE

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	125 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

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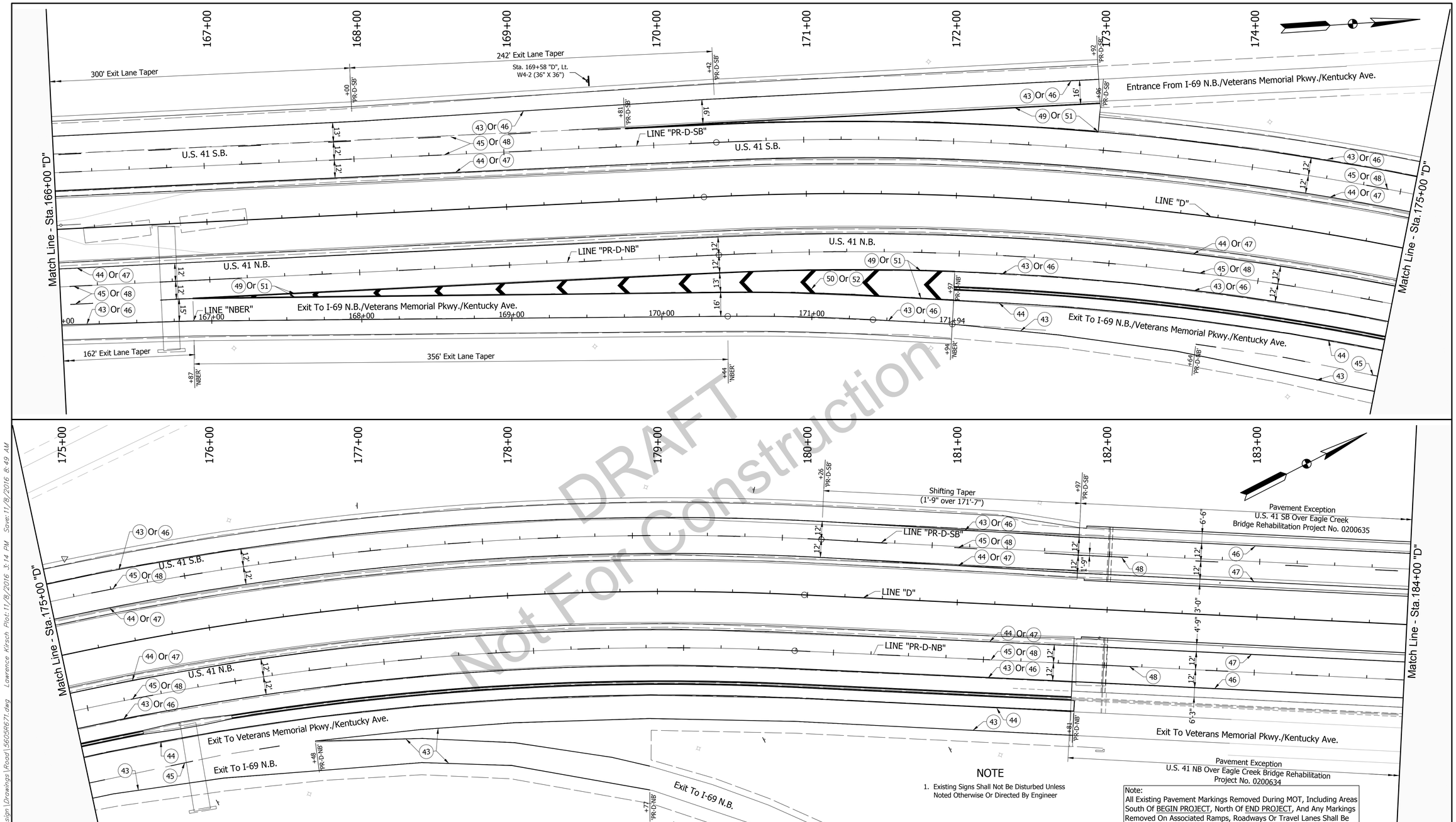

DRAFT
Not For Construction

NOTE

1. Existing Signs Shall Not Be Disturbed Unless Noted Otherwise Or Directed By Engineer

Note:
All Existing Pavement Markings Removed During MOT, Including Areas South Of BEGIN PROJECT, North Of END PROJECT, And Any Markings Removed On Associated Ramps, Roadways Or Travel Lanes Shall Be Replaced In Kind Once All MOT Phases Are Complete

LEGEND

43 Line, Thermoplastic, Solid, White, 4"	47 Line, Multi-Component, Solid, Yellow, 4"	51 Line, Multi-Component, Solid, White, 8", RPMs @ 40ft Sp.
44 Line, Thermoplastic, Solid, Yellow, 4"	48 Line, Multi-Component, Broken, White, 5", RPMs @ 80ft Sp.	52 Transverse Marking, Multi-Component, Solid, White, Crosshatch Line, 24"
45 Line, Thermoplastic, Broken, White, 4", RPMs @ 80ft Sp.	49 Line, Thermoplastic, Solid, White, 8", RPMs @ 40 ft Sp.	53 Transverse Marking, Thermoplastic, Solid, White, Stop Bar, 24"
46 Line, Multi-Component, Solid, White, 4"	50 Transverse Marking, Thermoplastic, Solid, White, Crosshatch Line, 24"	54 Pavement Message Marking, Thermoplastic, Lane Indication Arrow

MICHAEL MAEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER — 10/31/16 DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS & SIGNAGE

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET 126 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

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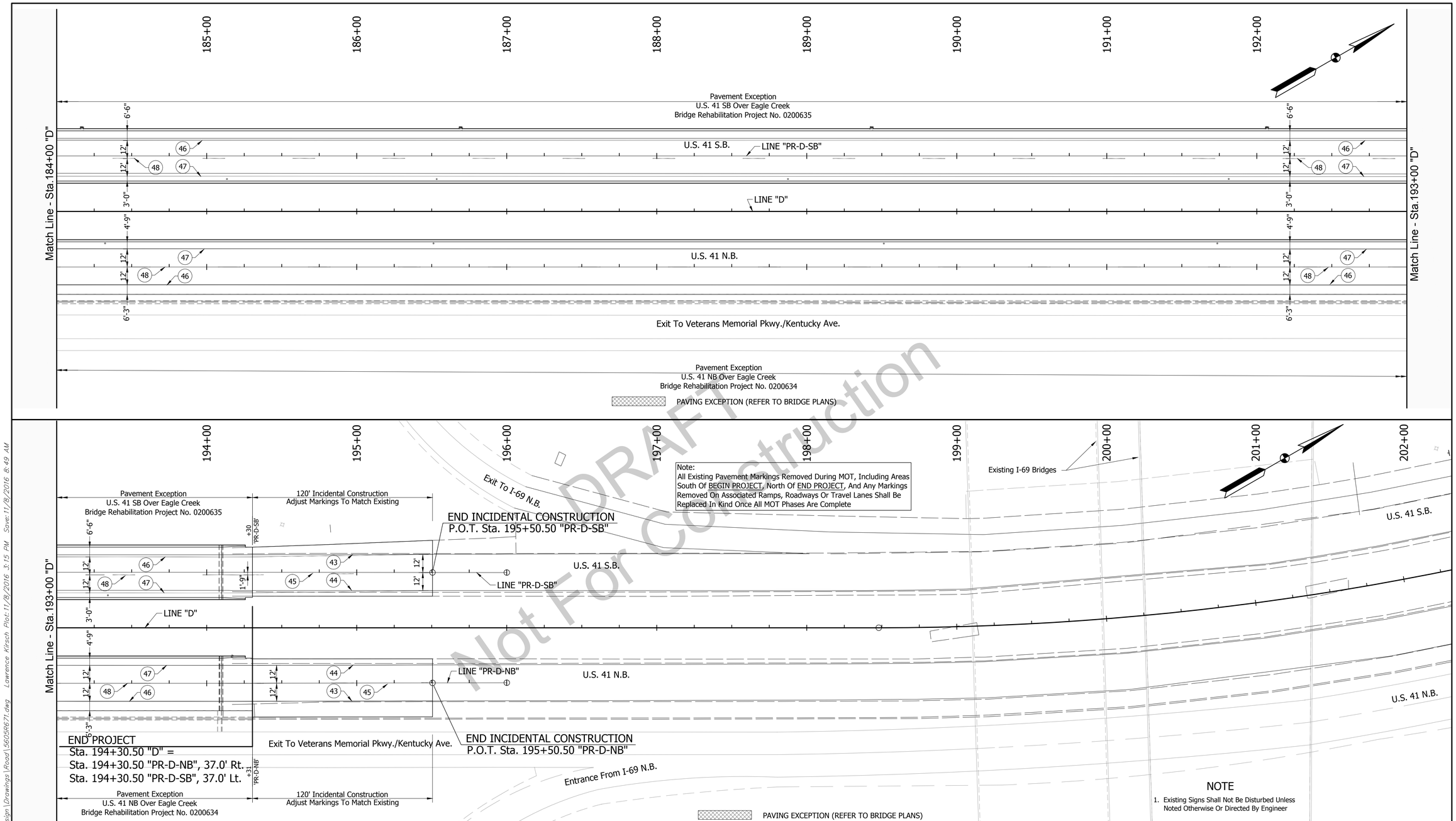

LEGEND

(43) Line, Thermoplastic, Solid, White, 4"	(47) Line, Multi-Component, Solid, Yellow, 4"	(51) Line, Multi-Component, Solid, White, 8", RPMs @ 40ft Sp.
(44) Line, Thermoplastic, Solid, Yellow, 4"	(48) Line, Multi-Component, Broken, White, 5", RPMs @ 80ft Sp.	(52) Transverse Marking, Multi-Component, Solid, White, Crosshatch Line, 24"
(45) Line, Thermoplastic, Broken, White, 4", RPMs @ 80ft Sp.	(49) Line, Thermoplastic, Solid, White, 8", RPMs @ 40 ft Sp.	(53) Transverse Marking, Thermoplastic, Solid, White, Stop Bar, 24"
(46) Line, Multi-Component, Solid, White, 4"	(50) Transverse Marking, Thermoplastic, Solid, White, Crosshatch Line, 24"	(54) Pavement Message Marking, Thermoplastic, Lane Indication Arrow

MICHAEL MAEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: M. Mael 10/31/16
DESIGN ENGINEER DATE

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS & SIGNAGE

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	127 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

U:\5605\ProjDevelopment\Design\Drawings\Road\5605R671.dwg Lawrence Kirsch Plot: 11/8/2016 3:15 PM Save: 11/8/2016 8:49 AM

TEMPORARY EROSION CONTROL TABLE

FROM STATION	TO STATION	LOCATION			TEMPORARY SILT FENCE	TEMPORARY DROP INLET PROTECTION	TEMPORARY STRAW BALE DITCH CHECK	TEMPORARY FILTER BERM	TEMPORARY NO. 2 STONE	TEMPORARY SEED MIXTURE	TEMPORARY MULCH	TEMPORARY GEOTEXTILE	REMARKS
		LEFT	MEDIAN	RIGHT	LFT	EACH	LFT	LFT	TON	LBS	TON	SYS	
Line "D"													
128+10.00	129+40.00	X			130								
128+10.00	129+40.00			X	130								
131+84.00	132+87.00	X			103								
131+85.00	132+84.00			X	100								
137+09.00	140+63.00			X	377								
137+17.00	140+80.00	X			368								
137+75.00			X			1							
141+20.00	158+05.00			X	1710								
141+29.00	158+17.00	X			1697								
145+00.00			X			1							
148+01.00			X			1							
149+50.00			X			1							
153+01.00			X			1							
154+25.00			X				15						
162+23.00	162+71.00		X		251								
162+29.00	178+78.00			X	1602								
162+31.00			X				15						
162+33.00	172+85.00	X			1065								
163+01.00			X			1							
164+62.00	167+80.00		X		320								
170+02.00			X			1							
170+52.00			X			1							
171+48.00			X				15						
172+90.00	181+80.00	X			914								
173+72.00				X		2							
177+02.00			X			1							
178+02.00				X		2							
179+02.00	181+97.00			X	299								
194+20.00	197+07.00		X		289								
196+80.00	199+75.00		X		297								
202+02.00			X			1							
ROADWAY PROJECT LIMITS										507	6.8		
SB CHEATAM SLOUGH								160	100	5	0.1	145	
NB CHEATAM SLOUGH								200	140	5	0.1	215	
SB OHIO RIVER OVERFLOW								280	90	5	0.1	135	
NB OHIO RIVER OVERFLOW								220	90	5	0.1	135	
SB EAGLE CHREEK								80.00	150	7	0.1	225	
NB EAGLE CREEK								80	150	7	0.1	225	
TOTAL					**9653**	**14**	**45**	**1020**	**720**	**541**	**7.4**	**1080**	

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MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK

CHECKED: ACE CHECKED: ACE

INDIANA
DEPARTMENT OF TRANSPORTATION

TEMPORARY EROSION CONTROL TABLE

HORIZONTAL SCALE	BRIDGE FILE
N/A	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	128 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

GUARDRAIL SUMMARY TABLE

FROM (STATION)	TO (STATION)	LEFT	RIGHT	MEDIAN LEFT	MEDIAN RIGHT	W-BEAM GUARDRAIL LENGTH: STANDARD POST AT 6'-3" SPA.	STANDARD POST AT 3'-1 1/2" SPA.	STANDARD POST AT 1'-6 3/4" SPA.	DOUBLE FACED AT 6'-3" SPA.	LONG POST AT 6'-3" SPA.	LONG POST AT 3'-1 1/2" SPA.	SHOP CURVED AT 6'-3" SPA.	NESTED GUARDRAIL	GUARDRAIL TRANSITION TGB	GUARDRAIL END TREATMENT MS	GUARDRAIL END TREATMENT OS	GUARDRAIL END TREATMENT TYPE I	REMARKS
						LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	EACH	EACH	EACH	EACH	
Line "PR-D-SB"																		
131+58.48	132+64.58	X				106.25												Connect To Exist.
132+64.58	132+89.08	X												1				
137+07.72	137+32.80		X											1				
137+07.72	137+32.60	X												1				
137+32.60	139+31.96		X						200									
137+32.80	138+89.46	X				156.25												
138+89.46	139+40.36	X														1		
139+31.96	139+75.00		X												1			
144+99.44	157+80.46	X				1251.25												
157+80.46	158+08.78	X												1				
162+27.42	162+51.89	X												1				
162+27.42	162+52.65		X											1				
162+51.89	172+90.50	X				1050.00												
162+52.65	164+27.40		X			175.00												
164+27.40	164+64.90		X												1			
181+46.81	181+78.05		X			31.25												
181+46.90	181+78.04	X				31.25												
181+78.04	181+84.43	X												1				
181+78.05	181+84.43		X											1				
194+25.07	194+50.07	X												1				
194+25.07	194+50.07		X											1				
194+50.07	195+00.02	X				50.00												
194+50.07	195+50.05		X			200.00									1			
195+00.02	195+58.00	X														1		
Line "PR-D-NB"																		
131+58.25	132+64.50	X				106.25												Connect To Exist.
131+58.71	132+64.69	X				106.25												Connect To Exist.
132+64.50	132+89.58	X												1				
132+64.69	132+89.58	X												1				
137+07.72	137+32.82		X											1				
137+32.82	140+49.28		X			318.75												Connect To Exist.
141+36.97	157+79.98		X			1650.00												Connect To Exist.
154+86.35	155+30.09	X													1			
155+30.09	157+83.79	X				256.25												
157+79.98	158+09.28	X												1				
157+83.79	158+09.28	X												1				
162+27.42	162+54.07		X											1				
162+54.07	172+00.47		X			943.75												
178+78.62	179+15.75		X												1			
179+15.75	181+40.24		X			225.00												
181+40.24	181+84.43		X											1				
TOTAL						**6657.50**			**200.00**					**17**	**5**	**2**		

DRAFT
Not For Construction

U:\5605\ProDevelopment\Design\Drawings\Road\5605R021.dwg Alexandria Riltman Plot:11/8/2016 12:39 PM Save:11/8/2016 12:36 PM

MICHAEL MAYEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK

CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

GUARDRAIL SUMMARY TABLE

HORIZONTAL SCALE	BRIDGE FILE
N/A	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	129 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605

BFS NO.

STRUCTURE DATA

STRUCTURE NUMBER	LOCATION				SIZE	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE	LENGTH	SKEW	FLOWLINE			SERVICE LIFE	SITE DESIGNATION	pH	BACKFILL METHOD	STRUCUTRE BACKFILL	REVETMENT RIPRAP	CONCRETE CLASS "A" FOR STRUCTURES	PIPE END SECTION	GEOTEXTILE	GRATED BOX END SECTION		SAFETY METAL END SECTION		RIM ELEVATION	CONNECT TO STRUCTURE	REMARKS
	STATION	LEFT	RIGHT	CROSS						COVER	UP STREAM	DOWN STREAM																
					IN.			FEET		FEET	ELEV.	ELEV.	YEAR				CYS.	TONS	CYS.	EA.	SYS.	TYPE	EA.	SLOPE	EA.			
Line "D"																												
10	137+75.00	X					Clean & Inspect Existing Inlet																					
110	145+00.00			X	15	II	Inlet, Type E-7	299.0		2.3	374.13	373.48	75	NA	7	3	62.77										11	Connect Pipes To Existing Structure
11	148+00.00			X			Cap Structure																					Connect Pipes To Existing Structure
111	149+50.00	X			15	II	Inlet, Type E-7	146.0		2.3	373.68	373.48	75	NA	7	3	30.65										11	
112	153+00.90	X			15	II	Inlet, Type E-7	2.0		2.2	373.53	373.13	75	NA	7	3	0.42										12	
12	153+00.90			X			Cap Structure																					Connect Pipes To Existing Structure
13	170+02.00		X				Adjust Casting to Grade																					
14	170+52.00		X				Adjust Casting to Grade																					
15	173+72.00		X				Inlet, Type H-5 Modified				Exist.	Exist.																Match Existing Structure Depth
16	177+02.00		X				Clean & Inspect Existing Inlet																					
17	177+87.00		X				Inlet, Type H-5 Modified				Exist.	Exist.																Match Existing Structure Depth

DRAFT
Not For Construction

U:\5605\ProDevelopment\Design\Drawings\Road\5605R931.dwg Alexandria Rittman Plot:11/8/2016 3:19 PM Save:11/8/2016 2:29 PM

MICHAEL MAEL
REGISTERED
No. 860186
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK

CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

STRUCTURE DATA TABLE

HORIZONTAL SCALE	BRIDGE FILE
N/A	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	130 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

UNDERDRAIN TABLE

UNDERDRAIN PIPE											OUTLET PIPE										OUTLET PROTECTORS						
Underdrain Pipe Limits	Type 4 Pipe 4" LFT	Type 4 Pipe 6" LFT	Geotextile for Underdrains SYS	Aggregate for Underdrains CYS	HMA for Underdrains TONS	Special Grade %	Flow Line Elevation @ Underdrain Pipe Limit	Outlet Pipe Required (Y/N)	Connect Underdrain Pipe to Structure No. __	Structure Invert Elevation	45 Degree Elbows Required (1 or 2)	6" Outlet Pipe LFT	Outlet Station	Outlet Elevation	Outlet at Outlet Protector No. 1	Ditch Flow Line Elevation at Outlet Protector	Connect Outlet Pipe to Structure No. __	Structure Invert Elevation	B Borrow for Structure Backfill CYS	HMA for Underdrains TONS	Outlet Protector No. __	Outlet Protector Type 2	Location: Outside Left	Location: Median Left	Location: Median Right	Location: Outside Right	Remarks
Line "PR-D-NB" Right																											
162+30		270.00	185.0	21.4		0.20%	378.33	Y			2	10.0	162+30.00	378.25	1												
165+00							378.87	N																			
165+05		295.00	202.1	23.3		0.20%	378.65	Y			2	10.0	165+05.00	378.55	1												
168+00							379.24	N																			
168+05		295.00	202.1	23.3		0.20%	378.66	Y			2	10.0	168+05.00	378.55	1												
171+00							379.25	N																			
171+05		92.00	63.0	7.3		0.20%	378.53	N																			
171+97							378.35	Y			2	10.0	171+97.00	378.30	1												
172+00		172.00	117.9	13.6		0.20%	378.80	N																			
173+72							378.46	N	15	Existing																	
173+72		413.00	283.0	32.7			378.46	N	15	Existing																	
177+85							380.48	N																			
177+87		391.00	267.9	30.9			380.48	N	17	Existing																	
181+78							384.15	N																			
Line "PR-D-NB" Left																											
162+30		270.00	185.0	21.4		0.20%	378.70	Y			2	50.0	162+30.00														Connect To Right Side For Outlet
165+00							379.24	N																			
165+05		295.00	202.1	23.3		0.20%	378.97	Y			2	50.0	165+05.00														Connect To Right Side For Outlet
168+00							379.56	N																			
168+05		295.00	202.1	23.3			379.37	Y			2	58.0	168+05.00	379.65													Connect To Right Side For Outlet
171+00							379.96	N																			
171+05		92.00	63.0	7.3		0.20%	380.85	Y																			
171+97							380.66	N			2	73.0	171+97.00														Connect To Right Side For Outlet
172+00		172.00	117.9	13.6		20.00%	380.85	N																			
173+72							380.50	N	15	Existing	2	38.0	173+72.00	378.46													
173+72		413.00	283.0	32.7			380.82	N	15	Existing	2	38.0	173+72.00	378.46													
177+85							380.84	N																			
177+87		391.00	267.9	30.9			382.84	N	17	Existing	2	38.0	177+87.00	380.50													Special 0.20% Grade Sta. 179+40 To 181+78
181+78							384.77	N																			
SUBTOTAL		**3856**	**2642**	**305**							**22**	**385**			**4**												

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U:\5605\ProjDevelopment\Design\Drawings\Road\5605R941.dwg Alexandria Rittman Plot: 11/8/2016 12:57 PM Save: 11/8/2016 10:27 AM

MICHAEL MALEK REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK

CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

UNDERDRAIN TABLE

HORIZONTAL SCALE	BRIDGE FILE
N/A	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	131 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

UNDERDRAIN TABLE

UNDERDRAIN PIPE											OUTLET PIPE										OUTLET PROTECTORS						
Underdrain Pipe Limits	Type 4 Pipe 4" LFT	Type 4 Pipe 6" LFT	Geotextile for Underdrains SYS	Aggregate for Underdrains CYS	HMA for Underdrains TONS	Special Grade %	Flow Line Elevation @ Underdrain Pipe Limit	Outlet Pipe Required (Y/N)	Connect Underdrain Pipe to Structure No. ___	Structure Invert Elevation	45 Degree Elbows Required (1 or 2)	6" Outlet Pipe LFT	Outlet Station	Outlet Elevation	Outlet at Outlet Protector No. 1	Ditch Flow Line Elevation at Outlet Protector	Connect Outlet Pipe to Structure No. ___	Structure Invert Elevation	B Borrow for Structure Backfill CYS	HMA for Underdrains TONS	Outlet Protector No. ___	Outlet Protector Type 2	Location: Outside Left	Location: Median Left	Location: Median Right	Location: Outside Right	Remarks
Line "PR-D-SB" Right																											
162+35		290.00	198.7	23.0			378.30	Y			2	50.0	162+35.00														Connect To Left Side For Outlet
165+25							378.90	N																			
165+30		285.00	195.3	22.6			379.07	Y			2	50.0	165+30.00														Connect To Left Side For Outlet
168+15							380.27	N																			
168+20		180.00	123.3	14.2			380.35	N			2	60.0	168+20.00														Connect To Left Side For Outlet
170+00							380.38	Y																			
170+02		350.00	239.8	27.7			380.38	Y	13	Existing	2	24.0	170+02.00	379.00													
173+52							381.75	N																			
173+54		348.00	238.4	27.5		0.20%	381.95	N																			
177+02							381.25	Y	16	Existing	2	24.0	177+02.00	381.18													
177+02		238.00	163.1	18.8		0.20%	381.25	Y	16	Existing	2	24.0	177+02.00	381.18													
179+40							381.82	N																			
179+95		190.00	130.2	15.0		0.20%	384.00	N																			
181+85							384.40	Y			2	40.0	181+85.00														Connect To Left Side For Outlet
Line "PR-D-SB" Left																											
162+35		290.00	198.7	23.0			377.55	Y			2	10.0	162+35.00	377.45	1												
165+25							378.40	N																			
165+30		285.00	195.3	22.6			378.77	Y			2	10.0	165+30.00	378.65	1												
168+15							380.08	N																			
168+20		240.00	164.4	19.0			380.00	Y			2	10.0	168+20.00	378.85	1												
170+60							382.08	N																			
170+65		225.00	154.2	17.8			381.90	Y			2	10.0	170+65.00	381.80	1												
172+90							382.53	N																			
173+00		295.00	202.1	23.3		0.20%	383.36	N																			Connect To Left Side For Outlet
175+95							382.77	Y			2	25.0	175+95.00	382.65	1												
176+00		295.00	202.1	23.3		0.20%	384.51	Y			2	16.0	176+00.00	384.36	1												
178+95							385.10	N																			
179+00		295.00	202.1	23.3			384.88	N																			
181+95							384.29	Y			2	16.0	181+95.00	384.15	1												
SUBTOTAL		**3806**	**2608**	**301**							**28**	**369**			**7**												
TOTAL		**7662**	**5250**	**606**							**50**	**754**			**11**												

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U:\5605\ProjDevelopment\Design\Drawings\Road\5605R961.dwg Alexandria Rittman Plot: 11/8/2016 12:57 PM Save: 11/8/2016 10:31 AM

MICHAEL MAEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK

CHECKED: MM CHECKED: MZ

INDIANA
DEPARTMENT OF TRANSPORTATION

UNDERDRAIN TABLE

HORIZONTAL SCALE	BRIDGE FILE
N/A	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	132 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

PCCP ALTERNATE BID - SUMMARY OF QUANTITIES AND APPROACH TABLE

LOCATION (STATION)	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH	LENGTH	RADII	SURFACE BEYOND R/W LINE			GRADE		EXCAVATION		QC/QA HMA FOR SHOULDER			QC/QA HMA FOR OVERLAY		MAINLINE		QC/QA HMA FOR MAINLINE				QC/QA HMA FOR SHOULDER				TEMP. PAVEMENT			HMA FOR APPR.		SUBGRADE TREATMENT TYPE IB	SUBGRADE TREATMENT TYPE IC	ASPHALT MATERIAL FOR		COMPACTED AGGREGATE FOR BASE NO. 53			MILLING, ASPHALT, 1 1/2 IN	D-1 CONTRACTION JOINTS	MILLED PCCP CORRUGATIONS	MILLED HMA CORRUGATIONS	REMARKS
					COMPACTED AGGREGATE BASE	HMA	CONCRETE					3, 70, SURFACE 9.5 mm	3, 70, INTERMEDIATE 19.0 mm	2, 64, BASE 19.0 mm	4, 76, SURFACE 9.5 mm- SMA	4, 76, INTERMEDIATE 19.0 mm	QC/QA PCCP, 10.5 IN.	SUBBASE FOR PCCP	4, 76, SURFACE 9.5 mm- SMA	4, 76, INTERMEDIATE 19.0 mm	4, 64, BASE 19.0 mm	5, 76, INTERMEDIATE OG 19.0 mm	2, 64, SURFACE 9.5 mm	2, 64, INTERMEDIATE 19.0 mm	1, 64, BASE 19.0 mm	5, 76, INTERMEDIATE OG 19.0 mm	HMA SURFACE, TYPE D	HMA INTERMEDIATE, TYPE D	HMA INTERMEDIATE, TYPE D	HMA FOR APPR, TYPE D SURFACE 9.5 mm	HMA FOR APPR., TYPE D INTERMEDIATE 19.0 mm			PRIME COAT	TACK COAT								
												LBS. PER SYD.							LBS. PER SYD.				LBS. PER SYD.				LBS. PER SYD.			LBS. PER SYD.						DEPTH							
								1	2	CUT	FILL	165	275	660	165	275			165	330	385	250	165	330	385	250	165	275	660	165	275					13.75"	10.5"	VAR.					
		FEET	FEET	FEET				%	%	CYS.	CYS.	TONS	TONS	TONS	TONS	TONS	SYS.	CYS.	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	SYS.	SYS.	TONS	TONS	SYS.	SYS.	SYS	SYS	LFT	LFT	LFT	
Line "PR-D-SB"																																											
37+36.36	38+38.86											9	16	41																			180		0.06							200	
92+62.96	93+64.21											11	18	46																			197		0.07							200	
131+64.15	132+84.15														46	77																			0.28				556			240	
137+13.15	137+19.15																		2	4	9	3	0.5	1	3	1						28			0.03							12	
137+19.15	140+70.00														149	250																			0.90	162		270	1794			694	
140+70.00	158+03.35														824	1374																			4.96				9912			3312	
140+90.87	M.P.R.A					X																									22	36			0.20				265				
141+45.00	158+03.35											344	580	1424																			5490		2.13	799		1269					
162+32.85	181+97.57																10395	2626														10503					913	1892		6086	3893		
194+30.50	195+50.50														39	64																			0.23				464			240	
Line "PR-D-NB"																																											
08+12.97	38+54.53											384	654	1641																			6815		2.43							6060	
131+64.15	132+84.15														42	70																			0.25				507			240	
137+13.15	137+19.15																		2	3	7	2	0.5	1	2	1						24			0.03							12	
137+19.15	140+70.00														174	292																			1.10	159		268	2095.8			706	
140+70.00	158+03.35														449	751																			2.70				5399			200	
140+94.46	M.P.R.A.					X																									34	56			0.13				408				
142+52.62	158+03.35											331	558	1375																			5351		2.05	518		1185				3102	
162+32.85	181+97.57											62	105	264			10464	2647														10586	1097		0.40		553	1701		6107	3892	982	
194+30.50	195+50.50														43	71																			0.26				517			240	
MOT "D"																																											
Phase 00																											38	66	173				799		0.90								
Phase 1																											556	942	2340				8687		10.8								
TOTAL												**1141**	**1931**	**4791**	**1766**	**2949**	**20859**	**5273**	**4**	**7**	**16**	**5**	**1**	**2**	**5**	**2**	**594**	**1008**	**2513**	**56**	**92**	**21141**	**28616**		**30.0**	**1638**	**1466**	**6585**	**21918**	**12193**	**7785**	**16440**	

PCCP ALTERNATE BID - PAVEMENT MARKINGS

FROM STATION	TO STATION	THERMOPLASTIC SOLID WHITE, 4"	THERMOPLASTIC SOLID YELLOW, 4"	THERMOPLASTIC BROKEN WHITE, 4"	MULTI-COMPONENT SOLID WHITE, 4"	MULTI-COMPONENT SOLID YELLOW, 4"	MULTI-COMPONENT BROKEN WHITE, 4"	MULTI-COMPONENT SOLID WHITE, 8"	TRANSVERSE MARKINGS MULTI-COMPONENT CROSSHATCH LINE, 24"	THERMOPLASTIC SOLID WHITE, 8"	TRANSVERSE MARKINGS THERMOPLASTIC CROSSHATCH LINE, 24"	TRANSVERSE MARKINGS THERMOPLASTIC STOP BAR, 24"	PVMNT. MESSAGE THERMOPLASTIC LANE INDICATION ARROW	MULTI-COMPONENT DOTTED WHITE, 4"	THERMOPLASTIC DOTTED WHITE, 4"	
		LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	EACH	LFT	LFT	
Line "D"																
FOR MOT		26520	23800	5950									12			
131+64	132+84	240	240	60												
132+84	137+13				858	858	214									
137+13	158+03	5593	4021	1063									8			
Waterworks Rd.		150	61									13				
Shawnee Dr.		246	129									14				
158+03	162+33				859	859	430									
162+33	182+79	1389	951	63	3892	3892	1274	1652	162							
182+79	194+31				2503	2503	626									
194+31	195+50	240	240	60												
FOR MOT		2600	3000	850	2200	2100	160									
TOTAL		**36978**	**32442**	**8046**	**10312**	**10212**	**2704**	**1652**	**162**			**27**	**20**			

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Not For Construction

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK

CHECKED: MM CHECKED: BZ

INDIANA DEPARTMENT OF TRANSPORTATION

PCCP ALTERNATE - QUANTITY TABLES

HORIZONTAL SCALE	BRIDGE FILE
N/A	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	133 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

U:\5605\Pro\Development\Design\Drawings\Road\5605R971.dwg Alexandria Rittman Plot:11/8/2016 4:00 PM Save:11/8/2016 2:23 PM

HMA ALTERNATE BID - SUMMARY OF QUANTITIES AND APPROACH TABLE

LOCATION (STATION)	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH	LENGTH	RADII	SURFACE BEYOND R/W LINE			GRADE		EXCAVATION		QC/QA HMA FOR SHOULDER			QC/QA HMA FOR OVERLAY		QC/QA HMA FOR MAINLINE				QC/QA HMA FOR SHOULDER				TEMP. PAVEMENT			HMA FOR APPR.		SUBGRADE TREATMENT TYPE IB	SUBGRADE TREATMENT TYPE IC	ASPHALT MATERIAL FOR		COMPACTED AGGREGATE FOR BASE NO. 53		MILLING, ASPHALT, 1 1/2 IN	MILLED HMA CORRUGATIONS				REMARKS
					COMPACTED AGGREGATE BASE	HMA	CONCRETE					3, 70, SURFACE 9.5 mm	3, 70, INTERMEDIATE 19.0 mm	2, 64, BASE 19.0 mm	4, 76, SURFACE 9.5 mm- SMA	4, 76, INTERMEDIATE 19.0 mm	4, 76, SURFACE 9.5 mm- SMA	4, 76, INTERMEDIATE 19.0 mm	4, 64, BASE 19.0 mm	5, 76, INTERMEDIATE OG 19.0 mm	2, 64, SURFACE 9.5 mm	2, 64, INTERMEDIATE 19.0 mm	1, 64, BASE 19.0 mm	5, 76, INTERMEDIATE OG 19.0 mm	HMA SURFACE, TYPE D	HMA INTERMEDIATE, TYPE D	HMA INTERMEDIATE, TYPE D	HMA FOR APPR, TYPE D SURFACE 9.5 mm	HMA FOR APPR, TYPE D INTERMEDIATE 19.0 mm			PRIME COAT	TACK COAT								
												LBS. PER SYD.					LBS. PER SYD.				LBS. PER SYD.				LBS. PER SYD.			LBS. PER SYD.						DEPTH							
								1	2	CUT	FILL	165	275	660	165	275	165	330	385	250	165	330	385	250	165	275	660	165	275					13.75"	VAR.						
		FEET	FEET	FEET				%	%	CYS.	CYS.	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	SYS.	SYS.	TONS	TONS	SYS	SYS	SYS					
Line "PR-D-SB"																																									
37+36.36	38+38.86											9	16	41																	180		0.06				200				
92+62.96	93+64.21											11	18	46																	197		0.07				200				
131+64.15	132+84.15														46	77																	0.28			556	240				
137+13.15	137+19.15																2	4	9	3	0.5	1	3	1									0.03				12				
137+19.15	140+70.00														149	250																	0.9	162	270	1794	694				
140+70.00	158+03.35														824	1374																	4.96			9912	3312				
140+90.87	M.P.R.A					X																						22	36				0.20			265					
141+45.00	158+03.35											344	580	1424																	5490		2.13	799	1269						
162+32.85	181+97.57																662	1323	3139	1016	182	368	863	293						10504			10.4	913	2478		3893				
194+30.50	195+50.50														39	64																	0.23			464	240				
Line "PR-D-NB"																																									
08+12.97	38+54.53											384	654	1641																	6815		2.43				6060				
131+64.15	132+84.15														42	70																	0.25			507	240				
137+13.15	137+19.15																2	3	7	2	0.5	1	2	1									0.03				12				
137+19.15	140+70.00														174	292																	1.10	159	268	2096	706				
140+70.00	158+03.35														449	751																	2.70	518	1185	5399	200				
140+94.46	M.P.R.A.					X																						34	56				0.13			408					
142+52.62	158+03.35											331	558	1375																	5351		2.05				3102				
162+32.85	181+97.57											62	105	264			670	1338	3173	1028	90	181	398	145						11368	1097		9.66	553	2350		4874				
194+30.50	195+50.50														43	71																	0.26			517	240				
MOT "D"																																									
Phase 00																									38	66	173				799		0.9								
Phase 1												557	943	2340																	8687		10.9								
TOTAL												**1698**	**2874**	**7131**	**1766**	**2949**	**1336**	**2668**	**6328**	**2049**	**273**	**551**	**1266**	**440**	**38**	**66**	**173**	**56**	**92**	**21872**	**28616**		**49.7**	**3104**	**7820**	**21918**	**24225**				

HMA ALTERNATE BID - PAVEMENT MARKINGS

FROM STATION	TO STATION	THERMOPLASTIC SOLID WHITE, 4"	THERMOPLASTIC SOLID YELLOW, 4"	THERMOPLASTIC BROKEN WHITE, 4"	MULTI-COMPONENT SOLID WHITE, 4"	MULTI-COMPONENT SOLID YELLOW, 4"	MULTI-COMPONENT BROKEN WHITE, 4"	MULTI-COMPONENT SOLID WHITE, 8"	TRANSVERSE MARKINGS MULTI-COMPONENT CROSSHATCH LINE, 24"	THERMOPLASTIC SOLID WHITE, 8"	TRANSVERSE MARKINGS THERMOPLASTIC CROSSHATCH LINE, 24"	TRANSVERSE MARKINGS THERMOPLASTIC STOP BAR, 24"	PVMNT. MESSAGE THERMOPLASTIC LANE INDICATION ARROW	MULTI-COMPONENT DOTTED WHITE, 4"	THERMOPLASTIC DOTTED WHITE, 4"	
		LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	LFT	EACH	LFT	LFT	
Line "D"																
FOR MOT		26520	23800	5950									12			
131+64	132+84	240	240	60												
132+84	137+13				858	858	214									
137+13	158+03	5593	4021	1063									8			
Waterworks Rd.		150	61									13				
Shawnee Dr.		246	129									14				
158+03	162+33				859	859	430									
162+33	182+79	5280	4843	1337						1652	162					
182+79	194+31				2503	2503	626									
194+31	195+50	240	240	60												
FOR MOT		2600	3000	850	2200	2100	160									
TOTAL		**40869**	**36334**	**9320**	**6420**	**6320**	**1430**			**1652**	**162**	**27**	**20**			

DRAFT
Not For Construction

MICHAEL MATEL REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK

CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

HMA ALTERNATE - QUANTITY TABLES

HORIZONTAL SCALE	BRIDGE FILE
N/A	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	134 OF 164
CONTRACT	PROJECT
B-33539	B-33539

BFS NO. 5605

U:\5605\ProDevelopment\Design\Drawings\Road\5605R91.dwg Alexandria Rittman Plot:11/8/2016 4:01 PM Save:11/8/2016 2:24 PM

SHEET SIGN & POST SUMMARY

SIGN							POST									
SIGN LOCATION	SIGN CODE	SIGN SIZE (IN. X IN.)	GROUND-MOUNTED SIGN AREA (SFT)			MOUNTED ON PANEL SIGN, AREA (SFT)	U CHANNEL				SQUARE					
											2 1/4" x 2 1/4" x 12 GA. (TYPE 1)			2" x 2" x 12 GA. (TYPE 2)		
							POST LENGTH		POST LENGTH		REINFORCED ANCHOR			REINFORCED ANCHOR		
			0.080	0.100	0.125	0.080	1	1	TYPE A	TYPE B	POST LENGTH (FT)			POST LENGTH (FT)		
							FT	FT	FT	FT	1	2	TOTAL	1	2	TOTAL
Line "D"																
140+38	R5-1	36 X 36	Reset Existing Sign								13.00		13.00			
140+52	R6-1	54 X 18	Remove Existing Sign													
140+56	M1-4	24 X 24	Reset Existing Sign								13.25		13.25			
	M6-1	21 X 15	Reset Existing Sign													
	M3-1	24 X 12	Reset Existing Sign													
140+66	R1-2	48 X 48 X 48	Remove Existing Sign													
140+71	R4-7	24 X 30	5.00								12.50		12.50			
141+40	R4-7	24 X 30	5.00								12.50		12.50			
141+52	M1-4	24 X 24	Reset Existing Sign								13.25		13.25			
	M6-1	21 X 15	Reset Existing Sign													
	M3-1	24 X 12	Reset Existing Sign													
141+54	R6-1	54 X 18	Remove Existing Sign													
141+93	R5-1	36 X 36	Reset Existing Sign								13.00		13.00			
146+93	R2-1	30 X 36	Reset Existing Sign								13.00		13.00			
148+65	Ellis Park	72 X 18	Reset Existing Sign											11.50	12.00	23.50
151+05	W2-1	30 X 30	Reset Existing Sign								12.50		12.50			
156+29	Watch for Left Turns	36 X 36	Reset Existing Sign								13.00		13.00			
169+58	W4-2	36 X 36		9.00							13.00		13.00			
TOTAL			**10.00**	**9.00**									**129.00**			**23.50**

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U:\5605\ProjDevelopment\Design\Drawings\Road\5605R985.dwg Alexandria Rittman Plot: 11/8/2016 12:57 PM Save: 11/8/2016 10:42 AM

MICHAEL M. MALEY REGISTERED No. 860186 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER 10/31/16 DATE

DESIGNED: BZ DRAWN: LK

CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

SIGN SUMMARY TABLE

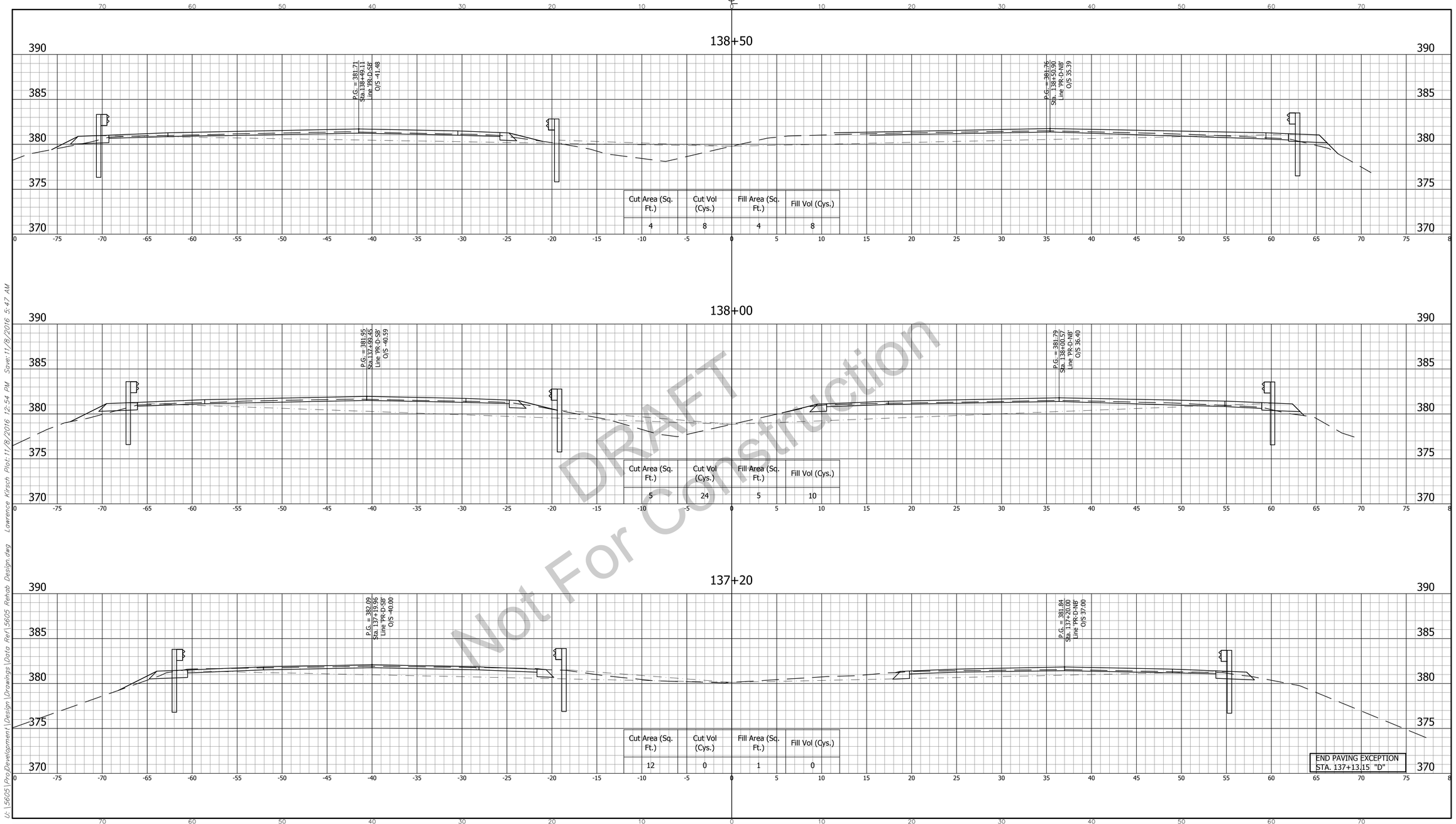
HORIZONTAL SCALE	BRIDGE FILE
N/A	----
VERTICAL SCALE	DESIGNATION
N/A	1592481
SURVEY BOOK	SHEET
	135 OF 164
CONTRACT	PROJECT
B-33539	1592481

BFS NO. 5605

CROSS SECTIONS

SCALE: 1" = 5'

CUT ℄ FILL



DRAFT
Not For Construction

U:\5605\Proj\Development\Design\Drawings\Data Ref\5605 Rehab Design.dwg Lawrence Kirsch Plot:11/8/2016 12:54 PM Save:11/8/2016 5:47 AM

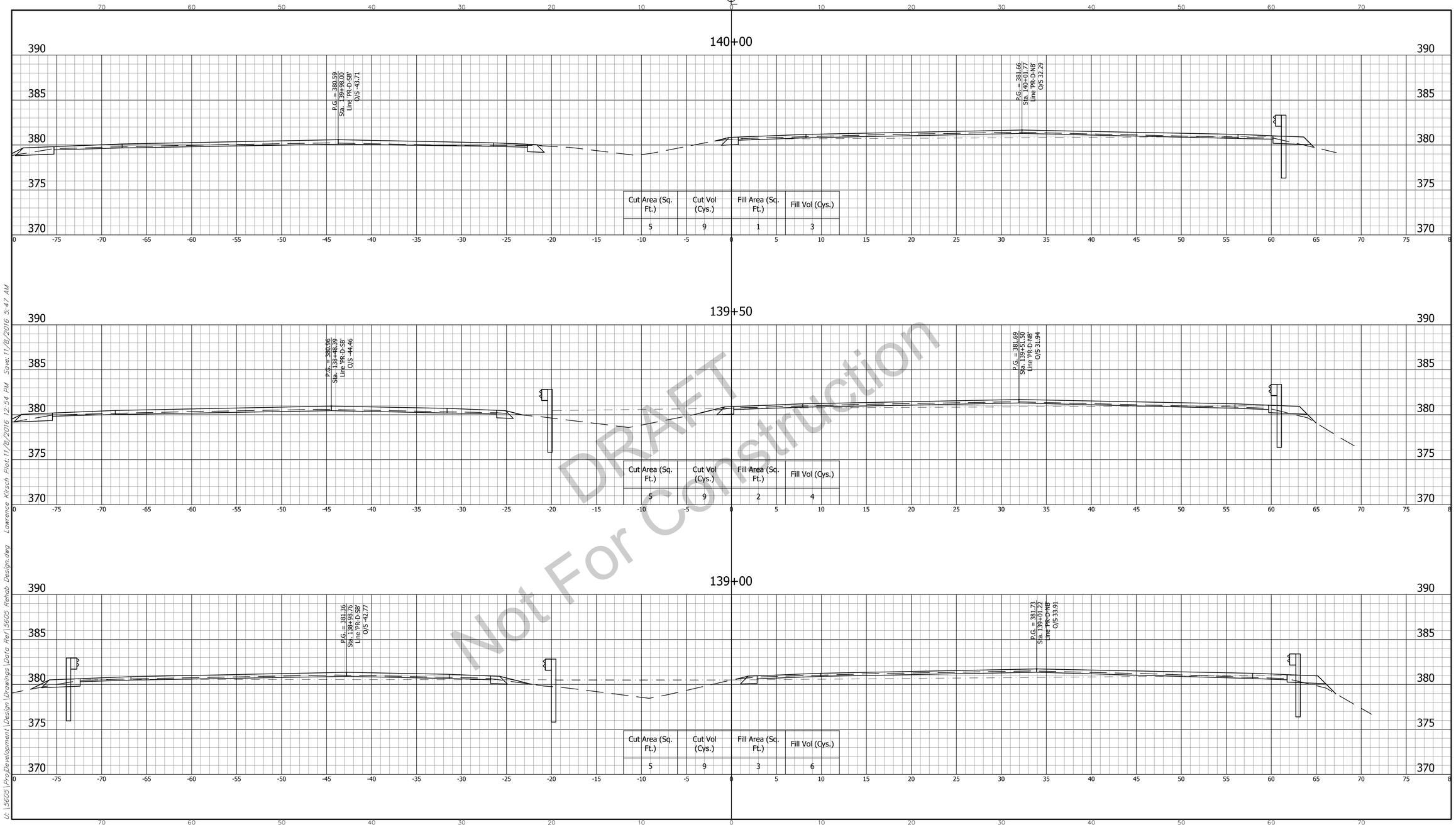
CROSS SECTIONS LINE "D"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 5'	BRIDGE FILE: N/A
		VERTICAL SCALE: 1" = 5'	DESIGNATION: 1592481
DESIGNED: BZ / DRAWN: LK	U.S. 41 REHABILATION SECTION CHEATAM SLOUGH TO OHIO RIVER OVERFLOW	SURVEY BOOK	SHEET: 136 OF 164
CHECKED: MM / CHECKED: BZ		CONTRACT: B-33539	PROJECT: 1592481

5605 BFS NO.

CROSS SECTIONS

SCALE: 1" = 5'

CUT ℄ FILL



DRAFT
Not For Construction

U:\5605\Proj\Development\Design\Drawings\Data Ref\5605 Rehab Design.dwg Lawrence Kirsch Plot:11/8/2016 12:54 PM Save:11/8/2016 5:47 AM

CROSS SECTIONS LINE "D"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 5'	BRIDGE FILE: N/A
		VERTICAL SCALE: 1" = 5'	DESIGNATION: 1592481
DESIGNED: BZ DRAWN: LK	U.S. 41 REHABILATION SECTION CHEATAM SLOUGH TO OHIO RIVER OVERFLOW	SURVEY BOOK	SHEET: 137 OF 164
CHECKED: MM CHECKED: BZ		CONTRACT: B-33539	PROJECT: 1592481

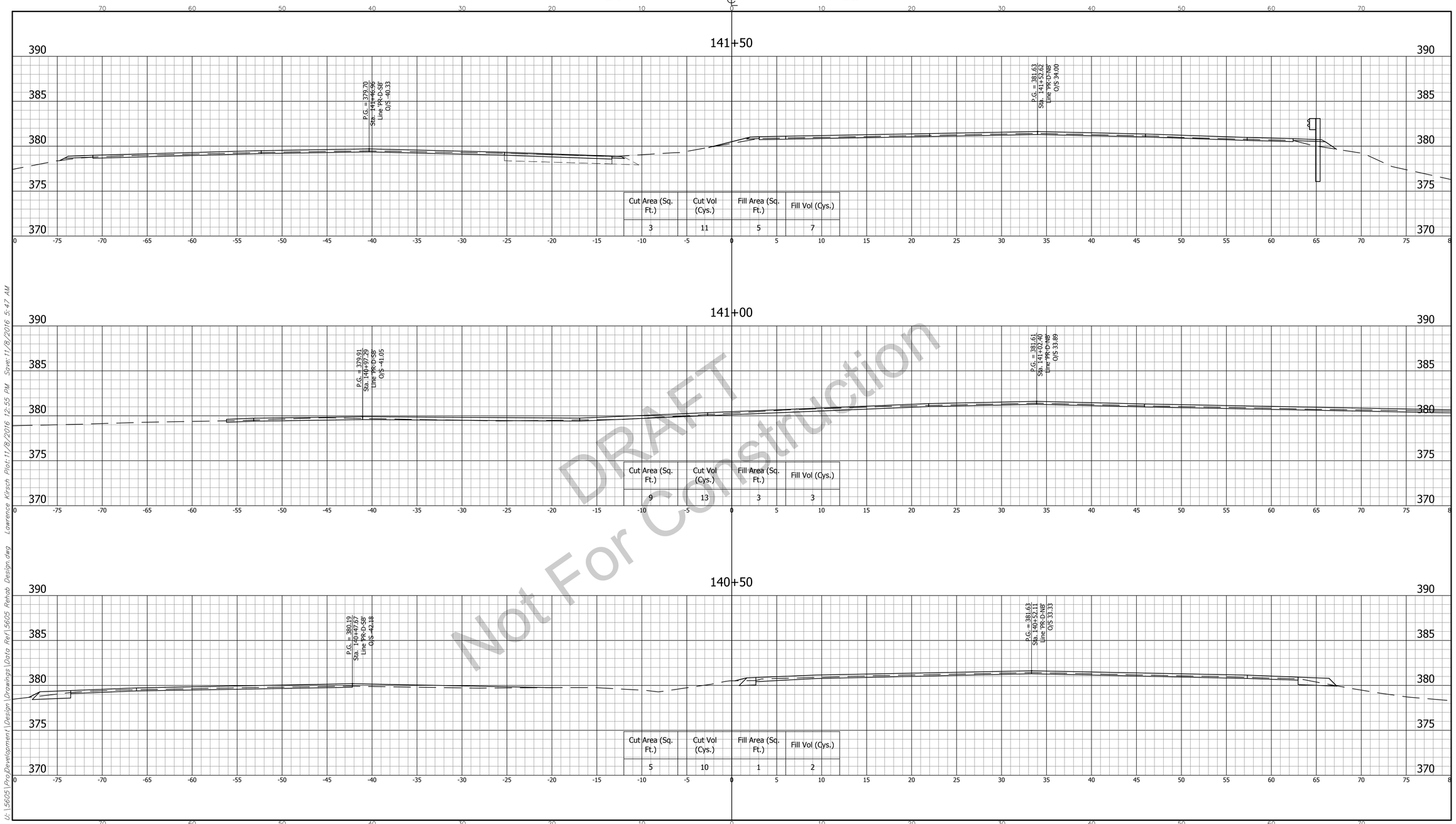
5605

BFS NO.

CROSS SECTIONS

SCALE: 1" = 5'

CUT ℄ FILL



Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
3	11	5	7

Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
9	13	3	3

Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
5	10	1	2

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U:\5605\ProDevelopment\Design\Drawings\Data Ref\5605 Rehab Design.dwg Lawrence Kirsch Plot: 11/8/2016 12:55 PM Save: 11/8/2016 5:47 AM

CROSS SECTIONS
LINE "D"

DESIGNED: BZ DRAWN: LK
CHECKED: MM CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

U.S. 41
REHABILITATION SECTION
CHEATAM SLOUGH TO OHIO RIVER OVERFLOW

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	1592481
SURVEY BOOK	SHEET
	138 OF 164
CONTRACT	PROJECT
B-33539	1592481

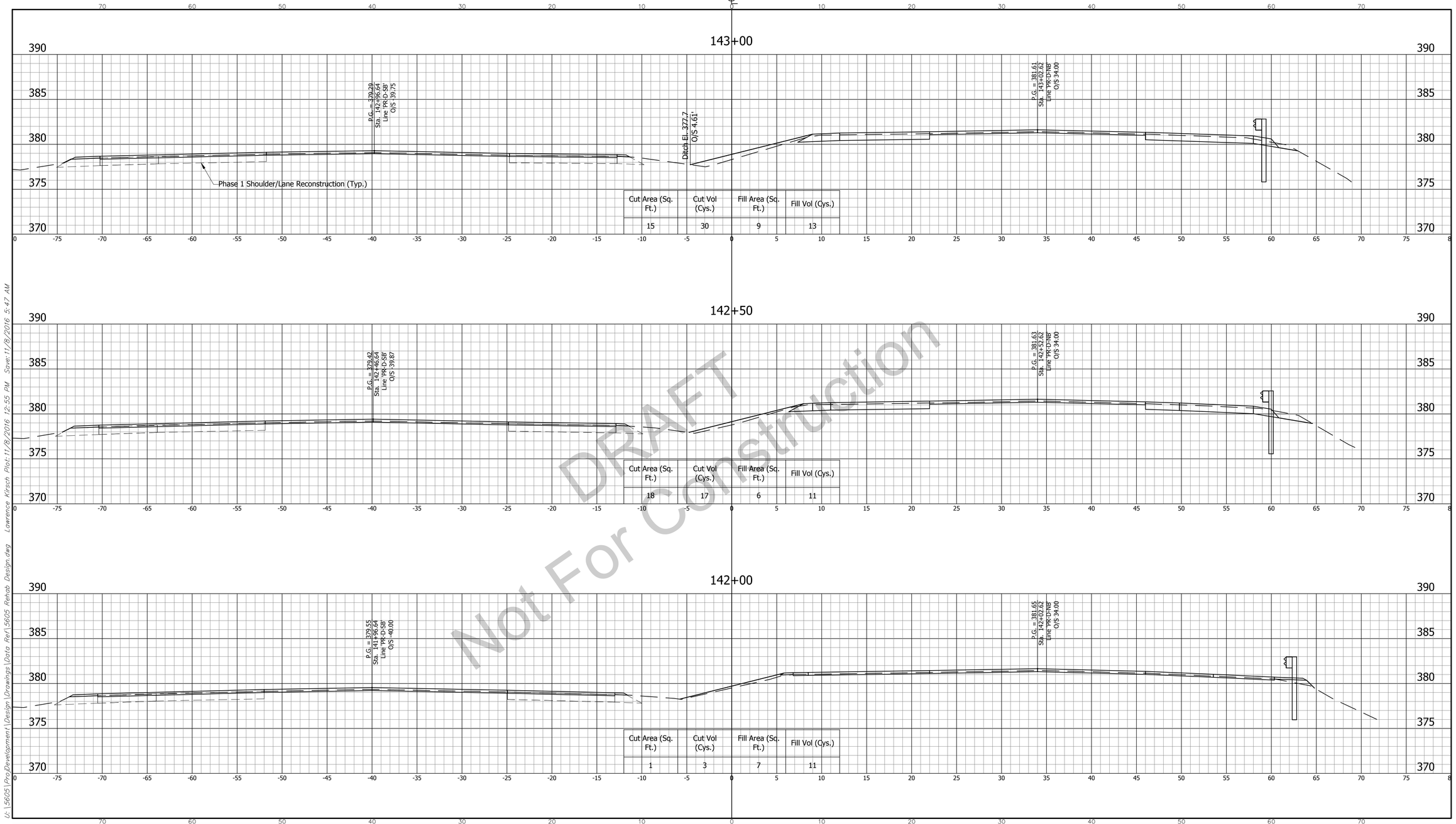
5605

BFS NO.

CROSS SECTIONS

SCALE: 1" = 5'

CUT ℄ FILL



DRAFT
Not For Construction

U:\5605\Proj\Development\Design\Drawings\Data Ref\5605 Rehab Design.dwg Lawrence Kirsch Plot:11/8/2016 12:55 PM Save:11/8/2016 5:47 AM

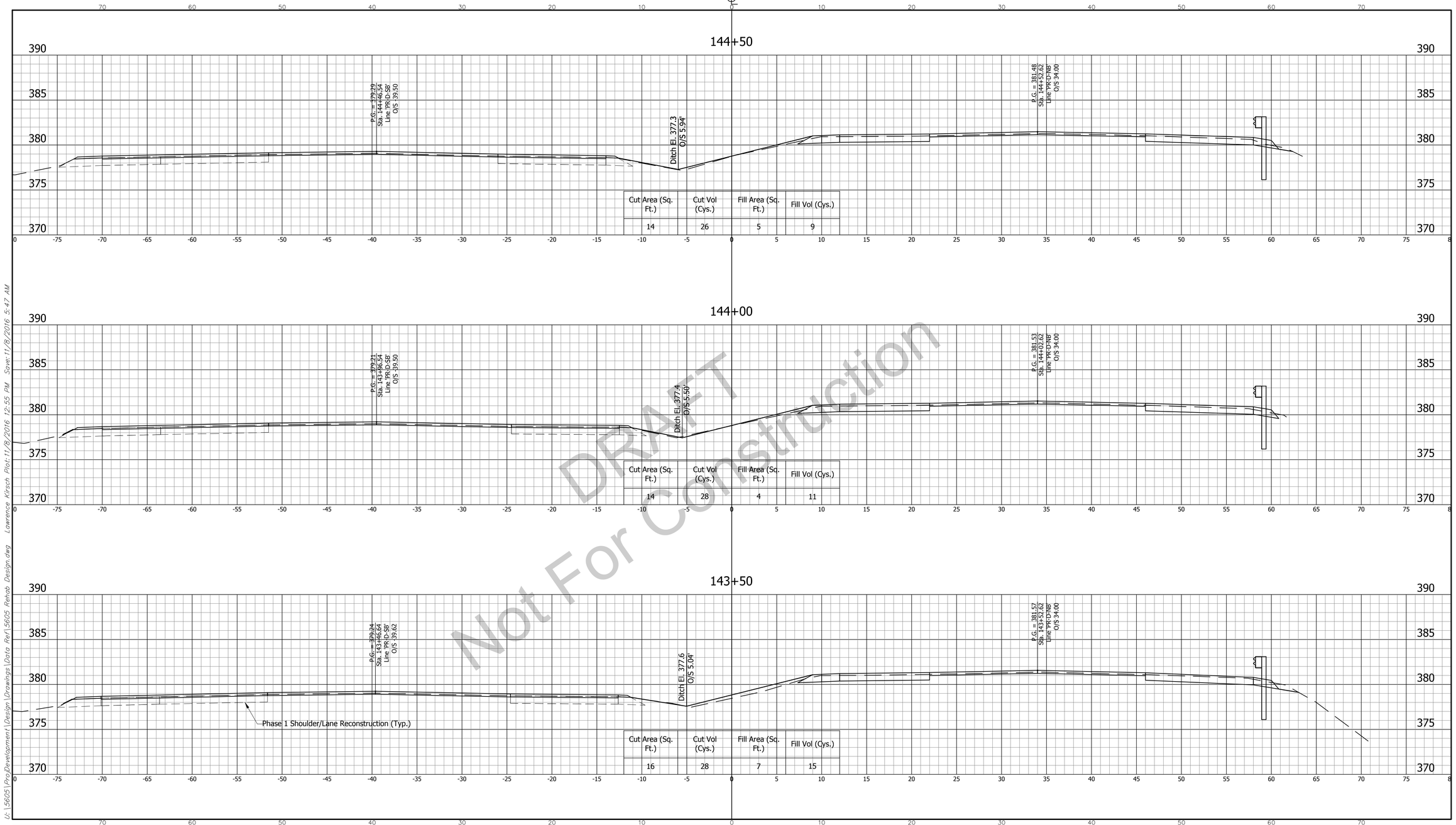
CROSS SECTIONS LINE "D"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 5'	BRIDGE FILE: N/A
		VERTICAL SCALE: 1" = 5'	DESIGNATION: 1592481
DESIGNED: BZ / DRAWN: LK	U.S. 41 REHABILATION SECTION CHEATAM SLOUGH TO OHIO RIVER OVERFLOW	SURVEY BOOK	SHEET: 139 OF 164
CHECKED: MM / CHECKED: BZ		CONTRACT: B-33539	PROJECT: 1592481

5605 BFS NO.

CROSS SECTIONS

SCALE: 1" = 5'

CUT ℄ FILL



DRAFT
Not For Construction

U:\5605\Proj\Development\Design\Drawings\Data Ref\5605 Rehab Design.dwg Lawrence Kirsch Plot:11/8/2016 12:55 PM Save:11/8/2016 5:47 AM

CROSS SECTIONS LINE "D"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 5'	BRIDGE FILE: N/A
		VERTICAL SCALE: 1" = 5'	DESIGNATION: 1592481
DESIGNED: BZ / DRAWN: LK	U.S. 41 REHABILATION SECTION CHEATAM SLOUGH TO OHIO RIVER OVERFLOW	SURVEY BOOK	SHEET 140 OF 164
CHECKED: MM / CHECKED: BZ		CONTRACT: B-33539	PROJECT: 1592481

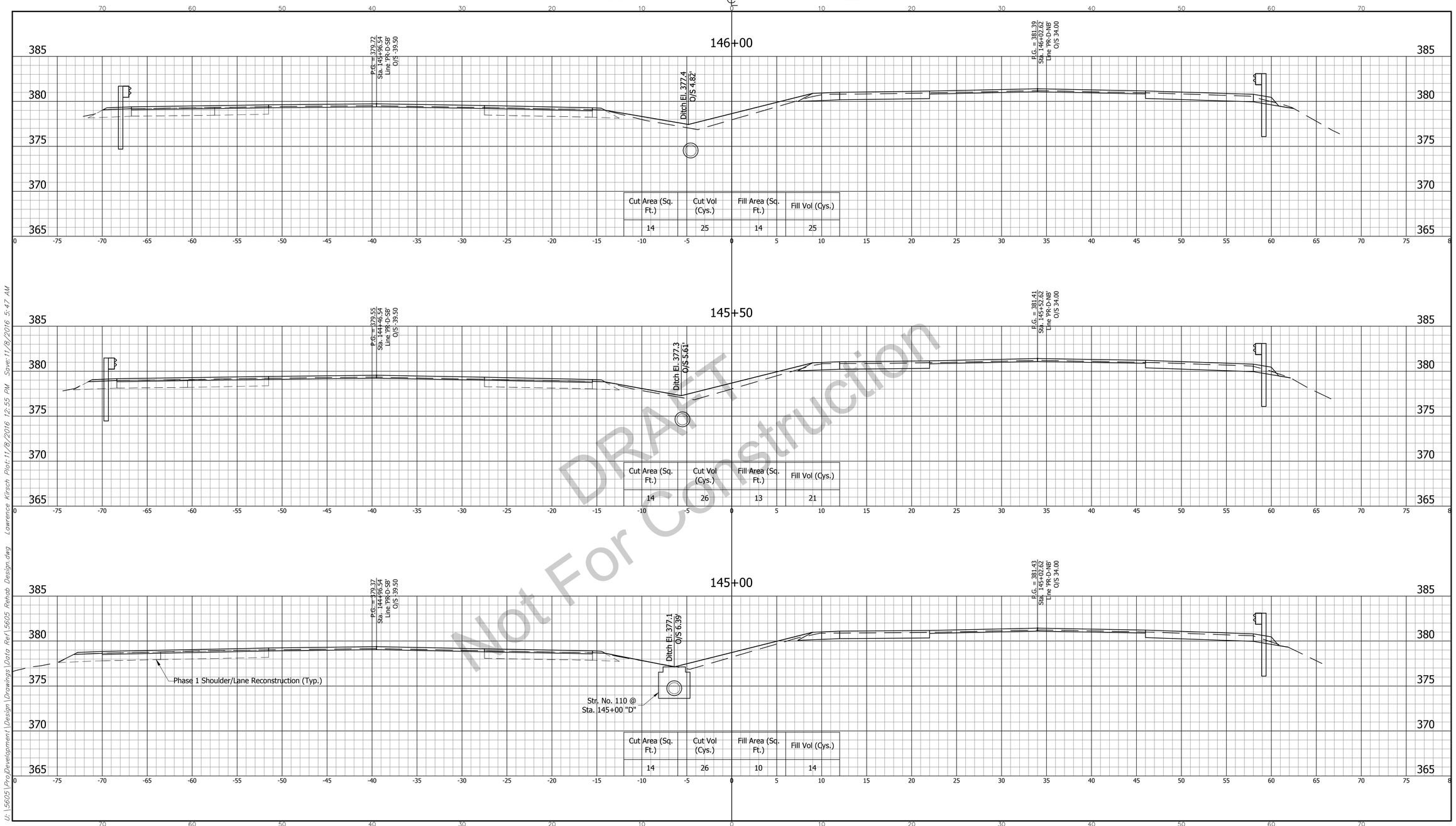
5605

BFS NO.

CROSS SECTIONS

SCALE: 1" = 5'

CUT ℄ FILL



DRAFT
Not For Construction

U:\5605\ProDevelopment\Design\Drawings\Data Ref\5605 Rehab Design.dwg Lawrence Kirsch Plot: 11/8/2016 12:55 PM Save: 11/8/2016 5:47 AM

CROSS SECTIONS LINE "D"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 5'	BRIDGE FILE: N/A
		VERTICAL SCALE: 1" = 5'	DESIGNATION: 1592481
DESIGNED: BZ CHECKED: MM	DRAWN: LK CHECKED: BZ	U.S. 41 REHABILITATION SECTION CHEATAM SLOUGH TO OHIO RIVER OVERFLOW	SURVEY BOOK:
			SHEET: 141 OF 164
			CONTRACT: B-33539
			PROJECT: 1592481

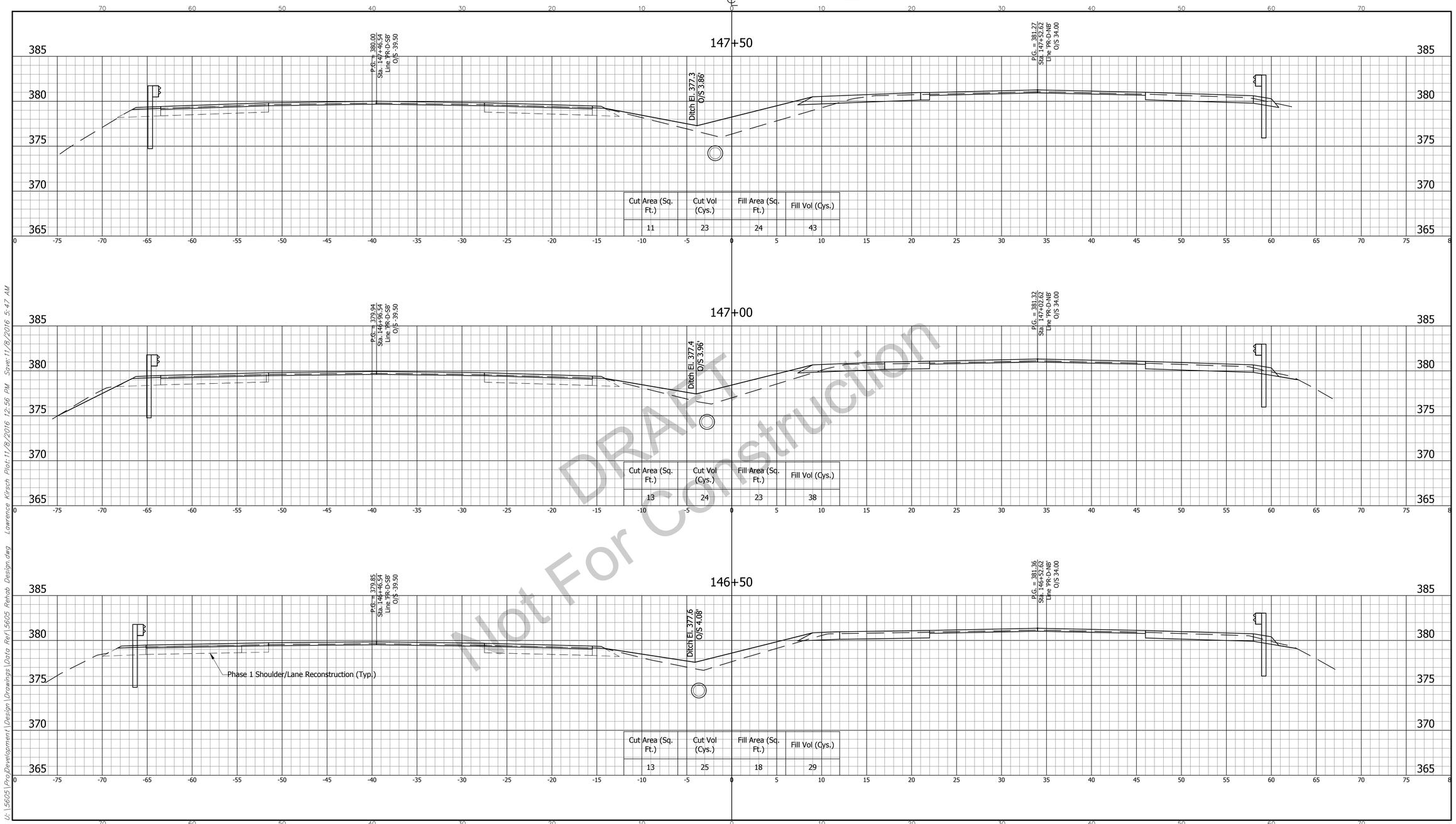
5605

BFS NO.

CROSS SECTIONS

SCALE: 1" = 5'

CUT ℄ FILL



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Not For Construction

U:\5605\ProDevelopment\Design\Drawings\Data Ref\5605 Rehab Design.dwg Lawrence Kirsch Plot: 11/8/2016 12:56 PM Save: 11/8/2016 5:47 AM

CROSS SECTIONS LINE "D"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 5'	BRIDGE FILE: N/A
		VERTICAL SCALE: 1" = 5'	DESIGNATION: 1592481
DESIGNED: BZ / DRAWN: LK	U.S. 41 REHABILITATION SECTION CHEATAM SLOUGH TO OHIO RIVER OVERFLOW	SURVEY BOOK	SHEET 142 OF 164
CHECKED: MM / CHECKED: BZ		CONTRACT: B-33539	PROJECT: 1592481

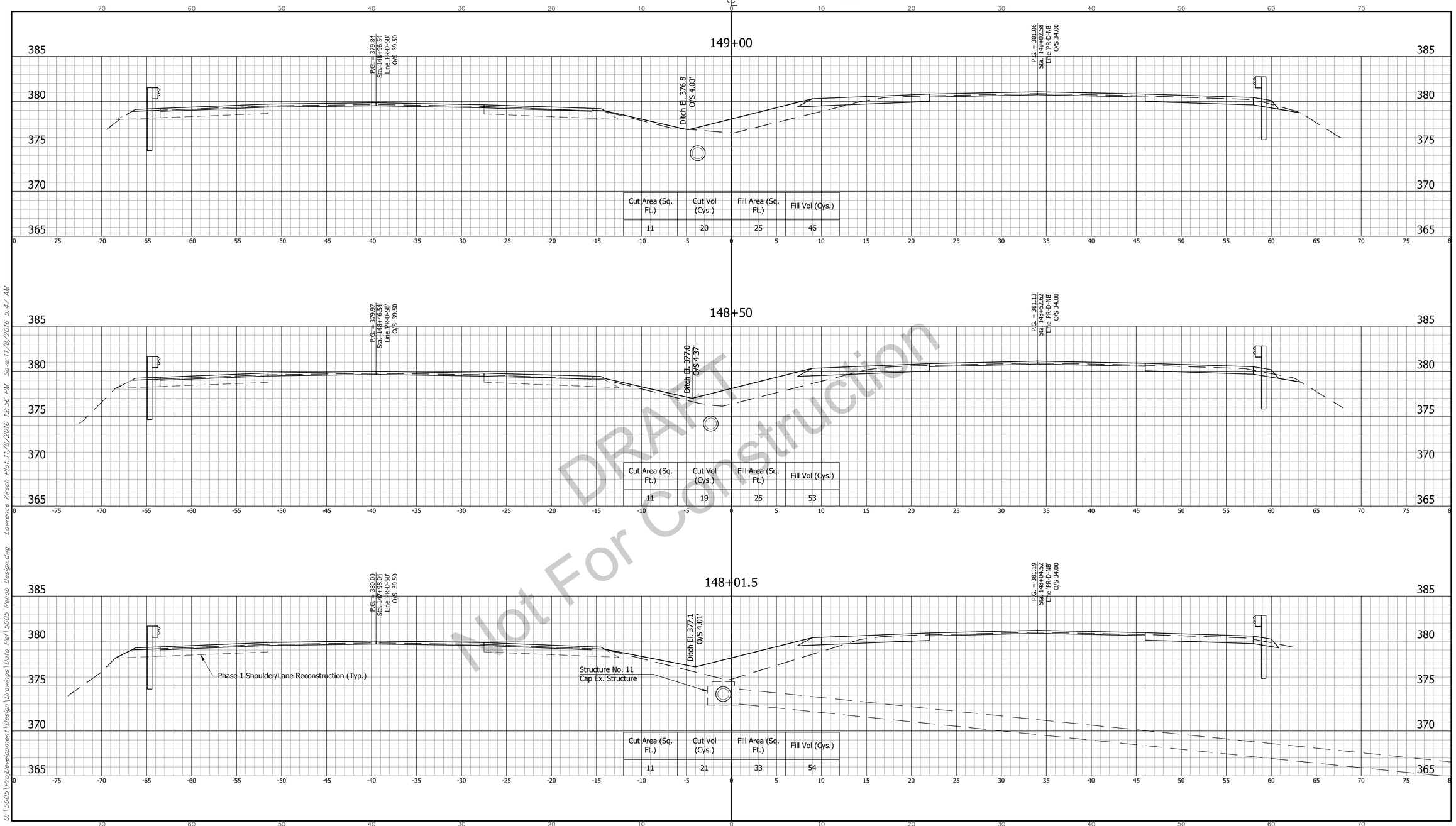
5605

BFS NO.

CROSS SECTIONS

SCALE: 1" = 5'

CUT ℄ FILL



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Not For Construction

U:\5605\ProDevelopment\Design\Drawings\Data Ref\5605 Rehab Design.dwg Lawrence Kirsch Plot: 11/8/2016 12:56 PM Save: 11/8/2016 5:47 AM

CROSS SECTIONS LINE "D"		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 5' / BRIDGE FILE: N/A / VERTICAL SCALE: 1" = 5' / DESIGNATION: 1592481
DESIGNED: BZ	DRAWN: LK	U.S. 41 REHABILITATION SECTION CHEATAM SLOUGH TO OHIO RIVER OVERFLOW	SURVEY BOOK / SHEET: 143 OF 164
CHECKED: MM	CHECKED: BZ		CONTRACT: B-33539 / PROJECT: 1592481

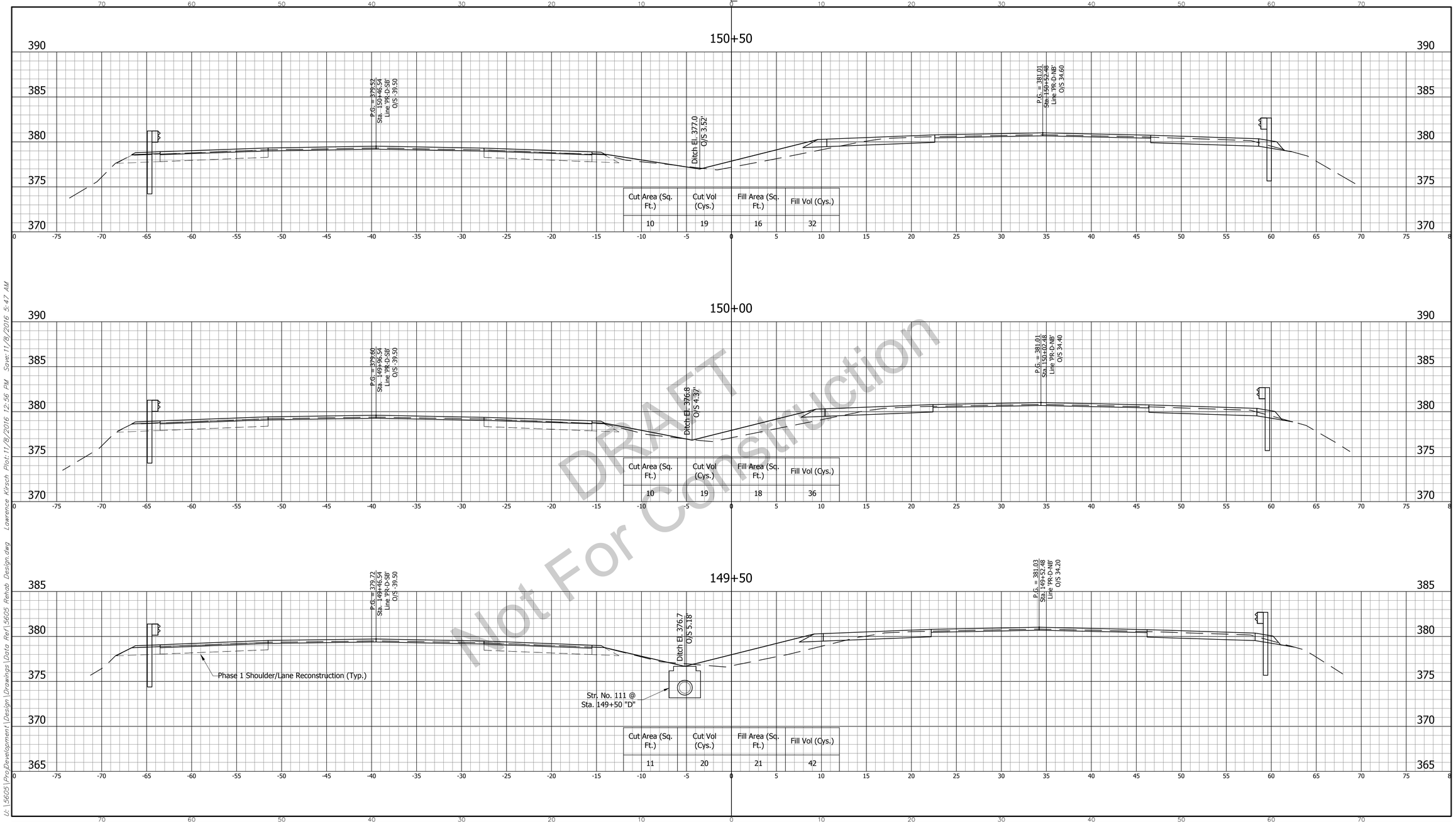
5605

BFS NO.

CROSS SECTIONS

SCALE: 1" = 5'

CUT ℄ FILL



DRAFT
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CROSS SECTIONS LINE "D"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 5'	BRIDGE FILE: N/A
		VERTICAL SCALE: 1" = 5'	DESIGNATION: 1592481
DESIGNED: BZ / DRAWN: LK	U.S. 41 REHABILITATION SECTION CHEATAM SLOUGH TO OHIO RIVER OVERFLOW	SURVEY BOOK	SHEET: 144 OF 164
CHECKED: MM / CHECKED: BZ		CONTRACT: B-33539	PROJECT: 1592481

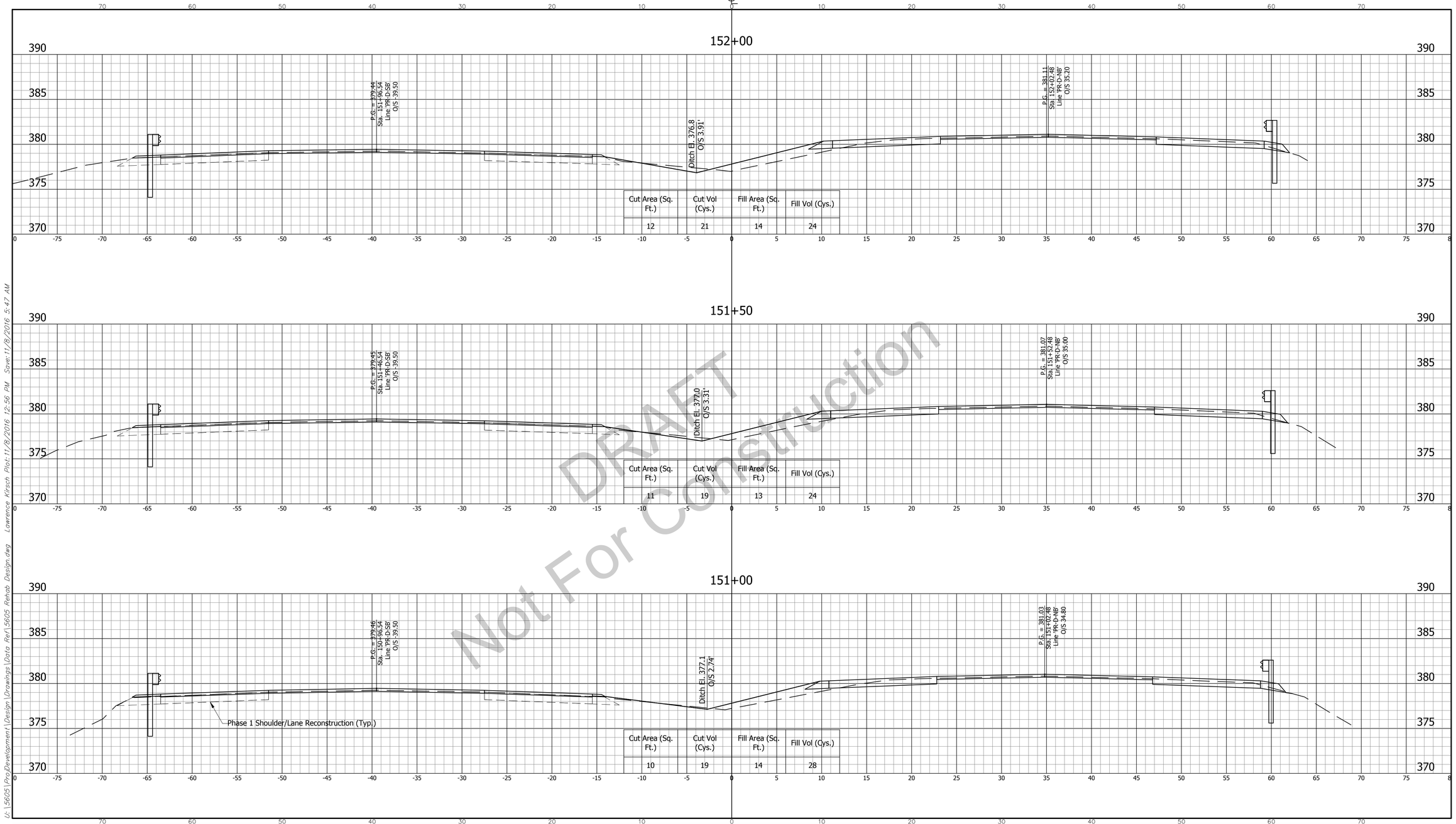
5605

BFS NO.

CROSS SECTIONS

SCALE: 1" = 5'

CUT ℄ FILL



DRAFT
Not For Construction

U:\5605\Proj\Development\Design\Drawings\Data Ref\5605 Rehab Design.dwg Lawrence Kirsch Plot:11/8/2016 12:56 PM Save:11/8/2016 5:47 AM

CROSS SECTIONS LINE "D"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1" = 5'	BRIDGE FILE N/A
		VERTICAL SCALE 1" = 5'	DESIGNATION 1592481
DESIGNED: BZ CHECKED: MM	DRAWN: LK CHECKED: BZ	U.S. 41 REHABILATION SECTION CHEATAM SLOUGH TO OHIO RIVER OVERFLOW	SURVEY BOOK SHEET 145 OF 164
			CONTRACT B-33539
			PROJECT 1592481

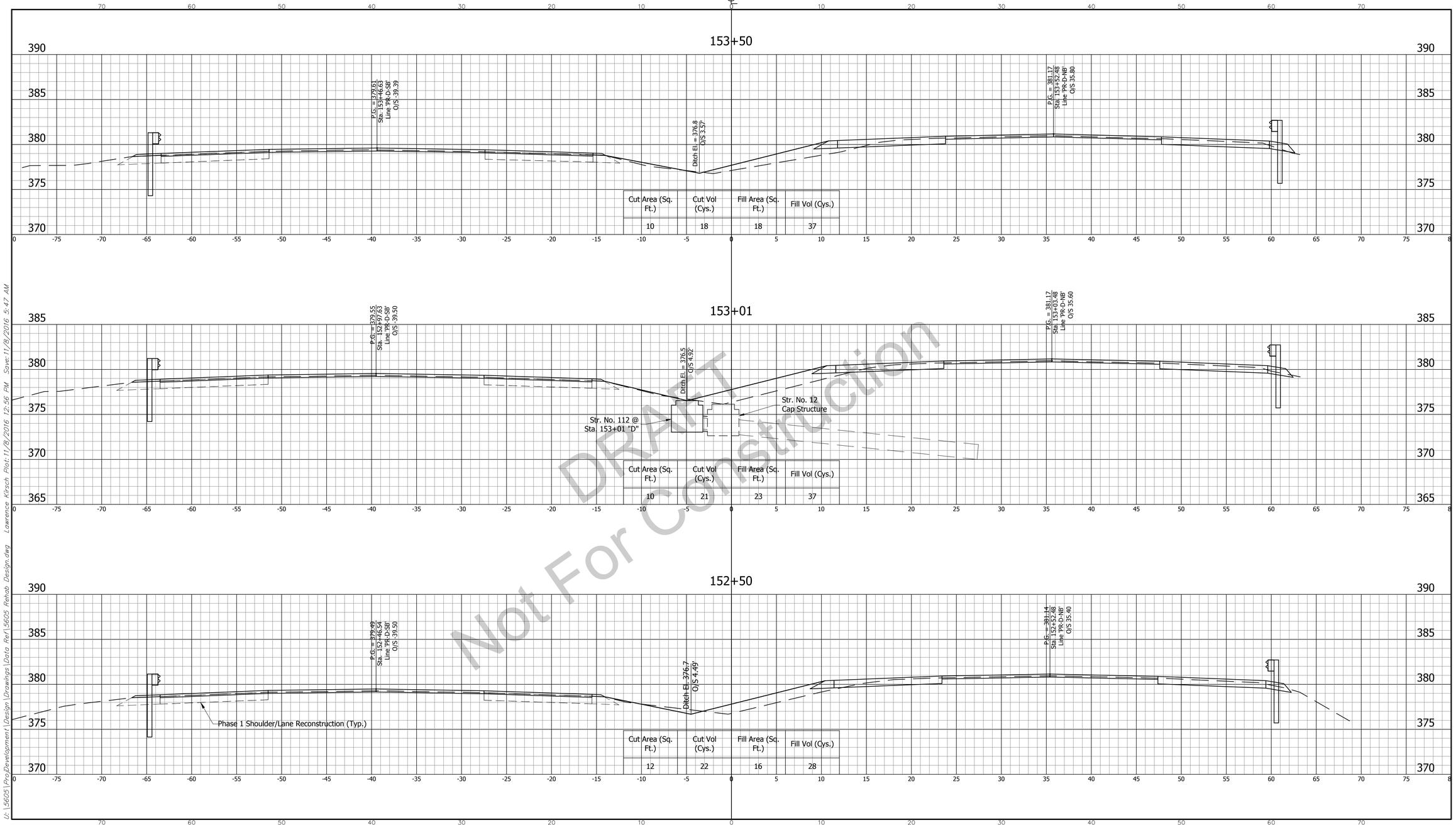
5605

BFS NO.

CROSS SECTIONS

SCALE: 1" = 5'

CUT ℄ FILL



Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
10	18	18	37

Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
10	21	23	37

Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
12	22	16	28

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Not For Construction

U:\5605\Proj\Development\Design\Drawings\Data Ref\5605 Rehab Design.dwg Lawrence Kirsch Plot:11/8/2016 12:56 PM Save:11/8/2016 5:47 AM

CROSS SECTIONS
LINE "D"

DESIGNED: BZ
DRAWN: LK
CHECKED: MM
CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

U.S. 41
REHABILATION SECTION
CHEATAM SLOUGH TO OHIO RIVER OVERFLOW

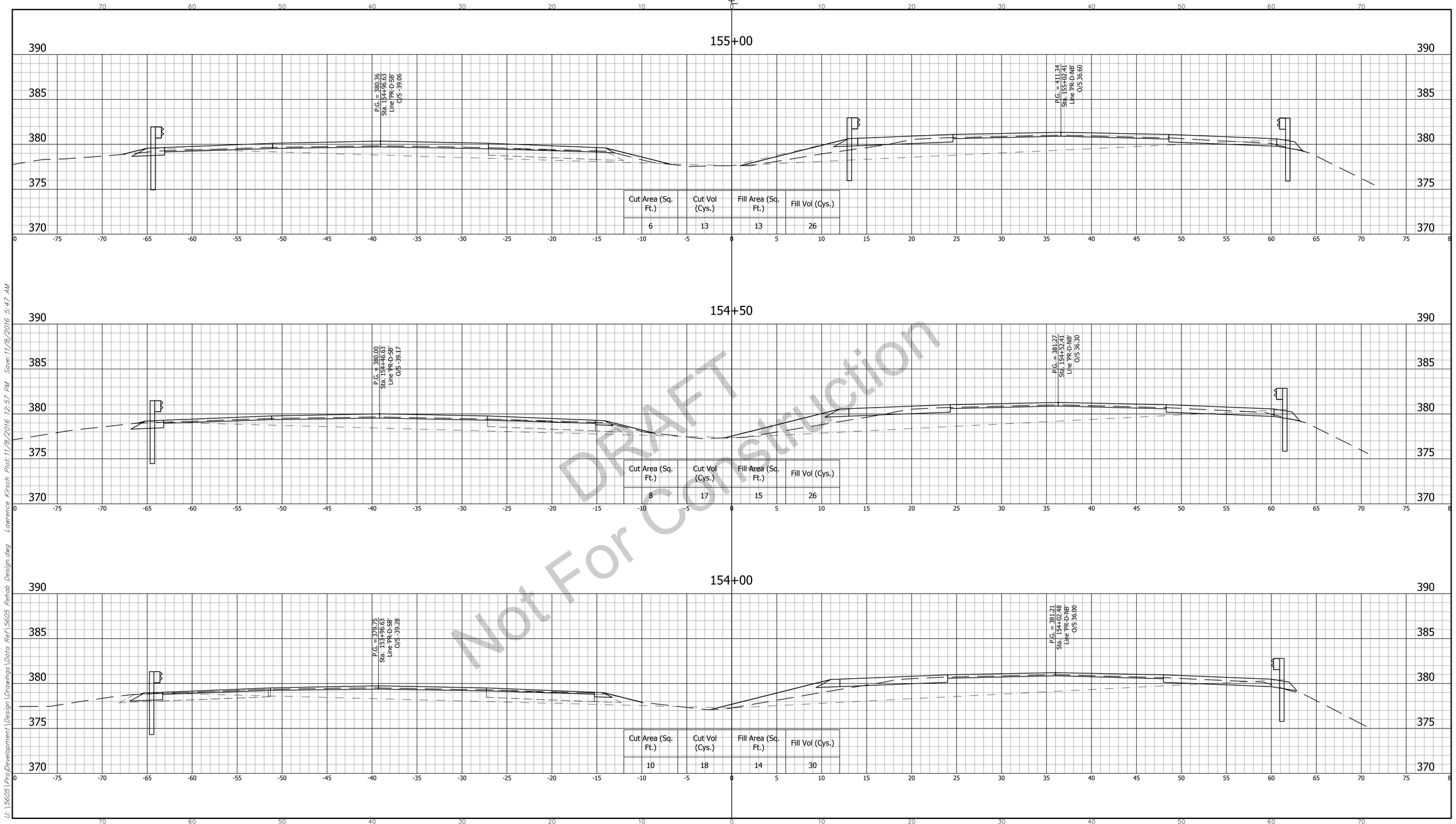
HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	1592481
SURVEY BOOK	SHEET
	146 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605
BFS NO.

CROSS SECTIONS

SCALE: 1" = 5'

CUT ℄ FILL



Station	Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
155+00	6	13	13	26
154+50	8	17	15	26
154+00	10	18	14	30

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U:\5605\Proj\Development\Design\Drawings\Data Ref\5605 Rehab Design.dwg Lawrence Kirsch Plot:11/8/2016 12:57 PM Save:11/8/2016 5:47 AM

CROSS SECTIONS LINE "D"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 5'	BRIDGE FILE: N/A
		VERTICAL SCALE: 1" = 5'	DESIGNATION: 1592481
DESIGNED: BZ / DRAWN: LK	U.S. 41 REHABILATION SECTION CHEATAM SLOUGH TO OHIO RIVER OVERFLOW	SURVEY BOOK	SHEET: 147 OF 164
CHECKED: MM / CHECKED: BZ		CONTRACT: B-33539	PROJECT: 1592481

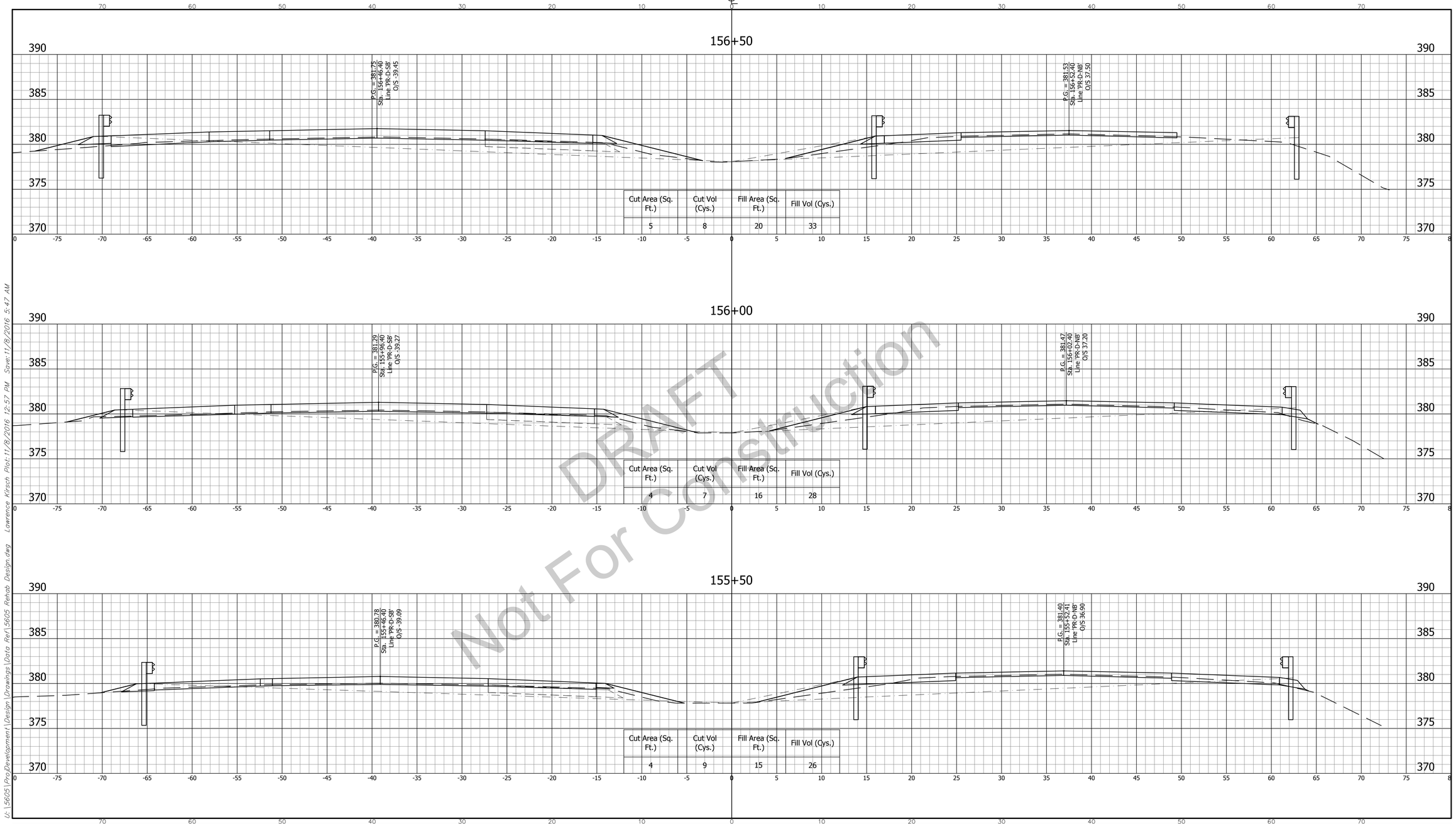
5605

BFS NO.

CROSS SECTIONS

SCALE: 1" = 5'

CUT ℄ FILL



Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
5	8	20	33

Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
4	7	16	28

Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
4	9	15	26

DRAFT
Not For Construction

U:\5605\Proj\Development\Design\Drawings\Data Ref\5605 Rehab Design.dwg Lawrence Kirsch Plot:11/8/2016 12:57 PM Save:11/8/2016 5:47 AM

CROSS SECTIONS
LINE "D"

DESIGNED: BZ
DRAWN: LK
CHECKED: MM
CHECKED: BZ

INDIANA
DEPARTMENT OF TRANSPORTATION

U.S. 41
REHABILATION SECTION
CHEATAM SLOUGH TO OHIO RIVER OVERFLOW

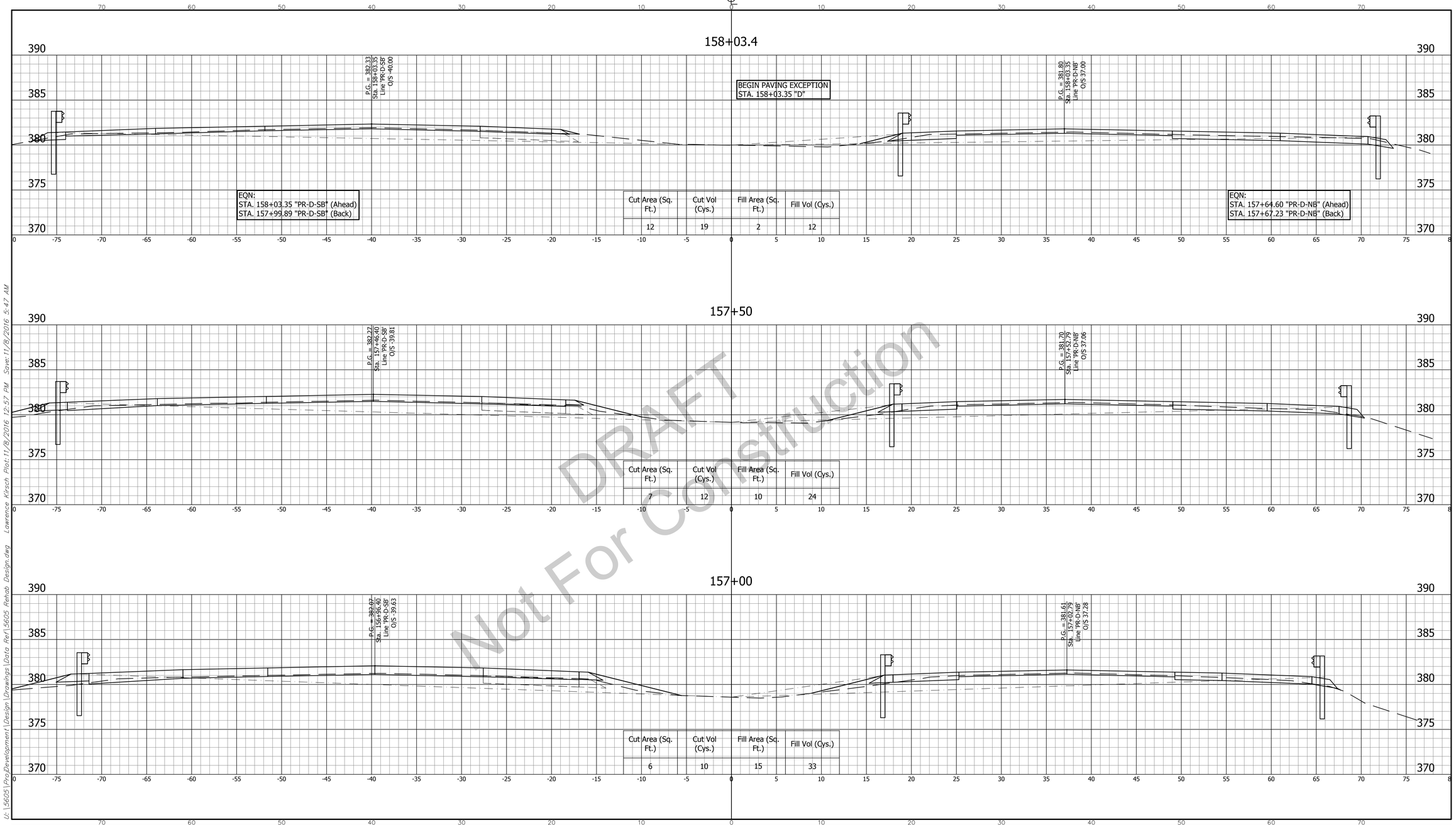
HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	1592481
SURVEY BOOK	SHEET
	148 OF 164
CONTRACT	PROJECT
B-33539	1592481

5605

BFS NO.

CROSS SECTIONS

CUT — SCALE: 1" = 5' — FILL



DRAFT
Not For Construction

U:\5605\Proj\Development\Design\Drawings\Data Ref\5605 Rehab Design.dwg Lawrence Kirsch Plot:11/8/2016 12:57 PM Save:11/8/2016 5:47 AM

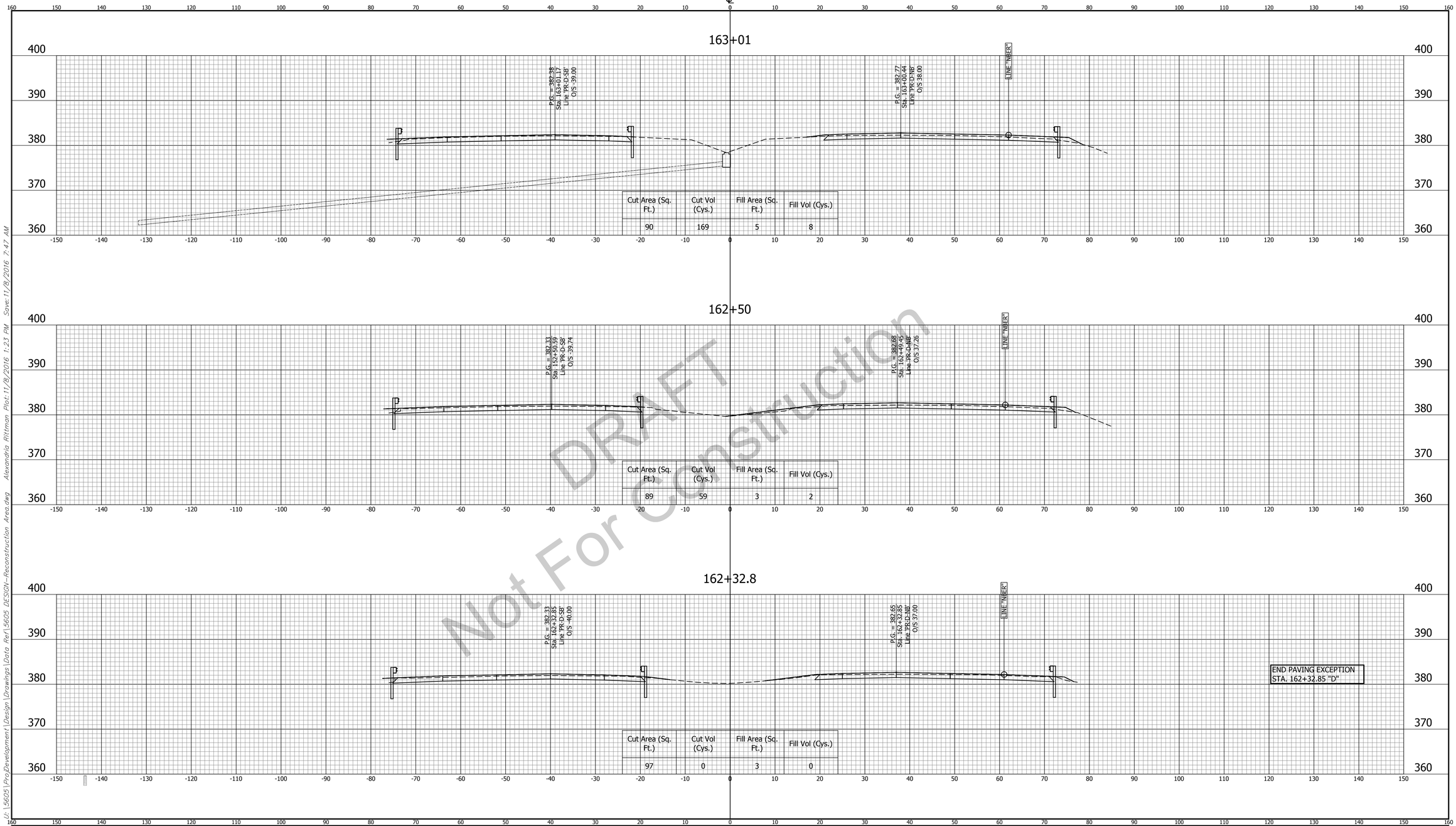
CROSS SECTIONS LINE "D"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 5'	BRIDGE FILE: N/A
		VERTICAL SCALE: 1" = 5'	DESIGNATION: 1592481
DESIGNED: BZ / DRAWN: LK	U.S. 41 REHABILATION SECTION CHEATAM SLOUGH TO OHIO RIVER OVERFLOW	SURVEY BOOK	SHEET 149 OF 164
CHECKED: MM / CHECKED: BZ		CONTRACT: B-33539	PROJECT: 1592481

5605 — BFS NO.

CROSS SECTIONS

SCALE: 1"=10'

CUT — FILL



Station	Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
163+01	90	169	5	8
162+50	89	59	3	2
162+32.8	97	0	3	0

DRAFT
Not For Construction

U:\5605\Proj Development\Design\Drawings\Data Rel\5605 DESIGN-Reconstruction Area.dwg Alexandria Rittman Plot:11/8/2016 1:23 PM Save:11/8/2016 7:47 AM

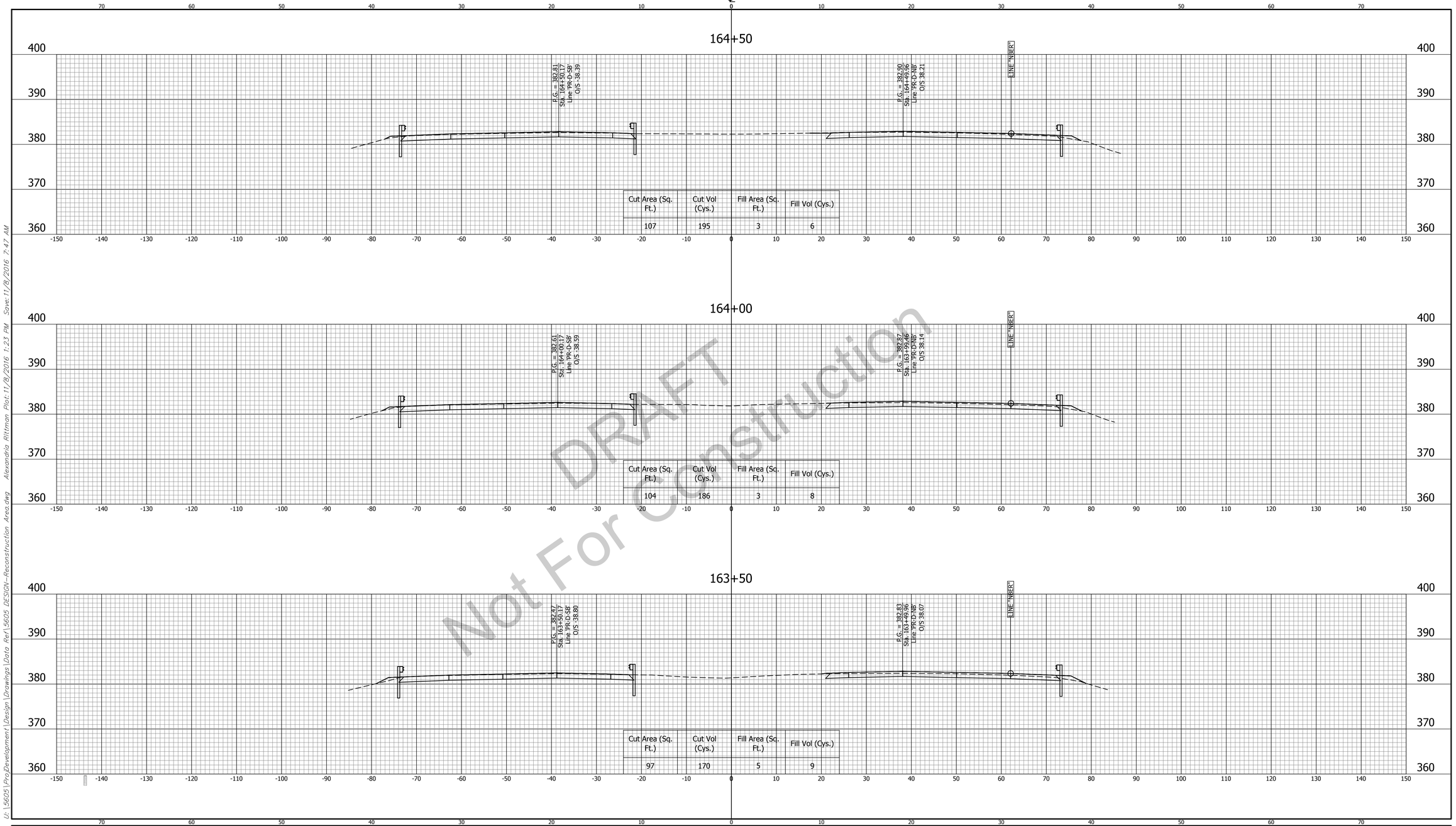
CROSS SECTIONS LINE "D"		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 10' / BRIDGE FILE: ----
			VERTICAL SCALE: 1" = 10' / DESIGNATION: 1592481
DESIGNED: MM	DRAWN: BH	U.S. 41 RECONSTRUCTION SECTION OHIO RIVER OVERFLOW TO EAGLE CREEK	SURVEY BOOK / SHEET: 150 OF 164
CHECKED: ACE	CHECKED: BZ		CONTRACT: B-33539 / PROJECT: 1592481

BFS NO. 5605

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



	Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
164+50	107	195	3	6
164+00	104	186	3	8
163+50	97	170	5	9

DRAFT
Not For Construction

U:\5605\Proj Development\Design\Drawings\Data Rev\5605 DESIGN-Reconstruction Area.dwg Alexandria Rittman Plot:11/8/2016 1:23 PM Save:11/8/2016 7:47 AM

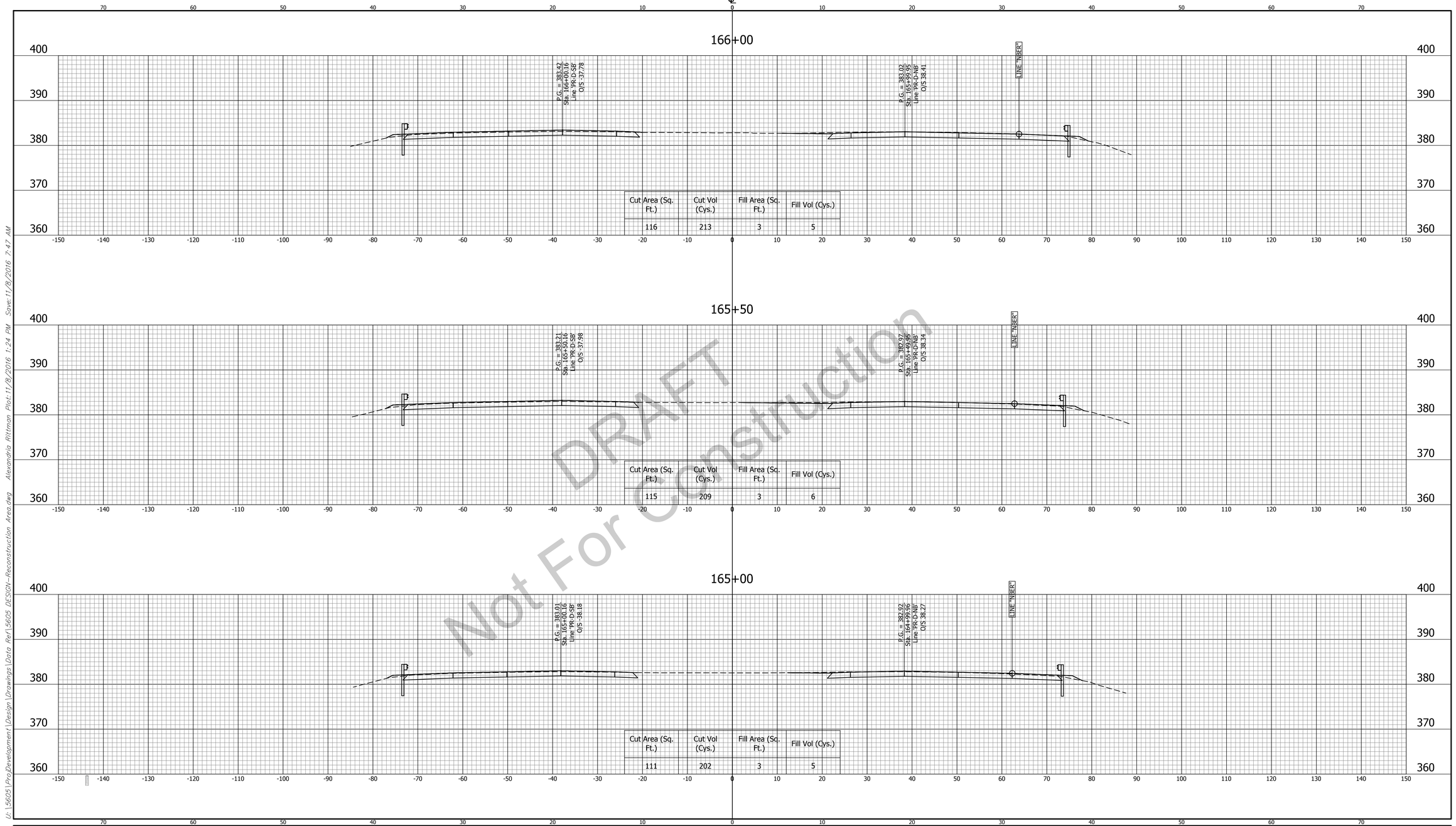
CROSS SECTIONS LINE "D"		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 10' VERTICAL SCALE: 1" = 10' BRIDGE FILE: ---- DESIGNATION: 1592481
DESIGNED: BZ	DRAWN: BEH	U.S. 41 RECONSTRUCTION SECTION OHIO RIVER OVERFLOW TO EAGLE CREEK	SURVEY BOOK: SHEET: 151 OF 164
CHECKED: MM	CHECKED: BZ		CONTRACT: B-33539 PROJECT: 1592481

BFS NO. 5605

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
116	213	3	5

Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
115	209	3	6

Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
111	202	3	5

DRAFT
Not For Construction

U:\5605\Proj Development\Design\Drawings\Data Ref\5605 DESIGN-Reconstruction Area.dwg Alexandria Rittman Plot:11/8/2016 1:24 PM Save:11/8/2016 7:47 AM

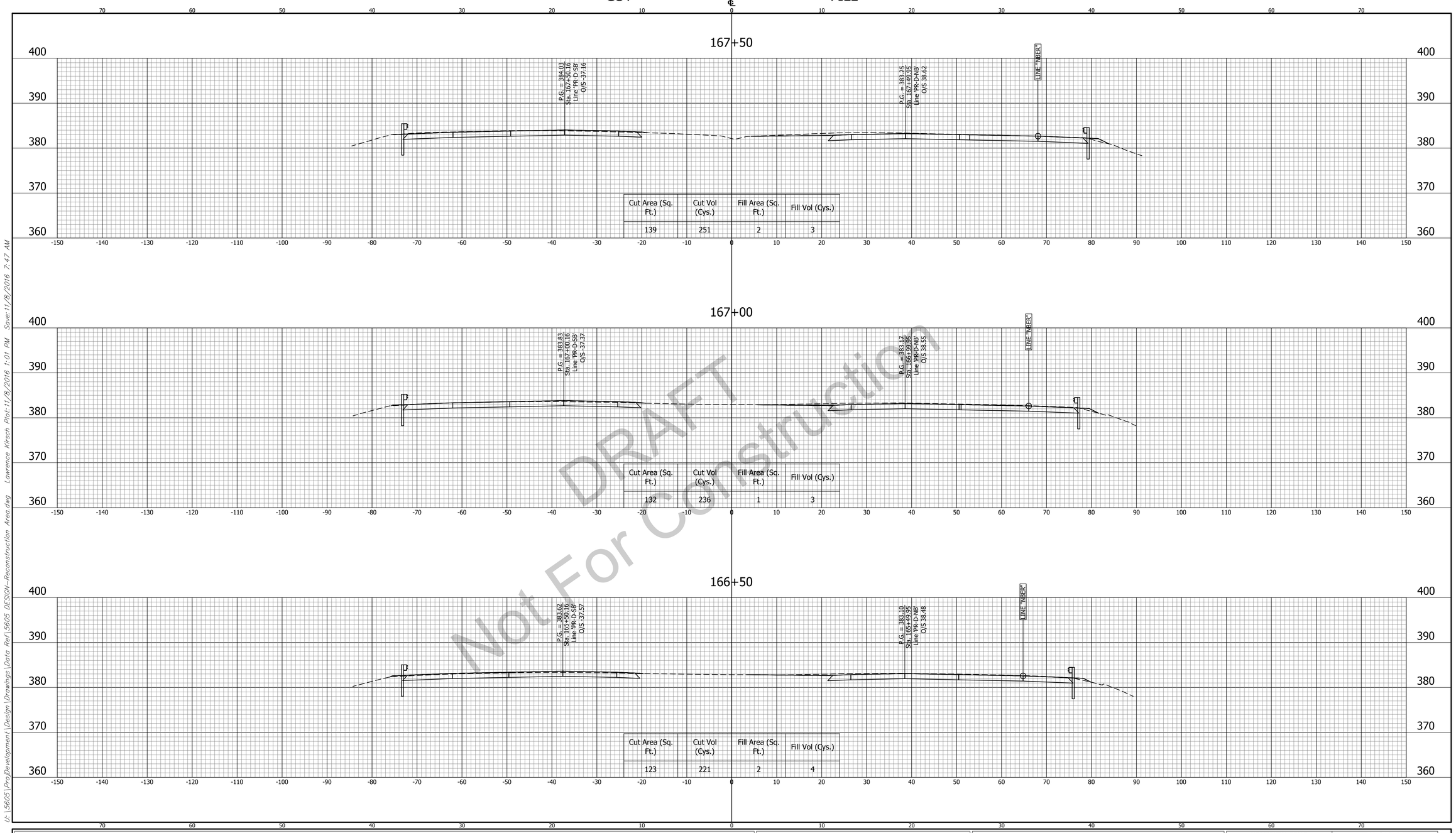
CROSS SECTIONS LINE "D"	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 10' VERTICAL SCALE: 1" = 10' BRIDGE FILE: ---- DESIGNATION: 1592481
DESIGNED: BZ DRAWN: BEH CHECKED: MM CHECKED: BZ	U.S. 41 RECONSTRUCTION SECTION OHIO RIVER OVERFLOW TO EAGLE CREEK	SURVEY BOOK SHEET 152 OF 164 CONTRACT: B-33539 PROJECT: 1592481

BFS NO. 5605

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



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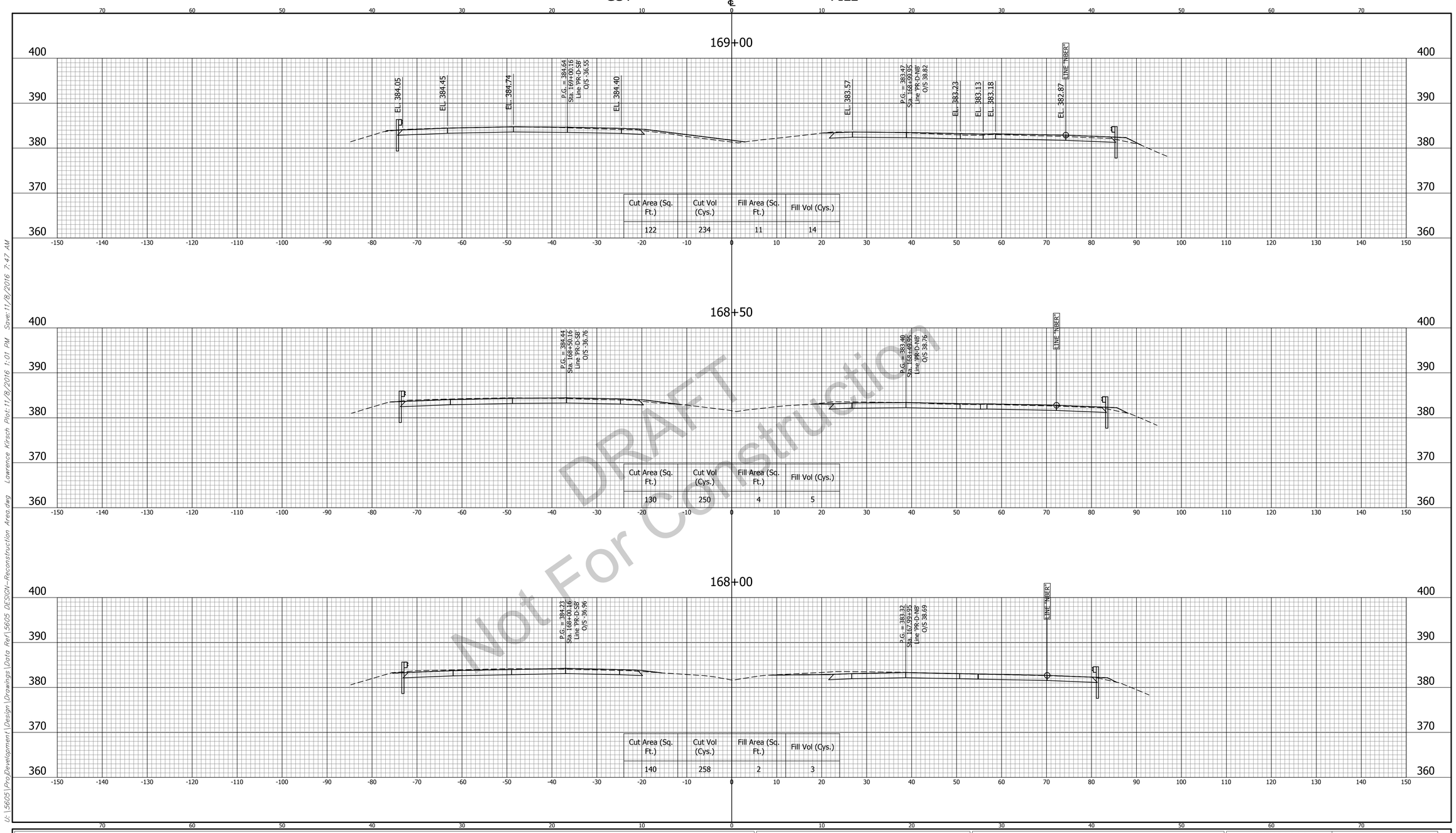
CROSS SECTIONS LINE "D"		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1" = 10' / BRIDGE FILE: ----
			VERTICAL SCALE: 1" = 10' / DESIGNATION: 1592481
DESIGNED: BZ	DRAWN: BEH	U.S. 41 RECONSTRUCTION SECTION OHIO RIVER OVERFLOW TO EAGLE CREEK	SURVEY BOOK / SHEET: 153 OF 164
CHECKED: MM	CHECKED: BZ		CONTRACT: B-33539 / PROJECT: 1592481

BFS NO. 5605

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



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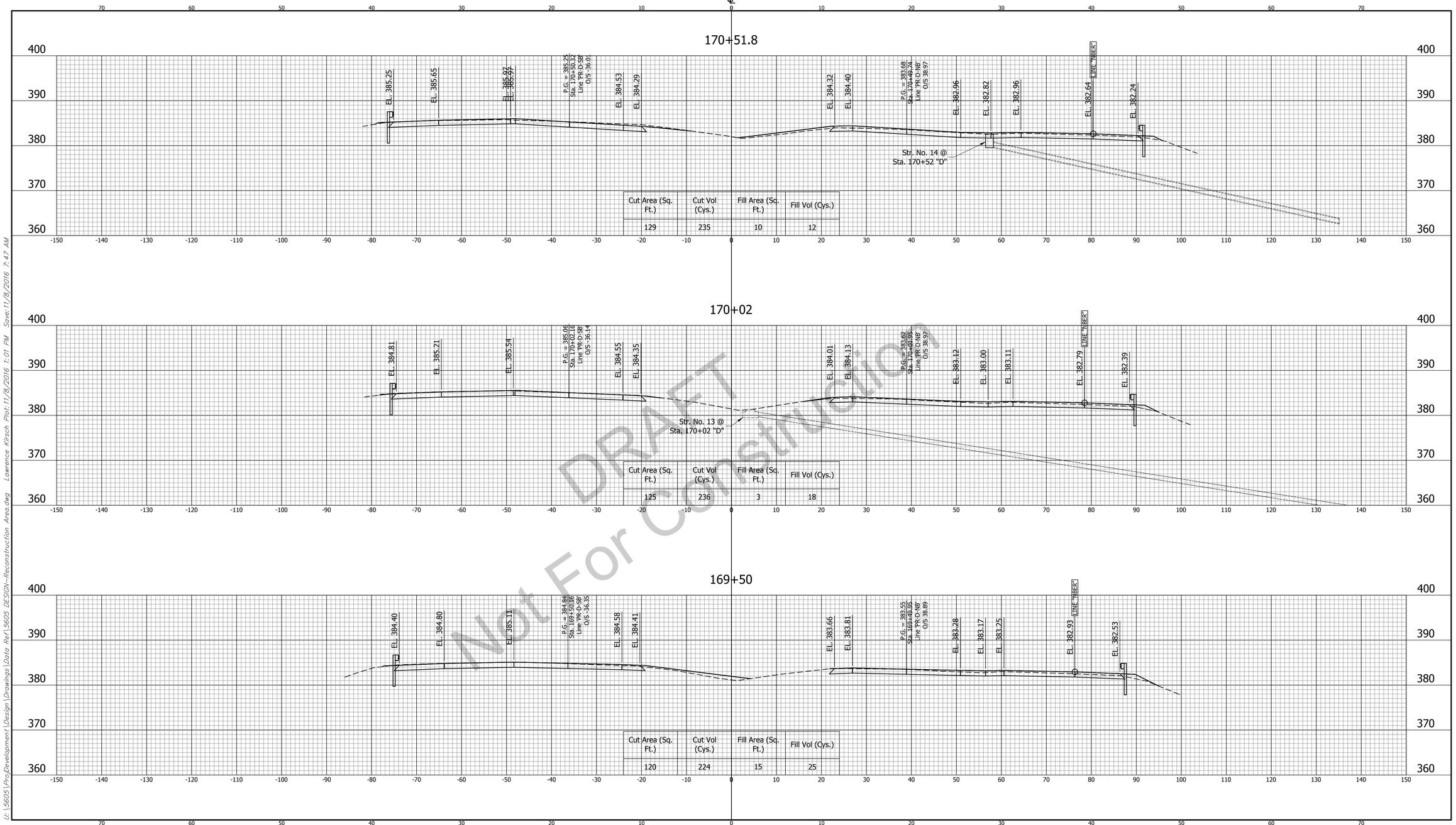
			VERTICAL SCALE: 1" = 10' / DESIGNATION: 1592481
DESIGNED: BZ	DRAWN: BEH	U.S. 41 RECONSTRUCTION SECTION OHIO RIVER OVERFLOW TO EAGLE CREEK	SURVEY BOOK / SHEET: 154 OF 164
CHECKED: MM	CHECKED: BZ		CONTRACT: B-33539 / PROJECT: 1592481

5605 BFS NO.

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



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		VERTICAL SCALE 1" = 10'	DESIGNATION 1592481
DESIGNED: BZ / DRAWN: BEH	U.S. 41 RECONSTRUCTION SECTION OHIO RIVER OVERFLOW TO EAGLE CREEK	SURVEY BOOK	SHEET 155 OF 164
CHECKED: MM / CHECKED: BZ		CONTRACT B-33539	PROJECT 1592481

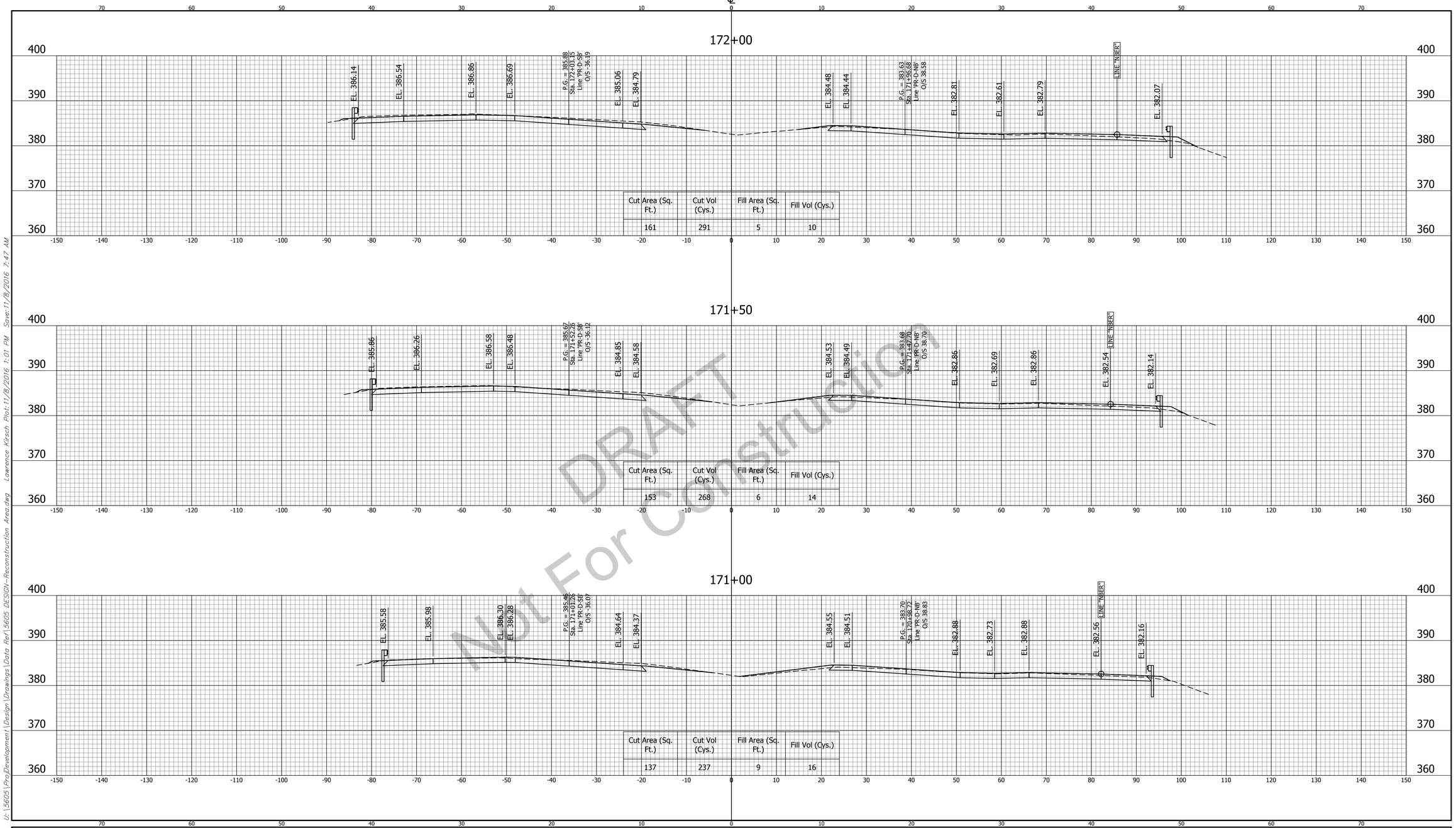
5605

BFS NO.

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
161	291	5	10

Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
153	268	6	14

Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
137	237	9	16

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U:\5605\Pro_Development\Design\Drawings\Data Rev\5605 DESIGN-Reconstruction Area.dwg Lawrence Kirsch Plot:11/8/2016 1:01 PM Save:11/8/2016 7:47 AM

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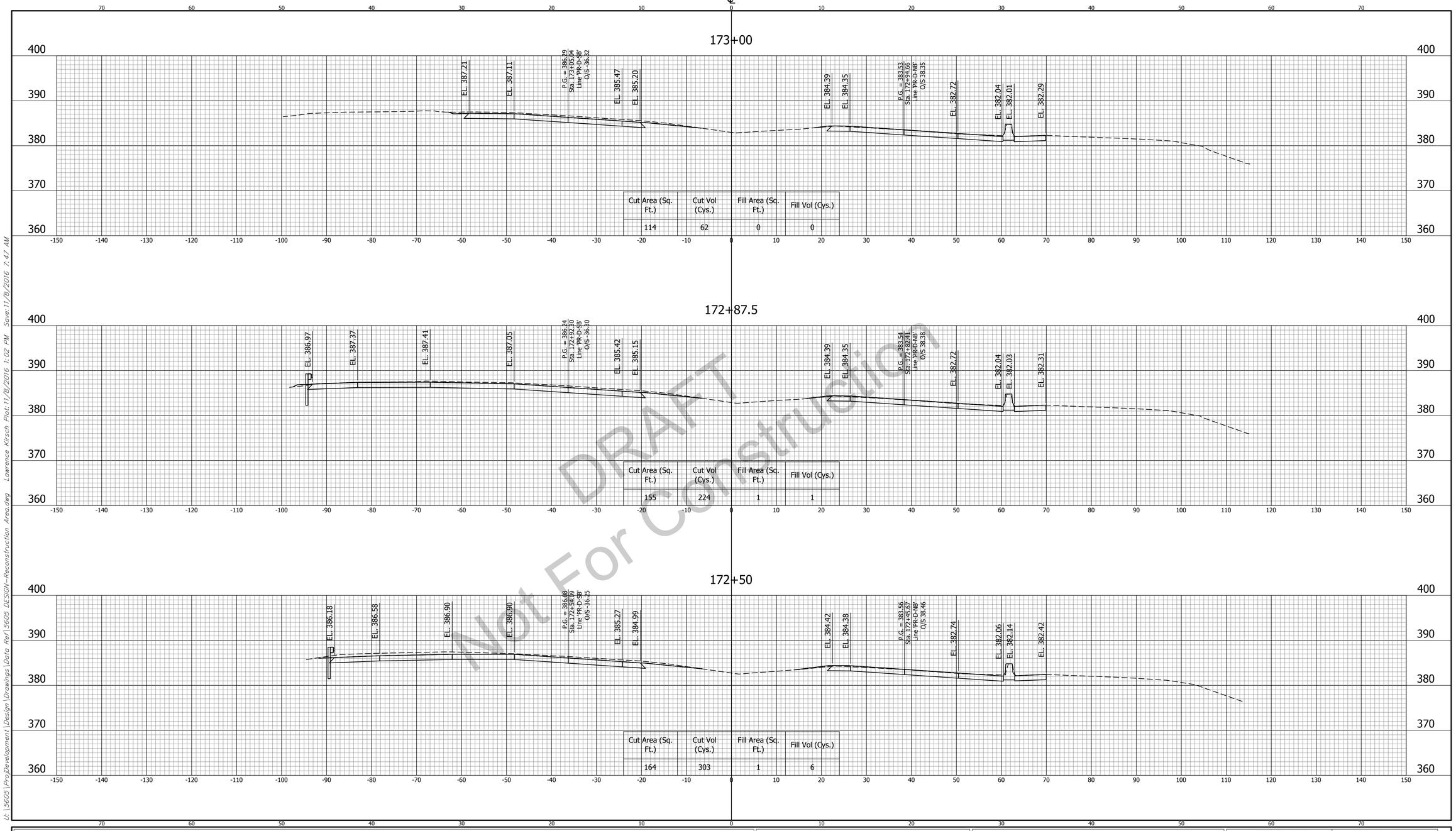
DESIGNED: BZ	DRAWN: BRH	U.S. 41 RECONSTRUCTION SECTION OHIO RIVER OVERFLOW TO EAGLE CREEK	SURVEY BOOK / SHEET: 156 OF 164
CHECKED: MM	CHECKED: BZ		CONTRACT: B-33539 / PROJECT: 1592481

5605 BFS NO.

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



	Cut Area (Sq. Ft.)	Cut Vol (Cys.)	Fill Area (Sq. Ft.)	Fill Vol (Cys.)
173+00	114	62	0	0
172+87.5	155	224	1	1
172+50	164	303	1	6

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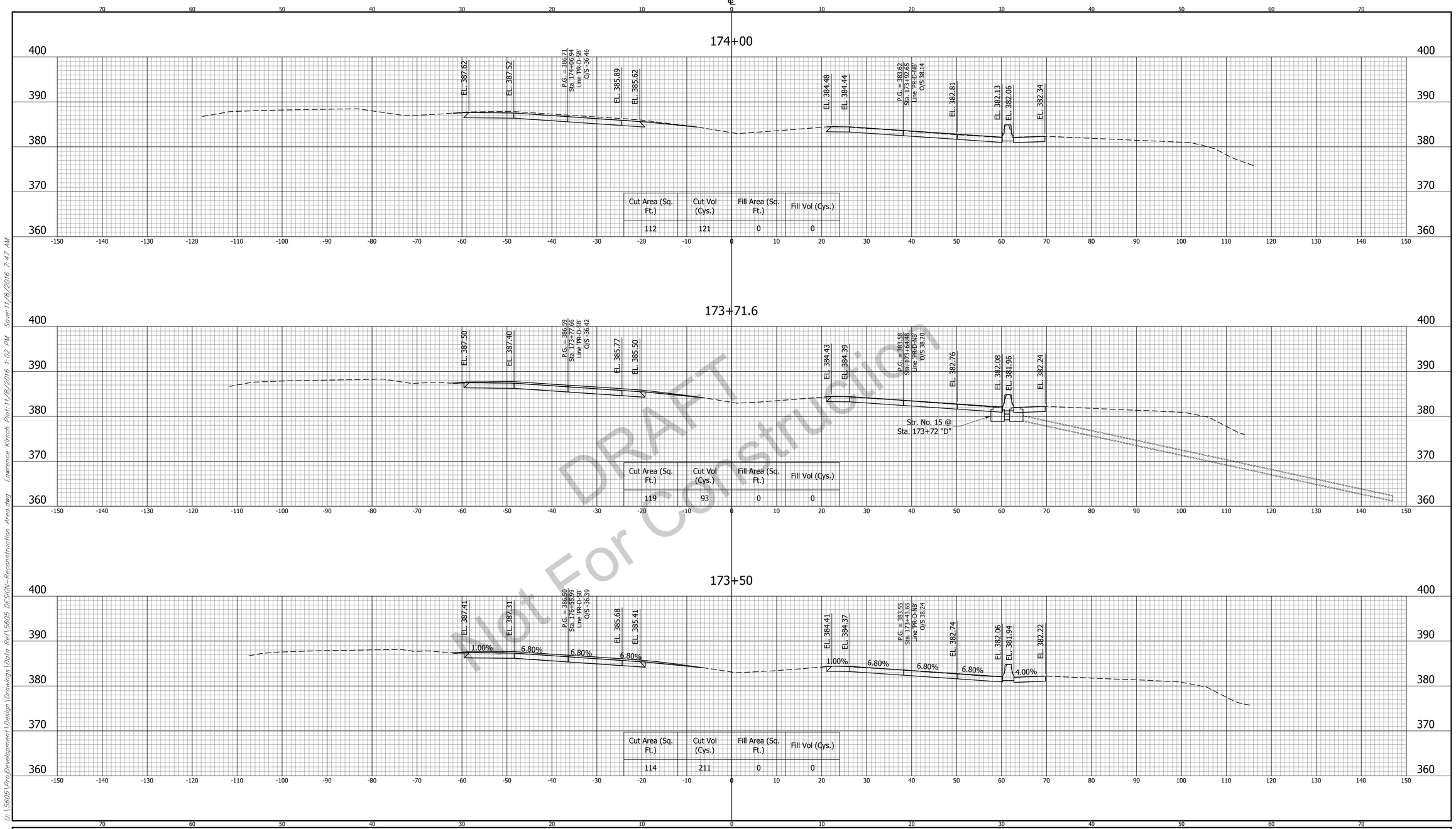
DESIGNED: BZ	DRAWN: BEH	U.S. 41 RECONSTRUCTION SECTION OHIO RIVER OVERFLOW TO EAGLE CREEK	SURVEY BOOK / SHEET: 157 OF 164
CHECKED: MM	CHECKED: BZ		CONTRACT: B-33539 / PROJECT: 1592481

BFS NO. 5605

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



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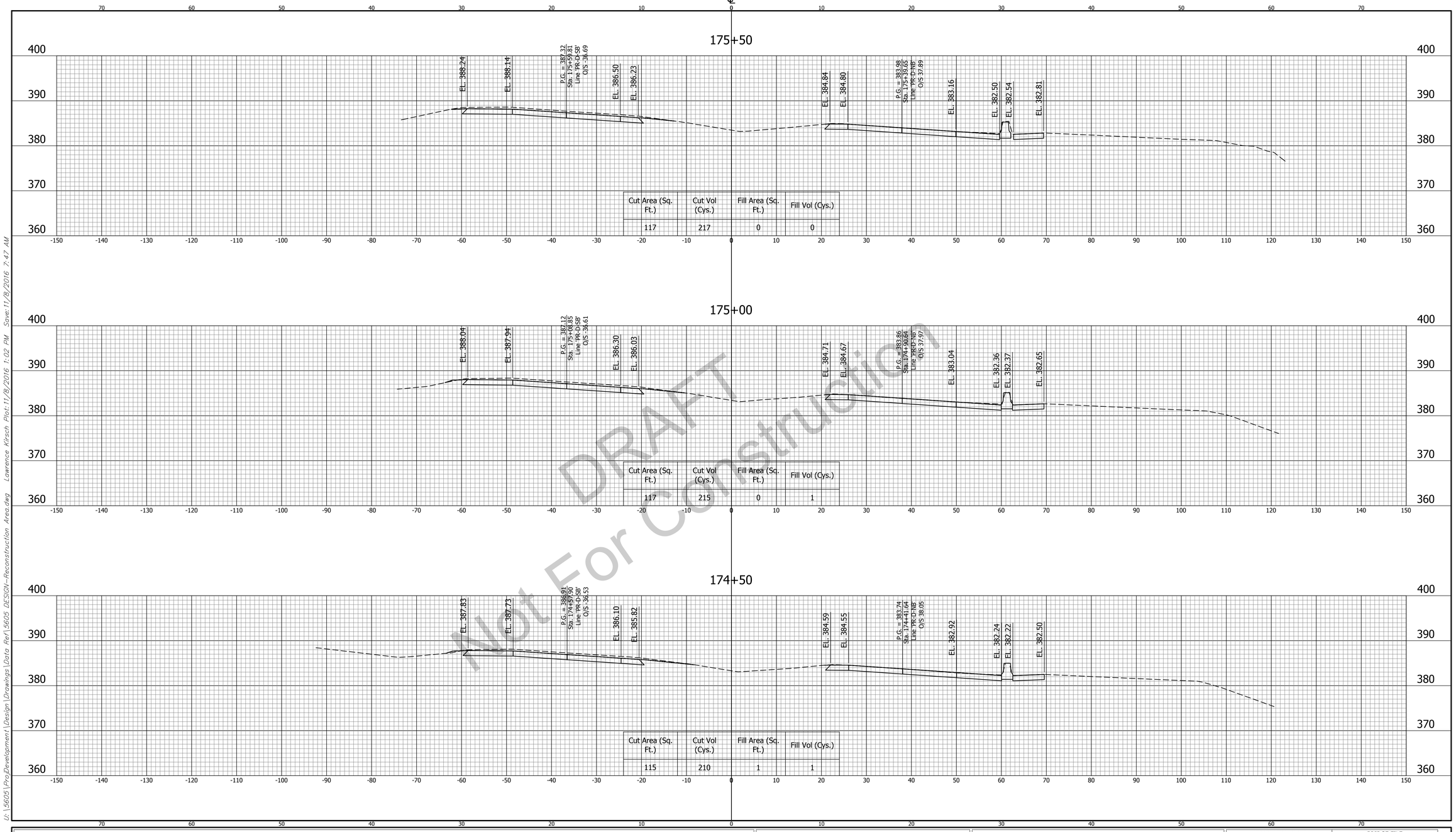
CHECKED: MM / CHECKED: BZ		CONTRACT B-33539	PROJECT 1592481

BFS NO. 5605

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



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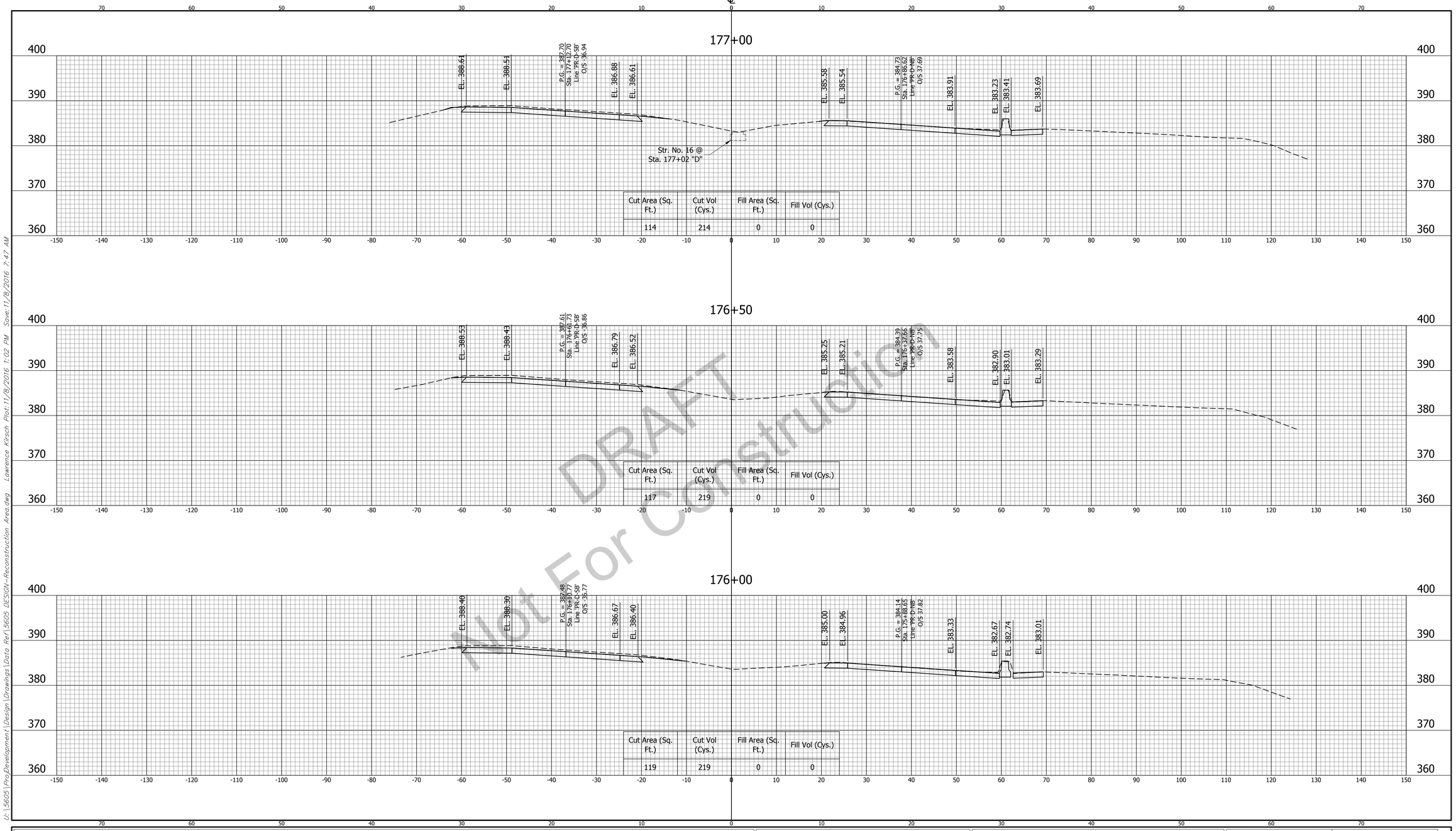
DESIGNED: BZ	DRAWN: BEH	U.S. 41 RECONSTRUCTION SECTION OHIO RIVER OVERFLOW TO EAGLE CREE	SURVEY BOOK / SHEET: 159 OF 164
CHECKED: MM	CHECKED: BZ		CONTRACT: B-33539 / PROJECT: 1592481

5605 BFS NO.

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



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DESIGNED: BZ	DRAWN: BEH	U.S. 41 RECONSTRUCTION SECTION OHIO RIVER OVERFLOW TO EAGLE CREE	SURVEY BOOK / SHEET 160 OF 164
CHECKED: ACE	CHECKED: ACE		CONTRACT B-33539 / PROJECT 1592481

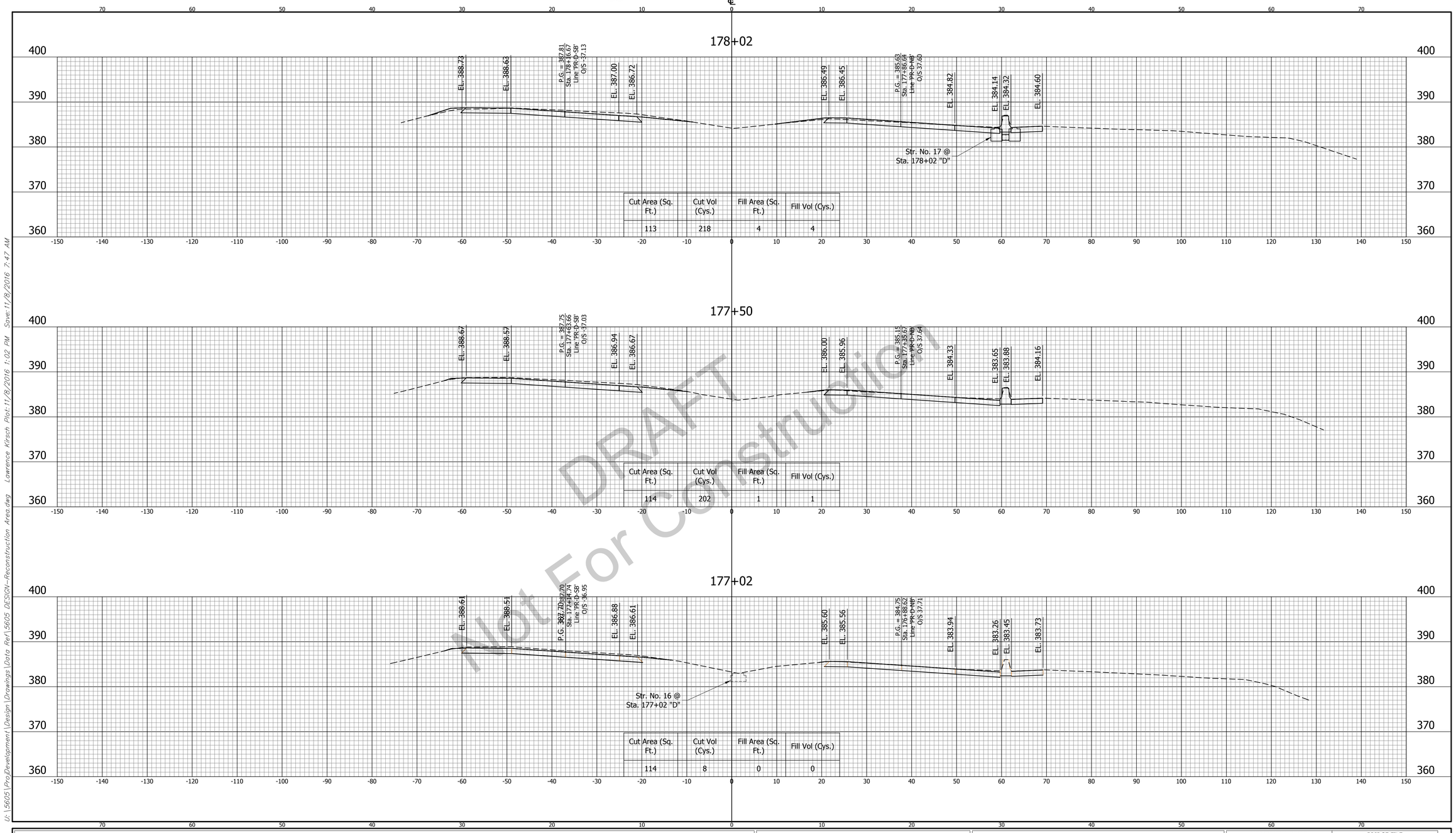
5605

BFS NO.

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



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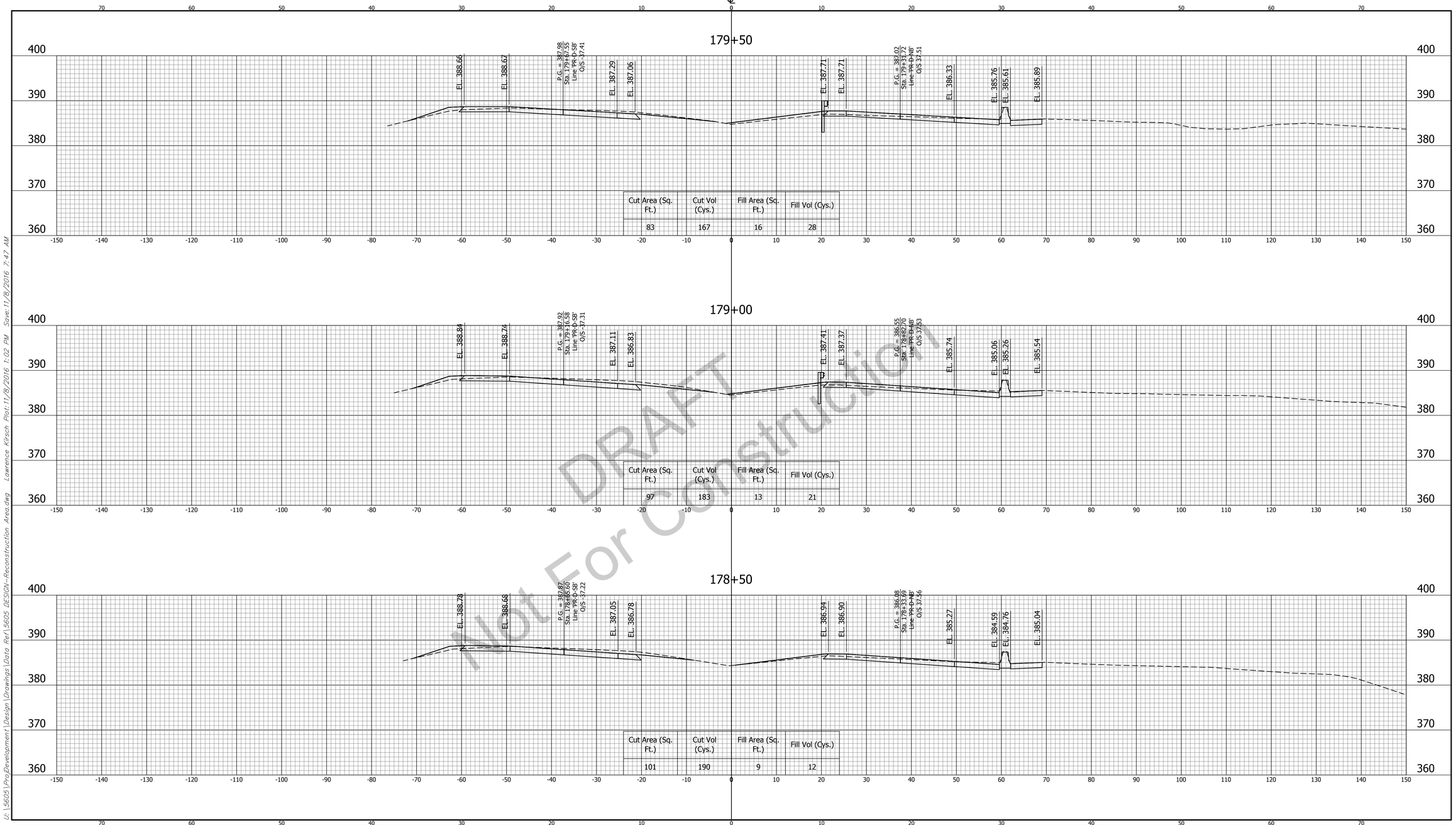
CHECKED: MM	CHECKED: BZ		CONTRACT: B-33539 / PROJECT: 1592481

BFS NO. 5605

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



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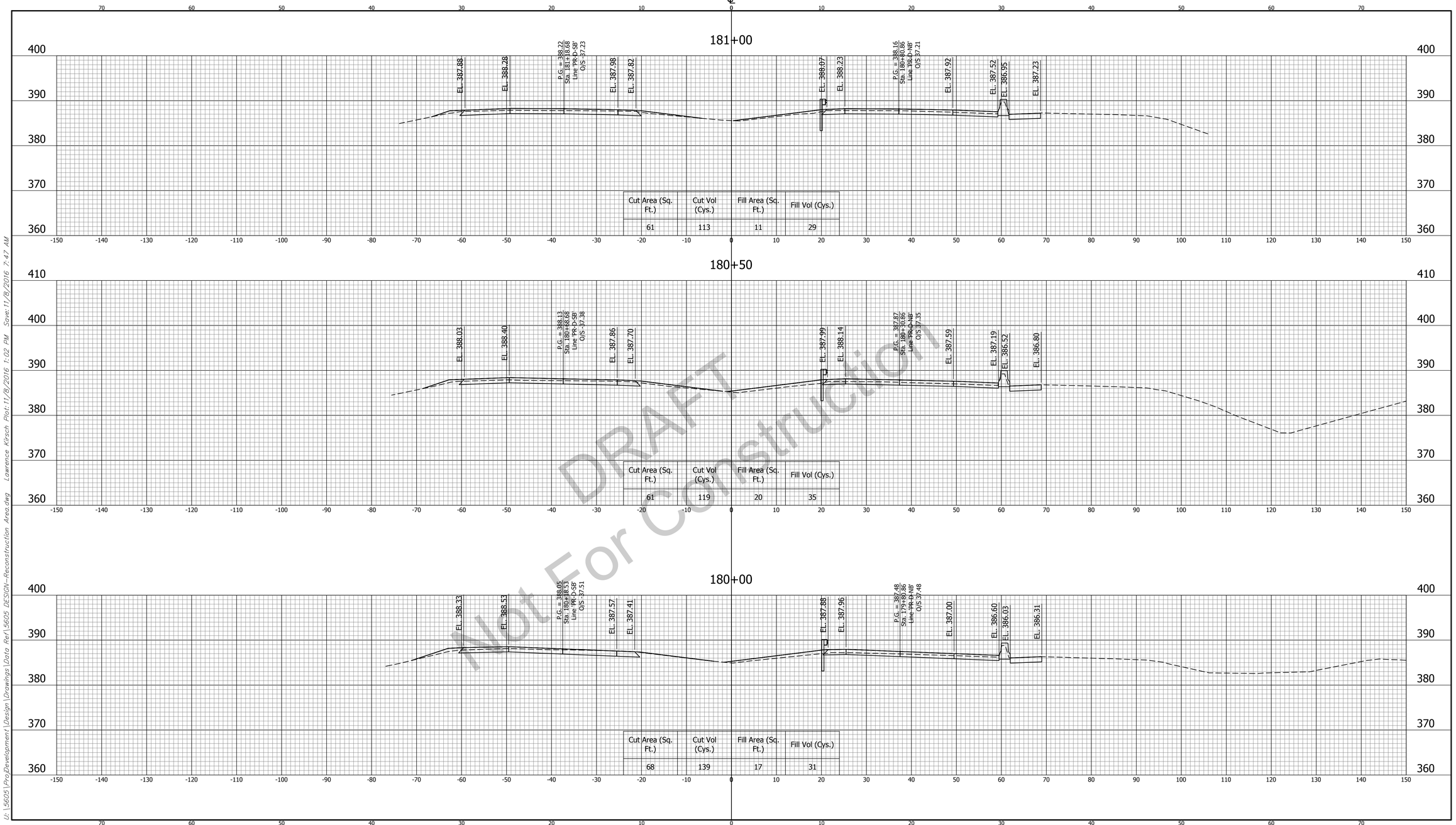
CHECKED: MM	CHECKED: BZ		CONTRACT: B-33539 / PROJECT: 1592481

5605 BFS NO.

CROSS SECTIONS

SCALE: 1"=5'

CUT ℄ FILL



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CHECKED: MM	CHECKED: BZ		CONTRACT: B-33539 / PROJECT: 1592481

5605 BFS NO.

CROSS SECTIONS

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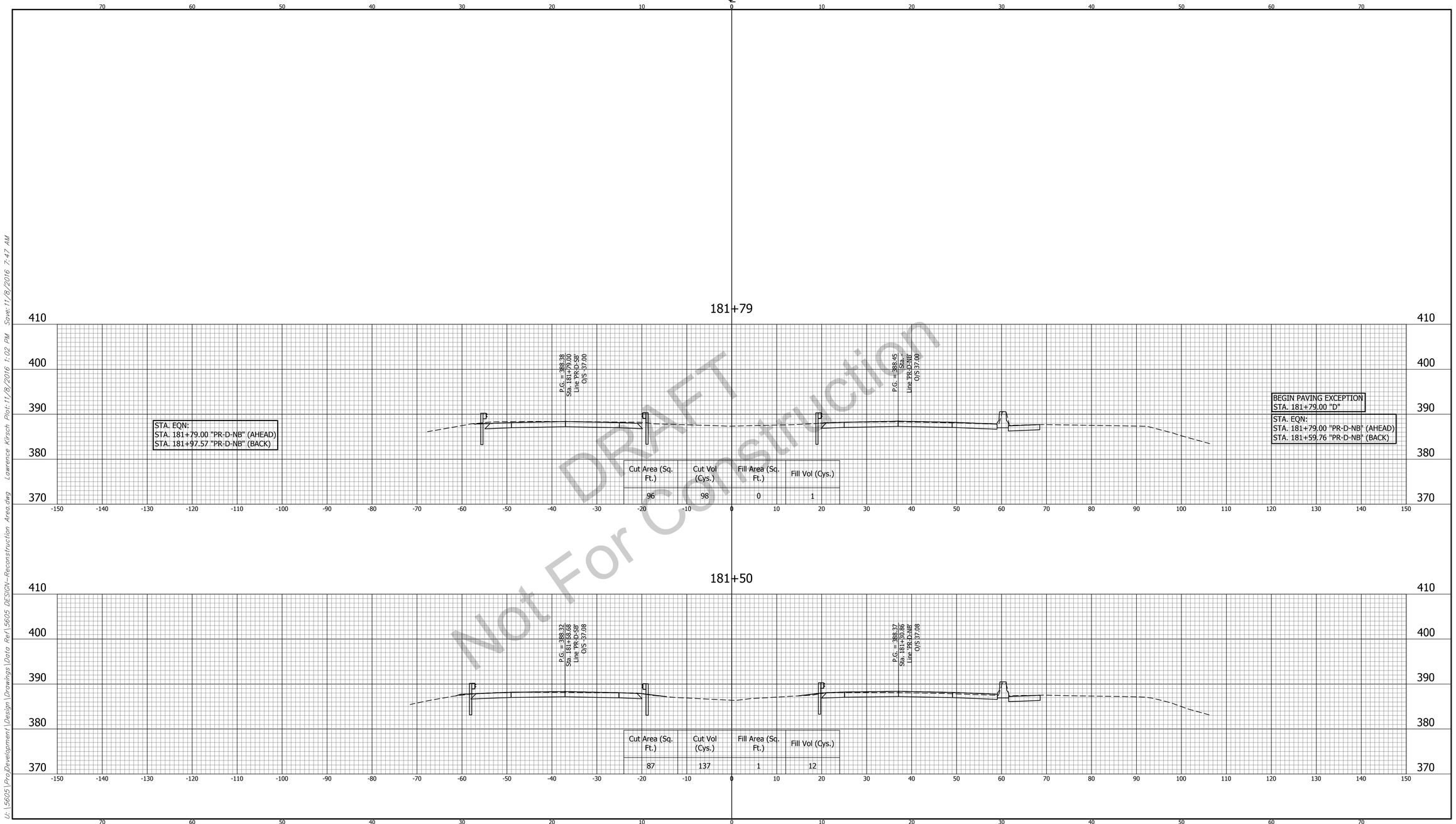

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BFS NO.