BOARD OF PUBLIC WORKS

MAYOR HON. THOMAS C. HENRY ROBERT P. KENNEDY CHAIR MIKE AVILA MEMBER **MEMBER KUMAR MENON** ATTEST

CLERK

CITY ENGINEER

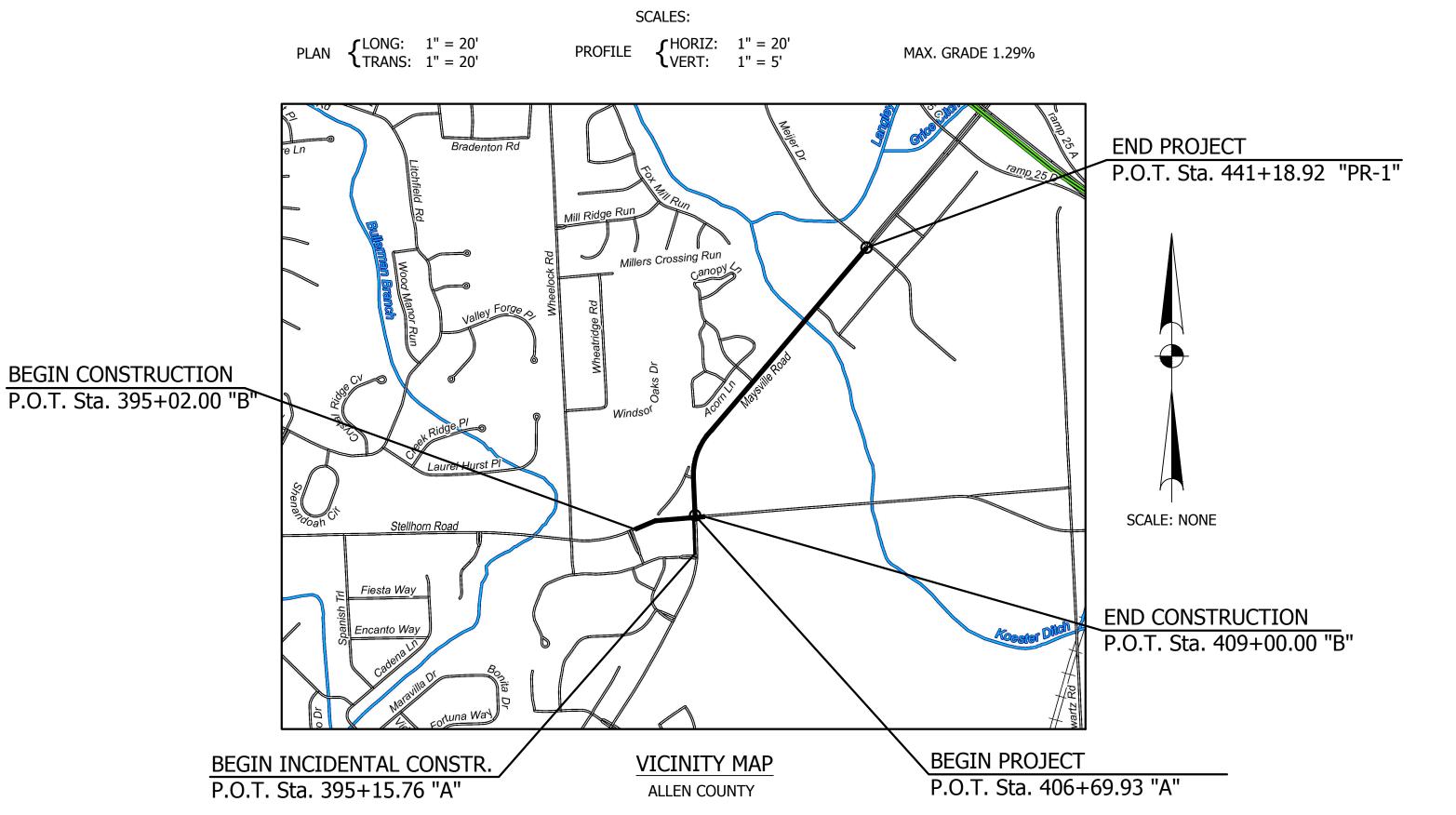
LINDSEY L. RICHARDS

SHAN GUNAWARDENA

THE CITY OF FORT WAYNE MAYSVILLE ROAD PLANS

MAYSVILLE ROAD WIDENING FROM STELLHORN ROAD TO MEIJERS DRIVE ALL IN SECTION 24 & 25, TOWNSHIP 31 NORTH, RANGE 13 EAST, ON THE U.S.G.S CEDARVILLE & FORT WAYNE EAST QUADRANGLES, ALL IN ST JOSEPH TOWNSHIP, CITY OF FORT WAYNE, ALLEN COUNTY, INDIANA

> GROSS LENGTH: 1.14 mi. NET LENGTH: 1.14 mi.



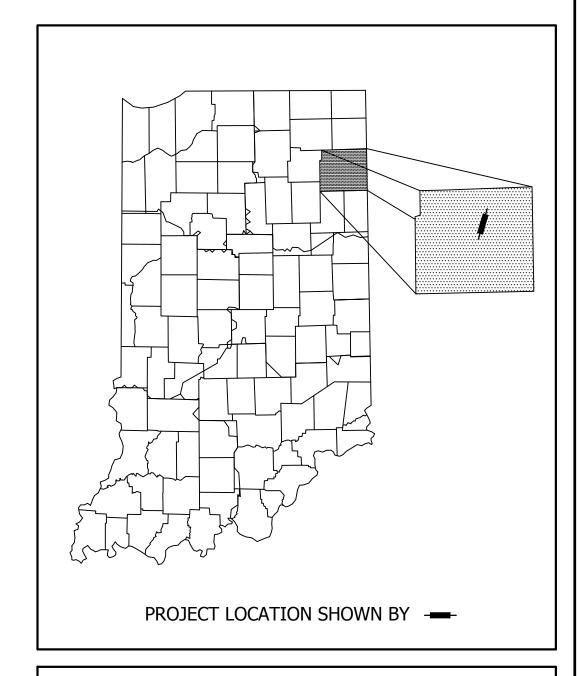
TRAFFIC DATA		MAYSVILLE I	ROAD
A.A.D.T.	2014	19,495	V.P.D.
A.A.D.T.	(2034)	22,574	V.P.D.
D.H.V.	(2034)	620	V.P.H.
DIRECTIONAL DISTR	IBUTION	50	%
TRUCKS		4.5	% D.H.V.
		4.5	% A.A.D.T.
DESIGN DATA			
DESIGN SPEED		40 MPH	
PROJECT DESIGN CR	ITERIA	3R (NON-FREE)	WAY)
FUNCTIONAL CLASSI	FICATION	URBAN MINOR AR	RTERIAL
RURAL/URBAN		URBAN	

LEVEL

NONE

TERRAIN

ACCESS CONTROL



Approx. 41°07'37" N. Lat. & 85°00'55" W. Long.

INDEX			
SHEET NO.	DESIGNATION		
1	TITLE SHEET		
2-6	TYPICAL CROSS SECTION		
7-10	PLAT No. 1		
11-21	MAINTENANCE OF TRAFFIC		
22-36	PLAN & PROFILES		
37-52	BRIDGE PLANS		
53-58	SANITARY AND WATERMAIN PLANS & DETAILS		
59-61	STRUCTURE, DRIVE & STANDARD DETAILS		
62-69	EROSION CONTROL		
70-81	LANDSCAPE PLANS		
82-83	SIGNALS		
84-86	LIGHTING		
87-90	PAVEMENT MARKINGS & SIGNAGE		
91	APPROACH TABLE		
92-93	STRUCTURE DATA TABLES		
94	EROSION CONTROL TABLE		
95-143	CROSS SECTIONS		

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

CABLE: COMCAST CABLEVISION 720 TAYLOR ST. FORT WAYNE, IN 46802 PH: 260-458-5107 ATTN: JOHN GAYDAY

CONSTRUCTION.

CAUTION

800 W. JEFFERSON BLVD. FORT WAYNE, IN 46804 PH: 260-461-3457 ATTN: AMY HEITZMANN EMAIL: amy.m.heitzmann@ftr.com

Know what's below.

Call before you dig.

LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE

BASED UPON ABOVE GROUND EVIDENCE (including, but not limited to, manholes, inlets, valves, and marks made upon the ground by others) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF SAID EXISTING UNDERGROUND

UTILITIES SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY AND ALL

REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES.

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES.

UTILITIES 200 E. BERRY ST., SUITE 250 FORT WAYNE, IN 46802 PH: 260-427-5155 ATTN: DAN SMITH EMAIL: dan.smith@cityoffortwayne.org

STORM/SANITARY: CITY OF FORT WAYNE UTILITIES GAS/ELECTRIC: NIPSCO ENGINEERING DEPT. ELECTRIC: AMERICAN ELECTRIC & POWER FIBER: WINDSTREAM 801 E. 86th AVE. MERRILLVILLE, IN 46410 PH: 219-647-5311 ATTN: DOUGLAS BENDA

ENGINEERING DEPT. P.O. BOX 60 3514 LANDIN RD. FORT WAYNE, IN 46801-0060 PH: 260-521-1766 ATTN: MARK WALLS EMAIL: mawalls@aep.com

ZAYO BANDWITH 800 N. DURAND ROAD 1710 DIRECTORS ROW FORT WAYNE, IN 46808 PH: 260-570-5677 ATTN: JASON GILPIN EMAIL: christopher.rogers@ EMAIL:jason.gilpin@zayo.com

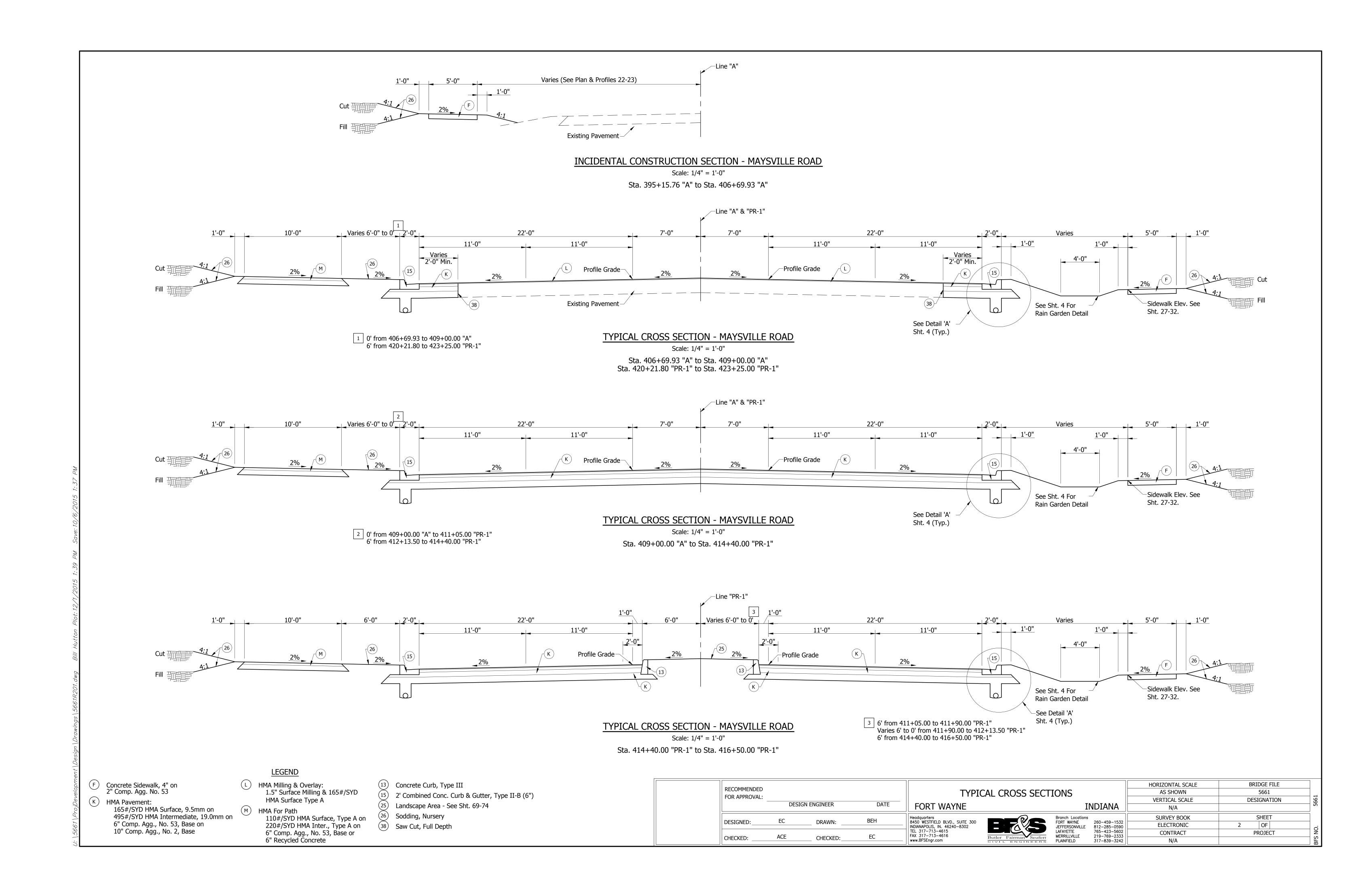
CERTIFIED BY:

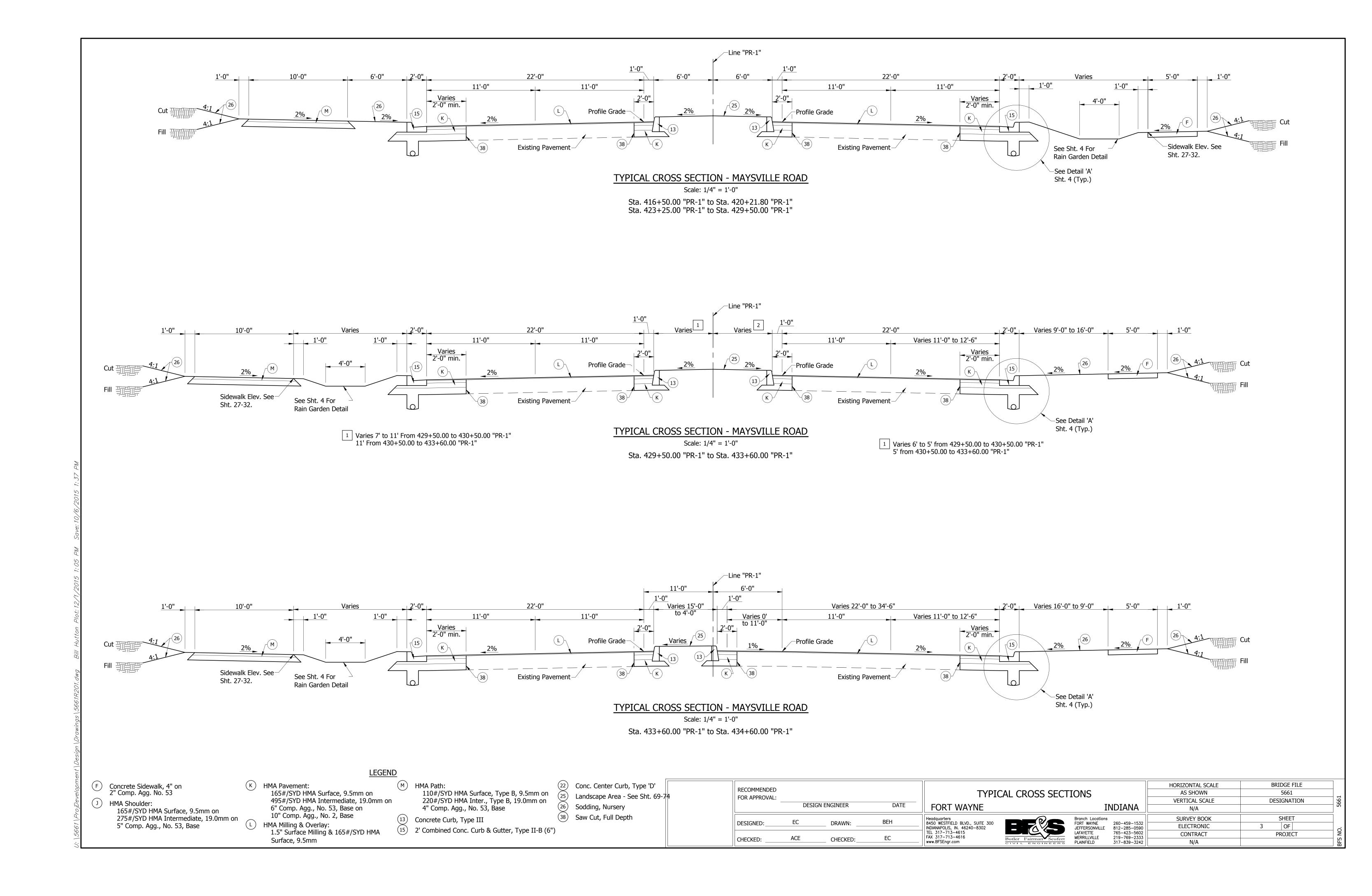


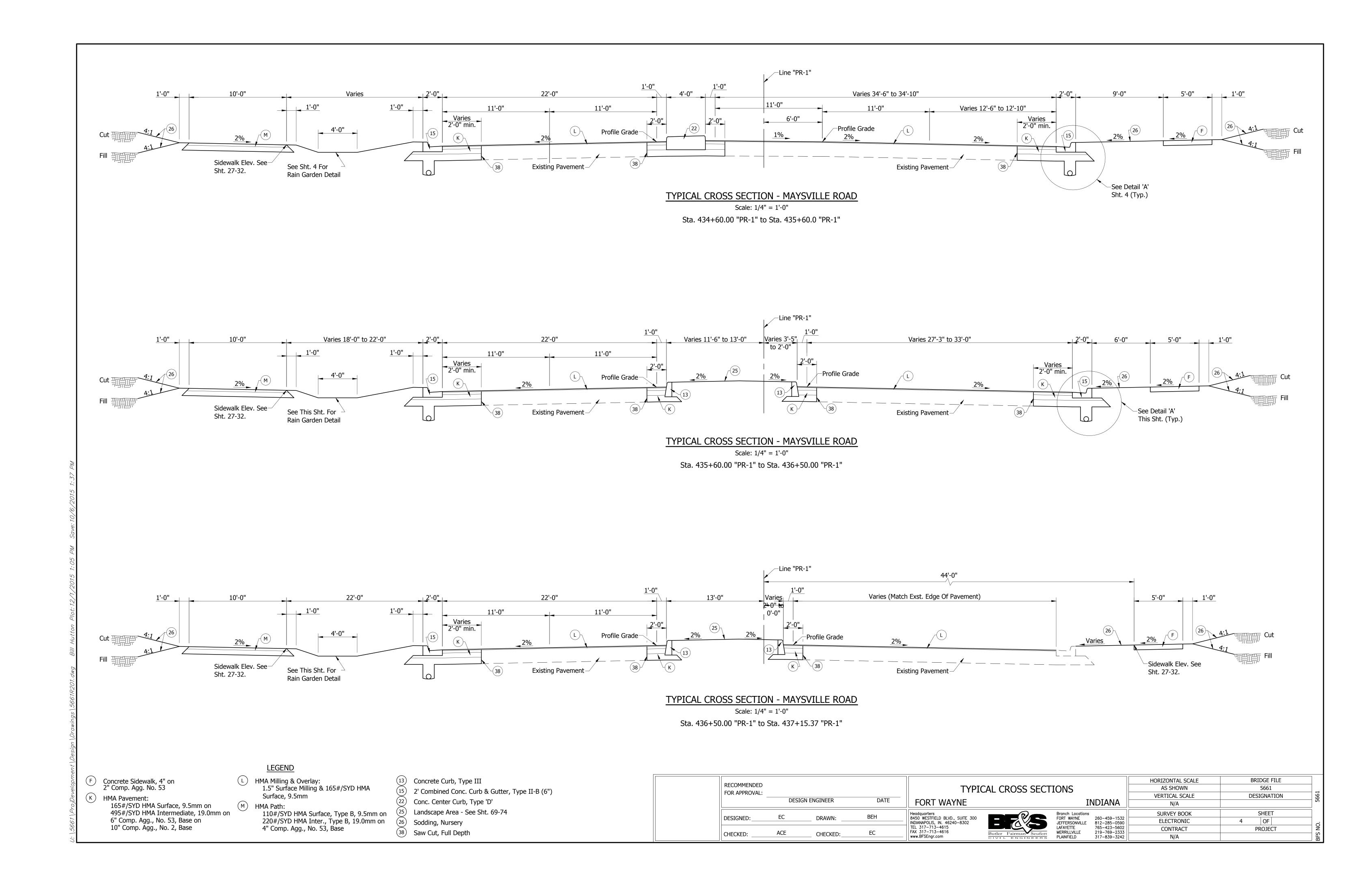
			FILE
			5661
LC		DESIG	GNATION
RING			
KING	SURVEY BOOK	S	HEET
	ELECTRONIC	1	OF
	CONTRACT	PR	OJECT
DATE	N/A		

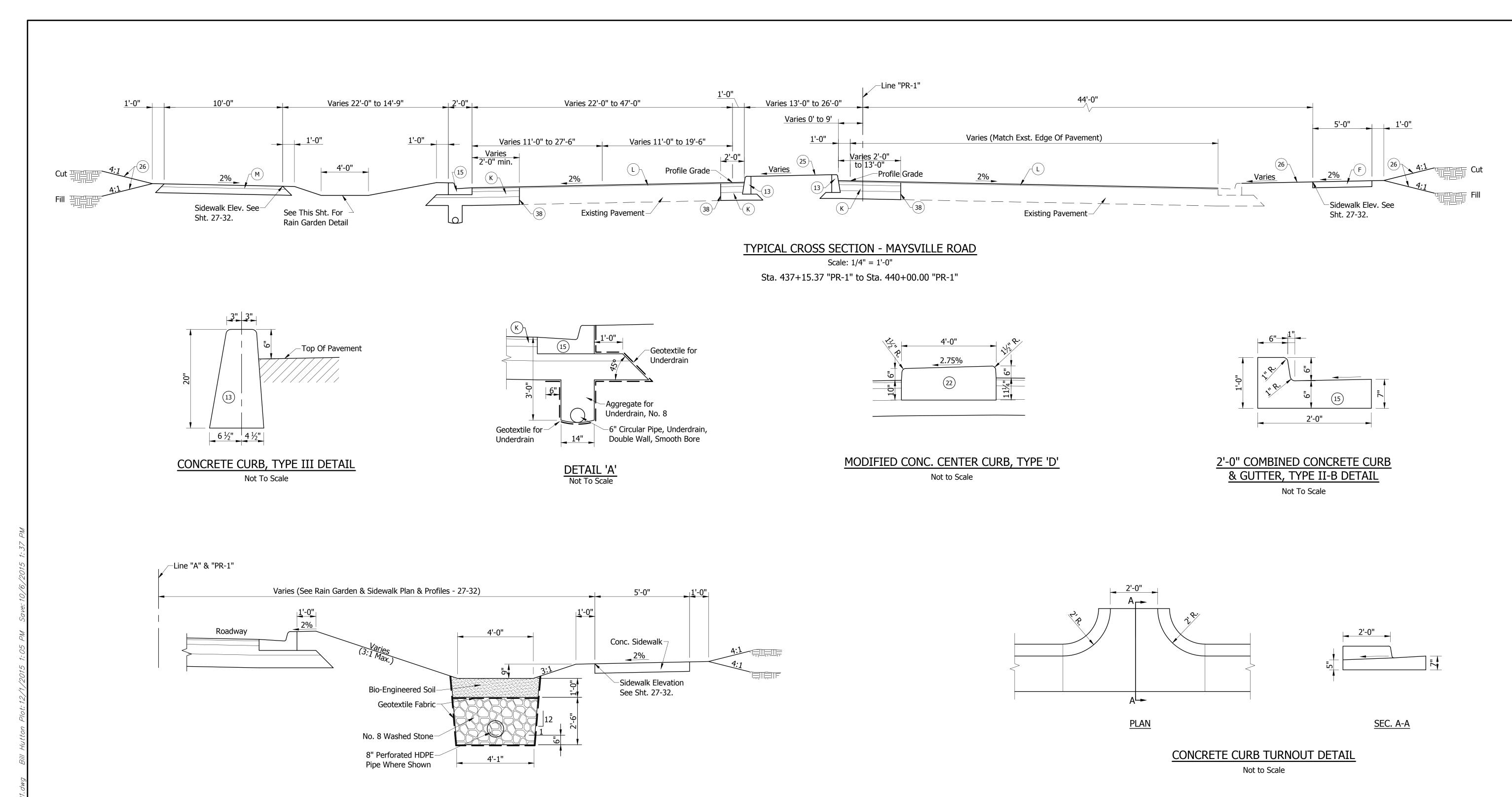
EMAIL: jdbenda@nisource.com

CORUNNA, MI 48817 PH: 812-759-7882 ATTN:CHRIS ROGERS windstream.com









RAIN GARDEN DETAIL NOT TO SCALE

HMA Milling & Overlay:	(13)	Concrete Curb, Type III
1.5" Surface Milling & 165#/SYD HMA Surface, 9.5mm	15	2' Combined Conc. Curb & Gutter, Type II-B (6")
HMA Path:	22	Conc. Center Curb, Type 'D'
110#/SYD HMA Surface, Type B, 9.5mm on	25	Landscape Area - See Sht. 69-74
220#/SYD HMA Inter., Type B, 19.0mm on	26	Sodding, Nursery
4" Comp. Agg., No. 53, Base	(38)	Saw Cut Full Donth

38) Saw Cut, Full Depth

<u>LEGEND</u>

F Concrete Sidewalk, 4" on 2" Comp. Agg. No. 53

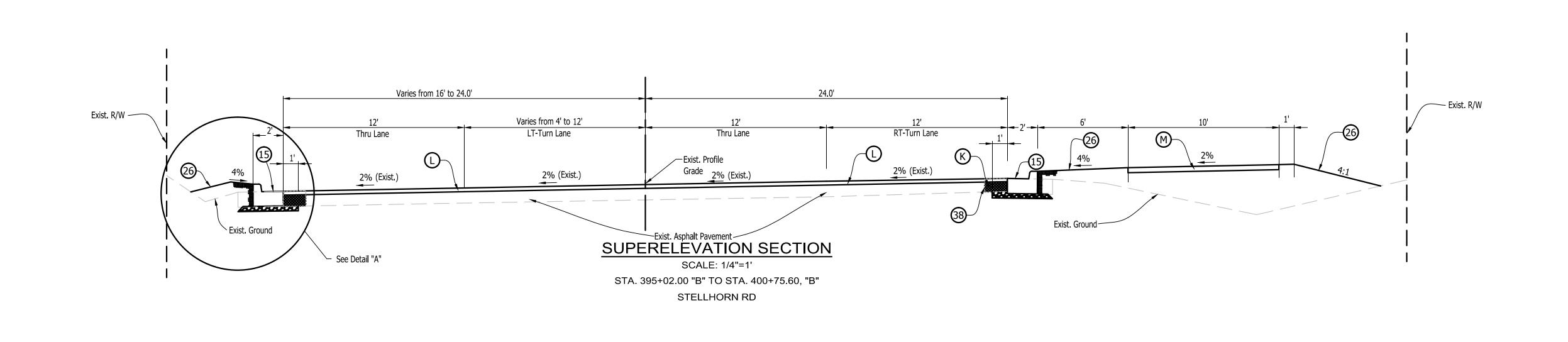
165#/SYD HMA Surface, 9.5mm on

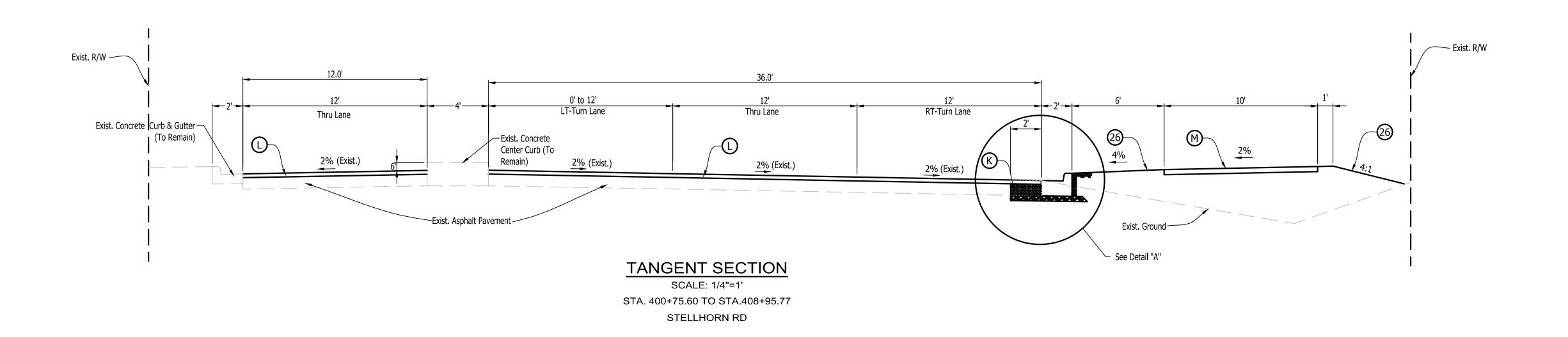
6" Comp. Agg., No. 53, Base on 10" Comp. Agg., No. 2, Base

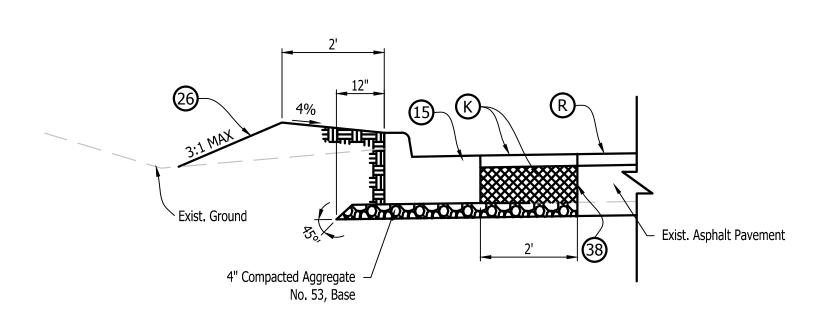
495#/SYD HMA Intermediate, 19.0mm on

(K) HMA Pavement:

RECOMMENDED FOR APPROVAL:	DESIGI	N ENGINEER	DATE	TYPIO FORT WAYNE	CAL CROSS SRCT		NDIANA	HORIZONTAL SCALE AS SHOWN VERTICAL SCALE AS SHOWN	BRIDGE FILE 5661 DESIGNATION	5661
DESIGNED:	EC	DRAWN:	BEH	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302		Branch Locations FORT WAYNE JEFFERSONVILLE	260-459-1532 812-285-0590	SURVEY BOOK ELECTRONIC	SHEET 5 OF	
CHECKED:	ACE	CHECKED:	EC	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765–423–5602 219–769–2333 317–839–3242	CONTRACT N/A	PROJECT	BFS NO



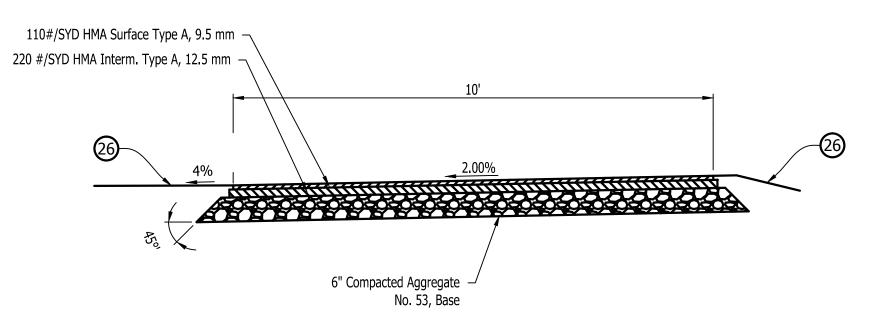




DETAIL "A"

SCALE: N.T.S.

STA. 396+17.50 TO STA.404+?? "B"



TRAIL/PATHWAY DETAILM SCALE: N.T.S.

- (15) CONCRETE CURB TYPE II-B
- 26 SODDING (NURSERY)
- 38 SAWCUT, FULL DEPTH

HORIZONTAL SCALE

- HMA PAVEMENT:
 110 #/SYD HMA SURFACE TYPE A, 9.5 mm ON
 330 #/SYD HMA INTERMEDIATE, TYPE A ON
 660 #/SY HMA BASE, TYPE A ON
 4" COMPACTED AGG., No. 53 BASE
- HMA PAVEMENT OVERLAY
 110 #/SY HMA SURFACE, 9.5 mm ON
 1" ASPHALT MILLING
- M HMA FOR TRAIL/PATH (SEE DETAIL)

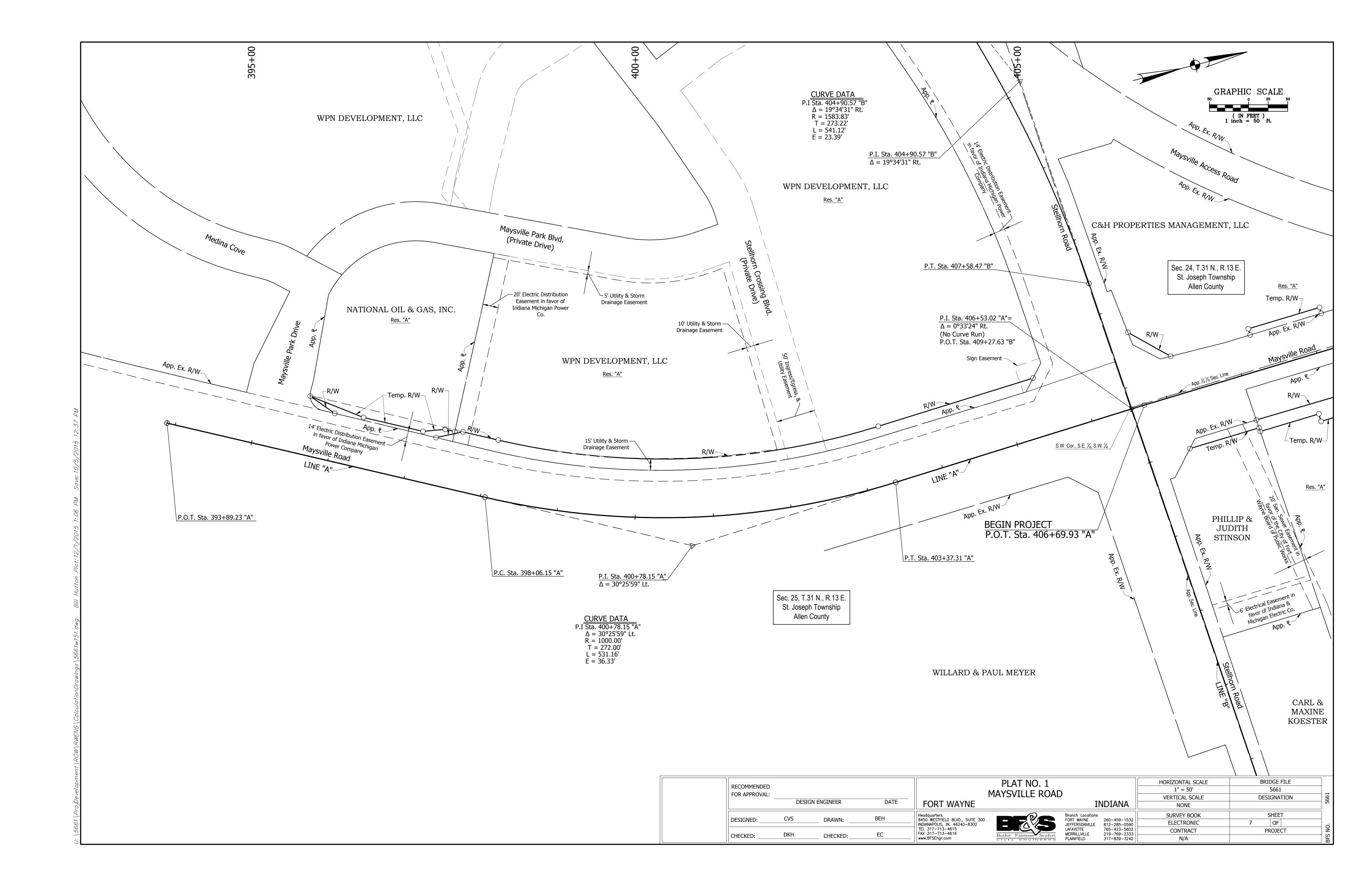
A 7 ENCINEEDING	RECOMMENDED FOR APPROVAL:
A&Z ENGINEERING	
017 Coldwater Road, Suite 500 Fort Wayne, IN 46825	DESIGNED:
260.485.7077 www.az-engineering.net	CHECKED:

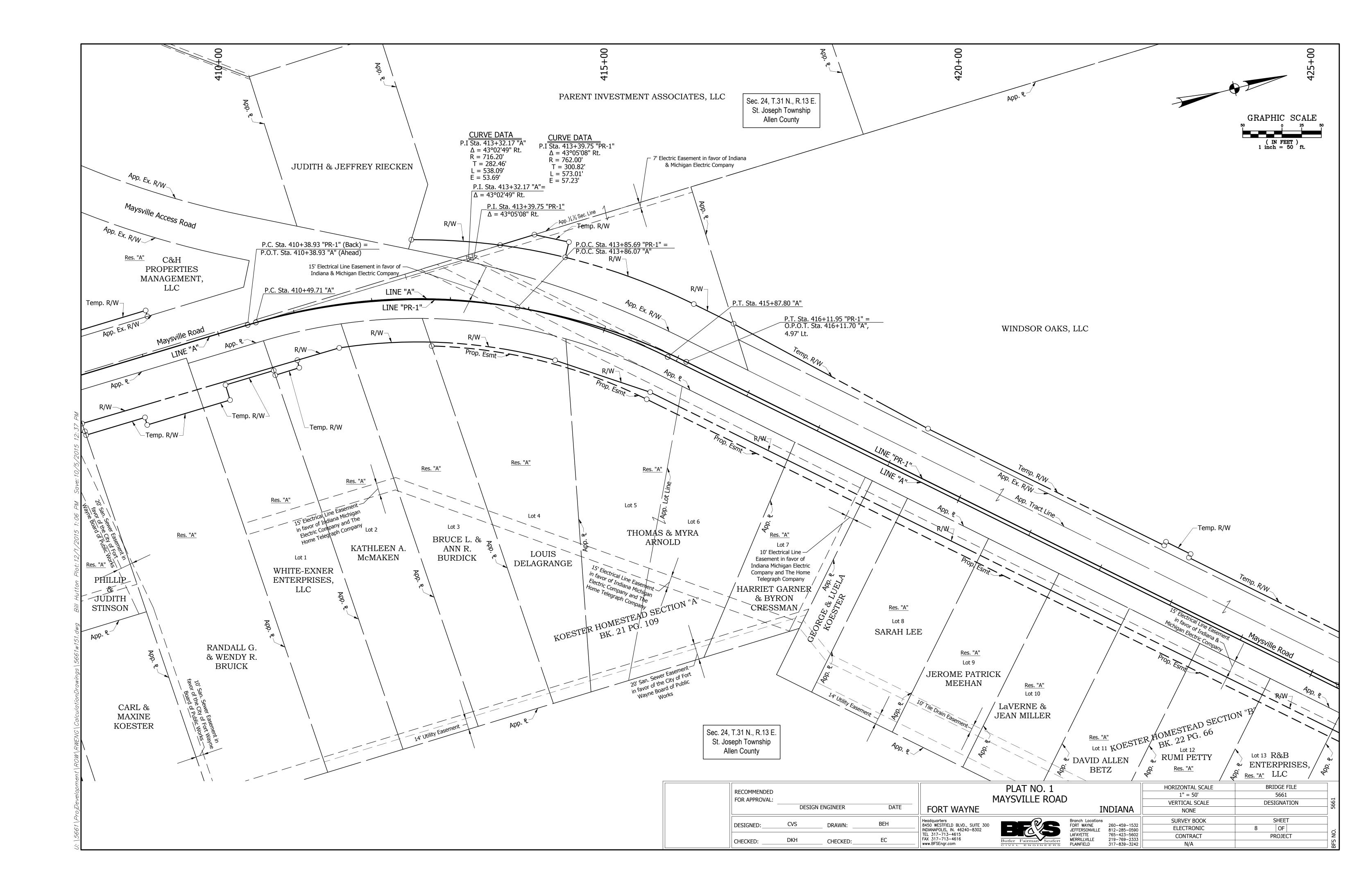
ENDED ROVAL:					TYP-
	DESIG	SN ENGINEER		DATE	
D:	C.H.	DRAWN:	E.M.H.		Headquarters 8450 WESTFIELD BLVD., SUITE 30 INDIANAPOLIS, IN. 46240-8302
:	W.J.Z.	CHECKED:	C.H.		TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com

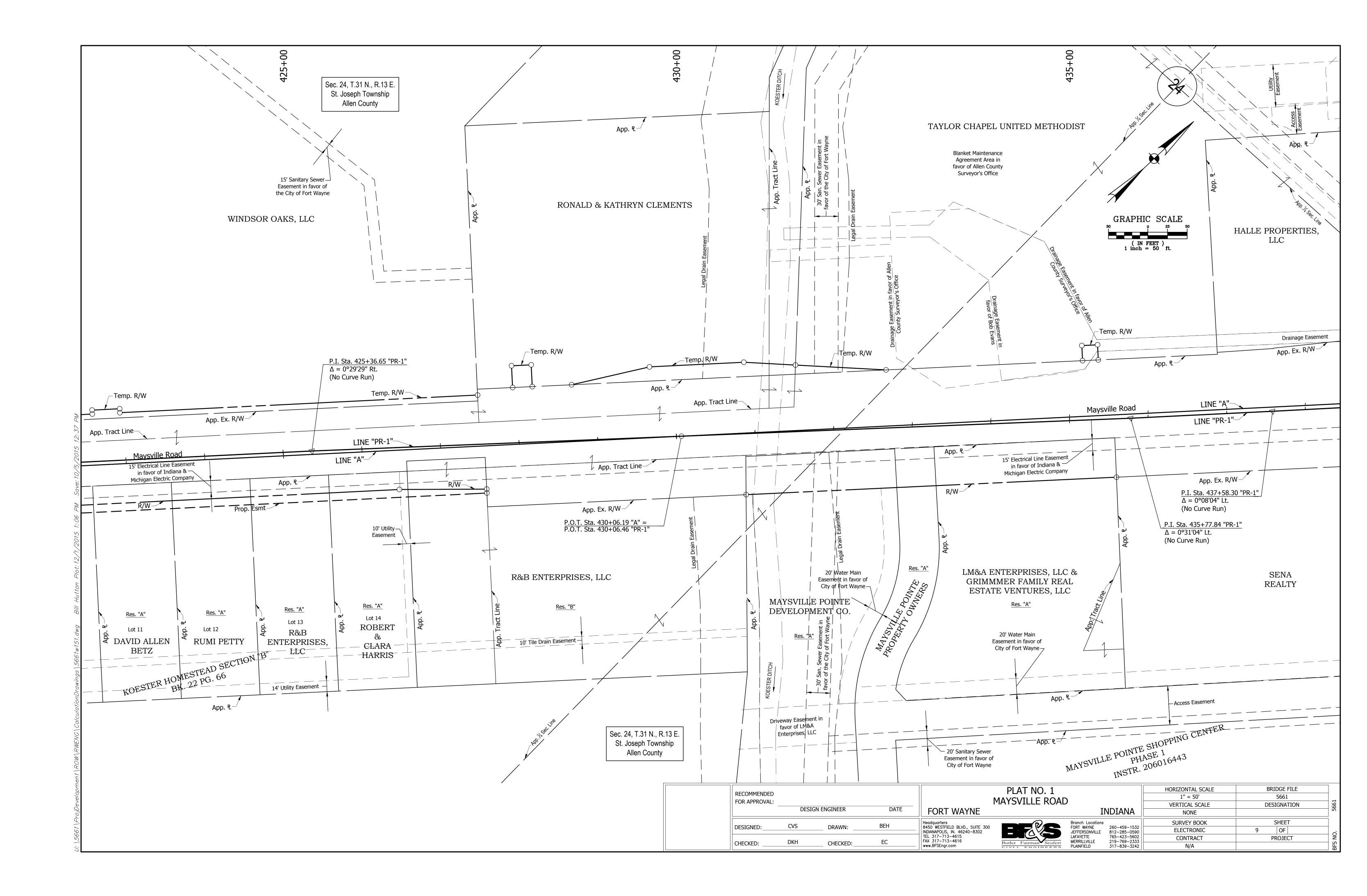
PICAL	_ CROSS	SECT	IONS		
TE 300 302	Butler Fairman	Seufert	Branch Locations FORT WAYNE JEFFERSONVILLE LAFAYETTE MERRILLVILLE PLAINFIELD	260-459-1532 812-285-0590 765-423-5602 219-769-2333 317-839-3242	

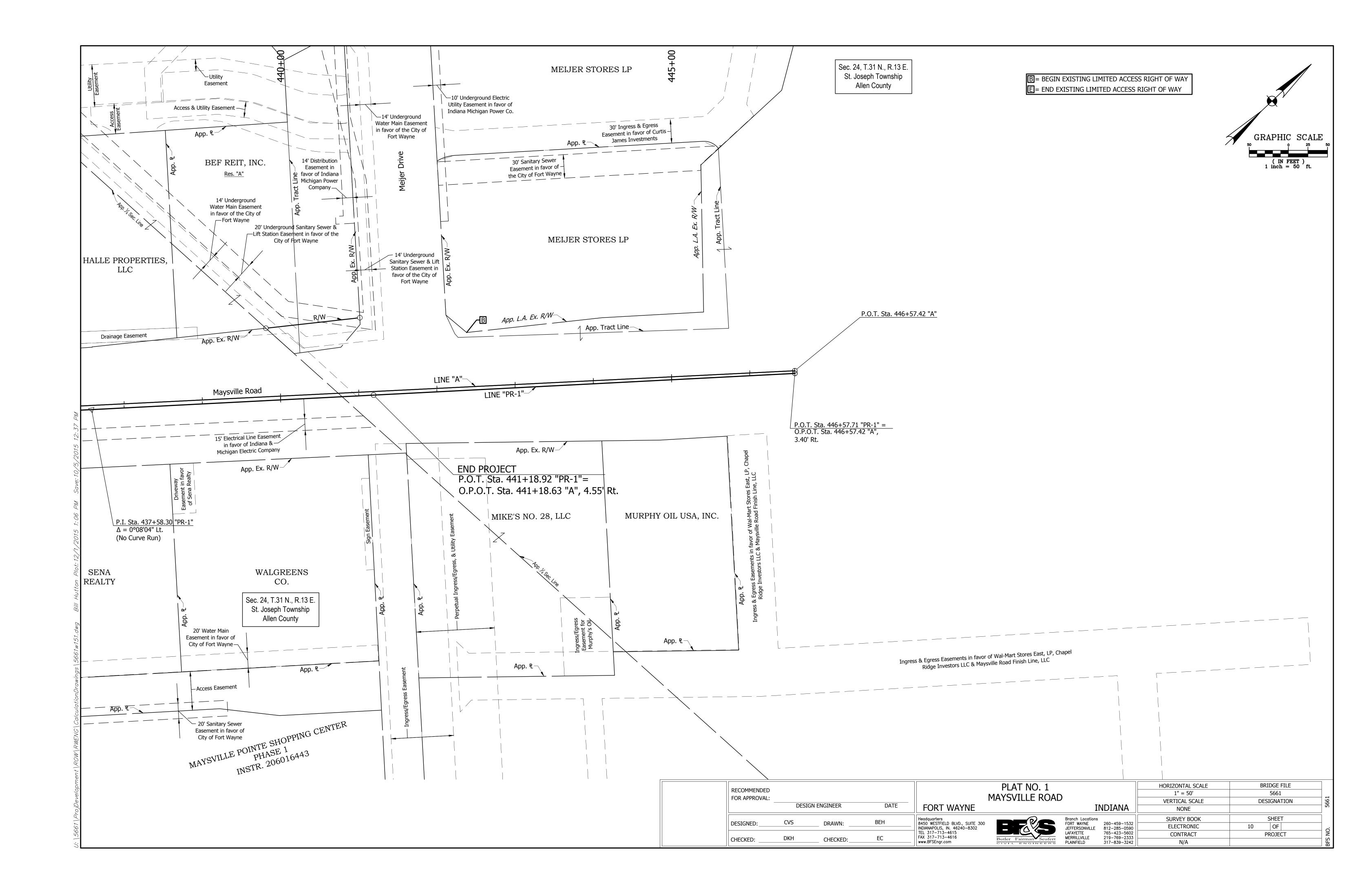
	AS SHOWN	
	VERTICAL SCALE	DESIGNATION
	N/A	
	SURVEY BOOK	SHEET
-1532 -0590		OF
-5602 -2333	CONTRACT	PROJECT
-3242		

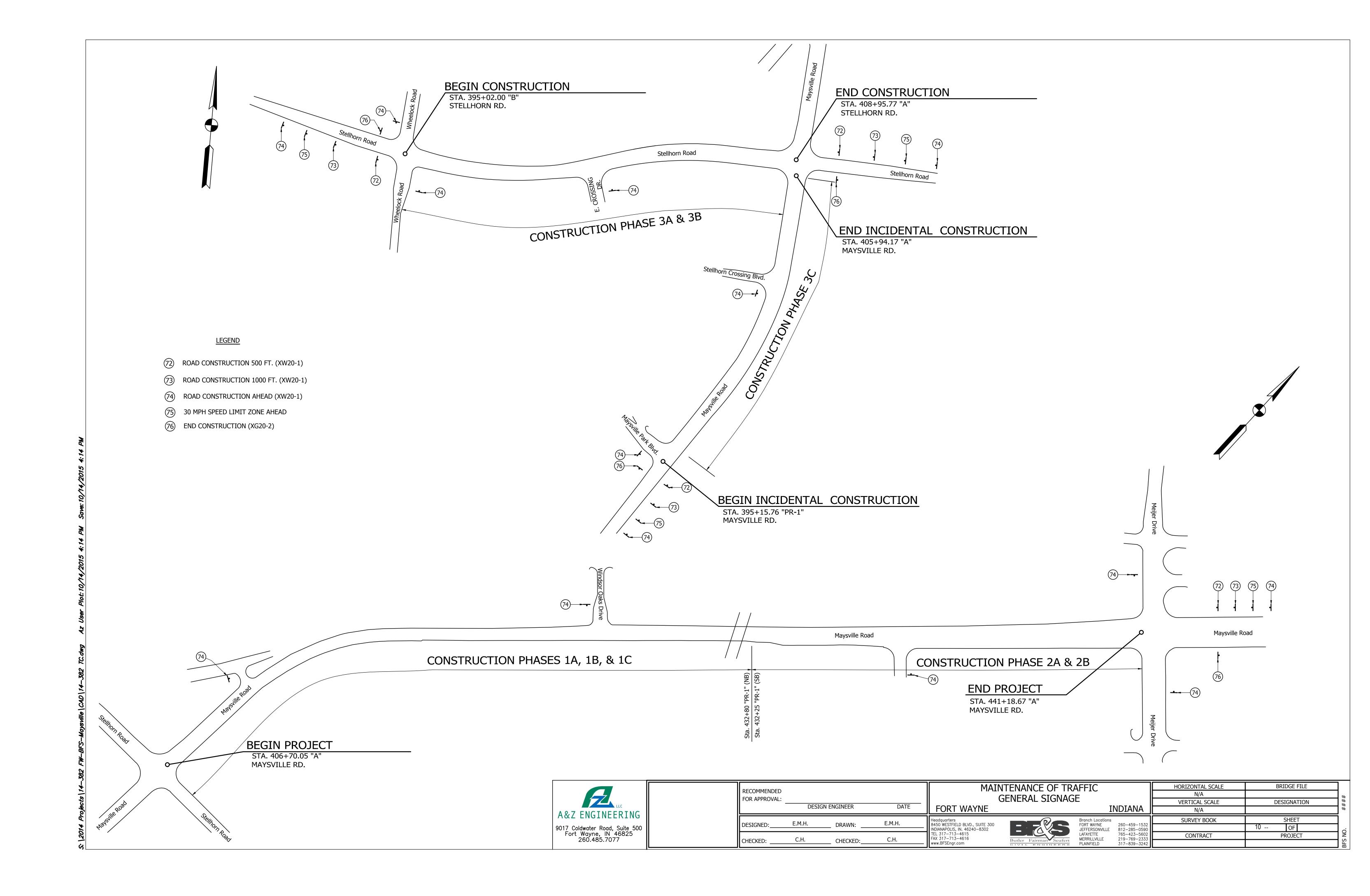
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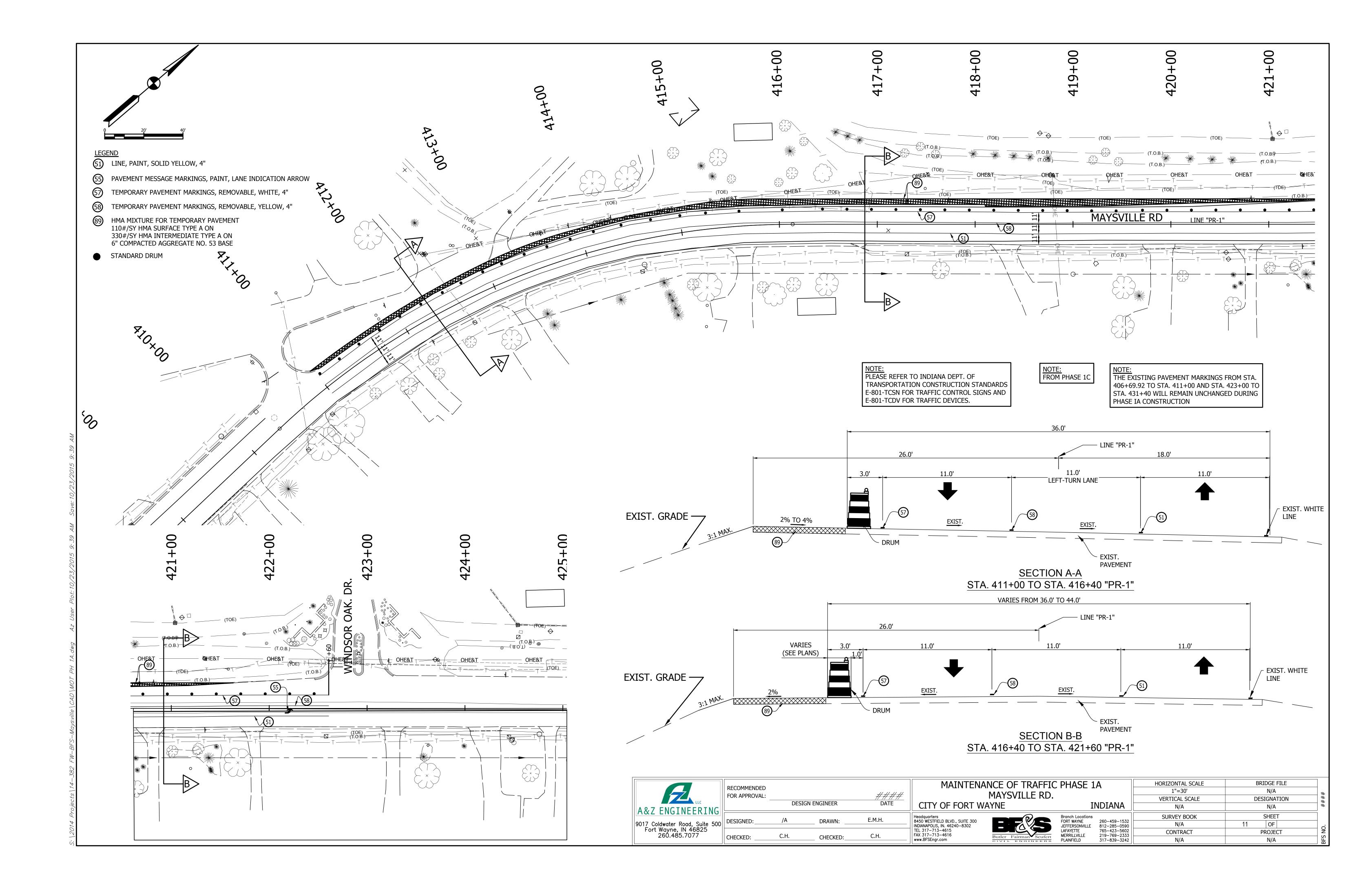


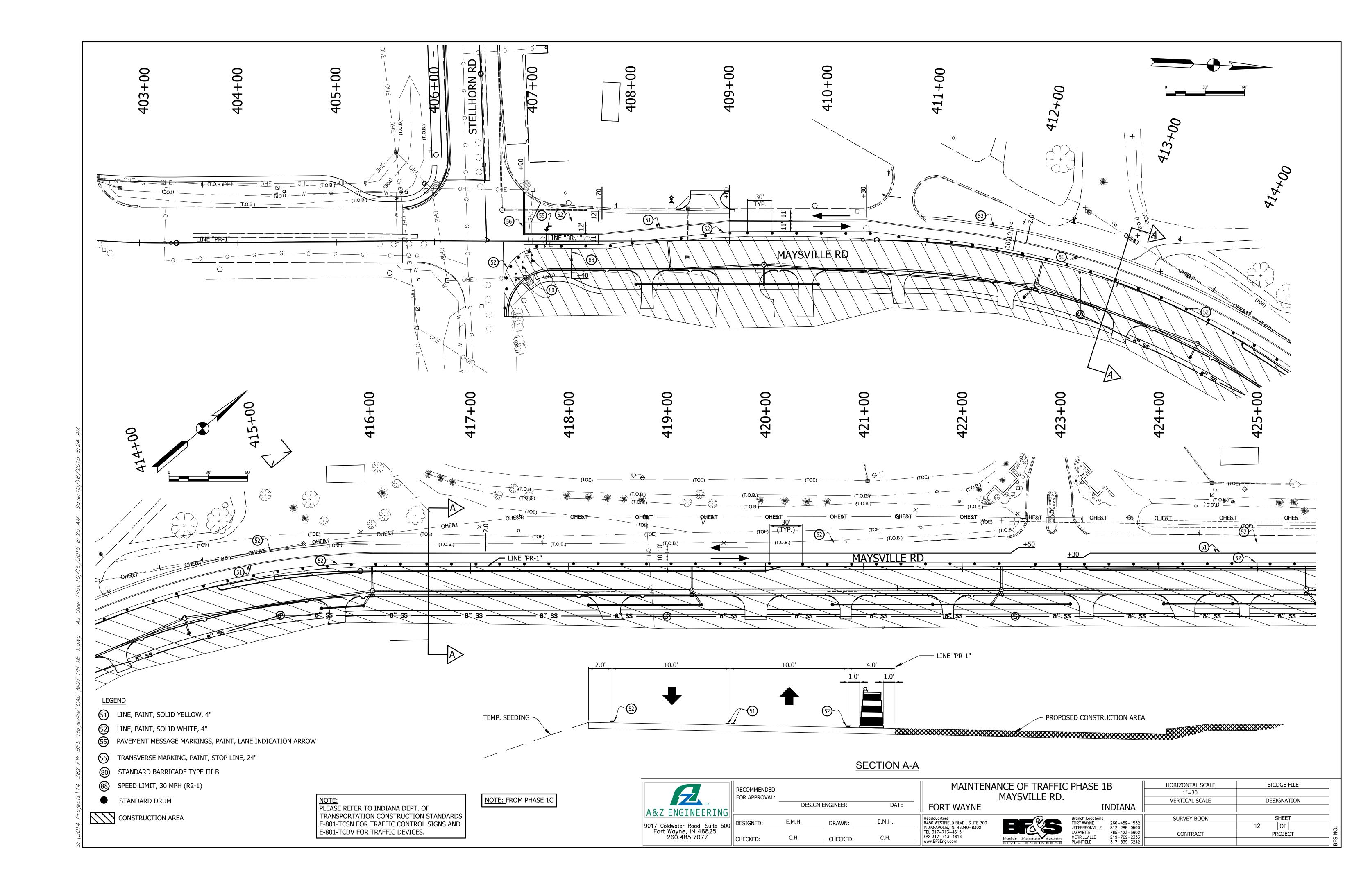


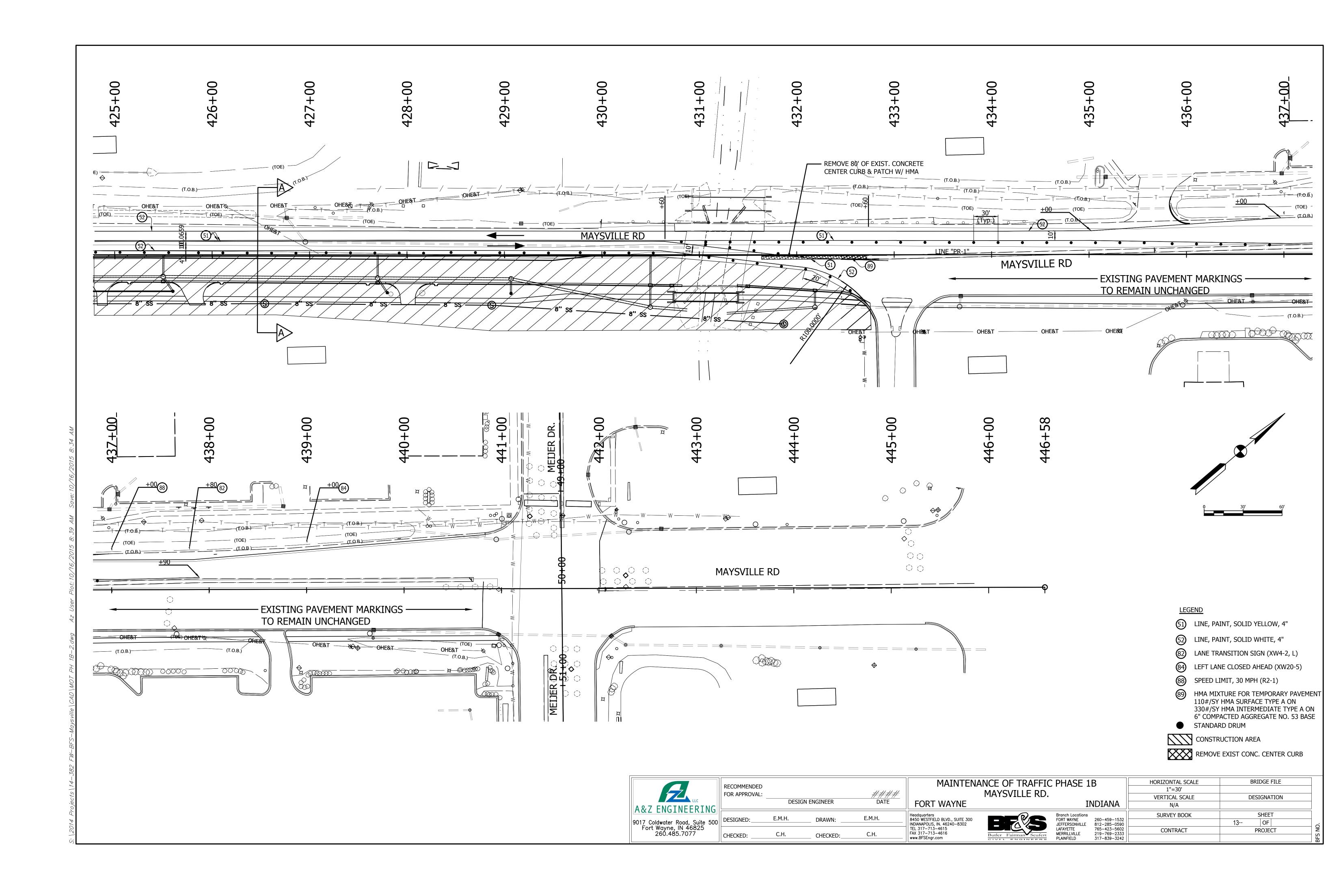


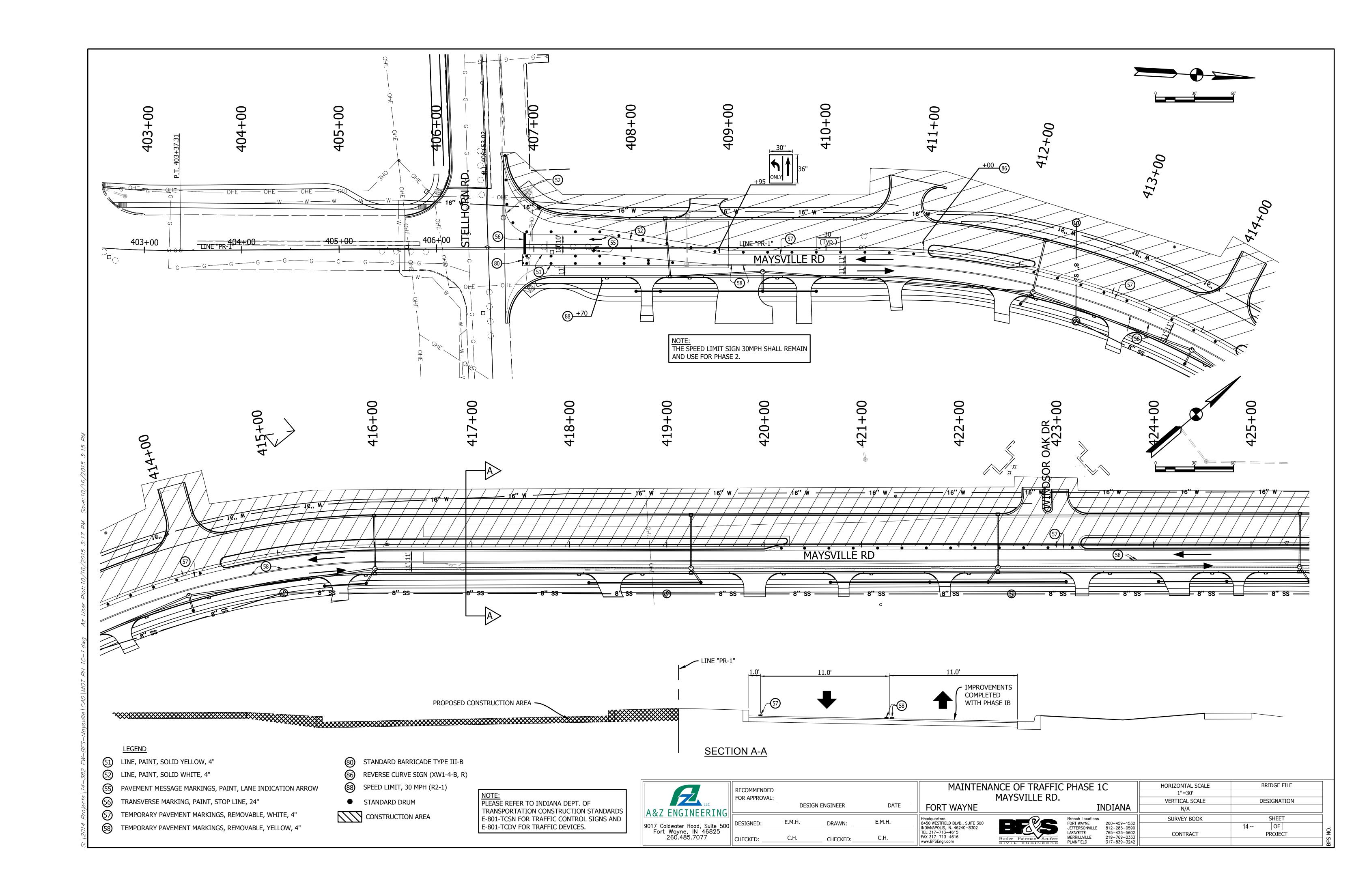


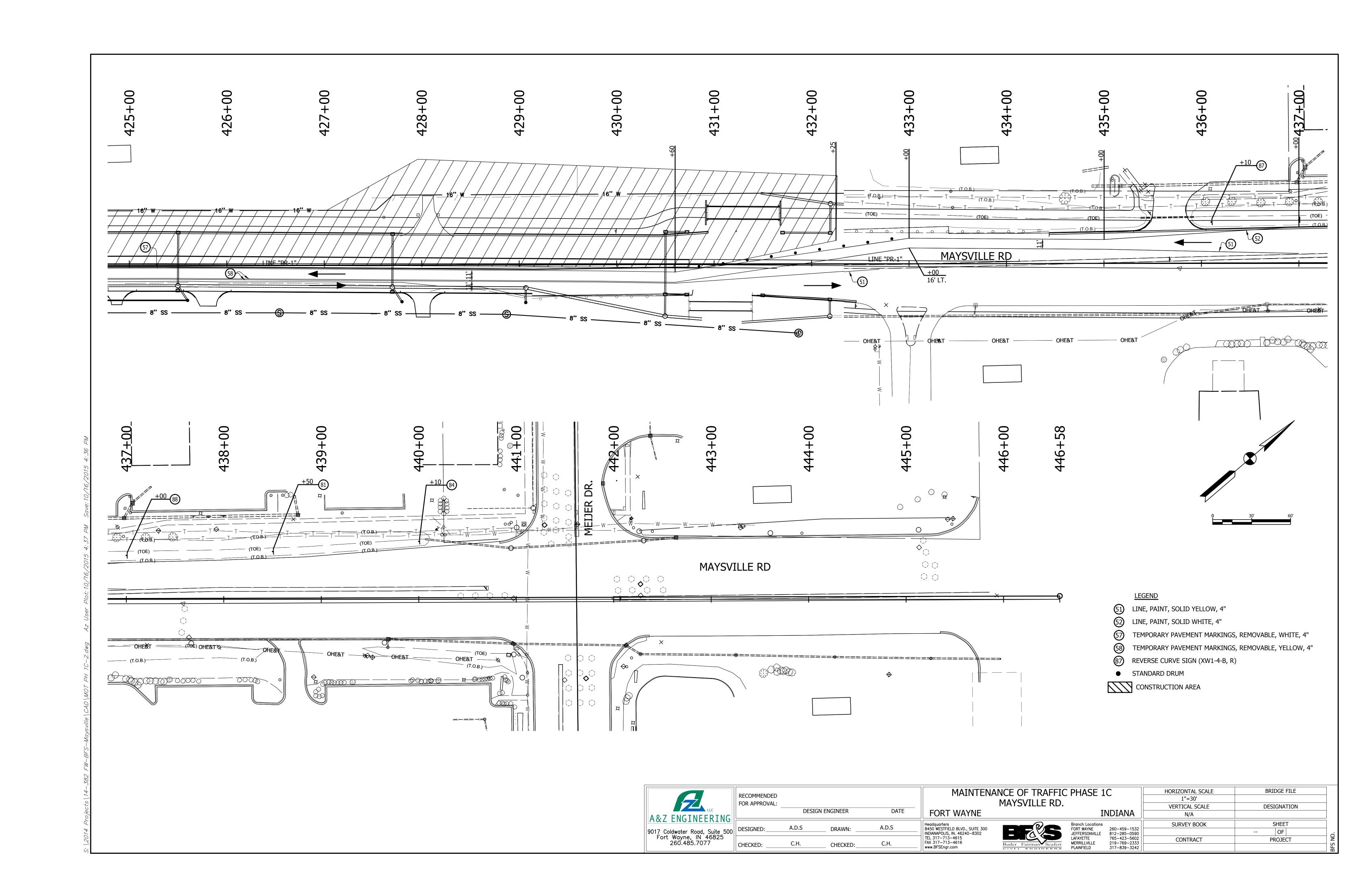


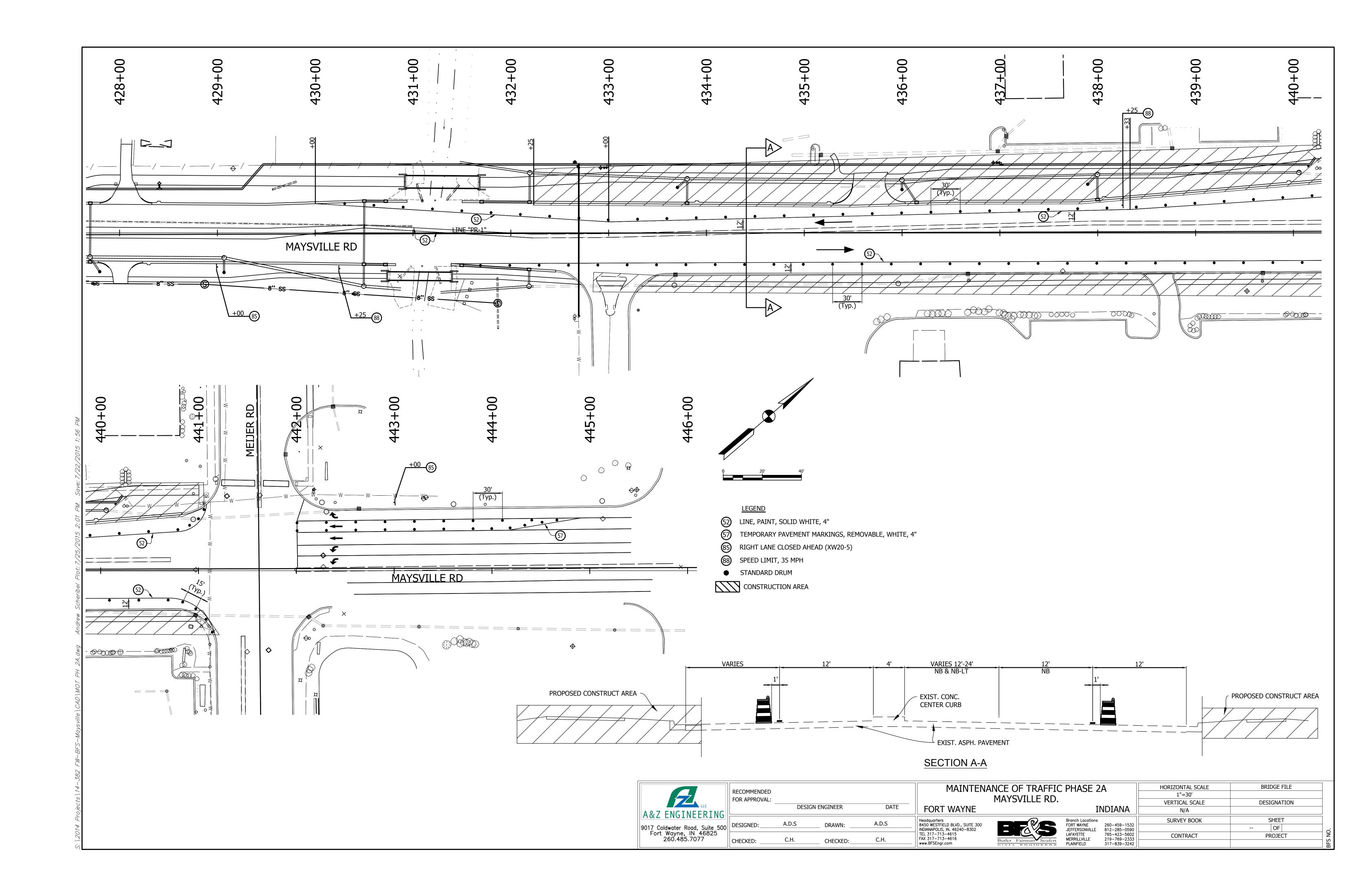


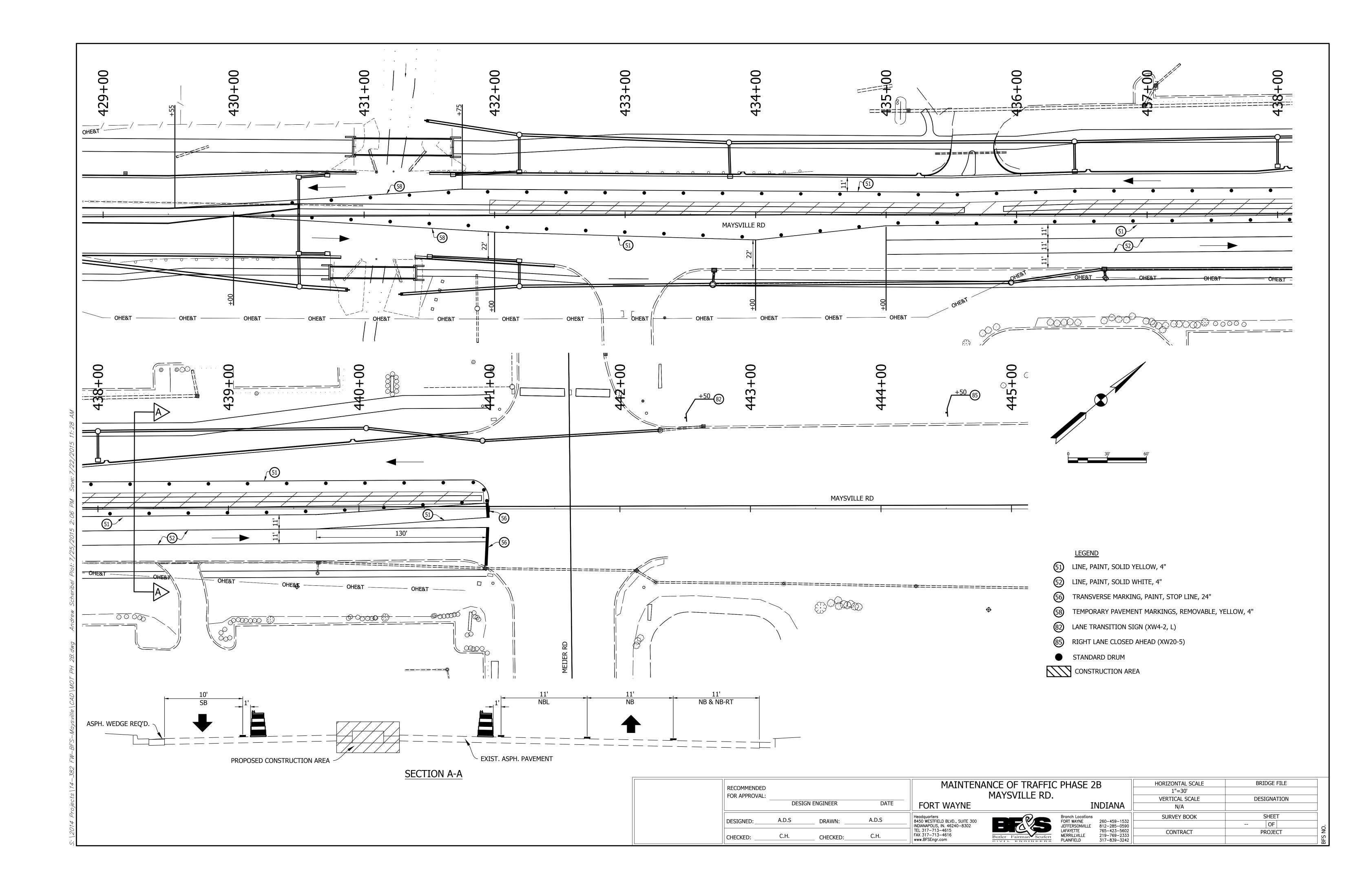


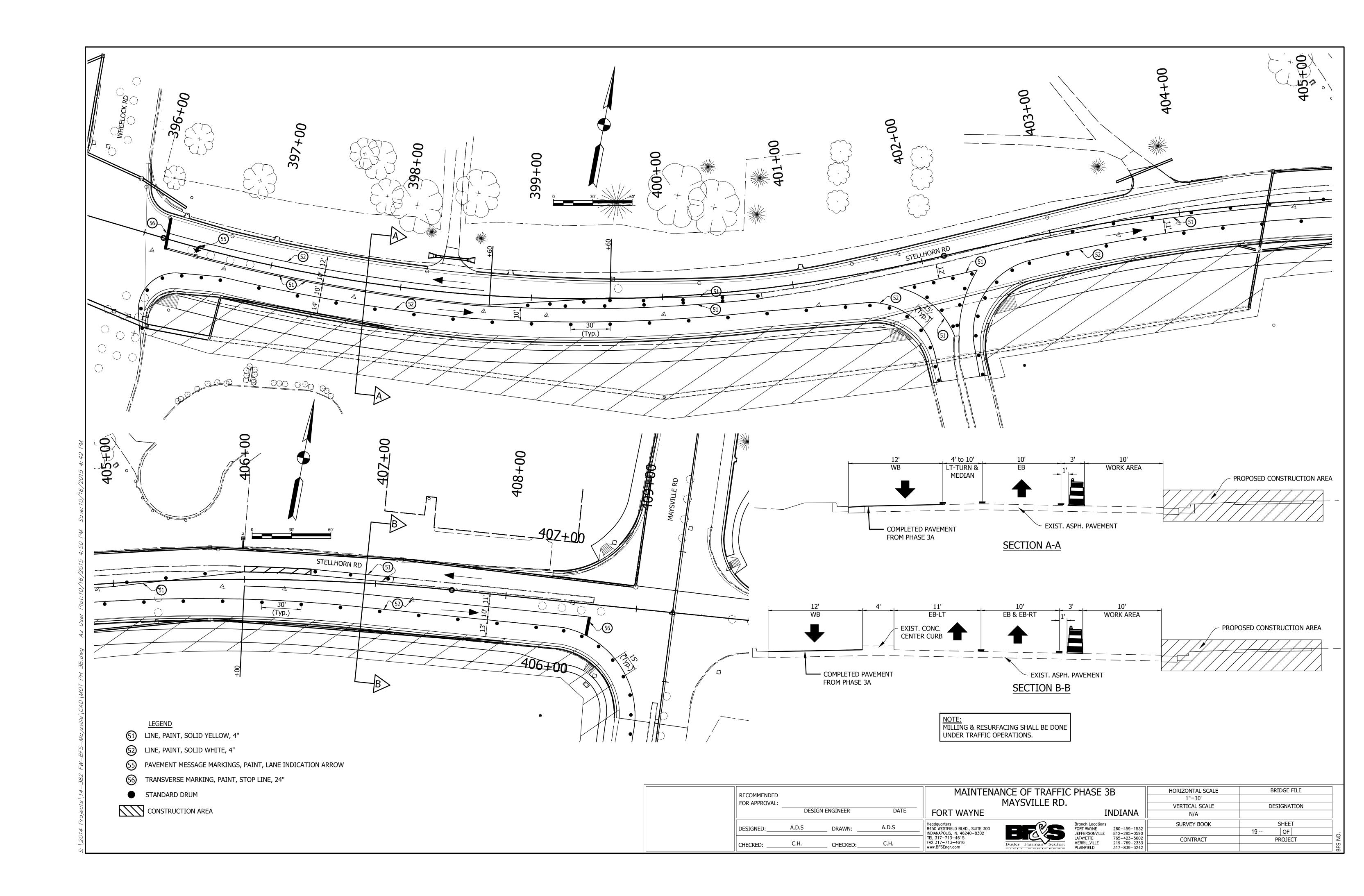


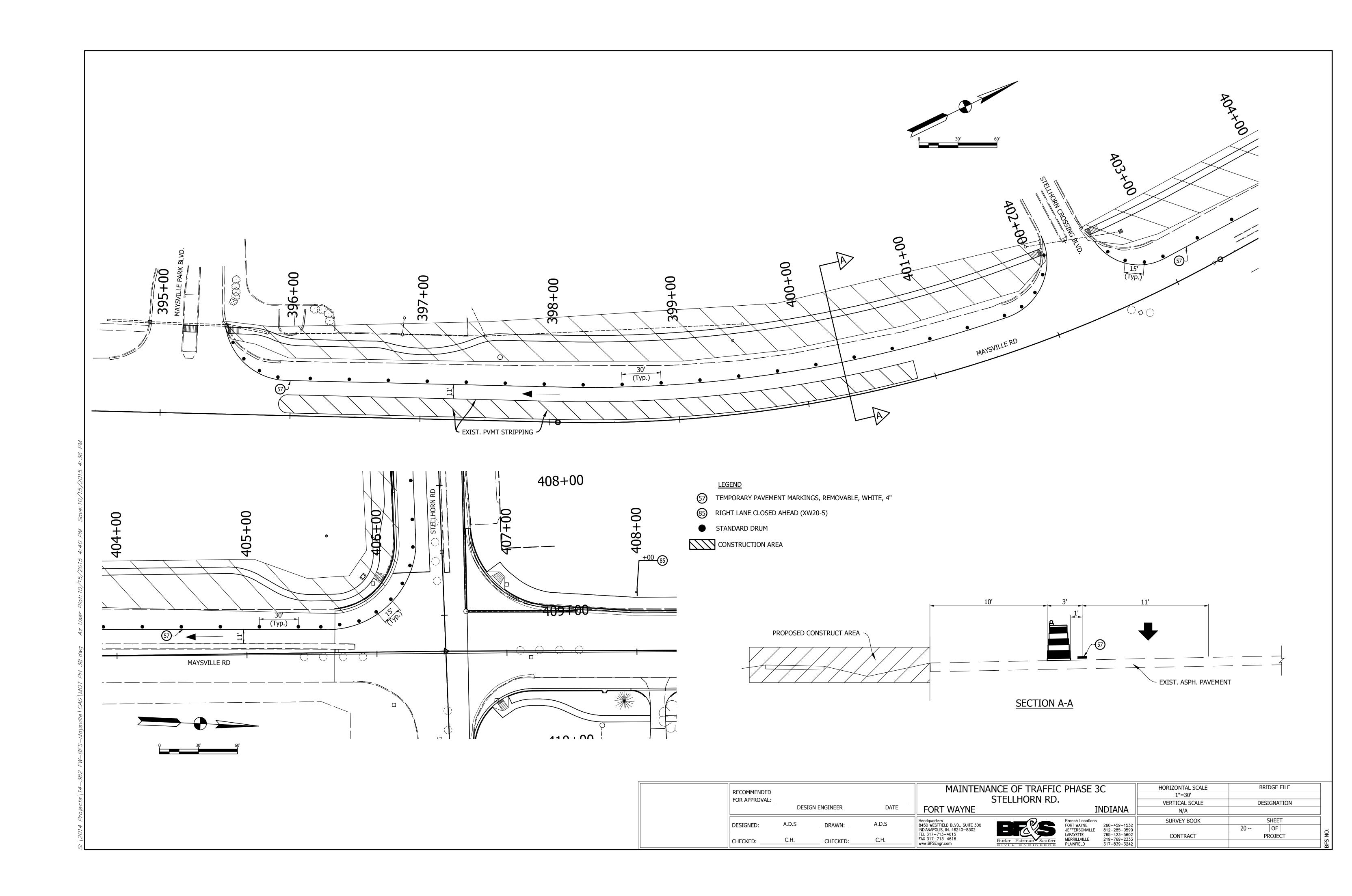


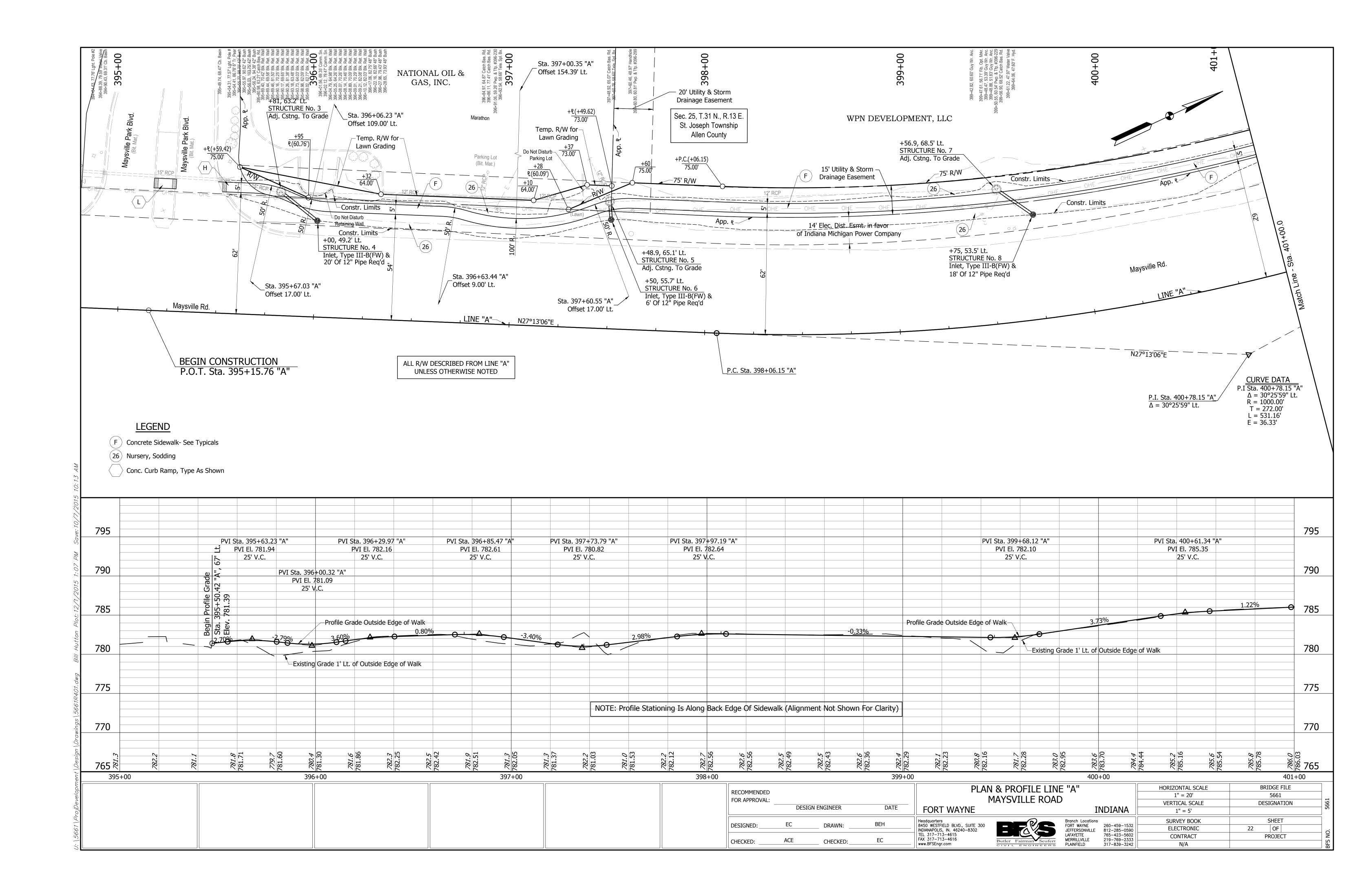


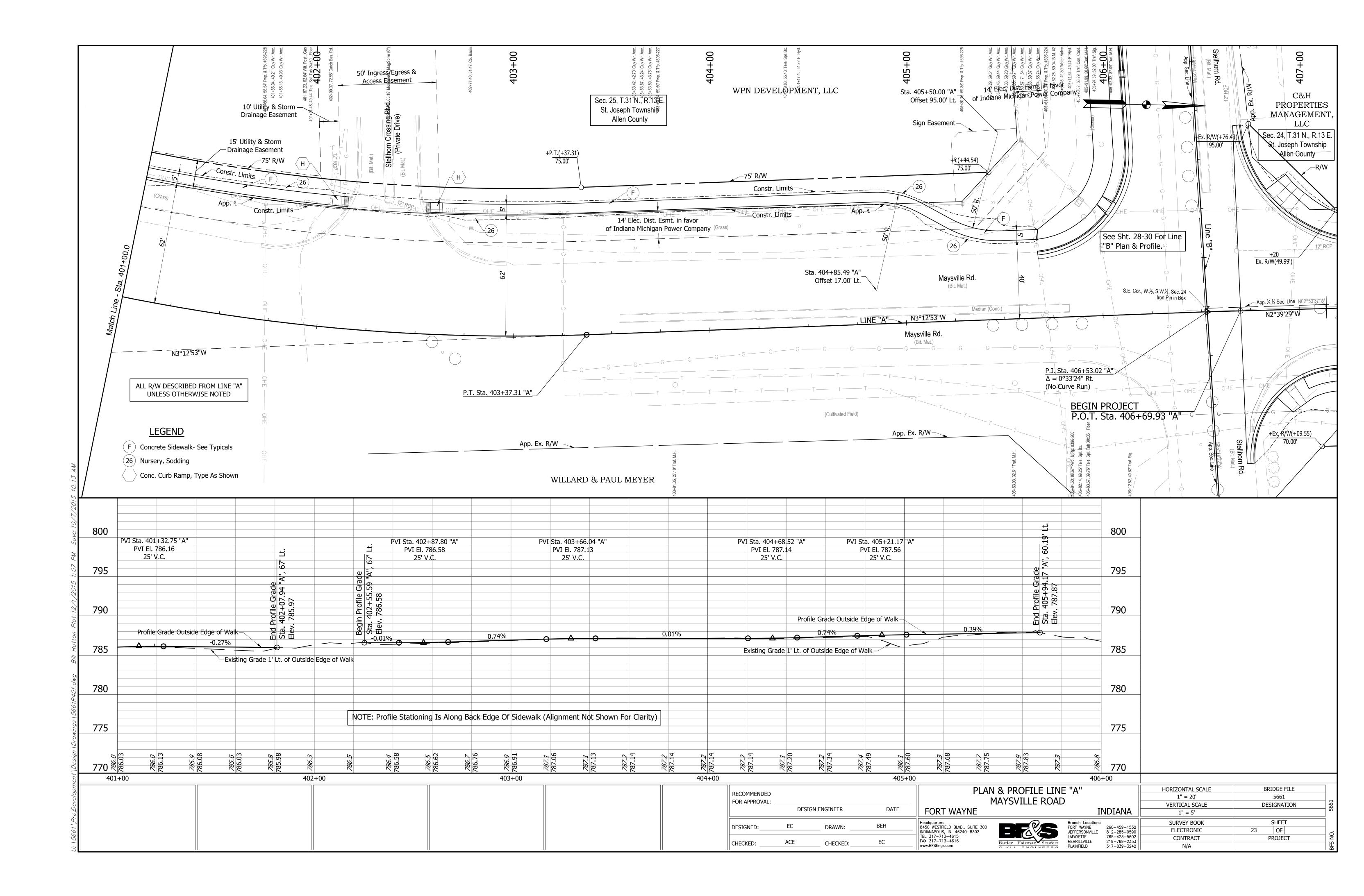


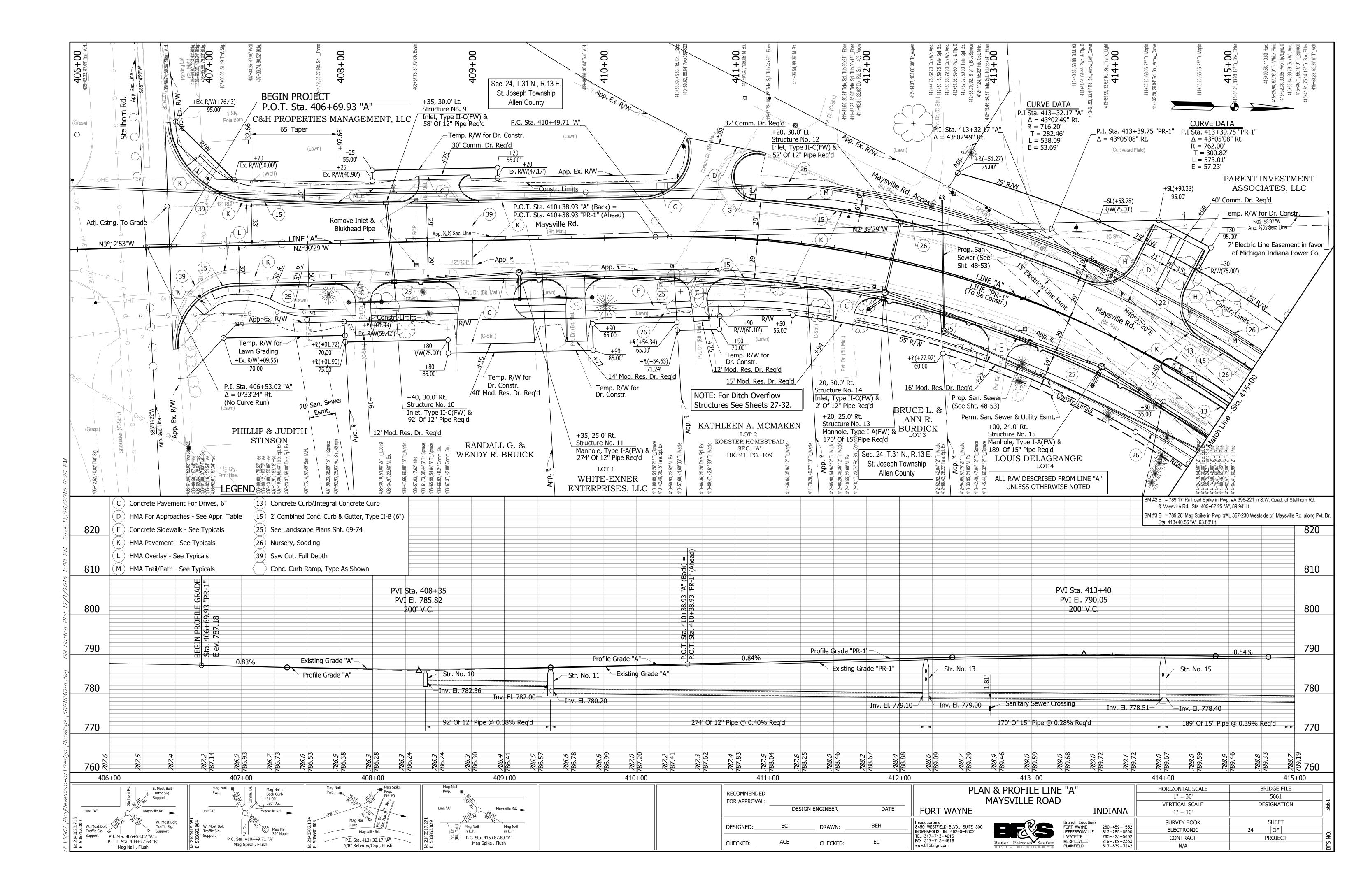


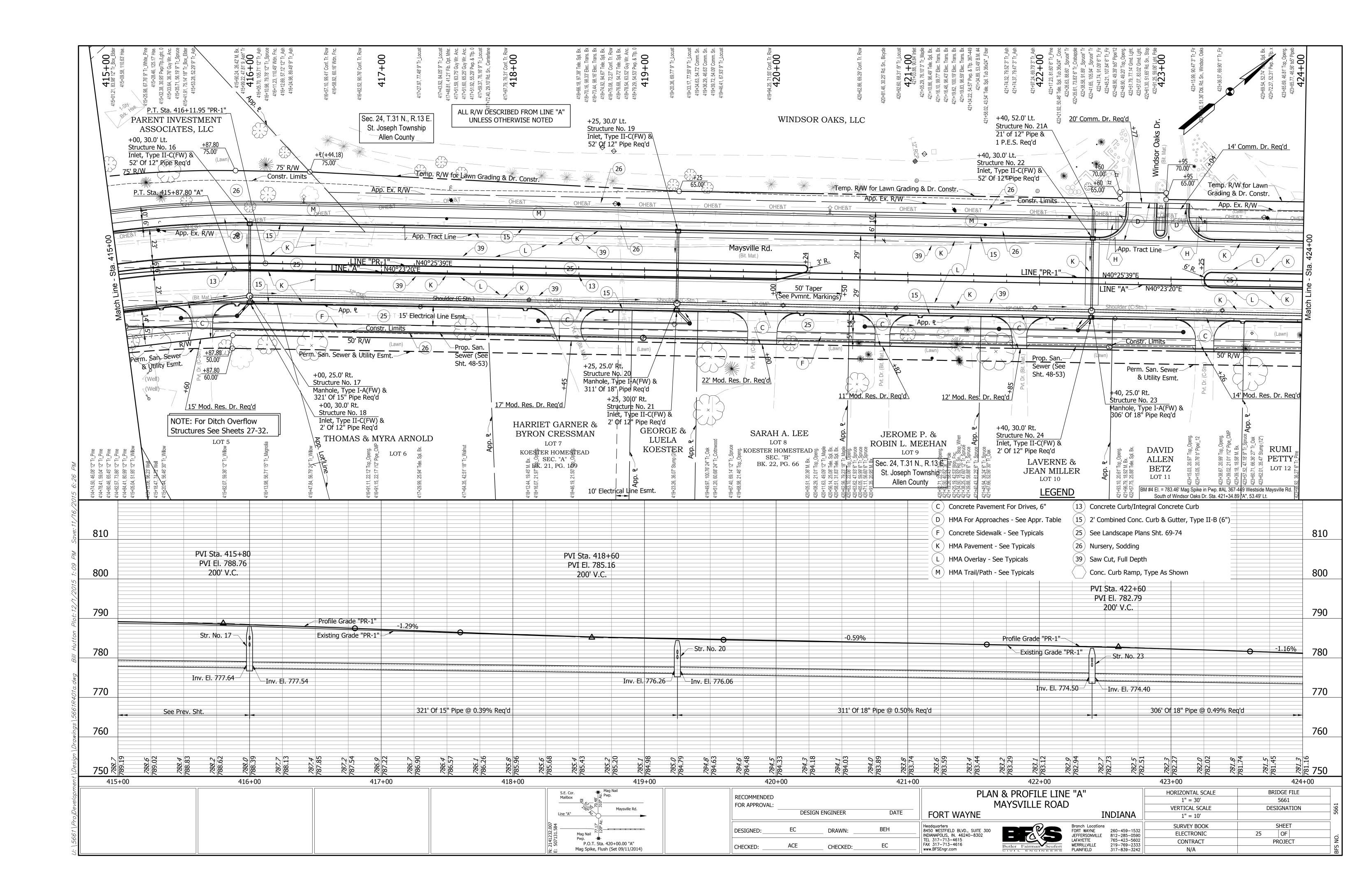


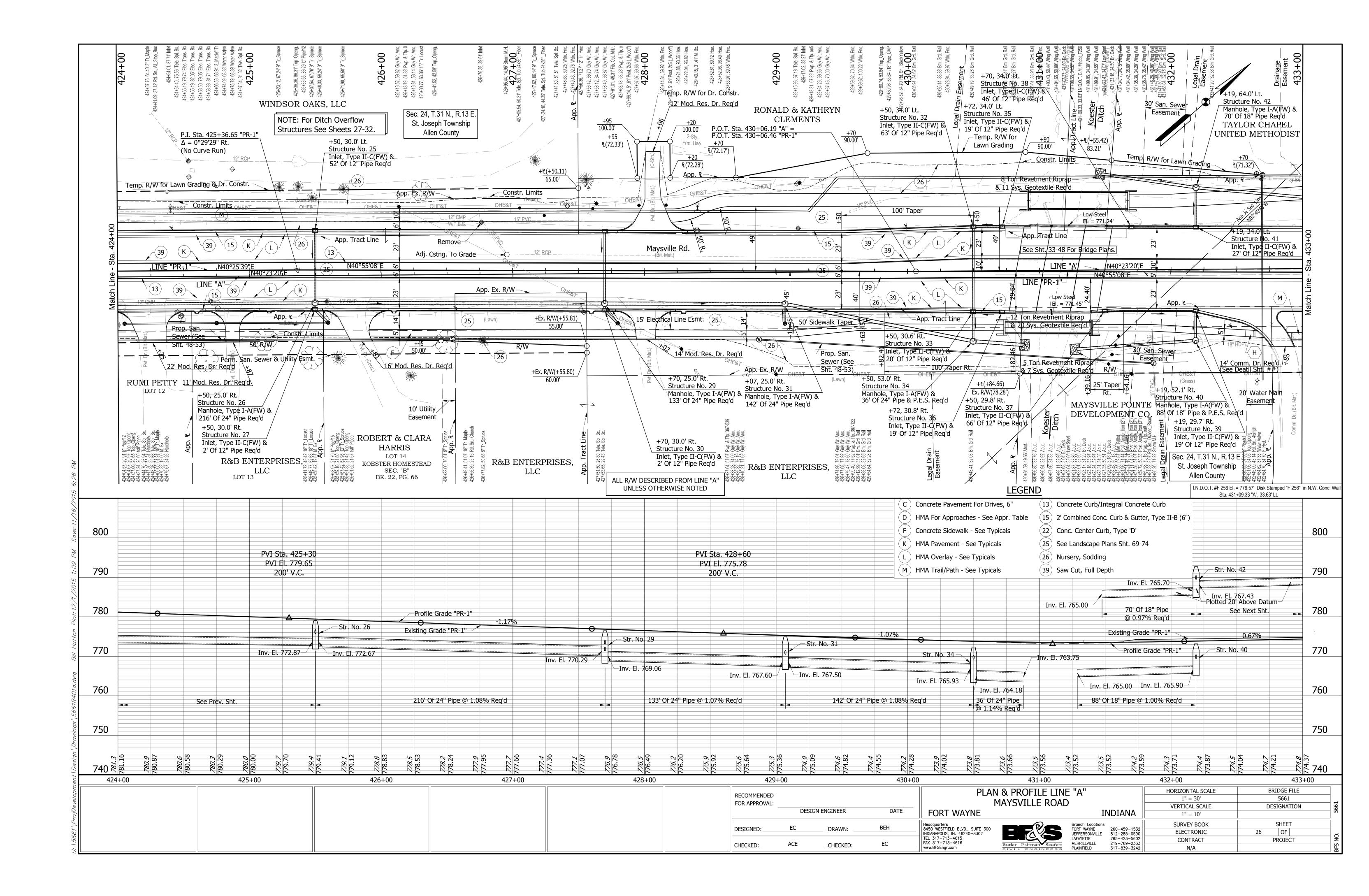


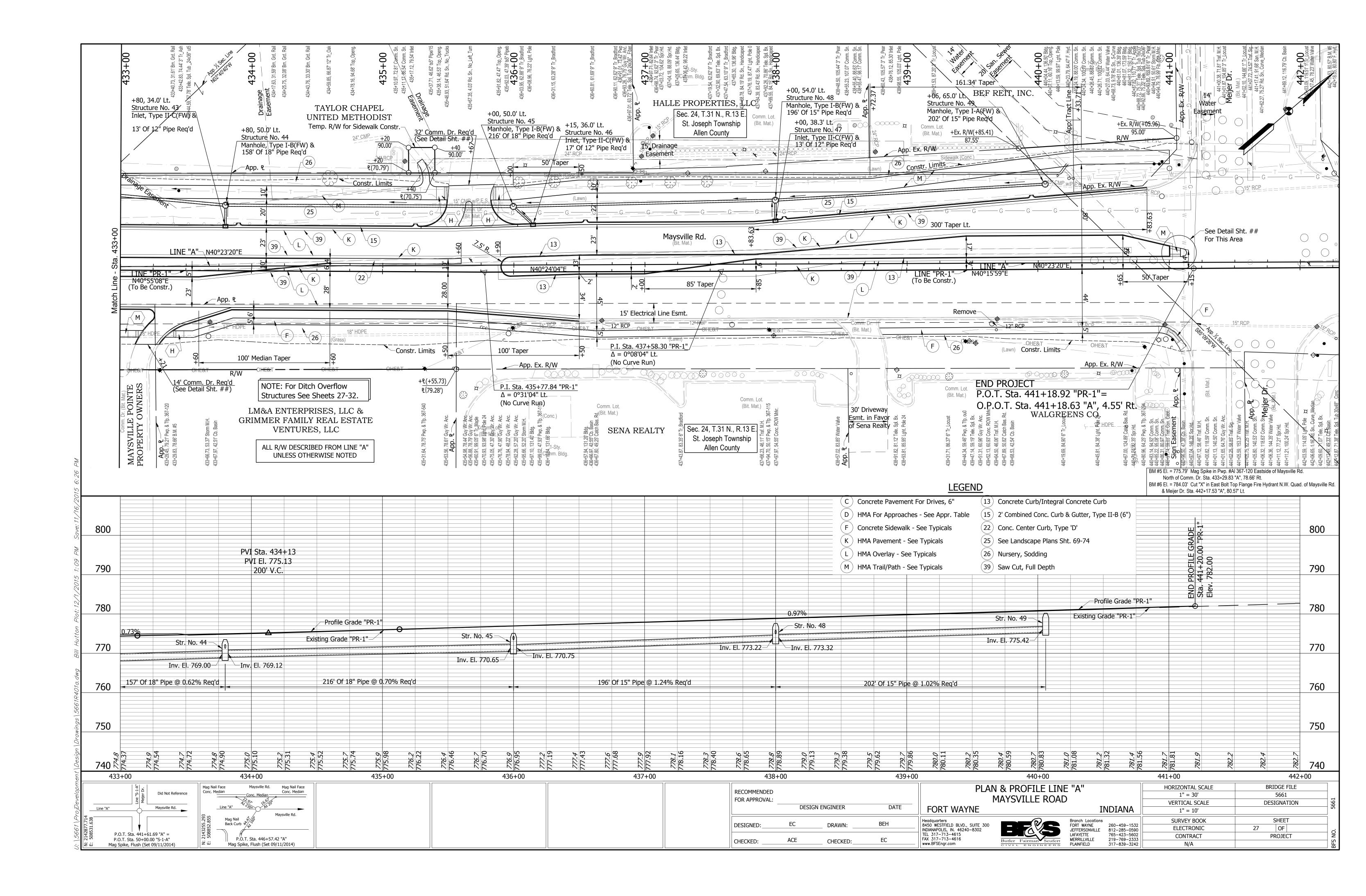


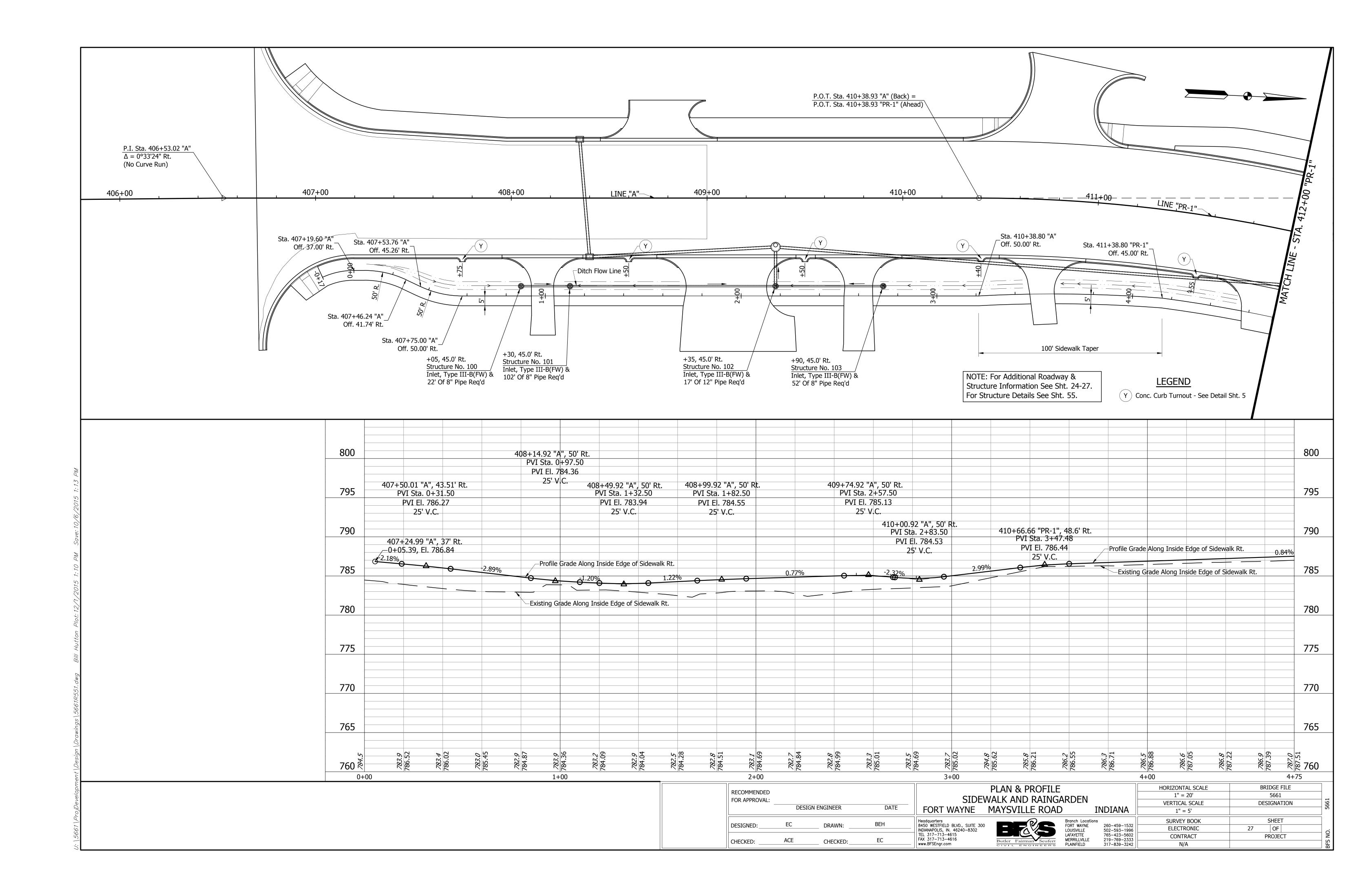


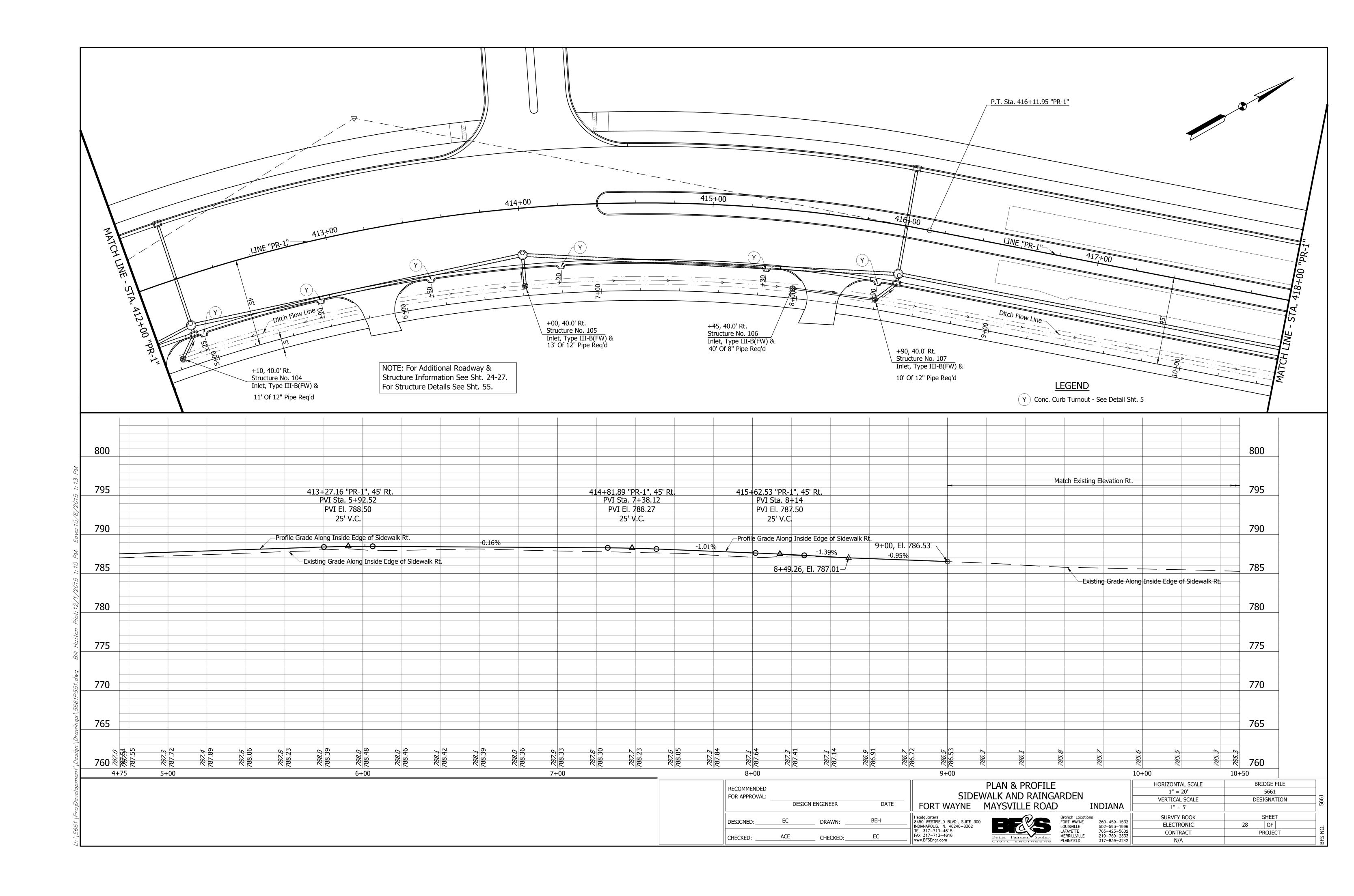


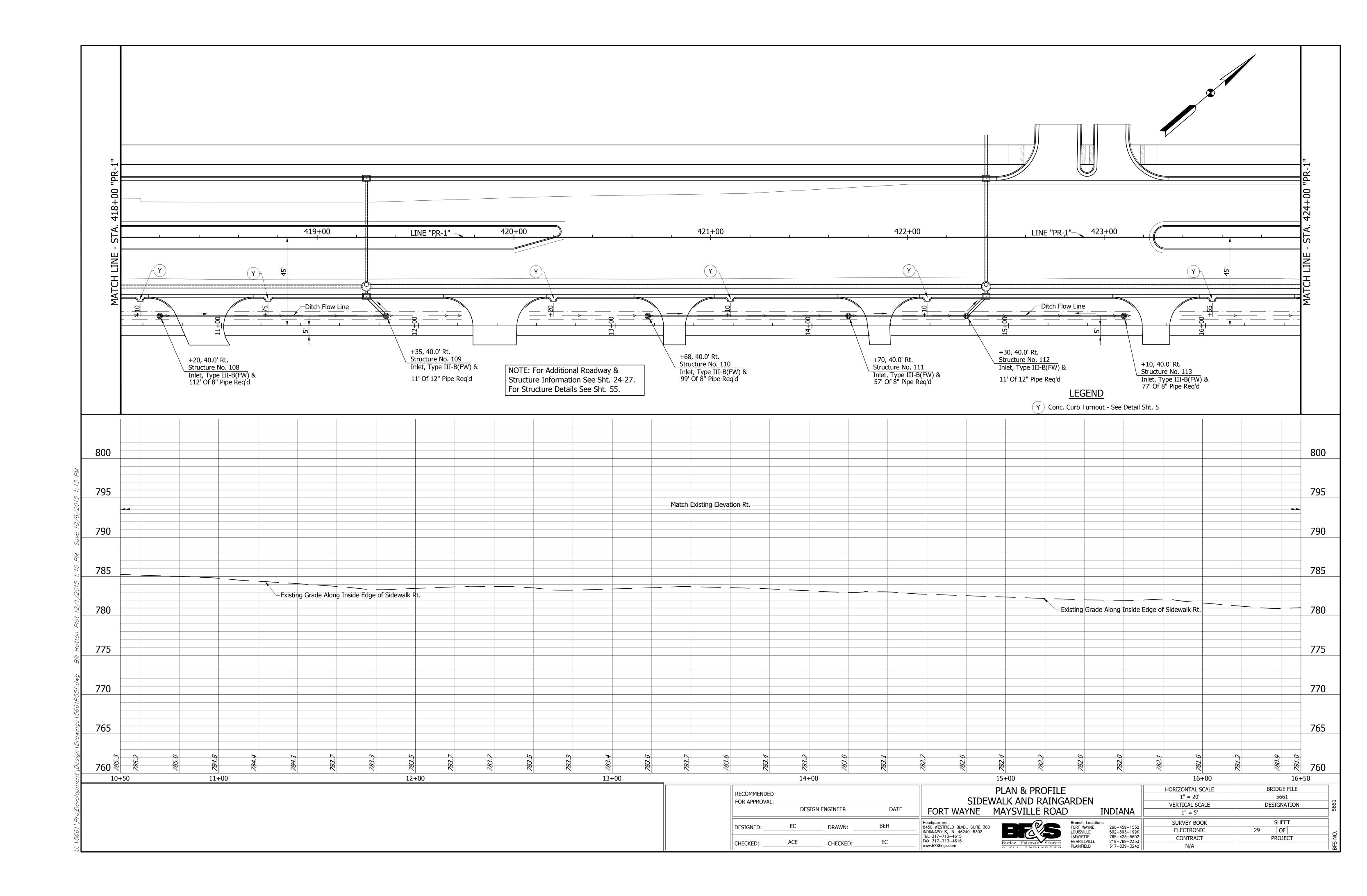


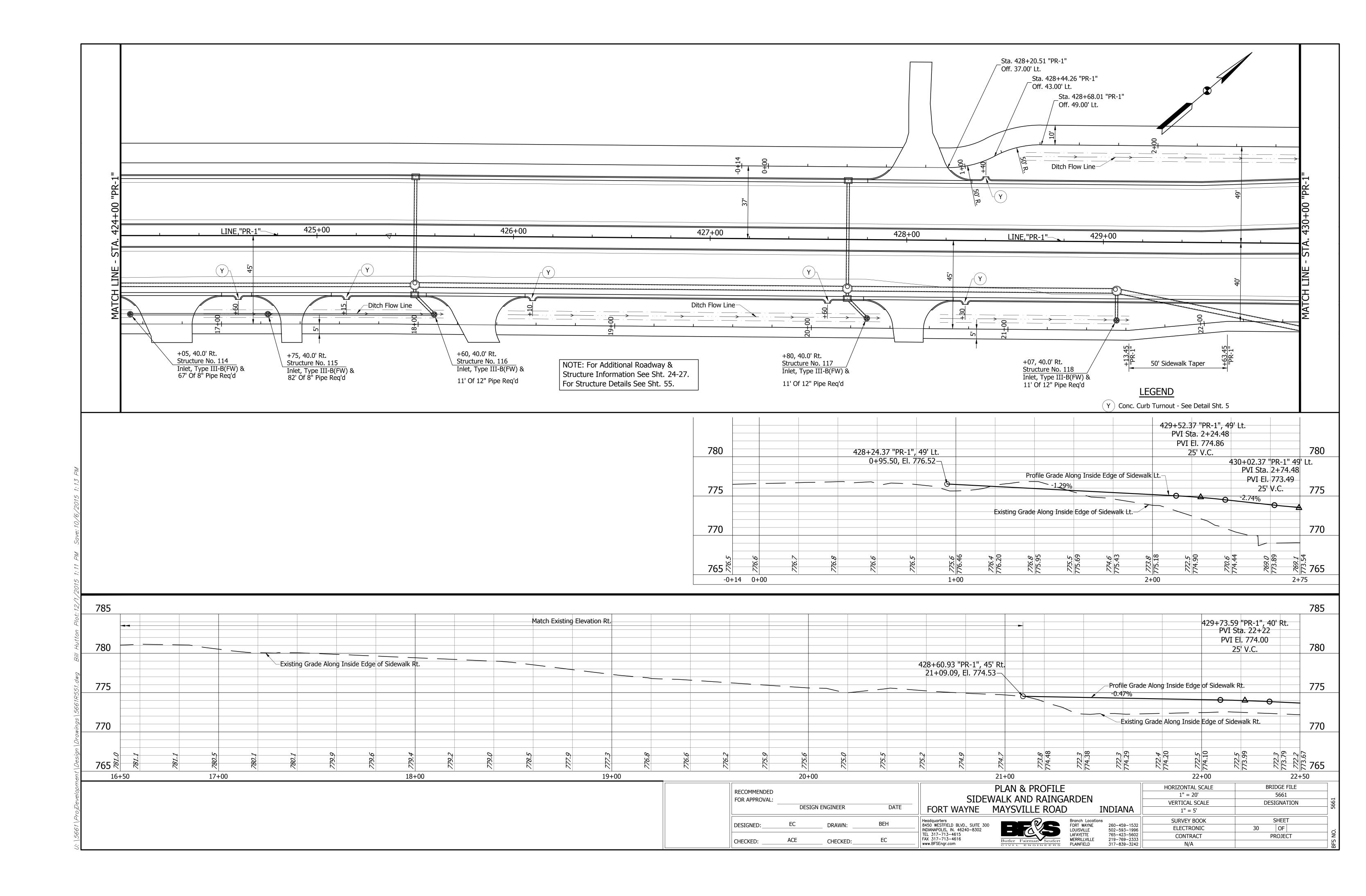


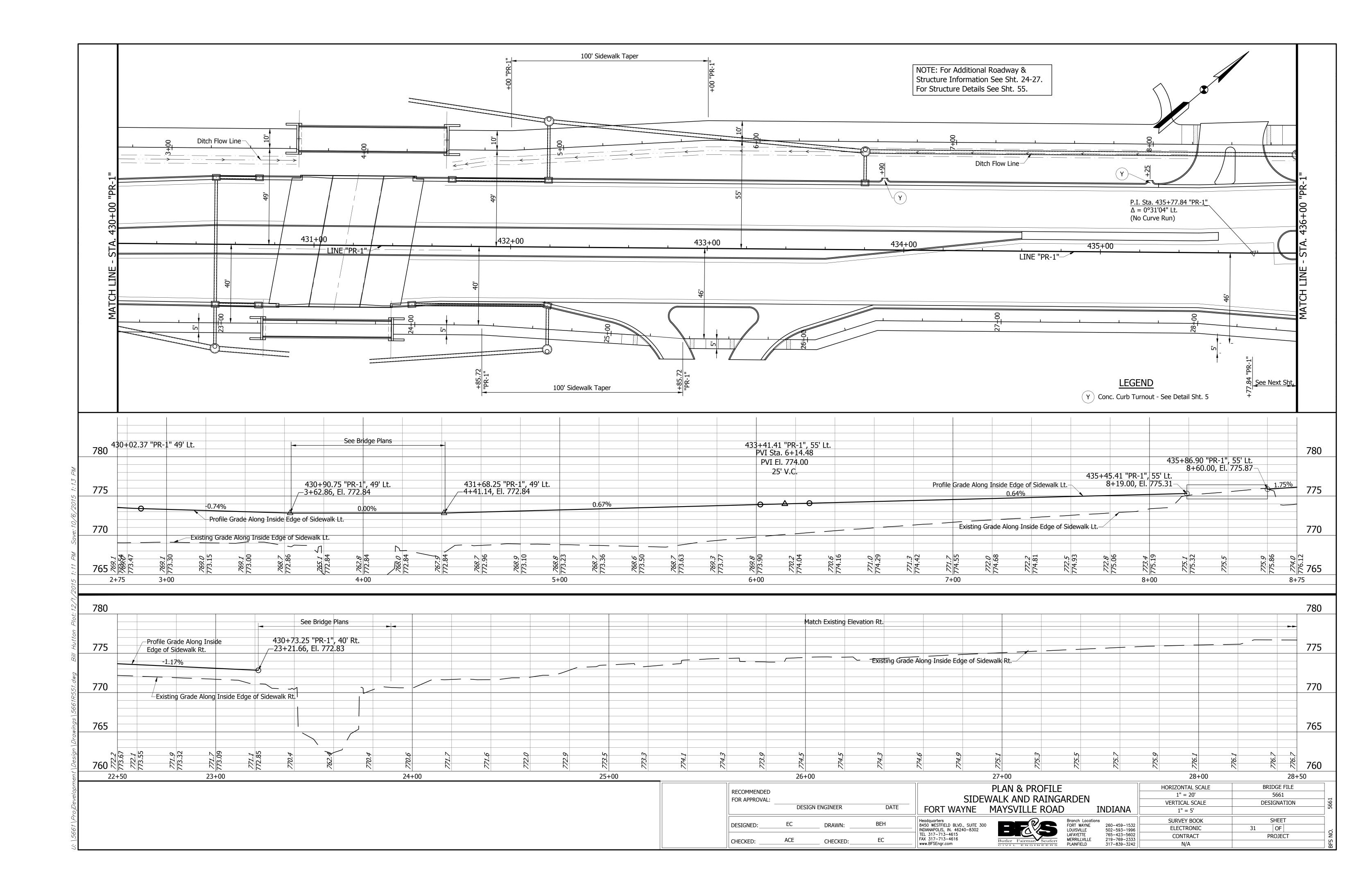


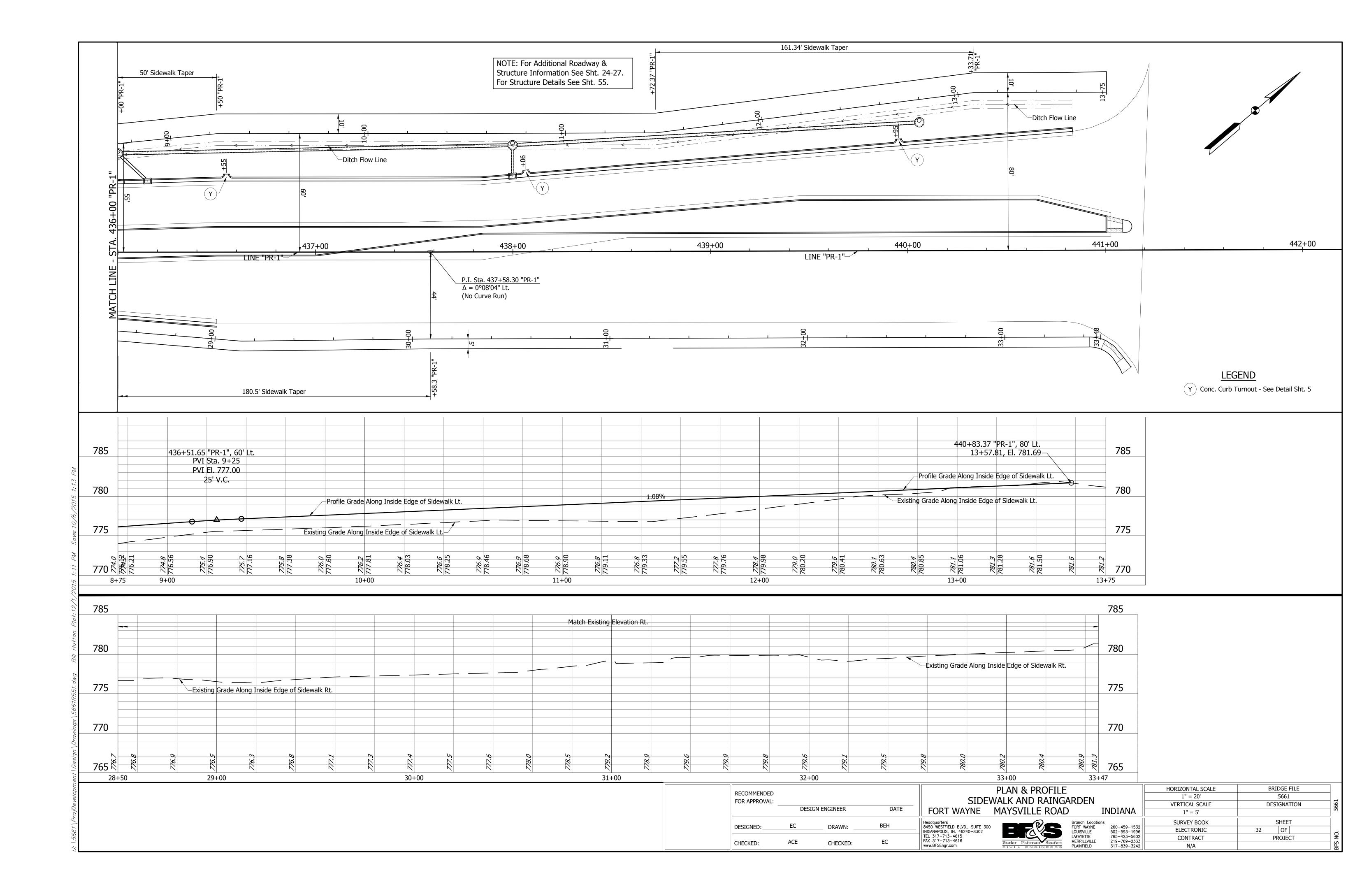


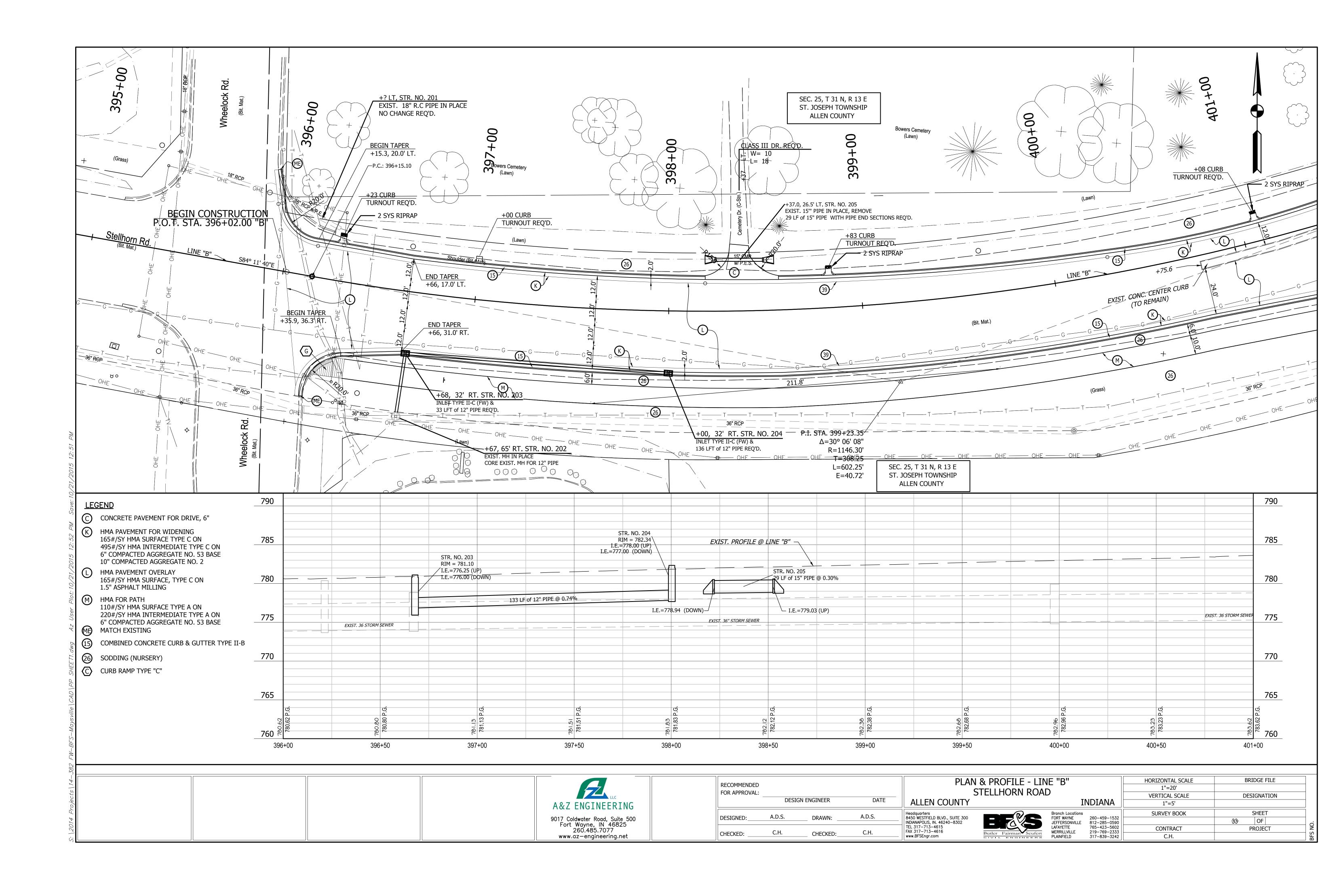


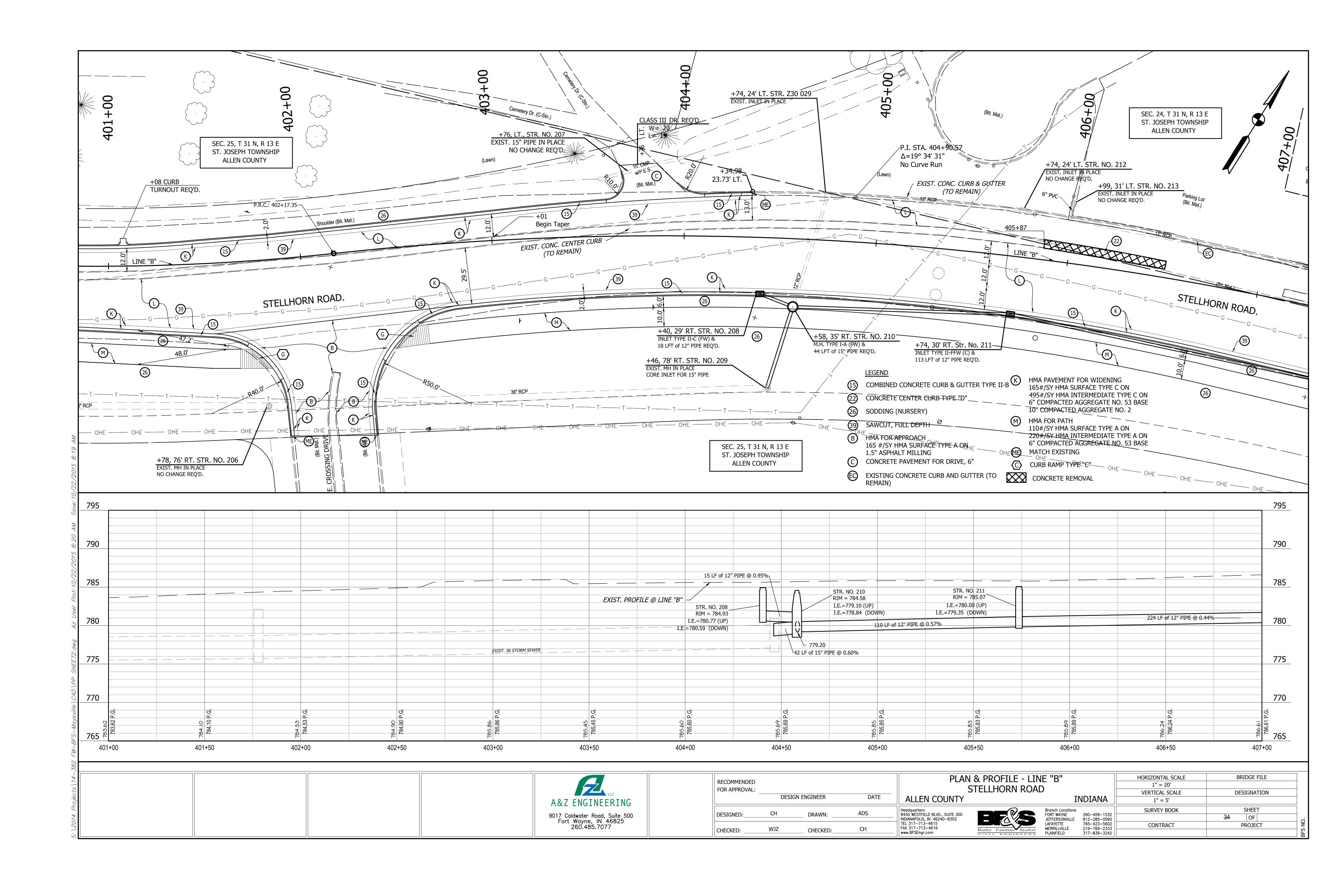


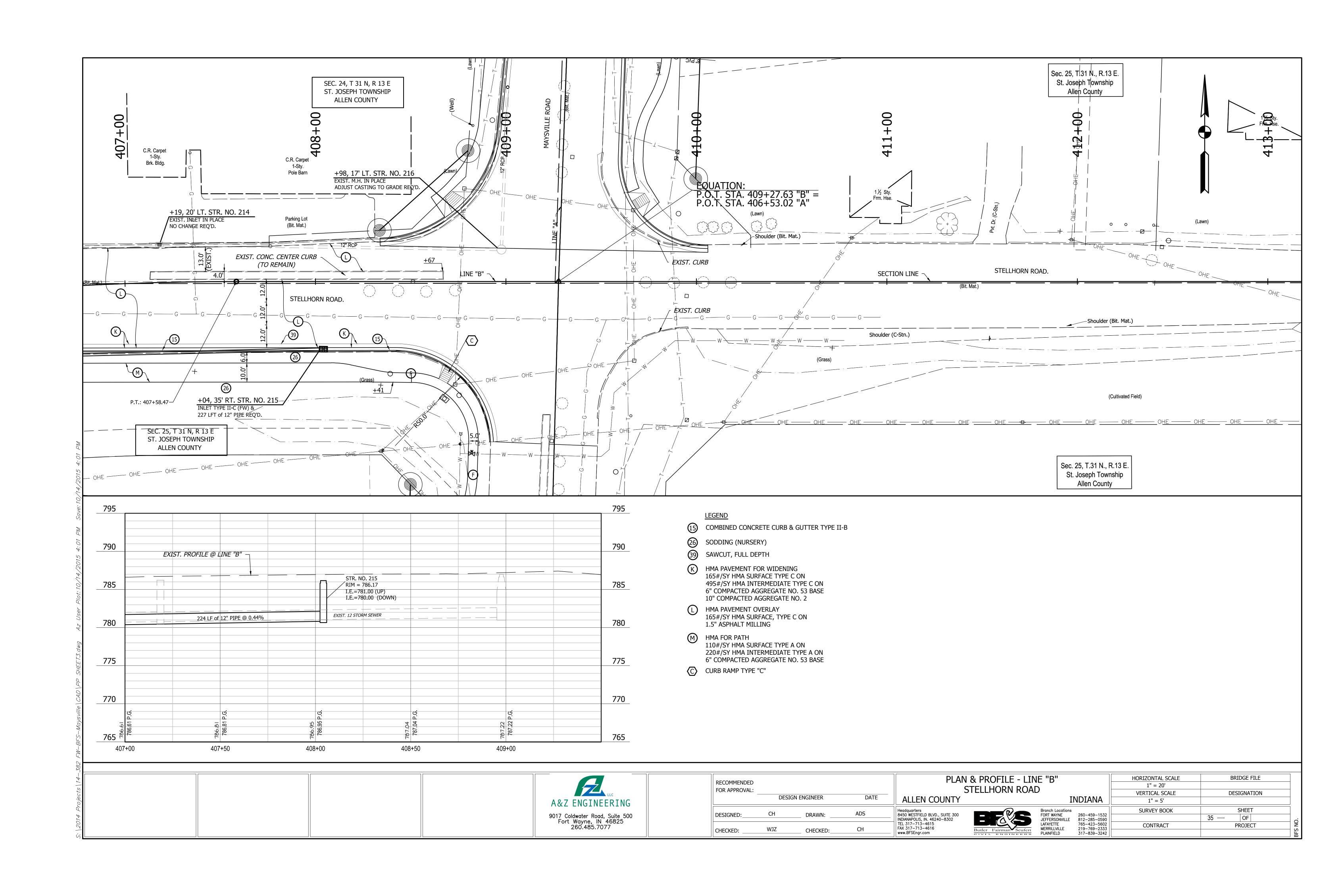


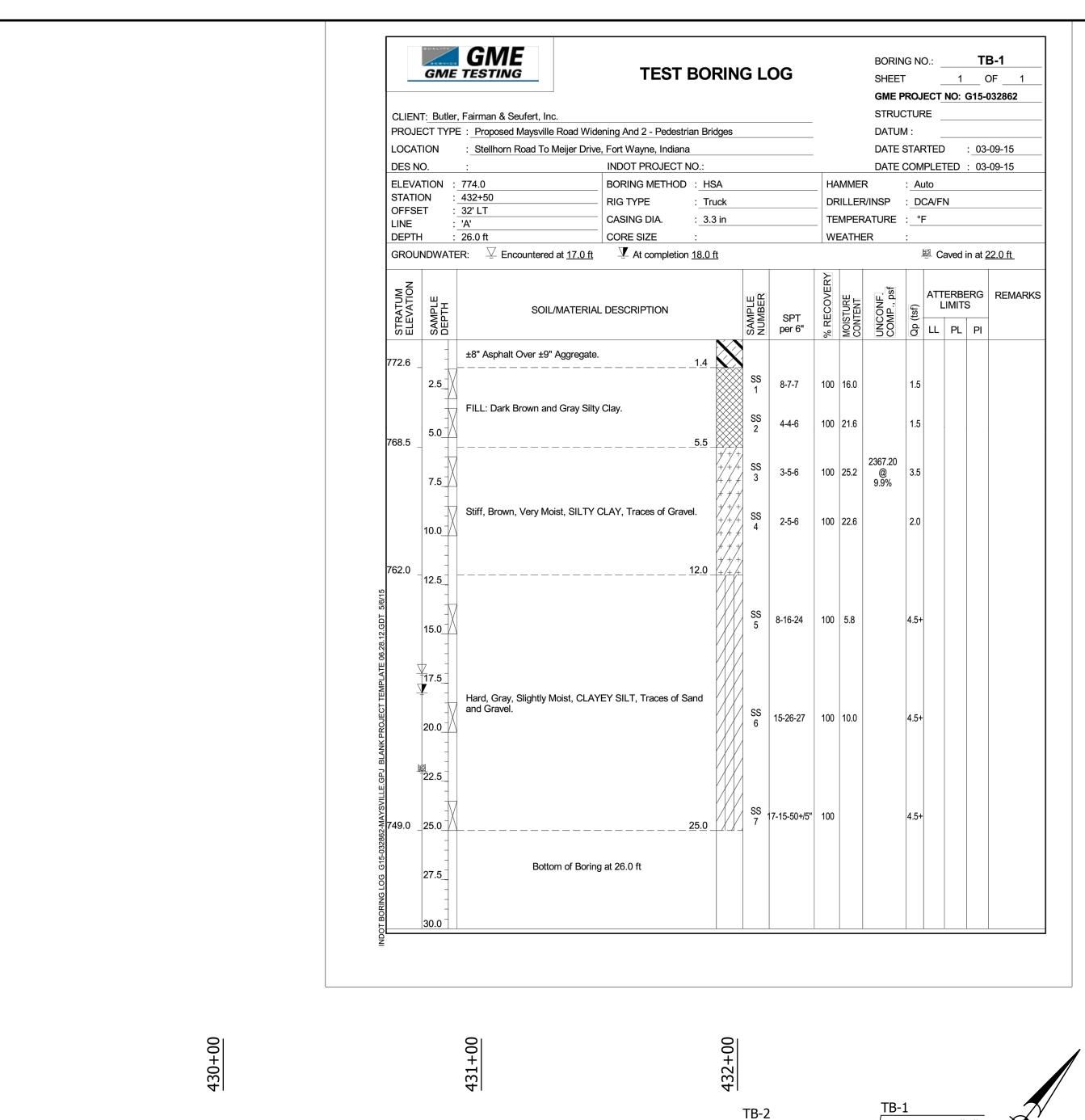


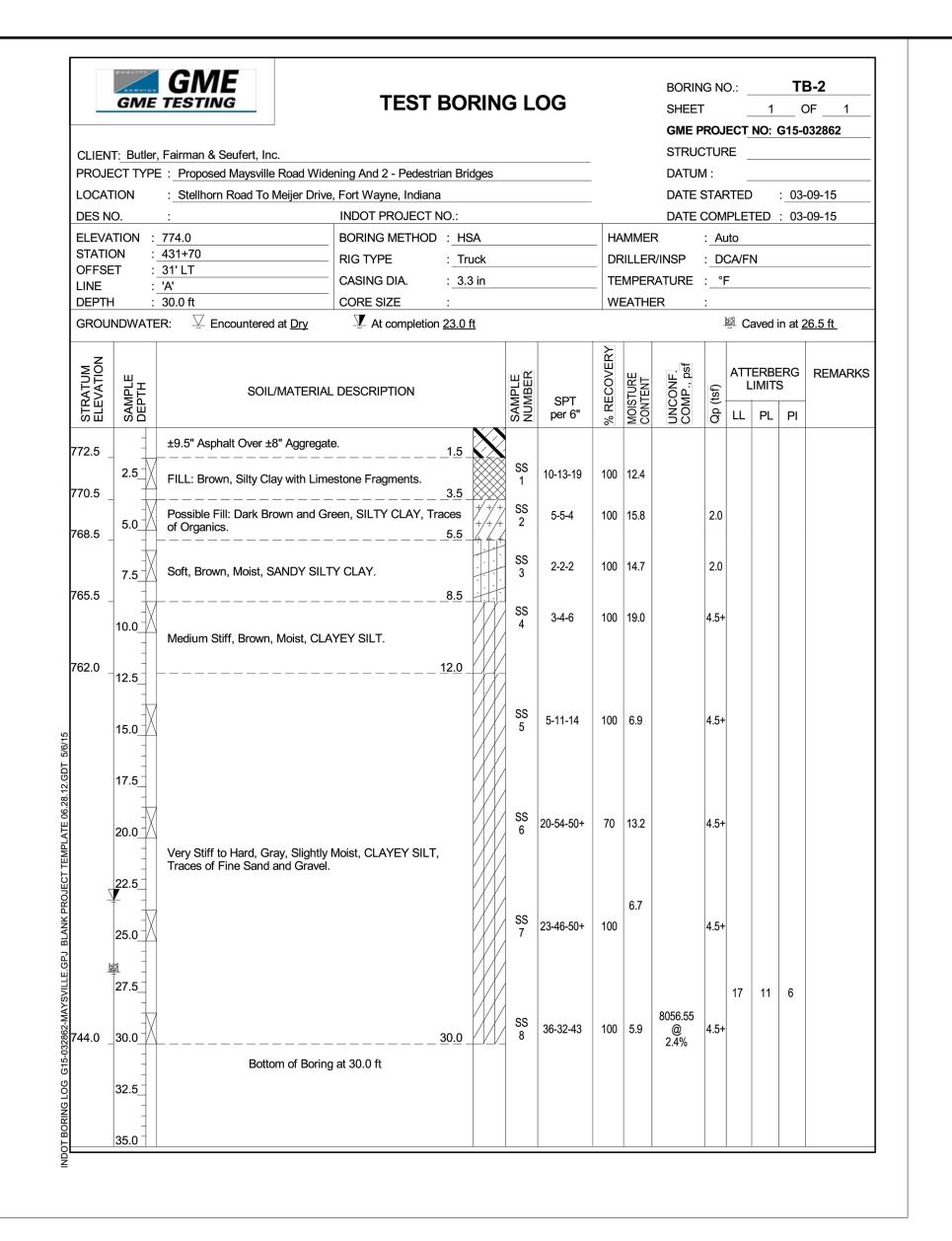








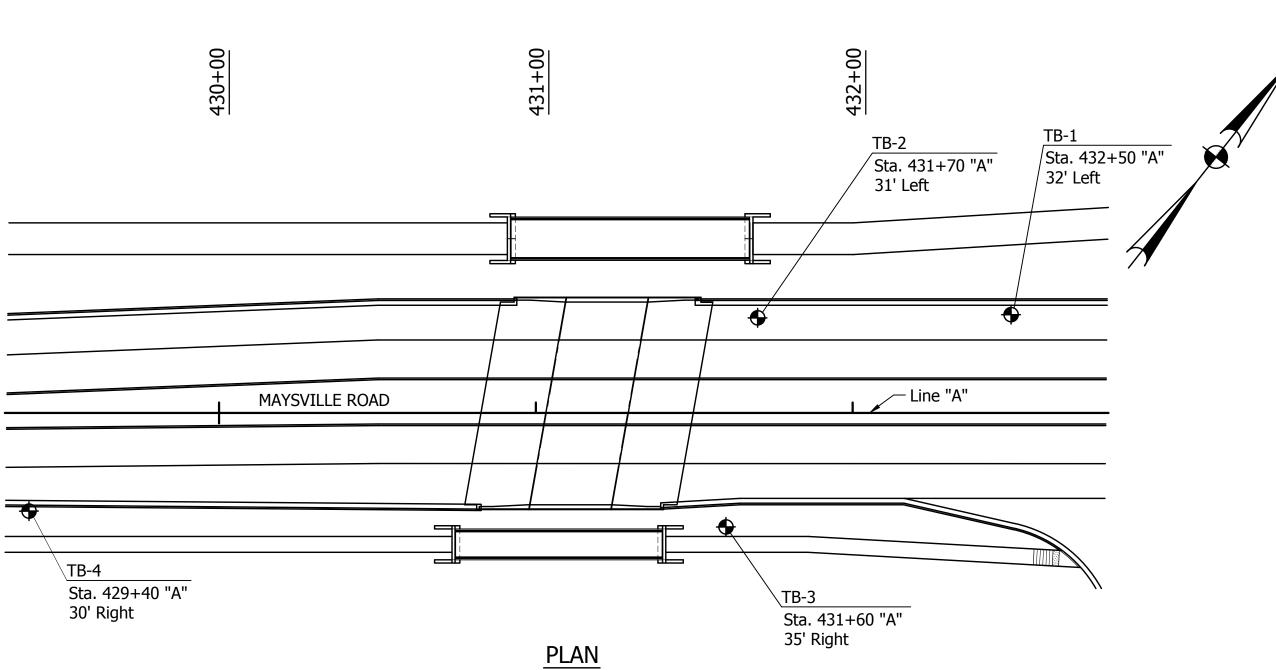




STANDARD PENETRATION TEST Driving 2" O.D. Sampler 1'-6" with 140# Hammer falling 30". Count made at 6"

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 GME Testing will be made available to the Contractor upon request.
See Sheet 34 for Additional Borings.



Not to Scale

Maysville Road over Koester ditch (North Bridge)

Maysville Road over Koester ditch (North Bridge)				
BENT/PIER NO.	End Bent No. 1	End Bent No. 2		
Pile Section	HP 10X42	HP 10X42		
Pile Steel	Grade 50	Grade 50		
Maximum Factored Design Soil Resistance per pile (Rr), kips	106	86		
Resistance Factor (Фdyn)	0.55	0.55		
Downdrag Load DD, kips	0.0	0.0		
Maximum Nominal Soil Resistance (Rn), kips	194	157		
Downdrag Friction (Rsdd), kips	0.0	0.0		
Scour Zone Friction (Rs scour), kips	N/A	N/A		
Relaxation in Shale (kips)	0.0	0.0		
Maximum Nominal Driving Resistance (Rndr), kips	194	157		
Estimated Pile Length, ft *	25 (El 744)	20 (El 749)		
Testing Method	Dynamic Formula INDOT Standa Specifications Section 701.05 (a			

^{*} Estimated pile tip elevation was based on the soil information obtained from TB-1 and TB-2.

Maysville Road over Koester ditch (South Bridge)					
BENT/PIER NO.	End Bent No. 1	End Bent No. 2			
Pile Section	HP 10X42	HP 10X42			
Pile Steel	Grade 50	Grade 50			
Maximum Factored Design Soil Resistance per pile (Rr), kips	129	106			
Resistance Factor (Фdyn)	0.55	0.55			
Downdrag Load DD, kips	0.0	0.0			
Maximum Nominal Soil Resistance (Rn), kips	235	193			
Downdrag Friction (Rsdd), kips	0.0	0.0			
Scour Zone Friction (Rs scour), kips	N/A	N/A			
Relaxation in Shale (kips)	0.0	0.0			
Maximum Nominal Driving Resistance (Rndr), kips	235	193			
Estimated Pile Length, ft *	25 (El 744)	25 (El 744)			
Testing Method	Dynamic Formula INDOT Standar Specifications Section 701.05 (a)				

^{*} Estimated pile tip elevation was based on the soil information obtained from TB-3 and TB-4.

RECOMMENDED FOR APPROVAL:				SOIL BORINGS - NORTH AND SOUTH STRUCTURES MAYSVILLE ROAD FORT WAYNE INDIANA			HORIZONTAL SCALE AS NOTED VERTICAL SCALE AS NOTED	BRIDGE FILE ALLEN 109 DESIGNATION	5661	
DESIGNED:	D. SHEETZ	DRAWN:	D. SHEETZ	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302		Branch Locations FORT WAYNE LOUISVILLE	260-459-1532 502-593-1996	SURVEY BOOK	SHEET 33 OF	
CHECKED:	K. PERO	CHECKED:	B. WRIGHT	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765-423-5602 219-769-2333 317-839-3242	CONTRACT N/A	PROJECT	BFS NC

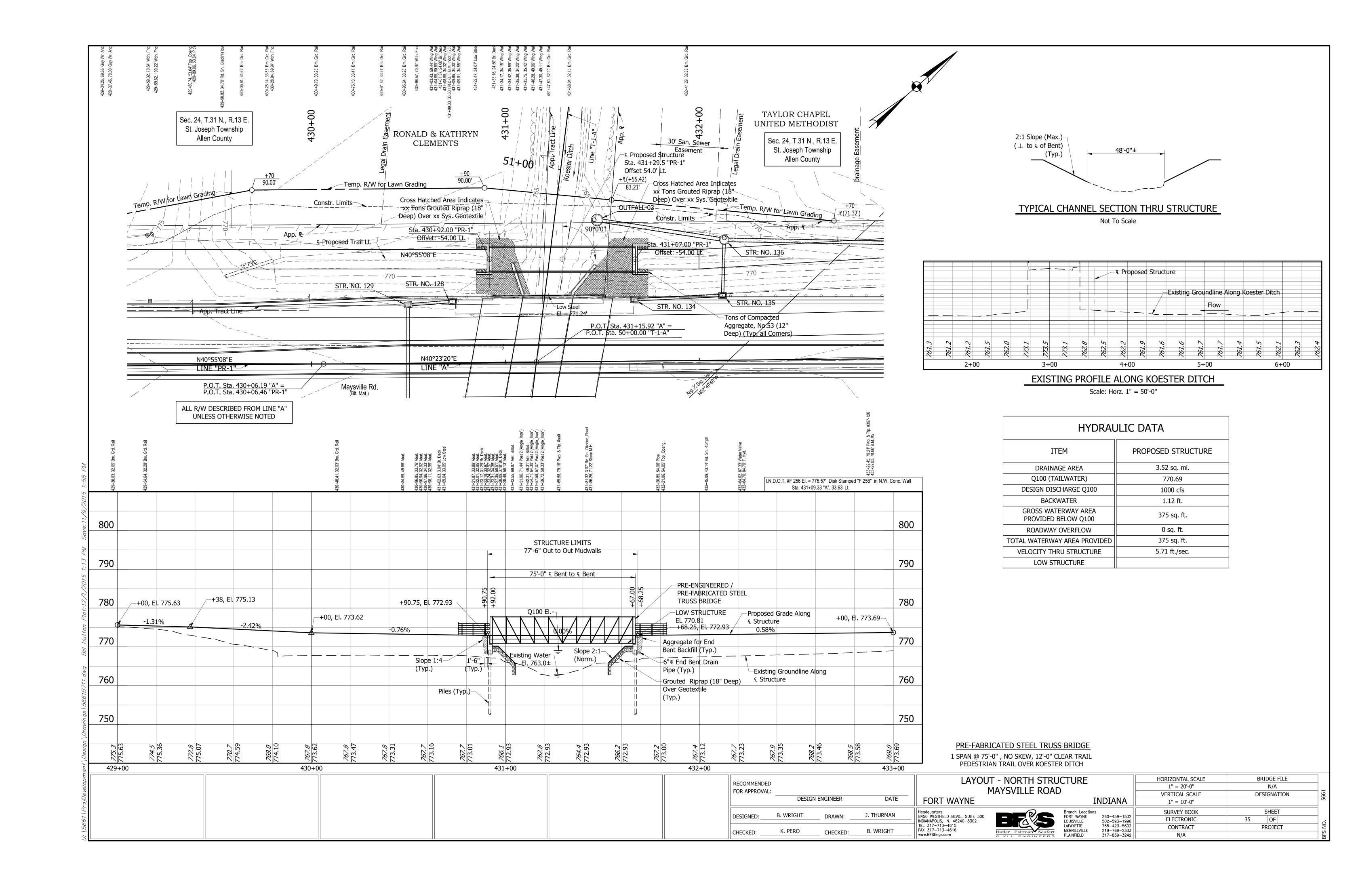
	OT TYPON ON TON:	, Fairman & Seufert, Inc. E: Proposed Maysville Road : Stellhorn Road To Meijer I	Miderine And 2. Deda						G	ME D	DO I			245 0	
PROJECT LOCATION DES NO ELEVAT STATION OFFSET LINE	OT TYPON ON TON:	E: Proposed Maysville Road	Widoning And O. Dodo						G		KUJ	FC I	NO: (J 13-U	32862
LOCATION DES NO ELEVAT STATION OFFSET LINE	ON). TON :		Widoning And O. Dodo						S	TRU	CTUF	RE _			
DES NO ELEVAT STATION OFFSET LINE). TON:	: Stellhorn Road To Meijer I	widening And 2 - Pede	strian l	3ridge	S			D	ATU	/ 1 :	_			
ELEVAT STATION OFFSET LINE	ION :	,	Drive, Fort Wayne, Indi	ana					D	ATE	STA	RTE)	:_03-	09-15
STATION OFFSET LINE		:	INDOT PROJECT	NO.:					D	ATE	COM	1PLE	TED	: 03-	09-15
OFFSET LINE		773.0	BORING METHOD	: HS	4			HAN	MER		: Au	ıto			
LINE	_	431+60	 RIG TYPE	: Tru				DRII	LLER/IN	SP	: D0	CA/FI	N		
1	_	35.0 ft Right 'A'	CASING DIA.	: 3.3	in			TEM	1PERATI	JRE	: °F	=			
		30.0 ft	CORE SIZE	:				1	ATHER		:				
GROUN		ER: $\frac{\nabla}{\nabla}$ Encountered at <u>15.0</u>	<u>ft</u>	n <u>17.0 </u>	<u>ft</u>			•			1	₫ Ca	aved	in at	24.0 ft
STRATUM ELEVATION	TH TH	SOIL/MATERIAI	_ DESCRIPTION		SAMPLE NUMBER		RECOVERY	MOISTURE CONTENT	UNCONF. COMP., psf	Dry Density, pcf	(tsf)		ERBE		REMARI
STR. ELE	SAMPLE DEPTH				SAM	SPT per 6"	% RE	MOIST	ONC COM	Dry De	Qp (t	LL	PL	PI	
772.0		±12" Limestone Aggregate.	1.0				5								
769.5	2.5	FILL: Soft, Black, Clayey, Si	lty, Topsoil.		SS 1	2-2-2	100	17.8							
	5.0			+ + + +	SS 2	1-1-2	100	20.0							
	7.5	Very Soft, Black and Gray, Mith Organics.	Moist, SILTY CLAY	# # # # +/+ +/+/+	SS 3	2-2-3	100	21.1							
764.0 _ 10	0.0	Medium Stiff, Brown, Mottled		4 /	SS 4	2-3-3	100	15.5			2.5				
760.5 _1	2.5_		12.5	+ + + + + + + + +											
l †	7.5_	Stiff, Gray, Slightly Moist, SI Fine Sand and Gravel.	LTY CLAY, Traces of	+	SS 5	10-18-17	100	8.1			4.5+				
754.0 _ 2 ¹	20.0		19.0	<i>**</i>	SS 6	10-18-39	100	8.5			4.5+				
超 2:	22.5	Hard, Gray, Clayey, Slightly Traces of Gravel.	Moist, SANDY SILT,		SS 7	18-31-47	100	7.0			4.5+				
2'	27.5_ - 30.0_		30.0		. SS . 8	34-50+-/4"	100	6.1			4.5+				
	32.5	Bottom of Borin	g at 30.0 ft												

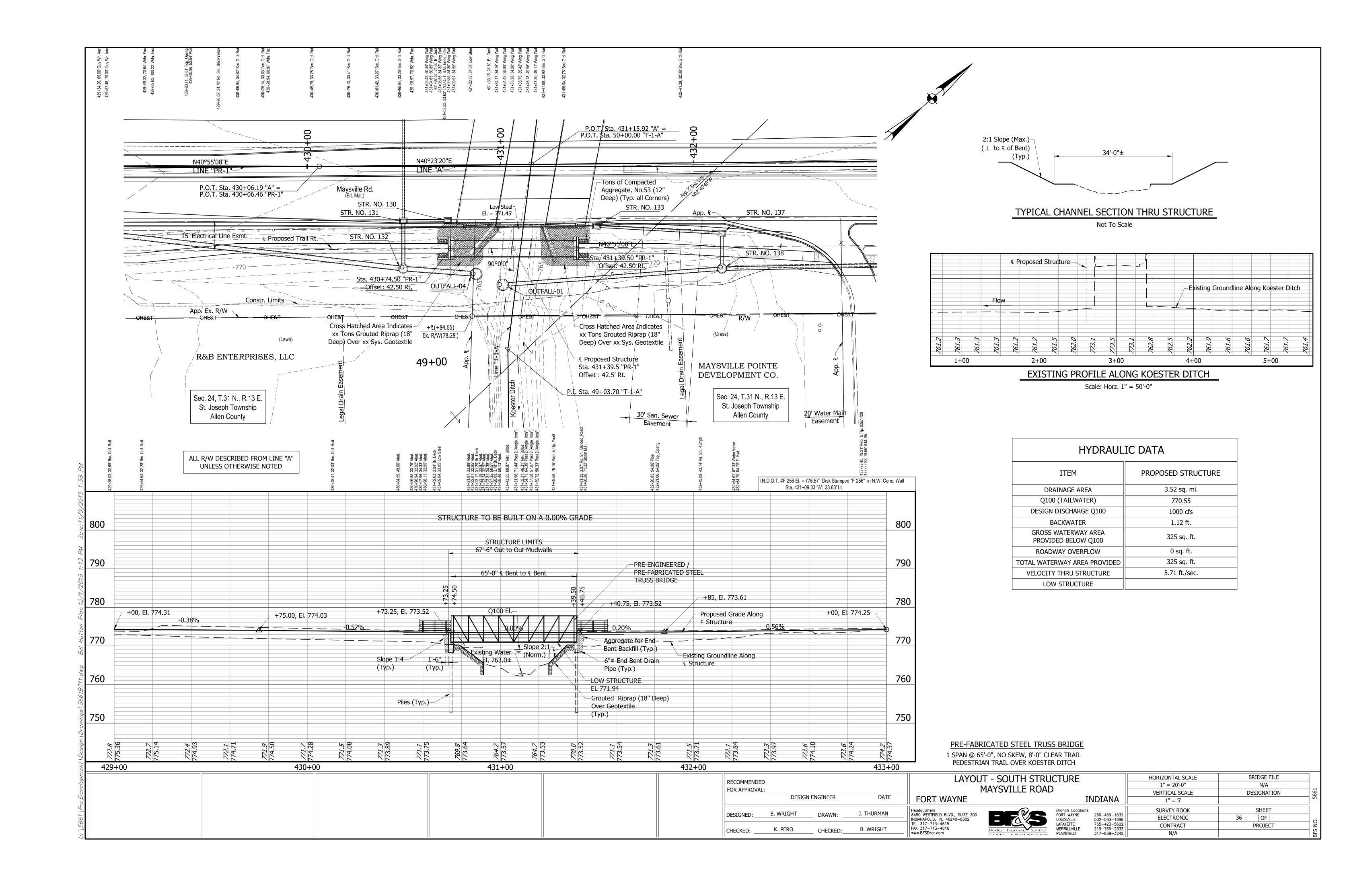
	GME	TESTING		TES	ST E	3OR	RINC	3 LOG				HEE [.]		_			OF <u>1</u>
CLIEN	T: Butler	, Fairman & Seufert, I	nc.								S	TRU	CTU	RE _			
PROJE	ECT TYP	E: Proposed Maysvill	e Road Wi	dening And 2 -	Pedes	strian E	Bridge	s			D	ATUI	M :	_			
LOCAT	ΓΙΟΝ	: Stellhorn Road To	Meijer Driv							_	D	ATE	STA	RTE	D	:_03	-09-15
DES N		:								_		ATE	CON	/IPLE	TED	: 03-	-09-15
ELEVA STATI	: NOITA	774.0 429+40		1						-	MER		: <u>A</u> ı				
OFFSE		30.0 ft Right				: Truc				-	LLER/IN				N		
LINE	:	'A'		1		: 3.3	in			-	1PERATI	JRE	:°I	F			
DEPTH		30.0 ft		•		:				WE	ATHER		:	hat -			
GROU	NDWAT	ER: Encountered	l at <u>Dry</u>	-¥ At comp	letion	<u>24.0 f</u>	<u>t</u>								aved	in at	27.0 ft
STRATUM ELEVATION	SAMPLE DEPTH	SOIL/MA	ATERIAL D	ESCRIPTION			SAMPLE NUMBER	SPT	% RECOVERY	MOISTURE CONTENT	UNCONF. COMP., psf	Dry Density, pcf	Qp (tsf)		ERBE		REMA
STE	SAN						SAI	per 6"	% R	NO NO	NOS	Dry	g	LL	PL	ΡI	
772.6		±9" Asphalt over ±8'	Aggregate		1.4												
772.6 ₋ 771.5	2.5	Dense, Gray, Limes					SS	24-27-9	100	4.5							
771.5	2.5			<u> </u>	<u>_2.5</u> _	7 + +	1	24-21-9	100	4.5							
	$ \forall$					+/+/+	SS	3-2-3	100	21.1			.75				
	5.0 7	Soft, Medium Stiff, E CLAY.	rown, Very	/ Moist, SILTY		//// /	2										
						+++	SS	2-3-3	100	21.9			1,0				
766.5	7.5_				7.5	 	3	2-3-3	100	21.9			1.0				
	-		Ile Road Widening And 2 - For Mayne, INDOT PROJECTION BORING METTER RIG TYPE CASING DIA. CORE SIZE d at Dry ATERIAL DESCRIPTION "Aggregate. Brown, Very Moist, SILTY CLAY, Traces of Fine Sand		V//	00											
	10.0					Y//	SS 4	3-6-9	100	18.3			1.5				
						Y//											
	10.5	Stiff, Brown, Moist, (CLAY, Trac	es of Fine San	d .	Y//											
	12.5_					Y//.											
	\downarrow					Y//	SS 5	5-5-10		7.9			2.5				
759.0	15.0_7/\				<u> 15.0</u>		5			'.5			2.0				
						YXX.	SS										
	17.5_					YXX.	6	13-18-21	100				4.5+				
	-					YXX.											
	20.0					 	SS 7	21-44-50+/4"	100	11.7							
	-3.5					 											
				= =		 											
	22.5_	Hard, Gray, Slightly of Fine Sand.	Moist, CLA	AYEY SILT, Tra	ces	[<i>XX</i>]											
<u> </u>	¥ ±						SS	21-45-50+/1"	400	7.8			4.5+				
	25.0					IXX/	8	21-45-50+/1	100	7.0			4.5+				
	-					XX											
<u> </u>	27.5_					////											
						////											
744.0	30.0				30 O	И//	SS 9	13-21-31	100	7.8			4.5+				
44.U -	30.0_/\				<u>30.0</u> _	<u>/_/</u> /											
744.0 <u>-</u>		Bottom	of Boring a	at 30.0 ft													
	32.5_																
	ı 7.1									1		1					1

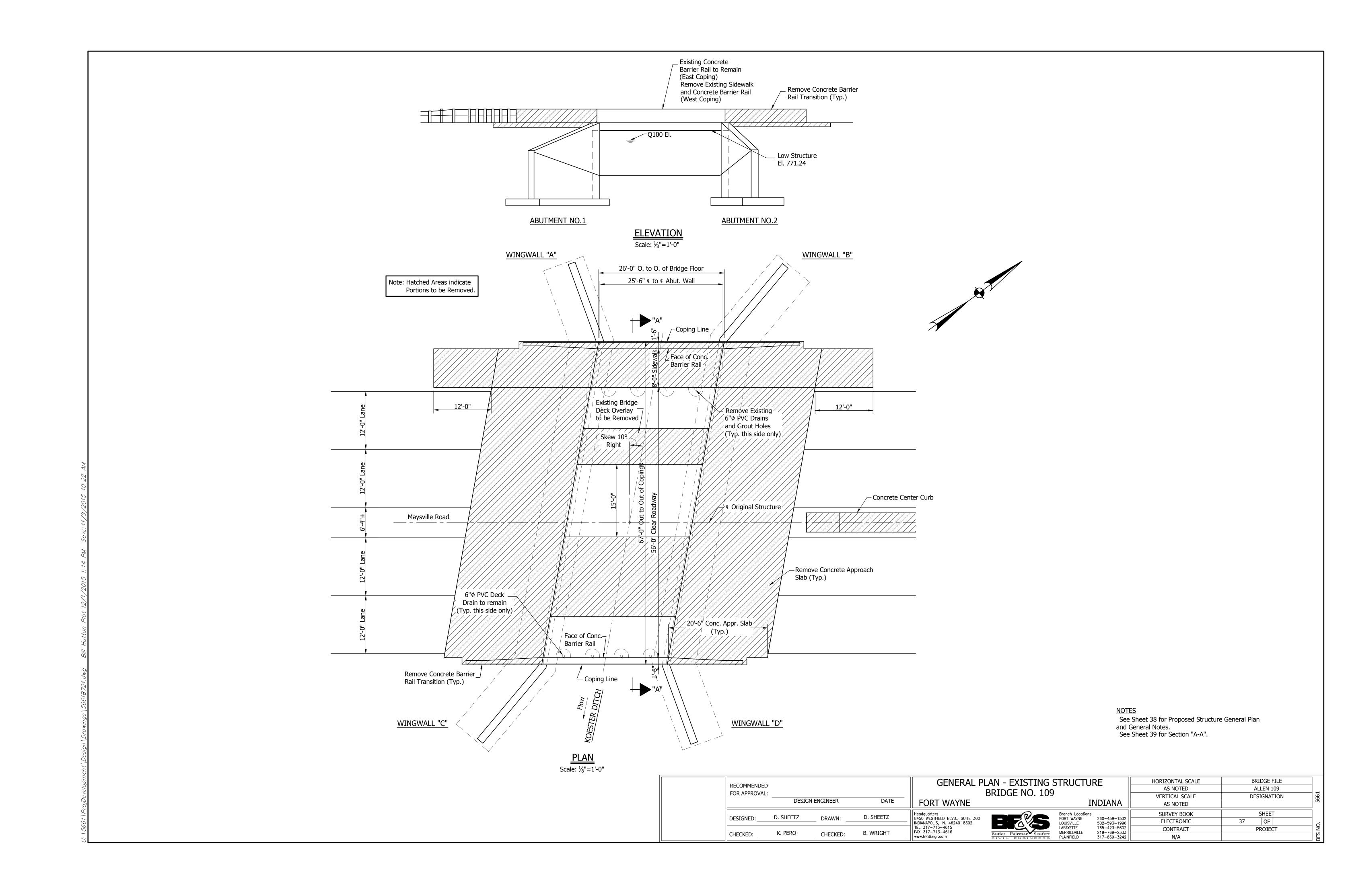
NOTES
The entire Geotechnical Report developed by GME Testing will be made available to the Contractor upon request.
See Sheet 33 for Additional Soil Borings, Pile Loading Table and Boring Location Plan.

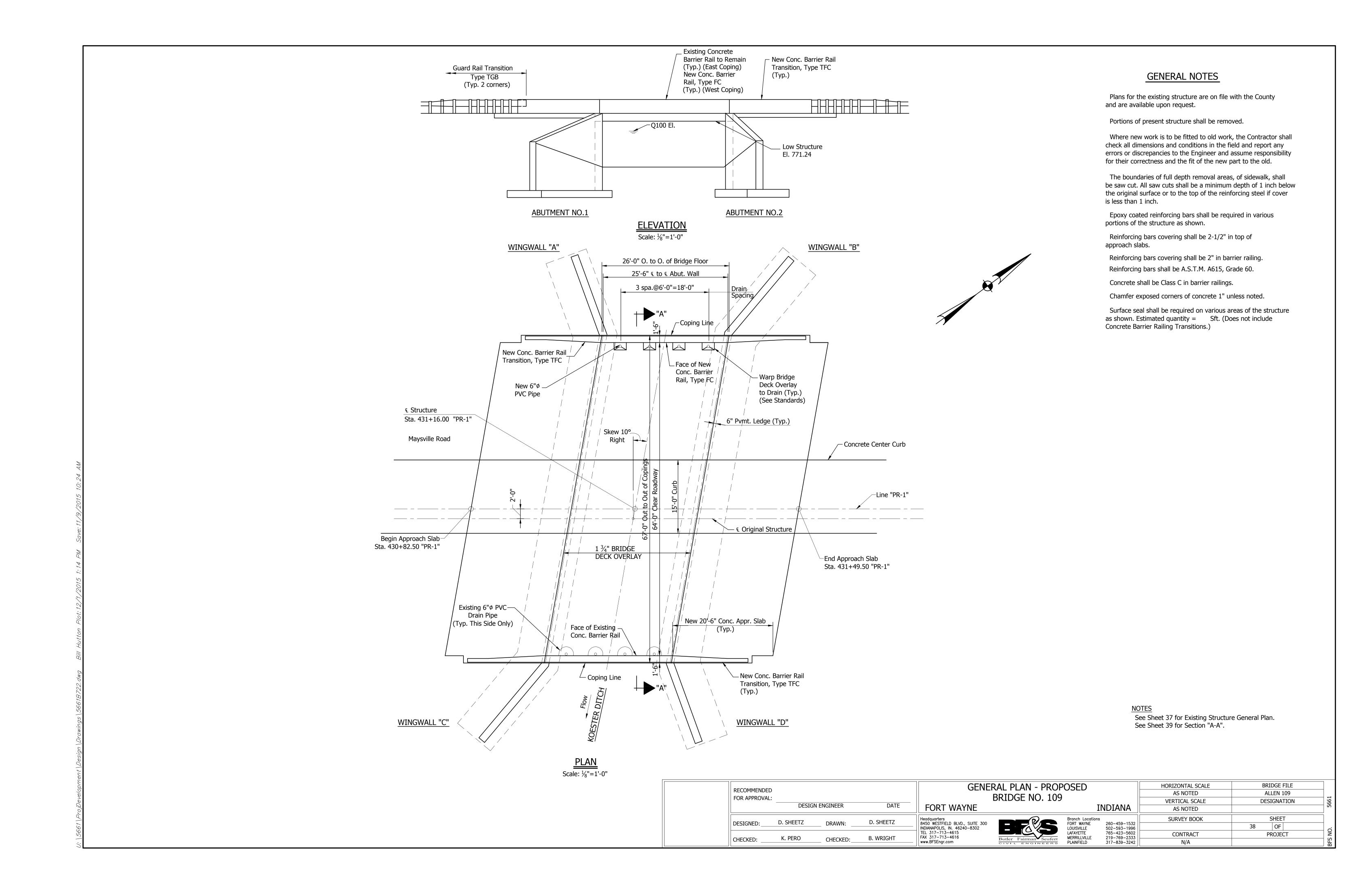
SOIL BORINGS

RECOMMENDED FOR APPROVAL:	DESIGN E	NGINEER	DATE	SOIL BORINGS - FORT WAYNE	NORTH AND SOU MAYSVILLE ROAD			HORIZONTAL SCALE AS NOTED VERTICAL SCALE AS NOTED	BRIDGE FILE ALLEN 109 DESIGNATION	5661
DESIGNED:	D. SHEETZ	DRAWN:	D. SHEETZ	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302			459-1532 593-1996	SURVEY BOOK	SHEET 34 OF	
CHECKED:	K. PERO	CHECKED:	B. WRIGHT	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE 765-4 MERRILLVILLE 219-7	423-5602 769-2333 839-3242	CONTRACT N/A	PROJECT	BFS NC









Note: Hatched Areas indicate Portions to be Removed. 67'-0" Out to Out of Copings 56'-0" Clear Roadway 8'-0" Sidewalk 12'-0" Lane 12'-0" Lane 12'-0" Lane 12'-0" Lane 2'-0" 2'-0" 2" 1'-4" Face of _ Railing (Typ.) 39'-0" Limits of Existing Bridge Deck Overlay 15'-0" 16'-6" 7'-6" —

€ Original Structure Line "PR-1" 2'-0" Remove Existing Sidewalk — Existing Concrete — Original Bridge Deck Overlay
(Do Not Remove At Location and Concrete Barrier Rail — € Original Crown Barrier Rail to Remain Remove Existing _ 8" Curb Of Proposed Curb) Bridge Deck Overlay _ Mill, Blast and Slope: 2.0% Slope: 2.0% Slope: 2.0% / Original P.G. Clean Deck └¼" Surface Milling Remove Existing Existing PVC Drain $\frac{3}{4}$ " Drip Bead (Typ.)— 6"ø PVC Drains to Remain and Grout Holes (Typ. this side only) EXISTING SECTION "A-A" Scale: $\frac{3}{8}$ "=1'-0" 67'-0" Out to Out of Copings 64'-0" Clear Roadway 6" Shldr.— 11'-0" Lane 11'-0" Lane 12'-6" Lane 2" 1'-4" 1'-0" 11'-0" Lane 1'-0" Shldr 15'-0" Curb 7'-6" 7'-6" Limits of Surface Face of Railing (Typ.) € Original Structure -Seal (Typ.) Line "PR-1" 2'-0" _ Existing Concrete € of Curb – Barrier Rail to Remain __ Variable Depth BRIDGE New Concrete Barrier____ Rail, Type FC DECK OVERLAY Crown -Slope: 1.0% Slope: 1.0% Slope: 2.0% Slope: 2.0% - Proposed P.G. (1¾" Min.) -Slope top of Overlay $\frac{1}{2}$ " (3 sides of New Drain) (Typ.) Warp Bridge Deck — New 6"ø PVC Overlay to Drain Pipe (Typ.) _Full Depth Bridge _Partial Depth Bridge Deck Patching Deck Patching (As Directed by (As Directed by Existing PVC Drain_/ the Engineer. the Engineer. $\frac{3}{4}$ " Drip Bead (Typ.) to Remain Estimated Estimated Quantity=14 Sft.) Quantity=52 Sft.) PROPOSED SECTION "A-A" Scale: 3/8"=1'-0" TYPICAL SECTIONS TYPICAL SECTIONS **BRIDGE FILE** HORIZONTAL SCALE RECOMMENDED AS NOTED ALLEN 109 BRIDGE NO. 109 FOR APPROVAL: VERTICAL SCALE DESIGNATION DESIGN ENGINEER DATE FORT WAYNE INDIANA AS NOTED Headquarters
8450 WESTFIELD BLVD., SUITE 300
INDIANAPOLIS, IN. 46240-8302
TEL 317-713-4615
FAX 317-713-4616
www.BFSEngr.com Branch Locations FORT WAYNE LOUISVILLE LAFAYETTE MERRILLVILLE PLAINFIELD SURVEY BOOK SHEET

D. SHEETZ

K. PERO

DESIGNED:

CHECKED:

D. SHEETZ

B. WRIGHT

CHECKED:

260-459-1532 502-593-1996 765-423-5602 219-769-2333 317-839-3242

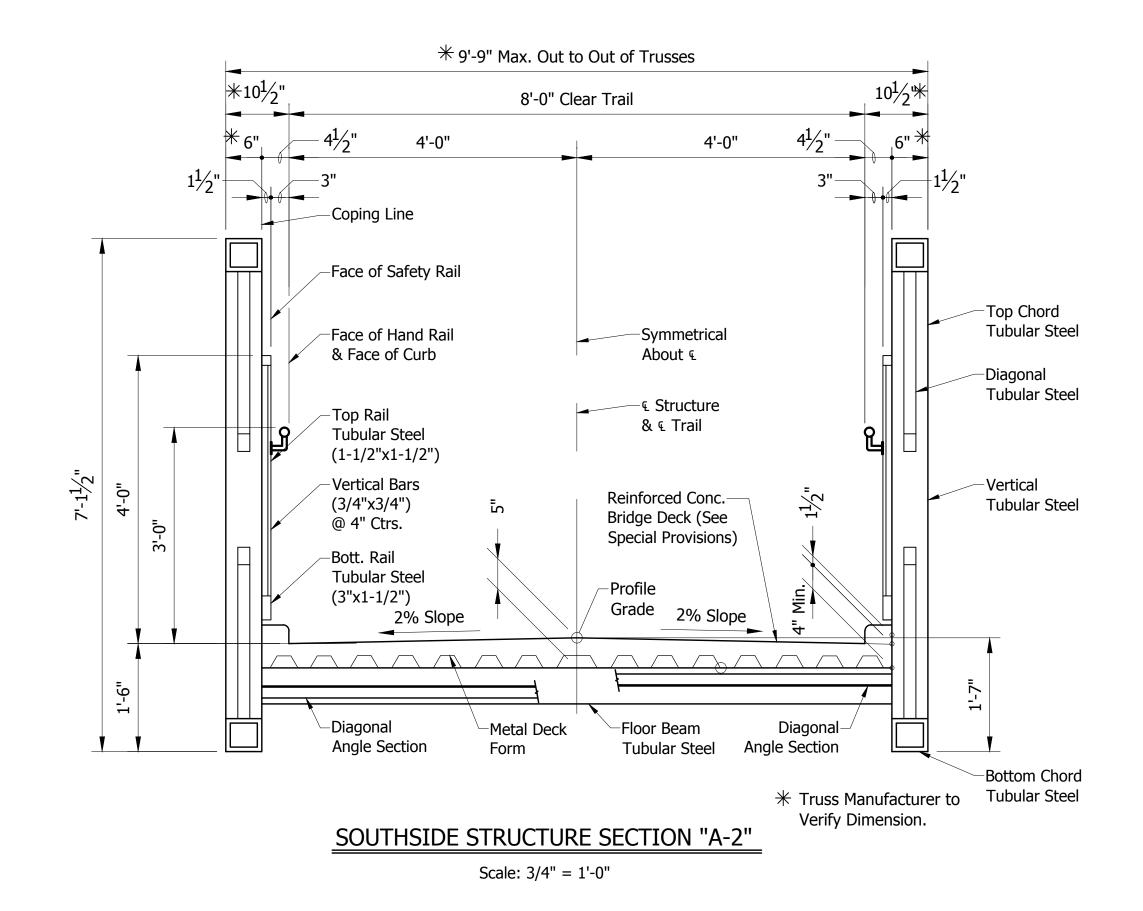
CONTRACT

N/A

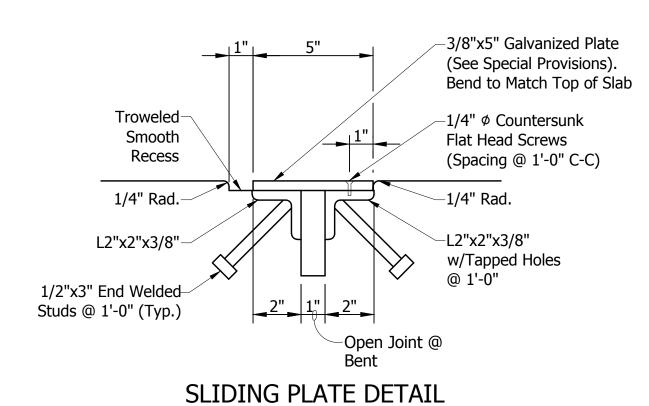
39

OF

PROJECT



NOTE:
Trusses, Bearing Assemblies, Floor Beams, Metal
Deck Forms, Slab Reinforcing and Bridge Railing
shall be Designed by the Pre-Engineered Steel
Truss Bridge Manufacturer. (See Special Provisions)



Not to Scale

GENERAL NOTES

No present structures at proposed bridge sites.

Footings shall be lower than shown if found necessary. See Article 206.11 of the Specifications.

Reinforcing bars shall not be ordered until rock is uncovered.

Reinforcing bars covering shall be 3" in footings except bottom steel which shall be 4"

Reinforcing bars covering shall be 2-1/2" in top and 1" in bottom of floor slabs and 2" in all other areas unless noted.

Reinforcing steel shall be A.S.T.M. A615, Grade 60.

Concrete shall be Class C in Concrete Slabs and Reinforced Bridge Decks.

Concrete shall be Class B in footings.

Concrete shall be Class A in all portions of the project not noted above.

Chamfer exposed corners of concrete 1" unless noted.

Paint shall conform to Federal Color Standard. Color shall be <u>xxx</u>. Paint sample submittals will be required for approval by the Owner.

DESIGN DATA-LRFD

DESIGN STRENGTH:

Class "C" Concrete F'c = 4,000 psiClass "A" Concrete F'c = 3,500 psiClass "B" Concrete F'c = 3,000 psi

Reinforcing Steel (Grade 60) Fy = 60,000 psi

Structural Steel (Grade 50W) Fy = 50,000 psi

LIVE LOAD:

85 psf pedestrian loading or an H5-44 loading in accordance with 1997 A.A.S.H.T.O. Guide Specifications for Design of Pedestrian Bridges and subsequent interim Specifications.

Load Factor = 1.75

DEAD LOAD:

Actual Weight Load Factor = 1.25 PRE-ENGINEERED STEEL TRUSS AND
REINFORCED CONCRETE SLAB BRIDGE

NORTHSIDE

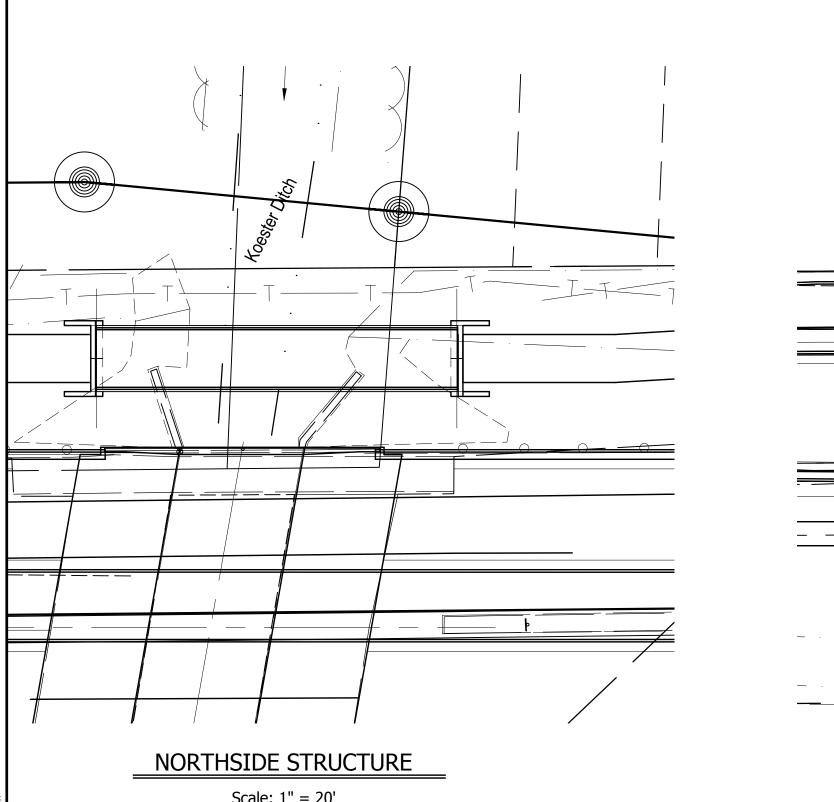
1 SPAN @ 75'-0", ; NO SKEW;
12'-0" CLEAR TRAIL OVER KOESTER DITCH

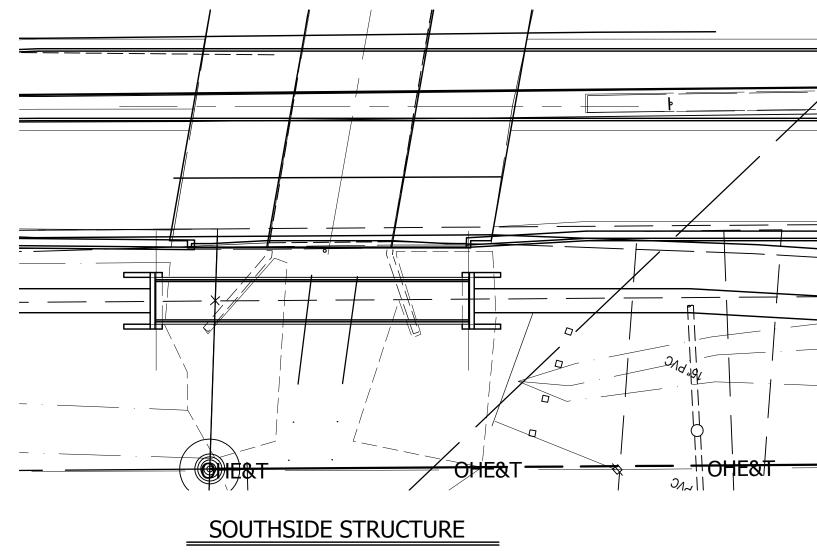
SOUTHSIDE

1 SPAN @ 65'-0", ; NO SKEW;

8'-0" CLEAR TRAIL OVER KOESTER DITCH

RECOMMENDED FOR APPROVAL:	DESIGN	ENGINEER	<i>ℋ</i> DATE		S - NORTH AND SC MAYSVILLE ROAD)	JCTURES NDIANA	HORIZONTAL SCALE AS SHOWN VERTICAL SCALE AS SHOWN	BRIDGE FILE N/A DESIGNATION	5661
DESIGNED:	B. WRIGHT	_ DRAWN:	J. THURMAN	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302		Branch Locations FORT WAYNE LOUISVILLE	260-459-1532 502-593-1996	SURVEY BOOK ELECTRONIC	SHEET 40 OF	o o
CHECKED:	K. PERO	_ CHECKED:	K. PERO	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765-423-5602 219-769-2333 317-839-3242	CONTRACT N/A	PROJECT	BFS N





EARTHWORK QUANTITY ITEM FILL + 20% Cys. COMMON EXCAVATION Cys. USABLE WATERWAY EXCAVATION (30%) Cys. BORROW Cys. WATERWAY EXCAVATION Cys. Cys. WET EXCAVATON STRUCTURE BACKFILL, TYPE 1 Cys. COARSE AGGREGATE Tons Cys. FLOWABLE BACKFILL FOUNDATION EXCAVATION (UNCLASSIFIED) Cys. CLASS "X' EXCAVATION Cys.

Note: Above Quantities do not include ____ Cys. for Benching. Estimated Benching will not be paid for directly. Cost of Benching shall be included in Cost of Common Excavation.

PRE-ENGINEERED STEEL TRUSS AND REINFORCED

CONCRETE SLAB BRIDGE

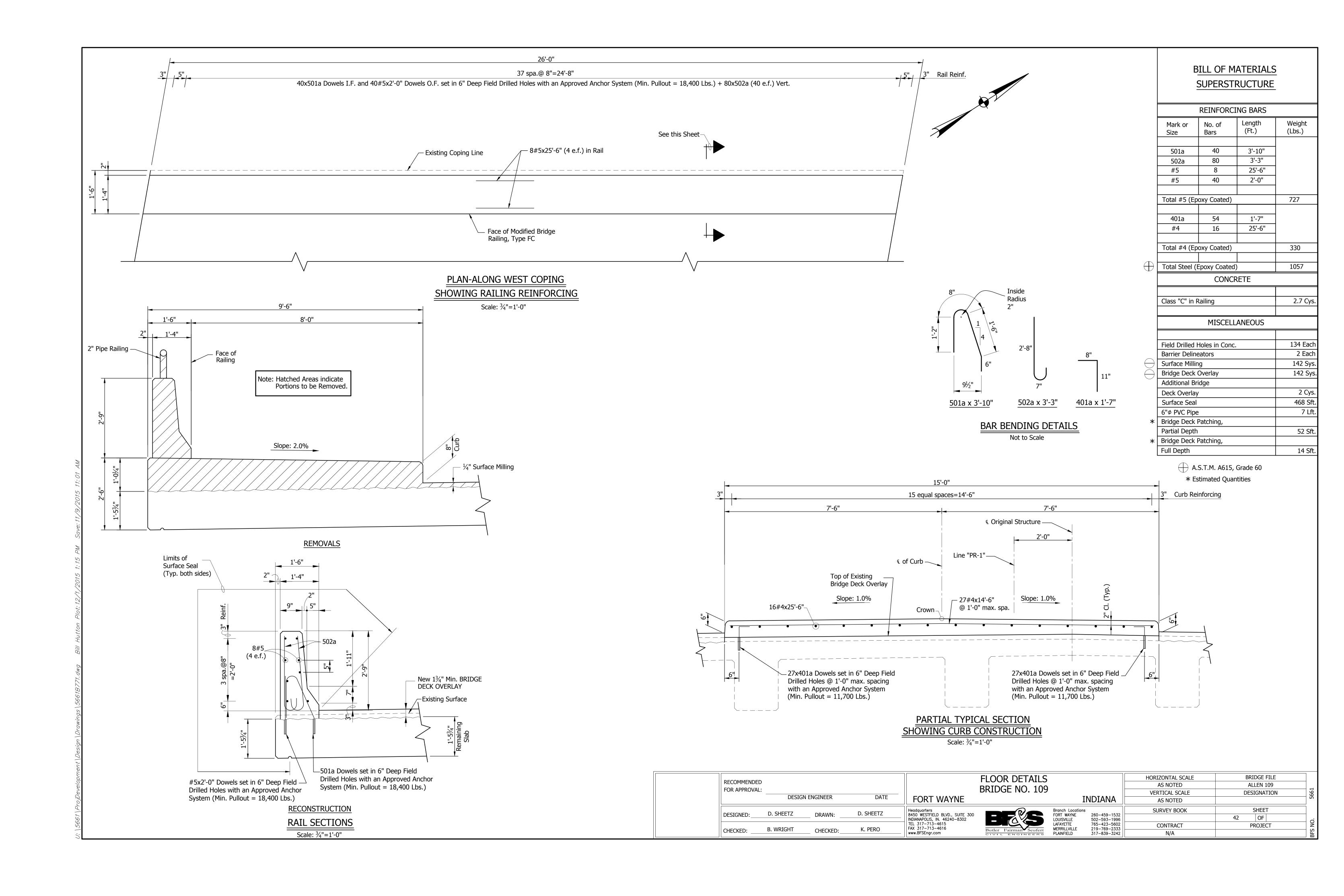
NORTHSIDE

1 SPAN @ 75'-0", ; xx° SKEW;

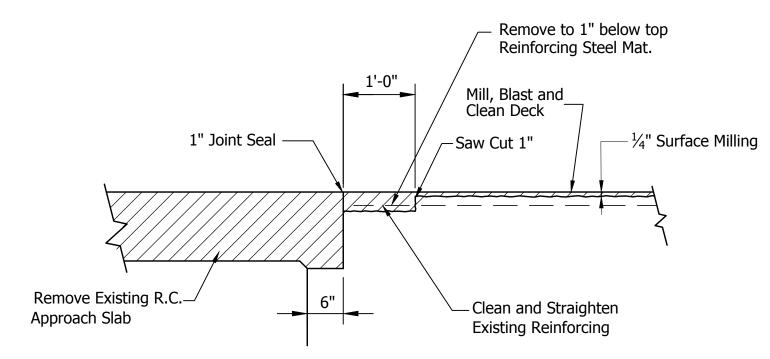
12'-0" CLEAR TRAIL OVER KOESTER DITCH

SOUTHSIDE 1 SPAN @ 65'-0", ; xx° SKEW; 8'-0" CLEAR TRAIL OVER KOESTER DITCH NOTES
See Sheet XX for Utility Owners.
See Sheets #### thru #### for Reference Points,
Bench Mark Data, and Add'l. Alignment Information.

DESIGNED: EC DRAWN: BEH Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302 TEL 317-713-4615 TEL 317-713-4616 TEL 317-713-4615 TEL 317-713-4616 TEL 317-7	RECOMMENDED FOR APPROVAL:		ENGINEER	K DATE				HORIZONTAL SCALE AS SHOWN VERTICAL SCALE AS SHOWN	BRIDGE FILE 5661 DESIGNATION	
CHECKED: ACE CHECKED: EC TEL 317-713-4615 Butler Fairman Seufert MERRILLVILLE 219-769-2333 N / A	DESIGNED:	EC	DRAWN:	BEH	8450 WESTFIELD BLVD., SUITE 300	FORT WAYNE	260-459-1532			
THE STREET STREET STATES TO STATE STREET STATES TO STATE	CHECKED:	ACE	CHECKED <u>:</u>	EC	TEL 317-713-4615	LAFAYETTE	765-423-5602	CONTRACT N/A	PROJECT	

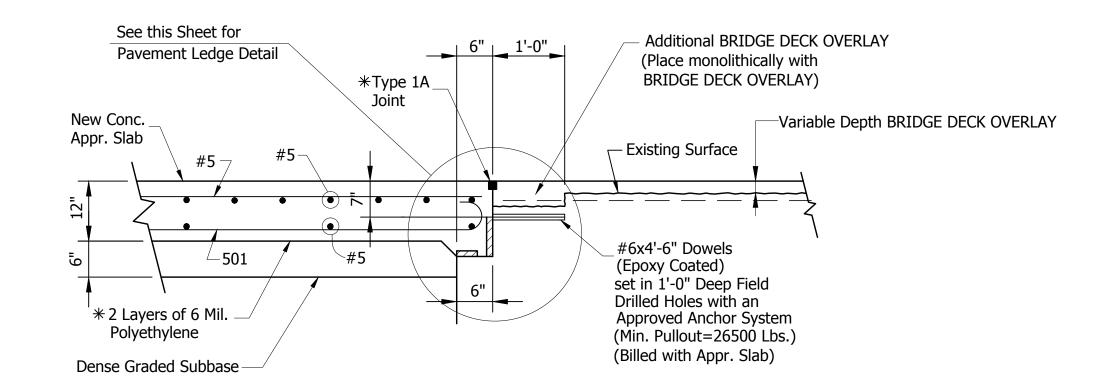


WITH BRIDGE DECK OVERLAY



WITHOUT BRIDGE DECK OVERLAY

SECTION "B-B" AT ABUT. NO.1 OR NO.2 (SHOWING REMOVALS) Scale: 3/4"=1'-0"

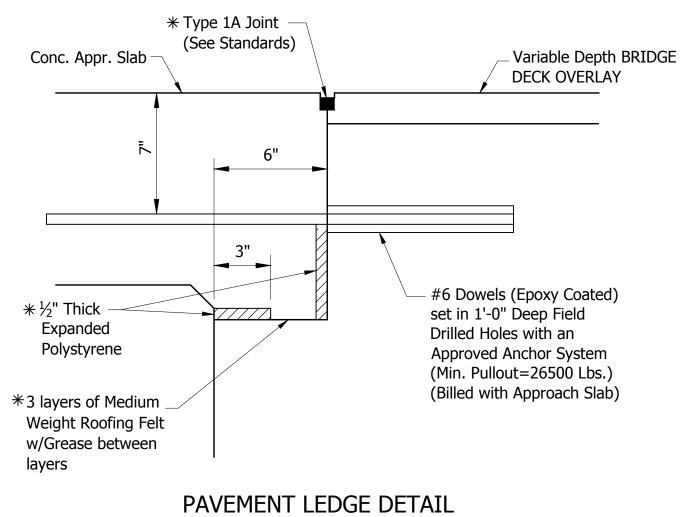


SECTION "B-B" AT ABUT. NO.1 OR NO.2

(SHOWING RECONSTRUCTION)

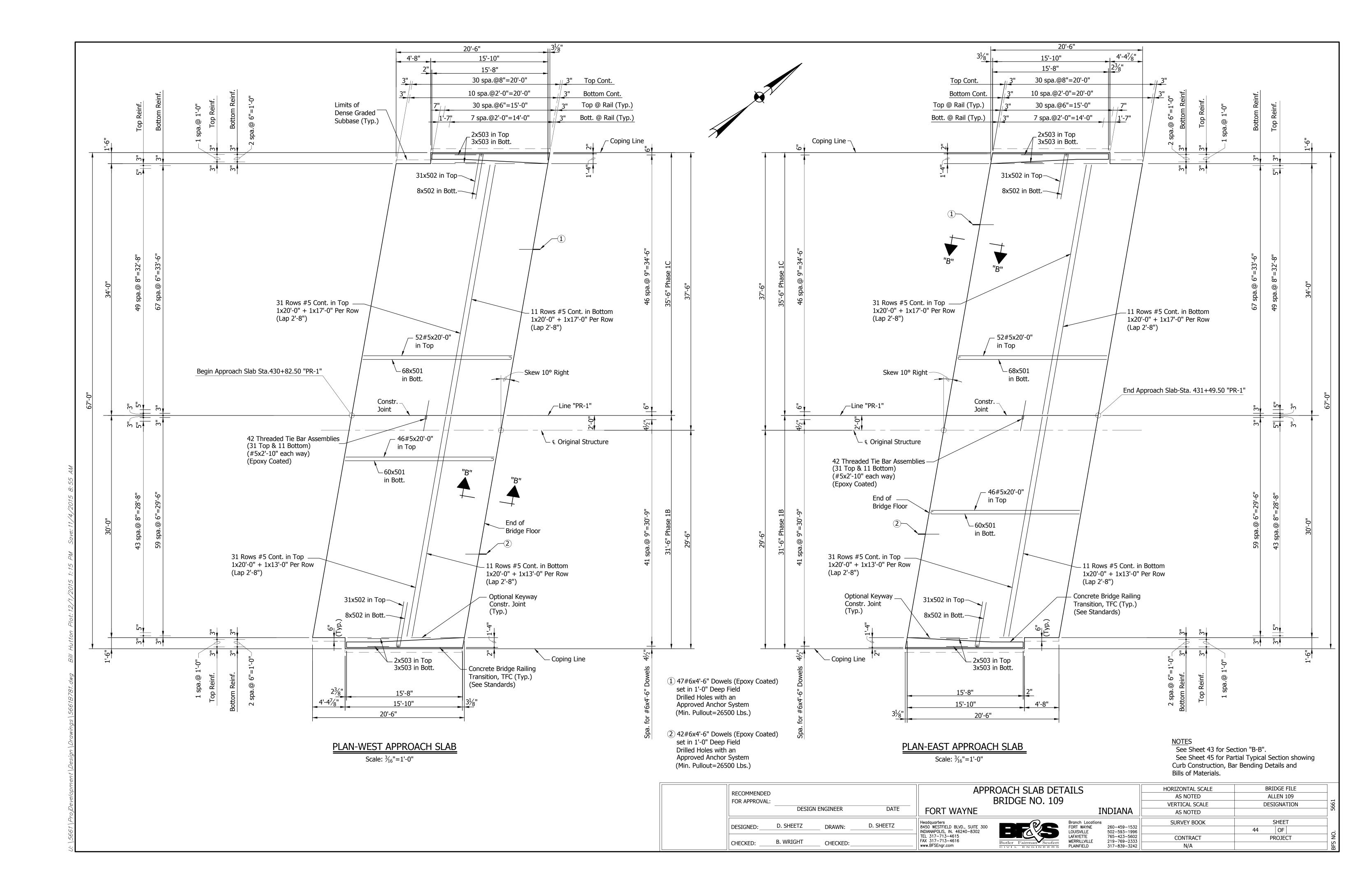
Scale: 3/4"=1'-0"

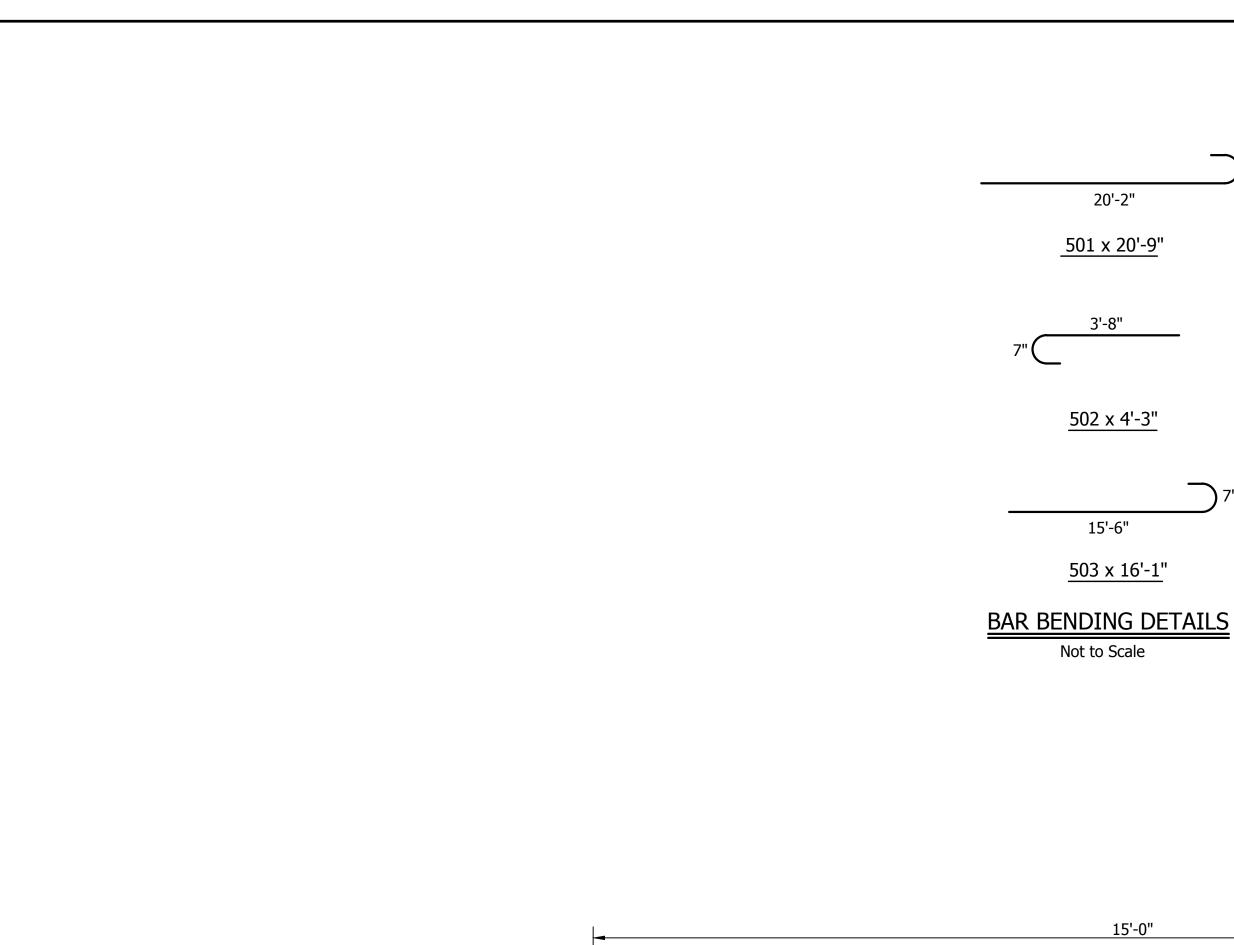
* See Special Provisions

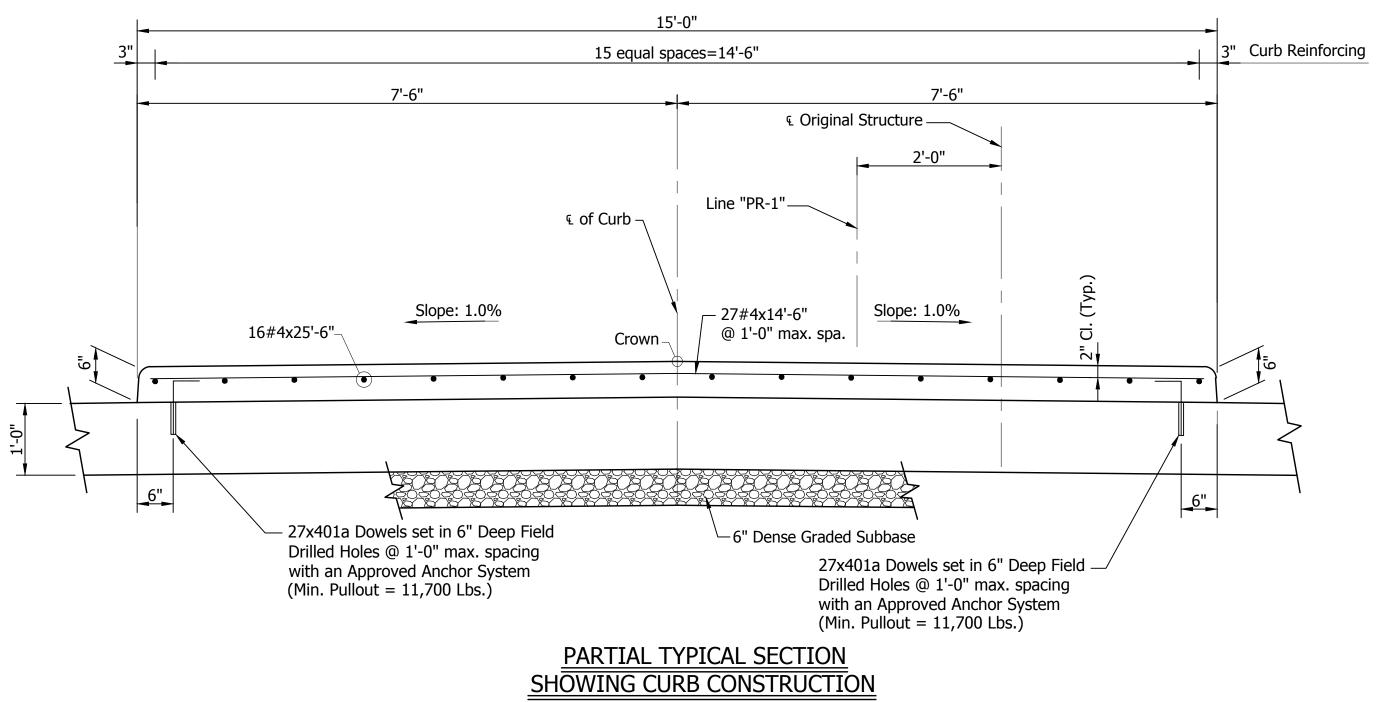


Not to Scale

RECOMMENDED FOR APPROVAL:	DESIGN I	ENGINEER	DATE		ROACH SLAB DET BRIDGE NO. 109		NDIANA	HORIZONTAL SCALE AS NOTED VERTICAL SCALE AS NOTED	BRIDGE FILE ALLEN 109 DESIGNATION	5661
DESIGNED:	D. SHEETZ	DRAWN:	D. SHEETZ	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302	FES	Branch Locations FORT WAYNE LOUISVILLE	260-459-1532 502-593-1996	SURVEY BOOK	SHEET 43 OF	
CHECKED:	B. WRIGHT	CHECKED:	K. PERO	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765-423-5602 219-769-2333 317-839-3242	CONTRACT N/A	PROJECT	BFS NC







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

BILL OF MATERIALS WEST APPR. SLAB (EAST APPR. SLAB SAME) PHASE IB

	REINFORCI	NC BADS	
	REINFORCI	ING DAKS	
Mark or	No. of	Length	Weight
Size	Bars	(Ft.)	(Lbs.)
#6	42	4'-6"	
Total #6 (Ep	oxy Coated)	,	284
501	60	20'-9"	
502	39	4'-3"	
503	5	16'-1"	
#5	88	20'-0"	
#5	42	13'-0"	
Total #5 (Ep	oxy Coated)		3960
Total Steel (Epoxy Coated)	4244
	CONC	RETE	
Reinforced	Concrete		
Bridge App	roach (12")		71 Sys.
	MISCELL	ANEOUS	
Dense Grade	ed Subbase		12 Cys.
			-
Concrete Bri	dge Railing Tr	ansition, TFC	1 Each

Threaded Tie Bar Assemblies

Field Drilled Holes in Concrete

(#5x2'-10" each way)

(Epoxy Coated)

BILL OF MATERIALS WEST APPR. SLAB (EAST APPR. SLAB SAME) PHASE IC

		REINFORCI	NG BARS	
	Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
	#6	47	4'-6"	
	Total #6 (Ep	oxy Coated)		318
	Γ01	60	201.011	
	501	60	20'-9"	
	502 503	39 5	4'-3" 16'-1"	
	#5	94		
	#5 #5	42	20'-0" 17'-0"	
	πΟ	72	17-0	
	Total #5 (Ep	oxy Coated)		4261
)	Total Steel (E	poxy Coated)		4579
		CONCR	RETE	
	Reinforced			
	Bridge Appr	oach (12")		81 Sys.
		MISCELL	ANEOUS	
	Dense Grade	d Subbase		14 Cys.
	Concrete Brid	lge Railing Tra	ansition, TFC	1 Each
	Field Drilled H	Holes in Concr	ete	47 Each

A.S.T.M. A615, Grade 60

42 Each

42 Each

RECOMMENDED FOR APPROVAL					ROACH SLAB DET BRIDGE NO. 109			HORIZONTAL SCALE AS NOTED VERTICAL SCALE	Д	RIDGE FILE ALLEN 109 SIGNATION	
	DESIGN	ENGINEER	DATE	FORT WAYNE			INDIANA	AS NOTED	DL	SIGNATION	
DESIGNED:	D. SHEETZ	_ DRAWN:	D. SHEETZ	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302	FES	Branch Locatio FORT WAYNE LOUISVILLE	260-459-1532 502-593-1996	SURVEY BOOK	45	SHEET	
CHECKED:	B. WRIGHT	CHECKED:		TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765-423-5602 219-769-2333 317-839-3242	CONTRACT N/A		PROJECT	

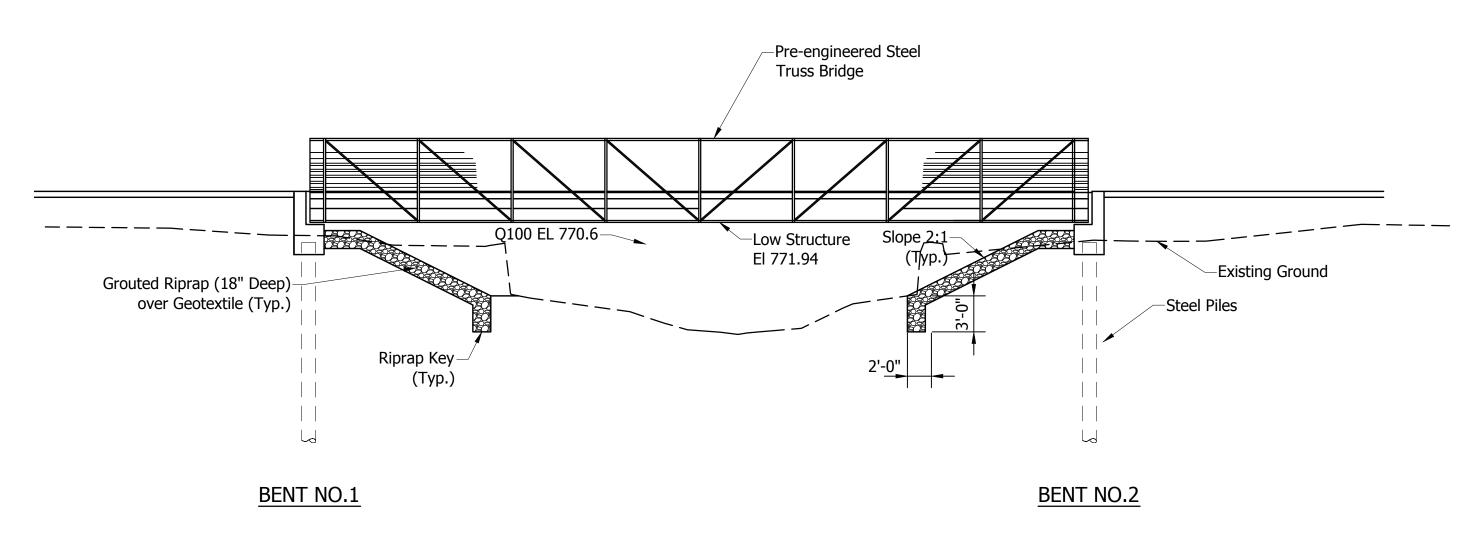
STRUCTURE TO BE BUILT ON A 0.00% GRADE Pre-engineered Steel Truss Bridge Slope 2:1 (Typ.) Low Structure El 770.81 Existing Ground Riprap Key-(Typ.) BENT NO.1 BENT NO.2 NORTHSIDE STRUCTURE ELEVATION VIEW Scale: 1/8" = 1'-0" EL. 772.93 EL. 772.93 Compacted Aggregate, No.53 (12" Deep) (Typ. all Corners) Limits of 2'-6" Bent (Typ.) —End of Bridge Floor (Typ.) € of Path and Structure Grouted Grouted Riprap Riprap 1'-0" Mudwall (Typ.) 74'-0" € Bearing to € Bearing 75'-4" Out to Out of Slab NORTHSIDE STRUCTURE PLAN VIEW Scale: 1/8" = 1'-0"

PRE-ENGINEERED STEEL TRUSS AND REINFORCED CONCRETE SLAB BRIDGE

NORTHSIDE 1 SPAN @ 75'-0", ; NO SKEW; 12'-0" CLEAR TRAIL OVER KOESTER DITCH

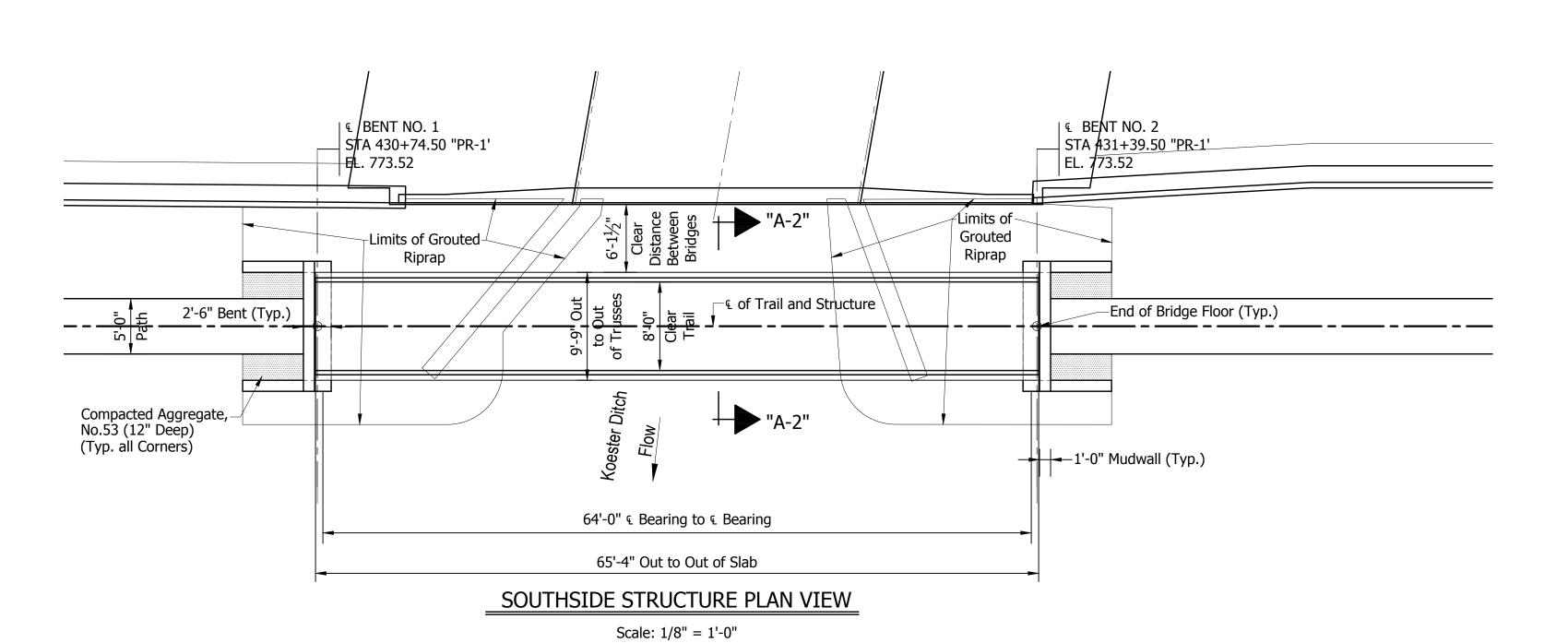
RECOMMENDED FOR APPROVAL:	DESIGN E	ENGINEER	ℋ DATE		PLAN - NORTH ST MAYSVILLE ROAD		[ANA	HORIZONTAL SCALE AS SHOWN VERTICAL SCALE AS SHOWN	BRIDGE FILE ALLEN 109 DESIGNATION	5661
DESIGNED:	B. WRIGHT	DRAWN:	J. THURMAN	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302			-459-1532 -593-1996	SURVEY BOOK ELECTRONIC	SHEET 46 OF	
CHECKED:	K. PERO	CHECKED:	B. WRIGHT	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE 765- MERRILLVILLE 219-	-423-5602 -769-2333 -839-3242	CONTRACT N/A	PROJECT	

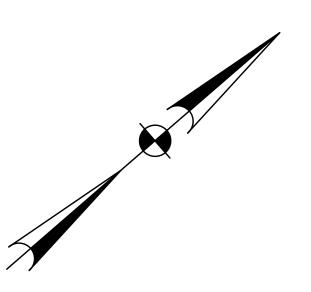
STRUCTURE TO BE BUILT ON A 0.00% GRADE



SOUTHSIDE STRUCTURE ELEVATION VIEW

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





PRE-ENGINEERED STEEL TRUSS AND REINFORCED CONCRETE SLAB BRIDGE SOUTHSIDE 1 SPAN @ 65'-0", ; NO SKEW;

8'-0" CLEAR TRAIL OVER KOESTER DITCH

N/A

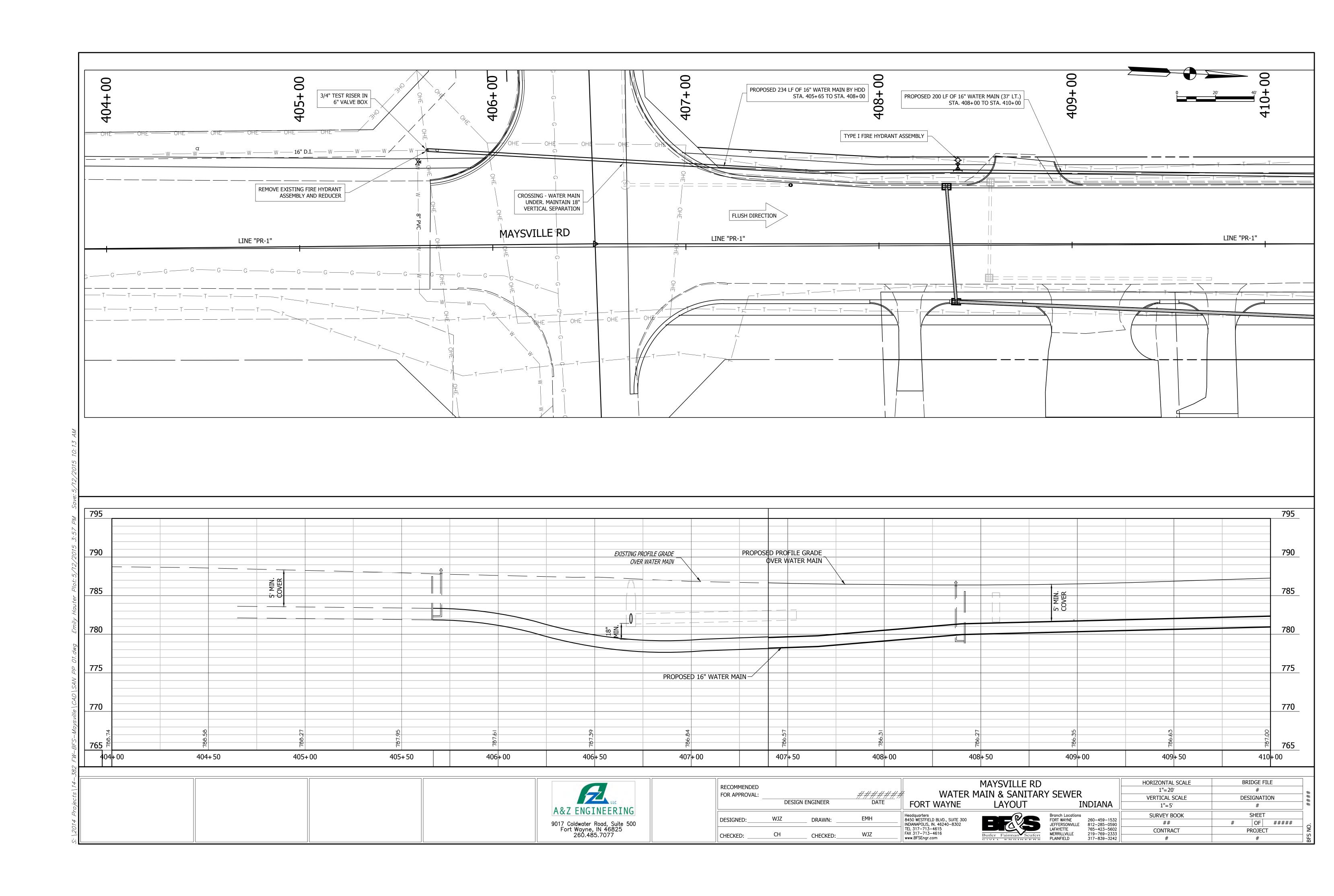
GENERAL PLAN - SOUTH STRUCTURE BRIDGE FILE HORIZONTAL SCALE RECOMMENDED AS SHOWN ALLEN 109 MAYSVILLE ROAD FOR APPROVAL: VERTICAL SCALE DESIGNATION DATE DESIGN ENGINEER FORT WAYNE INDIANA AS SHOWN Headquarters
8450 WESTFIELD BLVD., SUITE 300
INDIANAPOLIS, IN. 46240-8302
TEL 317-713-4615
FAX 317-713-4616
www.BFSEngr.com Branch Locations FORT WAYNE LOUISVILLE LAFAYETTE MERRILLVILLE PLAINFIELD SURVEY BOOK SHEET B. WRIGHT J. THURMAN 260-459-1532 502-593-1996 765-423-5602 219-769-2333 317-839-3242 DESIGNED:_ 47 OF ELECTRONIC CONTRACT PROJECT B. WRIGHT K. PERO CHECKED: CHECKED:_

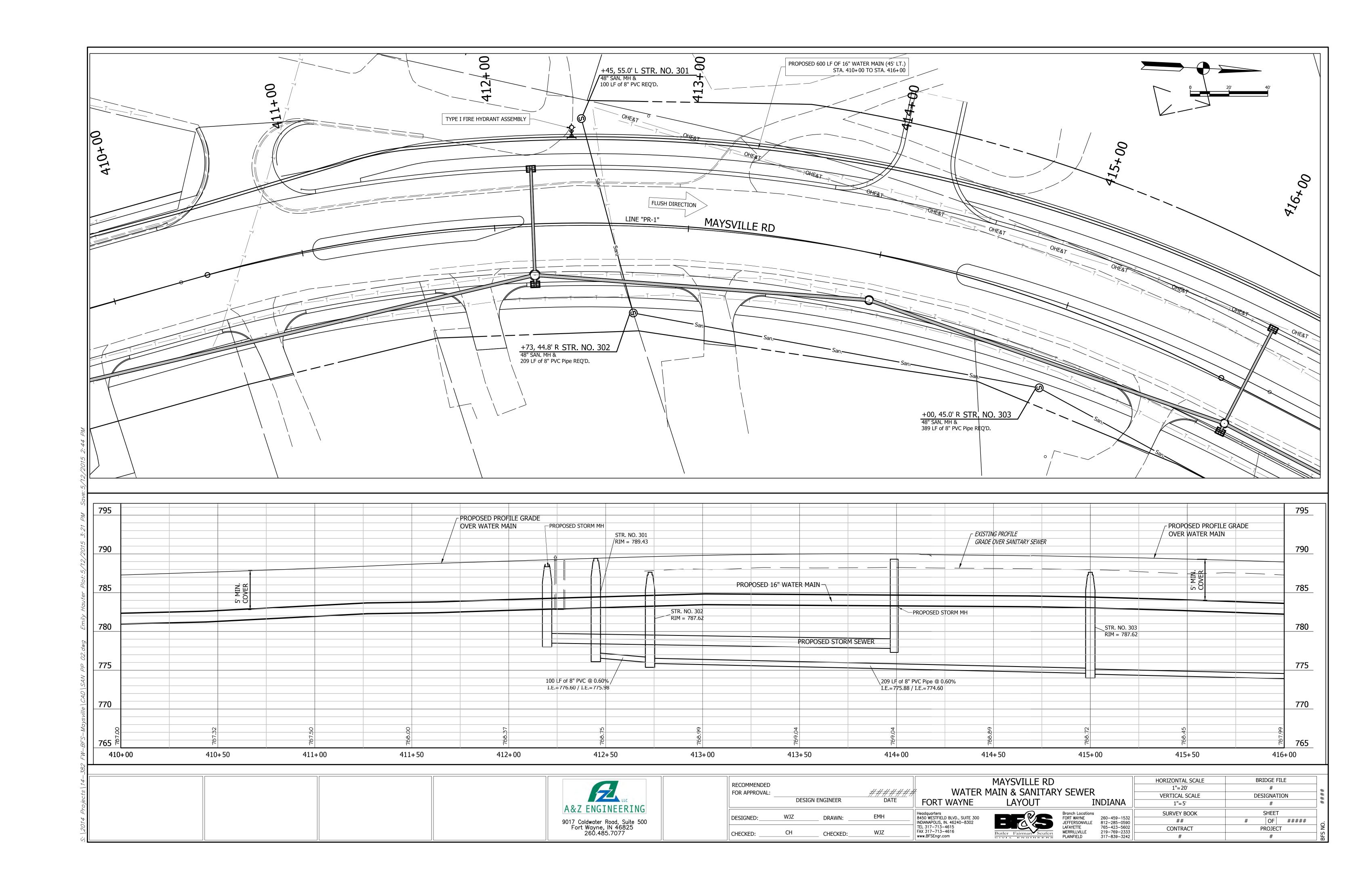
ITEM	CONC	RFTF	1									RE QUANTI	IILS								
ITEM	II			DENSE	REINF.		CONC.	REINF.	REINF.	BRIDGE	POLYMERIC BRIDGE	ADDITIONAL	DECK	THREADED TIE BAR	EST. AREA	FIELD DRILLED	TYPE S-S	BRIDGE		CONCRETE BARRIER	
	CLASS A IN SUPERSTR.	CLASS A IN SUBSTR.	SURFACE MILLING	GRADED SUBBASE	CONC. BRIDGE APPR. 12"		RAILING CLASS C	REINF. BARS (PLAIN)	BARS (EPOXY COATED)	RAILING PF-1	DECK OVERLAY	BRIDGE DECK OVERLAY	DECK DRAIN	ASSEMBLIES (EPOXY COATED)	SURFACE SEAL	HOLES IN CONCRETE	EXPANSION JOINT	DECK OVERLAY REMOVE	BARRIER DELINEATORS	RAILING TRANSITION, TFC	TERMINAL JOINT
	CYS.	CYS.	SYS.	CYS.	SYS.	SYS.	LFT.	LBS.	LBS.	SYS.	SYS.	CYS.	EACH	EACH	SFT.	EACH	LFT.	SYS.	EACH	EACH	LFT.
<u>PHASE I</u>																					
SUPERSTRUCTURE																					
APPROACH SLABS																					
South																					
North																					
SUB-TOTALS																					
PHASE II																					
SUPERSTRUCTURE																					
APPROACH SLABS																1					
West																					
East																					
SUB-TOTALS																					
							-								1	1					
																1					
																+					
TOTALS								\oplus	\oplus												

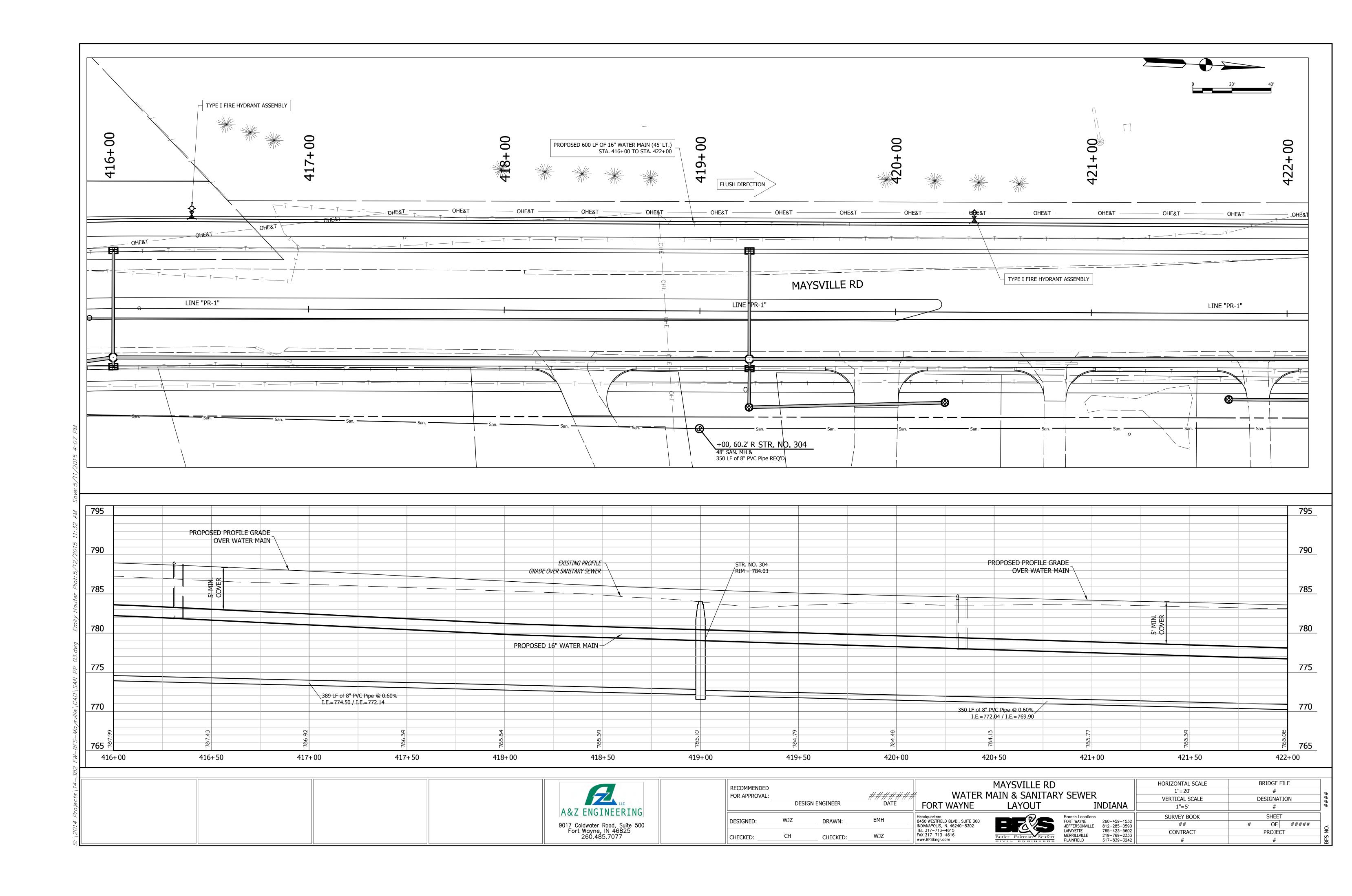
 \oplus A.S.T.M. A615, Grade 60

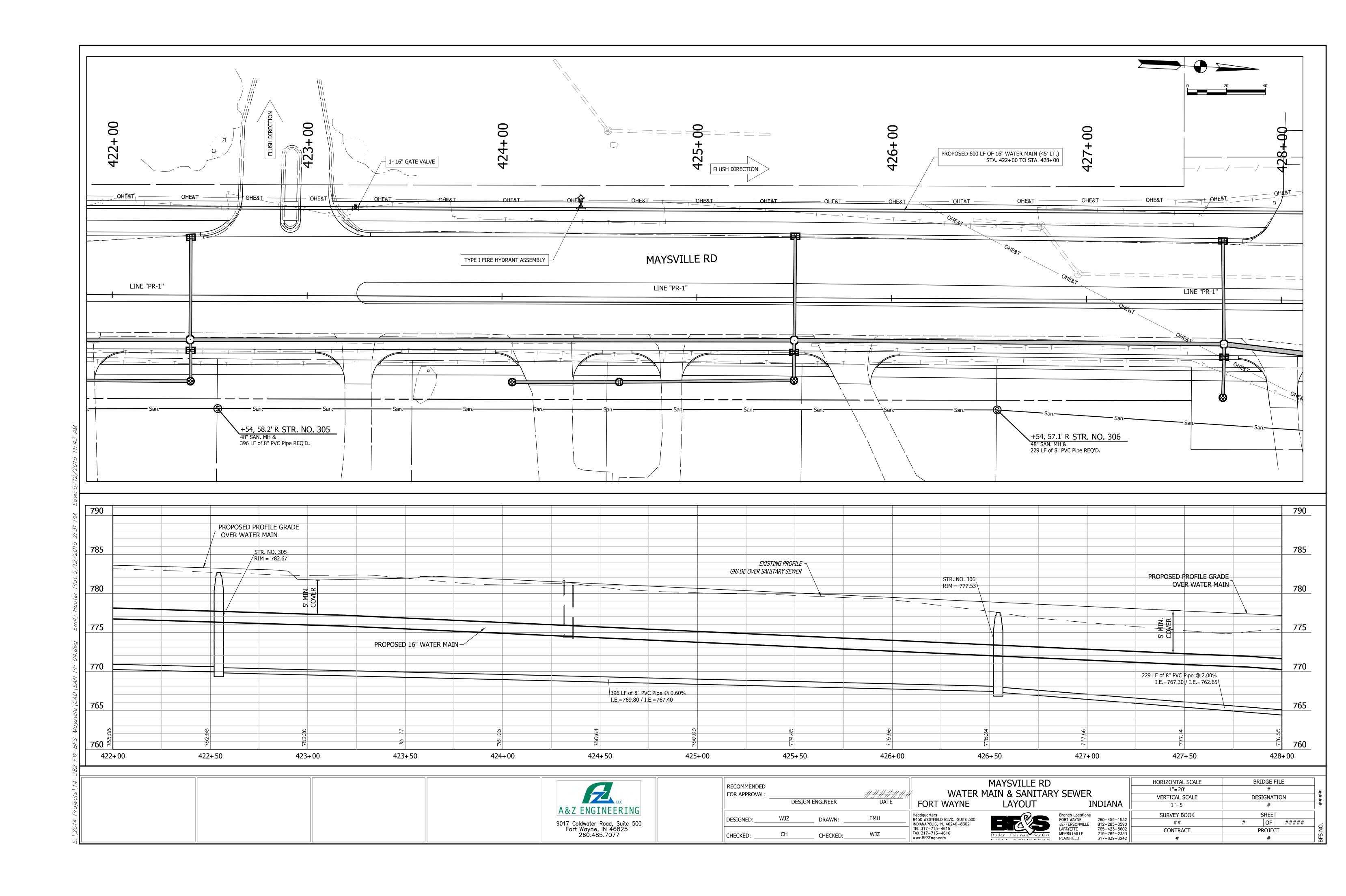
BRIDGE SUMMARY

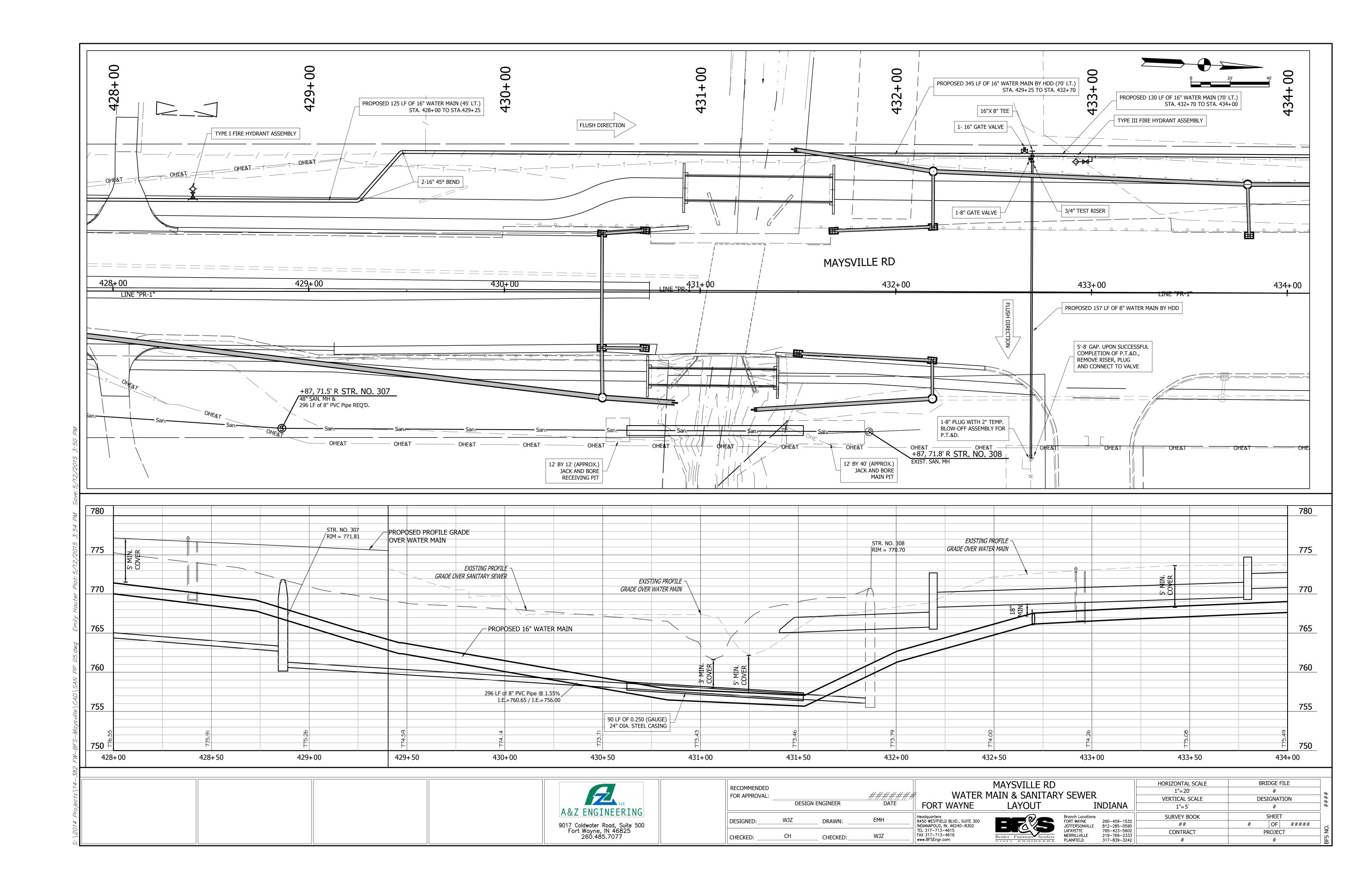
RECOMMENI FOR APPROV	/AL:	ENGINEER	DATE		BRIDGE SUMMAR BRIDGE NO. 109		NDIANA	HORIZONTAL SCALE AS NOTED VERTICAL SCALE AS NOTED	BRIDGE FILE ALLEN 109 DESIGNATION	5661
DESIGNED:	D. SHEETZ	DRAWN:	D. SHEETZ	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302		Branch Locations FORT WAYNE LOUISVILLE	260-459-1532 502-593-1996	SURVEY BOOK	SHEET 48 OF	
CHECKED: _	B. WRIGHT	CHECKED:	K. PERO	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765–423–5602 219–769–2333 317–839–3242	CONTRACT	PROJECT	BFS NC

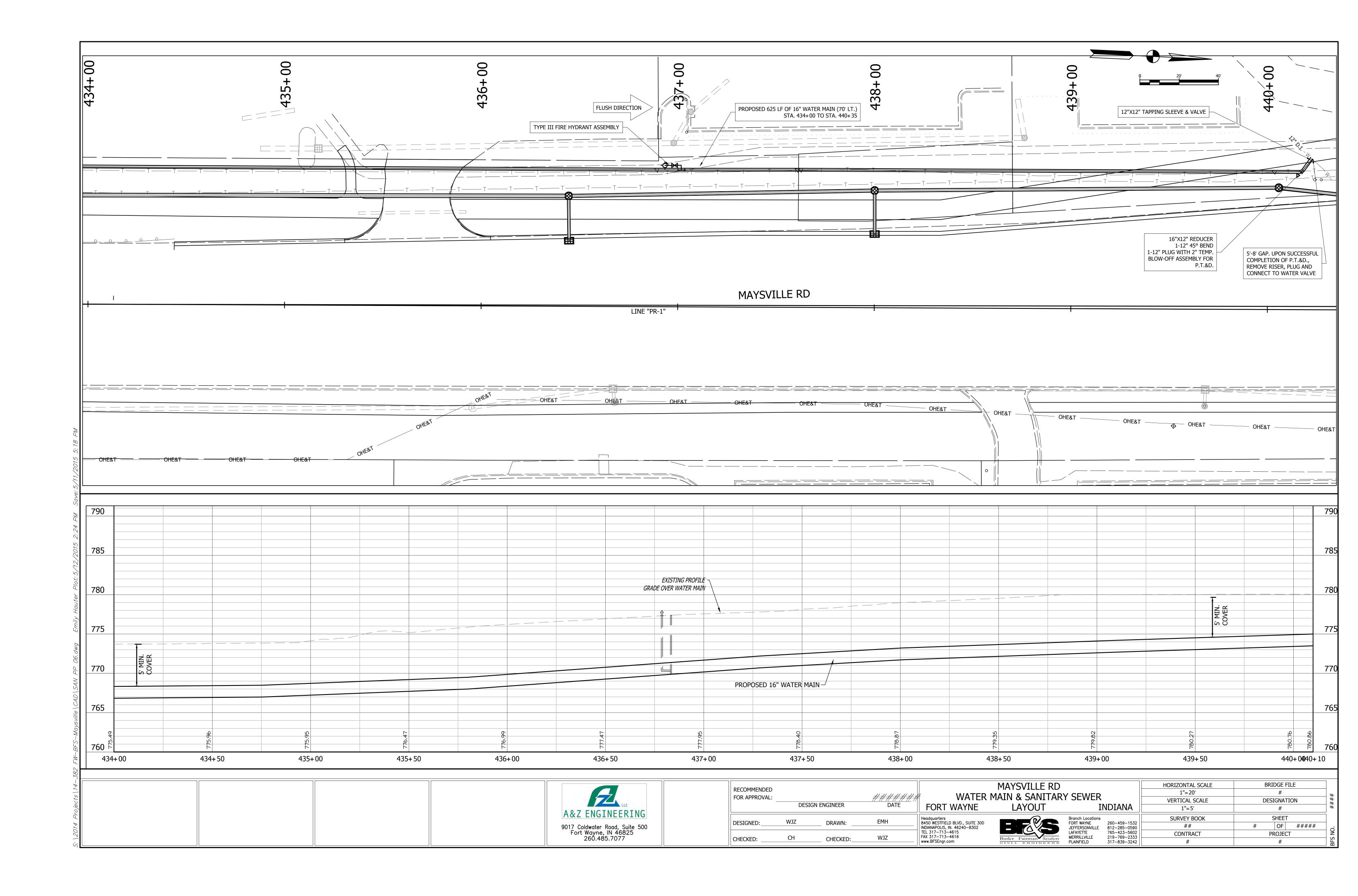


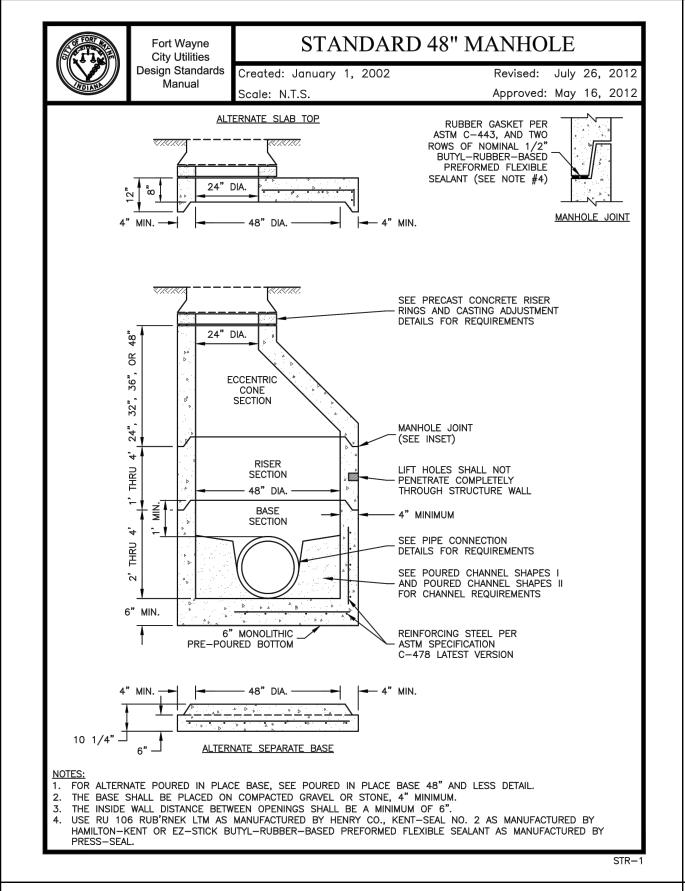


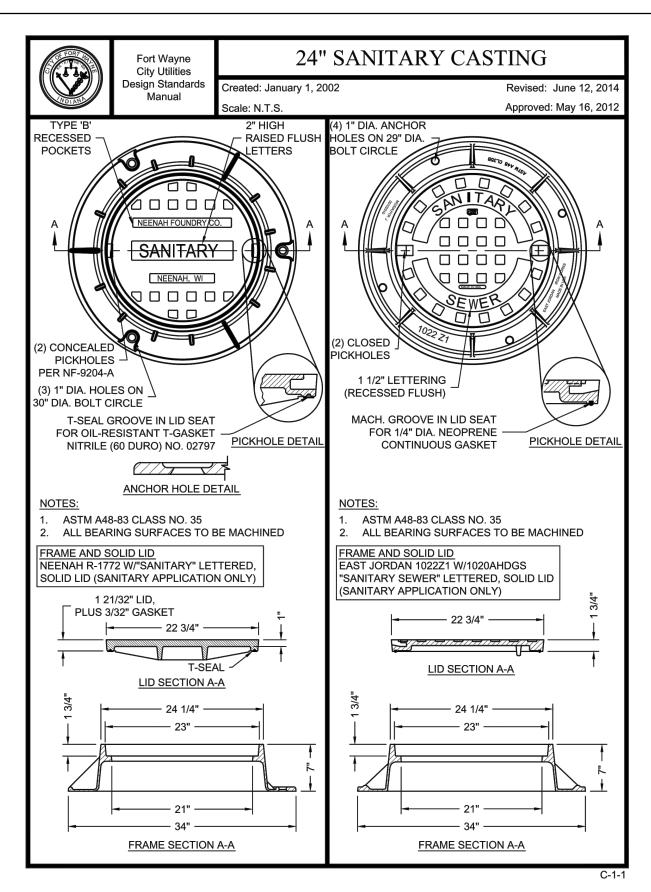


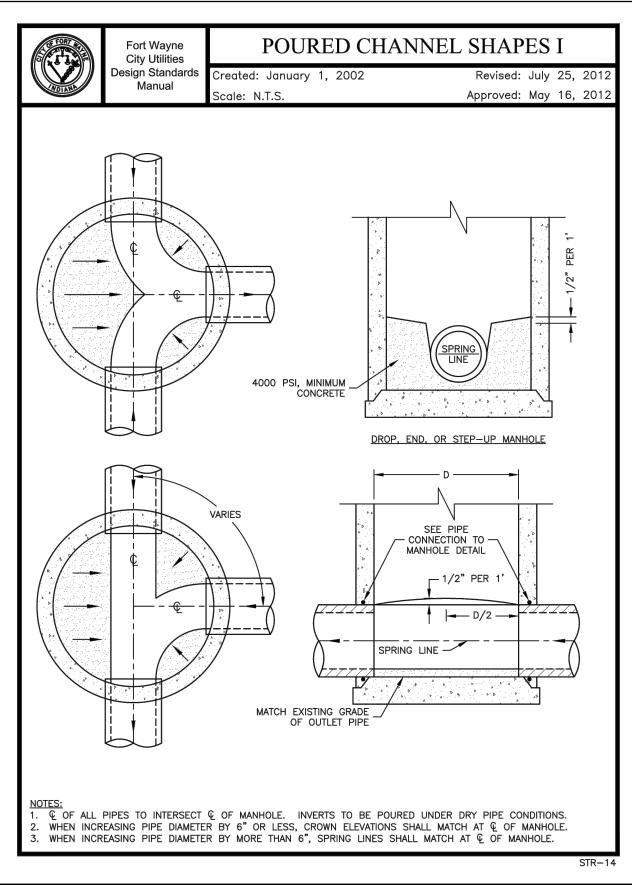


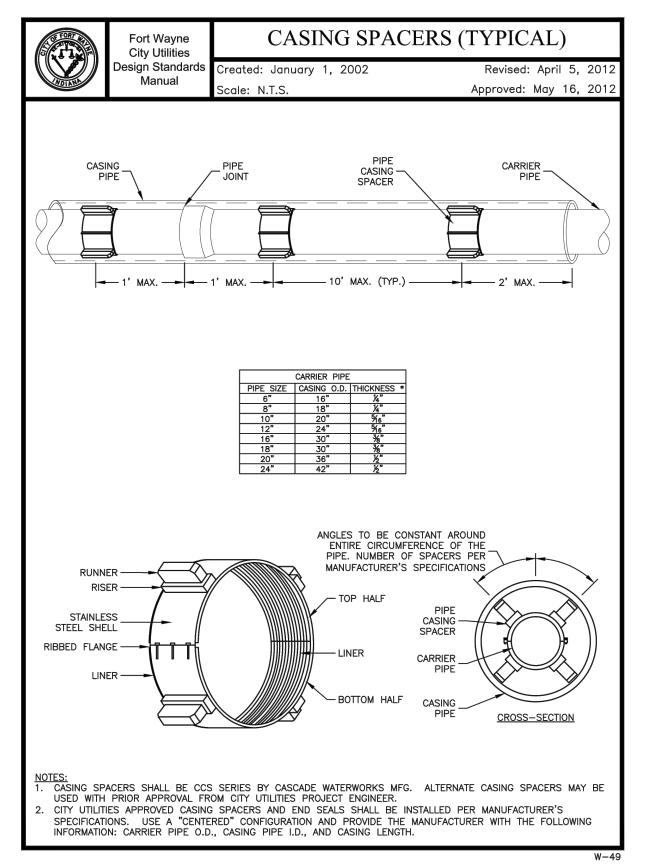


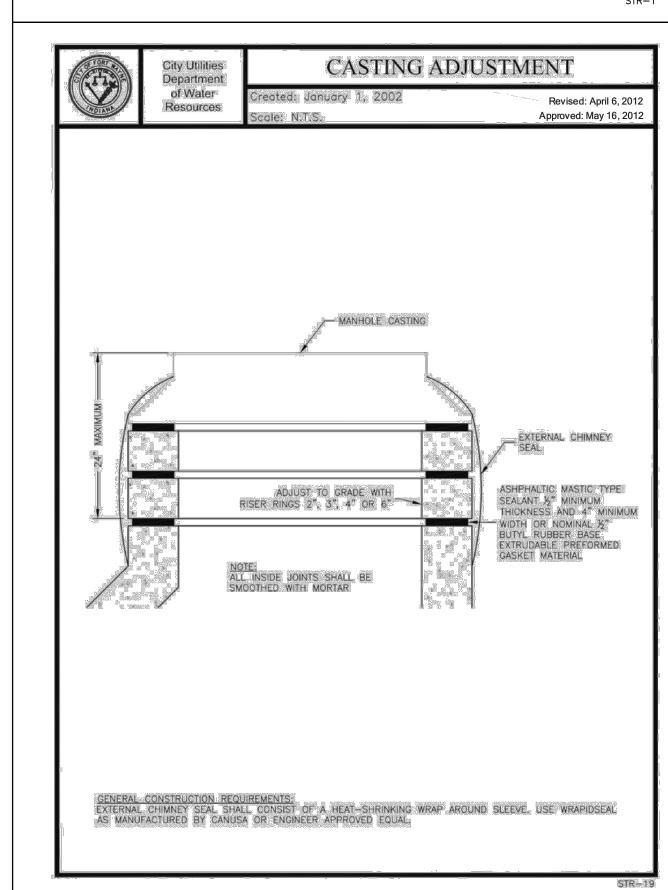


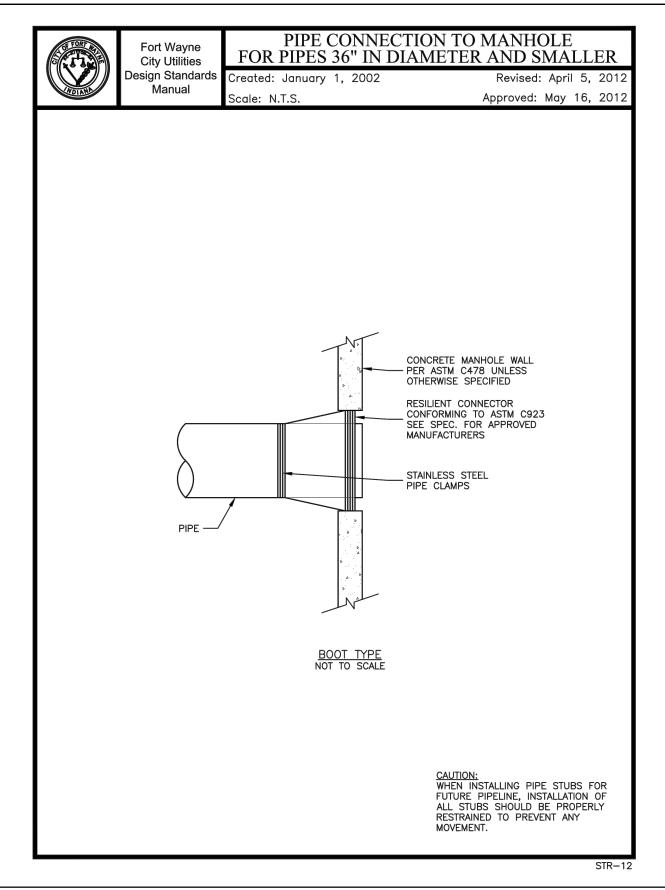


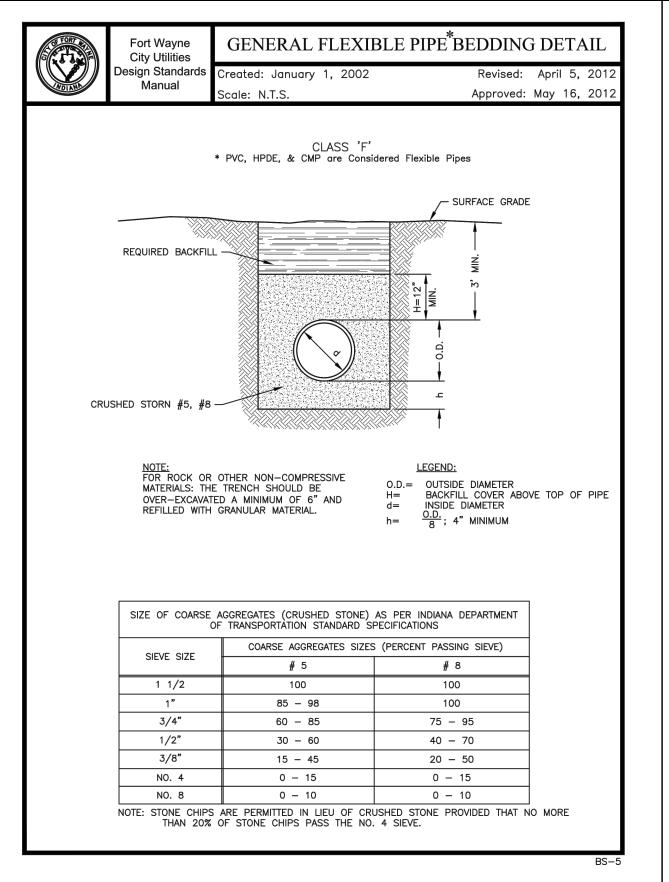


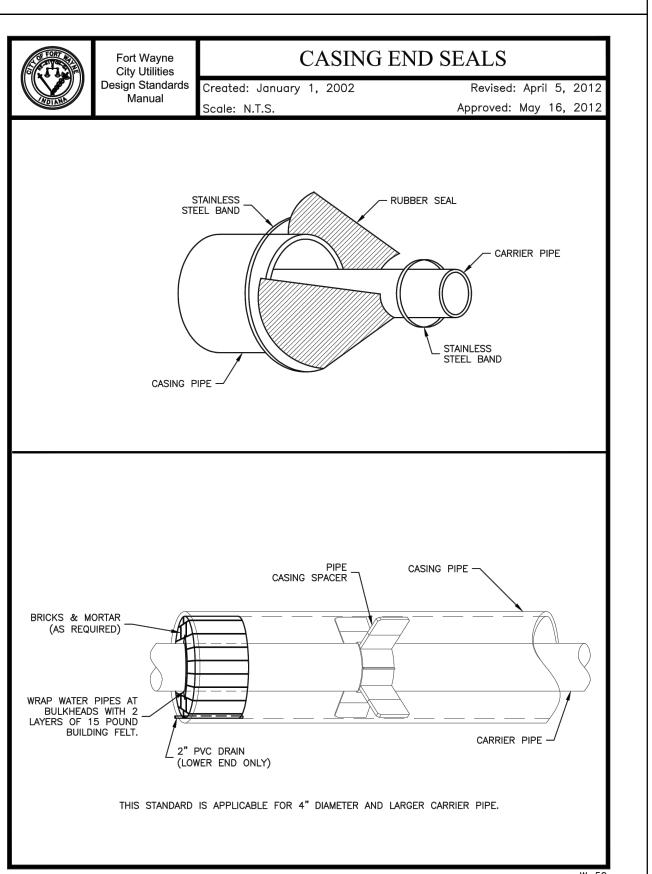


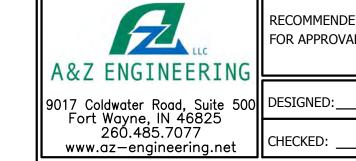


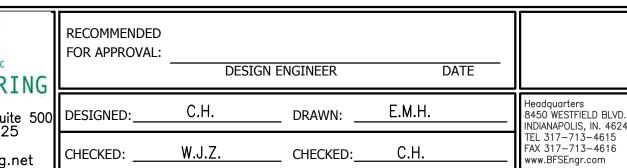














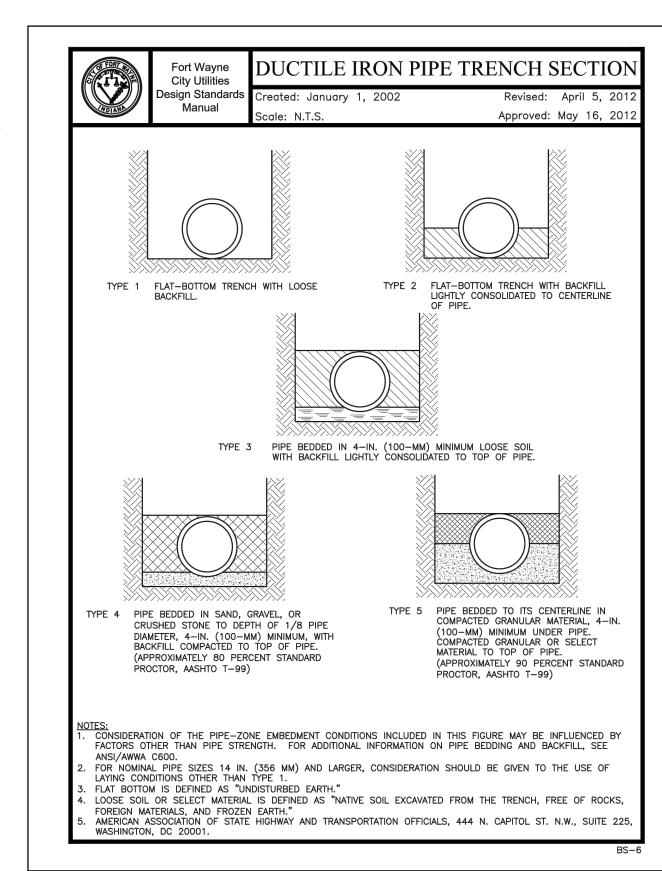
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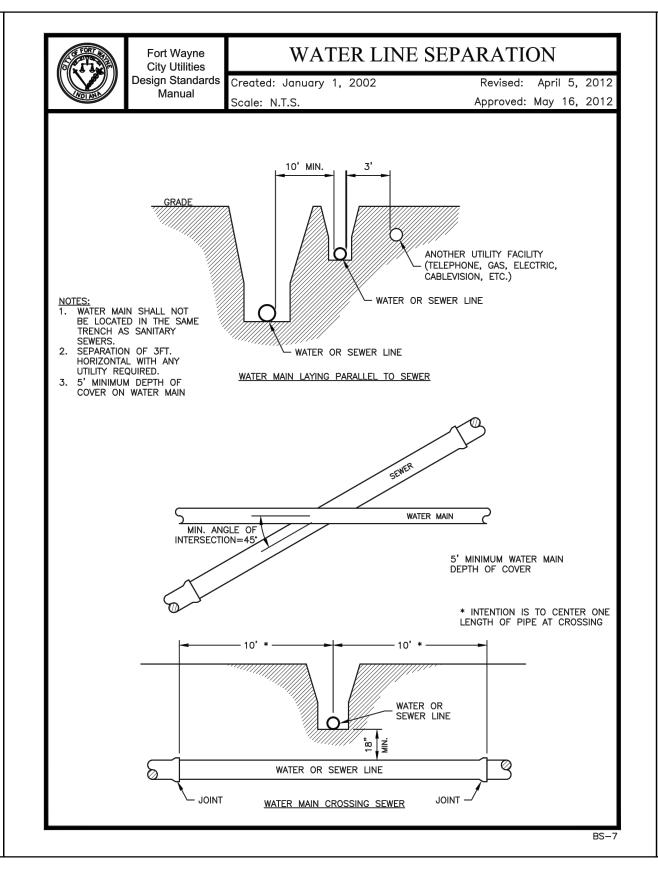
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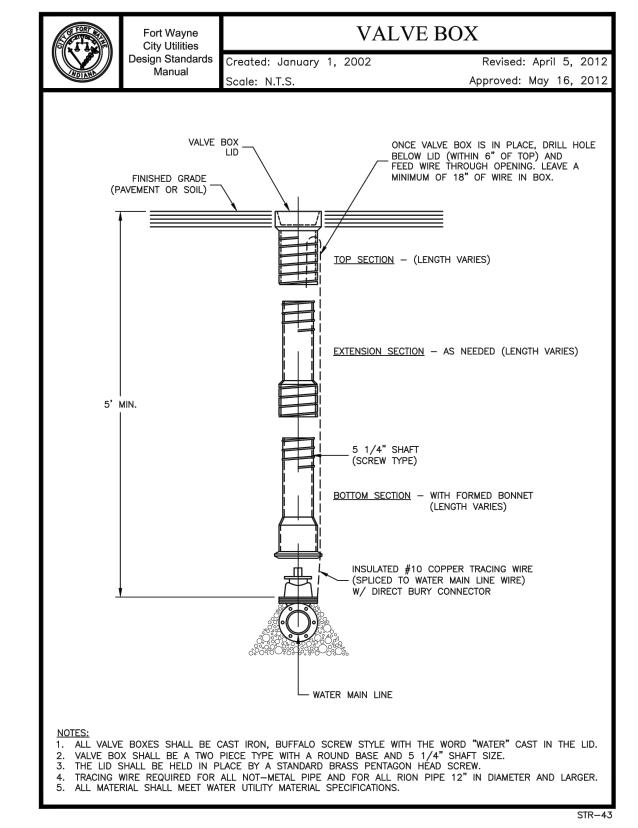
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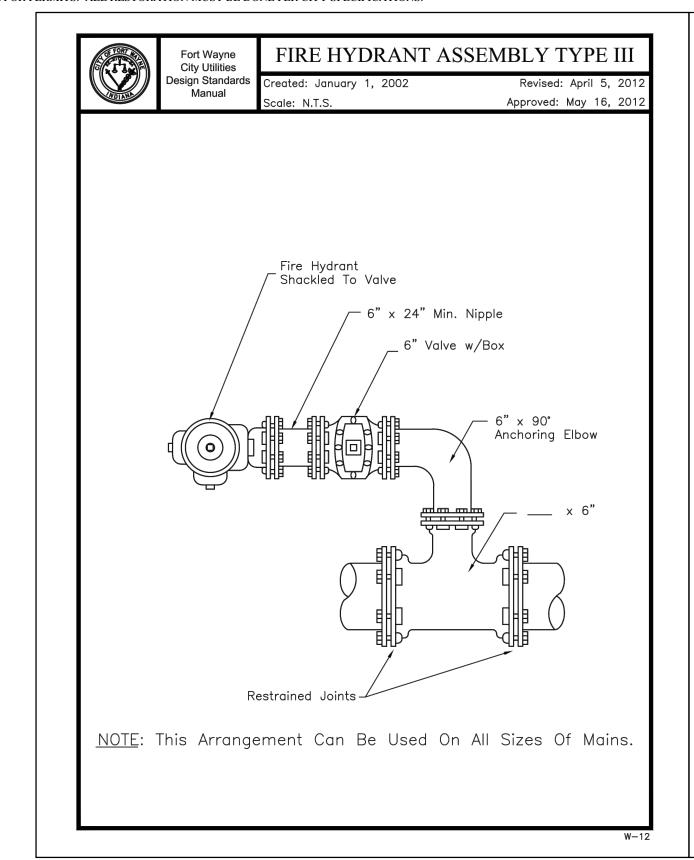
WATER MAIN GENERAL NOTES

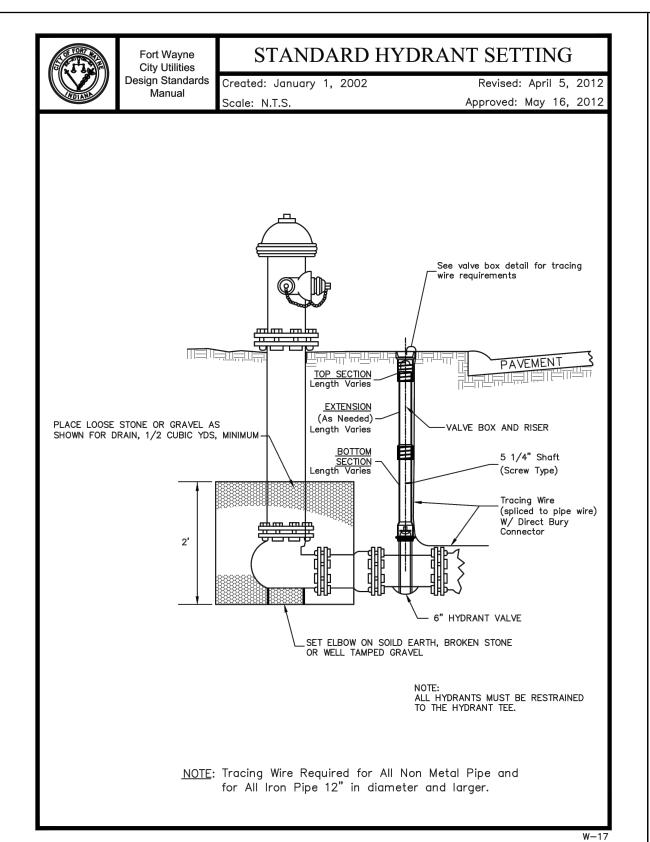
- 1. PIPE BACKFILL BACKFILL WATER MAIN TRENCH WITH NATIVE MATERIALS UNLESS OTHERWISE NOTED (SEE NOTE 5).
- 2. <u>RESTRAINING PIPES</u> ALL HYDRANTS TO BE RESTRAINED FROM TEE TO HYDRANT ASSEMBLY. RESTRAIN ALL JOINTS ON TEE. SEE DETAILS ON THIS SHEET FOR MINIMUM RESTRAINED LENGTHS.
- 3. WATER CONNECTIONS THE CITY OF FORT WAYNE WATER MAINTENANCE AND SERVICE (WMS) DEPARTMENT SHALL BE NOTIFIED A MINIMUM OF 48 HOURS IN ADVANCE OF ANY CONNECTION TO THE CITY OF FORT WAYNE WATER SYSTEM. ONLY WMS EMPLOYEES ARE TO OPERATE WATER VALVES FOR ISOLATION OF THE CONNECTION. TAPPING SLEEVES AND VALVES SHALL BE PROVIDED AND INSTALLED BY WMS EMPLOYEES.
- 4. <u>INTERUPTION OF WATER SERVICE</u> THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO ALL AFFECTED PROPERTY OWNERS AT LEAST 24 HOURS, BUT NOT MORE THAN 72 HOURS PRIOR TO ANY TEMPORARY INTERRUPTION OF WATER SERVICE. SERVICE INTERRRUPTIONS SHALL BE LIMITED TO 4 HOURS UNLESS OTHERWISE APPROVED BY THE CITY UTILITIES.
- 5. <u>SPECIAL BACKFILL '</u>ÖURGEICN'DCEMHKNÖ'UJ CNN'DG'75 195 'UVQP G'IP 'CEEQTF CP EG'Y KVJ 'IP F QV'; 26(240'75 195 'UVQP G'UJ CNN'DG USED UNDER ALL PAVED SURFACES (ROADWAYS AND DRIVEWAYS).
- 6. EXISTING UTILITIES IN GENERAL, UTILITY SERVICE LINES TO INDIVIDUAL CUSTOMERS ARE NOT SHOWN ON THE PLANS. CONTRACTOR SHALL ASSUME THAT UNDERGROUND SERVICE LINES EXIST TO EACH PROPERTY ALONG THE NEW ROUTE FOR WATER, SANITARY SEWER, GAS, ELECTRIC, TELEPHONE & CABLE TV. THE CONTRACTOR SHALL LOCATE, PROTECT, AND IF DAMAGED BY THE CONTRACTOR, REPAIR ALL UTILITY SERVICE LINES ENCOUNTERED. THIS WORK IS CONSIDERED INCIDENTAL TO CONSTRUCTION AND SHALL BE INCLUDED IN THE UNIT PRICE FOR CONSTRUCTION.
- 7. <u>PROTECTION OF UTILITY POLES</u> THE CONTRACTOR SHALL PROTECT ALL UTILITY/POWER POLES AND IS RESPONSIBLE FOR ANY DAMAGE TO THEM FROM THE ASSOCAITED CONSTRUCTION ACTIVITIES. ALL UTILITY/POWER POLES ARE TO BE SUPPORTED ADEQUATELY FOR INSTALLATION OF WATER PIPE.
- 8. <u>CONTRACT DRAWINGS</u> IF ANY ERRORS BECOME APPARENT IN THE CONTRACT DRAWINGS, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE CONSTRUCTION SO THAT CLARIFICAITION OF REDESIGN MAY OCCUR.
- 9. <u>SAWING PAVEMENT</u> WHERE NECESSARY TO DISTURB PAVEMENT AND DRIVES, THE PAVEMENT SHALL BE CUT IN NEAT STRAIGHT LINES.
- 10. REPLACEMENT OF EXISTING FACILITIES CONTRACTOR IS TO REPLACE ALL EXISTING FACILITIES DISTURBED BY THE WORK INCLUDING CURBS, SIDEWALKS, LANDSCAPING, STRUCTURES, ETC. THIS SHALL BE CONSIDERED INCIDENTAL TO THE WORK
- 11. <u>SIGN REMOVAL</u> EXISTING SIGNS TO BE REMOVED AND RESET AFTER CONSTRUCTION SHALL BE COORDINATED WITH THE CITY OF FORT WAYNE SIGN SHOP, PHONE #427-1224, UNLESS OTHERWISE SPECIFIED OR APPROVED. THE SIGN SHOP WILL REMOVE AND RESET ALL EXISTING TRAFFIC SIGNS.
- 12. <u>PROTECTION OF TREES</u> IT IS THE INTENT OF THIS PROJECT NOT TO DAMAGER OR REMOVE EXISTING TREES UNLESS OTHERWISE NOTED.
- 13. MINIMUM COVER A MINIMUM COVER OF 5 FEET SHALL BE PROVIDED OVER THE PROPOSED WATER MAIN UNLESS OTHERWISE NOTED.
- 14. <u>JOINT DEFLECTIONS</u> PIPE JOINTS MAY BE DEFLECTED TO OBTAIN HORIZONTAL ALIGNMENT AND VERTICAL ELEVATIONS UNLESS OTHERWISE INDICATED. DEFLECTIONS SHALL BE IN ACCORDANCE WITH AWWA C600.
- 15. WATER SERVICES CONTRACTOR SHALL REPLACE ALL EXISTING SERVICES WITH NEW SERVICES FROM NEW MAIN TO EXISTING CURB BOX. ALL WATER SERVICES SHOWN ARE EXISTING. PROPOSED WATER SERVICES SHALL CONSIST OF EITHER 5166" EQRRGT "QT "36" J F ROO"CNN"CZ KUVKP I "XCNXG"DQZ GU'UJ CNN"DG"TGWUGF O"Y CVGT "UGT XIEGU "WP F GT "RCXGO GP V"UJ CNN"DG INSTALLED BY TRENCHLESS METHODS.
- 16. <u>REMOVING VALVE BOXES</u> THE MINIMUM DISTANCE BETWEEN THE NOTED VALVE BOX TO BE REMOVED AND THE CUT & RNW 'CU'U QY P'U CNN'DG'7)/2ö0
- 17. <u>RIGHT-OF-WAY PERMITS</u> NO COST FOR PERMITTING ON CITY PROJECTS. HOWEVER, BOTH WMS AND CONTRACTOR MUST FILE FOR PERMITS. ALL RESTORATION MUST BE DONE PER CITY SPECIFICATIONS.

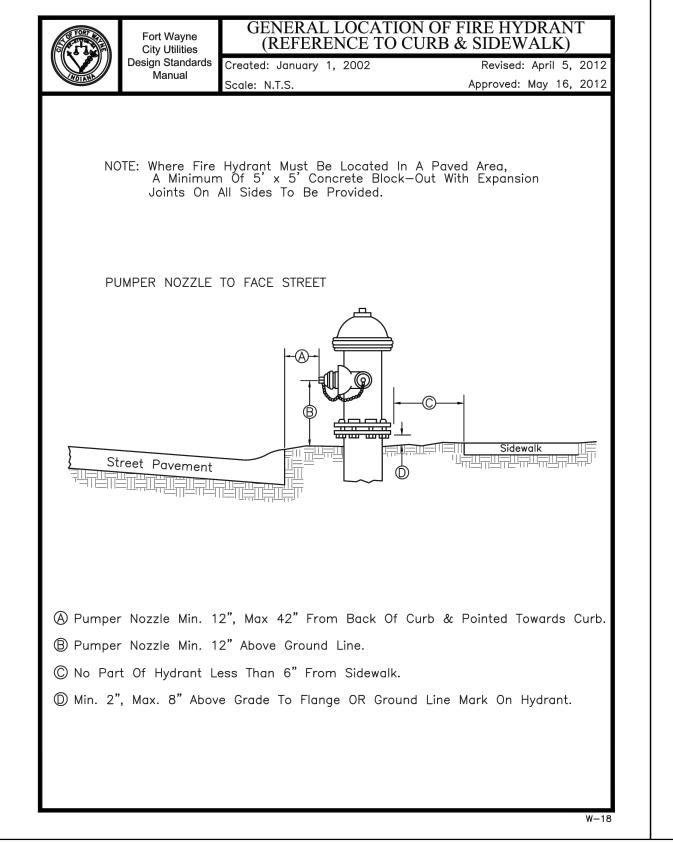


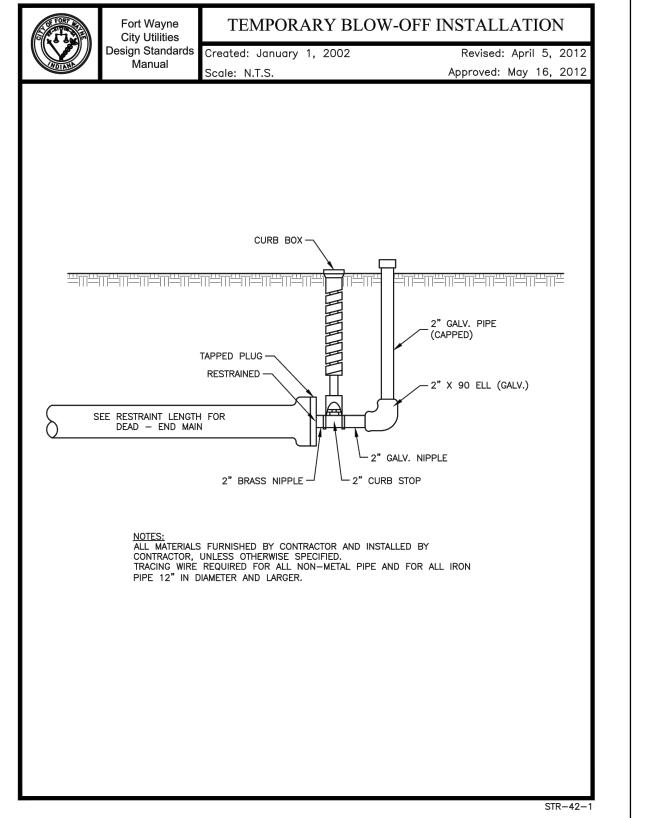










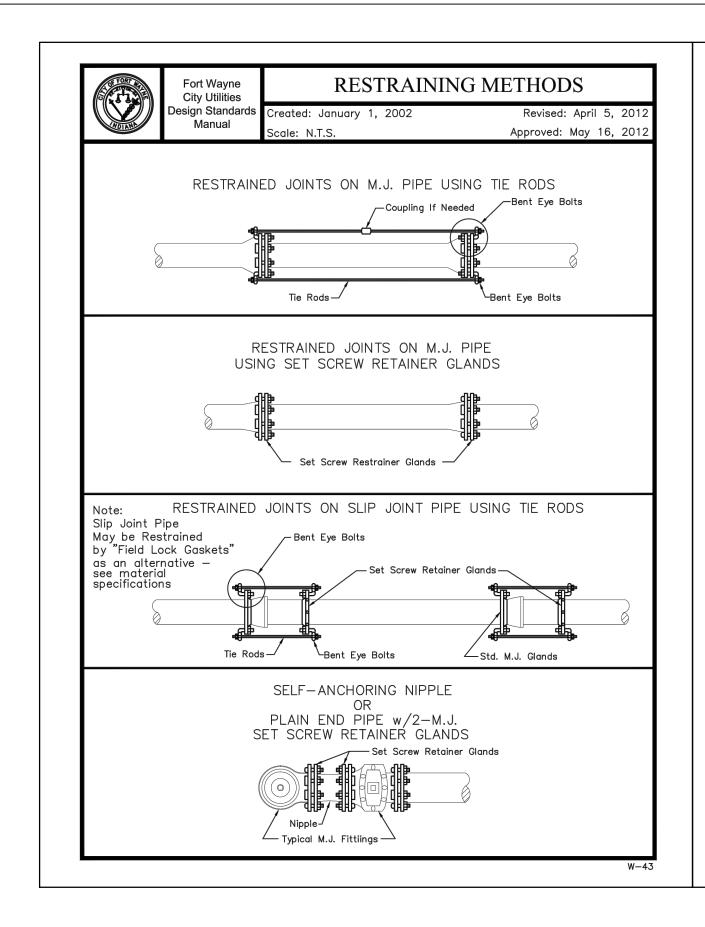


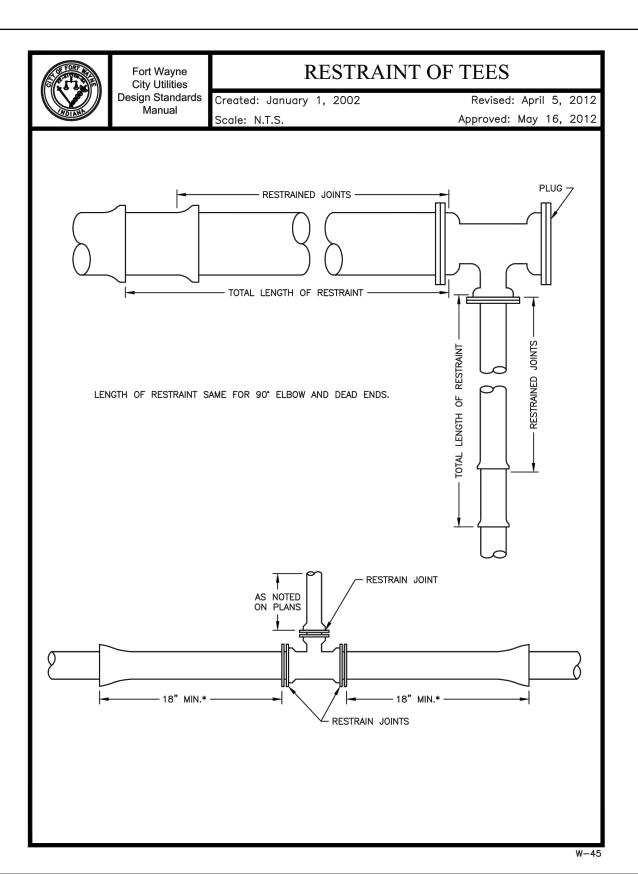
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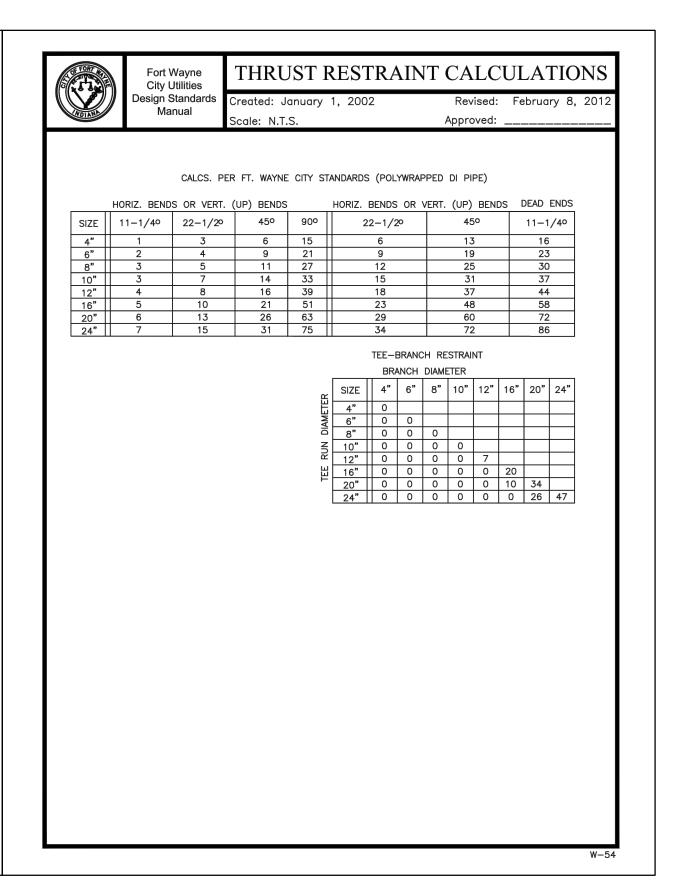
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0	DESIGNED:	C.H.	DRAWN:	E.M.H.	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302
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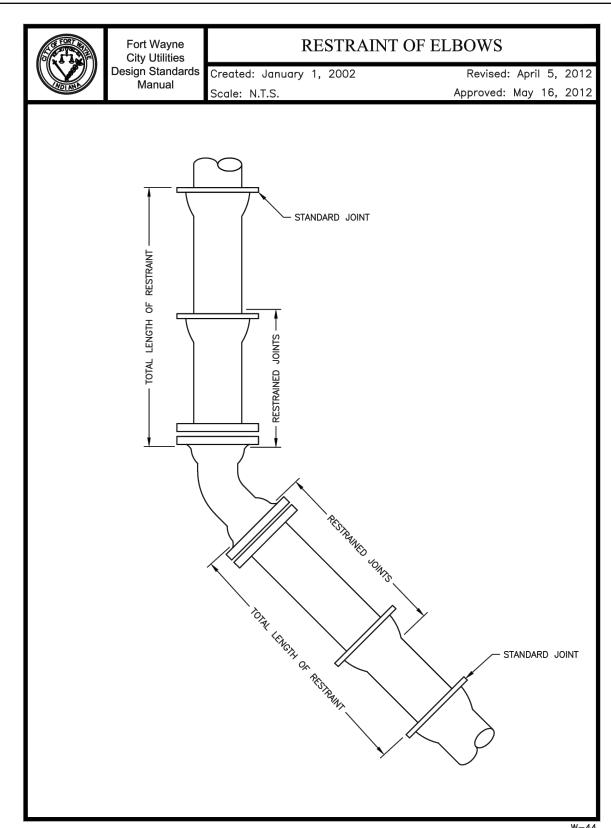
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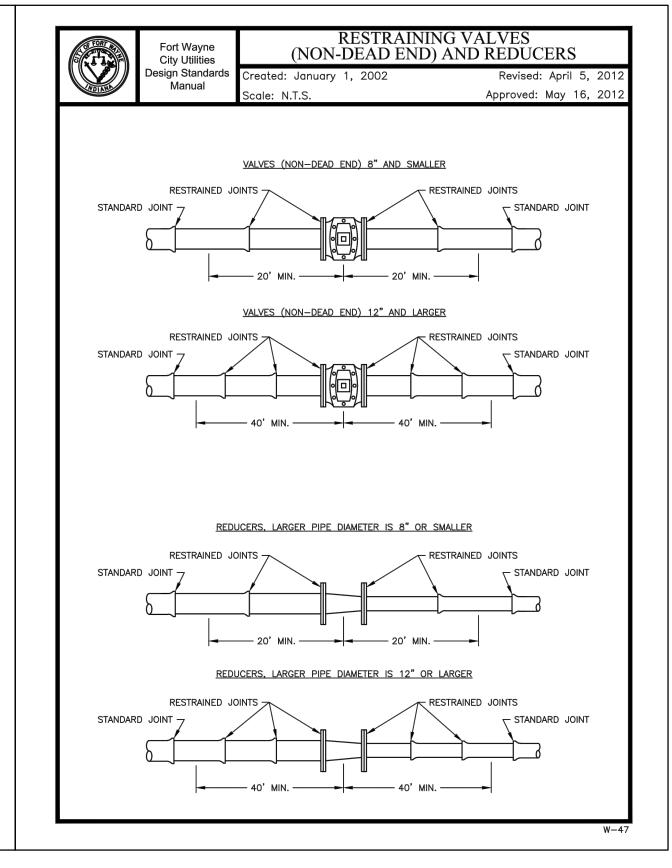
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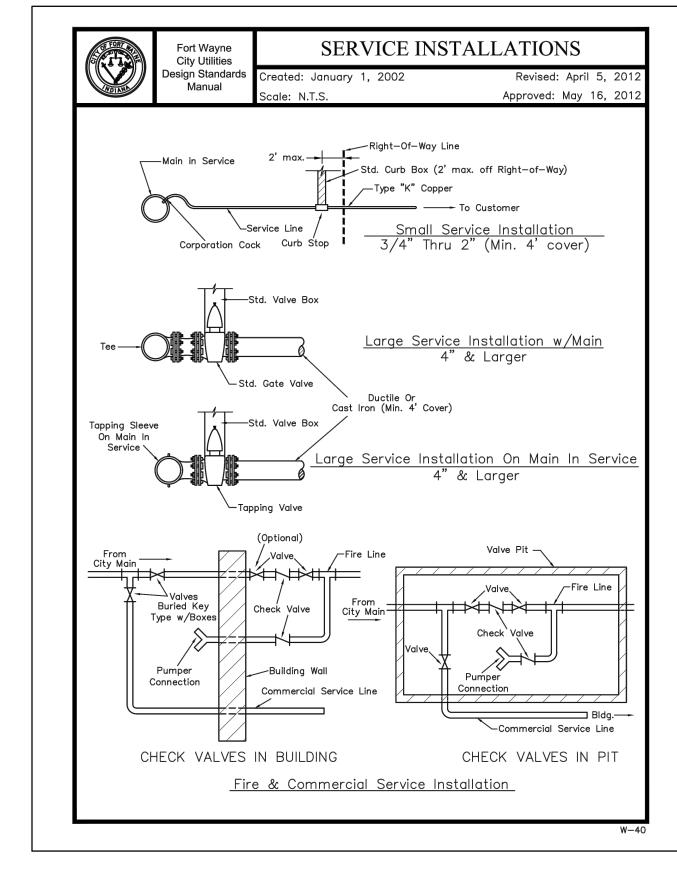


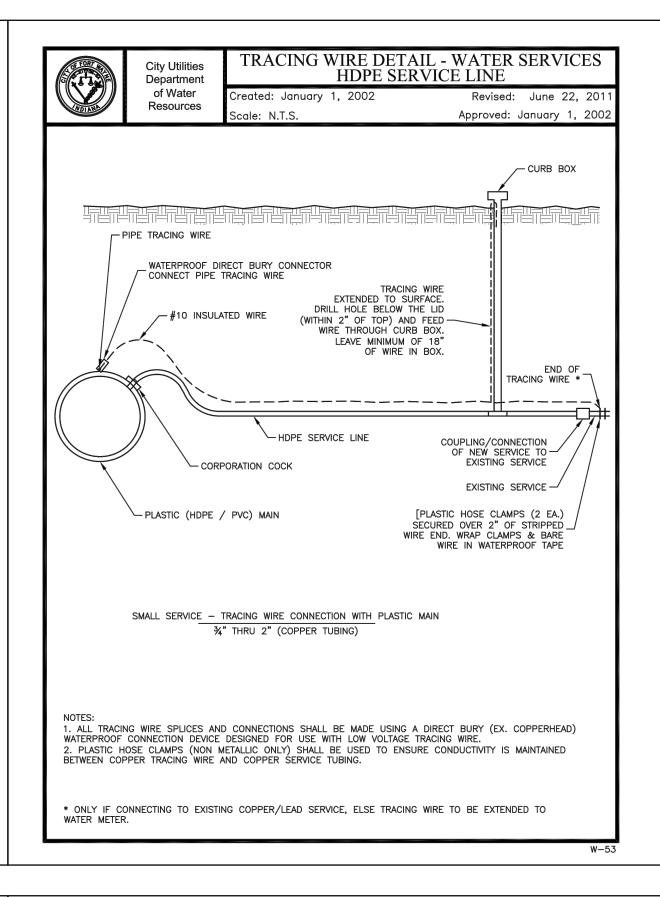
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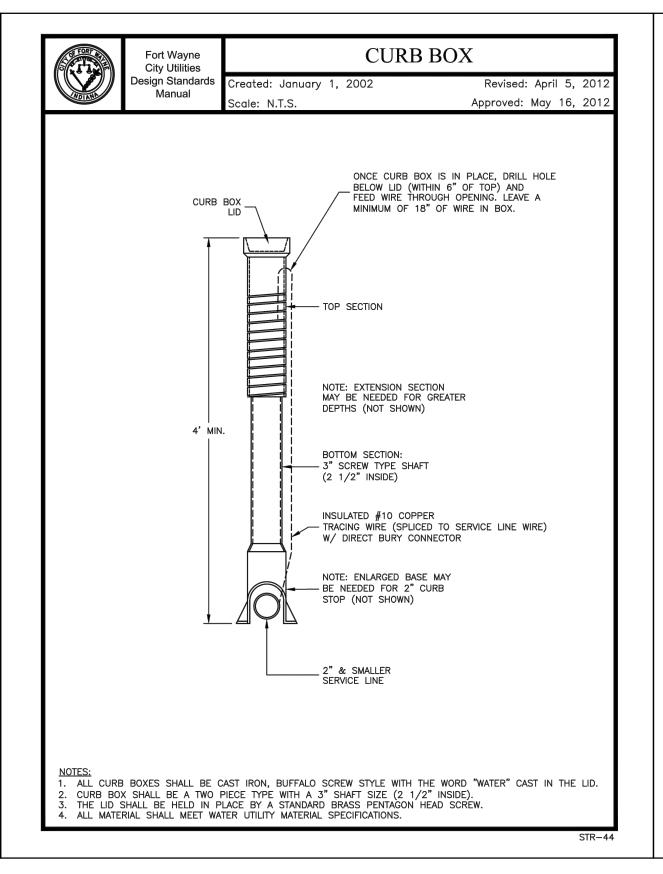
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et	CHECKED:	W.J.Z.	_ CHECKED:	C.H.	

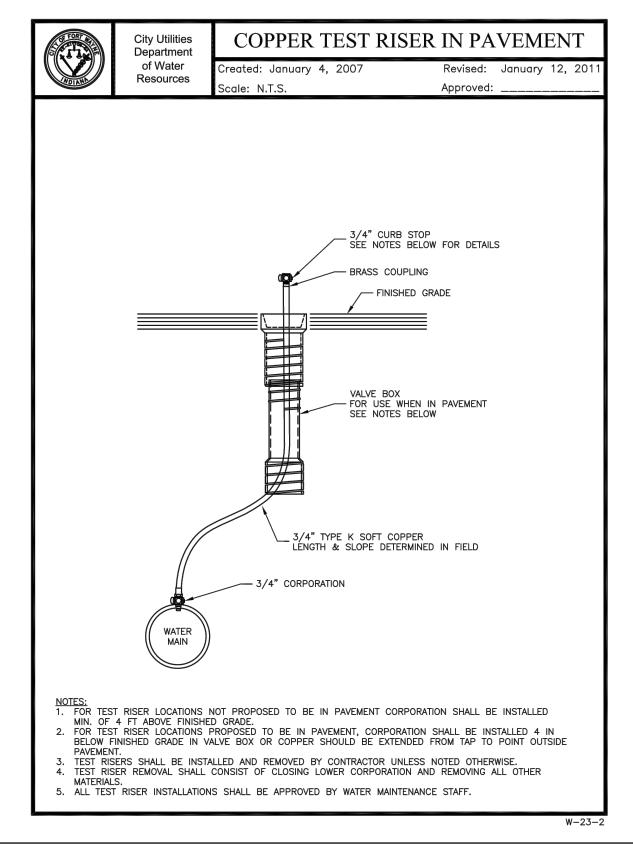
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		LAFAVETTE	765_423_5602		

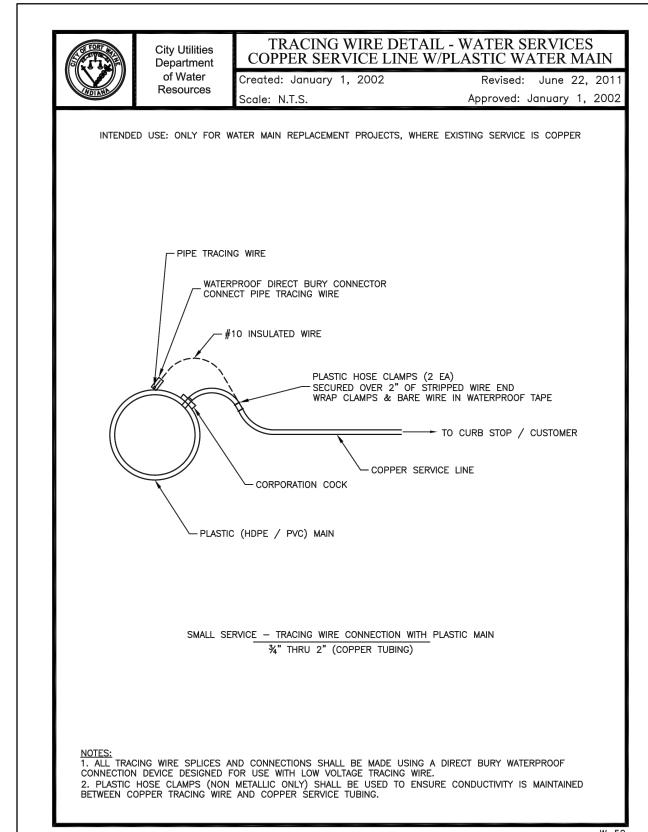
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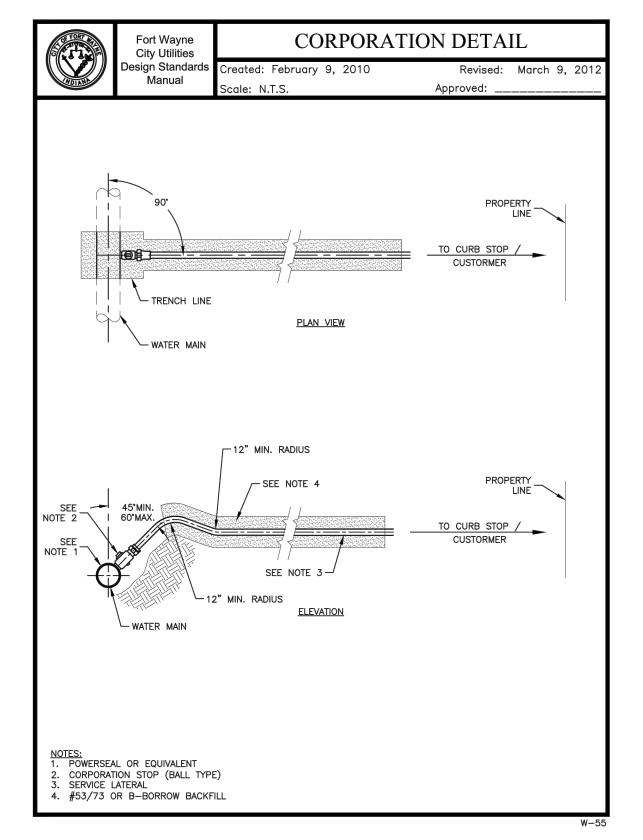


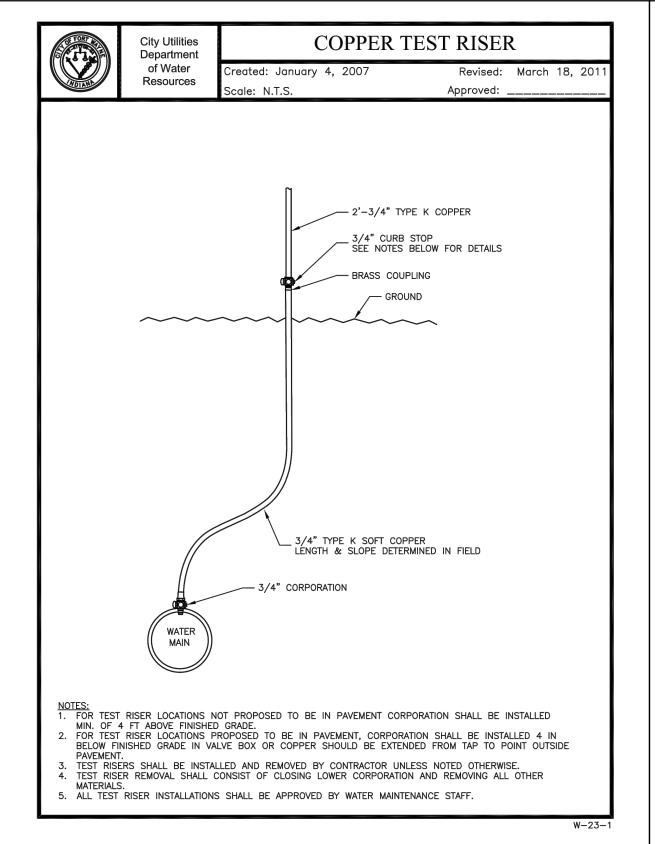


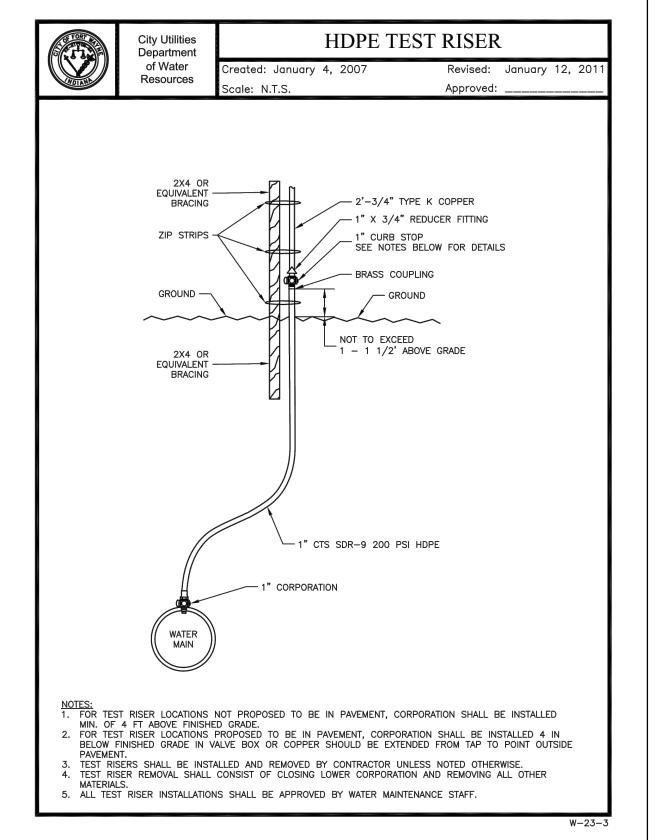


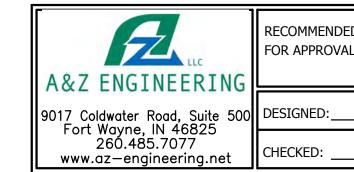


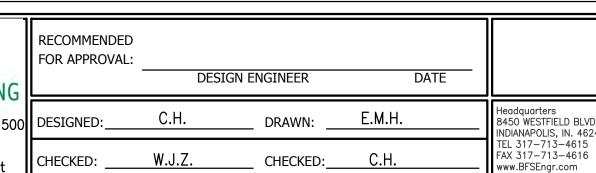












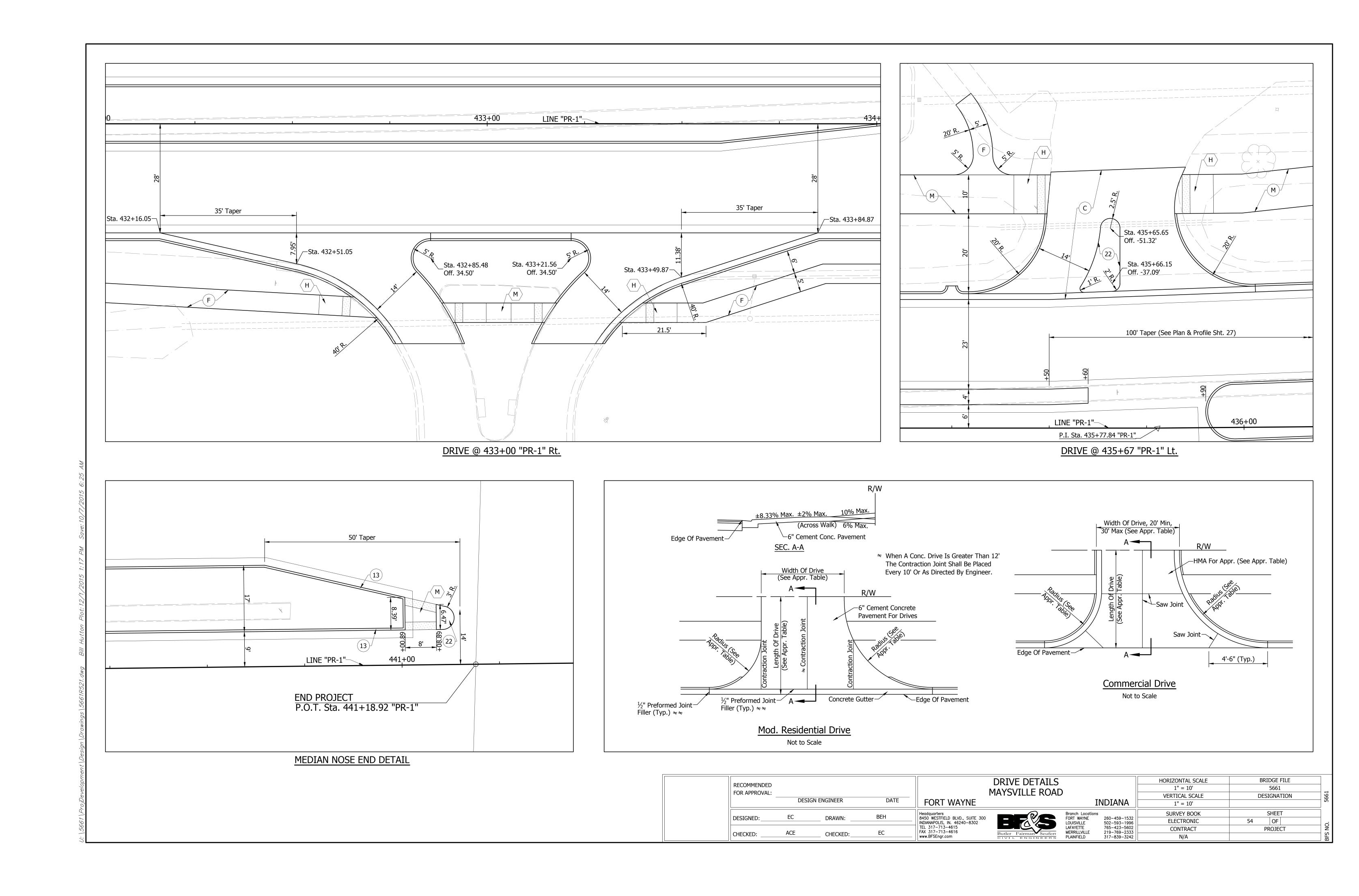
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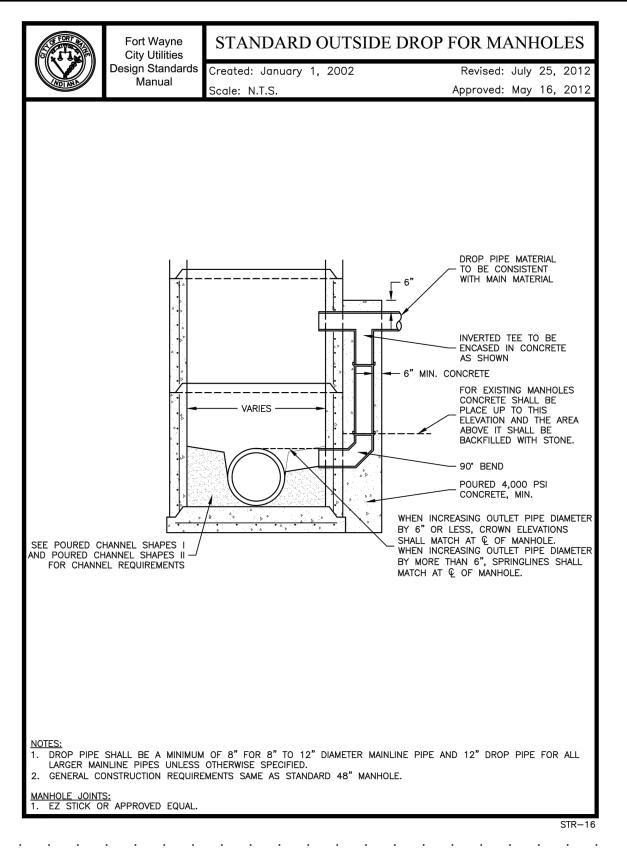
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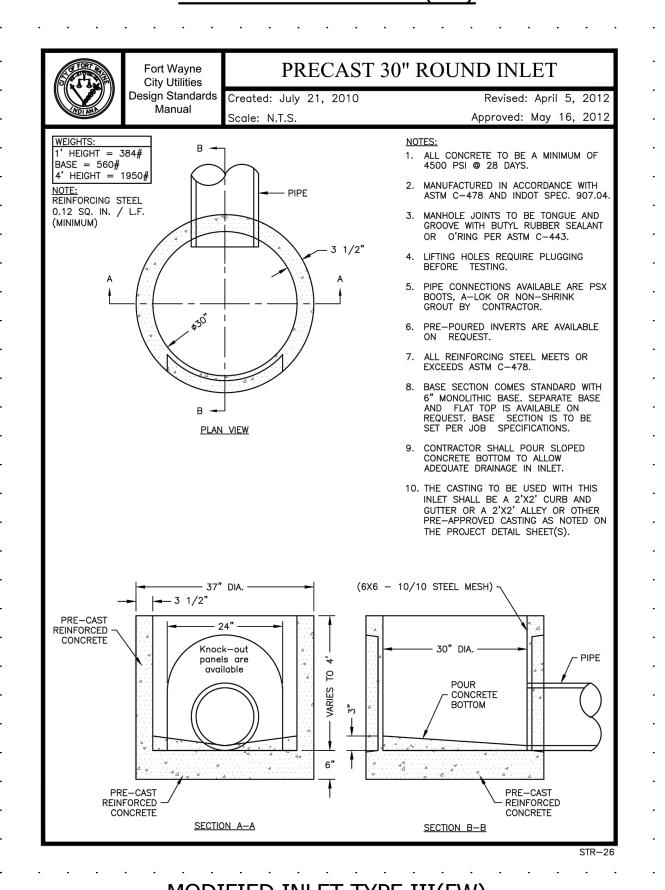
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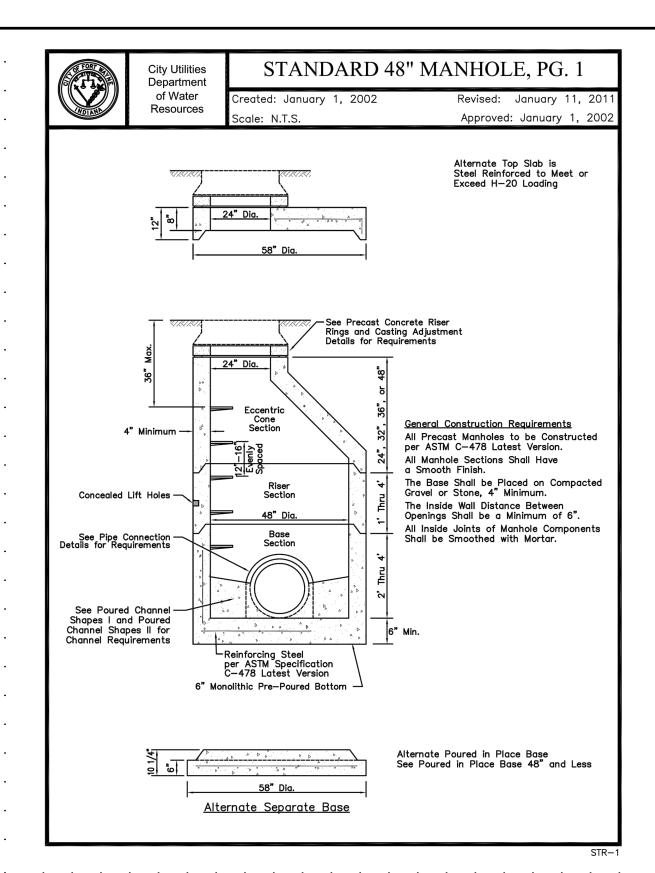




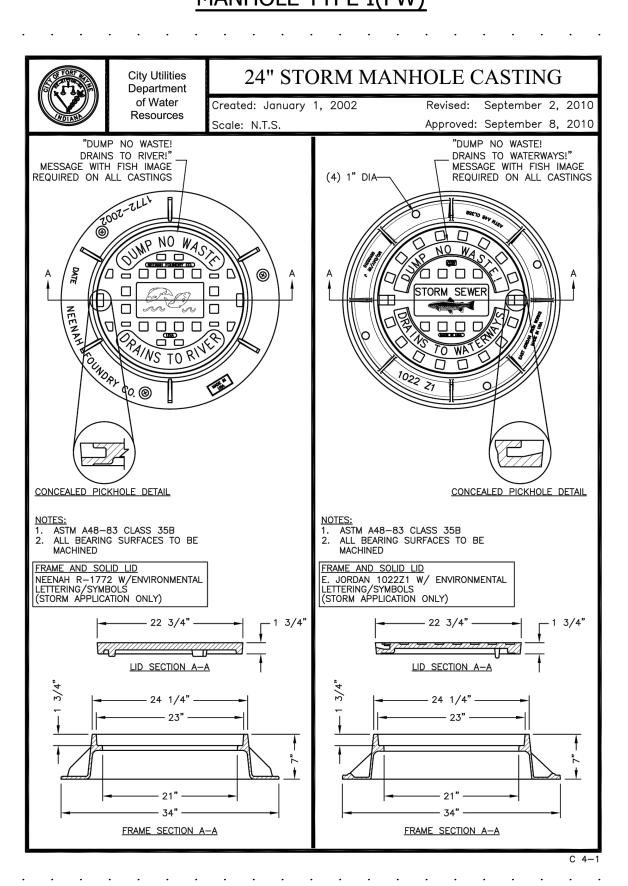


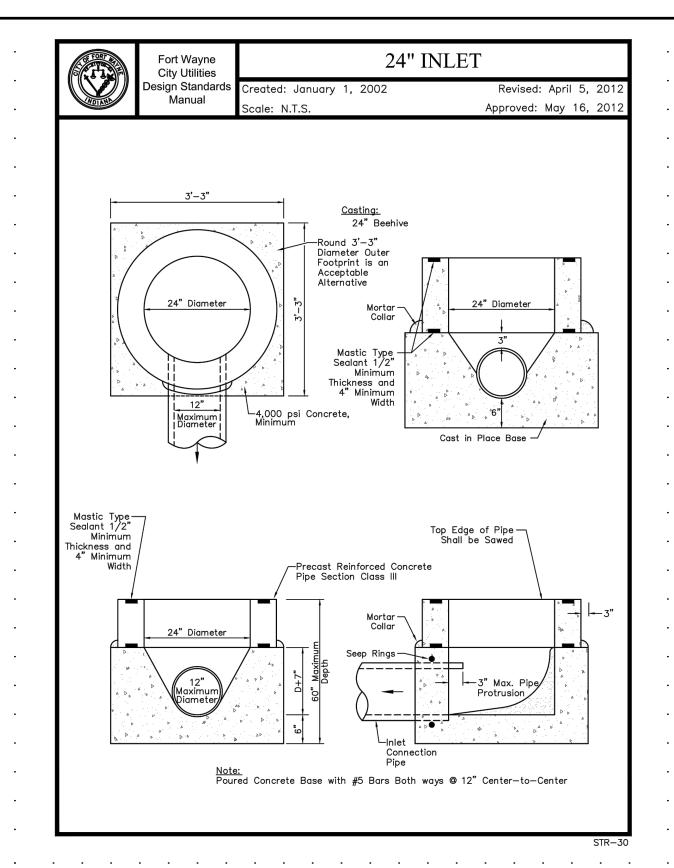


MODIFIED INLET TYPE III(FW)

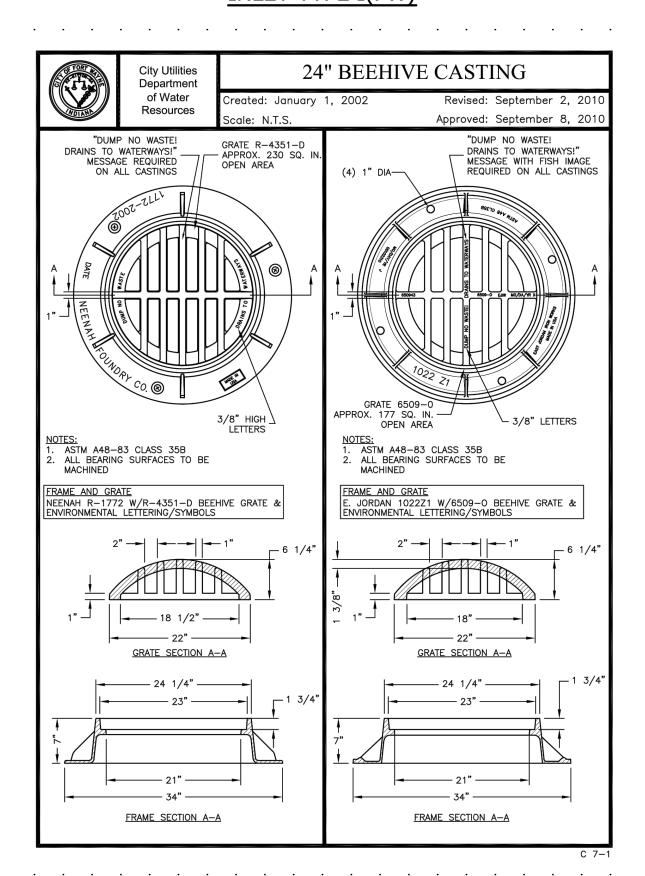


MANHOLE TYPE I(FW)





INLET TYPE I(FW)



Reinforcing Steel Per ASTM C-890 Pipe Connection Notes: Inlet and Outlet Pipes Shall Extend Through the Box Inlet Walls a Sufficient Distance to Allow for Placement of Grouting Material Aroundthe Pipe Diameter Both Inside and Outside of the Structure Wall, Preventing Leakage Around the Pipes Outer Surface. Inlet and Outlet Pipes Shall Not Extend Through the Inlet or Manhole Wall to Such a Degree that Flow is Obstructed. Holes for Connections of Storm Sewer Pipes Shall be Preformed by the Manufacturer, or Field Cut or Drilled. At No Time Shall the Pipe Hole Exceed the Outer Pipe Diameter Pius Four—Inches (O.D. + 4"), to Ensure a Proper Connection is Achieved. Should the Contractor Elect to Use Box Inlet Structures with Preformed Thin Wall "Knock—outs", the Balance of the "Knock—out" Area not Occupied by the Pipe Connection and All Remaining Unused "Knock—outs" Shall be Filled with 4000 psi Class A Concrete to a Finished Wall Thickness Not Less Than Required by these Standards. The Annular Space Between the Pipe and the Box Inlet Wall Shall be Filled Inside and Outside with a Grout Mixture Composed of 2 parts of No. 23 Fine Aggregate and One Part Portland Cement. As an Alternative, Pipe Connections to Box Inlet Utilizing an Approved Rubber Gasket Manufactured and Installed in Accordance with ASTM C—923 Will be Accepted. Thickness and 4" Minimum

City Utilities

Department

of Water

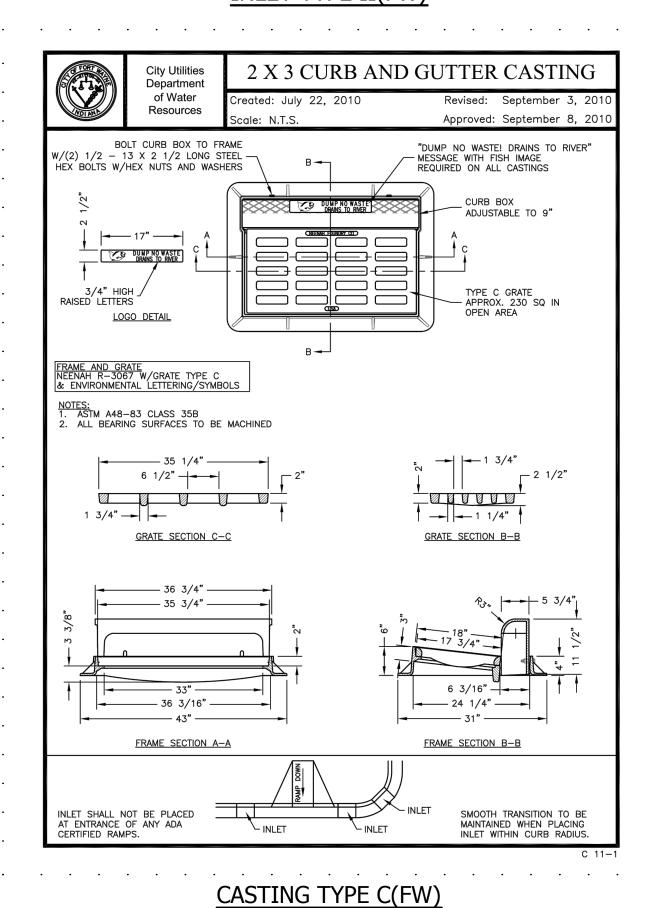
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2' X 3' INLET

Revised: January 13, 20

Approved: January 1, 200

INLET TYPE II(FW)



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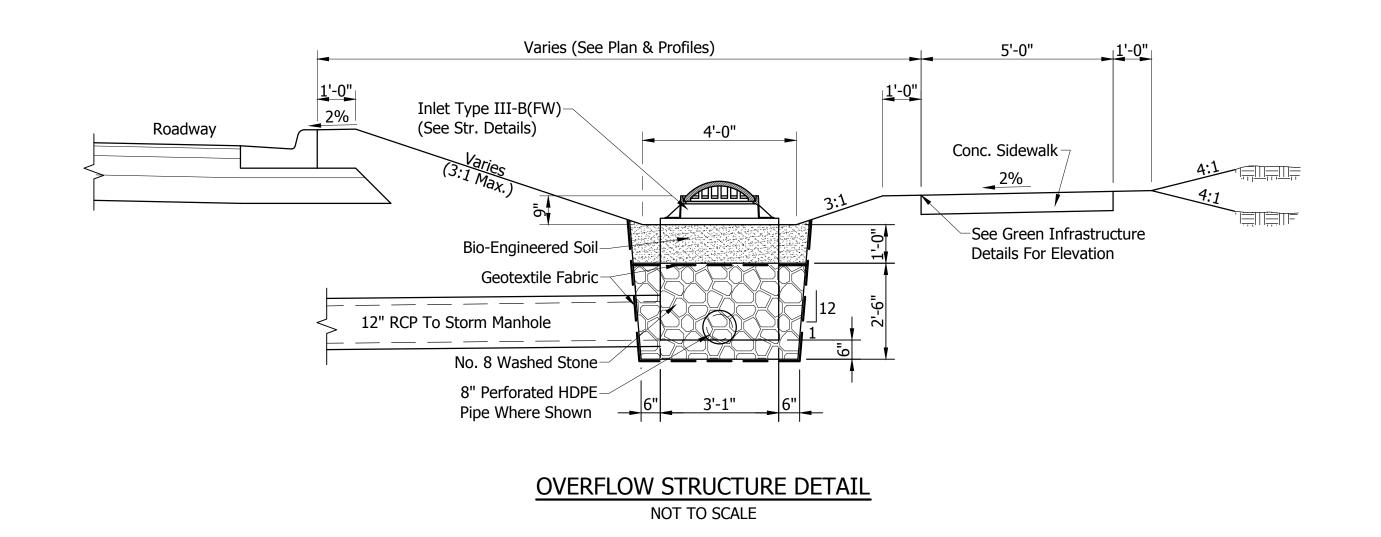
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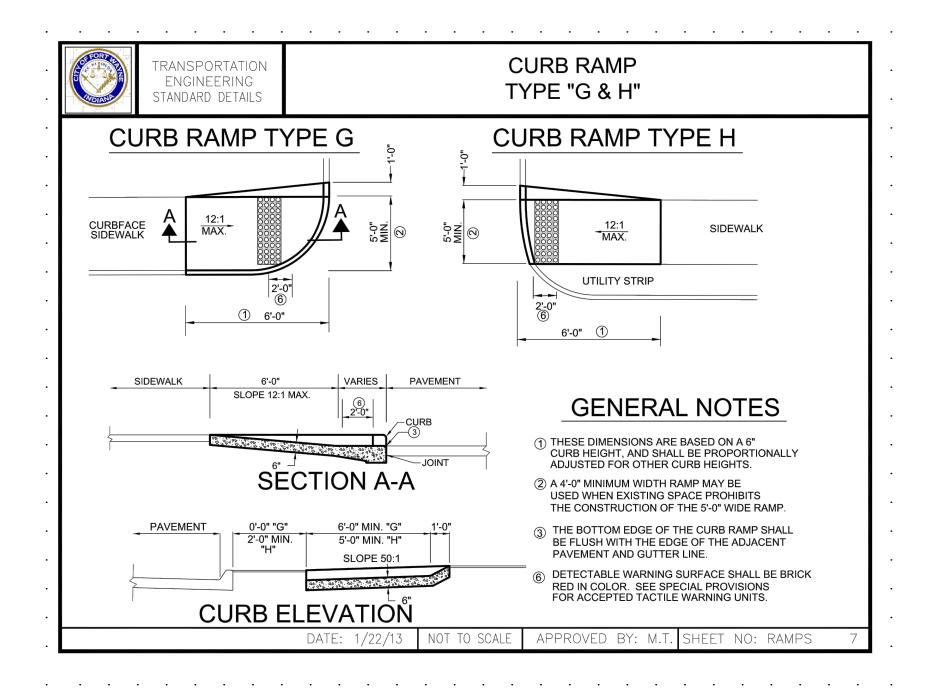
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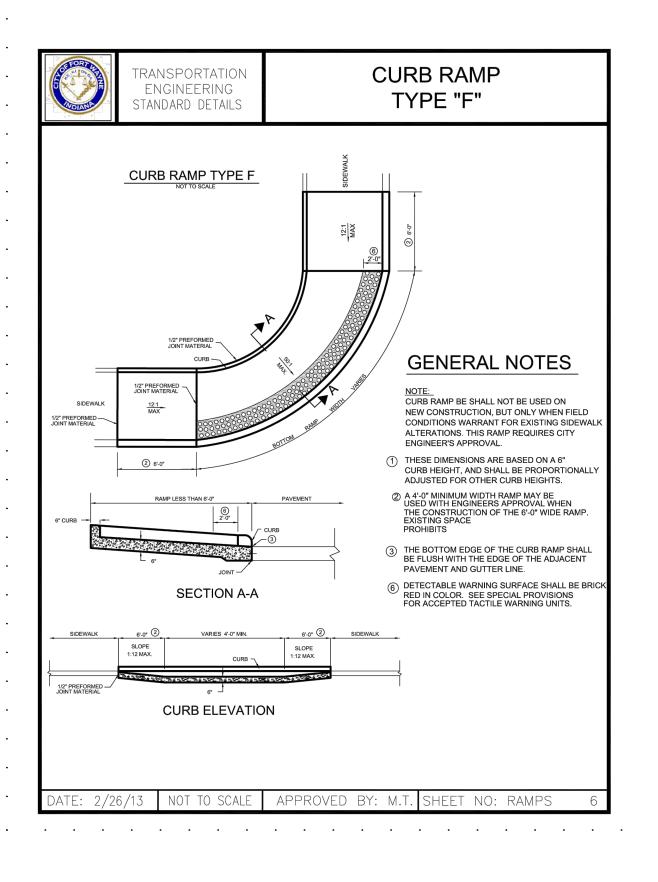
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01120172	EC	TEL 317-713-4615 FAX 317-713-4616		LAFAYETTE MERRILLVILLE	765-423-5602 219-769-2333	CONTRACT		PROJECT	
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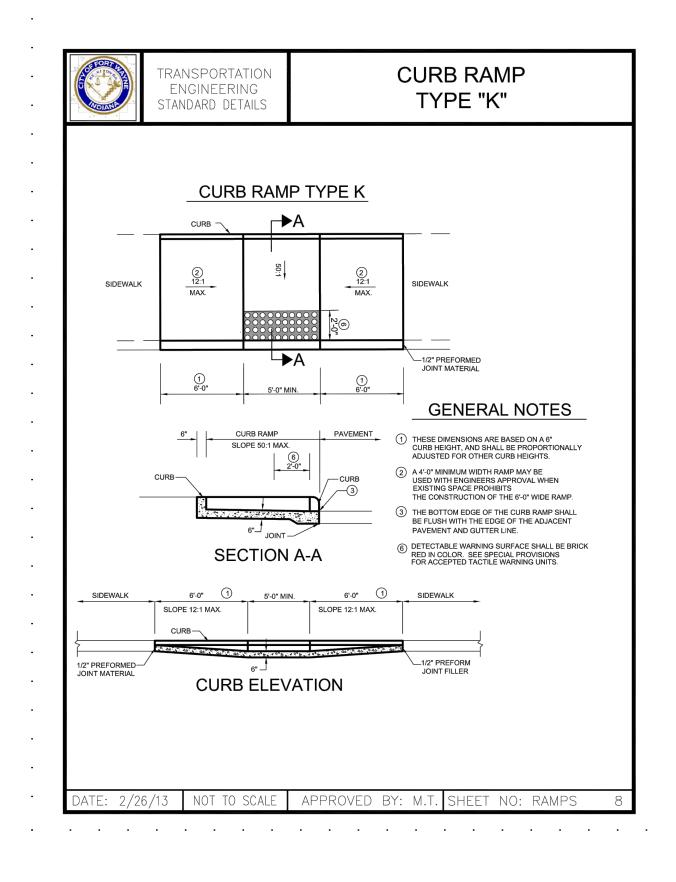
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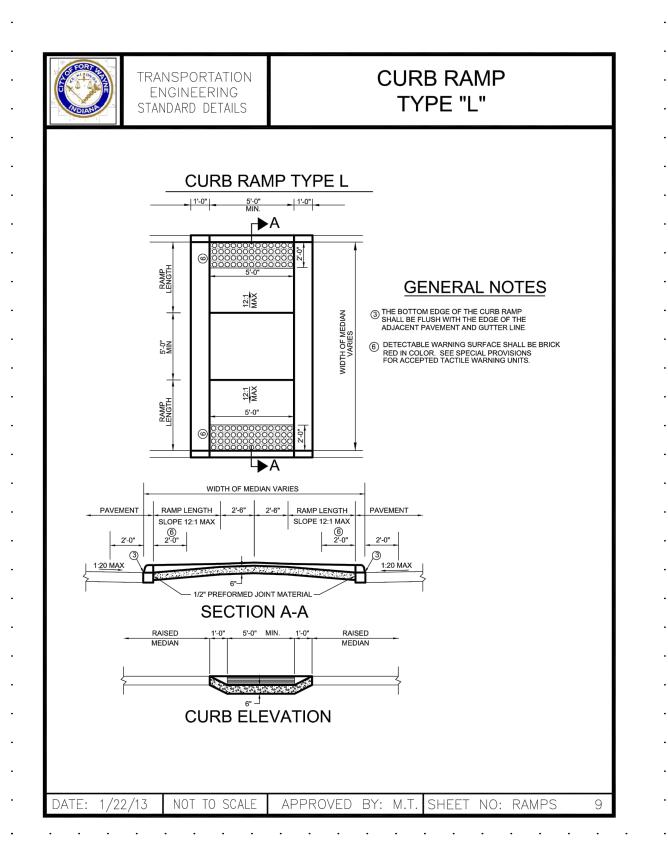
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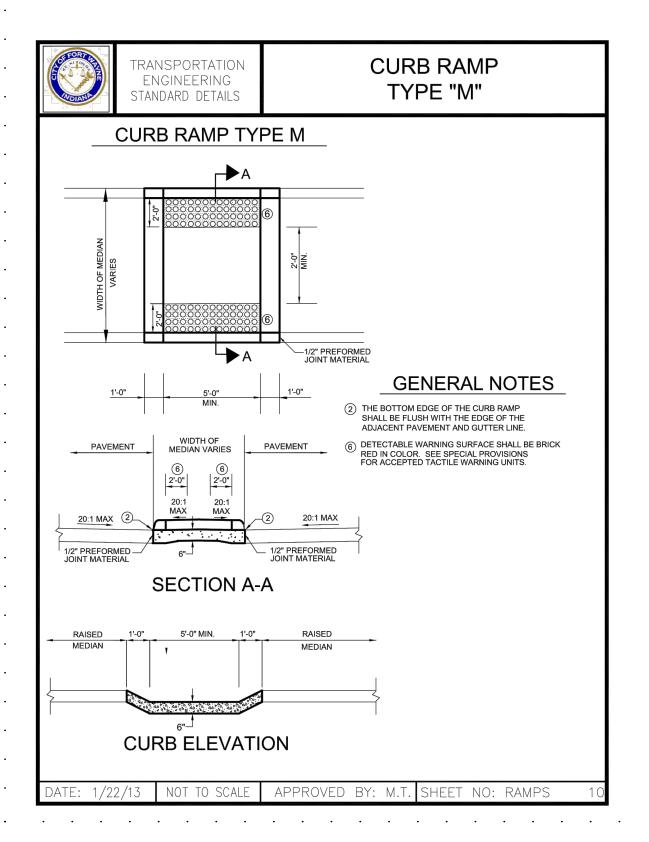




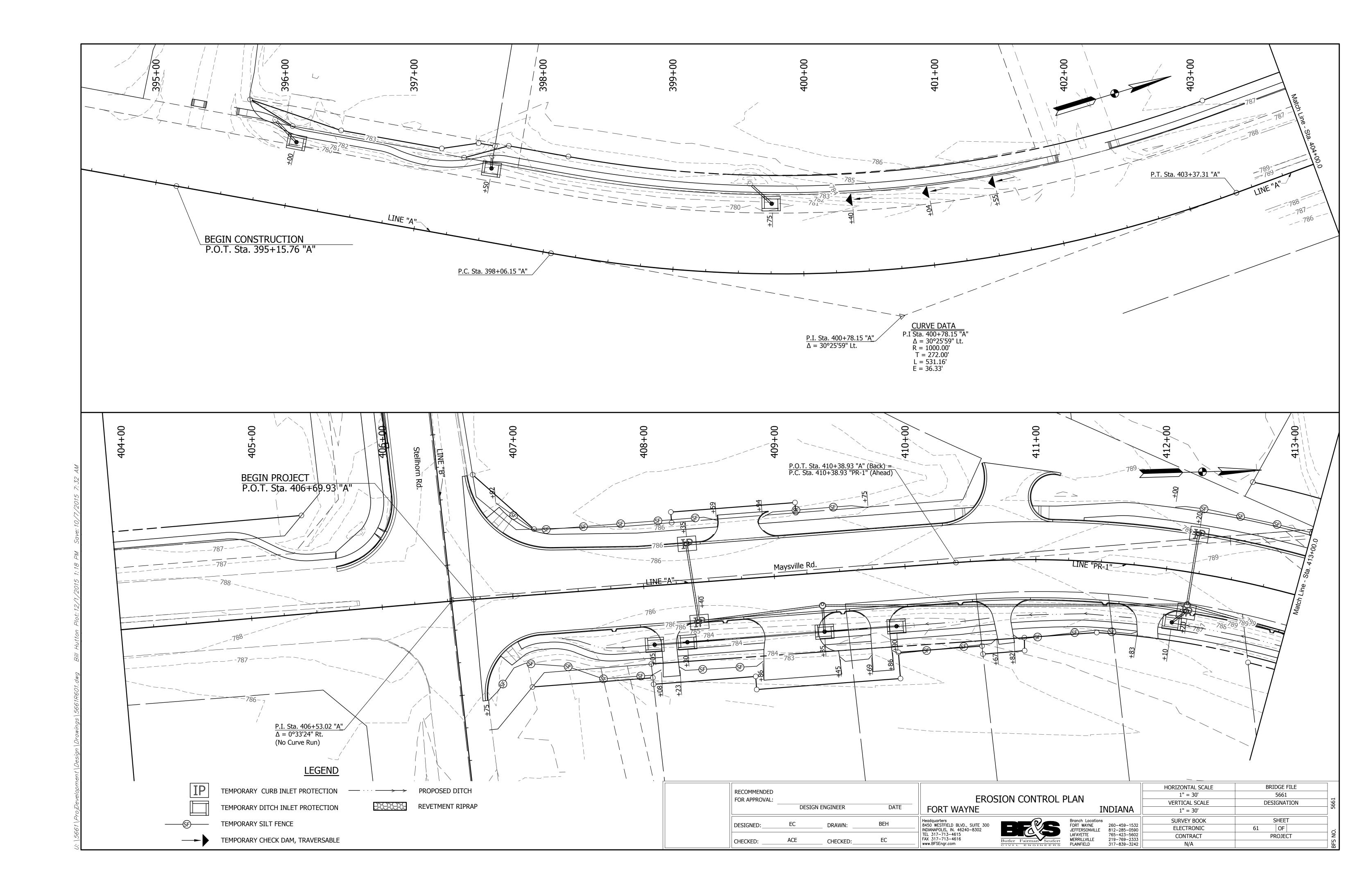


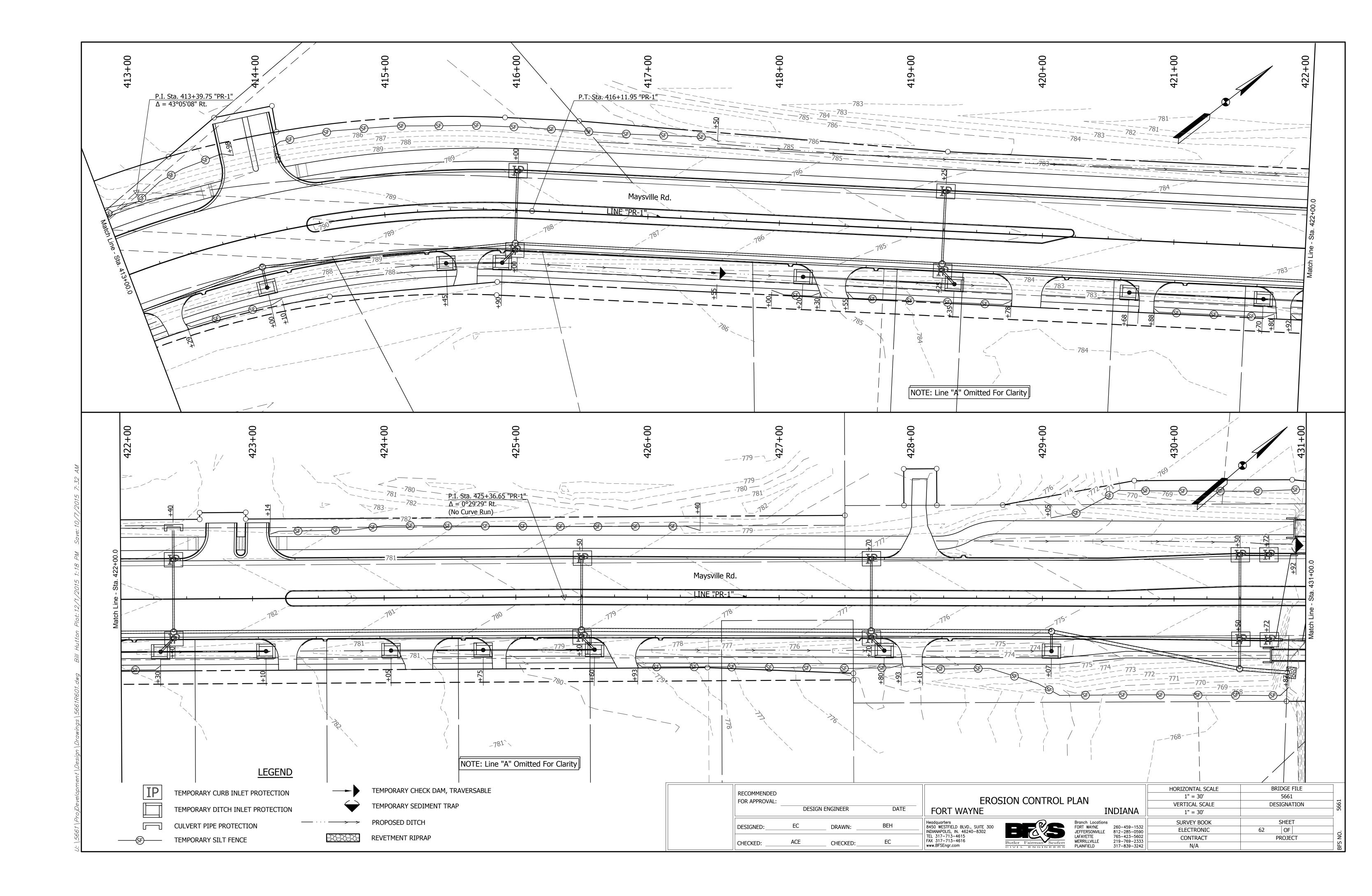


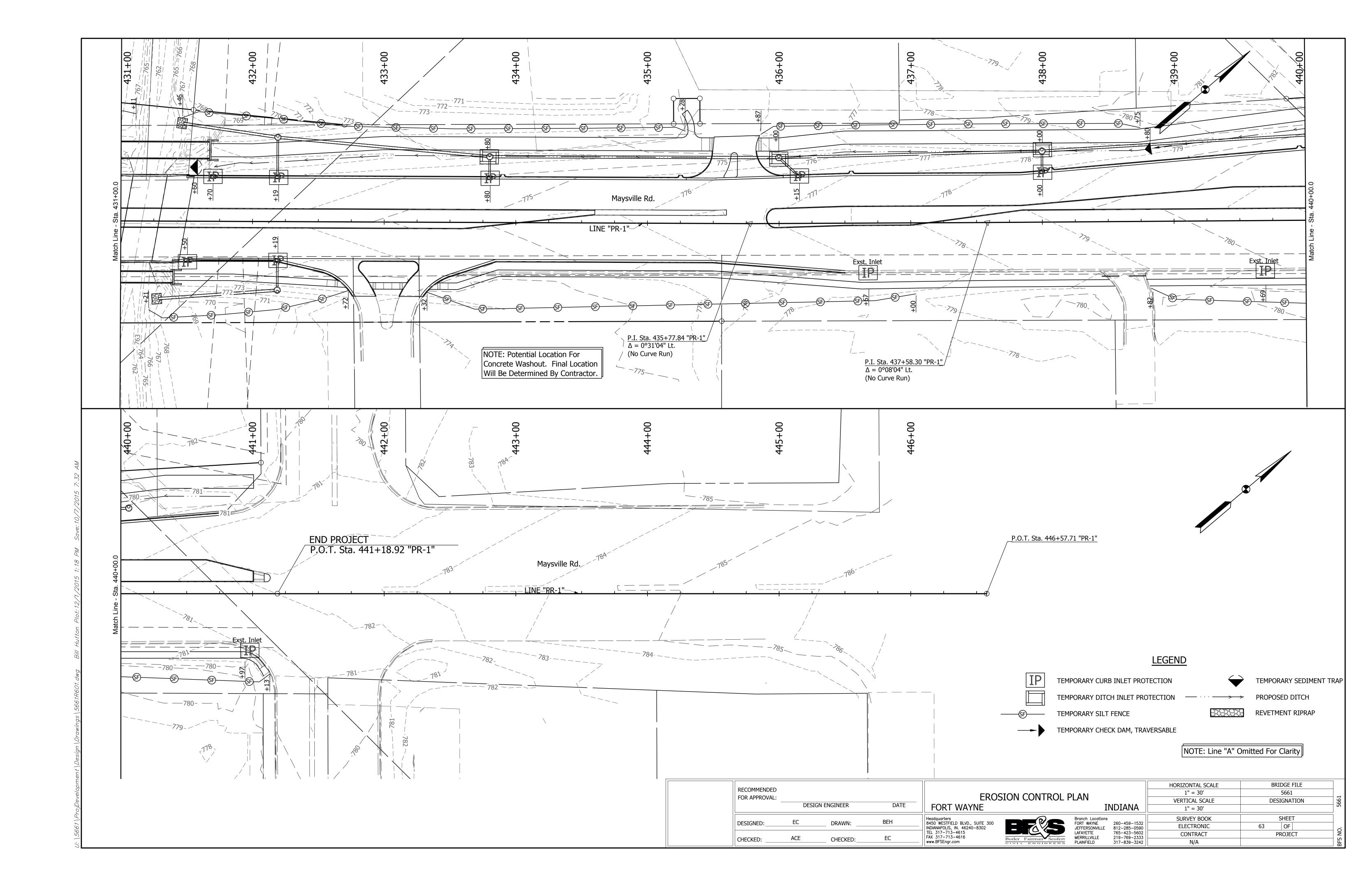


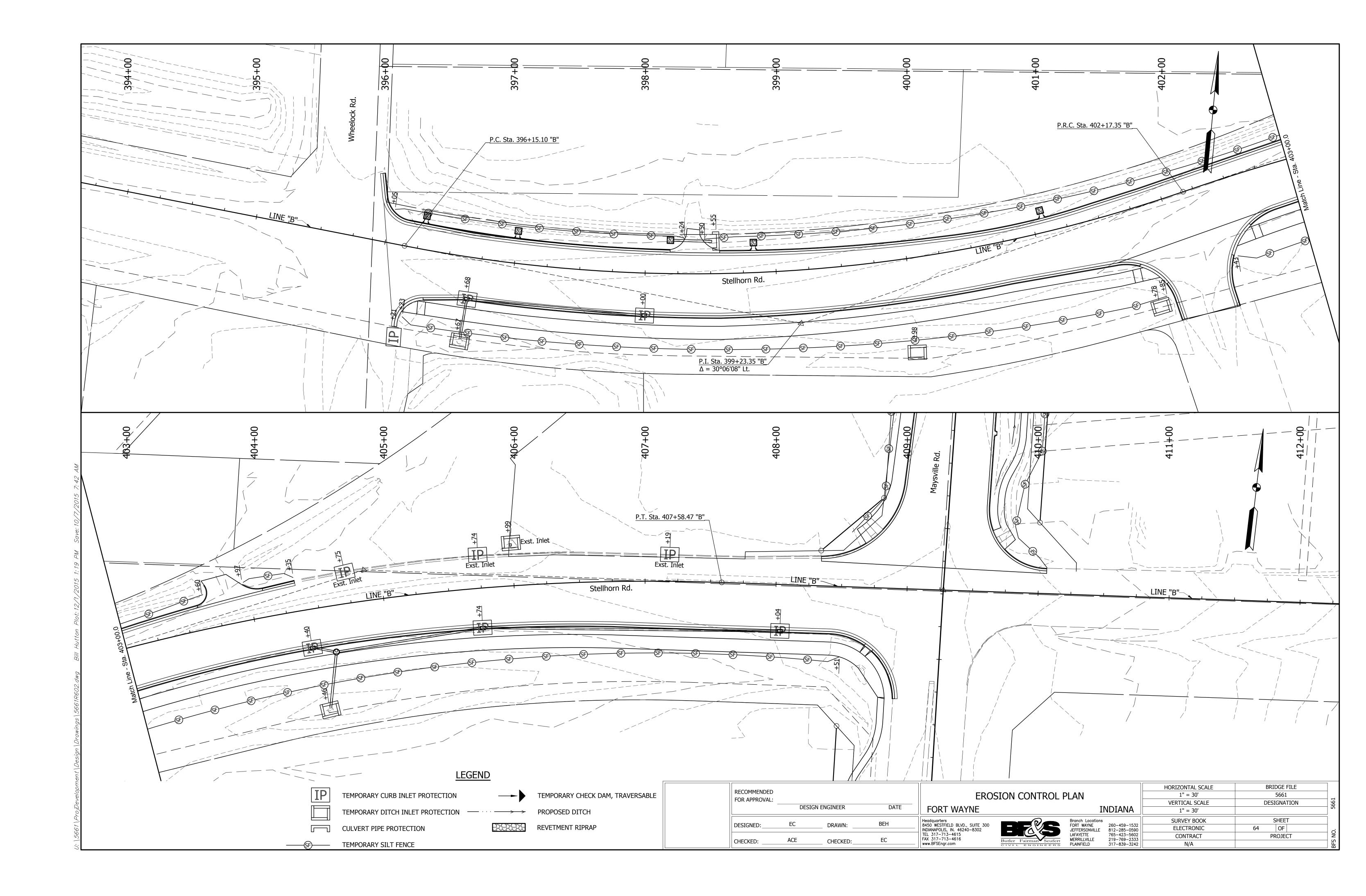


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EROSION CONTROL NOTES

<u>GENERAL:</u>

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 <u>Indiana Storm Water Quality Manual</u>, 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.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT PAD:

Construct The Temporary Gravel Drive Using 2-3 Inches INDOT CA No. 53 Washed Stone Over A Stable Foundation, 6 Inches Minimum Thickness. Geotextile Fabric May Be Used Under Wet Conditions Or For Soils Within A High Seasonal Water Table To Provide Greater Bearing Strength. Grade For Positive Drainage.

Inspect The Entrance Pad Area Weekly And After Storm Events Or Heavy Use. Reshape The Pad As Needed For Drainage And Runoff Control. Top Dress Pad With Clean Stone.

SODDING:

Do Not Install Sod On Hot, Dry Soil, Frozen Soil, Compacted Clay, Loose Sand Or Gravel, Or Pesticide Treated Soil. Ideal Sodding Time Is May 1-June 1, Or September 1-October 20, Although It Can Be Installed As Early As March 15, If Available And Temperatures Are Above 32°F, Or June 1-September 1 If Irrigated.

Install Sod After Other Erosion Control Practices Have Been Completed. Break Up Compacted Soils Sufficiently To Create A Favorable Rooting Depth Of 6-8 Inches, Using A Chisel Plow, Disk, Harrow, Or Rake.

Apply Topsoil If The Site Is Otherwise Unsuitable For Establishing Vegetation. Shape, Smooth, And Firm The Soil Surface.

Have The Soil In The Sod Bed Tested To Determine Its pH And Nutrient Level. If The pH Is Too Acidic For The Grass Sod To Be Installed, Apply Lime According To Test Results Or At The Rate Recommended By The Sod Supplier.

Fertilize As Recommended By The Soil Test. If Testing Was Not Done, Consider Applying 400-600 Lbs./Acre Of 12-12-12 Analysis Fertilizer, Or Equivalent Fertilizer, As Recommended By The Soil Test. Work The Fertilizer Into The Soil To 2-4 Inches Deep.

TREE CONSERVATION/PROTECTION:

Protect Trees From Construction Equipment By Fencing Off An Area Equivalent To The Tree's Crown With Temporary Construction Safety Fence. If A Fence Cannot Be Erected, Cushion The Rooting Area With 6 Inches Of Wood Chips, Or Wood Or Brick Paths.

Create Traffic Patterns Such As To Keep Soil Compaction To A Minimum. Store Supplies And Equipment Away From Protected Tree Areas. Aerate Soil Where Compaction Has Been Excessive.

When Clearing Areas Adjacent To Protected Trees, Use Equipment Such As A Brush Cutter Or Rotary Ax, Or Cut By Hand. Where Root Areas Must Be Graded, Cut Large Roots Instead Of Tearing Them With Equipment.

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.

Provide "Curlex Blankets" By American Excelsior Company, Or "S150" By North American Green, Or Accepted Substitute.

EROSION CONTROL BLANKET STAPLES:

Use Minimum 0.091 Inch Diameter Steel Wire "U" Shape With Legs 6 Inches In Length With 1 Inch Crown.

SEEDING

The Following Table Is For General Seeding Information Only. Consult The <u>Indiana Storm Water Quality Manual</u> For Recommendations Relating To Steep Banks And Cuts, High Maintenance Areas, And Channels And Areas Of Concentrated Flow.

S: FERTILIZ

40 Percent Kentucky Bluegrass Commercial Fertilizer (12-12-12)

40 Percent Creeping Red Fescue STRAW:

20 Percent Annual Rye Grass

Clean And Free Of Weed Seeds

Spread Fertilizer Uniformly Over Finish Graded Surfaces At A Rate Of 20 Pounds Per 1,000 Square Feet. Thoroughly Disk, Harrow, Or Rake Fertilizer Into Soil To Depth Not Less Than 2 Inches.

Distribute Seed Mix Same Day As Fertilizer Is Applied. Spread Evenly At A Rate Of 3 Pounds Per 1,000 Square Feet. Rake Lightly And Compact Areas With 100 Pound Roller.

Cover Areas With Straw Evenly Spread At A Rate Of 2 Tons Per Acre Immediately After Seeding. Water Areas With Fine Spray. Do Not Flood Or Create Washes. Protect Seeded Areas From Erosion.

Continue Watering Of These Areas On A Daily Basis For The Remainder Of The Construction Period.

Hold Sloped Areas Steeper Than 2 (Horizontal) To 1 (Vertical) With Wire Mesh Or Stakes And Wire.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
					Temp	orary S	eeding	Dates				
Wheat Or Rye												
Oats												
Annual Rye Grass												
					Pern	nanent	Seeding	Dates				
Non-Irrigated*												
Irrigated												
Dormant Seeding**												

Irrigation Required

- * Seeding Dates May Be Extended 5 Days
 If Mulch Applied And Planted Late Summer
- ** Increase Seeding Rate By 50%

NOTES:

If Construction Activities Take Place During The Months Of November Through February, Use Dormant Seeding Practices In Place Of Temporary And Permanent Seeding Practices.

See Chapter 7 Of The <u>Indiana Storm Water Quality Manual</u>, For Additional Seeding Recommendations.

Trade Name		Chemical/Physical		
/Material	Source	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 Hoode 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.

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).

Geotextile

SECTION

Swale Flowline

2:1 Or Flatter

Top Of Bank

Geotextile

Revetment Riprap

ELEVATION

-Swale Flowline

4. Store In Sealed Containers Appropriate For Specific Use.

INDOT CA No. 5-

Aggregate

NOTES: Installation:

Excavate A Cutoff Trench Into The Swale Banks And Extend It A Minimum Of 18 Inches Beyond The Top Of Bank. Place The Rock In The Cutoff Trench And Channel to The Limits And Dimensions Shown.

Extend The Rock At Least 18 Inches Beyond The Top Of Bank To Keep Overflow Water From Undercutting The Dam As It Re-Enters The Channel.

Space Dams So That The Upstream Dam Toe Elevation And The Overflow Weir Of The Downstream Dam Top Elevation Are The Same.

(A 1% Swale Slope Would Equal 200' Spacing)

Stabilize The Channel Above The Uppermost Dam.

Erosion Resistant Lining Shall Extend At Least 6" Below Lowest Dam.

Maintenance:

Inspect Check Dams And The Channel After Each Storm Event, And Repair Any Damage Immediately. If Significant Erosion Occurs Between Dams, Install A Riprap Liner In That Portion Of The Channel.

Remove Sediment Accumulated Behind Each Dam As Needed To Maintain Channel Capacity, To Allow Drainage Through The Dam, And To Prevent Large Flows From Displacing Sediment.

Add Aggregate To The Dams As Needed To Maintain Design Height And Cross Section.

When The Dams Are No Longer Needed, Remove The Aggregate And Stabilize Channel Using An Erosion Resistant Lining, If Necessary.

CHECK DAM DETAIL NOT TO SCALE

RECOMMENDED FOR APPROVAL:				EROS	ION CONTROL N	OTES		HORIZONTAL SCALE NONE VERTICAL SCALE	BRIDGE FILE 5661 DESIGNATION	661
	DESIGN ENG	SINEER	DATE	FORT WAYNE		I	INDIANA	NONE	2 2000 100 110 110 110 110 110 110 110 1	
DESIGNED:	EC [DRAWN:	ВЕН	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302		Branch Locations FORT WAYNE LOUISVILLE	260-459-1532 502-593-1996	SURVEY BOOK ELECTRONIC	SHEET 65 OF	
CHECKED:	ACE (CHECKED:	EC	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765-423-5602 219-769-2333 317-839-3242	CONTRACT N/A	PROJECT	BFS NO.

Rule 5 Checklist - Section A: **Construction Plan Elements**

- 1. Index Showing Locations Of Required Plan Elements See The Title Sheet.
- 2. 11x17 Inch Plat With Building, Lots, Boundaries, Road Layout Names See The Plat No. 1 Sheets.
- 3. Narrative Describing Nature And Purpose Of Project

The Project Will Involve The Widening Of Maysville Road Between Stellhorn Road And Meijer Drive In Northeast Fort Wayne. The Project Will Include A Typical 5-Lane Section (Two Travel Lanes In Each Direction With Center Turn Lane). Where It Is Not Needed, The Center Left-Turn Lane Is To Be Designed As A Landscaped Median. The Project Will Also Include The Resurfacing Of Stellhorn Road Between Maysville Road And Wheelock Road, As Well As A 5-Foot Sidewalk West Of Maysville Road And South Of Stellhorn Road To Maysville Park Boulevard. The Project Will Be Designed As An Urban Street With Curb And Gutter, Storm Sewers, Pedestrian And Green Infrastructures, Street Lighting, And Landscaping.

- 4. Vicinity Map Showing Project Location See The Title Sheet.
- 5. Legal Description Of The Project Site

Latitude: 41°07'37"N, Longitude: 85°00'55"W; Sections 24 And 25; Township 31N; Range 13E On The U.S.G.S. Cedarville And Fort Wayne Quadrangles, All In St. Joseph Township, City Of Fort Wayne, Allen County, Indiana. Maysville Road Widening Will Run From Stellhorn Road To Meijer Drive. The Project Will Also Include The Resurfacing Of Stellhorn Road Between Maysville Road And Wheelock Road, As Well As A 5-Foot Sidewalk West Of Maysville Road And South Of Stellhorn To Maysville Park Boulevard.

- 6. Location Of All Site Improvements
- Improvements Will Be Contained Within The Construction Limits As Shown On The Plan & Profile Sheets.
- 7. Hydrologic Unit Code 04100005010060
- 8. Note Any State Or Federal Water Quality Permits

IDEM Section 401 WQC Regional General Permit, IDEM Rule 5 Erosion Control Permit, IDEM NOI To Construct A Watermain, IDEM Sanitary Sewer Permit, IDNR Construction In A Floodway Permit, USACE Section 404 Nationwide Permit, And County Board Permit For Encroachment.

- 9. Specific Points Where Stormwater Discharge Will Leave The Site At Station 430+86 And Station 431+31 On Line "PR-1" The Proposed Pipe Networks Will Discharge To Koester Ditch. At Station 397+86 On Line "B" The Proposed Stormwater System Will Connect To The Existing Stormwater System, Which Discharges To Bullerman Ditch. See The Plan & Profile Sheets.
- 10. Location And Name Of All Wetlands, Lakes And Water Courses On And Adjacent To The
- Wetland Code PUBGx Is Located Northwest Of The Proposed Road Near Windsor Oaks Drive And North Of Koester Ditch. Wetland Code PFO1/SS1C Is Located To The Southeast Of The Proposed Road Near Koester Ditch. Both, Koester Ditch And Bullerman Ditch, Border The Proposed Site.
- 11. Identification Of All Receiving Waters

Stormwater Will Discharge To Koester Ditch And Bullerman Ditch.

- 12. Identification Of Potential Discharges To Ground Water (Abandoned Well, Sinkholes,
- Potential Locations For Groundwater Infiltration Include Wells, Roadside Ditches, And Utility
- 13. 100 Year Floodplains, Floodways, And Floodway Fringes See The Attached Flood Insurance Rate Maps.
- 14. Pre-Construction And Post Construction Estimate Of Peak Discharge (10 Year Storm Event)

Location Pre-Construction (10 yr.) Post-Construction (10 yr.) Bullerman Ditch 6.11 cfs 5.70 cfs 6.92 cfs 11.04 cfs Koester Ditch

- 15. Adjacent Land Use, Including Upstream Watershed The Land Use Within, And Adjacent To, The Project Limits Mostly Consists Of Commercial Development, Farmland And Residential Areas.
- 16. Construction Limits

See The Plan & Profile Sheets For Construction Limits.

- 17. Identification Of Existing Vegetative Cover The Project Is Located Mostly On Grassy Areas, Cultivated Crops, And Woods.
- 18. Soils Map Including Soil Descriptions And Limitations

10. 2013 14	ap including 3011 Descriptions And Enhitations	
See The At	tached Soils Map.	
BhA	Belmore Loam, 0 To 2% Slopes	9.9%
BhB	Belmore Loam, 2 To 6% Slopes	22.7%
BmA	Blount Silt Loam, 0 To 2% Slopes	16.5%
Es	Eel Silt Loam	6.3%
HaA	Haskins Loam, 0 To 2% Slopes	7.1%
HoA	Whitaker Loam, 0 To 2% Slopes	1.3%
HpA	Whitaker Silt Loam, 0 To 2% Slopes	4.6%
MrB2	Glynwood Silt Loam, 2 To 6% Slopes	13.8%
Pe	Pewamo Silty Clay Loam	11.4%
Ro	Rensselaer Silt Loam	6.3%

Rule 5 Checklist - Section A: (Continued)

19. Locations, Size And Dimensions Of Proposed Stormwater Systems (e.g. Pipes, Swales, And Channels)

See The Plan & Profile Sheets And Structure Data Table.

20. Plans For Any Off Site Construction Activities Associated With This Project (Sewer/Water

There Are No Off Site Construction Activities Associated With This Project.

- 21. Locations Of Proposed Soil Stockpiles And/or Borrow Disposal Areas The Contractor Will Determine The Location Of Stockpiles, Borrow And/Or Disposal Areas Used During Construction. The Determined Locations Will Have To Be Approved By INDOT. Proposed Borrow Or Disposal Sites Will Be Identified By The Contractor Before The Material Is Excavated Or Disposed Of Within Or Outside The R/W in Accordance w/Section 203.08, 203.09, & 212. The Contractor Will Comply w/Section 108.04 Of The INDOT Standard Specifications And Special Provision 108-C-192d Stormwater, Erosion Control And Sediment Control, Inspection Report.
- 22. Existing Site Topography At An Interval Appropriate To Indicate Drainage Patterns See The Plan & Profile, Erosion Control, & Cross Section Sheets For Existing Topography.
- 23. Proposed Final Topography At An Interval Appropriate To Indicate Drainage Patterns Refer To The Cross Sections For Final Topography.

Rule 5 Checklist - Section B:

Stormwater Pollution Prevention Plan-Construction Component

- 1. Description Of Potential Pollutant Sources Associated With Construction Activities. See The Potential Storm Water Pollutants And Spill Prevention Handling Table Located On The Erosion Control Details.
- 2. Sequence Describing Stormwater Quality Measure Implementation Relative To Land Disturbing Activities. Preconstruction:
- A. Notify Project Owner
- B. Contact The Indiana Underground Plant Protection Systems, Inc. To Verify The Location Of Any And All Underground Utilities.
- C. Install Temporary Construction Entrances At All Access Points.
- D. Exhibit Rule 5 Information At The Job Site. Contractor Will Designate A Person Responsible For On-Site Inspections And For Providing This SWPPP On-Site.
- E. Install Silt Fence And Drop Inlet Protection For Existing Inlets.
- Construction: A. Establish Construction Entrances.
 - B. Contractor Will Construct Concrete Washouts. Contractor Will Coordinate Location Of Concrete Washouts With Owner And Engineer.
 - C. Install Erosion Control Measures As Each New Item Of The Project Is Installed As Required Which May Include But Is Not Limited To Drop Inlet Protection, Silt Fence, Rock Check Dams, Sediment Traps, Erosion Control Blankets, and Riprap.
 - D. Begin Mass Earthwork Operations.
 - E. Install Temporary Diversion Swales.
 - F. Install Staging Areas, Material Storage Areas, & Fueling Stations. G. Temporarily Seed Disturbed Areas If To Be Disturbed More Than 7 Days.
 - H. Begin Trenching For Storm Sewers.
- I. Install Ditch Inlet Protection.
- J. Riprap Storm Sewer Discharge Location. K. Complete Subgrade Operations.
- L. Install Storm Sewers.
- M. Finish Grading.
- N. Install Permanent Seeding.
- 3. Stable Construction Entrance Locations And Specifications (At All Points Of Ingress And
- The Contractor Will Utilize Existing Streets And Drives As Much As Possible For Construction Ingress And Egress. The Contractor Will Keep Public Roads And Private Drives Clear And Remove All Dust, Dirt, And Debris As A Result Of Construction Activities. Temporary Construction Entrances Will Meet The Requirements Of The Construction Gravel Entrance As Shown On The Erosion Control Details. A Quantity Of No. 2 Stone Will Be Included In The Estimate For This Purpose.
- 4. Sediment Control Measures For Sheet Flow Areas
- Silt Fences Will Be Installed In Sheet Flow Areas As Shown On The Erosion Control Sheets. Sheet Flow Areas Will Be Temporarily Seeded During Construction And Permanently Seeded Or Sodded Upon Completion Of The Final Grade. See The Plan & Profile And Erosion Control Sheets.
- 5. Sediment Control Measures For Concentrated Flow Areas
- Sediment Control Will Be Handled Via Inlet Protection, Sediment Traps, And Riprap Over Geotextile Fabric. See The Erosion Control Sheets.
- 6. Storm Sewer Inlet Protection Measure Locations And Specifications
- The Contractor Is Instructed To Protect All Curb Inlets From Sediment During Construction Using INDOT-Approved Methods in Accordance With INDOT Standard Specifications 205.03(L). In Addition Drop And Ditch Inlets Will Be Protected From Sediment Using Drop Inlet Protection. See The Erosion Control Sheets.
- 7. Runoff Control Measures (e.g. Diversions, Rock Check Dams, Slope Drains, Etc.) Runoff Will Be Controlled By Curb & Gutter, Inlets, Storm Sewers, Ditches, Silt Fence, And Temporary And Permanent Seeding. See The Erosion Control And Erosion Control Details Sheets.

Rule 5 Checklist - Section B: (Continued)

8. Stormwater Outlet Protection Specifications

Stormwater Outlet Protection Will Be Handled Via Riprap Over Geotextile Or Rock Check Dams. See The Erosion Control Sheets And Erosion Control Details.

9. Grade Stabilization Structure Locations And Specifications.

Abutments Will Be Built For The Two Pre-Engineering Steel Truss Pedestrian Bridges Over Koestler Ditch At Approximately Stations 430+90 Abd 431+68. See The Plan & Profile, Erosion Control, And Cross Section Sheets.

- 10. Location, Dimensions, Specifications, And Construction Details Of Each Stormwater
- See The Structure Data Table, Erosion Control, And Erosion Control Details Sheets.
- 11. Temporary Surface Stabilization Methods Appropriate For Each Season. Seeding Of Disturbed Areas Shall Be Implemented For All Disturbed Land Left Inactive For A Period Of 7 Days.
- 12. Permanent Surface Stabilization Specifications.

Permanent Seeding And Sodding Will Be Implemented For All Disturbed Land And Will Occur Once Final Grading Has Been Completed. See The Plan & Profile Sheets And Erosion Control

13. Material Handling And Spill Prevention Plan

INDOT Standard Specification Addresses Material Handling And Spill Prevention Plans. The Contractor And INDOT Will Comply With The INDOT Standard Specifications And The Applicable Federal, State, And Local Laws, Regulations, And Rules. These Include, But Will Not Be Limited To The Federal Toxic Substance Control Act, The Federal Resource Conservation Recovery Act, The Federal Comprehensive Environmental Response Compensation Liability Act, OSHA, IDEM, And The State Rules Requiring Certification Of Underground Storage Tank Removal Firms. In Case Of A Spill, The IDEM Emergency Response Section Will Be Contacted At 1-800-233-7745.

The Contractor Will Be Responsible For The Proper Handling, Storage, Transportation And Disposal Of All Regulated Materials, Which Are Brought Onto The Site By The Contractor. This Will Include Those Materials, Which Are Required Under The Contract. The Contractor Will Comply With All Applicable Laws, Regulations, And Rules Regarding Such Materials. All Spills Of Regulated Materials, Caused By Negligence Of The Contractor Will Be Cleaned Up In Accordance With The Applicable Laws, Regulations, And Rules.

The City Of Fort Wayne Will Be Responsible For Proper Handling, Storage, Cleanup, Removal, Testing, Transportation, And Disposal Of All Regulated Material Which Are Located Within The Project Limits Except Fro Those Materials Brought Onto The Site By The Contractor And As Stated In The INDOT Standard Specifications.

14. Monitoring And Maintenance Guidelines For Each Proposed Stormwater Quality Measure. The Contractor Will Maintain All Water Quality Measures During Construction To Prevent Any Blockages From Accumulating Sediment. Monitoring Of The Protective Measures Will Be Done On A Weekly Basis And Again Within 24 Hours Of Every Half-Inch Rain Event.

Maintenance Will Include A Written Record Of Each Inspection That Is Made Within 24 Hours Of A Rain Event And Weekly. The Written Record Will Be Made Available Upon Request.

Temporary Construction Entrance:

- A. Inspect Weekly, Within 24 Hours Of Every Half-Inch Rain Event, And After Heavy
- 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
- E. Repair Any Damaged Pavement Immediately.

Temporary Silt Fence:

- 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
- 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.

Temporary Check Dam, Traversable:

- A. Inspect Check Dams And The Channel After Each Storm Event, And Repair Any Damage Immediately. If Significant Erosion Occurs Between Dams, Install A Riprap Liner In That Portion Of The Channel.
- B. Remove Sediment Accumulated Behind Each Dam As Needed To Maintain Channel Capacity, To Allow Drainage Through The Dam, And To Prevent Large Flows From Displacing Sediment.
- C. Add Aggregate To The Dams As Needed To Maintain Design Height And Cross
- D. When The Dams Are No Longer Needed, Remove The Aggregate And Stabilize The Channel Using An Erosion Resistant Lining If Necessary.

Temporary Inlet Protection:

- 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.

Rule 5 Checklist - Section B: (Continued)

Temporary Sediment Trap:

- A. Following Each Storm Event, Repair Slope Erosion And Piping Holes As Required.
- Sediment Will Be Removed Once It Has Accumulated to Half Of The Design Volume. C. Replace The Coarse Aggregate Filter Stone If The Sediment Does Not Drain Within 72 Hours Following A Stormwater Runoff Event.

Check For And Repair Any Adjacent Erosion.

B. Repair Washed Out Areas.

Temporary Seeding:

- A. Monitor Until It Reaches 70% Coverage.
- Reseed As Needed.

C. Install Additional Erosion Control To Help Establish Cover.

- Concrete Washout: A. Inspect Weekly, Within 24 Hours Of Every Half-Inch Rain Event, And After Heavy
 - 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.

Rule 5 Checklist - Section C:

Stormwater Pollution Prevention Plan-Post Construction Component

- 1. Description Of Pollutants And Their Sources Associated With The Proposed Land Use. See The Potential Storm Water Pollutants And Spill Prevention Handling Table Located On The Erosion Control Details Sheet.
- 2. Sequence Describing Stormwater Quality Measure Implementation.
- Typical Construction Sequence Schedule:

Included With The Project As Permanent Stormwater Quality Measures.

- 1. All Disturbed Ground Will Be Seeded Immediately After Grading Or When The Project Is Substantially Complete. Riprap Splash Pads And Geotextiles Will Be Constructed As Soon As Outlet Structures Are Installed.
- 2. Silt Fence, Check Dams, And Inlet Protections Are To Be Removed After Disturbed Soil Areas Have Been Stabilized. Riprap Ditches Will Remain.

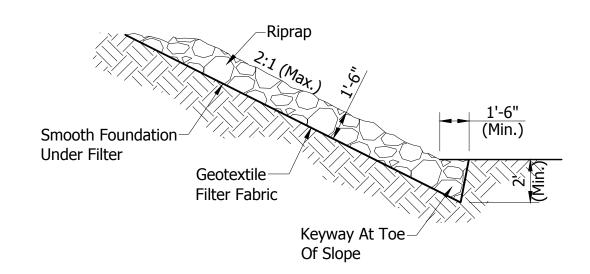
The Actual Sequence Of The Construction Events, Including Erosion Control Measures, Is The Responsibility Of The Contractor. See The Plan & Profile, Erosion Control, And Erosion Control Details Sheets.

- 3. Description Of Proposed Post Construction Stormwater Quality Measures. Sod And Seed Will Be Used In All Disturbed Areas For Permanent Stormwater Quality Measures. Geotextiles Will Be Utilized Under Riprap At All Locations In Accordance w/INDOT Standard Specifications 616.11. Riprap Splash Pads Will Be Constructed At Pipe Outlets As Shown On The Plan & Profile And Erosion Control Sheets In Accordance w/INDOT Standard Specifications 616.05. Green Infrastructures, Such As Rain Gardens And Bioswales, Are
- 4. Location, Dimensions, Specifications, And Construction Details Of Each Stormwater Quality
- See The Erosion Control Sheets And Erosion Control Details.
- Description Of Maintenance Guidelines For Post Construction Stormwater Quality Measures. The Contractor Will Ensure That Revegetated Areas Become Fully Established And Will Water And Re-Seed As Necessary. The Owners Will Clean Up Trash And Will Perform Maintenance On The Storm Sewer System At Regularly Scheduled Intervals.

HORIZONTAL SCALE BRIDGE FILE RECOMMENDED **RULE 5 CHECKLIST** NONE 5661 FOR APPROVAL: **VERTICAL SCALE** DESIGNATION DESIGN ENGINEER DATE **INDIANA** FORT WAYNE NONE SHEET SURVEY BOOK Branch Locations BEH **DESIGNED:** 8450 WESTFIELD BLVD., SUITE 260-459-1532 ELECTRONIC OF 502-593-1996 TEL 317-713-4615 FAX 317-713-4616 65-423-5602 CONTRACT **PROJECT** EC ACE CHECKED: CHECKED: www.BFSEngr.com PLAINFIELD 317-839-3242

- 1. The SWPPP Information Sign Must Be Located Near The Construction Entrance Of This Site, Such That It Is Accessible And Viewable By The General Public, But Not Obstructing Views As To Cause A Safety Hazard.
- 2. All Posted Documents Must Be Maintained In A Clearly Readable Condition At All Times Throughout Construction And Until The Notice-Of-Termination (NOT) Is Filed For The Permit.
- 3. Contractor Shall Post Other Storm Water And/Or Erosion And Sediment Control Related Permits On The Sign As Required.
- 4. Sign Shall Be Located Outside Of Public Right-Of-Way And Easements Unless Approved By The Plainfield MS4 Operator.

SWPPP INFORMATION SIGN DETAIL NOT TO SCALE



Excavate Only Deep Enough For Both Filter And Riprap. Compact Any Fill Material To The Density Of The Surrounding Undisturbed Soil.

Cut A Keyway In Stable Material At The Base Of The Slope To Reinforce The Toe. Keyway Depth Should Be 1/2 Times The Design Thickness Of The Riprap, And Should Extend A Horizontal Distance Equal To The Design Thickness.

Place Geotextile Fabric On The Smoothed Foundation, Overlapping The Edges 12 Inches Minimum. Secure With Anchor Pins Spaced Every 3 Feet Along The Overlap.

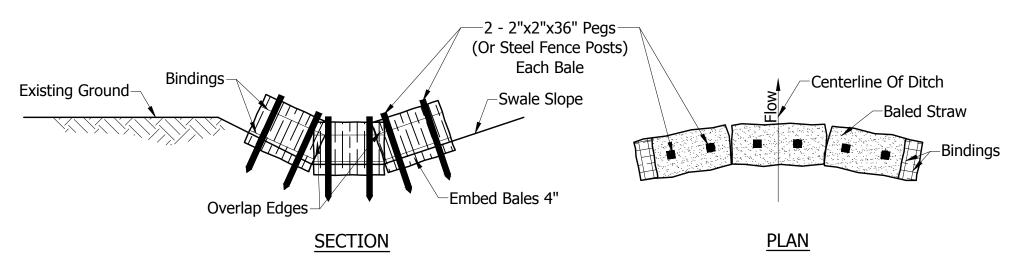
Immediately After Installing The Filter, Add The Riprap To Full Thickness In One Operation. Do Not Dump Through Chutes Or Use Any Method That Causes Segregation Of Rock Sizes, Or That Will Dislodge Or Damage The Underlying Filter Material.

If Fabric Is Damaged, Remove The Riprap And Repair By Adding Another Layer Of Fabric, Overlapping The Damaged Area By 12 Inches.

Place Smaller Aggregate In Voids To Form A Dense, Uniform, Well Graded Mass. Blend The Riprap Surface Smoothly With The Surrounding Area To Eliminate Protrusions Or Over Falls.

Inspect Periodically For Displaced Aggregate Material, Slumping And Erosion At Edges, Especially Downstream Or Downslope.

NOT TO SCALE



Notes:

Lay Out The Location Of The Straw Bale Barrier So That It Is Parallel To The Contour Of The Slope And At Least 10 Feet Beyond The Toe Of The Slope To Provide A Sediment Storage Area.

Excavate A Trench At Least 4 Inches Deep, A Bale's Width, And Long Enough That The End Bales Are Somewhat Upslope Of The Sediment Pool (So No Flow Can Cut Around The Bales).

Place Each Bale In The Trench So The Bindings Are Oriented Around The Sides Rather Than Top And Bottom (To Minimize Binding Deterioration), And Abut The Bales Tightly Against Each Other.

Anchor The Dam By Driving Two 36 Inch Long Steel Rebars Or 2"x2" Hardwood Stakes Through Each Bale Unit Nearly Flush With The Top. Drive The First Stake Towards The Previously Laid Bale To Force The Bales Together.

Tightly Wedge Straw Into Any Gaps Between The Bales To Prevent Sediment Laden Water From Running Through.

Backfill And Compact The Excavated Soil Against The Bales To Ground Level On The Down-slope Side And To 4 Inches Above Ground Level On The Up-slope Side.

Inspect Straw Bale Dams After Each Storm Event, And Remove Any Sediment Deposits Promptly To Ensure Adequate Storage Volume For The Next Rain. Take Care Not To Undermine The Entrenched Bales.

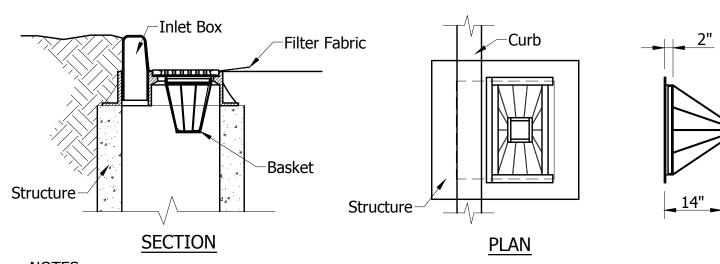
Inspect Daily For Deterioration Or Damage From Construction Activities, And Repair Immediately.

After The Contributing Drainage Area Has Been Stabilized, Remove All Straw Bales And Sediment, Bring The Disturbed Area To Grade, And Stabilize.

SLOPE STEEPNESS RESTRICTIONS							
Percer	nt Slope	Max. Distance Among Straw Bale Barrier					
<2%	<50:1	100 Ft.					
2%-5%	50:1 to 20:1	75 Ft.					
5%-10% ¹	20:1 to 10:1	50 Ft.					
10%-20% ¹	10:1 to 5:1	25 Ft.					
>20% ¹	>5·1	15 Ft					

TEMPORARY CHECK DAM, TRAVERSABLE DETAIL

NOT TO SCALE



NOTES:

Installation:

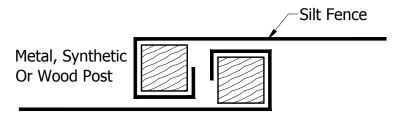
Install Basket Curb Inlet Protection As Soon As Inlet Boxes Are Installed (New Development) Or Prior To Land Disturbing Activities (Existing Development).

If Necessary, Adapt Basket Dimensions To Fit Inlet Box Dimensions.

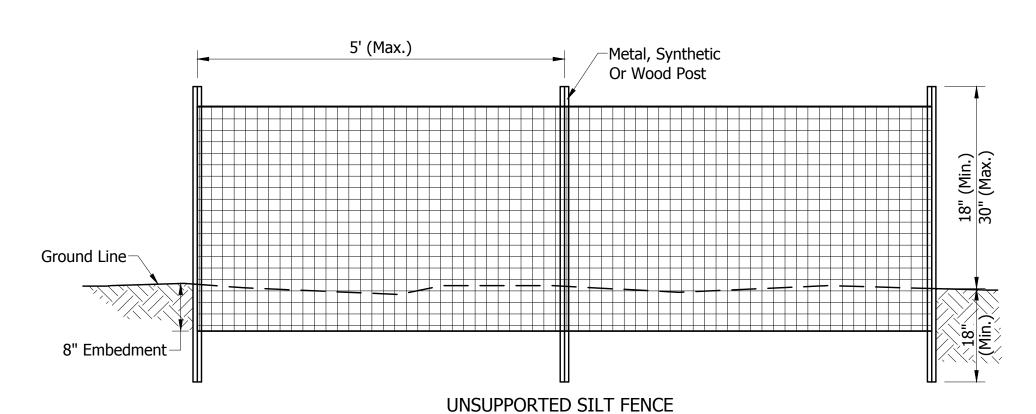
Remove The Grate And Install The Frame Into The Grate Opening. Cut And Install Geotextile Fabric According To The Manufacturer's Recommendations. Replace The Grate.

Inspect Daily And After Each Storm And Remove Sediment. Replace Or Clean Geotextile Fabric As Needed. Remove Tracked On Sediment From The Street (But Not By Flushing With Water) To Reduce The Sediment Load On This Curb Inlet Practice.

BASKET CURB INLET PROTECTION DETAIL NOT TO SCALE



JOINT DETAIL



NOTES:

Silt Fence Is Not Recommended For Use As A Diversion And Should Not Be Used Across A Stream, Channel, Ditch, Swale, Or Anywhere That Concentrated Flow Is Anticipated.

Lay Out The Location Of The Fence So That It Is Parallel To The Contour Of The Slope And At Least 10 Feet Beyond The Toe Of The Slope To Provide A Sediment Storage Area. Turn The Ends Of The Fence Up Slope Such That The Point Of Contact Between The Ground And The Bottom Of The Fence End Terminates At A Higher Elevation Than The Top Of The Fence At Its Lowest Point

Along The Entire Fence Line, Dig An 8 Inch Deep Flat Bottomed Or V-Shaped Trench. Place Fence According To Manufacturer's Recommendations.

Inspect The Silt Fence Weekly And After Each Storm Event.

If Fence Fabric Tears, Starts To Decompose, Or In Any Way Becomes Ineffective, Replace The Affected Portion Immediately.

Remove Deposited Sediment When It Reaches Half The Height Of The Fence At Its Lowest Point Or Is Causing The Fabric To Bulge.

Take Care To Avoid Undermining The Fence During Clean Out.

After The Contributing Drainage Area Has Been Stabilized, Remove The Fence And Sediment Deposits, Bring The Disturbed Area To Grade, And Stabilize.

TEMPORARY SILT FENCE DETAIL NOT TO SCALE

NOTES:

Excavate Only Deep Enough For Both Filter And Riprap. Compact Any Fill Material To The Density Of The Surrounding Undisturbed Soil.

Place Geotextile Fabric On The Smoothed Foundation, Overlapping The Edges 12 Inches Minimum. Secure With Anchor Pins Spaced Every 3 Feet Along The Overlap.

Immediately After Installing The Filter, Place Stone To Dimensions And Grade Shown On The Erosion Control Plan,

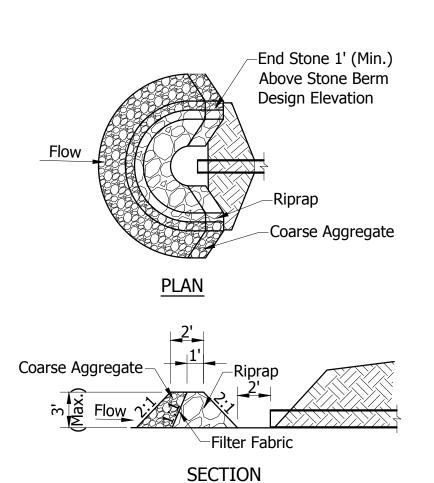
Tie The Stone Berm Into The Culvert Embankment A Minimum Of 1 Foot Above The Design Elevation of The Stone Berm.

Maintenance: Inspect Culvert Pipe Protection After Each Storm Event, And Repair Any Damage Immediately.

Remove Sediment Accumulated Behind Each Culvert Pipe Protector As Needed To Maintain Capacity, To Allow Drainage Through The Culvert Pipe Protection, And To Prevent Large Flows From Displacing Sediment.

Add Rock To The Culvert Pipe Protection As Needed To Maintain Design Height And Cross Section.

When The Culvert Pipe Protection Is No Longer Needed, Remove The Rock And Stabilize Channel Using An Erosion Resistant Lining, If Necessary.



TRENCH DETAIL

-Metal, Synthetic

Or Wood Post

Geotextile-

Fabric

Compacted Soil-

CULVERT PIPE PROTECTION DETAIL NOT TO SCALE

RECOMMENDED FOR APPROVAL:				EROSI	EROSION CONTROL DETAILS				BRIDGE 5661 DESIGNA	L
	DESIG	N ENGINEER	DATE	FORT WAYNE			INDIANA	VERTICAL SCALE NONE	32020117	
DESIGNED:	EC	DRAWN:	ВЕН	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302	FERS	Branch Location FORT WAYNE LOUISVILLE	ns 260-459-1532 502-593-1996	SURVEY BOOK ELECTRONIC	SHEE 67 OF	T
CHECKED:	ACE	CHECKED:	EC	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Scufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765–423–5602 219–769–2333 317–839–3242	CONTRACT N/A	PROJE	СТ

RIPRAP DETAIL

Remove All Vegetation And Other Objectionable Material From The Foundation Area, And Grade The Foundation And Crown For Positive Drainage.

If Longitudinal Slope Is In Excess Of 2%, Construct A Water Bar (Ridge) About 15 Feet From The Entrance To Divert Runoff Away Form The Road (See Detail Above).

Install Pipe Under The Pad (If Needed) To Maintain Proper Public Road Drainage.

If Wet Conditions Are Anticipated, Place Geotextile Fabric On The Graded Foundation To Improve Stability.

Place Aggregate To Dimensions And Grade Shown On The Erosion Control Plan, Leaving The Surface Smooth And Sloped For Drainage.

Top-dress The Drive With Washed Aggregate (INDOT CA No.53).

Divert All Surface Runoff And Drainage From The Stone Pad To A Sediment Trap Or Basin.

Maintenance

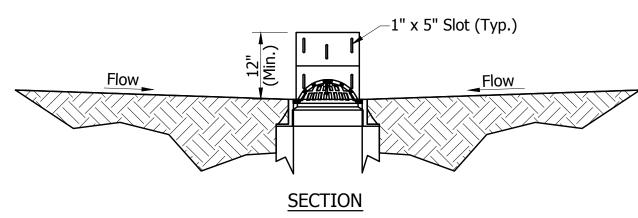
Inspect Daily And After Each Storm Event Or Heavy Use.

Reshape Pad And Topdress As Needed For Drainage And Runoff Control.

Immediately Remove Mud And Sediment Tracked Or Washed Onto Public Roads By Brushing Or Sweeping. Flushing Should Only Be Used If The Water Is Conveyed Into A Sediment Trap Or Basin.

TEMPORARY CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE



NOTES:

<u>Installation:</u>
Set Barrel Riser Height At Least 6 Inches Below Ground Elevation On The Downslope Side Of The Inlet To Prevent Runoff From By-passing The Inlet.

If Necessary, On The Low Side Of The Inlet, Build A Temporary Dike Compacted To 6 Inches Higher Than The Riser And Stabilize Appropriately.

Cut Slots At Least 1 Inch Wide And 5 Inches Long In The Barrel, And Cut Out The Barrel Ends.

Place The Barrel Riser Over The Casting Grate.

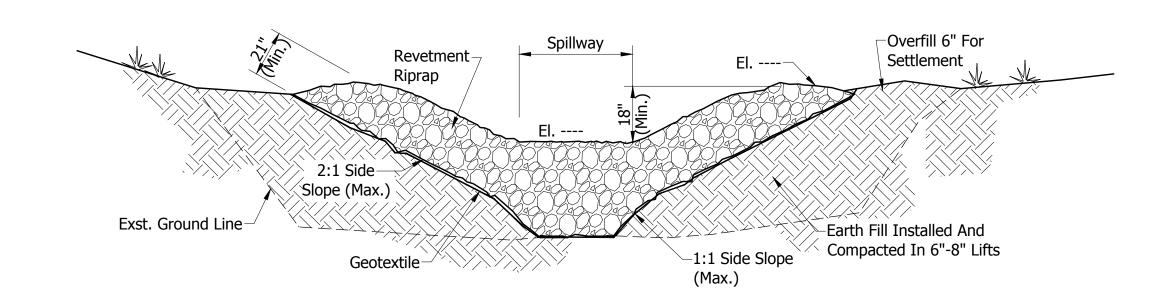
Wrap Geotextile Fabric Around The Riser Before Placement, And Tuck It Under The Bottom Of The Barrel. Attach The Fabric Top To The Barrel With Cord Or Wire.

Maintenance

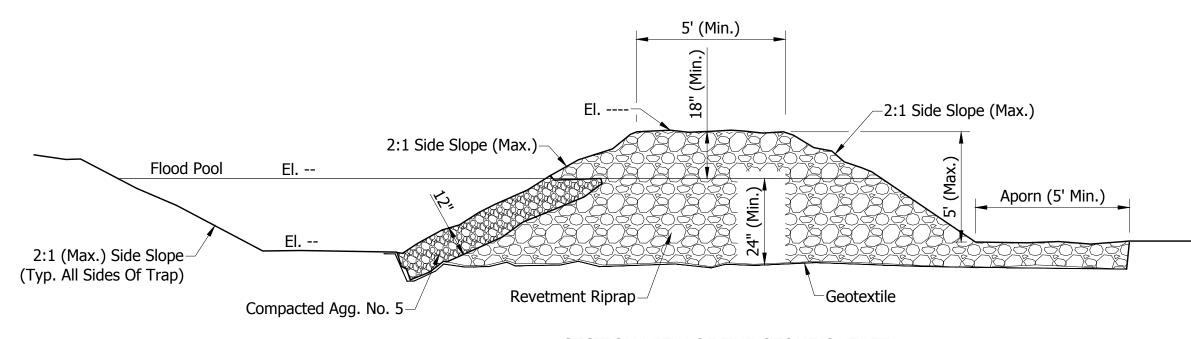
Inspect The Structure Weekly And After Each Storm Event, And Remove Accumulated Sediment And Make Needed Repairs Immediately.

When The Contributing Drainage Area Has Been Stabilized, Remove, And Properly Dispose Of All Construction Material And Sediment, And Dispose Of Properly. Grade The Disturbed Area To The Elevation Of The Top Of The Inlet And Stabilize.

SLOTTED BARREL DROP INLET PROTECTION DETAIL NOT TO SCALE



EARTH EMBANKMENT & STONE OUTLET SECTION



<u>PLAN</u>

SECTION VIEW OF THE STONE OUTLET

Notes:

The Spillway Width Varies With The Drainage Area Contributing To The Temporary Sediment Trap:

 Drainage Area (acres)
 Width (ft)

 1
 4

 2
 6

 3
 8

 4
 10

 5
 12

The Length And Width Of The Basin Are As Shown On The Erosion Control Plan (Maximum Drainage Area Is 5 Acres).

See The Indiana Storm Water Quality Manual For Additional Information.

<u>Installation:</u>

Clear, Grub, And Strip All Vegetation And Root Mat From The Embankment Area.

Create Embankment Using Material Free Of Roots, Rocks, Brush, And Debris. Overfill The Embankment 6 Inches To Allow For Settling.

Excavate A Trapezoidal Stone Outlet Section From The Compacted Embankment (Section A-A).

Install Geotextile And Place Specified Stone To The Lines And Grades Shown.

Stabilize The Embankment And Other Disturbed Areas With Seed And Mulch Or Another Suitable Erosion Resistant Cover.

laintenance:

Inspect Traps Weekly And Following Each Storm Event And Immediately Repair. Check Embankment For Any Erosion And Piping Holes And Repair.

Remove Sediment When It Has Accumulated To One Half The Design Depth. Check Pool Area Side Slopes For Erosion And Repair.

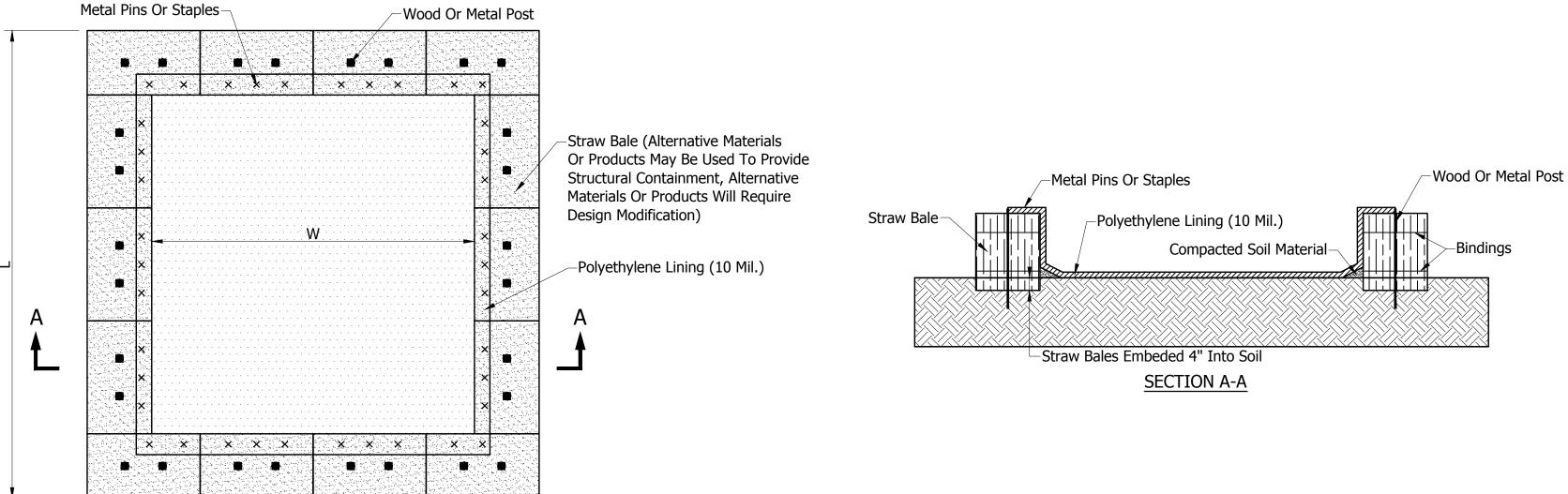
Replace Spillway Gravel Facing If Clogged.

Inspect Vegetation And Reseed Again, If Necessary.

Check The Spillway Depth Periodically To Ensure A Minimum 18 Inch Depth From The Lowest Point Of The Settled Embankment To Highest Point Of The Spillway Crest. Fill Any Low Areas To Maintain The Design Elevation.

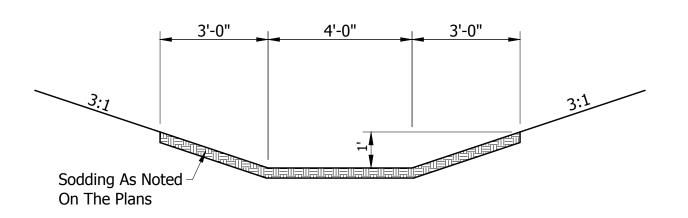
TEMPORARY SEDIMENT TRAP DETAIL

NOT TO SCALE



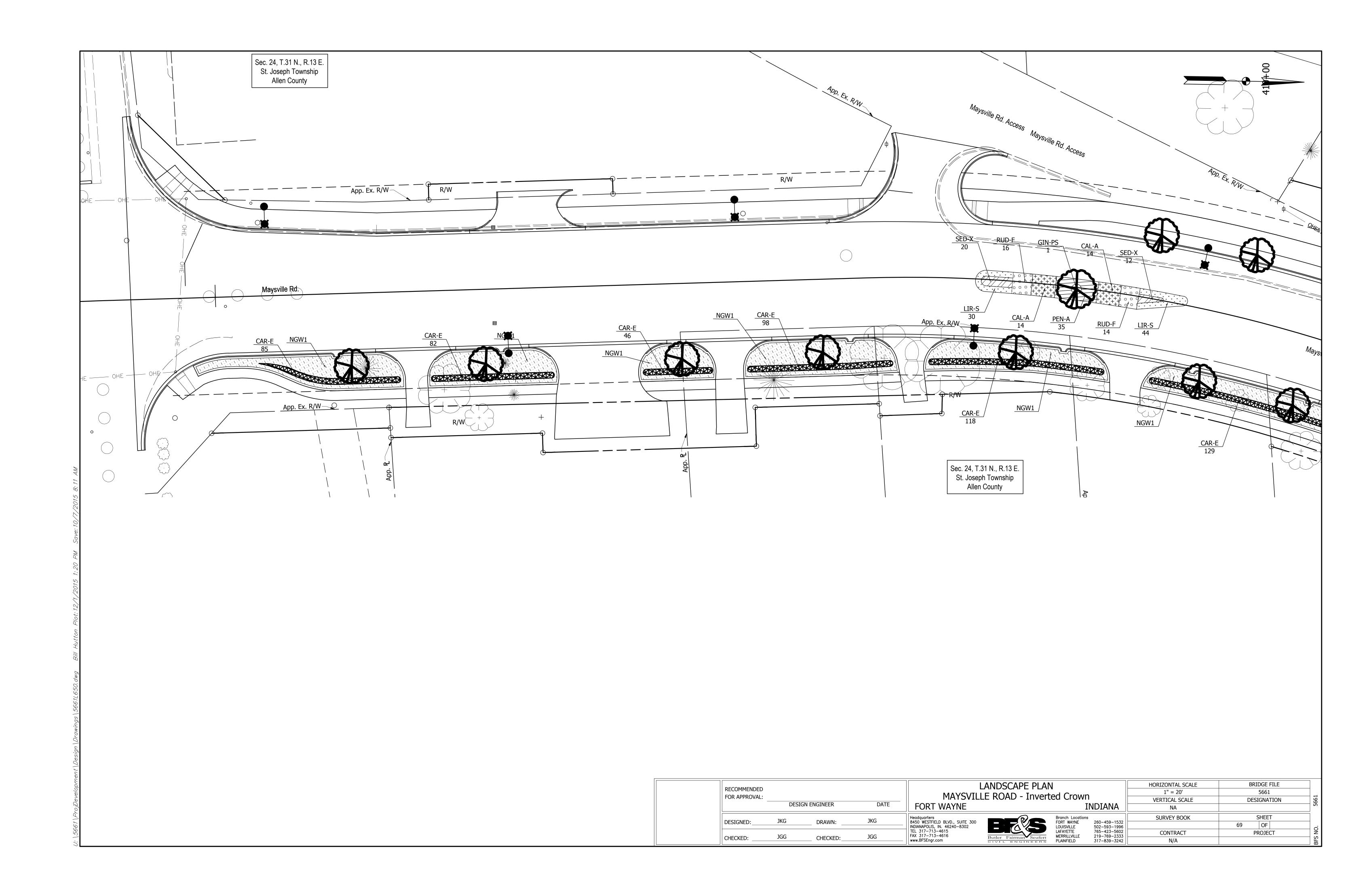
CONCRETE WASHOUT DETAIL

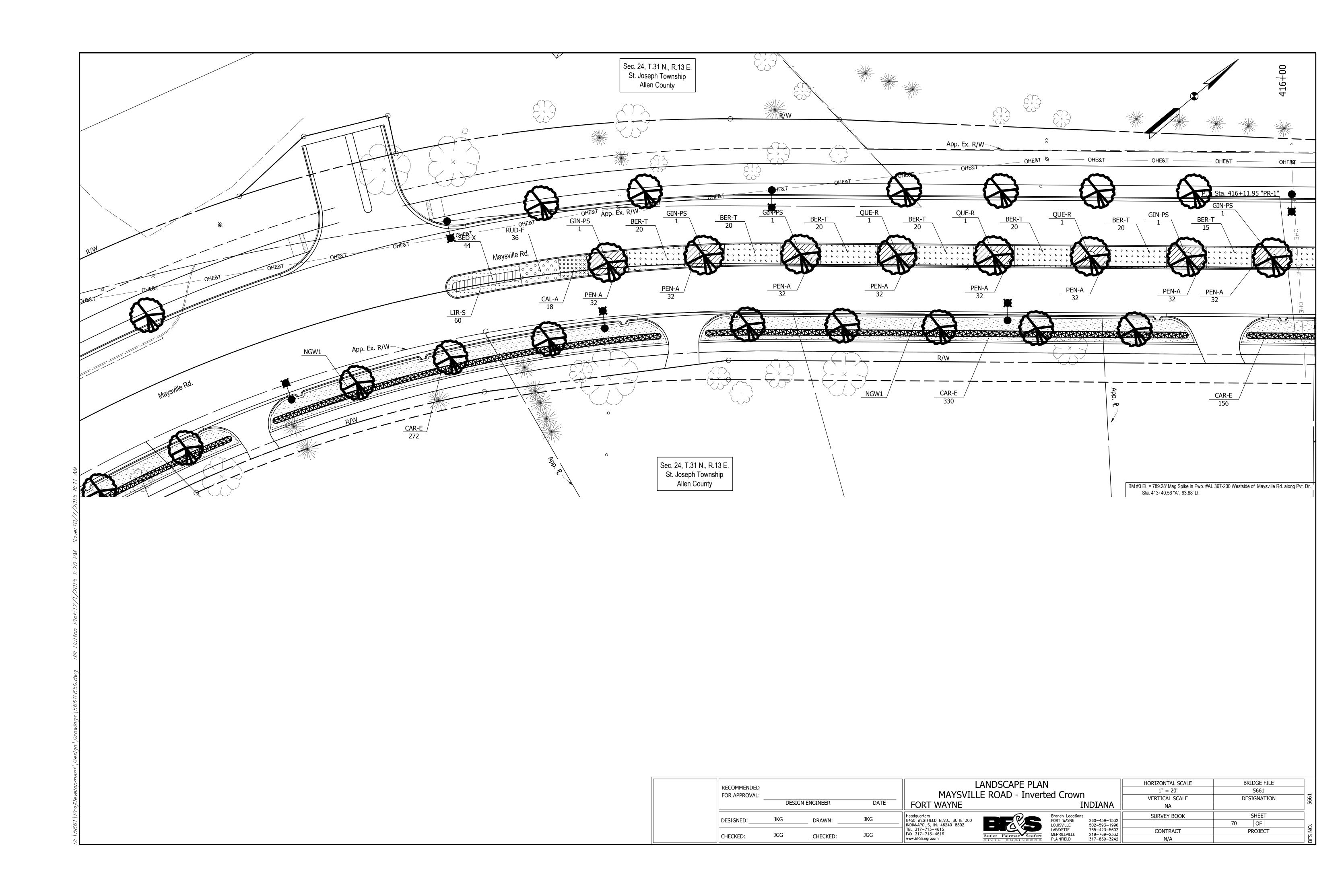
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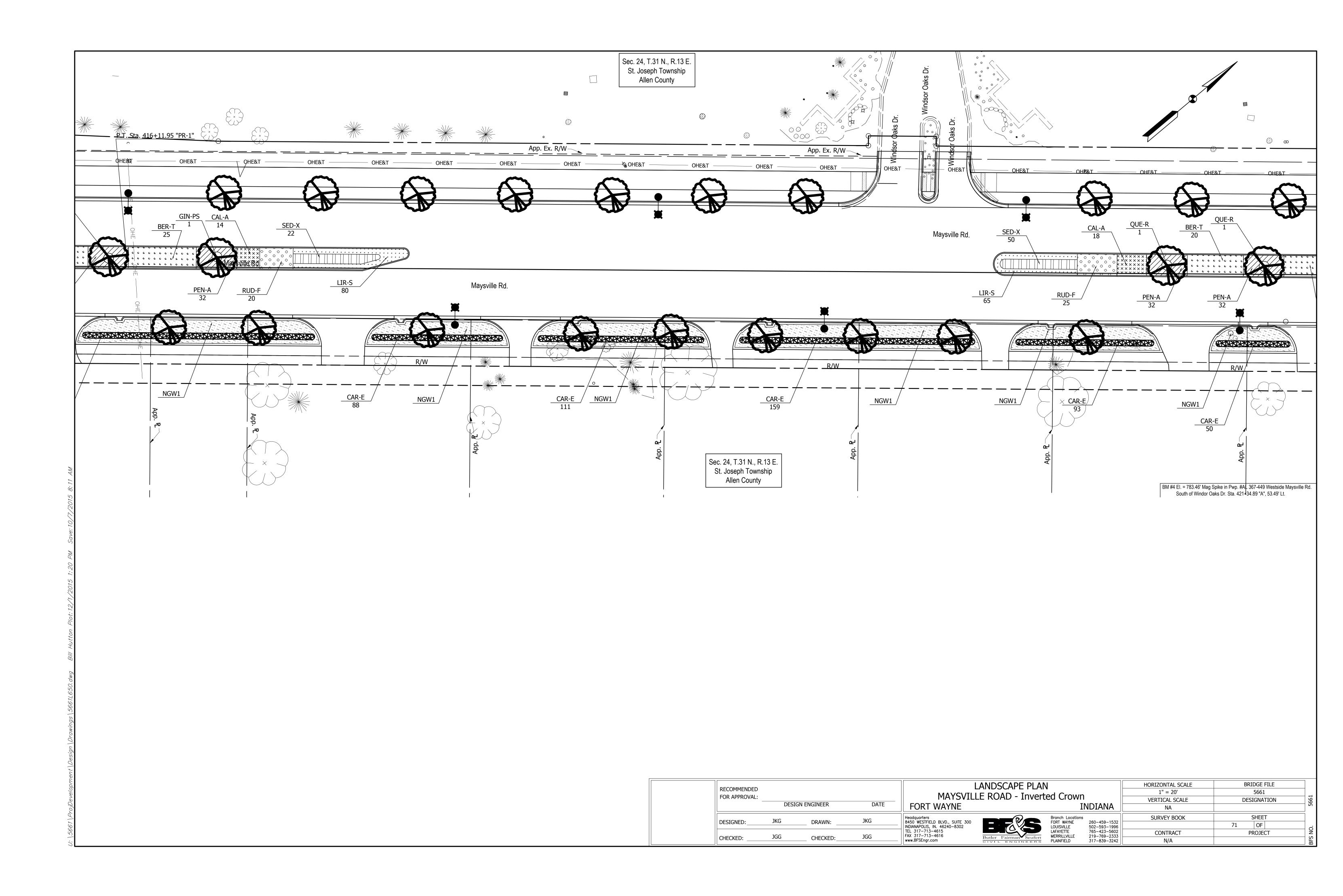


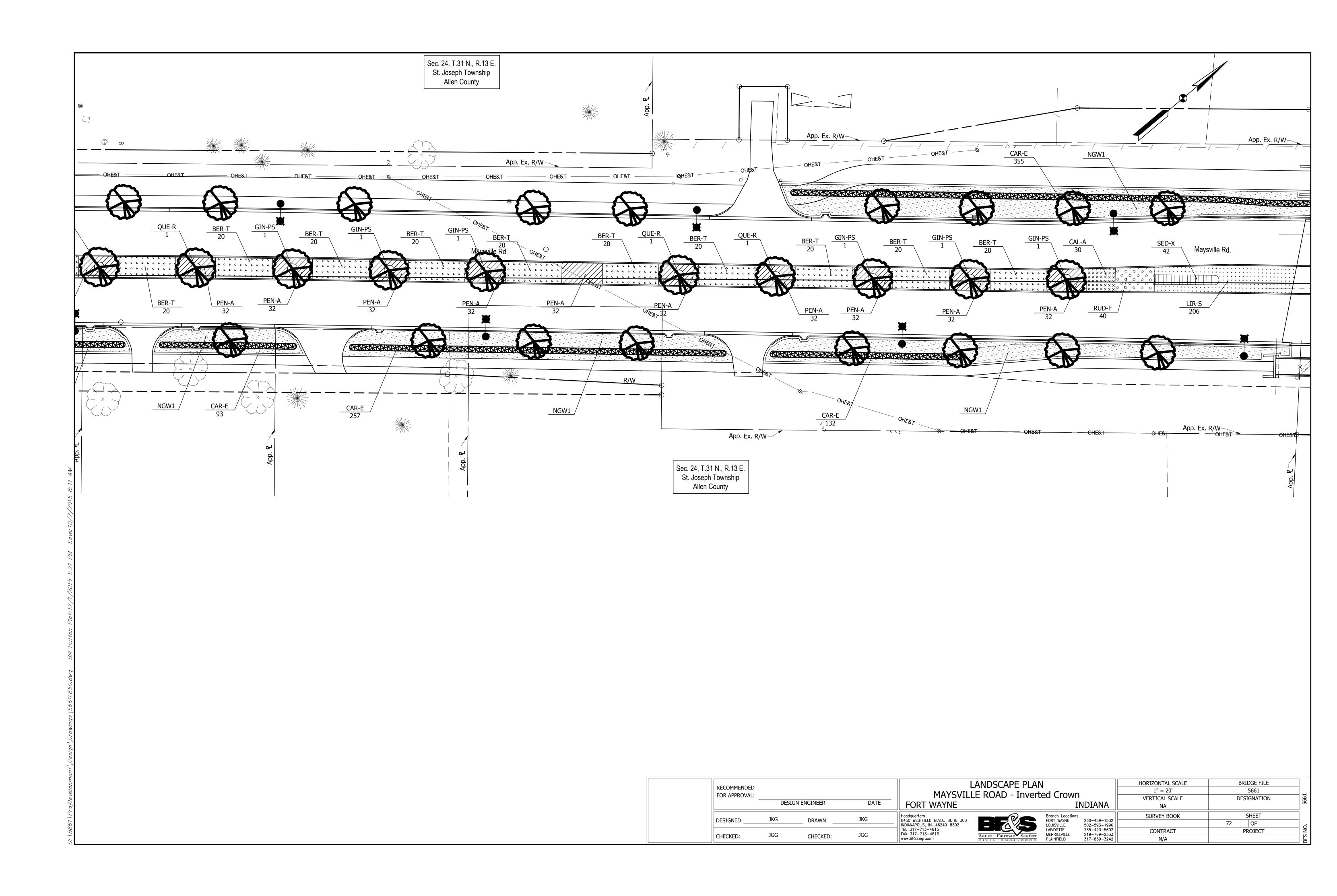
SODDED "FLAT BOTTOM" DITCH DETAIL NOT TO SCALE

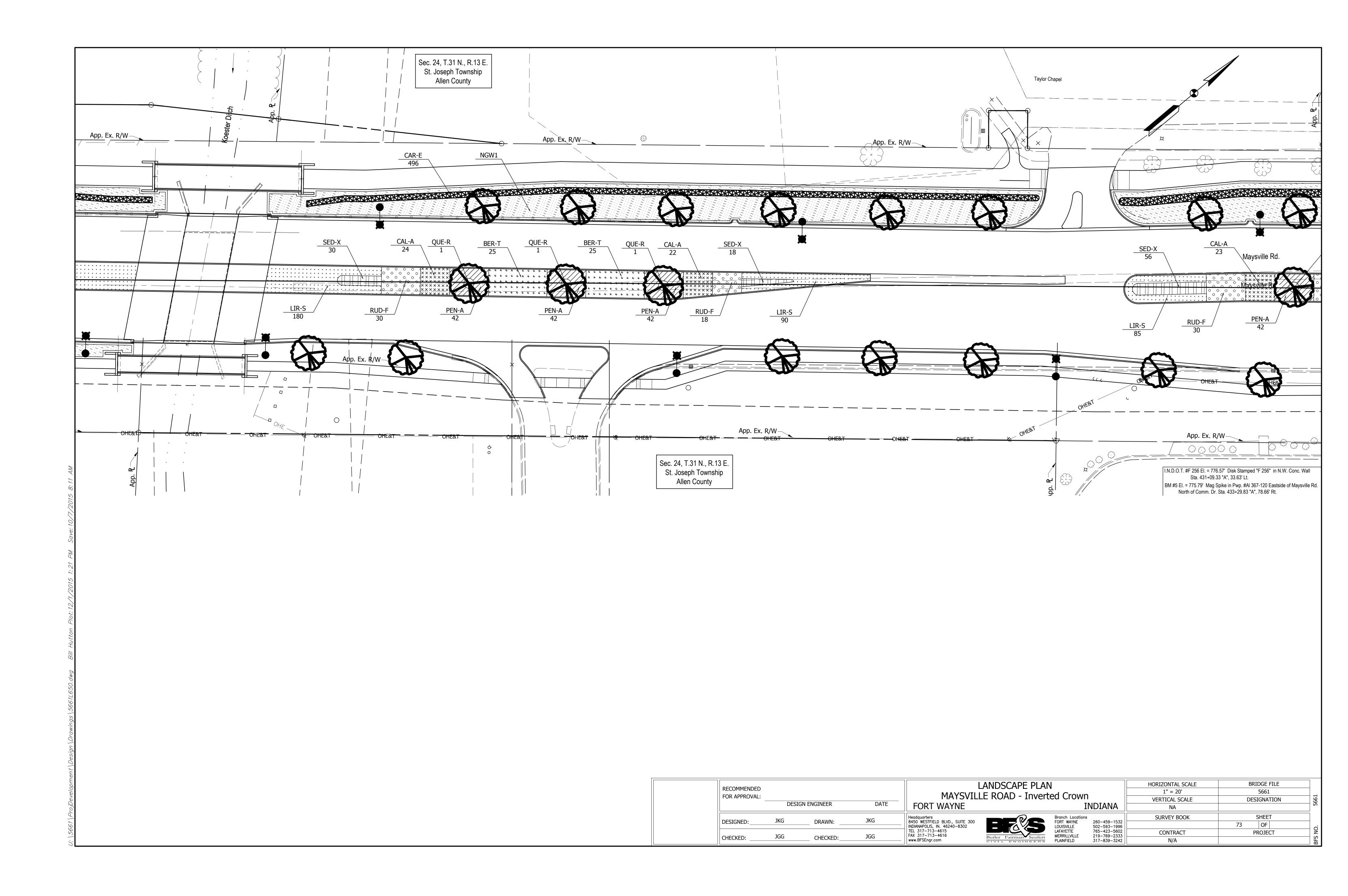
RECOMMENDED FOR APPROVAL:	DESI	gn engineer	DATE	EROSI FORT WAYNE	on control de		INDIANA	HORIZONTAL SCALE NONE VERTICAL SCALE NONE	BRIDGE FILE 5661 DESIGNATION	7661
DESIGNED:	EC	DRAWN:	BEH	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302		Branch Location FORT WAYNE LOUISVILLE	260-459-1532 502-593-1996	SURVEY BOOK ELECTRONIC	SHEET 68 OF	
CHECKED:	ACE	CHECKED:	EC	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765–423–5602 219–769–2333 317–839–3242	CONTRACT N/A	PROJECT	

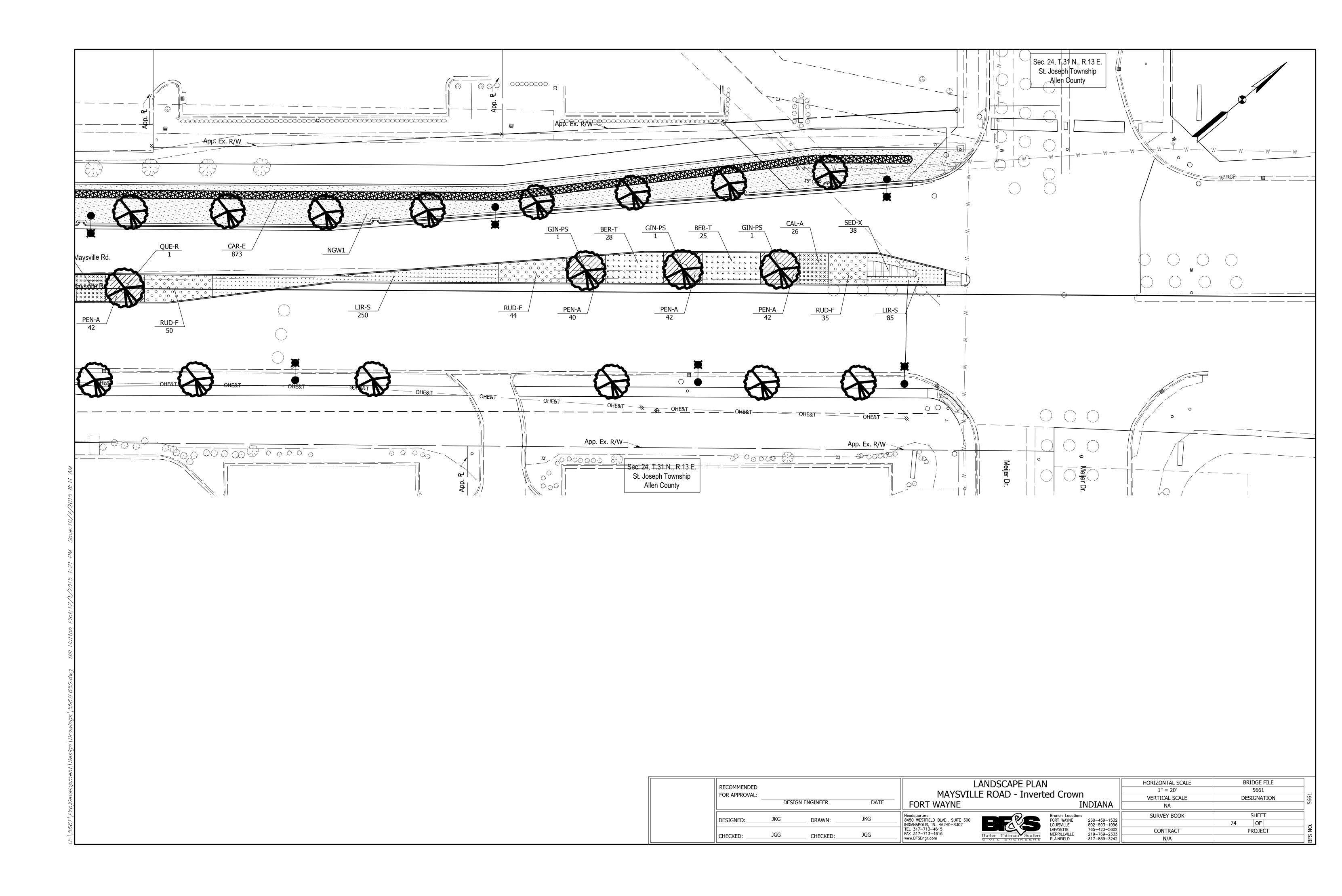












PLANT SCHED	ULE					
SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	NOTES
TREES						
GIN-PS	×	Ginkgo biloba 'Princeton Sentry'	Princeton Sentry Ginkgo	2"	B&B	As Shown
QUE-R	X	Quercus robur x bicolor 'Long'	Regal Prince Oak	2"	B&B	As Shown
<u>SHRUBS</u>						
BER-T	X	Berberis thunbergii 'Concorde'	Concord Barberry	×	Cont.	48" O.C.
SPI-B	×	Spiraea x bumalda 'Goldflame'	Goldflame Spiraea	×	Cont.	48" O.C.
ORNAMENTAL	<u>GRASS</u>					
CAL-A	×	Calamagrostis x acutiflora 'Karl Foerster'	Feather Reed Grass	1 Gal	Cont.	36" O.C.
CAR-E	×	Carex emoryi	Riverbank Tussock Sedge	1 Gal	Cont.	18" O.C.
PAN-V	X	Panicum virgatum 'Cheyenne Sky'	Red Switch Grass	1 Gal	Cont.	36" O.C.
PEN-A	X	Pennisetum alopecuroides 'Little Bunny'	Little Bunny Dwarf Fountain Grass	1 Gal	Cont.	30" O.C.
<u>PERENNIALS</u>						
ASC-T	X	Asclepias tuberosa	Butterfly Weed	×	Cont.	30" O.C.
ECH-P	×	Echinacea purpurea	Purple Coneflower	×	Cont.	30" O.C.
LIR-S	X	Liriope spicata	Lily Turf	X	Cont.	24" O.C.
SED-X	Х	Sedum 'Xenox'	Stonecrop 'Xenox'	X	Cont.	24" O.C.
RUD-F	X	Rudbeckia fulgida 'Goldsturm'	Goldsturm Black Eyed Susan	X	Cont.	36" O.C.

OTHER

TOP SOIL ?? CU. YARDS

SHREDDED HARDWOOD ?? CU. YARDS BARK MULCH

SPADE EDGE ?? L.F.

LANDSCAPE GENERAL NOTES:

- LANDSCAPE ARCHITECT TO INSPECT ALL PLANT LOCATIONS AND PLANT BED EDGES PRIOR TO INSTALLATION. ON-SITE ADJUSTMENTS MAY BE REQUIRED.
- 2. RECONDITION AND SEED/RE-SEED ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES THAT ARE NOT TO RECEIVE OTHER SURFACE TREATMENT
- 3. ALL PLANT BEDS TO RECEIVE 3" MINIMUM OF SHREDDED BARK MULCH (UNLESS OTHERWISE NOTED).
- 4. AVOID INSTALLING TREES AND SHRUBS ON CROWN OF BERMS. VERIFY LOCATIONS OF AND ALIGNMENT OF PLANTS ON BERMS WITH LANDSCAPE ARCHITECT.
- VERIFY DEPTH OF TOPSOIL PRIOR TO PLANT INSTALLATION. REFER TO LANDSCAPE WORK SPECIAL PROVISION FOR TESTING AND DEPTH, PLACEMENT REQUIREMENTS OF TOPSOIL.
- 6. ALL AREAS INCLUDED TO BE SEEDED SHALL BE RECONDITIONED AND PREPARED FOR PLANTING IN ACCORDANCE WITH THE LANDSCAPE WORK SPECIAL PROVISION.

BIOSWALE SEED MIXTURE

"NGW1" 0.76 ACRE TOTAL

50.0%

4.2%

Lolium multiflorum

Phleum pratense

	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE AT MATURITY		SEE SPECIAL PROVISIONS
-GRASSES	(RATE: 40 OZ/AC	CRE)				
	3.00 OZ/ACRE	Calamagrostis canadensis	Blue Joint Grass	2-4 Ft.	SEED	
	2.00 OZ/ACRE	Carex frankii	Frank's Sedge	1-2 Ft.	SEED	
	2.00 OZ/ACRE	Carex granularis	Meadow Sedge	1-2 Ft.	SEED	
	2.00 OZ/ACRE	Carex vulpinoidea	Brown Fox Sedge	2-3 Ft.	SEED	
	3.00 OZ/ACRE	Deschampsia caespitosa	Tufted Hair Grass	1-2 Ft.	SEED	
	14.00 OZ/ACRE	Elymus virginicus	Virginia Wild Rye	2-3 Ft.	SEED	
	1.50 OZ/ACRE	Glyceria striata	Fowl Manna Grass	2-4 Ft.	SEED	
	3.00 OZ/ACRE	Juncus torreyi	Torrey's Rush	1-2 Ft.	SEED	
	0.5 OZ/ACRE	Leersia oryzoides	Rice Cut Grass	2-4 Ft.	SEED	
	9.00 OZ/ACRE	Schizachyrium scoparium	Little Blue Stem	2-3 Ft.	SEED	
- WILDFLOWERS	S (RATE: 14.75 OZ/	ACRE)				SEE SPECIAL PROVISIONS
	14.0%	Asclepias tuberosa	Butterfly Weed	1–3 Ft.	SEED	
	3.5%	Aster ericoides	Heath Aster	1–2 Ft.	SEED	
	10.0%	Echinacea pupurea	Purple Coneflower	3–4 Ft.	SEED	
	21.5%	lris virginica shrevei	Blue Flag Iris	2-3 Ft.	SEED	
	2.0%	Lobelia cardinalis	Cardinal Flower	2–5 Ft.	SEED	
	4.0%	Lobelia siphilitica	Great Blue Lobelia	1-4 Ft.	SEED	
	14.0%	Physostegia virginiana	Obedient Plant	2-3 Ft.	SEED	
	12.0%	Rudbeckia hirta	Black-Eyed Susan	1-3 Ft.	SEED	
	10.5%	Sagittaria latifolia	Common Arrowhead	1-4 Ft.	SEED	
	10.5%	Solidago riddellii	Riddell's Goldenrod	2-3 Ft.	SEED	
	5.0%	Zizia aurea	Golden Alexanders	1–3 Ft.	SEED	
TEMPORARY I	MATRIX 2 0.93 AC	CRE TOTAL (RATE: 460 OZ/ACRE; To Be Seede	d With NGW1)			SEE SPECIAL PROVISIONS
	50.0%	Agrostis alba	Redtop		SEED	
	50.0%	Avena sativa	Seed Oats		SEED	

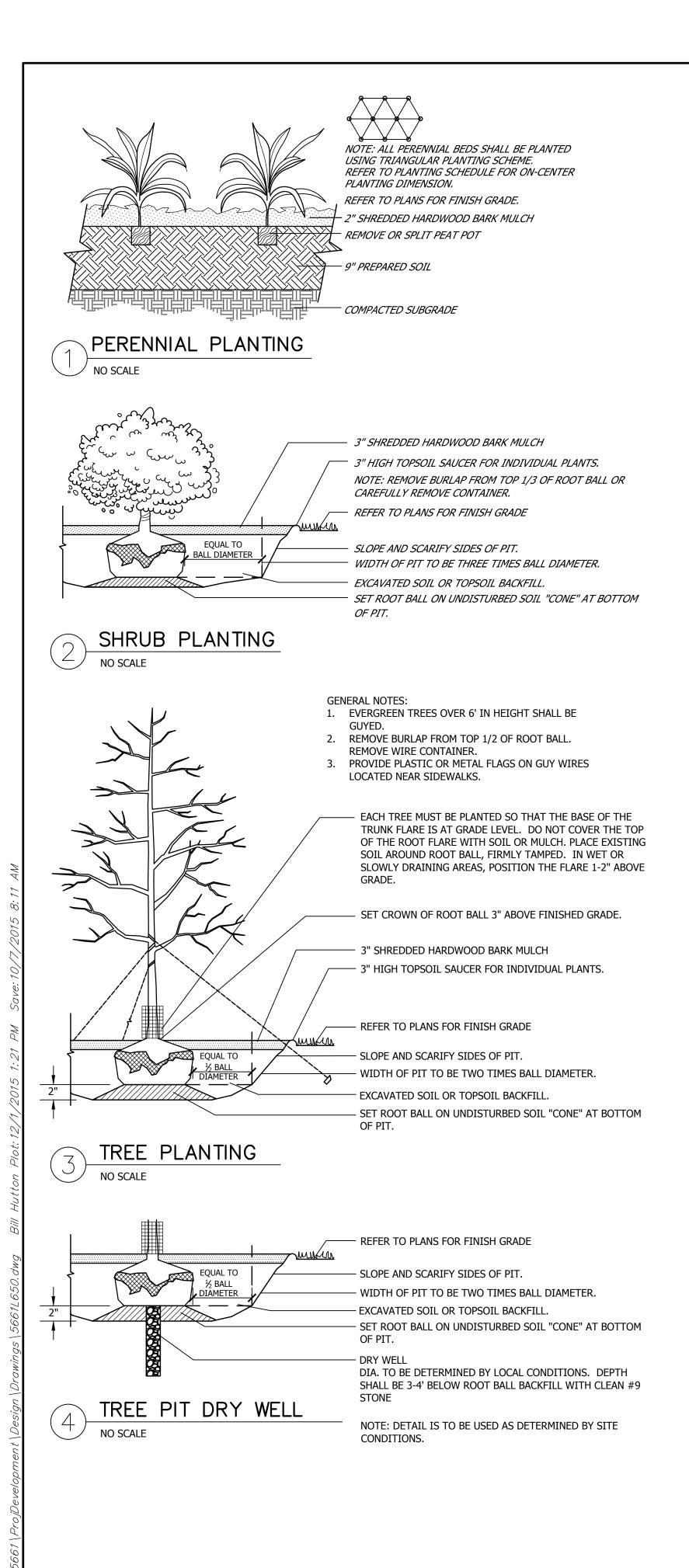
Annual Ryegrass

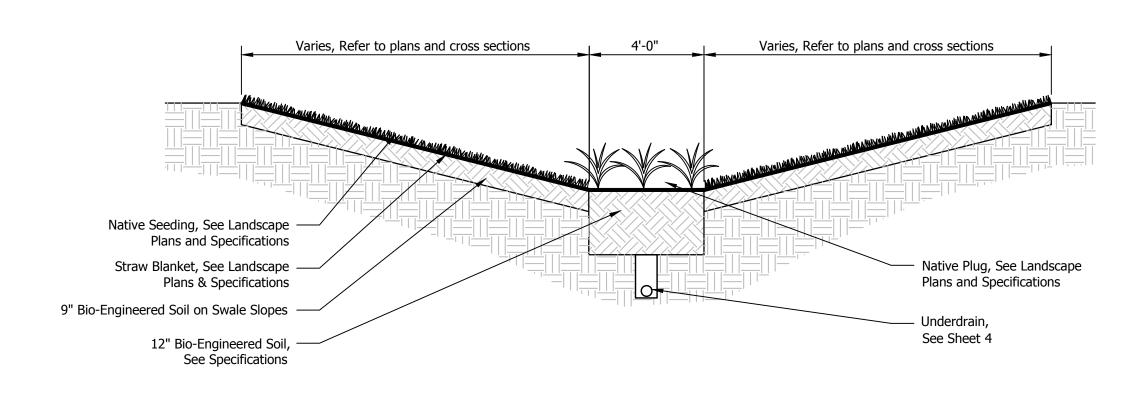
Timothy

SEED

SEED

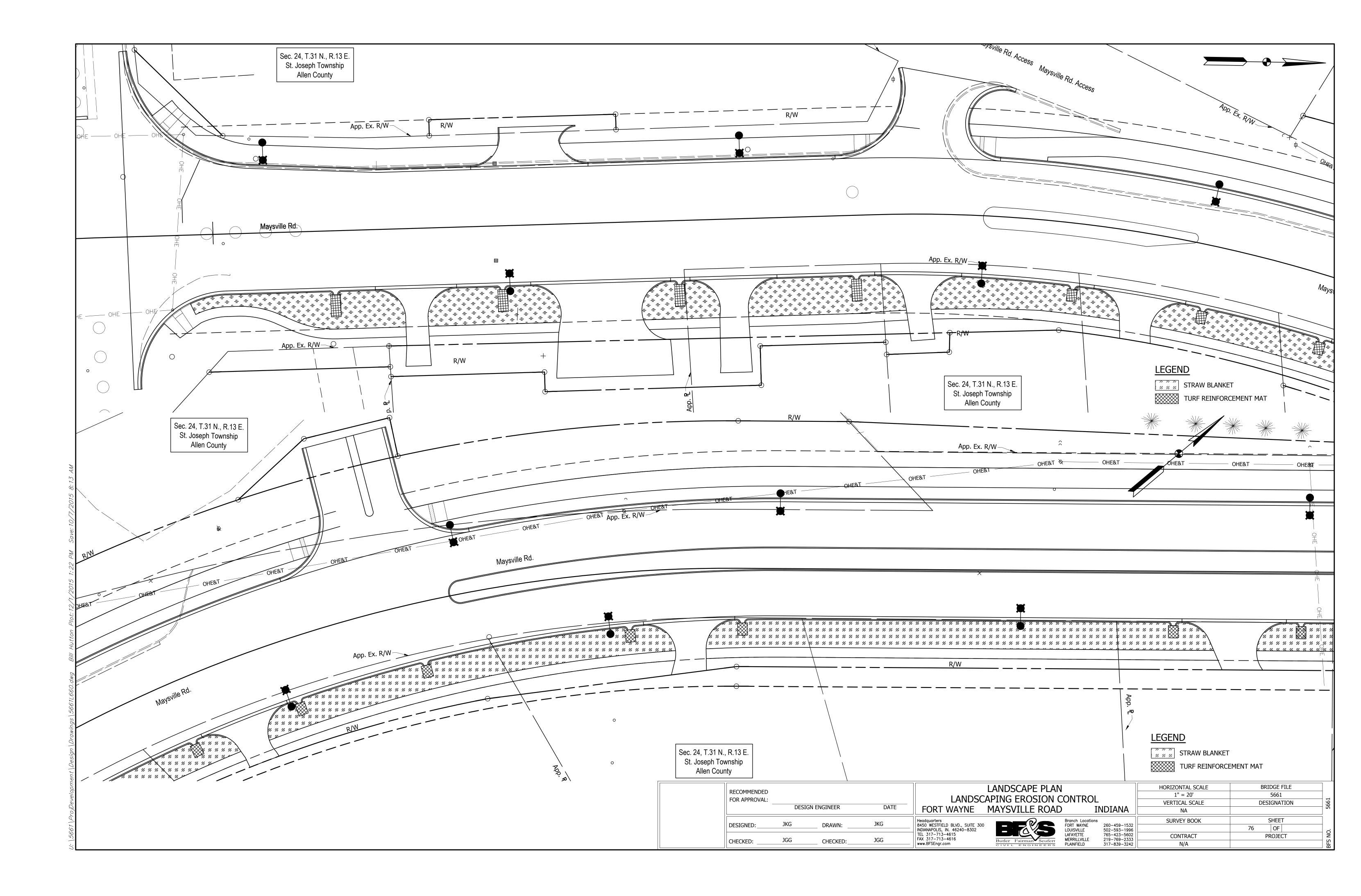
RECOMMENDED FOR APPROVAL:					NDSCAPE SCHEDI LE ROAD - Invert		1	HORIZONTAL SCALE NA VERTICAL SCALE		RIDGE FILE 5661 SIGNATION
	DESIG	N ENGINEER	DATE	FORT WAYNE		I	NDIANA	NA		
DESIGNED:	JKG	DRAWN:	JKG	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302		Branch Locations FORT WAYNE LOUISVILLE	260-459-1532 502-593-1996	SURVEY BOOK	75	SHEET OF
CHECKED:	JGG	CHECKED:	JGG	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765-423-5602 219-769-2333 317-839-3242	CONTRACT N/A		PROJECT

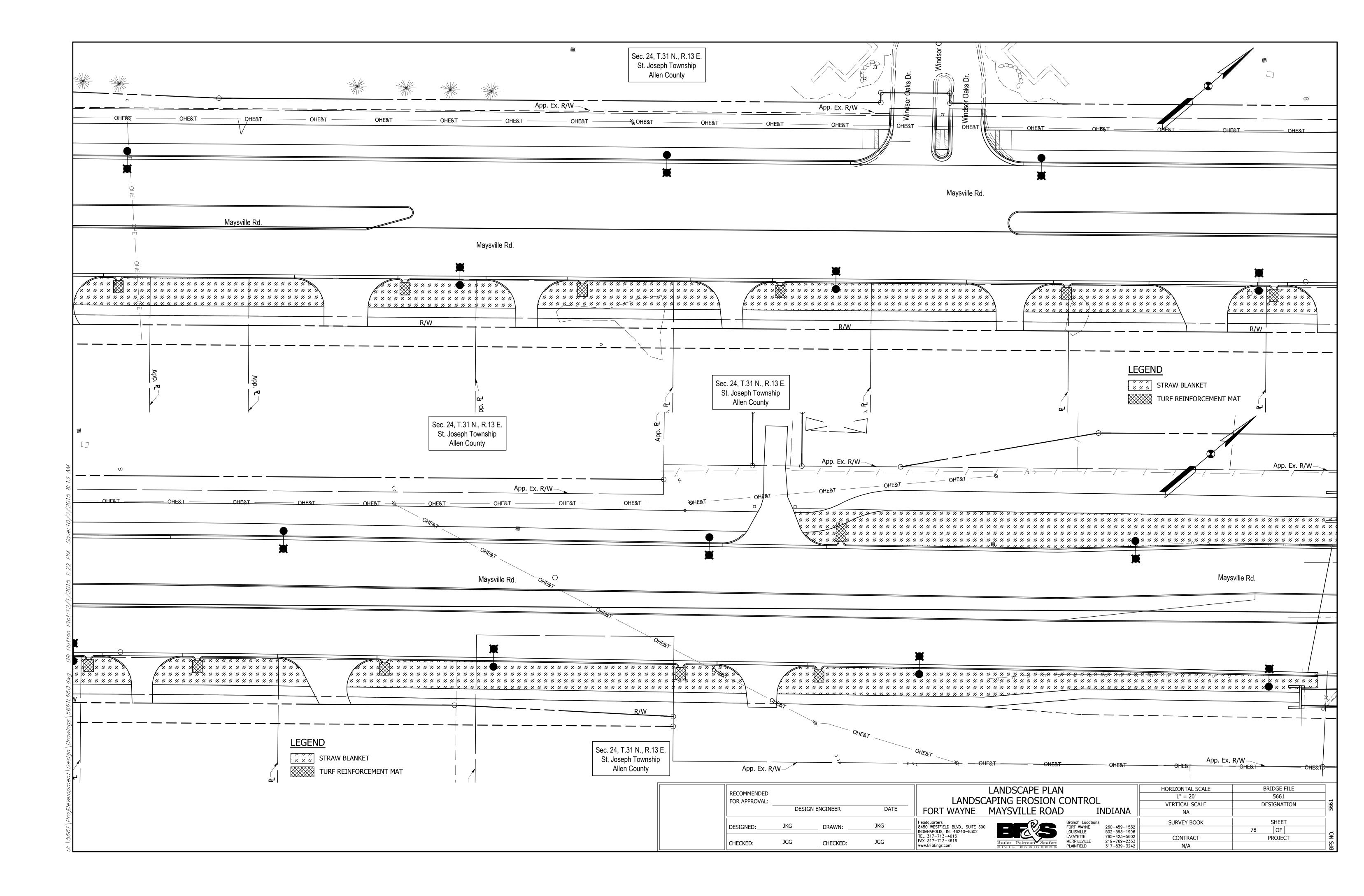


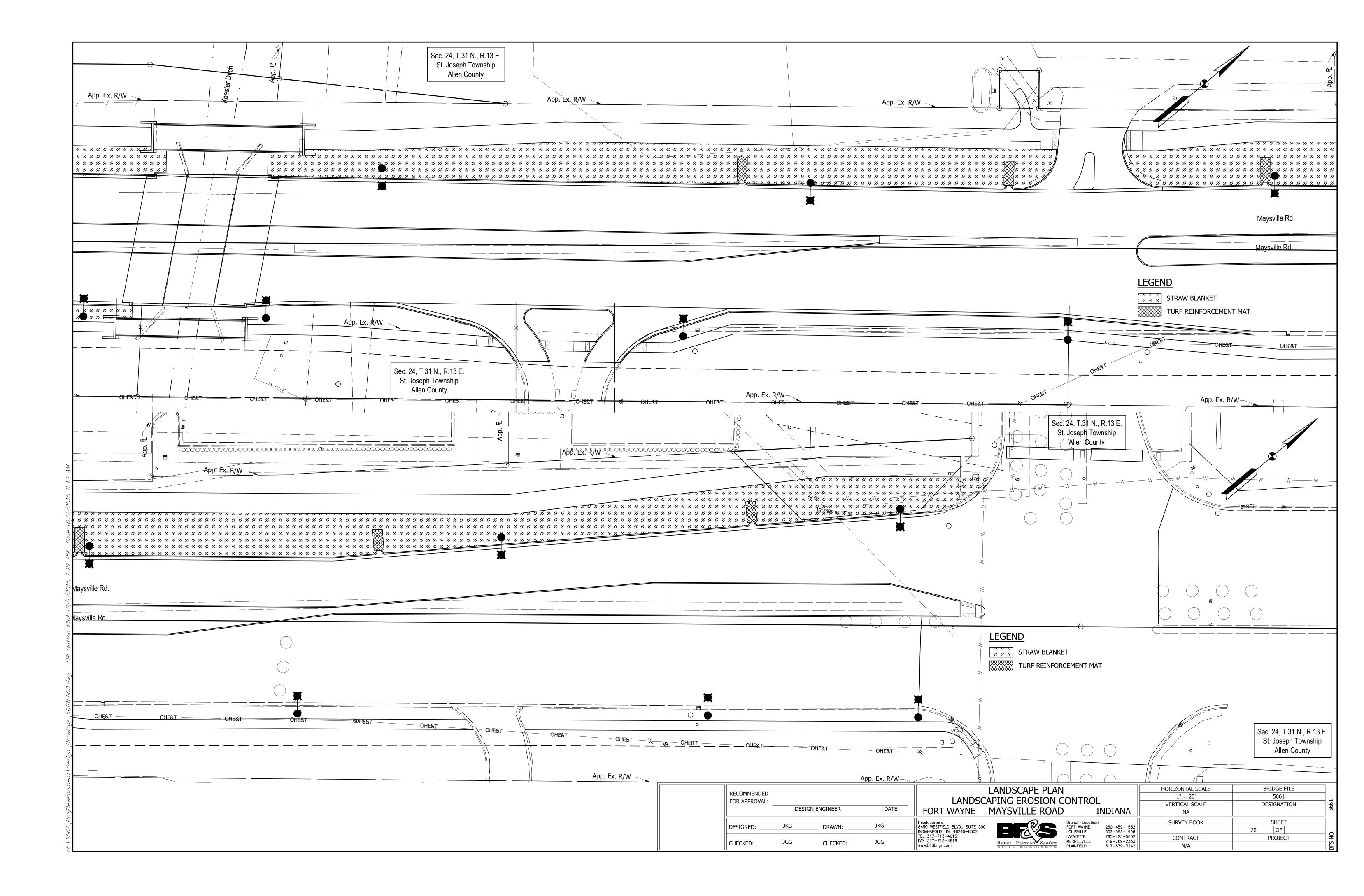


5 BIOSWALE CROSS SECTION
NO SCALE

RECOMMENDED FOR APPROVAL:					NDSCAPE SCHEDU ALK AND RAING			HORIZONTAL SCALE NA	BF	RIDGE FILE 5661	
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	DESIG	IN ENGINEER	DATE	FORT WAYNE			INDIANA	NA			
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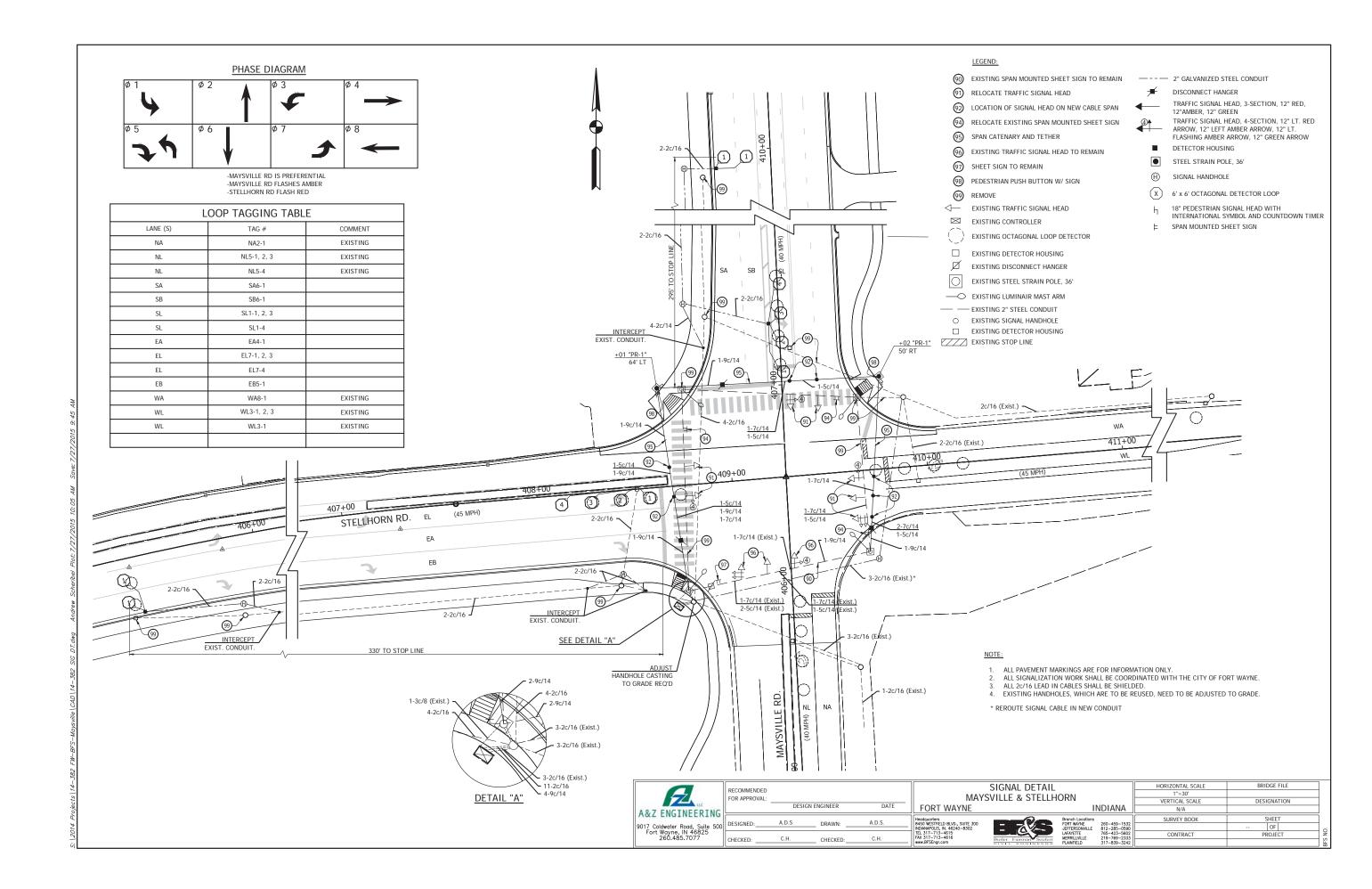


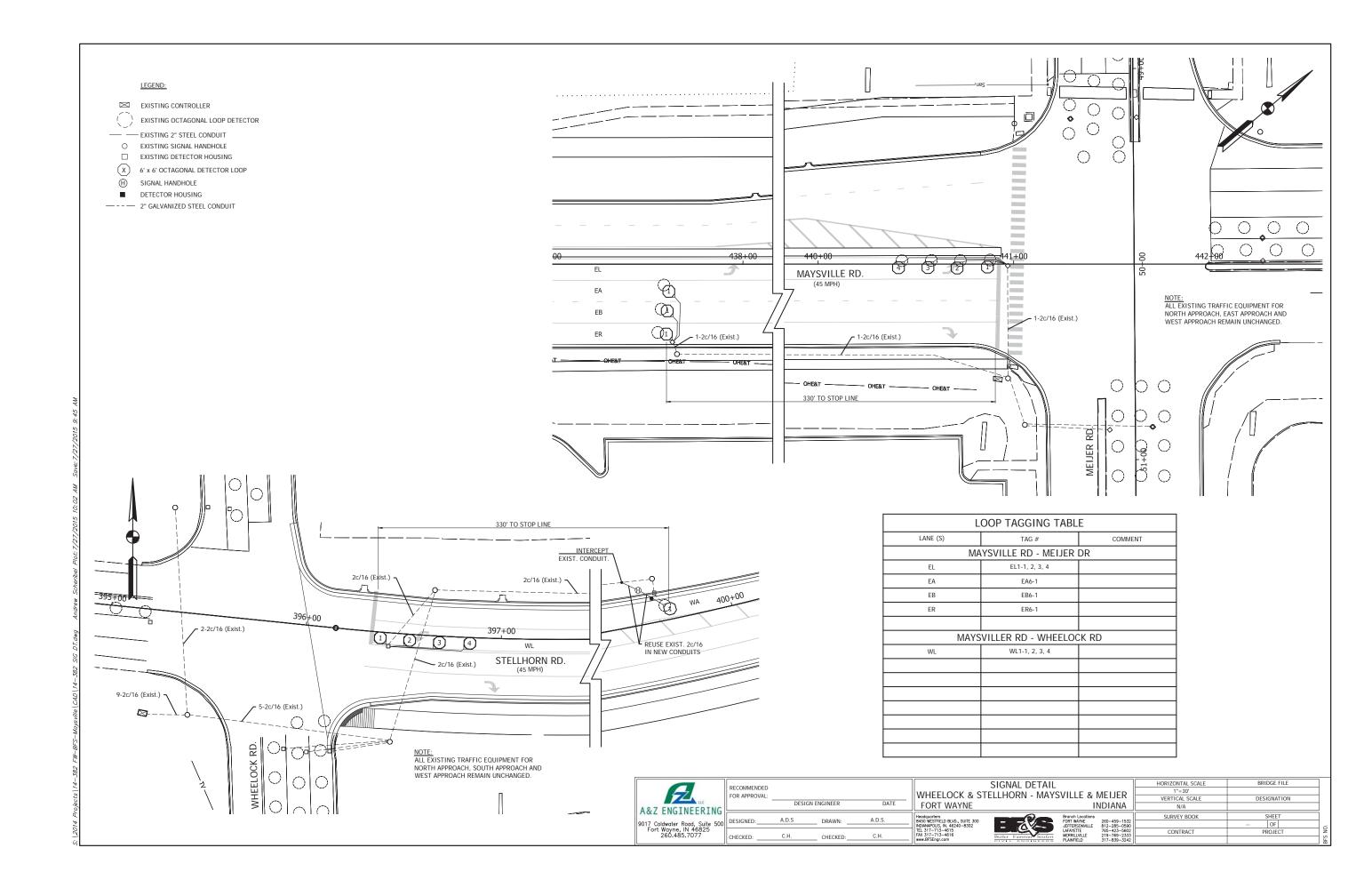


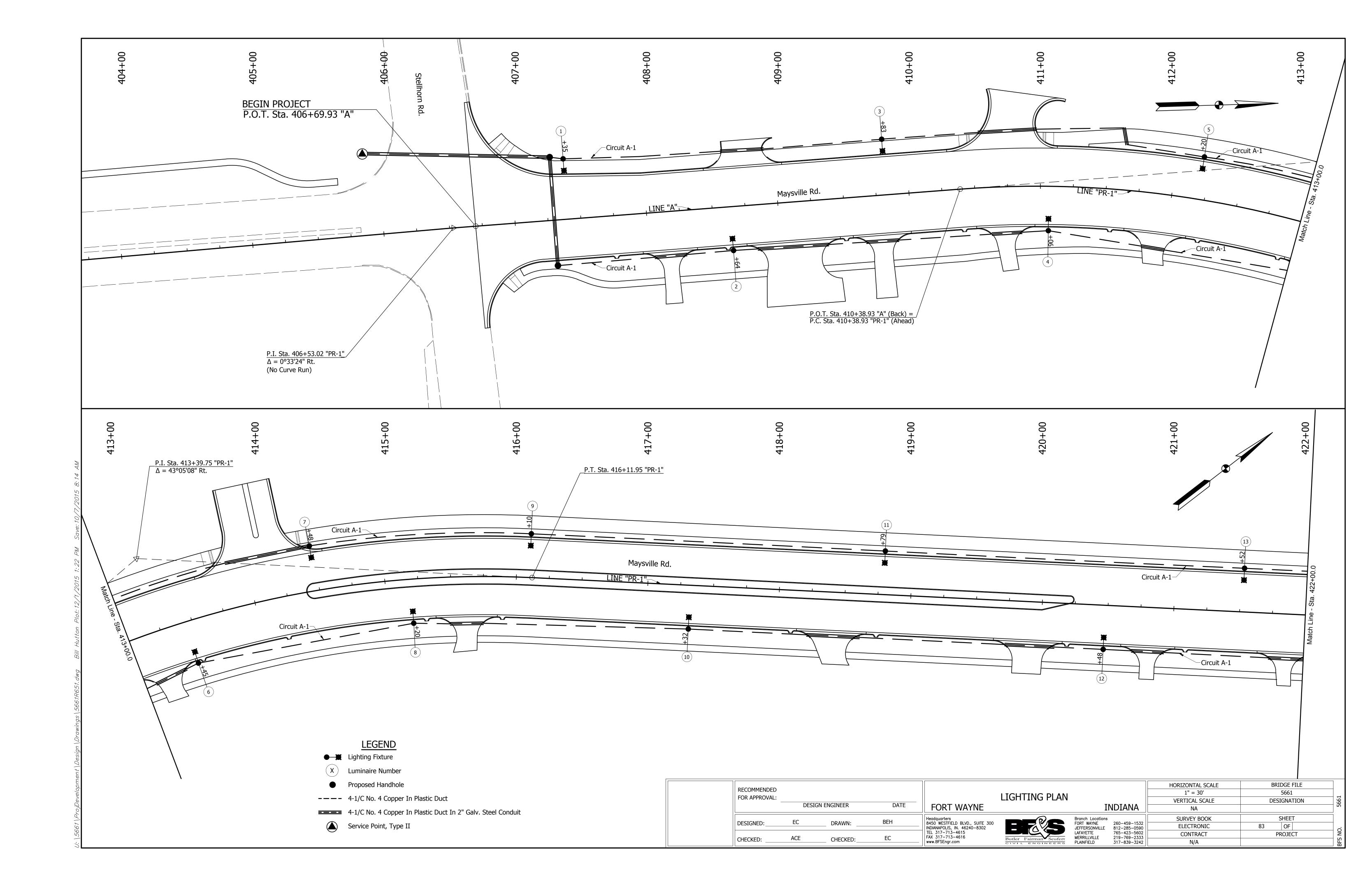


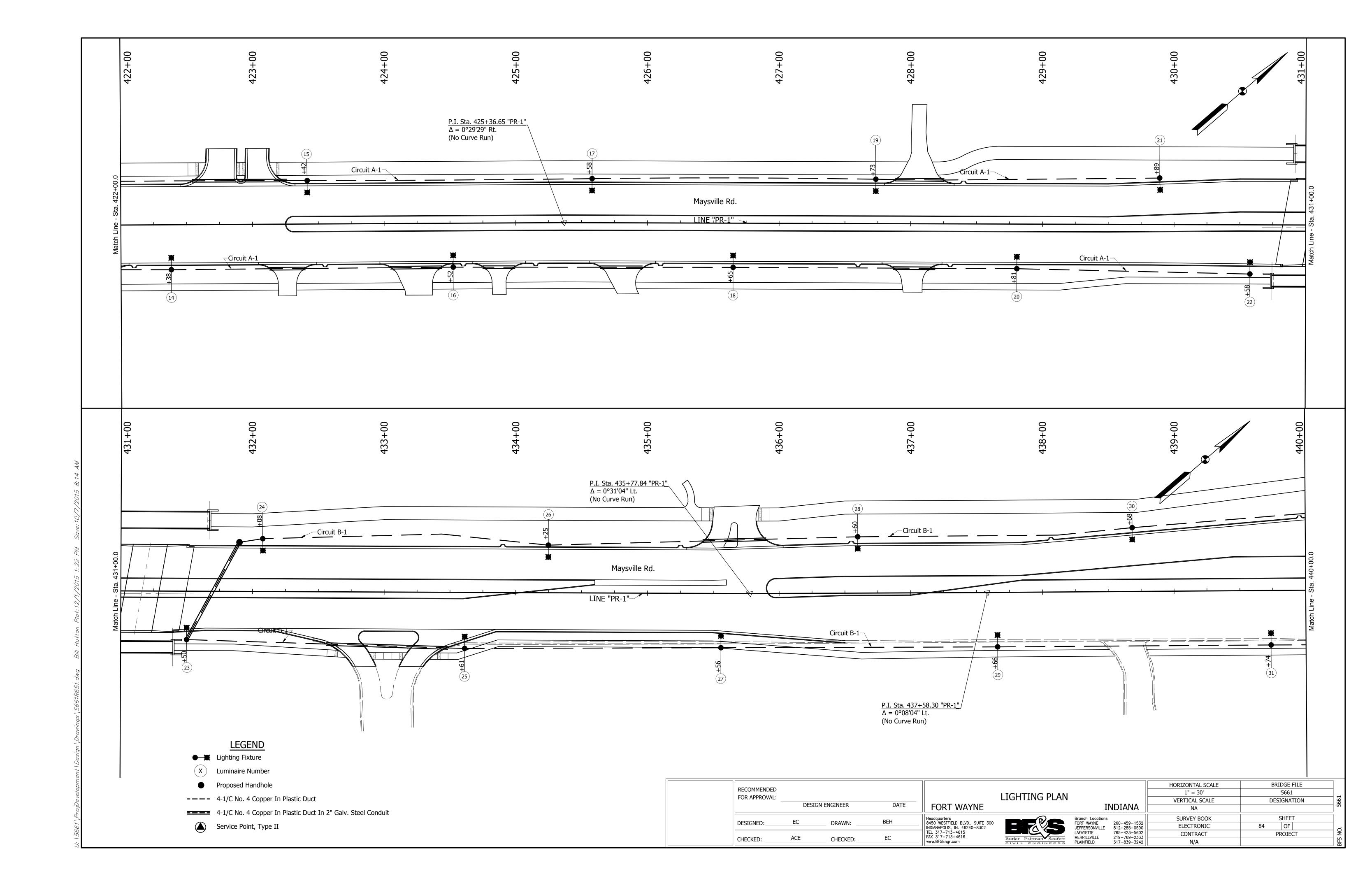
ERC	SION (C	0	N	TROL	TAB	LE
FROM STATION	TO STATION		LOCATION		TEMPORARY SILT FENCE	STRAW BLANKET	TURF REINFORCEMENT MAT (PERMANENT)
406+70 "A"	408+00 "A"	LEFT	MEDIAN	√ RIGHT	LFT.	SYS. 147	SYS. 6.5
						126	6.5
				/			
409+30 A	409+70 "A"			/		67	6.5
409+90 "A"	410+70 "A"			/		149	6.5
410+90 "A"	411+80 "A"			/		145	3.5
412+00 "A"	413+00 "A"			/		146	7
413+30 "A"	415+30 "A"			/		310	10.5
415+75 "A"	418+30 "A"			/		382	7
418+60 "A"	419+70 "A"			/		186	3.5
420+00 "A"	420+75 "A"			/		102	3.5
420+80 "A"	421+70 "A"			/		130	3.5
421+90 "A"	423+15 "A"			/		189	3.5
423+30 "A"	424+20 "A"			/		108	3.5
424+50 "A"	424+75 "A"			/		56	3.5
424+80 "A"	425+70 "A"			/		108	3.5
425+90 "A"	427+95 "A"			/		296	7
428+10 "A"	430+70 "A"			/		328	3.5
428+20 "A"	430+70 "A"	/				504	5
431+30 "A"	435+35 "A"	/				791	13
435+70 "A"	441+00 "A"	/				1113	19
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	TOTAL			I		5383	126

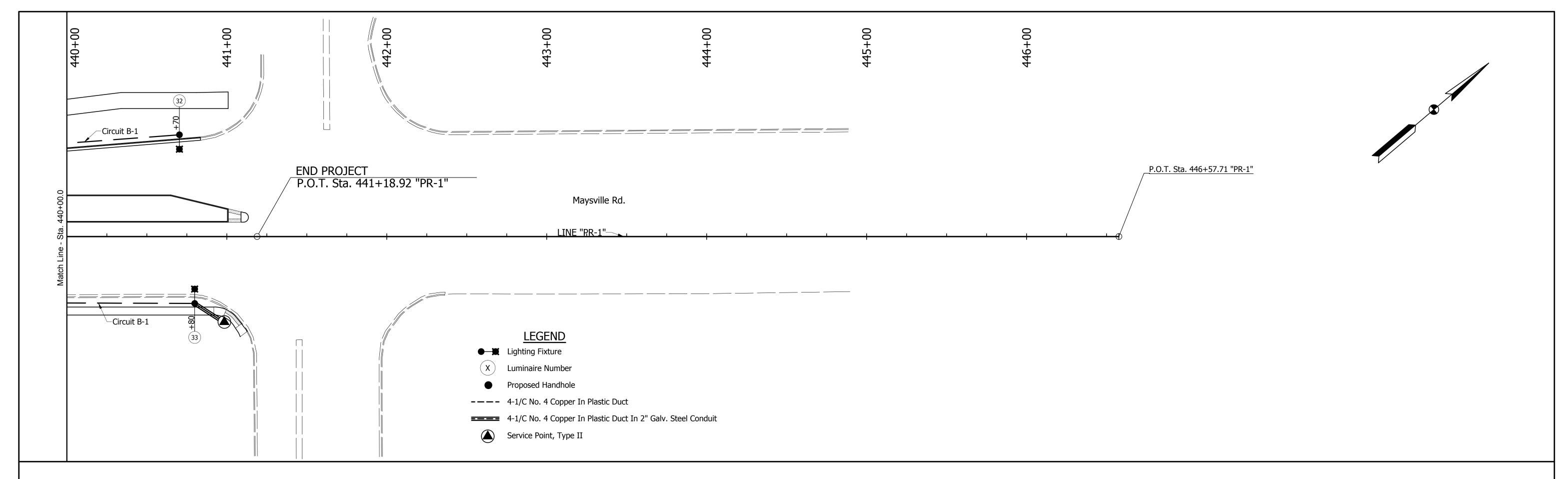
RECOMMENDED FOR APPROVAL:					LANDSCAPE PLAN G EROSION CONT		TAILS	HORIZONTAL SCALE 1" = 20' VERTICAL SCALE	BRIDGE FILE 5661 DESIGNATION	
	DESIGN	ENGINEER	DATE	FORT WAYNE	MAYSVILLE ROAD)	INDIANA	NA NA	D25751W117511	
DESIGNED:	JKG	DRAWN:	JKG	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302		Branch Location FORT WAYNE LOUISVILLE	260-459-1532 502-593-1996	SURVEY BOOK	SHEET 80 OF	
CHECKED:	JGG	_ CHECKED:	JGG	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765–423–5602 219–769–2333 317–839–3242	CONTRACT N/A	PROJECT	BFS NC









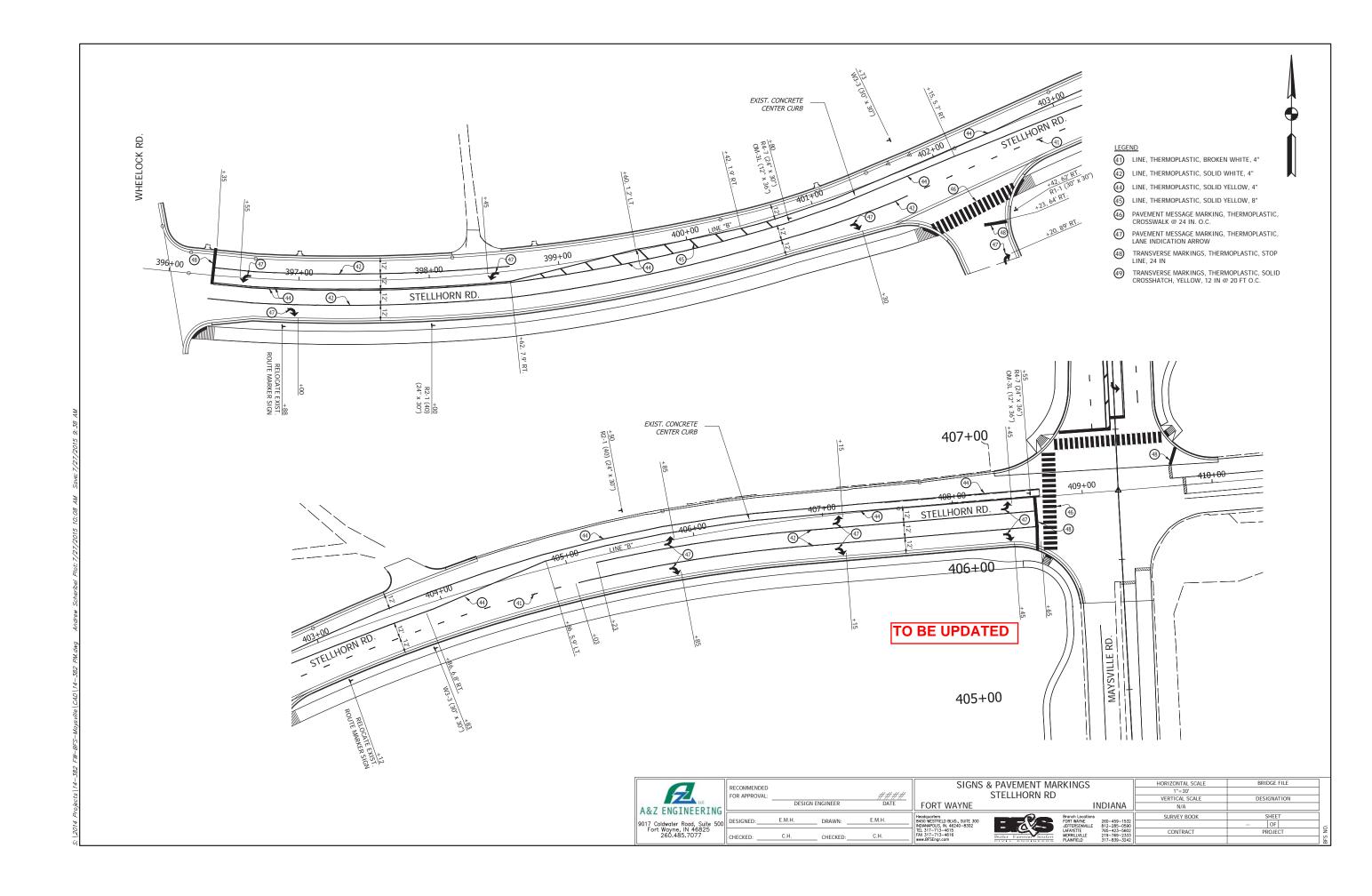


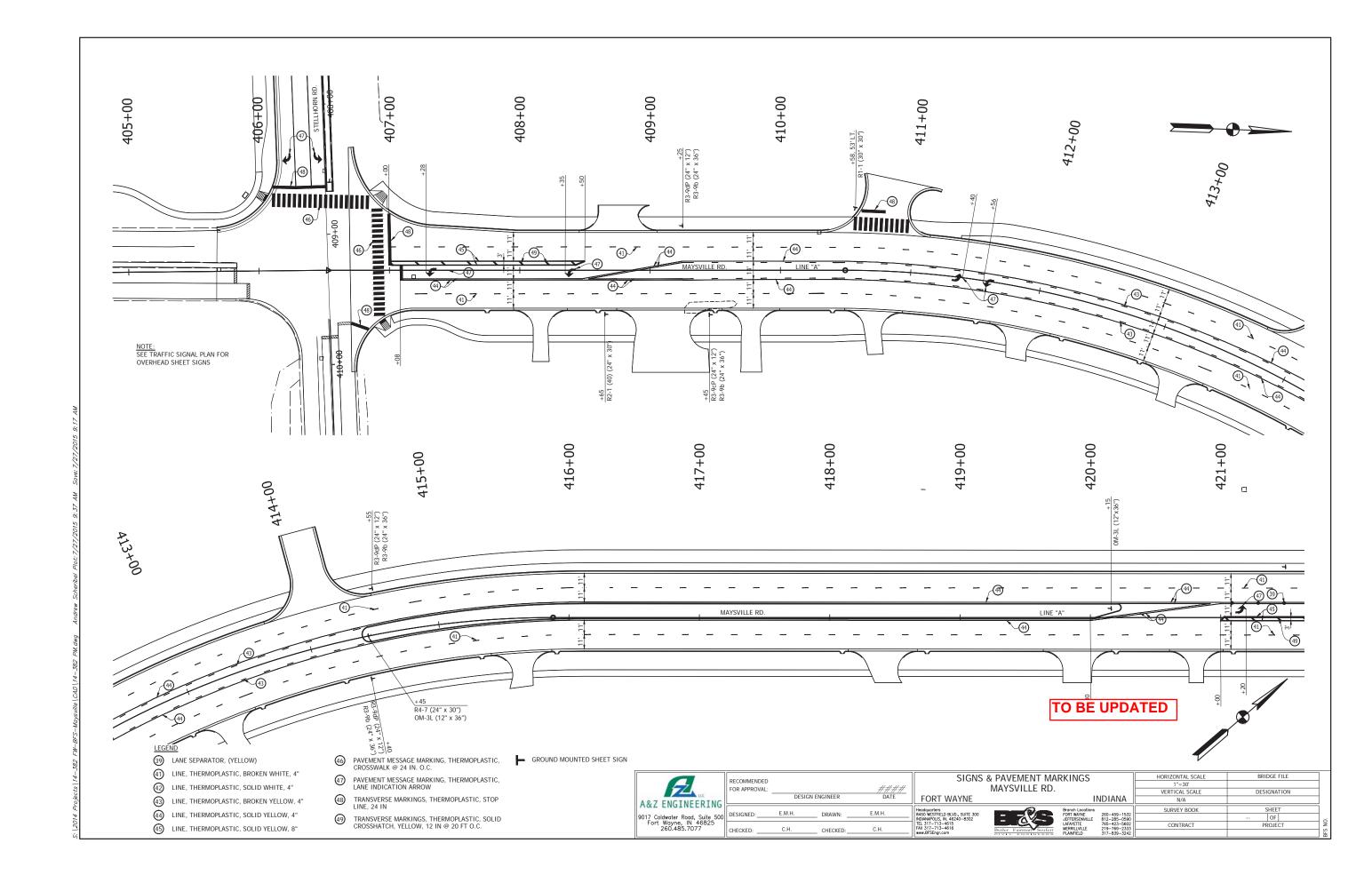
	LIGHTING SUMMARY TABLE																																
			CIRCUIT A-1											CIRCUIT B-1																			
Luminaire No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Circuit Connection	В	R	R	В	В	R	R	В	В	R	R	В	В	R	R	В	В	R	R	В	В	R	В	R	R	В	В	R	R	В	В	R	R
Connection Type	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2	2	2	2	2	1	2
Pole Setback from Face of Curb (ft.)	10.5	2	11	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Effective Mounting Height	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30

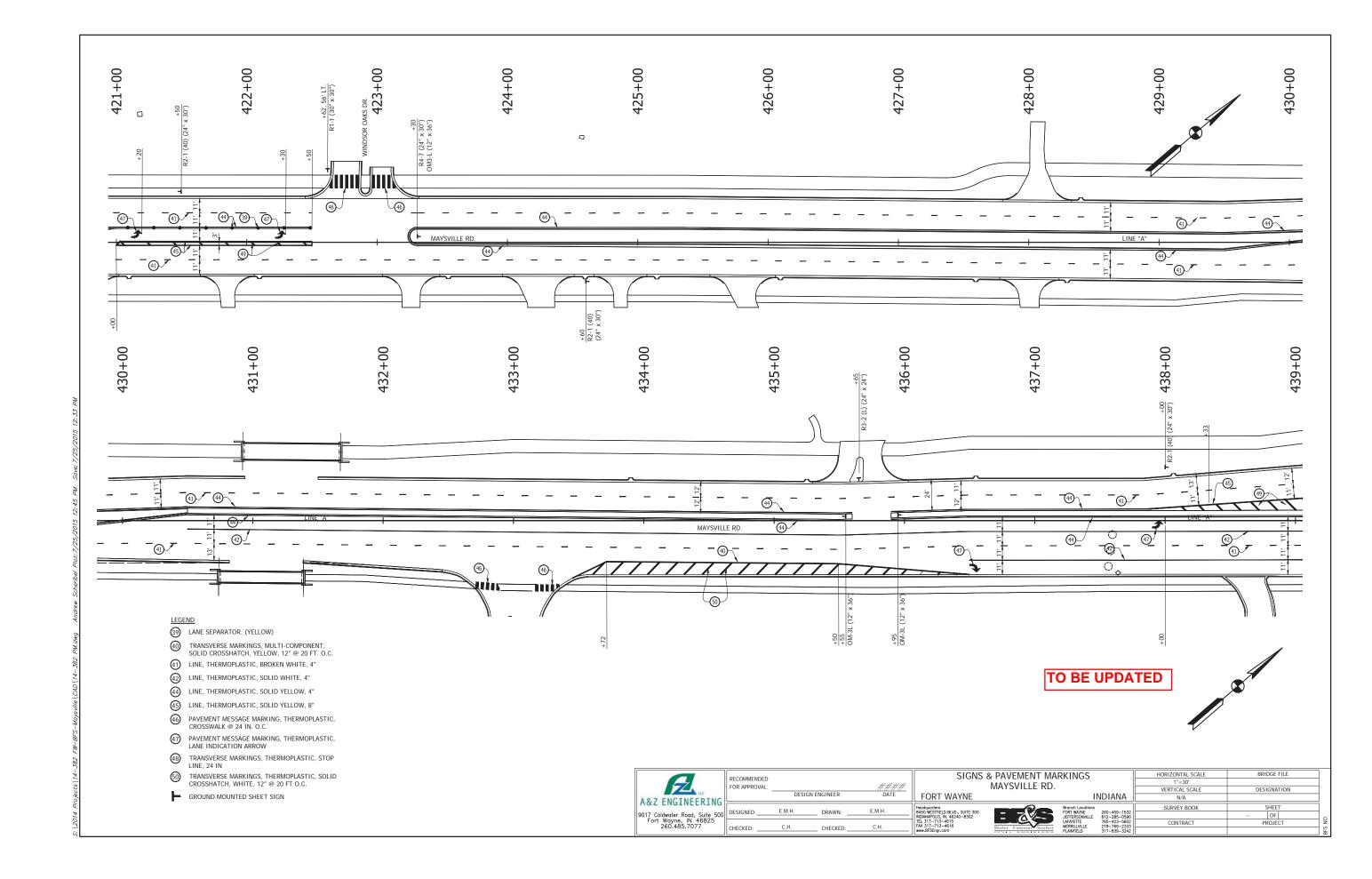
LIGHTIN	NG DATA
Lamp Type	1531RLED-FG-10ARC45T3R
I.E.S. Distribution	Type III
Voltage	120/240 V
Ballast	158 Watts
Initial Lamp Lumen (LL)	12,887
Average Maintained Illuminance (Eh.)	1.1 fc
Lamp Lumen Depreciation Factor (LLD)	0.9
Luminaire Dirt Depreciation Factor (LDD)	0.89
Uniformity Ratio	4:1
Effective Mounting Height	30 FT

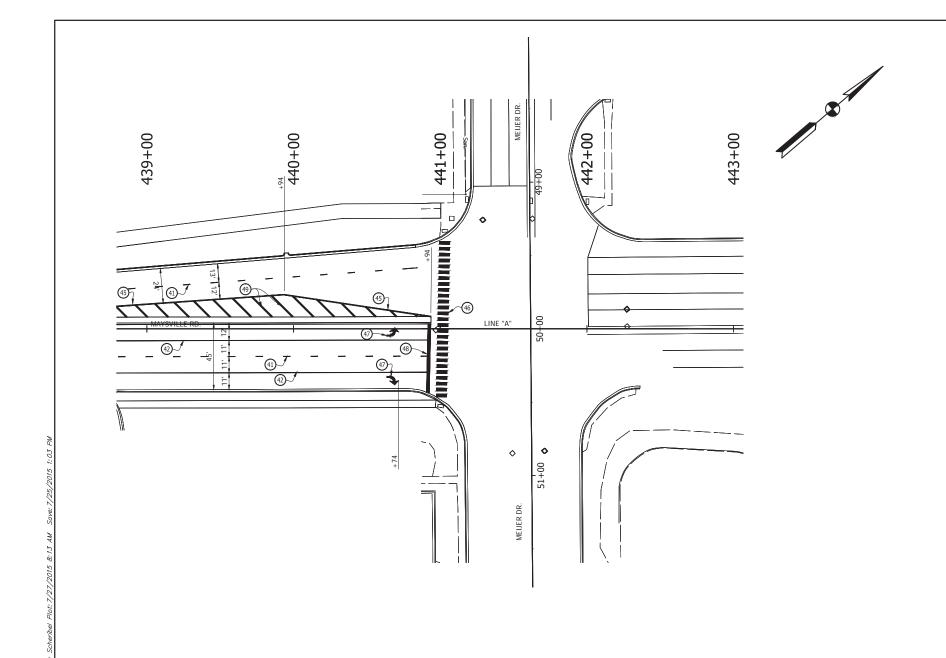
	LIGHTING SERVICE POINT											
Service Point	Main Breaker	Branch Circuit	Computed Branch Circuit Amperage	Branch Circuit Breaker Rating								
1	100 AMP	A-1	14.52 AMP	30 AMP								
1	100 AMP	B-1	7.92 AMP	30 AMP								

RECOMMENDED FOR APPROVAL:	DESIG	N ENGINEER	DATE	FORT WAYNE	LIGHTING PLAN	IN	DIANA	HORIZONTAL SCALE 1" = 30' VERTICAL SCALE NA		RIDGE FILE 5661 SIGNATION	7661
DESIGNED:	EC	DRAWN:	BEH	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302			260-459-1532 812-285-0590	SURVEY BOOK ELECTRONIC	85	SHEET	
CHECKED:	ACE	CHECKED:	EC	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE	765-423-5602 219-769-2333 317-839-3242	CONTRACT N/A	I	PROJECT	









TO BE UPDATED

BRIDGE FILE

- 41) LINE, THERMOPLASTIC, BROKEN WHITE, 4"
- 42 LINE, THERMOPLASTIC, SOLID WHITE, 4"
- 44 LINE, THERMOPLASTIC, SOLID YELLOW, 4"
- 45 LINE, THERMOPLASTIC, SOLID YELLOW, 8"
- PAVEMENT MESSAGE MARKING, THERMOPLASTIC, CROSSWALK @ 24 IN. O.C.
- PAVEMENT MESSAGE MARKING, THERMOPLASTIC, LANE INDICATION ARROW
- TRANSVERSE MARKINGS, THERMOPLASTIC, STOP LINE, 24 IN
- TRANSVERSE MARKINGS, THERMOPLASTIC, SOLID CROSSHATCH, YELLOW, 12 IN @ 20 FT O.C.

	REC
A&Z ENGINEERING	
9017 Coldwater Road, Suite 500	DESI
9017 Coldwater Road, Suite 500 Fort Wayne, IN 46825 260.485.7077	CHE

c	FOR APPROVAL:	DESIGN	ENGINEER	DATE	
00	DESIGNED:	E.M.H	_ DRAWN:	E.M.H.	
	CHECKED:	C.H.	_ CHECKED:	C.H.	1

	II	NDIANA	VERTIC
	Branch Locations FORT WAYNE	260-459-1532	SURVE
- 6	JEFFERSONVILLE LAFAYETTE MERRILLVILLE	812-285-0590 765-423-5602 219-769-2333	CON
Butler Fairman Scufert	PLAINFIELD	317-839-3242	

SIGNS & PAVEMENT MARKINGS MAYSVILLE RD. HORIZONTAL SCALE 1"=30' VERTICAL SCALE DESIGNATION FORT WAYNE

| Headquarters | 8450 WESTRIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302 | TEL 317-713-4616 | FAX 317-713-4616 | www.BFSEngr.com N/A RVEY BOOK SHEET OF PROJECT ONTRACT

			<u>.</u>	•					SUI	Al M	<u>AK Y</u>	OF							PPR		ACI	1 I.	ADL		_	•		<u>.</u>		,		
					SURFA BEYOND R					"A" ACH	MA FOR APPR		ANDS T	EDIATE VO	MATER	IAL FOR M	EDIATE n	HM#	FOR TEMP.	PAVEMI "A"	TMENT	TYDE II	TMENT	ASPHALT MATERIAL FOR	COMPACTED	JOINTS	z	ACHES	CRETE CURB	ROLL	JRB	
OCATION STATION)	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH	NG	- 1 ⊦	COMPACTED GGREGATE BASE HMA	CONCRETE	GF	RADE	EXCAVATION	HMA TYPE FOR APPRO	HMA TYPE		HMA FOR ISI TYPE "A 2, 70, SURI	12.5mn 2, 70, INTERM 19.0mn		i	5, 76, INTERM C19.0m	HMA TYPE	HMA TYPE	HMA TYPE	HMA TYPE SUBGRADE TREA	TYPE IB	SUBGRADE TREA	PRIME COAT	AGGREGATE FOR BASE NO. 53	-1 CONTRACTION	PCCP, 7.5 1	PCCP FOR APPRC 9 IN.	COMBINED CONG & GUTTER COMBINED CONG		CONCRETE C	REMARKS
					AG		 	2 3	CUT FILL	_	LBS. PE 330 22	275		20 275		330		110 440		330	220	20			DEPTH 6 IN.			ī 7	2'-0"			
Line "A"		FEET	FEET FE	ET			%	% %	CYS. CYS.	TONS	TONS TO	IS TONS	TONS TO	ONS TONS	TONS	TONS T	rons T	ONS TONS	S TONS T	ONS 1	TONS SYS	S. SY	'S. SYS.	TONS TONS	SYS. SYS.	LFT	SYS	SYS.	LFT LF	T LFT	LFT	
08+16 Rt.	Mod. Residential	12	41.0 15	5,15			-8.33 -2	2.00 -6.22	2																							
108+75 Lt. 109+10 Rt.	Commercial Mod. Residential	30 40	21.0 15 49.3 15			X	-1.00 -8 -8.33 -2	3.32 2.00 -8.33	;																							
09+77 Rt.	Mod. Residential	14	49.1 15			X	-8.33 -2																									
ine "PR-1"																																
10+75 Rt.	Mod. Residential	12					-8.00 -:																									
10+83 Lt. 11+94 Rt.	Commercial Mod. Residential	32 15	41.4 17. 24.8 15			X	-2.00 5 -8.33 -2																									
13+22 Rt. 14+12 Lt.	Mod. Residential Commercial	16	23.8 15 61.0 30	5,15	X		-8.00 -0 -2.00 -8	0.91																								
15+60 Rt.	Mod. Residential	15	27.6 15	5,15	^		-8.00 -(
18+45 Rt. 19+90 Rt.	Mod. Residential Mod. Residential	22	25.8 15 25.7 15	5,15			-0.93 -0.99																									
20+82 Rt. 21+85 Rt.	Mod. Residential Mod. Residential	11	25.6 15 25.6 15				2.00 -	1.11 0.29																								
122+77 Lt. 123+04 Lt.	Commercial Commercial	20	28.6 5,	,20	Х		-2.00 -4 -1.89	1.00																								
23+26 Rt.	Mod. Residential		24.1 20 25.5 15	5,15			2.05	12																								
124+25 Rt. 124+87 Rt.	Mod. Residential Mod. Residential		25.4 15 25.4 15				4.50 1 2.00 0	43).87																								
125+81 Rt. 128+02 Rt.	Mod. Residential Mod. Residential	16 14	24.9 15 22.9 15				2.00 5 -4.72 -2	5.48 2.00																								
128+06 Lt. 135+67 Lt.	Mod. Residential Commercial	12	60.1 15 32.7 20	5,15	Х		6.00 2 -1.52	2.00 8.33																								
		-																														
				1																												
				_																												

11. | FEE1 | Dec 30 01010 | Decision | Decision | FEE10031 June

RECOMMENDED FOR APPROVAL:					Approach table	<u> </u>		HORIZONTAL SCALE NONE VERTICAL SCALE		SIGNATION	
	DES	IGN ENGINEER	DATE	FORT WAYNE		II	NDIANA	NONE		,10.W.11011	
DESIGNED:	EC	DRAWN:	ВЕН	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS. IN. 46240-8302		Branch Locations FORT WAYNE LOUISVILLE	260-459-1532 502-593-1996	SURVEY BOOK ELECTRONIC	90	SHEET	
CHECKED:	ACE	CHECKED:	EC	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765-423-5602 219-769-2333 317-839-3242	CONTRACT N/A	F	PROJECT	BFS NC

								STRUCTU	RE	DA	TA													
E NUMBER	LOCATION	SS	SIZE	TYPE	MANHOLE, INLET, CATCH	LENGTH	SKEW	FLOWLINE OVER UP DOWN	ICE LIFE	GNATION	pH	. МЕТНОD	UCUTRE	ETMENT PRAP	ETE CLASS " FOR ICTURES	ID SECTION	TEXTILE	GRATED E		SAFETY END SE		EVATION	ECT TO CTURE	REMARKS
STRUCTUR	STATION	LEFT RIGH CROS	IN.	PIPE	BASIN, OR SPECIALTY STRUCTURE	当 FEET	SK	COVER STREAM STREAM FEET ELEV. ELEV.	SERV	SITE DESI	d	BACKFILL	CAS:	SNOT REVI	CONCR STRL	NE EA.	SYS.	TYPE	EA.	SLOPE	EA.	RIM ELE	CONNEC STRUC	REWARNS
	<u>Line "A"</u>																							
3	395+81, 63'	X	40		Adj. Cstng. To Grade			777.40																
5	396+00, 49' 397+49, 65'	X	12	11	Inlet, Type I-B(FW) Adj. Cstng. To Grade	20		777.18 776.83	75	NA	/												3	
6	397+50, 55.7'	X	12	II	Inlet, Type I-B(FW)	6		777.59 777.44	75	NA	7												5	
7	399+57, 68.5'	X			Adj. Cstng. To Grade			777105																
8	399+75, 53.5'	X	12	II	Inlet, Type I-B(FW)	18		778.15 778.05	75	NA	7												7	
9	408+35	X	12	II	Inlet, Type II-C(FW)	58		782.66 782.46		NA	7												10	
10	408+40 409+35, 25'	X	12 12	II	Inlet, Type II-C(FW)	92		782.36 782.00	75 75	NA NA	7												11	
11	409+35, 25		12	11	Manhole, Type I-A(FW)	2/4		780.20 779.30	/5	NA	/												13	
	Line "PR-1"																							
12	3 412+20-25' X 15 II Manhole Type I-Δ(FW) 170 779-20 778-60 75 ΝΔ 7																						13	
13		X	15	II				779.20 778.60 783.25 783.20			7												15 13	
14 15	412+20 414+00, 24'	X	12 15	II	Inlet, Type II-C(FW) Manhole, Type I-A(FW)	189		778.60 778.00	75 75	NA NA	7												17	
16	416+00	X	12	II	Inlet, Type II-C(FW)	52		784.79 784.59	75	NA NA	7												17	
17	416+00, 25'	X	15	II	Manhole, Type I-A(FW)	321		777.90 776.90	75	NA	7												20	
18	416+00	X	12	II	Inlet, Type II-C(FW)	2		782.95 782.90	75	NA	7												17	
19	419+25	X	12	II	Inlet, Type II-C(FW)	52		781.21 781.01	75	NA	7												20	
20	419+25, 25' 419+25	X	18 12	II	Manhole, Type I-A(FW) Inlet, Type II-C(FW)	311		776.80 775.80 779.80 779.75	75 75	NA NA	7												23	
22	422+40	X ^	12	II	Inlet, Type II-C(FW)	52		779.22 779.02	75	NA NA	7												23	
23	422+40, 25'	X	18	II	Manhole, Type I-A(FW)	306		775.70 774.50	75	NA	7												26	
24	422+40	X	12	II	Inlet, Type II-C(FW)	2		777.84 777.80	75	NA	7												23	
25	425+50	X	12	II	Inlet, Type II-C(FW)	52		775.82 775.62	75	NA	7												26	
26 27	425+50, 25' 425+50	X	24 12	II	Manhole, Type I-A(FW) Inlet, Type II-C(FW)	216		773.00 772.10 775.82 775.77	75 75	NA NA	7												29 26	
28	427+70	X ^	12	II	Inlet, Type II-C(FW)	52		773.24 773.04	75	NA NA	7												29	
29	427+70, 25'	X	24	II	Manhole, Type I-A(FW)	133		771.00 770.40	75	NA	7												31	
30	427+70	X	12	II	Inlet, Type II-C(FW)	2		771.32 771.30	75	NA	7												29	
31	429+07, 25'	X	24	II	Manhole, Type I-A(FW)	142		768.75 768.20	75	NA	7												34	
32	430+50 430+50	X	12 12	II	Inlet, Type II-C(FW) Inlet, Type II-C(FW)	63 20		769.70 769.50 769.35 769.25	75 75	NA NA	7												33 34	
34	430+50, 53'	X	24	II	Manhole, Type I-A(FW)	36		768.10 767.95	75	NA NA	7												Outlet	
35	430+72	X	12	II	Inlet, Type II-C(FW)	19		769.89 769.80	75	NA	7												32	
36	430+72	X	12	II	Inlet, Type II-C(FW)	19		769.89 769.80	75	NA	7												34	
37	431+50	X	12	II	Inlet, Type II-C(FW)	66		769.77 769.55	75	NA	7												39	
38	431+70 432+19	X	12 12	II	Inlet, Type II-C(FW) Inlet, Type II-C(FW)	46 19		769.84 769.65 769.45 769.40		NA NA	7												40	
40	432+19, 52'	X	18	II	Manhole, Type I-A(FW)	88		766.90 766.00		NA NA	7												Outlet	
41	432+19	X	12	II	Inlet, Type II-C(FW)	27		769.55 769.45		NA	7												42	
42	432+19, 64'	X	18	II	Manhole, Type I-A(FW)	70		765.70 765.00		NA	7												Outlet	
43	433+80	X	12	II	Inlet, Type II-C(FW)	13		771.34 771.25		NA	7												44	
44 45	433+80, 50' 436+00, 50'	X	18 18	II	Manhole, Type I-A(FW) Manhole, Type I-A(FW)	158 216		769.00 767.43 770.65 769.12		NA NA	7												42 44	
46	436+15	X	12	II	Inlet, Type II-C(FW)	17		773.51 773.40		NA NA	7												45	
47	438+00	X	12	II	Inlet, Type II-C(FW)	13		775 774.9	75	NA	7												48	
48	438+00, 54'	X	15	II	Manhole, Type I-A(FW)	196		773.22 770.75		NA	7												45	
49	440+06, 65'	X	15	II	Manhole, Type I-A(FW)	202		775.42 773.32	75	NA	7												48	

RECOMMENDED								HORIZONTAL SCALE NONE	BRIDGE FILE 5661
FOR APPROVAL:	DESIGN	ENGINEER	DATE	STRI FORT WAYNE	UCTURE DATA TA	VERTICAL SCALE NONE	DESIGNATION		
DESIGNED:	EC	DRAWN:	ВЕН	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302	BE S	Branch Location FORT WAYNE LOUISVILLE	ons 260-459-1532 502-593-1996	SURVEY BOOK ELECTRONIC	SHEET 91 OF
CHECKED:	ACE	CHECKED:	EC	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765-423-5602 219-769-2333 317-839-3242	CONTRACT N/A	PROJECT

Design | Drawings | 5661R961.dwg Bill Hutton Plot: 12/1/2015 1:23 PM Save: 10/7/2015 8:14 AM

	STRUCTURE DATA FLOWLINE																	
STRUCTURE NUMBER	LOCATION	LEFT RIGHT CROSS	SIZE IN.	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE	LENGTH	FLOWLINE COVER UP DOWN STREAM FEET ELEV. ELEV.	SERVICE LIFE	SITE DESIGNATION	Hd	BACKFILL METHOD STRUCUTRE SA BACKFILL	REVETMENT RIPRAP CONCRETE CLASS STRUCTURES	PIPE END SECTION	GEOTEXTILE	GRATED BOX END SAFETY MET SECTION END SECTION TYPE EA. SLOPE E	RIMELEV	CONNECT TO STRUCTURE	REMARKS
100 101	Line "A" 408+05, 45' 408+30, 45'	X	8 8	II	Inlet, Type III-B(FW) Inlet, Type III-B(FW)	22 102	780.86 780.78 780.78 780.48	75 75	NA NA	7 7							101 102	
102 103 104	409+35, 45' 409+90, 45' <u>Line "PR-1"</u> 412+10, 40'	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	12 8 12	II	Inlet, Type III-B(FW) Inlet, Type III-B(FW) Inlet, Type III-B(FW)	17 52 11	780.38 780.30 780.98 780.80 783.31 783.25		NA NA NA	7							11 102 13 14	
105 106 107 108	414+00, 40' 415+45, 40' 415+90, 40' 418+20, 40'	X X X X X	12 8 12 8	II II II	Inlet, Type III-B(FW) Inlet, Type III-B(FW) Inlet, Type III-B(FW) Inlet, Type III-B(FW)	13 40 10 112	784.36 784.30 783.34 783.20 783.10 783.00 781.34 781.00	75	NA NA NA	7 7 7 7							15 107 18 109	
109 110 111 112	419+35, 40' 420+68, 40' 421+70, 40' 422+30, 40'	X X X	12 8 8 12	II II II	Inlet, Type III-B(FW) Inlet, Type III-B(FW) Inlet, Type III-B(FW) Inlet, Type III-B(FW)	11 99 57 11	780.00 779.90 779.77 779.45 779.25 779.03 778.00 777.94	75 75 75	NA NA NA	7 7 7							21 111 112 24	
113 114 115	423+10, 40' 424+05, 40' 424+75, 40'	X X X	8 8 8	II II	Inlet, Type III-B(FW) Inlet, Type III-B(FW) Inlet, Type III-B(FW)	77 67 82	778.24 778.00 777.27 777.05 776.28 776.03	75 75 75	NA NA NA	7 7 7							112 115 116 27	
116 117 118	425+60, 40' 427+80, 40' 429+07, 40'	X X X	12 12 12	II II	Inlet, Type III-B(FW) Inlet, Type III-B(FW) Inlet, Type III-B(FW)	11 11 11	775.95 775.90 771.37 771.32 770.54 770.48	75	NA NA NA	7 7							30 31	

RECOMMENDED FOR APPROVAL:				STRI	UCTURE DATA TA	\RI F		HORIZONTAL SCALE NONE		RIDGE FILE 5661	
	DESIG	GN ENGINEER	DATE		OCTORE DIVITALIA		NIDTANIA	VERTICAL SCALE	DE	ESIGNATION	
			27.1.2	FORT WAYNE			INDIANA	NONE			
DECICNED.	EC	DD AVA/NI.	BEH	Headquarters		Branch Locations		SURVEY BOOK		SHEET	
DESIGNED:	LC	DRAWN:	DEIT	8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302		FORT WAYNE LOUISVILLE	260-459-1532 502-593-1996	ELECTRONIC	92	OF	
CUECUED.	ACE	CHECKED	FC	TEL 317-713-4615 FAX 317-713-4616		LAFAYETTE MERRILLVILLE	765-423-5602 219-769-2333	CONTRACT		PROJECT	
CHECKED:	ACL	CHECKED:		www.BFSEngr.com	Butler Fairman Seufert	PLAINFIELD	317-839-3242	N/A			BFS

	AR	Y	EROSION (CONTROL				TABLE		
FROM STATION	TO STATION	L	OCATION	N	PERIMETER PROTECTION	DRAINAGE BARRIER AT SWALE	STRAW BALE DITCH CHECK	CHECK DAM, TRAVERSABLE	CULVERT PIPE PROTECTION	SEDIMENT TRAP	DROP INLET PROTECTION	CURB INLET PROTECTION	REMARKS
		LEFT	MEDIAN	RIGHT									
Line "PR-	1" Cont'd				LFT	LFT	LFT	LFT	EA.	CYS	EA.	EA.	
429+07	1 Conta			Х							1		
430+50		Х		Х								2	
430+72		Х		Χ								2	
430+92	100 =0	X			150					X			
431+21 431+46	432+72 435+28	X		Х	156 384							1	
431+50	1 33+20			Х	304							1	
431+60		X		,,						X		_	
431+70		X										1	
432+19		Х		Х								2	
433+32	437+00			Χ	374								
433+80	420 : 75	X			204						1	1	
435+87 436+00	438+75	X			291						1		
436+00		X									1	1	
436+67				X								1	
438+00		Х									1	1	
438+80		Х						Х					
438+82	441+13			Χ	235								
438+69				X								1	
440+97				Х								1	
<u>Line</u>	"B"												
396+05	398+24	Х			223								
396+21				Χ								1	Exst. Inlet
396+23	401+85			Χ	591								
396+67				X							1		
396+68				X								1	
398+00 398+50	403+60	Х		X	516							1	
398+55	103 1 00	X			310				1				
399+98				Χ					_		1		Exst. Inlet
401+78				Х							1		Exst. Inlet
402+43	408+51			Χ	592								
403+97	404+35	X			40								
404+40 404+46				X							1	1	
404+75		Х		^							1	1	Exst. Inlet
405+74		X		Х								2	Exst. Inlet Lt.
405+99		Х									1		Exst. Inlet
407+19		Х										1	Exst. Inlet
408+04				Χ								1	

RECOMMENDED FOR APPROVAL:	DESIG	GN ENGINEER	DATE	EROS FORT WAYNE	SION CONTROL T		INDIANA	HORIZONTAL SCALE NONE VERTICAL SCALE NONE	BRIDGE FILE 5661 DESIGNATION	7661
DESIGNED:	EC	DRAWN:	ВЕН	Headquarters 8450 WESTFIELD BLVD., SUITE 300 INDIANAPOLIS, IN. 46240-8302		Branch Location FORT WAYNE LOUISVILLE	s 260-459-1532 502-593-1996	SURVEY BOOK ELECTRONIC	SHEET 93 OF	
CHECKED:	ACE	CHECKED:	EC	TEL 317-713-4615 FAX 317-713-4616 www.BFSEngr.com	Butler Fairman Seufert	LAFAYETTE MERRILLVILLE PLAINFIELD	765–423–5602 219–769–2333 317–839–3242	CONTRACT	PROJECT	

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