

U.S. 36 FORCEMAIN REPLACEMENT

FALL CREEK REGIONAL WASTE DISTRICT - PENDLETON, INDIANA



FCRWD MEMBERS

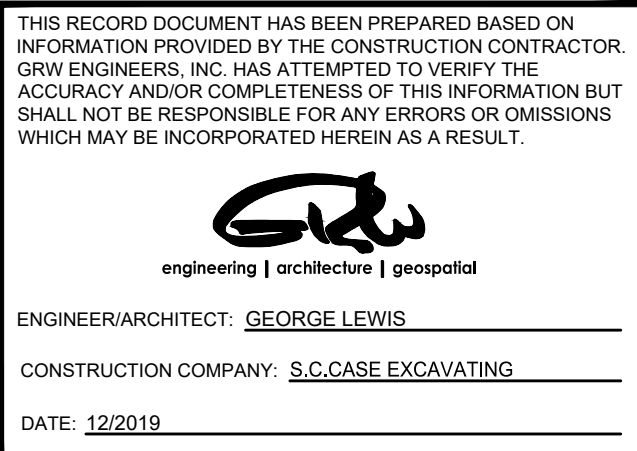
MARK A. JABLONSKI	- PRESIDENT
MICHELLE W. PATISHALL	- VICE PRESIDENT
GREGORY L. VALENTINE	- TREASURER
DAVID K. PADGETT	- SECRETARY
STEPHEN J. BILL	- DEPUTY SECRETARY/TREASURER
TIMOTHY E. GREEN	- BOARD MEMBER
KURT L. KAHL	- BOARD MEMBER
JACK C. WEIST	- BOARD MEMBER
ALBERT B. STEWART	- BOARD MEMBER
TERESA HUTTON	- GENERAL MANAGER
STEVE UNGER	- ATTORNEY



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This document, originally issued, sealed, and signed by Joseph P. Tierney, Indiana Professional Engineer, No. 19300407, on 7/2/2018, shall not be used in lieu of a certified document.



This document, originally issued, sealed, and signed by George W. Lewis, Indiana Professional Engineer, No. 10403303, on 7/2/2018, shall not be used in lieu of a certified document.



SCALE: 1" = 2,000'

PLAN SET IS FULL SCALE ON 24"X36"
AND HALF SCALE ON 12"X18"

FALL CREEK REGIONAL WASTE DISTRICT
DISTRICT OFFICE
9378 COUNTY ROAD SOUTH 650 WEST
PENDLETON, INDIANA 46064

JOSEPH P. TIERNEY, P.E.
INDIANA REG. NO. 19300407

DATE: 7/2/2018

GEORGE W. LEWIS, P.E.
INDIANA REG. NO. 10403303

DATE: 7/2/2018

JULY 2018

GRW PROJECT NO. 4635
SRF PROJECT NO. WW 16 07 48 03

RECORD DRAWINGS

PLOTTED BY: Johnson

PRINTED: 12/18/2019 @ 4:44PM

FILE NAME: G:\4635-FCRWD-US 38\Working Drawings\AutoCAD\4635-G-01.dwg


GENERAL NOTES

THE FOLLOWING GENERAL NOTES ARE APPLICABLE TO THE ENTIRE SET OF PLANS, AND ARE NOT SHOWN ON EACH INDIVIDUAL SHEET. HOWEVER, THIS DOES NOT RELIEVE THE CONTRACTOR OF ANY RESPONSIBILITY FOR THESE ITEMS IN ALL AREAS.

GENERAL NOTES

- THE UTILITIES AND THEIR LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND VERIFY ALL UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING UTILITY WORK, INCLUDING POLE RELOCATION, AS REQUIRED TO MEET THE PROJECT SCHEDULE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO AVOID EXISTING UTILITIES AND PERFORM ANY REQUIRED REPAIRS. IN ADDITION TO ALL UTILITY LINES, THE CONTRACTOR SHALL AVOID AND REPAIR ANY DAMAGE TO BURIED FIBER OPTIC CABLE, FIELD DRAINAGE TILES, AND PRIVATE IRRIGATION SYSTEMS. THE CONTRACTOR SHALL NOTIFY THE OWNER WHEN UTILITIES OR OTHER SUBSURFACE LINES ARE DAMAGED.
- PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF OVERHEAD OBSTRUCTIONS, ESPECIALLY OVERHEAD ELECTRIC LINES.
- THE CONTRACTOR IS RESPONSIBLE FOR RELOCATING, ADJUSTING, AND/OR HOLDING ANY UTILITY LINE AND/OR ASSOCIATED SERVICE POLE, OR DOWN GUY AT HIS OWN EXPENSE. HE SHALL ALSO BE RESPONSIBLE TO CONTACT ANY UTILITY OWNER AS NECESSARY TO RESOLVE ALL UTILITY CONFLICTS INCURRED DURING THE COMPLETION OF HIS CONSTRUCTION OPERATIONS
- UNLESS OTHERWISE NOTED, CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DISTURBANCE, DAMAGE, OR REMOVAL OF EXISTING TREES/VEGETATION WITHIN CONSTRUCTION LIMITS, INCLUDING CANOPIES, TRUNKS, AND ROOTS. IF DAMAGE OR REMOVAL IS NON-AVOIDABLE, CONTRACTOR SHALL OBTAIN APPROVAL FROM OWNER PRIOR TO INSTALLATION WITHIN AFFECTED AREA.
- ALL DISTURBED GRASS AREAS SHALL BE RESTORED WITH TOPSOIL, SEED MIX AND STRAW AS PER SPECIFICATIONS SECTION 02920. ALL DISTURBED AREAS SHALL BE RESTORED TO EQUAL TO OR BETTER THAN ORIGINAL CONDITIONS. RESTORATION SHALL BE PERFORMED TO THE SATISFACTION OF THE OWNER, THE ENGINEER, OR THEIR REPRESENTATIVES.
- ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL APPLICABLE CODES, SPECIFICATIONS, LOCAL ORDINANCES, INDUSTRY STANDARDS, AND UTILITY COMPANY REGULATIONS.
- HORIZONTAL OR VERTICAL BENDS, WHERE NOTED ON THE DRAWINGS, ARE PROVIDED FOR CLARIFICATION PURPOSES ONLY, AND ARE NOT ALL-INCLUSIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING QUANTITY, LOCATION, AND ORIENTATION OF BENDS AND OFFSETS ALONG FORCE MAIN ROUTE TO MAINTAIN ALIGNMENT, MINIMUM DEPTH OF COVER AND MINIMUM REQUIRED CLEARANCES FROM EXISTING AND PROPOSED UTILITIES. AS WELL AS MINIMUM PIPE BENDING RADIUS AND JOINT DEFLECTION REQUIREMENTS FOR THE PIPE AND FITTINGS BEING USED.
- CONTRACTOR SHALL CLEAN STREETS OF CONSTRUCTION DEBRIS DAILY TO THE SATISFACTION OF THE OWNER AND ENGINEER. CONTRACTOR SHALL FURTHER ENSURE THAT AT LEAST ONE LANE OF TRAFFIC IS OPEN AT ALL TIMES DURING CONSTRUCTION ALONG ROADWAYS UNLESS THE CONTRACTOR HAS WRITTEN APPROVAL AND AN APPROVED TRAFFIC MAINTENANCE PLAN. CONTRACTOR SHALL NOT CLOSE ANY LANE OF A STATE HIGHWAY WITHOUT INDOT APPROVAL.
- CONTRACTOR SHALL NOTIFY OWNER, ENGINEER, LAW ENFORCEMENT & EMERGENCY SERVICES, SCHOOL DISTRICT, TRASH PICK-UP SERVICE, AND AFFECTED RESIDENTS 48 HOURS PRIOR TO TEMPORARILY CLOSING ANY LANES OF TRAFFIC, INCLUDING PRIVATE DRIVEWAYS. PRIVATE DRIVEWAYS TO BE DISTURBED AND REPAIRED SHALL NOT BE SHUT DOWN LONGER THAN 8 HOURS. TRAFFIC SHALL BE BARRICADED FROM DRIVEWAY OR DRIVEWAY SHALL BE STEEL PLATE SPANNED TO ALLOW FOR MINIMUM CURING TIME. COMPLY WITH CITY REQUIREMENTS TO RECEIVE PERMIT APPROVAL FOR ALL WORK WITHIN CITY RIGHT-OF-WAY.
- STREET LINES AND PROPERTY LINES SHOWN ON THIS PLAN ARE NOT THE RESULT OF DEED RESEARCH BUT TO BE CONSIDERED APPROXIMATE AND FOR REFERENCE ONLY.
- LIMITS OF CONSTRUCTION SHALL BE MAINTAINED WITHIN RIGHT-OF-WAY, DENOTED EASEMENTS AND PERMITTED AREAS. THE CONTRACTOR SHALL INSURE THAT CONSTRUCTION DOES NOT DAMAGE ADJACENT PUBLIC OR PRIVATE PROPERTY. MAIN LINE AND TEMPORARY EASEMENTS ARE SHOWN ON THE DRAWINGS. OTHER TEMPORARY EASEMENTS, IF NECESSARY, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

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ENGINEER/ARCHITECT: GEORGE LEWIS

CONSTRUCTION COMPANY: S.C.CASE EXCAVATING

DATE: 12/2019

UTILITIES

ELECTRIC
 TOWN OF PENDLETON
 765-648-6480
 DUKE ENERGY
 1-800-521-2232

GAS
 VECTREN ENERGY
 1-800-227-1376

CABLE/PHONE/INTERNET
 COMCAST
 317-774-3384

AT&T DISTRIBUTION
 260-358-4507

FRONTIER
 1-855-870-5635

ROADS
 TOWN OF PENDLETON: 765-646-9240
 INDOT: ANDREA THRONEBURG (317) 467-3938

SEWER
 FALL CREEK REGIONAL WASTE DISTRICT
 765-778-7544

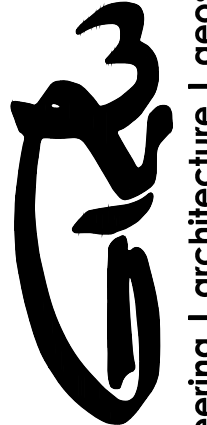
DRAWING INDEX	
SHEET NUMBER	SHEET TITLE
GENERAL	
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G-02	SYMBOLS LEGEND
CIVIL	
C-01	SURVEY CONTROL
C-02	PLAN AND PROFILE; LINE "FM-1"
C-03	PLAN AND PROFILE; LINE "FM-1"
C-04	PLAN AND PROFILE; LINE "FM-1"
C-05	PLAN AND PROFILE; LINE "FM-1"
C-06	PLAN AND PROFILE; LINE "FM-1"
C-07	PLAN AND PROFILE; LINE "FM-1"
C-08	PLAN AND PROFILE; LINE "FM-1"
C-09	PLAN AND PROFILE; LINE "FM-2" & "FM-3"
C-10	STANDARD DETAILS
C-11	STANDARD DETAILS
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C-15	PLAN; LINE "FM-4"
C-16	PLAN; LINE "FM-4"
C-17	PLAN; LINE "FM-4"

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GRW PROJECT NO. 4635

CLIENT PROJECT NO. --

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DRAWING INDEX
 AND GENERAL NOTES
 US 36 FORCEMAIN REPLACEMENT
 TOWN OF PENDLETON, INDIANA

REVISIONS				DESIGNED:	GWL
NO.	DESCRIPTION	DATE	BY		
				FORNAN	JRD
					REVIEWED: GWL
					APPROVED: GWL
SCALE CHECK: _____				THIS MARK SHOULD MEASURE EXACTLY 1" WHEN PLOTTED	

DATE:

JULY 2018

SCALE:







1"=30'

SHEET NO.

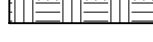
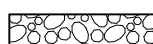

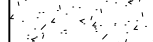
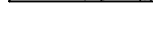
ABBREVIATIONS

ABAND	ANCHOR BOLT	HB	HOSE BIBB	PO	PUSH ON
ABS	ABANDONED	HCS	HOLLOW CORE SLAB	POL	POLISH
ACoust	ABSOLUTE	HD	HEAD, HEAVY DUTY	POS	POSITION
ADD	ACOUSTICAL	HDN	HARDEN	PREFAB	PREFABRICATED
ADDL	ADDENDUM	HDW	HARDWARE	PRESS	PRESSURE
ADM	ADDITIONAL	HDWL	HEADWALL	PRI	PRIMARY
AFF	ADMINISTRATION	HGR	HANGER	PS	PUMP STATION
AGG	ABOVE FINISH FLOOR	HM	HOLLOW METAL	PSF	POUNDS PER SQUARE FOOT
AHR	AGGREGATE	HOL	HOLLOW	PSI	POUNDS PER SQUARE INCH
AL	ANCHOR	HORIZ	HORIZONTAL	PSIG	POUNDS PER SQUARE INCH GAUGE
ALT	ALUMINUM	HP	HORSEPOWER	PT	POINT
ALT	ALTERNATE	HPT	HIGH POINT	PTD	PAINTED
APPROX	APPROXIMATE	HRT	HOOR	PVC	POLYVINYL CHLORIDE
ARCH	ARCHITECTURAL	HT	HEIGHT	PWR	POWER
ASB	ASBESTOS	HTR	HEATER		
AUX	AUXILIARY	HVY	HEAVY	QT	QUART
AVG	AVERAGE	HW	HOT WATER	QTY	QUANTITY
AWG	AMERICAN WIRE GAGE	HWL	HIGH WATER LEVEL		
		HWY	HIGHWAY		
BC	BOLT CIRCLE	HYD	HYDRAULIC	RAN	RANGE
BD	BOARD			RAD	RADIUS
BETW	BETWEEN	IAS	INTERCHANGE ACTIVATED SLUDGE	RAS	RETURN ACTIVATED SLUDGE
BFLY	BUTTERFLY	IASFM	INTERCHANGE ACTIVATED SLUDGE	RASFM	RETURN ACTIVATED SLUDGE
BHP	BHP HORSEPOWER				FORCE MAIN
BIT	BITUMINOUS	ID	INSIDE DIAMETER	RASFMA	RETURN ACTIVATED SLUDGE
BL	BASE LINE, BUILDING LINE	IFM	INFLUENT FORCE MAIN		FORCE MAIN ALTERNATE
BLDG	BUILDING	IFMA	INFLUENT FORCE MAIN ALTERNATE	RCPT	RECEPTACLE
BLK	BLOCK	ILLUM	ILLUMINATE	RD	ROOF DRAIN
BM	BENCH MARK, BEAM	ILLUS	ILLUSTRATE	RDCR	REDUCER
BOT	BOTTOM	IN	INCH	RECD	RECEIVED
BP	BASE PLATE	INCR	INCREASER	REF	REFERENCE
BRG	BEARING	INFL	INFLUENT	REFG	REFRIGERATOR
BSMT	BASEMENT	INSUL	INSULATION	REINF	REINFORCE
BTU	BRITISH THERMAL UNIT	INT	INTERIOR	REM	REMAINDER
BW	BUILT UP	INV	INVERT	REPL	REPLACE
BW	BOTH WAYS	ITI	INTERCHANGE TANK INFLUENT	REQD	REQUIRED
BYP	BYPASS			RESIL	RESILIENT
				REV	REVISION
		JT	JOINT	RJ	RESTRAINED JOINT
C	CENTIGRADE	JCT	JUNCTION	RM	ROOM
CAP	CAPACITY			RND	ROUND
CB	CATCH BASIN	KG	KILOGRAM	RPM	REVOLUTIONS PER MINUTE
CE	CLARIFIER EFFLUENT	KM	KILOMETER		
CER	CERAMIC	KV	KILOVOLT	S	SOUTH
CFM	CUBIC FEET PER MINUTE	KVA	KILOVOLT - AMPERE	SC	SCUM
CFS	CUBIC FEET PER	KVAH	KILOVOLT - AMPERE HOUR	SCFM	SCUM FORCE MAIN
CHK	CHECK	KW	KILOWATT	SCH	SCHEDULE
CHKR	CHECKERED	KWH	KILOWATT HOUR	SEC	SECOND
CI	CLARIFIER INFLUENT			SECT	SECTION
CIP	CAST IRON PIPE	L	LEFT, LONG	SEQ	SEQUENCE
CJ	CONSTRUCTION JOINT	LAB	LABORATORY	SFT	SHAFT
CL	CENTER LINE	LAM	LAMINATE	SHD	SHIELD
CLG	CEILING	LBS	POUNDS	SHT	SHEET
CLO	CLOSET	LDG	LOADING	SIM	SIMILAR
CLR	CLEAR	LF	LINEAR FOOT	SK	SKETCH
CMU	CONCRETE MASONRY UNIT	LG	LENGTH	SOL	SOLENOID
CO	COMPANY	LH	LEFT HAND	SPCS	SPACES
COL	COLUMN	LL	LIVE LOAD	SPEC	SPECIFICATIONS
CONC	CONCRETE	LLH	LONG LEG HORIZONTAL	SP GR	SPECIFIC GRAVITY
CONSTR	CONSTRUCTION	LLV	LONG LEG VERTICAL	SP HT	SPECIFIC HEAT
CONT	CONTINUOUS	LPT	LOW POINT	SPRT	SUPPORT
CONTR	CONTRACTOR	LS	LUMP SUM	SQ	SQUARE
CPLG	COUPLING	LW	LONG WAY	SQT	STAINLESS STEEL
CJ	CONTROL JOINT			S/S	SERVICE SINK
CTR	CENTER	MATL	MATERIAL	SS	SANITARY SEWER
CU	CUBIC	MAX	MAXIMUM	STA	STATION
CW	CLOCKWISE	ME	MATCH EXISTING	STD	STANDARD
		MECH	MECHANICAL	STIR	STIRRUP
D	DEPTH	MED	MEDIUM	STL	STEEL
DBL	DOUBLE	MFR	MANUFACTURER	STM	STORM
DET	DETAIL	MGD	MILLION GALLONS PER DAY	STRUCT	STRUCTURE
DF	DRINKING FOUNTAIN	MH	MANHOLE	SUSP	SUSPENDED
DI	DUCTILE IRON	MIN	MINIMUM	SW	STORM WATER
DIA	DIAMETER	MISC	MISCELLANEOUS	SYM	SYMBOL
DIM	DIMENSION	MJ	MECHANICAL JOINT	SYMM	SYMMETRICAL
DIP	DUCTILE IRON PIPE	MO	MASONRY OPENING		
DIR	DIRECTION	MP	MELTING POINT	T	TOP
DISTR	DISTRIBUTION	MTD	MOUNTED	T&B	TOP AND BOTTOM
DIV	DIVISION	MTG	MOUNTING	TECH	TECHNICAL
DL	DEAD LOAD	MTL	METAL	TEMP	TEMPERATURE, TEMPERED
DN	DOWN			THEO	THEORETICAL
DR	DRAIN	N	NORTH	THD	THREAD
DWG	DRAWING	NATL	NATIONAL	THRES	THRESHOLD
		NEG	NEGATIVE	THRU	THROUGH
E	EAST	NET	NETWORK	TOF	TOP OF FOOTING
EA	EACH	NEUT	NEUTRAL	TOL	TOLERANCE
EF	EACH FACE	NIC	NOT IN CONTRACT	TOS	TOP OF STEEL
EFL	EFFLUENT	NO.	NUMBER	TOT	TOTAL
EJ	EXPANSION JOINT	NOM	NOMINAL	TRANS	TRANSFER
ELEC	ELECTRIC	NPT	NATIONAL PIPE THREAD	TW	TOP OF WALL</

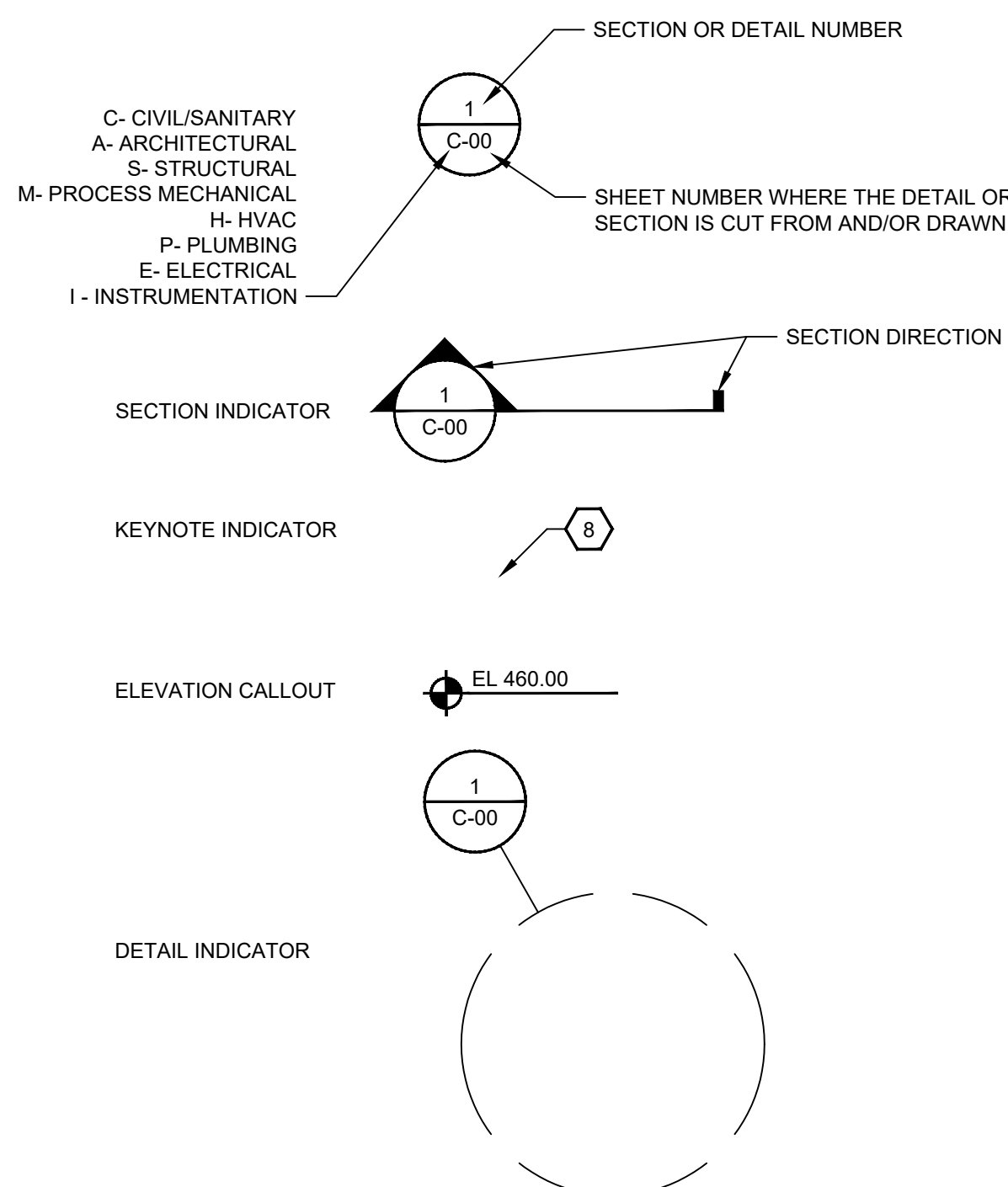
LINETYPES

	EXISTING	NEW
FENCE	— X — X —	— ○ — ○ —
PROPERTY LINE	— - - P/L - - -	
RIGHT OF WAY	— - - R/W - - -	
UNDERGROUND ELECTRIC	— — — UGE — — —	
OVERHEAD UTILITY LINE	— — — OHU — — —	
UNDERGROUND COMMUNICATION	— — — T — — —	
UNDERGROUND FIBER OPTICS	— — — F/O — — —	
CREEK / SWALE	— · · · — · · · —	
SILT FENCE		— SF —
NATURAL GAS	— — — G — — —	
RAILROAD TRACKS		
SANITARY FORCE MAIN		— 12" FM —
SANITARY SEWERS		
STORM SEWERS		
WATER LINE	— — — W — — —	
CONTOUR LINE	— — — 800 — — —	— — — 800 — — —
SPOT ELEVATION	+ 800.00	 800.00
YARD PIPING	— — — — —	
STORM CULVERT	== == == == == == == ==	
PERMANENT EASEMENT	— - - - -	
EXISTING YARD PIPING TO BE ABANDONED IN PLACE	- X - X - X - X - X - X - X - X -	

MATERIALS - PLAN/SECTION

	EARTH
	CRUSHED STONE
	STRUCTURAL CONCRETE
	GROUT, PLASTER OR SAND
	ASPHALT PAVEMENT

BUBBLE & SECTIONING CONVENTIONS




SYMBOLS

	EXISTING	NEW		EXISTING	NEW
WATER METER	(WM)	(WM)	COMMUNICATIONS PEDESTAL	[C]	
LIFT STATION	[LS]		UNDERGROUND TELEPHONE MARKER	(T)	
FIRE HYDRANT	⌋	♂	TELEPHONE MANHOLE	(T)	
AIR RELEASE VALVE	(A)	(A)	TELEPHONE PEDESTAL	[T]	
BLOW OFF VALVE	(BO)	(BO)	BOLLARD	●	●
WATER MAIN BEND		↘	SECTION CORNER	△	
WATER MAIN CAP/PLUG		┐	SURVEY CONTROL POINT	▲	
WATER MAIN TEE		T	SURVEY BENCHMARK	⊗	
WATER MAIN CROSS		+	TELEVISION ANTENNA	△	
REDUCER		▶	FIELD DRAIN	(FD)	
WATER VALVE	⊗ WV	✕	FLAG POLE	●	
WATER MAIN MARKER	(W)		HEADSTONE	⊥	
PUMP STATION	[PS]		MAILBOX	①	②
WATER SERVICE	+ WS		PARKING METER	(PM)	
IN LINE CONTROL VALVE	⊗ ICV		PLANTER BOX	○	
SANITARY MANHOLE	(S)	◎	RAILROAD SIGNAL	⊙	
CORPORATION STOP	(CSS)		RAILROAD GATE	△	
SANITARY SEWER MARKER	(SA)		RIGHT OF WAY MONUMENT	(RW)	
SANITARY SEWER VALVE	⊗ SV		PROPERTY CORNER	⦿	
SANITARY SEWER VALVE VAULT	(V)		ROCK SOUNDING	RS ●	
SANITARY SEWER WET WELL	(WW)		SOIL BORING	SB	
SEPTIC TANK	[ST]		ROCK ELEVATION (PROFILE)	▨	
CLEAN OUT	(C)	◎	SATELLITE DISH	⌒	
CATCH BASIN	■	□	SIGN	—	—
DOUBLE CATCH BASIN	■■	□ □	SIGN WITH MAST ARM	◈	
CURB INLET	E I	■	SINK HOLE		
CIRCULAR INLET	(I)	●	IRRIGATION SPRINKLER HEAD	●	
STORM SEWER MANHOLE	(ST)	○	STEAM MANHOLE	(SM)	
NATURAL GAS METER	(GM)		TRAFFIC LIGHT CONTROL BOX	[TR]	
NATURAL GAS PRESSURE VALVE	(GPV)		TRAFFIC LIGHT MAST POLE	□	
NATURAL GAS STOP	(GS)		TRAFFIC LIGHT LOOP DETECTOR	⊠	
NATURAL GAS VALVE	⊗ GV		TRAFFIC LIGHT MANHOLE	(TR)	
NATURAL GAS MARKER	(G)		WELL	(W)	
NATURAL GAS VENT	(GV)		YARD LIGHT	☼	
NATURAL GAS WELL	(GW)		MONITORING WELL	(MW)	
ELECTRIC MANHOLE	(E)		VEGETATION	~~~~~	
ELECTRIC METER	(EM)		DECIDUOUS TREE	🌳	🌳
ELECTRIC PEDESTAL	[E]		PINE TREE	🌲	🌲
ELECTRIC TRANSFORMER PAD	(ET)		TREE STUMP	🪵	
ELECTRIC HAND HOLE BOX	(HH)				
DOWN GUY WIRE	— C				
LIGHT POLE	☀				
UTILITY POLE	— ○				
ELECTRIC MARKER	(E)				
UNDERGROUND FIBER MARKER	(FO)				
FIBER MANHOLE	(FO)				

NOTE: SYMBOLS, MATERIALS AND ABBREVIATIONS MAY NOT BE ALL-INCLUSIVE. SYMBOLS USED BUT NOT LISTED HEREIN MAY BE DEFINED ELSEWHERE. IF NOT, CONTACT THE ENGINEER FOR CLARIFICATION PRIOR TO BIDDING. SYMBOLS, MATERIALS AND ABBREVIATIONS MISSING FROM THE DRAWINGS DO NOT EXCUSE THE CONTRACTOR FROM PROVIDING THE WORK.

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ENGINEER/ARCHITECT: GEORGE LEWIS

CONSTRUCTION COMPANY: S.C.CASE EXCAVATING


DATE: 12/2019

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CLIENT PROJECT NO. --

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SYMBOLS AND LEGEND

US 36 FORCEMAIN REPLACEMENT
TOWN OF PENDLETON, INDIANA

AINED:

DESIGN

99

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DATE _____

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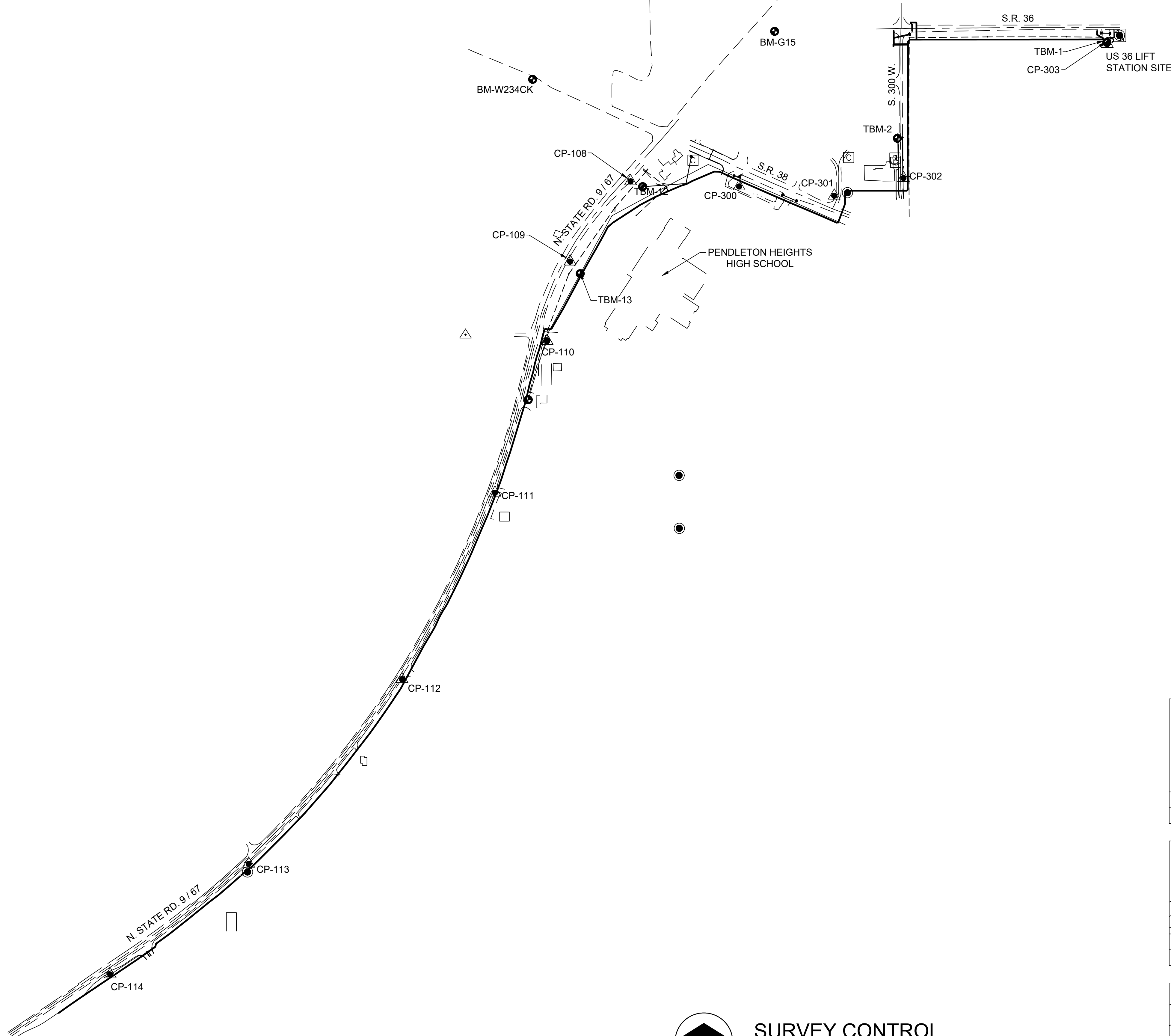
DATE:

JUL
SCALE: $1''=3$

SHEET

1

G-02




SURVEY CONTROL

NOT TO SCALE



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SURVEY CONTROL

US 36 FORCEMAIN REPLACEMENT
TOWN OF PENDLETON, INDIANA

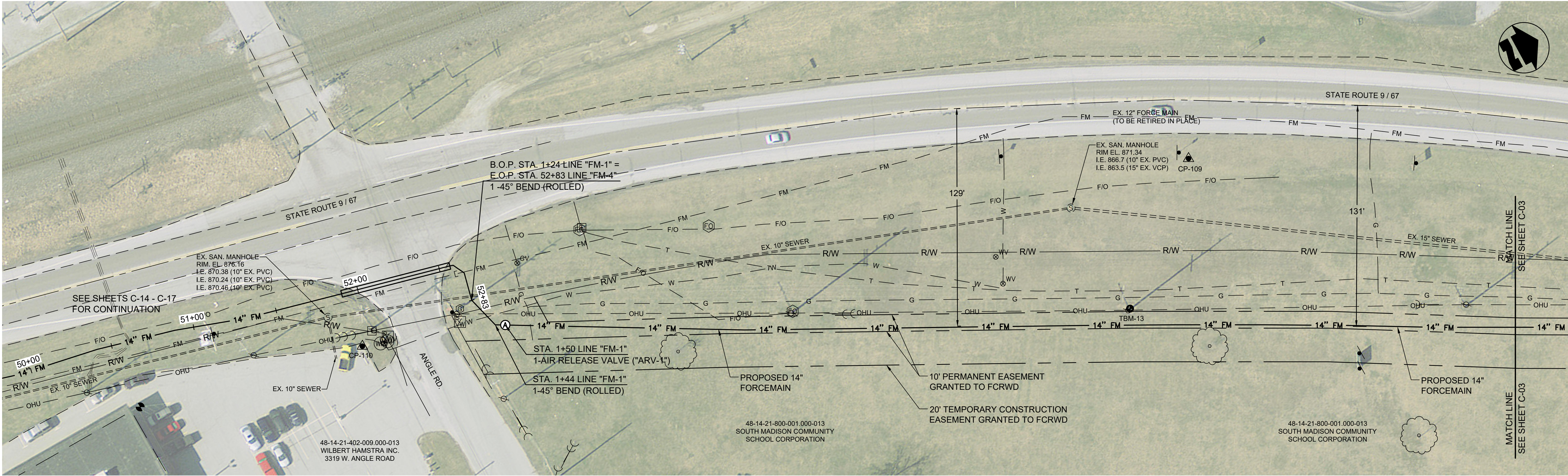
BENCHMARK INFORMATION	
BM-MAD G1 BENCHMARK ELEVATION: 860.40 FEET (NAVD 88)	
NORTHWEST WING OF 36' R.C. GIRDER OVER SPRING BRANCH.	
BM-MAD G-15 BENCHMARK ELEVATION: 858.43 FEET (NAVD 88)	
BRONZE PLATE SET ON EAST END OF BOX CULVERT ON SOUTHWEST CORNER OF THE INTERSECTION OF US 36 & SR 67.	
BM-MAD G-75 BENCHMARK ELEVATION: 869.35 FEET (NAVD 88)	
BRONZE DISK ON THE HANDRAIL AT THE NORTHWEST CORNER OF THE WEST MOST BRIDGE ON SR 38 OVER SPRING BRANCH CREEK.	

DESIGNED		DRAWN		REVIEWED		APPROVED	
GWL		JRD		GWL		GWL	
REVISIONS		DATE		DESCRIPTION		SCALE CHECK	
NO						THIS MARK SHOULD MEASURE EXACTLY 1" WHEN PLOTTED	
DATE		JULY 2018		SCALE:		1"=350'	
SHEET NO.							

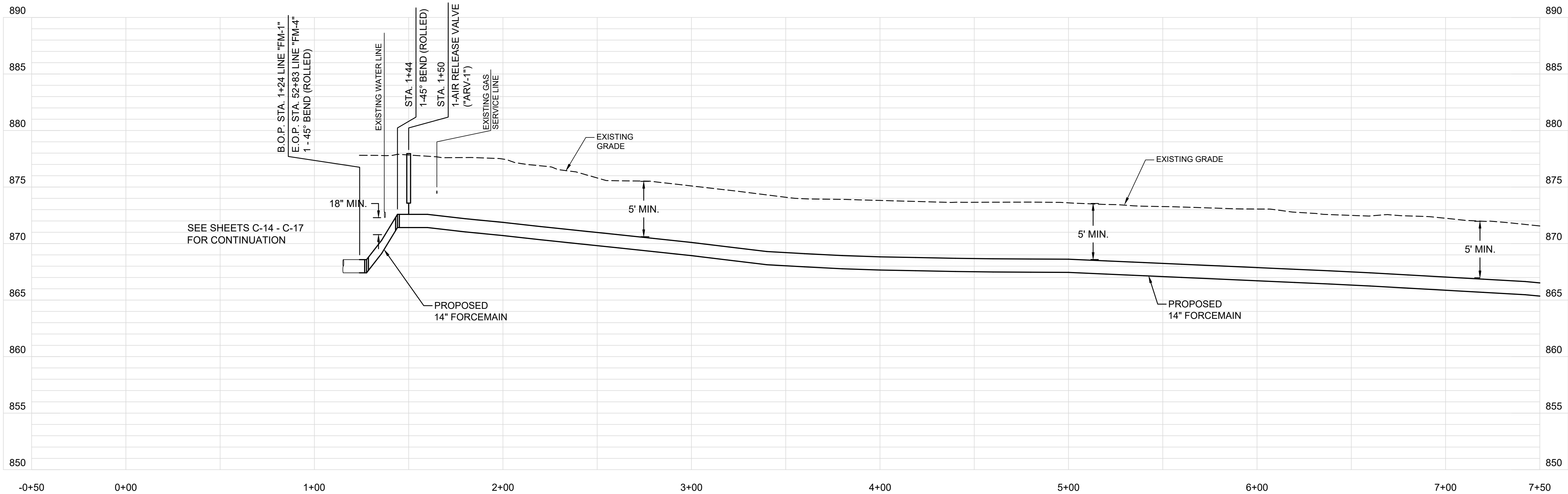
PLOTTED BY: Johnson

PRINTED: 12/19/2019 @ 4:45PM

FILE NAME: G:\4635-FCRWD-US 36\Working Drawings\AutoCAD\4635-C-02.dwg



PLAN VIEW - B.O.P. STA. 0+00 TO STA. 7+50 LINE "FM-1"



PROFILE - B.O.P. STA. 0+00 TO STA. 7+50 LINE "FM-1"

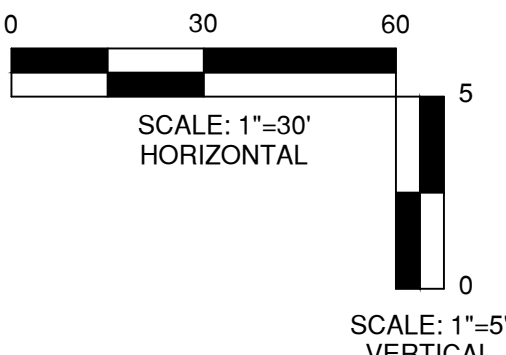
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ENGINEER/ARCHITECT: GEORGE LEWIS

CONSTRUCTION COMPANY: S.C. CASE EXCAVATING

DATE: 12/2019



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PLAN AND PROFILE

LINE "FM-1"

US 36 FORCEMAIN REPLACEMENT

TOWN OF PENDLETON, INDIANA

DESIGNED:	GWL
DRAWN:	JRD
REVIEWED:	GWL
APPROVED:	GWL

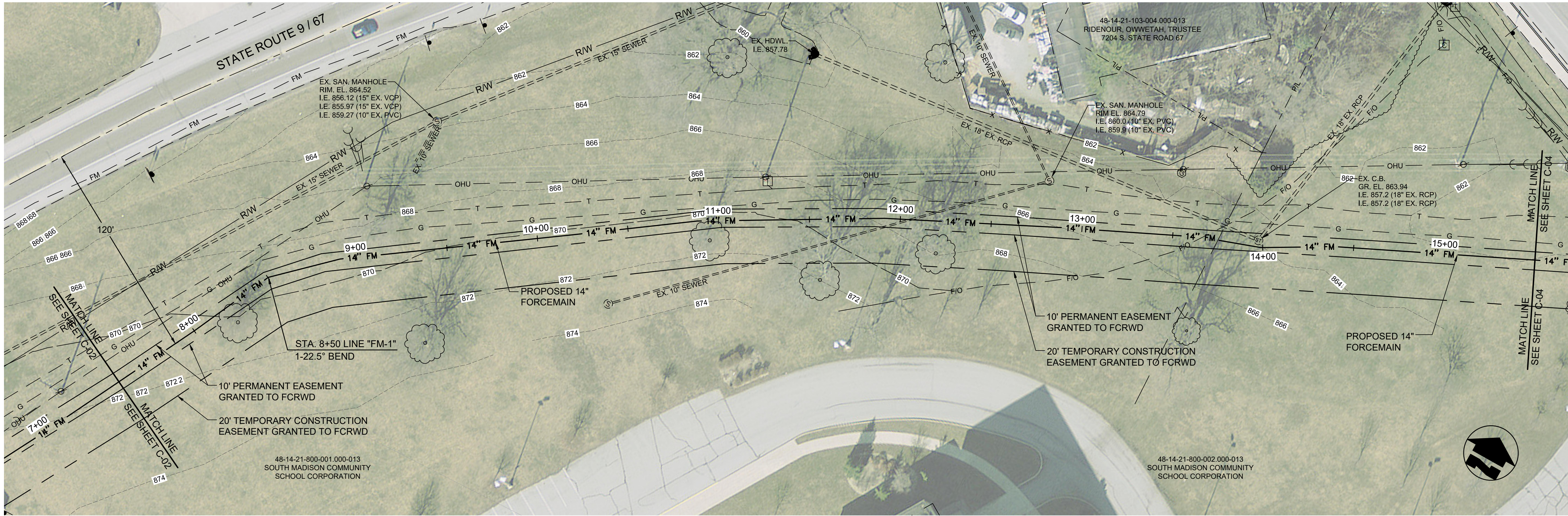
NO.	1
DATE	JULY 2018
SCALE	1"=30'
SHEET NO.	C-02

THIS MARK SHOULD MEASURE EXACTLY 1" WHEN PLOTTED

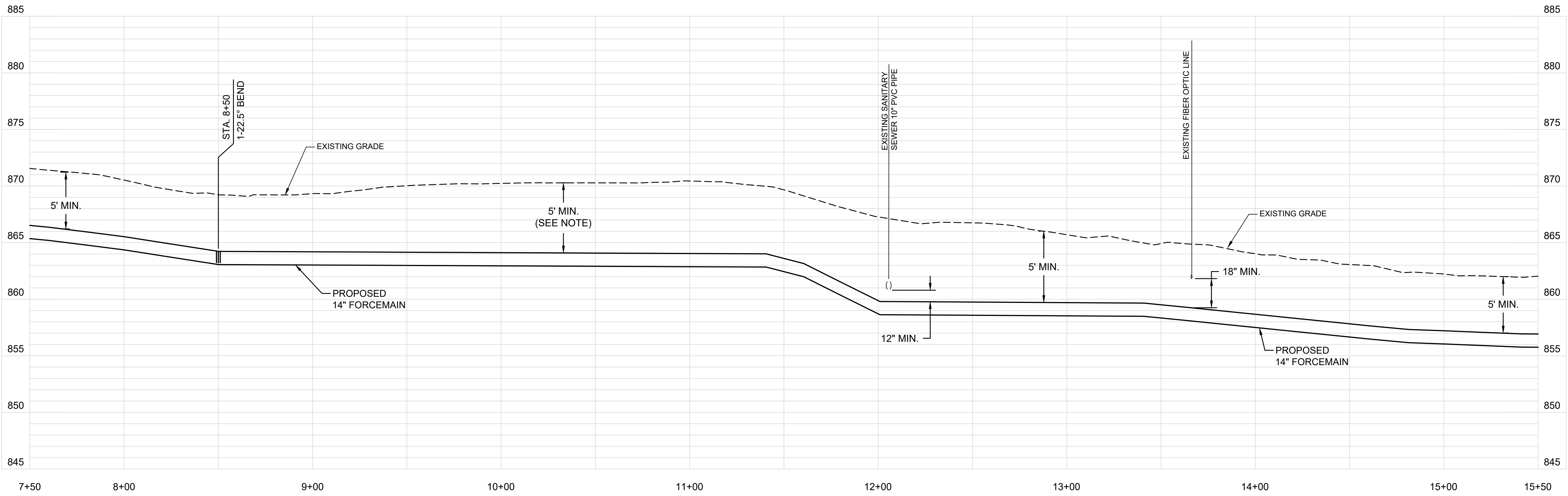
PLOTTED BY: Johnson

PRINTED: 12/19/2019 @ 4:46PM

FILE NAME: G:\4635-FCRWD-US 36\Working Drawings\AutoCAD\4635-C-03.dwg



PLAN VIEW - STA. 7+50 TO STA. 15+50 LINE "FM-1"



PROFILE - STA. 7+50 TO STA. 15+50 LINE "FM-1"

NOTE:
INSTALL FORCEMAIN ON EVEN GRADE TO PREVENT HIGH POINT

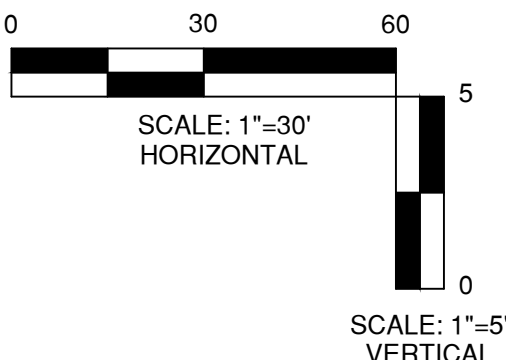
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ENGINEER/ARCHITECT: GEORGE LEWIS

CONSTRUCTION COMPANY: S.C. CASE EXCAVATING

DATE: 12/2019



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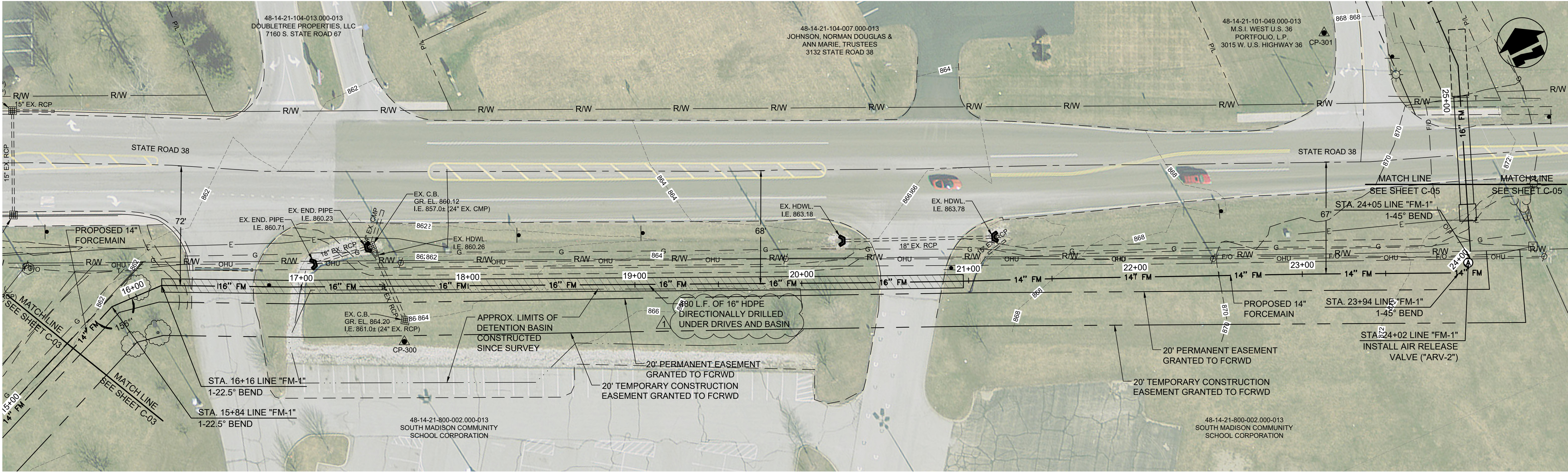
PLAN AND PROFILE
LINE "FM-1"
US 36 FORCEMAIN REPLACEMENT
TOWN OF PENDLETON, INDIANA

DESIGNED:	GWL
DRAWN:	JRD
REVIEWED:	GWL
APPROVED:	GWL

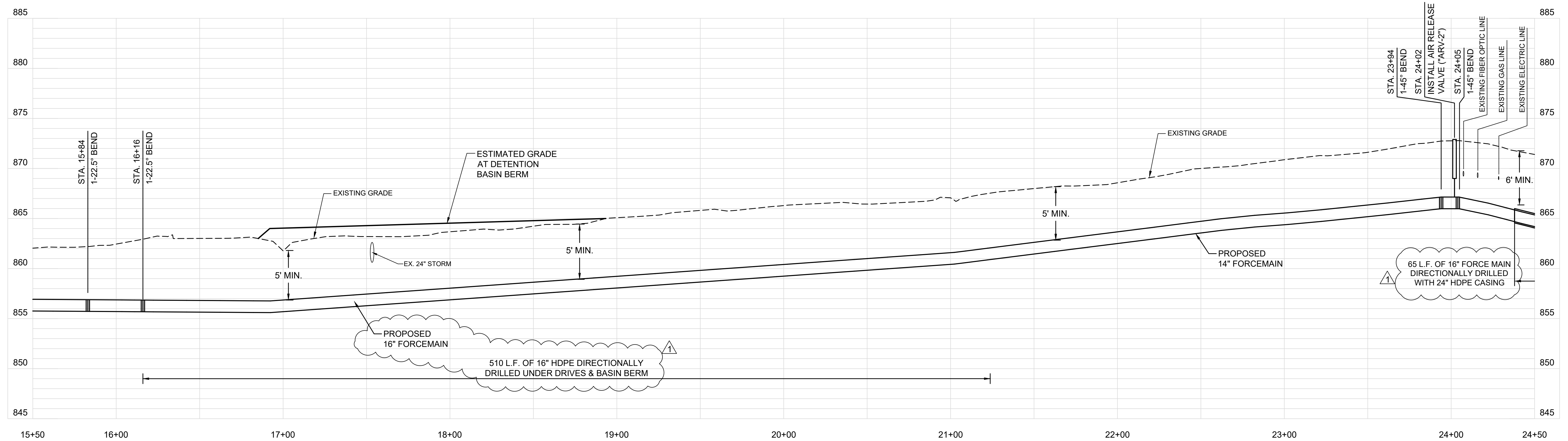
NO.	1
DATE	JULY 2018
SCALE:	1"=30'
SHEET NO.	C-03

THIS MARK SHOULD MEASURE EXACTLY 1" WHEN PLOTTED

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PRINTED: 12/19/2019 @ 4:46PM
PLOTTED BY: Johnson



PLAN VIEW - STA. 15+50 TO STA. 24+50 LINE "FM-1"

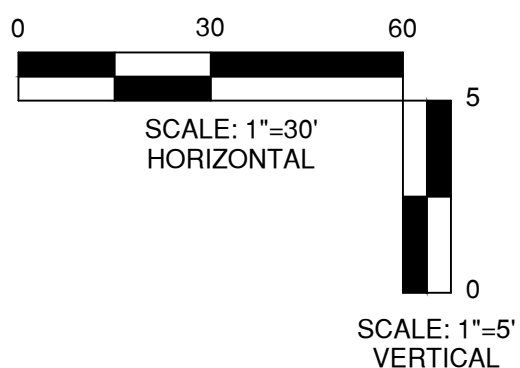


PROFILE - STA. 15+50 TO STA. 24+50 LINE "FM-1"

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ENGINEER/ARCHITECT: GEORGE LEWIS
CONSTRUCTION COMPANY: S.C. CASE EXCAVATING
DATE: 12/2019



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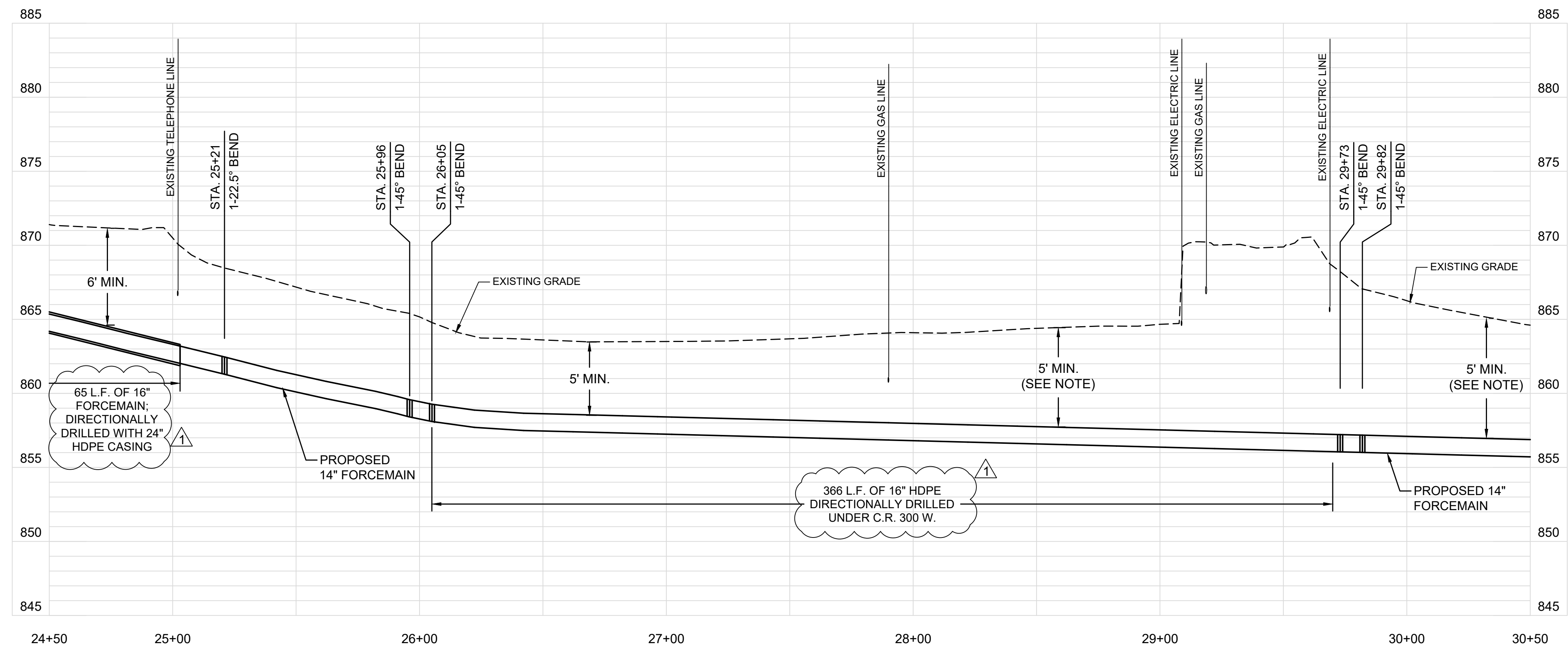
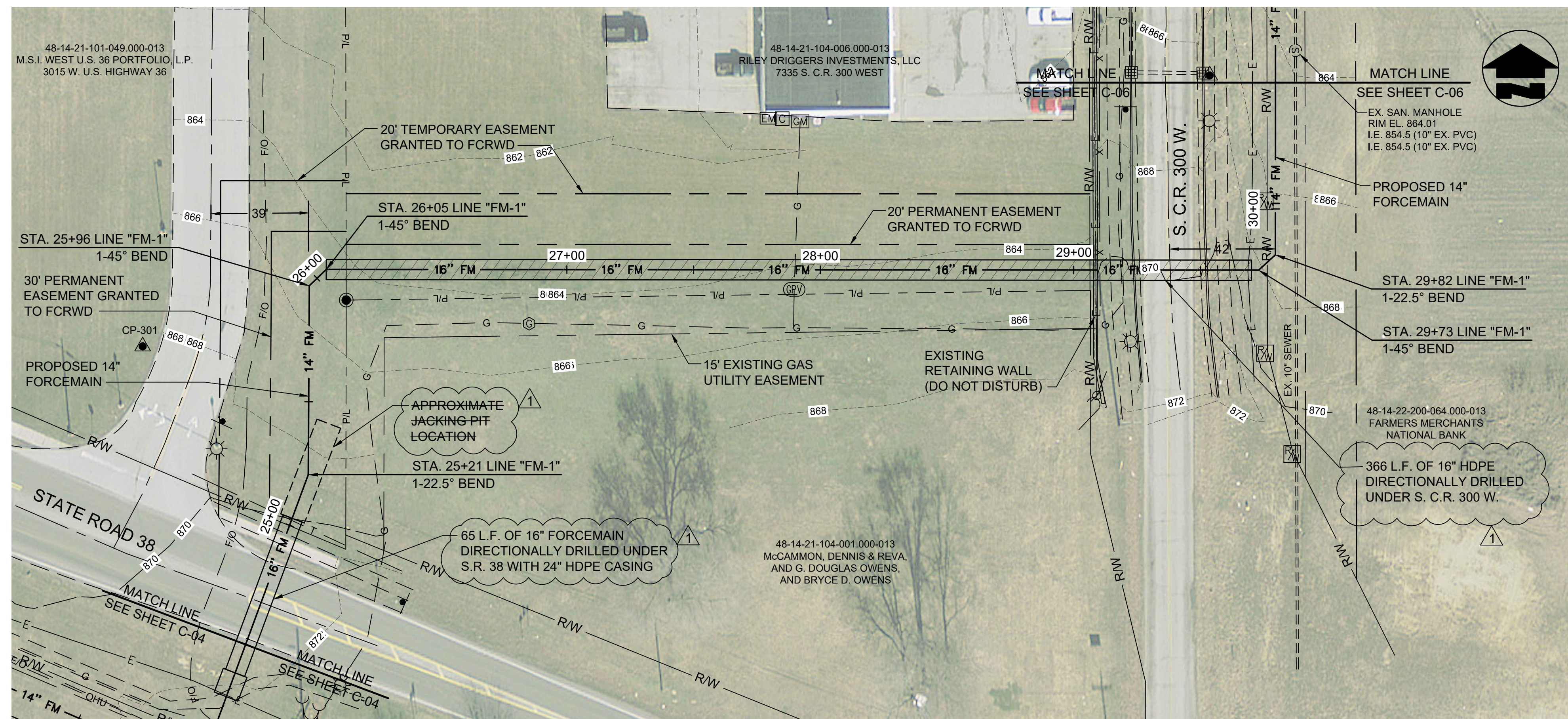
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DESIGNED: GWL
DRAWN: JRD
REVIEWED: GWL
APPROVED: GWL

REVISIONS
NO. DATE DESCRIPTION
1 PIPE SIZE REVISION

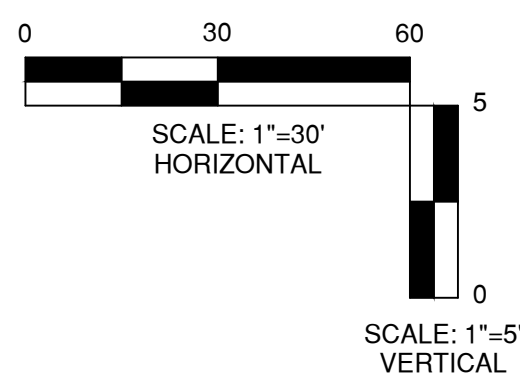
DATE: JULY 2018
SCALE: 1"=30'
SHEET NO. C-04



PROFILE - STA. 24+50 TO STA. 30+50 LINE "FM-1"

NOTE:

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GRADE TO PREVENT HIGH POINT



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ENGINEER/ARCHITECT: GEORGE LEWIS

CONSTRUCTION COMPANY: S.C.CASE EXCAVATING

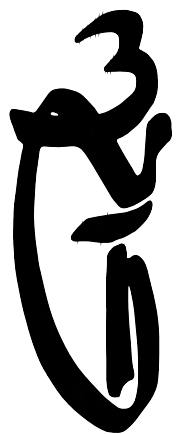
DATE: 12/2019

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PLAN AND PROFILE
LINE "FM-1"
US 36 FORCEMAIN REPLACEMENT
TOWN OF PENDLETON, INDIANA

NEW YORK STATE				DATE	BY	GWL
NO.	DESCRIPTION					
1	PIPE SIZE REVISION		9-18			JRD
						REVIEWED
						GWL
						APPROVED
SCALE CHECK: _____						GWL


DATE: JULY 2018

SCALE: 1"=30'

EFFECT NO.

C-05

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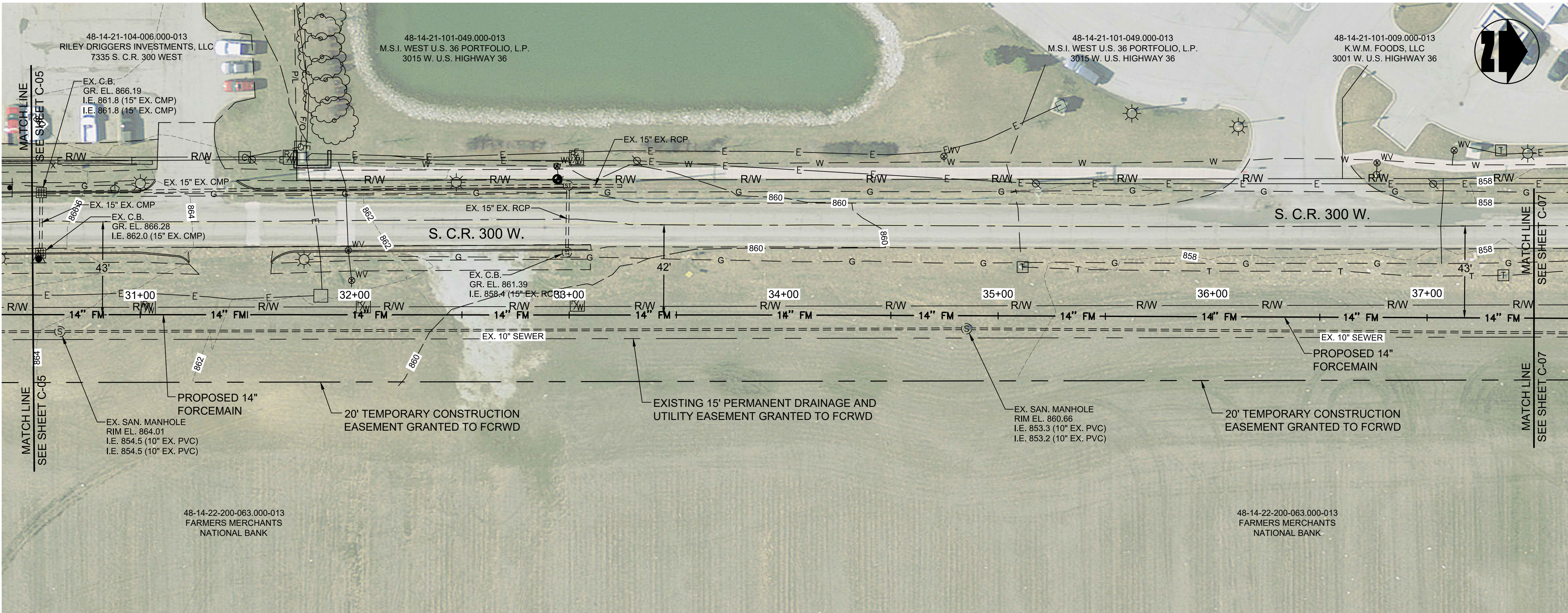


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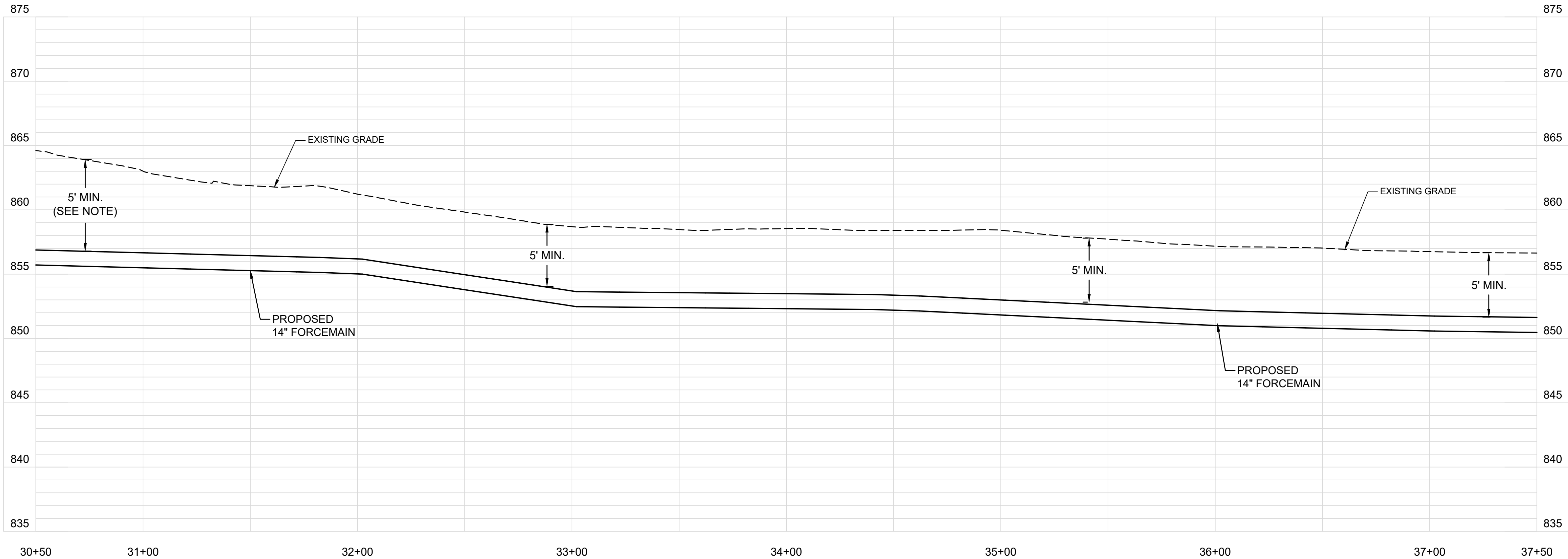
ENGINEER/ARCHITECT: GEORGE LEWIS

CONSTRUCTION COMPANY: S.C.SACE EXCAVATING

DATE: 12/2019



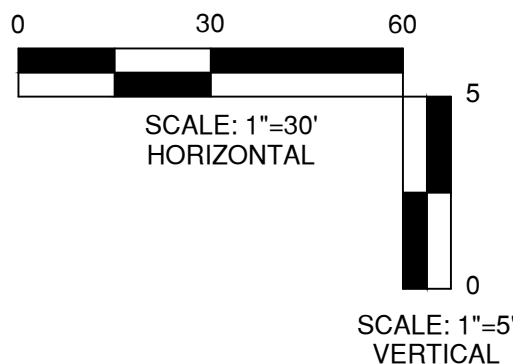
PLAN VIEW - STA. 30+50 TO STA. 37+50 LINE "FM-1"



PROFILE - STA. 30+50 TO STA. 37+50 LINE "FM-1"

NOTE:

INSTALL FORCEMAIN ON EVEN GRADE TO PREVENT HIGH POINT




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DESIGNED: GWL
 DRAWN: JRD
 REVIEWED: GWL
 APPROVED: GWL

REVISIONS
 NO. | DATE | DESCRIPTION

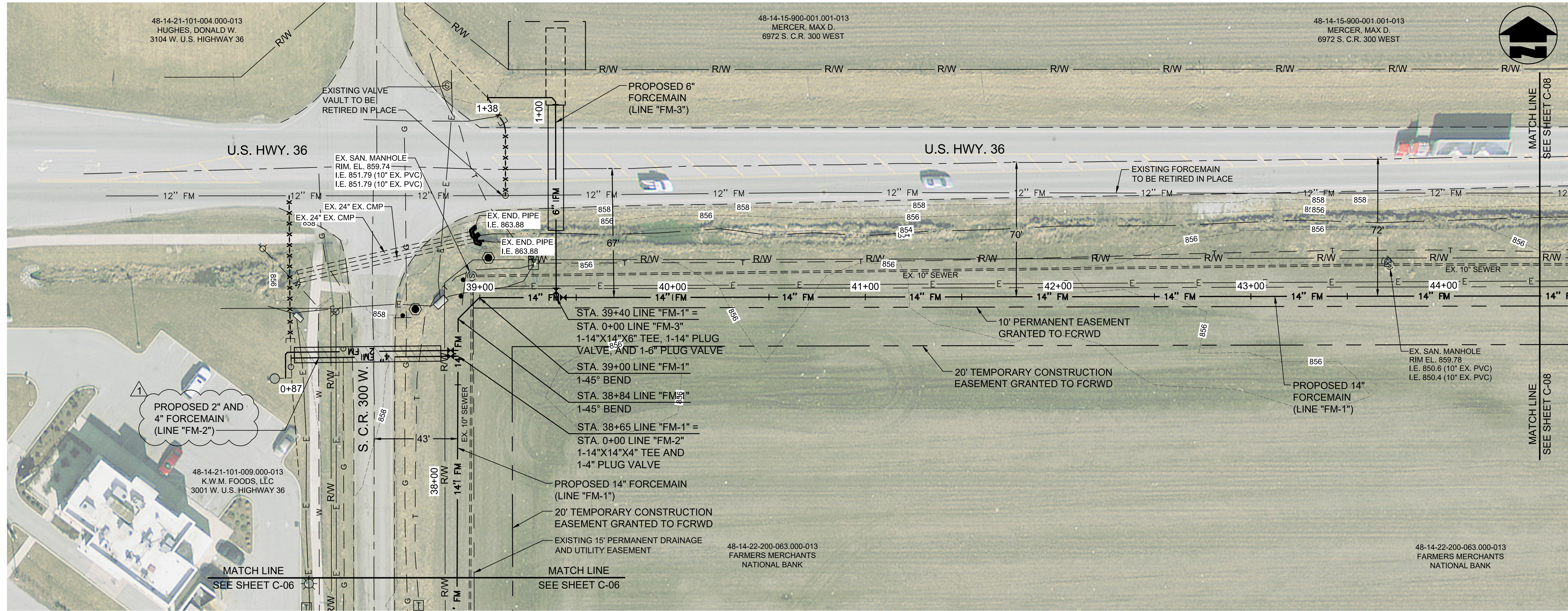
DATE: JULY 2018
 SCALE: 1"=30'
 SHEET NO.

C-06

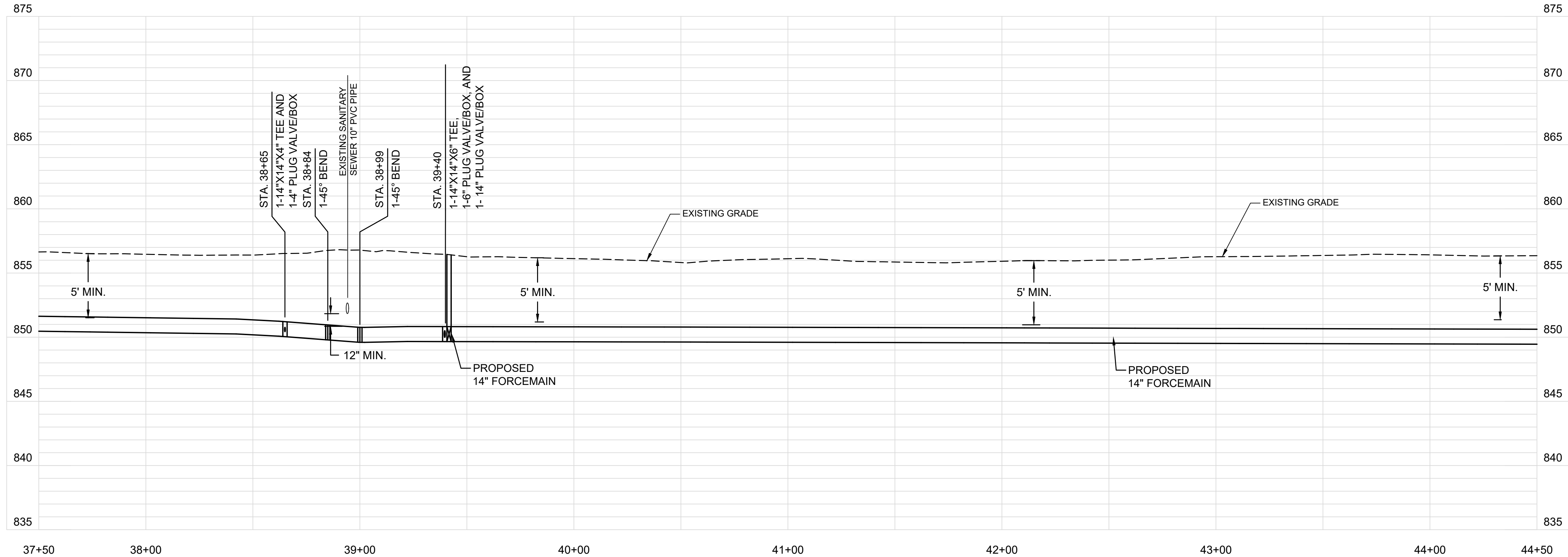
PLOTTED BY: Johnson

PRINTED: 12/19/2019 @ 4:47PM

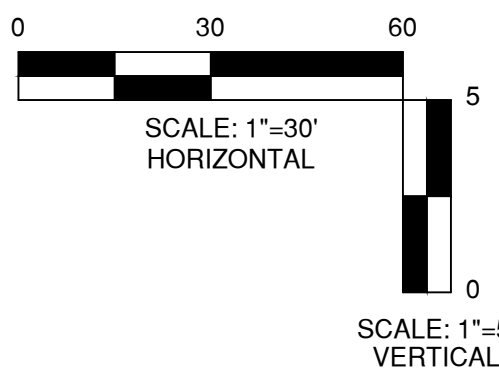
FILE NAME: G:\4635-FCRWD-US 36\Working Drawings\AutoCAD\4635-C-07.dwg



PLAN VIEW - STA. 37+50 TO STA. 44+50 LINE "FM-1"



PROFILE - STA. 37+50 TO STA. 44+50 LINE "FM-1"



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ENGINEER/ARCHITECT: GEORGE LEWIS

CONSTRUCTION COMPANY: S.C. CASE EXCAVATING

DATE: 12/2019

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CLIENT PROJECT NO.	-

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PLAN AND PROFILE

LINE "FM-1"

US 36 FORCEMAIN REPLACEMENT

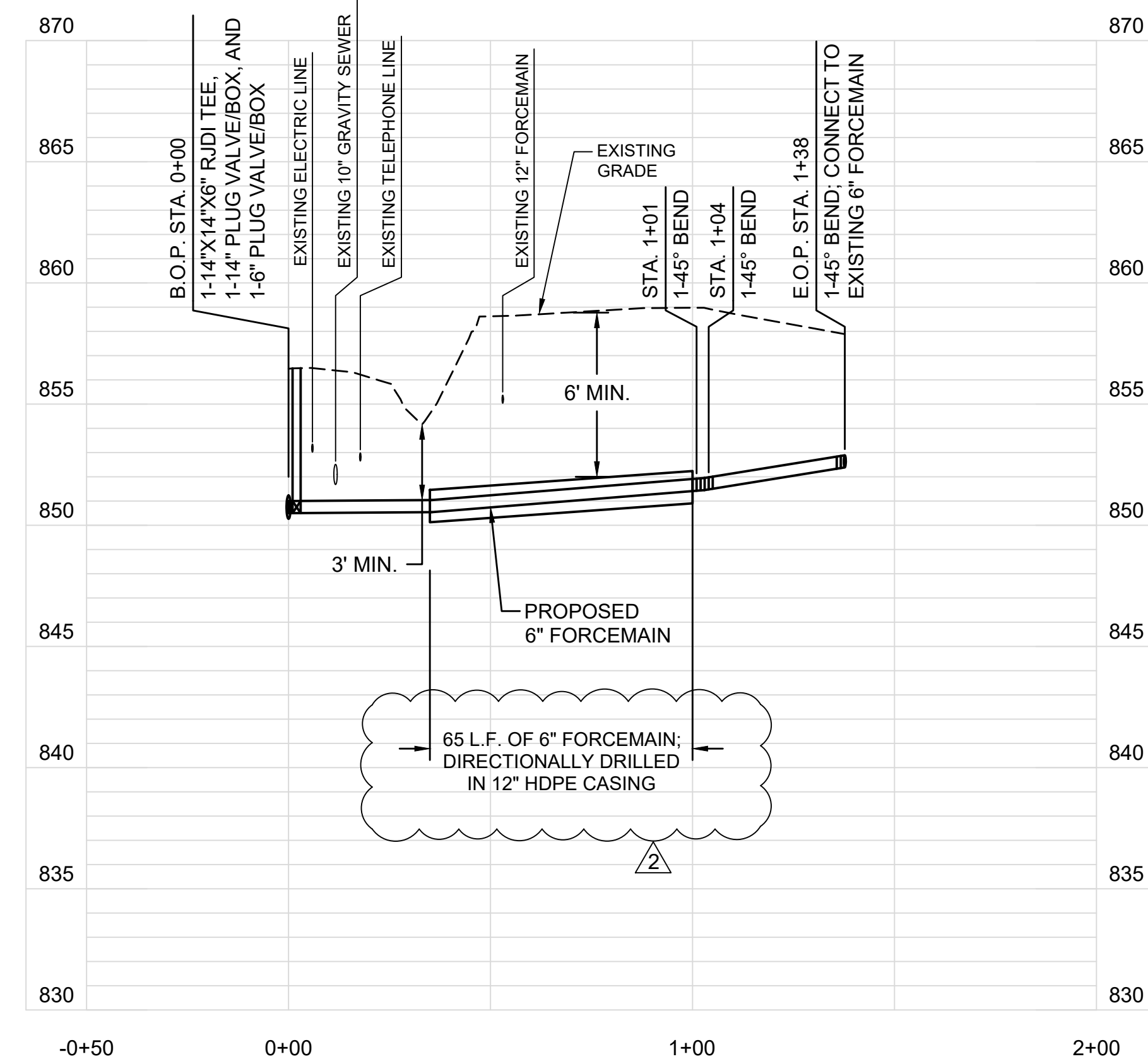
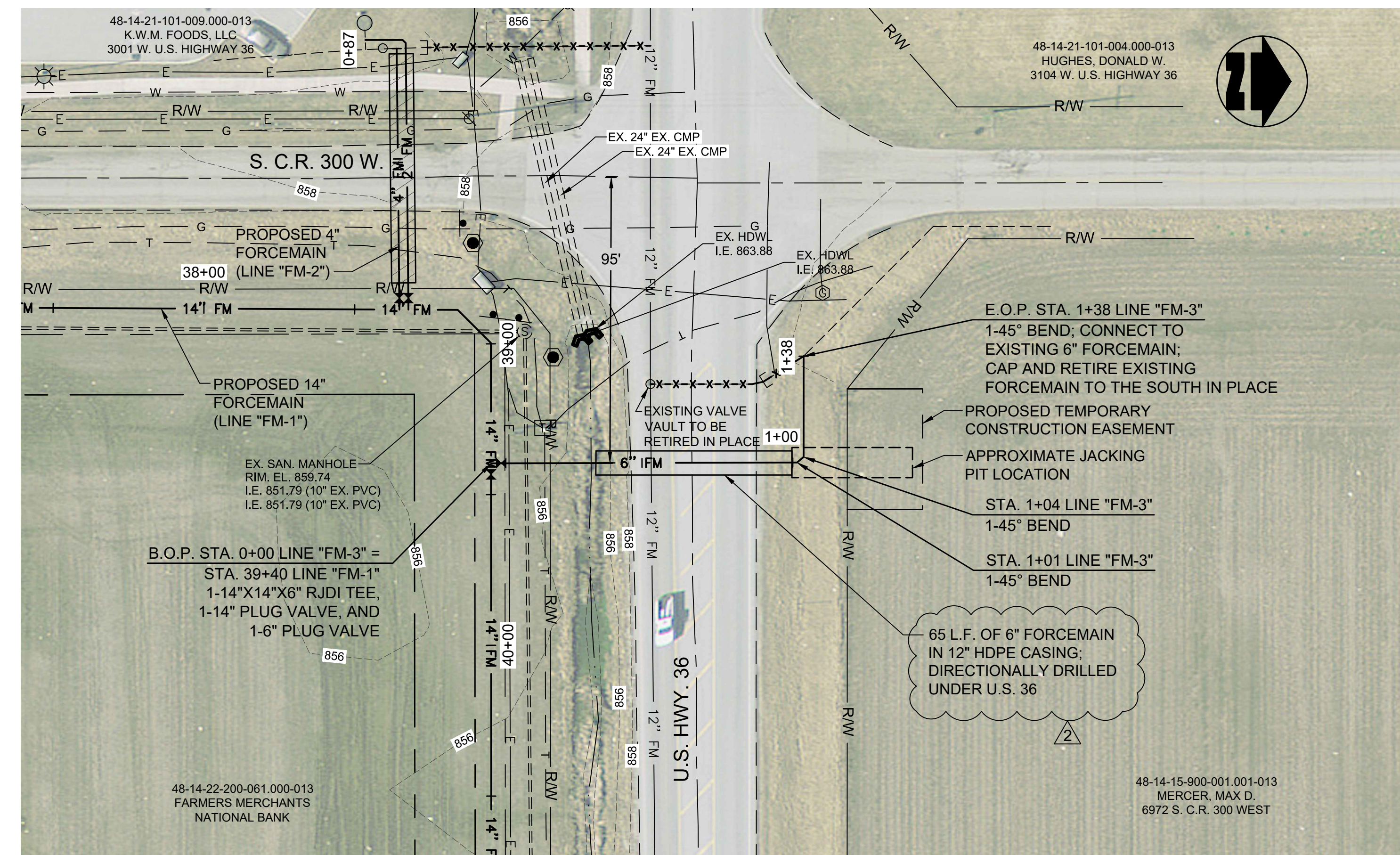
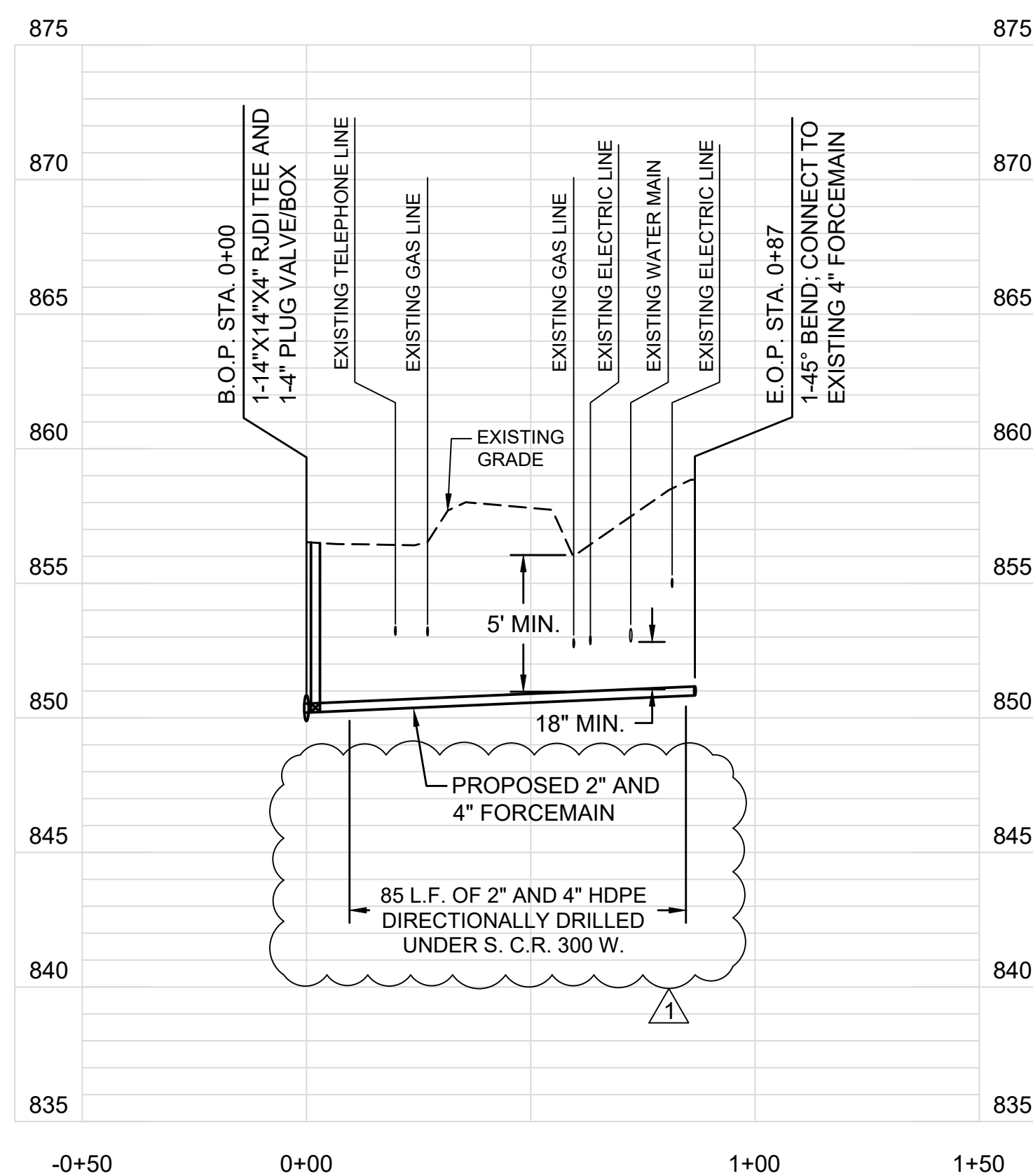
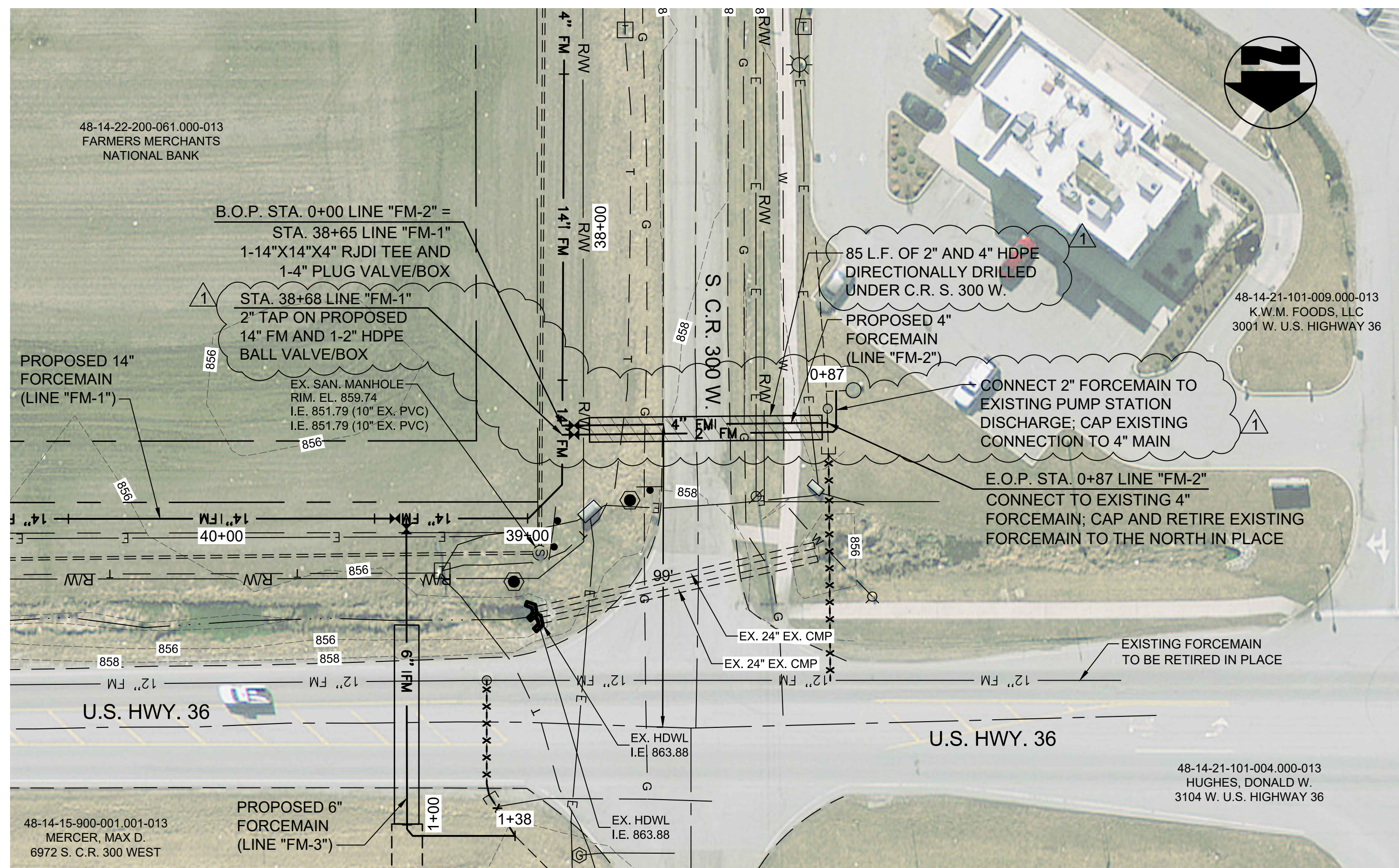
TOWN OF PENDLETON, INDIANA

DESIGNED	BY	DATE	DESCRIPTION
GWL	GWL	9/18	1 PIPE SIZE REVISION
JRD			
GWL			
GWL			

DATE: JULY 2018

SCALE: 1"=30'

SHEET NO. C-07



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PLAN AND PROFILE LINE "FM-2" AND "FM-3" US 36 FORCEMAIN REPLACEMENT TOWN OF PENDLETON, INDIANA

REVISIONS			DATE	BY	GWL
NO	DESCRIPTION				
1	ADDENDUM #1		7/2018	GWL	DRAWN: JRD
2	PIPE SIZE REVISION		9/18	GWL	
					REVIEWED: GWL
					APPROVED: GWL

JULY 2018

"=30'

SHEET NO.


C-09

PLOTTED BY: JJohnson

PRINTED: 12/18/2019 @ 4:48PM

FILE NAME: G:\4635-FCRWD-US 36\Working Drawings\AutoCAD\4635-C-09.dwg

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ENGINEER/ARCHITECT: GEORGE LEWIS

CONSTRUCTION COMPANY: S.C. CASE EXCAVATING

DATE: 12/2019

NOTES:

- FOR LOW-VOLUME SITUATIONS WITH SHORT WORK ZONES ON STRAIGHT ROADWAYS WHERE THE FLAGGER IS VISIBLE TO ROAD USERS APPROACHING FROM BOTH DIRECTIONS, A SINGLE FLAGGER, POSITIONED TO BE VISIBLE TO ROAD USERS APPROACHING FROM BOTH DIRECTIONS, MAY BE USED. THE "ROAD WORK AHEAD" AND THE "END ROAD WORK" SIGNS MAY BE OMITTED FOR SHORT-DURATION OPERATIONS.
- FLASHING WARNING LIGHTS AND/OR FLAGS MAY BE USED TO CALL ATTENTION TO THE ADVANCE WARNING SIGNS. A "BE PREPARED TO STOP" SIGN MAY BE ADDED TO THE SIGN SERIES.
- THE BUFFER SPACE SHOULD BE EXTENDED SO THAT THE TWO-WAY TRAFFIC TAPER IS PLACED BEFORE A HORIZONTAL (OR CREST VERTICAL) CURVE TO PROVIDE ADEQUATE SIGHT DISTANCE FOR THE FLAGGER AND A QUEUE OF STOPPED VEHICLES.
- AT NIGHT, FLAGGER STATIONS SHALL BE ILLUMINATED, EXCEPT IN EMERGENCIES.
- WHEN USED, THE "BE PREPARED TO STOP" SIGN SHOULD BE LOCATED BETWEEN THE "FLAGGER" SIGN AND THE "ONE LANE ROAD" SIGN.

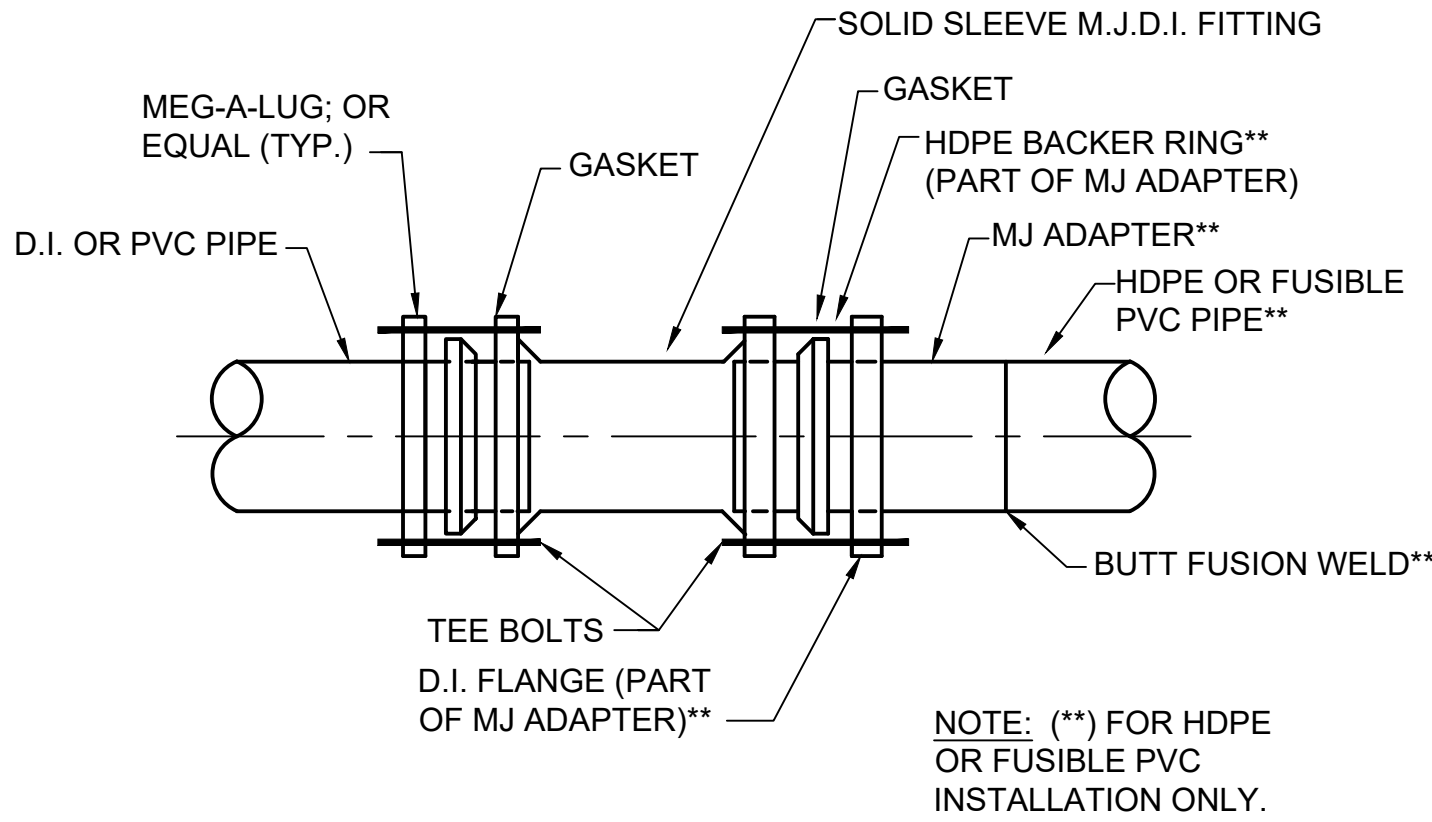
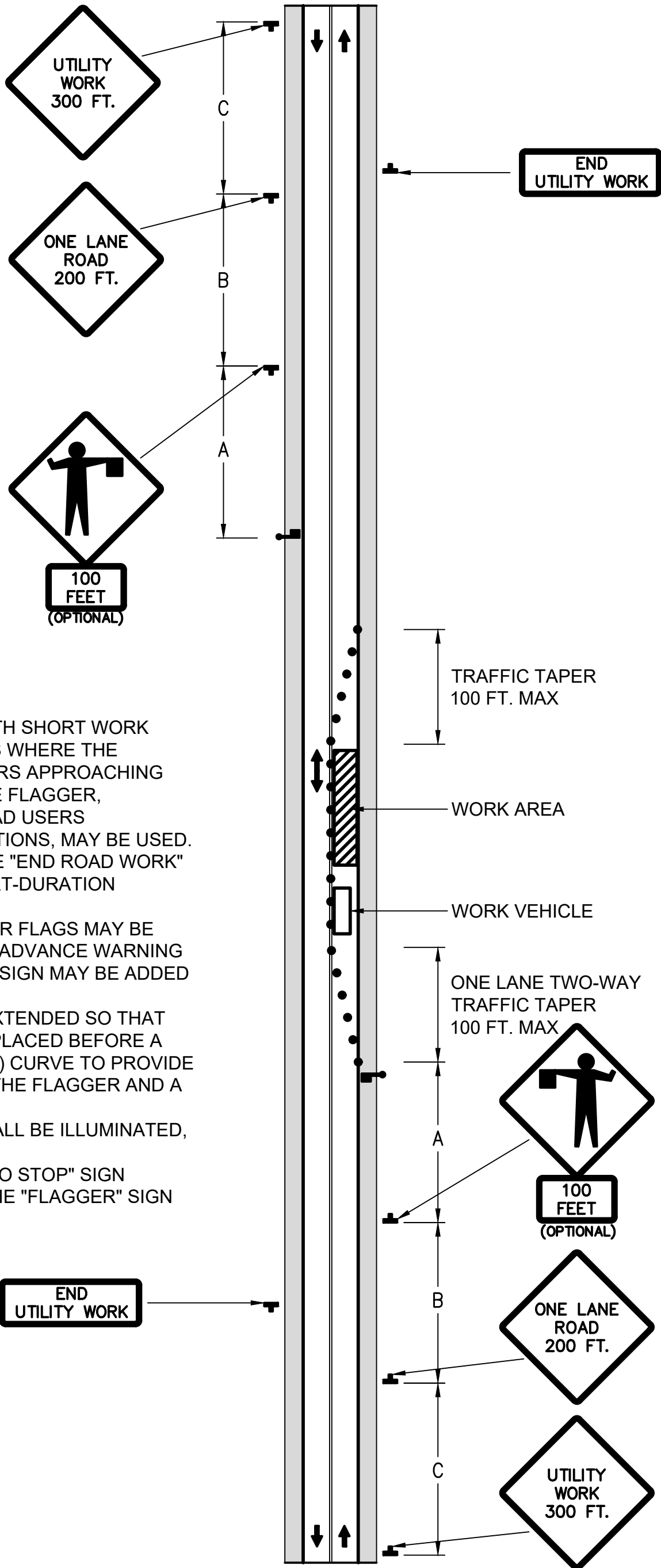
FOR LOW SPEED URBAN CONDITIONS

A=100 FT.
B=100 FT.
C=100 FT.

DETAIL - TRAFFIC CONTROL PLAN

NOT TO SCALE

NOTE: TRAFFIC CONTROL PLANS ARE GUIDELINES ONLY. ALL TRAFFIC CONTROL PLANS AND LANE CLOSURES MUST BE APPROVED BY THE OWNER AND ENGINEER.



DETAIL - RESTRAINED PIPE TRANSITION COUPLING

NOT TO SCALE

LENGTH IN FT. TO BE RESTRAINED ON EACH SIDE OF FITTING FOR 14" PVC PIPE					
TYPE OF BEND	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND	DEADENDS
HORIZ. BEND	24	10	5	3	73
VERT. BEND	---	30 UPPER	15 UPPER	8 UPPER	
		7 LOWER	4 LOWER	2 LOWER	

RESTRAINED JOINT NOTES

- CONTRACTOR SHALL INSTALL RJDI FITTINGS FOR ALL VERTICAL AND HORIZONTAL BENDS.
- RESTRAINED LENGTHS WERE CALCULATED ASSUMING A 1.5 FACTOR OF SAFETY, TYPE 5 TRENCH CONDITIONS, "SM" SOIL CLASSIFICATION, 5 FT. MIN. DEPTH OF BURY, AND 150 PSI HYDROSTATIC TEST PRESSURE (SOURCE: EBAA IRON RESTRAINT DESIGN CALCULATION SOFTWARE v.4.0).
- ALL FORCEMAIN APPURTENANCES WITHIN RJDI LIMITS MUST BE RESTRAINED AT EACH JOINT.

RESTRAINED JOINT CALCULATIONS

NOT TO SCALE

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ENGINEER/ARCHITECT: GEORGE LEWIS
 CONSTRUCTION COMPANY: S.C.CASE EXCAVATING
 DATE: 12/2019

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STANDARD DETAILS

US 36 FORCEMAIN REPLACEMENT
TOWN OF PENDLETON, INDIANA

DESIGNED:	BY:	DATE:	DRAWN:	REVIEWED:	APPROVED:
GWL	JRD				

DATE:	JULY 2018
SCALE:	1"=30'
SHEET NO.	

- THE IDEM RULE 5 PERMIT REQUIRES THAT THE PERMITTEE SHALL MINIMIZE DISTURBANCE AND THE PERIOD OF TIME THAT THE DISTURBED AREA IS WITHOUT STABILIZATION PRACTICES.
2. FINAL STABILIZATION SHALL BEGIN WITHIN 14 DAYS ON AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED OR HAVE BEEN SUSPENDED FOR MORE THAN 180 DAYS. WHEN SNOW COVER CAUSES DELAYS, STABILIZATION SHALL BEGIN AS SOON AS POSSIBLE. STABILIZATION PRACTICES INCLUDE SEEDING, MULCHING, PLACING SOD, PLANTING TREES OR SHRUBS, AND USING GEOTEXTILE FABRICS AND OTHER APPROPRIATE MEASURES. SEEDING RATES, DATES AND MATERIALS MAY BE OBTAINED FROM THE LOCAL NATURAL RESOURCES CONSERVATION SERVICE FIELD OFFICE.
3. FOR ALL CRITICAL AREAS (WITHIN 25' OF A STREAM), SOIL STABILIZATION TECHNIQUES SHALL BE IMPLEMENTED WITHIN 24 HOURS OR AS SOON AS PRACTICABLE AFTER COMPLETION OF GRADING OR DISTURBANCE. TEMPORARY STABILIZATION PRACTICES SHALL BE INITIATED WITHIN 14 DAYS OF CESSATION OF CONSTRUCTION ACTIVITIES.
4. A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE DEVELOPED AND IMPLEMENTED AS OUTLINED IN THE IDEM RULE 5 STORMWATER PERMIT REQUIREMENTS, IF NOT ALREADY INCLUDED IN THE SPECIFICATIONS. FOR THE LIFT STATION, SITE EROSION CONTROL MEASURES ARE SHOWN BELOW. FOR THE FORCE MAIN INSTALLATION, THE CONTRACTOR SHALL IMPLEMENT MEASURES AS NEEDED DEPENDING ON CONSTRUCTION SEQUENCE AND METHOD.
5. SEDIMENT BASINS (DEBRIS BASINS, DESILTING BASINS, OR SEDIMENT TRAPS) SHALL BE PROPERLY DESIGNED.
6. SEDIMENT BASINS (DEBRIS BASINS, DESILTING BASINS, OR SEDIMENT TRAPS) SHALL BE INSTALLED DURING INITIAL GRADING AT LOCATIONS THAT WILL PROVIDE THE BEST PROTECTION FROM OFF-SITE DAMAGES.
7. ALL SLOPES EXCEEDING 3:1 SHALL HAVE TURF REPLACEMENT MAT INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
8. INLET PROTECTION IS REQUIRED TO MINIMIZE DISCHARGE OF SEDIMENT LADEN WATER.
9. SITE PERIMETER CONTROLS ARE REQUIRED AND SHALL BE INSTALLED TO PREVENT THE DEPOSIT OF SOIL AND DEBRIS FROM GRADED SURFACES ONTO PUBLIC STREETS, INTO DRAINAGE CHANNELS OR SEWERS, OR ONTO ADJOINING LAND.
10. EROSION CONTROL MEASURES SHOWN ARE THE MINIMUM REQUIRED. CONTRACTOR SHALL PROVIDE ADDITIONAL CONTROLS AND REVISE THE CONTROLS AS NEEDED.

1. ALL EROSION CONTROL MEASURES, DISCHARGE LOCATIONS, VEHICLE EXITS, DISTURBED AREAS OF THE SITE, AND MATERIALS STORAGE AREAS SHALL BE INSPECTED WEEKLY AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES OR GREATER. EACH INSPECTION MUST BE DOCUMENTED IN ACCORDANCE WITH THE IDEM GENERAL PERMIT FOR STORMWATER POINT SOURCE DISCHARGE FROM CONSTRUCTION ACTIVITIES.
2. SEDIMENT ACCUMULATED AT THE SILT FENCES, INLET PROTECTION AREAS, AND OTHER SILT CHECK DEVICES SHOULD BE REMOVED NO LATER THAN WHEN IT REACHES 1/3 HEIGHT OF THE FENCE OR 9 INCHES MAXIMUM.

1. IDENTIFY AND FLAG OFF AREAS NOT TO BE DISTURBED AND/OR COMPACTED.
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
3. INSTALL UPGRADIENT DIVERSION SWALES AND BERMS.
4. INSTALL SEDIMENT BARRIERS (SILT FENCES).
5. CONSTRUCT OTHER SWALES.
6. CONSTRUCT STORM CONVEYANCE SYSTEM (INLETS AND STORM SEWERS)
7. BEGIN CLEARING AND GRADING FOR THE ROADS, BUILDINGS, TANKS, OR PIPES
8. STABILIZE BARE AREAS AFTER FINAL GRADE IS REACHED.
9. CONSTRUCT ROADS, BUILDINGS, TANKS, OR PIPES.
10. INSTALL LANDSCAPING.
11. DREDGE SEDIMENT BASIN AND INSTALL TEMPORARY EROSION CONTROL BLANKET ON ALL SLOPES.
12. REMOVE ALL CONTROLS ONCE THE SITE HAS BEEN FULLY STABILIZED.
13. FINAL INSPECTION FOR LAND DISTURBANCE PERMIT.
14. TEMPORARY DIVERSION DITCHES MAY BE REQUIRED DURING CONSTRUCTION TO MITIGATE EROSION OF THE DISTURBED CONSTRUCTION AREA, BY DIRECTING OFF-SITE DRAINAGE AROUND THE DISTURBANCE AREAS.



1. GEOTEXTILE FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL AND CUT TO THE LENGTH OF THE BARRIER. WHEN JOINTS CANNOT BE AVOIDED, GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER ONLY AT A POST WITH 3 FOOT MIN. OVERLAP, AND SECURELY SEALED.
2. POSTS SHALL BE AT LEAST 5 FEET IN LENGTH.
3. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE AND FABRIC.
4. WOOD POSTS SHALL BE 2 INCHES BY 2 INCHES OR EQUIVALENT. STEEL POSTS SHALL BE 1.33 LBS PER LINEAR FOOT.
5. IF REQUIRED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH IN LENGTH, WIRE TIES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
6. TURN SILT FENCE UP SLOPE AT ENDS.



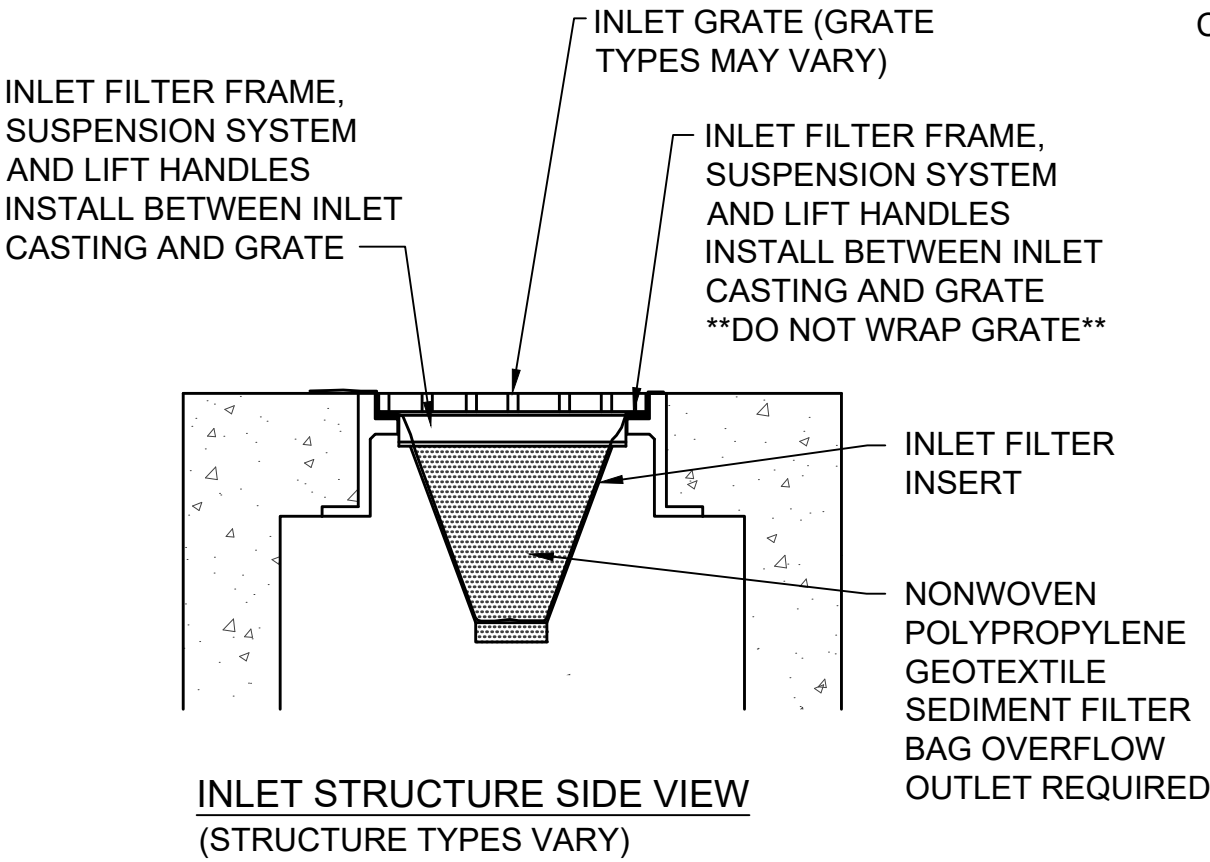
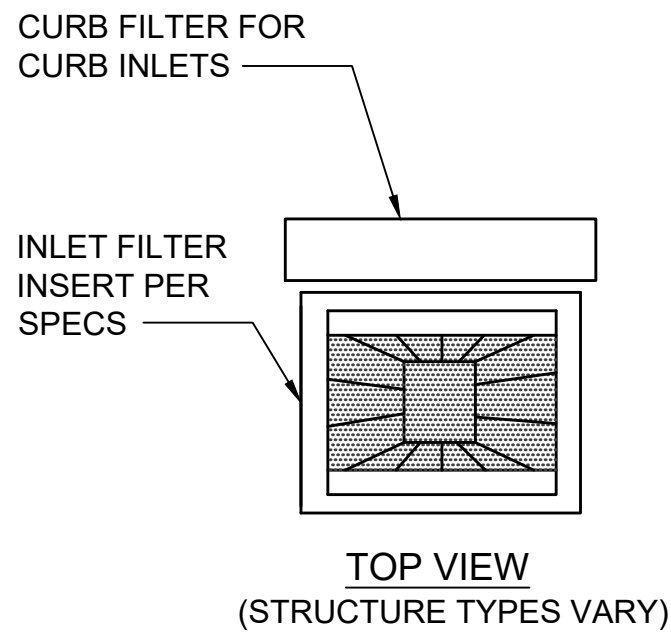
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C-12

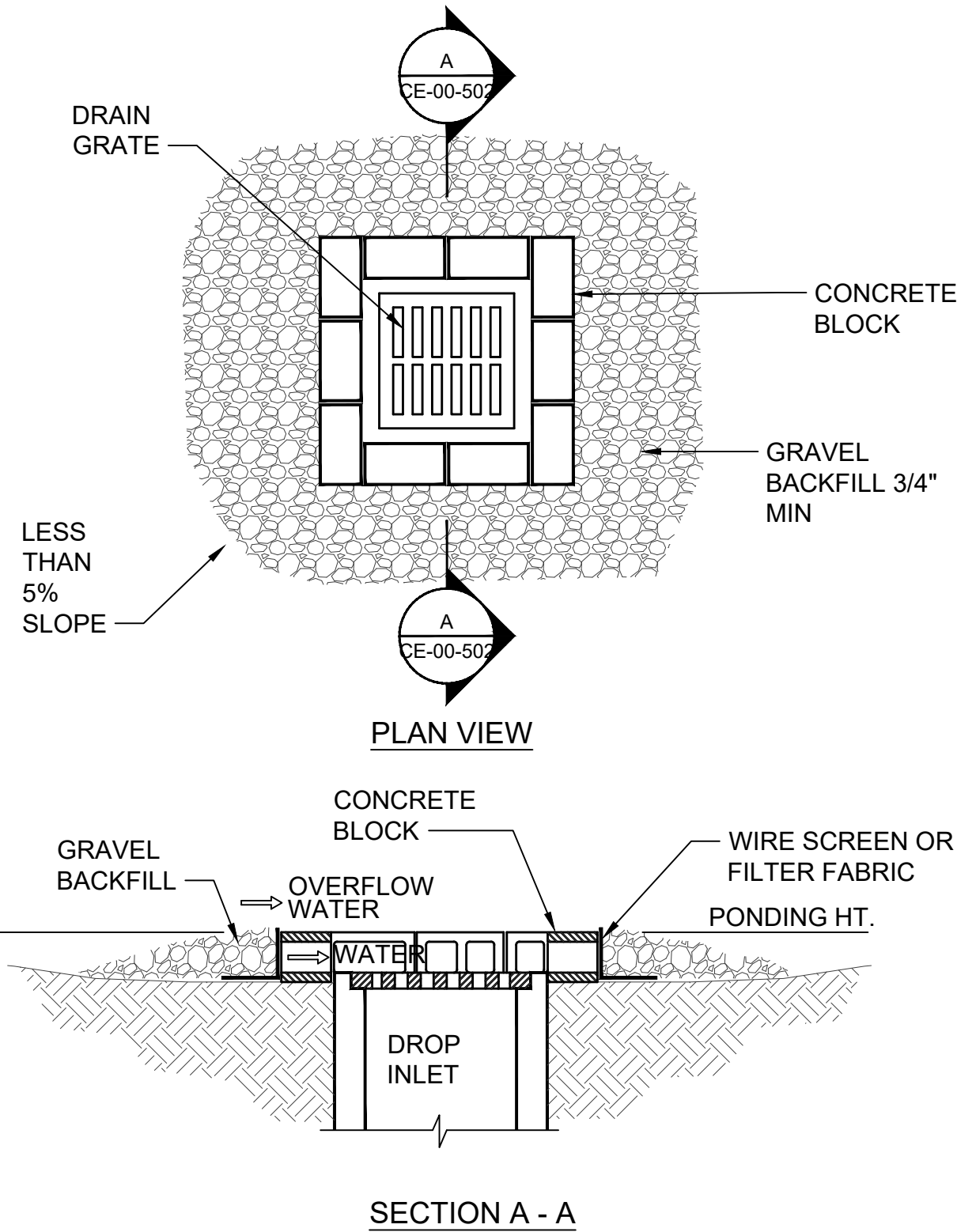
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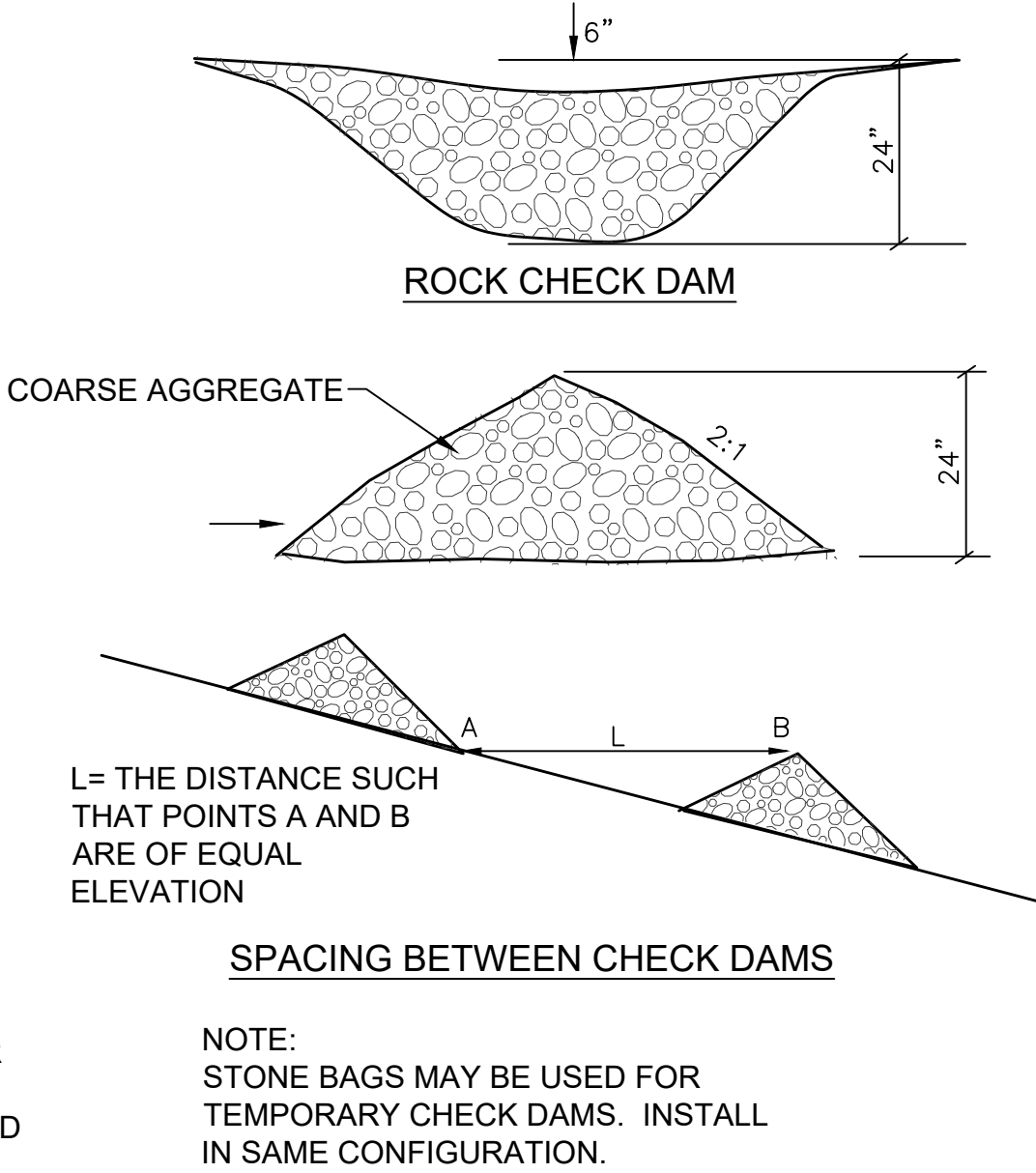


FLEXSTORM OR APPROVED EQUAL
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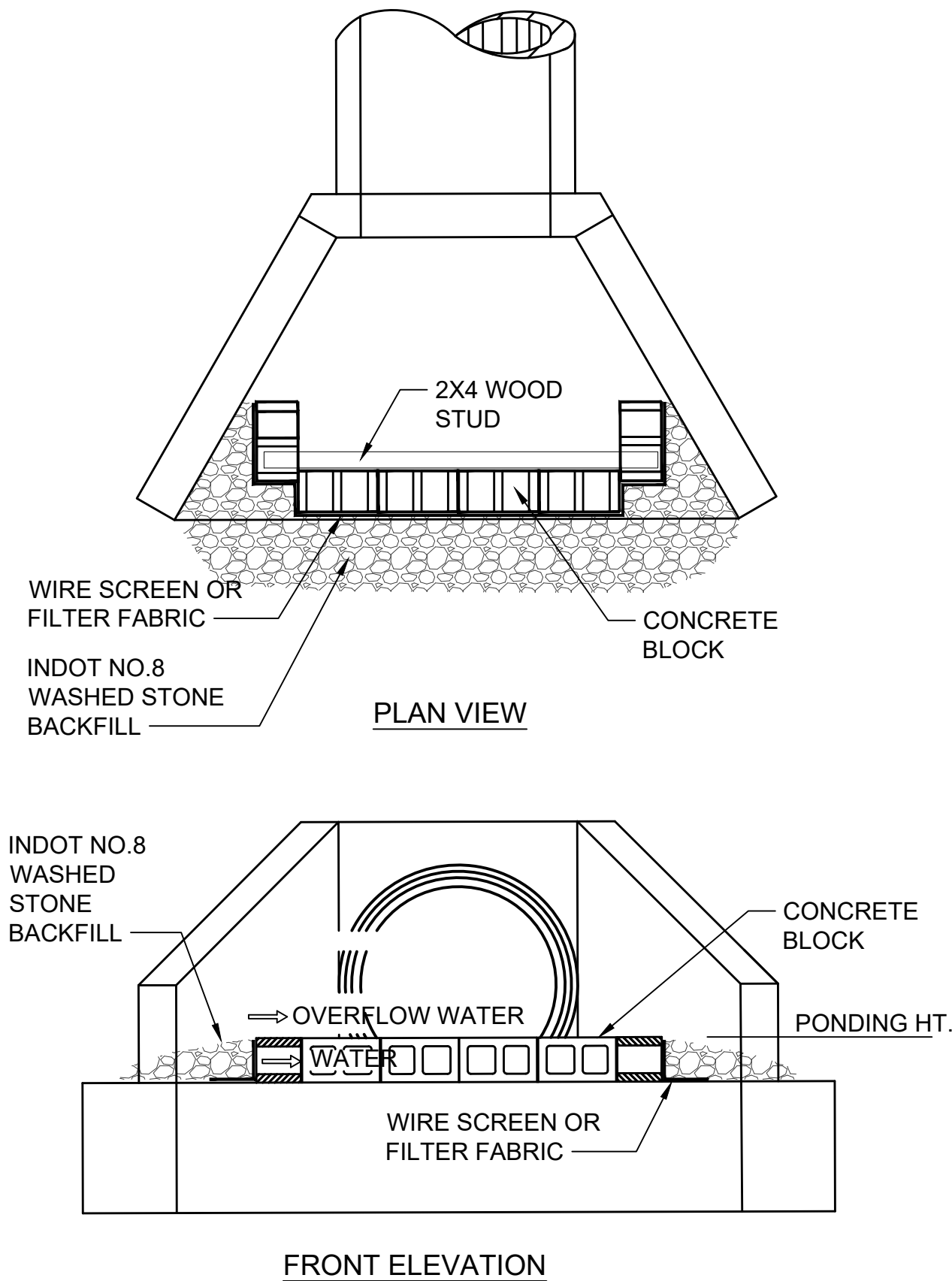


- NOTES:
- DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS (LESS THAN 5%).
 - EXCAVATE A BASIN OF SUFFICIENT SIZE ADJACENT TO THE DROP INLET.
 - THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

DROP INLET SEDIMENT BARRIER
 NOT TO SCALE



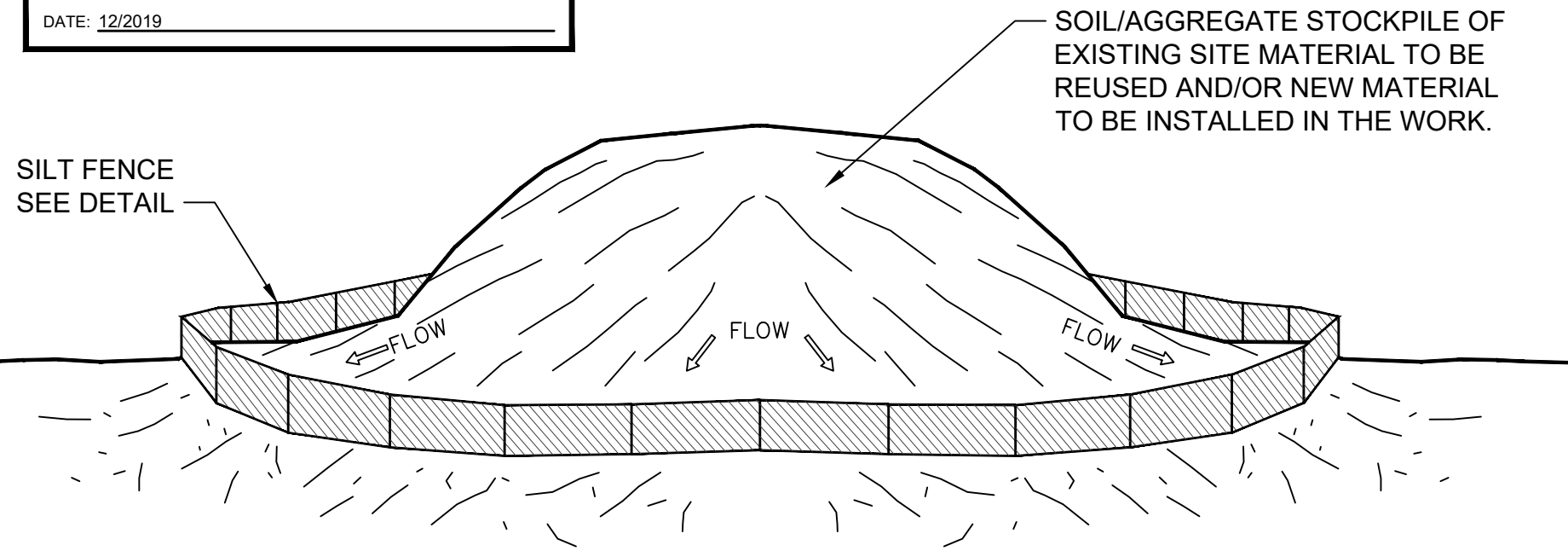
CHECK DAM DETAILS
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CULVERT INLET SEDIMENT BARRIER
 NOT TO SCALE

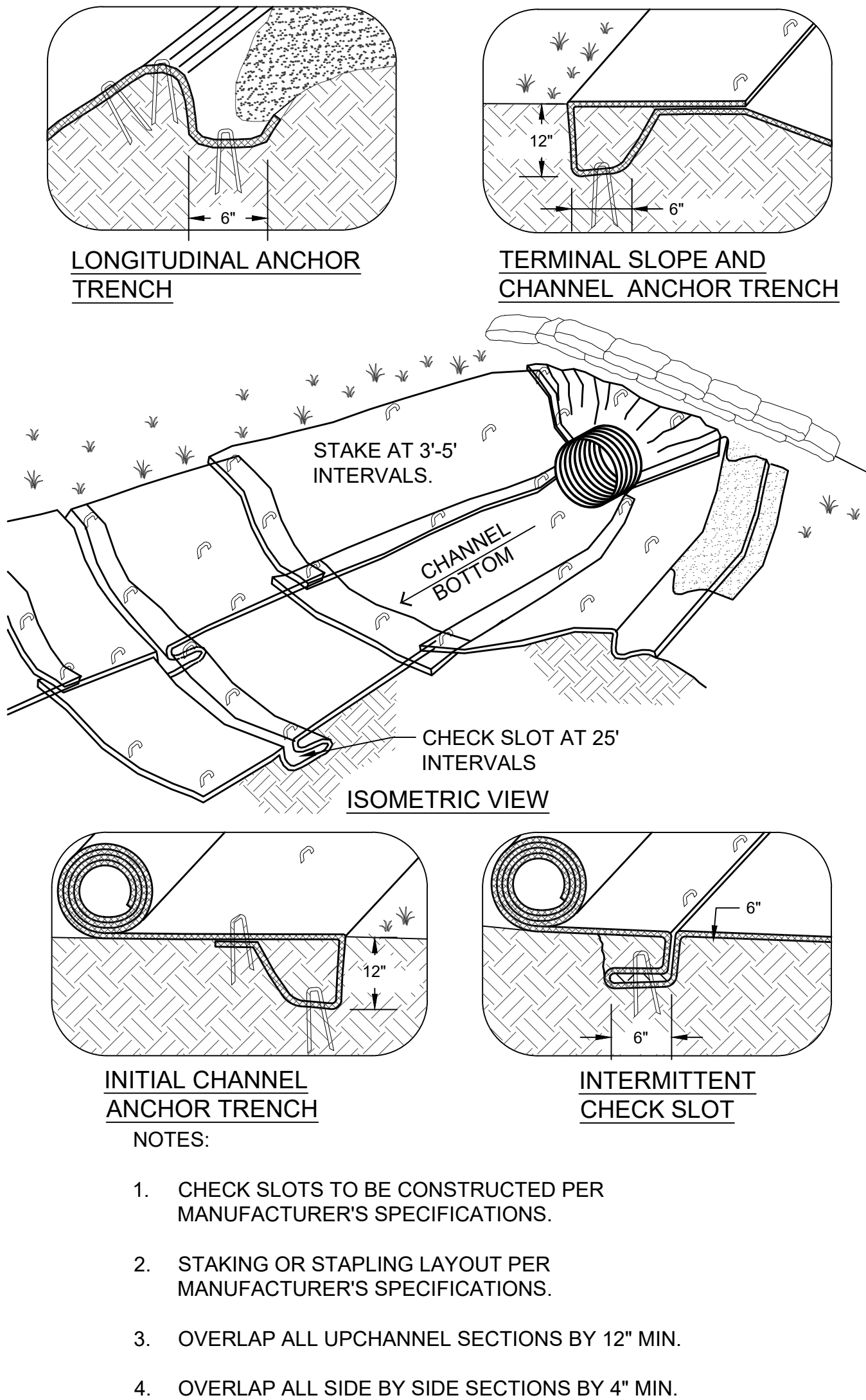
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 DATE: 12/2019



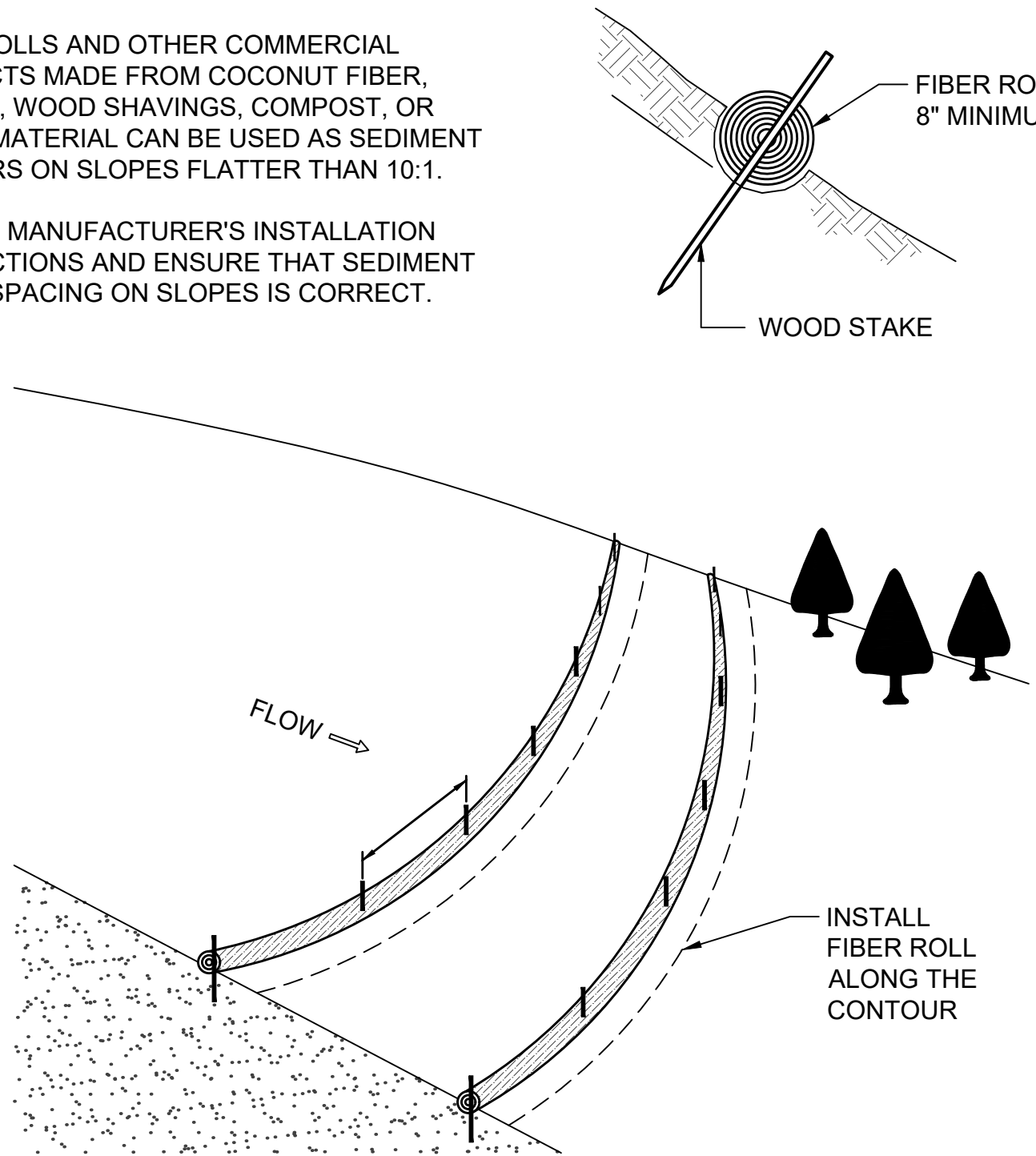
- NOTES:
- ALL EXISTING EXCAVATED MATERIAL THAT IS NOT TO BE REUSED IN THE WORK IS TO BE IMMEDIATELY REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.
 - RESTORE STOCKPILE SITES TO PRE-EXISTING PROJECT CONDITION AND RESEED AS REQUIRED.
 - STOCKPILE HEIGHTS MUST NOT EXCEED 35'. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.

MATERIALS STOCKPILE
 NOT TO SCALE

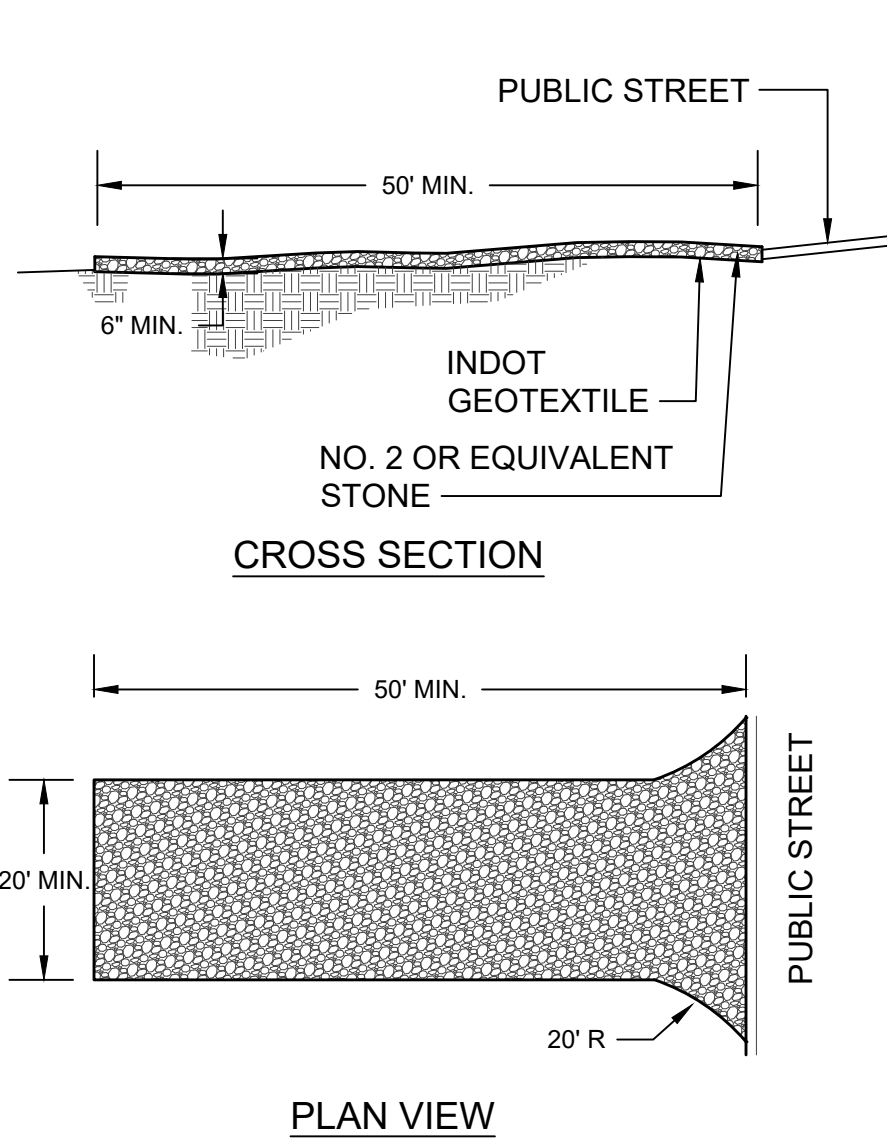


EROSION BLANKETS & TURF REINFORCEMENT MATS
 NOT TO SCALE

- NOTES:
- FIBER ROLLS AND OTHER COMMERCIAL PRODUCTS MADE FROM COCONUT FIBER, PLASTIC, WOOD SHAVINGS, COMPOST, OR OTHER MATERIAL CAN BE USED AS SEDIMENT BARRIERS ON SLOPES FLATTER THAN 10:1.
 - FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ENSURE THAT SEDIMENT FILTER SPACING ON SLOPES IS CORRECT.

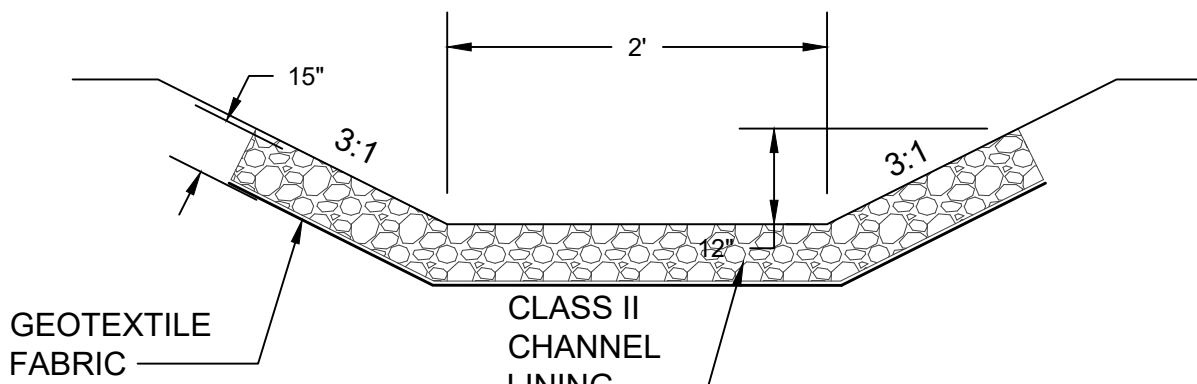


FIBER ROLLS
 NOT TO SCALE



- NOTES:
- A STABILIZED ENTRANCE PAD OF CRUSHED STONE SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.
 - GEOTEXTILE SHALL BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE.
 - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS WARRANT AND REPAIR OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 - ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
 - WHEN APPROPRIATE, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN.

STABILIZED CONSTRUCTION ENTRANCE
 NOT TO SCALE



RIPRAP CHANNEL LINING
 NOT TO SCALE

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EROSION CONTROL DETAILS
 US 36 FORCEMAIN REPLACEMENT
 TOWN OF PENDLETON, INDIANA

DESIGNED	DRAWN	REVIEWED	APPROVED
GWL	JRD	GWL	GWL

REVISIONS	DATE	DESCRIPTION
NO		

DATE: JULY 2018
 SCALE: 1"=30'
 SHEET NO.

THIS MARK SHOULD MEASURE EXACTLY 1" WHEN PLOTTED
 SCALE CHECK


C-13

PLOTTED BY: Johnson

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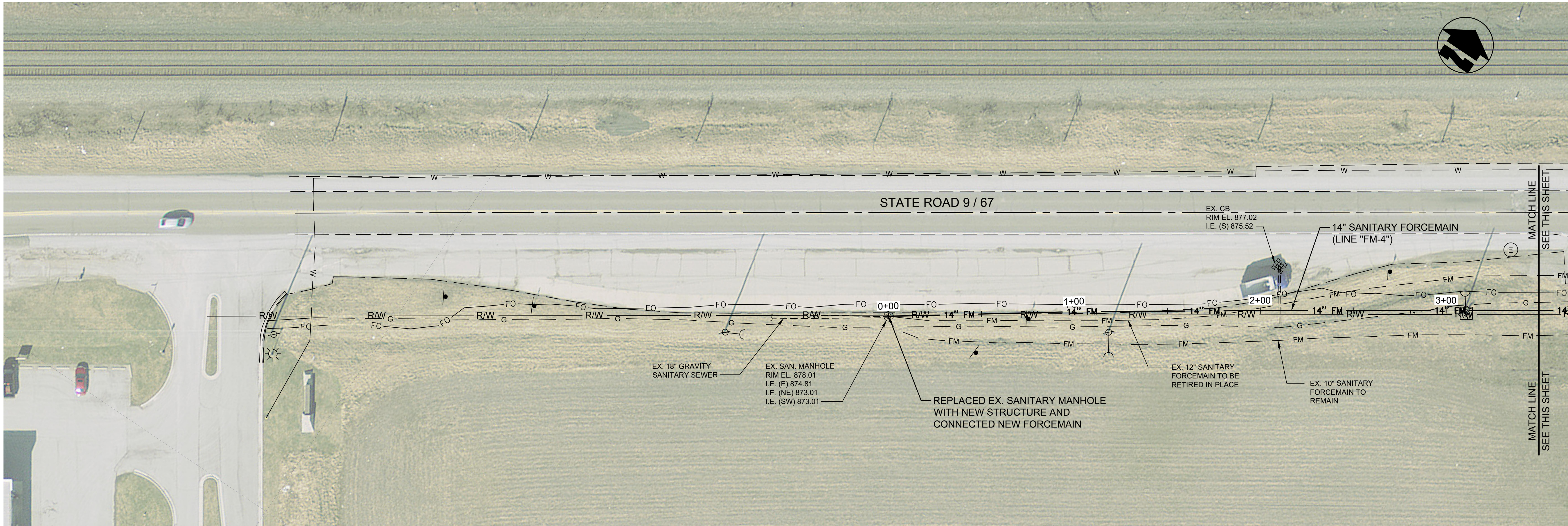


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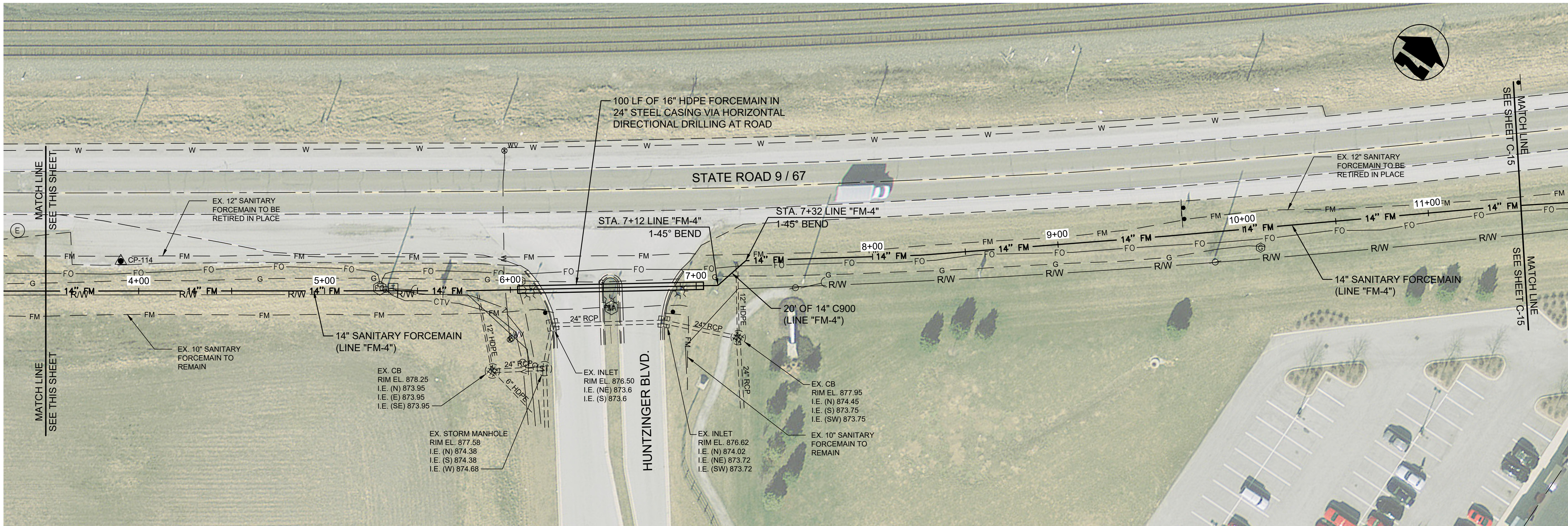
ENGINEER/ARCHITECT: GEORGE LEWIS

CONSTRUCTION COMPANY: S.C. CASE EXCAVATING

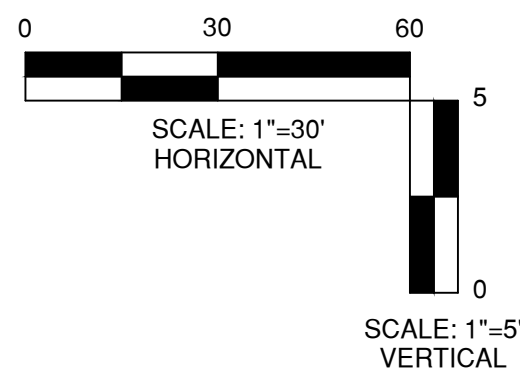
DATE: 12/2019



PLAN VIEW - B.O.P. STA. 0+00 TO STA. 3+50 LINE "FM-4"



PLAN VIEW - STA. 3+50 TO STA. 11+50 LINE "FM-4"

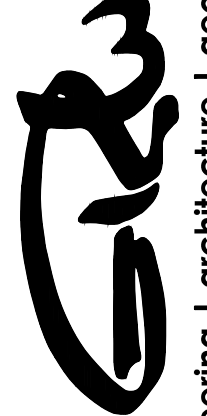


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PLAN

US 36 FORCEMAIN REPLACEMENT

TOWN OF PENDLETON, INDIANA

NO.	DATE	BY	DESIGNED		DRAWN		REVIEWED		APPROVED	
			GWL	JAU	GWL	GWL	GWL	GWL		

REVISIONS

NO.	DESCRIPTION

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C-14

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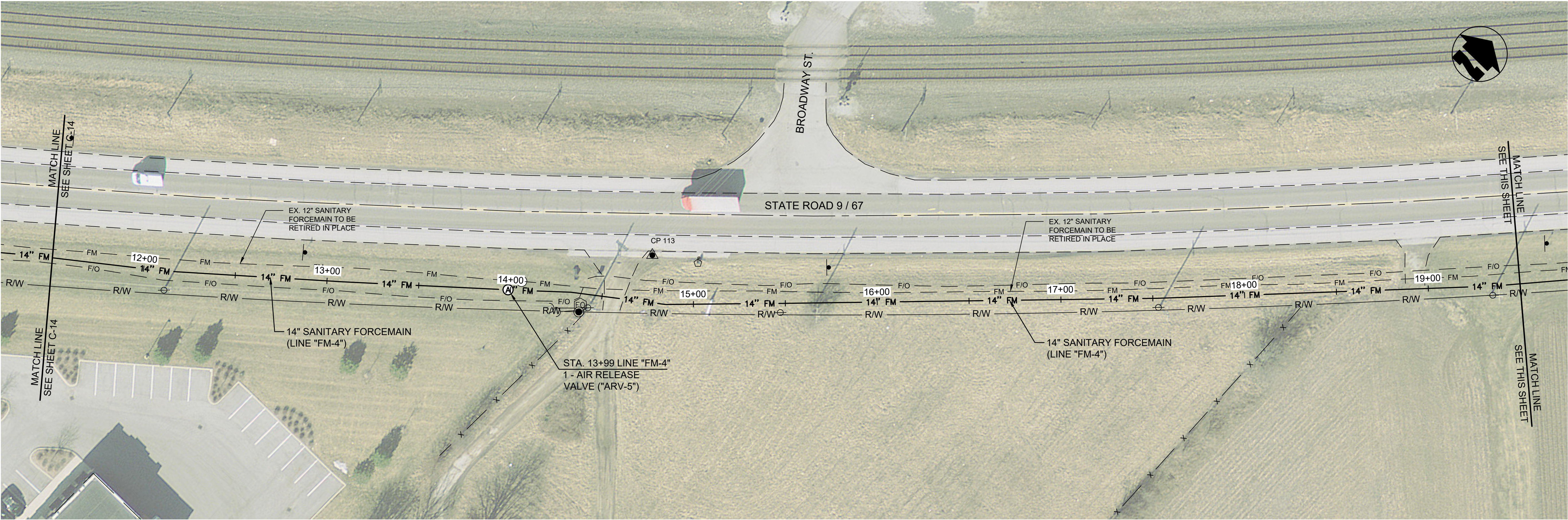
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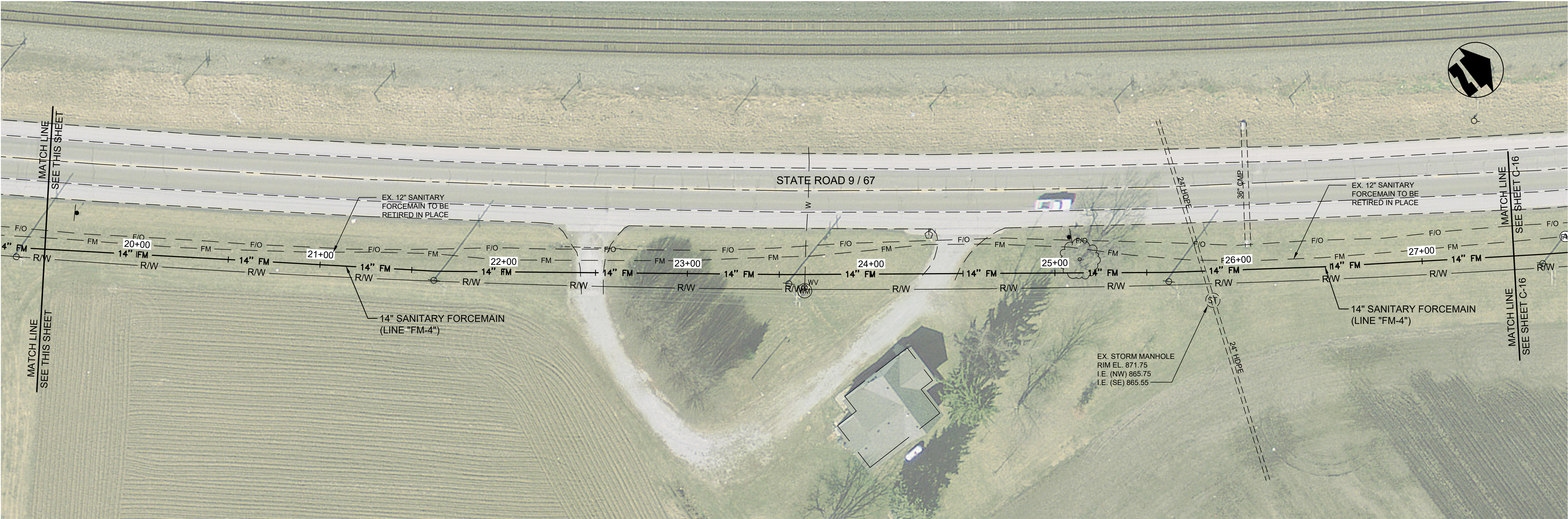


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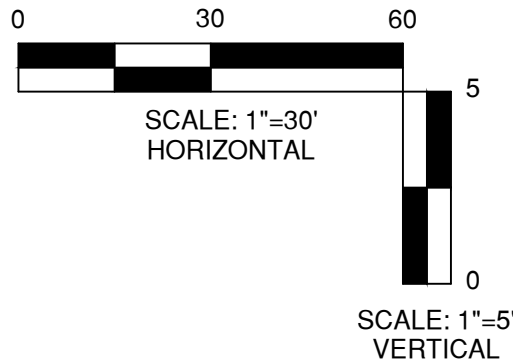
ENGINEER/ARCHITECT: GEORGE LEWIS
 CONSTRUCTION COMPANY: S.C. CASE EXCAVATING
 DATE: 12/2019



PLAN VIEW - STA. 11+50 TO STA. 19+50 LINE "FM-4"



PROFILE - STA. 19+50 TO STA. 27+50 LINE "FM-4"



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PLAN
 US 36 FORCEMAIN REPLACEMENT
 TOWN OF PENDLETON, INDIANA

NO.	DATE	BY	DESIGNED			
			GWL	JRD	GWL	GWL

REVISIONS
 DESCRIPTION
 NO. DATE BY

DATE: JULY 2018
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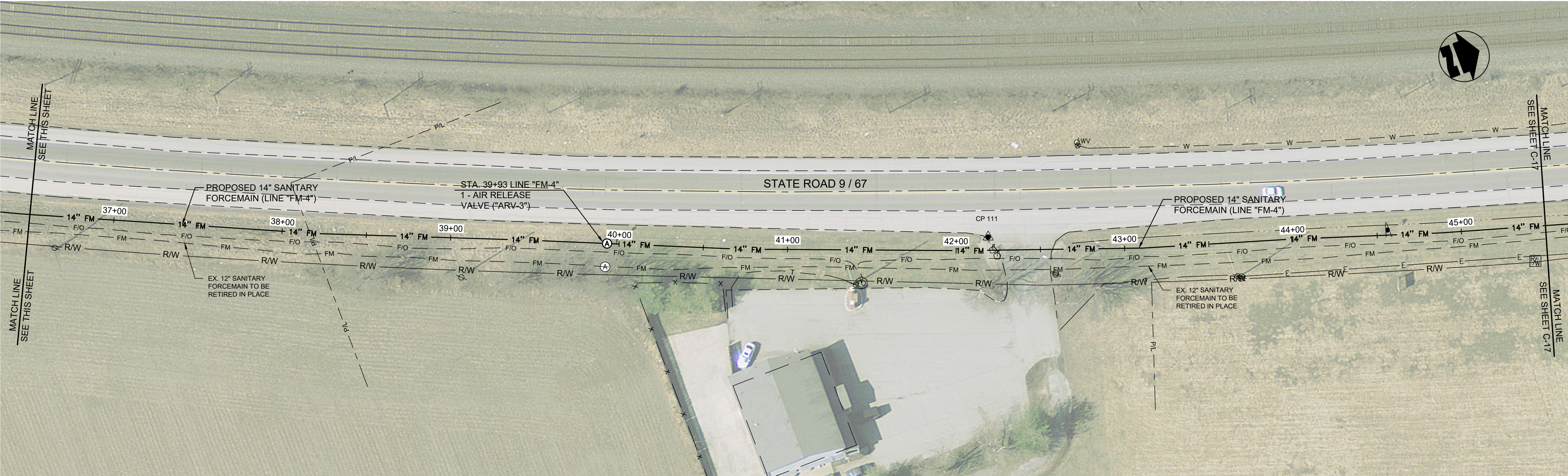


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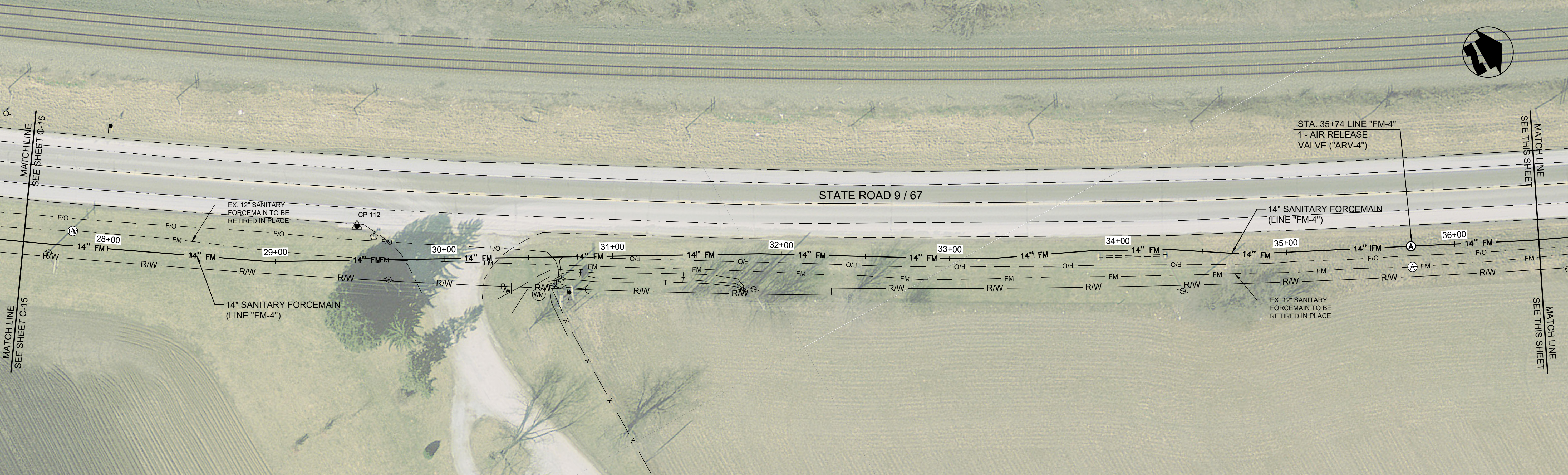
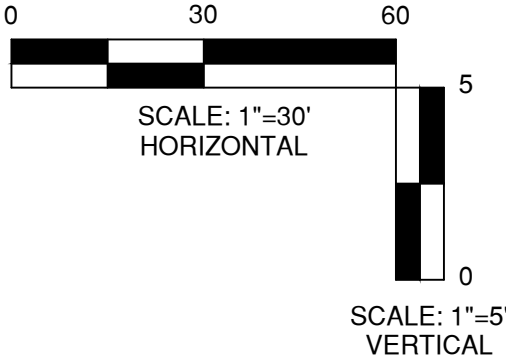
ENGINEER/ARCHITECT: GEORGE LEWIS

CONSTRUCTION COMPANY: S.C.CASE EXCAVATING

DATE: 12/2019



PROFILE - STA. 36+50 TO STA. 45+50 LINE "FM-4"



PLAN VIEW - STA. 27+50 TO STA. 36+50 LINE "FM-4"

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US 36 FORCEMAIN REPLACEMENT

TOWN OF PENDLETON, INDIANA

NO.	DESIGNED		DRAWN		REVIEWED		APPROVED	
	DATE	BY	DATE	BY	DATE	BY	DATE	BY

REVISIONS
 DESCRIPTION

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DATE: MARCH 2019


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C-16

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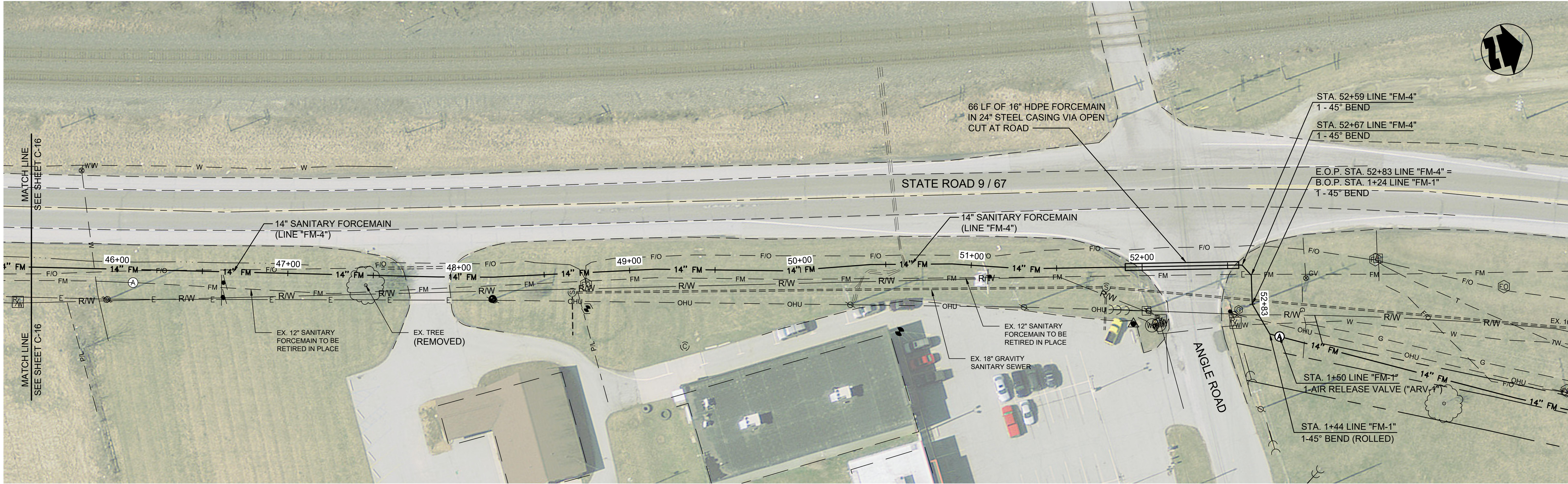


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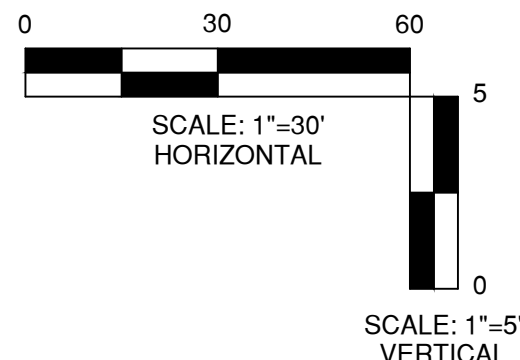
ENGINEER/ARCHITECT: GEORGE LEWIS

CONSTRUCTION COMPANY: S.C. CASE EXCAVATING

DATE: 12/2019



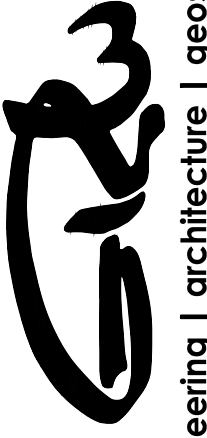
PLAN VIEW - STA. 45+50 TO E.O.P. STA. 52+83 LINE "FM-4"



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DESCRIPTION		GWL		
		DRAWN	JRD	
		REVIEWED	GWL	
		APPROVED	GWL	
SCALE CHECK		THIS MARK SHOULD MEASURE EXACTLY 1" WHEN PLOTTED		
DATE		JULY 2018		
SCALE		1"=30'		
SHEET NO.		C-17		

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