

ABBREVIATIONS

AB	ANCHOR BOLT	HB	HOSE BIBB	PO	PUSH ON
ABAND	ABANDONED	HCS	HOLLOW CORE SLAB	POL	POLISH
ABS	ABSOLUTE	HD	HEAD, HEAVY DUTY	POS	POSITION
ACOUST	ACOUSTICAL	HDN	HARDEN	PREFAB	PREFABRICATED
ADD	ADDENDUM	HDW	HARDWARE	PRESS	PRESSURE
ADDL	ADDITIONAL	HDWL	HEADWALL	PRI	PRIMARY
ADM	ADMINISTRATION	HGR	HANGER	PS	PUMP STATION
AFF	ABOVE FINISH FLOOR	HM	HOLLOW METAL	PSF	POUNDS PER SQUARE FOOT
AGG	AGGREGATE	HOL	HOLLOW	PSI	POUNDS PER SQUARE INCH
AHR	ANCHOR	HORIZ	HORIZONTAL	PSIG	POUNDS PER SQUARE INCH GAUGE
AL	ALUMINUM	HP	HORSEPOWER	PT	POINT
ALT	ALTERNATE	HPT	HIGH POINT	PTD	PAINTED
APPROX	APPROXIMATE	HR	HOUR	PVC	POLYVINYL CHLORIDE
ARCH	ARCHITECTURAL	HT	HEIGHT	PWR	POWER
ASB	ASBESTOS	HTR	HEATER	QT	QUART
AUX	AUXILIARY	HVY	HEAVY	QTY	QUANTITY
AVG	AVERAGE	HW	HOT WATER		
AWG	AMERICAN WIRE GAGE	HWL	HIGH WATER LEVEL		
		HWY	HIGHWAY		
		HYD	HYDRAULIC		
BC	BOLT CIRCLE			RAN	RANGE
BD	BOARD			RAD	RADIUS
BETW	BETWEEN	IAS	INTERCHANGE ACTIVATED SLUDGE	RAS	RETURN ACTIVATED SLUDGE
B'FLY	BUTTERFLY	IASFM	INTERCHANGE ACTIVATED SLUDGE	RASFM	RETURN ACTIVATED SLUDGE
BHP	BRAKE HORSEPOWER			RASFMA	RETURN ACTIVATED SLUDGE
BIT	BITUMINOUS	ID	FORCE MAIN		
BL	BASE LINE, BUILDING LINE	IFM	INSIDE DIAMETER	RCPT	RECEPTACLE
BLDG	BUILDING	IFMA	INFLUENT FORCE MAIN	RD	ROOF DRAIN
BLK	BLOCK	ILLUM	ILLUMINATE	RDCR	REDUCER
BM	BENCH MARK, BEAM	ILLUS	ILLUSTRATE	RECD	RECEIVED
BOT	BOTTOM	IN	INCH	REF	REFERENCE
BP	BASE PLATE	INCR	INCREASER	REFG	REFRIGERATOR
BRG	BEARING	INFL	INFLUENT	REINF	REINFORCE
BSMT	BASEMENT	INSUL	INSULATION	REM	REMAINDER
BTU	BRITISH THERMAL UNIT	INT	INTERIOR	REPL	REPLACE
BU	BUILT UP	INV	INVERT	REQD	REQUIRED
BW	BOTH WAYS	ITI	INTERCHANGE TANK INFLUENT	RESIL	RESILIENT
BYP	BYPASS			REV	REVISION
		JT	JOINT	RJ	RESTRAINED JOINT
		JCT	JUNCTION	RM	ROOM
				RND	ROUND
				RPM	REVOLUTIONS PER MINUTE
				S	SOUTH
				SCFM	SCUM FORCE MAIN
				SCH	SCHEDULE
				SEC	SECOND
				SECT	SECTION
				SEQ	SEQUENCE
				SFT	SHAFT
				SHLD	SHIELD
				SHT	SHEET
				SIM	SIMILAR
				SK	SKETCH
				SOL	SOLENOID
				SPCS	SPACES
				SPEC	SPECIFICATIONS
				SP GR	SPECIFIC GRAVITY
				SP HT	SPECIFIC HEAT
				SPRT	SUPPORT
				SQ	SQUARE
				SST	STAINLESS STEEL
				S/S	SERVICE SINK
				SS	SANITARY SEWER
				STA	STATION
				STD	STANDARD
				STIR	STIRRUP
				STM	STORM
				STRUC	STRUCTURE
				SUSP	SUSPENDED
				SW	STORM WATER
				SYM	SYMBOL
				SYMM	SYMMETRICAL
				T	TOP
				T&B	TOP AND BOTTOM
				TECH	TECHNICAL
				TEMP	TEMPERATURE, TEMPERED
				THEO	THEORETICAL
				THD	THREAD
				THRES	THRESHOLD
				THRU	THROUGH
				TOF	TOP OF FOOTING
				TOL	TOLERANCE
				TOS	TOP OF STEEL
				TOT	TOTAL
				TRANS	TRANSFER
				TW	TOP OF WALL
				TYP	TYPICAL
				UNIF	UNIFORM
				UON	UNLESS OTHERWISE NOTED
				UV	ULTRAVIOLET
				V	VOLT
				VAC	VACUUM
				VCT	VINYL COMPOSITION TILE
				VCP	VITRIFIED CLAY PIPE
				VERT	VERTICAL
				VISC	VISCOSITY
				VLR	VERTICAL LOOP REACTOR
				VLRE	VERTICAL LOOP REACTOR EFFLUENT
				VS	VERSUS
				VTR	VENT THROUGH ROOF
				W	WEST, WIDTH
				W/	WITH
				WAS	WASTE ACTIVATED SLUDGE
				WD	WOOD
				WDW	WINDOW
				WG	WIRE GAGE
				WL	WATER LEVEL
				WPG	WATERPROOFING
				WR	WATER RESISTANT
				WS	WASTE SLUDGE
				WSDR	WASTE SLUDGE DRAIN
				WSE	WATER SURFACE ELEVATION
				WWF	WELDED WIRE FABRIC
				YD	YARD
				YP	YIELD POINT
				YR	YEAR

ABBREVIATIONS

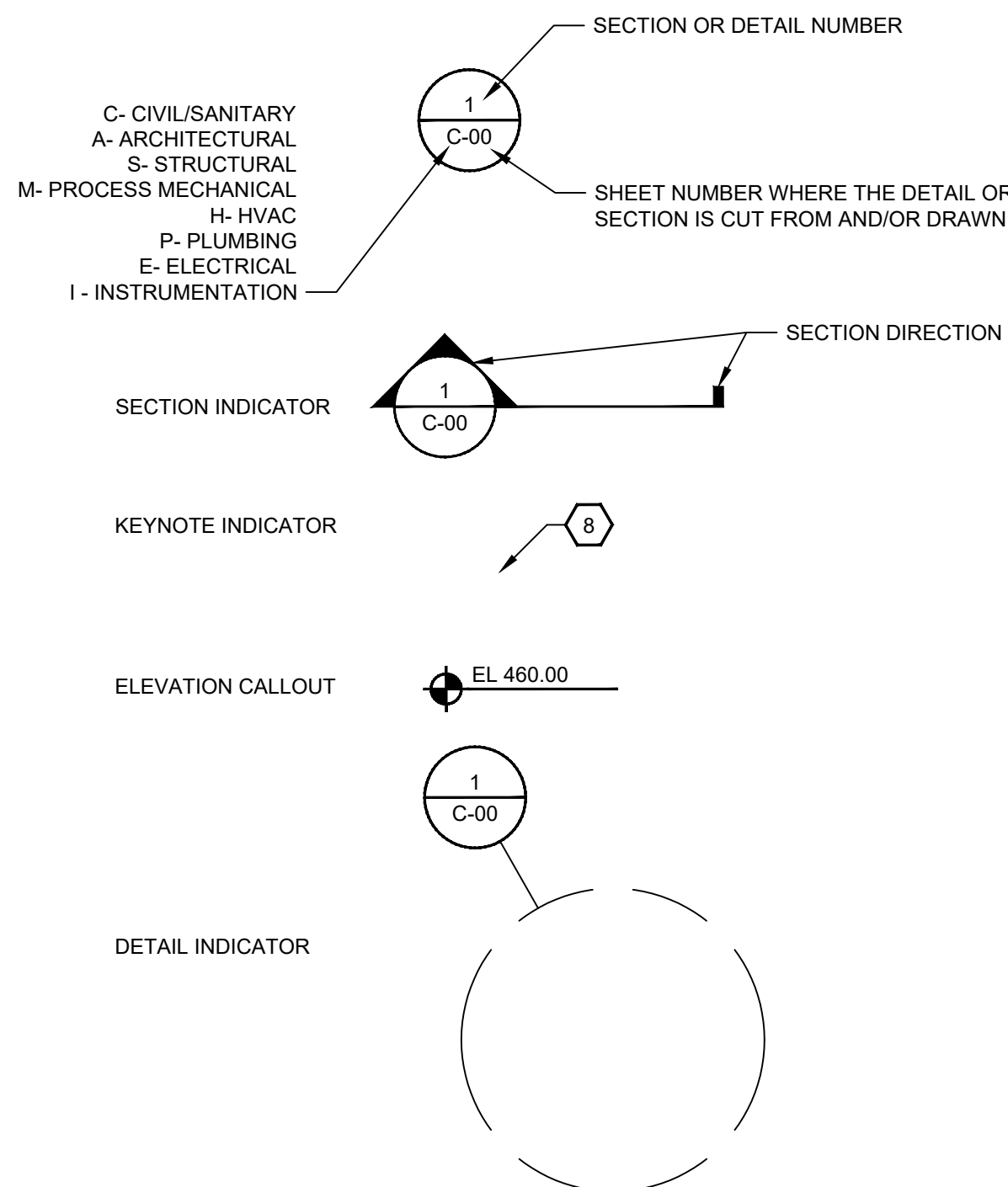
LINETYPES

	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



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.

SYMBOLS

	EXISTING	NEW		EXISTING	NEW
WATER METER			COMMUNICATIONS PEDESTAL		
LIFT STATION			UNDERGROUND TELEPHONE MARKER		
FIRE HYDRANT			TELEPHONE MANHOLE		
AIR RELEASE VALVE			TELEPHONE PEDESTAL		
BLOW OFF VALVE			BOLLARD		
WATER MAIN BEND			SECTION CORNER		
WATER MAIN CAP/PLUG			SURVEY CONTROL POINT		
WATER MAIN TEE			SURVEY BENCHMARK		
WATER MAIN CROSS			TELEVISION ANTENNA		
REDUCER			FIELD DRAIN		
WATER VALVE			FLAG POLE		
WATER MAIN MARKER			HEADSTONE		
PUMP STATION			MAILBOX		
WATER SERVICE			PARKING METER		
IN LINE CONTROL VALVE			PLANTER BOX		
SANITARY MANHOLE			RAILROAD SIGNAL		
CORPORATION STOP			RAILROAD GATE		
SANITARY SEWER MARKER			RIGHT OF WAY MONUMENT		
SANITARY SEWER VALVE			PROPERTY CORNER		
SANITARY SEWER VALVE VAULT			ROCK SOUNDING		
SANITARY SEWER WET WELL			SOIL BORING		
SEPTIC TANK			ROCK ELEVATION (PROFILE)		
CLEAN OUT			SATELLITE DISH		
CATCH BASIN			SIGN		
DOUBLE CATCH BASIN			SIGN WITH MAST ARM		
CURB INLET			SINK HOLE		
CIRCULAR INLET			IRRIGATION SPRINKLER HEAD		
STORM SEWER MANHOLE			STEAM MANHOLE		
NATURAL GAS METER			TRAFFIC LIGHT CONTROL BOX		
NATURAL GAS PRESSURE VALVE			TRAFFIC LIGHT MAST POLE		
NATURAL GAS STOP			TRAFFIC LIGHT LOOP DETECTOR		
NATURAL GAS VALVE			TRAFFIC LIGHT MANHOLE		
NATURAL GAS MARKER			WELL		
NATURAL GAS VENT			YARD LIGHT		
NATURAL GAS WELL			MONITORING WELL		
ELECTRIC MANHOLE			VEGETATION		
ELECTRIC METER			DECIDUOUS TREE		
ELECTRIC PEDESTAL			PINE TREE		
ELECTRIC TRANSFORMER PAD			TREE STUMP		
ELECTRIC HAND HOLE BOX					
DOWN GUY WIRE					
LIGHT POLE					
UTILITY POLE					
ELECTRIC MARKER					
UNDERGROUND FIBER MARKER					
FIBER MANHOLE					

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ENGINEER/ARCHITECT: GEORGE LEWIS

CONSTRUCTION COMPANY: S.C. CASE EXCAVATING

DATE: 12/2019

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.

GRW PROJECT NO. 4635

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SYMBOLS AND LEGEND

US 36 FORCEMAIN REPLACEMENT

TOWN OF PENDLETON, INDIANA

DESIGNED	GWL	DRAWN	JRD	REVIEWED	GWL	APPROVED	GWL
DATE	---	---	---	---	---	---	---
NO.	---	---	---	---	---	---	---
SCALE CHECK: 1"=30'							
DATE: JULY 2018							
SCALE: 1"=30'							
SHEET NO.							

G-02