

A	
AB	AGGREGATE BASE, ANCHOR BOLT
ABV	ABOVE
AC	ASPHALT CONCRETE, AIR COMPRESSOR
ACP	ASBESTOS CEMENT PIPE
AD	AREA DRAIN, ANODE, ACCESS DOOR
ADD	ADDITIONAL
ADJ	ADJUSTABLE, ADJACENT
ADMIN	ADMINISTRATION
ADWF	AVERAGE DRY-WEATHER FLOW
AF	AIR FLOW
AFC	AFTERCOOLER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AH	AHEAD
AHU	AIR HANDLING UNIT
AIB	AIR INLET BOX
ALT	ALTERNATE, ALTERNATIVE
ALUM	ALUMINUM
ANC	ANCHOR
AP	ACCESS PANEL, ANGLE POINT
APPR	APPROACH
APPROX	APPROXIMATE, APPROXIMATELY
AR	ANCHOR ROD
ARCH	ARCHITECTURAL
ASSY	ASSEMBLY
ATM	ATMOSPHERE, ATMOSPHERIC
AUTO	AUTOMATIC
AUX	AUXILIARY
AVG	AVERAGE
AWG	AMERICAN WIRE GAUGE
AWWA	AMERICAN WATER WORKS ASSOCIATION
AWWF	AVERAGE WET-WEATHER FLOW
B	
B	BORE HOLE, BEAM
B TO B	BACK TO BACK
BAL	BALANCE
BC	BACK OF CURB
BET	BETWEEN
BF	BLIND FLANGE
BHP	BRAKE HORSEPOWER
BITUM	BITUMINOUS
BLDG	BUILDING
BLK	BLOCK
BM	BENCHMARK
BOF	BOTTOM OF FOOTING
BOL	BOTLER
BOP	BOTTOM OF PIPE
BOT	BOTTOM
BP	BACK PRESSURE
BRG	BEARING
BS	BOTH SIDES
BU	BELL-UP
BVC	BEGINNING OF VERTICAL CURVE
C	
C	CURVE
C TO C	CENTER TO CENTER
CB	CATCH BASIN
CEN	CENTRATE
CF	CUBIC FEET
CFM	CENTRIFUGE
CFM	CUBIC FEET PER MINUTE
CFPS	CUBIC FEET PER SECOND
C&C	CURB AND CUTTER
CIP	CAST IRON PIPE
CISP	CAST IRON SOIL PIPE
CL	CLASS
C/L	CENTERLINE
CLG	CEILING
CLR	CLEAR, CLEARANCE
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CMC	CEMENT MORTAR COATED
CML	CEMENT MORTAR LINED
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT, COMPANY
COL	COLUMN
COMB	COMBINATION
COMB SWR	COMBINED SEWER
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUED, CONTINUOUS, CONTINUATION, CONTROL
CONTR	CONTRACTOR
COR	CORNER
CORR	CORRIDOR, CORRUGATED
CP	CONTROL POINT, CATHODIC PROTECTION, CATCH POINT, CAKE PUMP
CPLG	COUPLING
CPVC	CHLORINATED POLYVINYL CHLORIDE
CSP	CORRUGATED STEEL PIPE
CTR(S)	CENTER(S)
CTS	CORROSION/CATHODIC TEST STATION
CU	CUBIC, COPPER
CW	COLD WATER
CY	CUBIC YARD
D	
D	DOOR
DB	DUCT BANK
DBL	DOUBLE
DEG	DEGREE
DEPT	DEPARTMENT
DET	DETAIL
DI	DROP INLET, DUCTILE IRON
DIA	DIAMETER
DIFF	DIFFUSER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DISCH	DISCHARGE
DIST	DISTRIBUTION
DIV	DIVISION
DMJ	DISMANTLING JOINT
DN	DOWN
DR	DRAIN
DRY	DRYER
DW	DRY WELL
DWG(S)	DRAWING(S)

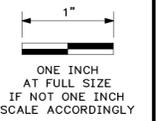
E	
EA	EAST, EASTING
EACH	EACH
ECC	ECCENTRIC
ECC RED	ECCENTRIC REDUCER
EFF	EFFLUENT, EFFICIENCY
EG	EXISTING GRADE
EJ	EXPANSION JOINT
EL	ELEVATION
ELB	ELBOW
ELL	ELBOW
ELEC	ELECTRIC, ELECTRICAL
EMER	EMERGENCY
ENC	ENCASEMENT
ENCL	ENCLOSURE
EOL	END OF LINE
EOP	EDGE OF PAVEMENT
EOS	EDGE OF SLAB
EQ	EQUAL
EQUIP	EQUIPMENT
EVC	END OF VERTICAL CURVE
EW	EACH WAY, EMERGENCY EYEWASH
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION, EXPOSED
EXT	EXTENSION, EXTERIOR, EXTERNAL
F	
F	FAHRENHEIT, FACE, FAN, FEEDER
F TO F	FACE TO FACE
FAB	FABRICATE(D)(TION)
FC	FACE OF CONCRETE, FAIL CLOSED, FLEXIBLE CONNECTION
FCA	FLANGED COUPLING ADAPTER
FD	FLOOR DRAIN
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FIG	FIGURE
FL	FLOOR, FLOW LINE
FLEX	FLEXIBLE
FLG	FLANGE(D)
FM	FORCE MAIN, FLOW METER
FMH	FLEXIBLE METAL HOSE
FO	FAIL OPEN
FOB	FLAT ON BOTTOM
FOM	FACE OF MASONRY
FOT	FLAT ON TOP
FPS	FEET PER SECOND
FRP	FIBERGLASS REINFORCED PLASTIC
FS	FAR SIDE, FLOOR SLEEVE
FT	FOOT, FEET
FTG	FOOTING
FURN	FURNISH, FURNISHED
FWD	FORWARD
G	
G	GAS
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GB	GRADE BREAK
GC	GROOVED COUPLING
GEN	GENERAL, GENERATOR
GL	GLASS
GM	GAS METER
GPD	GALLONS PER DAY
QPM	GALLONS PER MINUTE
GR	GRADE
H	
H	HIGH, HOUR
HOG	HOT-DIPPED GALVANIZED
HDPE	HIGH DENSITY POLYETHYLENE
HEX	HEAT EXCHANGER
HGT	HEIGHT
HH	HANDHOLE
HMC	HARNESSED MECHANICAL COUPLING
HMJ	HARNESSED MECHANICAL JOINT
HOP	HOPPER
HORIZ	HORIZONTAL
HP	HIGH POINT, HIGH PRESSURE, HORSEPOWER
HR	HOUR, HANDRAIL
HRB	HEAT RECOVERY BOX
HS	HIGH STRENGTH
HVAC	HEATING, VENTILATING AND AIR CONDITIONING
HW	HOT WATER
HWY	HIGHWAY
HYDRO	HYDRONEUMATIC, HYDROGENERATION
I	
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IF	INSIDE FACE
IN	INCH(ES)
INCL	INCLUDING
INCR	INCREASE
INST	INSTRUMENT, INSTRUMENTATION
INSUL	INSULATE, INSULATED, INSULATION
INT	INTERIOR, INTERNAL
INV	INVERT
IPS	IRON PIPE SIZE
J	
J	JUNCTION BOX
JB	JUNCTION BOX
JT	JOINT
K	
KVA	KILOVOLT AMPERE

L	
L	LENGTH, LONG, LOW, LOUVER
LAT	LATERAL, LATITUDE
LAV	LAVATORY
LB(S)	POUND(S)
LC	LENGTH OF CURVE
LF	LINEAR FEET
LH	LEFT HAND
LIN	LINEAL, LINEAR
LONG	LONGITUDE
LP LOW	POINT, LOW PRESSURE
LT	LEFT
M	
MAINT	MAINTENANCE
MAN	MANUAL(LY)
MAU	MAKEUP AIR UNIT
MAX	MAXIMUM
MBR	MEMBRANE BIореАCTOR
MC	MECHANICAL COUPLING
MCC	MOTOR CONTROL CENTER
MECH	MECHANICAL
MED	MEDIUM
MEZ	MEZZANINE
MFR(S)	MANUFACTURER(S)
MG	MILLION GALLONS
MG/L	MILLIGRAMS PER LITER
MGD	MILLION GALLONS PER DAY
MH	MAINTENANCE HOLE, MANHOLE
MIN	MINIMUM, MINUTE
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MJRG	MECHANICAL JOINT RETAINER GLAND
MJR	MECHANICAL JOINT WITH TIE ROD
MO	MOTOR OPERATED
MSL	MEAN SEA LEVEL
MTD	MOUNTED
MTL	MATERIAL
MTR	MOTOR
MW	MONITORING WELL
N	
N	NORTH, NORTHING, NITROGEN (TOTAL AS N)
N/A	NOT APPLICABLE
NAD	NORTH AMERICAN DATUM (HORIZONTAL)
NAVD	NORTH AMERICAN VERTICAL DATUM
NC	NORMALLY CLOSED
NF	NEAR FACE
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NO.	NUMBER(S)
NOM	NOMINAL
NPSH	NET POSITIVE SUCTION HEAD
NPSHR	NET POSITIVE SUCTION HEAD REQUIRED
NPT	NATIONAL PIPE THREAD
NPW	NONPOTABLE WATER
NRS	NON-RISING STEM
NS	NEAR SIDE
NTS	NOT TO SCALE
O	
OC	ON CENTER, ODOR CONTROL
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE, OVERFLOW
OH	OVERHEAD
OPER	OPERATING
OPNG	OPENING
OPP	OPPOSITE
OZ	OUNCE
P	
P&ID	PIPING/PROCESS AND INSTRUMENTATION DIAGRAM
P	PHOSPHORUS (TOTAL AS P)
PPM	PARTS PER MILLION
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCCP	PRESTRESSED CONCRETE CYLINDER PIPE
PE	PLAIN END
PG	PRESSURE GAUGE
PH	PIPE HANGER
PI	POINT OF INTERSECTION
PWL(S)	PANEL(S), PANELBOARD(S)
PCC	POINTON CIRCULAR CURVE, POINT OF CONNECTION
POT	POINT ON TANGENT
PP	POWER POLE
PPD	POUNDS PER DAY
PROJ	PROJECTION
PRS	PRESSURE REDUCING STATION
PRV	POWER ROOF VENTILATOR
PS	PIPE SUPPORT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAUGE
PT	POINT OF TANGENCY, POINT
PVC	POLYVINYL CHLORIDE, POINT OF VERTICAL CURVATURE
PVT	POINT OF VERTICAL TANGENCY
PVCP	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PW	POTABLE WATER
Q	
Q	RATE OF FLOW
QCPLG	QUICK COUPLING
R	
R	RADIUS, RISER
R/W	RIGHT OF WAY
RCP	REINFORCED CONCRETE PIPE
RCCP	REINFORCED CONCRETE CYLINDER PIPE
RECIRC	RECIRCULATING
RED	REDUCER, REDUCING
REF	REFERENCE

REIN	REINFORCED, REINFORCING
REM	REMOVABLE, REMOVE
REQD	REQUIRED
RET	RETURN
REV	REVISION, REVISED, REVERSED
RH	RIGHT HAND
RM	ROOM
RO	REVERSE OSMOSIS
RPM	REVOLUTIONS PER MINUTE
RR	RAILROAD
RS	RISING STEM
RT	RIGHT
ROW	RIGHT OF WAY
S	
S	SECOND, SLOPE, SOUTH
SCHED	SCHEDULE
SCFM	STANDARD CUBIC FEET PER MINUTE
SD	STORM DRAIN
SEC	SECOND
SECT	SECTION
SG	SLIDE GATE
SF	SQUARE FEET
SH	SHEET
SIM	SIMILAR
SP	STEEL PIPE
SPA	SPACING, SPACES
SPEC(S)	SPECIFICATION(S)
SPL	SPECIAL
SPLY	SUPPLY
SQ	SQUARE
SS	STAINLESS STEEL
SSK	SANITARY SEWER
SSK	SERVICE SINK
ST SWR	STORM SEWER
STA	STATION
STD	STANDARD
STL	STEEL
STOR	STORAGE
STR	STRUCTURAL
SUSP	SUSPENDED
SW	SERVICE WATER
SYM	SYMMETRICAL
SYS	SYSTEM
T	
T	TELEPHONE, TOP
TAN	TANGENT
TBC	TOP BACK OF CURB
TBD	TO BE DETERMINED
TBM	TEMPORARY BENCHMARK
TC	TOP OF CURB
TDS	TOTAL DISSOLVED SOLIDS
TEMP	TEMPERATURE, TEMPORARY
TH	TEST HOLE
THD	THREADED
THK	THICK, THICKNESS
TOC	TOP OF CONCRETE, TABLE OF CONTENTS, TOTAL ORGANIC CARBON
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOP	TOP OF PIPE
TOW	TOP OF WALL
TP	TEST PIT
TRANS	TRANSFORMER
TS	TOTAL SOLIDS
TSDU	THERMAL SLUDGE DRYING UNIT
TSS	TOTAL SUSPENDED SOLIDS
TYP	TYPICAL
U	
UB	UTILITY BOX
UF	ULTRAFILTRATION
UG	UNDERGROUND
UH	UNIT HEATER
UNO	UNLESS NOTED OTHERWISE
UP	UTILITY POLE
USGS	UNITED STATES GEOLOGICAL SURVEY
UV	ULTRAVIOLET
V	
V	VALVE (SEE P&ID ABBREVIATIONS), VERTICAL, VOLT, VENT
VAC	VACUUM
VB	VALVE BOX
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
VOCs	VOLATILE ORGANIC COMPOUNDS
VP	VAPOR PRESSURE
W	
W	WEST, WIDE, WATER
W/	WITH
WC	WATER COLUMN
WEF	WATER ENVIRONMENT FEDERATION
WL	WATER LEVEL
WM	WATER METER
W/O	WITHOUT
WP	WATERPROOF
WS	WATERSTOP
WS	WATER SURFACE
WSL	WATER SURFACE LEVEL
WT	WEIGHT
WW	WETWELL
X	
x	BY, TIMES
Y	
Y	YARD HYDRANT

NOTES:

- FOR EQUIPMENT ABBREVIATIONS, INCLUDING FOR VALVES, REFER TO PFD LEGEND AND ABBREVIATIONS DRAWINGS FUNCTION CODE ABBREVIATIONS.
- FOR SYSTEM AND PROCESS STREAM ABBREVIATIONS, REFER TO PFD LEGEND AND ABBREVIATIONS DRAWINGS SYSTEM CODE AND PROCESS CODE ABBREVIATIONS.
- FOR PIPE MATERIAL ABBREVIATIONS REFER TO PFD LEGEND AND ABBREVIATIONS DRAWINGS PIPELINE MATERIAL CODE ABBREVIATIONS.
- ITEMS MARKED WITH AN ASTERISK SHALL BE PROVIDED AS PART OF THE THERMAL SLUDGE DRYER SYSTEM BY THE SUPPLIER UNDER APPENDIX A OF THE SPECIFICATIONS.



DATE									
REVISION									



HAWKINS-WEIR ENGINEERS, INC.
BLACK & VEATCH

ROGERS, ARKANSAS
 ROGERS POLLUTION CONTROL FACILITY (PCF)
 SOLIDS HANDLING IMPROVEMENTS, PHASE II
 GENERAL, CIVIL, AND PROCESS MECHANICAL ABBREVIATIONS
 FOR: ROGERS WATER UTILITIES

DATE: AUGUST 2024
 SCALE: NONE
 DESIGNED BY: LRO
 DRAWN BY: RTD
 HWEI NO.: 2020043
 FILENAME:
 SHEET NO. G-09