MECHANICAL EQUIPMENT

- MAGNETIC FLOWMETER
- ORIFICE PLATE
- VENTURI FLOWMETER
- ANNUBAR
- TURBINE FLOWMETER
- ROTAMETER (FI)
- POSITIVE DISPLACEMENT FLOWMETER
- ULTRASONIC LEVEL INSTRUMENT
- NORMAL LIQUID LEVEL
- LEVEL SENSOR, FLOAT TYPE
- MIXER
- CALIBRATION COLUMN
- PULSATION DAMPENER
- REDUCER
- Y STRAINER
- BLIND FLANGE
- SAMPLE PORT
- DIAPHRAGM SEAL
- CAPPED OR PLUGGED
- QUICK CONNECT COUPLING
- CAMLOCK W/ MALE CAP
- RUPTURE DISK
- INJECTOR
- DRAIN
- ULTRASONIC LEVEL SENSOR
- PIPE MATERIAL CHANGE
- PIPE BREAK
- PIPE CROSSING
- PROPELLER MIXER
- INJECTION QUILL WITH CORP STOP
- PUMPOUT CONNECTION
- VAPOR SEAL
- FLEXIBLE HOSE
- VENT
- MOTOR OPERATED ACTUATOR WITH POSITIONER
- PNEUMATIC OPERATED ACTUATOR WITH POSITIONER
- MOTOR ACTUATOR
- SOLENOID ACTUATOR
- PNEUMATIC ACTUATOR
- PNEUMATIC ACTUATOR WITH STROKE POSITIONER

PIPING LEGEND

FITTING/ APPURTENANCE	FLANGED				MECHANICAL JOINT				GROOVE JOINT				SOLVENT WELD			
	SINGLE-LINE		DOUBLE-LINE		SINGLE-LINE		DOUBLE-LINE		SINGLE-LINE		DOUBLE-LINE		SINGLE-LINE		DOUBLE-LINE	
	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
BEND																
TEE																
WYE																
REDUCER																
CAP/ BLIND FLANGE					N/A	N/A	N/A	N/A								
PLUG	N/A	N/A	N/A	N/A					N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BUTTERFLY VALVE																
BALL VALVE					N/A	N/A	N/A	N/A								
CHECK VALVE					N/A	N/A	N/A	N/A								
GATE VALVE																
PLUG VALVE																
AUTOMATIC CONTROL VALVE					N/A	N/A	N/A	N/A								
PINCH VALVE					N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				

VALVES (MISC)

- GLOBE VALVE (GLV)
- DIAPHRAGM VALVE (DV)
- THREE WAY VALVE (TWV)
- THREE WAY GLOBE VALVE (TWGV)
- BALL CHECK VALVE (BCV)
- COMBINATION AIR VALVE (AVRV)
- PRESSURE RELIEF VALVE (PRV)
- VACUUM BREAKER VALVE (VBV)
- AIR VENT VALVE (AV)
- BACK PRESSURE REGULATOR VALVE (BPR)
- PRESSURE CONTROL VALVE (PCV)
- SOLENOID CONTROL VALVE (SV)
- 3 WAY SOLENOID
- NEEDLE VALVE (NV)
- FLUSH VALVE (FV)
- DIAPHRAGM CHECK VALVE (DC)

VALVE / EQUIPMENT TAGS

20-MP-25

- 20 — EQUIPMENT / VALVE NUMBER
- MP — EQUIPMENT / VALVE IDENTIFICATION
- 25 — PROCESS AREA (SEE DWG G-0003)

PUMPS & COMPRESSORS

- CENTRIFUGAL PUMP
- BLOWER
- VACUUM
- VERTICAL TURBINE PUMP
- CENTRIFUGAL SUMP PUMP
- DIAPHRAGM METERING PUMP
- PERISTALTIC METERING PUMP
- TURBO — TURBINE

TANKS AND VESSELS

- TANK — STORAGE TANK AS IDENTIFIED
- TANK — STORAGE TANK AS IDENTIFIED
- STORAGE TANK AS IDENTIFIED
- TANK/PROCESS AS IDENTIFIED
- PRESSURIZED TANK/PROCESS AS IDENTIFIED
- CARTRIDGE FILTER
- BAG FILTER
- STRAINER

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BID SET

ALABAMA LICENSED PROFESSIONAL ENGINEER CHRISTIAN P. TAUNTON 10/17/14

MARK	DATE	DESCRIPTION	BY

HUNTSVILLE UTILITIES
SOUTHEAST WATER TREATMENT PLANT

PROCESS SYMBOLS, ABBREVIATIONS & PIPING LEGEND

Project No.:	200-11740-10003
Designed By:	JCB
Drawn By:	JTE
Checked By:	JPT

D-0001

Copyright: Tetra Tech

Bar Measures 1 inch

10/17/2014 3:46:18 PM P:\IER\11740\200-11740-10003\CAD\SHEETFILES\TREATMENT PLANT\WTP D-000\ PROCESS LEGENDS AND ABBREVIATIONS.DWG EVANS, JON