NOTES:

GENERAL

CONNECTING PIPING AND INSTALLATION SHALL BE IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS.

GRAVITY SEWAGE PIPING

1. IF TWO MEDIA TANKS ARE CONNECTED IN SERIES:
   - A) LX–SERIES TANK FRAMES PROVIDE THE REQUIRED DROP FROM FIRST TANK OUTLET TO SECOND TANK INLET AND BOTH TANKS CAN BE INSTALLED AT THE SAME LEVEL.
   - B)FOR ALL OTHER FAST UNITS, THE FIRST MEDIA TANK SHALL BE SET NOT LESS THAN SIX INCHES (6") HIGHER THAN SECOND MEDIA TANK.
2. GRAVITY FLOW PIPING LEADING TO MEDIA TANK SHALL SLOPE NOT LESS THAN ONE–QUARTER INCH (1/4") PER FOOT AND SHALL BE EQUIPPED WITH PROPERLY VENTED TRAP AS SHOWN.
3. GRAVITY FLOW INLET TRAP SHALL BE VENTED TO VESSEL EXTERIOR.
4. GRAVITY FLOW INLET TRAP SHALL BE EQUIPPED WITH A CLEANOUT.

EMERGENCY BYPASS

1. AN EMERGENCY OVERBOARD BYPASS IS REQUIRED TO PROVIDE THE USE OF SANITARY FACILITIES IN THE EVENT OF EQUIPMENT MALFUNCTION.
2. IF THE BYPASS EMPLOYS GATE VALVES, INSTALL VALVES WITH STEMS UPRIGHT.

MEDIA TANK VENT PIPING

1. DO NOT COMBINE MEDIA TANK VENT WITH ANY OTHER VENT.
2. VENT TO TERMINATE NOT LESS THAN TEN FEET (10') ABOVE WEATHER DECK, FROM ANY SOURCE OF IGNITION, FROM ANY VENTILATION AIR INLET OR FROM ANY WINDOW OR DOOR WHICH MIGHT BE USED AS A VENTILATION AIR INLET.
3. VENT TO TERMINATE HIGH RATHER THAN LOW BECAUSE VENTED AIR IS WARMER THAN SURROUNDING AIR AND WILL TEND TO RISE.
4. HORIZONTAL OFFSETS IN MEDIA TANK VENT SHALL SLOPE NOT LESS THAN ONE–HALF INCH (1/2") PER FOOT SO THAT CONDENSATE WILL DRAIN TO MEDIA TANK.
5. MEDIA TANK VENT SIZE IS BASED UPON AN ASSUMED VENT RUN AND NUMBER OF ELBOWS.

MEDIA TANK VENT SIZING ASSUMPTIONS

FAST MODELS	MAX VENT RUN (FT)	MAX ELBOWS
LX-SERIES	50	6
M/MX-SERIES	50	6
D/DV/DX-SERIES	100	12

6. IF THE VENT RUN IS LONGER OR CONTAINS MORE FITTINGS, INCREASE ONE PIPE SIZE OR CONTACT FACTORY WITH DETAILS.
7. IF VACUUM TOILETS ARE USED, INCREASE VENT ONE PIPE SIZE OR CONTACT FACTORY WITH DETAILS.
8. A FLAME SCREEN IS NOT RECOMMENDED AS IT WILL PLUG WITH LINT AND REQUIRE FREQUENT CLEANING. IF A FLAME SCREEN IS REQUIRED, IT SHOULD BE NOT LESS THAN TWO PIPE SIZES LARGER THAN THE VENT PIPE.

PUMP

1.IF UNIT IS EQUIPPED WITH A SUBMERSIBLE EFFLUENT PUMP INSIDE WET WELL, A SEPARATE PUMP IS REQUIRED FOR PUMPOUT OF THE MEDIA TANK AND WET WELL FOR MAINTENANCE OR TROUBLESHOOTING.

2.STANDARD DISCHARGE PUMP CAN BE USED FOR BOTH EFFLUENT AND PUMPOUT.

BLOWER PIPING

DANGER – BLOWER REQUIRES INLET FLOW OF FRESH AIR. DO NOT INSTALL UNIT OR BLOWER IN ANY SEALED COMPARTMENT WITHOUT A SOURCE OF FRESH AIR. INADEQUATE VENTILATION CAN RESULT IN FORMATION OF DEADLY HYDROGEN SULFIDE GAS

AIR SCOUR

1. IF UNIT IS EQUIPPED WITH REGENERATIVE TURBINE BLOWER, THEN A SEPARATE SOURCE OF SHIP/RIG AIR IS REQUIRED TO AIR SCOUR MEDIA TANK BEFORE AND DURING PUMPOUT.

2.SCOUR CONNECTION SIZE ON TANK IS FOR LOW PRESSURE AIR. FOR HIGH PRESSURE SHIP/RIG AIR, MINIMUM FEED PIPE SIZE TO BE BASED ON SCFM REQUIRED, LENGTH OF PIPE AND SOURCE AIR PRESSURE.

BLOWER

1.ROOTS BLOWER CAN BE USED FOR BOTH AERATION AND TO AIR SCOUR MEDIA TANK.

2.BLOWER DISCHARGE PIPING TO RISE ABOVE TOP OF MEDIA TANK. AT THE HIGHEST POINT, DRILL 3/64" ANTI–SIPHON HOLE.

3.BLOWER DISCHARGE AIR IS HOT AND CAN BE OVER 200° F. PIPING MATERIALS TO BE SCHEDULE 40 STEEL AND TEMPERATURE RATED HOSE.

SEPARATE GRAY WATER INLET

1.ALL SEWAGE TO BE TREATED IS TO ENTER THE MEDIA TANK THROUGH A SINGLE INLET.

2.IF IT IS NECESSARY TO SEPARATE BLACKWATER AND GRAYWATER PIPING, THIS SHOULD BE DONE IN THE SHIP'S PIPING.

WATER MAKEUP

USE WATER FROM SEA CHEST. DO NOT USE DESALINATED WATER.

GREASE

IF GALLEY SINK DRAINS TO UNIT, THEN SINK MUST BE EQUIPPED WITH A PROPERLY SIZED AND MAINTAINED GREASE TRAP/INTERCEPTOR.

FLEX CONNECTIONS AND PLASTIC PIPE CONNECTIONS

1. ISOLATE BLOWER, DISCHARGE PUMP AND PLASTIC BULKHEAD FITTINGS FROM RIGID PIPING WITH HOSE AND/OR FLEX CONNECTIONS.
2. DO NOT OVERTIGHTEN PLASTIC PIPE CONNECTIONS

EFFLUENT SAMPLE POINT

1. FOR UNITS FITTED WITH PUMPS, SAMPLE VALVE TO BE INSTALLED IN PUMP DISCHARGE PIPING AS CLOSE TO UNIT AS PRACTICAL.
2. FOR UNITS WHERE EFFLUENT FLOWS BY GRAVITY TO THE SEA, SAMPLE VALVE TO BE ON SIDE OF WET WELL.
3. SAMPLE VALVE TO BE ½ INCH PIPE SIZE OR SMALLER SO THAT VELOCITY OF DISCHARGE STREAM WILL SCOUR DEBRIS FROM THE SAMPLE VALVE AND PIPING BEFORE TAKING SAMPLE FOR ANALYSIS.

REV	DESCRIPTION	BY	DATE

SCIENCO/FAST®
200 SUN VALLEY CIRCLE
FENTON, MO. 63026–4691 U.S.A.
PHONE: 314–756–9300 FAX: 314–756–9306

SYSTEM	SCIENCO/FAST MARINE/FAST
CUSTOMER	CUSTOMER NAME HERE
TITLE	L1X SYSTEM DRAWING INSTALLATION INSTRUCTIONS

SCALE	DRAWN	CHECKED	APPROVED
1"=1'–0"	SC	SC	N/A

SIZE	NEXT ASSY.	PREV. ASSY.	PLOT SCALE	DATE
B	N/A	N/A	1:1	1/2024

CONTRACT NO.	MODEL NO.	DRAWING NO.	SHEET NO.	REV
	MASTER	CU104	4 OF 5	