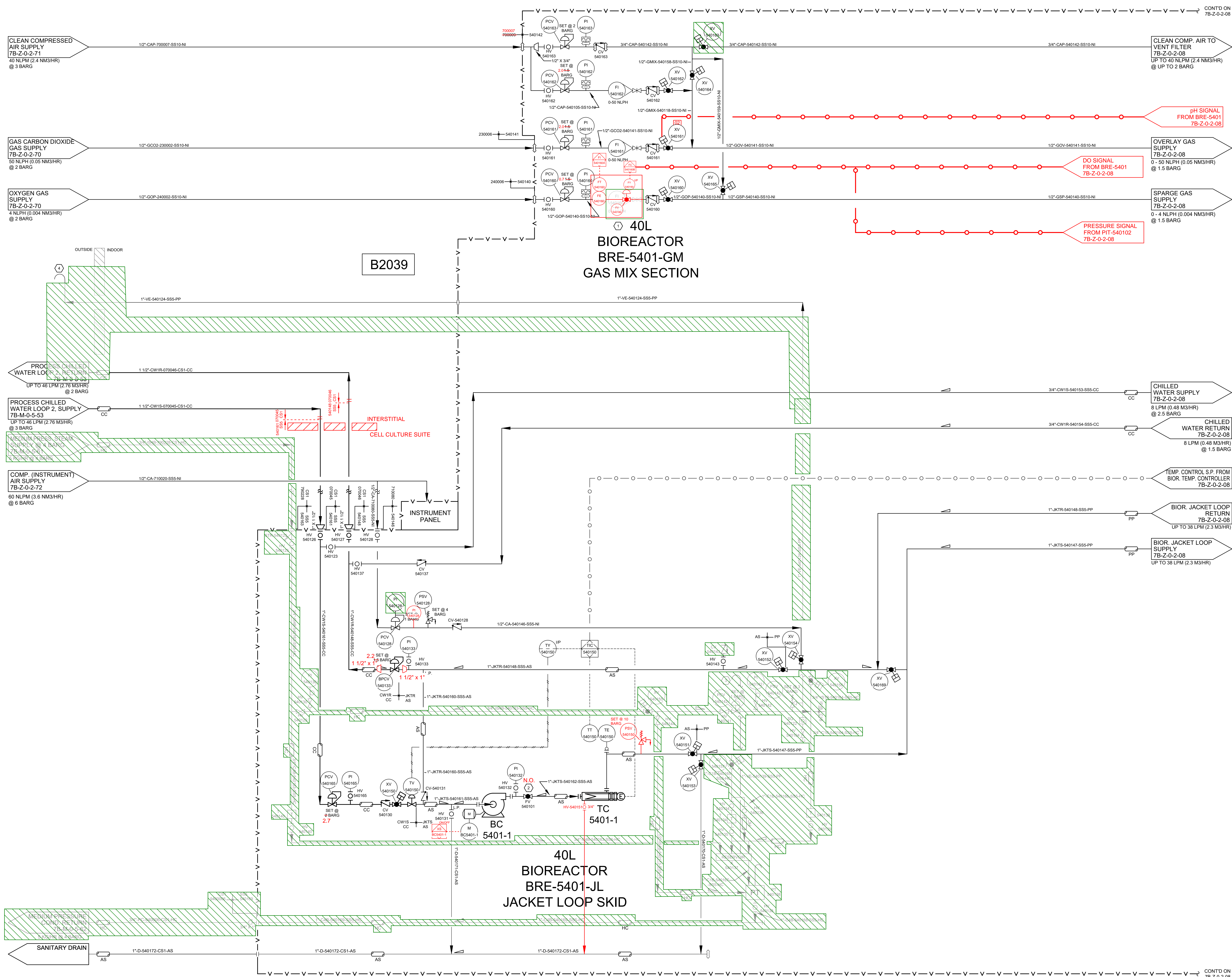


\\psdb\corporate\PS&P\Projects\2018\104398-B-DESIGN\10-Project Drawings\Process\7B-BDS\7B-Z-0-2-08.dwg 5-10-21 08:11:35 PM mmm\lin



GENERAL NOTES:

- 1 ALL COMPONENT & EQUIPMENT NUMBERS ARE PRECEDED BY "7B" TO REPRESENT THE BULK DRUG SUBSTANCE (BDS) BUILDING.
- 2 ALL AUTOMATIC VALVES FAIL CLOSED (F.C.) UNLESS NOTED F.A.I. OPEN (F.O.).
- 3 ALL PLC/COMPUTER CONNECTIONS ARE WITHIN THE PCS UNLESS OTHERWISE NOTED.
- 4 LAST LINE NUMBER.
- 5 LINE NUMBER NOT USED.
- 6 REFER TO P&ID 7B-Z-0-2-08 FOR DETAILS.
- 7 LAST AUTO VALVE NUMBER.
- 8 REFER TO P&ID 7B-Z-0-2-08 FOR DETAILS.
- 9 LAST MANUAL VALVE NUMBER.
- 10 REFER TO P&ID 7B-Z-0-2-08 FOR DETAILS.
- 11 REFER TO P&ID 7B-Z-0-2-08 FOR DETAILS.

SHEET NOTES

- 1 GAS MIX RACK, BRE-5401-GM, TO BE INSTALLED ON THE 1ST FLOOR PLATFORM ADJACENT TO THE BIOREACTOR VESSEL.
- 2 ADJUST MANUAL FLOW CONTROL VALVE FV-540101 TO PREVENT JACKET RELIEF VALVE PSV-540151 FROM OPENING DURING NORMAL OPERATION.
- 3 CONDENSATE RECOVERED FROM SHALL BE RE-IFIED HIGHER-THAN-VALVE-XV-540168. DELETED.
- 4 VENT-TO-SAFE-LOCATION-OUTSIDE. DELETED.

ips
Integrated Project Services
Engineering
Design/Build
Compliance
Consulting
721 Arbor Way Suite 100
BLUE BELL, PA 19422
PHONE: (610) 828-4090
FAX: (610) 828-3656
www.ipsdb.com
IPS Professional Engineers and Architects, LLC.

REVISION	DATE	DESCRIPTION	BY
A	28AUG2020	90% BD ISSUE	JMR
B	27NOV2020	DESIGN ISSUE	JMR
C	12FEB2021	80% DD ISSUE	RLD
D	19MAY2021	BD ISSUE	RLD
E	09JUL2021	90% DD ISSUE	RLD
F	10AUG2021	CONSTRUCTION ISSUE	RLD

DRAFT
INTERIM P&ID REDLINES
13JUL2022



R. Dr. Cesário Mota Júnior, 434 - Vila Buarque, São Paulo - SP, 01221-020

REVISION HISTORY

- 1 LINE CW15-070045 AND CW1R-070046 CHANGED FROM 1" TO 1 1/2".

CONFIDENTIAL
THE INFORMATION CONTAINED HEREIN MAY NOT BE USED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION OF INTEGRATED PROJECT SERVICES.

Takeda
Hemobrás
BURI TI EPCMV

P&ID DIAGRAM
DRUG SUBSTANCE
40L BIOREACTOR, BRE-5401
GAS MIX RACK & JKT LOOP

ENGINEER	ARCHITECT	DESIGNER	IPS PROJECT #
JMR	BJE	JJR	ITD19439.01
DRAWN BY	REVIEWED BY	SCALE	CADD FILE NAME
LG	GJC	NONE	7B-Z-0-2-08

THIS IS NOT A SEALED DOCUMENT
DATE: _____
7B-Z-0-2-09

ISSUED FOR CONSTRUCTION

BRE-5401-JL
BIOREACTOR JKT LOOP SKID
TYPE: CLOSED LOOP HEAT / OPEN LOOP COOL
FLOW: 38 LPM
SIZE: TBD
MOC: 304SS FRAME
POWER: 3/60/380VAC

BRE-5401-GM
BIOREACTOR GAS-MIX MANIFOLD
TYPE: MANUAL PIPING RACK
GASES: O₂, CO₂, COMP. AIR
SIZE: TBD
MOC: 316/316LSS
TYPE: PIPING RACK

BC-5401-1
JACKET LOOP RECIRC. PUMP
TYPE: INLINE CIRCULATOR
CAPACITY: 38 LPM / 1.2 BAR dP
DUTY: 9 kW
MANUF/MODEL: TBD
MOC: SS WETTED PARTS
POWER: 3/60/380VAC

TC-5401-1
JACKET LOOP HEATER
TYPE: INDUSTRIAL INLINE HEATER
CAPACITY: 38 LPM / 1.2 BAR dP
DUTY: 9 kW
FLOW: 38 LPM
MOC: 316LSS
POWER: 1/60/220VAC