



LEGEND:

⊙:	AT
H/L:	HIGH LEVEL
F.F.L:	FINISHED FLOOR LEVEL
UG:	UNDER GROUND
DN:	DOWN TO BELOW
UP:	UP TO ABOVE
CW:	COLD WATER SUPPLY PIPE
PPR:	POLYPROPYLENE PIPE
SV:	SOLENOID VALVE
GV:	CEILING INVERT LEVEL
HDPE:	HIGH DENSITY POLYETHYLENE
SP:	SPRINKLER PIPE
MV:	MOTORIZED VALVE
SFV:	SAFETY VALVE
S/S:	STAINLESS STEEL
MD:	MOTORIZED DAMPER
EG:	EXHAUST GRILL
VD:	VOLUME DAMPER
EF:	EXHAUST FAN
MVD1-2:	MOTORIZED VOLUME DAMPER 100% AIR TIGHT
BTV:	BUTTERFLY VALVE
DUT.:	DUTY
STD.:	STAND BY
UPVC.:	UNPLASTICIZED POLYVINYL CHLORIDE
mb:	MILLIBAR
GPM:	GALLON PER MINUTE
CFM:	CUBIC FEET PER MINUTE
ED:	EXHAUST DUCT
CH4:	METHANE
TWV:	THREE WAY VALVE
GM:	GAS METER
SG:	SUPPLY GRILL
BV:	BALL VALVE
P.L.:	PRESSURE LOSS
C.I.L.:	CEILING INVERT LEVEL
E.S.P.:	EXTERNAL STATIC PRESSURE
GS:	GALVANIZED STEEL
AAV:	AUTOMATIC AIR VENT
	NON RETURN VALVE OPERATE AT 25mb

Notes:

- All dimensions are in meter unless indicated otherwise
- Foundation of equipments is not final depend on material submittals
- Provisional equipments: Provisional equipments will not be supplied by MEES under the current scope of work:

*Nitrogen Generator	*Co-generator
*Desulfurization	*Biofilter

Project

BAALBACK BIOGAS PLANT

Client

COSV ngo

Toward clean energy and innovative environmental solutions in Lebanon

DCI-ENV/210/256-762

Contractor

Consultant

Date	9-12-2013
Scale	NTS
Checked by	M. JANBEIH
Revisions	3
Revisions	Shop Drawing

Title: P&I CONTROLLER

Drawing No: BBP-10

Sheet: A1

Biogas plan-schematic diagram of safety and control system