



MARK	DESCRIPTION
BL	BELLOWS
BFV	BUTTERFLY VALVE
PABFV	PNEUMATIC ACTUATED BUTTERFLY VALVE
NV	NEEDLE VALVE
BV	BALL VALVE
NRV	NON RETURN VALVE
PG	PRESSURE GAUGE
SLG	SLUICE GATE
V	VALVE
PIT	PRESSURE INDICATOR TRANSMITTER
FIT	FLOW INDICATOR TRANSMITTER
LIT	LEVEL INDICATOR TRANSMITTER
LS	LEVEL SWITCH
FV	FOOT VALVE
MABFV	MOTORISED ACTUATED BUTTERFLY VALVE
PRV	PRESSURE REDUCING VALVE
MV	MOTORISED VALVE
STR	STRAINER
FI	FLOW INDICATOR

MARK	SIZE	DESCRIPTION	QTY	TYPE	MOC
V1.2	350	RWT INLET VALVE	02	SLUICE	CI
V3-5	150 NB	RWP DISCHARGE VALVE	03	SLUICE	CI
NV2-5	015 NB	RWP DISCHARGE PG VALVE	04	NEEDLE	SS
V8	200-OD	FW RECIRCULATION	01	SLUICE	CI
V7-8	50 NB	WATER SUPPLY TO POLY TANK	02	BALL	PP
V8-10	50 NB	PDT-1E DRAIN VALVE	02	BALL	PP
V11-17	25 NB	PDT-1E SUCTION DELIVERY VALVE	07	BALL	PP
V18-19	40 NB	WATER SUPPLY TO ALUM TANK	02	BALL	PP
V20-21	40 NB	AD-LI DRAIN VALVE	02	BALL	PP
V22-28	80 NB	ADP-LI SUCTION DELIVERY VALVE	07	BALL	PP
V29	50 NB	CD LINE VALVES - COMMON	01	BALL	PP
V30-32	150 NB	AFP SUCTION VALVE	03	SLUICE	CI
V33-35	150 NB	AFP DISCHARGE VALVE	03	SLUICE	CI
NV6-9	015 NB	AFP DISCHARGE VALVE	04	NEEDLE	SS
V36	125 NB	BAS FED RECIRCULATION	01	SLUICE	CI
V37&49	300 NB	AWT SUCTION VALVE	02	SLUICE	CI
V38-40	200 NB	CFB SUCTION VALVE	03	SLUICE	CI
V41-43	150 NB	CFB DISCHARGE VALVE	03	SLUICE	CI
NV10-13	015 NB	CFB DISCHARGE VALVE	04	NEEDLE	SS
V44	150 NB	BAS INTERNAL RECIRCULATION	01	SLUICE	CI
V45-48	300 NB	RCP DISCHARGE	02	SLUICE	CI
NV14,15	15 NB	RCP DISCHARGE	02	NEEDLE	SS
V47-48	300 NB	RCP DISCHARGE	02	SLUICE	CI
NV16,17	15 NB	BL DISCHARGE	02	NEEDLE	SS
V50	300 NB	CLF DISCHARGE	01	SLUICE	CI
V51	200 NB	SLUDGE PIT VALVE	01	SLUICE	CI
V52&69	400 NB	CWT INLET VALVE	02	SLUICE	CI
V53&59	400 NB	CWT SUCTION VALVE	02	SLUICE	CI
V54-56	250 NB	FFP SUCTION VALVE	03	SLUICE	CI
V56,57	150 NB	FFP DISCHARGE VALVE	02	SLUICE	CI
NV18,19	015 NB	FFP DISCHARGE PG VALVE	02	NEEDLE	SS
NV20	015 NB	FFP DISCHARGE PG VALVE COMMON	01	NEEDLE	SS
NV21	15 NB	BWP DISCHARGE	01	NEEDLE	SS
V58	150 NB	CW RECIRCULATION	01	SLUICE	CI
V60,61	250 NB	FBP SUCTION VALVE	02	SLUICE	CI
V62,63	150 NB	FBP DISCHARGE VALVE	02	SLUICE	CI
NV22,23	015 NB	FBP DISCHARGE PG VALVE	02	NEEDLE	SS
NV24	015 NB	FBP DISCHARGE PG VALVE COMMON	01	NEEDLE	SS
V64	100 NB	PSF-01 DRAIN VALVE	01	BALL	CI
V65	100 NB	PSF-02 DRAIN VALVE	01	BALL	CI
V66	100 NB	ACF-01 DRAIN VALVE	01	BALL	CI
V67	100 NB	ACF-02 DRAIN VALVE	01	BALL	CI
V68	200 NB	PST SLUDGE VALVE	01	SLUICE	CI
V70	200 NB	SLUDGE VALVE FROM PST	01	SLUICE	CI
BFV7,8	350 NB	BWP SUCTION	02	BUTTERFLY	CI
BFV9,10	300 NB	BWP DISCHARGE	02	BUTTERFLY	CI
BFV11-15	250 NB	PSF-01 VALVE	05	BUTTERFLY	CI
NV25,26A	015 NB	PSF-01 PG VALVE	02	NEEDLE	SS
BFV16-20	250 NB	PSF-02 VALVE	05	BUTTERFLY	CI
NV26,26A	015 NB	PSF-02 PG VALVE	02	NEEDLE	SS
BFV21-25	250 NB	ACF-01 VALVE	05	BUTTERFLY	CI
NV27,27A	015 NB	ACF-01 PG VALVE	02	NEEDLE	SS
BFV26-30	250 NB	ACF-02 VALVE	05	BUTTERFLY	CI
NV28,28A	015 NB	ACF-02 PG VALVE	02	NEEDLE	SS
BFV31	300 NB	PSF-01 AIR RELEASE VALVE	01	BUTTERFLY	CI
BFV32	300 NB	PSF-02 AIR RELEASE VALVE	01	BUTTERFLY	CI
BFV33	300 NB	ACF-01 AIR RELEASE VALVE	01	BUTTERFLY	CI
BFV34	300 NB	ACF-02 AIR RELEASE VALVE	01	BUTTERFLY	CI
NRV5-7	150 NB	RWR DISCHARGE NRV	03	WAFER	CI
NRV8,9	40 NB	RDP LI DISCHARGE NRV	02	BALL TYPE	PP
NRV10,11	40 NB	ADP LI DISCHARGE NRV	02	BALL TYPE	PP
NRV12-14	150 NB	AFP DISCHARGE NRV	03	WAFER	CI
NRV15-17	150 NB	CFP DISCHARGE NRV	03	WAFER	CI
NRV18,19	300 NB	RCP DISCHARGE	02	WAFER	CI
NRV20,21	150 NB	FFP DISCHARGE NRV	02	WAFER	CI
NV22,23	300 NB	BWP DISCHARGE	02	WAFER	CI
NRV24,25	150 NB	FBP DISCHARGE NRV	02	WAFER	CI
FV1,FV2	300 NB	AWT SUCTION FOOT VALVE	02	BALL TYPE	CI
FV3,FV4	400 NB	CWT/ACF SUCTION FOOT VALVE	02	BALL TYPE	CI

MARK	TYPE	DESCRIPTION	RANGE	QTY
PG2-05	BT	RWP DISCHARGE	0-6 kg/cm ²	04
PG9-09	BT	AFP DISCHARGE	0-6 kg/cm ²	04
PG10-13	BT	CFP DISCHARGE	0-6 kg/cm ²	04
PG14,15	BT	RCP DISCHARGE	0-6 kg/cm ²	02
PG16,17	BT	BL DISCHARGE	0-6 kg/cm ²	02
PG18-20	BT	FFP DISCHARGE	0-6 kg/cm ²	03
PG21	BT	BWP DISCHARGE	0-6 kg/cm ²	01
PG22-24	BT	FBP DISCHARGE	0-6 kg/cm ²	03
PG25,25A	BT	PSF-01	0-6 kg/cm ²	04
PG26,26A	BT	PSF-02	0-6 kg/cm ²	04
PG27,27A	BT	ACF-01	0-6 kg/cm ²	04
PG28,28A	BT	ACF-02	0-6 kg/cm ²	04

MARK	DESCRIPTION	RANGE	QTY
FIT02	FROM INTAKE WELL	-	01
FIT03	RWP DISCHARGE	-	01
FIT04	AFP DISCHARGE	-	01
FIT05	CFP DISCHARGE	-	01
FIT06	FFP DISCHARGE	-	01
FIT07	FBP DISCHARGE	-	01
FIT08	CWT INLET VALVE	-	01

Project: IMPROVEMENT AND MODIFICATION OF FACILITIES IN EXISTING WATER TREATMENT PLANT AT MAHINDRA WORLD CITY.

Client: MAHINDRA WORLD CITY.

Consultant: Dr. P. Selvaraj - CHENNAI.

Drawn: [] **Title:** P&ID DIAGRAM Modified System

Checked: [] **Approved:** []

Date: [] **Scale:** NTS (A3) **DRG NO.:** MWC-IWTP-G-009 **SHEET NO.:** 3 of 11

PIPE LEGEND:

- Pressure Rating
- Pipeline Size
- MOC of Pipeline
- Contents of the Pipeline

LEGEND:

- RV - BUTTERFLY VALVE
- NRV - NON RETURN VALVE
- BV - BALL VALVE
- LS - LEVEL SWITCH
- PG - PRESSURE GAUGE
- SV - SLUICE VALVE

MARK: LINE TYPE DESCRIPTION

- RAW WATER
- SETTLED WATER
- ADRIATED WATER
- CLARIFIED WATER
- FILTERED WATER
- CHEMICAL DOSING
- SLUDGE
- BACKWASH WATER
- DRAIN WATER