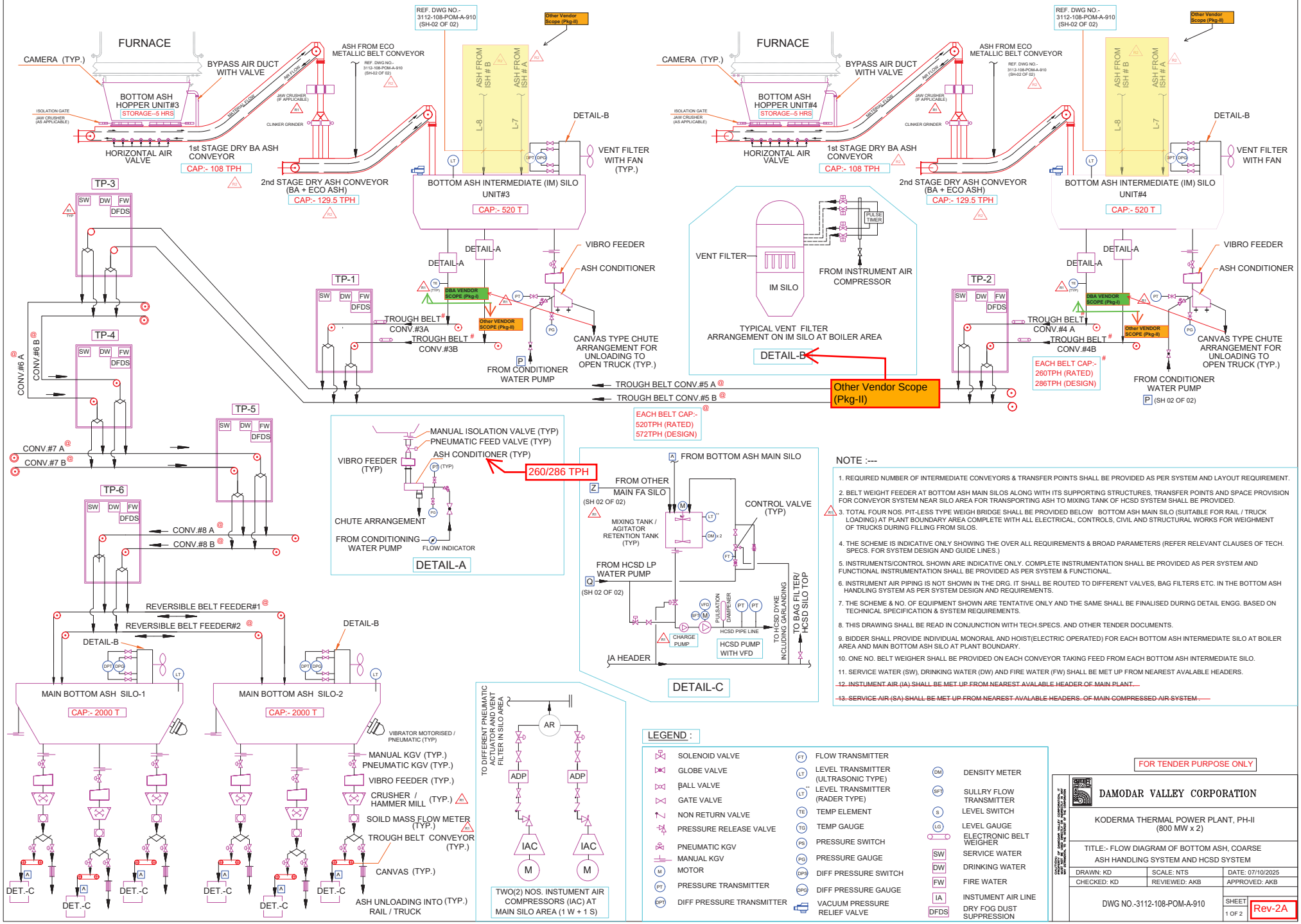


NOTE :---

1. REQUIRED NUMBER OF INTERMEDIATE CONVEYORS & TRANSFER POINTS SHALL BE PROVIDED AS PER SYSTEM AND LAYOUT REQUIREMENT.
2. BELT WEIGHT FEEDER AT BOTTOM ASH MAIN SILOS ALONG WITH ITS SUPPORTING STRUCTURES, TRANSFER POINTS AND SPACE PROVISION FOR CONVEYOR SYSTEM NEAR SILO AREA FOR TRANSPORTING ASH TO MIXING TANK OF HCSD SYSTEM SHALL BE PROVIDED.
3. TOTAL FOUR NOS. PIT-LESS TYPE WEIGH BRIDGE SHALL BE PROVIDED BELOW BOTTOM ASH MAIN SILO (SUITABLE FOR RAIL / TRUCK LOADING) AT PLANT BOUNDARY AREA COMPLETE WITH ALL ELECTRICAL, CONTROLS, CIVIL AND STRUCTURAL WORKS FOR WEIGHMENT OF TRUCKS DURING FILLING FROM SILOS.
4. THE SCHEME IS INDICATIVE ONLY SHOWING THE OVER ALL REQUIREMENTS & BROAD PARAMETERS (REFER RELEVANT CLAUSES OF TECH. SPECS. FOR SYSTEM DESIGN AND GUIDE LINES.)
5. INSTRUMENTS/CONTROL SHOWN ARE INDICATIVE ONLY. COMPLETE INSTRUMENTATION SHALL BE PROVIDED AS PER SYSTEM AND FUNCTIONAL INSTRUMENTATION SHALL BE PROVIDED AS PER SYSTEM & FUNCTIONAL.
6. INSTRUMENT AIR PIPING IS NOT SHOWN IN THE DRG. IT SHALL BE ROUTED TO DIFFERENT VALVES, BAG FILTERS ETC. IN THE BOTTOM ASH HANDLING SYSTEM AS PER SYSTEM DESIGN AND REQUIREMENTS.
7. THE SCHEME & NO. OF EQUIPMENT SHOWN ARE TENTATIVE ONLY AND THE SAME SHALL BE FINALISED DURING DETAIL ENGG. BASED ON TECHNICAL SPECIFICATION & SYSTEM REQUIREMENTS.
8. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH TECH.SPECS. AND OTHER TENDER DOCUMENTS.
9. BIDDER SHALL PROVIDE INDIVIDUAL MONORAIL AND HOIST(ELECTRIC OPERATED) FOR EACH BOTTOM ASH INTERMEDIATE SILO AT BOILER AREA AND MAIN BOTTOM ASH SILO AT PLANT BOUNDARY.
10. ONE NO. BELT WEIGHER SHALL BE PROVIDED ON EACH CONVEYOR TAKING FEED FROM EACH BOTTOM ASH INTERMEDIATE SILO.
11. SERVICE WATER (SW), DRINKING WATER (DW) AND FIRE WATER (FW) SHALL BE MET UP FROM NEAREST AVALABLE HEADERS.
12. ~~INSTUMENT AIR (IA) SHALL BE MET UP FROM NEAREST AVALABLE HEADER OF MAIN PLANT.~~
13. ~~SERVICE AIR (SA) SHALL BE MET UP FROM NEAREST AVALABLE HEADERS. OF MAIN COMPRESSED AIR SYSTEM .~~

LEGEND :

SOLENOID VALVE	FT FLOW TRANSMITTER	DM DENSITY METER	
GLOBE VALVE	LT LEVEL TRANSMITTER (ULTRASONIC TYPE)	SFT SULLRY FLOW TRANSMITTER	
BALL VALVE	LT LEVEL TRANSMITTER (RADER TYPE)	S LEVEL SWITCH	
GATE VALVE	TE TEMP ELEMENT	LG LEVEL GAUGE	
NON RETURN VALVE	TG TEMP GAUGE	ELECTRONIC BELT WEIGHER	
PRESSURE RELEASE VALVE	PS PRESSURE SWITCH	SW SERVICE WATER	
PNEUMATIC KGV	PG PRESSURE GAUGE	DW DRINKING WATER	
MANUAL KGV	DPS DIFF PRESSURE SWITCH	FW FIRE WATER	
M MOTOR	DPG DIFF PRESSURE GAUGE	IA INSTUMENT AIR LINE	
PT PRESSURE TRANSMITTER	VACUUM PRESSURE RELIEF VALVE	DFDS DRY FOG DUST SUPPRESSION	
DPT DIFF PRESSURE TRANSMITTER			

FOR TENDER PURPOSE ONLY

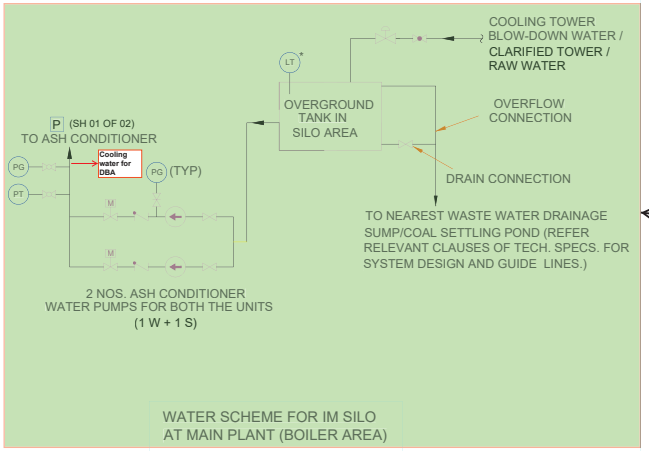
DAMODAR VALLEY CORPORATION

KODERMA THERMAL POWER PLANT, PH-II (800 MW x 2)

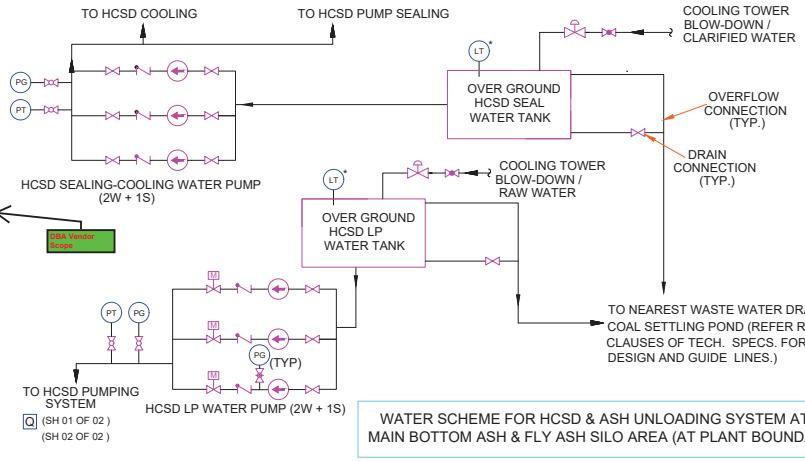
TITLE:- FLOW DIAGRAM OF BOTTOM ASH, COARSE ASH HANDLING SYSTEM AND HCSD SYSTEM

DRAWN: KD	SCALE: NTS	DATE: 07/10/2025
CHECKED: KD	REVIEWED: AKB	APPROVED: AKB

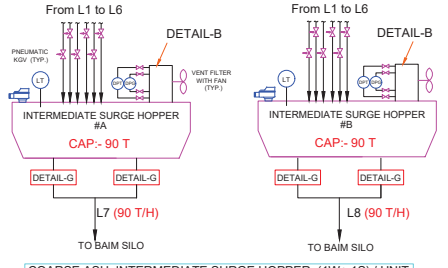
DWG NO.-3112-108-POM-A-910 SHEET 1 OF 2 Rev-2A



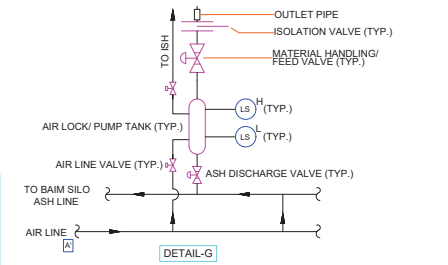
WATER SCHEME FOR IM SILO AT MAIN PLANT (BOILER AREA)

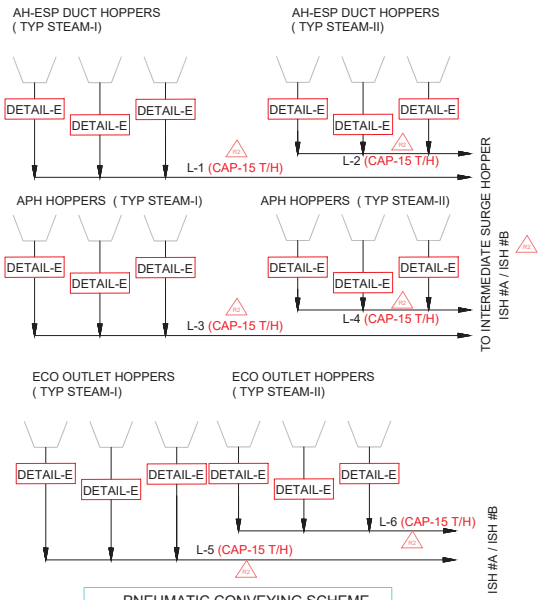


WATER SCHEME FOR HCSD & ASH UNLOADING SYSTEM AT MAIN BOTTOM ASH & FLY ASH SILO AREA (AT PLANT BOUNDARY)

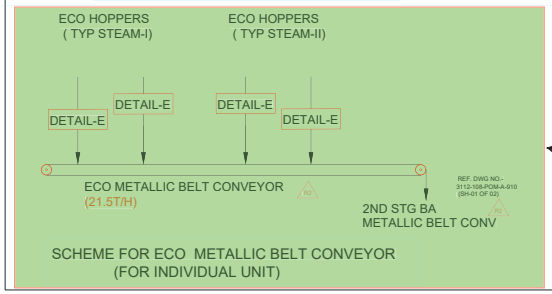


COARSE ASH INTERMEDIATE SURGE HOPPER (1W+ 1S) / UNIT

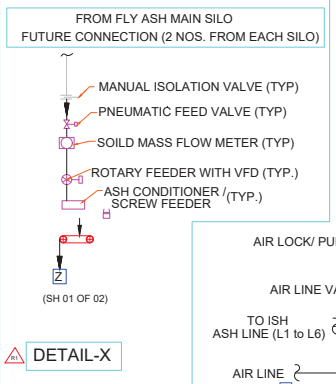


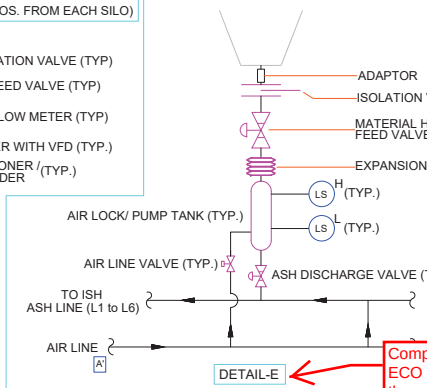


PNEUMATIC CONVEYING SCHEME ECO O/L, APH & AH-DUCT HOPPER (FOR INDIVIDUAL UNIT)

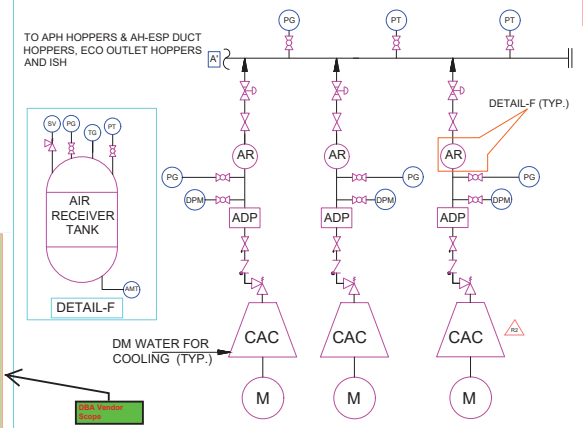


SCHEME FOR ECO METALLIC BELT CONVEYOR (FOR INDIVIDUAL UNIT)





Complete Detail E is not applicable for ECO Hoppers. Below Expansion Joint, the arrangement shall be as per requirement of ECO Metallic Belt Conveyor.



TWO(3) NOS. CONVEYING AIR COMPRESSORS (CAC) FOR EACH UNIT (2 W + 1 S)

I. MATERIAL OF SEAL USED IN MATERIAL HANDLING VALVE SHALL BE SUITABLE FOR CONTINUOUS OPERATING TEMPERATURE AND ALSO SUITABLE FOR OCCASIONAL EXPOSURE TO MAXIMUM TEMPERATURE. BIDDER SHALL ALSO PROVIDE SUITABLE ARRANGEMENT TO TAKE CARE OF HOT AIR COMING OUT OF BUFFER HOPPER. BAG FILTERS SHALL BE SELECTED SUITABLE FOR CONTINUOUS EXPOSURE OF TEMPERATURE OF 175°C MIN. AND MOMENTARY CONTACT 195°C AT BUFFER HOPPERS/ASH STORAGE SILOS.

II. PNEUMATICALLY ACTUATED ISOLATION VALVES TO BE PROVIDED BELOW EACH TYPE OF COLLECTION HOPPERS IN ADDITION TO MANUAL OPERATED VALVES.

III. COMMON AIR COMPRESSORS SHOWN ARE TYPICAL FOR EACH UNIT.

IV. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH TECH. SPEC. AND OTHER TENDER DOCUMENTS.

V. INSTRUMENTS SHOWN ARE INDICATIVE ONLY. COMPLETE INSTRUMENTATION SHALL BE PROVIDED AS PER SYSTEM & FUNCTIONAL REQUIREMENTS AS SPECIFIED.

VI. INSTRUMENT AIR PIPING IS NOT SHOWN. IN THE UNIT, IT SHALL BE ROUTED TO DIFFERENT VALVES, BAG FILTERS, ETC., IN FLY ASH HANDLING SYSTEM AS PER SYSTEM DESIGN AND REQUIREMENTS.

VII. SUITABLE DUST SUPPRESSION FACILITIES SHALL BE PROVIDED IN BA SILO AREA SIMILAR TO THAT OF FA SILO AREA.

VIII. EACH CONVEYING AIR COMPRESSOR SHALL BE PROVIDED WITH INDEPENDENT AIR DRYING PLANT REFRIGERANT TYPE AND AIR RECEIVER AS PER TECH. SPECIFICATION.

8 M MIN.) TO BE PROVIDED BELOW SILOS FOR TRUCK/ RAIL WAGON MOVEMENT. THE SILO UNLOADING FACILITY TRUCK/ CLOSED TANKER/ RAILWAGON LOADING. HOWEVER, BIDDER SHALL ENSURE THAT THE CLEARENCE OF TRACKS SHALL BE AS PER RAILWAYS/ RDSO GUIDLINES. THE SCOPE INCLUDES GETTING APPROVALS FROM

STRUMENT AIR SHALL BE PROVIDED WITH MANUAL ISOLATION VALVE IN AIR LINE. THIS IS APPLICABLE FOR THE M.

E PROVIDED FOR MANUAL VALVES AS PER SYSTEM REQUIREMENTS & CONTROL PHILOSOPHY.

XII. FOR ALL INSTRUMENTS AND DRIVES, SUPPLIER TO ASSIGN UNIQUE TAG NUMBERS FOR IDENTIFICATION. THIS TAG NUMBER SHALL BE INDICATED ON ALL DOCUMENTS/DRAWINGS/DATA SHEETS APPLICABLE FOR THE RESPECTIVE INSTRUMENT/DRIVE.

XIII. PRESSURE MEASUREMENT (TRANSMITTER) TO BE PROVIDED FOR INSTRUMENT AIR HEADER IN SILO AREA.

XIV. ONE NO. PI AND PG SHALL BE PROVIDED IN EACH UNIT SERVICE WATER HEADER USED FOR VACUUM PUMP SEALING/COOLING.

XV. THERE SHALL BE TWO NO. OF OUTLETS FROM EACH OF THE FLY ASH MAIN SILO (I.E., SILO NO.:-1,2 & 3), FOR UNLOADING OF FLY ASH THROUGH HCSD SYSTEM. IN DOING SO, DETAIL-X SHALL BE APPLICABLE.

XVI.THERE SHALL ONE (01) NO INCONECTION LINE WITH ISOLATING VALVE AT COMMON HEADER CONVEYING AIR LINE OF EACH UNIT.

LEGEND :

- SOLENOID VALVE
- GLOBE VALVE
- BALL VALVE
- GATE VALVE
- NON RETURN VALVE
- PRESSURE RELEASE VALVE
- PNEUMATIC KGV
- MANUAL KGV
- MOTOR
- PRESSURE GAUGE
- PRESSURE TRANSMITTER
- PRESSURE SWITCH
- LEVEL TRANSMITTER (ULTRASONIC TYPE)
- LEVEL GAUGE
- LEVEL SWITCH (H)
- LEVEL SWITCH (L)
- DENSITY METER
- SULLRY FLOW TRANSMITTER
- DEW POINT METER
- AUTOMATIC MOISTURE TRAP
- TEMPERATURE GAUGE

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