

**BRIHANMUMBAI MUNICIPAL CORPORATION  
MUMBAI SEWAGE DISPOSAL PROJECT**



**UPGRADATION OF GHATKOPAR INFLUENT PUMPING  
STATION & CARRYING CAPACITY OF RISING MAIN TO  
DESIGN PPF CAPACITY OF 699 MLD**

**BID NO. 7200037194**

**VOLUME - V**

**DRAWINGS**

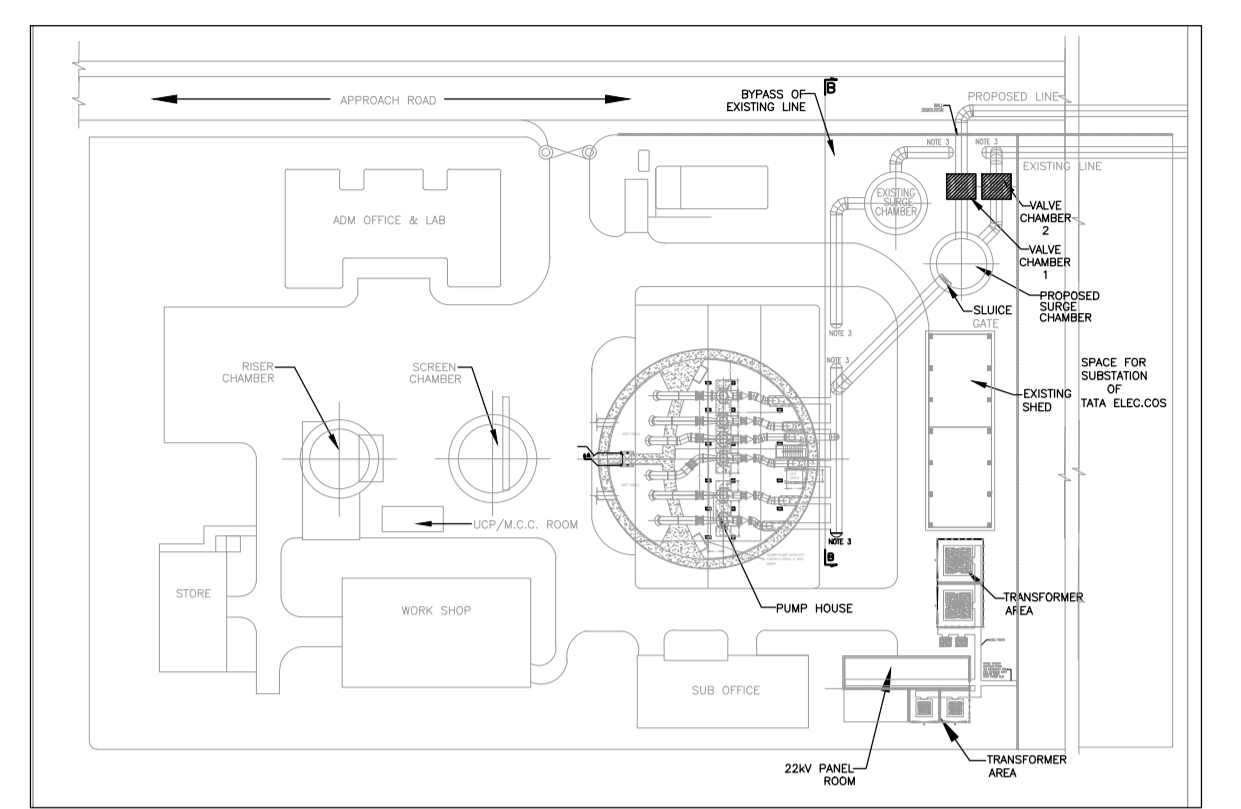
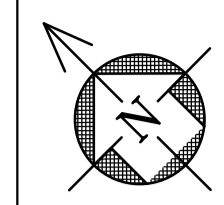
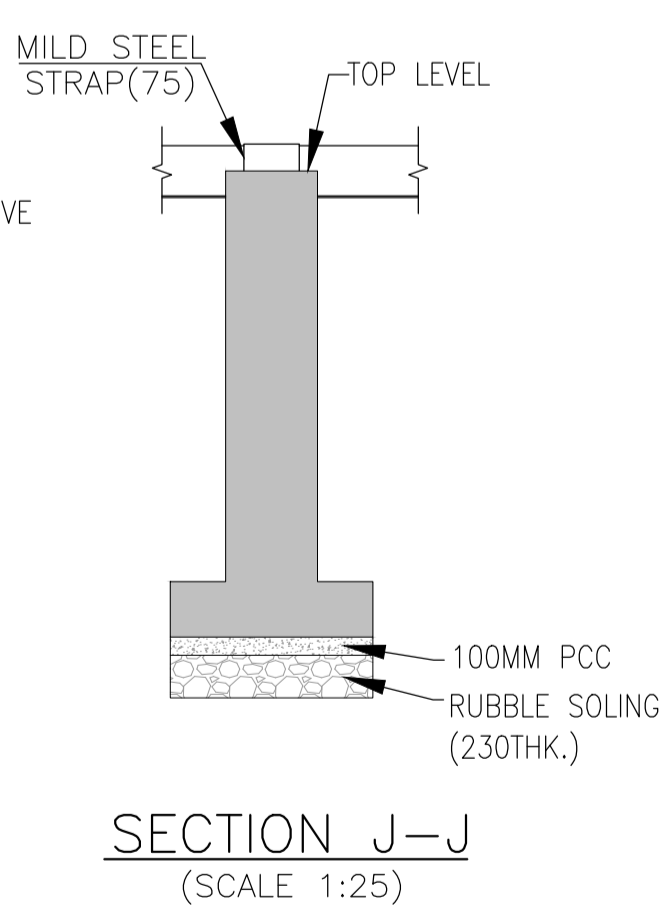
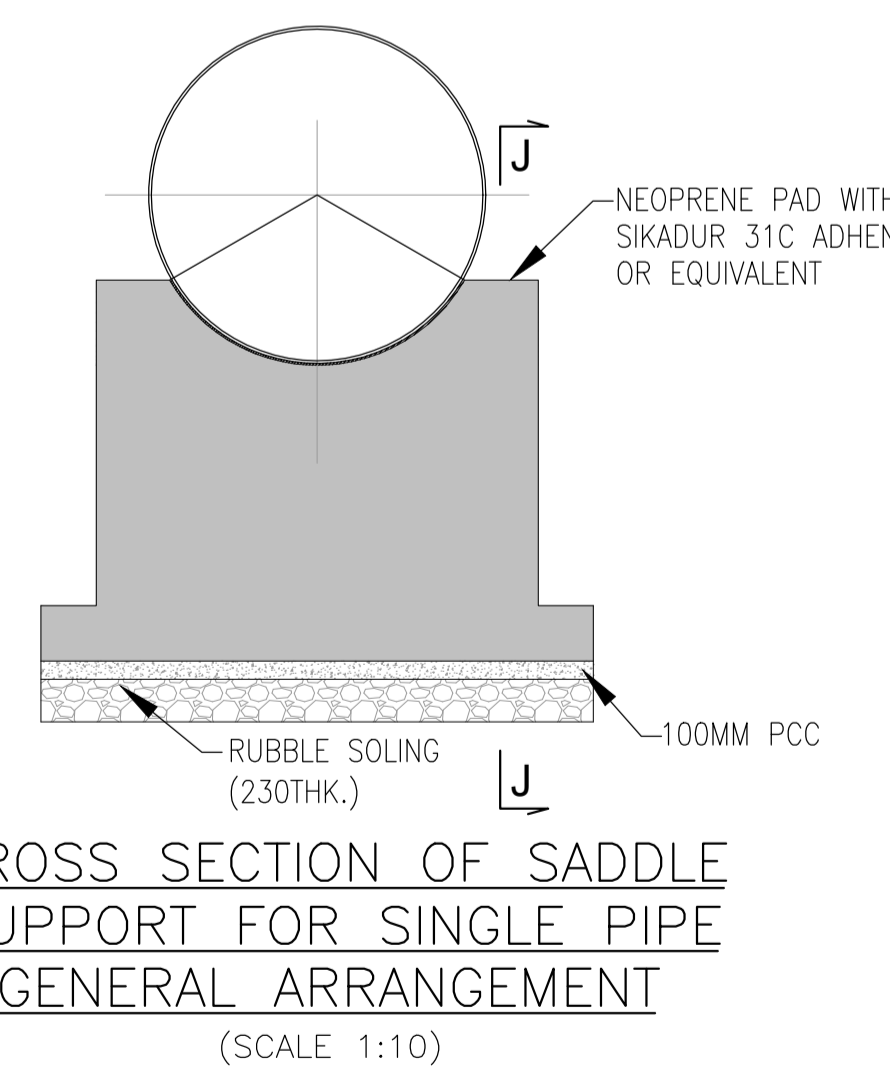
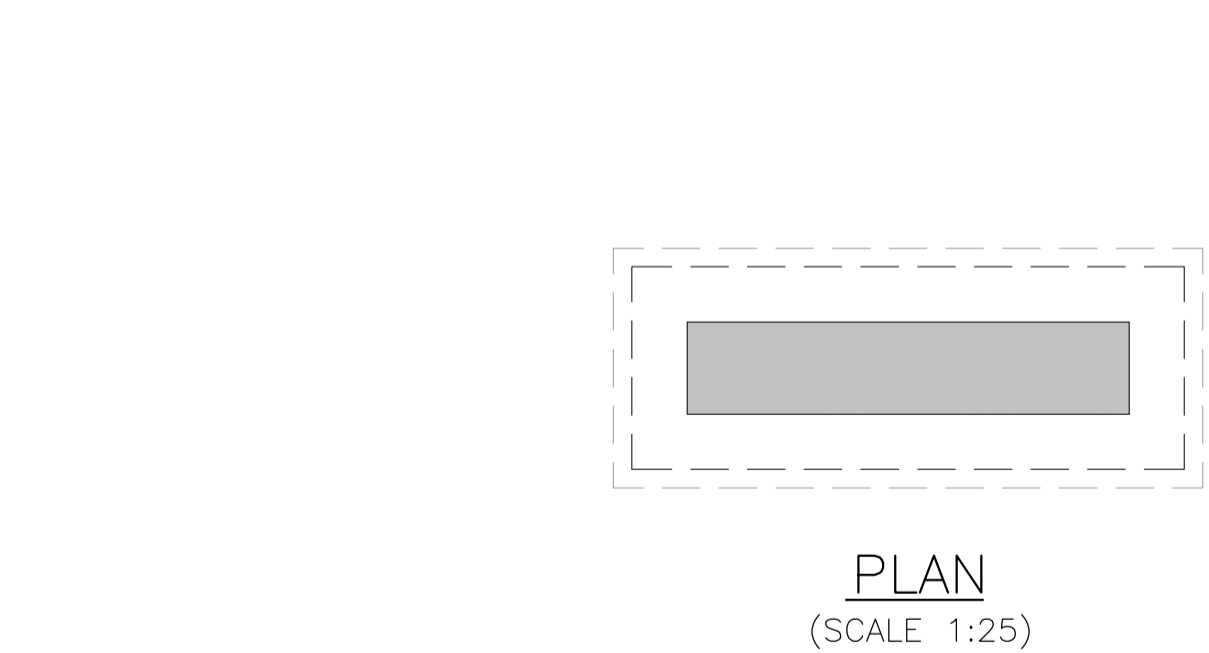
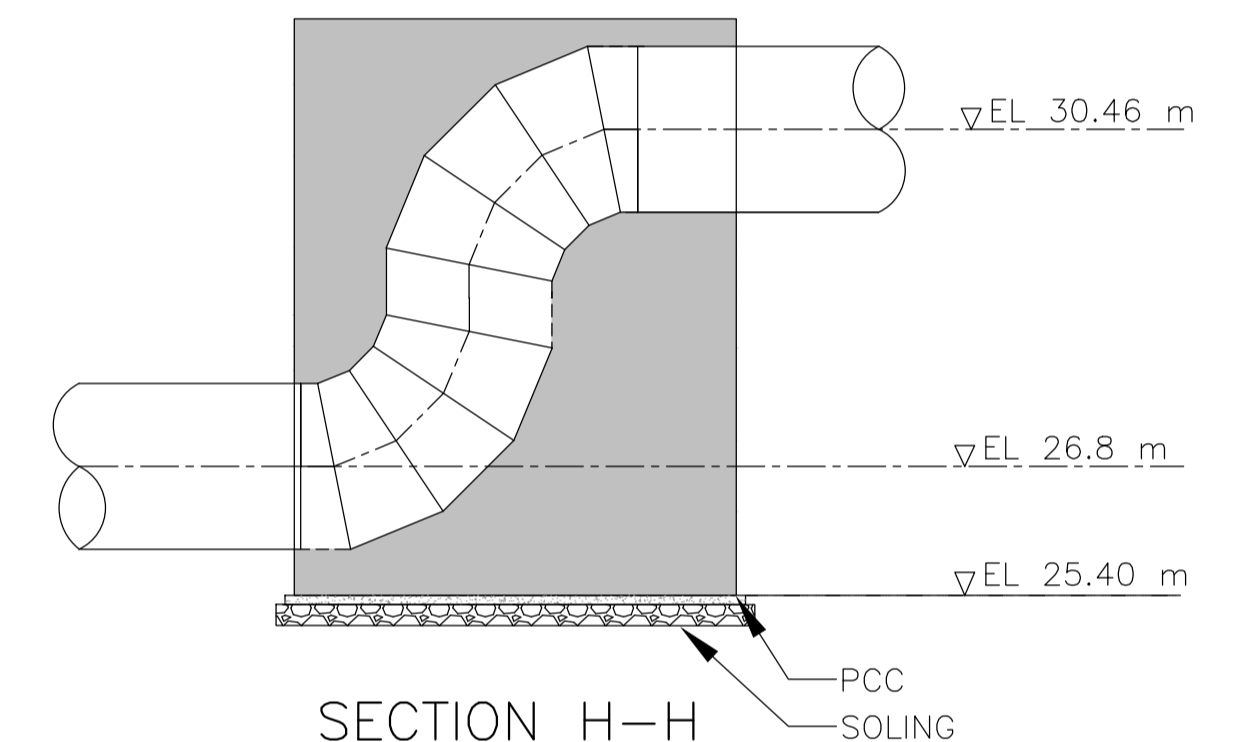
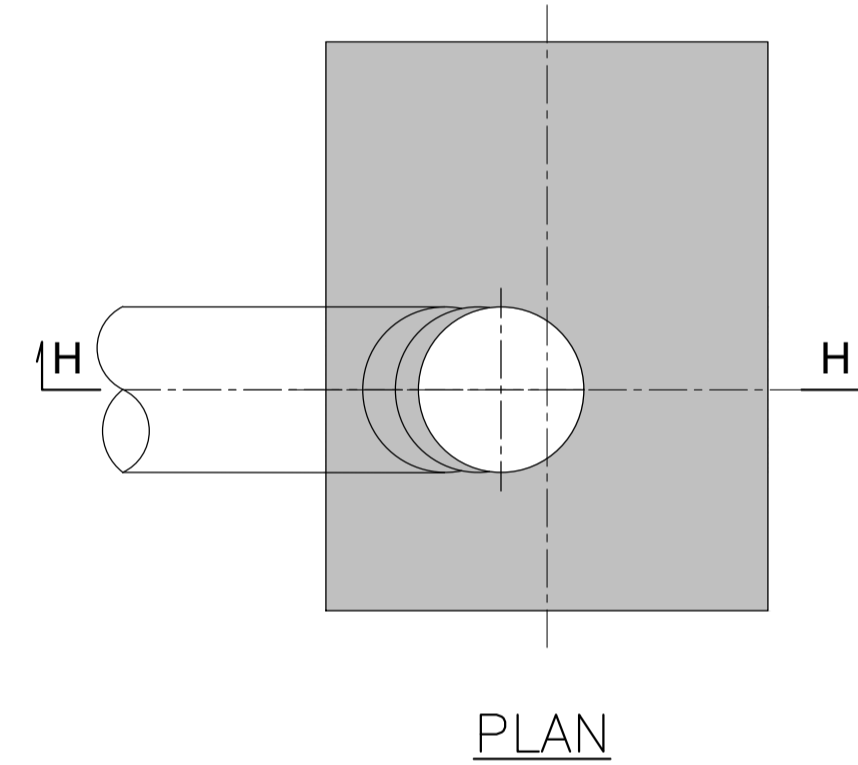
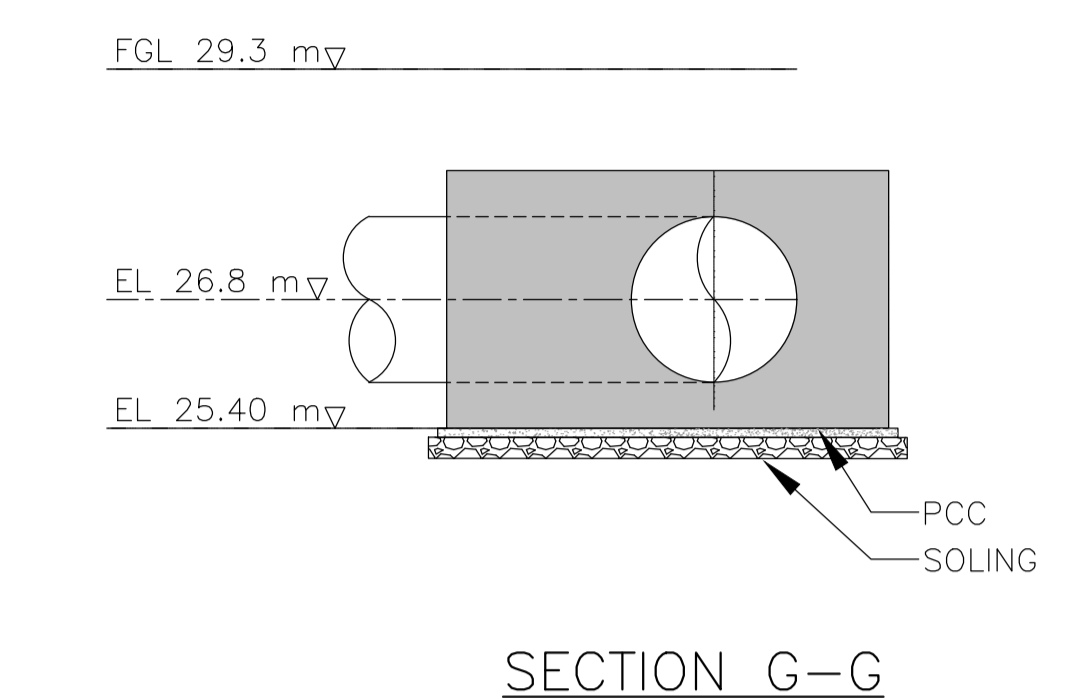
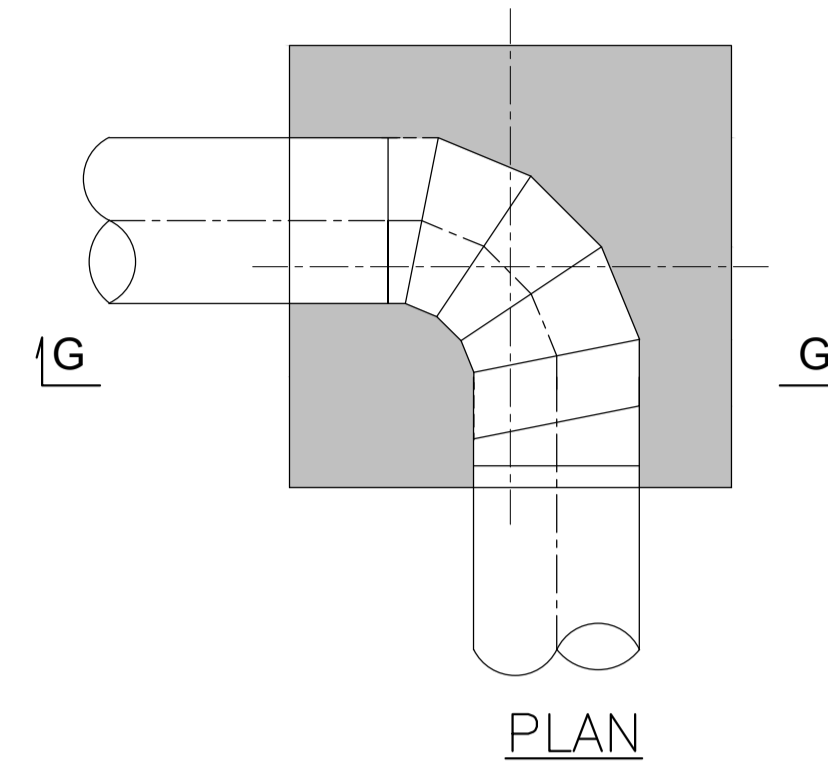
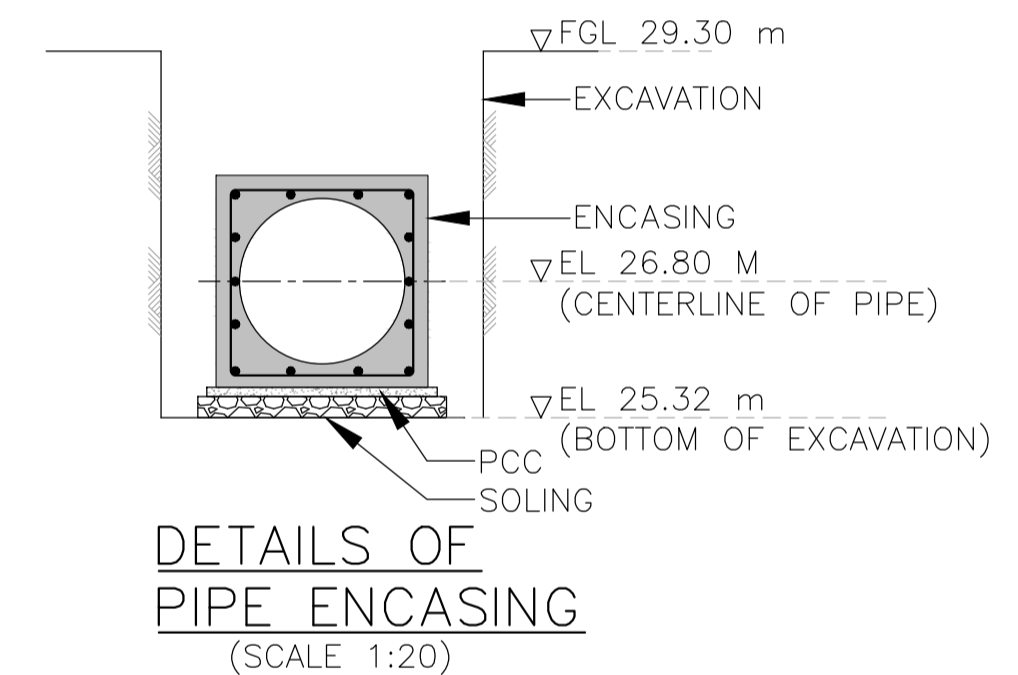
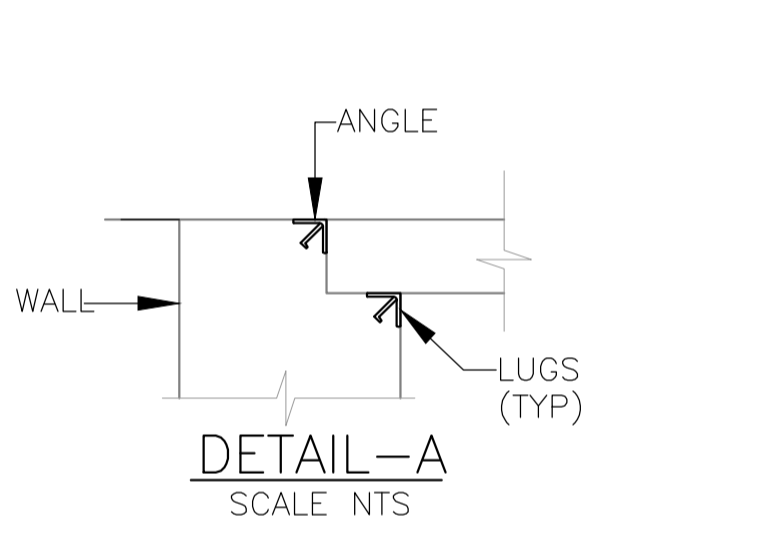
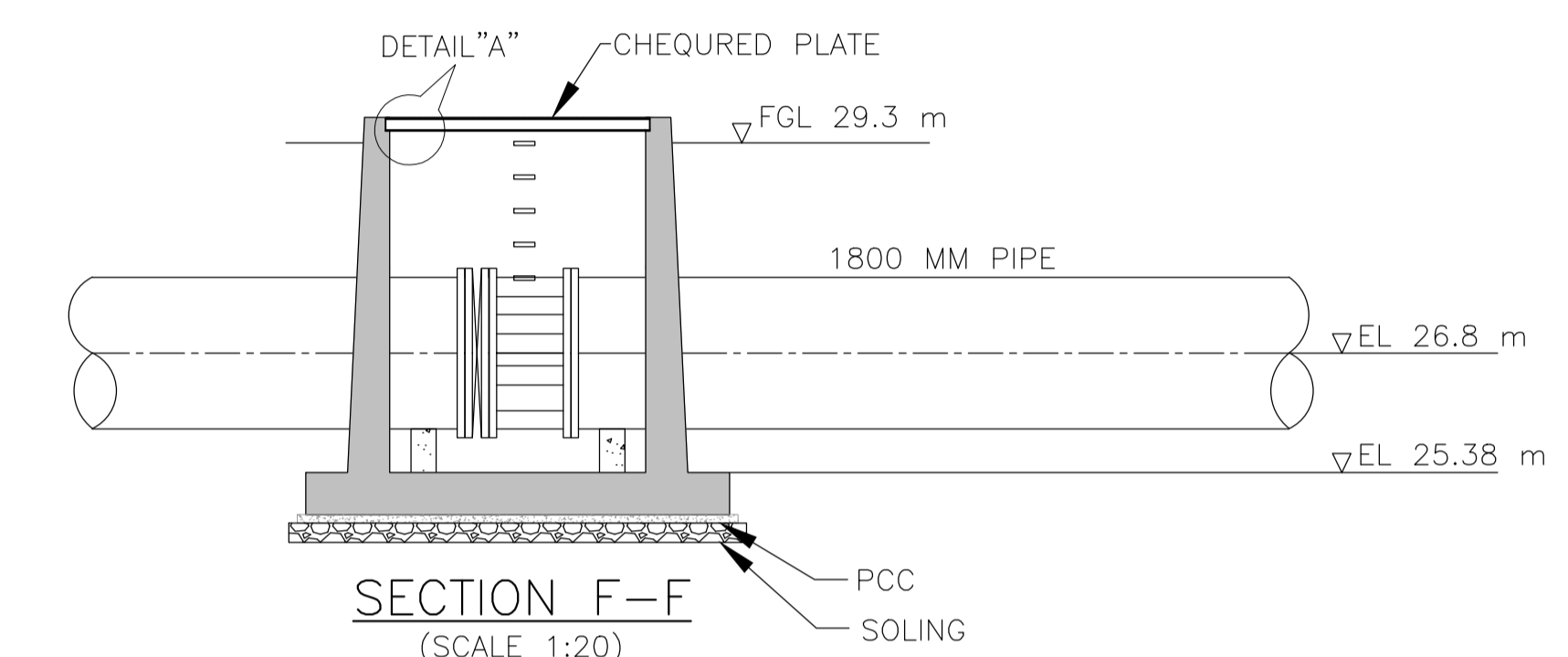
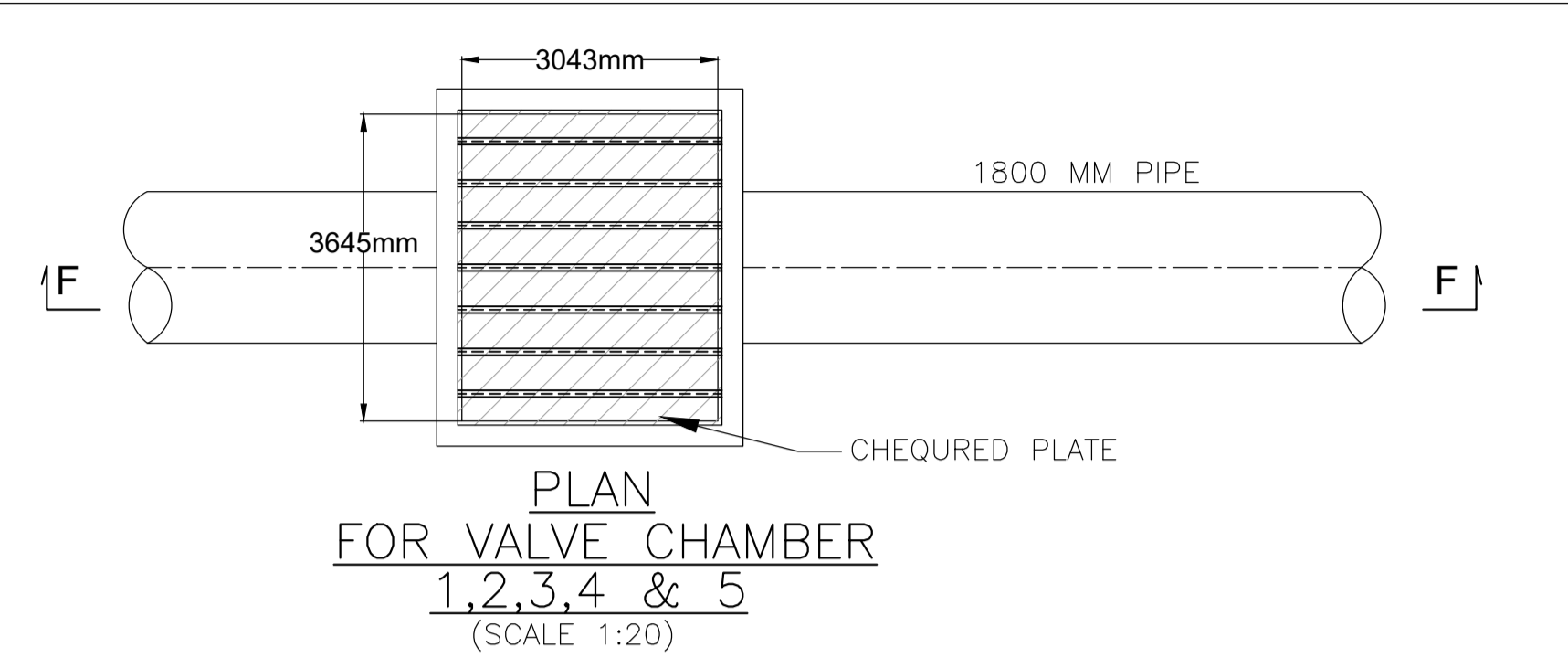
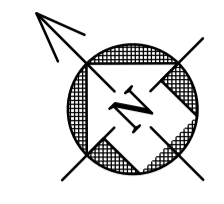
**OCTOBER 2022**

**EMPLOYER**

**Brihanmumbai Municipal Corporation  
Municipal Head Office Building,  
Mahapalika Marg, Fort, Mumbai India.**

**CONSULTANT**

**Tata Consulting Engineers Limited,  
15th Floor, Empire Tower, Thane-  
Belapur Road, Airoli, Navi Mumbai  
400 708 India.**



**LEGENDS :-**

- FGL - FINISH GROUND LEVEL
- EL - ELEVATION LEVEL

**NOTES**

1. ALL DIMENSIONS ARE IN MILLI METERS AND ELEVATIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.

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**BRIHANMUMBAI MUNICIPAL CORPORATION**  
 MUMBAI SEWAGE DISPOSAL PROJECT STAGE II-PRIORITY WORKS

**GHATKOPAR INFLUENT PUMPING STATION**  
 GENERAL ARRANGEMENT OF VALVE CHAMBER,  
 THRUST BLOCK & PIPE ENCASING DETAILS

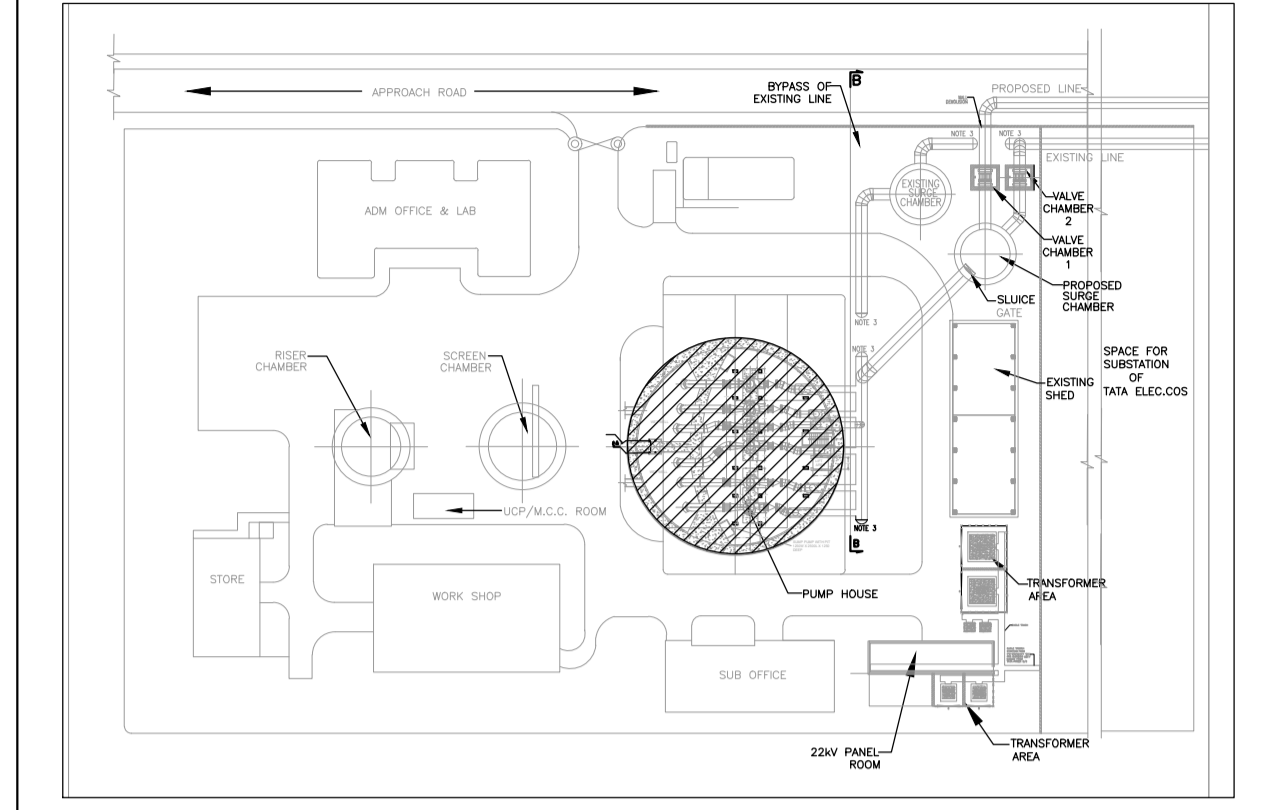
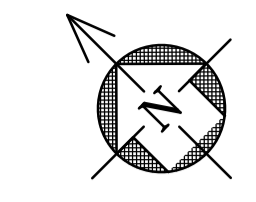
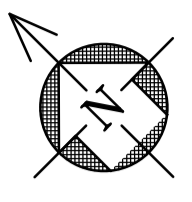
**TATA CONSULTING ENGINEERS LIMITED**  
 MUMBAI

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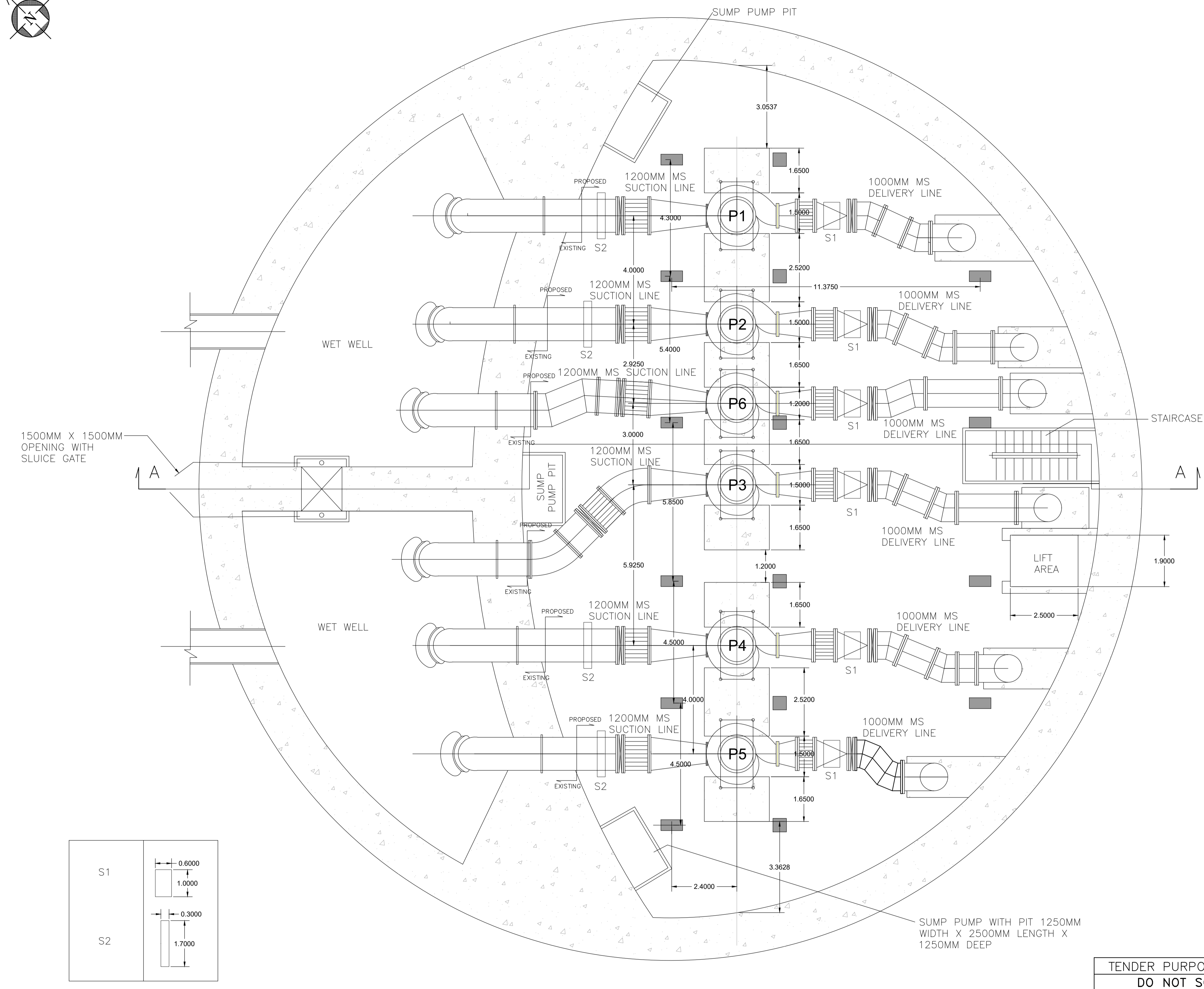




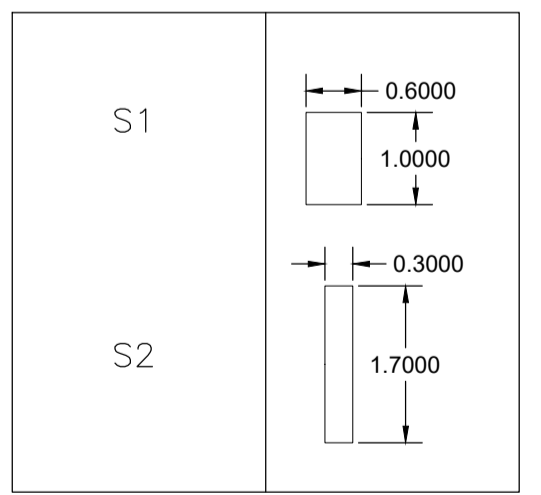




KEY PLAN



1500MM X 1500MM  
OPENING WITH  
SLUICE GATE



SUMP PUMP WITH PIT 1250MM  
WIDTH X 2500MM LENGTH X  
1250MM DEEP

PROPOSED SYSTEM - PLAN

LEGENDS:

S1	INDICATES SUPPORT OF NRV IN THE DELIVERY.
S2	INDICATES SUPPORT OF PIPE IN THE SUCTION LINE.
	KNIFE GATE VALVE
	DISMANTLING JOINT
	CHECK VALVE
	DRY-PIT NON CLOG SUBMERSIBLE CENTRIFUGAL PUMP AND MOTOR SET

NOTE

- ALL DIMENSIONS ARE IN METRES AND LEVELS ARE IN METRES UNLESS OTHERWISE INDICATED.
- ALL THE DIMENSIONS IN THE TENDER DRAWINGS SHALL BE MEASURED AND CONFIRMED BY THE CONTRACTOR BEFORE FABRICATION AND INSTALLATION AT SITE.
- AN ELECTROMAGNETIC FLOWMETER SHALL BE INSTALLED AT EACH PUMPS DISCHARGE ON VERTICAL LINE SUITABLY.

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MUMBAI SEWAGE DISPOSAL PROJECT STAGE II-PRIORITY WORKS

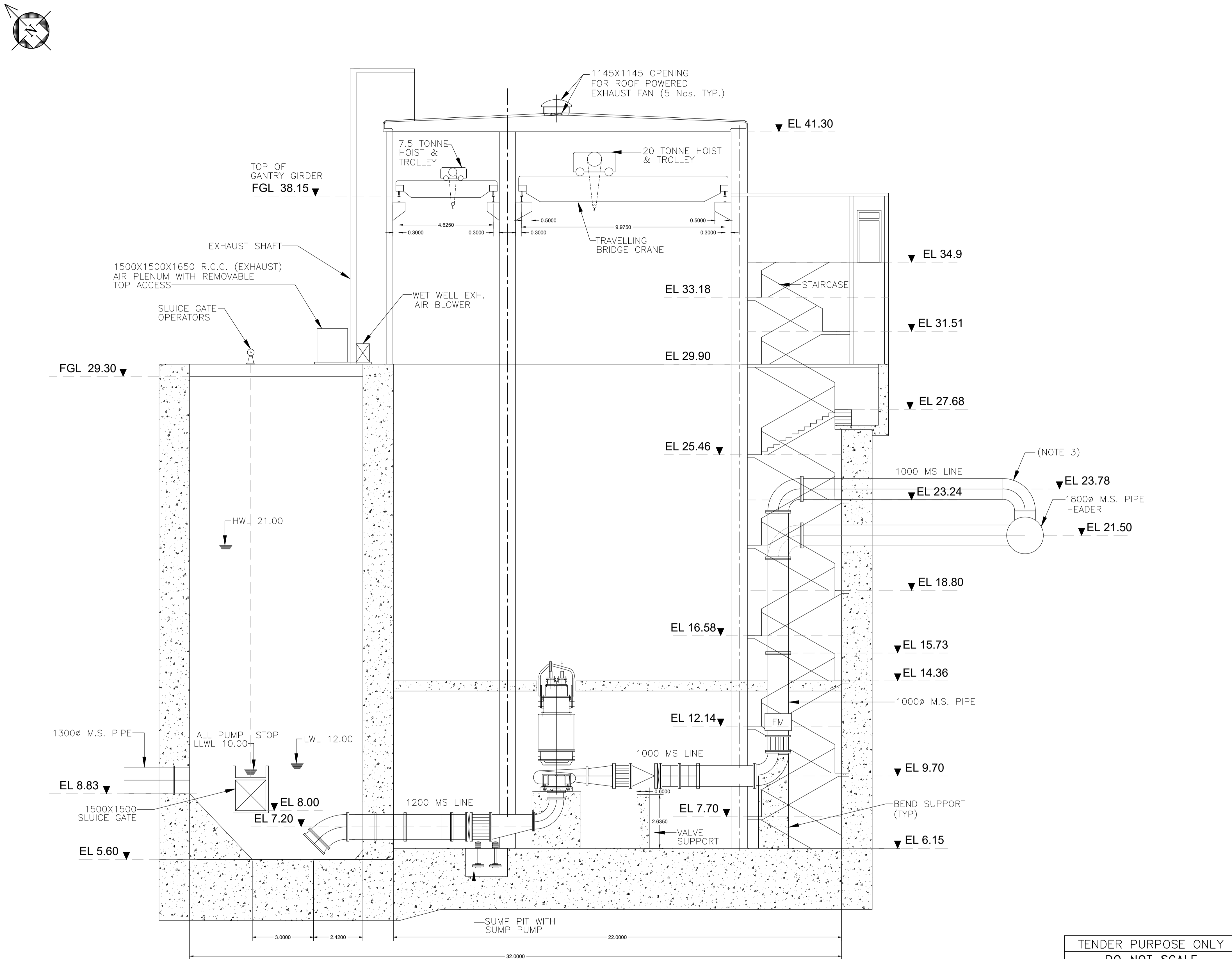
GHATKOPAR INFLUENT PUMPING STATION  
PUMP HOUSE LAYOUT-PLAN

TATA CONSULTING ENGINEERS LIMITED  
MUMBAI

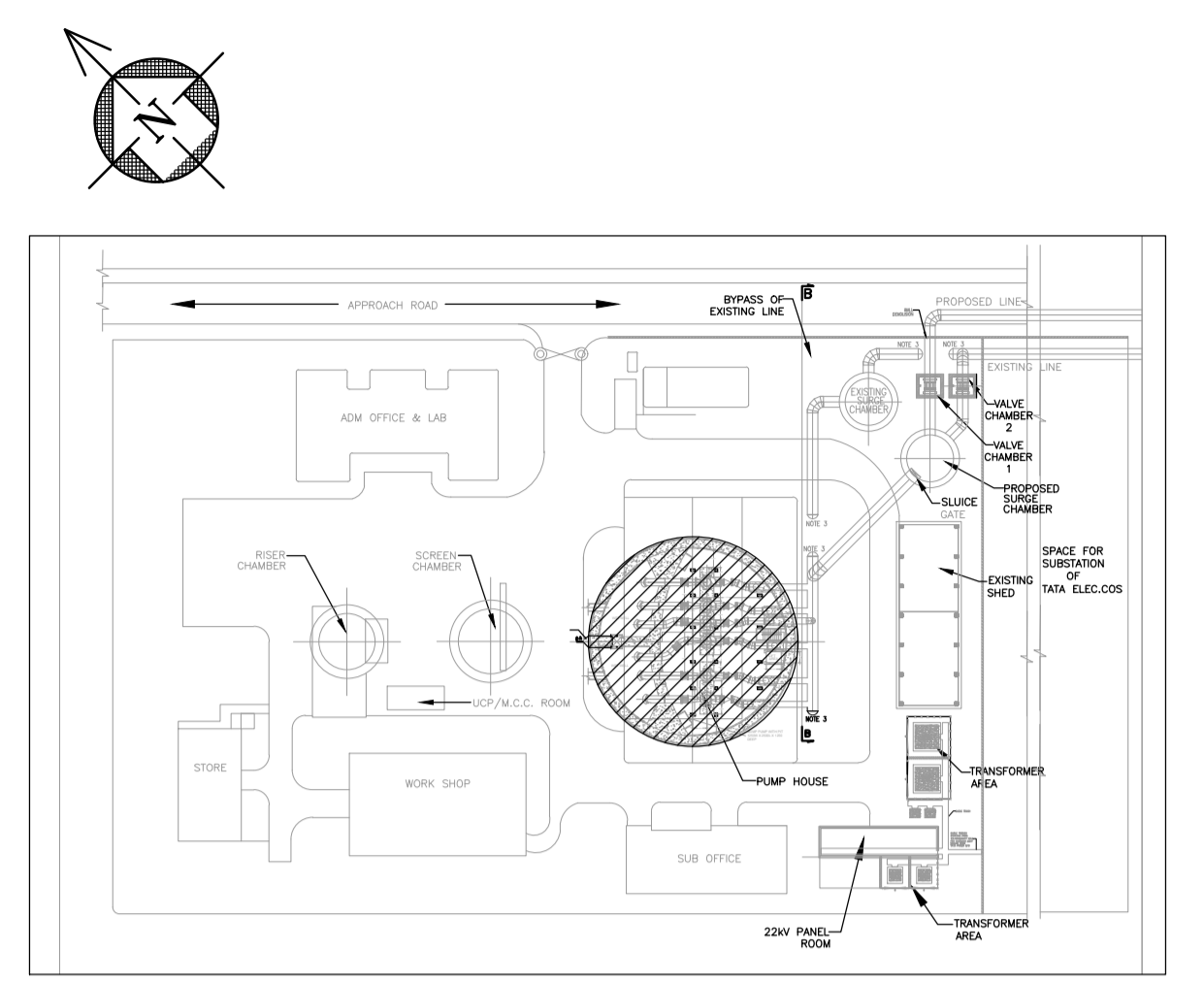
TENDER PURPOSE ONLY  
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PUMP HOUSE SECTION A-A  
 (1:100)



KEY PLAN

**LEGENDS**

	DISMANTLING JOINT
	NON RETURN VALVE
	KNIFE GATE VALVE
	FLOW METER

- NOTE**
- ALL DIMENSIONS ARE IN METRES AND LEVELS ARE IN METRES UNLESS OTHERWISE INDICATED.
  - ALL THE DIMENSIONS SHALL BE MEASURED AND CONFIRMED BY THE CONTRACTOR BEFORE FABRICATION AND INSTALLATION AT SITE.
  - THE DISCHARGE OF NEW PUMP WILL BE CONNECTED TO 1800MM RISING MAIN AS SHOWN SHOWN IN THE DRAWING. ALL THE OTHER FIVE LINES CONNECTION SHALL REMAIN IN THE SAME WAY AS THE EXISTING.

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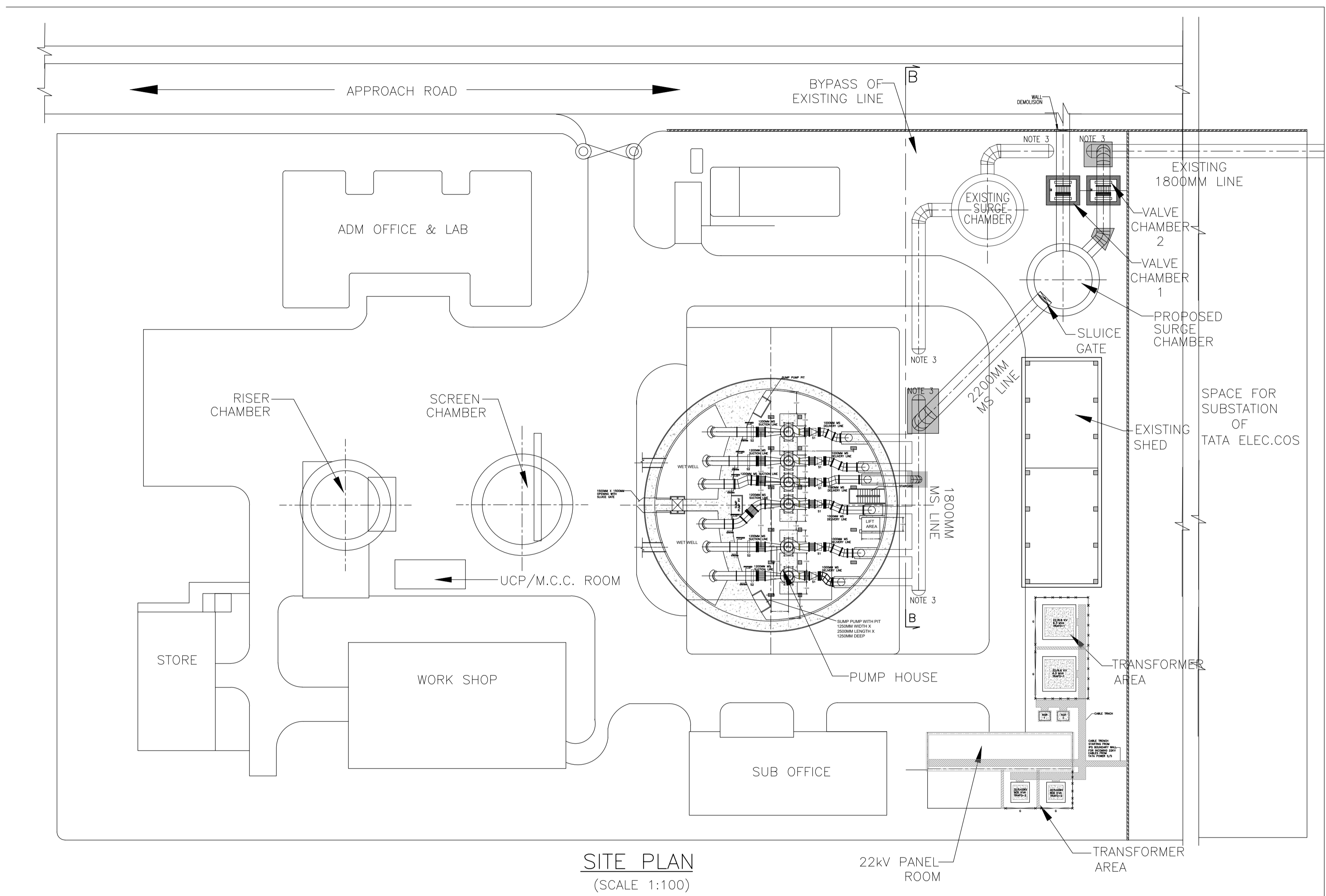
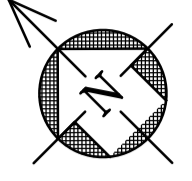
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 MUMBAI SEWAGE DISPOSAL PROJECT STAGE II-PRIORITY WORKS

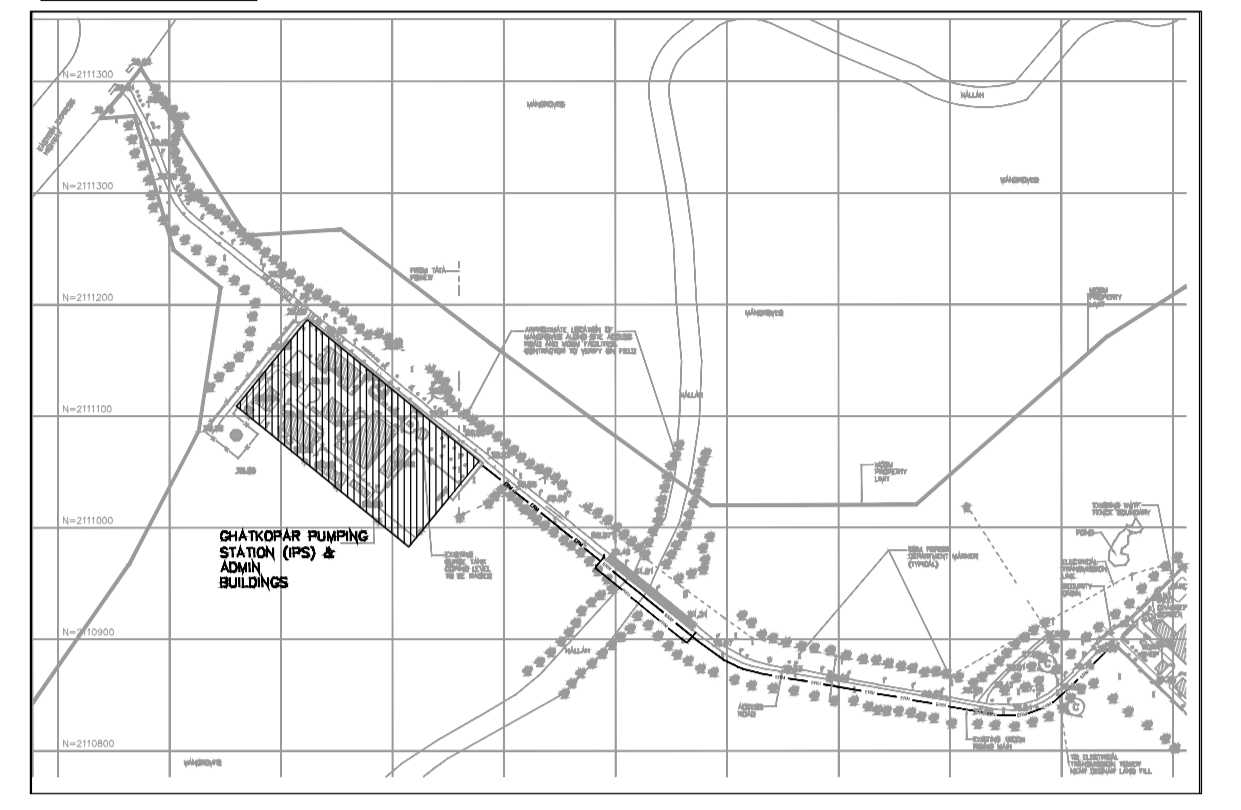
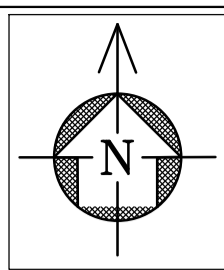
**GHATKOPAR INFLUENT PUMPING STATION**  
 PUMP HOUSE LAYOUT-SECTION

**TATA CONSULTING ENGINEERS LIMITED**  
 MUMBAI

SCALE : NTS  
 DWG NO : TCE.11710A-ME-6173-GA-60002  
 DC & DISC: MUM IC  
 ISSUE PO



**SITE PLAN**  
(SCALE 1:100)



**KEY PLAN**

**LEGENDS :-**

- HIDDEN LINE
- - - - - CENTRE LINE
- EXISTING LINE
- PROPOSED LINE

**NOTE**

1. ALL DIMENSIONS ARE IN METRES AND LEVELS ARE IN METRES UNLESS OTHERWISE INDICATED.
2. 22KV INCOMER CABLES FROM TATA POWER S/S WILL BE BURIED UNDERGROUND TILL THE IPS BOUNDARY, THEREAFTER 22KV CABLES WILL BE LAID IN THE TRENCH WITHIN THE IPS BOUNDARY.
3. DISCONNECTION POINTS OF EXISTING SURGE TANK FROM EXISTING LINE

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**BRIHANMUMBAI MUNICIPAL CORPORATION**  
 MUMBAI SEWAGE DISPOSAL PROJECT STAGE II-PRIORITY WORKS

**GHATKOPAR INFLUENT PUMPING STATION**  
**GHATKOPAR IPS SITE LAYOUT**

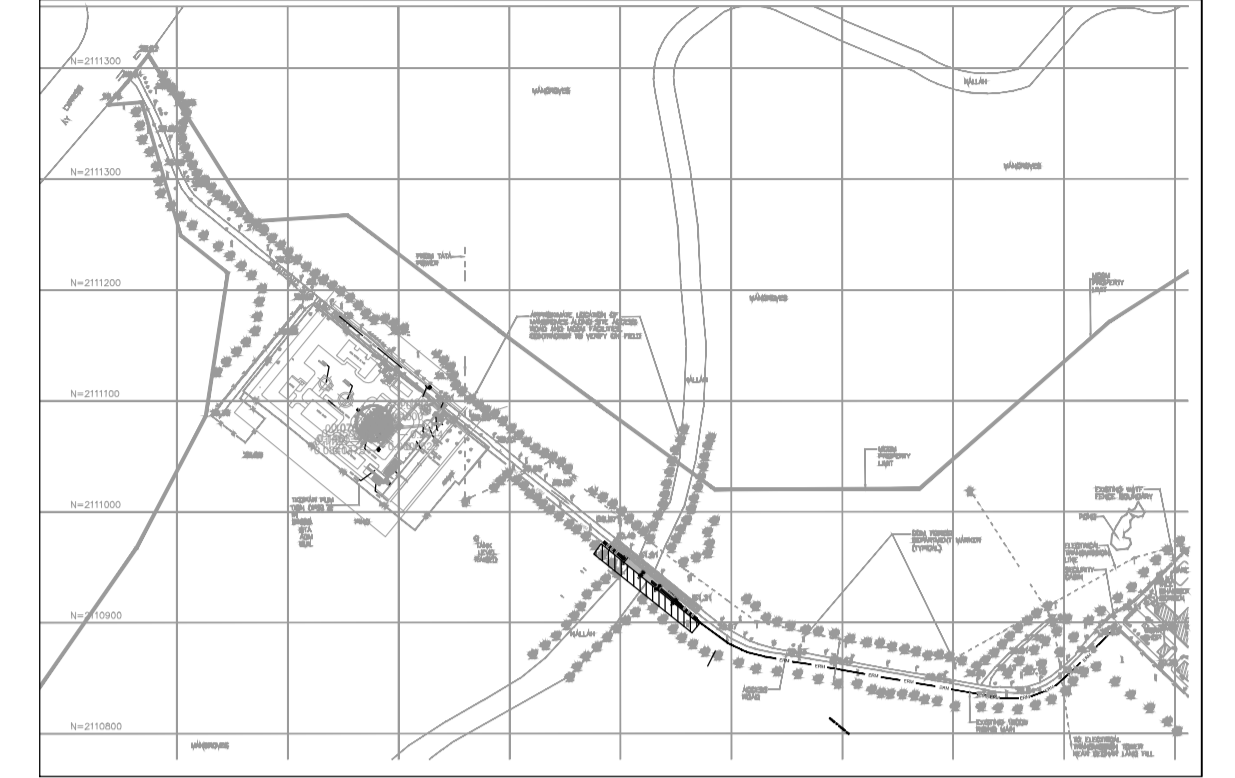
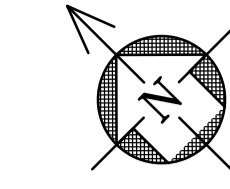
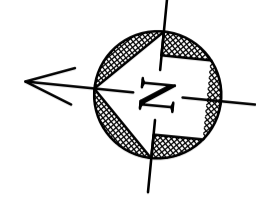
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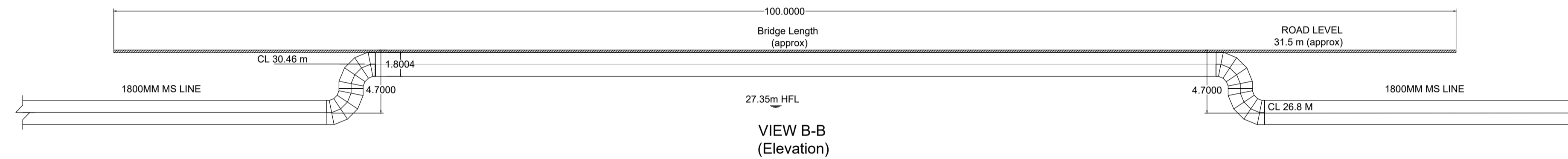
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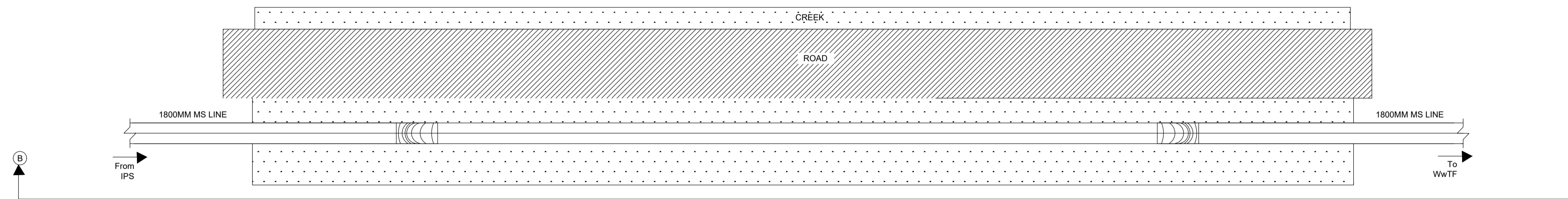
KEY PLAN

LEGENDS

HFL	HIGH FLOOD LEVEL
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VIEW B-B  
(Elevation)



PLAN

NOTE

1. ALL DIMENSIONS ARE IN METRES AND LEVELS ARE IN METRES UNLESS OTHERWISE INDICATED.
2. ALL THE ELBOWS AND FITTINGS SHALL BE AS PER PIPE AND FITTINGS FABRICATION DRAWING NO. TCE.11710A-ME-6173-GA-60008 SHEET 1 & 2 LATEST REVISION
3. THIS DRAWING IS AN INDICATIVE DRAWING ONLY. ACTUAL SPAN OF THE BRIDGE AND OTHER MEASUREMENTS SHALL BE CHECKED AND MEASURED BEFORE FABRICATION AND ERECTION.

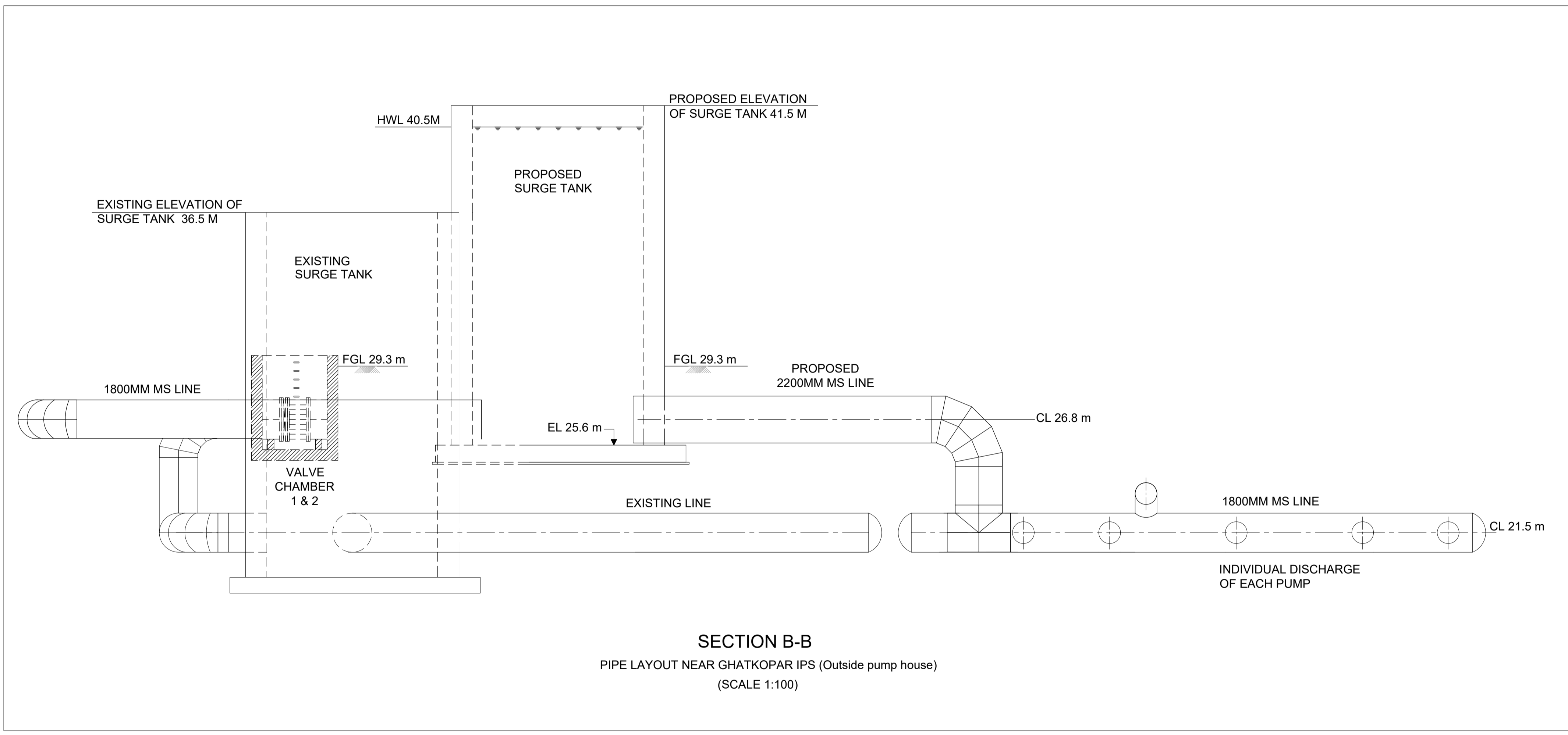
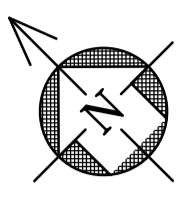
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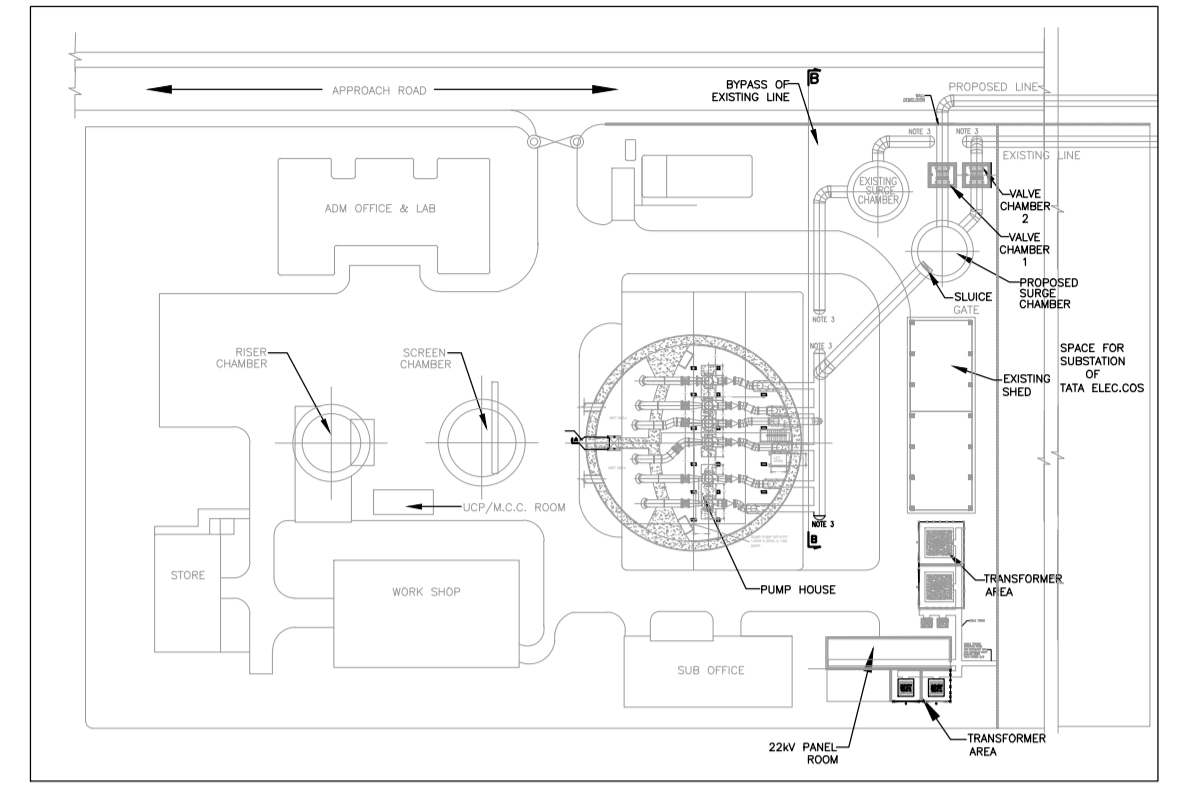
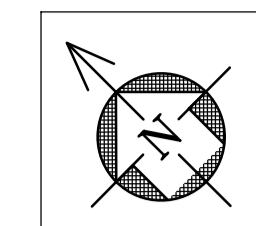
**BRIHANMUMBAI MUNICIPAL CORPORATION**  
 MUMBAI SEWAGE DISPOSAL PROJECT STAGE II-PRIORITY WORKS  
**GHATKOPAR INFLUENT PUMPING STATION**  
 PIPING DRAWING NEAR CREEK

**TATA CONSULTING ENGINEERS LIMITED**  
 MUMBAI

SCALE : NTS  
 DWG NO: TCE.11710A-ME-6173-GA-60005  
 ISSUE PO



**SECTION B-B**  
 PIPE LAYOUT NEAR GHATKOPAR IPS (Outside pump house)  
 (SCALE 1:100)



**KEY PLAN**

**LEGENDS**

---	HIDDEN LINE
- - - -	CENTRE LINE
---	EXISTING LINE
---	PROPOSED LINE
CL	CENTRE LINE
HWL	HIGH WATER LEVEL
FGL	FINISH GROUND LEVEL
EL	ELEVATION LEVEL

**NOTE**

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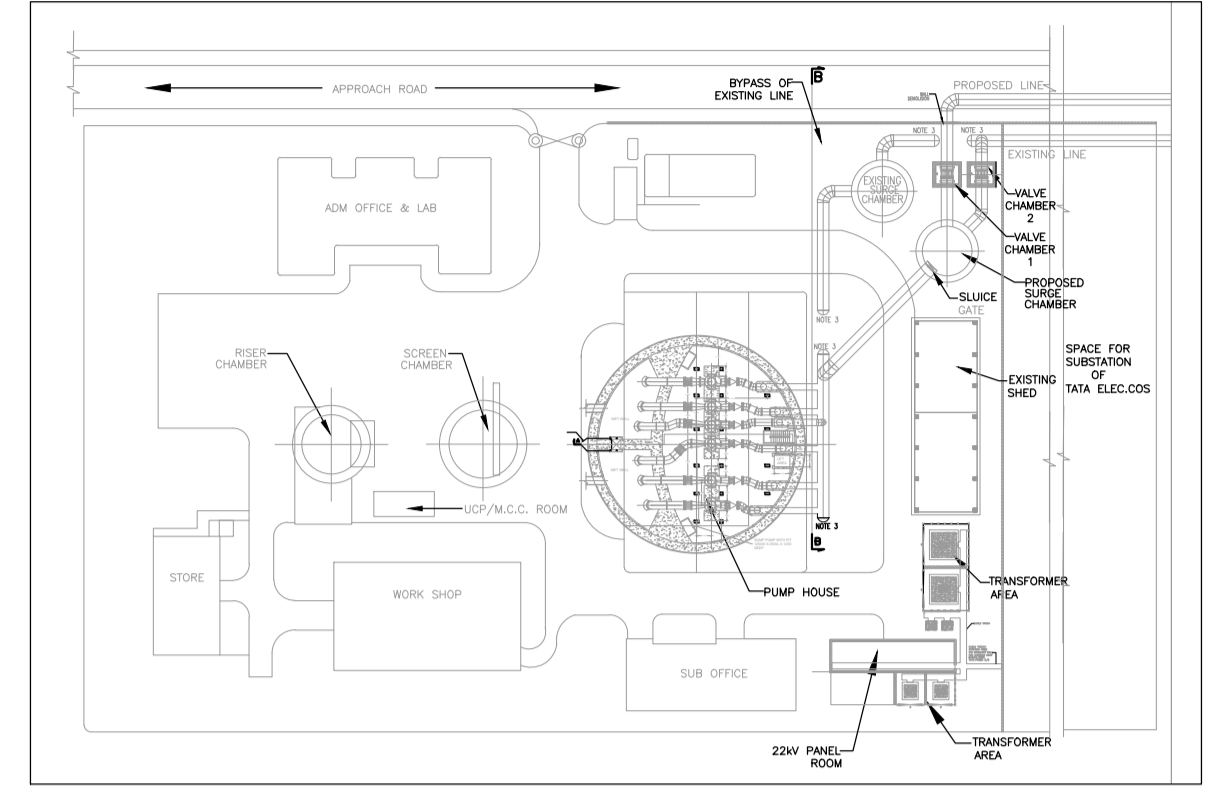
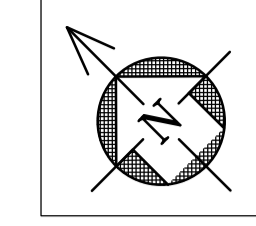
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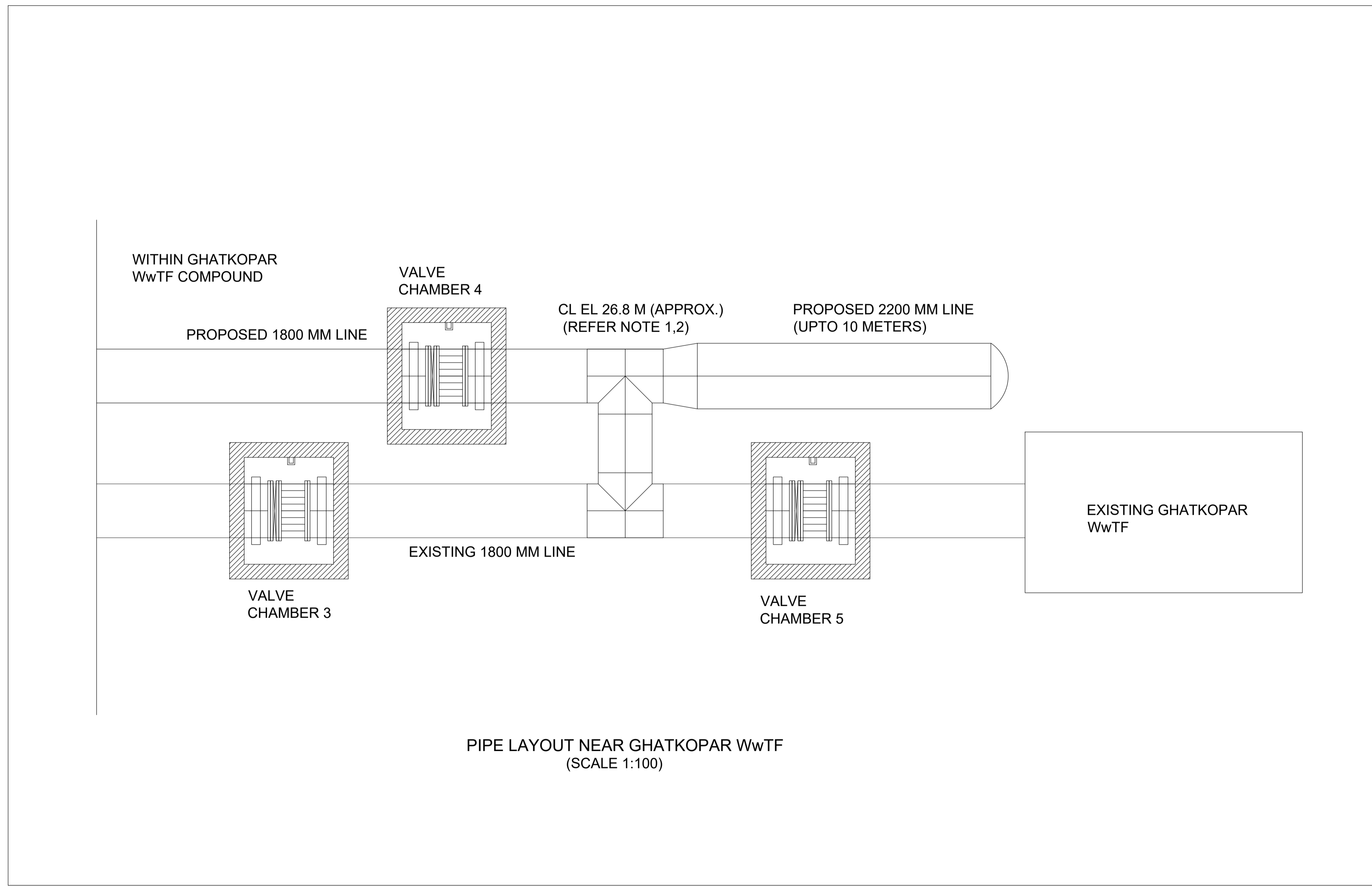
**GHATKOPAR INFLUENT PUMPING STATION**  
 PIPE ROUTING OUTSIDE PUMPHOUSE - SECTION

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 MUMBAI

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KEY PLAN



PIPE LAYOUT NEAR GHATKOPAR WWTF  
 (SCALE 1:100)

NOTE

1. THE ELEVATION OF THE EXISTING LINE NEAR WWTF SHALL BE MEASURED BY THE CONTRACTOR.
2. THE CENTERLINE OF THE PROPOSED 1800 MM LINE NEAR WWTF SHALL BE MATCHED WITH THE ELEVATION OF EXISTING LINE BEFORE THE CONNECTION POINT.
3. ALL DIMENSIONS ARE IN METRES AND LEVELS ARE IN METRES UNLESS OTHERWISE INDICATED.
4. ALL THE ELBOWS AND FITTINGS SHALL BE AS PER PIPE AND FITTINGS FABRICATION DRAWING NO. TCE.11710A-ME-6173-GA-60008 SHEET 1 & 2 LATEST REVISION

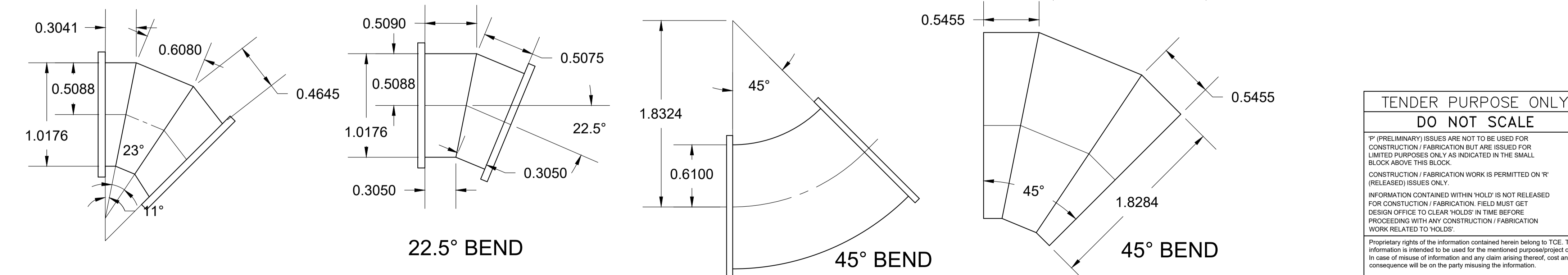
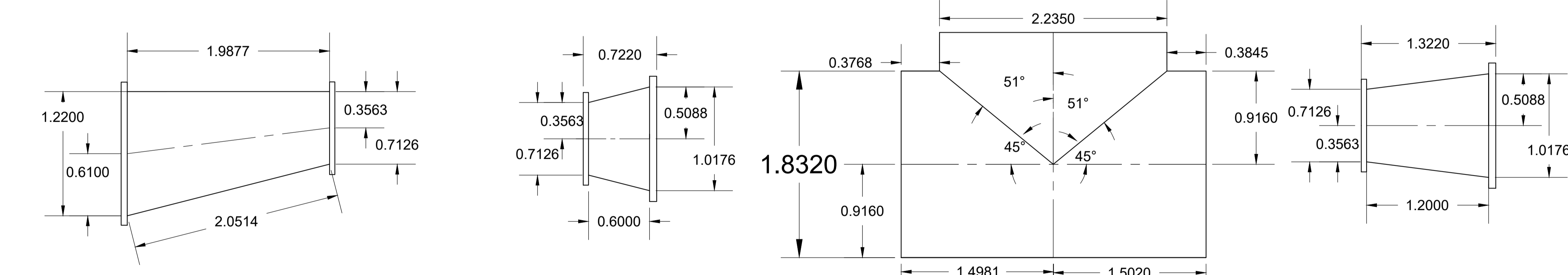
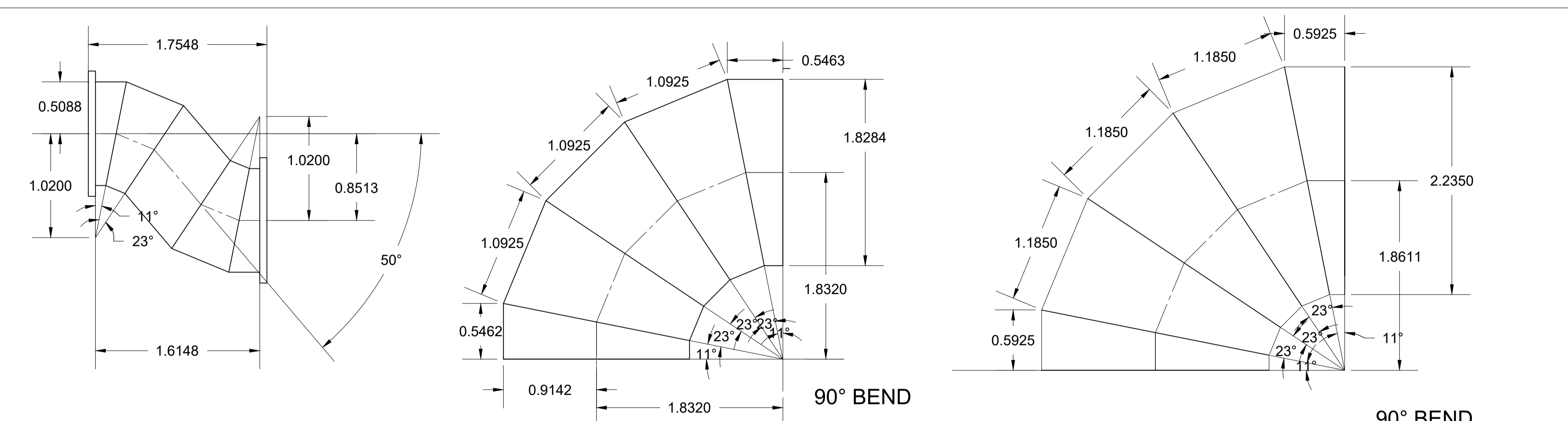
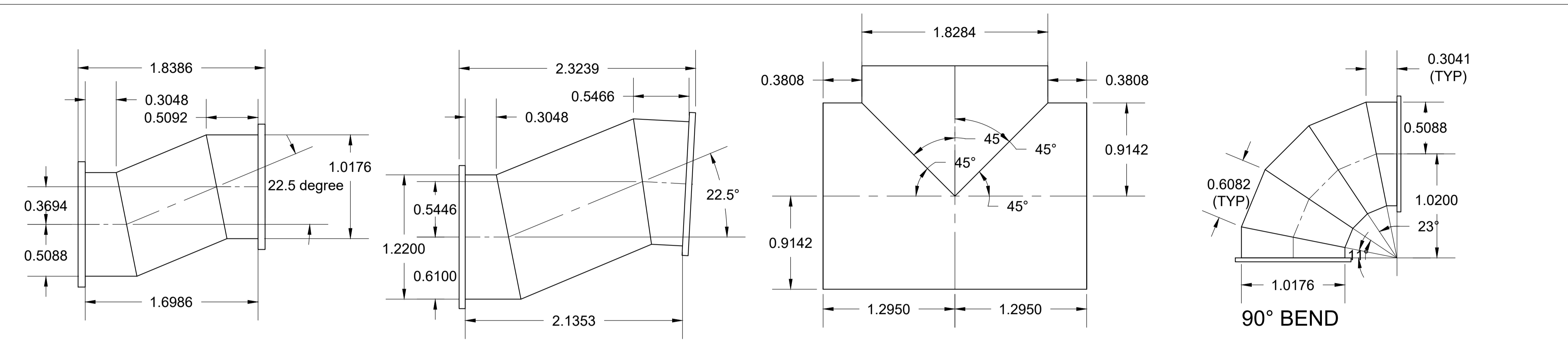
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 MUMBAI SEWAGE DISPOSAL PROJECT STAGE II-PRIORITY WORKS  
**GHATKOPAR INFLUENT PUMPING STATION**  
 PIPE ROUTING NEAR WWTF

**TATA CONSULTING ENGINEERS LIMITED**  
 MUMBAI

SCALE : NTS  
 DWG NO: TCE.11710A-ME-6173-GA-60007  
 DC & DISC: MUM IC  
 ISSUE PO  
 TCE FORM NO. 091 RO



PIPE DETAILS

SR NO	NOMINAL BORE (MM)	OUTER DIAMETER (MM)	PIPE THICKNESS (MM)	DESIGN PRESSURE (kg/cm <sup>2</sup> )
1	700	711	6.3	1.2
2	1000	1016	8.8	7.1
3	1200	1219	10	1.2
4	1800	1829	14.2	7.1
5	2200	2235	17.5	7.1

NOTE

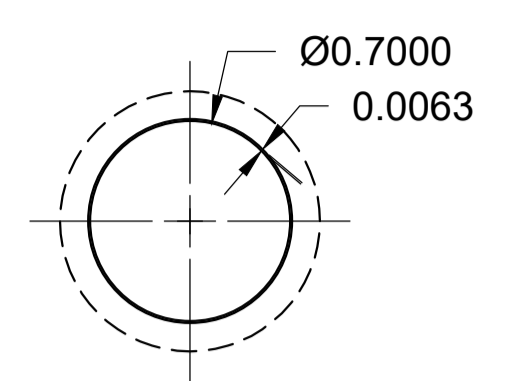
1. ALL DIMENSIONS ARE IN METRES AND LEVELS ARE IN METRES UNLESS OTHERWISE INDICATED.
2. ALL FLANGES DIMENSION SHALL BE AS PER REQUIREMENT.
3. SPECIAL FITTING MAY BE REQUIRED DUE TO SPACE CONSTRAINT.
4. PIPE LENGTH SHALL BE CONSIDERED BY CONTRACTOR.
5. ALL DIMENSION MAY CHANGE DURING DETAIL ENGINEERING AND SHALL BE CONSIDERED AS PER SITE SUITABILITY.
6. PIPE AND FITTING QUANTITY MAY VARY AND SHALL BE CONSIDERED AS PER SITE SUITABILITY.
7. GASKET SHALL BE CONSIDERED IN EACH FLANGE CONNECTION.
8. MATERIAL FOR ALL SURFACE PIPES SHALL BE CONFIRMING TO IS:2062 GRADE E250
9. TOLERANCES IN PIPE FOR ALL DIAMETERS SHALL BE AS APPLICABLE AS PER CLAUSE 12 OF IS:3589 (LATEST EDITION).
10. ALL THE FLANGE DRILLINGS SHALL BE AS PER BS EN 1092.
11. QUANTITY AS PER BIDDER'S DESIGN.

SIGN.										
INITIALS										
REVISIONS										
PO	SIGN.									10-06-2021
INITIALS	MMS	JR	GS			NDM		AP	SVP	
ISSUE	DRN	DSN	CHD	CV	EL	IC	ME	PE/PM	APPD	DATE

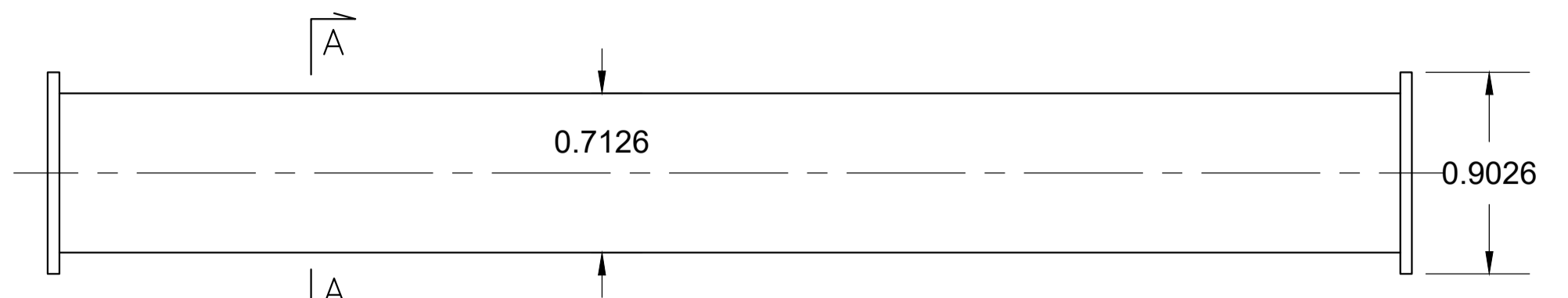
BRIHANMUMBAI MUNICIPAL CORPORATION  
 MUMBAI SEWAGE DISPOSAL PROJECT STAGE II-PRIORITY WORKS  
 GHATKOPAR INFLUENT PUMPING STATION  
 PIPE & FITTING FABRICATION  
 (SHEET 1 OF 2)

TATA CONSULTING ENGINEERS LIMITED  
 MUMBAI

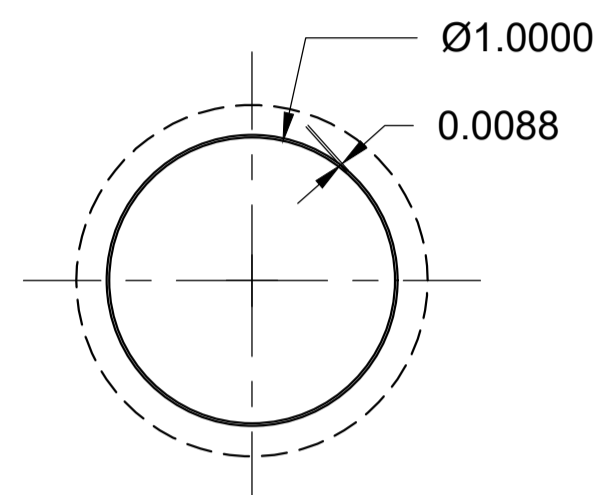
TENDER PURPOSE ONLY  
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 FILE NAME : TCE.11710A-ME-6173-GA-60008



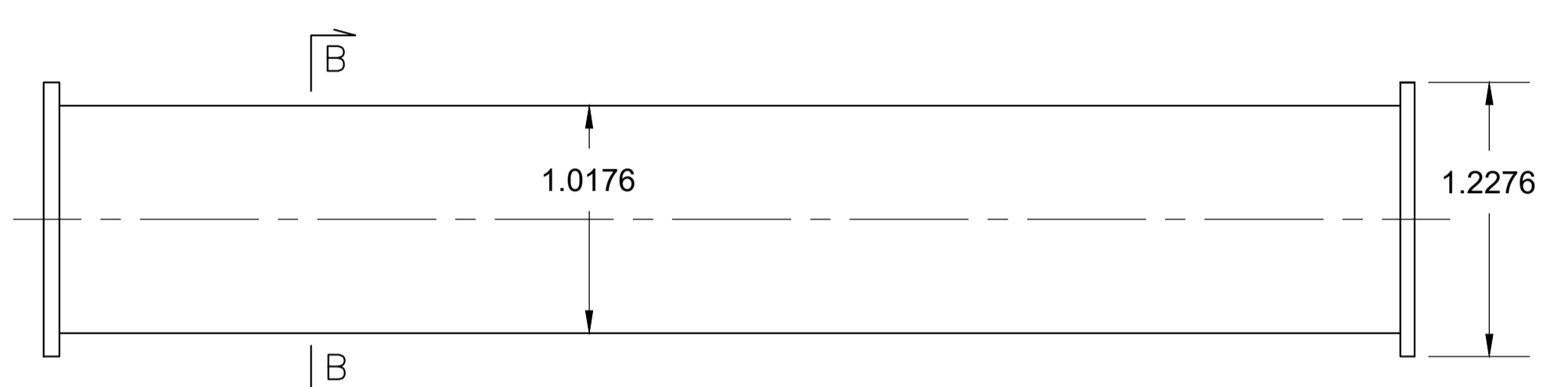
SECTION A-A



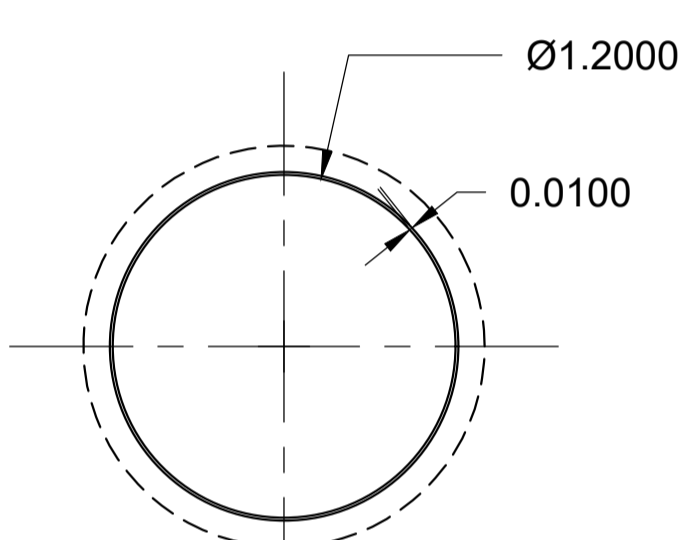
SIDE VIEW



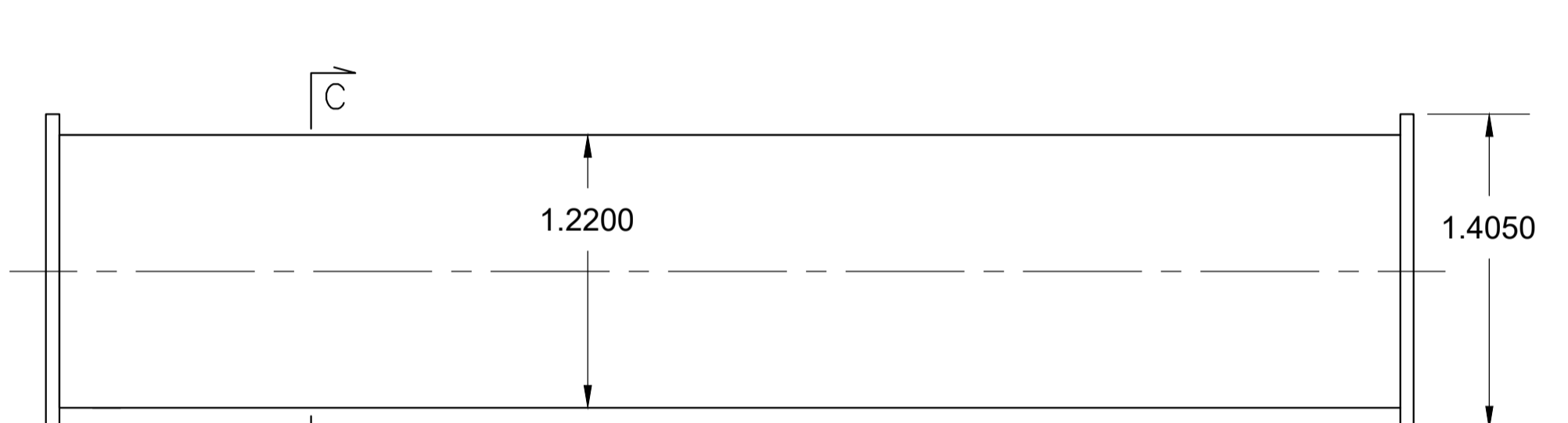
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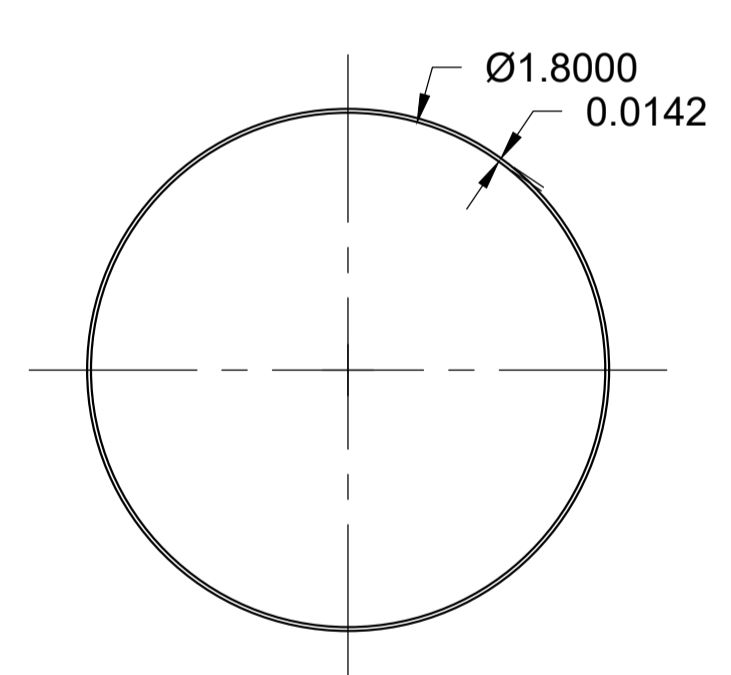
SIDE VIEW



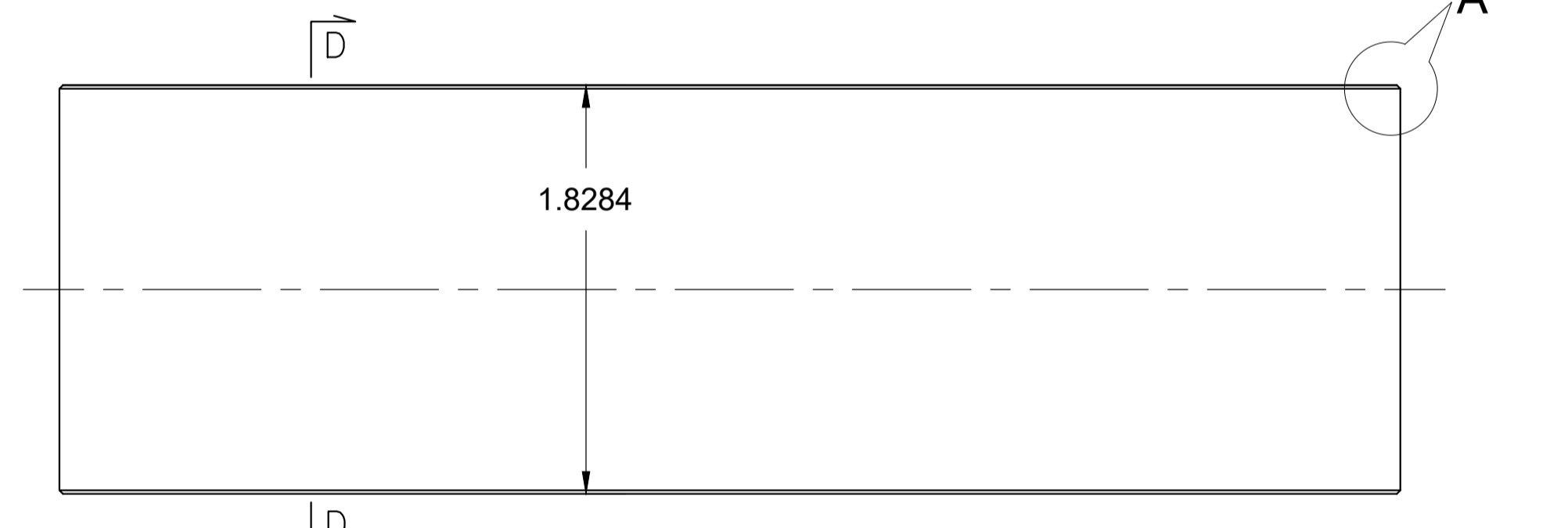
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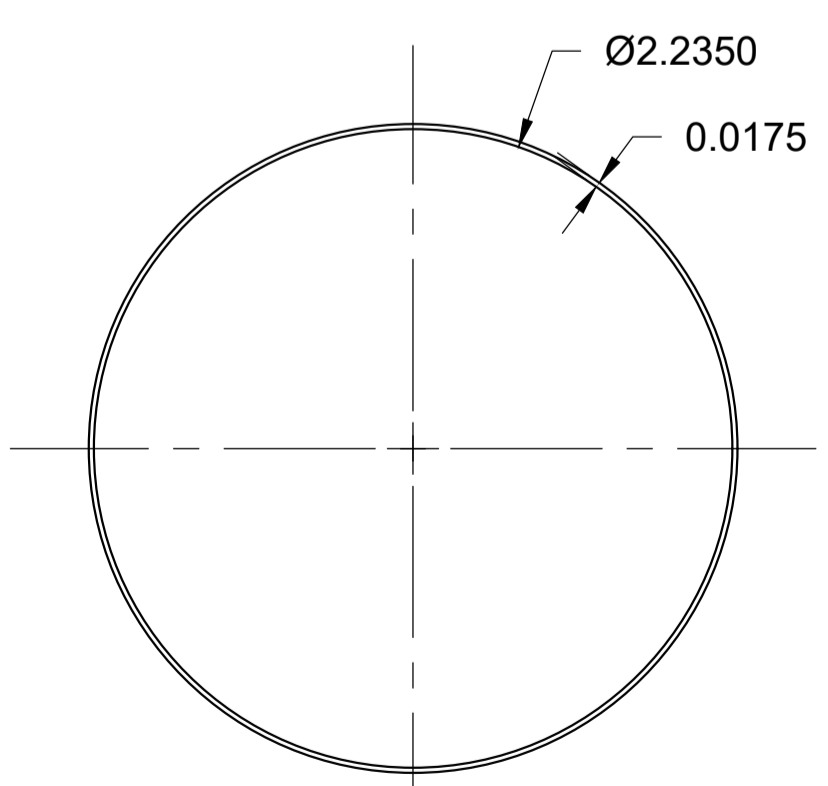
SIDE VIEW



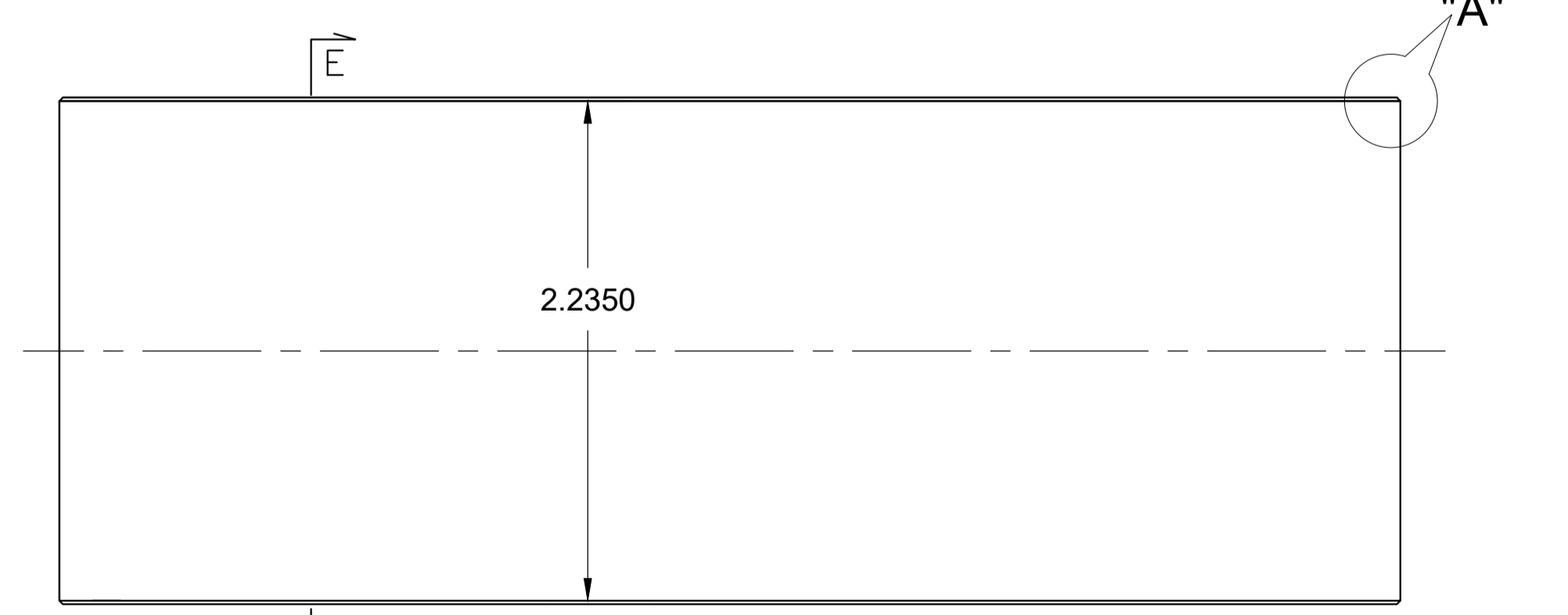
SECTION D-D



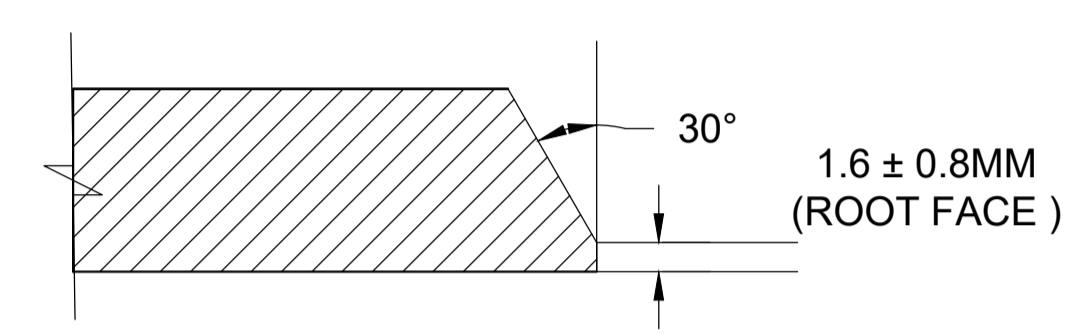
SIDE VIEW



SECTION E-E



SIDE VIEW



DETAIL "A"  
(NTS)

BEVELLED ENDS FOR  
BUTT WELDED JOINTS

PIPE DETAILS

SR NO	NOMINAL BORE (MM)	OUTER DIAMETER (MM)	PIPE THICKNESS (MM)	DESIGN PRESSURE (kg/cm <sup>2</sup> )
1	700	711	6.3	1.2
2	1000	1016	8.8	7.1
3	1200	1219	10	1.2
4	1800	1829	14.2	7.1
5	2200	2235	17.5	7.1

NOTE

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- ALL THE FLANGE DRILLINGS SHALL BE AS PER BS EN 1092.
- QUANTITY AS PER BIDDER'S DESIGN.

SIGN.										
INITIALS										
REVISIONS										
P0	SIGN.	MMS	JR	GS		NDM		AP	SVP	10-06-2021
ISSUE	DRN	DSN	CHD	CV	EL	IC	ME	PE/PM	APPD	DATE

TENDER PURPOSE ONLY  
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 FILE NAME : TCE.11710A-ME-6173-GA-60008

**BRIHANMUMBAI MUNICIPAL CORPORATION**  
 MUMBAI SEWAGE DISPOSAL PROJECT STAGE II-PRIORITY WORKS  
**GHATKOPAR INFLUENT PUMPING STATION**  
 PIPE & FITTING FABRICATION  
 (SHEET 2 OF 2)

**TATA CONSULTING ENGINEERS LIMITED**  
 MUMBAI



INCOMER 1 FROM TRAF0#1,800KVA, 22/0.433kV DISTRIBUTION TRANSFORMER

INTERLOCK LOGIC:

415 LV SWITCHGEAR:

INCOMER-1	INCOMER-2	BUS COUPLER
ON	OFF	ON
OFF	ON	ON
ON	ON	OFF

LEGENDS:

	INTERLOCK		CURRENT TRANSFORMER
	MOTOR		VOLTMETER
	VOLTMETER SELECTED SWITCH		2 WINDING, 3 PHASE, TRANSFORMER
	MOTOR PROTECTION CIRCUIT BREAKER		CAPACITOR BANK WITH APFC
	RELAYS		DIRECT ON LINE STARTER
	STAR DELTA STARTER		INDICATING LAMP
	AMMETER SELECTED SWITCH		MULTI FUNCTION METER
	PUSH BUTTON		ELECTRICAL DRAWOUT TYPE AIR CIRCUIT BREAKER
	LOCAL OR REMOTE SELECTOR SWITCH		MOULDED CASE CIRCUIT BREAKER
	REVERSE DIRECT ON LINE STARTER		AMMETER
	EARTH LEAKAGE CIRCUIT BREAKER		EARTH CONNECTION
	MINIATURE CIRCUIT BREAKER		

RELAYS:

- 27 UNDER VOLTAGE RELAY
- 2 TIME DELAY RELAY
- 59 OVER VOLTAGE RELAY
- 50 INSTANTANEOUS OVER CURRENT RELAY
- 51 IDMT OVER CURRENT RELAY WITH HIGH SET INSTANTANEOUS UNIT
- 50N INSTANTANEOUS EARTH FAULT RELAY
- 51N IDMT EARTH FAULT RELAY
- 86 MASTER TRIP RELAY

NOTES:

1. ALL THE PUMPS SHALL BE SUITABLE FOR PLC OPERATION.
2. SUCTION AND DELIVERY MOTORIZED VALVES SHALL BE SUITABLE FOR PLC OPERATION.
3. SWITCHGEAR PANEL SHALL BE PROVIDED WITH ANTI-CONDENSATION HEATER WITH THERMOSTAT & FLUORESCENT LAMP LIGHTING FIXTURE PROTECTED BY HRC FUSE & MCCB.
4. ALL MCCB'S SHALL BE PROVIDED WITH O/L, S/C, EARTH FAULT PROTECTION. MCCB FOR THE MOTOR FEEDER SHALL BE PROVIDED WITH O/L, S/C, U/V E/F PROTECTON. MCCB SHALL BE FIXED TYPE. ALL CIRCUIT BREAKERS SHALL BE PROVIDED WITH LSIG RELEASE.
5. ACB SHALL BE ELECTRICALLY OPERATED DRAW OUT TYPE, MICROPROCESSOR BASED WITH OVERLOAD, SHORT CIRCUIT, UNDER VOLTAGE AND EARTH FAULT PROTECTION.
6. MCCB SHALL BE PROVIDED WITH O/L, S/C PROTECTION.
7. RATING OF COMPONENTS LIKE POWER CONTRACTOR, MCCB, OLR ETC. SHALL BE SELECTED BY THE SUPPLIER TO ENSURE PROTECTION OF FEEDER AS PER CO-ORDINATION TYPE-2 OF IS:13947
8. ELECTRICAL VALVES SHALL BE OPERATED WITH GENERAL RDOL STARTER CONSISTING OF MPCB,OLR,CONTACTOR & SUITABLE FOR OPERATION IN BOTH LOCAL & REMOTE MODE.
9. FEEDER PROVISION FOR VALVES IN WWTF HAS TO BE CONSIDERED.
10. THERE WILL BE PROVISION OF ELECTRO-MECHANICAL INTERLOCK IN BETWEEN BOTH THE INCOMERS AND BUS COUPLER OF MCC-1.
11. ALL PUMP MOTORS SHALL HAVE PROVISION FOR OPERATION IN LOCAL OR REMOTE MODE.
12. CT AND PT RATINGS SHALL BE IN ACCORDANCE WITH MANUFACTURING STANDARD AND TO BE FINALISED DURING DDE.

PO	SIGN. INITIALS	MMS	ARK	AK	AP	SVP	31-05-2021
ISSUE	DRN	DSN	CHD	CV	EL	IC	ME
							PE/PM
							APPD
							DATE

BRIHANMUMBAI MUNICIPAL CORPORATION  
MUMBAI SEWAGE DISPOSAL PROJECT STAGE II-PRIORITY WORKS

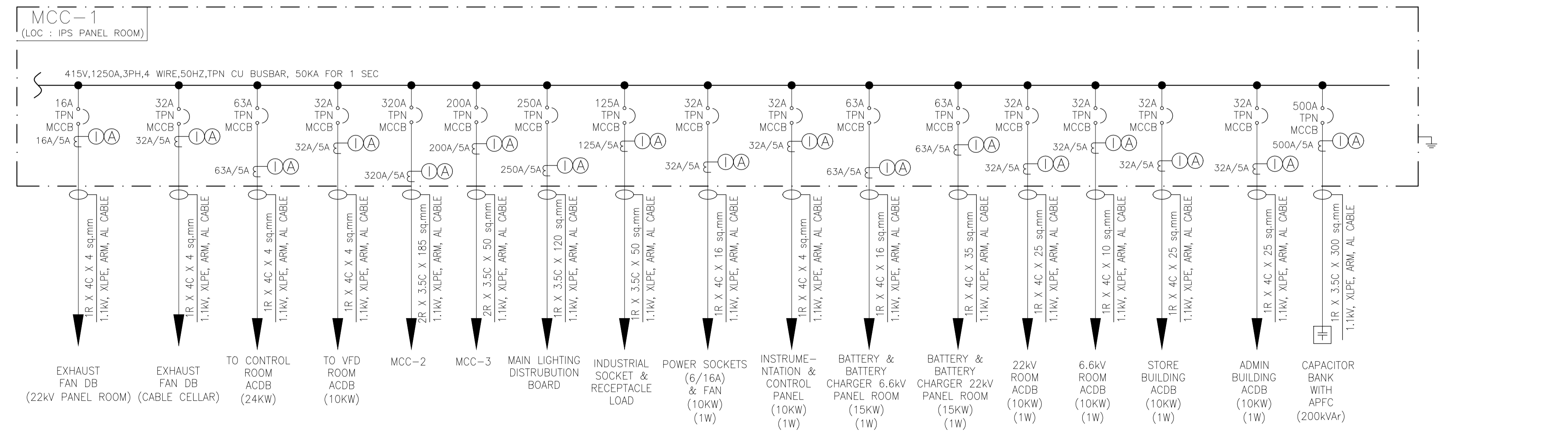
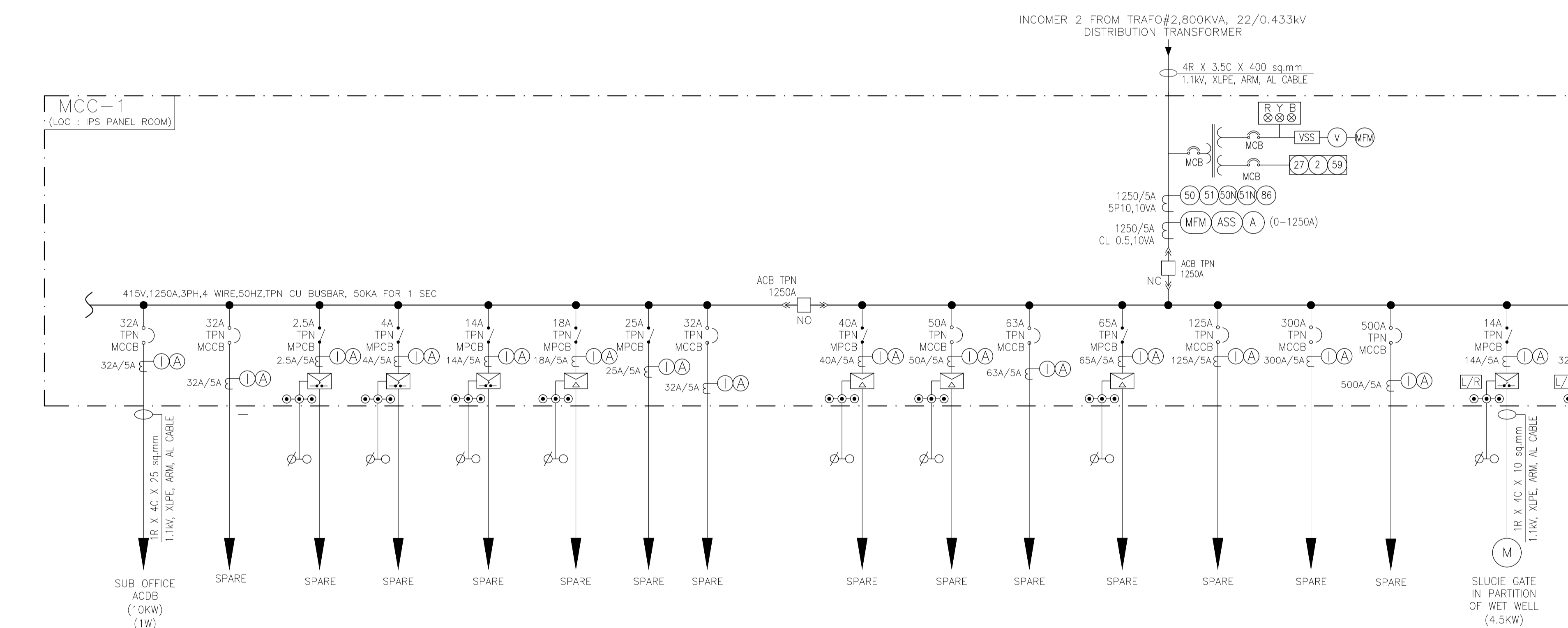
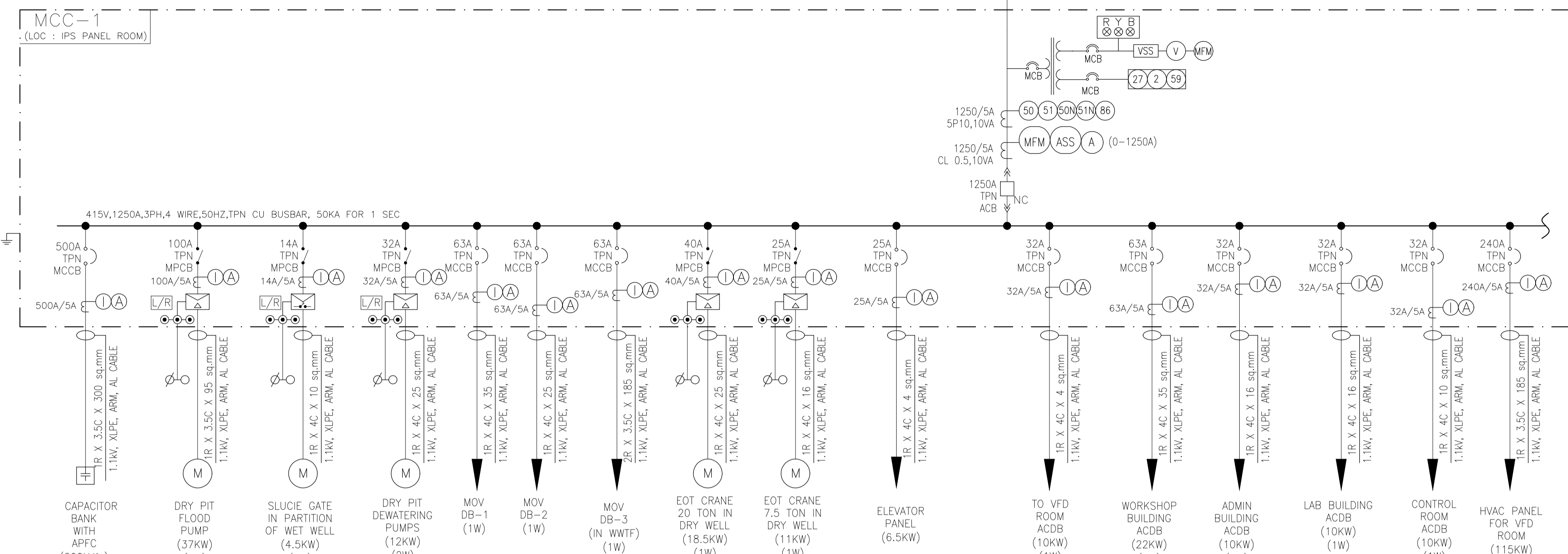
SINGLE LINE DIAGRAM  
FOR GHATKOPAR INFLUENT PUMPING STATION  
SHEET 2 OF 5

TATA CONSULTING ENGINEERS LIMITED  
MUMBAI

SCALE : NTS DWG NO. TCE.11710A-EL-4002-AU-4000 ISSUE PO  
DC & DISC: MUM IC FILE NAME : TCE.11710A-EL-4002-AU-4000

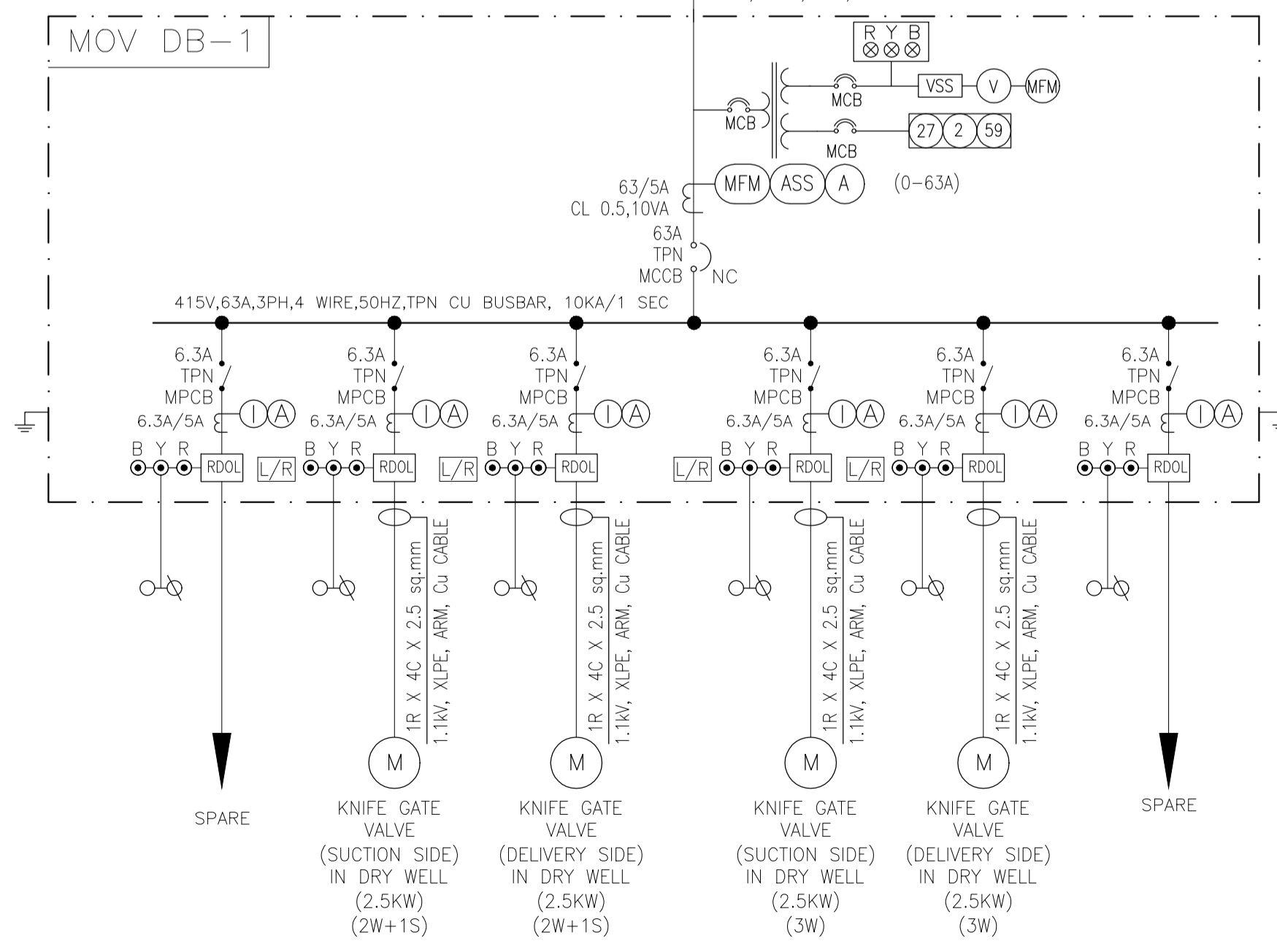
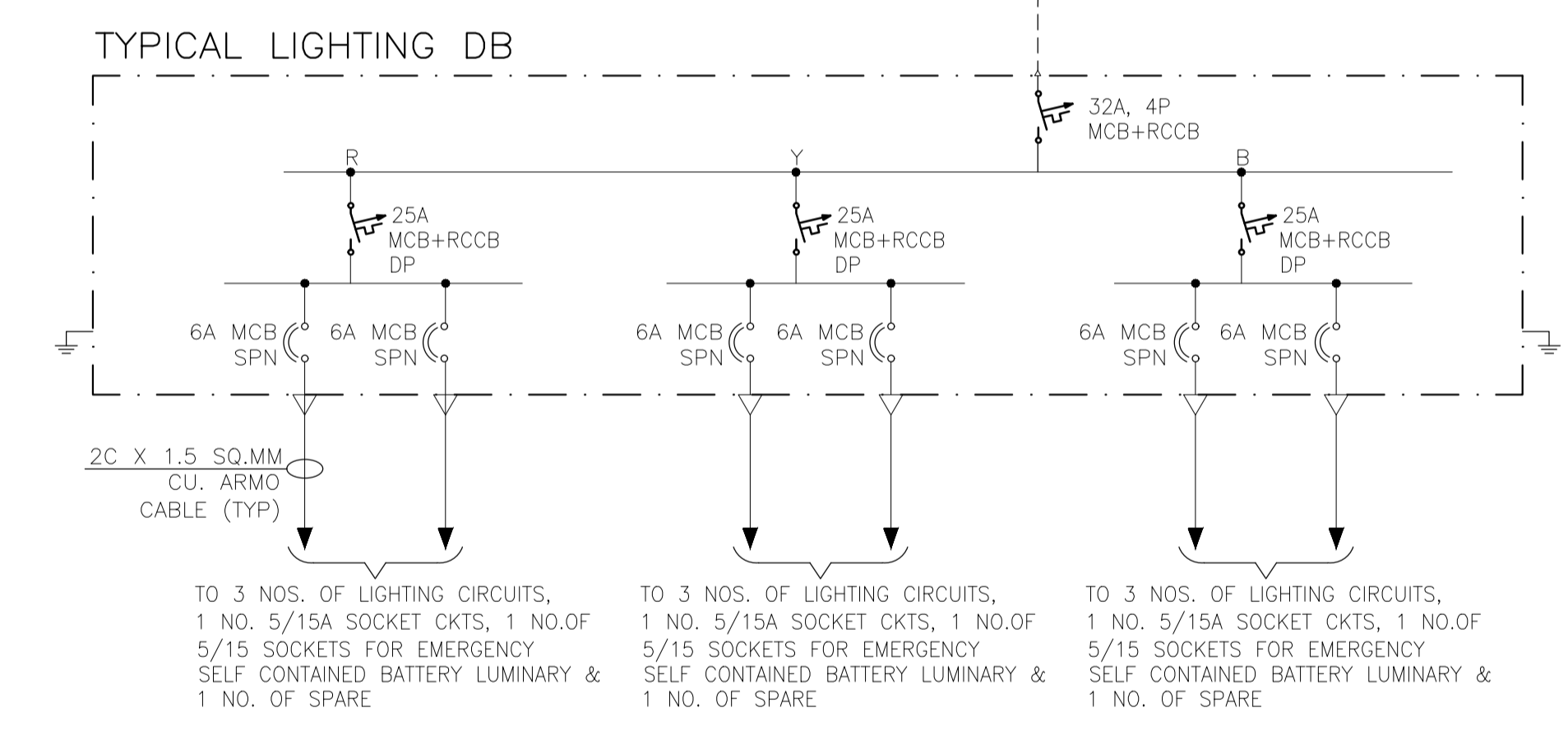
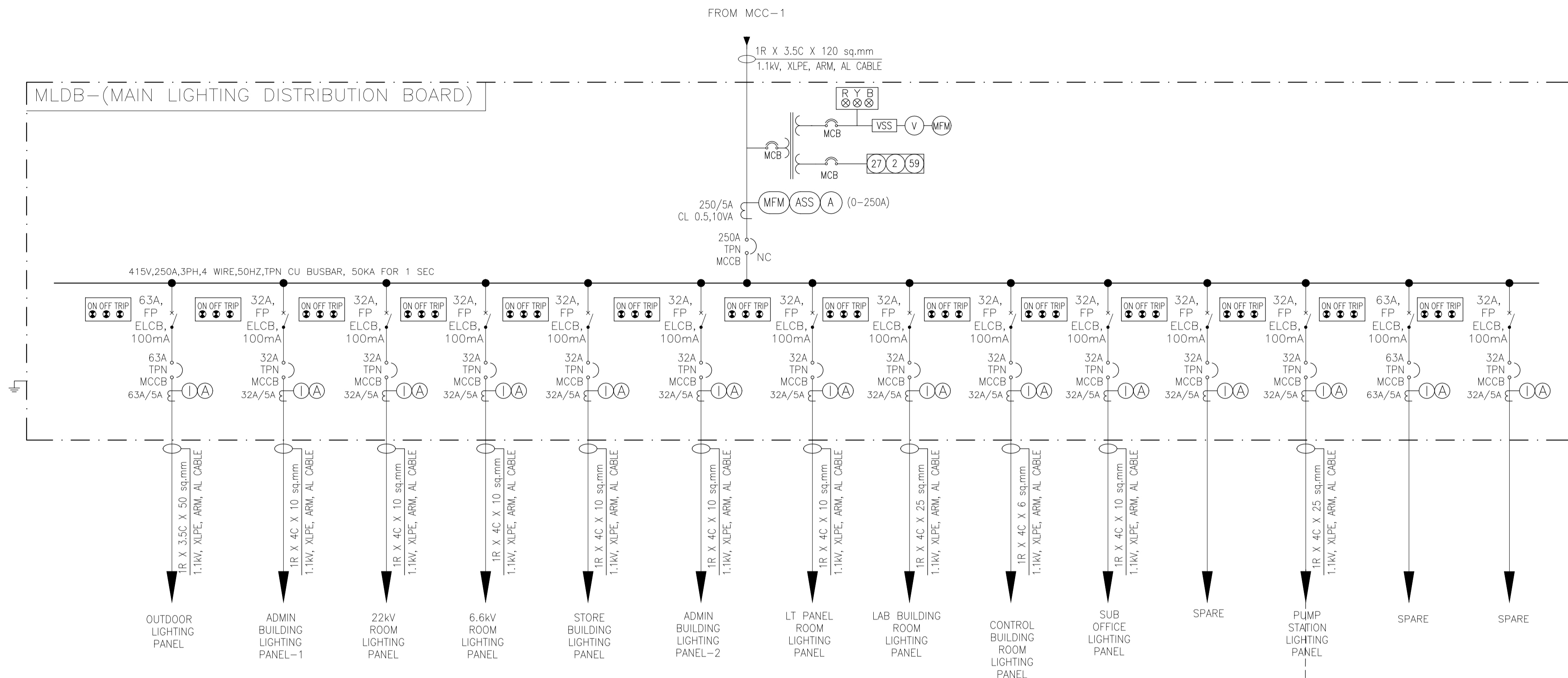
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**LEGENDS:**

	INTERLOCK		CURRENT TRANSFORMER
	MOTOR		VOLTMETER
	VOLTMETER SELECTED SWITCH		2 WINDING, 3 PHASE, TRANSFORMER
	MOTOR PROTECTION CIRCUIT BREAKER		CAPACITOR BANK WITH APFC
	RELAYS		DIRECT ON LINE STARTER
	STAR DELTA STARTER		INDICATING LAMP
	AMMETER SELECTED SWITCH		MULTI FUNCTION METER
	PUSH BUTTON		ELECTRICAL DRAWOUT TYPE AIR CIRCUIT BREAKER
	LOCAL OR REMOTE SELECTOR SWITCH		MOULDED CASE CIRCUIT BREAKER
	REVERSE DIRECT ON LINE STARTER		AMMETER
	EARTH LEAKAGE CIRCUIT BREAKER		EARTH CONNECTION
	MINIATURE CIRCUIT BREAKER		4 POLE MINIATURE CIRCUIT BREAKER & RESIDUAL CURRENT CIRCUIT BREAKER

**RELAYS:**

27	UNDER VOLTAGE RELAY
2	TIME DELAY RELAY
59	OVER VOLTAGE RELAY

- NOTES:**
- ALL THE PUMPS SHALL BE SUITABLE FOR PLC OPERATION.
  - SUCTION AND DELIVERY MOTORISED VALVES SHALL BE SUITABLE FOR PLC OPERATION.
  - SWITCHGEAR PANEL SHALL BE PROVIDED WITH ANTI-CONDENSATION HEATER WITH THERMOSTAT & FLUORESCENT LAMP LIGHTING FIXTURE PROTECTED BY HRC FUSE & MCB.
  - ALL MCCB'S SHALL BE PROVIDED WITH O/L, S/C, EARTH FAULT PROTECTION. MCCB FOR THE MOTOR FEEDER SHALL BE PROVIDED WITH O/L, S/C, U/V E/F PROTECTON. MCCB SHALL BE FIXED TYPE. ALL CIRCUIT BREAKERS SHALL BE PROVIDED WITH LSIG RELEASE.
  - ACB SHALL BE ELECTRICALLY OPERATED DRAW OUT TYPE, MICROPROCESSOR BASED WITH OVERLOAD, SHORT CIRCUIT, UNDER VOLTAGE AND EARTH FAULT PROTECTION.
  - MCB SHALL BE PROVIDED WITH O/L, S/C PROTECTION.
  - RATING OF COMPONENTS LIKE POWER CONTRACTOR, MCCB, OLR ETC. SHALL BE SELECTED BY THE SUPPLIER TO ENSURE PROTECTION OF FEEDER AS PER CO-ORDINATION TYPE-2 OF IS:13947
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  - FEEDER PROVISION FOR VALVES IN WWTF HAS TO BE CONSIDERED.
  - THERE WILL BE PROVISION OF ELECTRO-MECHANICAL INTERLOCK IN BETWEEN BOTH THE INCOMERS AND BUS COUPLER OF MCC-1.
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PO	SIGN. INITIALS	MMS	ARK	AK						AP	SVP	31-05-2021
ISSUE	DRN	DSN	CHD	CV	EL	IC	ME			PE/PM	APPD	DATE

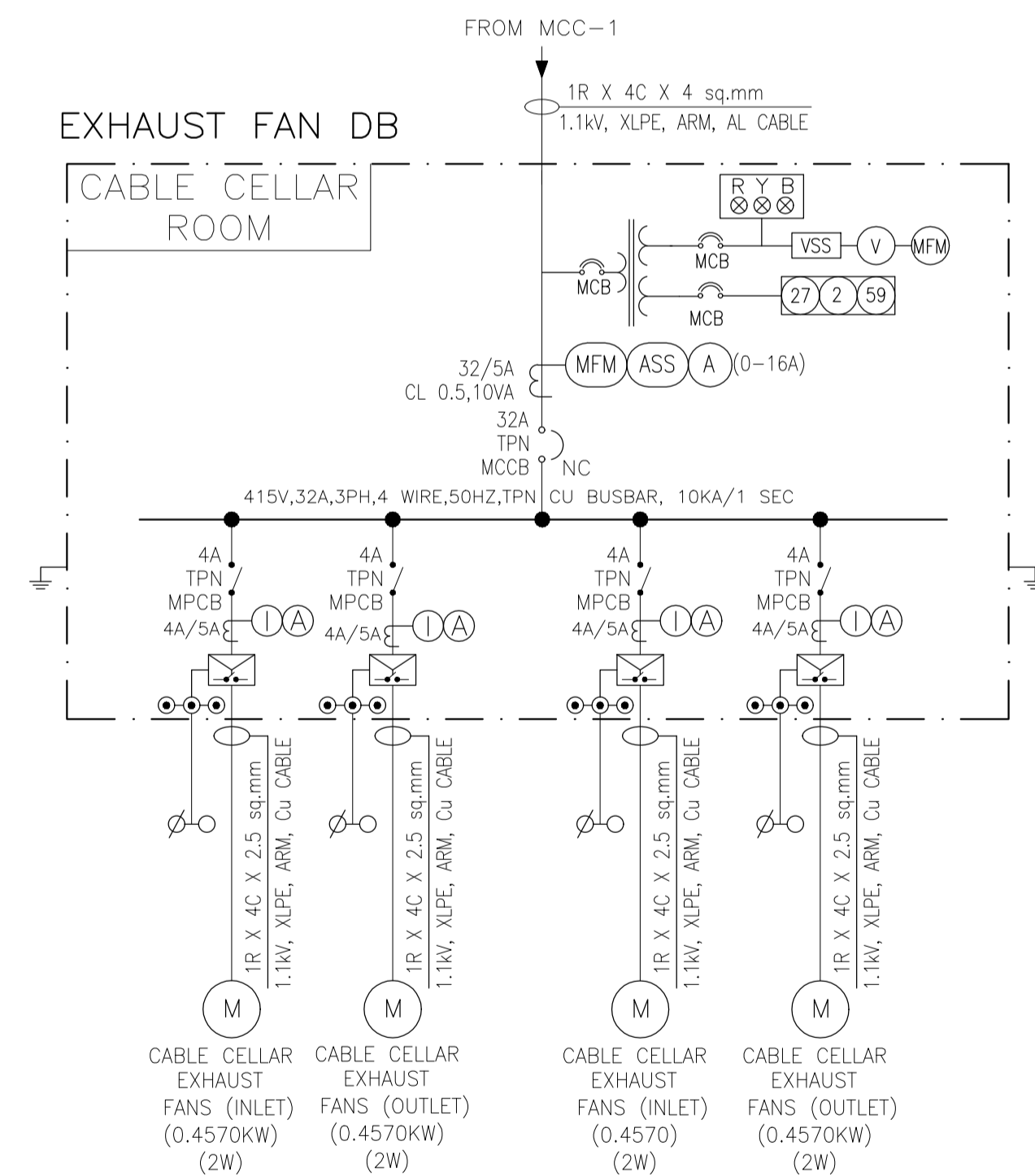
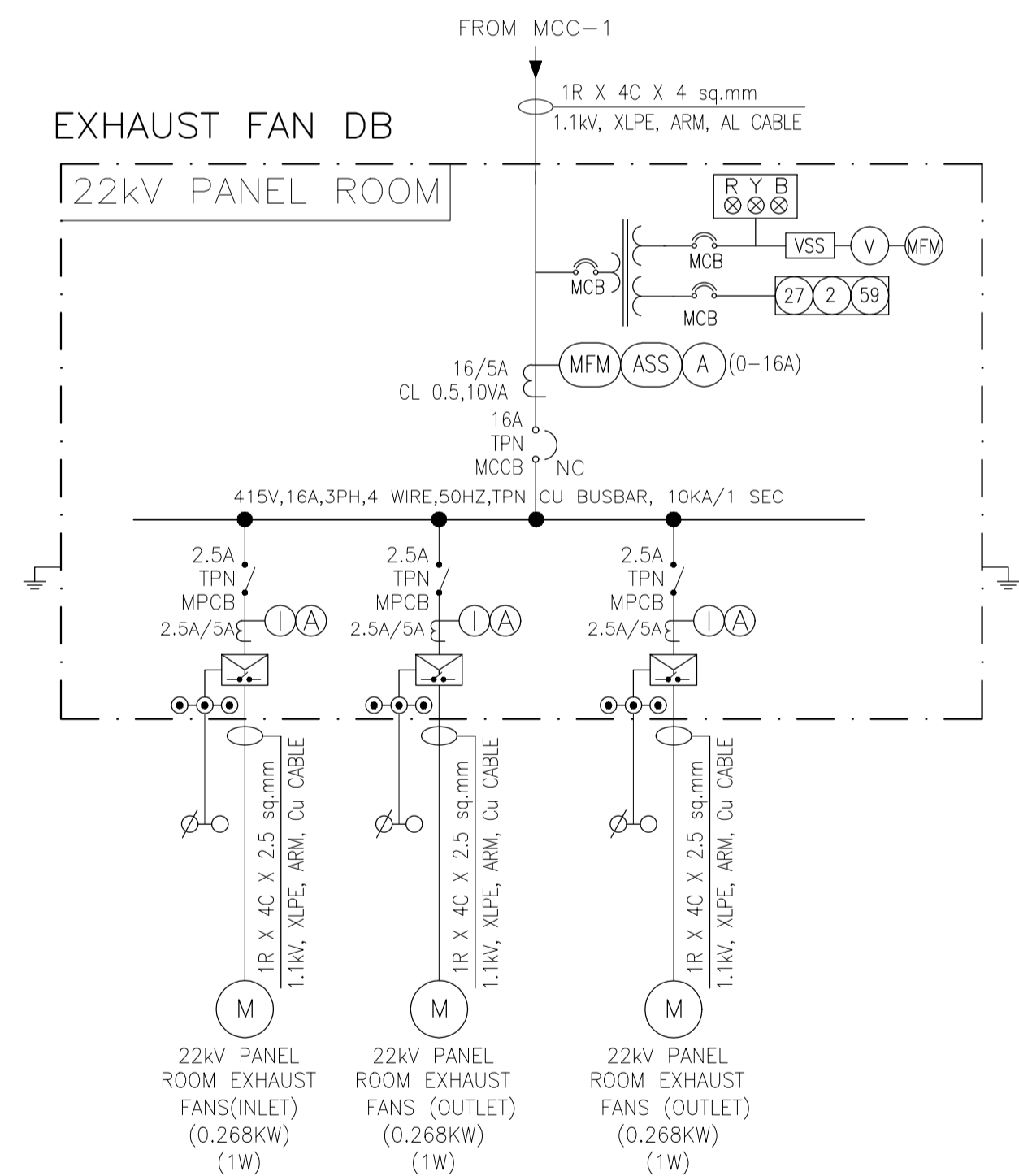
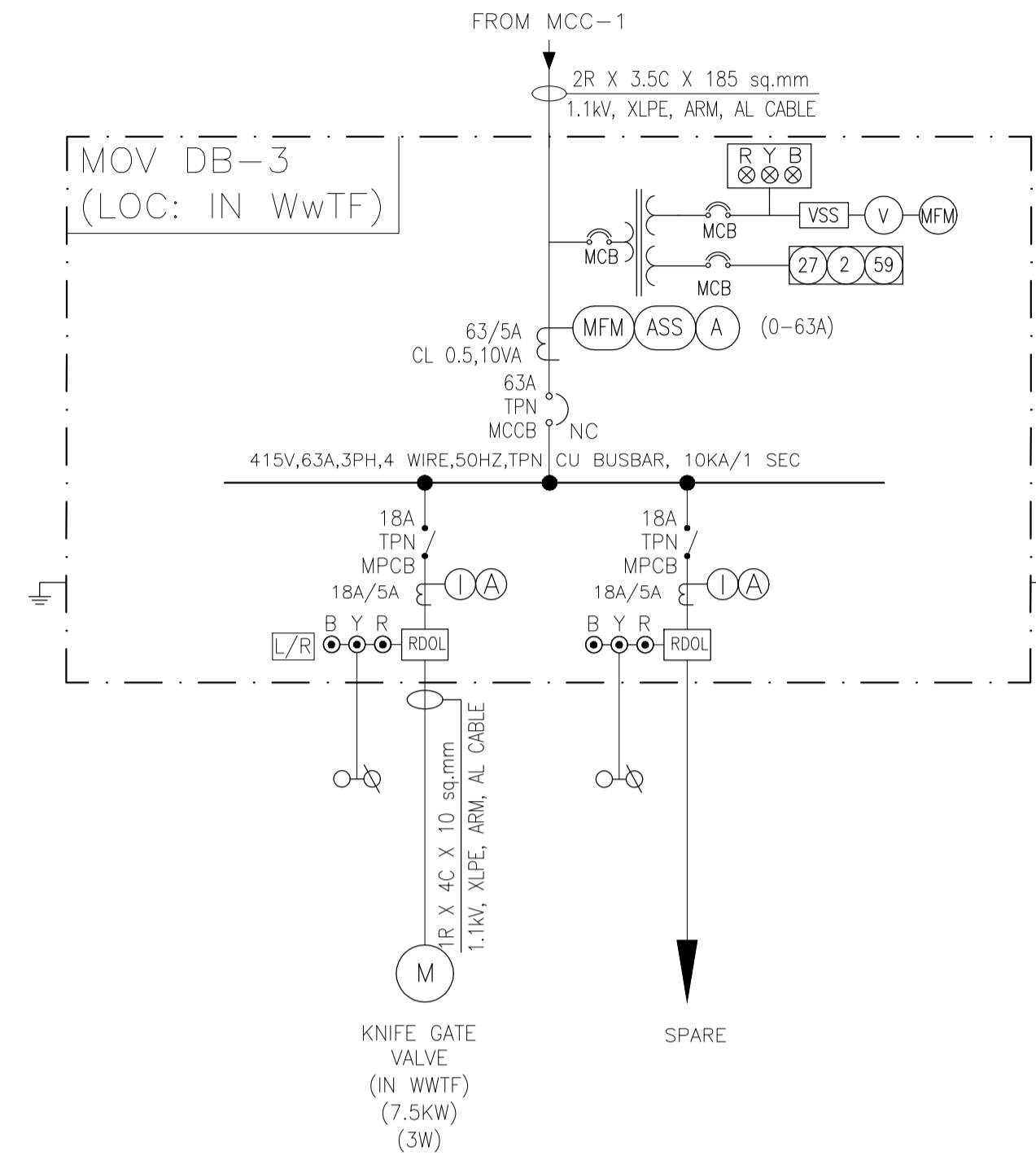
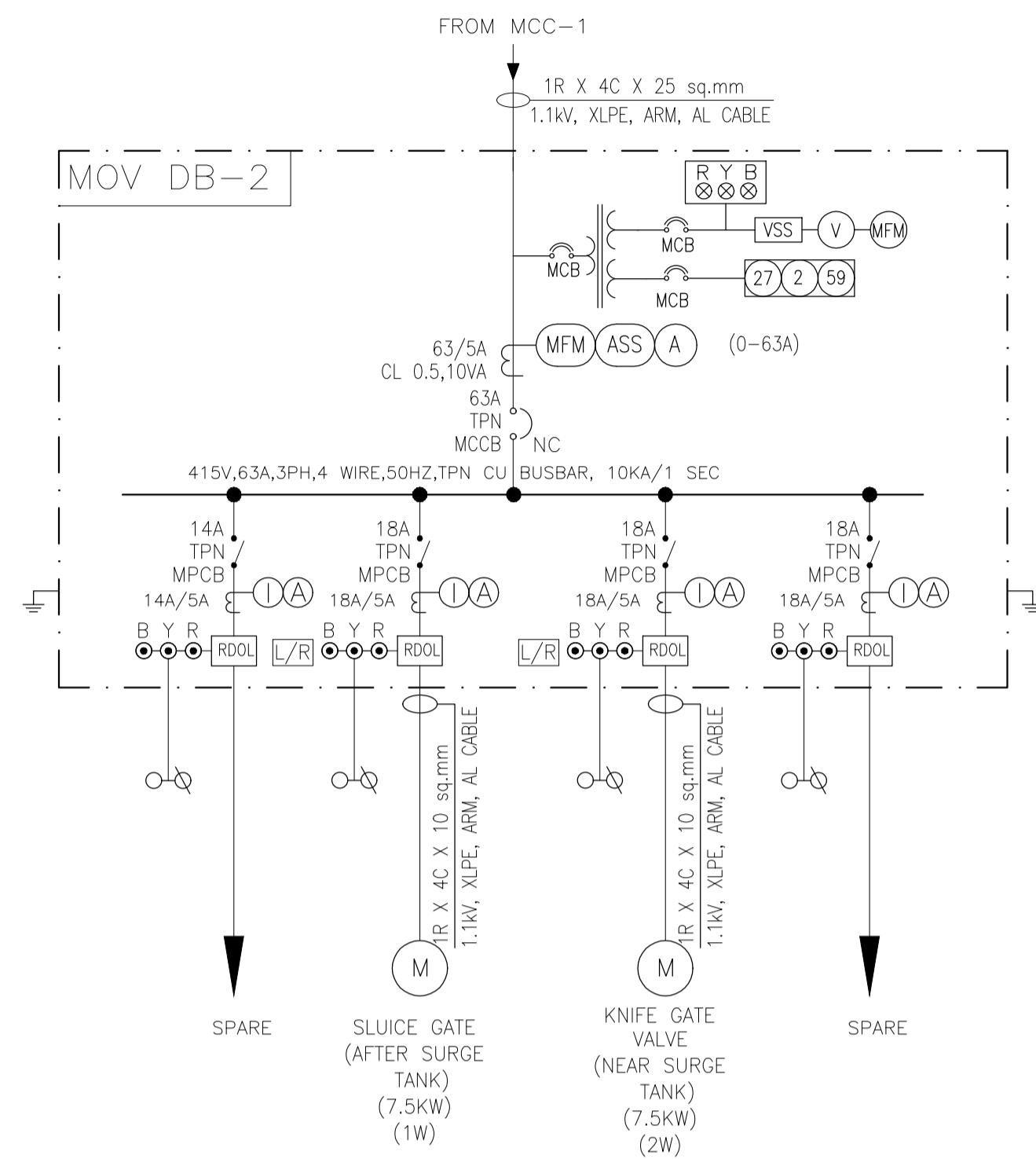
**BRIHANMUMBAI MUNICIPAL CORPORATION**  
 MUMBAI SEWAGE DISPOSAL PROJECT STAGE II-PRIORITY WORKS

**SINGLE LINE DIAGRAM**  
 FOR GHATKOPAR INFLUENT PUMPING STATION  
 SHEET 4 OF 5

**TATA CONSULTING ENGINEERS LIMITED**  
 MUMBAI

SCALE : NTS  
 DWG NO : TCE.11710A-EL-4002-AU-40000  
 DC & DISC: MUM IC

ISSUE PO  
 DATE



LEGENDS:

	INTERLOCK		CURRENT TRANSFORMER
	MOTOR		VOLTMETER
	VOLTMETER SELECTED SWITCH		2 WINDING, 3 PHASE, TRANSFORMER
	MOTOR PROTECTION CIRCUIT BREAKER		CAPACITOR BANK WITH APFC
	RELAYS		DIRECT ON LINE STARTER
	STAR DELTA STARTER		INDICATING LAMP
	AMMETER SELECTED SWITCH		MULTI FUNCTION METER
	PUSH BUTTON		ELECTRICAL DRAWOUT TYPE AIR CIRCUIT BREAKER
	LOCAL OR REMOTE SELECTOR SWITCH		MOULDED CASE CIRCUIT BREAKER
	REVERSE DIRECT ON LINE STARTER		AMMETER
	EARTH LEAKAGE CIRCUIT BREAKER		EARTH CONNECTION
	MINIATURE CIRCUIT BREAKER		

RELAYS:

- 27 UNDER VOLTAGE RELAY
- 2 TIME DELAY RELAY
- 59 OVER VOLTAGE RELAY

NOTES:

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ISSUE	DRN	DSN	CHD	CV	EL	IC	ME			PE/PM	APPD	DATE

**BRIHANMUMBAI MUNICIPAL CORPORATION**  
 MUMBAI SEWAGE DISPOSAL PROJECT STAGE II-PRIORITY WORKS  
  
**SINGLE LINE DIAGRAM**  
**FOR GHATKOPAR INFLUENT PUMPING STATION**  
**SHEET 5 OF 5**

**TENDER PURPOSE ONLY**  
**DO NOT SCALE**

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 MUMBAI

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