

MANGALORE REFINERY & PETROCHEMICALS LTD.
(A subsidiary of Oil & Natural Gas Corpn. Ltd – ONGC)
Regd. Office: Kuthethoor P.O., Via: Katipalla, Mangalore-575030 (India)
Phone: 0091-824-2270400 Fax: 0091-824-2271239

Addendum-1 dated 20.02.2023

To

Tender No. 3300009937 dated 07.02.2023

For

**Cable Trench Construction Package For MRPL Aromatic Complex
Power System Upgradation Project**

With reference to the above tender, bidders are requested to note the following:

The items, conditions, specification and stipulations of the Bidding Documents and the modified portion to the extent indicated in

- a) Annexure-I: Commercial Addendum
- b) Annexure-II: Technical Addendum
- c) Annexure-III: Reply to Pre-bid Queries

The implications of the same, elsewhere in the tender shall be taken care of appropriately by the bidders. All other terms and conditions, stipulations and specifications of tender shall remain unaltered.

Note:

Bidder shall submit copy of these documents along with the techno-commercial bid, **duly signed and stamped**, as a token of having read and understood the same.

Addendum-1**Annexure-I: Commercial Addendum**

<u>Sl. No.</u>	<u>Reference Section No./ Clause No.</u>	<u>Addition/Deletion/Modification</u>
1.	<u>Vol. I of II; SCC Part-2; Annexure-I to SCC for Time Schedule</u>	<u>Time for completion of work shall be read as Six (6) months.</u>

Addendum-1**Annexure-II: Technical Addendum**

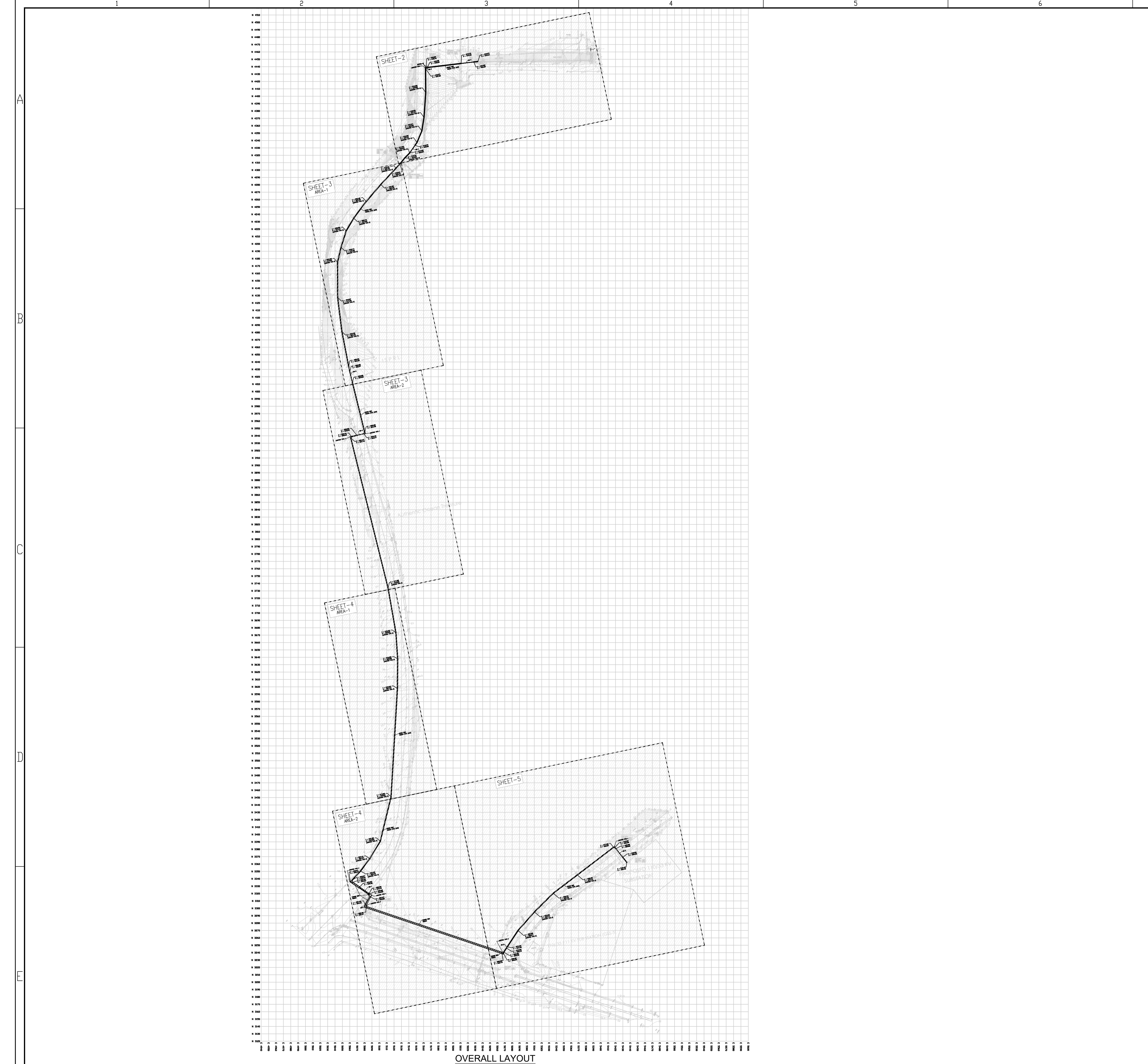
<u>Sl. No.</u>	<u>Reference Section No./ Clause No.</u>	<u>Addition/Deletion/Modification</u>
1.	<u>Vol. II of II; Clause No. 13: List of Attachment; Attachment-C1 (Structural Details for Outdoor Cable Trench Between 110/33 kV SS- 10 & SS-01A of Aromatic Complex Power System Upgradation Work; Tractebel Dwg. No. P.020678-M-46057-C001)</u>	<u>Please refer to the attached drawing with coordinate system updated in line with MRPL existing plant/s.</u>

Addendum-1

Annexure-III: Reply to Pre-bid Queries raised in the Pre-bid Meeting held on 15.02.2023

<u>Sl. No.</u>	<u>Reference Section No./ Clause No.</u>	<u>Subject</u>	<u>Bidder's Query</u>	<u>Owner's Reply</u>
1.	Vol. I of II; SCC Part-1; Clause No. 14: Price, Taxes and Duties	GST	Is GST applicable for this work?	No, GST is not applicable for this work.
2.	Vol. I of II; SCC Part-1; Clause No. 14: Price, Taxes and Duties	Location	Is the entire length of cable trench coming under MSEZ area?	Yes, the entire length of cable trench is coming under MSEZ area.
3.	Vol. I of II; SOR; Sr. No. 2.1 & 2.2	Disposal of debris	Why are there two different rates?	Sr. No. 2.1 is applicable when the disposal of debris is within a lead of 5 km, whereas 2.2 is applicable when the disposal of debris is beyond 5 km. However, the Probable Amount of Contract (PAC) value has been calculated considering that the debris shall be disposed of within 5 km distance.
4.		Sand filling	Is sand filling included in the scope of work?	No, sand filling is not included in the scope of work of this tender.
5.	Vol. I of II; NIT; Sr. No. 4: Salient Features of the Bidding Document	MSE preference	Is there any purchase preference for Micro & Small Enterprises (MSE)?	No, there is no preference for Micro & Small Enterprises (MSE) for this tender.
6.	Vol. I of II; NIT; Sr. No. 4 and SCC Part-2; Annexure-I to SCC for Time Schedule	Completion Time	It is mentioned in Volume I of II-page no. 5, the duration of Contract Period shall be six (6) months from the date of issue of Letter of Acceptance but also it is mentioned in Page No. 303 time schedule is Four (4) months so in this which	Please refer to the Annexure-I of this addendum. The time for completion of work shall be read as Six (6) months from the date of issue of letter of acceptance.

<u>Sl. No.</u>	<u>Reference Section No./ Clause No.</u>	<u>Subject</u>	<u>Bidder's Query</u>	<u>Owner's Reply</u>
			one we have to consider.	
7.		Site Visit	Bidders requested for a joint site visit for better assessment of the work/land profile.	The owner arranged for a joint site visit on the same day of pre-bid meeting, i.e., on 15.02.2023
8.		Construction Time	According to our site visit the time schedule (Including monsoon) for the completion of the project if its Six (6) Months then it's not enough, we require a minimum Ten (10) Months.	Please refer to the Annexure-I of this addendum. The time for completion of work shall be read as Six (6) months from the date of issue of letter of acceptance.



NOTES

1. ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED.
2. ALL RCC WORK SHALL BE M30 GRADE & REINFORCEMENT STEEL GRADE SHALL BE FE500D (HYSD BARS) UNO.
3. CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
SIDE WALL = 40MM
BASE SLAB = 40MM
COVER SLAB=15MM
4. GRADE OF STRUCTURAL STEEL FOR CHANNELS, ANGLES, LUGS ETC. SHALL BE GRADE A (E250A) CONFIRMING TO IS:20624.
5. BENDING & FIXING OF REINFORCEMENT STEEL SHALL BE AS PER IS:2502.
6. NO DIMENSIONS FROM THIS DRAWING SHALL BE MEASURED/SCALED OFF AND ONLY MARKED DIMENSIONS SHALL BE FOLLOWED.
7. CHECK ALL DIMENSIONS, CO-ORDINATES & ELEVATIONS CAREFULLY, REPORT ANY DISCREPANCIES, CONFLICTS / ERROR IMMEDIATELY FOR CLARIFICATION PRIOR TO COMMENCING CONSTRUCTION WORK AT SITE.
8. ANY SOFT PATCH IF ENCOUNTERED AT FOUNDATION LEVEL SHALL BE COMPLETELY REMOVED AND REPLACED WITH PCC (1:5:10) UPTO FIRM STRATA.
9. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH RELEVANT TECHNICAL DOCUMENTS/SPECIFICATIONS & REFERENCE DRAWINGS.
10. IF ANY EXISTING UNDERGROUND UTILITIES ARE ENCOUNTERED OTHER THAN TRENCH CROSSING LOCATIONS, TRENCH ROUTING /ALIGNMENT SHALL BE SUITABLY REROUTED AS PER THE SITE CONDITION.
11. THE DETAILS OF DRAIN, BITUMINOUS ROAD AND BOUNDARY WALL SHOWN IN THE DRAWING AS PER STANDARD AND FOR REFERENCE ONLY. THE RE-CONSTRUCTION WORK AFTER DISMANTLING ANY EXISTING STRUCTURE/FACILITY, IF REQUIRED SHALL BE MATCHED WITH THE PREVIOUS CONDITION

LEGEND

- CABLE TRENCH
- DUCT BANK
- R.C.C. REINFORCEMENT CEMENT CONCRETE
- P.C.C. PORTLAND CEMENT CONCRETE
- C/C CENTER TO CENTER
- THK THICK
- TYP TYPICAL
- UNO UNLESS NOTED OTHERWISE
- FGL FINISHED GROUND LEVEL
- Ø DIAMETER
- ℄ CENTERLINE

REFERENCE DRAWINGS

DRAWING TITLE	DRAWING NO.
TOPOGRAPHICAL SURVEY DRAWING FOR ELECTRICAL CABLE TRENCH CONSTRUCTION BETWEEN 110/33 KV SS-10 AND SS-01A IN AROMATIC COMPLEX (BY GEO PRECISE)	xxxx-x-xx-xxx-xxx
OUTDOOR CABLE ROUTING LAYOUT BETWEEN 110/33 KV SS-10 & SS-01A OF AROMATIC COMPLEX POWER SYSTEM UPGRADATION WORK	P.020678-M-46057-C001

Rev.	D	M	Y	Modifications	Drawn	Checked	Validated	Approved
0				ISSUED FOR CONSTRUCTION	DHK	DKY	AKS	SSB
A				ISSUED FOR APPROVAL	DHK	DKY	AKS	SSB

LOA NO. : 742000125 Dated 01.10.2022 SAP PO number:

OWNER / CLIENT **ONGC MANGALORE REFINERY & PETROCHEMICALS LTD.**
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Regd. Office: Kuthethoor P.O., Via: Katipalla, Mangalore-575030 (India)
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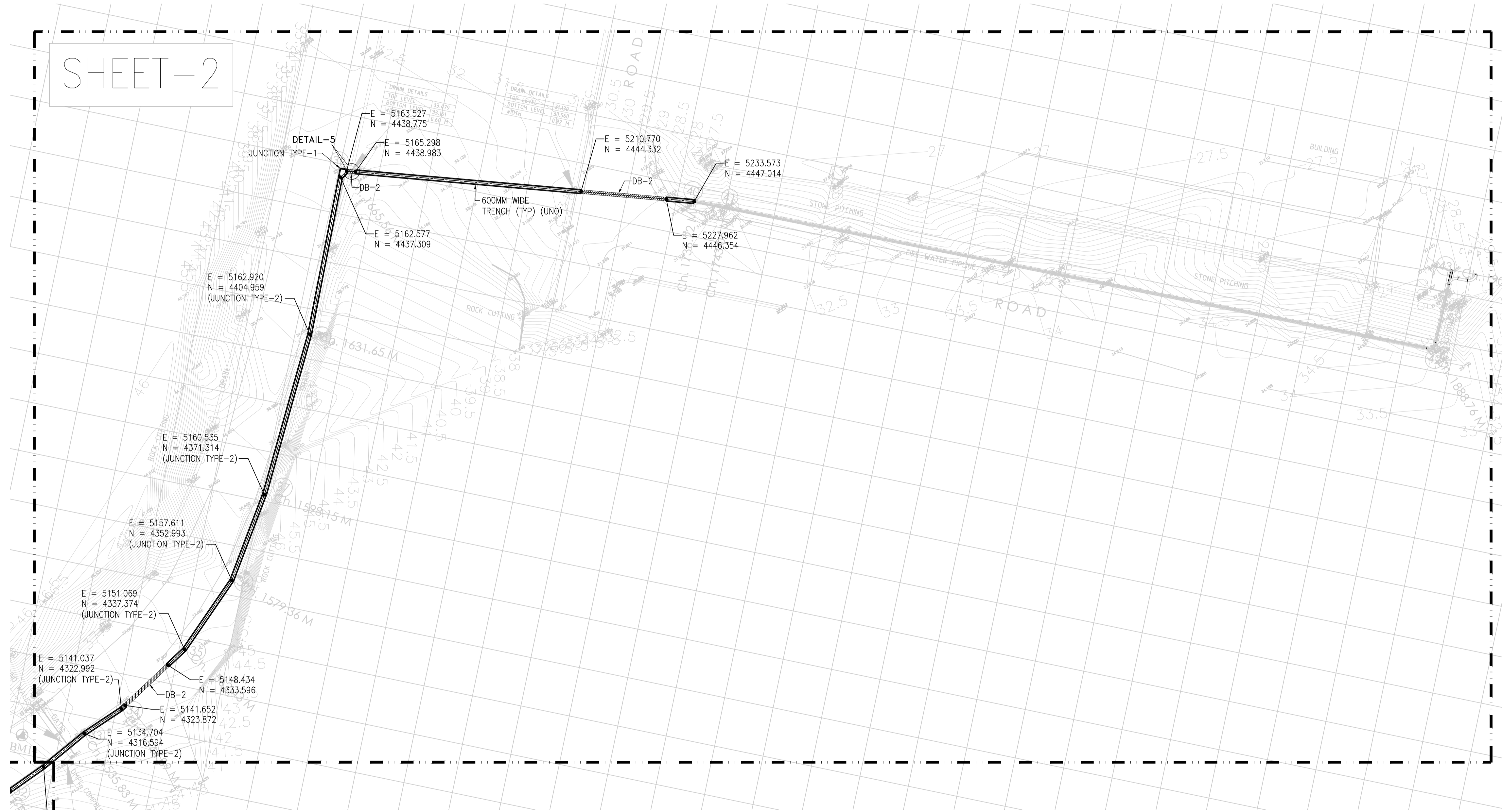
PROJECT **POWER SYSTEM UPGRADATION PROJECT AT MRPL AROMATIC COMPLEX, MANGALORE**

SUBJECT **STRUCTURAL DETAILS FOR OUTDOOR CABLE TRENCH BETWEEN 110/33 KV SS-10 & SS-01A OF AROMATIC COMPLEX POWER SYSTEM UPGRADATION WORK**

TRACTEBEL **TRACTEBEL Engineering pvt. ltd.**

Size	Scale	Sheet	Rev.
A1	1:2500	1	0
Project No.	Discipline Code	System Code	Serial No.
P.020678	M	46057	C001

SHEET-2



NOTES

1. FOR NOTES, LEGENDS & REFERENCE DRAWINGS, REFER SHEET 1 OF THIS DRAWING.

LEGEND

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Rev.	D	M	Y	Modifications	Drawn	Checked	Validated	Approved
0	16/02/2023			ISSUED FOR CONSTRUCTION	DHK	DKY	AKS	SSB
A	13/01/2023			ISSUED FOR APPROVAL	DHK	DKY	AKS	SSB

LOA NO. : 7420000125 Dated 01.10.2022 SAP PO number:

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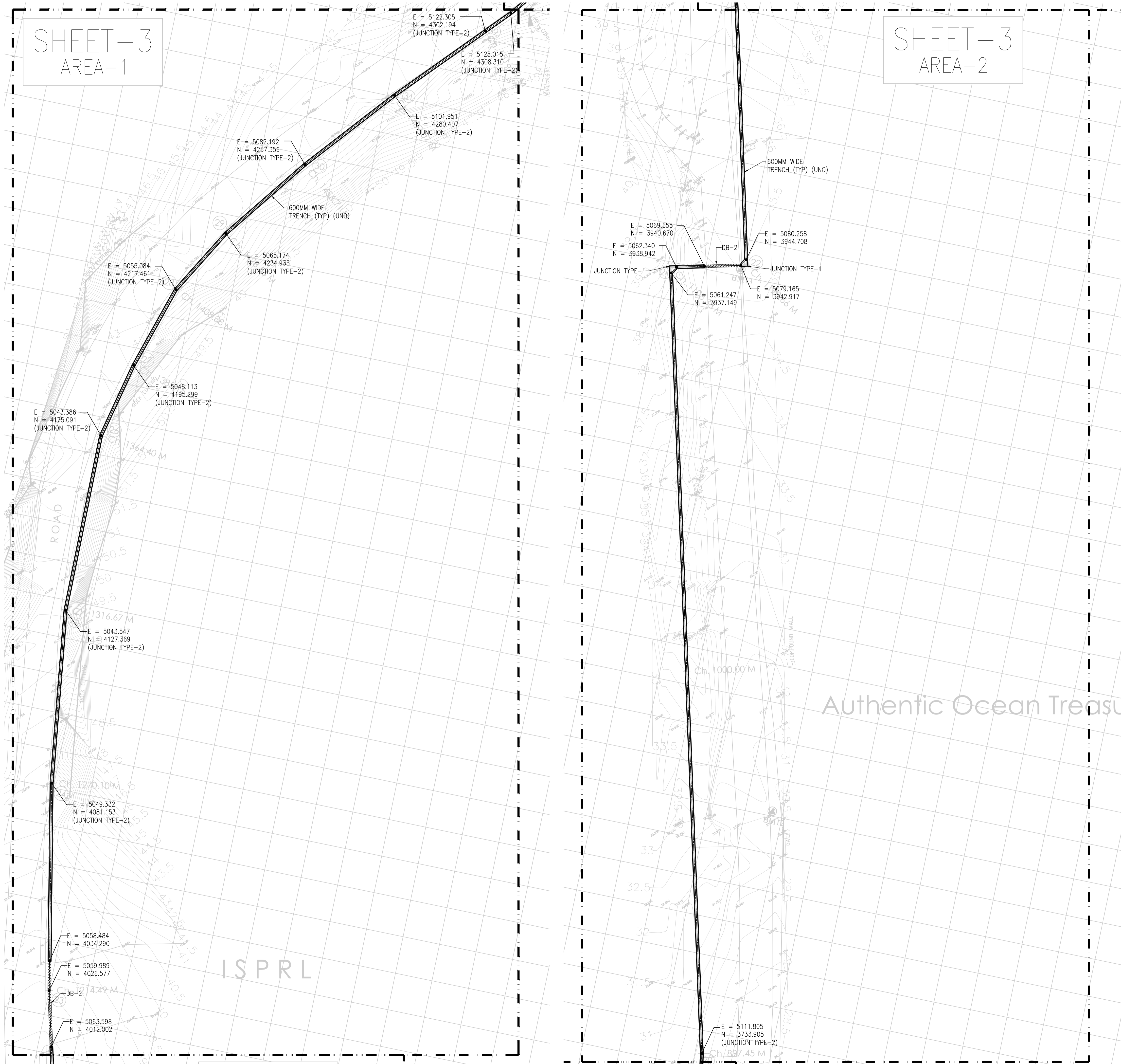
PROJECT: POWER SYSTEM UPGRADATION PROJECT AT MRPL AROMATIC COMPLEX, MANGALORE

SUBJECT: STRUCTURAL DETAILS FOR OUTDOOR CABLE TRENCH BETWEEN 110/33 KV SS-10 & SS-01A OF AROMATIC COMPLEX POWER SYSTEM UPGRADATION WORK

	Size	Scale	Sheet	Rev.
	A1	1:500	2 OF 7	0
Project No.	Discipline Code	System Code	Serial No.	
P.020678	M	46057	C001	

SHEET-3
AREA-1

SHEET-3
AREA-2



NOTES

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PROJECT **POWER SYSTEM UPGRADATION PROJECT AT MRPL AROMATIC COMPLEX, MANGALORE**

SUBJECT **STRUCTURAL DETAILS FOR OUTDOOR CABLE TRENCH BETWEEN 110/33 KV SS-10 & SS-01A OF AROMATIC COMPLEX POWER SYSTEM UPGRADATION WORK**

 TRACTEBEL Engineering pvt. ltd.	Size	Scale	Sheet	Rev.
	A1	1:500	3 OF 7	0
Project No.	Discipline Code	System Code	Serial No.	
P.020678	M	46057	C001	

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SHEET-4
AREA-1

SHEET-4
AREA-2

NOTES

1. FOR NOTES, LEGENDS & REFERENCE DRAWINGS, REFER SHEET 1 OF THIS DRAWING.


LEGEND

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0	16/02/2023			ISSUED FOR CONSTRUCTION	DHK	DKY	AKS	SSB
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SUBJECT: STRUCTURAL DETAILS FOR OUTDOOR CABLE TRENCH BETWEEN 110/33 KV SS-10 & SS-01A OF AROMATIC COMPLEX POWER SYSTEM UPGRADATION WORK

TRACTEBEL	Size	Scale	Sheet	Rev.
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N = 3597.753
(JUNCTION TYPE-2)

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(JUNCTION TYPE-2)

E = 5122.432
N = 3673.505
(JUNCTION TYPE-2)

E = 5082.399
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E = 5081.325
N = 3304.244

JUNCTION TYPE-4
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N = 3336.475

E = 5063.017
N = 3338.049

E = 5072.824
N = 3328.385

DB-1
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E = 5086.550
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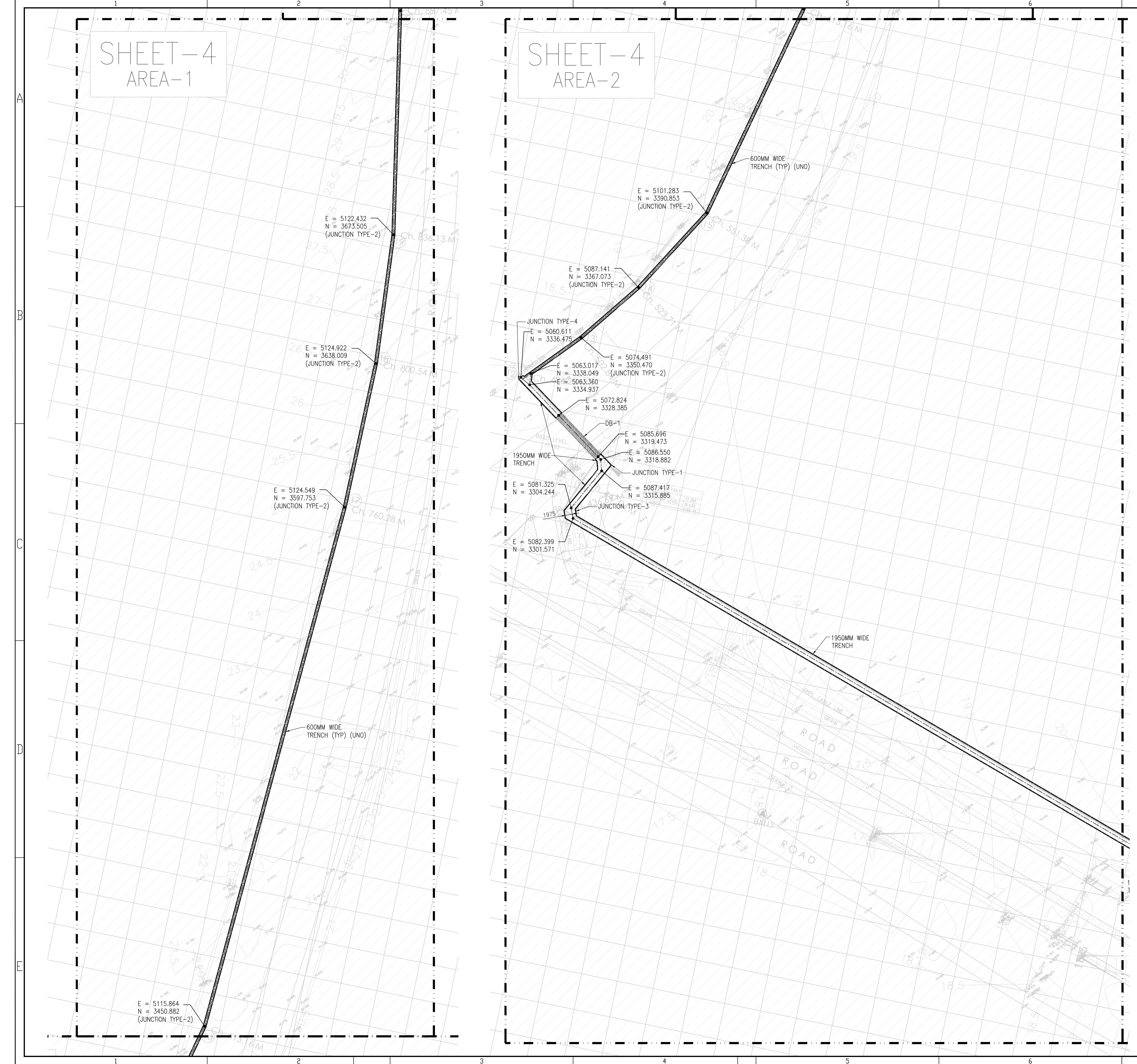
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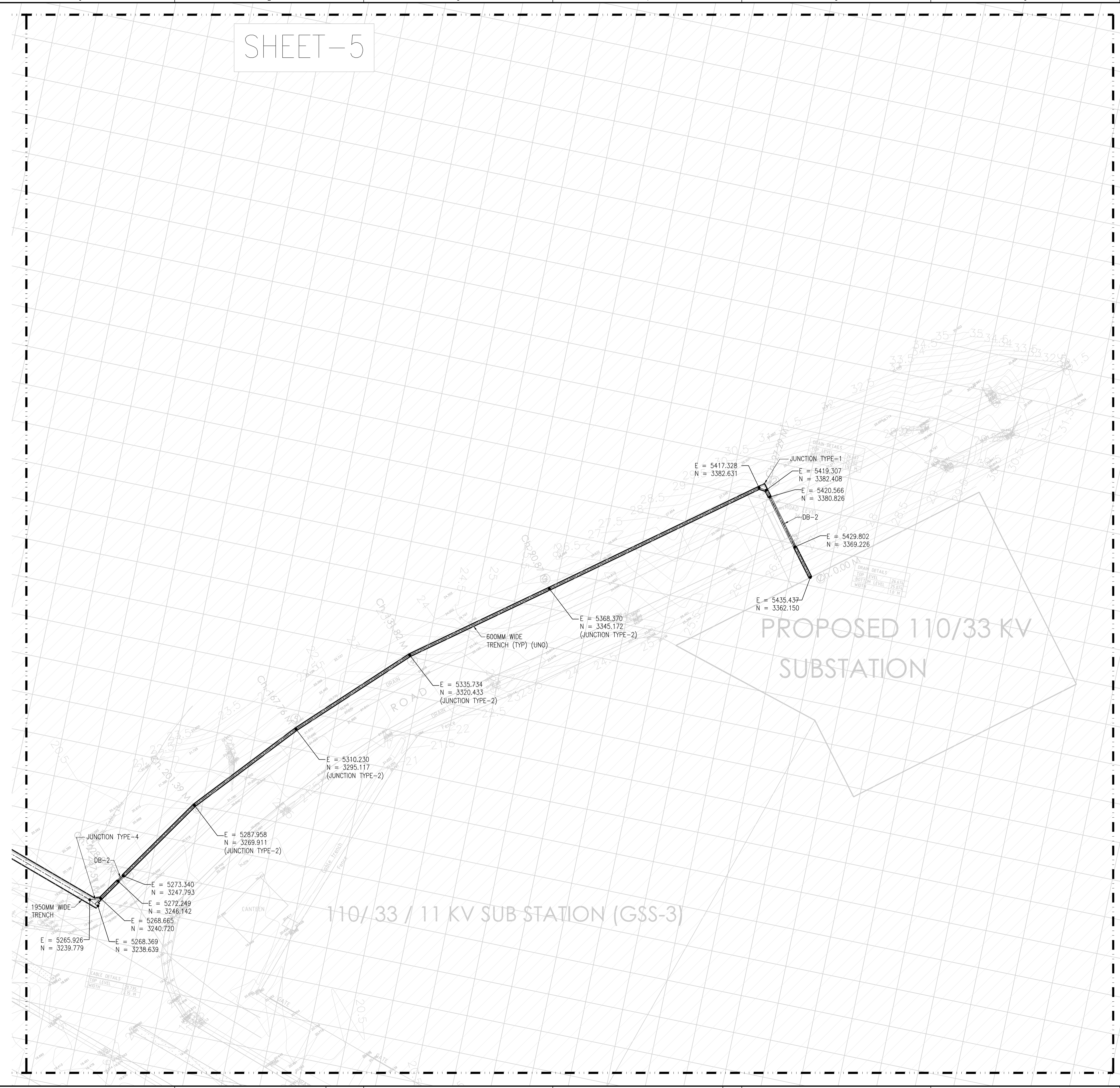
1950MM WIDE TRENCH

600MM WIDE TRENCH (TYP) (UNO)

600MM WIDE TRENCH (TYP) (UNO)



SHEET-5



NOTES

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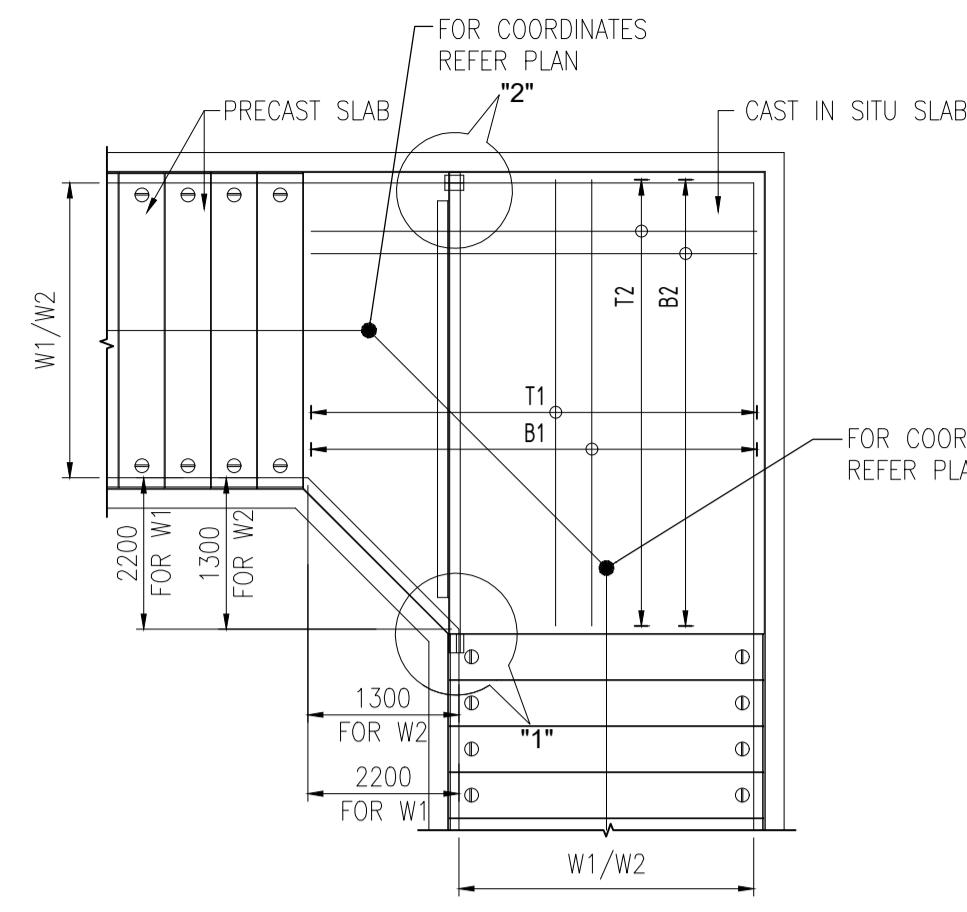
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PROJECT: POWER SYSTEM UPGRADATION PROJECT AT MRPL AROMATIC COMPLEX, MANGALORE

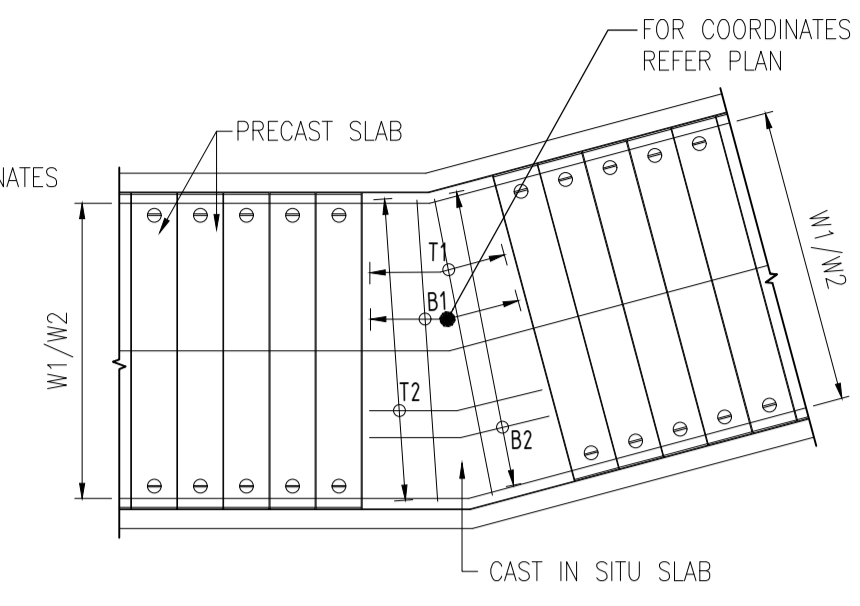
SUBJECT: STRUCTURAL DETAILS FOR OUTDOOR CABLE TRENCH BETWEEN 110/33 KV SS-10 & SS-01A OF AROMATIC COMPLEX POWER SYSTEM UPGRADATION WORK

TRACTEBEL **TRACTEBEL Engineering pvt. ltd.**

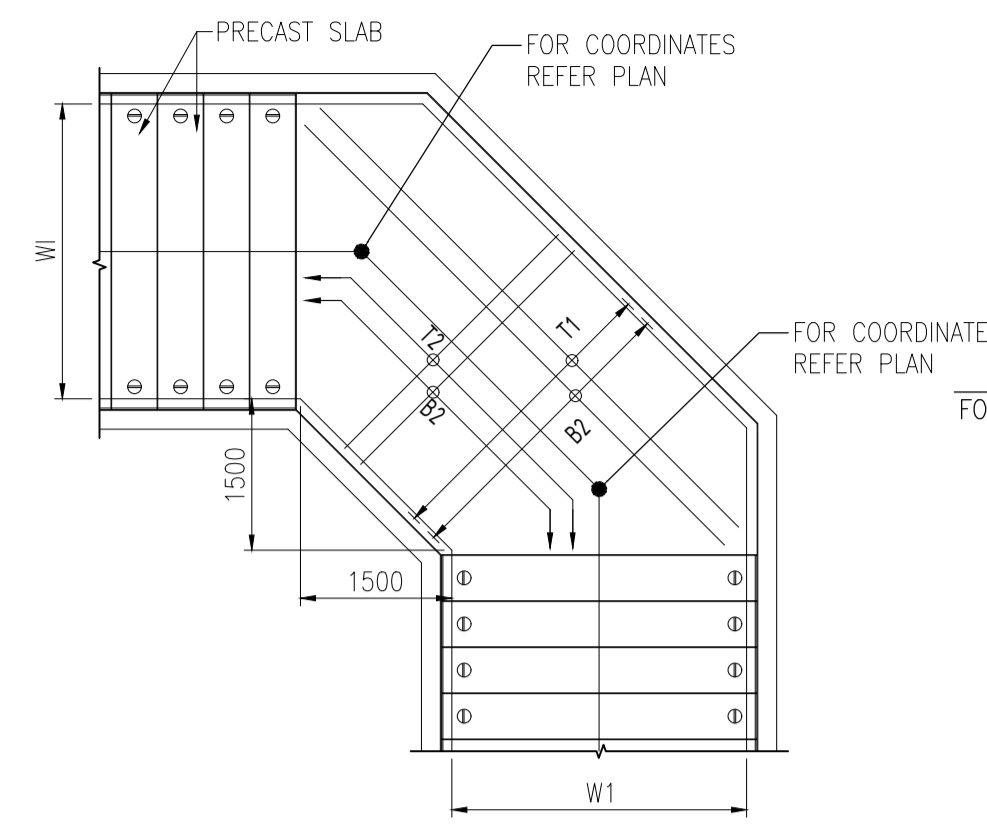
Size	Scale	Sheet	Rev.
A1	1:500	5 OF 7	0
Project No.	Discipline Code	System Code	Serial No.
P.020678	M	46057	C001



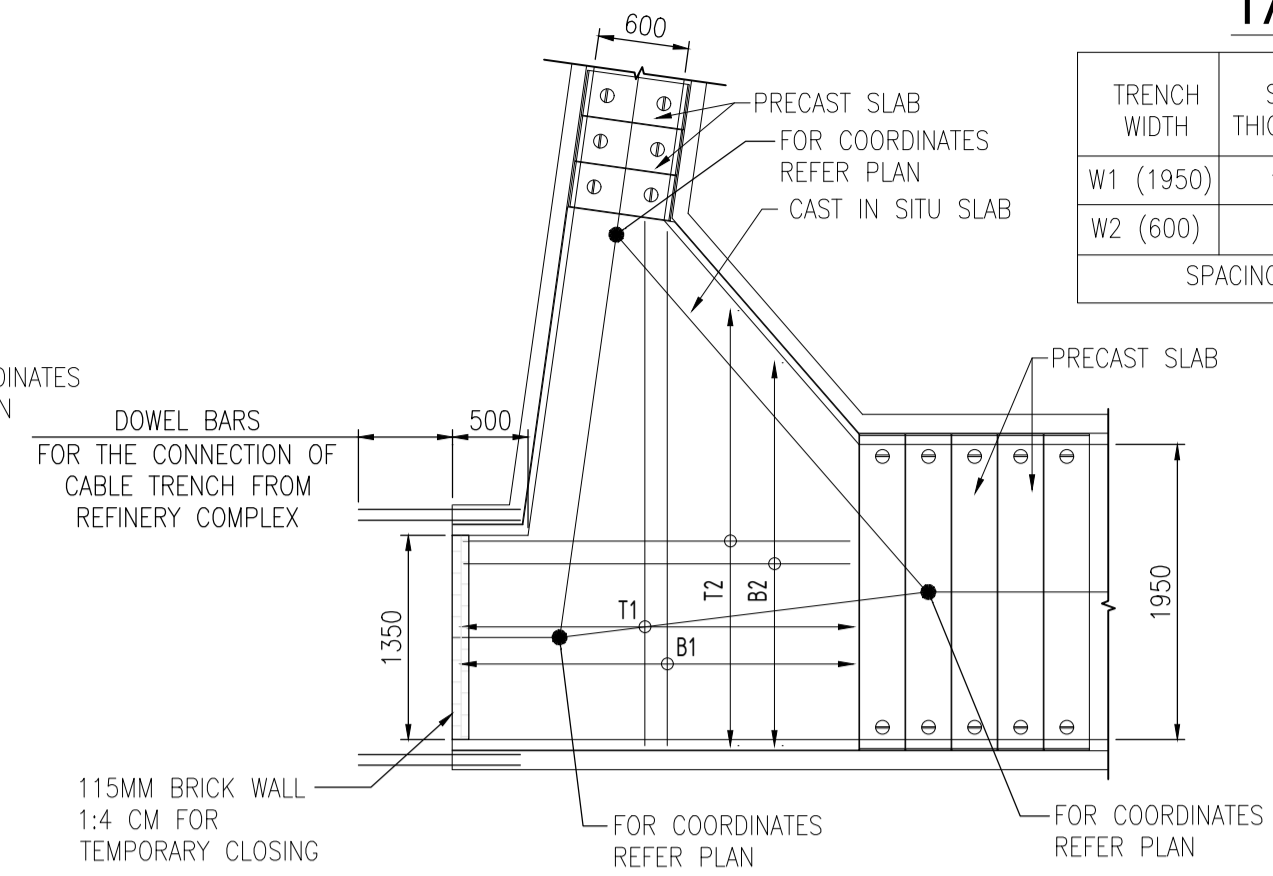
JUNCTION TYPE-1
(FOR REINFORCEMENT DETAILS REFER TABLE-1)
SCALE 1:50



JUNCTION TYPE-2
(FOR REINFORCEMENT DETAILS REFER TABLE-1)
SCALE 1:50



JUNCTION TYPE-3
(FOR OTHER DIMENSIONS AND REINFORCEMENT REFER TABLE-1)
SCALE 1:50

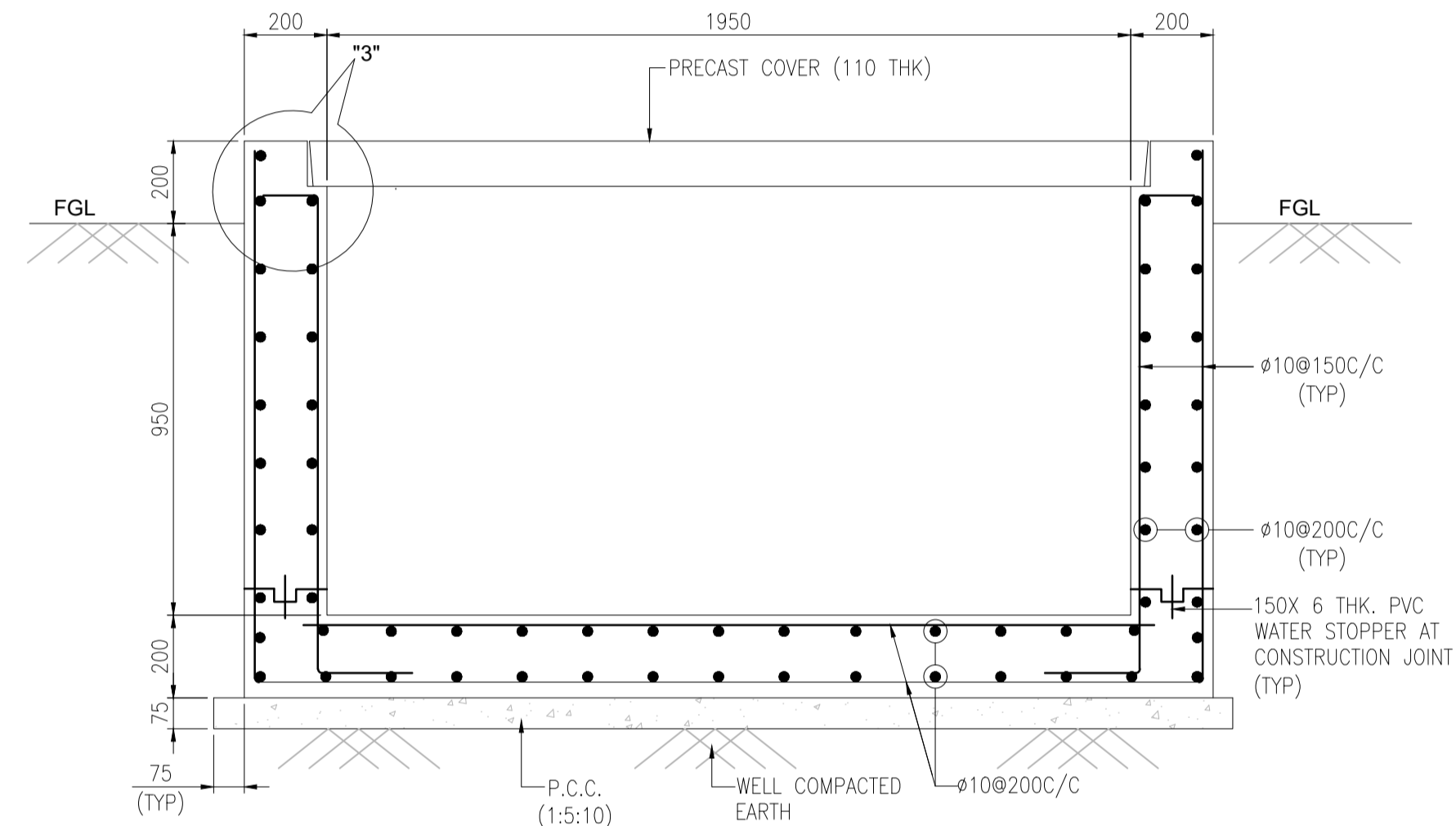


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(FOR REINFORCEMENT DETAILS REFER TABLE-1)
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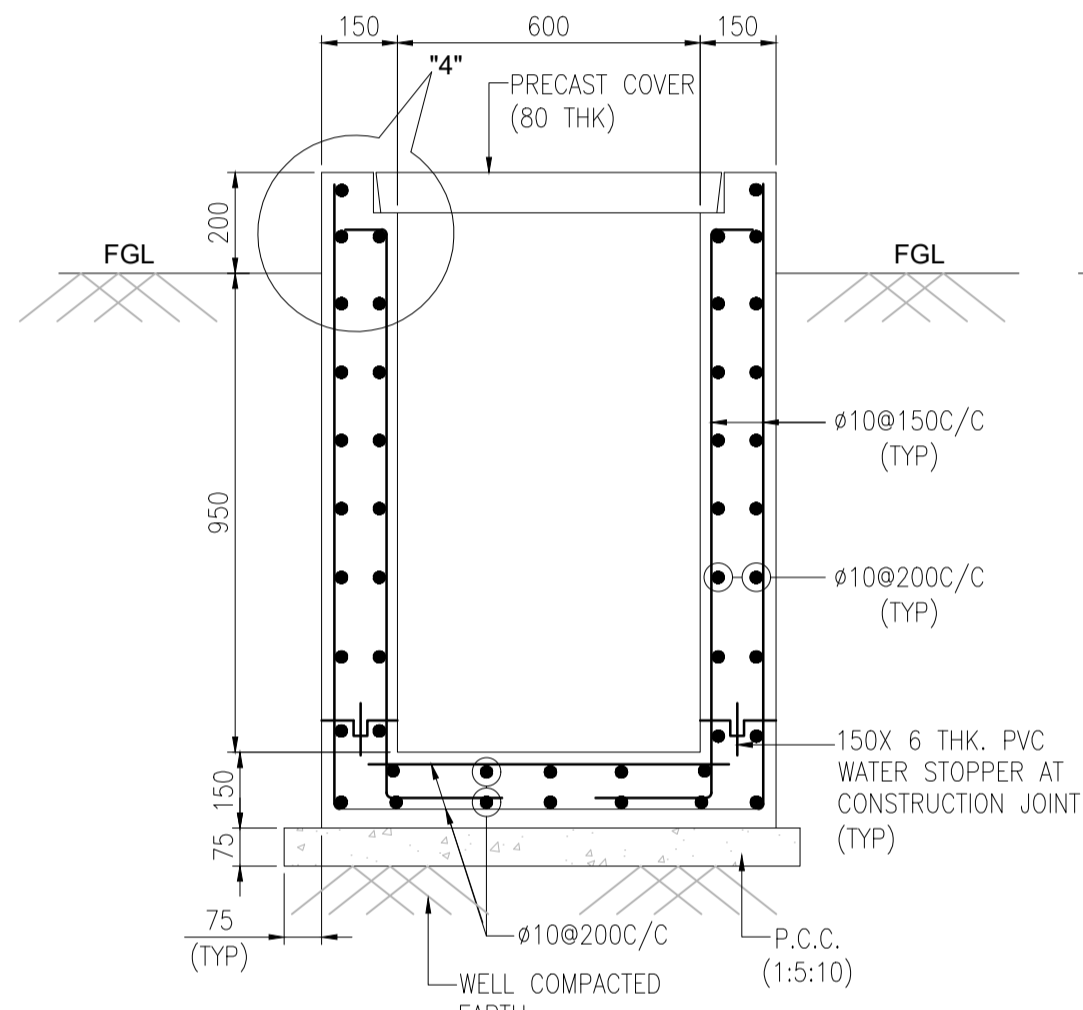
TABLE-1

TRENCH WIDTH	SLAB THICKNESS	REINFORCEMENT			
		T1	T2	B1	B2
W1 (1950)	110	φ10	φ10	φ10	φ10
W2 (600)	80	φ10	φ10	φ10	φ10

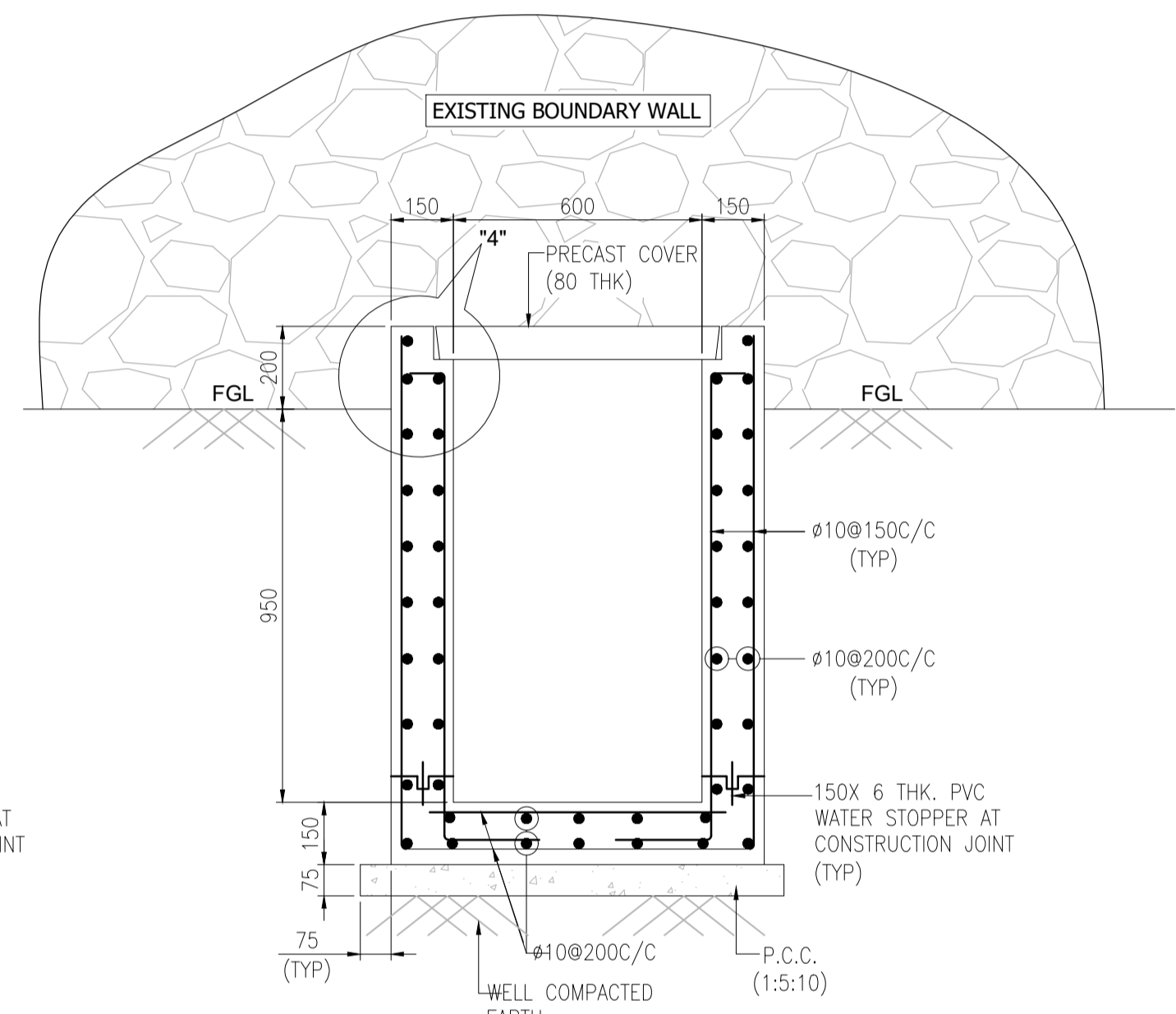
SPACING SHALL BE @ 150C/C



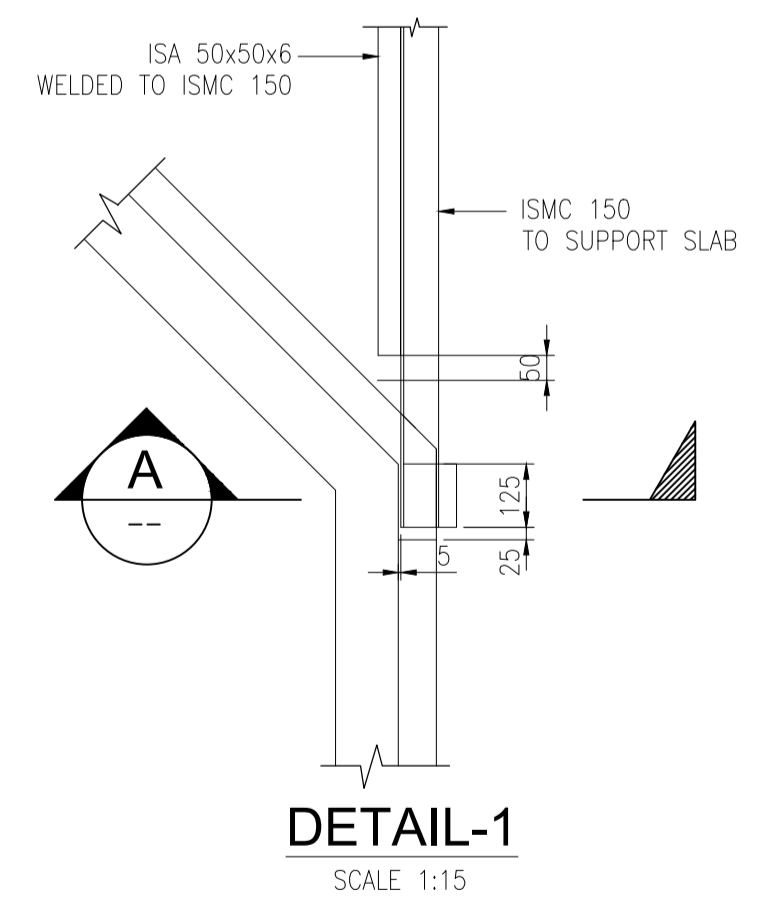
TYPICAL R.C.C. DETAIL OF CABLE TRENCH 1950 WIDE
SCALE 1:15



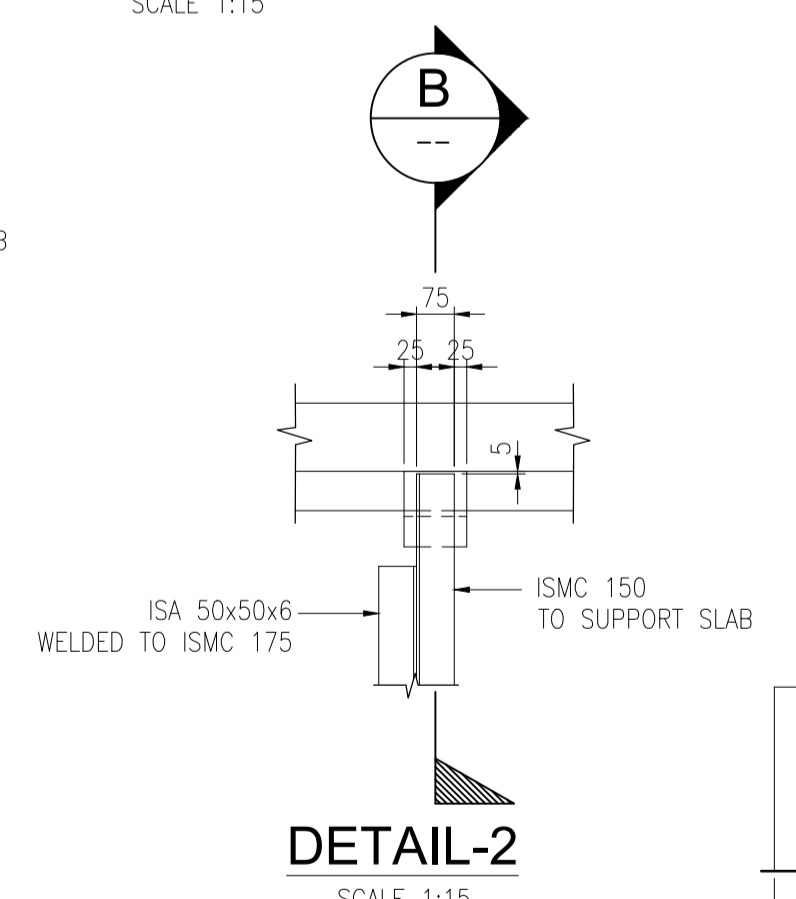
TYPICAL R.C.C. DETAIL OF CABLE TRENCH 600 WIDE
SCALE 1:15



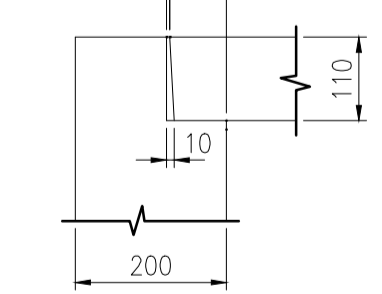
TYPICAL R.C.C. DETAIL OF CABLE TRENCH AT BOUNDARY WALL CROSSING LOCATION
SCALE 1:15



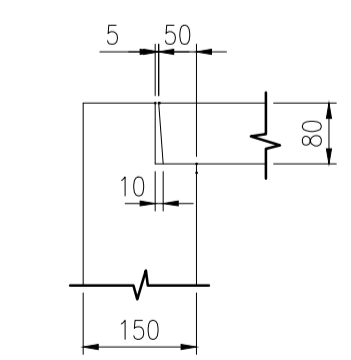
DETAIL-1
SCALE 1:15



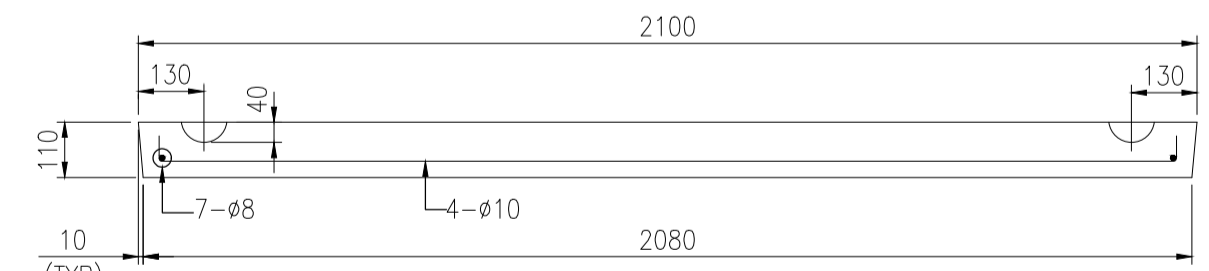
DETAIL-2
SCALE 1:15



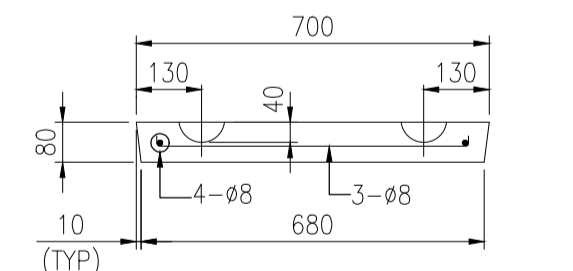
DETAIL-3
SCALE 1:10



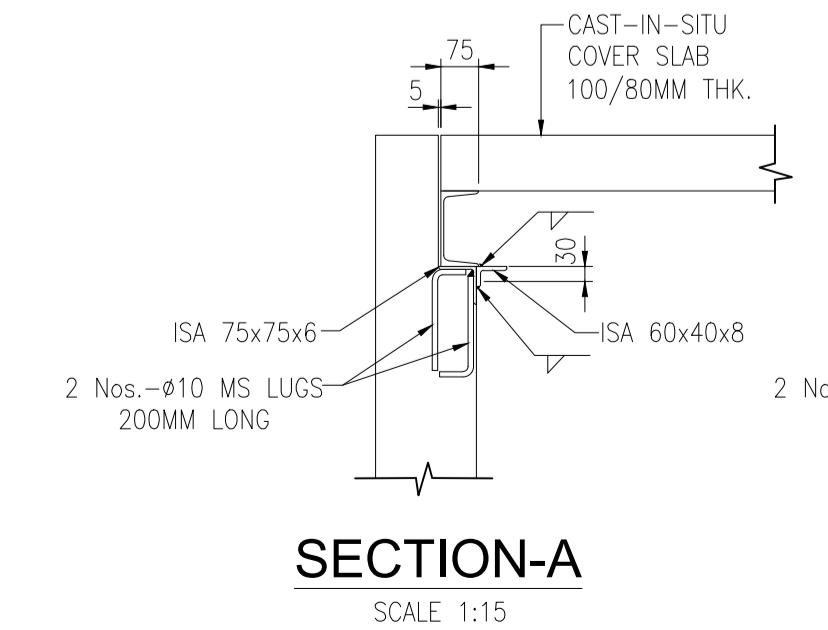
DETAIL-4
SCALE 1:10



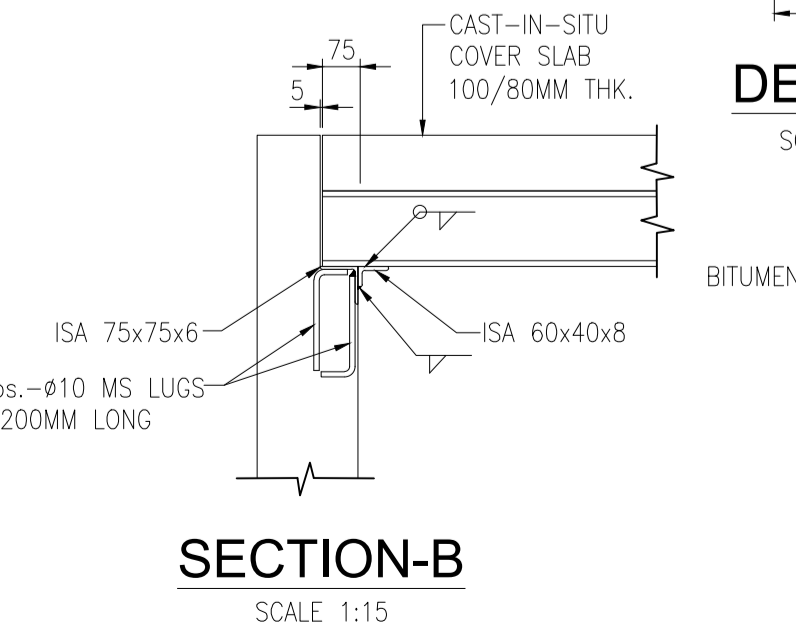
DETAIL OF PRECAST COVER FOR 110 THK



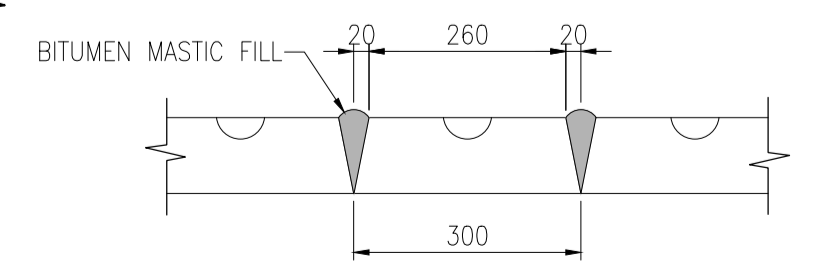
DETAIL OF PRECAST COVER FOR 80 THK



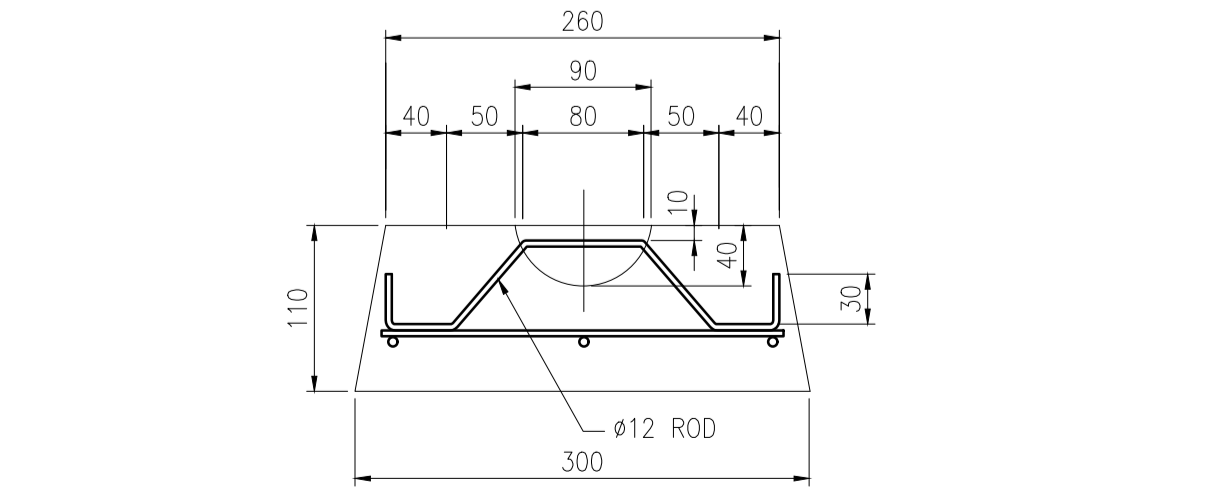
SECTION-A
SCALE 1:15



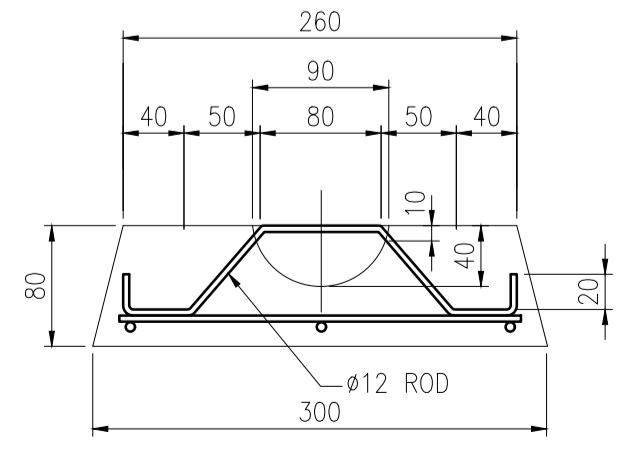
SECTION-B
SCALE 1:15



JOINING DETAIL OF PRECAST COVER SLAB
SCALE 1:10



DETAIL OF LIFTING HOOK FOR 110 THK PRECAST COVER
SCALE 1:5



DETAIL OF LIFTING HOOK FOR 80 THK PRECAST COVER
SCALE 1:5

NOTES

1. FOR NOTES, LEGENDS & REFERENCE DRAWINGS, REFER SHEET 1 OF THIS DRAWING.

LEGEND

REFERENCE DRAWINGS

DRAWING TITLE	DRAWING NO.

Rev.	D	M	Y	Modifications	Drawn	Checked	Validated	Approved
0	16/02/2023			ISSUED FOR CONSTRUCTION	DHK	DKY	AKS	SSB
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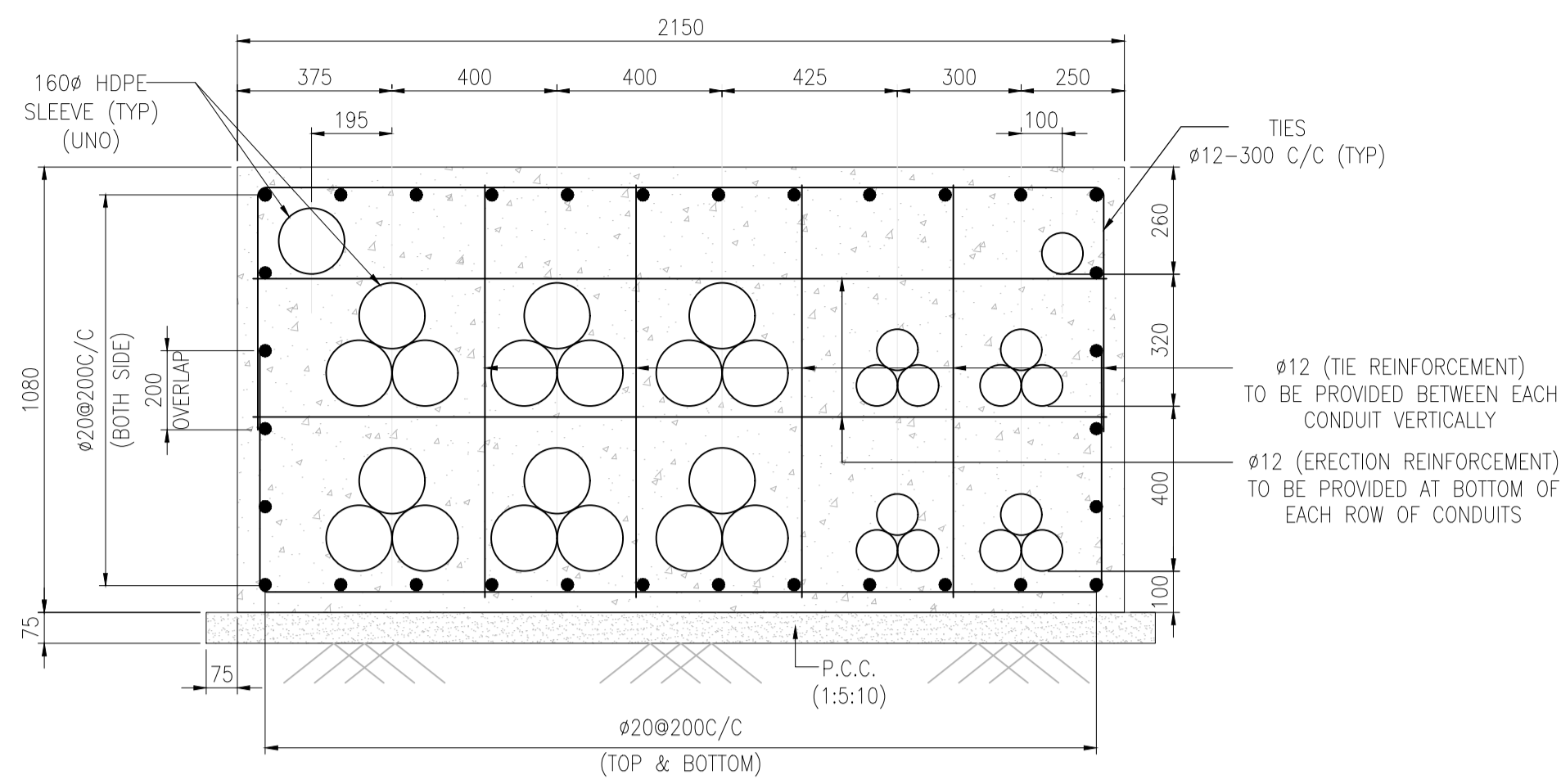
LOA NO. : 7420000125 Dated 01.10.2022

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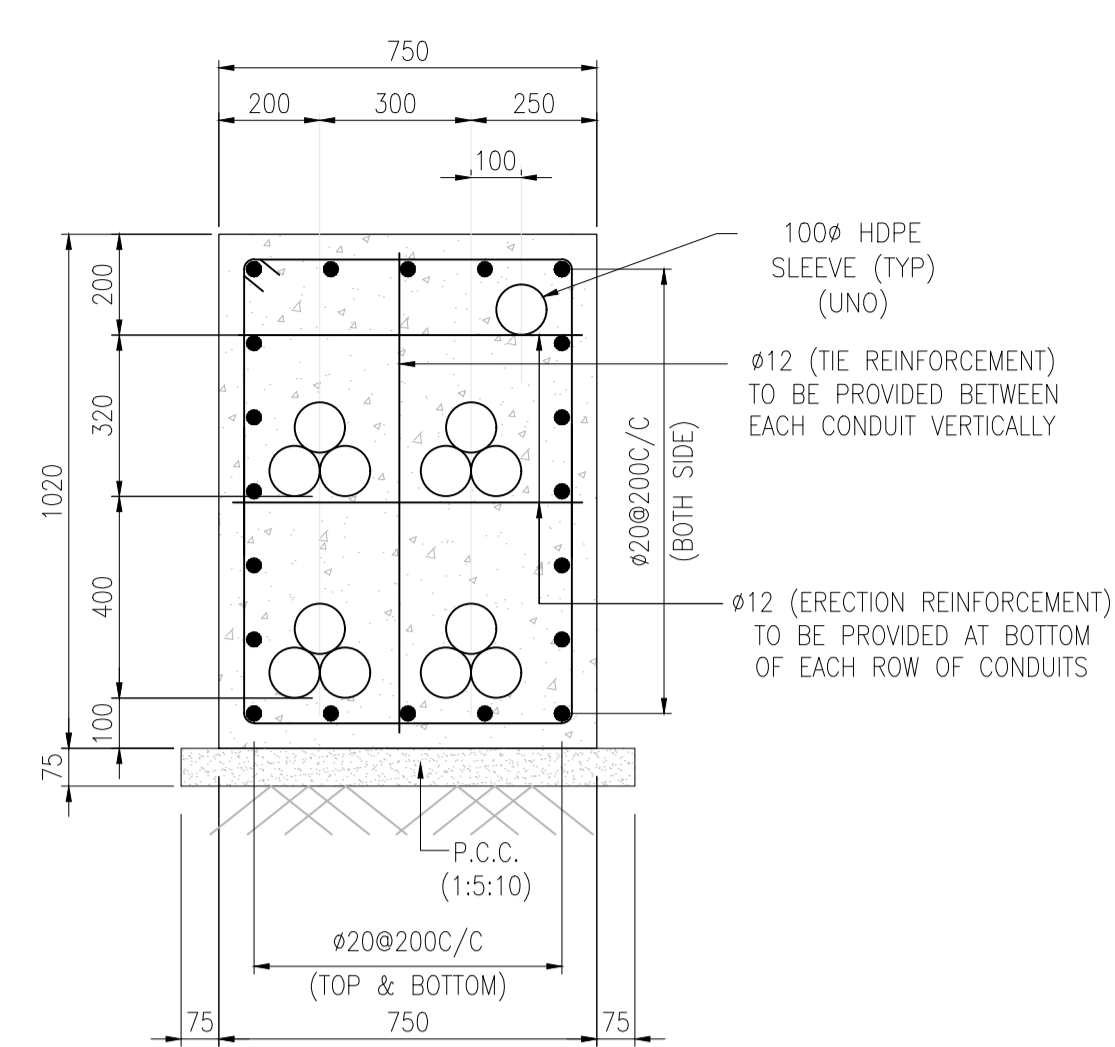
SUBJECT: **STRUCTURAL DETAILS FOR OUTDOOR CABLE TRENCH BETWEEN 110/33 KV SS-10 & SS-01A OF AROMATIC COMPLEX POWER SYSTEM UPGRADATION WORK**

TRACTEBEL	Size	Scale	Sheet	Rev.
ENGIE	A1	AS SHOWN	6 OF 7	0
TRACTEBEL Engineering pvt. ltd.	Project No.	Discipline Code	System Code	Serial No.
	P.020678	M	46057	C001



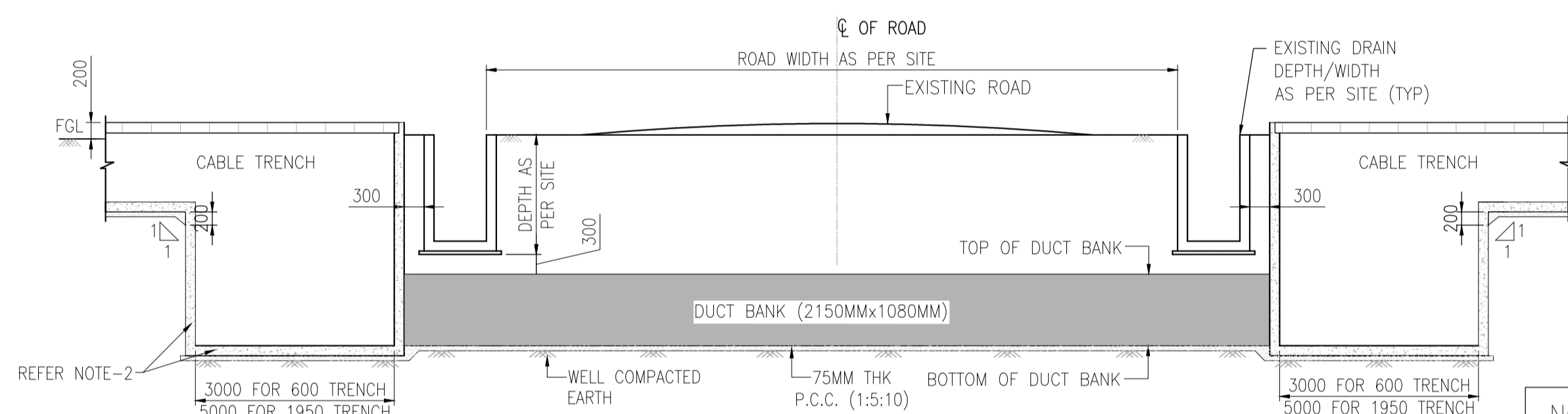
**TYPICAL DETAIL OF DUCT BANK DB-1
(2150MMx1080MM)**

SCALE 1:15



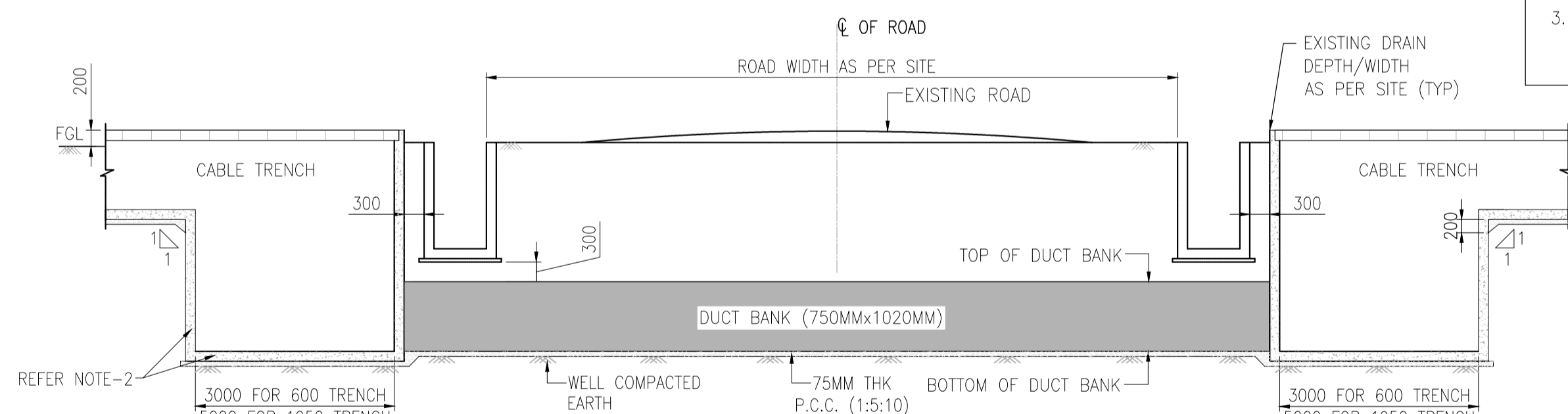
**TYPICAL DETAIL OF DUCT BANK DB-2
(750X1020MM)**

SCALE 1:15



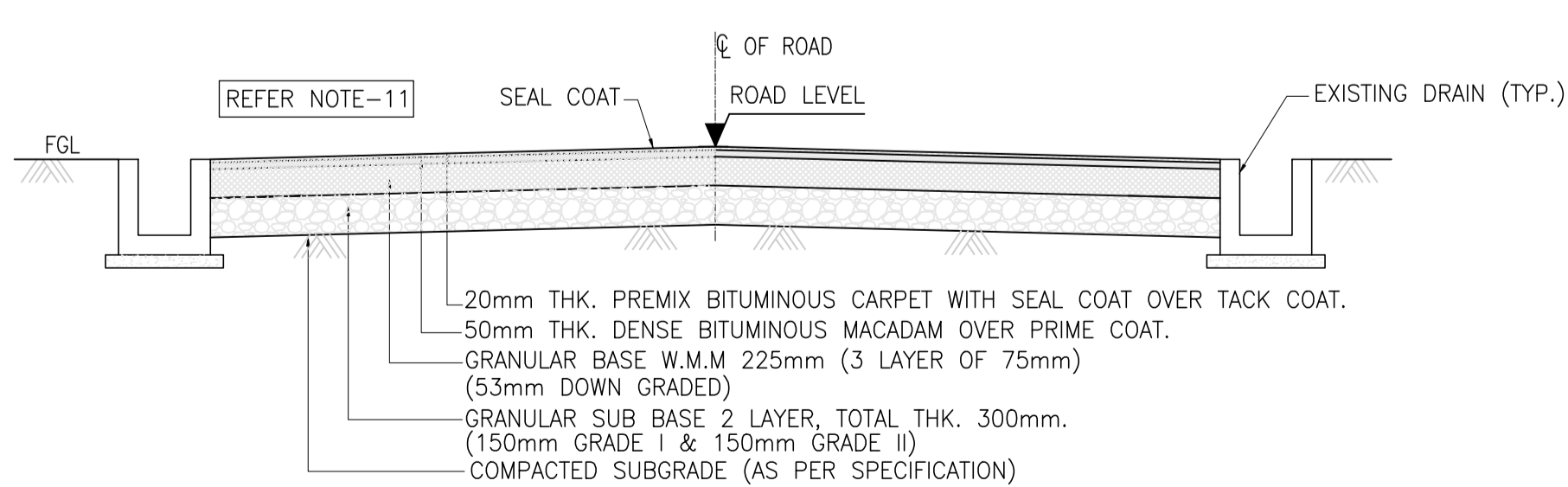
**TYPICAL DETAIL OF DUCT BANK DB1 (2150MMx1080MM)
AT ROAD/DRAIN CROSSING LOCATION**

(SCALE-1:75)



**TYPICAL DETAIL OF DUCT BANK DB2 (750MMx1020MM)
AT ROAD/DRAIN CROSSING LOCATION**

(SCALE-1:75)

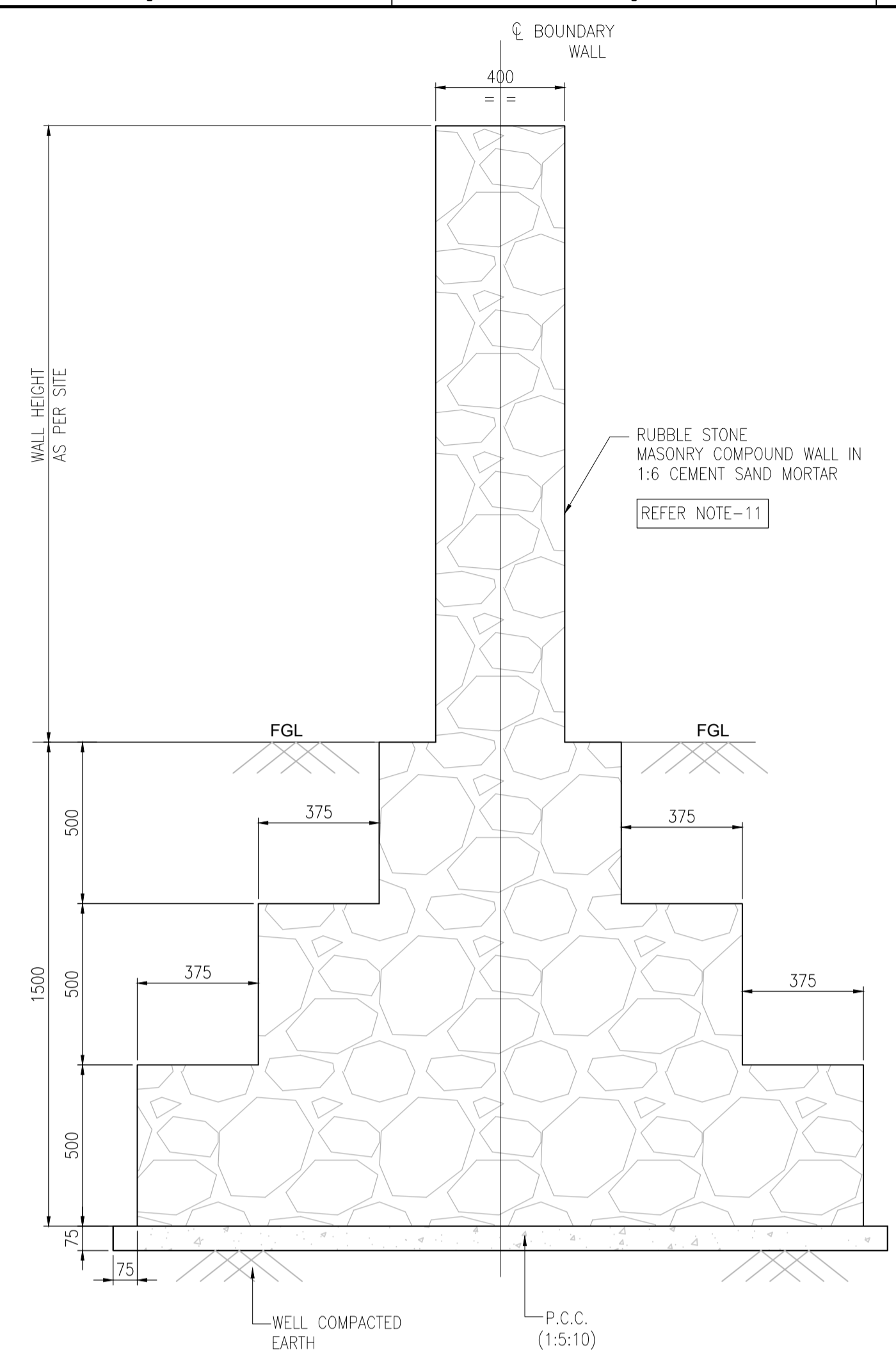


STANDARD DETAIL OF BITUMINOUS ROAD

(SCALE-1:75)

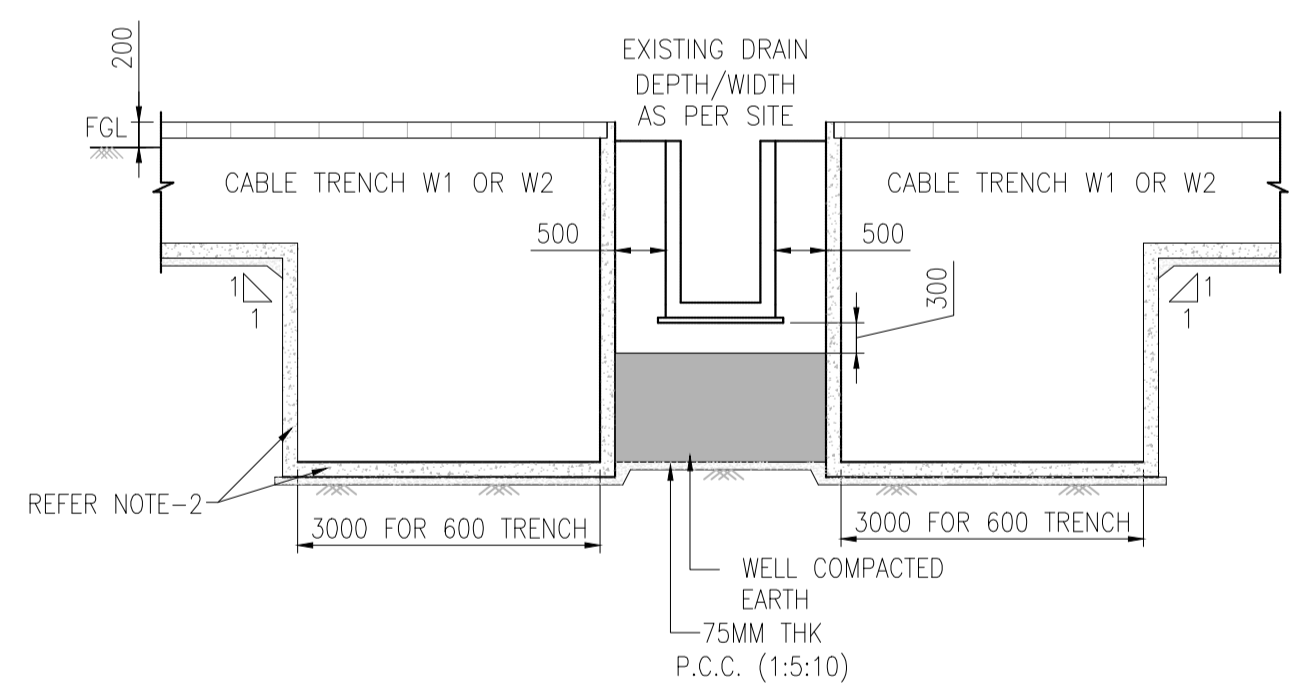
NOTE:-

1. THE LENGTH OF DUCT BANK SHALL BE 300 mm EXTENDED BEYOND LIMIT OF ROAD/DRAIN, AS APPLICABLE, AT BOTH ENDS.
2. THE TOP OF DUCT BANK SHALL BE 300 mm BELOW THE MAXIMUM DEPTH OF DRAIN AS PER SITE CONDITION.
3. THE BOTTOM OF TRENCH SHALL BE FLUSHED WITH BOTTOM OF DUCT BANK.



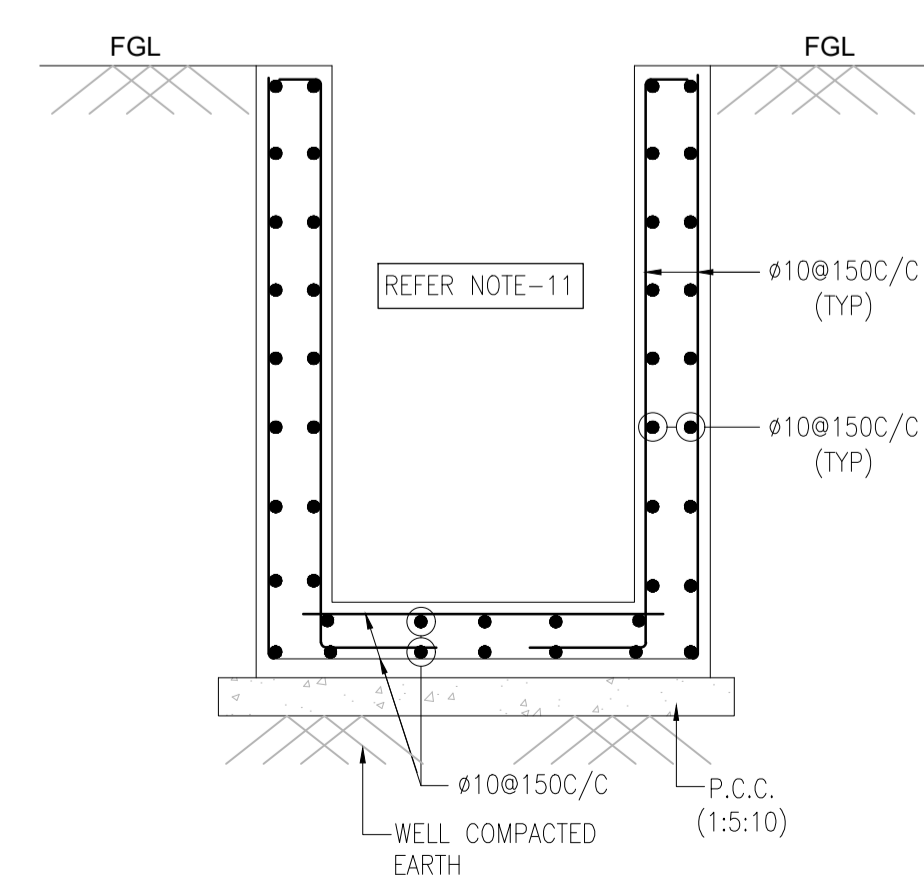
STANDARD DETAIL OF BOUNDARY WALL

SCALE 1:15



**DETAIL-5
(REFER SHEET 2)**

(SCALE-1:75)



STANDARD DETAIL OF DRAIN

(DRAIN WIDTH, DEPTH INCLUDING DRAIN WALL, BASE SLAB & P.C.C. THICKNESS AS PER SITE) SCALE NTS

NOTES

1. FOR NOTES, LEGENDS & REFERENCE DRAWINGS, REFER SHEET 1 OF THIS DRAWING.
2. REFER SHEET-6 (TYPICAL RCC DETAIL OF CABLE TRENCH 1950 WIDE) FOR THICKNESS & REINFORCEMENT OF CABLE TRENCH WALL/SLAB LOCATED LOCALLY AT LOWER LEVEL AT ROAD & DRAIN CROSSING LOCATION.

LEGEND

REFERENCE DRAWINGS

DRAWING TITLE	DRAWING NO.

Rev.	D	M	Y	Modifications	Drawn	Checked	Validated	Approved
0	16/02/2023			ISSUED FOR CONSTRUCTION	DHK	DKY	AKS	SSB
A	13/01/2023			ISSUED FOR APPROVAL	DHK	DKY	AKS	SSB

LOA NO. : 742000125 Dated 01.10.2022 SAP PO number: _____

OWNER / CLIENT **ONGC MANGALORE REFINERY & PETROCHEMICALS LTD.**
(A subsidiary of Oil & Natural Gas Corp. Ltd - ONGC)
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PROJECT POWER SYSTEM UPGRADATION PROJECT AT MRPL AROMATIC COMPLEX, MANGALORE

SUBJECT STRUCTURAL DETAILS FOR OUTDOOR CABLE TRENCH BETWEEN 110/33 KV SS-10 & SS-01A OF AROMATIC COMPLEX POWER SYSTEM UPGRADATION WORK

TRACTEBEL Engineering pvt. ltd.	Size	Scale	Sheet	Rev.
	A1	AS SHOWN	7 OF 7	0
Project No. P.020678		Discipline Code M	System Code 46057	Serial No. C001