

भारत सरकार  
अंतरिक्ष विभाग  
सतीश धवन अंतरिक्ष केंद्र शार  
श्रीहरिकोटा रेंज डा.घ. 524 124  
तिरुपति जिला, आं.प्र., भारत  
लैंड लाइन नं : 0862322  
गतिमान नं :



Government of India  
Department of Space  
Satish Dhawan Space Centre SHAR  
Sriharikota Range P.O. 524 124  
Tirupati Dist., AP, India  
Land Line No : 0862322  
Mobile No :

निविदा सूचना सं. TENDER NOTICE NO. SDSC SHAR/HPS/PT/RO-VALF/53/2026-27

भारत के राष्ट्रपति की ओर से प्रधान क्रय एवं भंडार, सतीश धवन अंतरिक्ष केंद्र श्रीहरिकोटा निम्नलिखित वस्तुओं के लिए ऑनलाइन निविदाएं आमंत्रित करते हैं/On behalf of President of India, Head Purchase and Stores, SDSC SHAR, SRIHARIKOTA invites on line quotations for the following: -

क्र.सं. SI No	संदर्भ सं. Ref. No.	विवरण Description	मात्रा Qty.
01	SDSC SHAR /VALF PURCHASE /VALF/ 2026000898 Procurement, supply, erection and application of Refractory Cement with SS-Anchors, SS-Rods etc. on MLS & JDD at SLC site [Public Tender - Two Part]	Procurement, Supply, fabrication, erection and application of Refractory Cement along with SS-Anchors, SS-Rods etc. on 1 no of Mobile Launch structure (MLS).	1 Lot
		Procurement, Supply, fabrication, erection and application of Refractory Cement along with SS-Anchors, SS-Rods etc. on 1 no of Jet Duct Deflector (JDD)	1 Lot

निविदा दस्तावेजों को डाउनलोड करने की अंतिम तिथि Last Date for downloading of tender documents : 22.07.2026 at 16:00 hrs.  
ऑनलाइन निविदा जमा करने की अंतिम तिथि Due Date for submission of bids online : 22.07.2026 at 16:30 hrs.  
निविदाएं खोलने की नियत तिथि Due Date for opening of tenders : 23.07.2026 at 11:00 hrs.

निविदाकार के लिए निर्देश Instructions to Tenderers:

निविदाएं ईजीपीएस के माध्यम से ही भेजी जाएं तथा कोई निविदा शुल्क लागू नहीं होगा।  
Bids shall be submitted on line through EGPS only and No tender fee shall be applicable.

- कार्य के सम्पूर्ण विवरण/जानकारी तथा नियम व शर्तों इत्यादि के लिए संलग्न अनुलपत्रक को देखें। / For full details/scope of work and terms and conditions etc., please see the enclosed annexures.
- इच्छुक निविदाकार इसरो की ई-खरीद वेबसाइट इसरो न्यू ई-प्रोकुरमेंट [www.eproc.isro.gov.in](http://www.eproc.isro.gov.in) से ई-निविदा डाउनलोड और अपनी निविदा ई-खरीद पोर्टल पर ऑनलाइन जमा कर सकते हैं। डाक / वाहक / स्वयं द्वारा प्राप्त निविदाओं पर विचार नहीं किया जाएगा। / Interested tenderers can download the e-tender from ISRO e-procurement website ISRO NEW E-PROCUREMENT [www.eproc.isro.gov.in](http://www.eproc.isro.gov.in) and submit the offer on line in the e-procurement portal. Offers sent physically by post/courier/in person will not be considered.
- निविदा दस्तावेज इसरो की वेबसाइट [www.isro.gov.in](http://www.isro.gov.in) इसरो न्यू ई-प्रोकुरमेंट वेबसाइट [www.eproc.isro.gov.in](http://www.eproc.isro.gov.in) तथा सतीश धवन अंतरिक्ष केंद्र शार की वेबसाइट [www.shar.gov.in](http://www.shar.gov.in) पर भी उपलब्ध हैं। इन्हें केवल ई-खरीद पोर्टल से डाउनलोड और निविदा ऑनलाइन जमा कर सकते हैं। / Tender documents are also available on ISRO website [www.isro.gov.in](http://www.isro.gov.in) ISRO New e-procurement website [www.eproc.vssc.gov.in](http://www.eproc.vssc.gov.in) and SDSC SHAR, Sriharikota website [www.shar.gov.in](http://www.shar.gov.in). The same can be down loaded and offer submitted on line in the new e-procurement portal only.
- निर्धारित तिथि/समय के पश्चात प्राप्त बोलियों पर विचार नहीं किया जाएगा। / Quotations received after the due date/time will not be considered.
- प्रधान क्रय एवं भंडार, सतीश धवन अंतरिक्ष केंद्र श्रीहरिकोटा के पास किसी भी या सभी निविदाओं को स्वीकार / अस्वीकार करने का अधिकार है। / Head, Purchase and Stores, SDSC-SHAR, Sriharikota reserves the right to accept or reject any/or all the quotations.
- GeM ARPTS Report ID: GEM/GARPTS/04062026/38Z0CXM2P809

दिनांक DT: 29.06.2026

  
प्रधान क्रय एवं भंडार  
HEAD PURCHASE AND STORES

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
SATISH DHAWAN SPACE CENTRE SHAR SRIHARIKOTA (SDSC SHAR)  
TIRUPATI**

**Tender for Procurement, supply, erection and application of  
Refractory Cement with SS-Anchors, SS-Rods etc. on MLS & JDD at  
SLC site**

**Bids to be submitted online**

**Tender No.: SDSC SHAR/VALF PURCHASE/SH202600089801 dated 29-06-2026**

## **A. Tender Details**

Tender No : **SDSC SHAR/VALF PURCHASE/SH202600089801**

Tender Date : **29-06-2026**

Tender Classification: **GOODS**

Purchase Entity : **VALF PURCHASE**

Centre : **SATISH DHAWAN SPACE CENTRE SHAR SRIHARIKOTA  
(SDSC SHAR)**

### **Procurement, supply, erection and application of Refractory Cement with SS-Anchors, SS-Rods etc. on MLS & JDD at SLC site**

GEM/GARPTS/04062026/38Z0CXM2P809

As per tender documents

#### **A.1 Tender Schedule**

Bid Submission Start Date : **29-06-2026 18:00**

Bid Clarification Due Date : **09-07-2026 10:00**

Bid Submission Due Date : **22-07-2026 16:30**

Bid Opening Date : **23-07-2026 11:00**

Price Bid Opening Date : **31-07-2026 14:00**

## B. Tender Attachments

NA

### Instructions To Vendors

#### 1. Format for Self Declaration regarding Restriction under Rule 144 (X) of GFR 2017 (Land Border Sharing)

1. (to be printed in letter head)

DECLARATION BY AUTHORISED SIGNATORY OF THE FIRM

2. I, the undersigned, \_\_\_\_\_ (full names), do hereby declare, in my capacity as \_\_\_\_\_ of M/s \_\_\_\_\_ (name of bidder entity), that:

3. 1) I have read the Order (Public Procurement No.1, 2 & 3) dtd 23 Jul 2020 & 24 Jul 2020 office memorandum (OM) No. F.18/37/2020-PPD Dt:08.02.2021, OM NO. F.12/1/2021-PPD (Pt) dated 02.03.2021 and OM No. F.7/10/2021-PPD dated 08.06.2021 and OM No.F.7/10/2021-PPD dated 23.02.2023 on the subject of Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs), 2017 regarding restrictions on procurement from a bidder of a country which shares a land border with India and comply to all the provisions of the Order.

4. I certify that M/s. \_\_\_\_\_ (name of bidder entity)

5. (A) IS NOT FROM SUCH A COUNTRY

6. (B) IS FROM SUCH A COUNTRY AND HAS BEEN REGISTERED WITH THE COMPETENT AUTHORITY (attach evidence of valid registration)

7. (Select any one of the above (A) or (B) and strike off the other) I hereby certify that this SUPPLIER fulfils all requirements in this regard and is eligible to be considered.

8. 3) I understand that the submission of incorrect data and / or if certificate / declaration given by M/s \_\_\_\_\_ (name of bidder entity) is found to be false, this would be a ground for debarment and further legal action in accordance with law as per Clause 18 of Procurement Policy Division OM No.F.7/10/2021-PPD dated 23.02.2023

9. AUTHORIZED SIGNATURE:

DATE: \_\_\_\_\_

Seal / Stamp of Bidder

## 2. Format for MII declaration

1. (to be printed in letter head) -

Self-Certification under preference to Make in India order Certificate

2. In line with Government Public Procurement Order No. P-45021/2/2017-PP (BE-II)-Part(4) Vol.II dated 19.07.2024 and its latest directives there of, we hereby certify that we

M/s. \_\_\_\_\_ are local suppliers and the offered item having local content of \_\_\_\_\_% [ Local content means the amount of value added in India which shall, unless otherwise prescribed by the respective Nodal Ministry, be the total value of the item procured (excluding Net Domestic Indirect Taxes, Transportation, Insurance, Installation, Commissioning, Training and after sales service support like AMC/CMC etc.) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent ] as defined in above orders for the material against Tender/Bid No \_\_\_\_\_ dated \_\_\_\_\_

3. Details of location at which local value addition will be made as follows:

\_\_\_\_\_

4. We also understand, false declaration will be breach of the code of integrity under the rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

5. Thanking You

\_\_\_\_\_  
Signature with date

Name

Designation

Official Seal

## 3. General Instructions to Vendor

1. Instructions to Tenderers

TeleNo.08623-226289/6082

e-Mail ID : hps.p@shar.gov.in, satya.ch@shar.gov.in, psovalf@shar.gov.in

1. Interested tenderers may, at their option, login to <https://eproc.isro.gov.in> and submit your offers.
2. TENDER FEE IS NOT APPLICABLE.
3. EARNEST MONEY DEPOSIT IS NOT APPLICABLE
4. Indian agents while quoting on behalf of their principals are requested to attach Principals original quote, necessary authorization letter from their Principals, copy of agency agreement etc. in their bid.
5. TWO PART BIDS: In case of Two part tender, price details shall not be uploaded in the Technical & Commercial Bids (Part I), failing to which the bid will be treated as INVALID.
6. The offer should be valid for a minimum period of 180 days for 2 part bids and minimum period of 90 days for single part from the date of bid opening.
7. Due date & time: Sufficient time has been allotted for Bid submission. Vendors are requested to complete Bid submission well in advance. Last minute requests for due date extension citing server problems etc. will not be entertained. Late bids will not be considered.
- 7 (A). Request for the extension of the due date will not be considered without clear justification and approval of competent authority.
8. (a) Bid Opening for Public Tender: In case of Public Tender-Two Part Tenders: Technical and Commercial Bids will be opened on the first day specified for Tender opening. Interested vendors can attend the tender opening session to know the bidding details (Bidders presence is not mandatory to consider the quote for evaluation). Price Bid opening of the selected vendors will be scheduled later and it will be intimated to the selected Bidder (s).
- (b) For Limited Tender: BIDDER PARTICIPATION IS NOT ALLOWED.
9. Prices are required to be quoted according to the units indicated. In domestic tenders price shall be quoted in INR only.
10. Preference will be given to those tenderers offering supplies from ready stocks and on the basis of FOR destination delivery at site.

11. (a) All available technical literature, catalogues and other data in support of the specifications and detail of the items should be furnished as attachments.

(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of non-acceptance of tender, the tenderer will have to remove the samples at his own expense.

(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensions details are available the same should be indicated in your offer.

(d) Specifications: Stores offered should strictly conform to our specifications. Deviations, if any, should be clearly indicated by the tenderer in their quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples wherever necessary. Test certificates wherever necessary should be attached. Whenever options are called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us the tenderer could suggest changes to specifications with appropriate response for the same.

12. The purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portion of quantity offered and the tenderers shall supply the same at the rates quoted.

13. All amounts shall be indicated both in words as well as in figures. Where there is difference between amounts quoted in words and figures, amount quoted in words shall prevail.

14. The tenderer will be required to furnish a document containing the name of his bankers as well as the latest income-tax clearance certificate duly counter signed by the Income-tax Officer of the Circle concerned under the Seal of his office, if required by the Purchaser.

15. OPTION CLAUSE: The Purchaser reserves the right to place order on the successful tenderers for additional quantity up to 25% of the quantity offered by them at the rates quoted.

16. SDSC SHAR SRIHARIKOTA reserves the right to accept or reject any bid in part or full by assigning reasons thereof.

17. Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with Competent Authority as specified in Office Memorandum no.F.No.7/10/2021-PPD, Ministry of Finance, Department of Expenditure, Public Procurement Division dated 23.02.2023. All the conditions mentioned in the above OM is applicable for this tender.

## 4. STANDARD TERMS & CONDITIONS

1. 1.OUR GST NUMBER: 37HYDF00385A1DZ- SDSC SHAR SRIHARIKOTA

2.Email for communication: psovalf(at)shar.gov.in

3.Instruction to Indigenous Suppliers:

A) Payment Terms shall be as specified in RFP. If not specifically mentioned Our Normal payment term is 100 percent within 30 days after receipt and acceptance of the item at our site. Please confirm acceptance in your quotation.

B) Purchase - Price preference to MSEs

Purchase - Price preference will be applicable to the product reservation admissible to the Micro and Small Enterprises. Purchase - Price Preference shall be extended to the MSEs under the Public Procurement Policy for MSEs formulated under the Micro, Small and Medium Enterprises

Development Act, 2006. The participating MSEs in a tender, quoting price within the band of L-1 plus 15 percent may also be allowed to supply a portion of the requirement by bringing down their price to the L-1 price, in a situation where L-1 price is from someone other than an MSE. Such MSEs may be allowed to supply up to 25 percent of the total tendered value. In case of more than one such eligible MSE, the supply will be shared equally.

Micro and Small Enterprises which have technical capability to deliver the goods and Services as per prescribed technical and quality specifications and may not be able to meet the qualification criterion relating to prior experience minus prior turnover may be relaxed as per guidelines issued by Ministry of MSMEs and as amended from time to time.

Interested vendors shall specifically claim the benefit with supporting documents.

C) Purchase - Price preference to Make-in-India Products:

Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders - Notifications issued by concerned Nodal Ministry for specific Goods - Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document 50 percent. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rupees 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in-India) order 2017 dated 04.06.2020 and amendments thereof. In case Buyer has selected Purchase preference to Micro and Small Enterprises clause in the bid, the same will get precedence over this clause.

D) Instruction to Foreign Suppliers-(if allowed as per RFP)

a) Payment Terms shall be as specified in RFP. If not specifically mentioned Our normal payment term is SIGHT DRAFT, Please confirm acceptance in your offer, if you insist for L - C, and all bank charges shall be to your account. Confirm acceptance.

b) Please specify whether any export clearance is required in case of an order on you.

c) Warranty - Guarantee applicable for the item shall be mentioned in your offer

d) Special Certification for packing Material : as per Plant Quarantine (Regulation of Control into India) Order 2003, Articles packed with packing material of plant origin namely, hay, straw, wood shavings, wood chips, saw dust, wood waste, wooden pallets, Dunn age Mats, wooden packages, coir pith, pear or sphagnum moss etcetera, will be allowed entry by Customs only with a Phytosanitary Certificate. In case of a Purchase Order, if you propose to us any of the above material for packing such a certificate issued by your local Plant Quarantine Authority shall be furnished.

e) Confirm whether any Export License is required and for which End User Certificate is to be provided by us, in case of an Order on you. (Enclose format for EUC, if applicable)

f) Either Indian Agent on behalf of the foreign principals or the foreign principal directly can quote against this order, but not both. In either case an Indian agent cannot represent more than one principal against the same tender.

g) In case the quote is in INR we prefer to execute the same on HSS Basis and for which Concessional Customs duty as per Notification number 50 - 2017 Customs dated 30.06.2017, Serial Number 539(A) as amended by Notification number 05 - 2018 dated 25.01.2018 and vide Notification No.05-2025 dt.01.02.2025 and 45-2025 dtd 24.10.2025. In case the quote is on Indian Rupee (Outside High Sea Sale), the price shall include taxes and duties if any. We shall not be able to provide any duty or IGST tax exemption - concession certificates. If the item quote is of USA make, please quote for all-inclusive price since we prefer to get the item on FOR destination basis.

h) Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with Competent Authority as specified in Office Memorandum number F.No.6 - 18 - 2019-PPD, Ministry of Finance, Department of Expenditure, Public Procurement Division dated 23rd July 2020. All the conditions mentioned in the above OM is applicable for this tender.

E) Common terms to Indigenous and foreign suppliers:

a.Warranty

You shall provide applicable warranty for the items offered by you without fail. For the applicable period you shall provide necessary warranty certificate.

b.Performance Bank Guarantee

Towards the performance of the systems during the warranty period you shall submit a performance bank guarantee equivalent to 3 percent of the order value to cover the warranty period. This PBG shall be interest free and the same shall be returned to you on successful completion of all contractual obligations. The said PBG shall have a further claim period of 2 months.

c.Security Deposit

On acceptance of the order, you shall submit an interest free amount equivalent to 3 percent of the total contract - order value towards security deposit. This security deposit is collected towards the performance of the Contract. The said Security Deposit shall be submitted either in the form of Bank Guarantee - Demand Draft - FDR receipts duly endorsed in the name of the centre. The Security Deposit will be returned to you on successful completion of the Contractual obligations; failing which it shall be forfeited - adjusted.

4.Offer Validity

Your offer shall be valid for 180 days in case of 2 part - 90 days in case of single part from the date of

tender opening. In case your offer validity is less than the mentioned above, the said offer is liable for rejection which may please be noted.

**5. Liquidated Damages:**

If you fail to deliver the ordered items satisfactorily within the time specified or any extension thereof, Liquidated Damage at 0.5 percent (zero point five percent) of the order value or part thereof the undelivered items for each calendar week of delay shall be recovered from your bill. However total Liquidated Damage shall not exceed 10 percent (ten percent) of the order value.

**6.FORCE MAJEURE:**

Should a part or whole work covered under this contract be delayed in delivery - completion of work due to reasons of Force majeure which shall include legal lockouts, strikes, riots, civil commotion, fire, accidents, quarantines, epidemic, acts of God and War, stoppage of deliveries by the Government, freight embargoes etcetera; the delivery period - completion of work referred to in this Contract shall be extended by a period not in excess of duration of such Force Majeure. The occurrence shall be notified by either party within reasonable time.

**Note:**

I.Offers received through post, courier, fax or email will not be considered.

II.Technical and commercial bid (Part-I) shall not contain any price details. Optional accessories or other price details, if any shall be uploaded in Supporting documents related to Price Bid, to be opened along with Price Bid.

III.In respect of FIM being issued, the fabricator shall submit Bank Guarantee for equivalent sum compulsorily. In case, submission of Bank Guarantee is not possible, the reasons there for shall be clearly mentioned. However, for such cases the fabricators at their cost shall secure such FIM through Insurance Policy with Director, SDSC SHAR as beneficiary. In case of PSU and Government Organization, Indemnity Bond in lieu of Bank Guarantee is acceptable. Balance FIM - Scrap, if any shall be returned along with the supply of the items. Please confirm acceptance in your quotation.

IV.SDSC SHAR shall have the right to place part order among the parties for the items for which they are the lowest.

V.TERMS AND CONDITIONS IN THE RFP/ SCOPE OF WORK, SHALL PREVAIL OVER OTHER TERMS AND CONDITIONS(in case of any contradiction or ambiguity)

**5. INSTRUCTIONS TO TWO PART TENDER**

1. We are proposing to invite Tenders in Two Parts viz., Part-I Techno and Commercial & Part-II Price. All Tenderers are requested to follow carefully the following instructions before preparing their offer.

**PART- I- TECHNO COMMERCIAL BID:**

(1)This part should contain detailed Specifications of the items quoted by you along with Technical

Literature and Leaflets if any.

(2)All the Commercial terms and Conditions applicable also should be indicated separately under separate heads.

(3)The Commercial terms such as delivery terms, delivery period, payment terms, warranty, validity of the offer, Installation & Commissioning, Duties and Taxes etc shall come into this.

(4)Either Technical Specifications or Terms & Conditions as above should be very clearly reflected items wise with reference to the items called for in the tender.

(5)Please note that Prices should not be indicated in this part.

(6)Any deviations from the Technical Specifications and Commercial Terms shall be indicated separately.

#### PART II-PRICE BID:

(1)The prices applicable for the items, item wise in response to the tender shall come into this part.

(2)Tender shall indicate very clearly item wise prices with reference to their Technical Offer.

Note: 1. PLEASE NOTE THAT THE OFFERS SUBMITTED CONTRADICTORY TO ABOVE INSTRUCTIONS WILL BE LIABLE FOR REJECTION. PLEASE ENSURE OFFERS ARE SUBMITTED WITHIN THE DUE DATE.

2. BEING TWO PART TENDER, WE REQUEST YOU NOT TO DISCLOSE / INDICATE ANY OF THE PRICE VALUE WHILE SEEKING / PROVIDING CLARIFICATION. YOU SHOULD INDICATE ONLY IN PERCENTAGE. IN CASE IF YOU DISCLOSE ANY OF THE PRICE AMOUNT YOUR OFFER WILL BE REJECTED.

## C. Bid Templates

### C.1 Technical Bid - Procurement, supply, erection and application of Refractory Cement with SS-Anchors, SS-Rods etc. on MLS & JDD at SLC site

1. Refractory blocks :Procurement, Supply, fabrication, erection and application of Refractory Cement along with SS-Anchors, SS-Rods etc. on 1 no of Mobile Launch structure (MLS) as per attached RFP document & drawings .

[Document : Drawing of Mobile Launch Structure \(MLS\)](#)

[Document : RFP document for supply and application of Refractory on MLS & JDD at SLC site](#)

2. Refractory blocks: Procurement, Supply, fabrication, erection and application of Refractory Cement along with SS-Anchors, SS-Rods etc. on 1 no of Jet Duct Deflector (JDD ) as per attached RFP document & drawings .

[Document : Drawing of Jet Duct Deflector \(JDD\)](#)

#### Common Specifications (Applicable for all items)

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Procurement, Supply, fabrication, erection and application of Refractory Cement along with SS-Anchors, SS-Rods etc. shall be as per technical specification, terms & conditions of the attached RFP document and drawings.	As per attached RFP document and drawings	Yes / No / Explain		

#### Supporting Documents required from Vendor

1. As mentioned in annexure of the RFP document

- 2. Land Boarder sharing declaration certificate**
- 3. Udyam Certificate if caliming MSE purchase preference.**
- 4. Self-deceleration indicating percentage of local content along with location of value addition.**
- 5. Turnover of last three FY**
- 6. Experince certificate as mentioned in the attached RFP**
- 7. GST certificate**
- 8. Current Solvency Certificate for an amount of Rs. 150 Lakhs**
- 9. Write-up on the detailed procedure**
- 10. Firm establishment certificate and nature of work**
- 11. Project execution plan**
- 12. Data sheet**
- 13. Power of attorney**
- 14. Any other docuements as mentioned in the RFP**

5 additional documents can be uploaded by the vendor

## C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	Since both the items (Refer: Sl no 1 & 2 of Annexure - D1 of RFP document) are inter-related for the completion of work, overall L1 offer will be considered.	Yes / No / Explain	
2	Procurement, Supply, fabrication, erection and application of Refractory Cement along with SS-Anchors, SS-Rods etc. shall be as per terms & conditions mentioned in the attached RFP document.	Yes / No / Explain	
3	As per the Notification No. 9/2025 - Integrated tax dated 17.09.2025, S. No. 462 and as per Notification No. 9/2025 - Central tax dated 17.09.2025, S. No. 462 issued by Ministry of Finance (Dept. of Revenue) & Government of Andhra Pradesh, Revenue (Commercial Taxes) Department, G.O.MS.No. 345, Dated: 20.09.2025 S.No.462, SDSC SHAR is eligible to avail GST/IGST @5% for the procurements related to Scientific and technical instruments, apparatus, equipment, accessories, parts, components, spares, tools, mock ups and modules, raw material and consumables required for launch vehicles and satellites and payloads.  End Use Certificate for availing GST/IGST @5% shall be issued in the event of PO.	Yes / No / Explain	
4	Please confirm here whether your quoted "UNIT PRICE" in our Price Bid is EXCLUDING GST or INCLUDING GST. ----- NOTE: If you are not clearly stating "GST Extra in basic cost" it will be treated as "GST is included in the quoted Basic/Unit cost in the price bid". Your offer will be evaluated as INCLUSIVE OF GST.	Yes / No / Explain	
5	Delivery Term FOR : SLC Project Site, Madhavankurichi (MANDATORY)	Yes / No / Explain	
6	Delivery Period required for delivery of the items/completion of total scope of work: As indicated in the RFP para no. 20 of Section A2	Yes / No / Explain	

7	Payment Term: As indicated in the RFP para no. 18 & 19 of Section A2	Yes / No / Explain	
8	Warranty/Guarantee: Warranty/Guarantee for the offered item shall be from the date of acceptance of the item at our site for a minimum period of one year or specified in the tender document.	Yes / No / Explain	
9	Liquidated Damages (LD) :- Since delivery is the essence of this order, LD @ 0.5% per week or part thereof subject to a maximum of 10% of the order value for the delayed period of any scope of procurement.	Yes / No / Explain	
10	<p>Security Deposit (SD) Security Deposit shall be submitted at 03% (or as notified by Govt. Of India/ISRO from time to time) of the value of the Purchase Order as per the format issued by the purchaser for satisfactory execution of the Purchase Order/Contract within 15 days of award/PO release. Security Deposit may be furnished in the form of Account Payee Demand Draft, Fixed Deposit Receipt from a scheduled commercial Bank, Bank Guarantee (including e-Bank Guarantee) from a scheduled Commercial bank executed on Rs.200/- non-judicial stamp paper as per the format issued by SDSC SHAR or online payment in an acceptable form and shall be valid for a period of sixty days beyond the date for completion of the Purchase Order/Contract. The bank guarantee or fixed deposit receipt submitted by the tenderer/Contractor shall be verified immediately from the issuing bank.</p> <p>In case of non-performance/poor performance the Bank Guarantee shall be forfeited and in case the vendor fails to furnish the security deposit within the specified date or extended due date, the Purchase Order/Contract shall be cancelled, EMD, if any, made earlier shall be forfeited or other forms of guarantee shall be encashed. Further appropriate penal and legal action shall also be initiated.</p>	Yes / No / Explain	

11	<p>Performance Bank Guarantee (PBG): A Bank Guarantee for 03% of the order value shall be provided along with supply towards the performance of the system. PBG may be furnished in the form of Account Payee Demand Draft, Fixed Deposit Receipt from a scheduled commercial Bank, Bank Guarantee (including e-Bank Guarantee) from a scheduled commercial bank executed on Rs.200/- non-judicial stamp paper as per the format issued by SDSC SHAR or online payment in an acceptable form valid till the successful completion of warranty period plus 60 days. This will not carry any interest and shall be returned to you after successful completion of warranty period against your request. In case of non-performance/poor performance the Bank Guarantee shall be forfeited or other forms of guarantee shall be encashed. Further appropriate penal and legal action shall also be initiated.</p>	Yes / No / Explain	
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12	<p>Combined BG for PBG cum SD: In case, if parties are unable to provide two separate BGs, i.e., one for SD &amp; one for PBG, they can submit a combined BG for SD &amp; PBG for 03% (or as notified by Govt. Of India/ISRO from time to time) of the value of the Purchase Order within 15 days of award/ release of PO as per the format issued by the purchaser. Combined Bank Guarantee may be furnished in the form of Account Payee Demand Draft, Fixed Deposit Receipt from a scheduled commercial Bank, Bank Guarantee (including e-Bank Guarantee) from a scheduled Commercial bank executed on Rs.200/- non-judicial stamp paper as per the format issued by SDSC SHAR or online payment in an acceptable form and shall be valid till the completion of total contractual obligation (i.e., Supply period PLUS commissioning period (if applicable) PLUS warranty period PLUS 60 days).</p> <p>This will not carry any interest and shall be returned to you after successful completion of contractual obligations against your request. In case of non-performance/poor performance the Bank Guarantee shall be forfeited and in case if the vendor fails to furnish the security deposit within the specified date or extended due date, the Purchase Order/Contract liable to be cancelled. In case of non-performance/poor performance the Bank Guarantee shall be forfeited and in case the vendor fails to furnish the security deposit within the specified date or extended due date, the Purchase Order/Contract shall be cancelled, EMD, if any, made earlier shall be forfeited or other forms of guarantee shall be encashed. Further appropriate penal and legal action shall also be initiated.</p>	Yes / No / Explain	
13	<p>Insurance Being a Govt. Of India Dept., Insurance is not required at our cost. Please ensure the safe delivery of the ordered item with proper transport worthy packing.</p>	Yes / No / Explain	

14	<p>Validity of Offer In case of single part tender - the validity of offers/tenders should be 90 days. In case of two part tender - 120 days from the date of opening of Part-I bid and 60 days from the date of opening of Part-II bid. Tenders shorter than offer validity mentioned above will not be considered for evaluation.</p>	Yes / No / Explain	
15	<p>The bidder shall provide compliance to Order No. F.No.7/10/2021 PPD dated 23.02.2023 and amendments thereof by Ministry of Finance, Department of Expenditure, Public Procurement Division regarding restrictions on procurement from a bidder of a country which shares a land border with India and comply to all the provisions of the Order. In this regard, you shall certify that the bidder entity is not from such a country or, is from such a country, has been registered with the Competent Authority.</p>	Yes / No / Explain	
16	<p>As per the above Order, are you (the Bidder/Company/Entity) OR offering product/service is from such a Country sharing Land border with INDIA.</p>	Yes / No / Explain	
17	<p>Make-In-India (MII) Clause: Provisions contained in Public Procurement Policy (Preference to Make in India), Order 2017 issued by DPIIT vide OM No. P-45021/2/2017-PP(BE-II) dated 16.09.2020 &amp; directives related including latest amendments (if any) is applicable for this tender.</p> <p>You are requested to provide Self Declaration Certificate that the offered Item meets Local Content Requirement of Class 1 or Class 2 as per Make in India(MII) Policy, clearly indicating the Percentage of local content &amp; the details of Location(s) at which value addition is made in the offered product.</p> <p>It may be noted that Local Content shall not include services such as Transportation, Insurance, Installation, Commissioning, Training and after sales service support like AMC/CMC etc.</p>	Yes / No / Explain	

18	<p>Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the BIDDER MUST BE MANUFACTURER OF THE OFFERED PRODUCT in case of bid for supply of goods. TRADERS ARE EXCLUDED from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence along with UDYAM REGISTRATION in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1 plus 15% (Selected by Buyer) of margin of purchase preference/price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 25% (selected by Buyer) percentage of total QUANTITY.</p>	Yes / No / Explain	
19	<p>Are you claiming MSME Preference for this tendered item/service?</p> <p>Note: You should have been the MANUFACTURER of the offered product or SERVICE Provider of the said service (in service tender) as per your MSME Registration. (If YES, valid Udyam Registration documents shall be uploaded. Otherwise your claim will not be considered. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h))</p>	Yes / No / Explain	
20	<p>Please mention in PERCENTAGE the Value addition of offered products happened in INDIA in line with Make In India Policy. (Mandatory). You have to upload MII Deceleration mentioning place and percentage of value addition along with Offer.</p>	Yes / No / Explain	

21	Please Select for the offered Product whether you are: (1) Manufacturer (2) Authorized Agent (3) Distributor (4) Dealer (5) Reseller (6) Others	Yes / No / Explain	
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22	<p>Dispute Resolution:  In the event of any dispute/s, difference/s or claim/s arising out of or relating to the interpretation and application of the Contract, such dispute/s or difference/s or claim/s shall be settled amicably by mutual consultations of the good Offices of the respective Parties and recognizing their mutual interests attempt to reach a solution satisfactory to both the parties.  ? If such a resolution is not possible, within 30 days from the date of receipt of written notice of the existence of such dispute/s, then the unresolved dispute/s or difference/s or claim/s shall be referred to the Sole Arbitrator appointed by the Parties by mutual consent in accordance with the rules and procedures of Arbitration and Conciliation Act 1996 as amended from time to time.  The arbitration shall be conducted in Bengaluru in the Arbitration and Conciliation Centre - Bengaluru (Domestic) as per its rules and regulations.  ? The expenses for the Arbitration shall be shared equally or as may be determined by the Arbitrator.  ? The considered and written decision of the Arbitrator shall be final and binding between the Parties.  ? The applicable language for Arbitration shall be English only.  ? Work under the Contract shall be continued by the CONTRACTOR during the pendency of arbitration proceedings, without prejudice to a final adjustment in accordance with the decision of the Arbitrator unless otherwise directed in writing by the Department of Space or unless the matter is such that the works cannot be possibly continued until the decision (whether final or interim) of the Arbitrator is obtained.  ? Arbitration will be a method of dispute resolution in contracts where the dispute value is lesser than Rs.10 Crore (Rupees Ten Crore) only.  In case order is concluded on the Public Sector Undertakings, the following Arbitration Clause will be applicable:  In the event of any dispute(s) or difference(s) relating to the interpretation and application of the</p>	Yes / No / Explain	
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	provisions of the commercial contracts between ISRO/SDSC SHAR & Central Public Sector Enterprises (CPSEs)/Port Trusts inter se and also between ISRO/SDSC SHAR & CPSEs and Government Departments/Organizations (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute(s) or difference(s) shall be taken by either party for resolution through the ?Administrative Mechanism for Resolution of CPSEs Disputes (AMRCD)?, as mentioned in the Office Memorandum 05/0003/2019-FTS-10937 dated 14th December, 2022 issued by the Director of the Department of Public Enterprises (DPE) under the Ministry of Heavy Industries and Public Enterprises, Government of India.		
23	Do you have Unique GeM Seller ID? If YES, provide details If NO, As per Office Memorandum No 6/9/2020-PPD dated 24/08/2020 of Department of Expenditure, it shall be mandatory for sellers providing Goods and Services to Central Government Organizations to be registered on GeM and obtain a Unique GeM Seller ID, at the time of Placement of Order/acceptance of contract. Tenderers shall ensure the same.	Yes / No / Explain	
24	Address on which PO is to be placed and GSTIN	-	
25	Please provide valid/currently using E-mail Id & Contact no. for seeking further clarifications if any	-	
26	Remarks if any.	-	
27	CURRENCY OF YOUR QUOTE SHALL BE IN INR ONLY. THIS BEING A DOMESTIC TENDER QUOTATIONS IN FOREIGN CURRENCIES SHALL BE SUMMARILY REJECTED	-	

### C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
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1	Refractory blocks :Procurement , Supply, fabrication, erection and application of Refractory Cement along with SS-Anchors, SS-Rods etc. on 1 no of Mobile Launch structure (MLS) as per attached RFP document & drawings .	1.00 Lot		-		
2	Refractory blocks: Procurement, Supply, fabrication, erection and application of Refractory Cement along with SS-Anchors, SS-Rods etc. on 1 no of Jet Duct Deflector (JDD ) as per attached RFP document & drawings .	1.00 Lot		-		

**PROCUREMENT, SUPPLY, ERECTION AND APPLICATION OF**  
**REFRACTORY CEMENT WITH SS-ANCHORS, SS-RODS etc**  
**ON MLS AND JDD**  
**AT**  
**SLC PROJECT SITE**

**SPECIFICATIONS & PRICE SCHEDULE**

OWNER : INDIAN SPACE RESEARCH ORGANISATION

PROJECT : SSLV LAUNCH COMPLEX (SLC)

LOCATION : **SSLV PROJECT OFFICE, SURVEY NO. 260-3C,  
MADHAVANKURICHI VILLAGE – 628206, OPP. TO  
KODAL NAGAR, THIRUCHENDUR TK., TUTICORIN  
DIST., TAMILNADU**



**SSLV LAUNCH COMPLEX (SLC)**  
**SATISH DHAWAN SPACE CENTRE**  
**SRIHARIKOTA -524124**  
**INDIAN SPACE RESEARCH ORGANISATION**

SPEC: SLC/RFA/2026	<b>SSLV LAUNCH COMPLEX (SLC)</b>	SECTION: TITLE
	<b>REFRACTORY CEMENT APPLICATION AT SLC</b>	SHEET 2 OF 3

<b>SPECIFICATIONS &amp; ANNEXURES</b>			
<b>SEC</b>	<b>SPECIFICATION NO</b>	<b>ISSUE NO.</b>	<b>TITLE: REFRACTORY CEMENT APPLICATION AT SLC</b>
<b>SPECIFICATIONS</b>			
A1	SPEC: SLC/RFA/2026	R0	General Terms and Conditions of the Contract
A2	SPEC: SLC/RFA/2026	R0	General Specifications & Project information
B	SPEC: SLC/RFA/2026	R0	Scope of work & Technical Specifications
C	SPEC: SLC/RFA/2026	R0	Quality Assurance Plane
<b>ANNEXURES</b>			
D1	SPEC: SLC/RFA/2026	R0	Schedule of prices & general particulars
D2	SPEC: SLC/RFA/2026	R0	Bid qualification criteria
D3	SPEC: SLC/RFA/2026	R0	Schedule for general particulars / vendor evaluation format
D4	SPEC: SLC/RFA/2026	R0	Exceptions and deviations
D5	SPEC: SLC/RFA/2026	R0	Schedule of bidder's experience
D6	SPEC: SLC/RFA/2026	R0	Data to be filled along with the bid
D7	SPEC: SLC/RFA/2026	R0	Check list

<b>ENCLOSURES</b>		
<b>S.NO</b>	<b>DRAWING TITLE</b>	<b>DRAWING NUMBER</b>
<b>MLS RELATED DRAWINGS</b>		
1.	SECTIONAL VIEW OF PEDESTAL DECK AND CUTOUT DETAILS	10-STR-12-1-23/A1
<b>JDD RELEATED DRAWINGS</b>		
2.1	CONFIGURATION DETAILS FOR JET DEFLECTOR DUCT FOR SSLV LAUNCH COMPLEX AT KULASEKARAPATNAM (SLC PROJECT)	10-STR-12-01-36/AD1/R2
2.2	EP PLATES ARRANGEMENT AT JDD OF SLC	JDD/EP/01

ISSUE R0
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# **SECTION -A1**

## **GENERAL TERMS AND CONDITIONS OF THE CONTRACT**

**PROPOSAL DOCUMENT, CLARIFICATION AND ADDENDUM**

Quotations are invited from the interested bidders for the enclosed scope of work in two-part bid.

**Part-1:** Technical & un-priced part of the work and **Part-2:** Priced commercial part.

***Only experienced Bidders who are qualifying the bid-qualification criterion given in Section D2 shall quote.***

The RFP document is organized in three sections as follows.

Section –A1 : General Terms and Conditions of the Contract

Section –A2 : General Specifications & Project information

Section –B : Scope of work & Technical Specifications.

Section –C : Quality Assurance Plane

Section- D1 to D7: Annexures.

**Title of the proposal:**

**“Procurement, Supply, Erection of Anchor and Application of Refractory Cement on MLS and JDD at SLC Project Site”**

***Situated at***

***“SSLV PROJECT OFFICE, SURVEY NO. 260-3C, MADHAVANKURICHI VILLAGE – 628206, OPP. TO KOODAL NAGAR, THIRUCHENDUR TK., TUTICORIN DIST., TAMILNADU”***

**Date Public Notification issued by ISRO: [as per the notification](#)**

**Last Date of downloading tender Document by tenderer: [as per the notification](#)**

**Last date of submission of tender documents in online by tenderer: [as per the notification](#)**

**Last date of Bid sealing in online by ISRO: [as per the notification](#)**

**1. PROPOSAL DOCUMENT**

1.1. Bidder shall sign & stamp each page of this tender document as token of his acceptance and submit the same during the submission of Part-I bid.

1.2. Proposal documents shall remain the property of SDSC SHAR and shall not be used for any another purpose without the consent of SDSC SHAR.

- 1.3. The proposal shall be completely filled in all respects and shall be tendered together with requisite information & Annexure. Any offer incomplete in any particulars is liable to be rejected.
- 1.4. The Proposal (Unpriced Techno-commercial bid) with a complete set of the required documents shall be submitted in ISRO e-procurement website.
- 1.5. The Proposals shall be submitted on-line before the time limit for bid submission specified in the Letter Inviting Bid.
- 1.7. The Proposal will be opened on the date and on the time specified in the Letter Inviting Bid or as soon thereafter as convenient. Proposal not received in time will not be considered.
- 1.8. Bidders shall set their quotations in firm figures and without variations/additions in the terms of the Proposal documents.
- 1.9. Should there be any ambiguity or doubt as to the meaning of any of the tender clause/condition or if any further information is required, the matter shall be immediately brought to the notice of Head, Purchase & Stores of SDSC SHAR in writing.

## **2. PREPARATION OF BIDS**

### **2.1 SITE VISIT**

Bidder is advised to visit & examine the site and its surrounding to familiarize himself of the existing facilities & environment and shall collect all other information which may require for preparing & submitting the Bid and entering into the contract. Claims and objections due to ignorance of existing conditions or inadequacy of information will not be considered after submission of the Bid and during implementation.

### **2.2 VALIDITY OF OFFER**

Bid shall remain valid for acceptance for a minimum period of 4 (four) months from the due date of submission of the Bid. The Bidder shall not be entitled during the said period to revoke or revise his Bid or to vary the Bid except and to the extent required by SDSC SHAR in writing. Bid shall be revalidated for extended period as required by SDSC SHAR in writing. In such cases, unless otherwise specified, it is understood that validity is sought and provided without varying either the quoted price or any other terms & conditions of Bid finalized till that time.

### **2.3 COST OF BIDDING**

All direct and indirect costs associated with the preparation and submission of bid shall be to Bidder's account and SDSC SHAR will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bid process.

### **2.4 APPLICABLE LANGUAGE/ MEASUREMENTS**

The bid and all correspondence incidentals to and concerning the bid shall be in the English Language. For supporting document and printing literature submitted in any other language, an accurate English Translation shall also be submitted.

Responsibility for correctness in translation shall lie with the Bidder.  
All the measurements shall be given in metric system.

#### 2.5 ARRANGEMENT OF BID

The Bid shall be neatly presented on white paper with consecutively numbered pages. It should not contain any terms and conditions which are not applicable to the Bid. The Bid and all details submitted by the Bidder shall be signed and stamped on each page as token of acceptance, by a person legally authorised to enter into agreement on behalf of the Bidder. (Corrections / alteration, if any, shall also be signed by the same person) and upload in EGPS portal.

#### 2.6 SCHEDULE OF PRICES

The schedule of prices shall be read in conjunction with all the sections of proposal document. The price must be filled online in the same format of 'Schedule of Prices' in Section D1. No copy of price bid shall be enclosed along with other document and upload the same anywhere in the e-procurement portal.

#### 2.7 DOCUMENTS COMPRISING THE BID

Bids shall be arranged in the following order.

##### 2.7.1 Part – I : Technical and Unpriced Commercial Part

Technical and un-priced commercial part shall comprise the attachments, specifying attachment number arranged in the order as follows:

- (a) Submission of bid letter.
- (b) Power of attorney in favour of authorised signatory of the bid / proposal documents.
- (c) All the annexure in Section-D1 to D7 enclosed in proposal duly filled, signed and sealed
- (d) Bid qualification criteria as mentioned in Section-D2 and all supporting documents.
- (e) Write-up on the detailed procedure to be erection at SLC Site of all the items.
- (f) **Unpriced copy of schedule of prices** with all other commercial terms, taxes, duties, exemption certificates and conditions duly filled (**Prices to be kept blank**), signed and stamped.
- (g) Audited balance sheet including profit and loss account for last three financial years showing annual turnover.
- (h) Income tax certificate for last three financial years.
- (i) Solvency certificate from a commercial bank for a value not less than Rs. 150 lakhs and not before 6 months from the date of tender closing.

- (j) Data sheets for all the equipment & checklists enclosed in proposal duly filled, signed & stamped.
- (k) Technical literature & data sheets of equipment / machinery used by him and any other document as mentioned in the proposal.
- (l) Project execution plan.
- (m) Any other relevant document, bidder desires to submit.

### 2.7.2 Part – II: Priced Commercial Bid

Priced commercial bid shall be filled online in the price bid format. Schedule of prices (Section D1) also to be filled in the online format and no separate document shall be attached. Deviations in terms and conditions, assumptions, conditions, discounts etc. shall be stipulated in format specified in the portal.

## 3. BID SUBMISSION

Bids duly filled in by the Bidder should invariably be submitted as stipulated in the Letter inviting bid. Bids shall be submitted in the following manner.

### 3.1 PART – I: UN PRICED TECHNO-COMMERCIAL PART OF THE BID FOR THE WORK

Complete Techno–commercial part of the bid shall be filled online in the “Vendor Specified Terms’ form of the e-tender. Any documents related, technical literature, guarantee / warrantee certificates and any other relevant documents as per the tender shall be scanned in lower resolution format and uploaded to the e-tender under ‘Documents solicited from Vendor’ form only in ISRO e-procurement portal (<https://eprocure.isro.gov.in>).

The deviation statement and checklist shall be filled online, without which the bid will not be considered.

**Any bids/offers with price/cost details in Techno-Commercial Offer (Part –I) shall be rejected.**

### 3.2 PART – II: PRICE PART OF THE BID FOR THE WORK

Price bid shall be filled in the on-line ‘price bid’ form of the e-tender only in ISRO e-procurement <https://eprocure.isro.gov.in>. Any other terms and conditions given in this part shall not be considered and if insisted upon by the Bidder, bids are liable for rejection.

- a) SDSC SHAR may open Part – I of the bid on the due date of opening .Price Bids (Part-II) of technically and commercially acceptable offers shall be opened at a later date.

- b) SDSC SHAR reserves the right to reject any or all the Bids without assigning any reasons thereof.

#### **4. Vendor Evaluation Format**

SDSC SHAR seeks response to the given questionnaire for assimilating data which would be used for evaluating the capability of the supplier for executing the referred work. Hence, the supplier is requested to provide only genuine data and any discrepancy found at a later point of time may result in rejection of the supplier from purchase process. Furnishing of data cannot be construed as automatic qualification for participation in the tender. Questionnaire should be signed by a responsible and authorized person of the Company / Agency.

Schedule of general particulars / vendor evaluation format shall be filled as per Section: D3. Schedule of Bidders experience and details of present works being executed are to be filled as per Section: D5.

Note: In order to consider as valid experience, all the experience has to be supported with the technical details, completion certificate and purchase order.

**If warranted, department/ third party will carry out the inspection of the vendor site / site at which vendor has executed the order for evaluation of the capability and genuineness of the documents.**

#### **5. DETERMINATION OF RESPONSIVENESS**

SDSC SHAR will scrutinize tenders to determine whether the tender is substantially responsive to the requirements of the tender documents. For the purpose of this clause, a substantially responsive tender is one which inter-alia conforms to all the terms and conditions of the entire Tender document without any deviations and reservations. The decision of SDSC SHAR shall be final in this regard.

#### **6. BID EVALUATION**

6.1 During evaluation, SDSC SHAR may request Bidder for any clarification on the bid or additional documents.

6.2 Bidder must provide the point-by-point compliance to the technical specifications along with deviations as per "Schedule of deviations" attached in D4. The tender will be rejected, if the deviations are not acceptable to the Department.

6.3 Performance of Bidder on similar nature of works executed/ under execution shall be taken into consideration before selecting the Bidder for opening his price bid.

6.4 The time schedule for completion is given in the Proposal document. Bidder is required to confirm the completion period unconditionally.

6.5 SDSC SHAR reserves the right to accept a bid other than a lowest and to accept or reject any bid in full or part without assigning any reasons. Such decisions by SDSC SHAR shall bear no liability whatsoever consequent upon such decision.

6.6 The Bidder, whose bid is accepted by SDSC SHAR, shall be issued a Purchase Order (PO) to proceed with the work. Bidder shall confirm acceptance by returning a signed copy of the PO.

SPEC: SLC/RFA/2026

**SSLV LAUNCH COMPLEX (SLC)**

SECTION: A2

**REFRACTORY CEMENT APPLICATION AT SLC**

SHEET : 1 OF 21

# **SECTION –A2**

## **GENERAL SPECIFICATION & PROJECT INFORMATION**

## 1. INTRODUCTION

Specification of "Procurement, Supply, Erection of Anchor Fasteners and Application of Refractory Cement at SLC Project Site".

## 2. SCOPE OF WORK AND TECHNICAL SPECIFICATIONS

The detailed scope of work and technical specifications are given in Sections B of this document. The general terms and conditions are given below.

## 3. SUPPLIER'S OBLIGATIONS & FUNCTIONS

### 3.1 SPECIFICATIONS AND DRAWINGS

Supplier shall execute the works in compliance with the provisions of Contract, good engineering practices and codes requirements.

### 3.2 SUBMISSION OF TECHNICAL DOCUMENTS

Supplier shall prepare and submit to SDSC SHAR for approval of following documents and drawings:

- Technical literatures & data sheets of equipment used by him.
- Erection sequence schedule along with erection drawings.
- Detailed Quality Assurance Plan.
- No activity shall be executed unless SDSC SHAR's approval is obtained. The above documents shall be submitted in a format approved by SDSC SHAR.

### 3.3 FABRICATION & SUPPLY

Supplier shall carry out detailed engineering, fabrication and supply the Anchor and other associated items in accordance with the scope, technical specifications and terms & conditions of contract.

### 3.4 DELIVERY AND STORAGE

- Dispatch Instructions given in the Contract shall be strictly followed. Failure to comply with the instructions may result in delay in payment apart from imposing any other charges as may be deemed to fit.
- The Supplier shall be responsible for transporting all the items to site, unloading and storage.
- **Since, SLC site is a new place, no shelters or storage places are available to store the items. It is the responsibility of the party to store the item near to site with proper protections.**
- Supplier shall take proper care while storing the items and shall provide watch & ward at his own cost.

#### **4. INSTALLATION**

##### **4.1 GENERAL**

- Supplier's staff shall include adequate number of competent erection and application engineers with proven experience on similar works to supervise the erection works and sufficient skilled, unskilled and semiskilled labour to ensure completion of work in time.
- Supplier's staff shall arrive at site on date agreed by department. Prior to proceeding to work, Supplier shall however, first ensure that required/sufficient part of his supply has arrived at site.
- Erection of the anchors and application of the Refractory cement may be phased in such a manner so as not to obstruct the work being done by other Suppliers and / or operating staff who may be present at that time.
- During erection, Department's quality team / their engineer will visit site from time to time with or without Supplier's engineer to establish conformity of the work with specification. Any deviations, deficiencies or evidence of unsatisfactory workmanship shall be corrected as instructed by Department.
- Supplier shall carry out work in a true professional manner and strictly Adhere to the approved drawings. Any damage caused by Supplier during erection/application to the new or existing building / items/ environment shall be made good at no extra cost to Department.

##### **4.2 RECORDS**

Supplier shall maintain records pertaining to the quality of erection and application work in a format approved by Department. Whenever erection work is complete at site, Supplier shall call for inspection to Department's engineer who along with Supplier's engineer will sign such records on acceptance.

##### **4.3 ERECTION**

- Supplier shall carry out the works in accordance with the specific instructions given on the approved drawings, method statements, manufacturer's drawings / documents or as directed by Department.
- Items as described in the forth coming sections shall be erected/installed in neat manner so that they are properly aligned and oriented.
- At site, no items shall be welded or bolted, until its alignment is checked and found acceptable by Department.

- Supplier shall provide all supervision, labour, tools, machines, cranes, equipments, scaffolding, rigging material and incidental material such as bolts, wedges, anchors, compressors etc. required to complete the works.
- Supplier shall also provide at his own cost all such consumables like oxygen - acetylene gas, welding rods, grinding wheels, temporary supports, shims etc. required to complete work.
- Supplier shall take utmost care while handling instruments, delicate items, etc. and protect all such items during erection.

**4.4 SAFETY**

Supplier shall follow the safety regulations / codes and shall take necessary measures at his own cost.

**4.5 ERECTION & CONSTRUCTION POWER**

- As the site is not fully established and no power supply is available at site, Vendor has to arrange required electrical power for completing this order.
- Material handling equipment required for loading or unloading items, erection of anchors and application of Refractory Cement at SLC site is in the scope of vendor.
- Arranging the Material handling equipment for loading/ unloading and movement of items or any other required materials etc., from storage yard to the erection site including manpower is in the scope of vendor.
- Storing of the supplied items till the completion of work at SLC site is in the scope of vendor, no separate shelter will be provided for storage.

**4.6 SITE PREPARATION / CLEARANCE**

- No site preparation works are planned by SLC Project for site fabrication, erection and application works.
- Preparation of required site for any fabrication, approach and application requirements for handling the items shall be in scope of Supplier.
- Upon completion of work, Supplier shall remove all his equipment and material from the site within one month or time mutually agreed.
- Supplier at all times shall keep site in clean condition and remove all unwanted material at regular intervals.
- In case Supplier fails to remove all their equipment and material within the mutually agreed time, it is deemed that department will arrange to remove the same at Supplier's cost.

**4.7 ACCOMMODATION**

- Accommodation will not be provided by department to Contractors.
- Supplier shall make their own arrangement for accommodation, transportation & canteen facility for all his staff, technicians, labour & workers.

**4.8 MEDICAL FACILITIES**

No medical facilities will be provided by department. Supplier shall make their own arrangement at their own expenses for medical facilities for site personnel.

**4.9 WORK PROGRAMME**

Supplier shall prepare a detailed program schedule for review / approval by department. Supplier as per exigencies of work shall revise and update programme periodically.

**4.10 SUB-CONTRACTS**

- No work shall be sub-contracted without prior approval of department.
- Supplier shall be responsible for the proper execution of any sub-contract placed by him in connection with this purchase order.
- Supplier shall furnish to department the copies of all un-priced sub-orders showing promised delivery dates and places.

**4.11 CHANGES AND MODIFICATION TO SPECIFICATIONS, DRAWINGS AND QUALITATIVE / QUANTITATIVE REQUIREMENTS**

- Supplier shall obtain approval from department before initiating the action for procurement and fabrication of items.
- During the fabrication review, supplier has to carry out the mutually agreed modifications to meet the overall requirement.

**5. TAXES AND DUTIES**

- As per the Notification No. 9/2025-Central Tax (Rate) DT: 17.09.2025 S.No.462 (Schedule I, 88 or any other chapter) issued by Ministry of Finance (Dept. of Revenue) & Government of Andhra Pradesh, Revenue (Commercial Taxes) Department, G.O.MS.No. 345 Dated: 20.09.2025 S.No.462 (Schedule I, 88 or any other chapter) and as per the Notification No. 9/2025-Integrated Tax (Rate) dt:17.09.2025 S.No.462 (Schedule I, 88 or any other chapter) issued by Ministry of Finance (Dept. of Revenue), SDSC SHAR is eligible to avail GST/IGST @5% for the procurements related to Scientific and technical instruments, apparatus, equipment, accessories, parts, components, spares, tools, mock ups and modules, raw material and consumables required for launch vehicles and satellites and

payloads. We will issue only End User Certificate for availing GST/IGST @5%. Hence, kindly confirm your acceptance and submit your price quotation accordingly.

- It is the responsibility of the contractor to issue the Tax Invoice strictly as per the format prescribed under the relevant applicable GST law (CGST Act/SGST Act/UTGST Act/IGST Act). Contractor to indicate the proper GSTN Registration/ HSN code in their tax invoices.
- CGST/SGST/UTGST/IGST shall be paid at actual against Tax Invoice but restricted to the amount and percentage in the contract.
- GST details of SDSC SHAR are given below:
  - Designation : Senior Accounts Officer
  - GSTIN : 33HYDF00385A1D7

#### **6. STATUTORY VARIATION**

- Statutory variation for CGST/SGST/UGST/IGST is applicable, provided the actual completion of services does not occur beyond the period stipulated in the order/contract or any extension (without levy of penalty). For variation after the agreed completion periods, the service provider alone shall bear the impact for the upwards revisions.
- For downward revisions, the Department shall be given the benefit of reduction in CGST/SGST/UGST/IGST.

#### **7. RISK COVERAGE**

- The Supplier shall arrange comprehensive risk coverage for his personnel and equipments at his own cost covering the value of equipment including transportation to the site storage at site till completion of works at site. The period of such coverage shall be up to contractual completion period or any extension granted by Department thereof.
- The purchaser shall not be responsible for any type of risk allowance. This is solemnly lying with service provider.

#### **8. SAFETY CLAUSE**

- The contractor shall take all safety precautions and ensure the safety of his workmen. SDSC SHAR is not responsible for injury / loss of life due to any accident / explosion during the execution of the contract.

**9. INCOME TAX**

Income tax at the prevailing rate as applicable from time to time shall be deducted from the Supplier's bills as per Income Tax Act, 1961 and the rules there-under or any re-enactment or modifications thereof and a TDS certificate shall be issued.

**10. BANK GUARANTEE FOR SECURITY DEPOSIT, PERFORMANCE BANK GUARANTEE:****10.1. PERFORMANCE BANK GUARANTEE (PBG):**

A Bank Guarantee for 3% of the order value (or as notified ISRO from time to time) shall be provided towards the performance of the system. PBG may be furnished in the form of Insurance Security Bonds, Account Payee Demand Draft, Fixed Deposit Receipt from a commercial Bank, Bank Guarantee (including e-Bank Guarantee) from a Commercial bank executed on Rs.200/- non-judicial stamp paper or online payment in an acceptable form valid till the successful completion of warranty period plus 60 days. This will not carry any interest and shall be returned to you after successful completion of warranty period against your request. In case of non-performance/poor performance the Bank Guarantee shall be forfeited and necessary action as per departmental procedures will be initiated.

**10.2. SECURITY DEPOSIT (SD)**

If Order value exceeds Rs.5 Lakh, Security Deposit shall be submitted for 3% of the order value (or as notified by ISRO from time to time) in single installment through Insurance Surety Bonds/ Account Payee Demand Draft/ Bankers Cheque/ Fixed Deposit Receipts or Bank Guarantee (including e-Bank Guarantee) from a Commercial bank executed on Rs.200/- non-judicial stamp paper or payment online in an acceptable form within 14 days after receipt of Purchase Order valid till completion of the Delivery period plus 60 days claim period. This security deposit shall not carry any interest and shall be returned to you only after successful completion of total scope of work. In case of poor performance/ non performance of the contractual obligation security deposit shall be forfeited. In case of non submission of Security deposit within the stipulated period, this order shall be liable to be cancelled and necessary action as per departmental procedures will be initiated.

**10.3. COMBINED BG FOR PBG CUM SD**

In case vendors are unable to submit two separate BG for SD and PBG, to ensure due performance of the contract, please furnish performance security for 3% of the

value of the Purchase Order within 15 days of award/release of GeM contract/PO as per the format issued by the purchaser. Performance Security may be furnished in the form of Insurance Security Bonds, Account Payee Demand Draft, Fixed Deposit Receipt from a commercial Bank, Bank Guarantee (including e-Bank Guarantee) from a Commercial bank executed on Rs.200/- non-judicial stamp paper or online payment in an acceptable form and shall be valid till the completion of total contractual obligation (i.e., Supply period PLUS commissioning period (if applicable) PLUS warranty period PLUS 60 days). This will not carry any interest and shall be returned to you after successful completion of contractual obligations against your request. In case of non-performance/poor performance/breach of contractual obligations, bank Guarantee shall be forfeited and in case if the vendor fails to furnish the performance security deposit within the specified date, the Purchase Order/Contract liable to be cancelled and necessary action as per departmental procedures will be initiated.

**Note: No interest shall be payable on any bank guarantee.**

#### **11. PACKING AND FORWARDING**

- The Supplier shall arrange to have all the material suitably packed as per the standards and as specified in the contract. Unless otherwise provided for in the contract, all containers (including packing cases, boxes, tins, drums, and wrappings) used by the Supplier shall be non-returnable.
- All packing and transport charges, transit handling costs and transport fees of agents employed at the place of delivery or elsewhere, shall be deemed included in the price to be paid to the Supplier.

#### **12. ARBITRATION**

- In the event of any dispute/s, difference/s or claim/s arising out of or relating to the interpretation and application of the Contract, such dispute/s or difference/s or claim/s shall be settled amicably by mutual consultations of the good Offices of the respective Parties and recognizing their mutual interests attempt to reach a solution satisfactory to both the parties.
- If such a resolution is not possible, within 30 days from the date of receipt of written notice of the existence of such dispute/s, then the unresolved dispute/s or difference/s or claim/s shall be referred to the Sole Arbitrator appointed by the Parties by mutual consent in accordance with the rules and procedures of Arbitration and Conciliation Act 1996 as amended from time to time.

- The arbitration shall be conducted in Bengaluru in the Arbitration and Conciliation Centre - Bengaluru (Domestic) as per its rules and regulations.
- The expenses for the Arbitration shall be shared equally or as may be determined by the Arbitrator.
- The considered and written decision of the Arbitrator shall be final and binding between the Parties.
- The applicable language for Arbitration shall be English only.
- Work under the Contract shall be continued by the CONTRACTOR during the pendency of arbitration proceedings, without prejudice to a final adjustment in accordance with the decision of the Arbitrator unless otherwise directed in writing by the Department of Space or unless the matter is such that the works cannot be possibly continued until the decision (whether final or interim) of the Arbitrator is obtained.
- Arbitration will be a method of dispute resolution in contracts where the dispute value is lesser than Rs.10 Crore (Rupees Ten Crore) only.

***In case order is concluded on the Public Sector Undertakings, the following Arbitration Clause will be applicable:***

In the event of any dispute(s) or difference(s) relating to the interpretation and application of the provisions of the commercial contracts between ISRO/SDSC SHAR & Central Public Sector Enterprises (CPSEs)/Port Trusts inter se and also between ISRO/SDSC SHAR & CPSEs and Government Departments/Organizations (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute(s) or difference(s) shall be taken by either party for resolution through the “Administrative Mechanism for Resolution of CPSEs Disputes (AMRCD)”, as mentioned in the Office Memorandum F No. 4(1)/2013-DPE(GM)/FTS-1835 dated 22nd May, 2018 issued by the Director of the Department of Public Enterprises (DPE) under the Ministry of Heavy Industries and Public Enterprises, Government of India.

**13. APPLICABLE LAW AND JURISDICTION**

The laws of India shall govern this purchase order for the time being in force. The Courts of Andhra Pradesh, India only shall have jurisdiction to be with and decide any legal matters or disputes what so ever arising out of the purchase order.

**14. FORCE MAJEURE**

A Force Majeure (FM) means extraordinary events or circumstance beyond human control such as an event described as an act of God (like a natural calamity) or events such as a war, strike, riots, crimes (but not including negligence or wrong-doing, predictable/seasonal rain and any other events specifically excluded in the clause). An FM clause in the contract frees both parties from contractual liability or obligation when prevented by such events from fulfilling their obligations under the contract. An FM clause does not excuse a party's non-performance entirely, but only suspends it for the duration of the FM. The firm has to give notice of FM as soon as it occurs (say, not later than 14 days after its occurrence), and it cannot be claimed ex-post facto. There may be a FM situation affecting the purchase organisation only. In such a situation, the purchase organisation is to communicate with the supplier along similar lines as above for further necessary action. If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of FM for a period exceeding 90 (Ninety) days, either party may at its option terminate the contract without any financial repercussion on either side. Notwithstanding the punitive provisions contained in the contract for delay or breach of contract, the supplier would not be liable for imposition of any such sanction so long as the delay and/ or failure of the supplier in fulfilling its obligations under the contract is the result of an event covered in the FM clause.

**15. WARRANTY**

- The bidder shall provide **12 months** warranty for the entire system for a defect liability, after final official handing over at his cost. During this period, supplier has to provide and adhere to the following:

**16. SCHEDULE OF PRICE**

- CONTRACT price shall include all costs of "Procurement, Supply, Erection of Anchor and Application of Refractory Cement at SLC Project Site" as per this contract, transport to site, unloading, storage, all risk coverage, erection, installation and application of Refractory Cement including any other cost for proper and complete execution of the CONTRACT.
- CONTRACT prices shall also include all travelling expenses, living expenses, salaries, overtime, benefit and any other compensation for engineers, supervisors, skilled, semiskilled workmen, watch and ward staff, labours and other staff employed by the Supplier, cost of tools and tackles required for erection and other consumable material required, and all taxes, duties, and levies as applicable on the date of submission of bid.

- Supplier shall quote the prices similar to price bid format enclosed as Section – D1 only in online. The rate quoted shall be on FOR SLC site, Tuticorin, Tamil Nadu, basis.

**17. DISCOUNTS**

Tenderer shall not indicate any discount separately and quoted price should be after deducting the discount.

**18. TERMS OF PAYMENTS**

General guideline terms of payments are as indicted below. Any deviation to these payment terms to be brought out.

**A. For MLS****OPTION-1:**

- I. **30% of PO value for MLS application** as Advance against submission of Advance Bank Guarantee (ABG) for an equal amount from a commercial bank and shall be valid till Contract completion period plus 60 days claim period.
- II. **70% of PO value for MLS application with GST** after successful application of the Refractory cement in all respect, duly accepted by Department at departmental site.

**Note: Interest on advance will be loaded in cost to arrive L1**

**OR**

**OPTION-2:**

**100% of PO value for MLS application with GST** shall be made within 30 days of Supply, Erection of Anchors, Meshes, etc., application of Refractory cement as per Specifications and CLIP acceptance by the department of the item at our site against submission of PBG.

**B. For JDD****OPTION-1:**

- I. **30% of PO value for JDD application** as Advance against submission of Advance Bank Guarantee (ABG) for an equal amount from a commercial bank and shall be valid till Contract completion period plus 60 days claim period.
- II. **70% of PO value for JDD application with GST** after successful

application of the Refractory cement in all respect, duly accepted by Department at departmental site.

**Note: Interest on advance will be loaded in cost to arrive L1**

**OR**

**OPTION-2:**

**100% of PO value for JDD application with GST** shall be made within 30 days of Supply, Erection of Anchors, Meshes, etc., application of Refractory cement as per Specifications and CLIP acceptance by the department of the item at our site against submission of PBG.

**19. TERMS AND CONDITIONS APPLICABLE FOR ADVANCE PAYMENT.**

- a) Wherever advance payment is requested, Bank Guarantee from any commercial bank on Rs.200 non-judicial stamp paper should be furnished for the equivalent amount as per the format issued by SDSC SHAR valid till completion of total scope of work plus 60 days.
- b) After drawl of advance payments, if the vendor/supplier is not supplying the material within the delivery schedule, the advance amount will be recovered and interest will be levied as per the RBI Prime Lending Rate or similar rate published by RBI plus 2% penal interest.
- c) In case of any delay attributable to the contractor/supplier in effecting the supply after the prescribed delivery date. Interest at RBI Prime Lending Rate or similar rate published by RBI will be charged for the period beyond the specified delivery date, on the amount of balance advance payment in addition to LD.
- d) Interest will be loaded for advance payments/stage payments as per the RBI Prime Lending Rate or similar published by RBI and will be added to the landed cost for comparison purpose. In case of different milestone payments submitted by the parties, a standard and transparent methodology like NPV will be adopted for evaluating the offers.

**20. DELIVERY SCHEDULE**

- The realization of fabrication works within the schedule is very essential. Hence, bidders are requested to adhere to the schedules given below.
- Contractor shall follow the following schedule for executing the contract:

S. No	Description of Target	Responsibility	Target Completion Date (in months)
1.	Purchase Order release	Dept.	T0

2.	Submission of QAP	Vendor	T0 + 15 days
3.	Department clearance for QAP	Dept	T0+ 20 days
4.	Department clearance for erection and application of Refractory cement on MLS	Dept	T1
5.	Procurement, Fabrication, Supply, transportation, Erection of Anchor and Application of Refractory cement for MLS	Vendor	T1 + 2 months
6.	Department clearance for erection and application of Refractory cement for JDD	Dept.	T2
7.	Procurement, Fabrication, Supply, transportation, Erection of Anchor and Application of Refractory cement for JDD	Vendor	T2 + 2 months from the date of site clearance for erection

**Note: Site clearance for starting erection and application will be given by department via official correspondence.**

**Bidder shall ensure that they are ready for working in both MLS & JDD at the same time.**

## 21. LIQUIDATED DAMAGES

In the event of the Supplier failing to complete the work within the delivery period specified in the contract agreement or in extension agreed thereto, Department shall reserve the right to recover from the Supplier as liquidated damages, a sum of 0.5 percentage per week or part thereof of the undelivered portion of the total contract price of equipment or work. However, the total liquidated damages shall not exceed 10.0 percentage of the total contract price.

## 22. DISCLOSURE AND USE OF INFORMATION

- If the documents supplied by SDSC SHAR are marked "Strictly Confidential", Supplier shall take all necessary steps to ensure the same.
- Supplier shall guarantee that all information and data received during execution of Purchase Order from SDSC SHAR shall be classified as "confidential" within the meaning of the Official Secrets Act and will not be divulged to any third party without prior written permission of SDSC SHAR. All drawings & documents shall be returned after execution of work.
- No publicity of any kind whatsoever regarding this work shall be given without prior clearance from SDSC SHAR.

## 23. ACCEPTANCE AND REJECTION:

- On completion of the work or part of the work as specified in the contract, the representative of the Department referred to, shall check as soon as possible, but in

any event within one month of notification of readiness for acceptance that the work performed complies with the contract requirements as regards quantity and quality.

- In the event of rejection of any of the articles, whereby the Supplier feels himself aggrieved, he may within eight days of the receipt of notification of rejection and before such articles have been removed from the place of inspection, give the Department notice of objection. Such objection shall be considered by a Board of Appeals of the Department. The Department shall, without prejudice to the arbitration clause in the contract, take a decision upon presentation of the Board's findings.
- On completion of tests, the members of the Inspection Organization of the Department or Inspection agency appointed by Department shall prepare a report, which must be countersigned by the Supplier.

#### **24. SUSPENSION**

- Department may notify the Supplier to suspend performance of any or all of his obligations under the Contract. Such notice will specify the reasons for suspension and the effective date of suspension. Supplier there upon shall suspend the performance of such obligations until ordered in writing to resume performance of Contract by Department.

#### **25. CANCELLATION**

##### **a) GENERAL RULE**

The Department shall have the right at any time to cancel a contract either wholly or in part by giving written notice by registered mail. From the time of receipt of the written notice, the Supplier shall undertake to observe the instructions of the Department as to the winding up of the contract both on his own part and on the part of his sub-Suppliers.

##### **b) WITHOUT FAULT OF SUPPLIER**

- In the case of cancellation of a contract by the Department without any fault of the Supplier, the Supplier shall on receipt of Department's instructions forthwith take the necessary steps to implement them. The period to be allowed to implement them shall be fixed by the Department after conclusion with the Supplier and, in general, shall not exceed three months.
- Subject to the Supplier confirming, Department shall take over from the Supplier at a fair and reasonable price all finished parts not yet delivered to the Department, all unused and undamaged material, bought-out components and articles in course of manufacture in the possession of the supplier and property obtained by or supplied to the Supplier for the performance of the contract, except such material, bought-out components and articles in course of manufacture as the supplier shall, with the agreement of the Department, elect to retain.

**c) WITH FAULT OF SUPPLIER:**

- The Department reserves the right, after full consideration of all relevant circumstances, including the observations of the supplier, to cancel a contract in any of the following circumstances.
- In the event of the Supplier's failure to meet
  - I. The Technical requirements of the Supplier.
  - II. The Progress and/or delivery requirements.
- If the Supplier has not observed the provisions of the contract concerning the disclosure and use of information provided by the Department.
- If the Supplier fails to comply with the provisions of the contract concerning the equipment, supplies and technical documents made available by the Department.
- If the Supplier transfers his contract without the Department's authorization or concludes sub-contracts against the Department's explicit directives.
- In the event that Supplier unjustifiably repudiates the Contract or fails to ship or dispatch all or part of the goods ordered for reasons other than those attributed to the Department's actions or as provided in the Force Majeure clause, the Department may, by giving an appropriate notice in writing to the Supplier, fix a Date of Essence by which the Supplier must complete the dispatch in full. If the Supplier fails to do so, the Department, in addition to his right to recover Liquidated Damages in terms of the Contract, shall also have the right to cancel this Contract and make substitute purchases from other sources. If the goods are in a partial state of fabrication, Department may have the fabrication completed by other means, in which event Supplier shall be liable to Department for the additional expenses incurred thereby, but shall not have any claim on savings, if any, in such cases.
- In the event of such cancellation, the Department shall unless otherwise specified in the contract, only pays.
  - In the case of a fixed-cost contract for the supply of equipment or material. The contractual value of items delivered and accepted under the contract before receipt of notification of cancellation, or to be accepted under the special conditions of cancellation.
  - In the other cases. Fair and reasonable price in respect of such work as has been carried out prior to the receipt by the Supplier of notification of cancellation.

**26.FRAUDULENT PRACTICES, BRIBERY AND CORRUPTION OF GOVERNMENT SERVANTS**

The Supplier represents and undertakes that he has not given, offered or promised to give, directly or indirectly any amount, gift, consideration, reward, commission, fees, brokerage or inducement to any person in service of the department or otherwise in procuring the contracts or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the contract or any other contract with the Government for obtaining a contract or showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with the government. Any breach of the aforesaid undertaking by the contract or any one employed by him or acting on his behalf or for his benefit (whether with or without the knowledge of the Supplier) or the commissioning of any offence by Supplier or any one employed by him or acting on his behalf, as defined in chapter IX of the Indian Penal code, 1860 or the prevention of corruption Act. 1947 or any other Act enacted for the prevention of corruption shall, without prejudice to any other legal action, entitle the Department to cancel the contract either wholly or in part, and all or any other contracts with Supplier and recover from the Supplier such amount or the monetary value thereof and the amount of any loss arising from such cancellation without any entitlement or compensation to the Supplier. The Department will also have the right to recover any such amount from any contracts concluded earlier between the Supplier and the Government of India. The Supplier will also be liable to be debarred from entering into any contract with the Government of India for a minimum period of five years. A decision of the Department to the effect that a breach of the undertaking had been committed shall be final and binding on the Supplier.

**27. RISK AND COST PURCHASE:**

Timely delivery of goods/services is of prime importance and where the vendor fails to fulfil their contractual obligations, the Procuring Entity shall be entitled, and it shall be lawful on his part, to procure Stores and/ or services similar to those ordered/cancelled, with such terms and conditions and in such manner as it deems fit at the "Risk and Cost" of the Contractor and the Contractor shall be liable to the Procuring Entity for the extra expenditure, if any, incurred or accrued by the Procuring Entity for arranging such procurement. However, the Contractor shall not be entitled to benefits if any, from such procurements.

Prior to resorting to risk purchase the Purchaser shall consider impact of the default by the contractor, proper notice to the contractor to invoke risk purchase clause and method of recovering the additional amount spent by the Purchaser. The cost as per risk purchase exercise may be recovered from the Earnest Money Deposit/ Security Deposit/ Performance Security of the supplier and/or bills submitted by the supplier against the same contract or any other contract. GST will be charged / levied on Risk Purchase as per the provision of GST Act Rule thereon.

Risk purchase action may be initiated under any of the following conditions.

- a. When the supplier fails to deliver the materials even after extending the delivery period.
- b. When the supplier fails to respond to purchases request for supply of the materials and fails to provide any genuine and bonafide reason for the delay in supply.
- c. When the supplier breaches any of the terms and conditions of the supply order/ contract and as a result fails to execute the order satisfactorily.

#### **28. LAND BORDER SHARING DECLARATION:**

The bidder shall provide compliance to Order No. F.No.7/10/2021 PPD dated 23.02.2023 and amendments thereof by Ministry of Finance, Department of Expenditure, Public Procurement Division regarding restrictions on procurement from a bidder of a country which shares a land border with India and comply to all the provisions of the Order. In this regard, you shall certify that the bidder entity is not from such a country or, is from such a country, has been registered with the Competent Authority.

#### **29. MAKE-IN-INDIA (MII) CLAUSE:**

- **Preference to Make in India: Class-I Local Supplier and Class-II Local Supplier are eligible to bid in terms of Public Procurement (Preference to Make in India), Order 2017 – Revision dated 04.06.2020 and 19.07.2024 issued by Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India.**
- **Eligibility of ‘Class-1 local supplier/Class-II local supplier’/Non-local suppliers’ for different types of procurement:**
  - I. In procurement of all goods services or works in respect of which the Nodal Ministry/Department has communicated that there is sufficient local capacity and local competition, only ‘Class-I local supplier’, as defined under the Order, shall be eligible to bid irrespective of purchase value.
  - II. Only ‘Class-I local supplier and class-II local supplier, as defined under the Order, shall be eligible to bid in procurements undertaken by procuring entities, except when Global tender enquiry has been issued in global tender enquiries. ‘Non-local suppliers’ shall also be eligible to bid along with “Class-I local suppliers and Class-II local suppliers. In procurement of all goods, services of works, not covered by sub-para (i) above and with estimated value of purchases less than Rs.200 Crore, in accordance with Rule 161(iv) of GFR,2017, Global tender enquiry shall not be issued except with the approval of competent authority as designated by Department of Expenditure.
  - III. For the purpose of this Order, works includes Engineering Procurement and Construction (EPC) contracts and services include System Integrator (S) contracts.
- **Local Content:**
  - I. Local content means the amount of value added in India which shall be the total value of the item procured (excluding net domestic indirect taxes) minus the value of

imported content in the item (including all customs duties) as a proportion of the total value in percent.

- II. It shall be noted that Local Content shall not include services such as Transportation, Insurance, Installation, Commissioning, Training and after sales service support like AMC/CMC etc.
- III. Imported items sourced locally from resellers/distributors, license fees/royalties paid/ technical charges paid out of India, procurement/Supply of repackaged/refurbished/rebranded, shall be excluded from the calculation of local content.
- IV. For contract involving supply of multiple items, weighted average of all items has to be taken while calculating the local content.

**A. Purchase Preference:**

- a) Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to 'Class-1 local supplier' in procurements undertaken by procuring entities in the manner specified here under.
- b) In the procurements of goods or works, which are covered by para (ii) above and which are divisible in nature, the 'Class-I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier' as per following procedure:
  - Among all qualified bids, the lowest bid will be termed as L1, if L1 is 'Class-I local supplier, the contract for full quantity will be awarded to L1.
  - If L1 bid is not a 'Class supplier' 50% of the order quantity shall be awarded to L1. Therefore, the lowest bidder among the Class-1 local supplier will be invited to match the L1 price for the remaining 50% of quantity subject to the Class-I local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such 'Class-1 local supplier' subject to matching the L1 price. In case such lowest eligible 'Class-I supplier' fails to match the L1 price or accepts less than the offered quantity, the next higher 'Class-I supplier' within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on Class-I suppliers, then such balance quantity may also be ordered on the L1 bidder.
- c) In the procurements of goods or works, which are covered by para (ii) above and which are not divisible in nature and in procurement of services where the bid is evaluated on price alone, the 'Class-I local supplier shall get purchase preference over 'Class-II local supplier as well as 'Non-local supplier, as per following procedure:
  - Among all qualified bids, the lowest bid will be termed as L1 if L1 is Class-I local supplier, the contract will be awarded to L1.

- If L1 is not 'Class-I local supplier' the lowest bidder among the 'Class-I local supplier', will be invited to match the L1 price subject to 'Class-I local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such 'Class-I local supplier subject to matching the L1 price.
  - In case such lowest eligible 'Class-1 local supplier fails to match the L1 price, the 'Class-I local supplier with the next higher bid within the margin of purchase reference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the 'Class-I local supplier' within the margin of purchase preference matches the L1 price, the contract may be awarded to the L1 bidder.
- d) "Class-II local supplier" will not get purchase preference in any procurement undertaken buy procuring entities.

**B. Applicability in tenders where contract is to be awarded to multiple bidders-**

In tenders where contract is awarded to multiple bidder's subject to matching of L1 rates or otherwise, the 'Class -I local supplier' shall get purchase preference over 'Class-II local supplier' as well as 'Non-local supplier', as per following procedure:

- In case there is sufficient local capacity and competition for the item to be procured, as notified by the nodal Ministry, only Class I local suppliers shall be eligible to bid. As such, the multiple suppliers, who would be awarded the contract, should be all and only 'Class 1 local suppliers.
- In other cases, 'Class II local suppliers' and 'Non-local suppliers' may also participate in the bidding process along with 'Class I Local suppliers' as per provisions of this Order.
- If 'Class I Local suppliers qualify for award of contract for at least 50% of the tendered quantity in any tender, the contract may be awarded to all the qualified bidders as per award criteria stipulated in the bid documents. However, in case 'Class I Local suppliers' do not qualify for award of contract for at least 50% of the tendered quantity, purchase preference should be given to the 'Class I local supplier' over 'Class II local suppliers'/ 'Non local suppliers' provided that their quoted rate falls within 20% margin of purchase preference of the highest quoted bidder considered for award of contract so as to ensure that the 'Class I Local suppliers' taken in totality are considered for award of contract at least 50% of the tendered quantity.
- First purchase preference has to be given to the lowest quoting 'Class-I local supplier'. Whose quoted rates fall within 20% margin of purchase preference, subject to its meeting the prescribed criteria for award of contract as also the constraint of maximum quantity that can be sourced from any single supplier. If the lowest quoting 'Class – I local supplier', does not qualify for purchase preference because of aforesaid constraints or does not accept the offered quantity, an opportunity may be given to next higher 'Class-I local supplier', failing within 20% margin of purchase preference, and so on.

**C. Verification of Local Content:**

- The 'Class-I local supplier'/ 'Class-II local supplier' at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for 'Class-I local

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<p>supplier/ 'Class-II local supplier', as the case may be. They shall also give details of the location(s) at which the local value addition is made.</p> <ul style="list-style-type: none"> <li>• In cases of procurement for a value in excess of Rs. 10 Cr., the 'Class-I local supplier'/ 'Class-II local supplier' shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.</li> <li>• The Bidder shall give self-certification for local content in the quoted item (goods/works/services) at the time of tendering. However, at the time of execution of the project, for all contracts above INR 10 Crore, the contractor/ supplier shall be required to give local content certification duly certified by cost/ chartered accountant in practice. For cases where it is not possible to provide certification by Cost/ Chartered Accountant at the time of execution of project, the supplier shall be permitted to provide the certificate for local content from Cost/Chartered Accountant after completion of the contract, within time limit acceptable to the procuring entity. In case the contractor/supplier does not meet the stipulated local content requirement and the category of the supplier changes from Class-I to Class-I or from Class-II to Non-local, a penalty up to 10% of the contract value shall be imposed. However, contract once awarded shall not be terminated on this account.</li> <li>• False declarations will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.</li> <li>• Certification/ Declaration under preference to Make in India order indicating the percentage of local content in the goods, services or works offered for procurement shall be submitted.</li> </ul> <p><b><u>"Purchase preference to MSE/MII-Class-I local suppliers will be as per notification No.F.1/4/2021-PPD dated 18-05-2023 and its directives/amendments thereof issued by Ministry of Finance, Department of Expenditure, And Public Procurement Division".</u></b></p> <p><b>30. PURCHASE PREFERENCE TO MICRO AND SMALL ENTERPRISES (MSES):</b></p> <p>Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1 PLUS 15% of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 100% of total QUANTITY or as defined in the RFP/Tender.</p>		

**PROJECT INFORMATION**

- 1.0 Project Title : SSLV LAUNCH COMPLEX (SLC)
- 2.0 Location of Plant : SSLV LAUNCH COMPLEX, SSLV PROJECT OFFICE, SURVEY NO. 260-3C, MADHAVANKURICHI VILLAGE – 628206, OPP. TO KODAL NAGAR, THIRUCHENDUR TK., TUTICORIN DIST., TAMILNADU
- 3.0 Elevation : 22 m
- 4.0 Access to Site : Road about 21km from Thiruchendur and about 46km from Koodankulam approximately.
- 5.0 Terrain : Uneven with level varying significantly.
- 6.0 Climatic Conditions
- a) Temperature
- Mean of daily max : 34 °C
- Mean of daily min. : 28 °C
- Maximum Temperature : 39 °C
- Design ambient temperature for performance guarantee : 45.0 °C
- b) Relative humidity
- i. Range : 58% to 72%
- ii. Design relative humidity for performance guarantee : 80%
- c) Rainfall
- i. Annual average maximum : 1222.7 mm
- 7.0 Wind Load
- Basic wind speed : 7m/s  
(Enhanced by a factor 1.4)
- 8.0 Seismic Data : As per IS : 1893 latest issue
- Zone : Zone II

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# SECTION -B

## TECHNICAL SPECIFICATION

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**1. SCOPE**

- This specification covers the description of scope of work, functional requirements, technical parameters, general design, materials, construction features, interfaces, list of drawings, and all the associated items.
- The scope of the contractor shall include understanding the erection of required quantity of anchor fasteners and application of Refractory Cement as per the requirements given in the upcoming sections. Understanding the functional requirement, procurement of raw material, fabrication, packing, forwarding, transportation, delivery at SLC site, handling at site, erection and application of refractory cement as per the enclosed specification under the supervision of ISRO and handing over of the tower.

**2. QUANTITY**

- The following are the list of items comprising the supply portion of the tender.

S. No	Description	Quantity
1.	Refractory Castable (CUMICRETE CA392G)	1 Lot
2.	3D V-ANCHOR, DIA. - 8mm, H = 155mm,SS310 (TYPE-A)	1 Lot
3.	3D V-ANCHOR, DIA. - 8mm, H = 60mm,SS310 (TYPE-B)	1 Lot
4.	V-ANCHOR, DIA. - 8mm, H = 35mm, SS310	1 Lot
5.	V-ANCHOR, DIA. - 6mm, H = 30mm,SS310	1 Lot
6.	ROD, DIA. - 8mm, SS310	1 Lot
7.	SS FIBRES	1 Lot

- The following are the list of items comprising the erection and application portion of the tender.

S. No	Description
1	Welding of V-Anchors
2	Welding of SS Rods to form Mesh
3	Welding of Dovel pins to EP plates

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4	Application of refractory cement
5	Site Preparation & Establishment works

### **3. BACKGROUND INFORMATION / FUNCTIONAL REQUIREMENT**

- SLC Launch Pad is planned with two-way wedge type jet deflector duct (JDD), which is of 3m deep, 4m in width and 39.5 m long.
- Mobile Launch Structure (MLS) is a rectangular steel structure configured and designed for supporting and transporting SSLV launch Vehicle from integration facility to launch pad.
- Refractory cement needs to be applied to both MLS and JDD to protect the exposed surfaces from lift off jet.
- The areas to be applied, type of refractory to be used, various thickness of application and storage of Refractory Cement Material are explained in the upcoming sections.
  - Refractory cement - CUMICRETE CA 392G
  - Application method - By gunning
  - Reinforcement anchor material - SS310
  - Filler material at JDD wedge -SS fibres (3% by weight)

### **4. REFRACTORY REQUIREMENT FOR MLS AT SLC**

#### **4.1 LOCATIONS OF REFRACTORY APPLICATION**

- Jet exposed areas of MLS needs to be protected with refractory cement.
- The thickness of refractory cement proposed to be applied is 50mm which includes inner and outer surfaces of Central Annular Structure (CAS) region, horizontal and vertical surfaces.
- The areas that are to be applied with refractory cement is shown in Fig.1.
- Refer Drawing No: 10-STR-12-1-23/A1, for additional dimensions and details.
- The corners are to be welded with ISA 50 Angles as shown in Fig.1.

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- The following areas required refractory application,

Area	Description	Orientation
1	MLS Top deck area at 5.5m EL	Horizontal
2	Vertical Portion connection top and bottom deck	Vertical
3	MLS Top deck area at 6.9m EL	Horizontal
4	CAS Outer surface area	Vertical Circular
5	CAS inner surface area	Vertical Circular

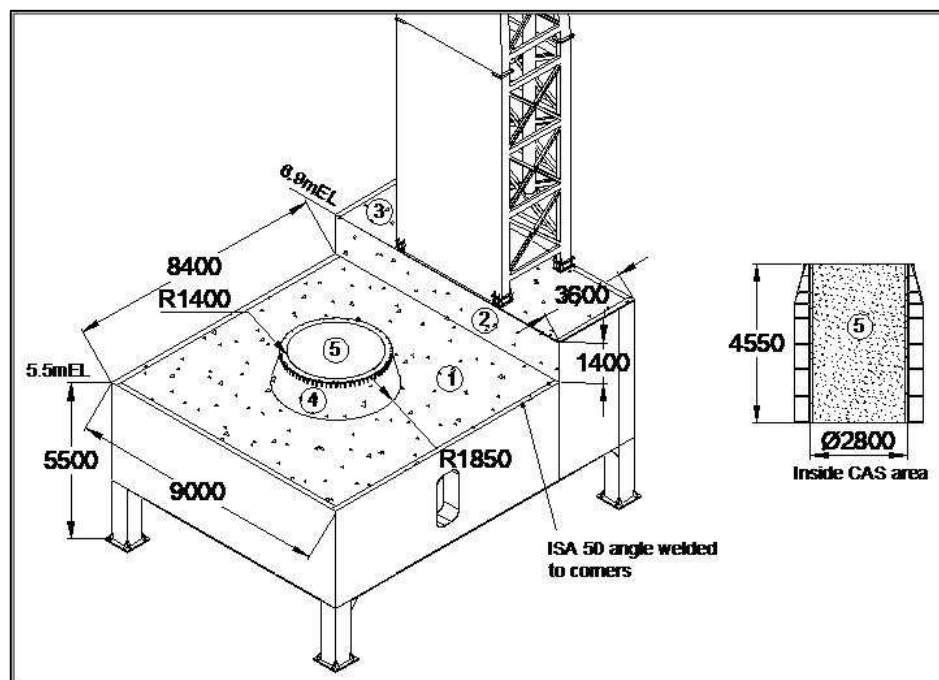


Fig.1. Refractory Application Locations in MLS of SLC

- The inner region of the CAS is to be provided with 50mm thick refractory.
- ISA 50 Angles should be welded all around the inner circumference at the top and bottom of the CAS to hold the refractory in position.

#### 4.2 V-ANCHORS ARRANGEMENT AT MLS

- V – Anchors of 8 mm diameter with height of 35 mm and base width of 30 mm shall be full welded on the surfaces of MLS.
- V-Anchor drawing with its welding locations is shown in Fig.2.

- The material of V-anchor is stainless steel (SS310).

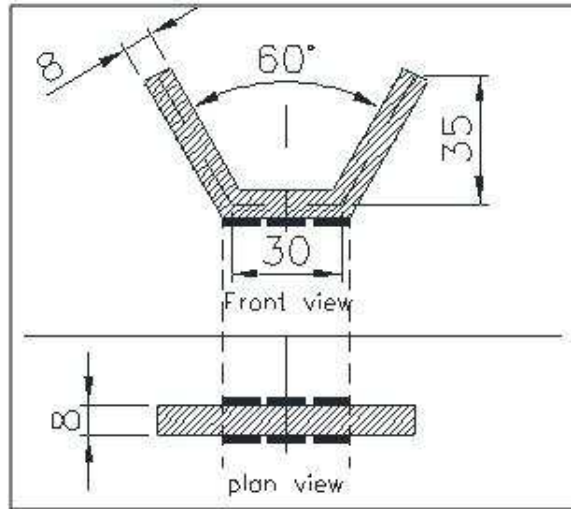
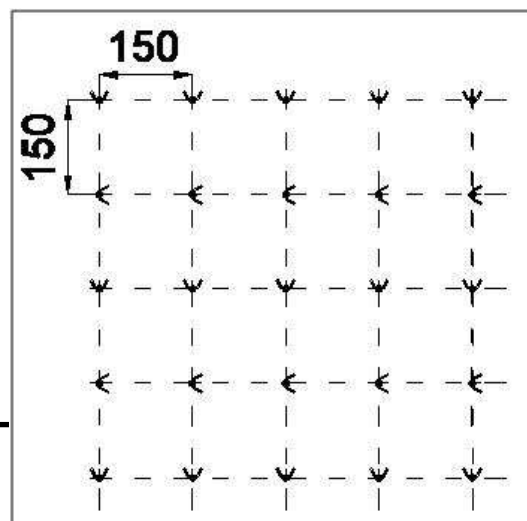
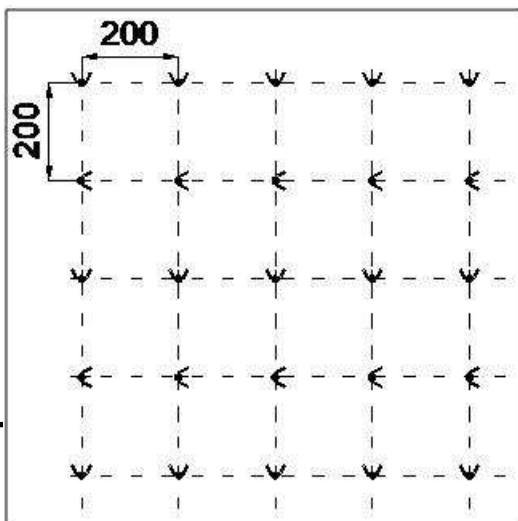


Fig.2. V-Anchor Welding Scheme

**4.2.1 HORIZONTAL & VERTICAL REGION**

- On Horizontal surfaces of the MLS (Area - 1 & 3), V- Anchors shall be spaced in grid of 200 mm x 200 mm and the V-anchors shall be oriented in X & Y directions alternatively on the subsequent rows of the grids as shown in Fig.3.
- Edge distance of half pitch shall be maintained along the corners.
- On Vertical surfaces of the MLS (Area - 2, 4 & 5) , V- Anchors shall be spaced in grid of 150 mm x 150 mm and the V-anchors shall be oriented in X & Y directions alternatively on the subsequent rows of the grids as shown in Fig.4.



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Fig.3. Spacing for Horizontal surface      Fig.4. Spacing for Vertical surface

**5. REFRACTORY REQUIREMENT FOR JDD AT SLC**

- SLC Launch Pad is planned with two-way wedge type jet deflector duct (JDD) of 3m deep, 4m in width and 39.5 m long. Cross Sectional details of JDD is shown in Fig.5.
- Refer Drawing No: 10-STR-12-01-36/AD1/R2 & JDD/EP/01, for additional dimensions and details.
- The foundation of JDD is integral with the ground anchor foundation and rail track beam.
- Track beam is 0.55m (w) x 0.75m (d) with 6.5m centre-to centre spacing.
- Top cover slab is 0.2m thick and its beams are 0.3m (w) x 0.5m (d).
- MS plate of thickness 25mm is embedded from the apex area till the sloped area. (Ref Fig.6).
- Lugs are reinforced in concrete and its arrangement is as per the Fig.7.

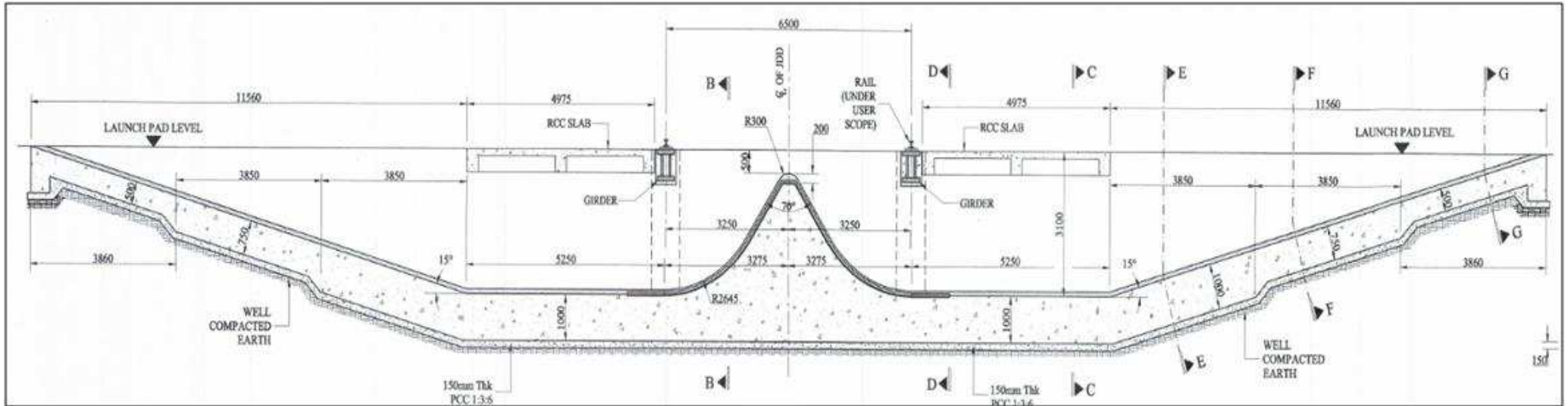


Fig.5. Cross Section of JDD at SLC

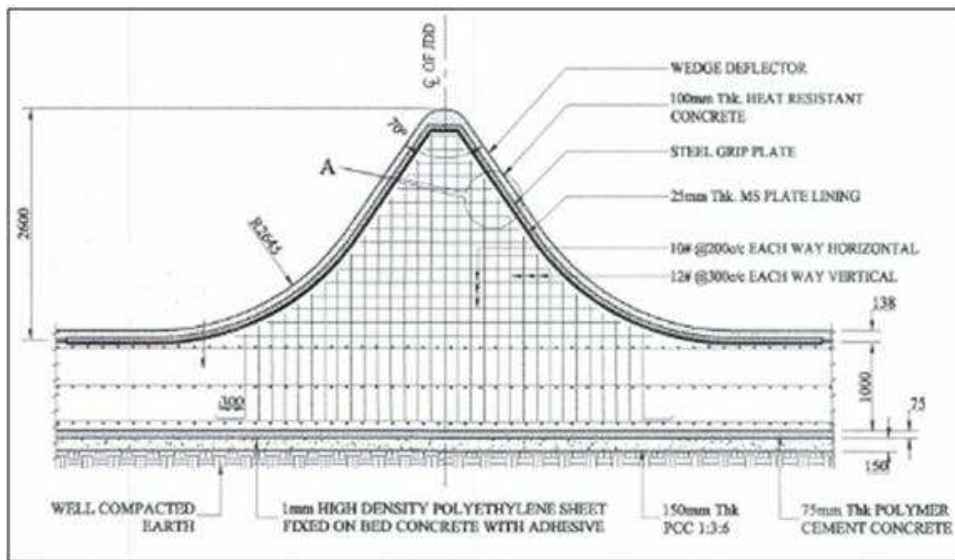


Fig.6. Cross Section of Apex and Slant area

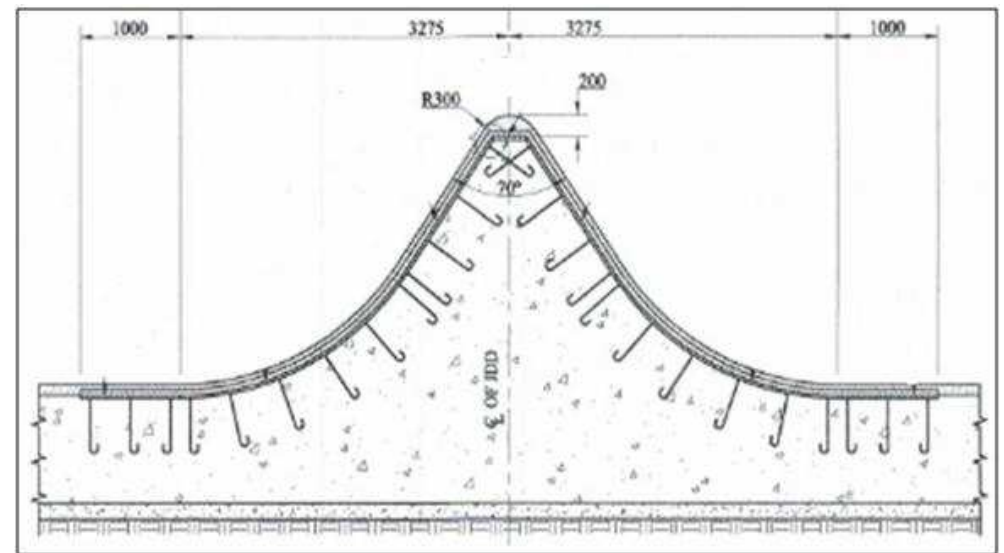


Fig.7. Details of Lugs for fixing MS plate

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## 5.1 LOCATIONS OF REFRACTORY APPLICATION

- The following are the areas in JDD at which application is required,
  - a) Apex area
  - b) Slant area
  - c) Horizontal area
  - d) Wall area
  - e) Track beam and cover slab area

### 5.1.1 APEX AREA

- The Apex area is the top most point of the JDD as shown in Fig.8.
- In this region, the refractory thickness required is 200mm.

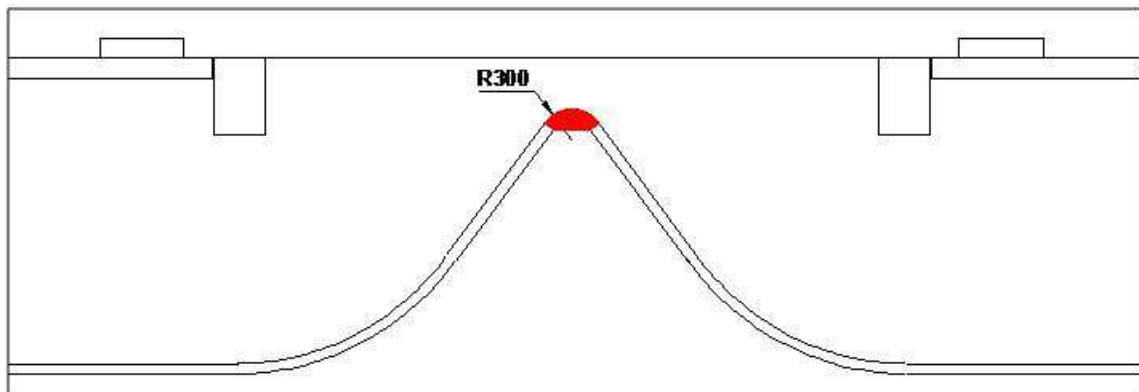


Fig.8. JDD Apex Area

- SS Fibers shall be used a filler material (max 3% in weight basis) shall be used in refractory for the apex area of JDD.
- Embedment plate of 350 mm (W) x 4200 mm (L) x 25 mm (t) is already embedded in apex area as shown in Fig.9.
- 3D anchors (Type-A) made of stainless steel (SS 310) and of size 155 mm (H) x 10 mm (Diameter) (Refer Fig.10) shall be fully welded on the embedment plate along the centre line of the plate with spacing of 200 mm (Refer Fig.9).

- 3D anchors (Type-B) of size 60 mm (H) x 8 mm (Diameter) (Refer Fig.10) shall be full welded to the embedment plate along two straight lines, which are 40 mm offset from the plate edges with a spacing of 200 mm (Refer Fig.9).
- The 3D anchors of type A & B shall be arranged in a zigzag manner (45 degree) and their orientation shall be perpendicular to each other (Refer Fig.9).
- Refractory cement shall be applied on the apex area and a radius 300 mm shall be formed as shown in Fig.11.

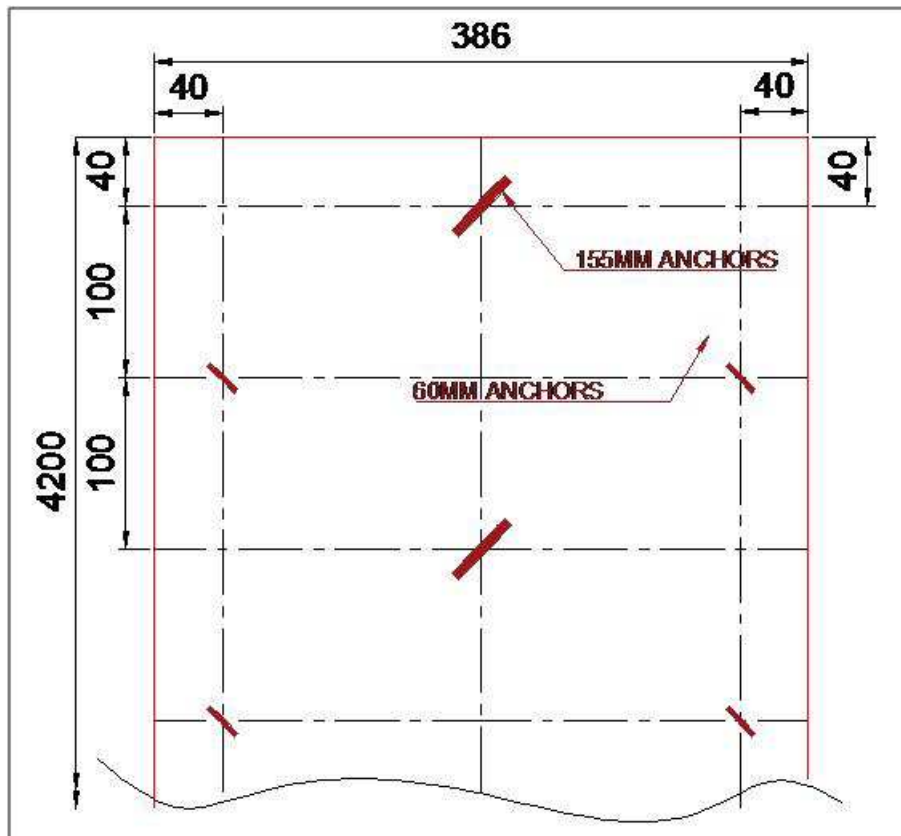
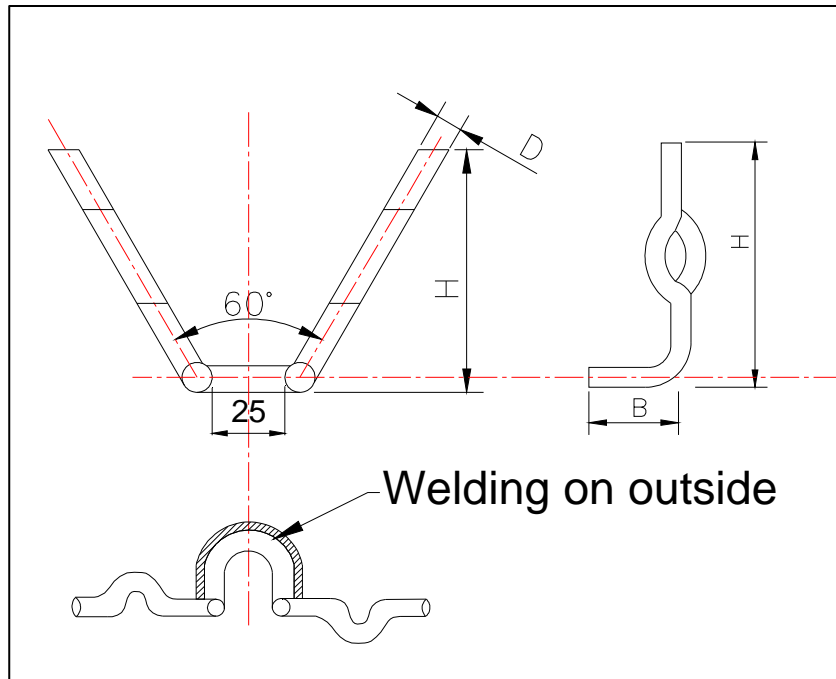


Fig.9. Type – A & B Anchors fixing arrangement.



	Type-A	Type-B
<b>D</b>	<b>10</b>	<b>8</b>
<b>H</b>	<b>155</b>	60
<b>B</b>	<b>45</b>	<b>41</b>

Fig.10. 3D Anchor details.

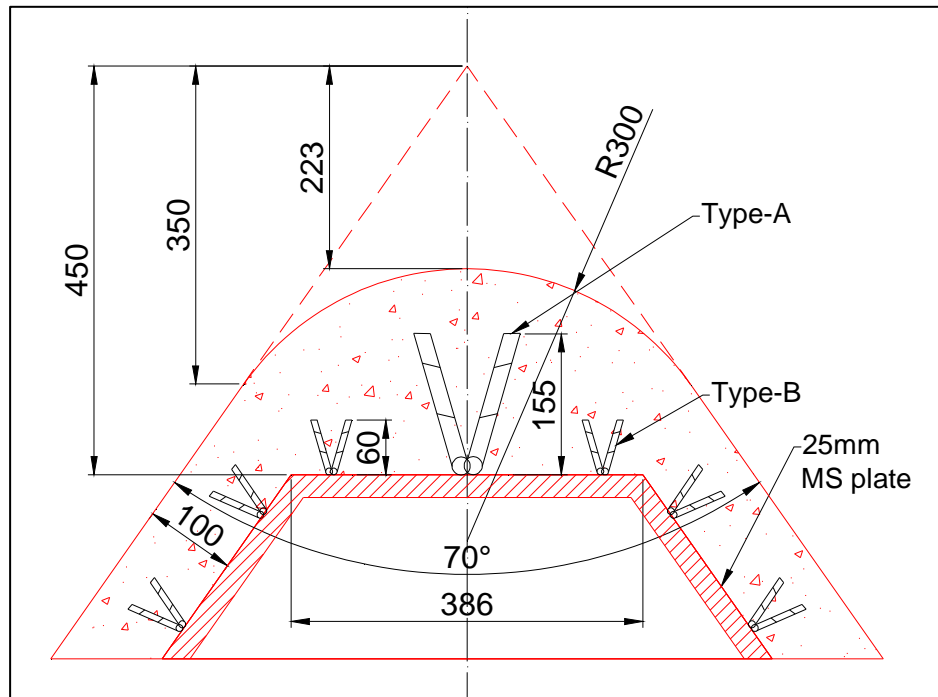


Fig.11. Apex area reinforcement details.

**5.1.2 SLANT AREA**

- MS plate of 4200mm (Width) and 25mm thickness is embedded, originating from the Apex area up to the slant area. Refer Fig. 6 & 7.

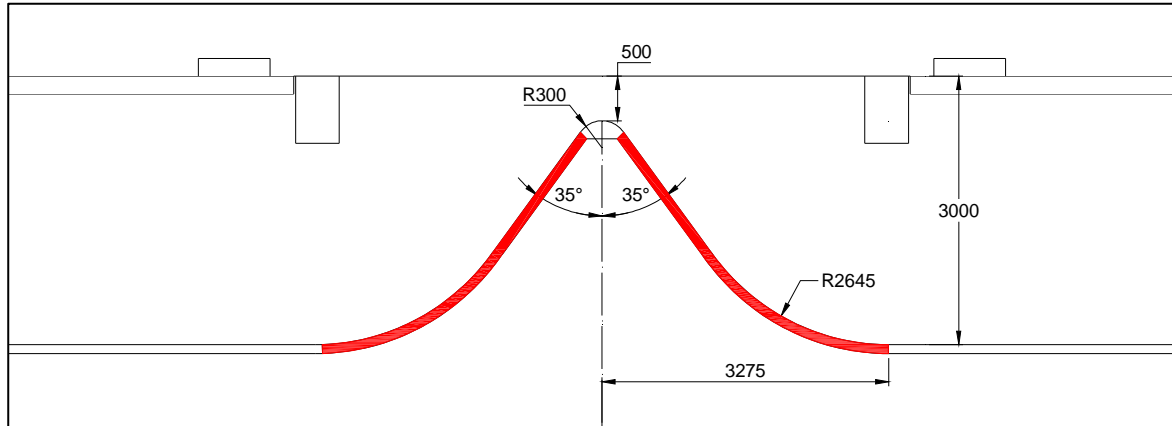


Fig.12. Slant area of JDD.

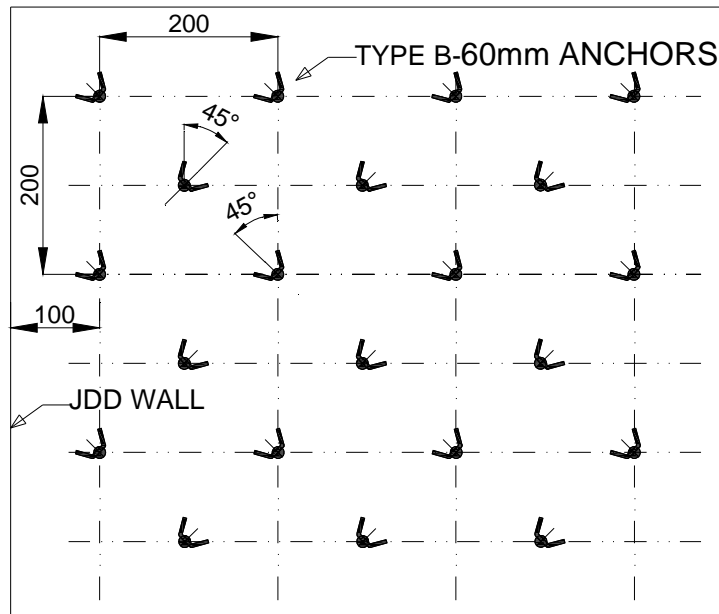


Fig.13. 3D Anchors fixing scheme at slant portion.

- Type-B (Refer Fig.10) 3D SS Anchors (SS310) of size 60mm (H) x 8mm (Diameter) is to be welded on the embedment plates.
- The 3D anchors shall be spaced in grid of 200mm x 200mm along with an anchor at the center of the grid as shown in figure.
- The edge distance from wall is 100mm.

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- SS Fibers shall be used a filler material (max 3% in weight basis) shall be used in refractory for the slant area of JDD.
- Thickness of the refractory layer on the slant surfaces shall be 100mm, i.e. 40mm thick refractory layer should be available above the anchors.

### 5.1.3 JDD FLOOR AREA

- The JDD floor area consists of horizontal surface and ramp up surface as shown in Fig.14.

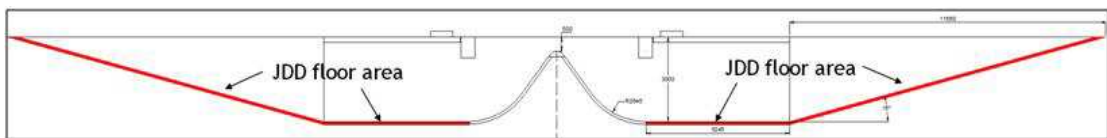


Fig. 14. Floor Area of JDD.

- Embedment plates (EP) of size 150mm x 150mm x 10mm with MS lugs are proposed on the floor area of JDD. Refer Fig.15.

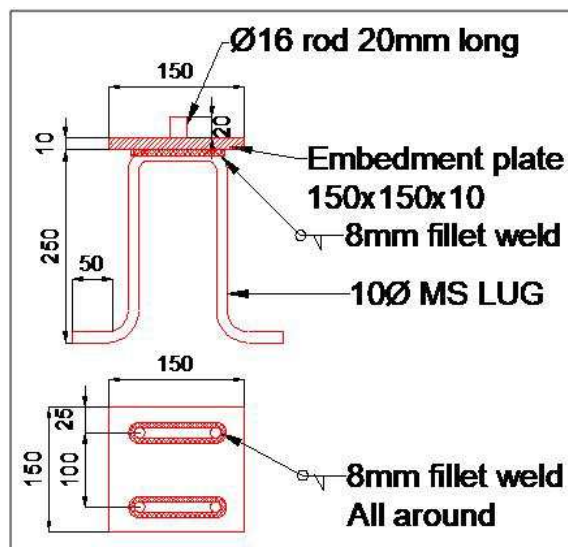


Fig.15. Embedment plate details.

- Spacer rods of size 20mm (H) x 16mm (Diameter) is provided on the embedment plates to provide gap between reinforcement rods and the floor surface of JDD to facilitate easy flow of refractory cement. These plates are spaced in grid of 600 x 600 mm as shown in Fig.16.

- SS 310 reinforcement rods of 8 mm diameter shall be welded on the spacer rods with a grid size of 300 x 300 mm tag weld on grid junctions. Refer Fig.16.
- V – Anchors of SS 310 material and size of 30mm (H) x 6mm (Diameter) and base width of 30 mm (Refer Fig.17) shall be welded on each grid junction point of the reinforcement rods. Edge distance of half pitch shall be maintained from corner of walls.
- The V-anchors shall be oriented in X & Y directions alternatively on the subsequent rows and columns of the grids. Refer Fig.16.
- Refractory layer of 100 mm thickness shall be applied on the horizontal floor area and the ramp up portions of JDD. The thickness of the Refractory above the anchors should be atleast 34 mm. Refer Fig.17.

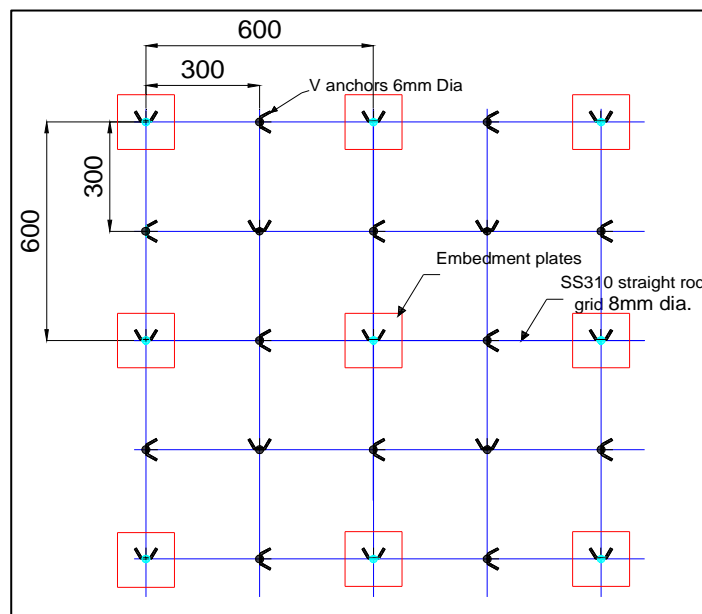


Fig.16. Reinforcement Scheme at floor area.

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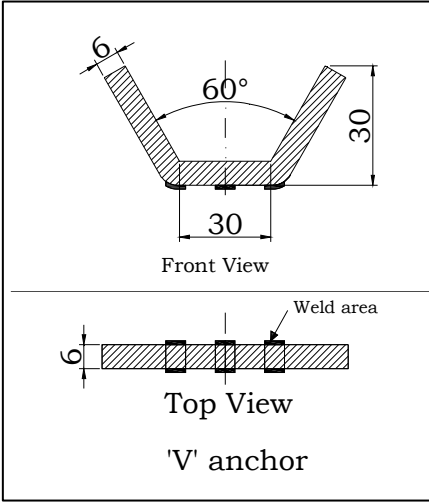
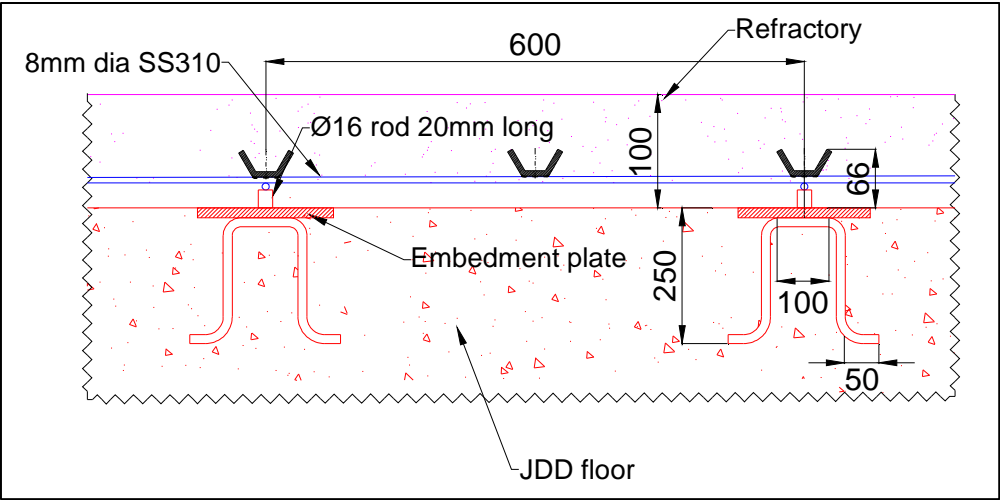


Fig.17. Reinforcement details at floor area.

**5.1.4 JDD SIDE WALL AREA**

- The side walls are present on both sides of the JDD. Refer Fig.18.



Fig.18 JDD Side walls area.

- Embedment plates of size 150mm x 150mm x 10mm with MS Lugs is already available on the side walls. Embedment plates are provided with Spacer rods of size 8mm (H) x 16mm (Diameter) Refer Fig. 21.

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- Reinforcement rods shall be welded on the spacers to provide with sufficient gap for easy flow of refractory cement. Refer Fig.19.
- The embedment plates shall be spaced in grid of 600 mm x 600 mm. Refer Fig.20.
- Reinforcement rods (SS 310) of 8 mm diameter shall be welded directly on the spacer rods and the grid of 150mm x 150mm shall be tag welded on grid junctions as per Fig.20. Horizontal grid rods shall be placed outside and vertical grid rods shall be placed inside.
- V – Anchors of SS 310, size 30mm (H) x 6 mm (Diameter) (Refer Fig.17.) and base width of 30 mm shall be welded on the reinforcement rods with a spacing of 300 x 300 mm in zig-zag manner.
- The thickness of the refractory layer shall be 65mm thick for the side walls of the JDD.
- V-Anchors shall be welded on the bottom reinforcement rods to provide maximum possible thickness of refractory above the V-anchors.
- A minimum of 19mm thickness of refractory should be made available above the V-anchors.

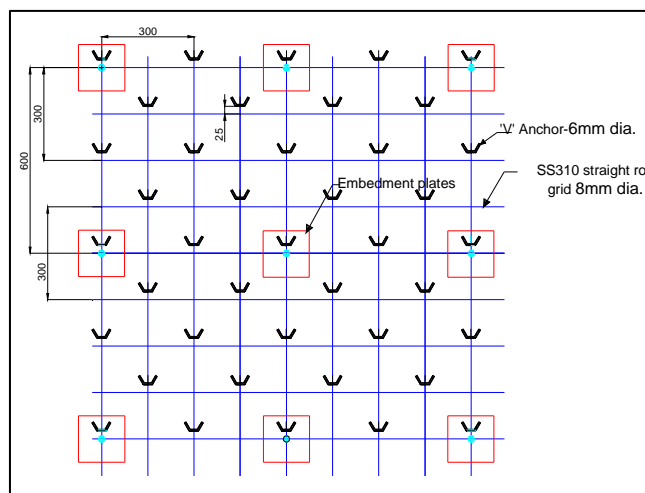


Fig.19. Reinforcement details at JDD side walls

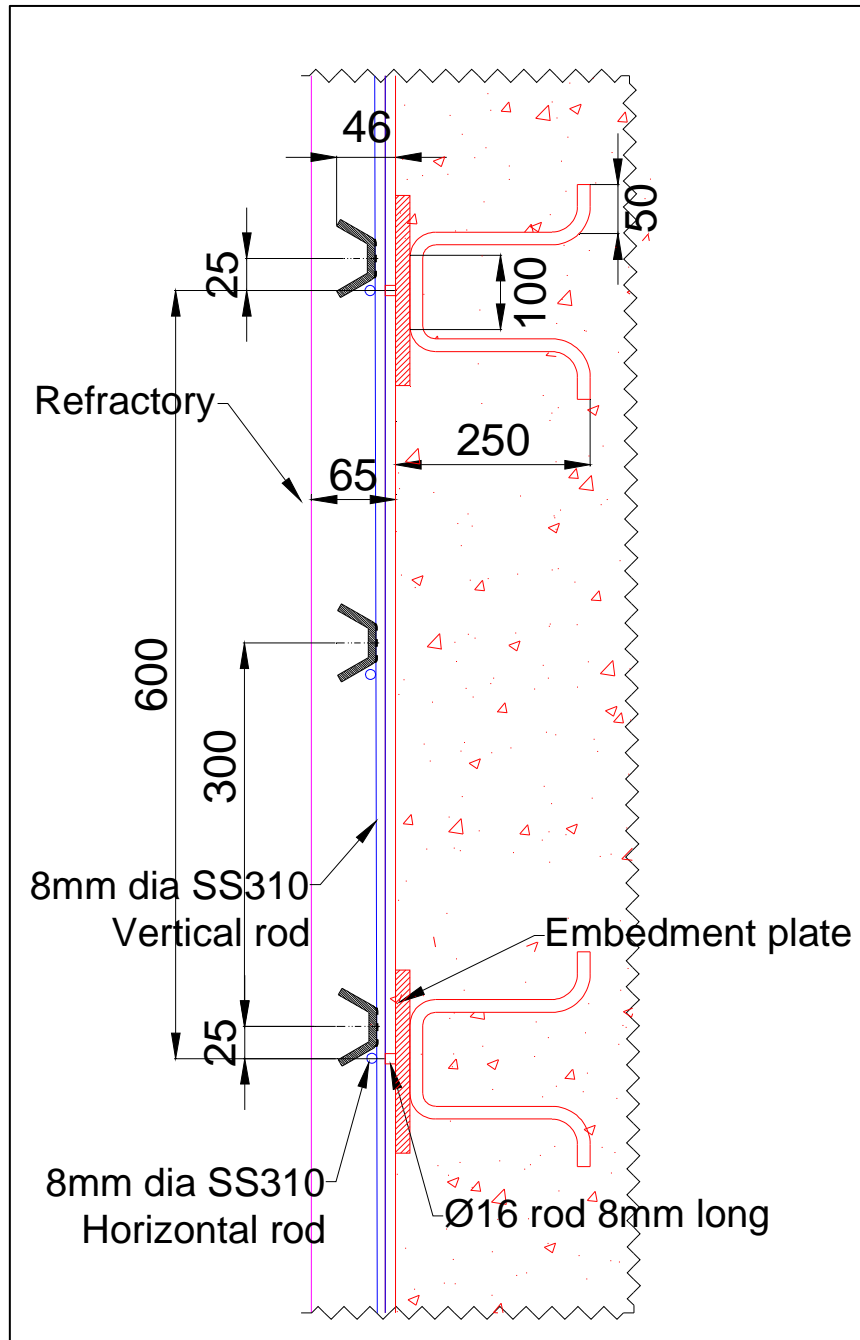


Fig. 20. Reinforcement scheme at JDD side walls.

REFRACTORY CEMENT APPLICATION AT SLC

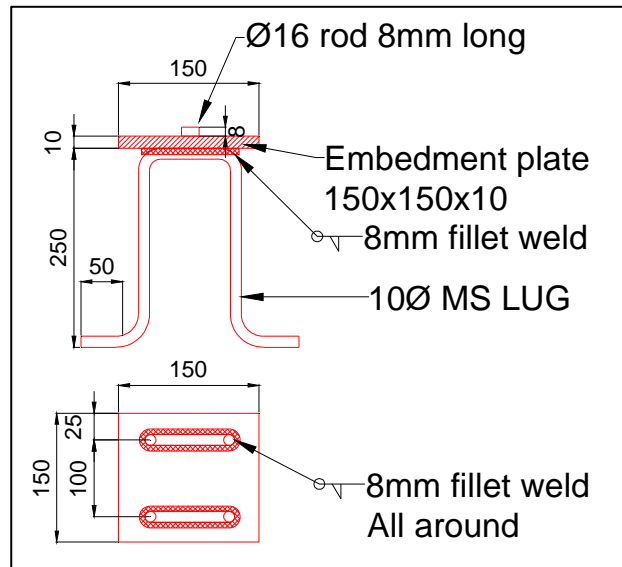


Fig. 21. EP Plate details.

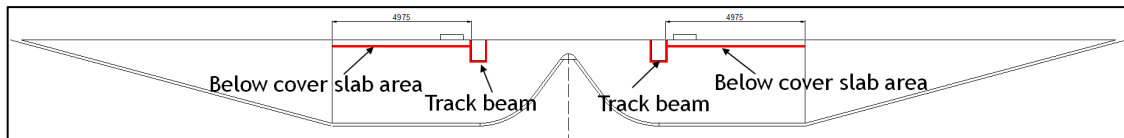


Fig.22. JDD track beam and below cover slab area.

**5.1.5 TRACK BEAM AND BELOW COVER SLAB AREA**

- The Track beam is 0.55m (w) x 0.75m (d) with a centre-centre distance of 6.5m. Top cover slab is 0.2m thick and its beams are 0.3m (w) x 0.5m (d). The areas to be covered by refractory cement are shown in Fig.22.

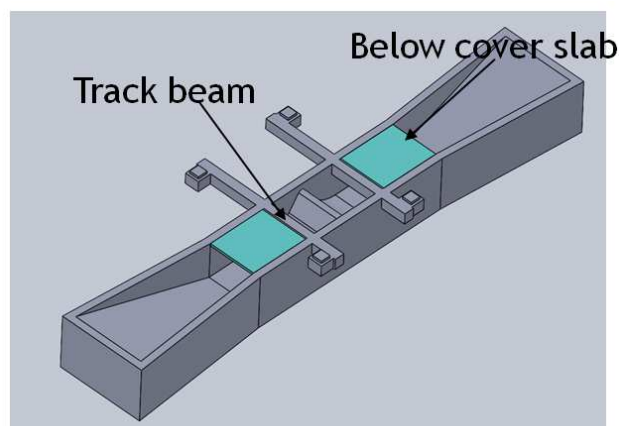


Fig.23. 3D view of JDD

- The size and arrangement of embedment plates, reinforcement rods, V-anchors and total thickness of the refractory for Track beam and

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bottom surface of cover slabs areas should be similar to the side walls of the JDD.

## **5.2 REFRACTORY APPLICATION AROUND CORNERS**

- Sufficient filleting around the corners shall be maintained wherever corners and 90<sup>0</sup> edges are present in the floor region, wall region, track beam region, etc.

## **6. PROCEDURE FOR REFRACTORY APPLICATION**

### **6.1 PRE-REQUISITES AND SURFACE PREPARATION**

- The areas where refractory is to be applied is explained in the previous sections and are to be inferred from the drawings.
- The existing concrete surface is to be coated with suitable bonding agent as an interface between refractory and concrete to ensure proper bonding with refractory cement. Supply and application of bonding agent is in the scope of the vendor.
- All required tools & tackles like mixer machine, gunning machine, wire brush, measuring jar, painting brushes, etc., shall be made available at the site by the contractor, this shall be ensured prior to start of lining work.
- The fresh water used for the works shall have a maximum temperature of 20<sup>0</sup>C.
- The spacing of anchors plays a vital role in the application and quality of refractory cement's strength. The spacing of the anchors shall be maintained as per the details shown in the previous sections.
- After welding, the Anchors shall be randomly tested for the quality of the welds with the help of a light hammer action and bending it to 45° on either side. Necessary repairs are to be carried out wherever the welding is found defective.

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- Before commencing the application of refractory by gunning, the interior surfaces shall be thoroughly cleaned and free from debris. The exposed areas shall be made wet with cold water.
- The exposed areas shall be divided into cells. Each cell shall be not more than 1m x 1m. Gunning shall be made for alternate cells. Vertical joints shall be staggered a minimum of 500mm.
- Areas where gunning is not feasible, application of refractory shall be carried out by hand picking or screeding.

## **6.2 AIR PRESSURE**

- Optimum Air pressure required to apply the refractory mix shall be determined during prequalification testing. Optimum density shall be obtained to maximize physical properties.
- Pressure shall be kept steady at optimal value to prevent loss of material, produce a uniform lining, and minimize rebound.
- Ensure the availability of air with pressure of 6 to 7 Kg/cm<sup>2</sup>.
- The suggested nozzle pressure for Refractory Cement is 3 to 4 Kg/cm<sup>2</sup>.
- High Air Pressure and volume increase the feed rate of the gunning mix through the nozzle water ring. This widens the liquid range and reduces the sensitivity of the material to changes in the amount of liquid.
- High Pressure helps reduce laminations within the refractory mass.
- Calibrated Gauges shall be used for application.

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### **6.3 EQUIPMENT READINESS**

- Prior to start-up it is necessary to check that the hoses are laid with no loops to prevent plugging.
- The water ring and nozzle liner must be clean and in good condition.
- There should be plenty of air for sufficient material flow of at least 6 Kg/cm<sup>2</sup> liquid through a 3/4 inch diameter hose.

### **6.4 MIXING**

- Take 200 Kg of one batch of material in a Pan Mixer.
- Dry Mix for 1 minute.
- Add 2 to 4% of water for premixing.
- Add 3% (Max by weight) of SS fibers with cement for application at Wedge portion only.
- Mix for 3-5 minutes (Pre-damping).
- The total quantity of water % shall be 9% by weight (around 18 Kg per 200Kg mixing of refractory cement). This shall be adjusted as per manufacturer's recommendation and site conditions.
- Feed the material in the gunning machine.
- Gun the material in the test panel.
- Based on trial, fix liquid percentage requirement, air nozzle pressure and check for rebound losses.
- Pre-damped material shall be placed in the gunning machine via the feeding hopper with sieve cover or manually as per site condition.
- From the gunning machine, the material shall be transported to the nozzle unit through high abrasion resistant material hoses by means of compressed air, via an agitator and a pocket rotor.

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- At the nozzle unit, Water shall be added with a manual valve which is operated by the nozzle operator, who may only add as much liquid as required.

#### **6.5 NOZZLE WATER CONTROL**

- The appearance of the gunned refractory surface shall be the best indicator of the correct Water / mix ratio. Gunning materials shall be designed to have a wider liquid range, therefore are less sensitive to the amount of liquid added.
- The amount of liquid should be controlled so that the gunned surface has a wet, silky sheen and the coarse aggregate makes craters on the surface upon impact. A sandy, gritty surface indicates that too little liquid has been used. Whereas slumping, ripples, or washboard effect on the surface indicates that too much liquid has been used.
- Air as well as liquid pressures and material feed rates shall be controlled so that proper flow occurs and the material of appropriate consistency emerges from the nozzle.

#### **6.6 PLACEMENT**

- Once proper flow and consistency are achieved, the nozzle operator should direct the stream of material at the base of the wall and proceed to build upward.
- The nozzle should be kept perpendicular to and about 0.6m to 1.2m from the surface of work.
- A limited area shall be gunned at once, using a small, circular motion.
- The following and any other application methods that may create laminations in the lining shall not be permitted:
  - a) Using a "painting" motion
  - b) Building up the lining thickness in layers

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- Gunning shall be into the just-applied refractory and approximately perpendicular to the lined surface.
- Joining surface of cold joints shall be cleaned, roughened and pre-wet before the placement of adjacent refractory.
- Rebounds should fall or bounces clear of the target and should not be entrapped. Entrapment of rebounds by the fresh stream from the nozzle can lead to laminations or spots of low density in the lining.
- Rebound material shall be cleaned thoroughly.

#### **6.7 THICKNESS OF CASTABLE LINING**

- Lining thickness shall be measured by means of panel height. The thickness of cement for wedge is as per the drawings provided.
- Measurement of the installed refractory thickness shall be taken continuously and as close as possible behind the nozzle man.
- Edges shall be cut to full thickness perpendicular to the shell.
- Thin areas shall be marked and brought to full thickness immediately.
- If the thickness found is over the specified thickness, the material shall be immediately cut away without pulling or damaging the underlying material.
- Trowel finishing of the cut-off surface shall not be permitted.

#### **6.8 CURING OF CASTABLE**

- Water curing shall be started after the final setting of the cement, within 4 to 6 hours of application and shall be done for 24 hours by laying gunny bags.
- Normal water spraying can be done for 48 hours.

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## **7. REPAIRS**

- The works will be monitored continuously by the department personnel, corrections if found shall be carried out by the supplier and the rework shall be reviewed. Only after getting necessary clearances from the department personnel, the contractor shall proceed for further works.
- Requirement of repairs after gunning, if any shall be identified based on visual inspection for cracks and Hammer Test.
- Cracks of more than 3 mm wide up to full depth are not accepted. Dull sound during hammer test is not accepted.
- The department personnel shall be informed for any repair.
- Repair shall be carried out on a minimum of 300mm x 300mm area to the satisfaction of the department personnel in charge at site.

## **8. STORAGE OF REFRACTORY CEMENT**

- There is no identified area for material storage at SLC site. Hence, contractor has to prepare an identified area for storage purpose by consulting with the department personnel posted at site.
- The materials shall be stored in clean, dry & enclosed (covered) area over a raised platform by means of wooden pallets or gratings, etc., to prevent contact with ground run-off water, rain & away from walls
- Packing & bagging shall not be opened before use. Care should be taken that bags should not get torn off, punctured due to mishandling.
- The normal shelf life of the Refractory Cement shall be considered as per the manufacturer's recommendation from the date of manufacturing. Therefore, the materials should be used within the period of shelf life. Materials shall be manufactured & procured accordingly, considering installation schedule. First In First Out (FIFO) is must.

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	<b>REFRACTORY CEMENT APPLICATION AT SLC</b>	SHEET : 24 OF 26

- Refractory Cement must always, in all circumstances be stored in a dry and weatherproof storehouse.
- The date of opening the packet, identification no. of each bag shall be noted in log book.

**9. INSPECTION AND REVIEW**

- The checklist for application of refractory for casting and gunning is given in Section C of this document.
- The contractor shall ensure that all the details are filled and submitted for the review of department personnel time to time.
- Category A: Stage wise and final inspection including review of documents by Department.
- Category B: Stage wise and final inspection including review of documents by the Contractor. Department shall perform final inspection and review documents.
- Category C: Final inspection and review of documents shall be carried out by the Contractor. Department shall carry out the final review of documents.

The minimum requirements for ensuring quality at various stages are spelt out below. However, the reliability and quality assurance plan shall be prepared by the vendor and will be reviewed and approved by Department.

The following are the basic inspection requirements to be followed upon receipt of raw material:

Review of material certificates for Cement, SS Anchors and SS rods	Category A
--	------------

The following are the minimum in-process tests that shall be carried out (if applicable):

Welding procedure & welder / welding operator's performance qualification	Category C
---	------------

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Preparation of already available surface of MLS and JDD prior to erection of SS V-Anchors and SS Rods	Category A
Application of suitable bonding compound to the existing concrete surface to ensure compatibility with proposed refractory cement.	Category B
Marking of position of V-Anchors and SS Rods as per the Technical requirements of the Department	Category A
Erection of V-Anchors and SS Rods as per the Technical requirements of the Department	Category A
Mixing of Refractory in batches as per the technical requirements given in previous sections. (As per checklist given in Section-C)	Category B
Wetting of exposed surfaces prior to application of refractory	Category B
Gunning of refractory to the exposed surface as per the panel sizes mentioned in the earlier sections. (As per checklist given in Section-C)	Category B
Curing of applied refractory as per the curing procedure mentioned in the previous sections.	Category B

The following are the final inspection / tests that shall be carried out after erection & application works, as applicable:

Visual and dimensional inspection of SS V-Anchors & SS Rods (After fabrication)	Category A
Visual and dimensional inspection of SS V-Anchors & SS Rods (After erection)	Category A
Dimensional inspection of Casted Refractory cement as per the dimensions required in various areas (explained in previous sections)	Category A
Hammer Testing of Casted Panels	Category A
Visual inspection for cracks after curing of the casted panels.	Category A

The schedule of tests stated above is indicative and not exhaustive in nature. CONTRACTOR shall carry out any other tests at site as per directions of PURCHASER.

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**10. DATA TO BE FURNISHED AFTER AWARD OF CONTRACT**

The contractor shall ensure the following documentation are prepared and submitted to PURCHASER for his review / record

- Schedule of Erections & Detailed drawings and documents to be submitted for review & approval with submission dates.
- **The contractor shall make an exclusive Quality Assurance Plan (QAP) for this proposal and submit it to the department for final review. The QAP shall be submitted within 15 days from the date of release of Purchase Order.**
- Progress reports
- The above list of documents is indicative and not exhaustive. The CONTRACTOR shall submit documents as specified in various sections of this specification and also as per the specific instructions of the PURCHASER.

**1. CHECKLIST FOR MIXING OF REFRACTORY CEMENT**

Date	Temperature of water every 1hr	Air pressure near gunning machine every 1 hr	Batch of cement and manufacturing date	Mixing Batch No.	No. of packet per each mixing	Amount of SS fiber mixed in each mixing	Total bags of cement used per day	Remarks

**\*The above checklist shall be filled & signed by the contractor and submitted to the department for review, acceptance & clearance.**

**2. CHECKLIST FOR APPLICATION OF REFRACTORY (CASTING) ON MLS/JDD**

Date	Area of Identification	Refractory (Batch No. & Year)	Weight of Refractory (Kg)	Qty of Water added (4.5 litre for 50kg)	Water Temp (less than 20 <sup>0</sup> C)	Start of Mixing time	End of application time	Ball Test	Remarks
						Total Duration < 20 mins			

**\*The above checklist shall be filled & signed by the contractor and submitted to the department for review, acceptance & clearance.**

**3. CHECKLIST FOR APPLICATION OF REFRACTORY (GUNNING) ON MLS/JDD**

Date	Area of Application	Panel No.	Batch No.	Air Pressure 5.5 to 7 bar	Water Pressure >3 bar	Water Temp. < 25 °c	Ambient Temp. °c	Water Qty in premix (liters)	Starting time of pre-mix	Completi on time of Gunning	Gunner's Name
			Date: _____				Date: _____			Date: _____	
Qty of Refractory used											
Qty of water used											

**\*The above checklist shall be filled & signed by the contractor and submitted to the department for review, acceptance & clearance.**

**SCHEDULE OF PRICES (UN-PRICED COPY) & GENERAL PARTICULARS**

1. Bidders shall not alter the contents of this schedule of prices. If the bidder wants any additions / alterations, these shall be brought out separately in the format as given in this schedule of prices.
2. Equipment and material to be supplied and erected shall be in accordance with section A, B & C of this specification.
3. The quoted price shall be price in Indian Rupees for Supply of all required material, packing, forwarding and transportation to site, unloading / receipt at site, storage / handling and erection/ application at site.
4. IGST shall be separately indicated in the price bid.

S.No	Item	Qty.	Cost in Rs.
1.	Procurement, Supply, fabrication, erection and application of Refractory Cement along with SS-Anchors, SS-Rods etc. on 1 no of Mobile Launch structure (MLS) as per technical specifications and terms & conditions of the attached RFP document and drawings.	1lot.	
2.	Procurement, Supply, fabrication, erection and application of Refractory Cement along with SS-Anchors, SS-Rods etc. on 1 no of Jet Duct Deflector (JDD) as per technical specifications and terms & conditions of the attached RFP document and drawings.	1lot	
3.	IGST @ 5%		
	Total cost		

**Note:**

1. Cost off packing, forwarding and transportation shall be loaded to the unit rate, not to be quoted extra.
2. **Any bids/offers with price details in Techno-Commercial Offer (Part -I) shall be rejected.**
3. **Interest on advance will be loaded in cost to arrive L1, in case of advance payment.**
4. **Since both the items are inter-related for the completion of work, overall L1 will be considered.**

SIGNATURE: \_\_\_\_\_

NAME: \_\_\_\_\_

DESIGNATION: \_\_\_\_\_

DATE: \_\_\_\_\_

SPEC: SLC/RFA/2026

**SSLV LAUNCH COMPLEX (SLC)**

SECTION: D1

**REFRACTORY CEMENT APPLICATION AT SLC**

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SPEC: SLC/RFA/2026	<b>SSLV LAUNCH COMPLEX (SLC)</b>	SECTION: D2
	<b>REFRACTORY CEMENT APPLICATION AT SLC</b>	SHEET 1 OF 2

**BID QUALIFICATION CRITERIA**

Bidders who are qualifying / meeting following Technical and financial criteria are eligible to participate in the bid. Bidder shall furnish all the information mentioned in the criteria with documentary proof and submit along with quotation. Bids of the parties which are not meeting the following criteria will not be considered for evaluation and will be rejected without seeking any further clarifications.

**A. TECHNICAL QUALIFICATION REQUIREMENTS**

The bidder shall meet the following technical qualifying requirements and shall submit relevant certificates to establish his credentials.

1. The Bidder shall be an organization with minimum 5 years of experience ending by 31.05.2026 having executed contracts for Application of Refractory Cement.

2. The bidder shall have successfully completed erection and application of refractory cement during the last ten (10) years ending on 31.03.2026 as follows:

Minimum 120 MT of refractory cement in a single work order;

OR

Minimum 90 MT of refractory cement in two separate work orders, each of not less than 90 MT;

OR

Minimum 60 MT of refractory in three separate work orders, each of not less than 60 MT.

Bidders have to submit, PO copy, Completion certificate along with the submission of bid for consideration of bid document.

Bidders have to provide relevant documentary proof for the above experience, along with the submission of bid for consideration of bid document.

**B. FINANCIAL QUALIFICATION REQUIREMENTS**

1. The bidder shall have successfully completed erection and application of refractory cement works during the last ten (10) years ending on 31.03.2026 as follows:

One similar completed work costing not less than ₹300.00 Lakhs

OR

Two similar completed works, each are costing not less than ₹200.00 Lakhs

OR

Three similar completed works, each are costing not less than ₹150.00 Lakhs

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	<b>REFRACTORY CEMENT APPLICATION AT SLC</b>	SHEET 2 OF 2
<p style="text-align: center;">Documentary proofs like POs/ tax invoices are to be submitted</p>		
<ol style="list-style-type: none"> <li>1. The firm should have an average annual turnover of Rs. 150 Lakhs in the last three financial years ending with March 2025.</li> <li>2. Bidder shall submit audited profit/loss &amp; balance statement of financial status for last three years ending with March 2025.</li> <li>3. Bidder shall submit ITR documents for the last three financial years ending with March 2025.</li> <li>4. PAN details of the firm shall be submitted.</li> <li>5. GST registration details of the firm shall be submitted.</li> </ol>		
<p><b>C. THE FOLLOWING DOCUMENTS SHALL BE SUBMITTED ALONG WITH THE TECHNO COMMERCIAL BID</b></p>		
<ol style="list-style-type: none"> <li>1. Firm establishment certificate and nature of work.</li> <li>2. Details of work of similar type completed during the last ten years ending with 31.05.2026.</li> <li>3. Satisfactory work Completion certificates from the clients, with the work order copies.</li> <li>4. Solvency certificate from a commercial bank for a value not less than Rs. 150 lakhs and not before 6 months from the date of tender closing.</li> <li>5. Structure and Organization chart.</li> <li>6. List of personnel with qualification &amp;. experience in the firm in the areas of design, production, quality, safety, administration etc.,</li> <li>7. List of Machinery &amp; Equipment to be used for the work.</li> </ol>		
<p><b>D. BID SELECTION PROCEDURE AND PROCESS OF PRE-QUALIFICATION</b></p>		
<ol style="list-style-type: none"> <li>2. Short listing based on documents submitted, satisfying the all-eligibility criteria given above by the firm or individual along with their Bid / application. (No submission of any document as given in above list within stipulated time leads to rejection of Bid).</li> <li>3. Subsequently Bidder's competency, their technical achievements and financial status will be evaluated suitable for this project. Feedbacks from Bidder's clients will be verified.</li> <li>4. Visit to sites by technical team (ISRO or Third party) where Bidder has established above mentioned works.</li> <li>5. If required, visit will be made to their factory/ firm by technical team (ISRO or third party) for accessing the capability of manufacturer.</li> <li>6. Scrutiny of all technical specification and supply conditions mentioned in techno commercial bid.</li> </ol>		
		<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;"> ISSUE R0 </div>

**SCHEDULE OF GENERAL PARTICULARS / VENDOR EVALUATION FORMAT**

<b>S. NO.</b>	<b>DESCRIPTION</b>	<b>RESPONSE</b>
1.	Name of Company	
2.	Address of Company	
3.	Type of Company (Proprietary/Pvt.Ltd/Public Ltd/Joint Venure/Consortium)	
4.	Registration number	
5.	Year of inception of the company	
6.	Registered address	
7.	Name & address of the office of the Chief Executive of the company	
8.	Name & Designation of the officer of the Bidder to whom all correspondence shall be made for expeditious technical/ commercial co-ordination.  Telephone number Fax number E-mail address	
9.	Locations of the Branches of Company (if any)	
10.	Annual turn-over of the company for the last three years	
11.	Major customers (Enclose copies of the Purchase Orders)	
12.	Any customers feedback on the services which is in writing (Pl. enclose copies)	
13.	Quality certification of the company	
14.	Orders executed during last three years, (Separate sheet can be attached).	
15.	Shop floor area covered	
16.	No. of employees	
17.	Handling equipments available	
18.	Welding professionals	
19.	Details of inspection facilities / Instruments available ( Brief description & specifications shall be provided)	
20.	Bid validity period (Min. 4 months from date of bid opening)	

SIGNATURE :

NAME :

SEAL OF THE COMPANY DESIGNATION :

COMPANY :

DATE :

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**EXCEPTIONS AND DEVIATIONS**

In line with Proposal Document, Bidder may stipulate Exceptions and deviations to the proposed conditions if considered unavoidable.

S.No	Reference in Specification		Dept. Specification	Offered Specification	Deviation
	Page no	Clause no			

**NOTE:**

- Only deviations are to be written in the above form.
- Any deviations taken by the Bidder to the stipulations of the Proposal document shall be brought out strictly as per this format and enclosed along with the bid.
- Any deviations not brought out in this Proforma and written elsewhere in the Proposal document shall not be recognized and the same is treated as null and void.
- Any wilful attempt by the Bidders to camouflage the deviations by giving them in the covering letter or in any other documents that are enclosed may render the Bid itself non-responsive.

SIGNATURE: \_\_\_\_\_

NAME: \_\_\_\_\_

DESIGNATION: \_\_\_\_\_

DATE \_\_\_\_\_

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SPEC: SLC/RFA/2026	<b>SSLV LAUNCH COMPLEX (SLC)</b>	SECTION: D5
	<b>REFRACTORY CEMENT APPLICATION AT SLC</b>	SHEET: 1 of 1

**SCHEDULE OF BIDDERS EXPERIENCE**

The bidder shall furnish here under a list of works executed by him to whom a reference may be made by the PURCHASER in case the PURCHASER considers such a reference necessary.

S. NO.	Name & address of Client / Name & address of project or plant (incl. Tel.no., fax no., e-mail and name & Designation of person who can be contacted.	Purchase Order / Contact no. and Date.	Brief details of equipment / system covered	Scope of services	Contract price (Rs)	Scheduled date of completion	Actual date of completion	Reasons for delay in completion, if applicable.	REMARKS

SIGNATURE :  
NAME :  
DESIGNATION :  
COMPANY SEAL:

**DATA TO BE FILLED ALONG WITH THE BID**

<b>S. NO.</b>	<b>DESCRIPTION</b>	<b>OFFER</b>
1	Confirm that the work proposed shall be completed as per technical specification, approved drawings, bill of material to meet the functional requirement.	Yes / No
2	Confirm that all the items are to be procured as per the specification from the approved parties	Yes / No
3	Supply schedule & Erection schedule shall be submitted along with offer.	Yes / No
4	Confirm that all storage of material, welding, material handling, site preparation, establishing electrical power supply, sourcing of fresh water, etc will be carried out with own equipment's & man power.	Yes / No
5	Confirm that testing and acceptance of the refractory cement application shall be carried out as per specification.	Yes / No
6	Confirm that QAP shall be submitted for approval within 15 days from the date of release of Purchase Order.	Yes / No

SIGNATURE: \_\_\_\_\_

NAME: \_\_\_\_\_

DESIGNATION: \_\_\_\_\_

DATE \_\_\_\_\_

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**CHECK LIST**

S.No	Description	Response by supplier
1	All documents related to Prequalification criteria mention in <b>Section D2</b> have been met and all related documents are enclosed in technical Bid	Yes / No
2	Are all the technical particulars as called for in the data sheets section A, B, C, & Annexure D1 to D7 and commercial details as called for in schedule of prices are filled up.	Yes / No
3	The detailed scope of work and technical specifications are understood and price was quoted accordingly.	Yes / No
4	Confirmation that the quoted prices are firm and fixed till the completion of scope of work.	Yes / No
5	Validity of Offer is 4 months (minimum).	Yes / No
6	Vendor Evaluation Format is attached	Yes / No
8	Delivery Schedule with milestones	Yes / No
9	Acceptance of departmental payment terms & conditions as per para no.17 of Section A2	Yes / No
10	Are General terms and Conditions of Contract for Supply & Erection included in proposal acceptable?	Yes / No
11	If not acceptable, are the deviations brought out in the "Schedule of Deviations"	Yes / No
12	Are there any deviations from enquiry technical specifications?	Yes / No
13	If there are technical deviations, are these filled in "Schedule of Deviations from Tech. Specifications"?	Yes / No
14	Warranty for the fully commissioned and accepted system is 12 months	Yes / No
15	PBG of 3% as per clause 9.1 of Section-A2	Yes / No
16	SD of 3% as per clause 9.2 of Section-A2	Yes / No
17	Combined BG for SD & PBG for 3% as per clause 9.3 of Section-A2	Yes / No
18	Liquidated Damages as specified in the specification document are acceptable	Yes / No
19	Last three years audited financial results are enclosed	Yes / No
20	Registration certificate of the company is enclosed	Yes / No
21	All the forms in Section D1 to D7 are filled	Yes / No
23	Un priced copy enclosed along with technical-unpriced bid.	Yes / No
24	Priced Bid Format (D1) filled in E-procurement portal Price Bid form only.	Yes / No
25	Signed copy of the complete RFP document is submitted.	Yes / No

SIGNATURE: \_\_\_\_\_

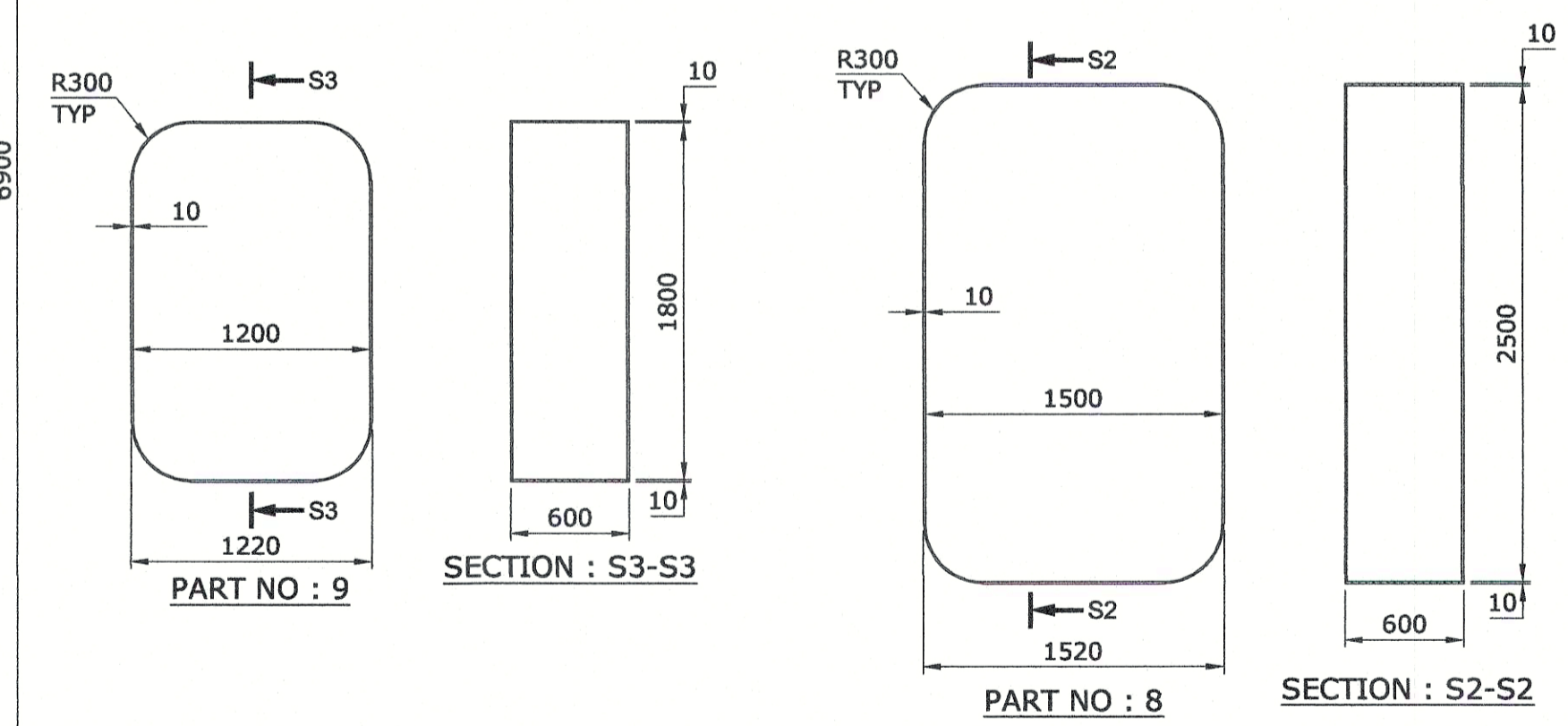
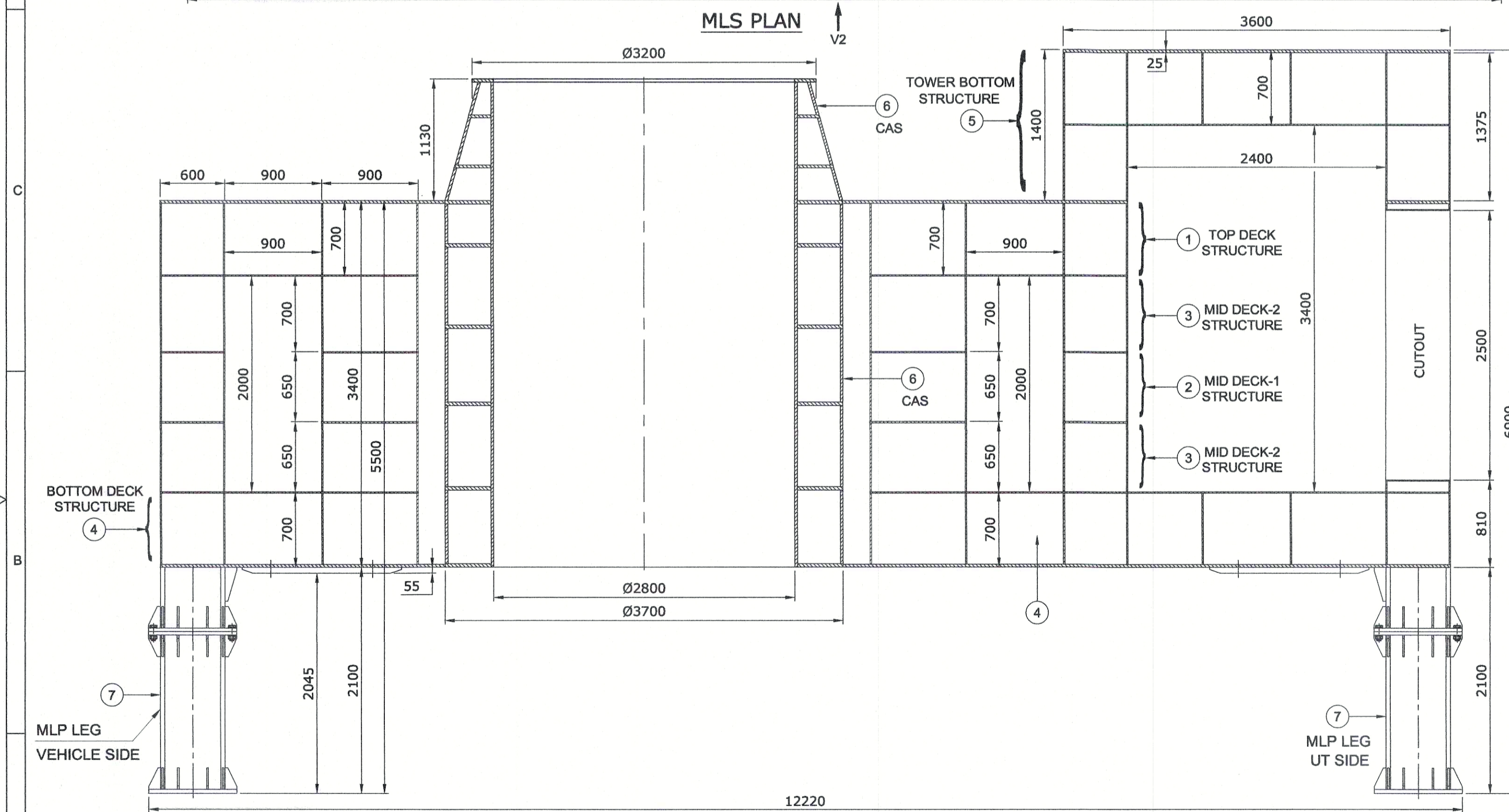
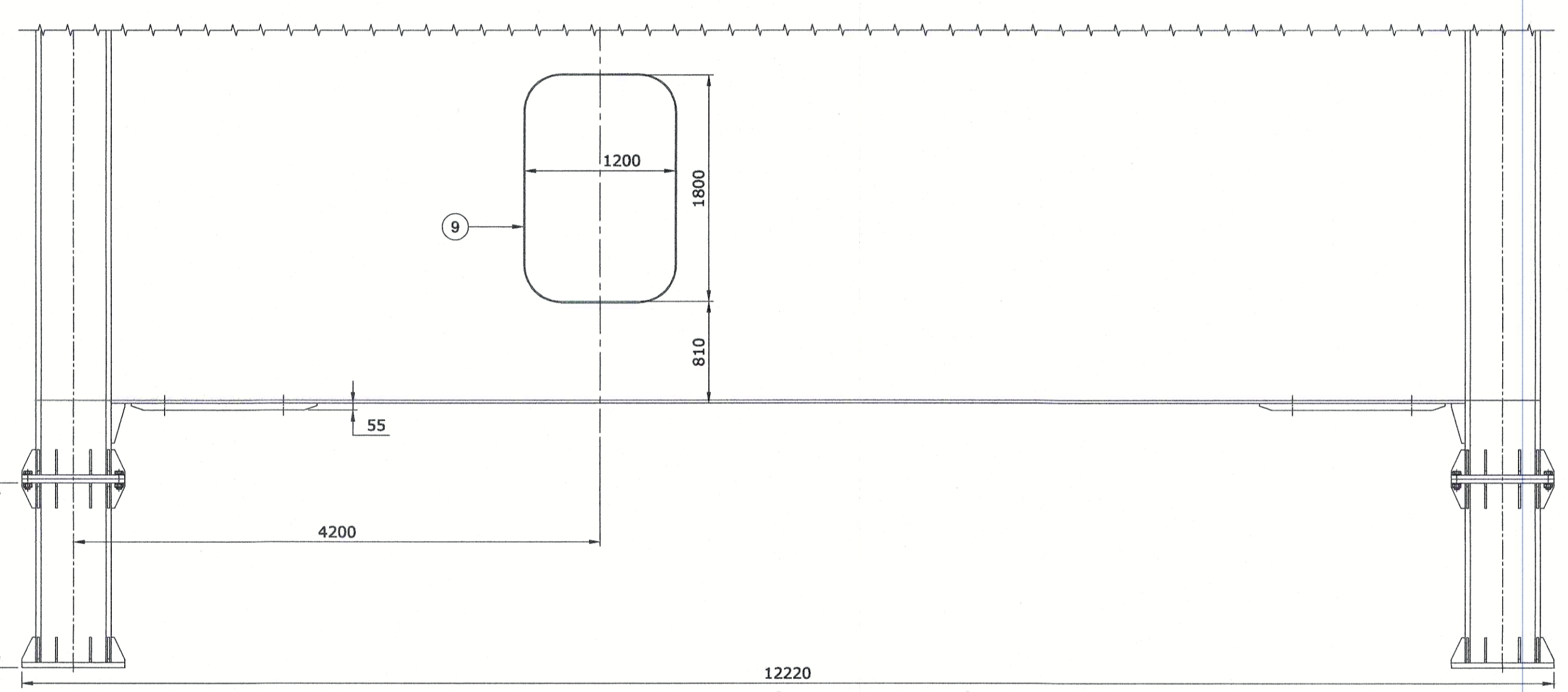
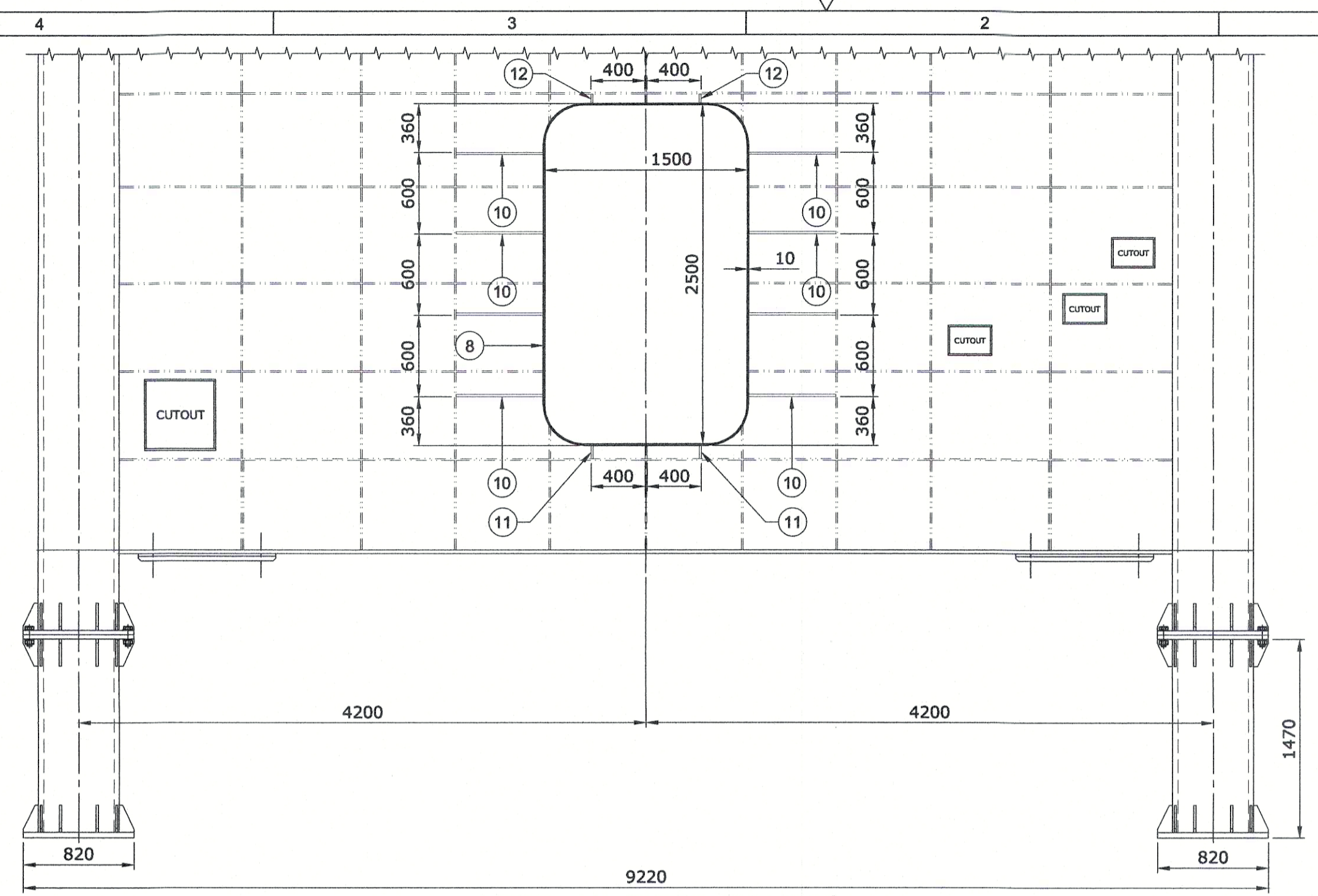
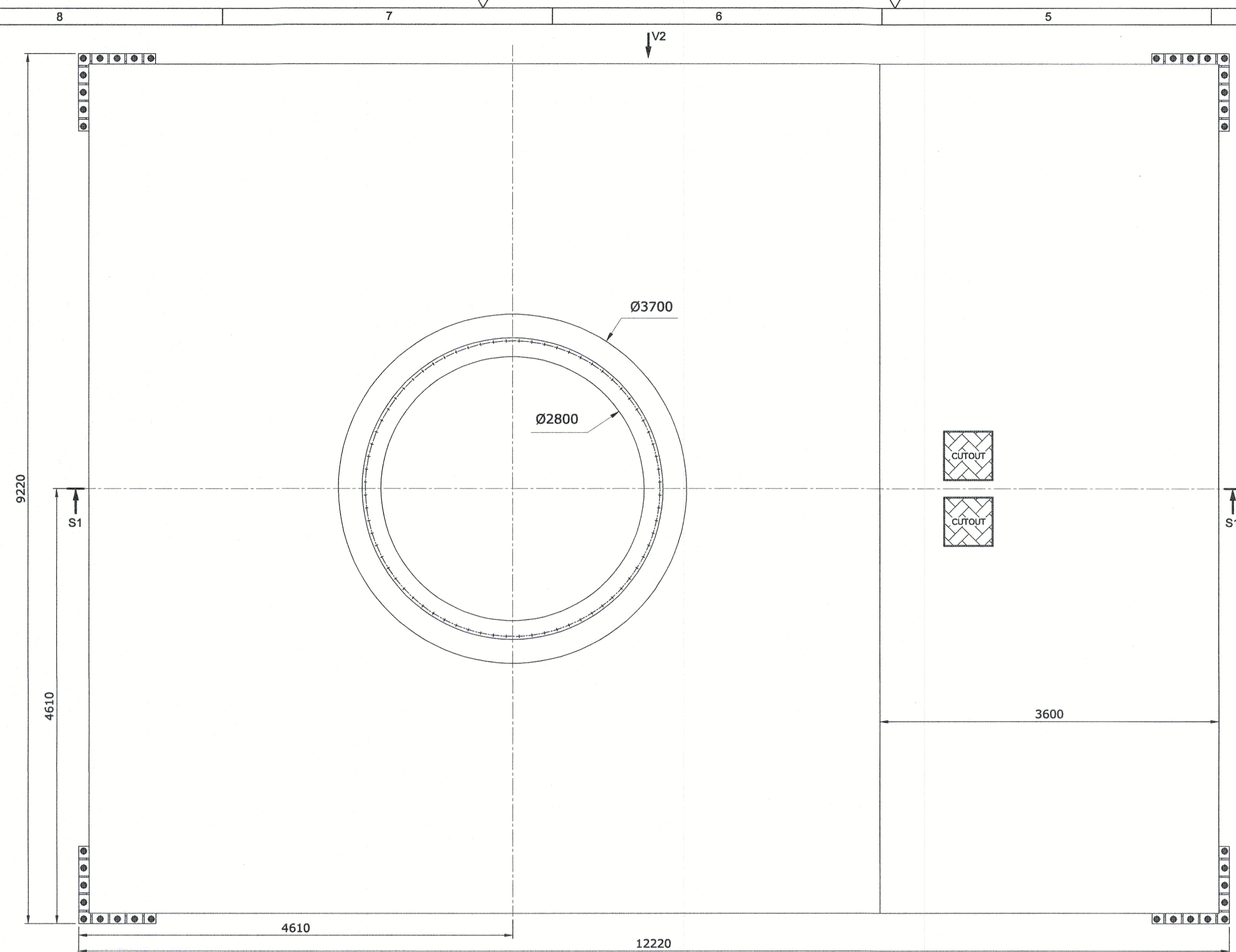
NAME: \_\_\_\_\_

DESIGNATION: \_\_\_\_\_

DATE \_\_\_\_\_

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TOTAL WEIGHT: 231927kg (Approx.)

S.NO	DESCRIPTION	MATERIAL	QTY	W.T	REMARKS
12	STIFFENER-3 600 x 68 x 16Thk	IS : 2062 E250 Gr : B	3	15	
11	STIFFENER-2 800 x 100 x 16Thk	IS : 2062 E250 Gr : B	3	23	
10	STIFFENER-1 645 x 600 x 16Thk	IS : 2062 E250 Gr : B	8	389	
9	PLATE 5565 x 600 x 10Thk	IS : 2062 E250 Gr : B	2	524	
8	PLATE 7565 x 600 x 10Thk	IS : 2062 E250 Gr : B	1	356	
7	DETAILS OF MLS LEGS	-	1	16529	REFER SHEET NO : 10 OF 17
6	CENTRAL ANNULAR STRUCTURE (CAS) OF MLS	-	1	30960	REFER SHEET NO : 9 OF 17
5	DETAILS OF TOWER BOTTOM STRUCTURE FOR MLS	-	1	21894	REFER SHEET NO : 8 OF 17
4	DETAILS OF BOTTOM DECK FOR MLS	-	1	55187	REFER SHEET NO : 7 OF 17
3	DETAILS OF MID DECK-2 OF MLS	-	1	26168	REFER SHEET NO : 6 OF 17
2	DETAILS OF MID DECK-1 OF MLS	-	1	33293	REFER SHEET NO : 5 OF 17
1	DETAILS OF TOP DECK FOR MLS	-	1	46589	REFER SHEET NO : 4 OF 17

- NOTES:-**
1. ALL DIMENSIONS SHOWN ARE FINISHED DIMENSIONS.
  2. ALL PLATES ABOVE 20mm THICK SHALL BE UT TESTED.
  3. ALL WELDS ARE OF 10mm SIZE FILLET UNLESS OTHERWISE SPECIFIED.
  4. ALL WELDS ARE TO BE DP TESTED FOR ROOT AND FINAL PASSES TO ENSURE WELD QUALITY.
  5. ALL BUTT WELD JOINTS SHALL BE 100% R.T CHECKED.
  6. FINAL MACHINING SHALL BE CARRIED OUT AFTER STRESS RELIEVING.
  7. CHECK THE STATUS OF THE DRAWING BEFORE STARTING FABRICATION.

STATUS	SIGN	DATE
DISCUSSION / REVIEW		
TENDER PURPOSE		
FABRICATION		

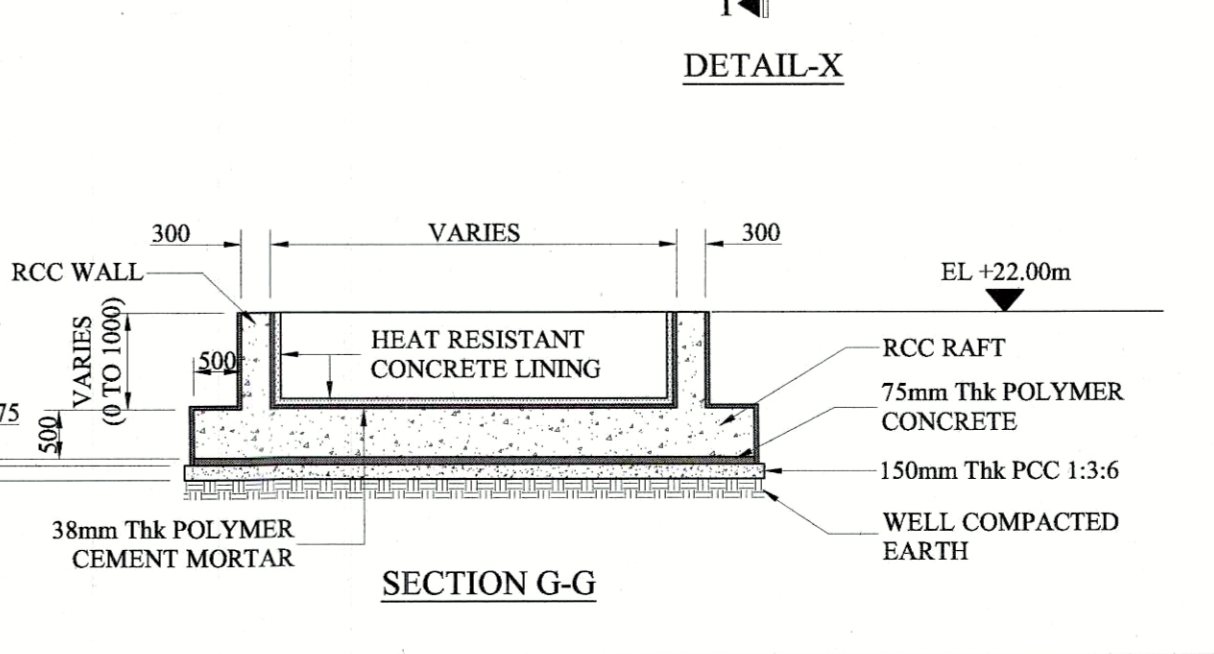
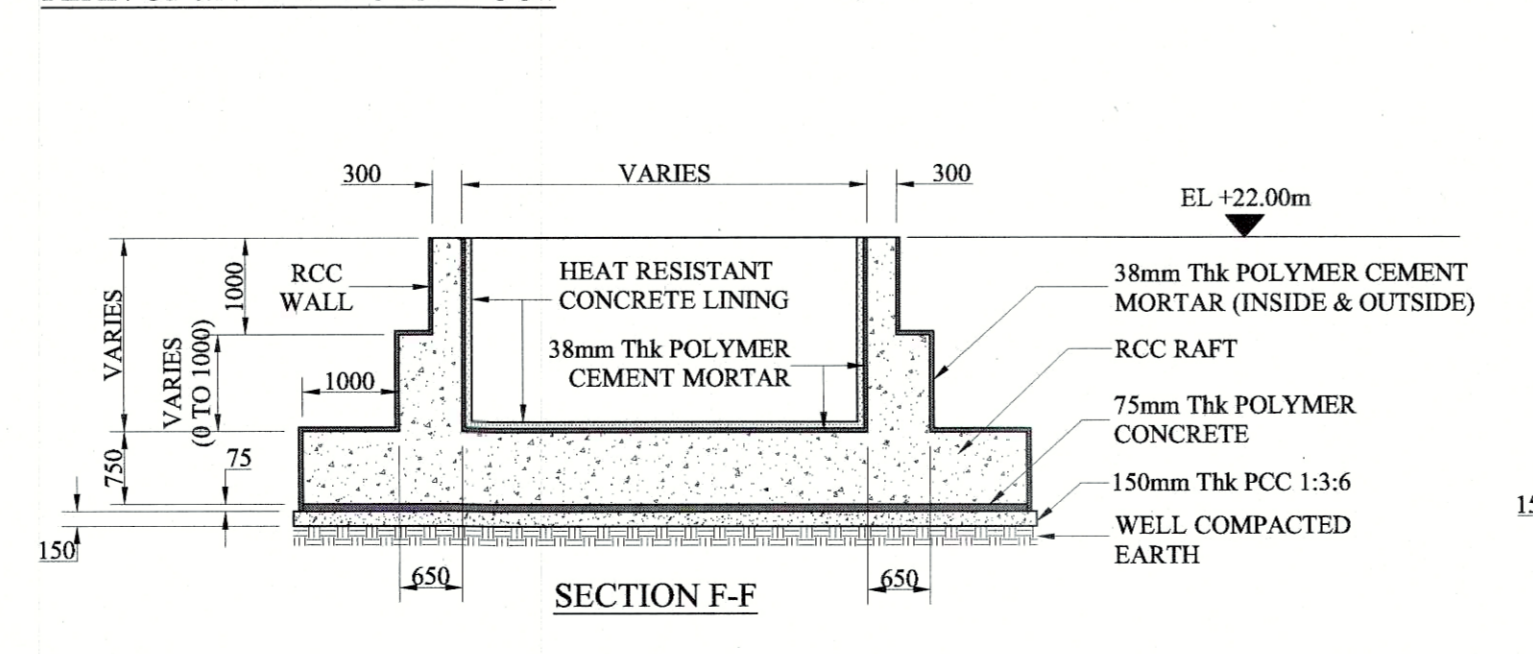
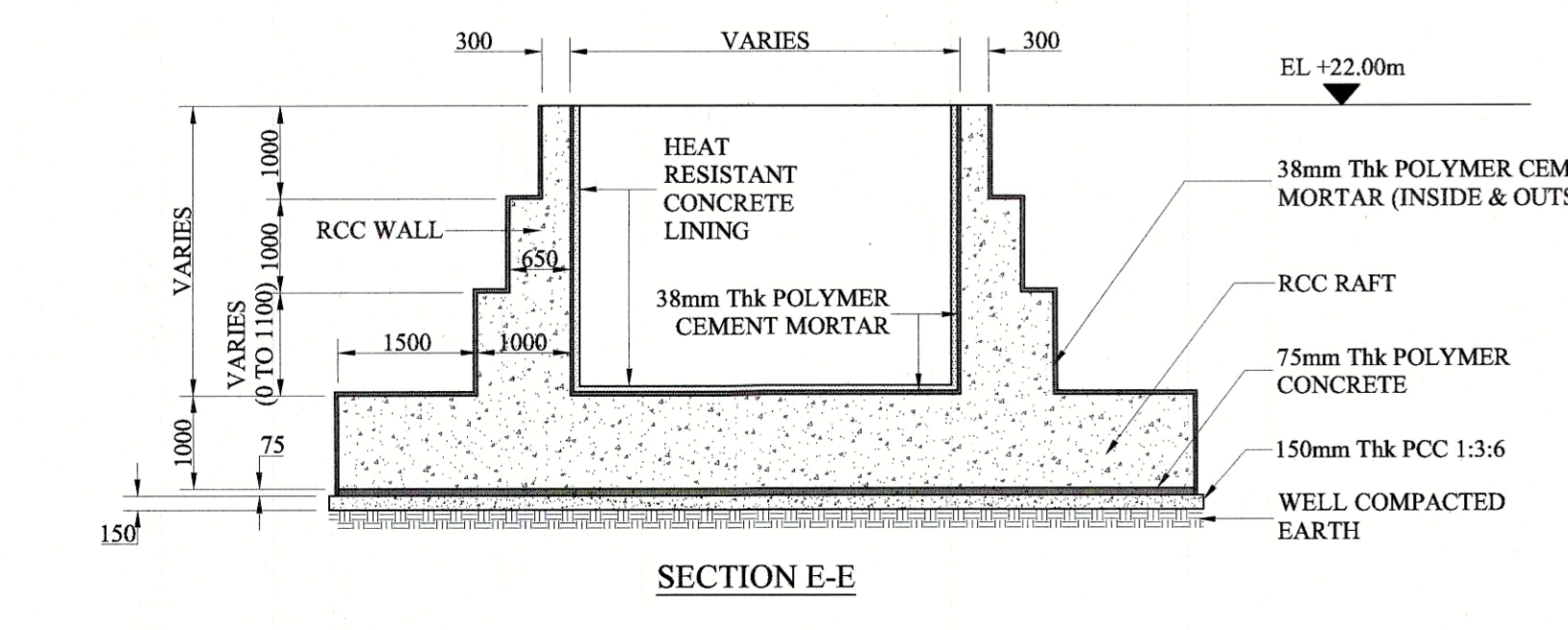
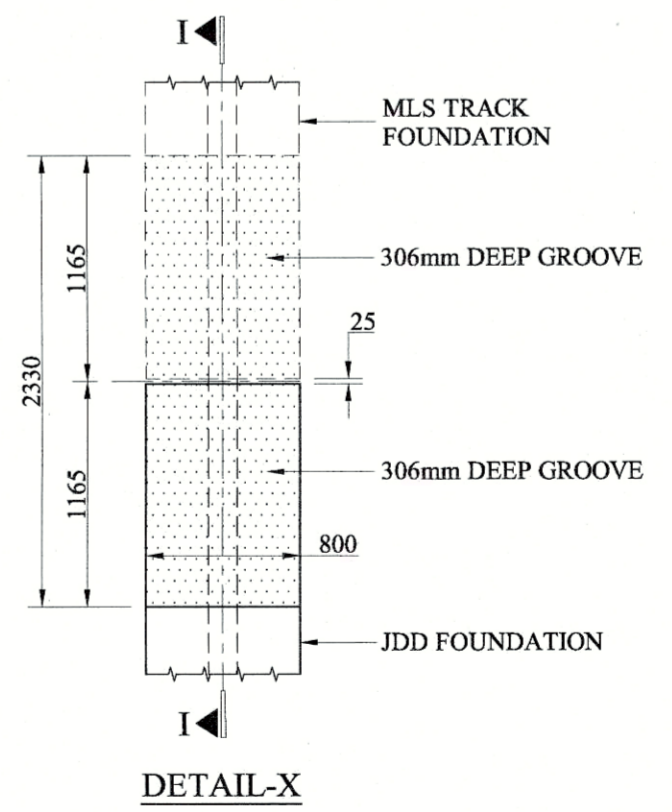
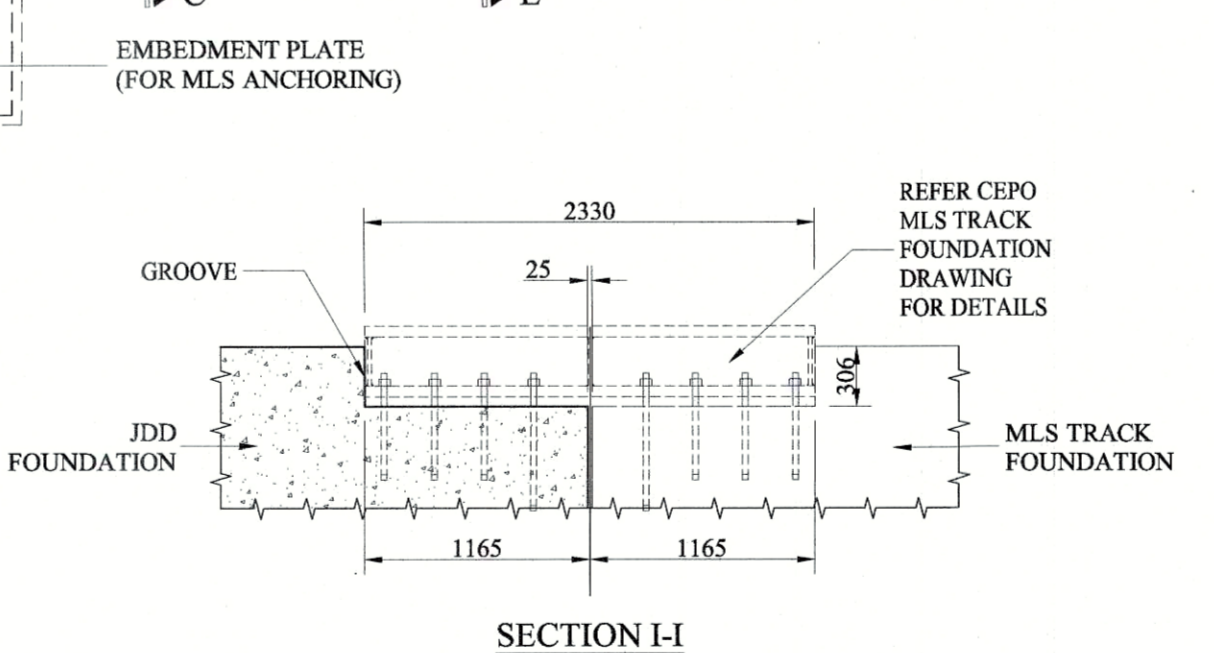
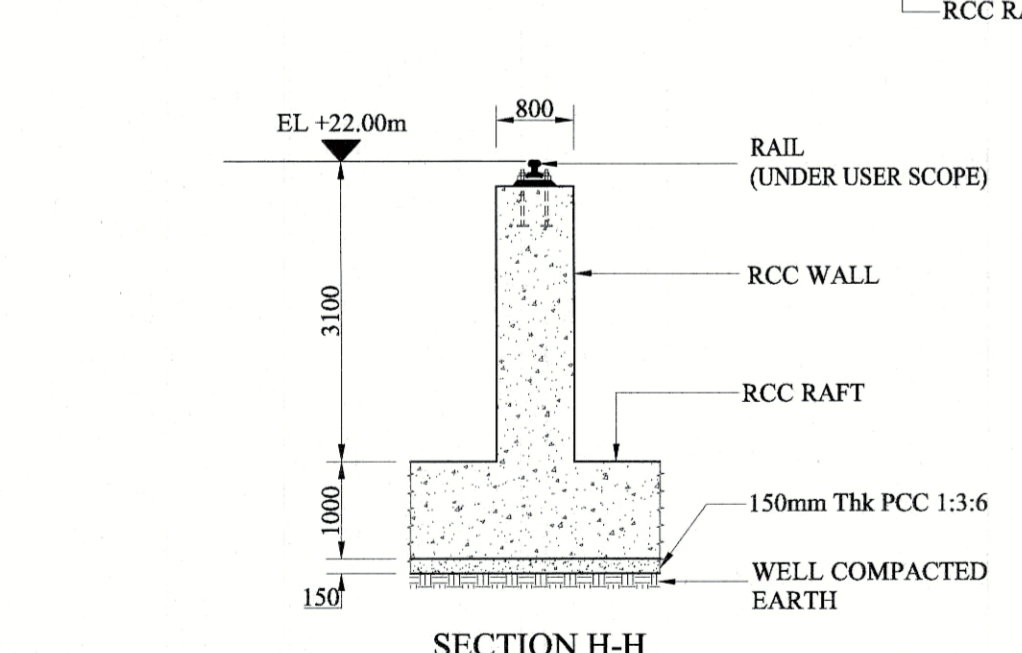
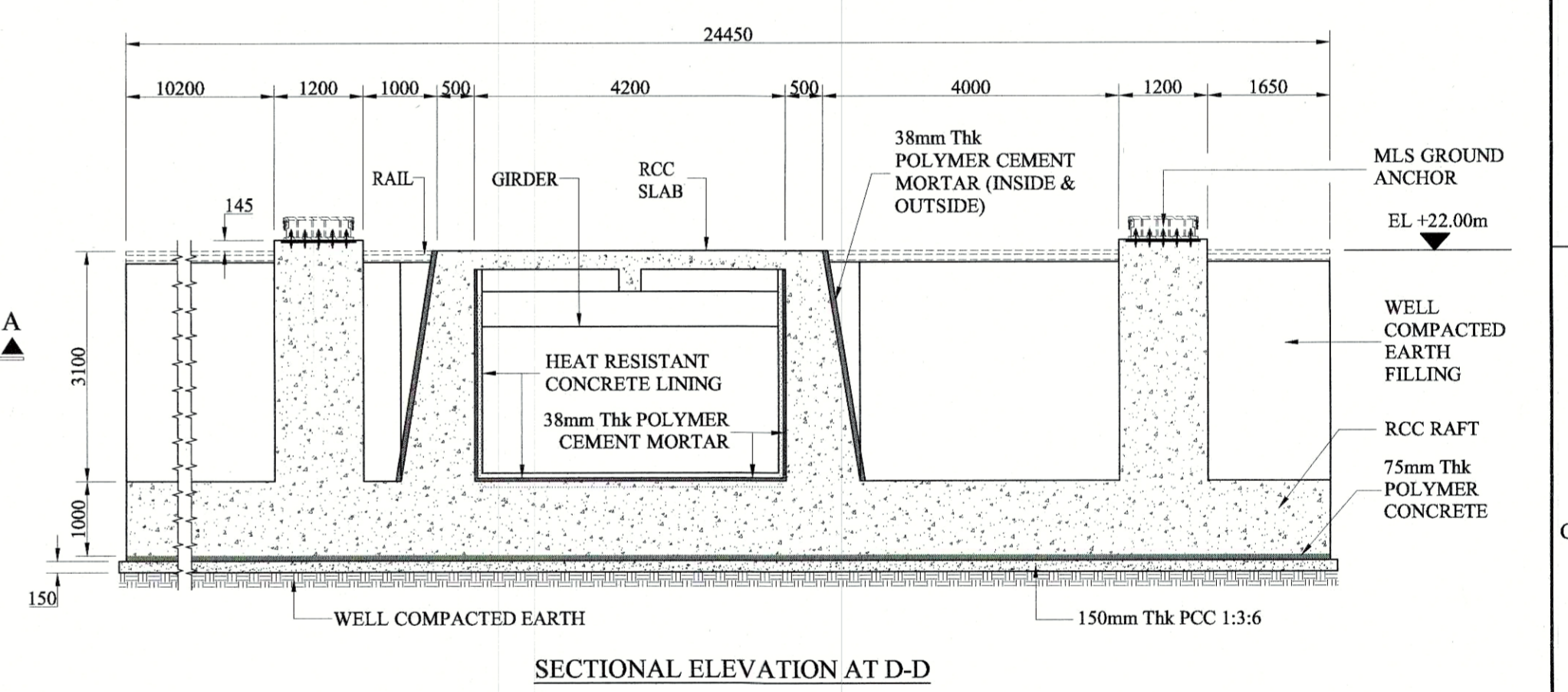
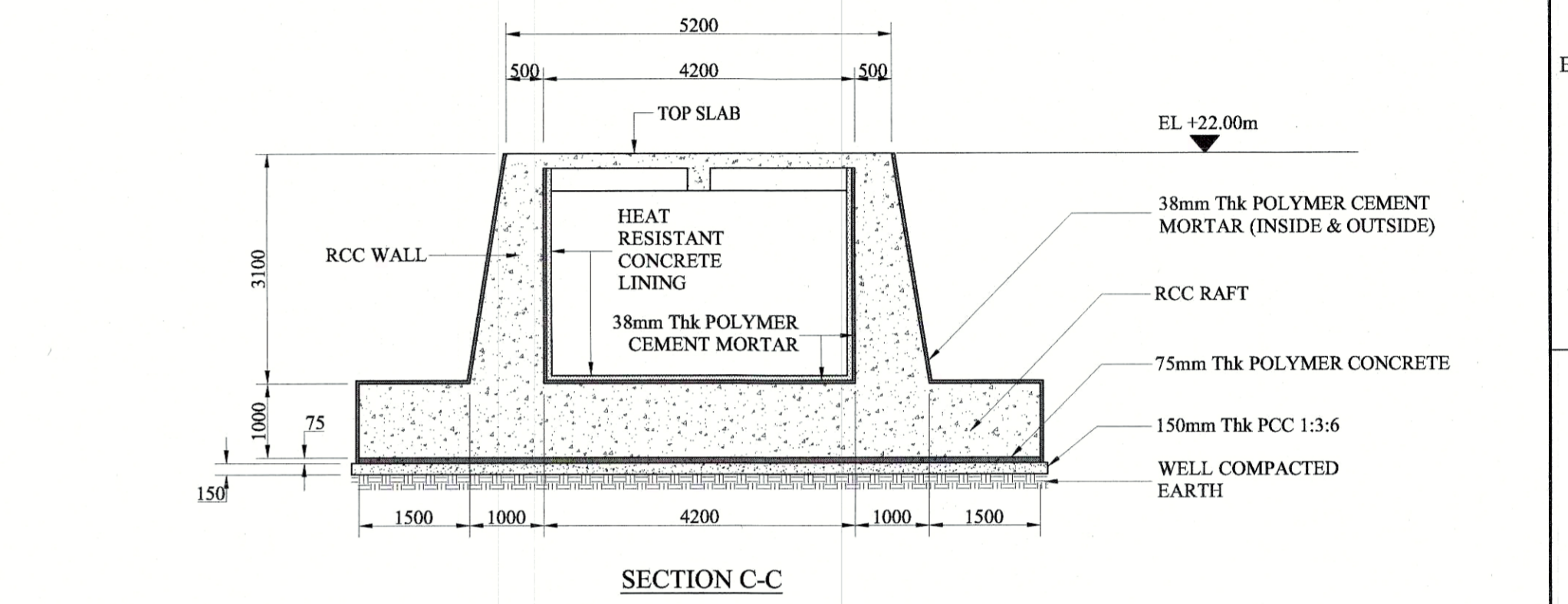
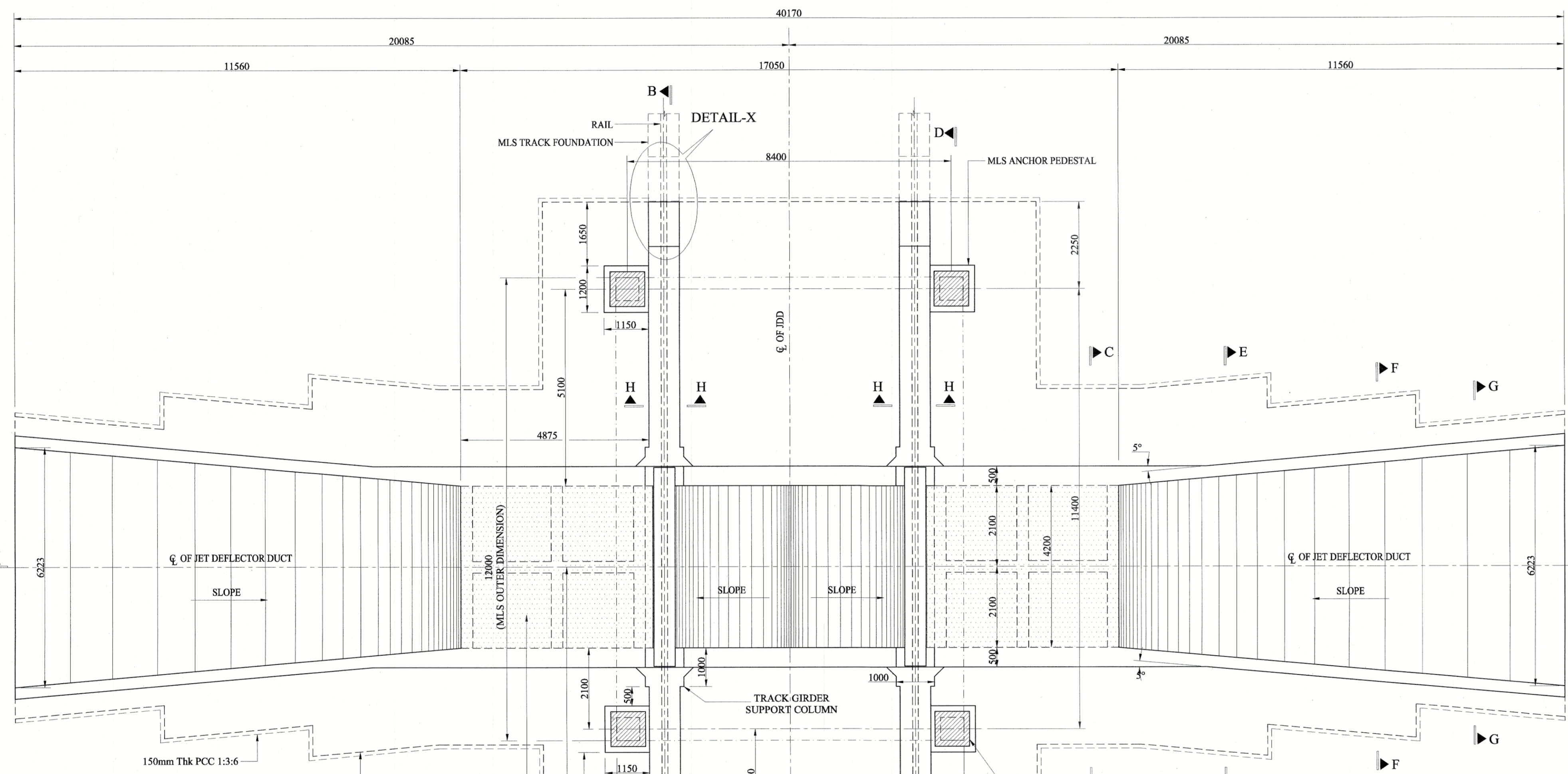
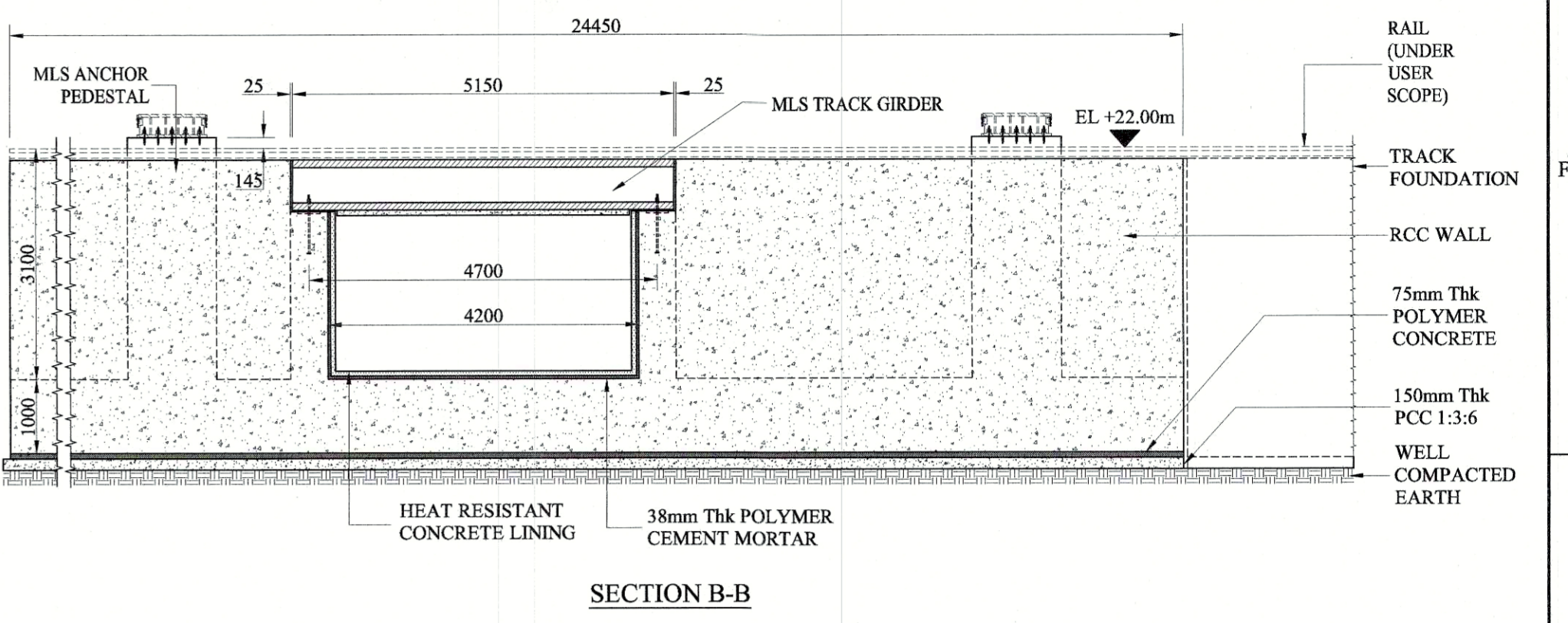
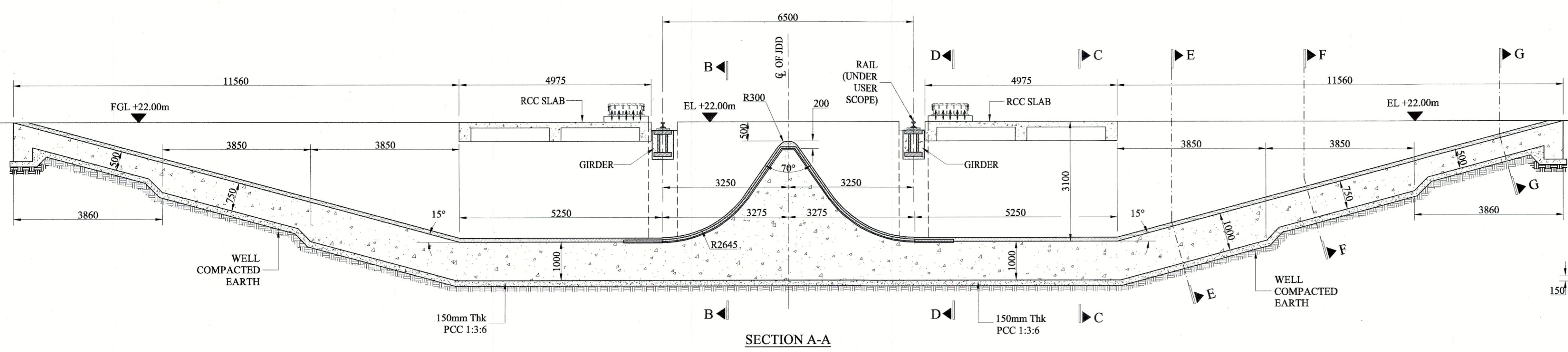
DO NOT SCALE THE DRAWING  
ASK IF IN DOUBT  
UNLESS OTHERWISE SHOWN  
ALL DIMENSIONS ARE IN MILLIMETERS  
REMOVE SHARP EDGES & BURRS  
CHAMFER 1 M.M. X 45°  
MACHINING FINISH IN MICRONS :-  
▽ 8 - 25      ▽ 1.6 - 8  
▽▽ 0.025 - 1.6      ▽▽▽ < 0.025

DEVIATION FOR NON TOLERANCED DIMENSIONS (IS - 2102)	
DIAMETERS & LENGTHS UPTO & INCL	LENGTH IN M.M. OF SHORTER SIDE OF ANGLE UPTO & INCL.
6 ± 0.1	1 - 6 ± 1°-00'
30 - 30 ± 0.2	6 - 30 ± 0°-30'
30 - 120 ± 0.3	30 - 120 ± 0°-20'
120 - 315 ± 0.5	120 - 400 ± 0°-10'
315 - 1000 ± 0.8	
1000 - 2000 ± 1.2	
2000 - 4000 ± 2.0	
4000 & ABOVE ± 3.0	

**SCEND**  
SHAR CENTRAL DESIGNS  
DESIGNED: [Signature]  
DRAWN: SREENU.P.16-07-24  
DRG.CHKD: [Signature]  
APPROVED: [Signature]

TITLE		SCALE		DRG. NO.		SHEET	
SECTIONAL VIEW OF PEDESTAL DECK & CUTOUT DETAILS (SLC PROJECT)		1 : 25		10-STR-12-1-23/A1		3 OF 17	
<b>GOVERNMENT OF INDIA</b> <b>INDIAN SPACE RESEARCH ORGANISATION</b> <b>SATISH DHAWAN SPACE CENTRE SHAR</b> <b>SRIHARIKOTA</b>				PROJECTION 			

सं. आर. नं. / REF. DRG. NO.  
कंप्यूटर सं. / COM. FILE NO.



**GENERAL NOTES**

- ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES.
- PLEASE DO NOT MEASURE THE DRAWING ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
- JDD TOP LEVEL OF EL +22.00m SHALL BE CHECKED AND CONFIRMED AT SITE.
- RAIL TOP LEVEL AT JDD SHALL BE MATCHED WITH RAIL TOP LEVEL OF TRACK FOUNDATION.
- GRADE OF CONCRETE SHALL BE M40.
- GRADE OF STEEL SHALL BE Fe500D.
- ANY DISCREPANCY IN THE DRAWING SHALL BE BROUGHT TO THE NOTICE OF ENGINEER INCHARGE / DESIGNER.
- \*\* REFRACTORY ANCHORING : THREE DIMENSIONAL ANCHOR EVERY 300x300mm GRID. INSTALLATION : GUNTING
- POLYMER CONCRETE, POLYMER CEMENT MORTAR & HEAT RESISTANT CONCRETE LINING THICKNESS ARE BASED ON EXISTING FLP JDD DRAWING.
- DETAILS SHALL BE CONFIRMED WITH CEPO MLS TRACK FOUNDATION DRAWING.
- THE STRUCTURE IS DESIGNED FOR A MAXIMUM MLS BOGIE WHEEL LOAD OF 84t (VERTICAL), 24t (LATERAL) & 4.2t (LONGITUDINAL) WITH A WHEEL SPACING OF 2.20m (1st & 2nd WHEEL), 6.80m (2nd & 3rd WHEEL) & 2.20m (3rd & 4th WHEEL).
- THE STRUCTURE IS DESIGNED FOR MAXIMUM JET LOAD OF 640m<sup>3</sup> IN THE CENTRAL WEDGE PORTION.

**REVISIONS**

R1 - DRAWING IS REVISED BASED ON USER COMMENTS RECEIVED VIDE MAIL DATED : 21/05/2025.  
R2 - DRAWING IS REVISED BASED ON USER COMMENTS RECEIVED VIDE MAIL DATED : 18.07.2025

UNRESTRICTED	RESTRICTED	CONFIDENTIAL	DISCUSSION / REVIEW
THIS DRAWING IS THE PROPERTY OF SDCS-SHAR AND IS ISSUED FOR THE SPECIFIC WORK / PROJECT MENTIONED THEREIN. THIS IS NOT TO BE COPIED OR USED FOR OTHER WORKS / PROJECTS UNLESS EXPRESSLY PERMITTED BY SDCS-SHAR.			TENDER PURPOSE
EXECUTION			DATE
STATUS			SIGN
DATE			DATE
<p><b>स्केड SCEND</b> शार केंद्रीय अभिकल्पनाएं SHAR CENTRAL DESIGNS</p>			<p>CONFIGURATION DETAILS OF JET DEFLECTOR DUCT FOR SSLV LAUNCH COMPLEX AT KULASEKHARAPATNAM (SLC PROJECT)</p>
DESIGNED	T.VAMSI	भारत सरकार INDIAN SPACE RESEARCH ORGANISATION	प्रक्षेप / PROJECTION
DRAWN	SRIRUDRATH	भारतीय अंतरिक्ष अनुसंधान संगठन SATISH DHAWAN SPACE CENTRE SHAR	श्रीरङ्गिकोटा
DRG.CHECKED		श्रीरङ्गिकोटा	
APPROVED		भारत सरकार INDIAN SPACE RESEARCH ORGANISATION	प्रक्षेप / PROJECTION
SIGN	DATE	SCALE: 1:80	श्रीरङ्गिकोटा
		10-STR-12-01-36/AD1/R2	SHAR
			OF 1
			AH-69