

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/Sr.HPS/PT/RO-VALF/33/2026

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

क्र.सं. Sl No	संदर्भ सं. Ref. No.	विवरण Description	मात्रा Qty.
01	SDSC SHAR /VALF PURCHASE /VALF/ 2026000409 [Public Tender - Two Part]	Fabrication, Supply, Erection and Commissioning of Assembly Tower and Tilting Fixtures	01 Lot.

निविदा दस्तावेजों को डाउनलोड करने की अंतिम तिथि Last Date for downloading of tender documents : 29.05.2026 at 14:00 hrs.
ऑनलाइन निविदा जमा करने की अंतिम तिथि Due Date for submission of bids online : 29.05.2026 at 14:30 hrs.
निविदाएं खोलने की नियत तिथि Due Date for opening of tenders : 29.05.2026 at 16:00 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 अनुलग्नक 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-प्रोक्यूरमेंट www.eproc.vssc.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.vssc.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 इसरो न्यू ई-प्रोक्यूरमेंट वेबसाइट www.eproc.vssc.gov.in तथा सतीश धवन अंतरिक्ष केंद्र शार की वेबसाइट 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 ISRO New e-procurement website www.eproc.vssc.gov.in and SDSC SHAR, Sriharikota website 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.
- निविदा दस्तावेज दिनांक 29.05.2026 को 14:00 बजे तक डाउनलोड करने के लिए उपलब्ध रहेंगे तथा निविदा ऑनलाइन जमा करने की अंतिम तिथि 29.05.2026 को 14:30 बजे तक है। निविदाएं दिनांक 29.05.2026 को 16:00 बजे खोली जाएंगी। / The tender documents are available for download upto 29.05.2026 at 14:00 hrs. and last date for submission of tenders on line 29.05.2026 at 14 30 hrs. and Tender Opening on 29.05.2026 at 16:00 hrs.
- इच्छुक विक्रेता विवरण जानने के लिए निविदा खोले जाने वाले सत्र में शामिल हो सकते हैं। निविदा के मूल्यांकन पर विचार करने के लिए उनकी उपस्थिति अनिवार्य नहीं है। / Interested vendors can attend the Bid opening sessions to know the details. Presence not mandatory to consider the quote for evaluation.
- वरि. प्रधान क्रय एवं भंडार, सतीश धवन अंतरिक्ष केंद्र श्रीहरिकोटा के पास किसी भी या सभी निविदाओं को स्वीकार / अस्वीकार करने का अधिकार है। / Sr. 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/20022026/C0EAV81ZBH5T

दिनांक DT: 06.05.2026

वरि. प्रधान क्रय एवं भंडार
Sr. HEAD PURCHASE AND STORES

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

**Tender for Fabrication, Supply, Erection and Commissioning of
Assembly Tower and Tilting Fixtures at SHSB-II**

Bids to be submitted online

Tender No.: SDSC SHAR/VALF PURCHASE/SH202600040901 dated 08-05-2026

A. Tender Details

Tender No : **SDSC SHAR/VALF PURCHASE/SH202600040901**

Tender Date : **08-05-2026**

Tender Classification: **WORKS**

Purchase Entity : **VALF PURCHASE**

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

Fabrication, Supply, Erection and Commissioning of Assembly Tower and Tilting Fixtures at SHSB-II

GEM/GARPTS/20022026/C0EAV81ZBH5T

As per tender documents.

A.1 Tender Schedule

Bid Submission Start Date : **08-05-2026 11:00**

Bid Clarification Due Date : **22-05-2026 10:00**

Bid Submission Due Date : **29-05-2026 14:30**

Bid Opening Date : **29-05-2026 16:00**

Price Bid Opening Date : **25-06-2026 14:30**

B. Tender Attachments

NA

Instructions To Vendors

1. 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.

2. 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 SHALL PREVAIL OVER OTHER TERMS AND CONDITIONS(in case of any contradiction or ambiguity)

3. General Instructions to Vendor

1. Instructions to tenderers

TeleNo.08623-225174/225127

Fax No.08623-225170/22-5028

e-Mail ID : hps@shar.gov.in, sselvan@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 IF NOT MENTIONED IN THE RFP SPECIFICATION.

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 / 90 days for single part from the date of 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. Bids will not be entertained after the due date and time.

7 (A). Request for the extension of the due date will not be considered.

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: Bidders participation is not allowed.

9. Prices are required to be quoted according to the units indicated.

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. 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. Sr. Head, Purchase and Stores, SDSC SHAR SRIHARIKOTA reserves the right to accept or reject any bid in part or full without assigning any reason 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.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.

C. Bid Templates

C.1 Technical Bid - Fabrication, Supply, Erection and Commissioning of Assembly Tower and Tilting Fixtures at SHSB-II

1. MAJOR FABRICATION WORKS: Fabrication, Supply, Erection and Commissioning of Assembly Tower and Tilting Fixtures as per the enclosed specifications & drawings.

Document : Tender Drawing-15

Document : Tender Drawing-14

Document : Tender Drawing-13

Document : Tender Drawing-12

Document : Tender Drawing-11

Document : Tender Drawing-10

Document : Tender Drawing-9

Document : Tender Drawing-8

Document : Tender Drawing-7

Document : Tender Drawing-6

Document : Tender Drawing-5

Document : Tender Drawing-4

Document : Tender Drawing-3

Document : Tender Drawing-2

Document : Tender Drawing-1

Document : Tender Specifications

Common Specifications (Applicable for all items)

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Specifications for Fabrication, Supply, Erection and Commissioning of Assembly Tower and Tilting Fixtures as per the enclosed specifications and drawings	as per tender	Yes / No / Explain		

Supporting Documents required from Vendor

- 1. Party has to provide 1 year warranty period for the assembly tower and tilting fixtures from the date of acceptance.**
- 2. requested to provide Chemical and Mechanical certificates for the materials supplied for fabrication of assembly tower and tilting fixture.**
- 3. Udyam Certificate if caliming MSE purchase preference.**
- 4. Self-deceleration indicating percentage of local content along with location of value addition.**
- 5. Experince certificate as mentioned in the attached RFP**

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	As per tender document	Yes / No / Explain	
2	<p>(1). The procurement intended for the bonafide use in Systems/Sub-systems of Launch Vehicle Project of Indian Space Research Organization, Government of India, Department of Space and eligible for IGST@5% as per guiding principles conveyed by the Ministry of Finance Dept. of Revenue Notification No. 25/2018-Integrated Tax (Rate) Schedule-I; Sl. No. 243B dated 31.12.2018 (Amendment to Notification No. 07/2018-Integrated Tax (Rate) dated 25.01.2018 and Notification No. 01/2017- Integrated Tax (Rate) dated: 28.06.2017)</p> <p>End user certificate in this effect shall be issued in the event of PO.</p>	Yes / No / Explain	
3	<p>Please confirm here whether your quoted "UNIT PRICE" in our Price Bid is EXCLUDING GST or INCLUDING GST.</p> <p>----- NOTE: If you are not clearly stating "GST is Inclusive OR 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.</p>	Yes / No / Explain	
4	Delivery Term FOR : SDSC SRIHARIKOTA (MANDATORY)	Yes / No / Explain	
5	<p>Packing and Forwarding(P & F) charges, extra if any, please mention percentage in price-bid. Please note that in case of Two part tenders, only percentage should be mentioned otherwise those offers shall be summarily rejected.</p>	Yes / No / Explain	
6	<p>Delivery Period required for delivery of the items/completion of total scope of work: Supply: 04 Months from the date of receipt of PO. Erection of the assembly tower & Tilting system: 01 month from the date of site clearance from the department as detailed in the RFP.</p>	Yes / No / Explain	

7	<p>Payment Term: (i) 80% payment shall be made through RTGS within 30days of receipt & acceptance of items by purchaser & CLIP member at purchaser site, Sriharikota, SDSC SHAR. (ii) 20% payment shall be made after erection and commissioning of total systems and also after completion of load test, over load test and DP testing of critical welds of the items at purchaser site, Sriharikota, SDSC SHAR.</p>	Yes / No / Explain	
8	<p>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.</p>	Yes / No / Explain	
9	<p>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 supply.</p>	Yes / No / Explain	
10	<p>Security Deposit (SD) 3% value of the order shall be deposited with SDSC within 10 days from the date of the Purchase Order towards security deposit in the form of Bank Guarantee(BG)/ FDR/DD towards performance of the Contract valid till completion of the contract period plus sixty days towards claim period. (This will be returned by SDSC immediately on execution of the order satisfactorily as per order terms. If not, the amount will be forfeited). NOT REQUIRED FOR LANDED COST BELOW RS.5 LAKHS.</p>	Yes / No / Explain	
11	<p>Performance Bank Guarantee (PBG) You have to submit a BG/DD/FDR in lieu of PBG from a Nationalized / Scheduled Bank for 3% of the order value at the time of supply valid till the completion of warranty period plus 60 days towards claim period.</p>	Yes / No / Explain	
12	<p>Combined BG for PBG cum SD In case, if parties are unable to provide two separate BGs, i.e., one for SD & one for PBG, they can submit a combined BG for SD & PBG for 3% of the Order value valid till the completion of total contractual obligation (i.e., Supply period plus warranty period plus 60 days). Please confirm.</p>	Yes / No / Explain	

13	<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	
14	<p>We reserve the right to place order based on MSE/MII Purchase preferences policy, if required. Please confirm acceptance for part order.</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 & 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 & 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	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.	Yes / No / Explain	
19	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.	Yes / No / Explain	
20	Are you claiming MSME Preference for this tendered item/service? 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))	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	
22	ARBITRATION:- The Contract/PO shall be interpreted, construed and governed by the Laws in India. 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/PO, such dispute/s or difference/s or claim/s shall be settled amicably by mutual consultations of the good Office 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 and International) 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.	Yes / No / Explain	
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.	-	

C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	P&F IN PERCENTAGE	FREIGHT PERCENTAGE	Remark
1	MAJOR FABRICATION WORKS: Fabrication, Supply, Erection and Commissioning of Assembly Tower and Tilting Fixtures as per the enclosed specifications & drawings.	1.00 Lot		-				

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Annexure-I	Bid Qualification Criteria
Annexure-II	Compliance Statement Form
Annexure-III	Deviations Table

2.3. □□□□2(Techno-commercial bid): The bid which does not satisfy the Bid qualification criteria mentioned above will not be considered for tender evaluation.

2.4. □□□□2(Price bid): The prices applicable for items, in response to this tender shall come into this part.

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3.1 The term “Purchaser” means Satish Dhawan Space Centre- SDSC SHAR, a centre under the Indian Space Research Organization (ISRO) of the Department of Space (DOS) here in after called “Purchaser” includes its Units/Entities/Groups/ Divisions and facilities.

3.2 The term “Vendor” shall mean any registered Establishment to which purchase order is awarded and which will be performing the purchase order.

3.3 The term “Purchaser site” shall mean Building SHSB of VALF, SDSC SHAR (located in Sriharikota Island, PIN-524124), where Assembly tower & Tilting systems are to be delivered and erected as per the purchase order.

3.4 The term “Vendor site” shall mean site of the Vendor, where said items shall be inspected by the representative of the purchaser as per the purchase order for predelivery inspection.

3.5 The term “Bidder” shall mean a person or organisation submitting a formal offer for the bid.

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4.1 Sriharikota is an island located 20 km east of Sullurpeta town and it is connected by road and Sullurpeta is a town located 80km north of Chennai and it is connected by road/ rail.

4.2 Conveyance: To & Fro from work spot is in the scope of vendor.

4.3 Vendor shall give undertaking to observe all safety norms put forth by department from time to time till completion of work. Vendor has to adhere to the safety regulations enforced by safety officer of the purchaser.

4.4 The Vendor should bring their own workmen including helpers and others. The Vendor should also bring all the tools required for installation work including consumables, gas cutting sets, welding set, erection tool/equipments etc.

- 4.5 Transport & accommodation at Sullurpeta (30kms from purchaser site at Sriharikota) shall be arranged by the contractor for his workmen (including helpers). No transport will be provided by SDSC SHAR.
- 4.6 Accommodation may be provided by the department subject to availability on chargeable basis.
- 4.7 All service engineers/ technicians deployed by the vendor at purchasers site shall be skilled and experienced for installation and commissioning work.
- 4.8 Contract shall strictly adhere to insurance requirement and minimum wages act time to time. Purchaser is not responsible for any deviation in the above by the vendor.
- 4.9 In the event damage to our property (or) personal injury to our personnel due to negligence of Vendor employees during execution of the work at Purchaser site, the responsibility shall solely rest with the vendor.
- 4.10 Purchaser will not be responsible for any injury/death to contract personnel and damage to Vendor property caused at site, due to negligence (or) unsafe act of contract personnel.

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- 5.1 Bidders shall provide its complete offer considering the total quantity required item wise as per the drawing.
- 5.2 Bidder can visit the purchaser site with a prior intimation to the purchaser (SDSC, SHAR) to understand the site conditions and scope of work.
- 5.3 Bidder shall quote the price in lump sum for Fabrication, Supply, Erection and commissioning of all the related items including its transportation to purchaser site (SDSC SHAR) as mentioned in the scope. Applicable taxes shall be mentioned separately.

Vendor shall present the bids on two-part basis as highlighted below:

27% (without indicating the price)

27% (indicating the price)

27%

The Vendor shall necessarily present the following in techno-commercial bid:

- The Vendor shall furnish point-wise confirmation **87%** for the technical specifications given in the enquiry. However, change of specifications/ deviations (if any) shall be brought out in the offer with detailed justification.

- Vendor needs to furnish the details related to commercial terms indicating payment terms, details of bank guarantee in case of advance payments etc.
- Mode of dispatch of the assembly tower & tilting fixture components shall be by Road.
- Vendor/Bidder needs to submit Un-priced price bid copy (as highlighted below) indicating the description of all the cost elements considered, without indicating the price. Vendor shall note that indication of price in the techno-commercial bid shall lead to dis-qualification of bid.
- The price bids will be opened only after evaluation and acceptance of the techno-commercial bid of the respective Vendor.
- Vendor needs to sign and with his seal in all pages of tender document and submit the same along with Techno-commercial bid (Part-I), indicating that Vendor has gone through the full document and accepts all the terms and conditions.
- **Vendor shall note that civil foundation works are not in the scope of this tender. However, Assembly tower, stair case and A frames are to be installed as per enclosed drawings without any deviation.**

□□□□ □□□□□: □%□□□□□□□□□□□□□□ Confirmation of item wise cost break up by the Vendor.

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1.	Supply of Assembly Tower components and tilting fixture systems as per drawing nos. mentioned in table -I and enclosed specifications.	1	Un-priced	□□□□□□□□□□□□□□□□ □□□□□□□
2.	Erection, & commissioning of Assembly Tower components and Tilting Fixture Systems as per enclosed specifications.	1	Un-priced	□□□□□□□□□□□□□□□□ □□□□□□□

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□□	Supply of Assembly Tower components and tilting fixture systems as per drawing nos. mentioned in table -I and enclosed specifications.	1	

Sl. No.	Description of Work	Quantity	Unit	Rate	Amount	Total
1	Erection, & commissioning of Assembly Tower components and Tilting Fixture Systems as per enclosed specifications.	1				

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Price bid should be submitted by the Vendor in the above format with price break up of all individual components. Otherwise the offer will be considered invalid.

The order will be awarded to overall lowest bidder (L1) for both Sl. No.1 & 2. Splitting of the order is not possible.

1. In respect of Two-Bid system, the technical Bids forwarded by the Bidders will be evaluated by the Department with reference to the technical specifications as mentioned in the Tender Specifications. The compliance of Technical Bids would be determined on the basis of the parameters specified in the Tender Specifications. *The Price Bids will be opened whose Technical Bids would clear in the technical evaluation.*

- During evaluation, SDSC SHAR may request Bidder for any additional clarifications/documents on the bid, if required.
- The time schedule for completion is given in delivery schedule of this tender document. Bidder is required to confirm the completion period unconditionally.
- SDSC SHAR reserves the right to reject any bid if not meeting the technical/commercial requirements and terms & conditions. Such decisions by the SDSC SHAR shall bear no liability whatsoever consequent upon such decision.

3. Bidders who are qualifying/meeting following technical & financial capabilities are eligible to participate in the bid. Bidder shall furnish all the details with documentary proof and submit the same along with quotation as mentioned in the Annexure-I.

(Bids of the parties which are not meeting the criteria as mentioned in Annexure-I will not be considered for evaluation and will be rejected without seeking any further clarification.

0. Vendor has to submit QAP (Quality Assurance Plan) for the fabrication & supply of Assembly tower and tilting fixtures components within 15 days from the date of receipt of purchase order for approval from the Purchaser.

- 7.1 Vendor has to submit QAP (Quality Assurance Plan) for the fabrication & supply of Assembly tower and tilting fixtures components within 15 days from the date of receipt of purchase order for approval from the Purchaser.
- 7.2 Vendor shall fabricate the items like Sliding platform mechanisms, Saddles, Mobile jack supports and A frames & Extension adaptors at vendor site only and

Erection and commissioning of assembly tower and stair case shall be done at SHSB, VALF, SDSC SHAR.

- 7.3 Modifications if warranted as per site condition, shall be accommodated by the vendor without any extra cost.
- 7.4 Fabrication shall be carried out only as per the dimensions and tolerances indicated in the enclosed drawings and no modifications are entertained without the firm prior approval of the “Purchaser”.
- 7.5 Unless otherwise specified, general tolerances as per IS 2102 have to be followed.
- 7.6 Detailed fabrication schedule indicating critical operation/ inspection stages shall be submitted after receiving firm purchase order for completion of the fabrication and supply within 30 days.
- 7.7 Detailed installation schedule indicating critical operation/inspection stages shall be submitted after receiving firm purchase order, for completion of the installation and testing within 30 days.
- 7.8 Test certificates for Chemical and Mechanical properties as applicable shall be produced for all the materials used in the fabrication and shall be submitted to the purchaser or any person nominated by him during pre-dispatch inspection.
- 7.9 All the holes and slots shall be made by suitable drilling/milling or any other superior machining methods. Holes/slots shall not be made by gas cutting. Holes and slots shall be made perfectly as per the drawing.
- 7.10 Trial suiting of sliding platform mechanism interfaces, if required can be carried out at vendor site.
- 7.11 During fabrication and welding, vendor shall ensure that no twisting/ bending of any parts shall occur.

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- 8.1 All the wire ropes, right angle drives, bearings etc., should be of reputed brands or substantially equivalent brands.
- 8.2 Non-standard size of bolt & nuts thread (if any) should be formed in the thread rolling process only.
- 8.3 All the bolt & nuts shall be of reputed make like Unbrako, TVS or equivalent.
- 8.4 All the castor wheels shall be of reputed make like REVVO, JACK CASTOR or equivalent.

- 11.1 The painting of Assembly tower and tilting system components shall be as per the following scheme: All the weldments shall be properly masked with protective adhesive tape of cotton/ paper to avoid paint entry to weldments while painting.
- 11.2 Rust removal and sand blasting shall be done as preparatory works for painting wherever required.
- 11.3 The inner surfaces of hollow sections shall be cleaned and painted with zinc epoxy primer (by brush) to a thickness of 75microns DFT before closing the section.
- 11.4 After cleaning thoroughly, one coat of “inorganic zinc silicate” or “zinc rich epoxy” primer shall be applied.
- 11.5 Two coats of “Polyurethane enamel paint” having excellent resistance to UV radiation and abrasion finish paint shall be applied before dispatch.
 - GP Bond 141 of Grand Polycoats (aliphatic polyurethane) or equivalent.
 - Bergerthane enamel of Berger (Acrylic polyurethane) or equivalent.
 - Pentathane finish paint 4513 of Bombay Paints (Aliphatic isocyanate polyurethane) or equivalent.
 - MRF special finish, Metal coat (Glossy) or equivalent.
- 11.6 All the machined surfaces shall be painted with anti-corrosive paint & all the holes shall be protected from corrosion by applying grease.
- 11.7 All the items shall be packed neatly to avoid any damage during transit / storage.
- 11.8 After successful completion of D.P test after load test at SDSC-SHAR, Vendor has to re-paint the D.P tested welded region with one coat of primer and two coats paints which are mentioned above.
- 11.9 Vendor shall follow the below mentioned painting scheme for the items supplied.
 - Tilting set-up (A-frames & Extension adaptors) : Apple green
 - Assembly tower with Sliding platform mechanism : Smoke Gray
 - Staircase assembly : Smoke Gray
 - Saddle and Mobile Jack Support : Yellow

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- 12.1 All the tests (Mechanical, Chemical, Heat Treatment, Load test & Physical test) are to be carried out at NABL/Govt. approved test lab and the test certificates are to be submitted before dispatch of item to SDSC-SHAR. Note: Above said test certificates shall be provided to the purchaser or any person nominated by him during pre-dispatch inspection.
- 12.2 Certificate for DP test of all weldments after root run as well as after final weld during fabrication.
- 12.3 Inspection report for dimensions of all the items after completion of the fabrication.

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- 13.1 All documents shall be provided by the vendor as mentioned above in Sl. No. 12.
- 13.2 After receipt of items at SDSC SHAR, its parts shall be load tested to SWL and overload (1.25 times of SWL) followed by DP test of critical weldments.
- 13.3 Above said DP test after completion of the load test is in scope of works of vendor. It includes works viz. Cleaning of weldments, DP test (penetrant/dye/developer application), repainting of weldments with primer and paint as procedure given under Sl. No.11 and it shall be done by vendor at our site in SDSC SHAR without charging any extra cost. The offer from vendor shall be inclusive of all the works (which are in scope of vendor) mentioned in this complete annexure.
- 13.4 However, the assessment of the DP test results shall be done by NDT team of SDSC-SHAR.

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- 14.1 Vendor shall produce a warranty certificate for the assembly tower, Stair case & tilting fixture components for a period of □, □□ □□7□ from the date of completion of installation at SDSC SHAR. Problems faced during the warranty period for the fabrication and manufacturing defects shall be solved by the vendor at free of cost (including replacement of defective material, if any).
- 14.2 In case any defects are noticed during the above period due to faulty design, poor workmanship, use of substandard materials etc., the same shall be rectified / replaced by party free of cost within a reasonable period.

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- 15.1 Total quantity required: As mentioned under scope in □□□(□□□. above.
- 15.2 Dispatch Instructions 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.

- 15.3 Vendor shall quote for delivery of the equipment as delivered at Place (DAP): SDSC SHAR, Sriharikota.
- 15.4 The Vendor shall be responsible for transportation of all the items to site and unloading at Purchaser's site (SDSC SHAR). However, material handling equipment support will be extended for unloading of consignment at SDSC SHAR, Sriharikota at free of cost.
- 15.5 No item shall be delivered without obtaining dispatch clearance from SDSC SHAR.
- 15.6 All the equipment shall be properly packed to avoid any damage during transportation / handling and any damage found has to be replaced free of cost.
- 15.7 The realization of Assembly tower and tilting system components within the schedule is very essential. Hence, bidders are requested to adhere to the schedules given below.
- 15.8 Vendor shall supply the items within **30 days** from the date of Purchase Order. Erection and commissioning of assembly tower & tilting fixture systems shall be completed within **7 days** after supply of items and facility clearance.

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- 16.1 **□□B** payment shall be made through RTGS within 30 days of receipt & acceptance of items by purchaser & CLIP member at purchaser site, Sriharikota, SDSC SHAR.
- 16.2 , **□□B** payment shall be made after erection and commissioning of total systems and also after completion of load test, over load test and DP testing of critical welds of the items at purchaser site, Sriharikota, SDSC SHAR.
- 16.3 □□□□□□ The procurement intended for the bonafide use in Systems/Sub-systems of Launch Vehicle Project of Indian Space Research Organization, Government of India, Department of Space and eligible for IGST@5% as per guiding principles conveyed by the Ministry of Finance Dept. of Revenue Notification No. 25/2018-Integrated Tax (Rate) Schedule-I; Sl. No. 243B dated 31.12.2018 (Amendment to Notification No. 07/2018-Integrated Tax (Rate) dated 25.01.2018 and Notification No. 01/2017- Integrated Tax (Rate) dated: 28.06.2017). End user certificate in this effect shall be issued in the event of PO. **SDSC SHAR GSTIN: 37HYDF00385A1DZ**

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- The delivery & erection period is very critical for assembly tower, tilting fixtures LD at the rate of 0.5% per week of delay or part there off on undelivered portion to a maximum of 10% of the total value will be imposed, if the causes of the delay are attributable to the contractor or his vendors.

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- 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.

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- 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 & directives related including latest amendments (if any) is applicable for this tender. 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 & the details of Location(s) at which value addition is made in the offered product. 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.

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- The systems shall conform to the technical requirements covered in this specification and the relevant manufacturing/approved drawings/standards (latest revision) and bill of materials in respect of dimensions, sizes, material of construction, manufacturing, inspection, testing, painting, marking, packaging, erection and commissioning procedures.
- Inspection & testing of Bought Out Items (B.O.I) shall be carried out in presence of Vendor/ISRO at Vendors/sub-Vendor works on the basis of drawings, specifications, latest Indian Standards & Quality Assurance Plan (QAP).
- Vendor shall not off-load the tender or part thereof to any Sub-Vendor without written permission of Department. In case, sub-letting of any part of the work is permitted by Department, the fact that such permission has been accorded, neither shall establish any contractual relationship between sub-Vendor and Departments nor shall release the Vendor from any of his obligations and liabilities under the specific and applicable Vendor.
- The system shall be realised strictly as per technical specifications, manufacturing / fabrication drawings and bill of materials. Vendor may suggest any improvement for the betterment of the operation of the system, which shall be reviewed by ISRO as necessary.
- Vendor shall clearly indicate any assumption made in respect of specification, data or any other details that have not been mentioned in this tender but considered necessary for meeting the specified functional and duty requirements. Any such

assumptions not indicated during tendering stage, will not be binding on Departments.

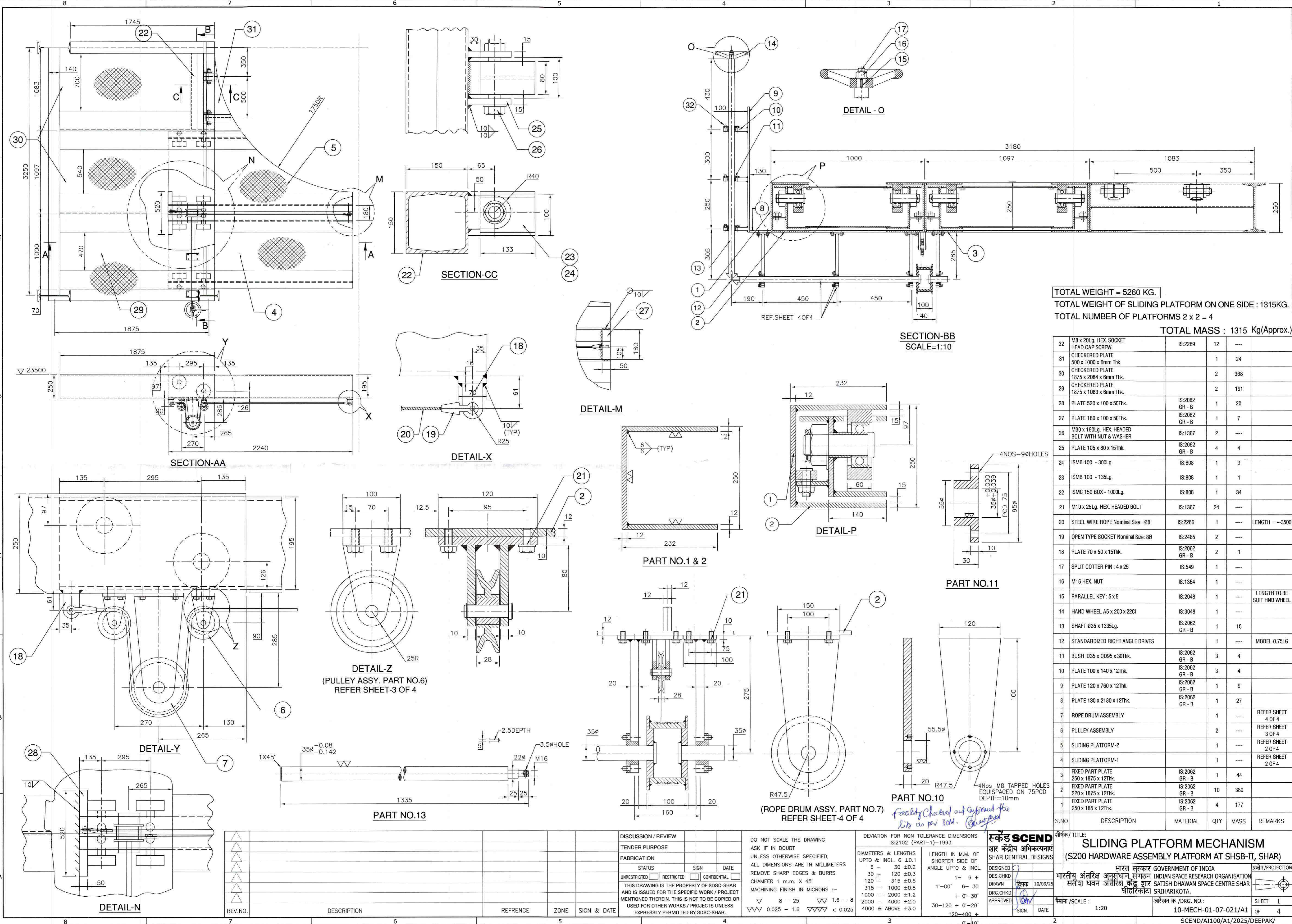
- Vendor shall procure all Bought Out Items from the approved suppliers only. However, Vendor can put up list of additional reputed parties who can supply the same for Department's approval, if required. Department shall reserve the right to specify particular type and make of such items even after the award of contract. Price implication, if any, shall be mutually discussed and agreed.
- Approval of various procedures submitted by the successful Vendor shall not relieve the Vendor of his responsibilities towards completion of work as defined in the contract. During the course of execution, if any additions/alterations are found necessary and intimated to the Vendor before fabrication/installation of the equipment, the same shall be implemented by the Vendor without any extra cost.
- All necessary facilities including tools, tackles, safety appliances, measuring & testing equipment/ instruments, accessories & material handling equipment, etc. shall be provided by the successful Vendor to enable stage wise inspection of the system during fabrication, erection, testing and commissioning at site by ISRO.
- The Successful Vendor shall be solely responsible for obtaining necessary clearances, if any, from various statutory bodies including those of Central & State Government, as applicable, during the course of manufacture/fabrication, testing, transportation, erection and commissioning of the equipment at site.
- Vendor shall clearly understand the civil floor & column embedment interface requirement details for assembly tower, stair case & tilting system components as per the attached drawings. **Note: Civil foundation works are not in the scope of Vendor. However, Assembly tower, stair case and A frames are to be installed as per enclosed drawings without any deviation.**
- Vendor shall have to take care of above interfaces during different stages of execution at their works as well as during erection at site. In case of any dispute with regards to interface management, Vendor shall abide by the decision of Department.
- Complete understanding of functional requirements of the above fixtures interfaces in the table-I drawings and thereby ensuring satisfactory operation of the system.
- Procurements of raw materials and bought out items with all test / inspection certificates.
- Carrying out the fabrication as per supplied fabrication drawings and machining of the items.
- Fabrication & machining of all structures & components with stage inspection as per approved QAP's including DP as specified in drawings and documents.
- Procurement of wire ropes, pulleys, gears, bearings etc., as per the given specifications in the drawings.
- Procurement of paints, sand blasting & painting of fabricated items and protecting machined surfaces.

- List of material handling equipment, tools, tackles, alignment & measuring instruments along with certificates of correction.
- List of consumables, other erection materials, packing plates, etc with estimates of quantities /volume.
- Vendor should have certified welders to carry out various types of welding.
- All field connection materials like bolts, nuts, washers and electrode will also be supplied by the Vendor. In addition, the Vendor will supply all other materials like oxygen, acetylene, paints, fuels, lubricants, oil, grease which are necessary for the execution of the work in accordance with the contract.
- All materials required to be supplied by the Vendor under this contract shall conform to relevant Indian Standard specifications/ASTM standards as specified in the drawing.
- ***Fabrication of all sliding platform, A frames, extension adaptors, mobile jack supports and support saddle shall be done at Vendor site only.*** Only minimum fabrication works required for erection and commissioning of assembly tower and stair case as per enclosed drawings can be taken up at SDSC SHAR.
- Any deviation in method and sequence of erection shall have the prior approval of ISRO. The Vendor shall follow most economical method and sequence available to him in consistent with the Drawings and Specifications.
- Unless adequate bracing is included as a part of the permanent framing, the Vendor during erection shall install temporary bracing wherever needed depending upon the loads due to erection equipment and erection operations.
- No permanent field connections by bolting or welding shall be carried out until alignment has been attained.
- Before starting the site work, Vendor has to insure all his personnel working at site in Sriharikota against accidents. Safety protocols are to be followed during erection of Assembly tower & stair case system components.
- The department will identify the power source on chargeable basis fixed by the Department from time to time. It is the responsibility of the Vendor to extend the facility to suit his requirement at his own cost from the power source identified by the department with necessary panel boards, power cables along with kWh meter.
- Vendor should follow all the safety regulations as per relevant safety IS codes. The Vendor will not have any claim against the department in the event of failure, interruption / insufficiency of these services.
- ***Civil foundation works are not in the scope of Vendor. However, Assembly tower, stair case and A frames are to be installed as per enclosed drawings without any deviation.***

<p>□□□□ (□□□)</p>	<p>) □□□□□□□□□□</p>	<p>□□□□□□C□□ □□□ □□□□□□□□□□ □□□- (□□</p>
<p>4 □□□□□□□□□□ □□</p>		
<p>1.</p>	<p>The Bidder has understood the requirement and is offering the bid for “Fabrication and supply of Assembly Tower and tilting system components” as per the specifications mentioned in the specification document.</p>	
<p>2.</p>	<p>Techno-commercial bid is submitted as per the tender document along with supporting documentary proofs.</p>	
<p>3.</p>	<p>Un-priced price bid is submitted along with the techno-commercial bid as a token of confirmation that all fields are properly filled in the price bid.</p>	
<p>4.</p>	<p>Break up cost for the individual parts i.e. supply and erection is submitted in the price bid.</p>	
<p>5.</p>	<p>The Bid-Evaluation Criteria as per Sl. No 6.3 is thoroughly studied and agreeable.</p>	
<p>6.</p>	<p>Acceptance to technical specifications for supply of Assembly Tower, stair case and tilting fixture system components as per enclosed specifications and drawings in tender document.</p>	
<p>7.</p>	<p>Acceptance to technical specifications for Erection & commissioning of Assembly Tower, stair case and tilting fixture system components as per enclosed specifications and drawings in tender document.</p>	
<p>8.</p>	<p>All bought out items and structural items are mentioned in the drawings are as per specified brands and standards only.</p>	
<p>9.</p>	<p>Performance of Bidder on similar nature of works executed/ under execution will be taken into consideration before selecting the Bidder for opening his price bid (as per qualification criteria)</p>	
<p>10.</p>	<p>The time schedule for completion is given in the Proposal document. Bidder is required to confirm the completion period unconditionally.</p>	
<p>11.</p>	<p>SDSC SHAR reserves the right to reject any bid if not meeting the technical/commercial requirements and terms & conditions. Such decisions by the SDSC SHAR shall bear no liability whatsoever consequent upon such decision</p>	

12.	Purchaser reserves the right for evaluation of any bidder by visiting his premises towards acceptance of the techno-commercial bid. The decision of the purchaser is final in this regard.	
13.	Documentary proof of previously executed Purchase orders in fabrication and supply of items consisting of Structural items & machined items to be submitted with Technical bid	
14.	Vendor has to submit QAP (Quality assurance plan) for the Fabrication and supply of Assembly Tower, stair case and tilting system components within 15 days from the date receipt of purchase order for approval from the Purchaser.	
15.	Fabrication of all sliding platforms, A frames, mobile jack supports and support saddle shall be done at Vendor site only. Only minimum fabrication works required for erection can be taken up at SDSC SHAR.	
16.	Finished fabricated items and structural steel members for assembly tower and stair case have to be delivered to SDSC-SHAR only after inspection at the Vendor's site and clearance for dispatch by the representatives of the purchaser.	
17.	Functional and load testing of sliding platforms in assembly tower, Load testing of support saddle, mobile jack support and tilting A frames to its SWL and over load i.e.1.25 x SWL at purchaser's site are in the scope of Vendor.	
18.	All weldments root weld and final weld during fabrication shall be D.P tested by the Vendor. Note-Certificate for said DP tests shall be provided to the purchaser or any person nominated by him during pre-dispatch inspection (D.P test interpretation will be carried out by SDSC-SHAR, NDT team).	
19.	After successful completion of load test by the vendor, D.P test is to be carried out for weldments at SDSC-SHAR. If any observations are noticed in the DP test, Vendor has to rectify the same and shall carry out DP test again.	
20.	Re-paint the D.P tested welded region with one coat of primer and two coats paints which are mentioned above.	
21.	Manufacturer's test certificates for Chemical and Mechanical properties shall be produced for all the materials used in the fabrication.	
22.	All the tests (Mechanical & Chemical) are to be carried out at NABL/Govt. approved test lab and the test certificates are to be submitted before dispatch of item to SDSC-SHAR. Note: Above	

	said test certificates shall be provided to the purchaser or any person nominated by him during pre-dispatch inspection.	
23.	All the structural steels are of reputed brand like TATA/Jindal/Sail/Vizag Steel/Equivalent ISI brand	
24.	Vendors have to submit a BG/DD/FDR in lieu of PBG from a Nationalized / Scheduled Bank for 3% of the order value at the time of supply valid till the completion of warranty period plus 60 days towards claim period.	
25.	3% value of the order shall be deposited with SDSC within 10 days from the date of the Purchase Order towards security deposit in the form of Bank Guarantee (BG)/ FDR/DD towards performance of the Contract valid till completion of the contract period plus sixty days towards claim period. <i>(This will be returned by SDSC immediately on execution of the order satisfactorily as per order terms. If not, the amount will be forfeited).</i>	
26.	In case, if parties are unable to provide two separate BGs, i.e., one for SD & one for PBG, they can submit a combined BG for SD & PBG for 3% of the Order value valid till the completion of total contractual obligation (i.e., Supply period plus warranty period plus 60 days). Please confirm.	
27.	If the supplies are not made by the end of delivery period, liquidated damage will be levied @ 0.5 % per week or part there of subject to a maximum of 10% of total order value.	
28.	Payment shall be made through RTGS as per payment terms mentioned in tender document & acceptance of the items at purchaser site against submission of BG.	
29.	The validity of the offers / tenders should be □, □□□□□ from the date of opening of the tenders. Tenders with offer validity less than the period mentioned above, will not be considered for evaluation.	
30.	All the deviations are listed in Deviation table. Other than the deviations listed in the deviation table, all other specifications mentioned in the tender are confirmed.	
31.	All the items shall be delivered within □3□□ □□□7□ from the date of receipt of the purchase order.	
32.	Erection of the assembly tower & Tilting system components shall be completed within □□□□ □□□7 after getting facility clearance from Department.	
33.	All the items shall provide warranty against any manufacturing defects for a period of □, □ □ □□□7□ from the date of commissioning.	



TOTAL WEIGHT = 5260 KG.
 TOTAL WEIGHT OF SLIDING PLATFORM ON ONE SIDE : 1315KG.
 TOTAL NUMBER OF PLATFORMS 2 x 2 = 4

TOTAL MASS : 1315 Kg(Aprox.)

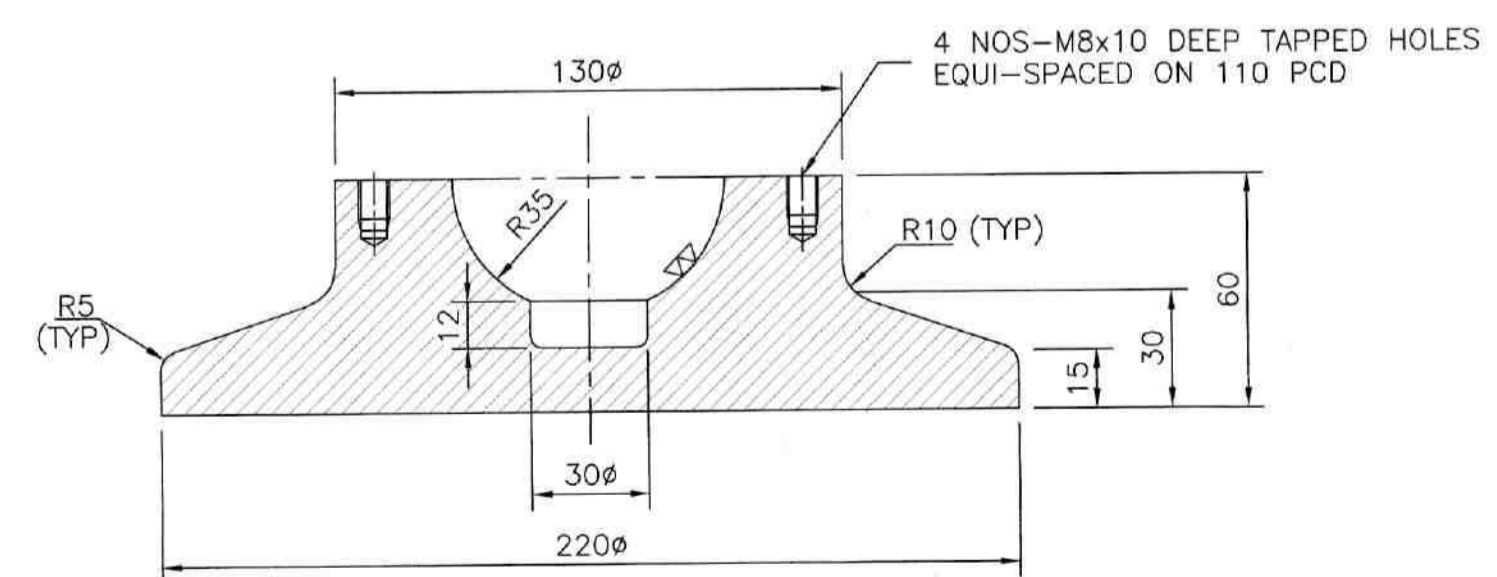
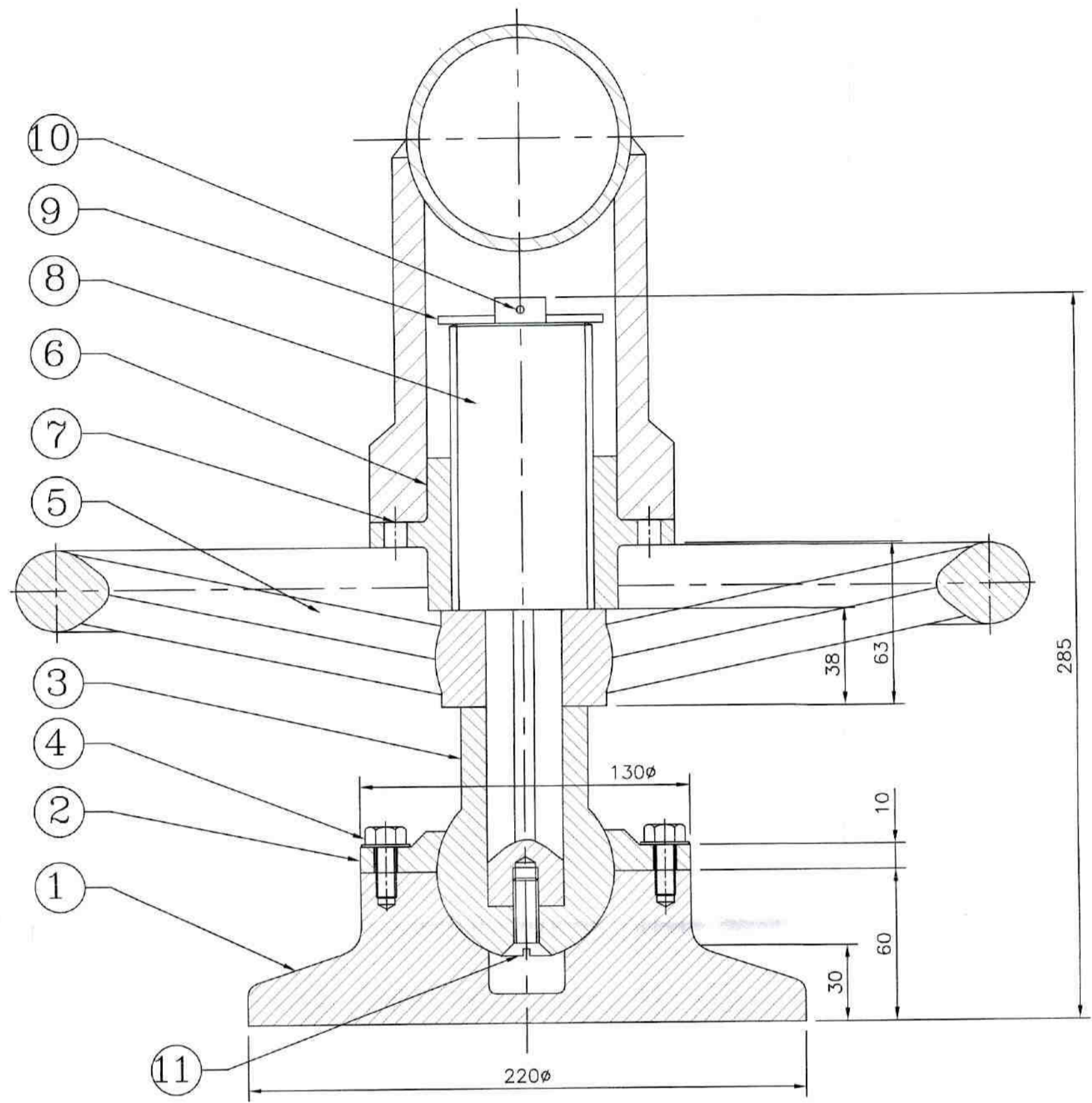
S.NO	DESCRIPTION	MATERIAL	QTY	MASS	REMARKS
32	M8 x 20Lg. HEX. SOCKET HEAD CAP SCREW	IS:2289	12	---	
31	CHECKERED PLATE 500 x 1000 x 6mm Thk.		1	24	
30	CHECKERED PLATE 1875 x 2084 x 6mm Thk.		2	368	
29	CHECKERED PLATE 1875 x 1083 x 6mm Thk.		2	191	
28	PLATE 520 x 100 x 50Thk.	IS:2062 GR - B	1	20	
27	PLATE 180 x 100 x 50Thk.	IS:2062 GR - B	1	7	
26	M30 x 160Lg. HEX. HEADED BOLT WITH NUT & WASHER	IS:1367	2	---	
25	PLATE 105 x 80 x 15Thk.	IS:2062 GR - B	4	4	
24	ISMB 100 - 300Lg.	IS:808	1	3	
23	ISMB 100 - 135Lg.	IS:808	1	1	
22	ISMC 150 BOX - 1000Lg.	IS:808	1	34	
21	M10 x 25Lg. HEX. HEADED BOLT	IS:1367	24	---	
20	STEEL WIRE ROPE Nominal Size=Ø8	IS:2266	1	---	LENGTH = ~3500
19	OPEN TYPE SOCKET Nominal Size: 80	IS:2485	2	---	
18	PLATE 70 x 50 x 15Thk.	IS:2062 GR - B	2	1	
17	SPLIT COTTER PIN : 4 x 25	IS:549	1	---	
16	M16 HEX. NUT	IS:1364	1	---	
15	PARALLEL KEY : 5 x 5	IS:2048	1	---	LENGTH TO BE SUIT HND WHEEL
14	HAND WHEEL A5 x 200 x 220	IS:3048	1	---	
13	SHAFT Ø35 x 1335Lg.	IS:2062 GR - B	1	10	
12	STANDARDIZED RIGHT ANGLE DRIVES		1	---	MODEL 0.75LG
11	BUSH ID35 x OD95 x 30Thk.	IS:2062 GR - B	3	4	
10	PLATE 100 x 140 x 12Thk.	IS:2062 GR - B	3	4	
9	PLATE 120 x 760 x 12Thk.	IS:2062 GR - B	1	9	
8	PLATE 130 x 2180 x 12Thk.	IS:2062 GR - B	1	27	
7	ROPE DRUM ASSEMBLY		1	---	REFER SHEET 4 OF 4
6	PULLEY ASSEMBLY		2	---	REFER SHEET 3 OF 4
5	SLIDING PLATFORM-2		1	---	REFER SHEET 2 OF 4
4	SLIDING PLATFORM-1		1	---	REFER SHEET 2 OF 4
3	FIXED PART PLATE 250 x 1875 x 12Thk.	IS:2062 GR - B	1	44	
2	FIXED PART PLATE 220 x 1875 x 12Thk.	IS:2062 GR - B	10	389	
1	FIXED PART PLATE 250 x 185 x 12Thk.	IS:2062 GR - B	4	177	

SCEND		SLIDING PLATFORM MECHANISM (S200 HARDWARE ASSEMBLY PLATFORM AT SHS-B-II, SHAR)	
DESIGNED	10/09/25	DRG.CHKD	10/09/25
APPROVED		DATE	

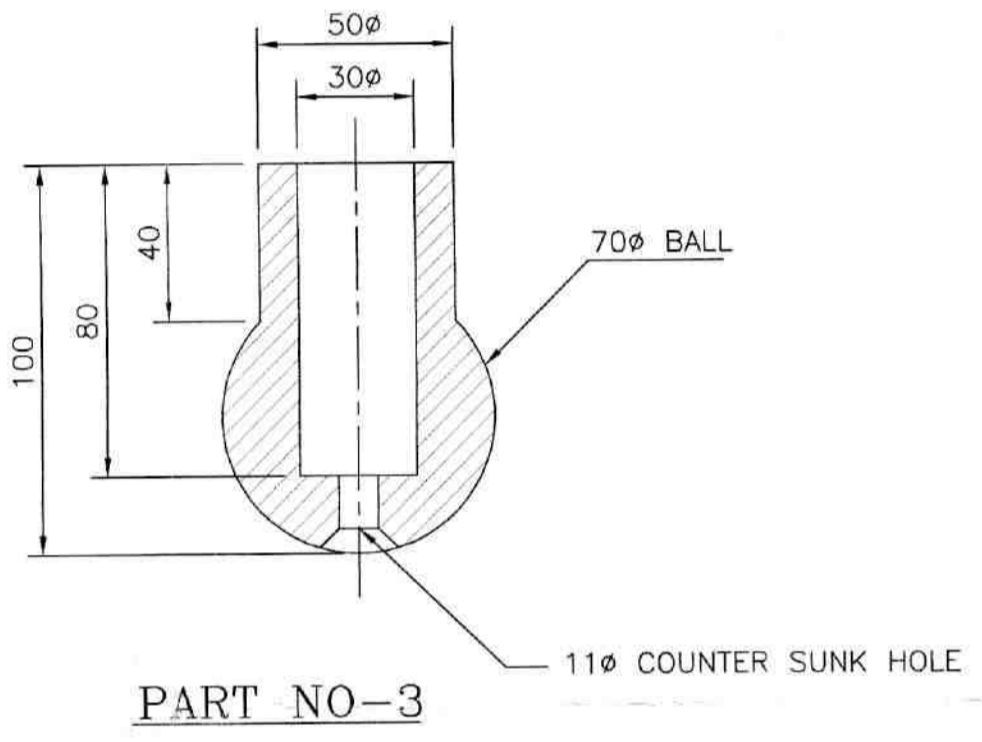
DISCUSSION / REVIEW
 TENDER PURPOSE
 FABRICATION
 STATUS: UNRESTRICTED [] RESTRICTED [] CONFIDENTIAL []
 THIS DRAWING IS THE PROPERTY OF SDSC-SHAR AND IS ISSUED FOR THE SPECIFIC WORK / PROJECT MENTIONED THEREIN. THIS IS NOT TO BE COPIED OR USED FOR OTHER WORKS / PROJECTS UNLESS EXPRESSLY PERMITTED BY SDSC-SHAR.

REV.NO.	DESCRIPTION	REFERENCE	ZONE	SIGN & DATE

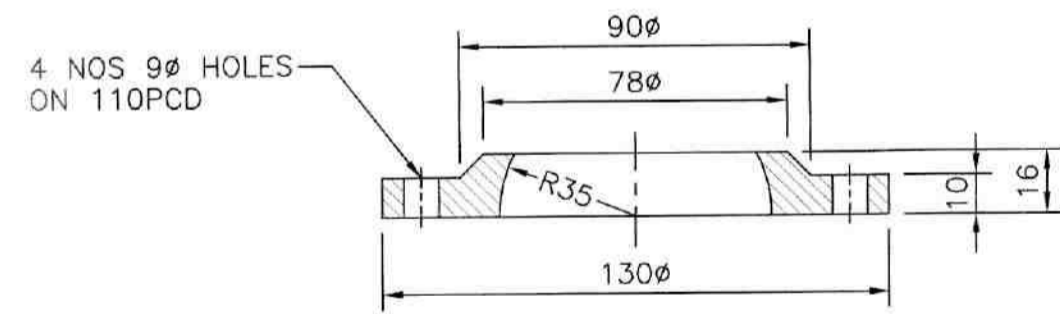
संदर्भ आरेखन क्र. / REF. DRG. NO. 10-MECH-01-03-017/A2
 कंप्यूटर संचिका क्र. / COM. FILE NO. SCEND/A103/A2/2025/DEEPAK/



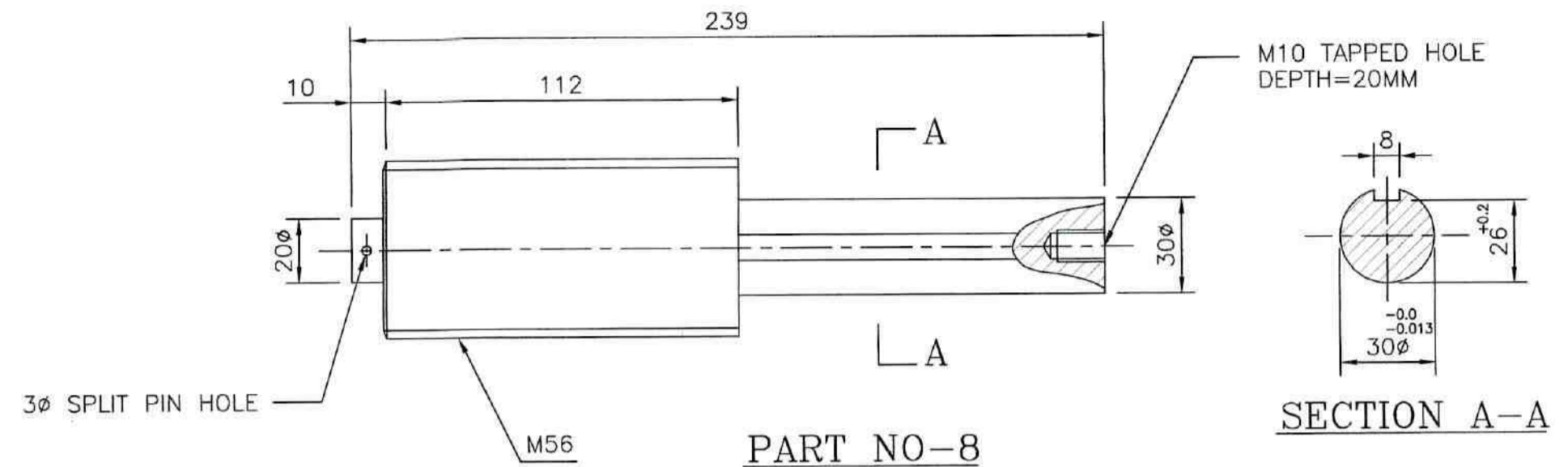
PART NO-1



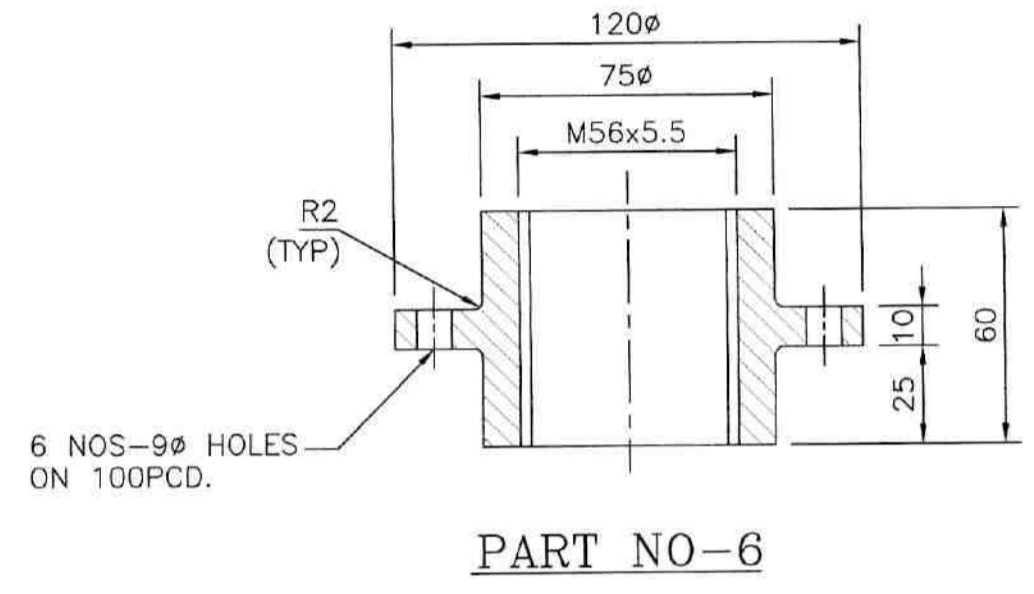
PART NO-3



PART NO-2



PART NO-8



PART NO-6

NOTE:-
 1. ALL DIMENSIONS ARE IN MM
 2. ALL THE WELDS ARE OF 5mm SIZE FILLET WELD UNLESS OTHERWISE SPECIFIED.
 3. ALL THE WELDS SHALL BE DP TESTED FOR ROOT AND FINAL RUN.
 4. REF. ASSEMBLY DRAWING :10-04-200-04-001/A1 Sheet 1 of 2

TOTAL MASS : 16 Kg(Approx.)

S.NO	DESCRIPTION	MATERIAL	QTY	MASS	REMARKS
11	M10 x 30Lg. CSK. SCREW	IS:1365	1	---	
10	SPLIT PIN 3φ x 40Lg.	IS:549 STEEL	1	---	
9	LOCK PLATE 65φ x 3Thk.	IS:2062 GR - B	1	0.2	
8	SCREW ROD 56φ x 240Lg.	IS:2062 GR - B	1	2.8	
7	M8 x 20 HEX. HD. SCREW	IS:1364	4	---	
6	NUT 120φ x 60	IS:2062 GR - B	1	1.5	
5	HAND WHEEL A5 x 400 x 30 OFFSET ARM TYPE	IS:3048	1	---	NOMINAL SIZE: 400, CAST IRON
4	M8 x 15 HEX. HD. SCREW	IS:1364	4	---	
3	BALL 70φ x 100Lg.	45C8 (IS:1570)	1	1.5	
2	COVER PLATE 130 x 15Thk.	IS:2062 GR - B	1	1	
1	SEAT 220φ x 60	45C8 (IS:1570)	1	9.4	

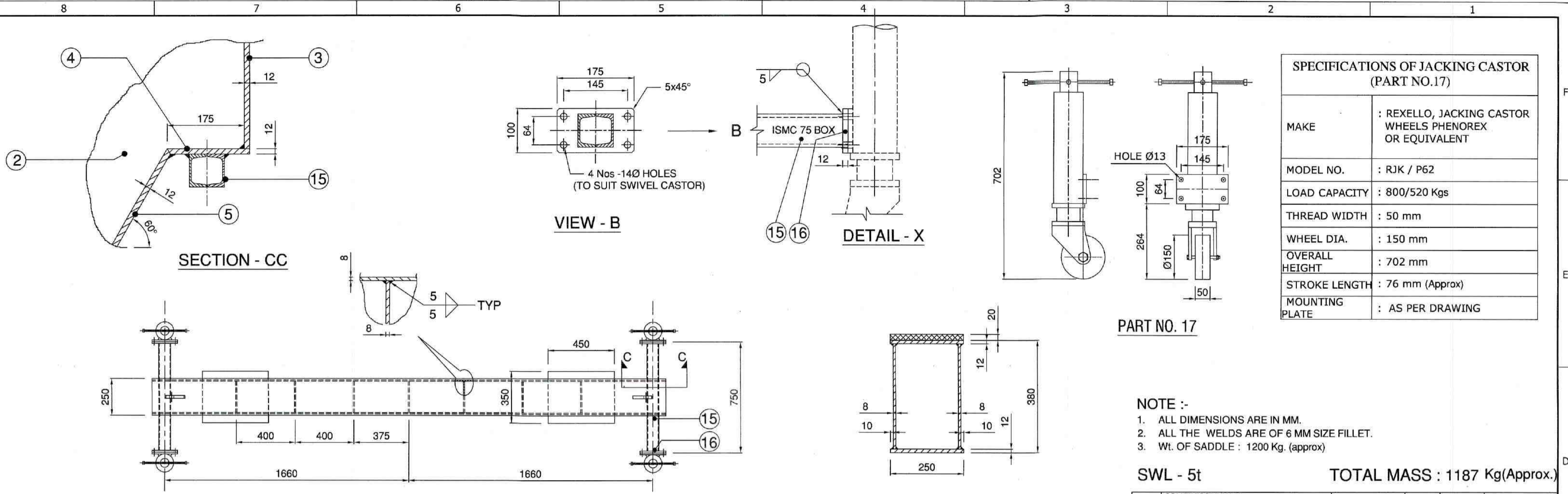
DISCUSSION / REVIEW		
TENDER PURPOSE		
FABRICATION		
STATUS	SIGN	DATE
UNRESTRICTED <input type="checkbox"/>	RESTRICTED <input type="checkbox"/>	CONFIDENTIAL <input type="checkbox"/>
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DO NOT SCALE THE DRAWING
 ASK IF IN DOUBT
 UNLESS OTHERWISE SPECIFIED,
 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 (PART-1)-1993	
DIAMETERS & LENGTHS UPTO & INCL.6 ±0.1	LENGTH IN M.M. OF SHORTER SIDE OF ANGLE UPTO & INCL.
6 - 30 ±0.2	1 - 6 ± 1'-00'
30 - 120 ±0.3	6 - 30 ± 0'-30'
120 - 315 ±0.5	30-120 ± 0'-20'
315 - 1000 ±0.8	120-400 ± 0'-10'
1000 - 2000 ±1.2	
2000 - 4000 ±2.0	
4000 & ABOVE ±3.0	

स्कड SCEND
 शार केंद्रीय अभिकल्पनाएं
 SHAR CENTRAL DESIGNS
 DESIGNED
 DRAWN दिपक 10/09/25
 DRG.CHKD
 APPROVED
 SIGN. DATE

शीर्षक / TITLE: JACK ASSEMBLY & DETAILS (MOBILE JACK SUPPORT-10T.Cap.)
 भारत सरकार GOVERNMENT OF INDIA
 भारतीय अंतरिक्ष अनुसंधान संगठन INDIAN SPACE RESEARCH ORGANISATION
 सतीश धवन अंतरिक्ष केंद्र शार SATISH DHAWAN SPACE CENTRE SHAR
 श्रीहरिकोटा SRIHARIKOTA.
 पैमाना / SCALE : 1:2
 आरेखन क्र. / DRG. NO.: 10-MECH-01-03-017/A2
 प्रक्षेप / PROJECTION
 SHEET 2 OF 2

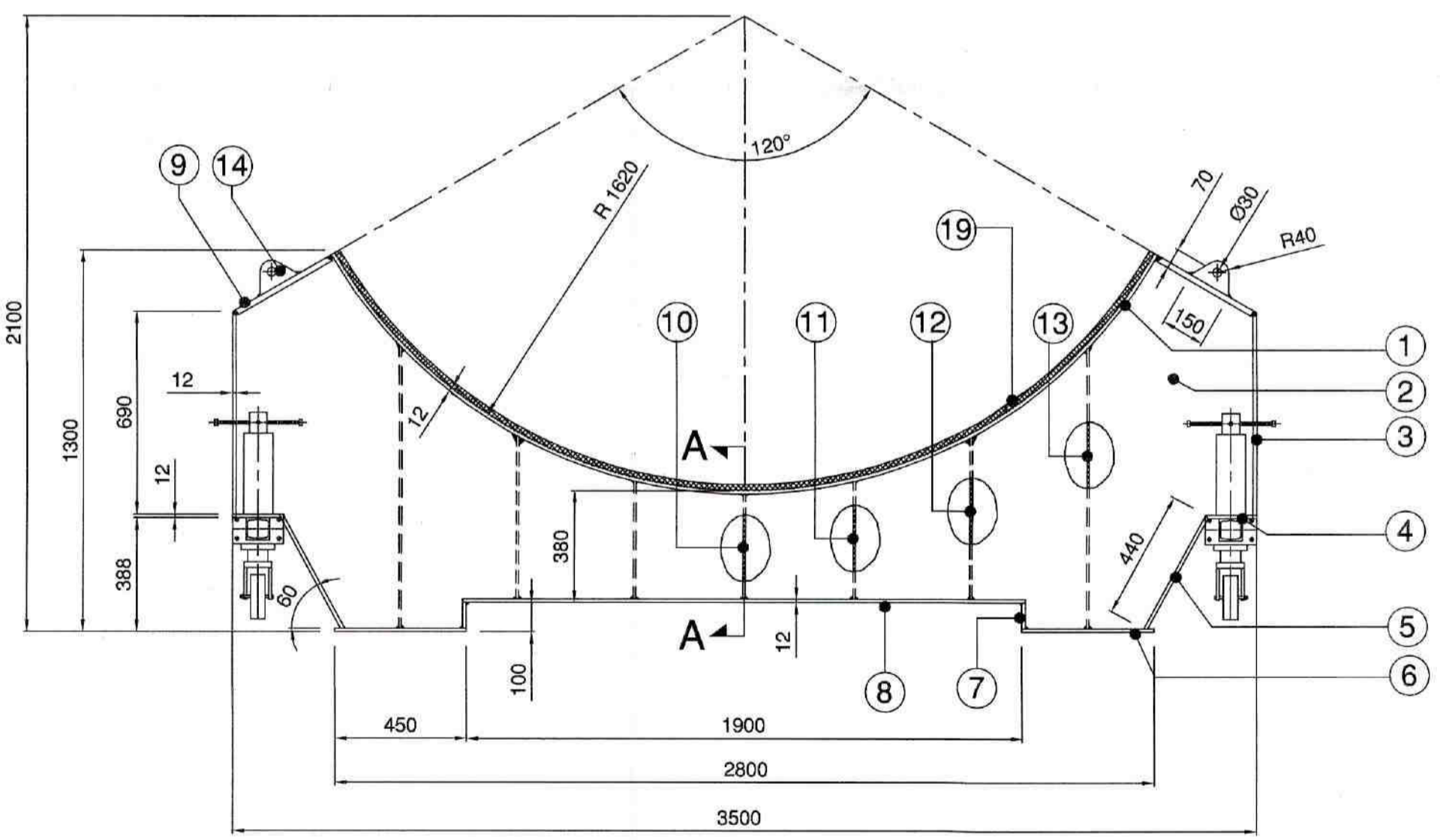


SPECIFICATIONS OF JACKING CASTOR (PART NO.17)	
MAKE	: REXELLO, JACKING CASTOR WHEELS PHENOREX OR EQUIVALENT
MODEL NO.	: RJK / P62
LOAD CAPACITY	: 800/520 Kgs
THREAD WIDTH	: 50 mm
WHEEL DIA.	: 150 mm
OVERALL HEIGHT	: 702 mm
STROKE LENGTH	: 76 mm (Approx)
MOUNTING PLATE	: AS PER DRAWING

- NOTE :-**
- ALL DIMENSIONS ARE IN MM.
 - ALL THE WELDS ARE OF 6 MM SIZE FILLET.
 - WT. OF SADDLE : 1200 Kg. (approx)

SWL - 5t TOTAL MASS : 1187 Kg(Approx.)

S.NO	DESCRIPTION	MATERIAL	QTY	MASS	REMARKS
19	COMPRESSED FELT 3400 x 250 x 20Thk.	FELT	1	---	
18	M8 x 20Lg. HEX. SOCKET HEAD CAP SCREW	IS:2269	16 SETS	---	
17	JACK CASTER	---	4	---	REFER SPECIFICATION
16	JACK CASTER FITTING PLATE 175 x 100 x 12Thk.	IS:2062 GR - B	4	7	
15	ISMC 75 BOX - 726 Lg.	IS:808	2	21	
14	HANDLING LUG 150 x 110 x 12Thk.	IS:2062 GR - B	2	3	
13	STIFFENER 945 x 214 x 8Thk.	IS:2062 GR - B	2	25	
12	STIFFENER 550 x 214 x 8Thk.	IS:2062 GR - B	2	15	
11	STIFFENER 395 x 214 x 8Thk.	IS:2062 GR - B	2	11	
10	STIFFENER 355 x 214 x 8Thk.	IS:2062 GR - B	1	5	
9	PLATE 375 x 250 x 12Thk.	IS:2062 GR - B	2	18	
8	PLATE 1900 x 250 x 12Thk.	IS:2062 GR - B	1	45	
7	PLATE 250 x 100 x 12Thk.	IS:2062 GR - B	2	5	
6	BASE PLATE 450 x 350 x 12Thk.	IS:2062 GR - B	2	30	
5	PLATE 440 x 250 x 12Thk.	IS:2062 GR - B	2	21	
4	PLATE 175 x 250 x 12Thk.	IS:2062 GR - B	2	8	
3	PLATE 690 x 250 x 12Thk.	IS:2062 GR - B	2	32	
2	WEB PLATE 3590 x 1276 x 12Thk.	IS:2062 GR - B	2	863	
1	SADDLE PLATE 3400 x 250 x 12Thk.	IS:2062 GR - B	1	80	



DISCUSSION / REVIEW		
TENDER PURPOSE		
FABRICATION		
STATUS	SIGN	DATE
UNRESTRICTED <input type="checkbox"/>	RESTRICTED <input type="checkbox"/>	CONFIDENTIAL <input type="checkbox"/>
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 ASK IF IN DOUBT
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 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 (PART-1)-1993	
DIAMETERS & LENGTHS UPTO & INCL. 6 ±0.1	LENGTH IN M.M. OF SHORTER SIDE OF ANGLE UPTO & INCL.
6 - 30 ±0.2	1- 6 ± 1'-00
30 - 120 ±0.3	6- 30 ± 0'-30
120 - 315 ±0.5	30-120 ± 0'-20
315 - 1000 ±0.8	120-400 ± 0'-10
1000 - 2000 ±1.2	
2000 - 4000 ±2.0	
4000 & ABOVE ±3.0	

स्कैंड SCEND
 शार केंद्रीय अभिकल्पनाएं
 SHAR CENTRAL DESIGNS

DESIGNED: [Signature]
 DES.CHKD: [Signature]
 DRAWN: दिपक 10/09/25
 DRG.CHKD: [Signature]
 APPROVED: [Signature]
 SIGN. DATE

शीर्षक / TITLE: **SADDLE FOR S-200 HARDWARE**
 (S200 HARDWARE ASSEMBLY PLATFORM AT SHSB-II, SHAR)

भारत सरकार GOVERNMENT OF INDIA
 भारतीय अंतरिक्ष अनुसंधान संगठन INDIAN SPACE RESEARCH ORGANISATION
 सतीश धवन अंतरिक्ष केंद्र शार SATISH DHAWAN SPACE CENTRE SHAR
 श्रीहरिकोटा SRIHARIKOTA.

प्रक्षेप/PROJECTION: [Symbol]

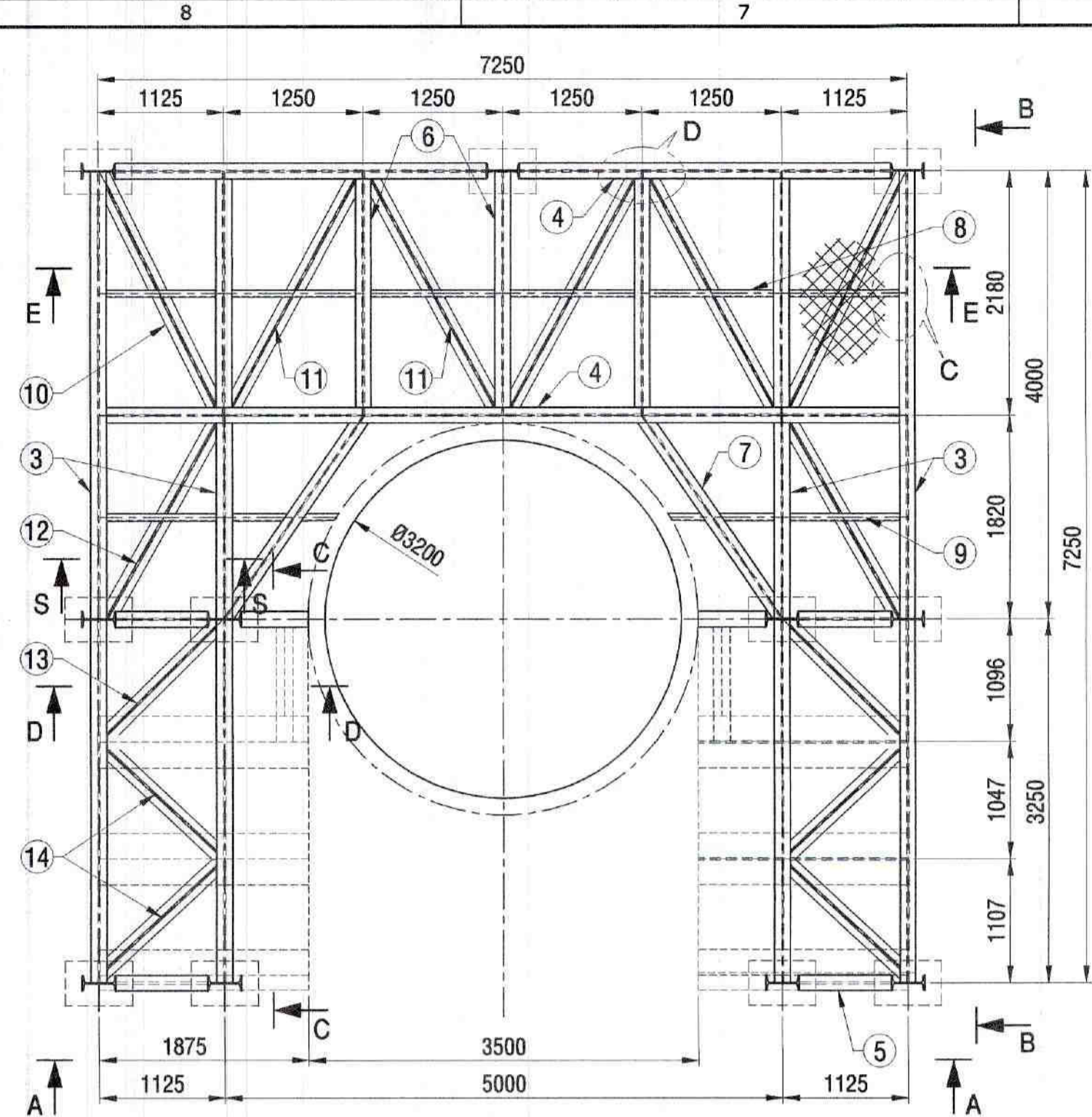
पैमाना /SCALE: 1:20

आरेखन क्र. /DRG. NO.: 10-MECH-01-03-016/A2

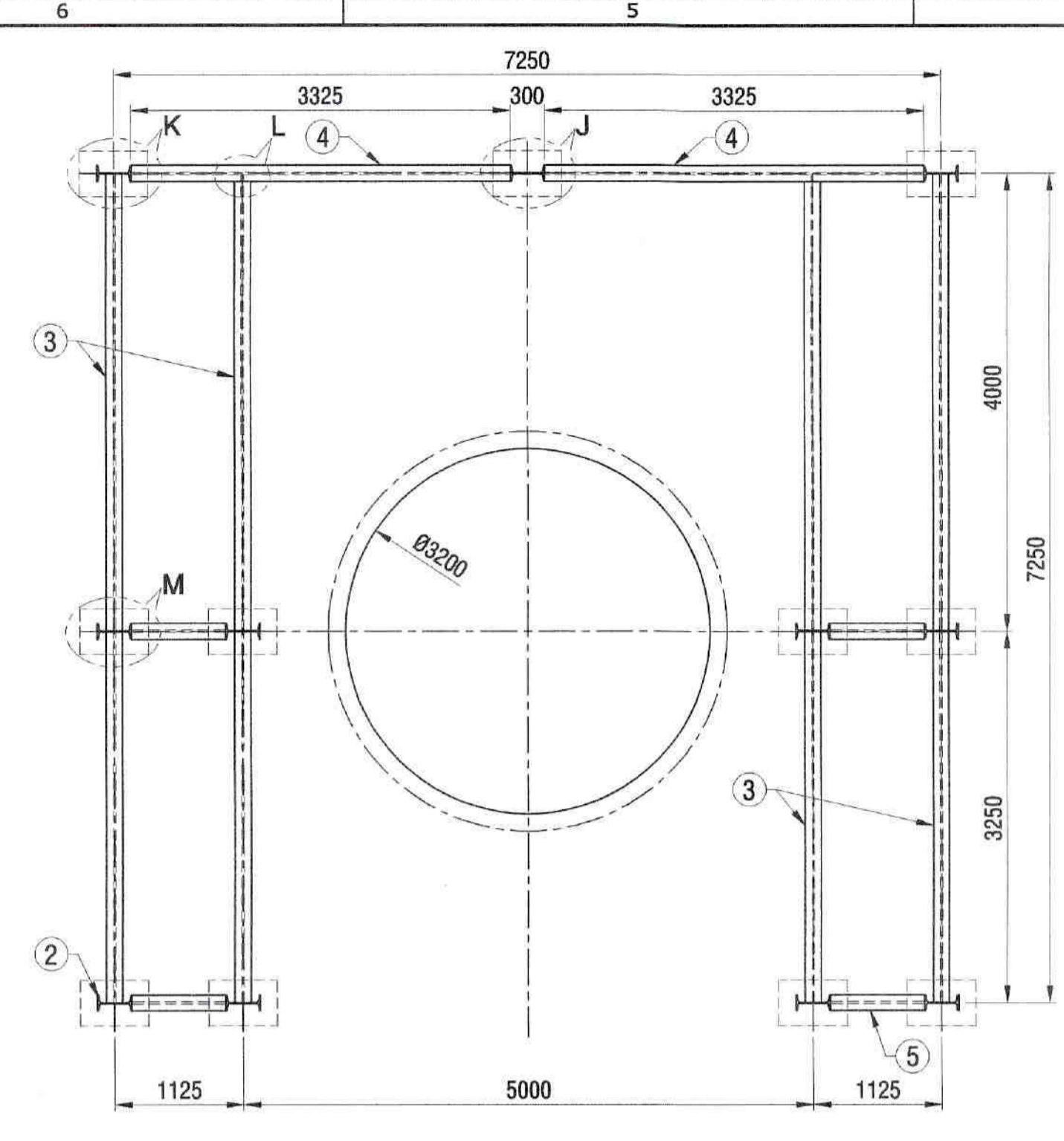
शेड्यूल /SHEET: 1 OF 1

SCEND/A1102/A2/2025/DEEPAK/

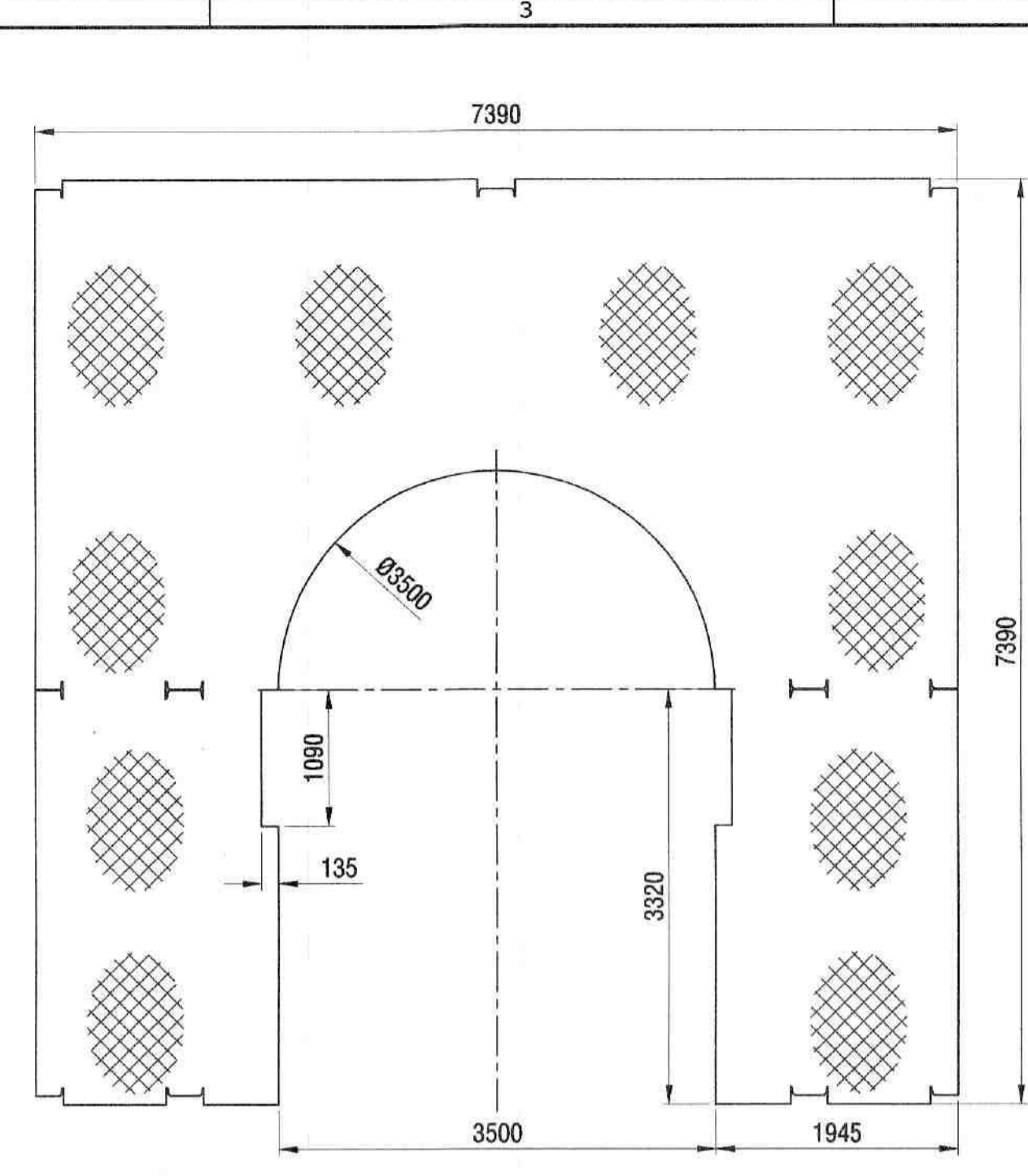
SCEND/AT76/A1/2025/DEEPAK/KAMAL



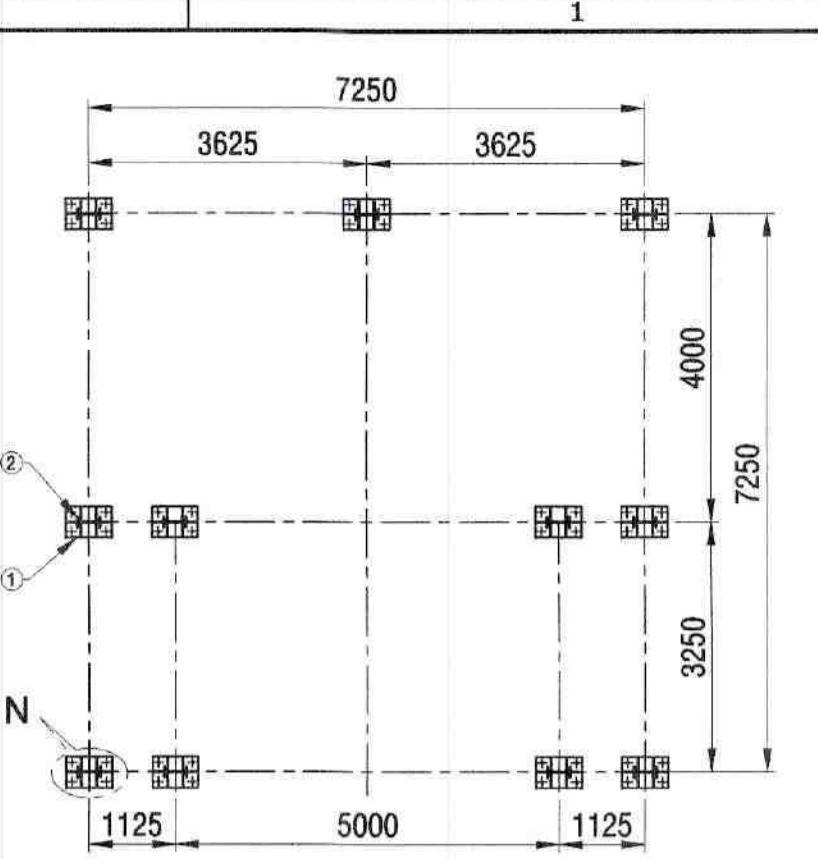
PLAN
WITHOUT CHEQD. PLATE



SECTION F-F



PART NO. 35
CHEQD. PLATE AT LVL 3200 & 9560

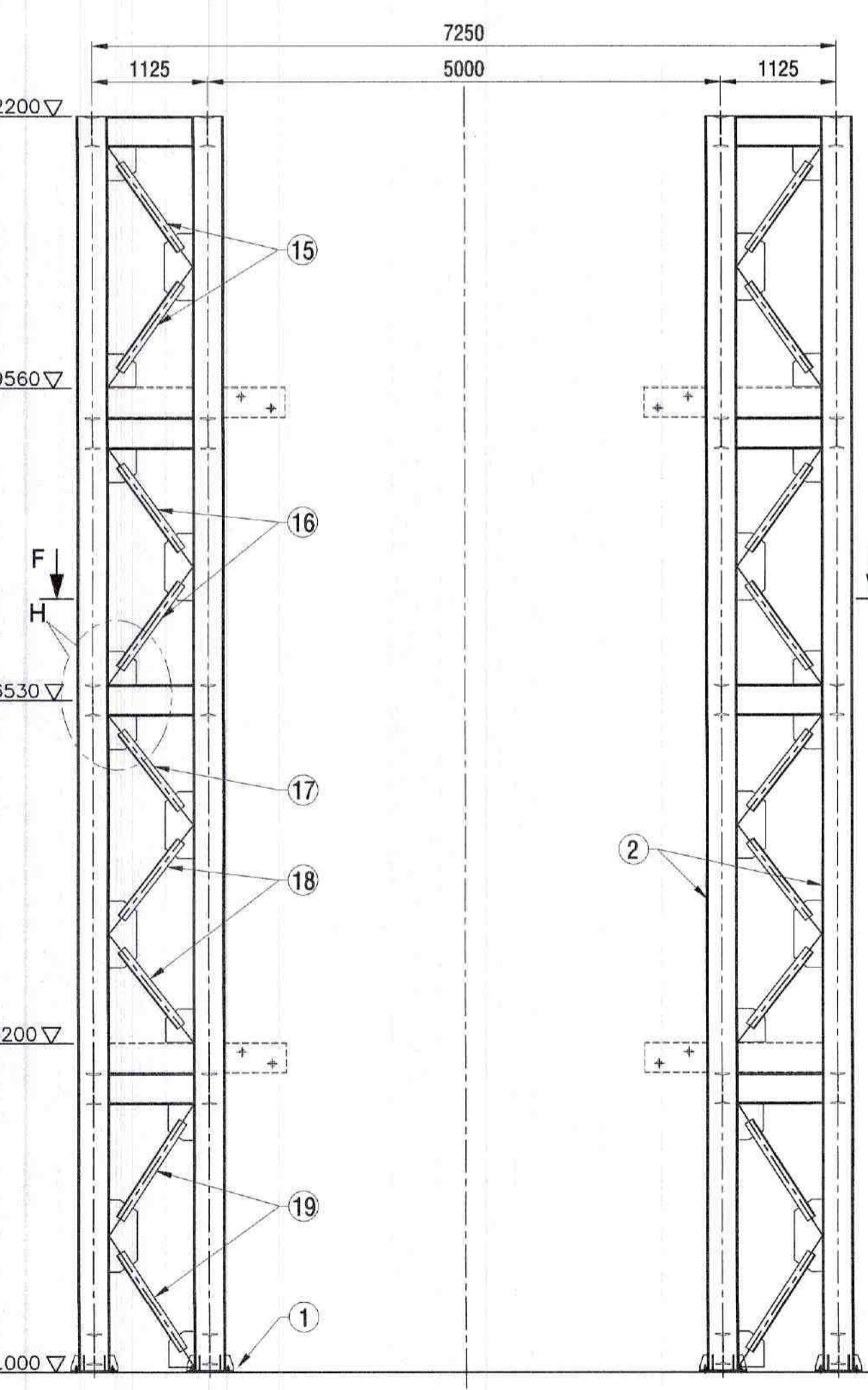


COLUMN PLAN
(SCALE 1:2)

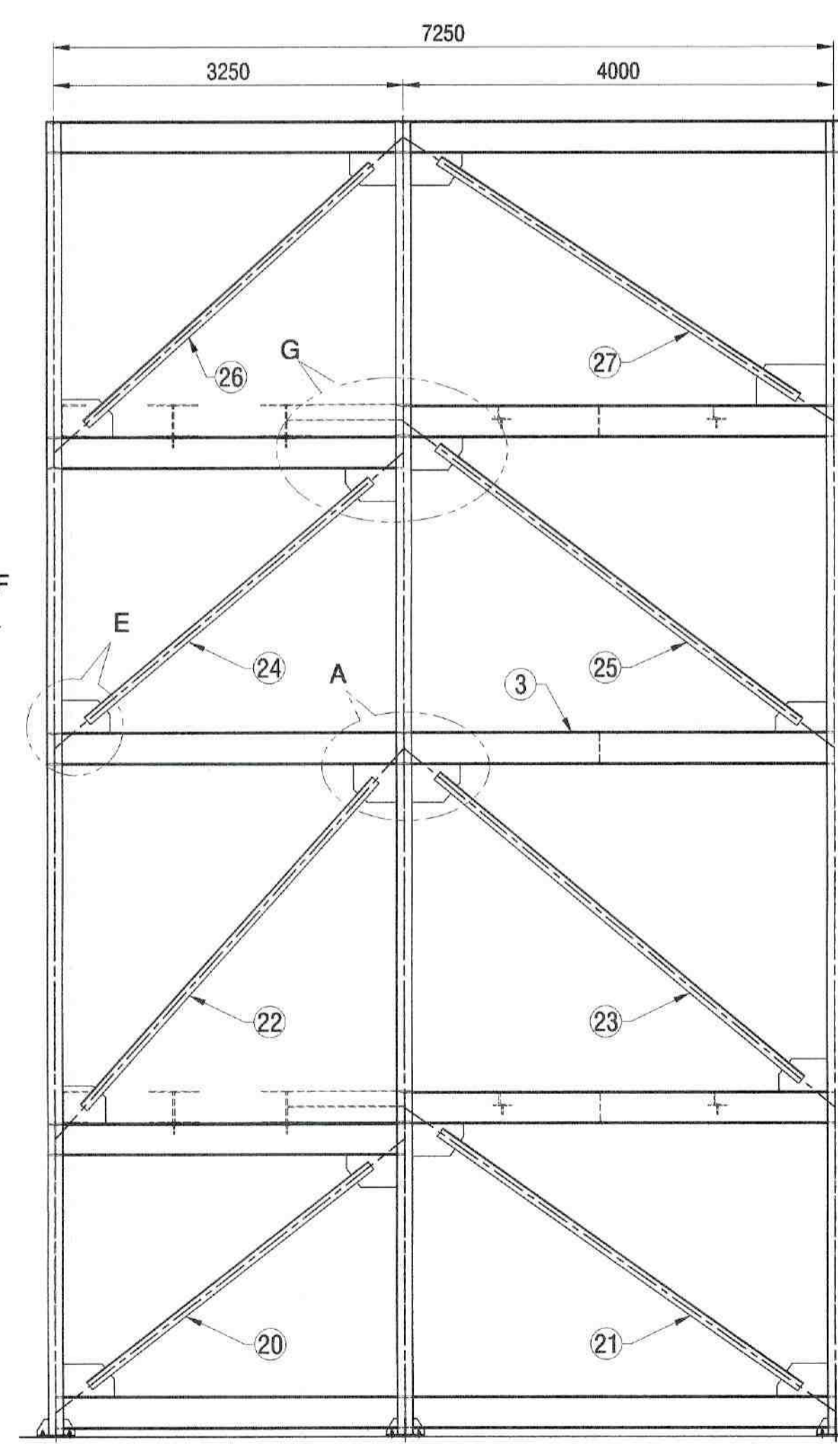
NOTES :

1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. ALL FILLET WELDS ARE 5mm SIZE UNLESS OTHERWISE STATED.
3. MATERIAL FOR THE STEEL SECTIONS CONFORMS TO IS:2062 GR-B.
4. THE BILL OF MATERIALS GIVEN IN THIS DRAWING IS ONLY INDICATIVE. EXACT LENGTH AND WEIGHT OF THE MEMBERS ARE TO BE ARRIVED BY THE FABRICATOR AFTER MAKING FABRICATION DRAWING.
5. TYPICAL JOINT DETAILS ONLY ARE GIVEN. FABRICATOR HAS TO DETAIL OUT ALL THE JOINTS. ALL THE JOINTS MAY BE DESIGNED FOR FULL STRENGTH OF THE MEMBERS AT THE JOINT.
6. WEIGHT OF GUSSET PLATES, STIFFENER PLATES ARE NOT INCLUDED IN BILL OF MATERIALS. MINIMUM 10 THK. GUSSET PLATE SHALL BE USED AS PER SITE CONDITION.
7. APPROVED PAINTING SCHEDULE SHALL BE FOLLOWED AS PER THE PURCHASE ORDER TERMS.
8. CHECK THE STATUS OF THE DRAWING BEFORE FABRICATION / MACHINING.

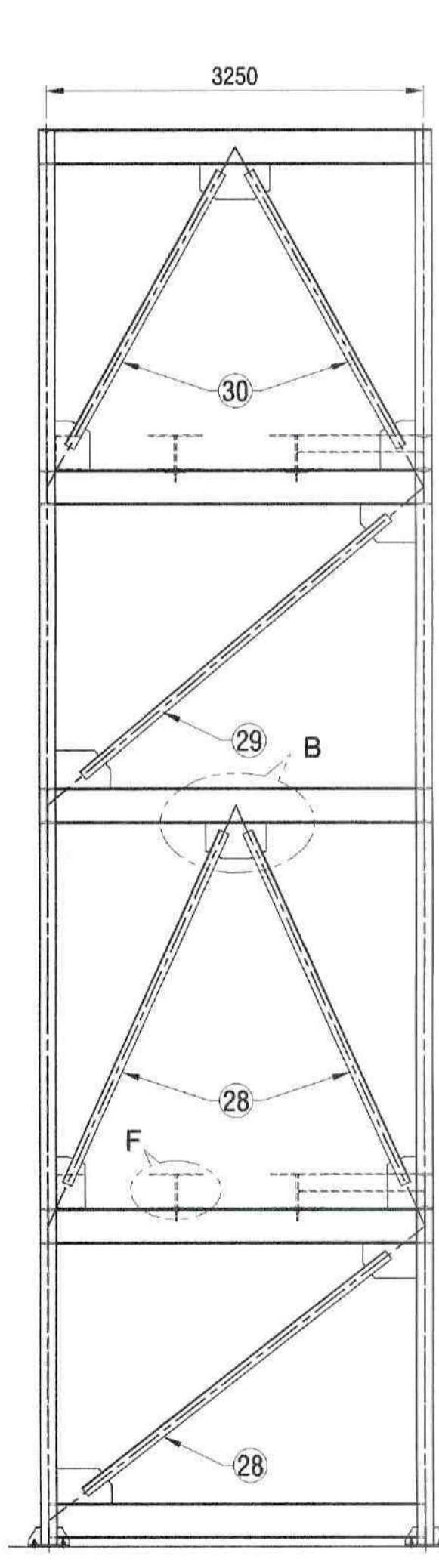
TOTAL MASS : 23760 Kg(Approx.)



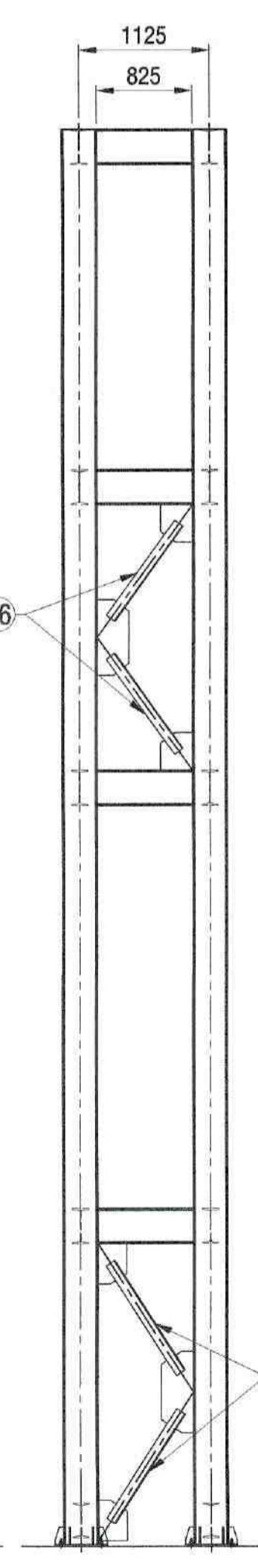
VIEW-AA



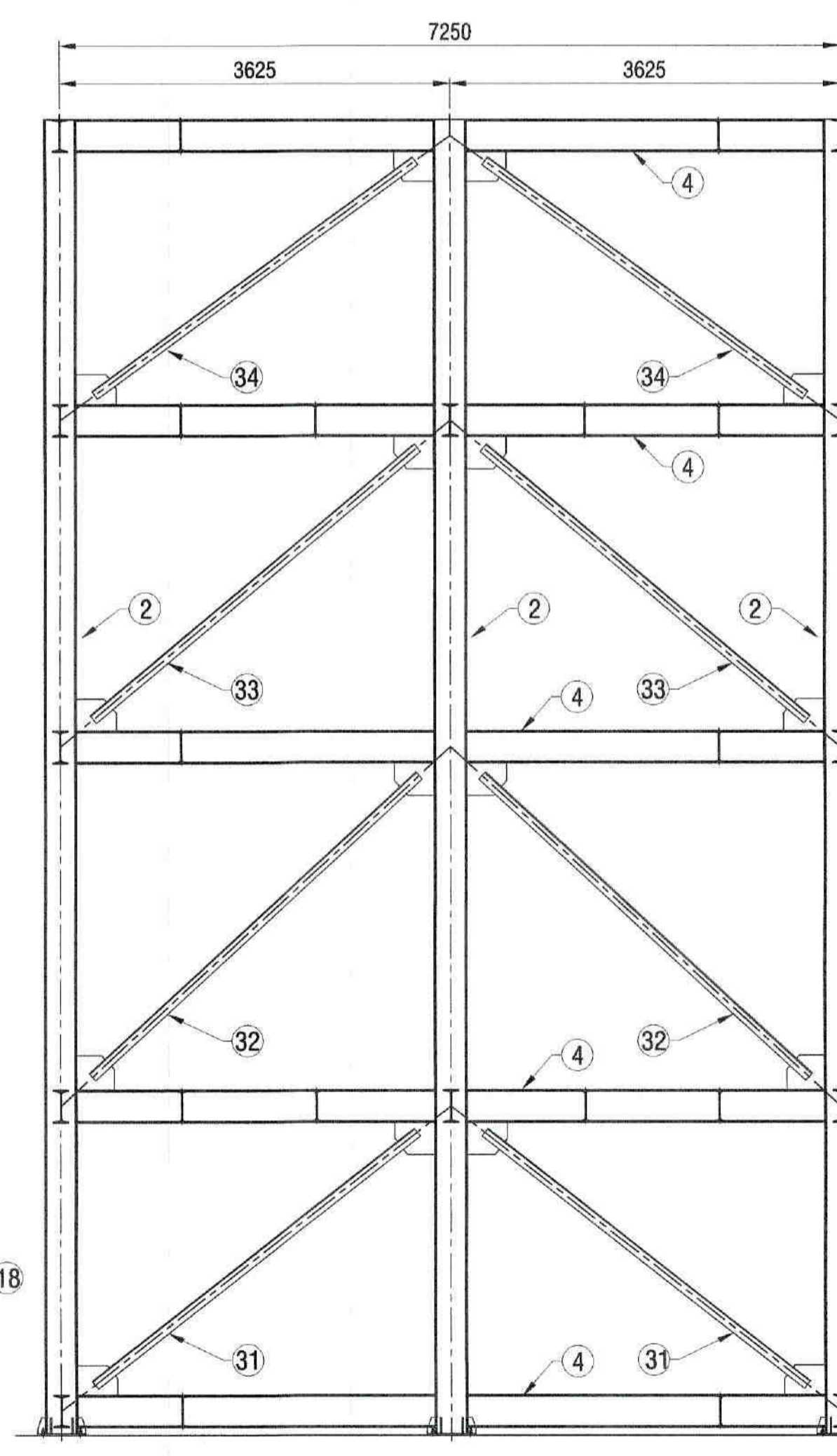
VIEW-BB



SECTION-CC



SECTION-DD



SECTION-EE

S.NO	DESCRIPTION	MATERIAL	QTY	MASS	REMARKS
35	CHECKERED PLATE 7390 x 7390 x 6mm Thk.	IS:2062 GR-B	2	1769	
34	2/ISA 90 x 90 x 8 - 3680 Lg.	IS:808	2	159	
33	2/ISA 90 x 90 x 8 - 3925 Lg.	IS:808	2	170	
32	2/ISA 90 x 90 x 8 - 4125 Lg.	IS:808	2	178	
31	2/ISA 90 x 90 x 8 - 3795 Lg.	IS:808	2	164	
30	2/ISA 90 x 90 x 8 - 2700 Lg.	IS:808	4	233	
29	2/ISA 90 x 90 x 8 - 3450 Lg.	IS:808	2	149	
28	2/ISA 90 x 90 x 8 - 3320 Lg.	IS:808	6	430	
27	2/ISA 90 x 90 x 8 - 3990 Lg.	IS:808	2	172	
26	2/ISA 90 x 90 x 8 - 3575 Lg.	IS:808	2	154	
25	2/ISA 90 x 90 x 8 - 4215 Lg.	IS:808	2	182	
24	2/ISA 90 x 90 x 8 - 3450 Lg.	IS:808	2	149	
23	2/ISA 90 x 90 x 8 - 4405 Lg.	IS:808	2	190	
22	2/ISA 90 x 90 x 8 - 4065 Lg.	IS:808	2	176	
21	2/ISA 90 x 90 x 8 - 4100 Lg.	IS:808	2	177	
20	2/ISA 90 x 90 x 8 - 3320 Lg.	IS:808	2	143	
19	2/ISA 90 x 90 x 8 - 1120 Lg.	IS:808	4	97	
18	2/ISA 90 x 90 x 8 - 940 Lg.	IS:808	8	162	
17	2/ISA 90 x 90 x 8 - 945 Lg.	IS:808	2	41	
16	2/ISA 90 x 90 x 8 - 1010 Lg.	IS:808	8	175	
15	2/ISA 90 x 90 x 8 - 1030 Lg.	IS:808	4	89	
14	2/ISA 65 x 65 x 6 - 1500 Lg.	IS:808	8	139	
13	2/ISA 65 x 65 x 6 - 1545 Lg.	IS:808	4	717	
12	2/ISA 65 x 65 x 6 - 2115 Lg.	IS:808	4	98	
11	2/ISA 65 x 65 x 6 - 2486 Lg.	IS:808	8	231	
10	2/ISA 65 x 65 x 6 - 2430 Lg.	IS:808	4	113	
9	ISMC 125 - 2130Lg.	IS:808	4	112	
8	ISMC 125 - 2250Lg.	IS:808	2	190	
7	ISMB 300 - 2158Lg.	IS:808	4	397	
6	ISMB 300 - 2180Lg.	IS:808	6	602	
5	ISMB 300 - 825Lg.	IS:808	16	607	
4	ISMB 300 - 7250Lg.	IS:808	7	2335	
3	ISMB 300 - 7250Lg.	IS:808	20	6670	
2	ISMB 300 - 12200Lg.	IS:808	11	6173	
1	BASE PLATE 450 x 350 x 16THK.	IS:2062 GR - B	11	218	

DISCUSSION / REVIEW	DO NOT SCALE THE DRAWING	DEVIATION FOR NON TOLERANCE DIMENSIONS
TENDER PURPOSE	ASK IF IN DOUBT	IS:2102 (PART-1)-1993
FABRICATION	UNLESS OTHERWISE SPECIFIED,	DIAMETERS & LENGTHS
STATUS	ALL DIMENSIONS ARE IN MILLIMETERS	UPTO & INCL 6 ±0.1
UNRESTRICTED	REMOVE SHARP EDGES & BURRS	6 - 30 ±0.2
RESTRICTED	CHAMFER 1 m.m. X 45°	30 - 120 ±0.3
CONFIDENTIAL	MACHINING FINISH IN MICRONS :-	120 - 315 ±0.5
	▽ 8 - 25	315 - 1000 ±0.8
	▽▽ 0.025 - 1.6	1000 - 2000 ±1.2
	▽▽▽ 1.6 - 8	2000 - 4000 ±2.0
	▽▽▽▽ < 0.025	4000 & ABOVE ±3.0
		LENGTH IN M.M. OF SHORTER SIDE OF ANGLE UPTO & INCL
		1 - 6 + 1'-00"
		6 - 30 + 0'-30"
		30 - 120 + 0'-20"
		120 - 400 + 0'-10"

SCEND
शार केंद्रीय अभिकल्पना
SHAR CENTRAL DESIGNS

DESIGNED: [Signature]
DRAWN: [Signature]
DRG.CHKD: [Signature]
APPROVED: [Signature]

श्रीधर / TITLE: STRUCTURAL DETAILS
S200 HARDWARE ASSEMBLY PLATFORM AT SHSB-II, SHAR

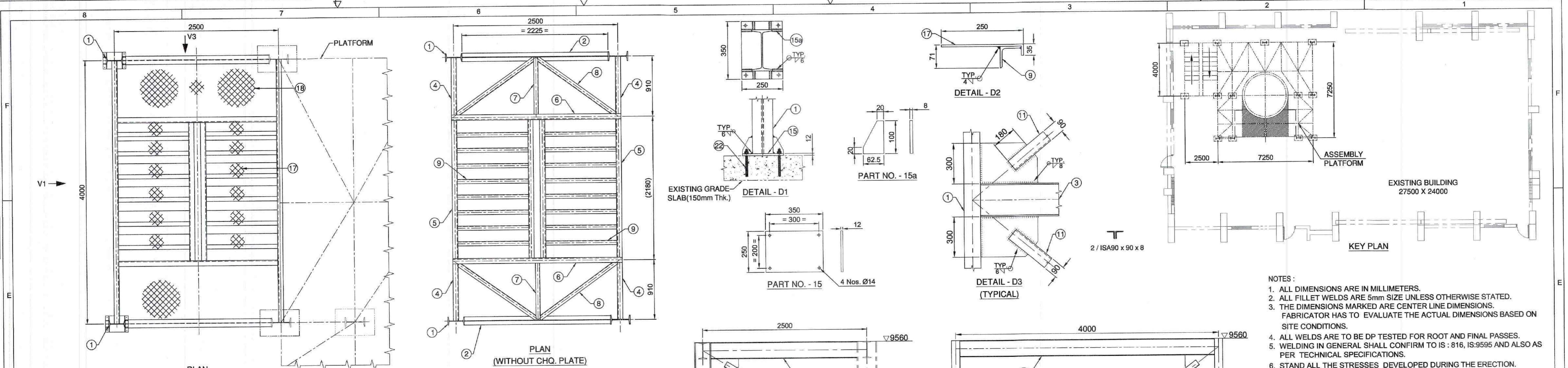
भारत सरकार GOVERNMENT OF INDIA
भारतीय अंतरिक्ष अनुसंधान संगठन INDIAN SPACE RESEARCH ORGANISATION
सतीश धवन अंतरिक्ष केंद्र शार SATISH DHAWAN SPACE CENTRE SHAR
श्रीहरीकोटा SRIRHARIKOTA

श्रीधर / PROJECTION: [Symbol]

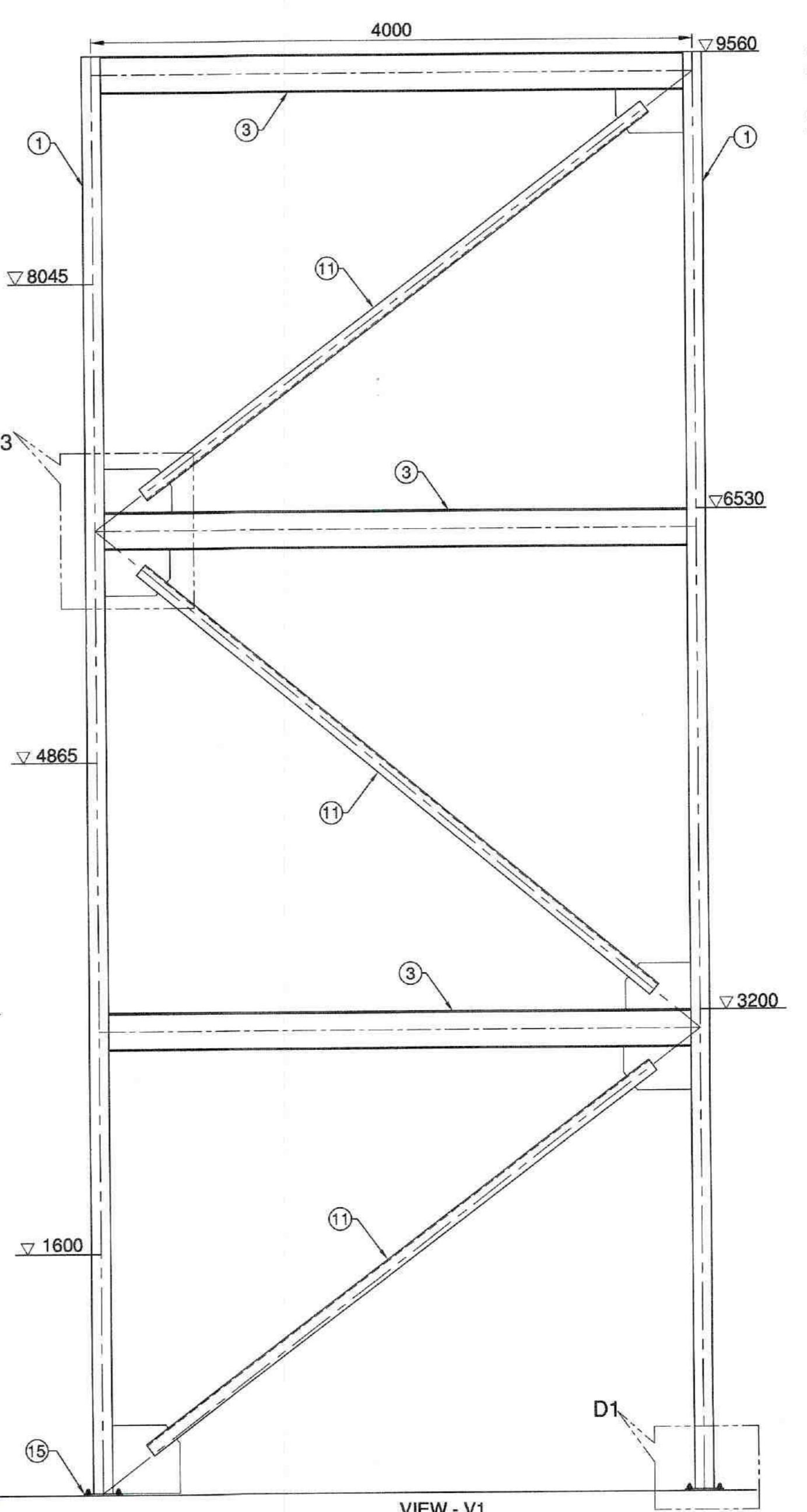
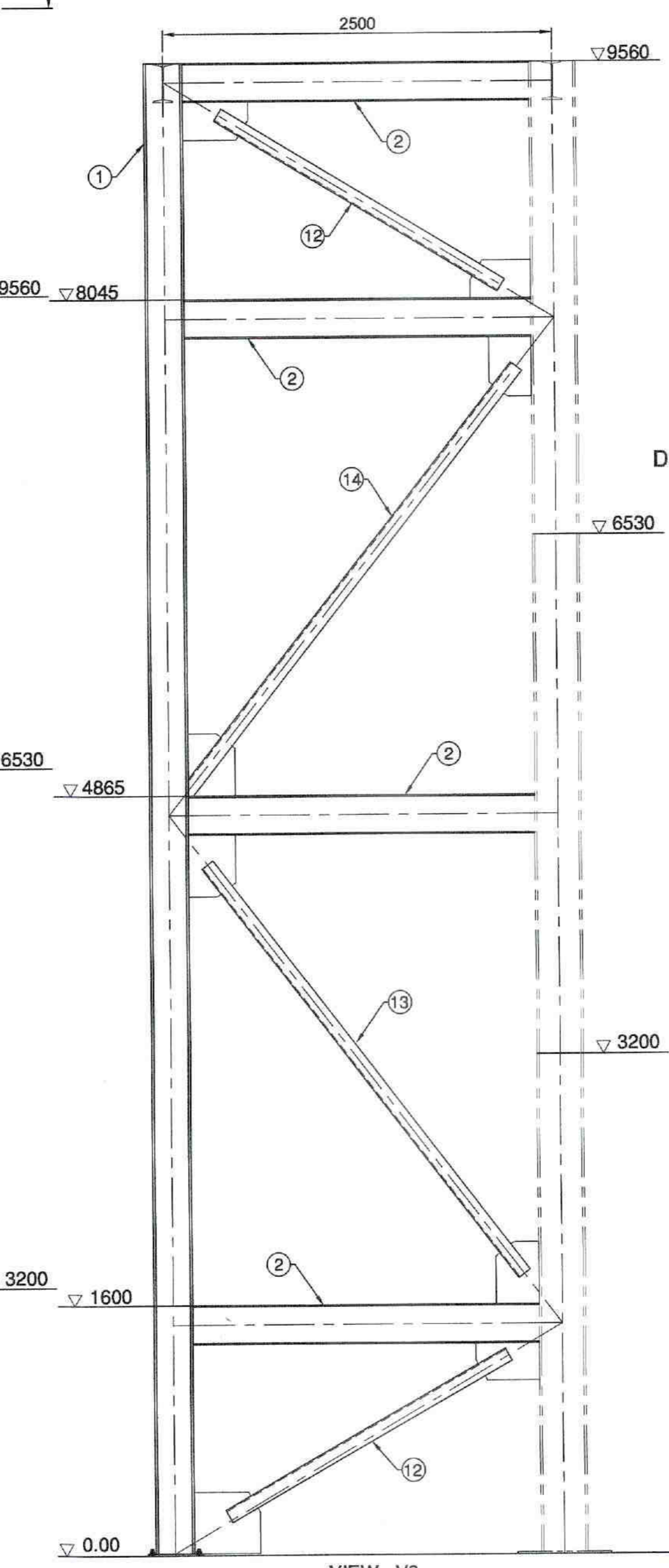
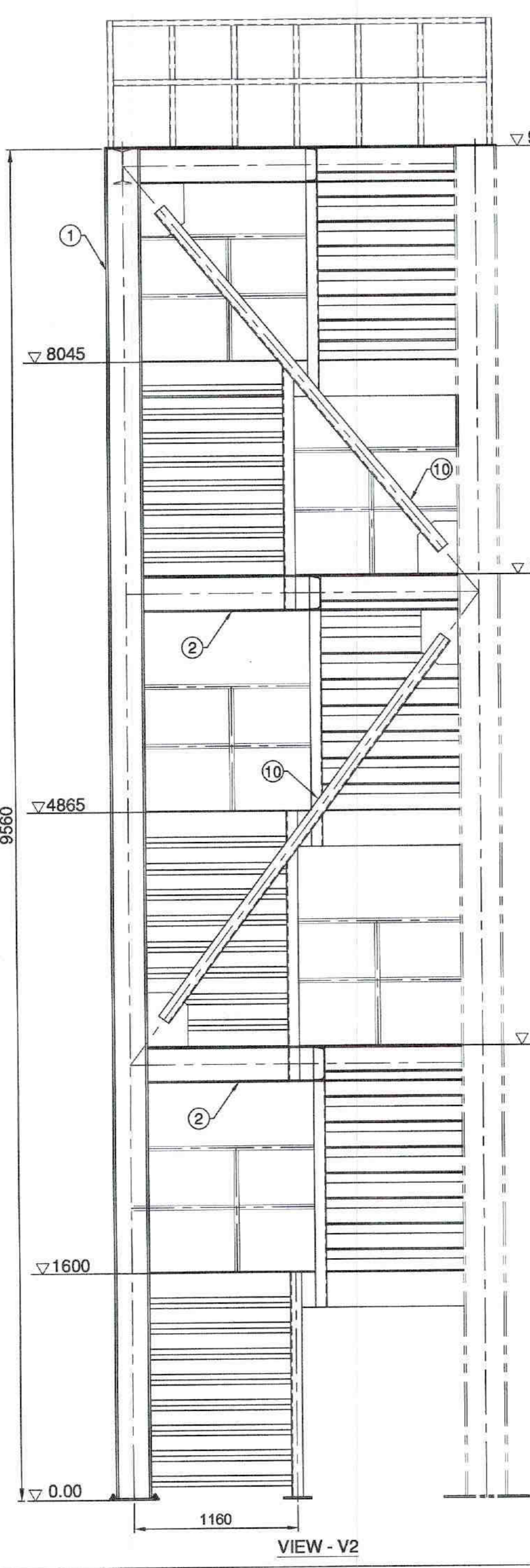
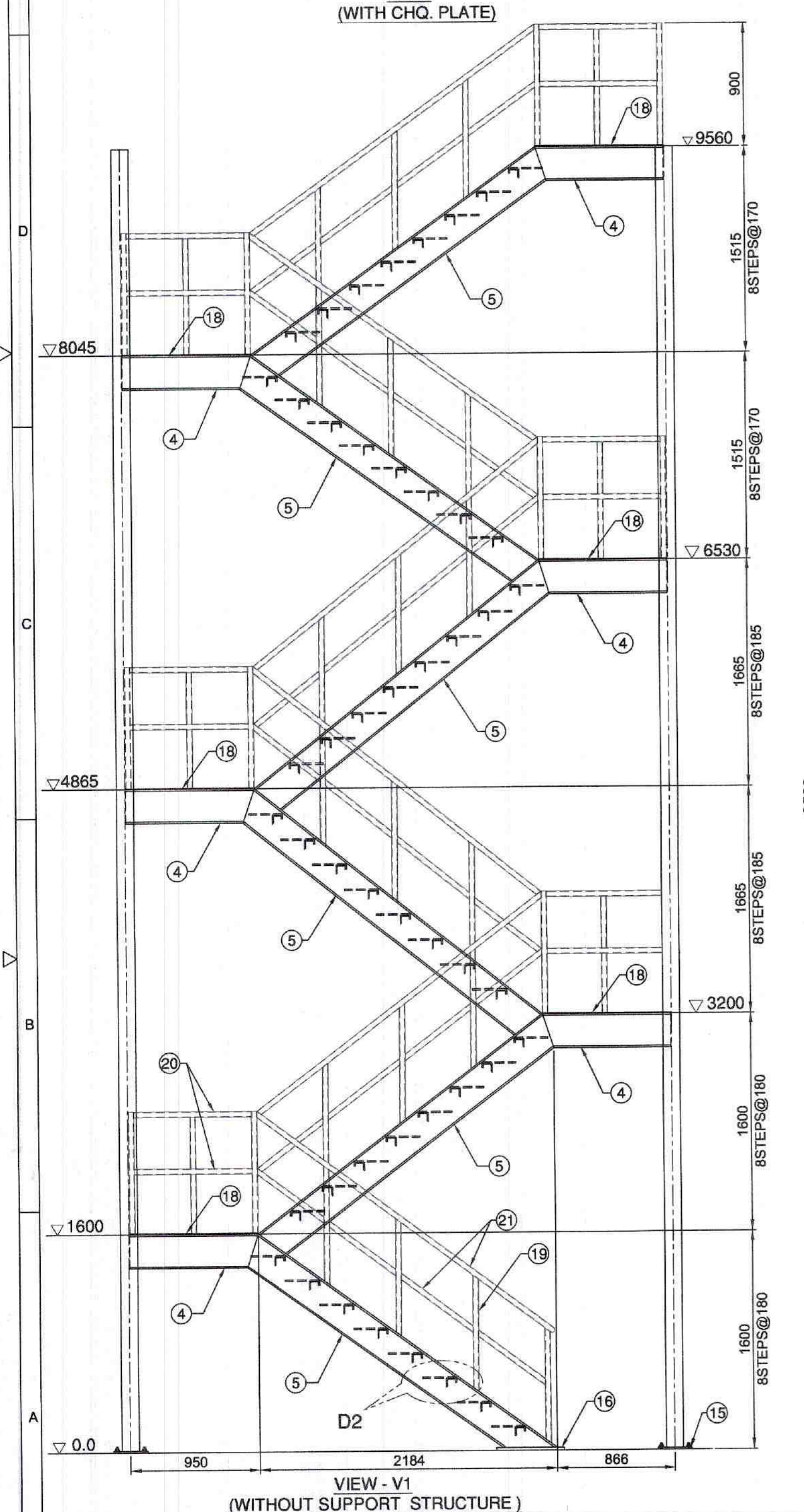
मान / SCALE: 1:50
आरेखन क्र. / DRG. NO.: 10-STR-01-06-02/A1/R0

SHEET 2 OF 6

SCEND/AT76/A1/2025/DEEPAK/KAMAL



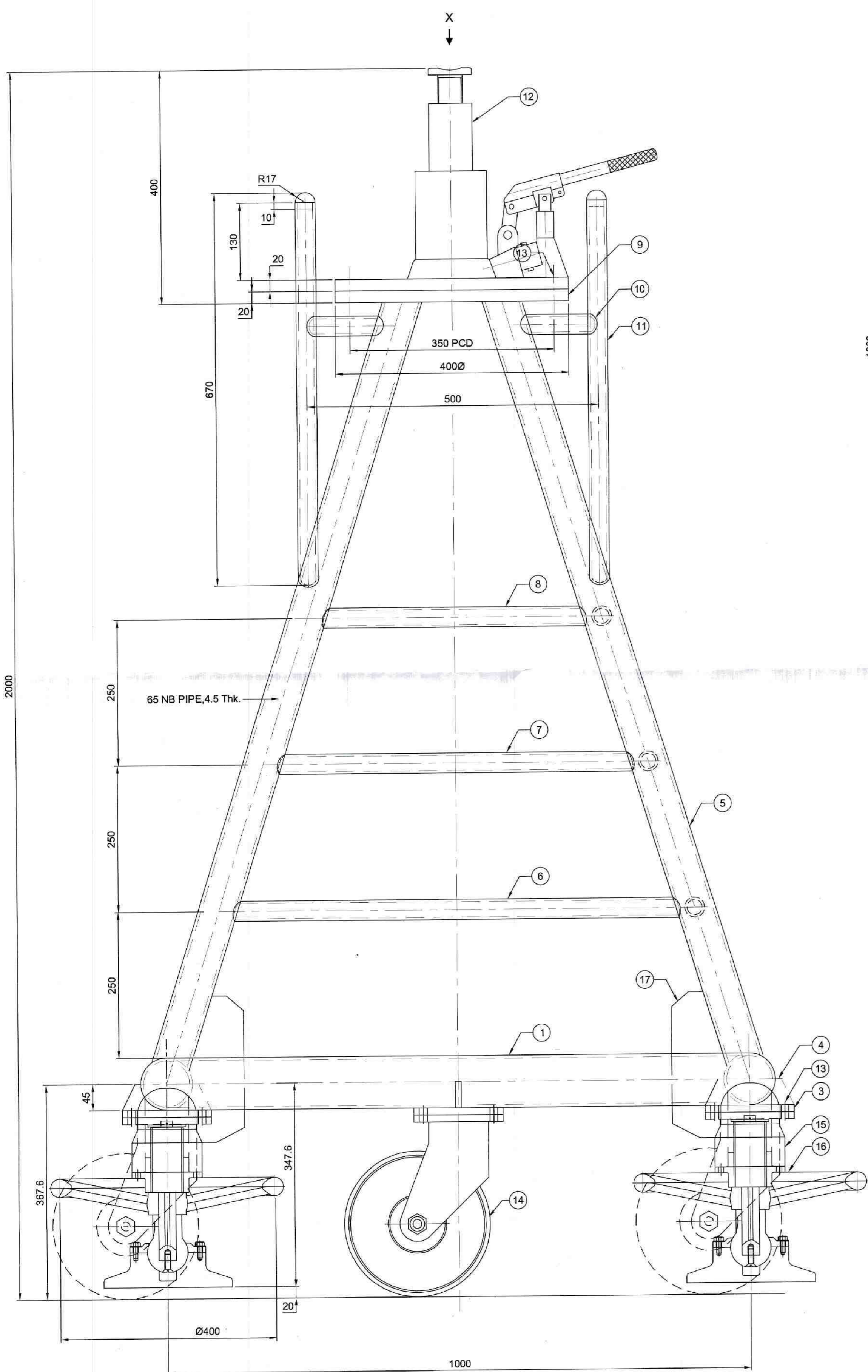
- NOTES :**
- ALL DIMENSIONS ARE IN MILLIMETERS.
 - ALL FILLET WELDS ARE 5mm SIZE UNLESS OTHERWISE STATED.
 - THE DIMENSIONS MARKED ARE CENTER LINE DIMENSIONS. FABRICATOR HAS TO EVALUATE THE ACTUAL DIMENSIONS BASED ON SITE CONDITIONS.
 - ALL WELDS ARE TO BE DP TESTED FOR ROOT AND FINAL PASSES. WELDING IN GENERAL SHALL CONFORM TO IS : 816, IS:9595 AND ALSO AS PER TECHNICAL SPECIFICATIONS.
 - STAND ALL THE STRESSES DEVELOPED DURING THE ERECTION.
 - MATERIAL FOR THE STEEL SECTIONS CONFORMS TO IS:2062 GRADE B.
 - CHEMICAL ANCHOR BOLT OF 12 DIA. 5.8 GRADE SHALL BE USED FOR FIXING OF STAIR CASE COLUMN IN THE EXISTING BUILD SLAB.
 - WEIGHT OF GUSSET PLATES ARE NOT INCLUDED IN BILL OF MATERIALS, MINIMUM 10mm THK. GUSSET PLATE SHALL BE USED AS PER SITE CONDITIONS.
 - WITH REGARD TO TOLERANCES AND FABRICATION GENERAL GUIDANCE SHALL BE FOLLOWED AS PER IS:7215 & IS:800.
 - APPROVED PAINTING SCHEDULE SHALL BE FOLLOWED AS PER THE PURCHASE ORDER TERMS.
 - CHECK THE STATUS OF THE DRAWING BEFORE FABRICATION / MACHINING.
 - ANY DISCREPANCY IN THE DRAWING SHALL BE BROUGHT TO THE NOTICE OF DESIGNER.



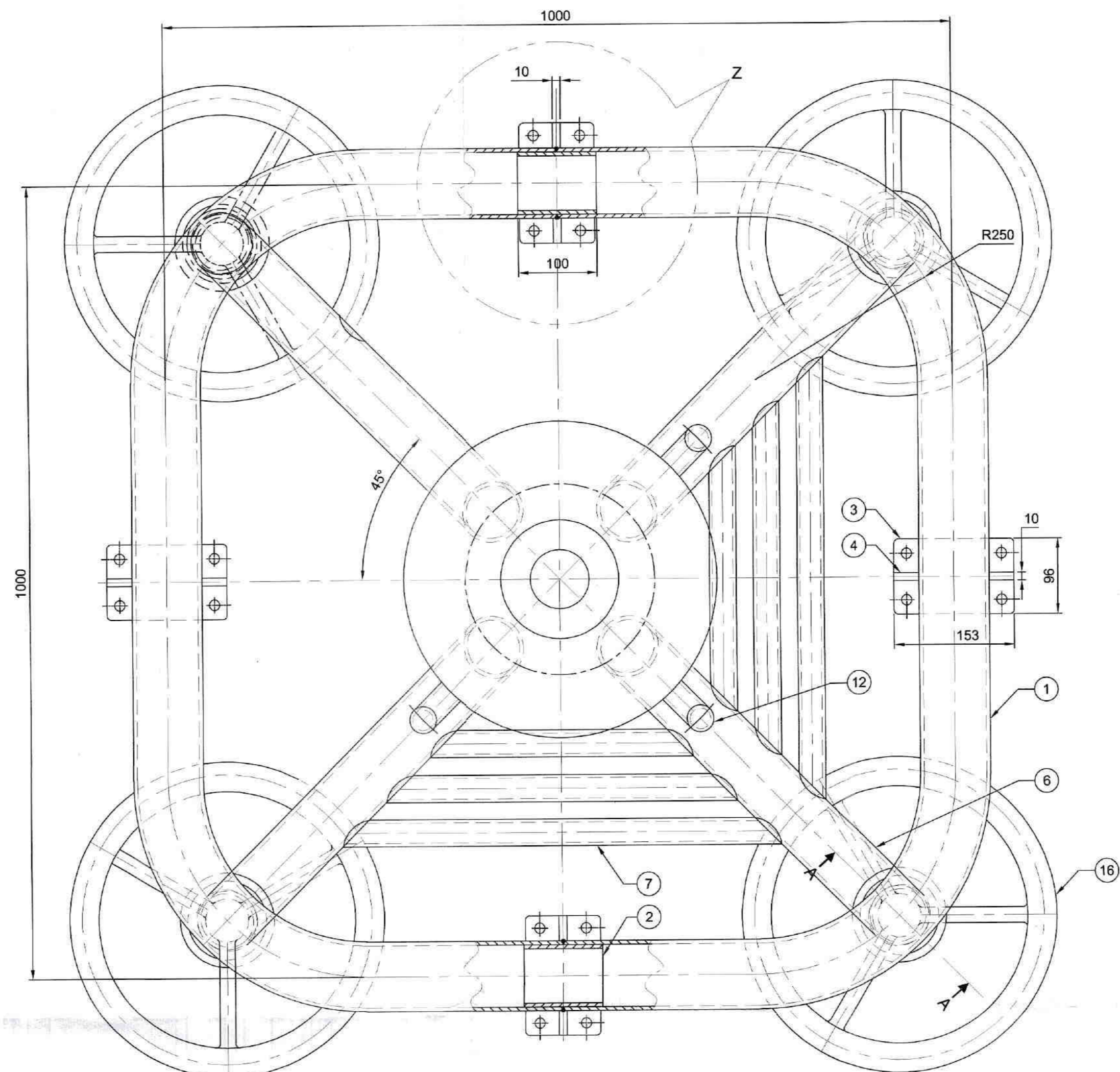
TOTAL: 6291 Kg (APPROX)

S.NO	DESCRIPTION	MATERIAL	QTY	W.T	REMARKS
22	M12 CHEMICAL ANCHOR BOLT GRADE 5.8	---	8	---	LENGTH 125 Lg.
21	25NB PIPE OD33.7xWALL Thk 4mm- 64800Lg	IS:1161	1	188	
20	25NB PIPE OD33.7xWALL Thk 4mm- 20760Lg	IS:1161	1	60	
19	25NB PIPE OD33.7xWALL Thk 4mm- 75600Lg	IS:1161	1	219	
18	CHQ. PLATE - 2 2020 X 950 X 6 THK.	IS:2062 GR-B	6	542	
17	CHQ. PLATE - 1 1080 X 250 X 6 THK.	IS:2062 GR-B	48	610	
16	BASE PLATE - 1 500 X 200 X 12 THK.	IS:2062 GR-B	2	19	
15a	STIFFENER 100 X 62.5 X 8 THK.	IS:2062 GR-B	16	6	
15	BASE PLATE - 1 350 X 250 X 12 THK.	IS:2062 GR-B	2	16	
14	2/ISA 90 X 90 X 8 THK. x 4420Lg.	IS:808	1	95	
13	2/ISA 90 X 90 X 8 THK. x 3350 Lg.	IS:808	1	72	
12	2/ISA 90 X 90 X 8 THK. x 2150 Lg.	IS:808	2	93	
11	2/ISA 90 X 90 X 8 THK. x 4250 Lg.	IS:808	3	275	
10	2/ISA 90 X 90 X 8 THK. x 3150 Lg.	IS:808	2	136	
9	ISA 65 X 65 X 6 THK. x 1080 Lg.	IS:808	48	290	
8	ISA 65 X 65 X 6 THK. x 1560 Lg.	IS:808	12	105	
7	ISMC 125 X 935 Lg.	IS:808	6	77	
6	ISMC 250 X 2580 Lg.	IS:808	6	474	
5	ISMC 250 X 2760 Lg.	IS:808	12	1007	
4	ISMC 250 X 950 Lg.	IS:808	12	347	
3	ISMB 250 X 4000 Lg.	IS:808	3	448	
2	ISMB 250 X 2225 Lg.	IS:808	6	498	
1	ISMB 250 X 9550 Lg.	IS:808	2	712	

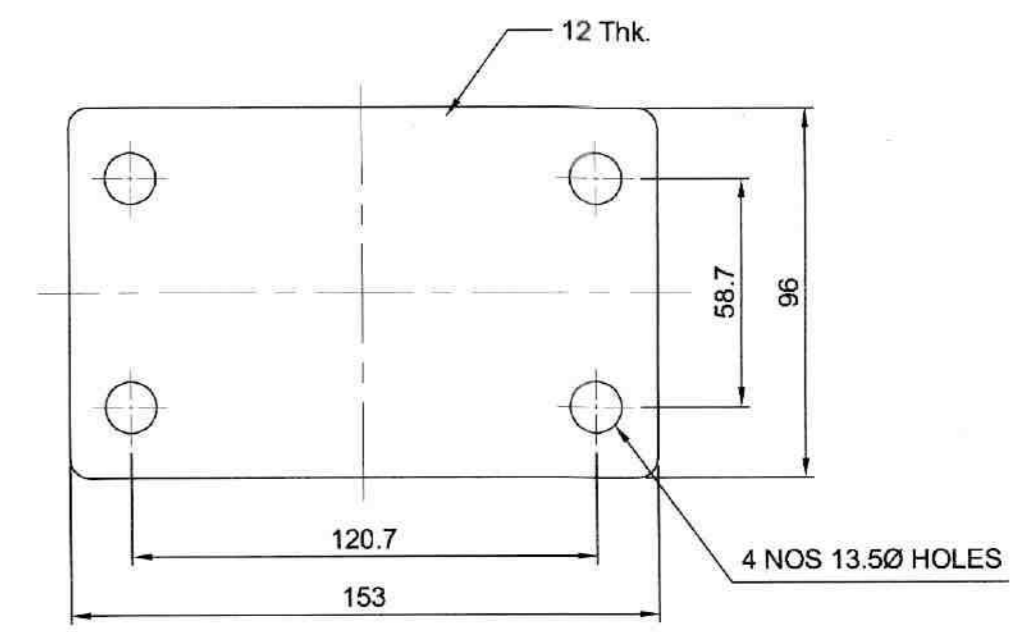
<p>VIEW - V3 (BRACING DETAILS)</p> <table border="1"> <tr><th>STATUS</th><th>SIGN</th><th>DATE</th></tr> <tr><td>DISCUSSION / REVIEW</td><td></td><td></td></tr> <tr><td>TENDER PURPOSE</td><td></td><td></td></tr> <tr><td>FABRICATION</td><td><i>[Signature]</i></td><td><i>[Date]</i></td></tr> <tr><td>UNRESTRICTED</td><td>RESTRICTED</td><td>CONFIDENTIAL</td></tr> </table>	STATUS	SIGN	DATE	DISCUSSION / REVIEW			TENDER PURPOSE			FABRICATION	<i>[Signature]</i>	<i>[Date]</i>	UNRESTRICTED	RESTRICTED	CONFIDENTIAL	<p>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 :-</p> <table border="1"> <tr><td>▽ 8 - 25</td><td>▽ 1.6 - 8</td></tr> <tr><td>▽ 0.025 - 1.6</td><td>▽ 0.025</td></tr> </table>	▽ 8 - 25	▽ 1.6 - 8	▽ 0.025 - 1.6	▽ 0.025	<p>DEVIATION FOR NON TOLERANCED DIMENSIONS (IS-2102)</p> <table border="1"> <tr><th>DIAMETERS & LENGTHS UPTO & INCL.</th><th>SHORTER SIDE OF LENGTH IN M.M. OF ANGLE UPTO & INCL.</th></tr> <tr><td>6 - 30 +0.2</td><td>1 - 6 ± 1'-00'</td></tr> <tr><td>30 - 120 +0.3</td><td>6 - 30 ± 0'-30'</td></tr> <tr><td>120 - 315 +0.5</td><td>315 - 1000 +0.8</td></tr> <tr><td>315 - 1000 +0.8</td><td>1000 - 2000 +1.2</td></tr> <tr><td>2000 - 4000 +2.0</td><td>4000 & ABOVE +3.0</td></tr> </table>	DIAMETERS & LENGTHS UPTO & INCL.	SHORTER SIDE OF LENGTH IN M.M. OF ANGLE UPTO & INCL.	6 - 30 +0.2	1 - 6 ± 1'-00'	30 - 120 +0.3	6 - 30 ± 0'-30'	120 - 315 +0.5	315 - 1000 +0.8	315 - 1000 +0.8	1000 - 2000 +1.2	2000 - 4000 +2.0	4000 & ABOVE +3.0	<p>श्रीकेंद्र SCEND SHAR CENTRAL DESIGNS DESIGNED: <i>[Signature]</i> DRAWN: <i>[Signature]</i> DRG. CHD: <i>[Signature]</i> APPROVED: <i>[Signature]</i></p>	<p>शीर्षक / TITLE: STAIR CASE DETAILS FOR S200 HARDWARE ASSEMBLY PLATFORM AT SHSB II - SHAR</p> <p>भारत सरकार भारतीय अंतरिक्ष अनुसंधान संगठन सतीश धवन अंतरिक्ष केंद्र शार श्रीहरिकोटा</p> <p>भारत सरकार GOVERNMENT OF INDIA INDIAN SPACE RESEARCH ORGANISATION SATISH DHAWAN SPACE CENTRE SHAR SRIMARIKOTA</p> <p>केमान / SCALE: 1:30 आरेखन नं / DRG. NO. 10-STR-01-06-02/A1/R0</p>	<p>श्रीकेंद्र PROJECTION</p> <p>SHEET 4 OF 6</p>
STATUS	SIGN	DATE																																		
DISCUSSION / REVIEW																																				
TENDER PURPOSE																																				
FABRICATION	<i>[Signature]</i>	<i>[Date]</i>																																		
UNRESTRICTED	RESTRICTED	CONFIDENTIAL																																		
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▽ 0.025 - 1.6	▽ 0.025																																			
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2000 - 4000 +2.0	4000 & ABOVE +3.0																																			



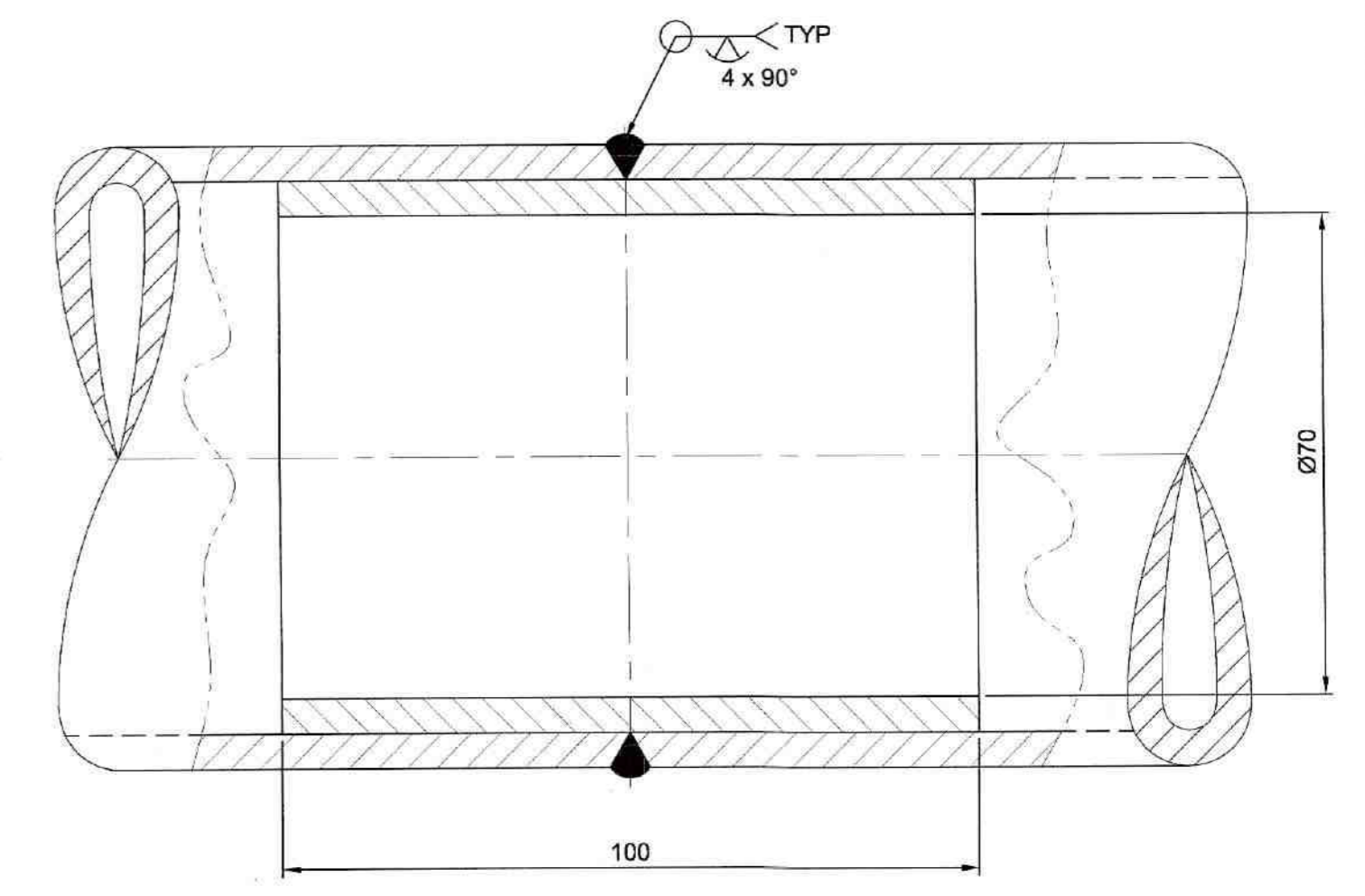
ELEVATION



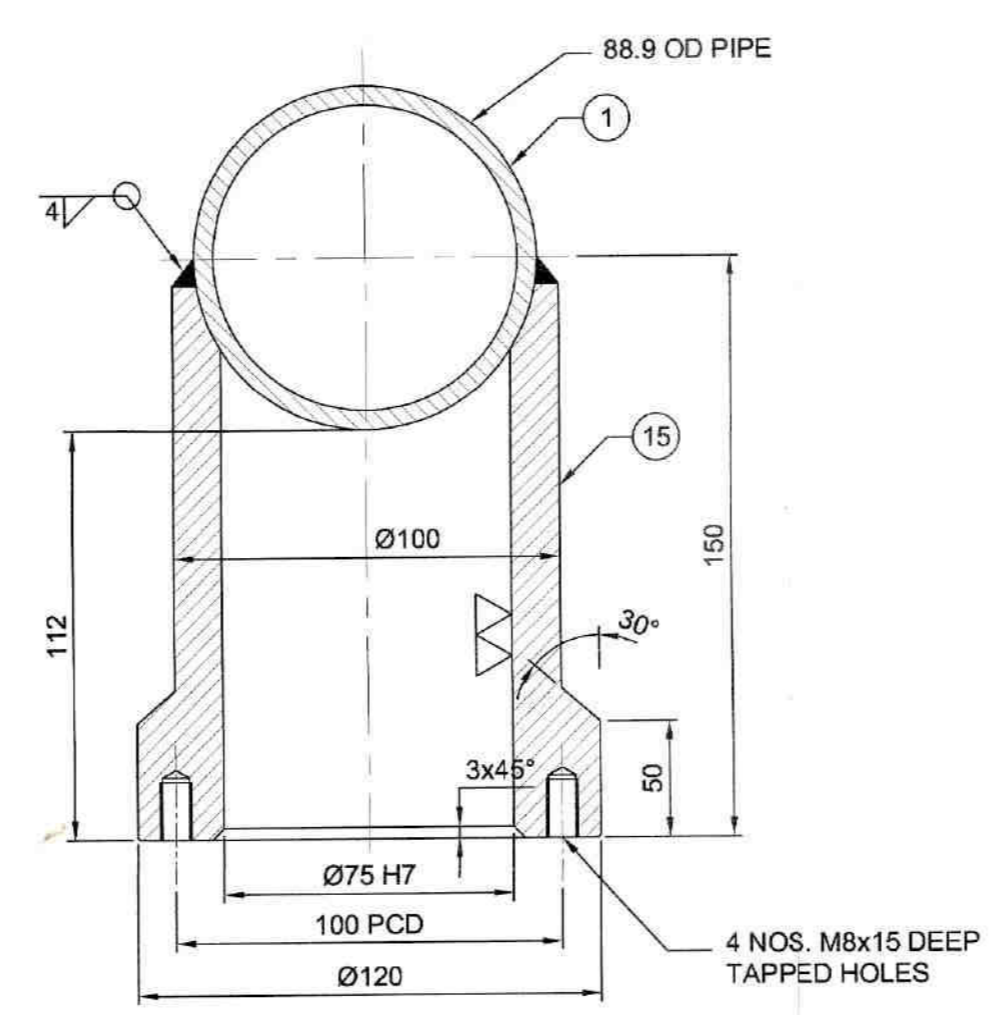
VIEW FROM-X



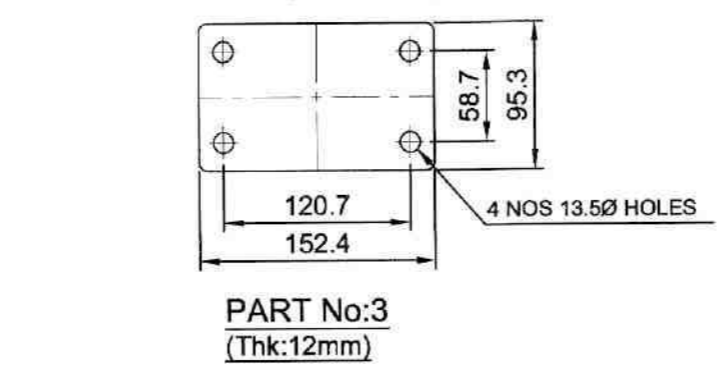
PART No-03
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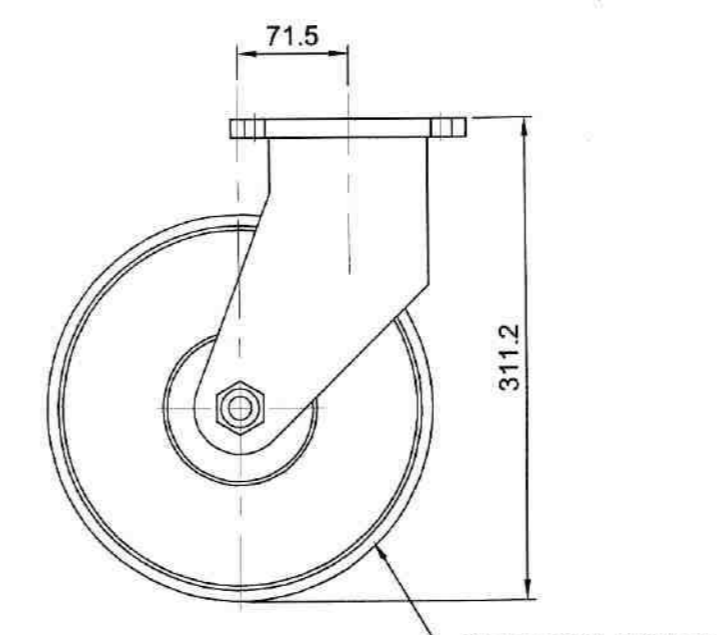
DETAILS AT-Z
(SCALE 1:2.5)



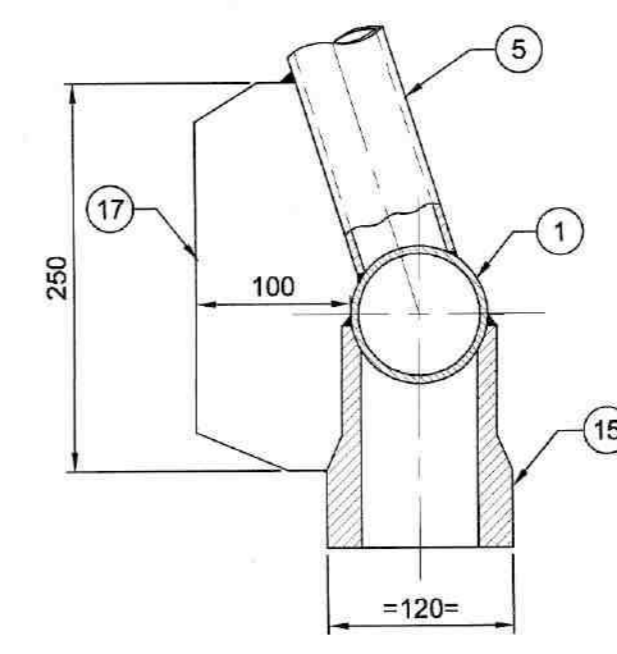
PART No: 15
(SCALE 1:2.5)



PART No:3
(Thk:12mm)



PART No-14
WHEEL 250Ø, WIDTH 75



SECTION-AA

NOTE :-
ALL THE WELDS ARE 4mm FILLETS.

TOTAL WEIGHT: 171 Kg.(Approx).

S.NO	DESCRIPTION	MATERIAL	QTY	W.T	REMARKS
17	STIFFENER 250 x 100 x 12 Thk	IS : 2062 Gr-B	4	9	
16	BASE SUPPORTING JACK	--	4	--	
15	JACK HOLDING SLEEVE OD 120 x ID 75 - 143lg	IS : 1363	4	31	
14	SWIVEL CASTER	--	4	--	
13	HEX. BOLT, NUT & WASHERS	IS : 1161	4	--	
12	10 T. HYDRAULIC JACK CLOSED 239mm / OPEN 466mm	--	1	--	
11	25NB PIPE OD 33.7 x 3.2Thk - 660Lg	IS : 1161	3	5	
10	25NB PIPE OD 33.7 x 3.2Thk - 150Lg	IS : 1161	3	1	
9	CIRCULAR PLATE Ø400 x 20Thk	IS : 2062 Gr-B	1	20	
8	40NB PIPE OD 48.3 x 4Thk - 450Lg	IS : 1161	2	4	
7	40NB PIPE OD 48.3 x 4Thk - 600Lg	IS : 1161	2	5	
6	40NB PIPE OD 48.3 x 4Thk - 763Lg	IS : 1161	2	7	
5	65NB PIPE OD 76.1 x 4.5Thk - 1260Lg	IS : 1161	4	40	
4	STIFFENER 45 x 35 x 10 Thk	IS : 2062 Gr-B	8	1	
3	CASTER WHEEL FIXING PLATE 153 x 96 x 12 Thk	IS : 2062 Gr-B	4	5	
2	SLEEVE OD 80 x ID 70 x 10 Thk - 100Lg	IS : 2062 Gr-B	2	4	PROPERTY CLASS : 8.8
1	BASE PLATE 80 NB PIPE OD(88.9) x 4.8Thk - 4000Lg	IS : 1161	1	40	

STATUS	SIGN	DATE
DISCUSSION / REVIEW		
TENDER PURPOSE		
FABRICATION		
UNRESTRICTED	RESTRICTED	CONFIDENTIAL

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)	SHORTER SIDE OF LENGTH IN M.M. OF ANGLE UPTO & INCL.
DIAMETERS & LENGTHS UPTO & INCL. 6+0.1	1- 6 ± 1°-00'
6- 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
 शर केंद्रीय अभियन्तार
 SHAR CENTRAL DESIGNS

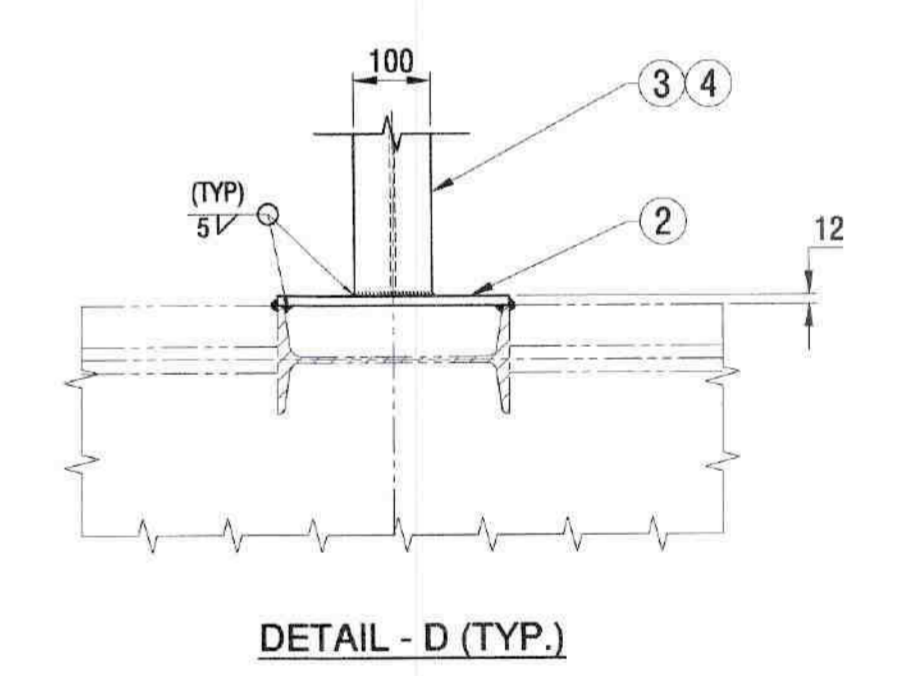
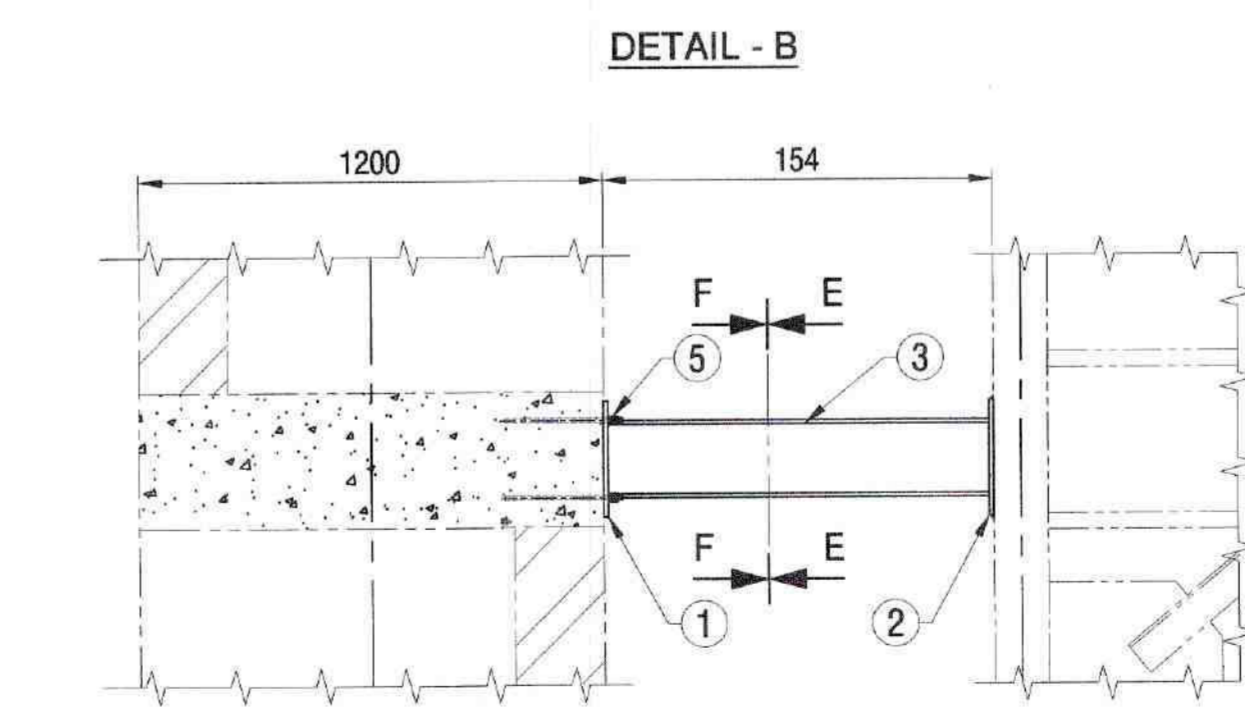
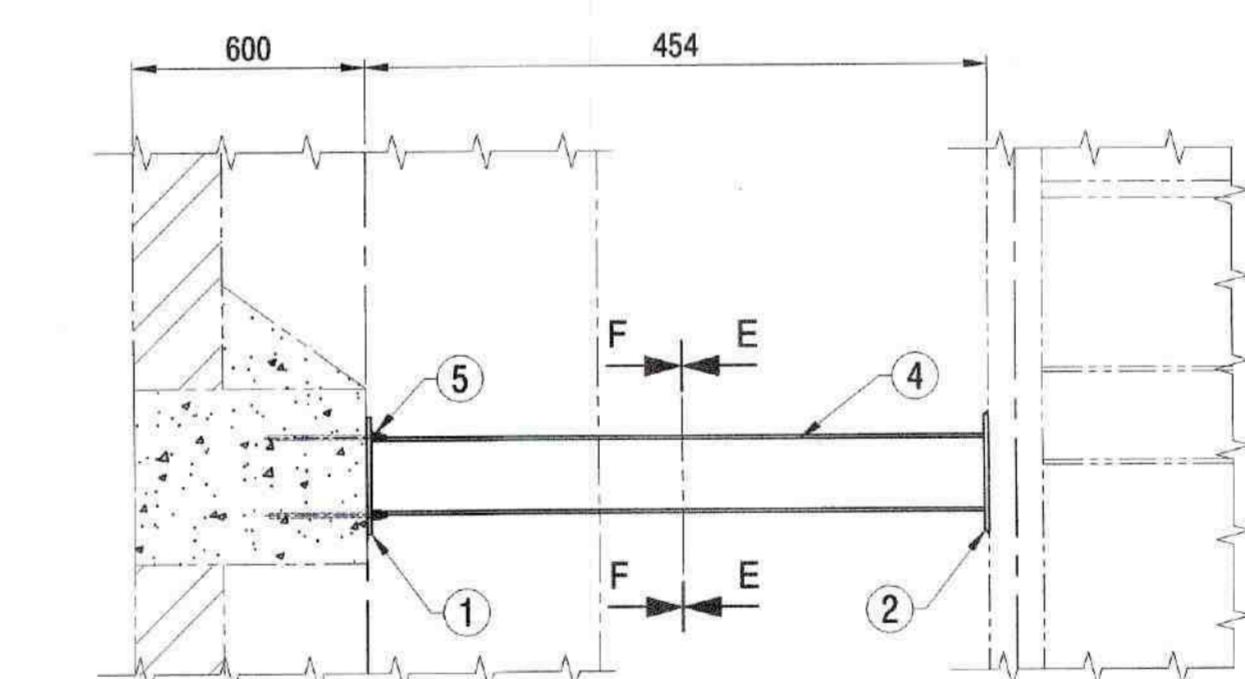
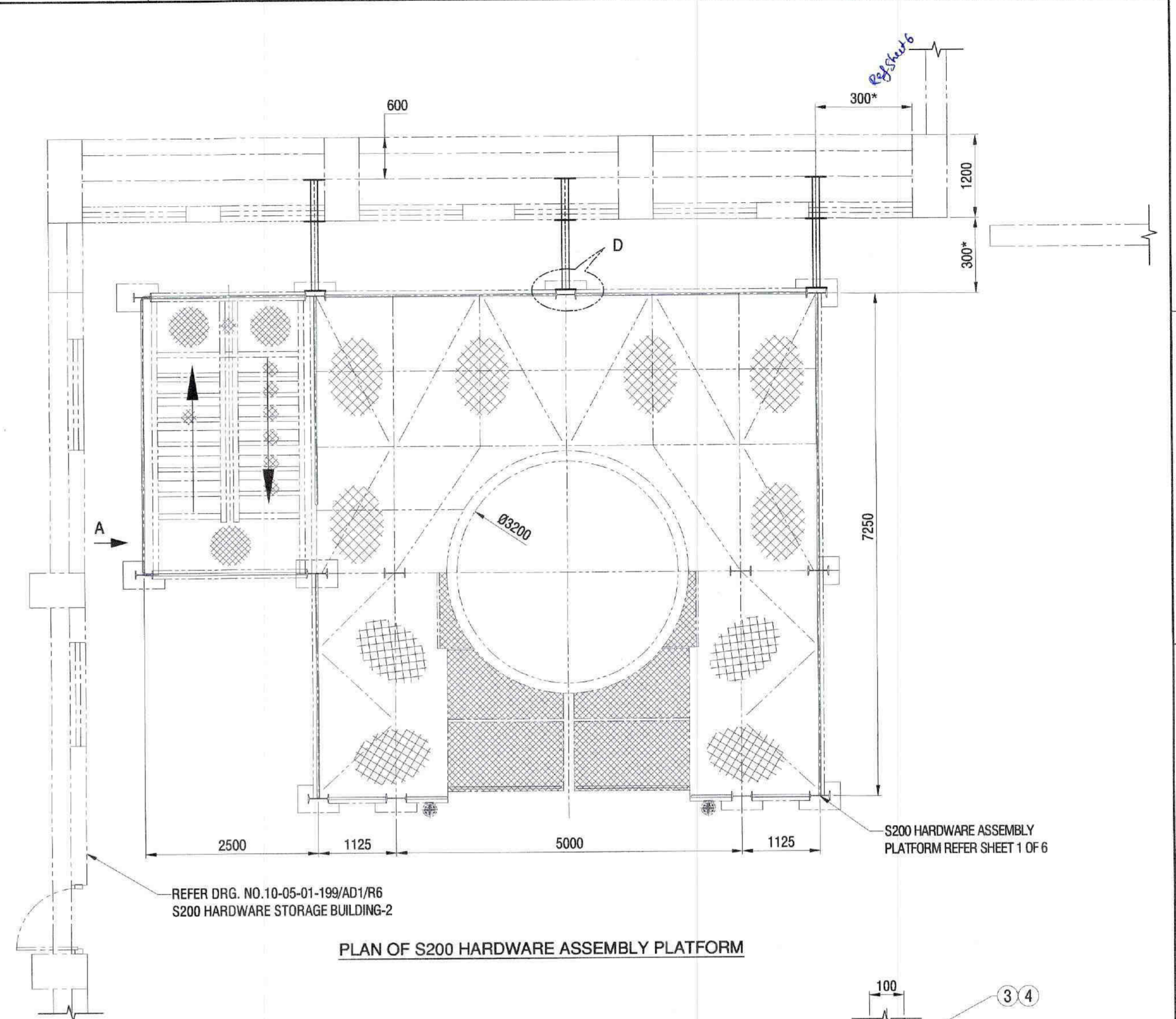
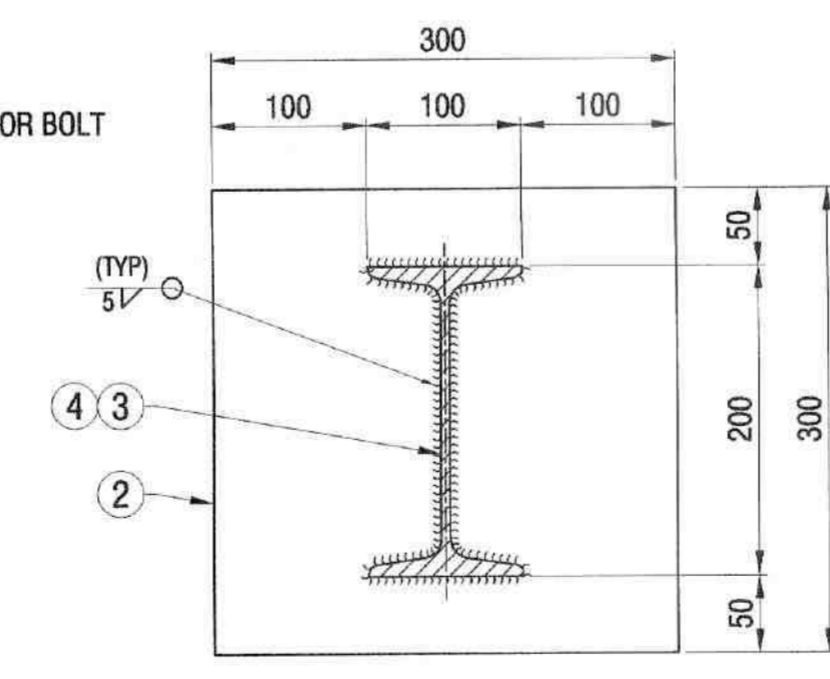
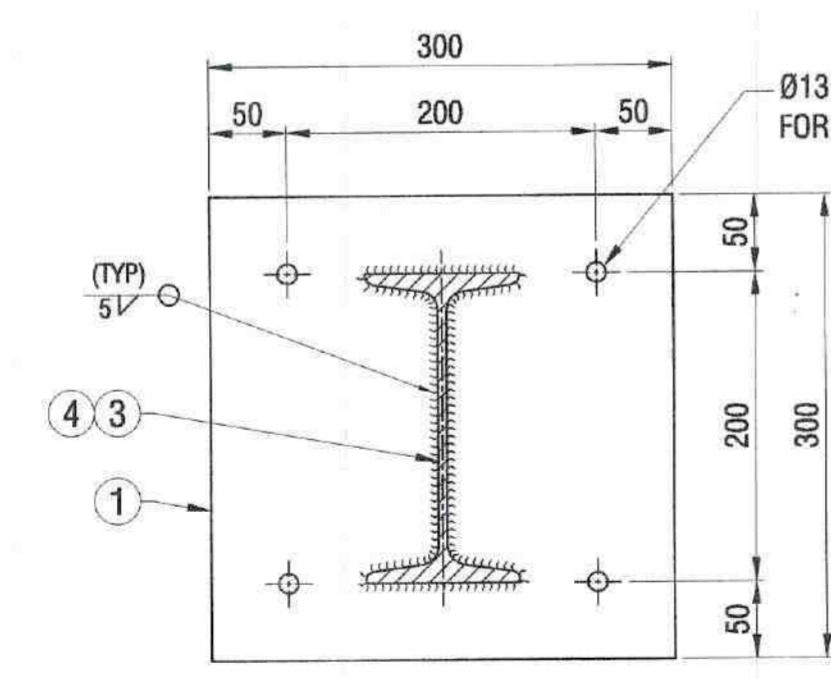
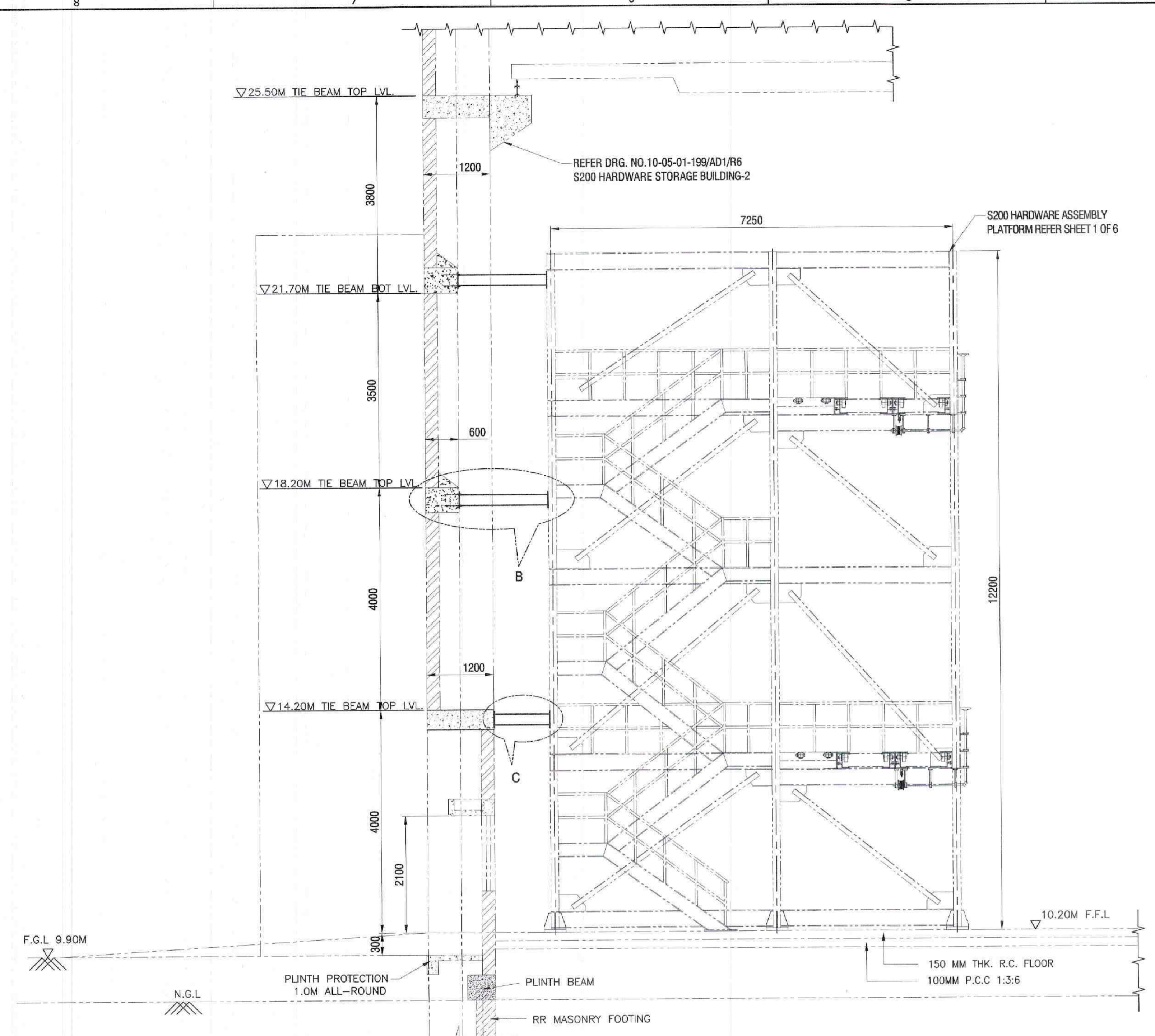
शीर्षक / TITLE: MOBILE JACK SUPPORT-10T.Cap.
 (S-200 HARDWARE TILTING FIXTURE)

भारत सरकार GOVERNMENT OF INDIA
 भारतीय अंतरिक्ष अनुसंधान संगठन INDIAN SPACE RESEARCH ORGANISATION
 सतीश धवन अंतरिक्ष केंद्र शर SATISH DHAWAN SPACE CENTRE SHAR
 श्रीहरिकोटा SRIHARIKOTA

डिजाइनर DESIGNED: [Signature]
 ड्रॉइंग ड्रॉइंग DRAWN: DEEPAK 10/09/25
 ड्रॉइंग चेक ड्रॉइंग CHECKED: [Signature]
 अनुमोदित APPROVED: [Signature]

स्केल / SCALE: 1:5
 शीट नं. / SHEET NO: 10-MECH-01-03-017/A1
 शीट / SHEET OF 1 OF 2

Facility checked and confirmed the list as per BOM.
(Signature)



- NOTES :**
- ALL DIMENSIONS ARE IN MILLIMETERS.
 - ALL FILLET WELDS ARE 5mm SIZE UNLESS OTHERWISE STATED.
 - MATERIAL FOR THE STEEL SECTIONS CONFORMS TO IS:2062 GR-B.
 - APPROVED PAINTING SCHEDULE SHALL BE FOLLOWED AS PER THE PURCHASE ORDER TERMS.
 - CHECK THE STATUS OF THE DRAWING BEFORE FABRICATION / MACHINING.

TOTAL MASS : 224 Kg(Approx.)

S.NO	DESCRIPTION	MATERIAL	QTY	MASS	REMARKS
5	M12 CHEMICAL ANCHOR BOLT Gr. 5.8	---	36	---	LENGTH 150 Lg.
4	ISMB 200 - 430Lg.	IS-808	6	62	
3	ISMB 200 - 130Lg.	IS-808	3	9	
2	PLATE 300 x 300 x 12THK.	IS:2062 GR - B	9	76	
1	PLATE 300 x 300 x 12THK.	IS:2062 GR - B	9	76	

DISCUSSION / REVIEW	DATE	SIGNATURE
TENDER PURPOSE		
FABRICATION		
STATUS		
UNRESTRICTED	RESTRICTED	CONFIDENTIAL

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

DEVIATION FOR NON TOLERANCE DIMENSIONS IS:2102 (PART-1)-1993	
DIAMETERS & LENGTHS UPTO & INCL. 6 ±0.1	LENGTH IN M.M. OF SHORTER SIDE OF ANGLE UPTO & INCL.
6 - 30 ±0.2	1 - 6 + 1'-00"
30 - 120 ±0.3	6 - 30 + 0'-30"
120 - 315 ±0.5	30 - 120 + 0'-20"
315 - 1000 ±0.8	2000 - 4000 ±2.0
1000 - 2000 ±1.2	4000 & ABOVE ±3.0
2000 - 4000 ±2.0	
4000 & ABOVE ±3.0	

SCEND / TITLE: **LATERAL SUPPORT DETAILS**
S200 HARDWARE ASSEMBLY PLATFORM AT SHSB-II, SHAR

DESIGNED: [Signature] / DRAWN: [Signature] / DRG.CHECKED: [Signature] / APPROVED: [Signature]

DATE: 4/08/25

भारत सरकार GOVERNMENT OF INDIA
 भारतीय अंतरिक्ष अनुसंधान संगठन INDIAN SPACE RESEARCH ORGANISATION
 सतीश धवन अंतरिक्ष केंद्र SHAR SATISH DHAWAN SPACE CENTRE SHAR
 श्रीहरीकोट SRIRAHKOTA.

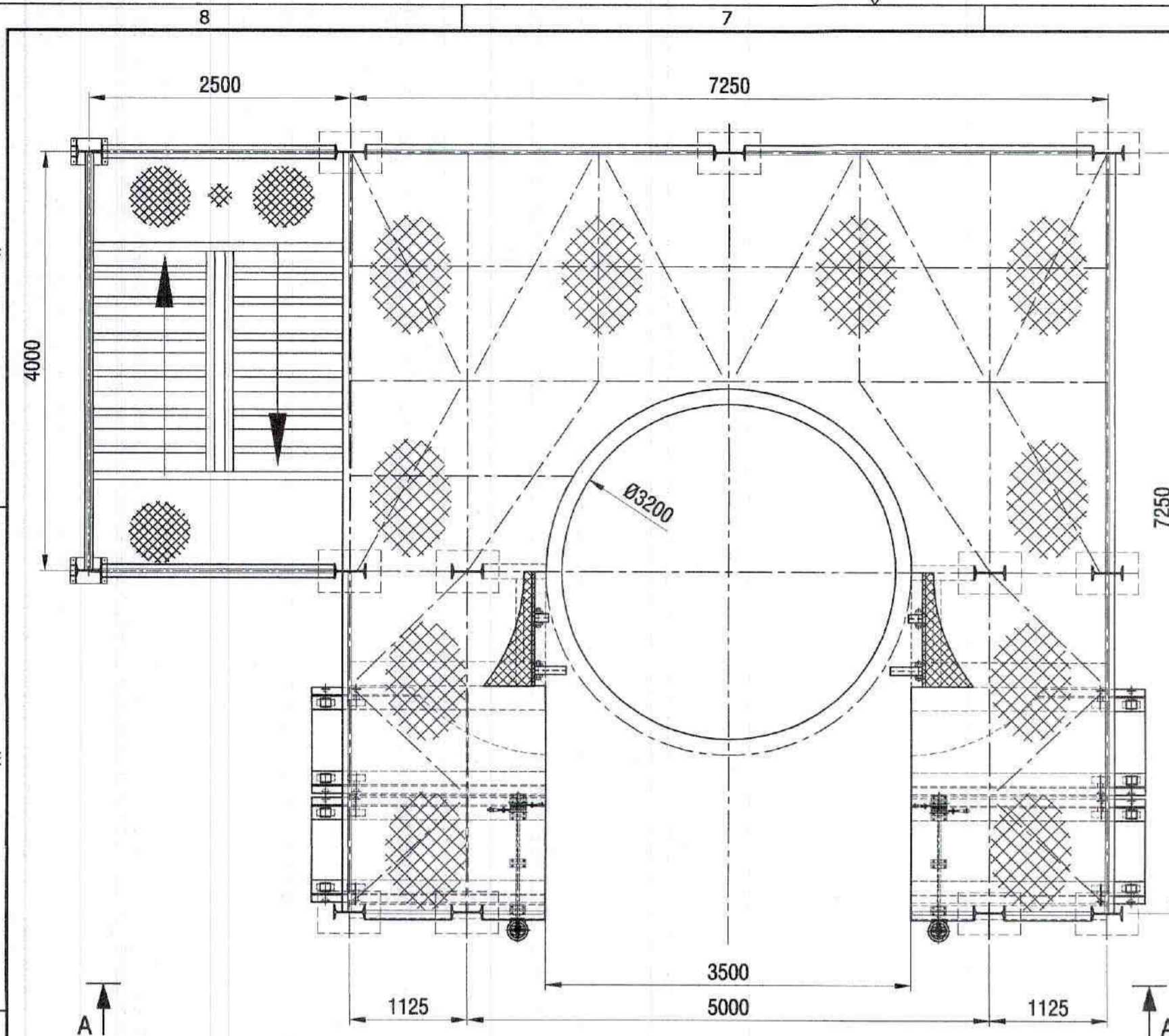
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ड्राइंग नं./DRG. NO.: 10-STR-01-06-02/A1/R0

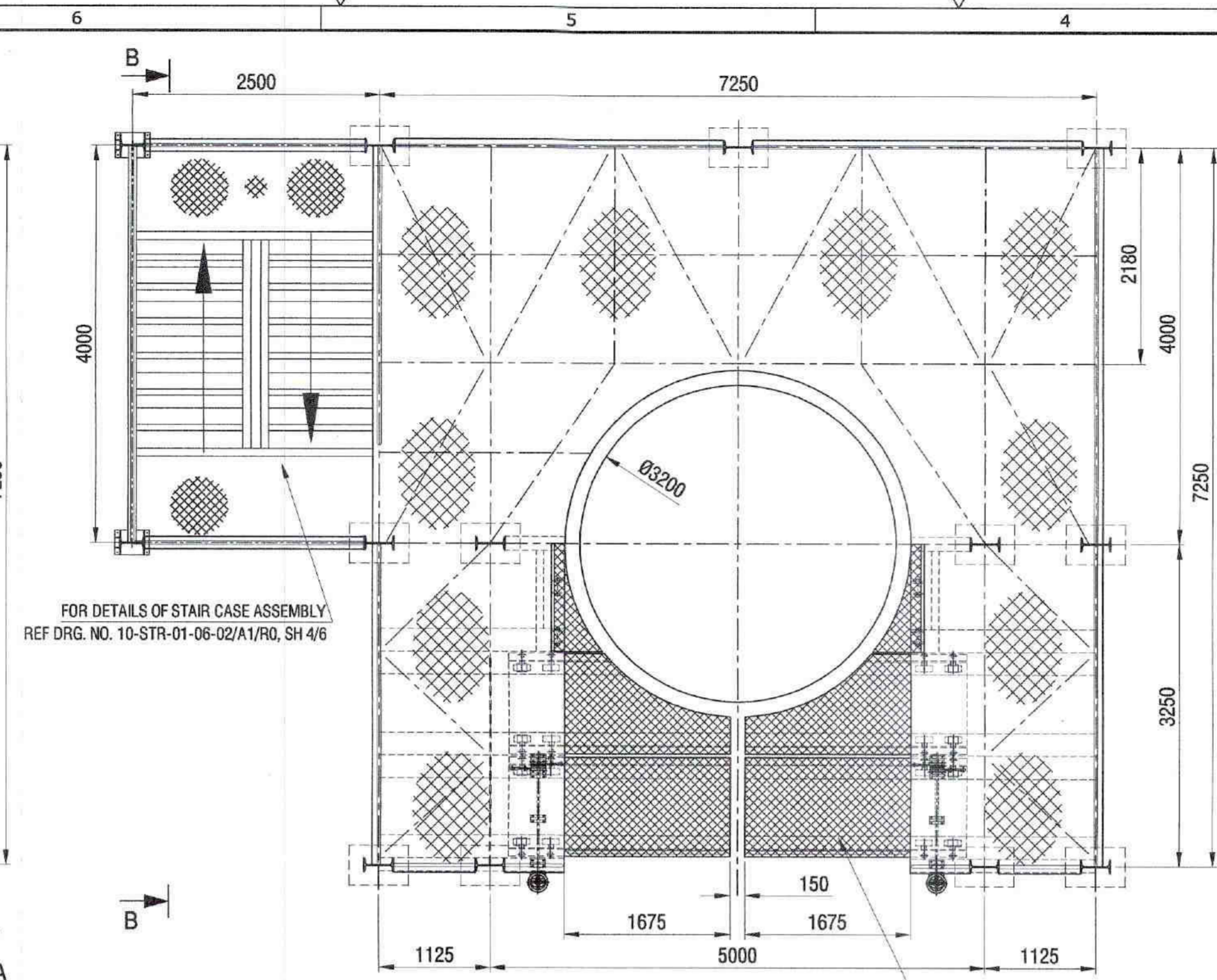
शीट / SHEET: 5 OF 6

SCEND/A176/A1/2025/DEEPAK/KAMAL

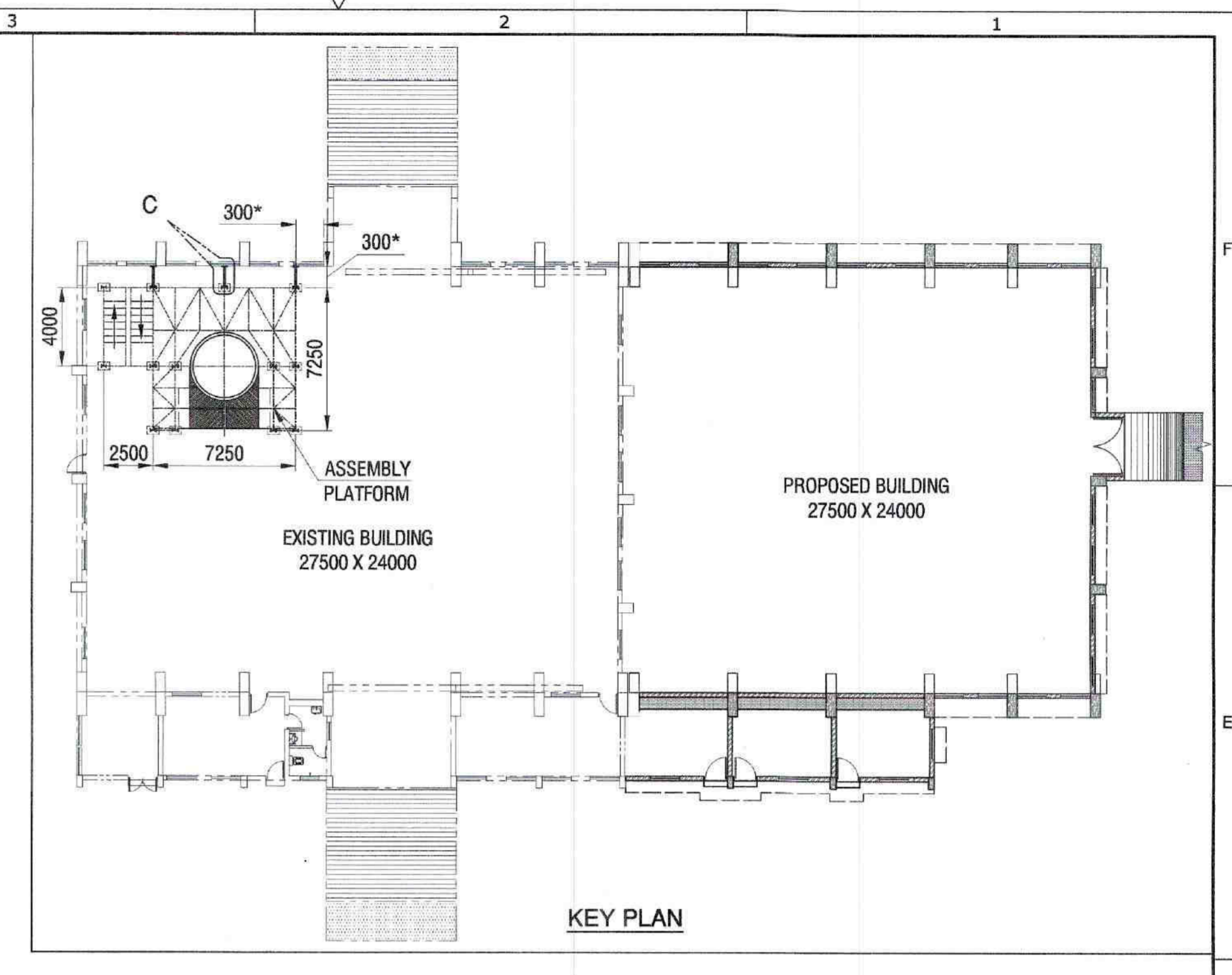
REF. DRG. NO. 10-STR-01-06-02/A1/R0
 SCEND/A176/A1/2025/DEEPAK/KAMAL



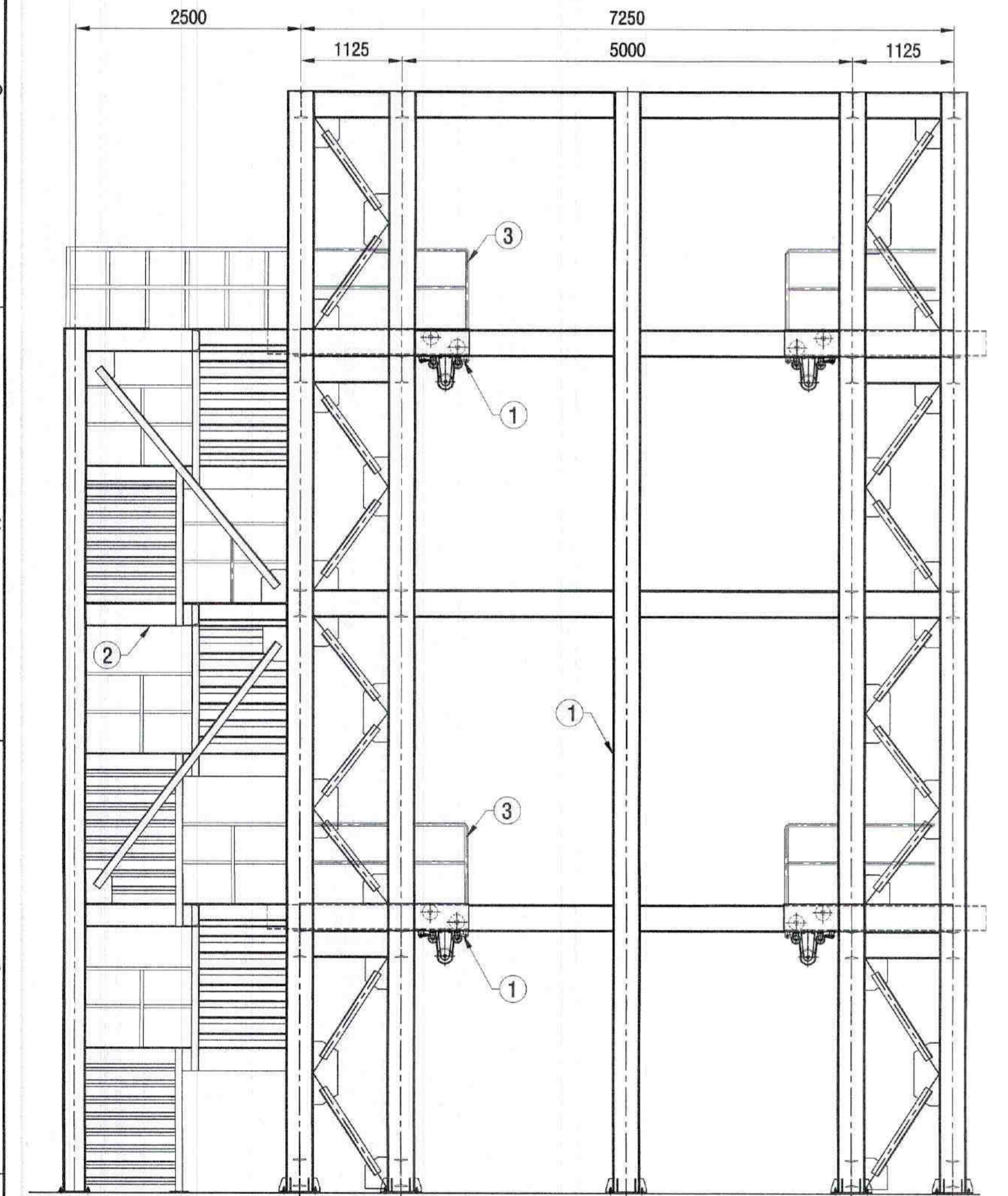
PLAN OF SLIDING PLATFORM IN RETRACTED CONDITION



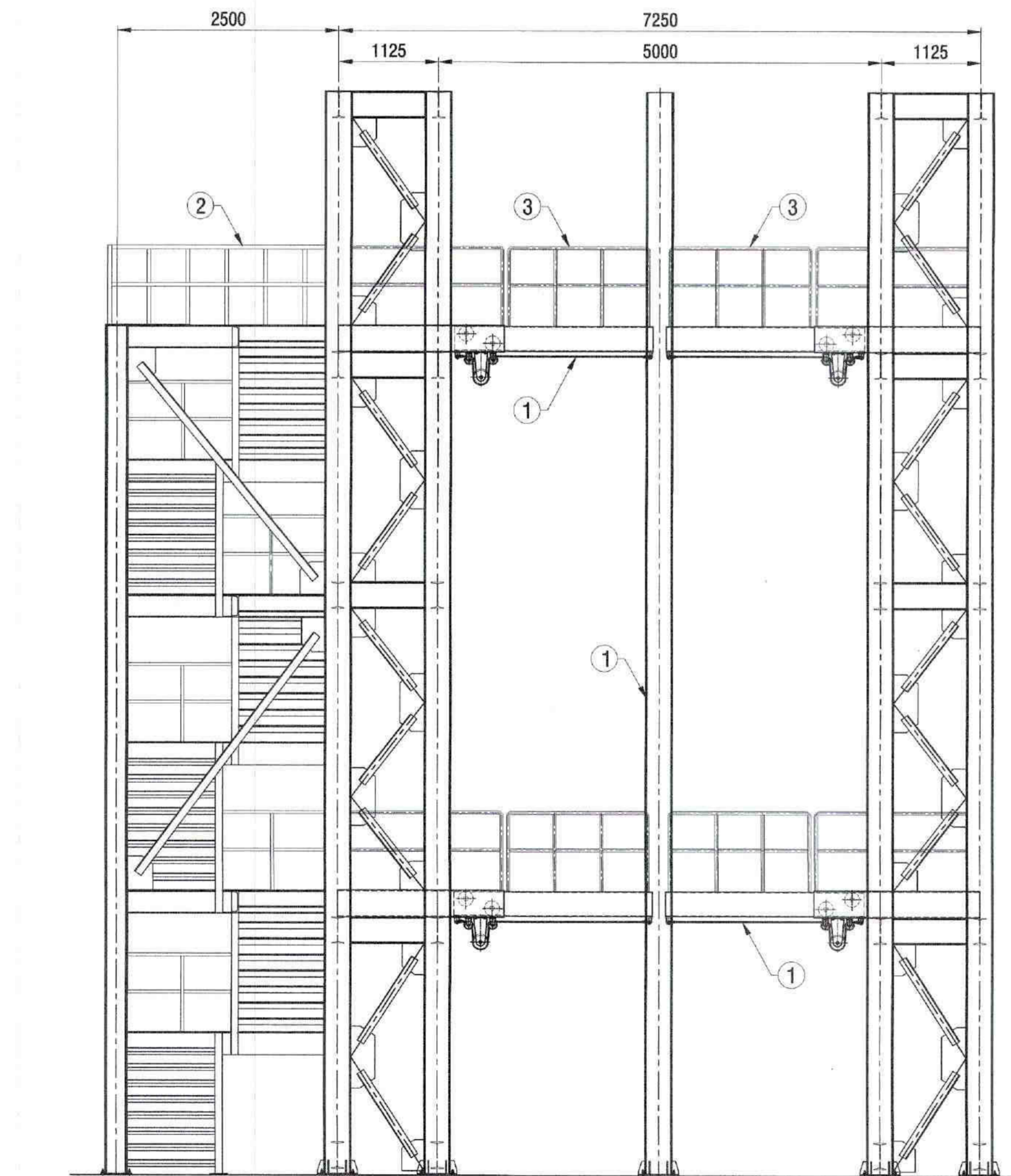
PLAN OF SLIDING PLATFORM IN CLOSED CONDITION



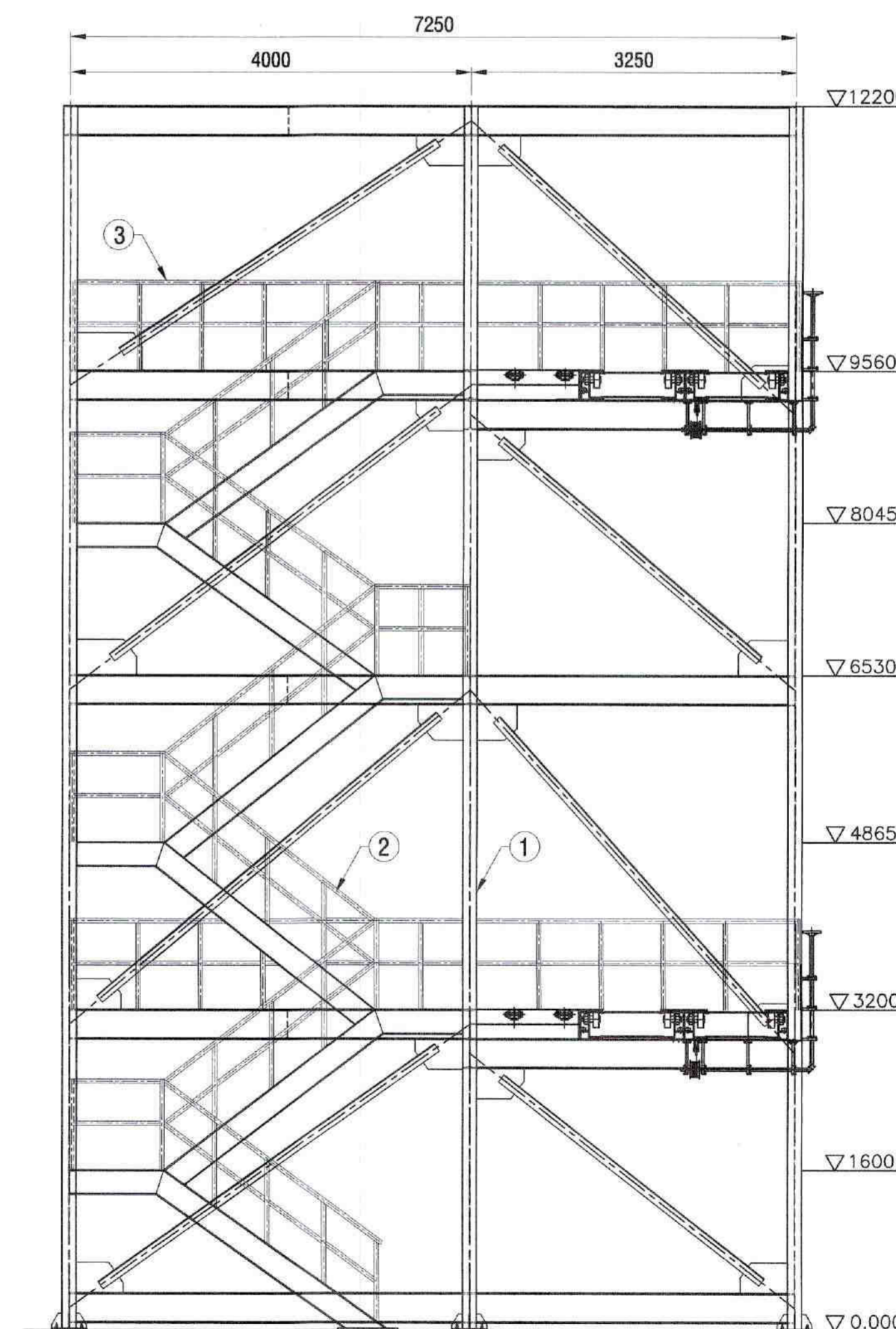
KEY PLAN



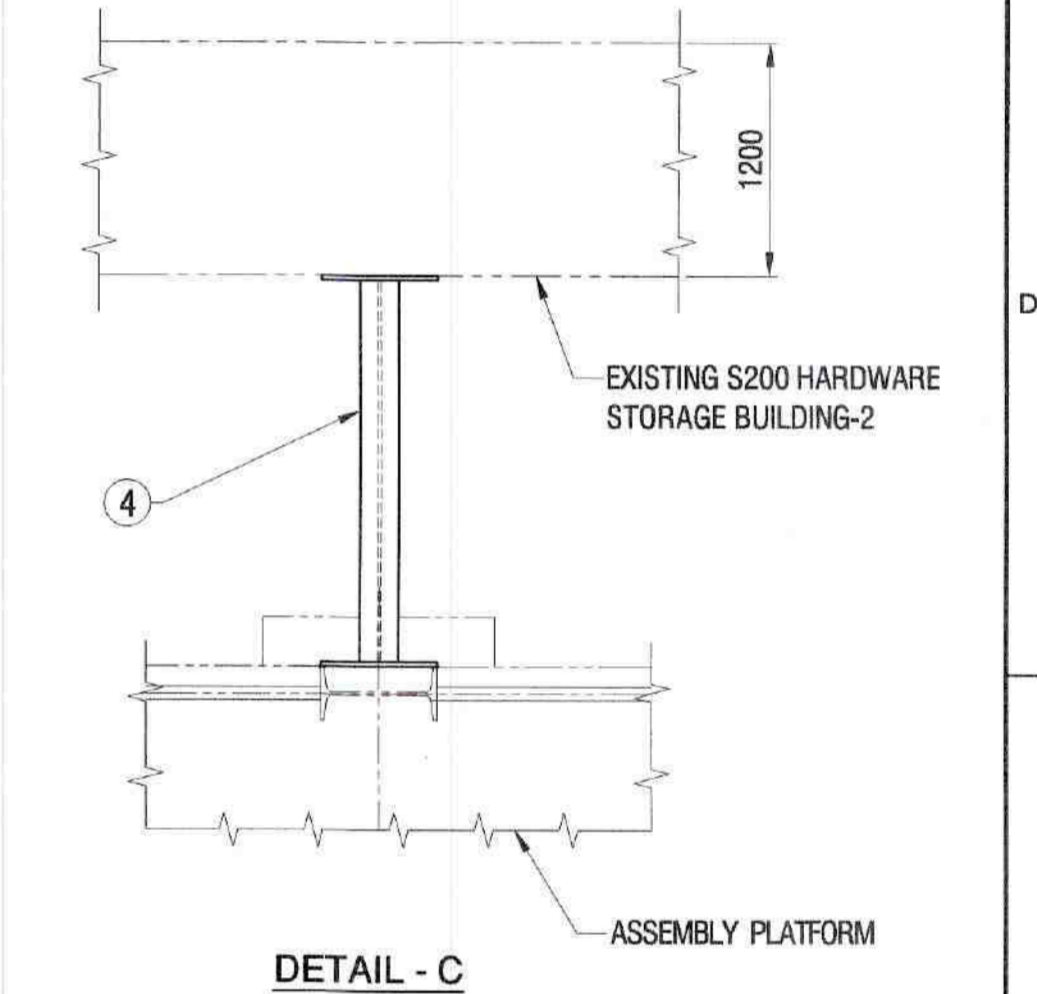
VIEW-AA SLIDING PLATFORM IN RETRACTED CONDITION



ELEVATION



VIEW-BB



DETAIL - C

HAND RAILS TOTAL WEIGHT IN Kg. 275

1	25NB PIPE OD33.7 x 4.0 WALL THK. - 94000g.	1	275
---	---	---	-----

- NOTES :**
- ALL DIMENSIONS ARE IN MILLIMETERS.
 - ALL FILLET WELDS ARE 5mm SIZE UNLESS OTHERWISE STATED.
 - MATERIAL FOR THE STEEL SECTIONS CONFORMS TO IS:2062 GR-B.
 - FOR THE DETAILS OF SLIDING PLATFORM & ITS WEIGHT REF. DRAWING NO.
 - THE HAND RAILS ARE TO BE PROVIDED AT THE EDGES OF THE PLATFORM TO SUIT AT SITE.
 - REMOVABLE HAND RAILS SHALL BE PROVIDED IN SLIDING PLATFORM.
 - WITH REGARD TO TOLERANCES AND FABRICATION GENERAL GUIDANCE SHALL BE FOLLOWED AS PER IS:7215 & IS:800.
 - APPROVED PAINTING SCHEDULE SHALL BE FOLLOWED AS PER THE PURCHASE ORDER TERMS.
 - CHECK THE STATUS OF THE DRAWING BEFORE FABRICATION / MACHINING.

TOTAL MASS : 30550 Kg(Aprox.)

S.NO	DESCRIPTION	MATERIAL	QTY	MASS	REMARKS
4	LATERAL SUPPORT		1	224	REFER DRG NO. SH. 5 OF 6
3	HAND RAILS	IS:1161	1	275	
2	STAIR CASE DETAILS	---	1	6291	REFER DRG NO. SH. 4 OF 6
1	STRUCTURAL DETAILS	---	1	23780	REFER DRG NO. SH. 2 OF 6

DISCUSSION / REVIEW	DO NOT SCALE THE DRAWING ASK IF IN DOUBT UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN MILLIMETERS REMOVE SHARP EDGES & BURRS CHAMFER 1 mm. X 45° MACHINING FINISH IN MICRONS :- ▽ 8 - 25 ▽ 1.6 - 8 ▽▽ 0.025 - 1.6 ▽▽▽ < 0.025	DEVIATION FOR NON TOLERANCE DIMENSIONS IS:2102 (PART-1)-1993 DIAMETERS & LENGTHS UPTO & INCL. 5 ±0.1 6 - 30 ±0.2 30 - 120 ±0.3 120 - 315 ±0.5 315 - 1000 ±0.8 1000 - 2000 ±1.2 2000 - 4000 ±2.0 4000 & ABOVE ±3.0	LENGTH IN M.M. OF SHORTER SIDE OF ANGLE UPTO & INCL. 1 - 6 + 1'-00" 6 - 30 + 0'-30" 30 - 120 + 0'-20" 120 - 400 + 0'-10"
---------------------	--	--	--

SCEND शर केंद्रीय अभिकल्पना शर सेंट्रल डिजाइन्स

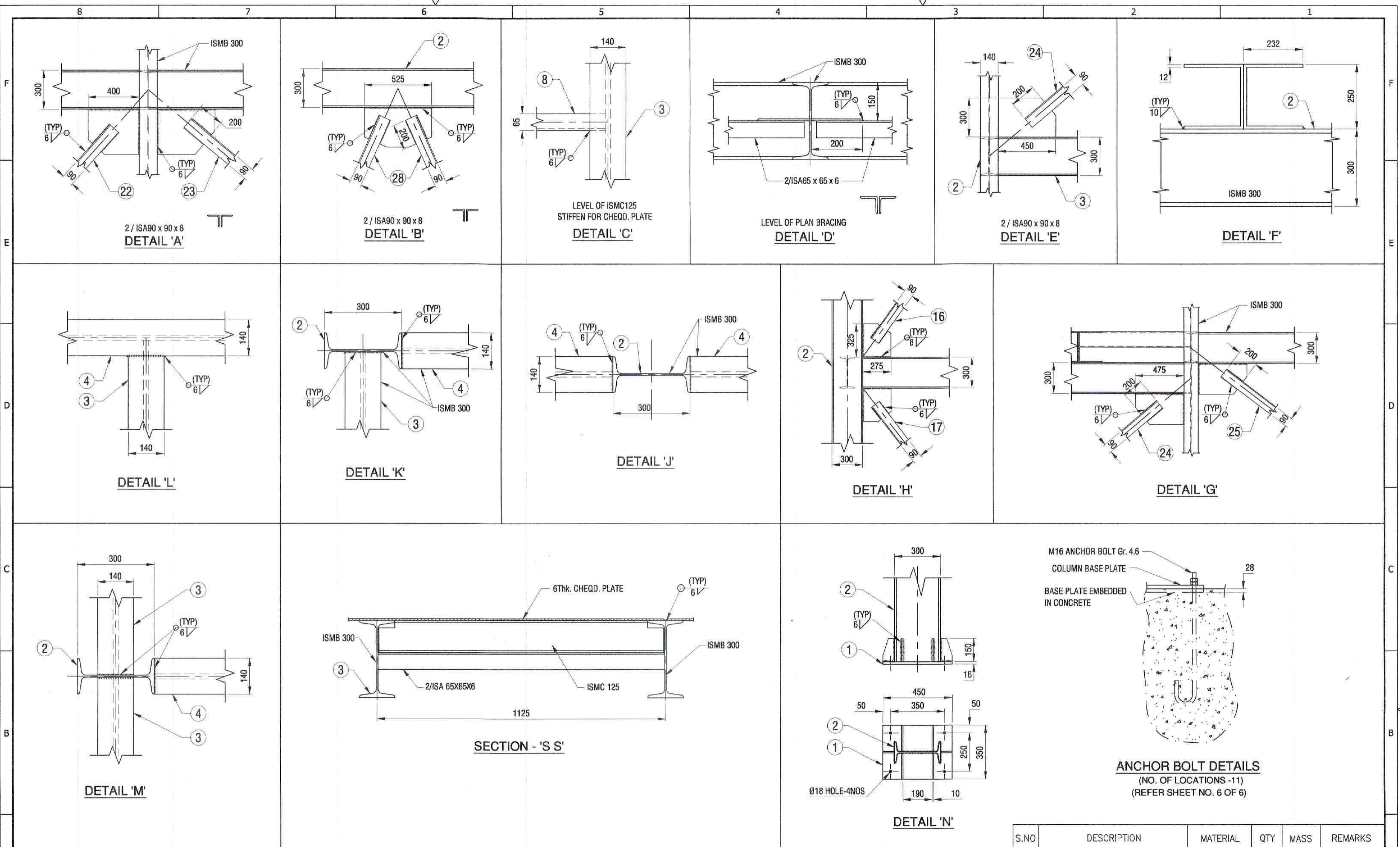
DESIGNED: [Signature]
DRAWN: [Signature]
DRG.CHRD: [Signature]
APPROVED: [Signature]

श्रीकंक / TITLE: GENERAL ASSEMBLY S200 HARDWARE ASSEMBLY PLATFORM AT SHSB-II, SHAR

भारत सरकार GOVERNMENT OF INDIA
भारतीय अंतरिक्ष अनुसंधान संगठन INDIAN SPACE RESEARCH ORGANISATION
सतीश धवन अंतरिक्ष केंद्र शर SATISH DHAWAN SPACE CENTRE SHAR
श्रीहरीकोटा SRIHARIKOTA.

माना /SCALE: 1:50 आरेखन क्र./DRG. NO.: 10-STR-01-06-02/A1/R0

SIGN. DATE



NOTES:
 GUSSET PLATE THICKNESS MINIMUM 10mm SHALL BE MAINTAINED.

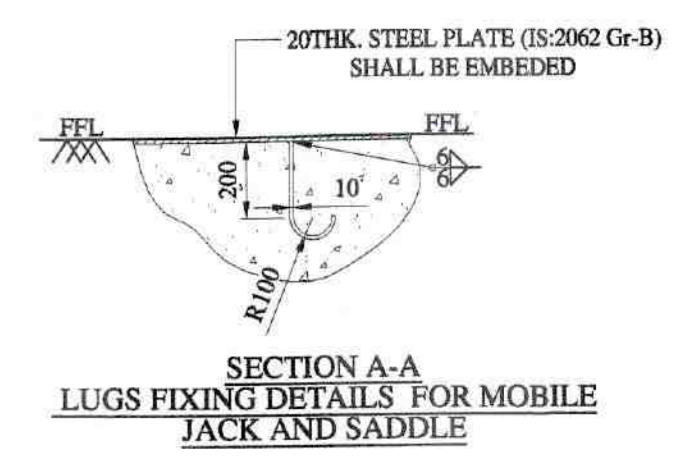
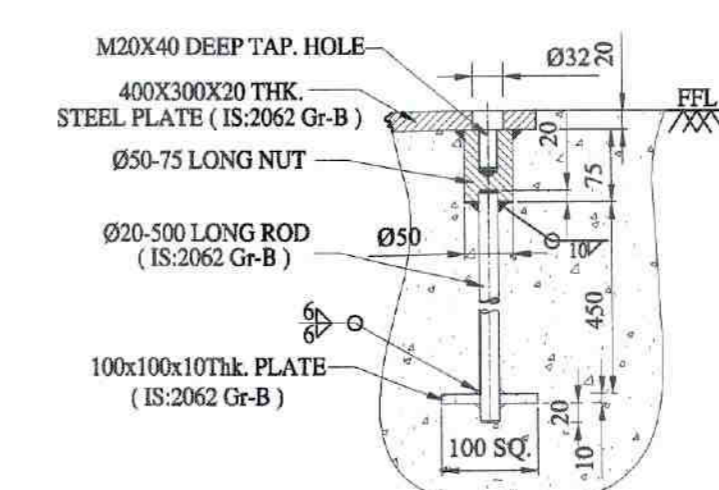
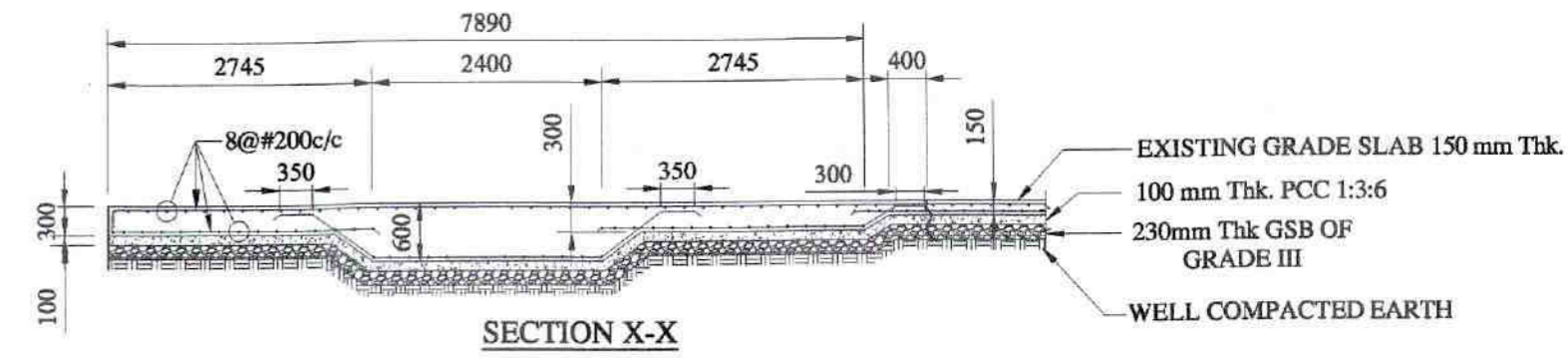
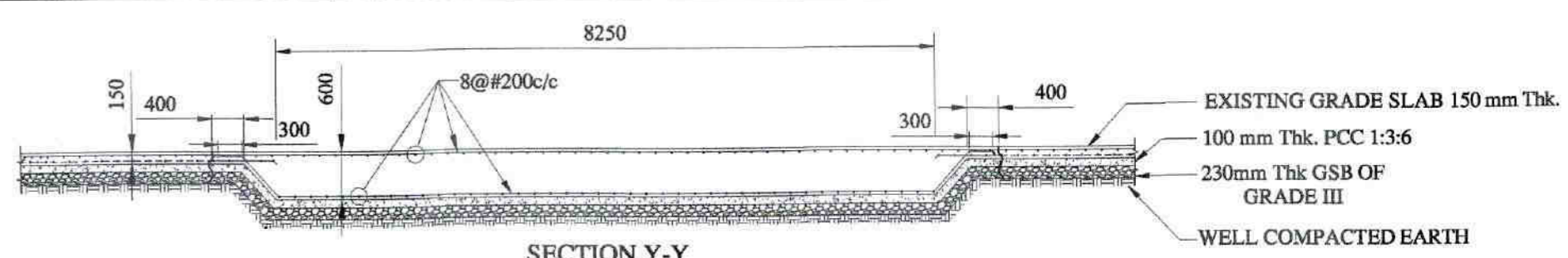
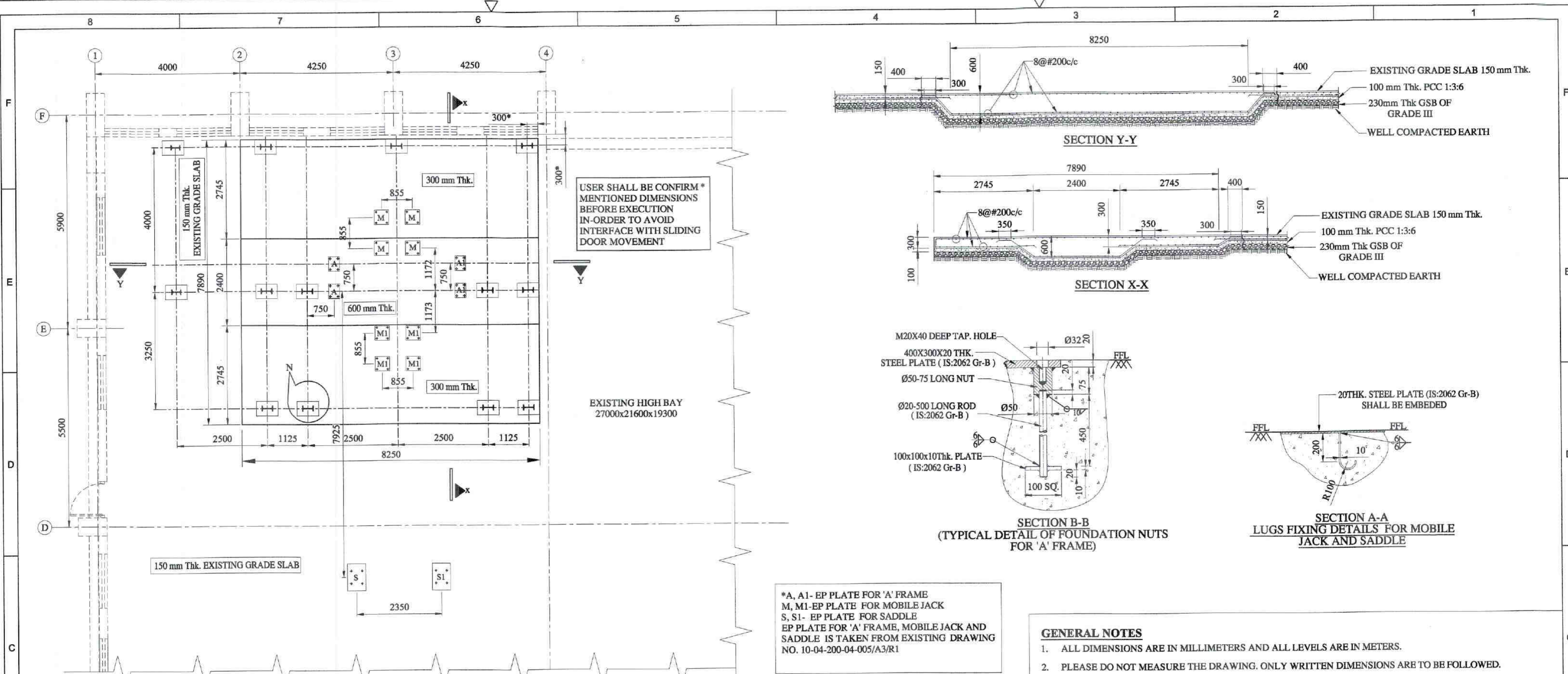
DISCUSSION / REVIEW		
TENDER PURPOSE		
FABRICATION		
STATUS	SIGN	DATE
UNRESTRICTED <input type="checkbox"/>	RESTRICTED <input type="checkbox"/>	CONFIDENTIAL <input type="checkbox"/>
THIS DRAWING IS THE PROPERTY OF SDSC-SHAR AND IS ISSUED FOR THE SPECIFIC WORK / PROJECT MENTIONED THEREIN. THIS IS NOT TO BE COPIED OR USED FOR OTHER WORKS / PROJECTS UNLESS EXPRESSLY PERMITTED BY SDSC-SHAR.		

DO NOT SCALE THE DRAWING
 ASK IF IN DOUBT
 UNLESS OTHERWISE SPECIFIED,
 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 (PART-1)-1993	
DIAMETERS & LENGTHS UPTO & INCL. 6 ±0.1	LENGTH IN M.M. OF SHORTER SIDE OF ANGLE UPTO & INCL.
6 - 30 ±0.2	1- 6 ± 1'-00
30 - 120 ±0.3	6- 30 ± 0'-30
120 - 315 ±0.5	30-120 ± 0'-20
315 - 1000 ±0.8	120-400 ± 0'-10
1000 - 2000 ±1.2	
2000 - 4000 ±2.0	
4000 & ABOVE ±3.0	

स्कैंड SCEND
 शार केंद्र अभिकल्पनाएं
 SHAR CENTRAL DESIGNS

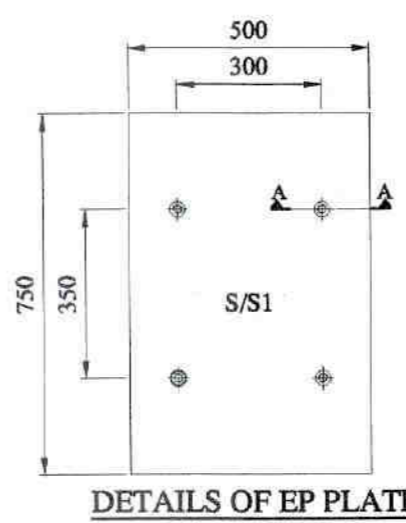
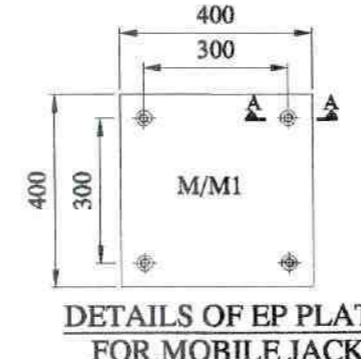
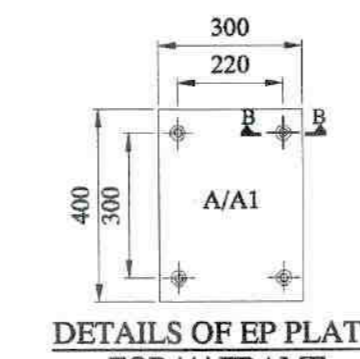
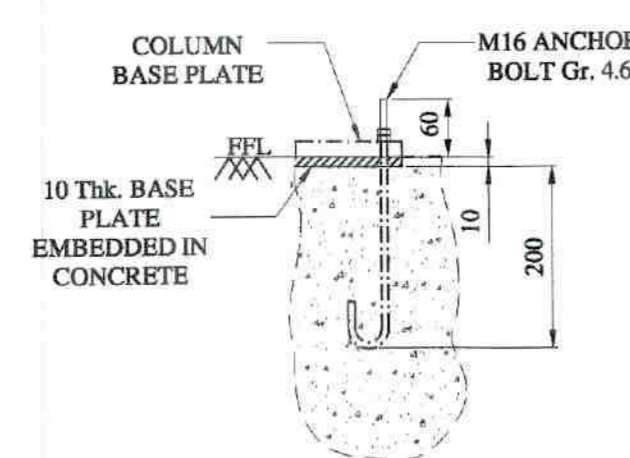
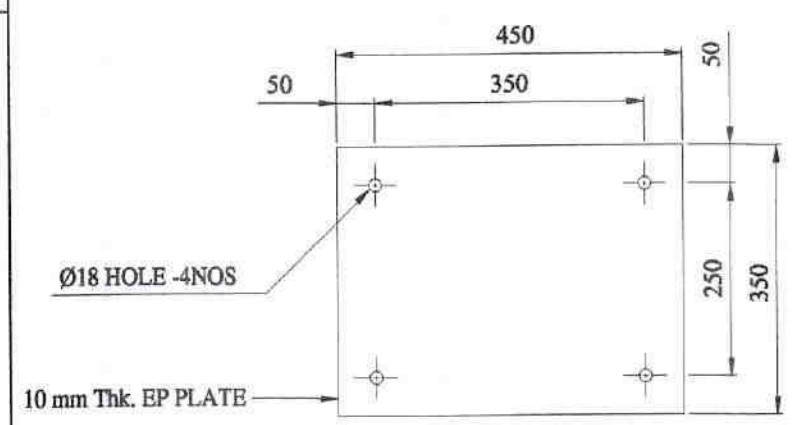
S.NO	DESCRIPTION	MATERIAL	QTY	MASS	REMARKS
शेषक / TITLE: CONNECTIONS DETAILS S200 HARDWARE ASSEMBLY PLATFORM AT SHSB-II, SHAR					
DESIGNED		भारत सरकार GOVERNMENT OF INDIA		प्रक्षेप/PROJECTION	
DES.CHKD		भारतीय अंतरिक्ष अनुसंधान संगठन INDIAN SPACE RESEARCH ORGANISATION		[Symbol]	
DRAWN		सतीश धवन अंतरिक्ष केंद्रशार SATISH DHAWAN SPACE CENTRE SHAR		[Symbol]	
DRG.CHKD		श्रीहरिकोटा SRIHARIKOTA.		[Symbol]	
APPROVED		पैमाना /SCALE :		SHEET 3	
SIGN. DATE		1:25		OF 6	
		आरेखन क्र. /DRG. NO.:		SCEND/A176/A2/2025/DEEPAK/KAMA	
		10-STR-01-06-02/A2/R0			



*A, A1- EP PLATE FOR 'A' FRAME
 M, M1- EP PLATE FOR MOBILE JACK
 S, S1- EP PLATE FOR SADDLE
 EP PLATE FOR 'A' FRAME, MOBILE JACK AND SADDLE IS TAKEN FROM EXISTING DRAWING NO. 10-04-200-04-005/A3/R1

- GENERAL NOTES**
- ALL DIMENSIONS ARE IN MILLIMETERS AND ALL LEVELS ARE IN METERS.
 - PLEASE DO NOT MEASURE THE DRAWING. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
 - GRADE OF CONCRETE SHALL BE M35.
 - GRADE OF STEEL Fe 500D.
 - CLEAR COVER FOR MAIN REINFORCEMENT IN GRADE SLAB - 30mm.
 - DEVELOPMENT LENGTH OF BARS SHOULD NOT BE LESS THAN 50 TIMES THE DIA OF BARS.
 - NOT MORE THAN 50 PERCENT OF THE BARS SHALL BE SPLICED AT ONE SECTION.
 - LAP SPLICES SHALL BE PROVIDED IN A STAGGERED WAY SUCH THAT THE CENTER TO CENTER DISTANCE BETWEEN SPLICES SHALL NOT BE LESS THAN 1.3 TIMES DEVELOPMENT LENGTH.
 - *EXISTING GRADE SLAB SHALL BE REMOVED UP TO A DEPTH 300 mm OF SIZE 7.89m X 8.25m AND DEPTH OF 600 mm OF SIZE 2.4m x 8.25 m FOR 'A' FRAME LOCATIONS . TOP CONCRETE SHALL BE CHIPPED OFF APPROX. 400mm LENGTH ALL AROUND REMOVED LOCATION IN ORDER TO EXTEND NEW REINFORCEMENT FOR DEVELOPMENT LENGTH. APPLY EPOXY BONDING ON OLD CONCRETE BEFORE NEW CONCRETING.
 - ALL WELDS ARE 6mm SIZE FILLET WELD UNLESS OTHERWISE SPECIFIED.
 - IN CASE OF ANY DISCREPANCIES THE SAME SHALL BE BROUGHT TO THE NOTICE OF DESIGN ENGINEER BEFORE EXECUTION.

EP PLATE LAYOUT



STATUS	SIGN	DATE
DISCUSSION / REVIEW		
TENDER PURPOSE		
CONSTRUCTION	<i>[Signature]</i>	8/2/25
UNRESTRICTED	RESTRICTED	CONFIDENTIAL

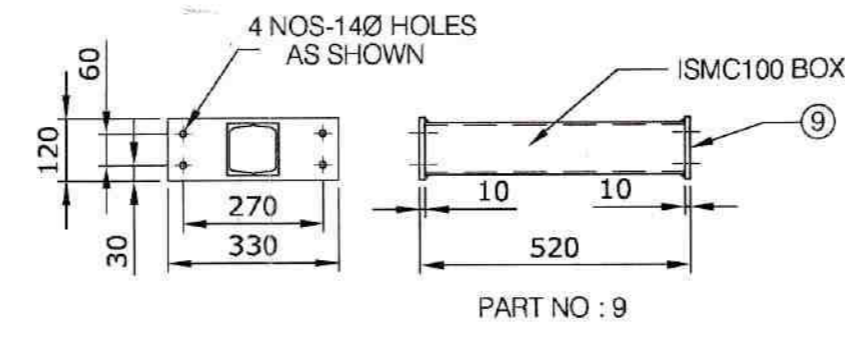
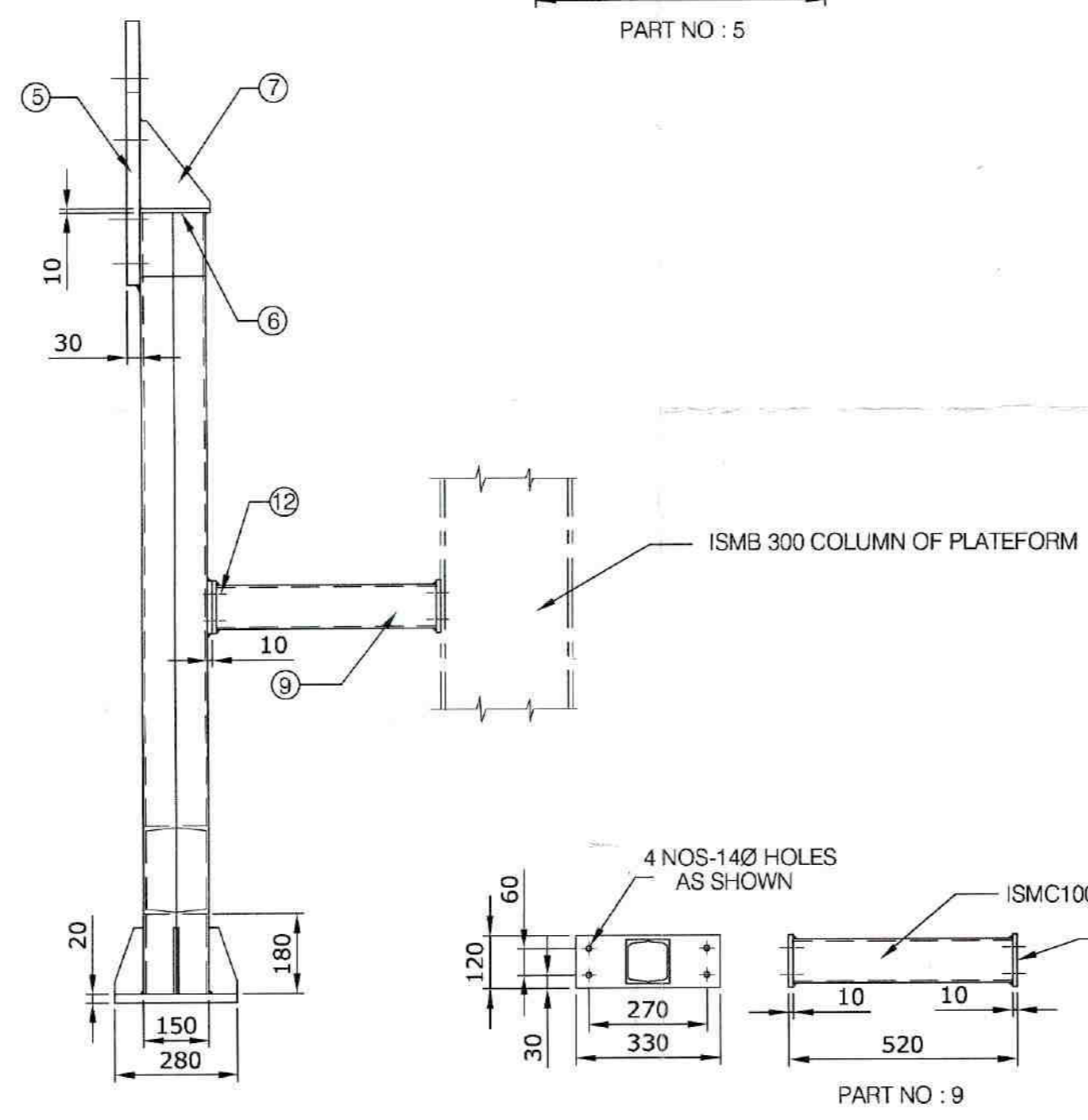
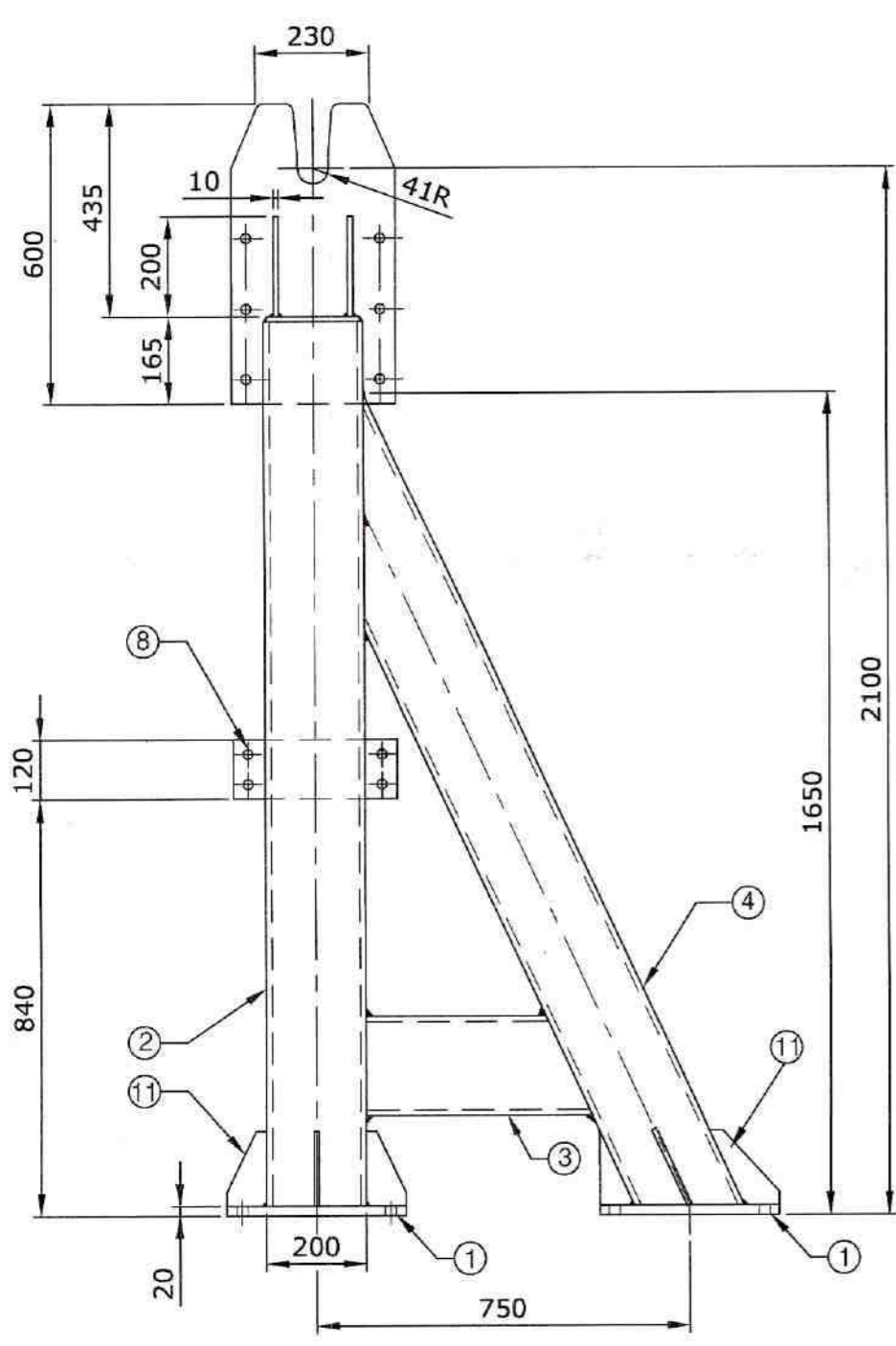
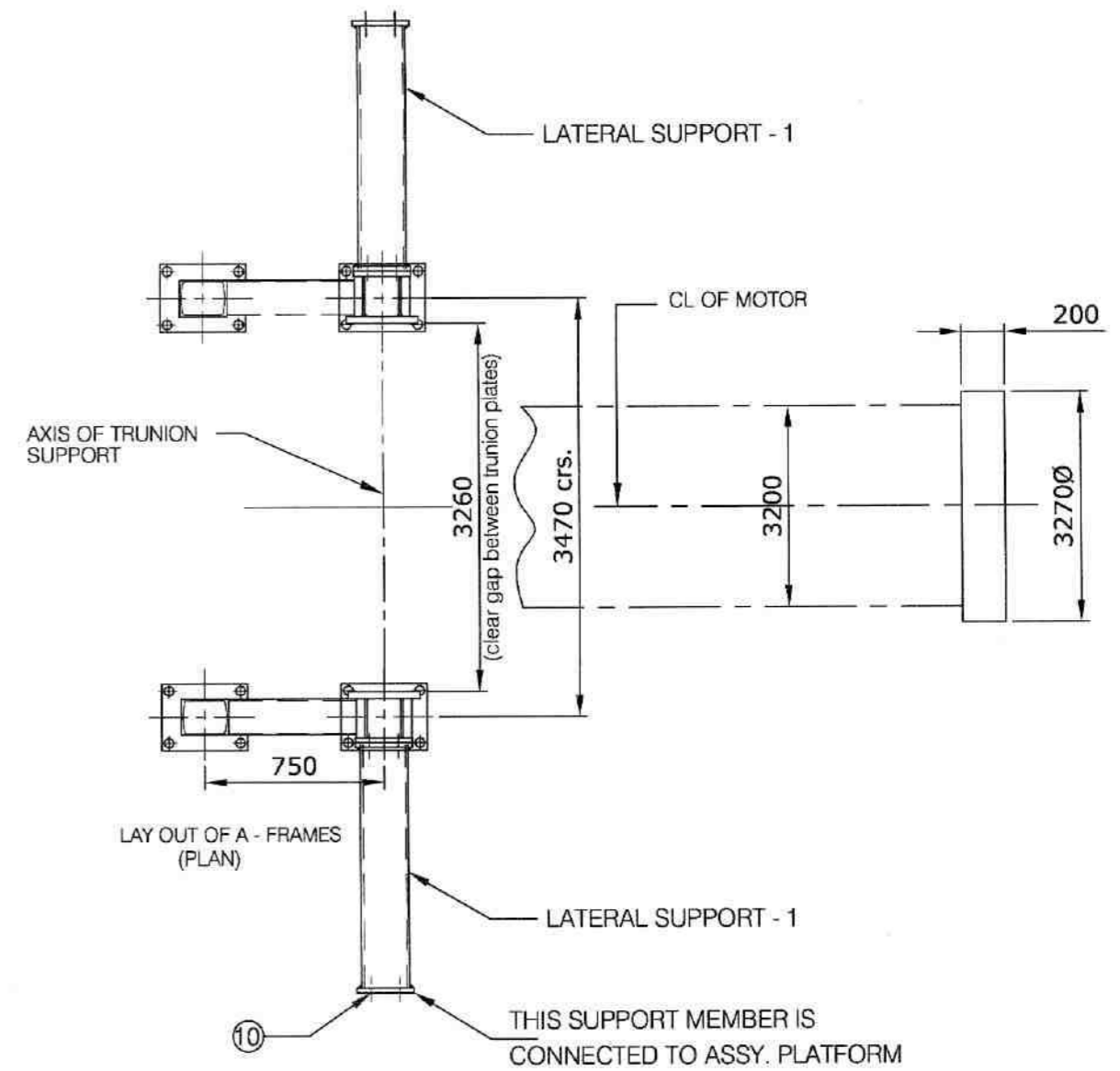
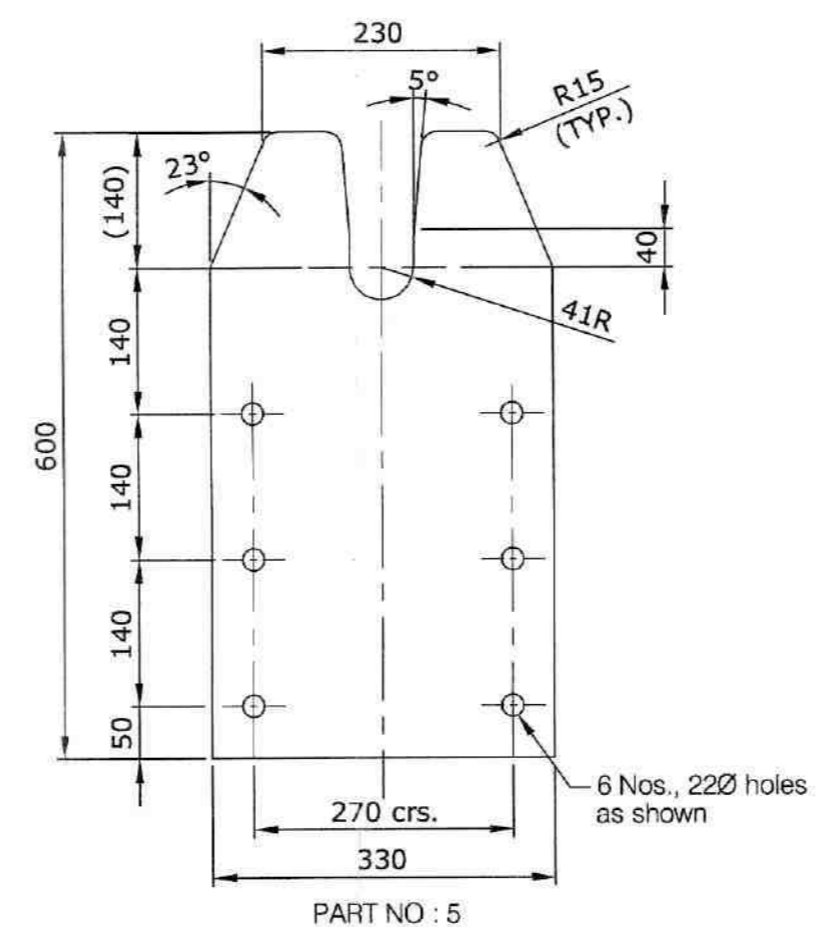
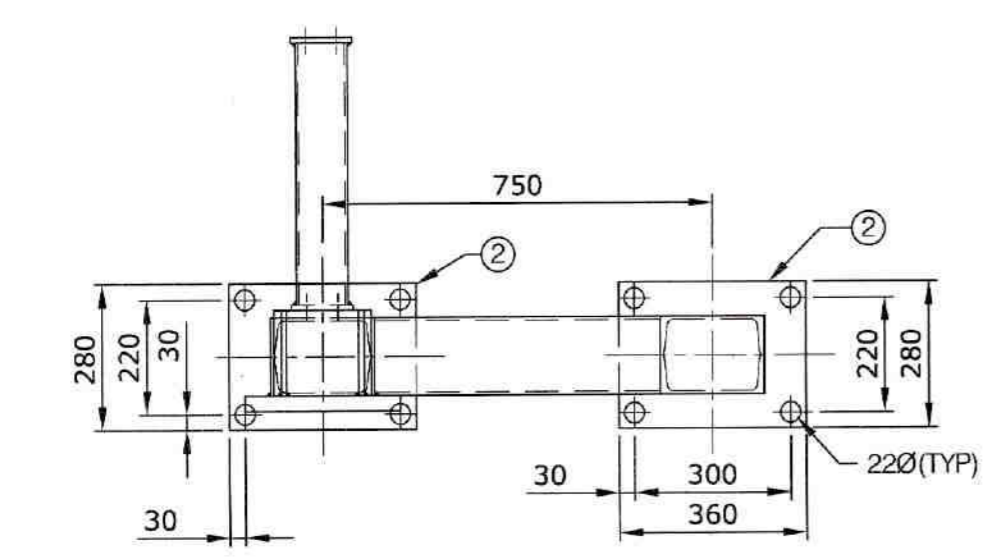
THIS DRAWING IS THE PROPERTY OF SDSC-SHAR AND IS ISSUED FOR THE SPECIFIC WORK / PROJECT MENTIONED THEREIN. THIS IS NOT TO BE COPIED OR USED FOR OTHER WORKS / PROJECTS UNLESS EXPRESSLY PERMITTED BY SDSC-SHAR.

स्कैंड SCEND शार केंद्रीय अभिकल्पनाएं SHAR CENTRAL DESIGNS		शीर्षक / TITLE: EP PLATE LAYOUT & FOUNDATION DETAILS FOR S200 HARDWARE ASSEMBLY PLATFORM AT SHSB II - SHAR	
DESIGNED	KAMAL	भारत सरकार	GOVERNMENT OF INDIA
DES.CHKD	<i>[Signature]</i>	भारतीय अंतरिक्ष अनुसंधान संगठन	INDIAN SPACE RESEARCH ORGANISATION
DRAWN	CH.RAMESH	सतीश धवन अंतरिक्ष केंद्र शार	SATISH DHAWAN SPACE CENTRE SHAR
DRG.CHKD	<i>[Signature]</i>	श्रीहरिकोटा	SRIHARIKOTA
APPROVED	<i>[Signature]</i>	वेमाना / SCALE:	आरेखन क्र / DRG. NO.
SIGN.	DATE	NTS 1:100	10-STR-01-06-02

श्रेण PROJECTION

SHEET 6 OF 6

SCEND/A176/A2/2025/CH RAMESH/KAMAL



A - FRAME S-200 HARDWARE TILTING CAPACITY - 26t.

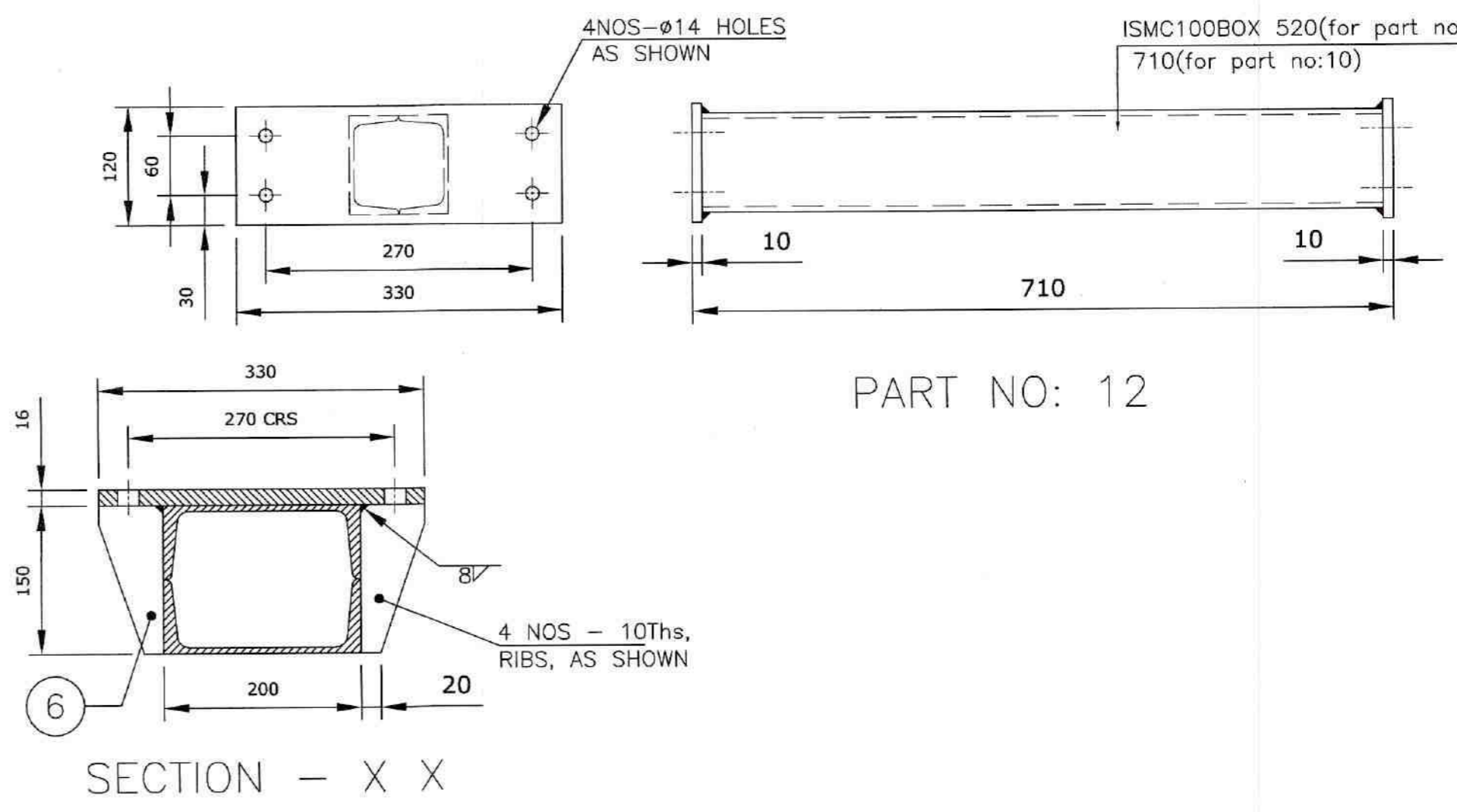
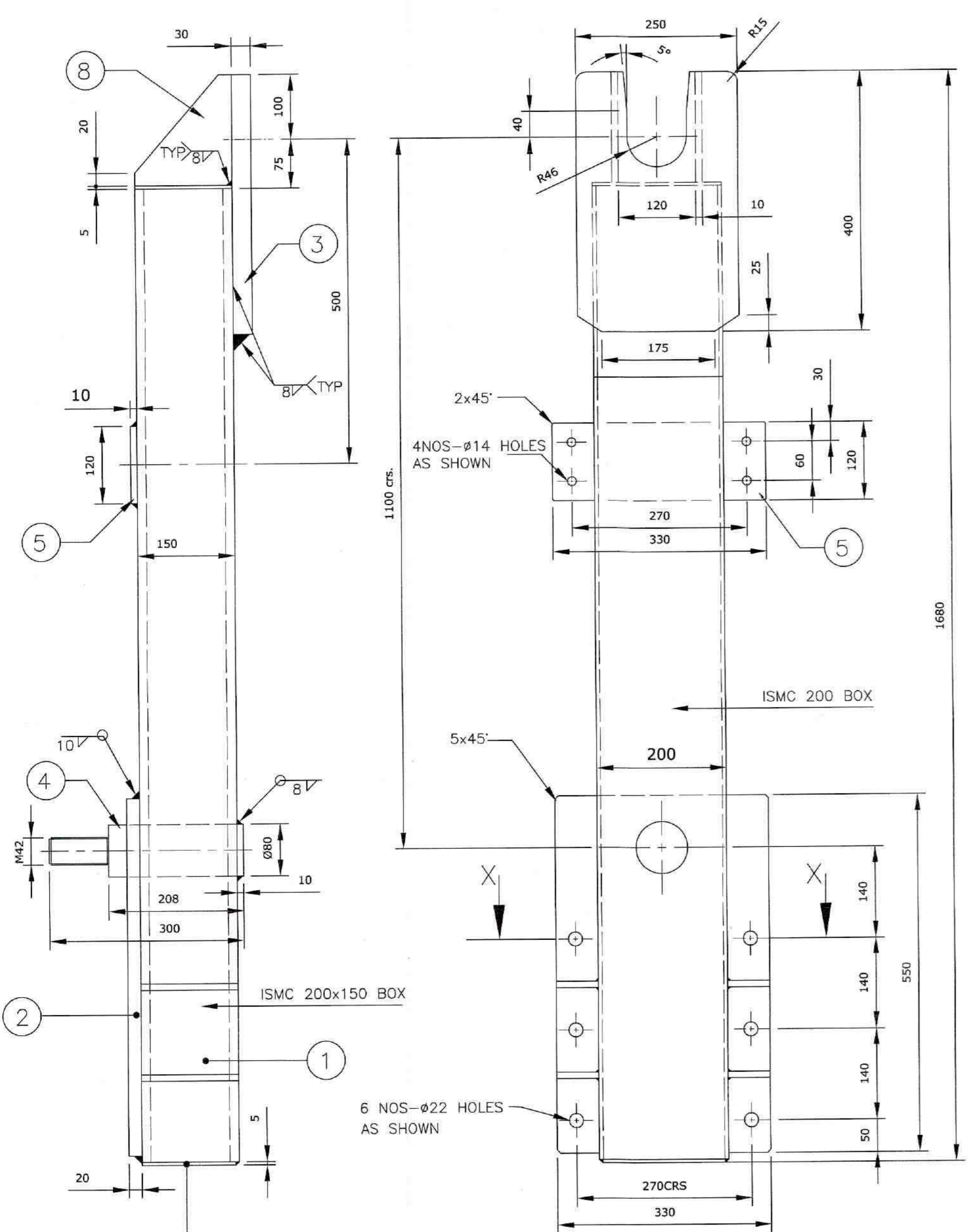
- NOTE:-
1. ALL DIMENSIONS ARE IN mm
 2. ALL THE WELDS ARE OF 6mm SIZE FILLET WELD UNLESS OTHERWISE SPECIFIED.
 3. ALL THE WELDS SHALL BE DP TESTED FOR ROOT AND FINAL RUN.
 4. MASS OF EACH 'A' FRAME: 300 Kg. (Approx.) QTY. IS GIVEN FOR ONE ASSY. ONLY TOTAL QUANTITY REQUIRED : 2 Nos.
 5. THE OTHER ONE IS THE MIRROR IMAGE ABOUT MOTOR TILTING PLANE

TOTAL MASS : 297 Kg(Approx.)

S.NO	DESCRIPTION	MATERIAL	QTY	MASS	REMARKS
12	HEX. SCREW M12x50 Lg. WITH WASHER	IS 1364	8 SETS	---	
11	RIB 150 x 75 x 10Thk.	IS:2062 GR - B	8	7	
10	M12 x 50Lg. HEX. BOLT WITH NUT & DOUBLE WASHER	IS:1364	8 SETS	---	
9	LATERAL SUPPORT- 1 ISMC 100 BOX WITH END PLATE	IS:2062 GR - B	1	19	
8	PLATE 300 x 120 x 10Thk.	IS:2062 GR - B	1	3	
7	RIB 200 x 160 x 10Thk.	IS:2062 GR - B	2	5	
6	PLATE 220 x 160 x 10Thk.	IS:2062 GR - B	1	3	
5	TRUNNION SUPPORT PLATE 600 x 330 x 30Thk.	IS:2062 GR - B	1	47	
4	ISMC 200 BOX - 1800 Lg.	IS:808	1	83	
3	ISMC 200 BOX - 456 Lg.	IS:808	1	20	
2	ISMC 200 BOX - 1775 Lg.	IS:808	1	79	
1	BASE PLATE 360 x 280 x 20Thk.	IS:2062 GR - B	2	32	

factly checked and confirmed the list as per BOM. (Signature)

DISCUSSION / REVIEW		DO NOT SCALE THE DRAWING ASK IF IN DOUBT UNLESS OTHERWISE SPECIFIED, 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 (PART-1)-1993	स्कैंड SCEND शार केंद्रीय अभिकल्पनाएं SHAR CENTRAL DESIGNS	शीट/ TITLE: A - FRAME (S-200 HARDWARE TILTING) (S200 HARDWARE ASSEMBLY PLATFORM AT SHSB-II, SHAR)	
TENDER PURPOSE			DIAMETERS & LENGTHS UPTO & INCL.6 ±0.1 6 - 30 ±0.2 30 - 120 ±0.3 120 - 315 ±0.5 315 - 1000 ±0.8 1000 - 2000 ±1.2 2000 - 4000 ±2.0 4000 & ABOVE ±3.0		LENGTH IN M.M. OF SHORTER SIDE OF ANGLE UPTO & INCL. 1- 6 ± 1'-00' 6- 30 ± 0'-30' 30-120 ± 0'-20' 120-400 ± 0'-10'	भारतीय अंतरिक्ष अनुसंधान संगठन सतीश धवन अंतरिक्ष केंद्र शार SATISH DHAWAN SPACE CENTRE SHAR श्रीहरीकोटा SRIHARIKOTA.
FABRICATION			STATUS	SIGN	DATE	भारत सरकार GOVERNMENT OF INDIA भारतीय अंतरिक्ष अनुसंधान संगठन सतीश धवन अंतरिक्ष केंद्र शार SATISH DHAWAN SPACE CENTRE SHAR श्रीहरीकोटा SRIHARIKOTA.
UNRESTRICTED <input type="checkbox"/> RESTRICTED <input type="checkbox"/> CONFIDENTIAL <input type="checkbox"/>			THIS DRAWING IS THE PROPERTY OF SDSC-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 SDSC-SHAR.			प्रक्षेप/PROJECTION SHEET 1 OF 2



- NOTE:-
1. ALL DIMENSIONS ARE IN MM
 2. ALL THE WELDS ARE OF 5mm SIZE FILLET WELD UNLESS OTHERWISE SPECIFIED.
 3. ALL THE WELDS SHALL BE DP TESTED FOR ROOT AND FINAL RUN.
 4. MASS OF EACH 'A' FRAME 162 Kg (Approx) QTY. IS GIVEN FOR ONE ASSY. ONLY TOTAL QUANTITY REQUIRED : 2 Nos.

TOTAL MASS : 162 Kg (Approx.)

S.NO	DESCRIPTION	MATERIAL	QTY	MASS	REMARKS
13	M12 x 80Lg. HEX. BOLT	IS:1364	6 SETS	---	
12	LATERAL SUPPORT- 2 WITH END PLATES: 710Lg.	IS:2062 GR - B	1	19	
11	WASHER Ø120 x Ø45 x 1Thk.	IS:2062 GR - B	1	---	
10	M42 HEX. NUT	IS:1364	1	---	
9	M12 x 50Lg. HEX. BOLT WITH NUT & DOUBLE WASHER	IS:1364	8 SETS	---	
8	RIB 170 x 150 x 10Thk.	IS:2062 GR - B	2	4	
7	END PLATE 190 x 140 x 5Thk.	IS:2062 GR - B	2	2	
6	RIB 150 x 65 x 10Thk.	IS:2062 GR - B	4	3	
5	PLATE 120 x 330 x 10Thk.	IS:2062 GR - B	1	3	
4	SUPPORT PIN : Ø80 x 300Lg.	IS:2062 GR - B	1	12	
3	PLATE 400 x 250 x 30Thk.	IS:2062 GR - B	1	24	
2	PLATE 550 x 330 x 20Thk.	IS:2062 GR - B	1	28	
1	ISM200 BOX - 1500 Lg.	IS:808	1	67	

DISCUSSION / REVIEW		
TENDER PURPOSE		
FABRICATION		
STATUS	SIGN	DATE
UNRESTRICTED <input type="checkbox"/>	RESTRICTED <input type="checkbox"/>	CONFIDENTIAL <input type="checkbox"/>
THIS DRAWING IS THE PROPERTY OF SDSC-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 SDSC-SHAR.		

DO NOT SCALE THE DRAWING
 ASK IF IN DOUBT
 UNLESS OTHERWISE SPECIFIED,
 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 (PART-1)-1993	
DIAMETERS & LENGTHS UPTO & INCL. 6 ±0.1 6 - 30 ±0.2 30 - 120 ±0.3 120 - 315 ±0.5 315 - 1000 ±0.8 1000 - 2000 ±1.2 2000 - 4000 ±2.0 4000 & ABOVE ±3.0	LENGTH IN M.M. OF SHORTER SIDE OF ANGLE UPTO & INCL. 1- 6 ± 1'-00" 6- 30 ± 0'-30" 30-120 ± 0'-20" 120-400 ± 0'-10"

स्कड SCEND
 शार केंद्रीय अभिकल्पनाएं
 SHAR CENTRAL DESIGNS

DESIGNED: [Signature]
 DES.CHKD: [Signature]
 DRAWN: दिपक 10/09/25
 DRG.CHKD: [Signature]
 APPROVED: [Signature]
 SIGN. DATE

शीर्षक / TITLE:
A FRAME ADAPTOR FOR S-200 NOZZLE TILTING (S200 HARDWARE ASSEMBLY PLATFORM AT SHSB-II, SHAR)

भारत सरकार GOVERNMENT OF INDIA
 भारतीय अंतरिक्ष अनुसंधान संगठन INDIAN SPACE RESEARCH ORGANISATION
 सतीश धवन अंतरिक्ष केंद्र शार SATISH DHAWAN SPACE CENTRE SHAR
 श्रीहरिकोटा SRIHARIKOTA.

प्रक्षेप/PROJECTION: [Symbol]

मैमाना / SCALE : 1:6
 आरेखन क्र. / DRG. NO.: 10-MECH-01-02-013/A2
 SHEET 2 OF 2

SCEND/AI101/A2/2025/DEEPAK