



ISO 9001 Company

**Heavy Engineering Corporation Limited**  
(A Govt. of India Enterprise)  
**Heavy Machine Building Plant**  
**Ancillary & Contract Department**

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**OPEN TENDER ENQUIRY**  
**(E Tender)**

**TENDER DOCUMENTS**

**Outsourcing a reviewing and approving agency of the  
fabrication drawings submitted by the detailing agencies**



**HEAVY MACHINE BUILDING PLANT**  
**HEAVY ENGINEERING CORPORATION LIMITED**  
**PO – DHURWA, RANCHI**



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**E -Tender Notice**

Tender No. ACD/HMB/20/WC/2125/OTE-6083 dtd 07.08.2020 for Outsourcing a reviewing and approving agency of the fabrication drawings submitted by the detailing agencies" is available on our website in e-procurement section i.e. **<https://etenders.gov.in/e procure/app>**. Aspiring bidders may go through the tender document.

Interested bidders are requested to submit their most competitive offer through e-procurement mode only. Offer submitted through offline mode will not be considered. For more information please visit our website <https://etenders.gov.in/e procure/app>.

Bid submission end date	22/08/2020 till 01:00 PM
Technical Bid Opening date	24/08/2020 at 03:00 PM
Tender Fee	Rs. 500/- (Rupees Five Hundred only)
EMD	Rs. 30000/- (Rupees thirty thousand only)

Prospective Tenderer are advised to get register themselves only on at NIC e-tender portal i.e. <https://etenders.gov.in/e procure/app>, obtain 'User ID' & 'Password' and go through the 'Self Help files' available in the Home Page after log in to the portal <http://etenders.gov.in>. They should also obtain Class III Digital Signature Certificate (DSC) in parallel which is essentially required for submission of their application. Detailed instructions for online bid submission are attached in **annexure-5**. No registration fee would be charged from the bidders.

Bidders are required to upload the bid along with all supporting documents including priced part (BoQ) only on the e-tendering website (<https://etenders.gov.in/e procure/app>), on or before the due date and time for submission of bid.

**NOTE:**

- 1. Any Future changes/notifications including extension of bid due date, pertaining to this tender will be published/hosted only on website & CPP Portal only.**



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**Submission of tender**

The Following 2 covers shall be submitted through online CPP - portal by the bidders. Last date and time of submission of bids (cover 1, 2) is as per given dates.

**Cover – I: - Containing techno-commercial bid**

Cover – I containing

- i. Duly Filled Annexure-1 & 2
- ii. Documents as per Qualification Criteria
- iii. All other documents as per NIT

**Cover - II: Price Bid (BoQ)**

a) The tenderer shall upload the digitally signed Schedule of price bid in the form of BOQ.xls

Bidders may please note, the schedule of quantities is attached in the portal. The same (BOQ) shall be downloaded and be filled in the editable (un protected) cells only and they should necessarily submit their financial bids in the format provided after entering the financial quotes, name of the bidder etc.

**Bid Opening Process is as below:-**

Cover-I: Technical bid opening date will be as per given dates. If any clarification is needed from the bidder about the deficiency in his uploaded documents in Cover-I, he will be asked to provide it through Short fall documents folder in e-tendering portal one time only or through mail. The bidder shall upload the requisite clarification / documents within time specified by HEC, failing which tender will be liable for rejection.

Cover-II: The financial bids of the contractors / firms found to be meeting the qualifying requirements and technical criteria shall be intimated through portal. (Depending on Cover-I evaluation any changes in the date shall be intimated through e-tendering portal).



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No. ACD/HMB/20/WC/2125/OTE-6083

Dt: 07/08/2020

We request you to submit your most competitive offer as per the details.

Sl. No.	Work Description	Estimated Weight (in MT)
1	Reviewing and approving of detailed fabrication drawings	<b>13582</b> (Note - The weight can be varied by $\pm 20\%$ )

**QUALIFICATION CRITERIA**

- A) Detailer/successful bidder** (finalized in open Tender No - ACD/HMB/20/WC/2124/OTE-6020 dated 21.05.2020) **shall not be allowed to participate in this tender.** The offer of the same shall not be considered for the opening.
- B)** Bidder must have experience of having successfully completed three similar works ending on 31st March 2020, document for the same to be submitted along with offer.
- C)** A suitable office with desired manpower (minimum 4 degree engineers and other related tech. staffs) and related facilities must be available for proper co-ordinations, day to day development, timely completion of the complete job and technical assistance related to the review/approval of design/drawings for fabrication of the structures.
- D)** Bidder have to submit Name and postal address of firm with E-mail, telephone no., copies of legal status/ registration of firms, Copy PAN, GST Registration certificate, name of officers and supervisors concerned with work with authorization to act for the firm.
- E)** Bidder must have technical capability to complete the work within 5 days from handing over of detailed fabrication drawings made by detailer.
- F)** Documents to be submitted with techno commercial bid.
- List & proof of successfully completion of three similar works till March 2020
  - List of man power (technical & non technical) with the related facilities.
  - Financial status for last 3 years.
  - List of order in hand.
  - Certificate that to complete the work in time.



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**(Scope of Work & Responsibilities for Detailer)**

**Scope of work for the Service of Reviewer & Approver of Fabrication drawings**

Reviewing and approving of detailed fabrication drawings(Pre-Fabricated Structural Steel Items of FGD, LSS & GSS system BARH STPP, Bihar shall include but not limited to the following:

Truck Hopper Super structure Framing and Roofing, FGD Control Room Building, MCC Building

Ball Mill Building & Lime Stone Storage Building, Transfer Point (TP's), Conveyor and trestle. Gypsum Dewatering Building, Crusher House (CR Building), Gypsum Storage Shed, Pent House, Misc. Pump & Equipment Shed, Flue Duct and Pipe Line Duct Support, Pipe & Cable Trestles, Air & Water pipe line Support structure, Limestone Storage Silo, Misc. Structures, etc)

1. Bill of materials and their bolted joint design calculations made by detailer based on G.A. drawings given by BHEL along with all other general and special requirements with approximate tonnage of 13582 MT with a variance of  $\pm 20\%$ .
2. HEC will provide soft copy of BHEL & detailer fabrication drawing and connection design calculation to reviewer / approver. It is the responsibility of reviewer / approver to take print for checking and approval. Approval of fabrication drawings duly checked and stamped. Approval of fabrication drawings does not relieve the bidder from the responsibility of its correctness and accuracy.
3. All the detailed drawings and their bolted joint design calculation shall be reviewed and approved in accordance with detail Technical Specification including design criteria and relevant latest Indian Standard code. The review and approval of drawing works is to be carried out in desired sequence and as per the availability of detailed drawings.
4. Reviewed & duly approved drawings for final submission to BHEL shall be submitted to HEC within a week time from the date of furnishing of detailed drawings by HEC/Detailer.
5. BHEL GA drawing for one unit of project is attached herewith for reference. Detailer fabrication drawings shall be given to successful bidder.
6. Total tonnage of the project is 13582MT approx  $\pm 20\%$ . Checking of Design/Drawings shall be as per the IS Standard and /or the relevant standard indicated in the basic drawings.
7. Completion Period / delivery Schedule : The completion period of the entire work shall be a week time from the issuance of the assignment drawing under this contract by HEC
8. The scope of work is not limited to the scope mentioned above any other related drawing job not specifically mentioned herein but necessary for the completion of the work shall also be under the scope of the works of the firm



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**TERMS AND CONDITIONS OF THE CONTRACT**

- 1.1 Price -** The quoted rates should be for total works excluding the taxes and duties with contractor overhead and profit etc. complete. Most competitive and realistic price bid to be furnished in prescribed Bill of Quantities based on prevailing market rates. The bidder may be asked to substantiate the same with cost break-up as per prevailing market rates, failing which or in case of discrepancy the offer will be either rejected and/or loaded as derived by the department with respect to offered price of other bidders. The decision of the department will be final and binding. The rates should be quoted both in figure and words. In case of difference between the two, later will prevail. **The price / rate shall remain firm during entire period of contract.**
- 1.2 Validity of Offer-** The rates quoted must be firm and the offer made must remain valid for acceptance up to **three months** from the date of opening of the tender. The rate quoted must be in word and figure as well. In case any discrepancy in rate given in figures and word, the rate given in words will prevail.
- 1.3 Acceptance of Tender -** Tender may be accepted in full or part. Any incomplete tender in any respect is liable to be rejected. The company is having right to reject any tender without assigning any reason for which no question can be asked anywhere.
- 1.4 Tender Fee -** Rs. 500/- in the form of D.D. in favor of Heavy Engineering Corporation Ltd. Payable at Hatia must accompany the tender. **Exemption of Tender Fee shall be applicable on submission of valid SSI/NSIC/MSME certificate and as per Govt rules.**
- 1.5 Earnest Money -** Rs. 30000/- in the form of D.D./BG in favor of Heavy Engineering Corporation Ltd. Payable at Hatia must accompany the tender. **Exemption of EMD shall be applicable on submission of valid SSI/NSIC/MSME certificate and as per Govt rules.** Earnest money of the successful bidder will be converted to security deposit. The E.M.D will be refunded to the unsuccessful tenderer within a reasonable time.
- 1.6 Security Deposit –** shall be 10% of the contract value.

A Security Deposit of 10% shall be deducted from running bills of the contractor in a proportionate subject to a maximum of 10% of the total contract value. The security deposit will be refunded within 14 days of issue of work completion certificate against a request from contractor and submission of no claim certificate from the respective engineer/ executing department. In the event of non execution of the contract or withdrawal before expiry of the validity period the security deposit will be forfeited.



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- 1.7 Executing Authority** - I/c RPD/HMBP or his authorized representative will be the executing Authority of this contract and Service Provider after award of work has to take all necessary instruction from him.
- 1.8 Measurement of Work-** On the basis of Weight duly certified by executing authority.
- 1.9 Paying Authority** - DGM I/c (Finance)/HMBP is the paying authority.
- 1.10 Submission of the Bills** - Service Provider has to submit his bills in triplicate along with Drg approval certificate against the order to DGM /ACD/ HMBP duly certified by Executing Authority.
- GST Invoice in triplicate
  - Drawing Approval with weight Certificate by in-charge of Executing Authority (i.e. by I/c RPD/HMBP or his authorized representative)
- 1.11 Payments Terms**  
RA bill for 100% payment with 100% GST shall be processed based on the progress of work. The payment will be made on weight basis (Prorata basis) after deducting applicable statutory and contractual deduction as following:
- 10% of basic value shall be deducted as security deposit as per cl.no. 1.6
  - 10% of basic value shall be deducted and hold till completion of erection of fabricated structures at site and submission of as built drawings duly certified by HEC/BHEL.
  - Statutory deduction like TDS, GST TDS ...etc shall be deducted extra as applicable.
- Note:** Contractor can claim payment for the value of work done at the end of every month
- 1.12 Completion Period / Delivery Schedule**  
The completion period of the entire work shall be 7 days from the issuance of the last assignment drawing under this contract by HEC including submission/rectification and approval of drawings from the client of the same, or 3 months from the date of issue of LOA/WO whichever is later.
- 1.13 Split Clause:** Based on HEC's requirement and in order to ensure the timely completion of work, the total tendered quantity of work may be split amongst more than one successful bidder at L-1 Landed Price and Terms & Conditions. The ratio of the split will be as under-
- Between two Vendors - 60:40 or as decided by the Tender Committee to meet the delivery schedule.
- 1.14 Termination of Contract.**
- The contract can be terminated if the service Provider fails to complete the work in time and even after giving in writing to him, he does not improve his performance then contract can be terminated.



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- b) If the Service Provider does not follow statutory rules, safety rules and in spite of giving notice he does not improve.
- c) Any other reason due to which company thinks it fit to terminate the contract.
- d) In the event of the termination of the contract in part/ full the company can get the work completed from any other agency/ departmentally at the risk and cost of the contractor.

**1.15 LIQUIDATED DAMAGE**

In case of delay in completion of work LD to be levied @ 0.5% of the unfinished part per week of delay subject to maximum deduction of 10% of the contract price.

**1.16 WORK DONE AT RISK AND COST**

At any time, if the progress or quality of work is not found satisfactory, H.E.C. shall have the right either to withdraw the balance work or part thereof and shall get the same done at Contractor's risk and cost after giving an advance notice of 07 days to the contractor. In such a situation no compensation whatever shall be payable to the contractor. The security deposit whatsoever deducted would be adjusted against the excess cost incurred over the balance contract value.

**1.17 ARBITRATION**

In case of any dispute in executing of this contract the same to be settled by arbitrator appointed/nominated by chairman-cum Managing Director of HEC Ltd. The decision given by such arbitrator shall be final and binding on both parties i.e. HEC Ltd., and the contractor. The dispute shall be strictly subject to Ranchi Jurisdiction only.

**1.18 General Conditions of contract for works contract of HEC Ltd.**

The contract will be governed by General conditions of contract for work contract of HEC Ltd., which is available in the website of the company for downloading by the interested tenderer.

(Vimal Kumar)  
DGM/i/c MM/HMBP





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No. ACD/HMB/20/WC/2125/OTE-6083

Dt: 07/08/2020

**Techno Commercial Bid**

**Part –1**

**(Annexure-1)**

Dear Sir,

I have gone through the tender Document and I submit my offer for doing the work as specified in the tender. I give following technical details to carry out the work:-

	Requisite	✓ your option		Remark
		Yes	No	
1	Whether the scope of work & Responsibilities of successful bidders mentioned in the tender enquiry is acceptable.	Yes	No	
2	Documents submitted as per Qualification Criteria	Yes	No	(enclose the relevant documents)
3	Whether EMD and Tender fees Deposited (As per Terms & condition)	Yes	No	(In case yes, then enclose Copy of DD/BG)
4	Whether SSI/NSIC/MSME	Yes	No	(In case yes, then enclose certificate)
5	UAM no to avail Facilities of MSME	Yes	No	(In case yes, mention UAM no .....)
6	Payment Term (As per Terms & condition)	Yes	No	(In case your answer is No, then please mention your term)
7	Delivery Schedule & Completion Period (As per Terms & condition)	Yes	No	(In case your answer is No, then please mention your term)
8	Validity (As per Terms & condition)	Yes	No	
9	L.D. Clause & Risk purchase clause (As per Terms & condition)	Yes	No	
10	Security Deposit (As per Terms & condition)	Yes	No	
11	Split Clause (As per Terms & condition)	Yes	No	
12	GST Extra	Yes	No	Applicable GST (%) .....
13	Firm is owned by SC/ST Entrepreneurs	Yes	No	



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14	Whether other Terms & Condition/Note etc. mentioned in the tender enquiry is acceptable to the tenderer	Yes	No	
15	Contact Person Name:- Email:- Contact Number:-			

(Signature of Tenderer)  
With official Seal



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No. ACD/HMB/20/WC/2125/OTE-6083

Dt: 07/08/2020

**(Annexure-2)**  
**Part -1**

To,

The DGM/ ACD/HMBP  
Heavy Machine Building Plant  
Heavy Engineering Corporation Ltd.  
Ranchi – 834 004(Jharkhand)

Dear Sir,

I have gone through the contents of the Tender Document and the following clause of the document are not acceptable to me and needs to be amended as below:-

Sl.No.	Clause No.	Amendment proposed
-----	-----	-----

(Signature of Tenderer)  
With official Seal

Note :

If any new clause is to be incorporated then that may be mentioned in this schedule. If no amendment is proposed or new clause be incorporated then the tenderer should write NIL



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**Annexure – 3**

**PART-II (Price Bid)**

The tenderer shall upload the digitally signed Schedule of price bid in the form of BOQ.xls

Bidders may please note, the schedule of quantities is attached in the portal. The same (BOQ) shall be downloaded and be filled in the editable (un protected) cells only and they should necessarily submit their financial bids in the format provided after entering the financial quotes, name of the bidder etc.



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**Annexure - 4**

Format for  
**BANK GUARANTEE FOR EARNEST MONEY DEPOSIT**

*(to be issued by any Nationalized bank preferably State bank of India negotiable at their counters in Ranchi )*

NO.

Dated:

TO  
ANCILLARY & CONTRACT DEPARTMENT  
MATERIAL MANAGEMENT DIVISION  
HEAVY MACHINE BUILDING PLANT  
HEAVY ENGINEERING CORPORATION LTD.  
RANCHI-834004, JHARKHAND  
INDIA

Dear Sirs,

In consideration of your agreeing to accept the Earnest money deposit of Rs.-----  
(Rs----- ) furnishable to you by M/s-----  
------(Hereinafter  
Referred to As Contractor) In terms of the Enquiry No. -----  
-----Dtd. ----- for Supply of ----- (Hereinafter  
Referred to as the Contract) in the form of a Bank Guarantee in the Manner hereinafter  
contained we -----, having registered office at ----  
-----do hereby covenant and agree with you as follows.

1. We hereby undertake to indemnify you up to a sum of Rs. ----- (Rs. -----  
----- only) against any loss or damage caused to or suffered by you or  
that may be caused to or suffered by you by reason of any breach or breaches on the part  
of the contractor of any of the terms and conditions contained in the said contract and in  
the event the Contractor shall make any default or defaults in carrying out any of the  
works under the said contract or otherwise in the observance and performance of any of  
the terms and conditions relating thereto in accordance with the true intent and meaning  
thereof, we shall forthwith on demand and without any protest or demur pay to you such  
sum or sums not exceeding in total the said sum of Rs.----- (Rs. -----  
*amount*-----only) as may be claimed by you as your losses and/or damages,



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costs, charges or expenses by reason of such default or defaults on the part of the contractor.

2. Notwithstanding anything to the contrary contained in this guarantee your decision as to whether the contractor has made any such default or defaults and the amount or amounts to which you are entitled by reasons thereof will be binding on us and we shall not be entitled to ask you to establish your claim or claims or damages or losses suffered by you but will pay the amount demanded by you under this guarantee forthwith on your demand without any protest or demur.

3. This guarantee shall continue and hold good until it is released by you on the application by the contractor after expiry of the related warranty period of the said contract and after the contractor have discharged all their obligations under the said contract and produced a certificate of due completion of the work under the said contract and submitted a "NO Demand Certificate" provided always that this guarantee shall in no event remain in force after the date of----- without prejudice to your claim or claims arisen and demanded from or otherwise notified to us in writing before the expiry of six months from the said date which will be enforceable against us not withstanding that the same is or are enforced after the said date.

4. We-----, further undertake to extend the validity of this beyond the period prescribed in clause 3 or as extended from time to time for such further period as may be required in writing before the Expiry of this and upon such extension(s), all terms and conditions of this shall remain in full force till the expiry of this extended period(s).

5. You will have the fullest liberty without affecting this guarantee from time to time to vary any of the terms and conditions of the said contract or extend the time of performance of the contractor or to postpone for any time or from time to time any of your rights or powers against the contractor and either to enforce or forbear to enforce any of the terms and conditions of the said contract and we shall not be released from our liability under this guarantee by the exercise of your liberty with reference to matters aforesaid or by reason of any time being given to the contractor or any other forbearance, act or omission on your part or any indulgence by you to the contractor or by any other variation or modification of the said contract or any other act, matter or things whatsoever, which, under the law relating to sureties, would but for the provisions hereof, have the effect of so releasing us from our liability hereunder provided always that nothing herein contained will enlarge our liability hereunder beyond the limit of Rs. -----(Rs.- -----) as aforesaid or extend the period of the guarantee beyond the said Date of -----unless expressly agreed to by us in writing in terms of clause 4 hereof.

6. This guarantee shall not in any way be affected by your taking or varying or giving up any securities from the contractor or any other person, firm or company on its behalf or by the winding up, dissolution, insolvency or death as the case may be of the contractor.

7. In order to give full effect to the guarantee herein contained, you shall be entitled to act as if we are your principal debtors in respect of all your claims against the contractor



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hereby guaranteed by us as aforesaid and we hereby expressly waive all our rights of suretyship and other rights, if any, which are in any ways inconsistent with any of the provisions of this guarantee.

8. Subject to the maximum limit of our liability as aforesaid this guarantee will cover all your claim or claims against the contractor from time to time arising out of or in relation to the said contract and in respect of which your claim in writing is lodged on us before expiry of six months from the date of expiry of this guarantee.

9. Any notice by way of demand or otherwise hereunder shall be in writing and may be sent by special Courier or Telefax to us or our Local Address as aforesaid.

10. This guarantee and the powers & provisions herein contained are in addition to and not by way of limitation or substitution for any other guarantee or guarantees heretofore given to you by us whether jointly with others or alone and now existing uncanceled and that this guarantee is not intended to and shall not revoke or limit such guarantee or guarantees.

11. This guarantee shall not be affected by any change in the constitution of the contractor or us nor shall it be affected by any change in your constitution or by any Amalgamation or absorption thereof or therewith but will ensure for the benefit or and be available to and enforceable by the absorbing or amalgamated company or concern.

12. This guarantee is irrevocable during the period of its currency and shall not be revoked without your previous consent in writing.

13. We further agree and undertake to pay you the amount demanded by you in writing irrespective of any dispute or controversy between you and the contractor or any reference to arbitration of the said dispute/controversy pending or a civil suit filed by the contract or in respect of the dispute or controversy.

14. Notwithstanding anything contained herein above our liability under this guarantee is restricted to Rs.----- (Rs. -----only) and this guarantee shall remain in force until -----unless a written claim is lodged on us for payment under this guarantee within six months from the date of expiry of this guarantee . i.e. On or before-----all your rights under this guarantee shall be forfeited and we shall be deemed to have released and discharged from all liabilities there under, irrespective of whether or not the original guarantee is returned to us.

15. We have power to issue this guarantee in your favour under the memorandum and articles of association of the bank and the undersigned has full power to execute this guarantee under the power of Attorney Granted to them by the Bank.

FOR AND ON BEHALF OF

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Annexure-5

**Instructions for Online Bid Submission**

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.

**REGISTRATION**

- (i) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://etenders.gov.in/eprocure/app>) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge.
- (ii) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- (iii) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- (iv) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- (v) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- (vi) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

**SEARCHING FOR TENDER DOCUMENTS**

- i) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters





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such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.

- ii) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- iii) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

**PREPARATION OF BIDS**

- i) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- ii) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- iii) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- iv) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

**Note:** My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.



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**SUBMISSION OF BIDS**

- i) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- ii) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- iii) Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
- iv) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by as specified in the tender documents. The details of the DD / any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- v) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BOQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BOQ file is found to be modified by the bidder, the bid will be rejected.
- vi) The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- vii) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become



ISO 9001 Company

**Heavy Engineering Corporation Limited**  
(A Govt. of India Enterprise)  
**Heavy Machine Building Plant**  
**Ancillary & Contract Department**

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readable only after the tender opening by the authorized bid openers.

- viii) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- ix) Upon the successful and timely submission of bids (i.e. after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- x) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

**ASSISTANCE TO BIDDERS**

- i) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- ii) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 **CPP Portal** Helpdesk.

Note: For any query related to registration and processing on the Portal please visit

FAQ available at

<https://etenders.gov.in/eprocure/app?page=FAQFrontEnd&service=page>

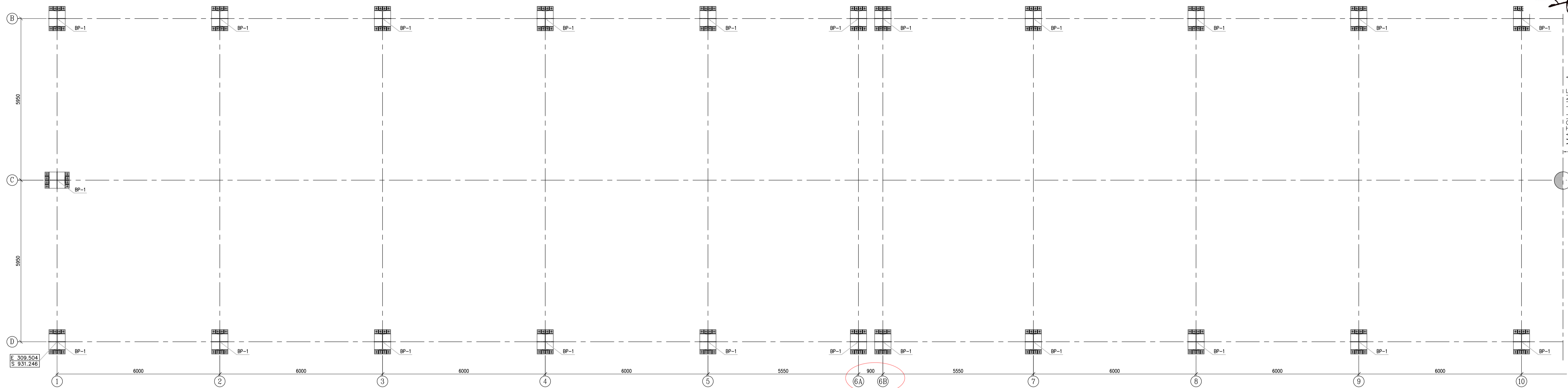
You may call the Helpdesk. The 24 x 7 Help Desk Numbers are  
0120-4200462, 0120-4001002, 0120-4001005, 0120-6277787  
E-Mail: [support-eproc@nic.in](mailto:support-eproc@nic.in)

**Or**

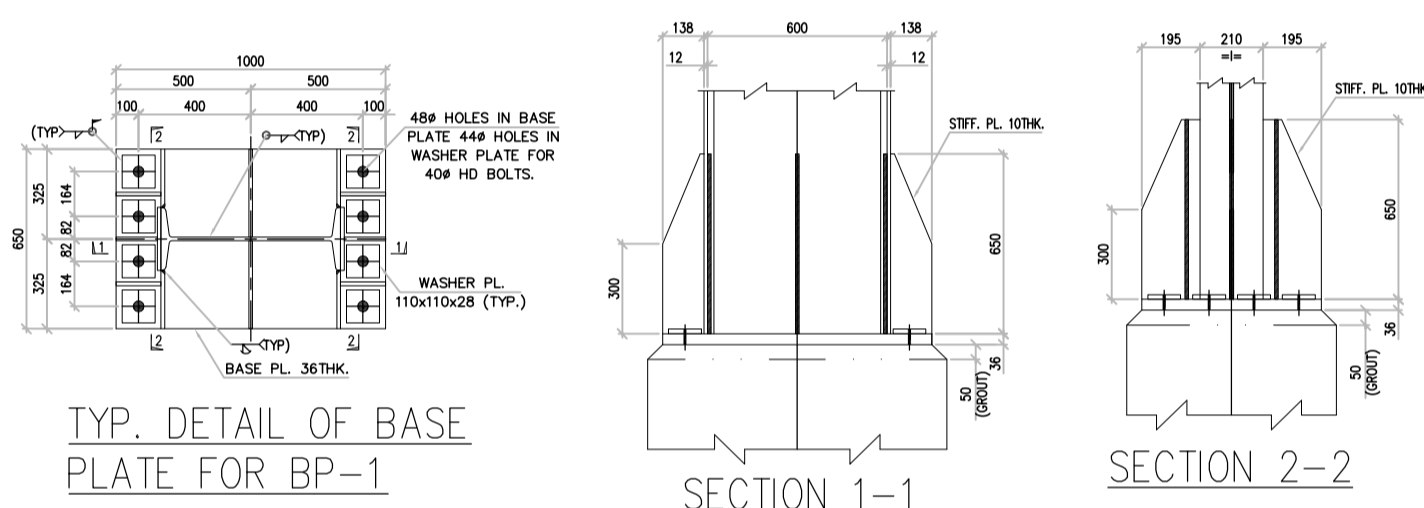
You may call to our service provider, Mr.Kushal (7903884318)  
E-Mail: [kushalnicccl@gmail.com](mailto:kushalnicccl@gmail.com)

\*\*\*

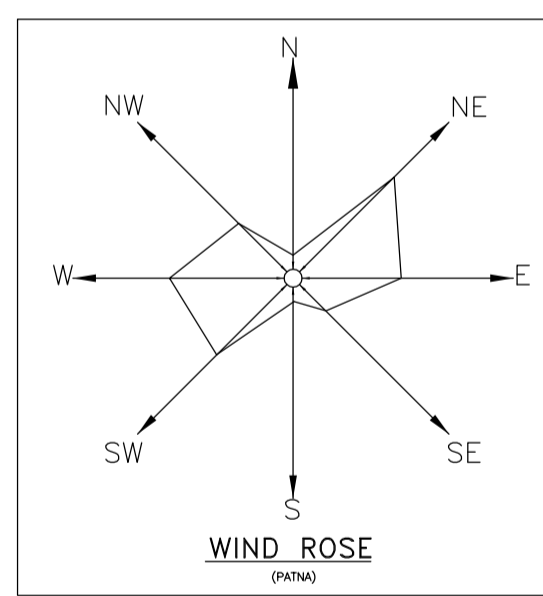
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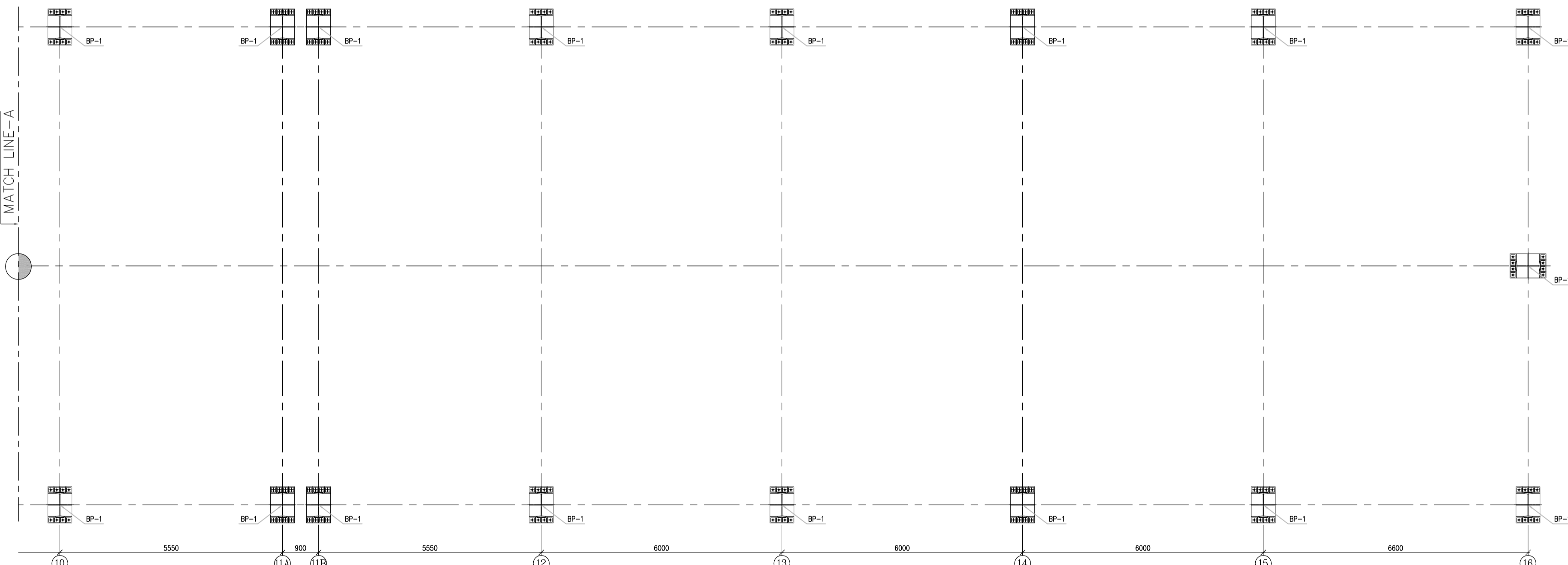
PLAN AT BASE PLATE LEVEL EL(+10.100M.(B.O.B.P))



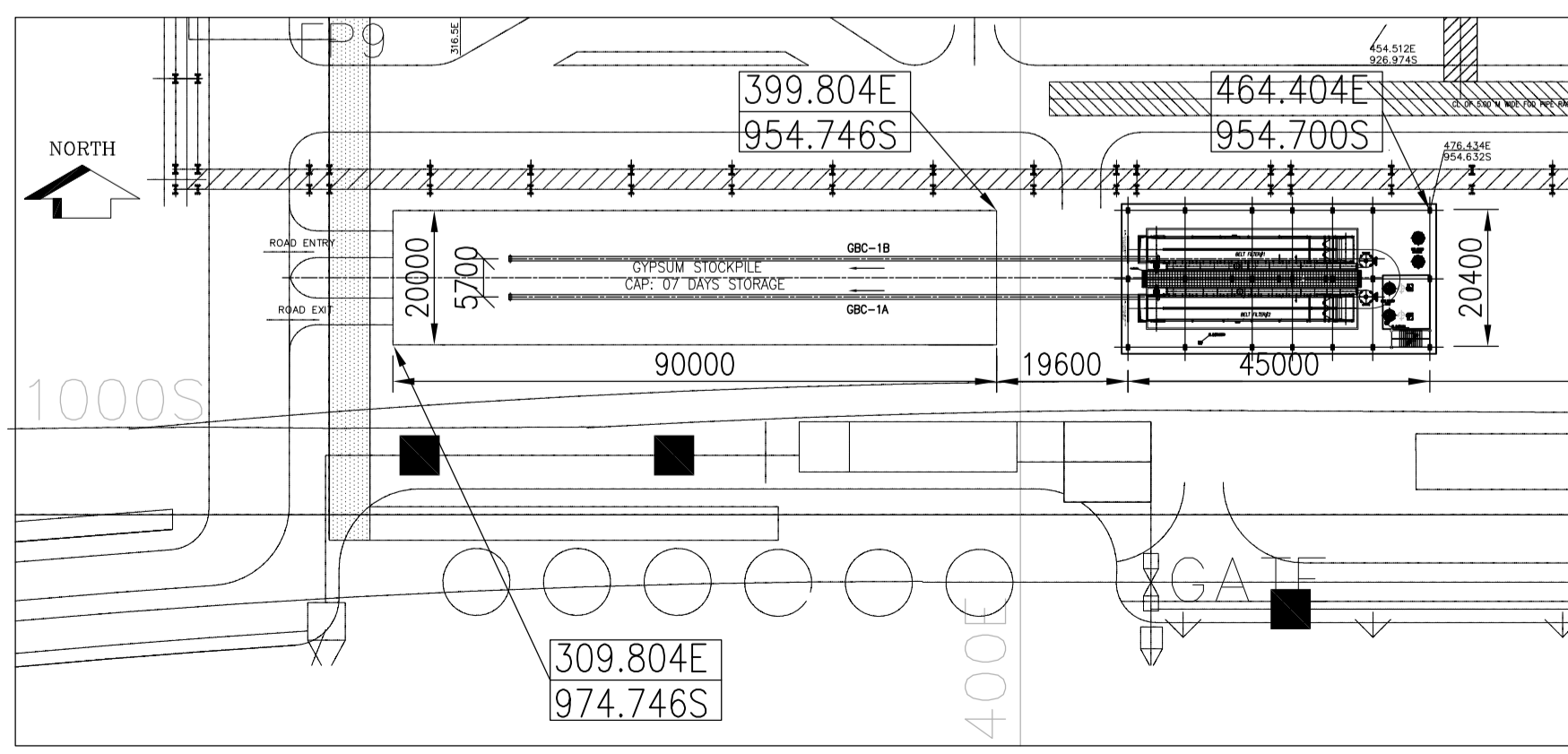
TYP. DETAIL OF BASE PLATE FOR BP-1



WIND ROSE



PLAN AT BASE PLATE LEVEL EL(+10.100M.(B.O.B.P))



KEY PLAN

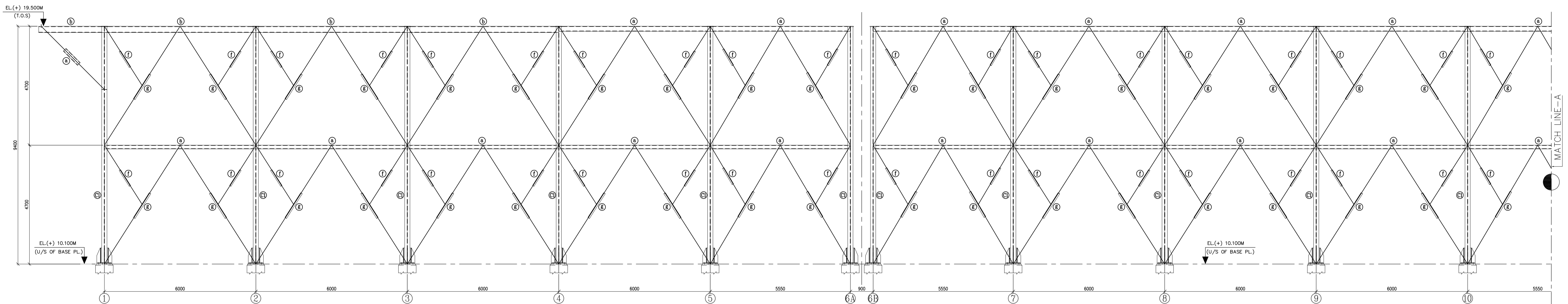
**NOTES:**

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. EL(±) 0.00M. CORRESPONDS TO RL.(+)46.700M.
3. ALL FILLET WELDS SHALL BE MINIMUM 6mm THK UN OTHERWISE.
4. ALL HOLES ARE 21.5Ø DRILLED HOLES FOR M20 ERECTION BOLTS UNO.
5. ALL GUSSET PLATES ARE 10mm THK UN OTHERWISE.
6. GRADE OF STEEL E 250 AS PER IS:2062.
7. THIS DRAWING READ IN CONJUNCTION WITH DRAWING NO. 9558-001-109-PVC-C-015 RO SH. 1 TO 3

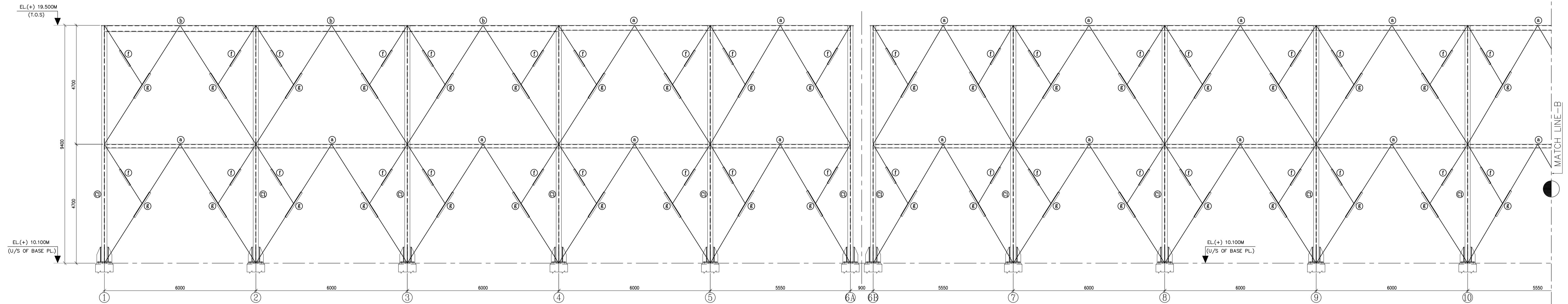
**REFERENCE: -**

1. MECH. DRG. NO. 9558-109-LGH-PVM-B-043 R2:-GA OF GYPSUM STORAGE SHED-1

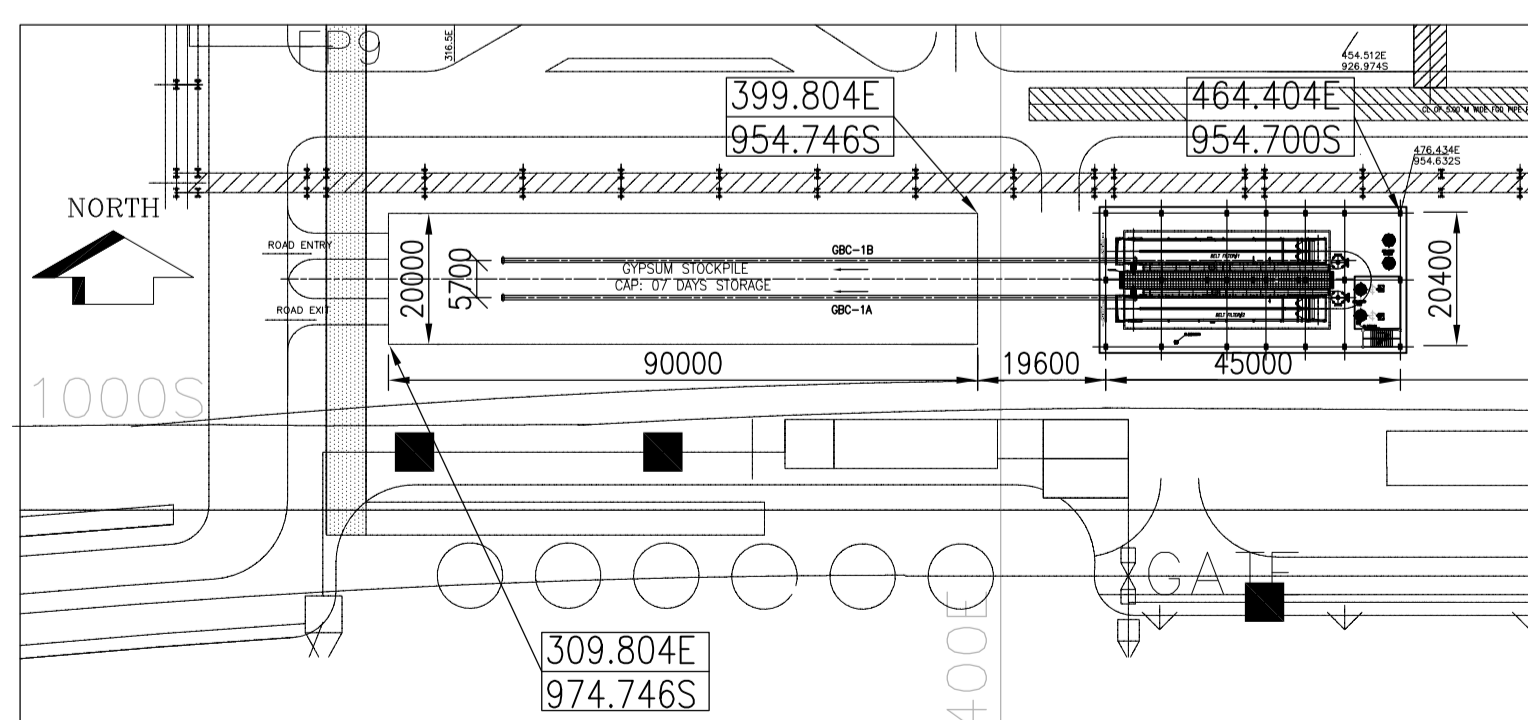
OWNER & CONSULTANT: <b>एन टी सी</b> <b>NTPC</b>	PROJECT:	<b>3X660MW NTPC BARH STAGE-I FGD</b>						
	CUSTOMER PACKAGE CODE:	LHP	CONTRACTOR:	<b>BHARAT HEAVY ELECTRICALS LIMITED</b> INDUSTRIAL SYSTEMS GROUP, BANGALORE.				
JOB No.:	DISCIPLINE:	M	C	E	I	L		
STATUS OF DRAWING:	QTY.	JOB NO.:						
REV. NO.	NAME	DATE	NAME	SIGN.	DATE	DEPT.	CODE	TITLE:
ALTERED	ABD	09.12.2019						GYPSUM STORAGE SHED-1: LAYOUT & DETAILS
CHECKED	PANCHU	26.12.2019	UNTOX. DIMN.					
APPROVED	P. REDDY	27.12.2019	C / M / S					
ZONE:	APPD.	SCC	27.12.2019					NTPC DRG. NO.: 9558-001-109-PVC-C-013 REV. NO.: 00
SCALE: 1:1			SHEET NO.: 1		NO. OF SHEETS: 1			



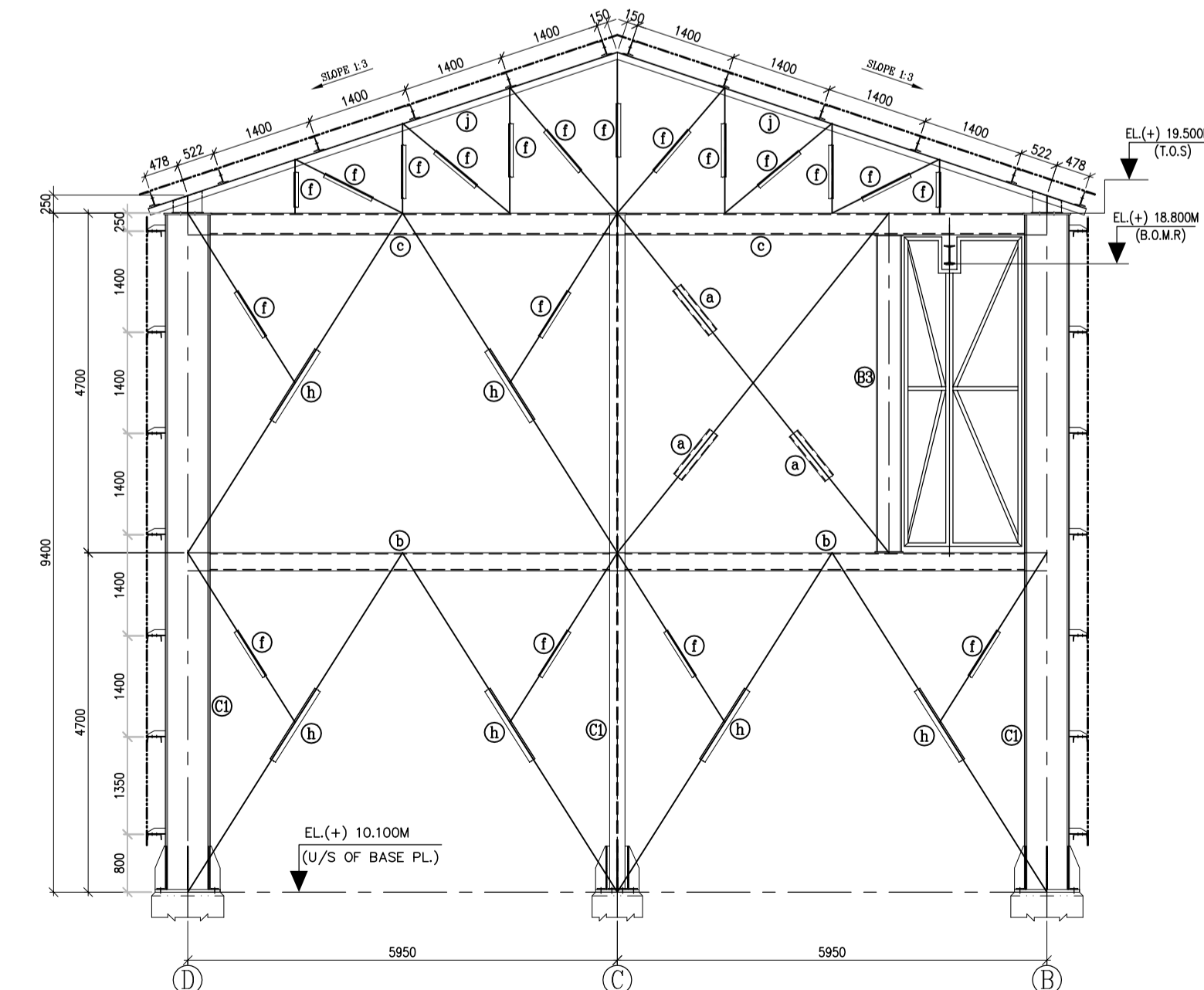
ELEVATION ON ROW B



ELEVATION ON ROW D



KEY PLAN



ELEVATION ON GRID 1

SCHEDULE OF MEMBERS		
MARK.	PROFILE	SECTION
C1	∅ I ∅	① ISMB 600 ② PL. 210x12 THK.
B1	∅ I ∅	① ISMB 400 ② PL. 140x12 THK.
B2	I	ISMB 400
B3	I	ISMB 350
a	□	BOX MC150
b	□	BOX MC250
c	□	BOX MC300
d	∅ I ∅	① ISMB 350 ② PL. 140x10 THK.
e	C	ISMC 200
f	T	2/ISA 65x65x6
g	T	2/ISA 75x75x6
h	T	2/ISA 90x90x6
j	T	2/ISA 100x100x10

**NOTES:**

1. ALL DIMENSIONS ARE IN MILLIMETRES
2. EL(±)0.00M. CORRESPONDS TO RL.(+)46.700M.
3. ALL FILLET WELDS SHALL BE MINIMUM 6mm THK UN OTHERWISE.
4. ALL HOLES ARE 21.5∅ DRILLED HOLES FOR M20 ERECTION BOLTS UNO.
5. ALL GUSSET PLATES ARE 10mm THK UN OTHERWISE.
6. GRADE OF STEEL E 250 AS PER IS:2062.
7. THIS DRAWING READ IN CONJUNCTION WITH DRAWING NO. 9558-001-109-PVC-C-013 RO SH.1

**REFERENCE: -**

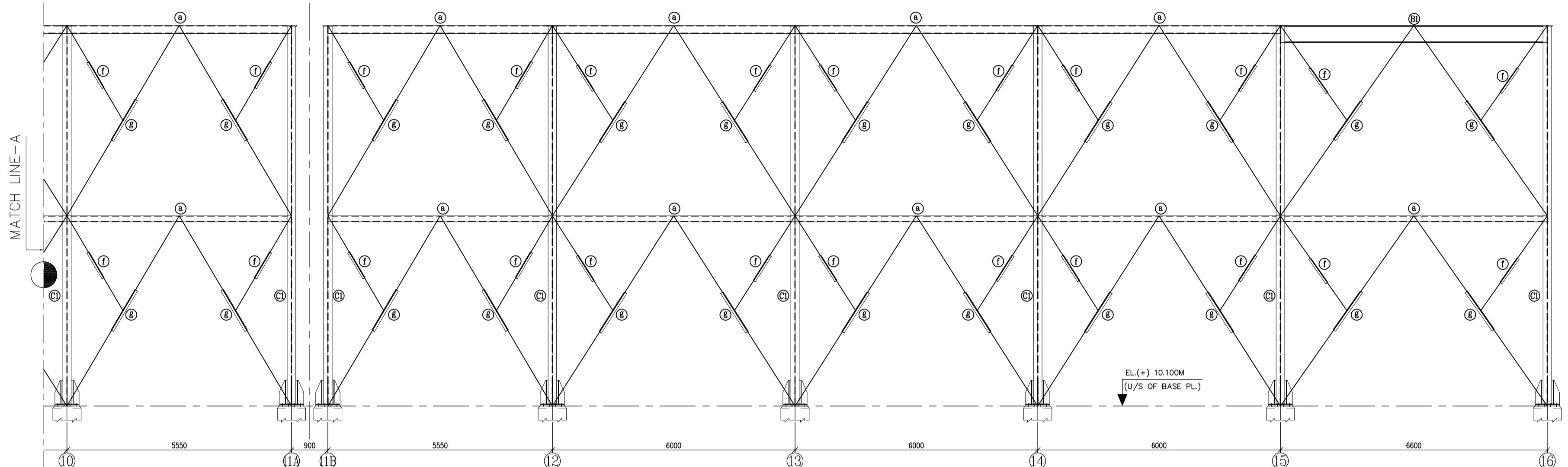
1. MECH. DRG. NO. 9558-109-LGH-PVM-B-043 R2:-GA OF GYPSUM STORAGE SHED-1

Signature: *Rajin*  
 Date: 2020.01.15  
 Time: 09:43:33 IST  
 Location: CAT  
 Project: NTPC

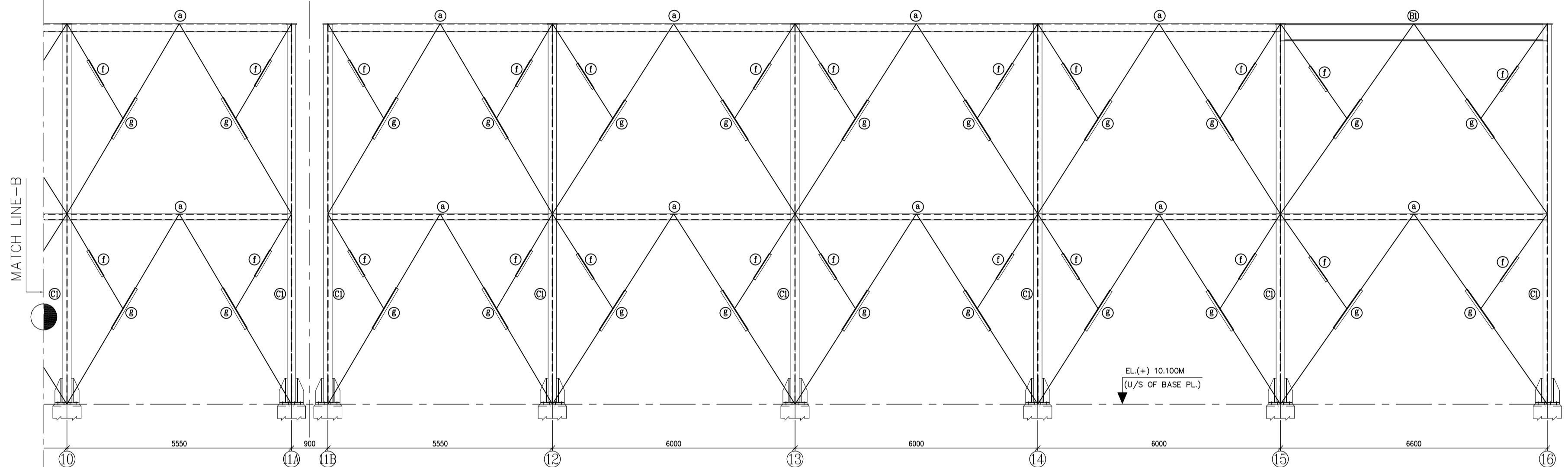
OWNER & CONSULTANT: <b>NTPC Limited</b> (A GOVERNMENT OF INDIA ENTERPRISE)		PROJECT: 3X660MW NTPC BARH STAGE-I FGD	
JOB NO.:	STATUS OF DRAWING:	CUSTOMER PACKAGE CODE:	LHP
DISTRIBUTION OF PRINTS:	QTY:	DISCIPLINE:	M C E I L
REV.:	ALTERED	CHECKED	APPROVED
NAME:	ABD	NAME:	ABD
SIGN:		SIGN:	
DATE:	09.12.2019	DATE:	09.12.2019
DEPT.:		DEPT.:	
CODE:		CODE:	
CONTRACTOR: <b>BHARAT HEAVY ELECTRICALS LIMITED</b> INDUSTRIAL SYSTEMS GROUP, BANGALORE	TITLE: GYPSUM STORAGE SHED-1 GA OF SECTIONS AND ELEVATIONS		
CONTRACTOR'S LOGO	NTPC DRG. NO.: 9558-001-109-PVC-C-015		
CONTRACTOR'S LOGO	REV. NO.: 00		
CONTRACTOR'S LOGO	BHEL DRG. NO.: IS-1-CA-723-408-C015		
CONTRACTOR'S LOGO	SCALE: 1:1		
CONTRACTOR'S LOGO	SHEET NO.: 1		
CONTRACTOR'S LOGO	NO. OF SHEETS: 3		

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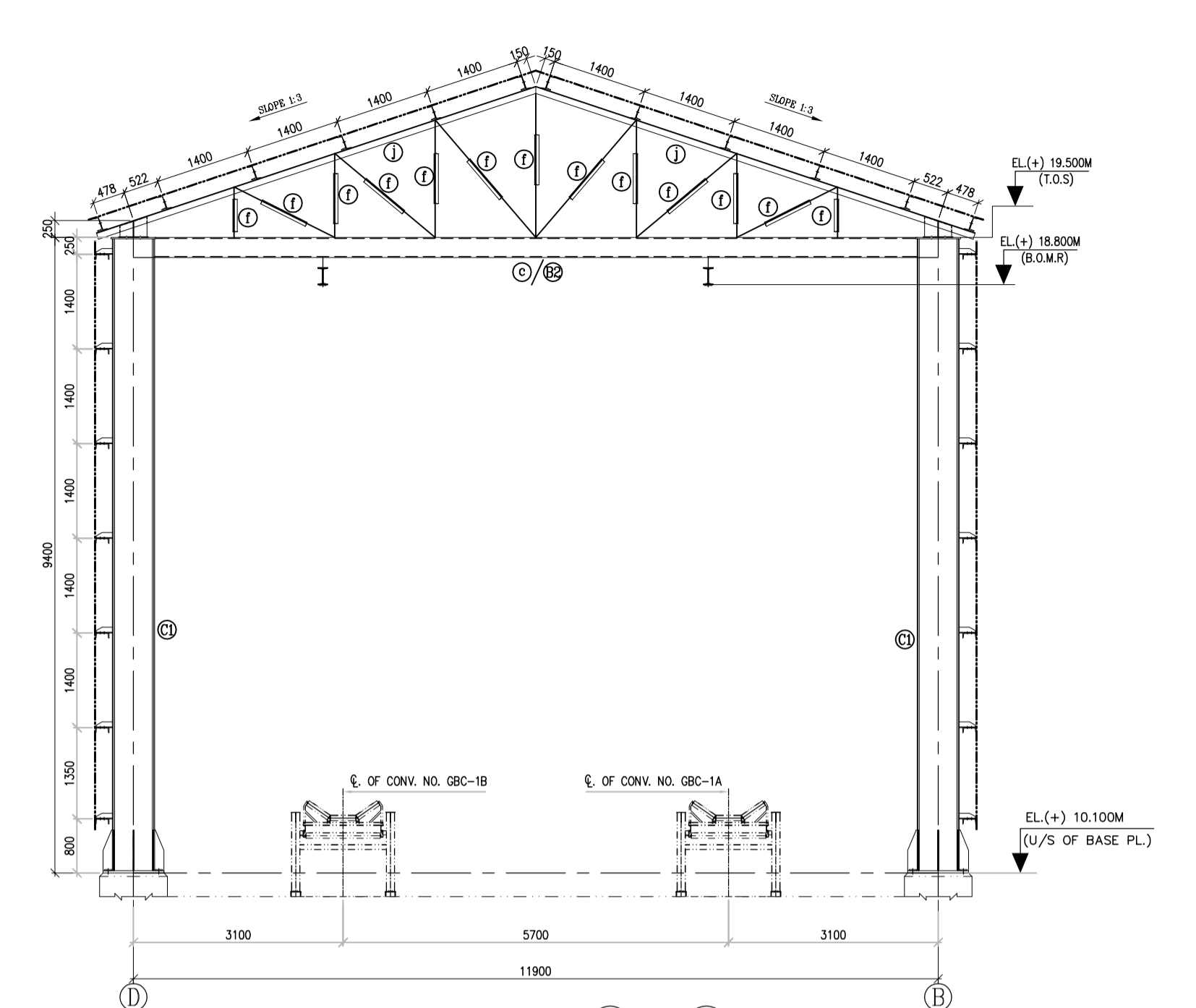
INVENTORY NO. REF.DWG. NO. SIGN & DATE



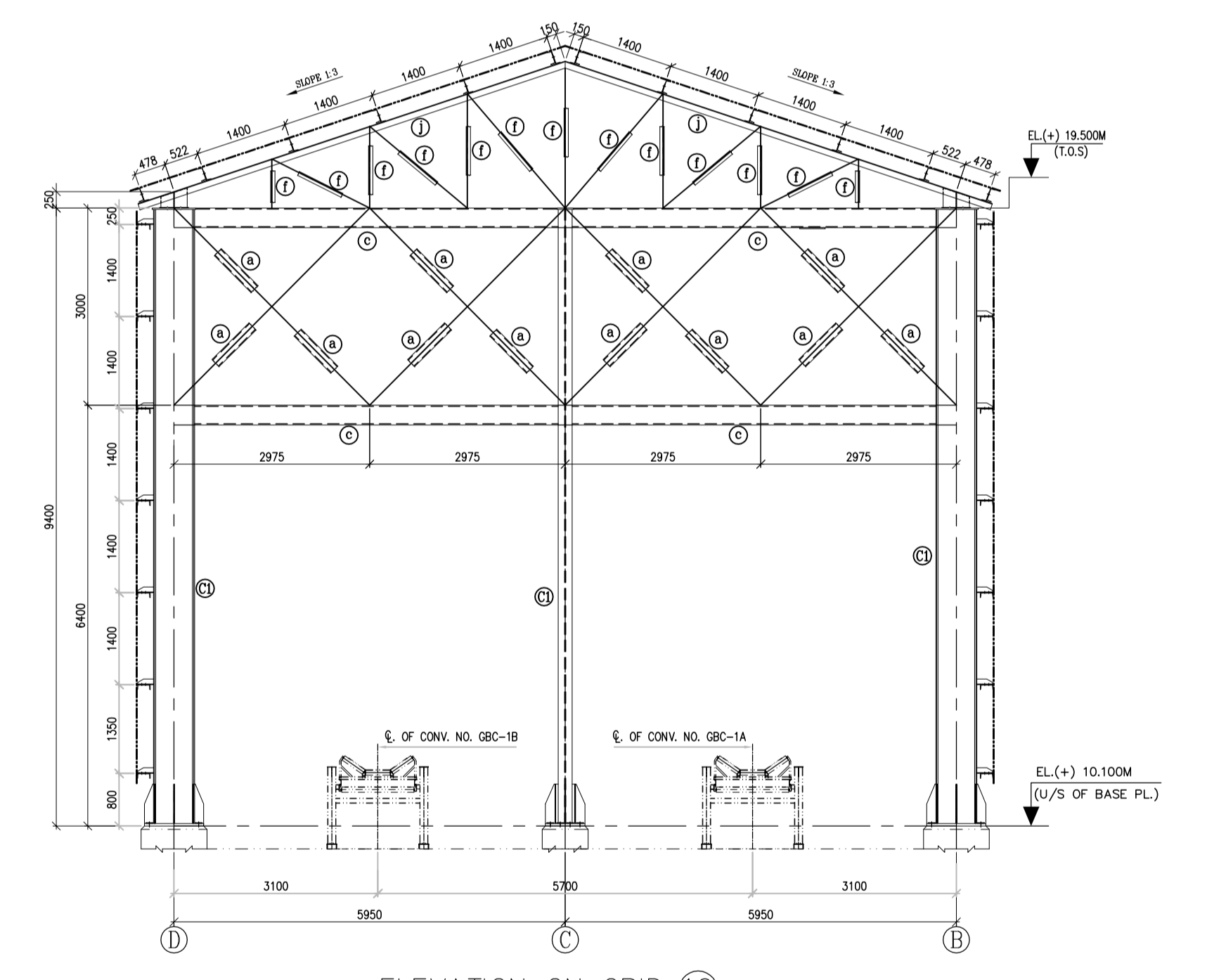
ELEVATION ON ROW B



ELEVATION ON ROW D



ELEVATION ON GRID 2 TO 15

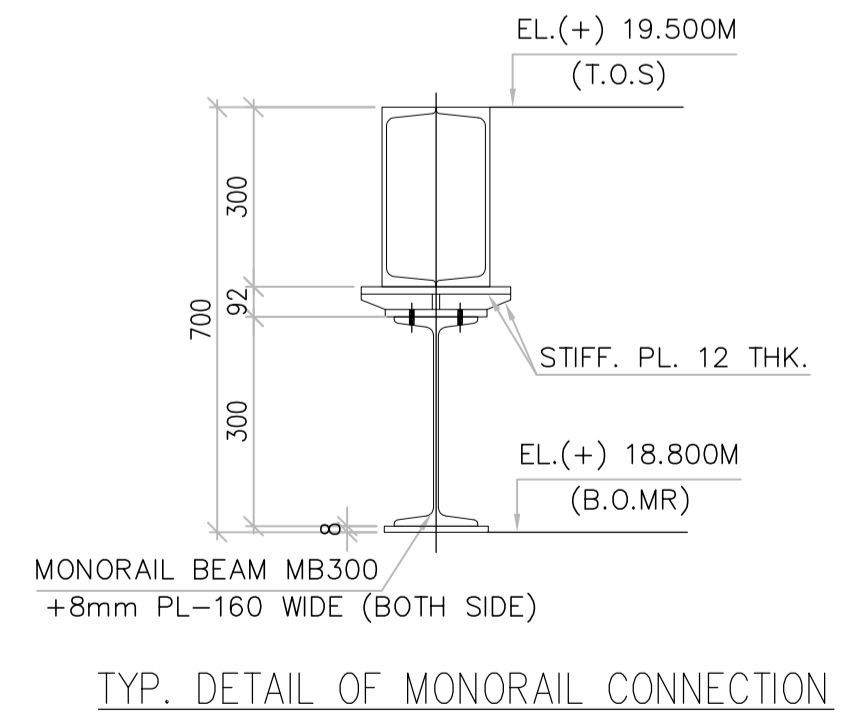


ELEVATION ON GRID 16

SCHEDULE OF MEMBERS		
MARK.	PROFILE	SECTION
C1	② I ①	① ISMB 600 ② PL. 210x12 THK.
B1	② I ①	① ISMB 400 ② PL. 140x12 THK.
B2	I	ISMB 400
B3	I	ISMB 350
a	□	BOX MC150
b	□	BOX MC250
c	□	BOX MC300
d	② I ①	① ISMB 350 ② PL. 140x10 THK.
e	C	ISMC 200
f	T	2/ISA 65x65x6
g	T	2/ISA 75x75x6
h	T	2/ISA 90x90x6
j	T	2/ISA 100x100x10

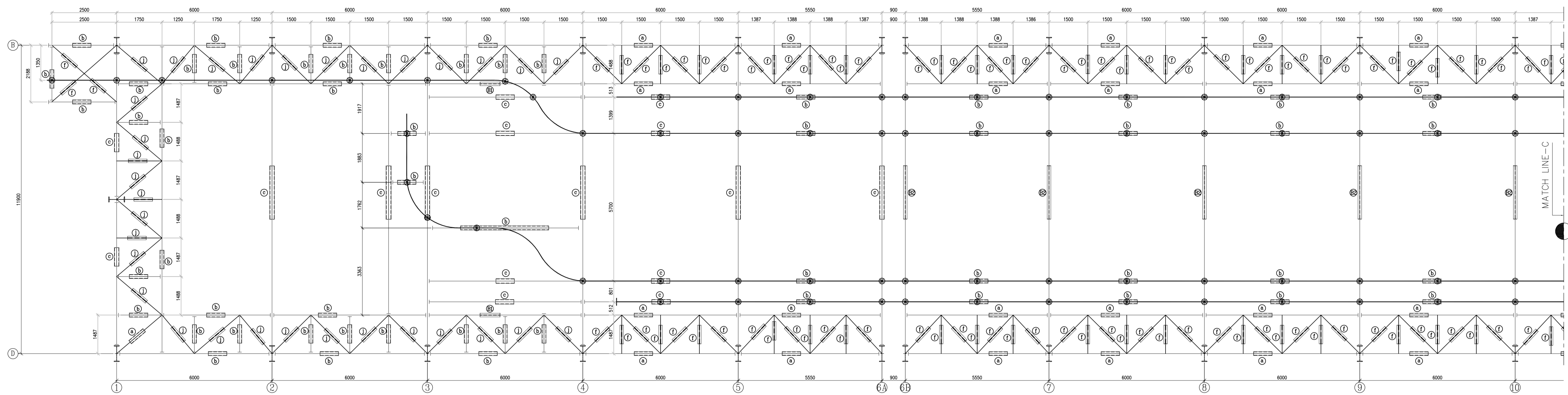
- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETRES
  - EL(±)0.00M. CORRESPONDS TO RL.(+)46.700M.
  - ALL FILLET WELDS SHALL BE MINIMUM 6mm THK UN OTHERWISE.
  - ALL HOLES ARE 21.5ø DRILLED HOLES FOR M20 ERECTION BOLTS UNO.
  - ALL GUSSET PLATES ARE 10mm THK UN OTHERWISE.
  - GRADE OF STEEL E 250 AS PER IS:2062.
  - THIS DRAWING READ IN CONJUNCTION WITH DRAWING NO. 9558-001-109-PVC-C-013 RO SH.1

**REFERENCE: -**  
1. MECH. DRG. NO. 9558-109-LGH-PVM-B-043 R2:-GA OF GYPSUM STORAGE SHED-1

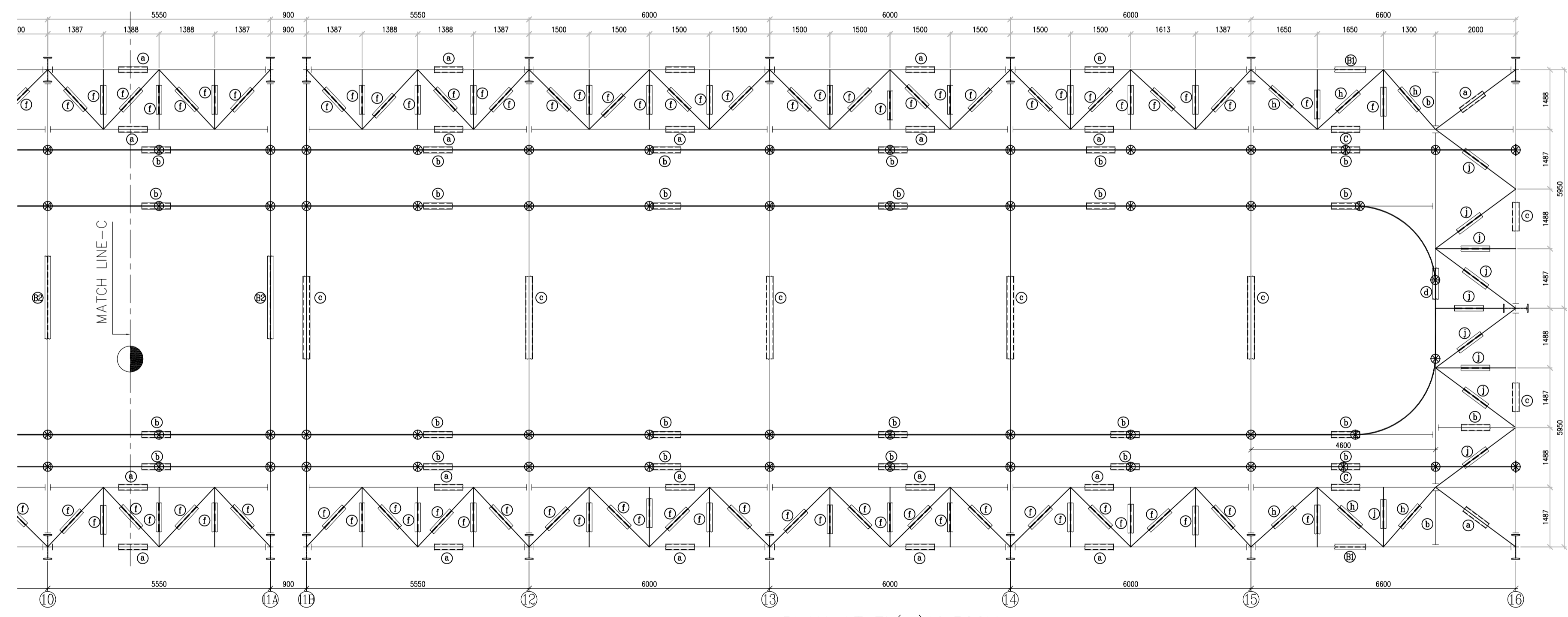


OWNER & CONSULTANT: <b>एन टी पी सी</b> <b>NTPC</b>		<b>NTPC Limited</b> (A GOVERNMENT OF INDIA ENTERPRISE)	
PROJECT: 3X660MW NTPC BARH STAGE-I FGD		CONTRACTOR: <b>BHARAT HEAVY ELECTRICALS LIMITED</b> INDUSTRIAL SYSTEMS GROUP, BANGALORE.	
JOB No.:	STATUS OF DRAWING:	CUSTOMER PACKAGE CODE:	DISCIPLINE:
REV. NO.:	ALTERED	NAME:	SIGN.:
	CHECKED	NAME:	SIGN.:
	APPROVED	NAME:	SIGN.:
ZONE:		DATE:	DEPT. CODE:
TITLE: GYPSUM STORAGE SHED-1 GA OF SECTIONS AND ELEVATIONS		NTPC DRG. NO.: 9558-001-109-PVC-C-015 REV. NO.: 00	
SCALE: 1:1		SHEET NO.: 2 NO. OF SHEETS: 3	

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 REF.DRG.NO.  
 SIGN & DATE  
 INVENTORY NO.



PLAN AT EL(+19.500M.)



PLAN AT EL(+19.500M.)

SCHEDULE OF MEMBERS		
MARK.	PROFILE	SECTION
C1	⊕ I ⊕	⊕ ISMB 600 ⊕ PL. 210x12 THK.
B1	⊕ I ⊕	⊕ ISMB 400 ⊕ PL. 140x12 THK.
B2	I	ISMB 400
B3	I	ISMB 350
a	□	BOX MC150
b	□	BOX MC250
c	□	BOX MC300
d	⊕ I ⊕	⊕ ISMB 350 ⊕ PL. 140x10 THK.
e	C	ISMC 200
f	T	2/ISA 65x65x6
g	T	2/ISA 75x75x6
h	T	2/ISA 90x90x6
j	T	2/ISA 100x100x10

- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETRES
  2. EL(±)0.00M. CORRESPONDS TO RL.(+ )46.700M.
  3. ALL FILLET WELDS SHALL BE MINIMUM 6mm THK UN OTHERWISE.
  4. ALL HOLES ARE 21.5φ DRILLED HOLES FOR M20 ERECTION BOLTS UNO.
  5. ALL GUSSET PLATES ARE 10mm THK UN OTHERWISE.
  6. GRADE OF STEEL E 250 AS PER IS:2062.
  7. THIS DRAWING READ IN CONJUNCTION WITH DRAWING NO. 9558-001-109-PVC-C-013 RO SH.1

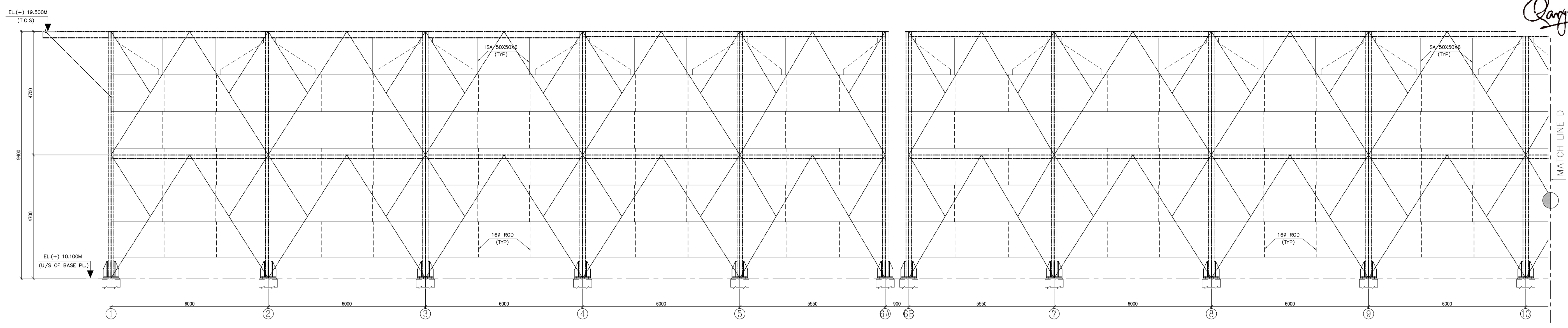
- REFERENCE: -**
1. MECH. DRG. NO. 9558-109-LGH-PVM-B-043 R2:-GA OF GYPSUM STORAGE SHED-1

OWNER & CONSULTANT: <b>NTPC</b> NTPC Limited (A GOVERNMENT OF INDIA ENTERPRISE)		PROJECT: 3X660MW NTPC BARH STAGE-I FGD	
JOB No.:	STATUS OF DRAWING:	CUSTOMER PACKAGE CODE:	LHP
DISTRIBUTION OF PRINTS:		DISCIPLINE:	M E I L
REV.:		CONTRACTOR:	BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL SYSTEMS GROUP, BANGALORE.
ALTERED	CHECKED	APPROVED	TITLE: GYPSUM STORAGE SHED-1 GA OF SECTIONS AND ELEVATIONS
NAME	SIGN	DATE	DEPT. CODE
DESIGN	ABD	09.12.2019	
DRN.	PANCHU	26.12.2019	
CHKD.	P.REDDY	27.12.2019	
APPD.	SCC	27.12.2019	
NTPC DRG. NO.: 9558-001-109-PVC-C-015		REV. NO.: 00	
BHTEL DRG. NO.: IS-1-CA-723-408-C015		SCALE: 1:1	
SHEET NO.: 3		NO. OF SHEETS: 3	

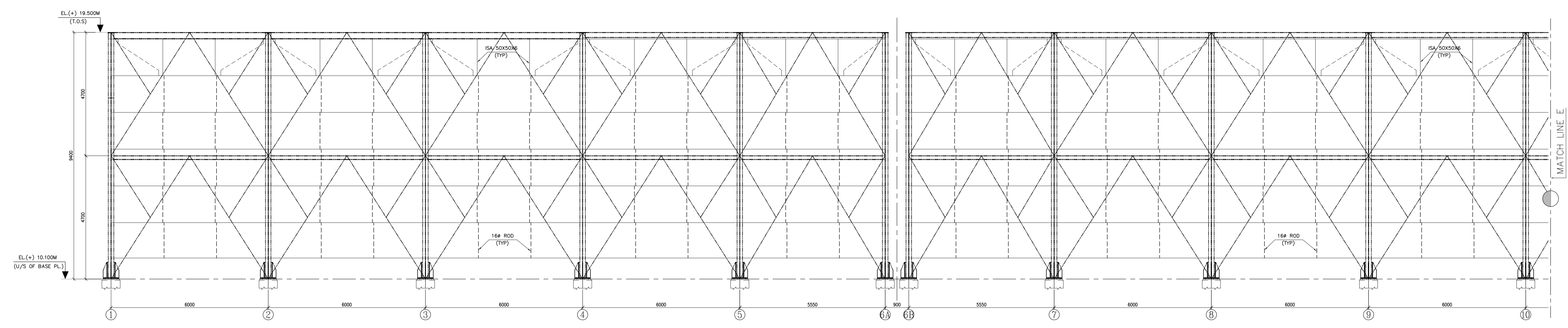
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*Ashish Ranjan*

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ELEVATION ON ROW (B)  
(ALL SIDE RUNNER SHALL BE MC 200)

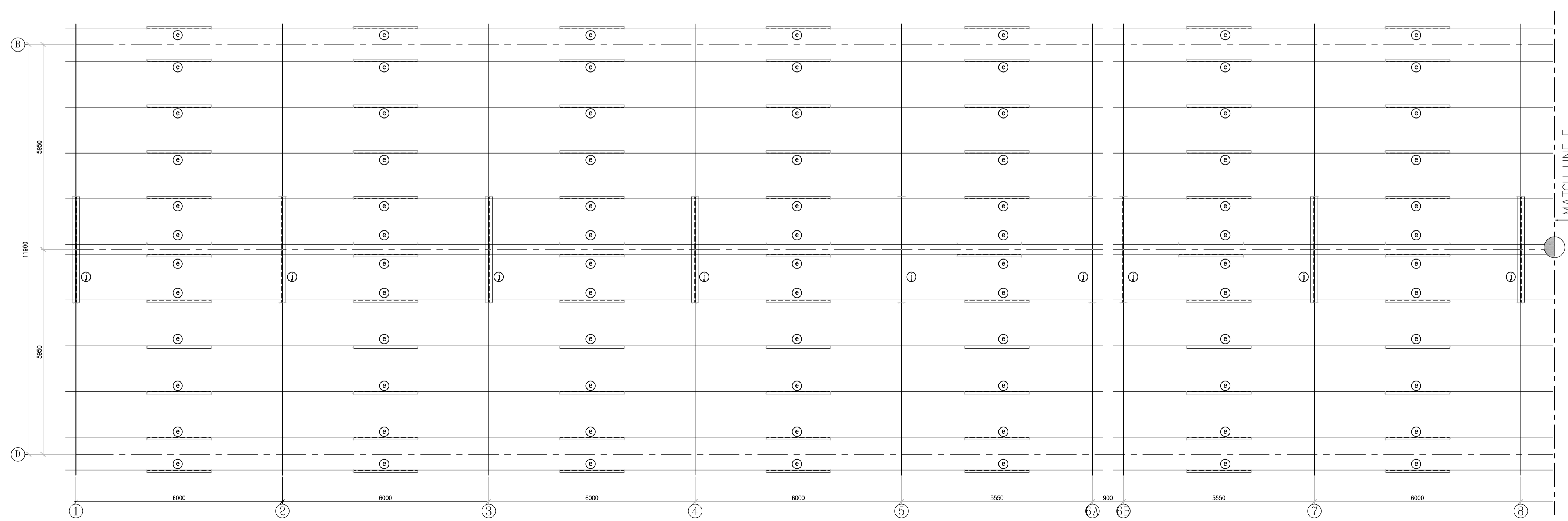


ELEVATION ON ROW (D)  
(ALL SIDE RUNNER SHALL BE MC 200)

SCHEDULE OF MEMBERS		
MARK.	PROFILE	SECTION
e	C	ISMC 200
j	T	2/ISA 100x100x10

- REFERENCE: -
- MECH. DRG. NO. 9558-109-LGH-PVM-B-043 R2:-GA OF GYPSUM STORAGE SHED-1

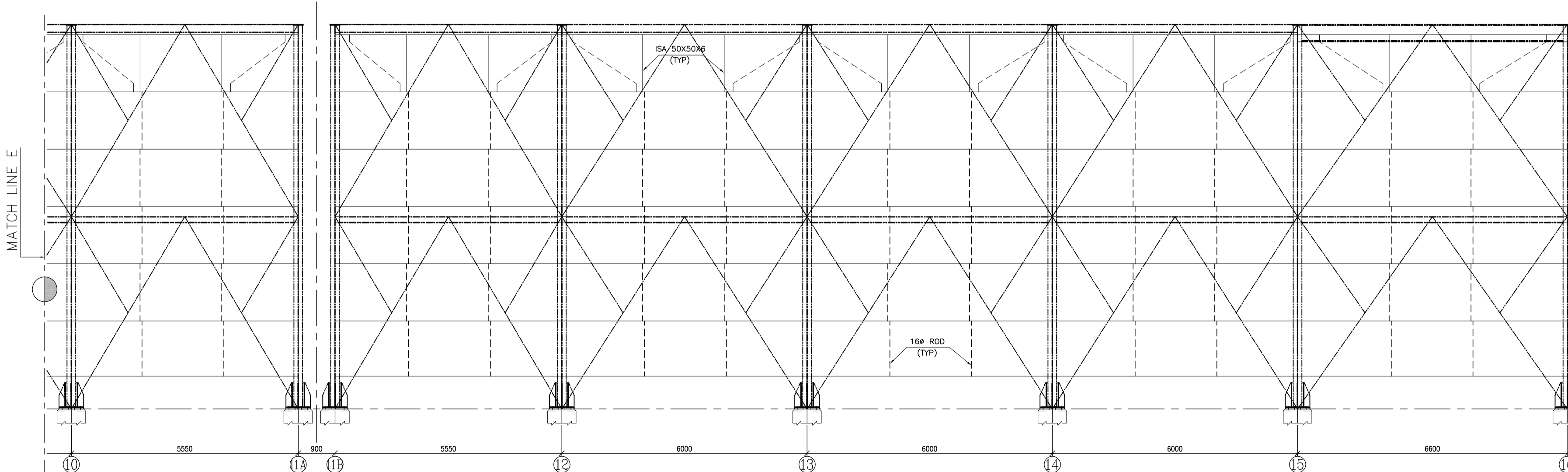
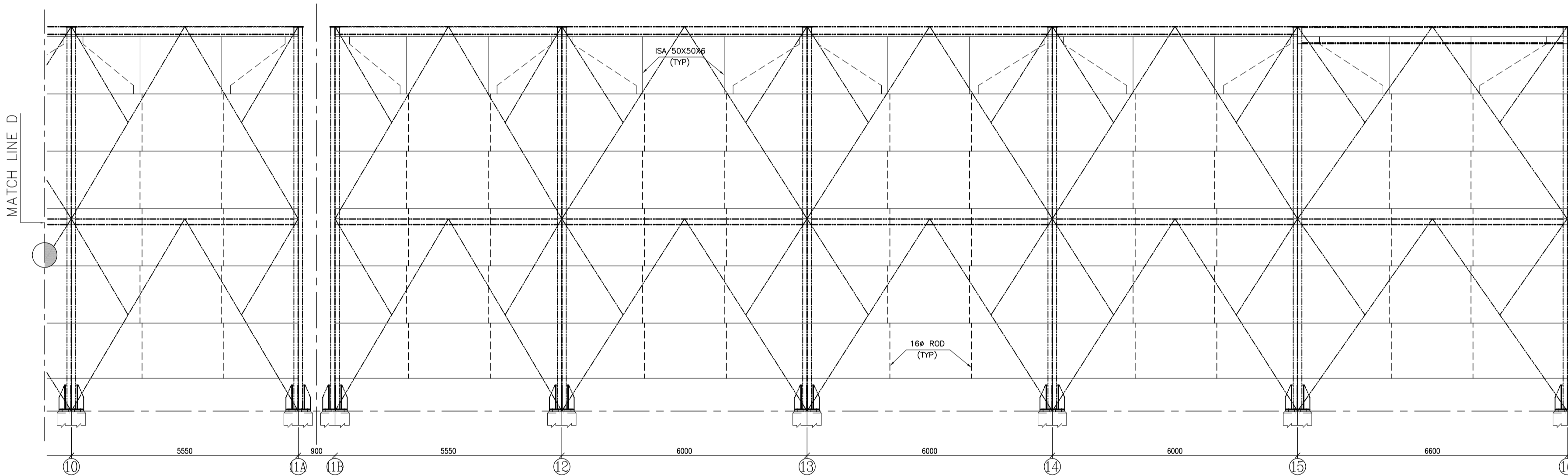
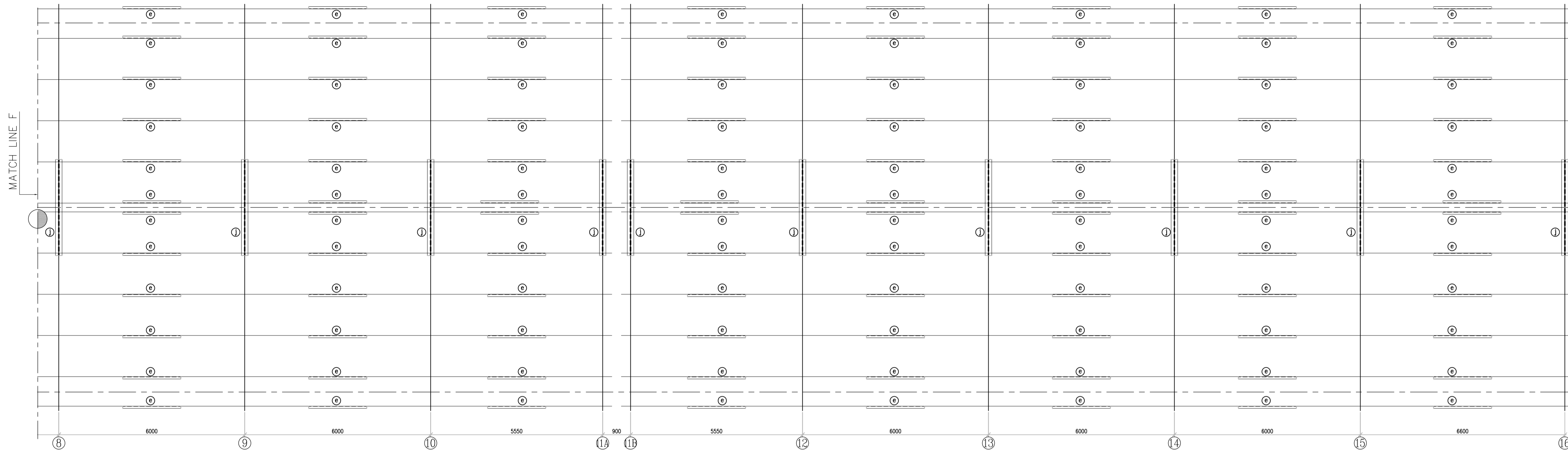
- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETRES
  - ALL FILLET WELDS SHALL BE MINIMUM 6mm THK UN OTHERWISE.
  - ALL HOLES ARE 21.5 $\phi$  DRILLED HOLES FOR M20 ERECTION BOLTS UNO.
  - ALL GUSSET PLATES ARE 10mm THK UN OTHERWISE.
  - GRADE OF STEEL E 250 AS PER IS:2062.
  - THIS DRAWING READ IN CONJUNCTION WITH DRAWING NO. 9558-001-109-PVC-C-013,015 & 16 RO



PLAN AT PURLIN LEVEL

OWNER & CONSULTANT: <b>NTPC</b>		PROJECT: 3X660MW NTPC BARH STAGE-I FGD	
CONTRACTOR: <b>BHARAT HEAVY ELECTRICALS LIMITED</b>		INDUSTRIAL SYSTEMS GROUP, BANGALORE	
JOB NO.:		TITLE: GYPSUM STORAGE SHED-1	
STATUS OF DRAWING:		DETAILS OF SIDE RUNNER & PURLIN	
REV.	ALTERED	NAME	SIGN.
CHECKED	ABD	09.12.2019	
APPROVED	PANCHU	26.12.2019	
ZONE	CHODI	P. REDDY	27.12.2019
	APPOD	SCC	27.12.2019





SCHEDULE OF MEMBERS		
MARK.	PROFILE	SECTION
e	[	ISMC 200
j	T	2/ISA 100x100x10

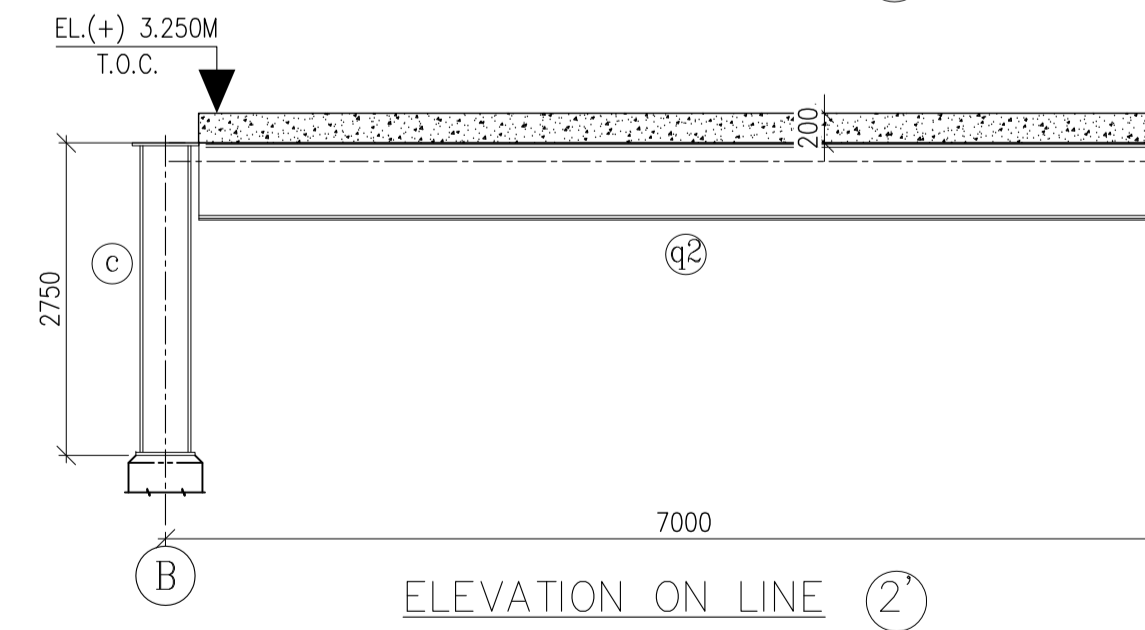
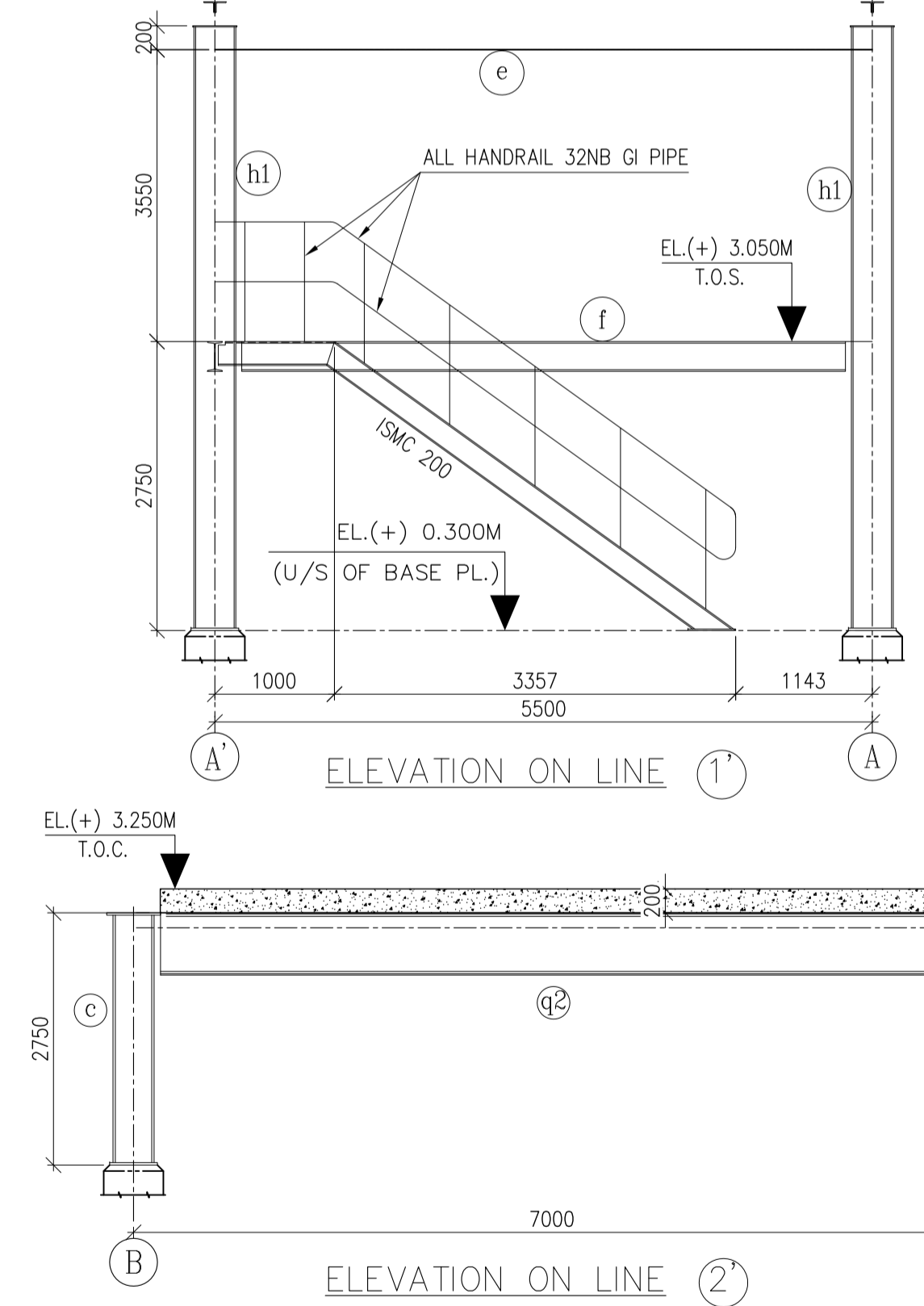
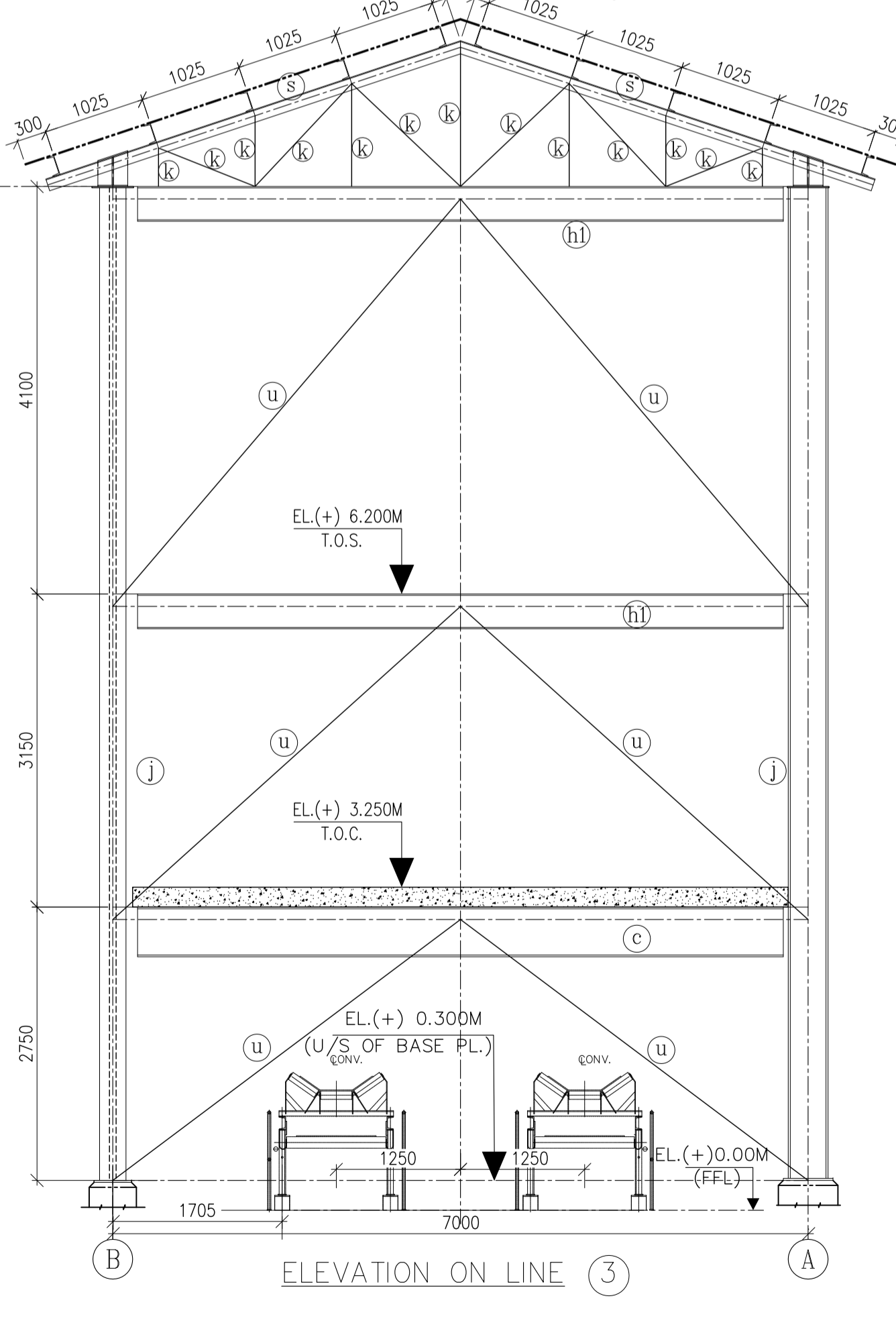
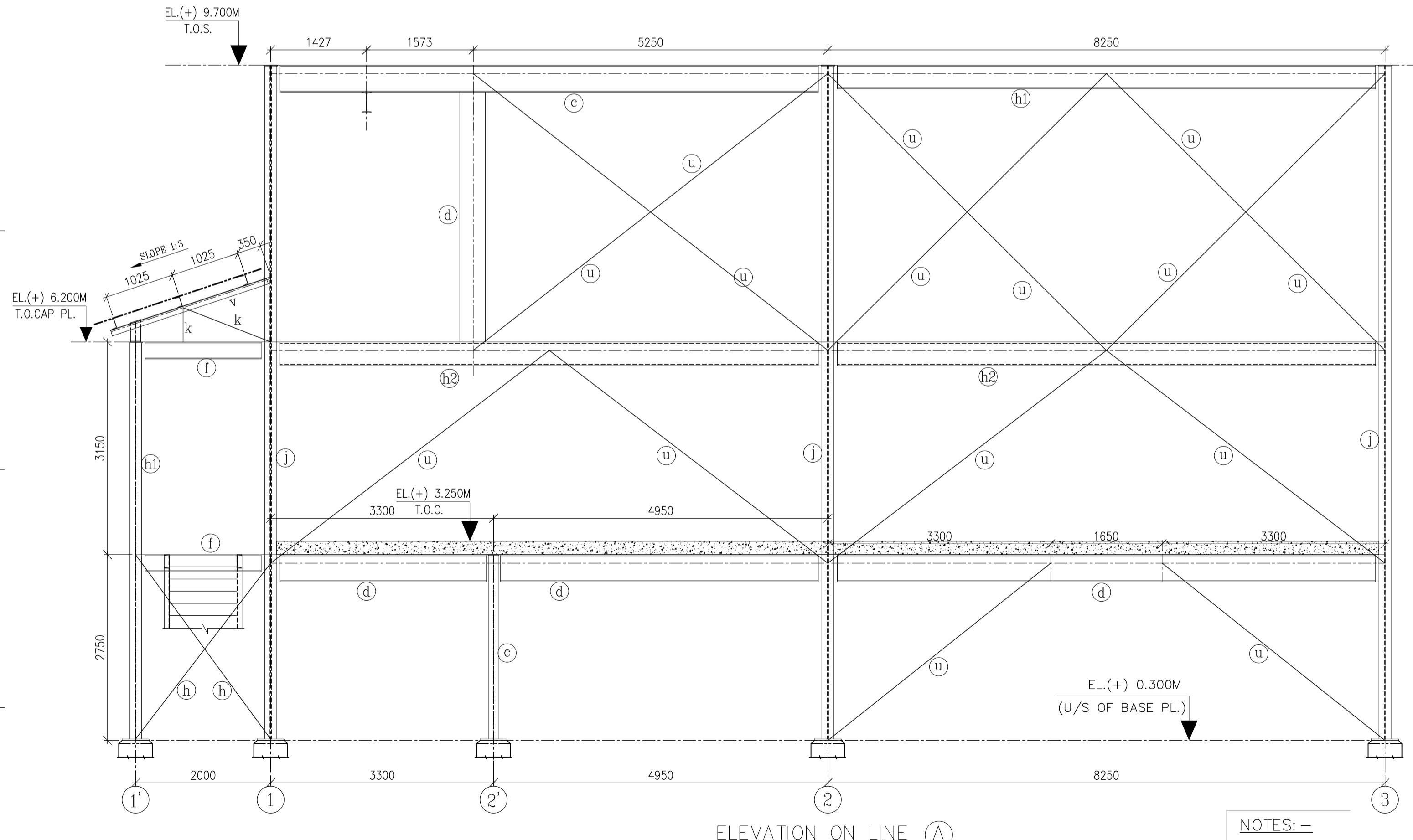
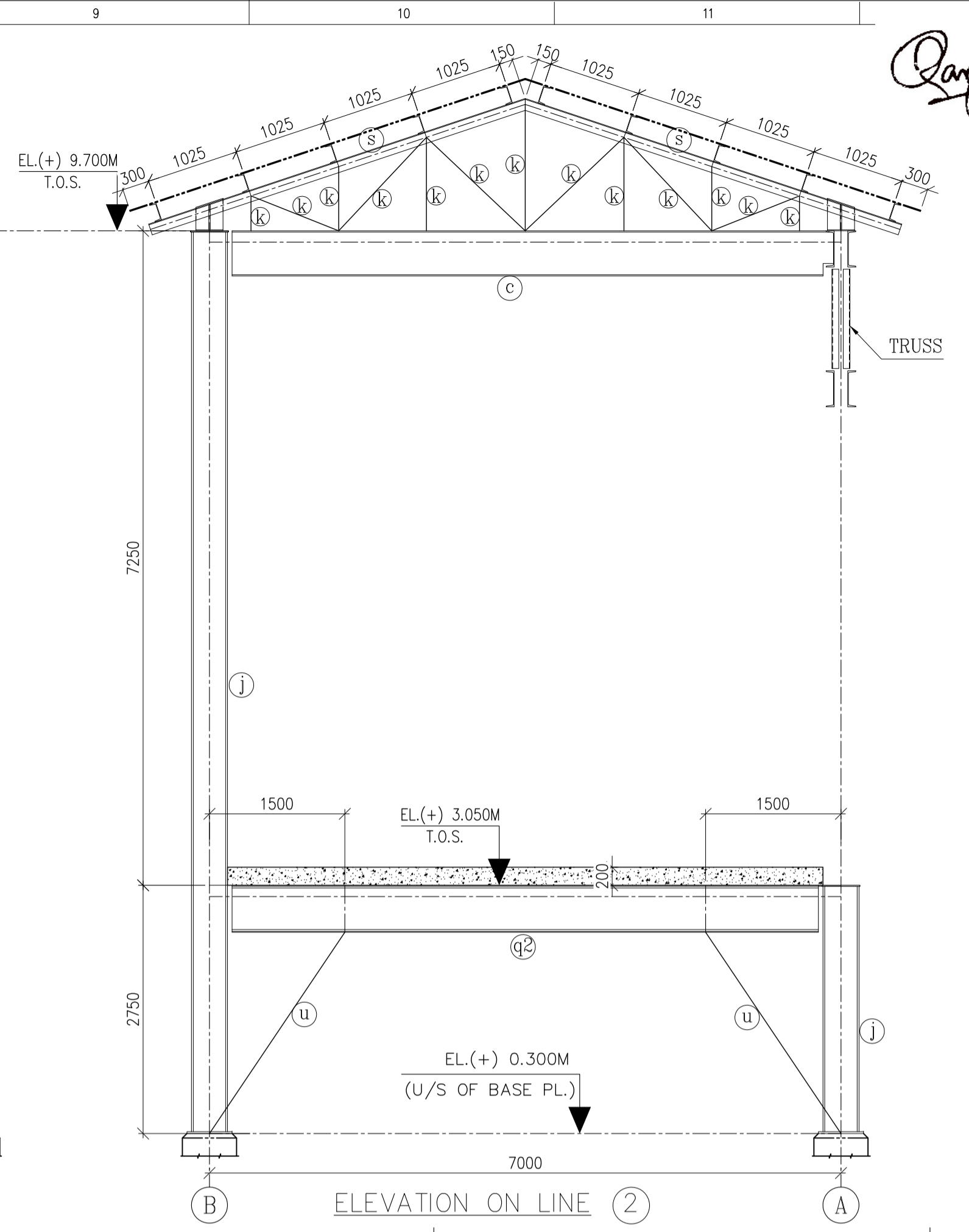
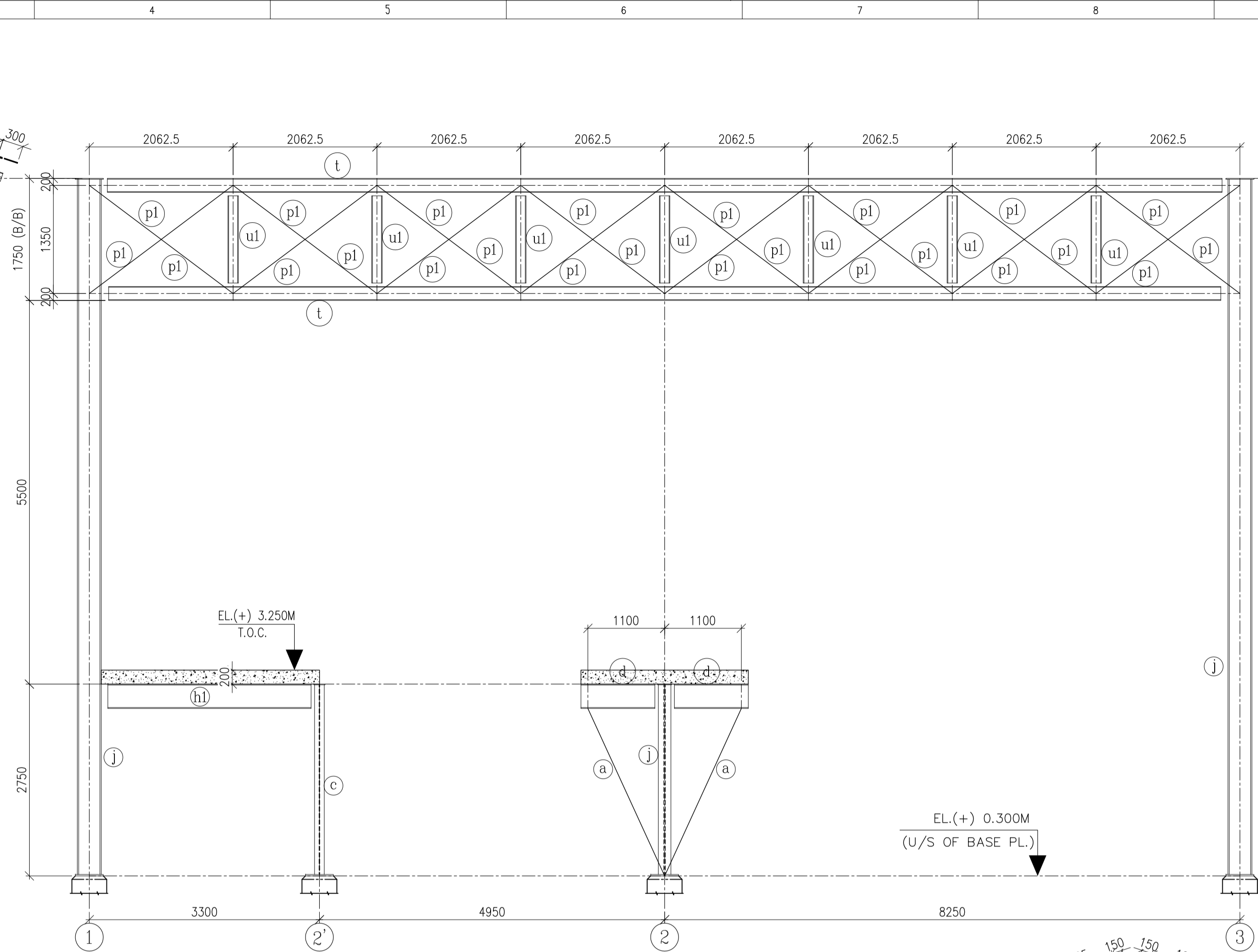
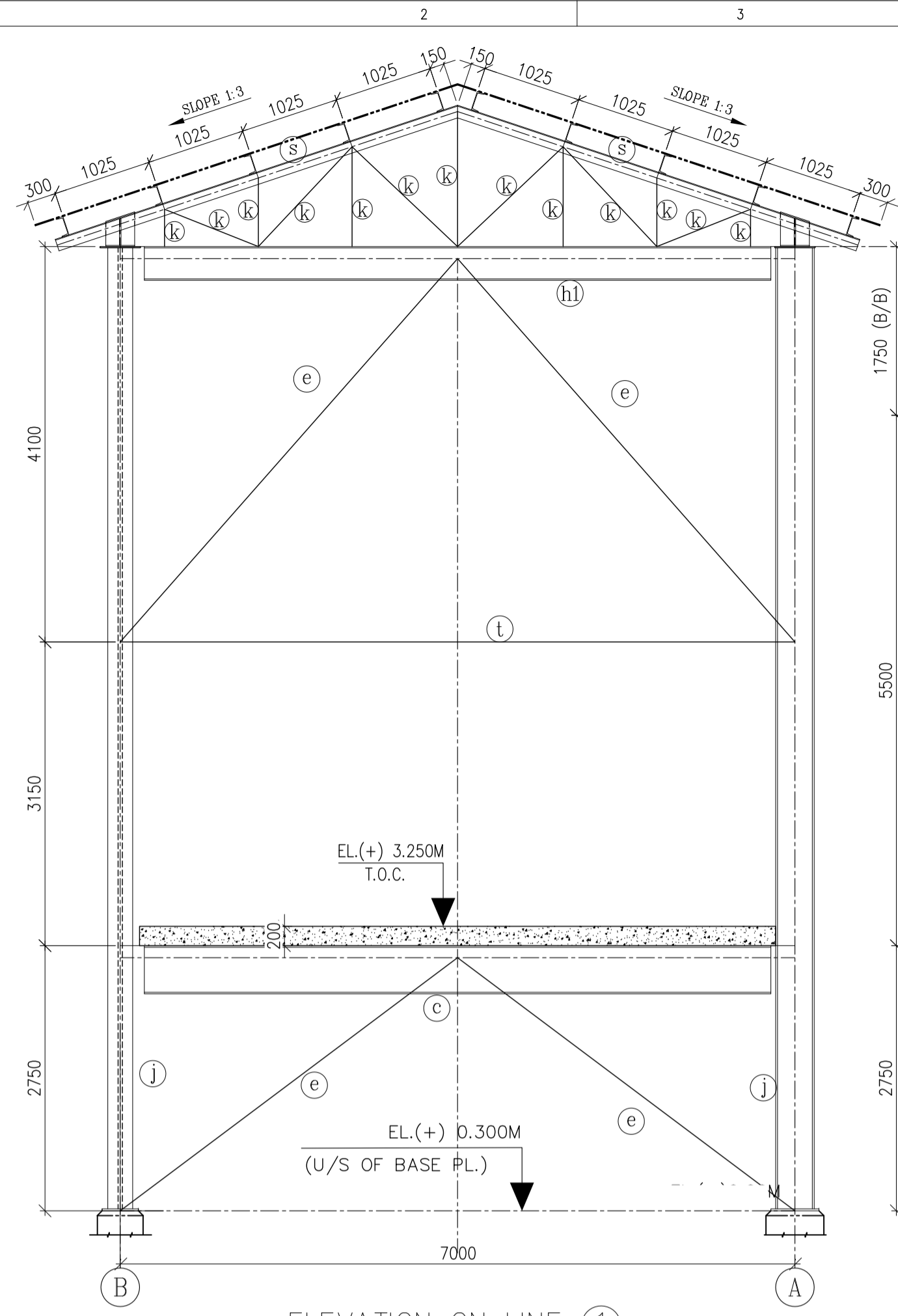
- REFERENCE: -**
- MECH. DRG. NO. 9558-109-LGH-PVM-B-043 R2:-GA OF GYPSUM STORAGE SHED-1

- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETRES
  - ALL FILLET WELDS SHALL BE MINIMUM 6mm THK UN OTHERWISE.
  - ALL HOLES ARE 21.5 $\phi$  DRILLED HOLES FOR M20 ERECTION BOLTS UNO.
  - ALL GUSSET PLATES ARE 10mm THK UN OTHERWISE.
  - GRADE OF STEEL E 250 AS PER IS:2062.
  - THIS DRAWING READ IN CONJUNCTION WITH DRAWING NO. 9558-001-109-PVC-C-013,015 & 16 R0

OWNER & CONSULTANT: <b>NTPC</b> (A GOVERNMENT OF INDIA ENTERPRISE)		PROJECT 3X660MW NTPC BARH STAGE-I FGD	
JOB No.:		CUSTOMER PACKAGE CODE: LHP	
STATUS OF DRAWING		CONTRACTOR: <b>BHARAT HEAVY ELECTRICALS LIMITED</b> INDUSTRIAL SYSTEMS GROUP, BANGALORE	
DISTRIBUTION OF PRINTS		JOB NO.:	
REV. NO.		TITLE: GYPSUM STORAGE SHED-1 DETAILS OF SIDE RUNNER & PURLIN	
ALTERED	NAME	SIGN	DATE
CHECKED	DESJL	ABD	09.12.2019
APPROVED	DRN.	PANCHU	26.12.2019
ZONE		CHKD.	P.REDDY
		APPD.	SCC
		DATE	27.12.2019
		UNTO. DIMN.	C / M / S
		ISS	2/268
		NTPC DRG. NO.:	9558-001-109-PVC-C-016
		BHEL DRG. NO.:	IS-1-CA-723-408-C016
		SCALE:	1:1
		SHEET NO.:	2
		NO. OF SHEETS:	2

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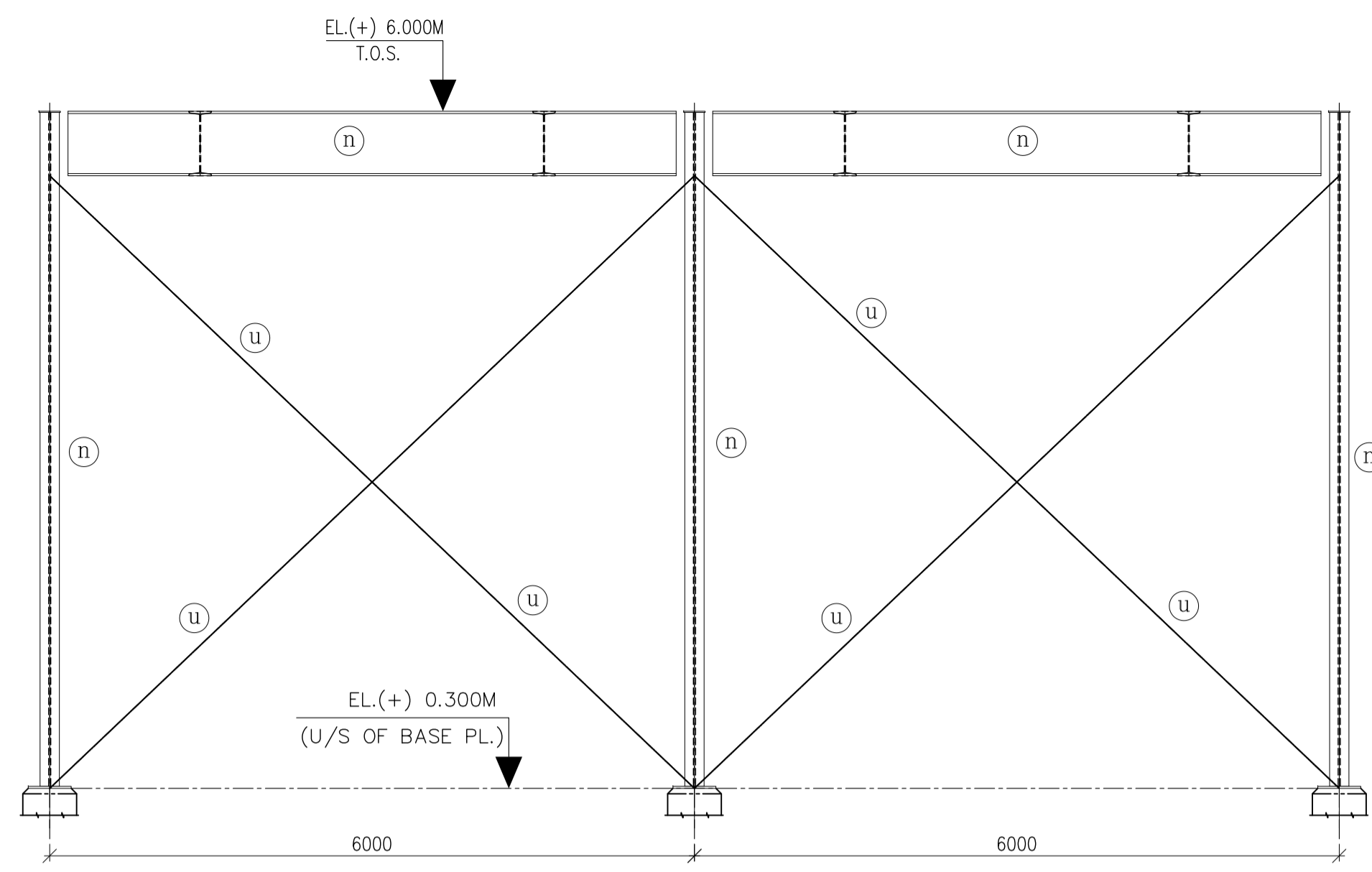


**NOTES:-**  
 1. THIS DRAWING READ IN CONJUNCTION WITH DRAWING NO. 9558-001-109-PVC-C-031 (SH. 2)

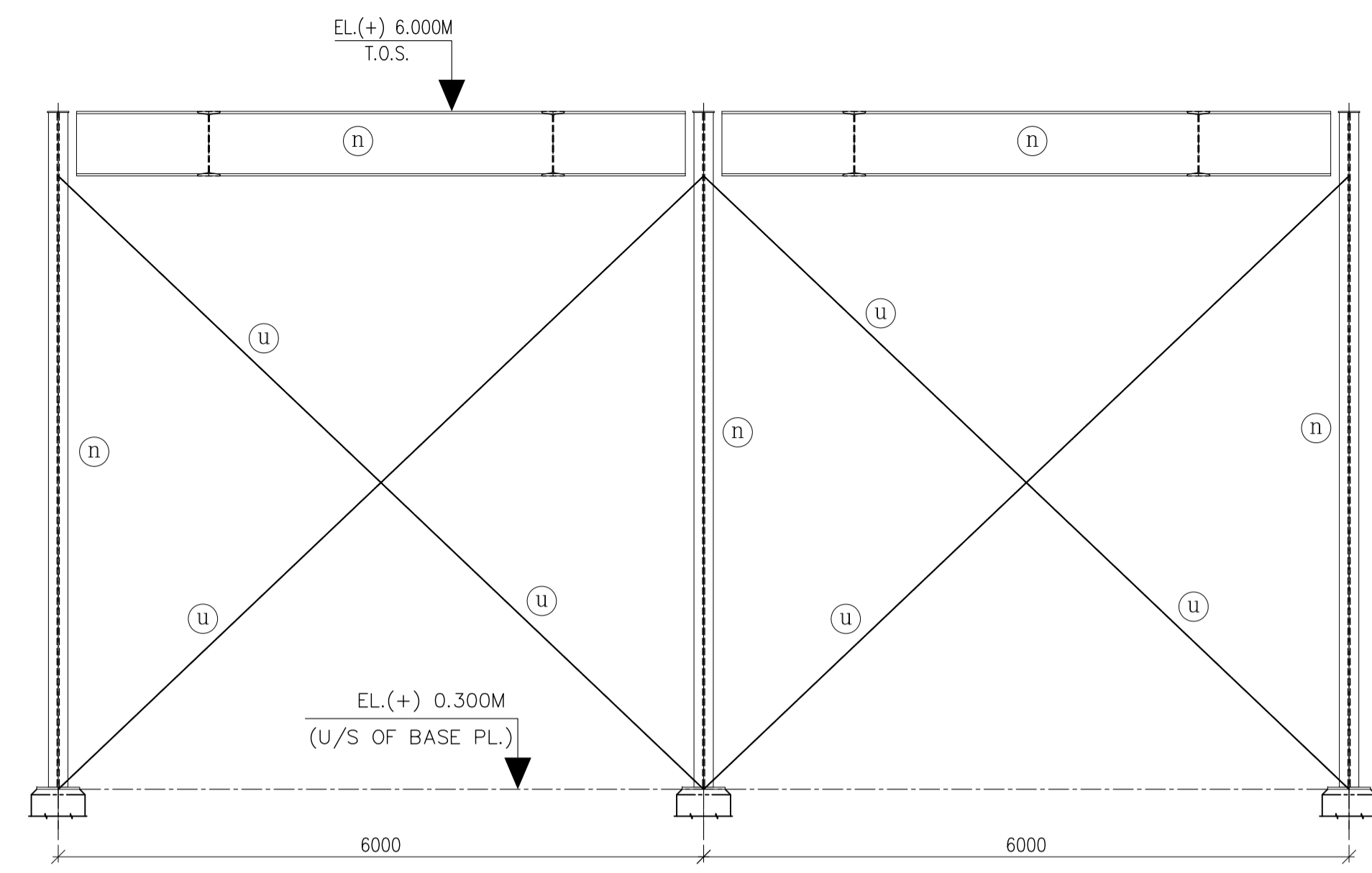
**REFERENCE:-**  
 1. MECH. DRG. NO. 9558-109-LGH-PVM-B-010 REV-04

OWNER & CONSULTANT: <b>NTPC</b>		<b>NTPC Limited</b> (A GOVERNMENT OF INDIA ENTERPRISE)	
PROJECT: <b>3X660MW NTPC BARH STAGE-I FGD</b>			
CUSTOMER PACKAGE CODE: LHP		CONTRACTOR: <b>BHARAT HEAVY ELECTRICALS LIMITED</b> INDUSTRIAL SYSTEMS GROUP, BANGALORE.	
DISCIPLINE: M C E I L		TITLE: <b>LTP-1</b> GA OF ELEVATION AND STAIRCASE	
REV. NO.	NAME	SIGN.	DATE
01	ALTERED PANCHU	-SD-	11.11.2019
	CHECKED ABD	-SD-	11.11.2019
	APPROVED P. REDDY	-SD-	11.11.2019
ZONE	RCC FLOOR SLAB INTRODUCED AS PER LATEST MECH. GA		
APPD.	SCC	23.08.19	
NTPC DRG. NO.: 9558-001-109-PVC-C-031		REV. NO.: 01	
BHEL DRG. NO.: IS-1-GA-723-404-C032		SCALE: 1:1	
SHEET NO.: 1		NO. OF SHEETS: 2	

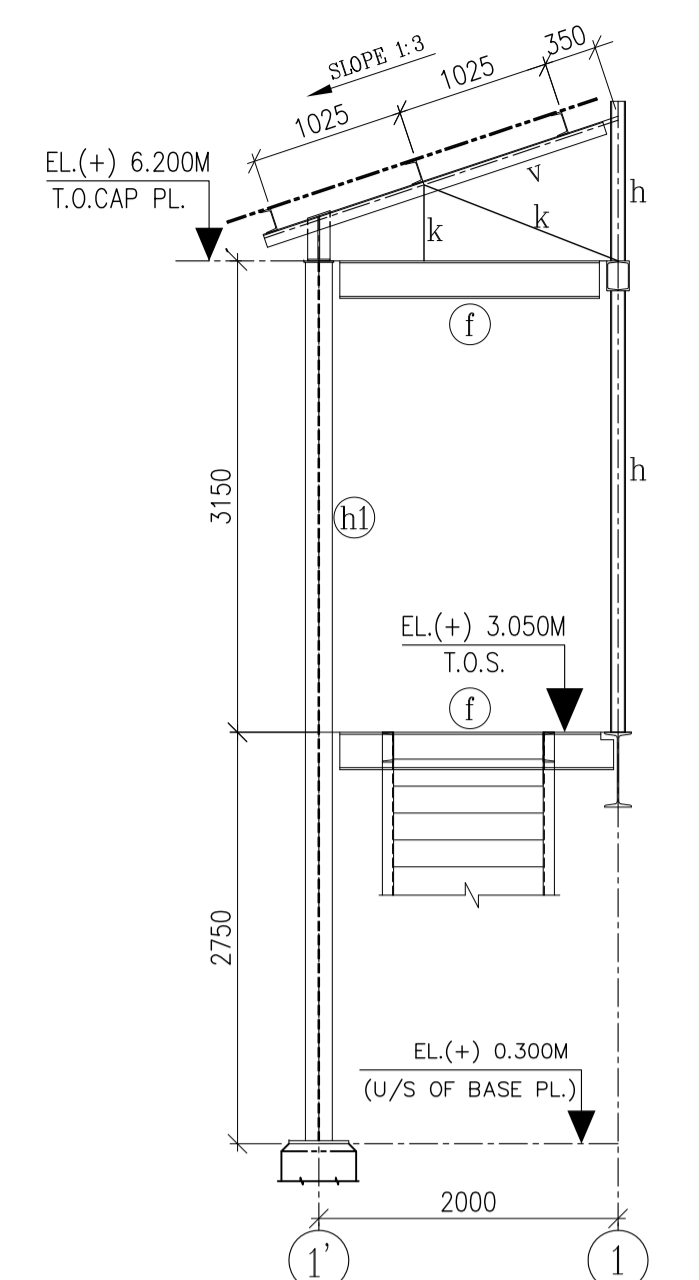
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ELEVATION ON LINE (D)

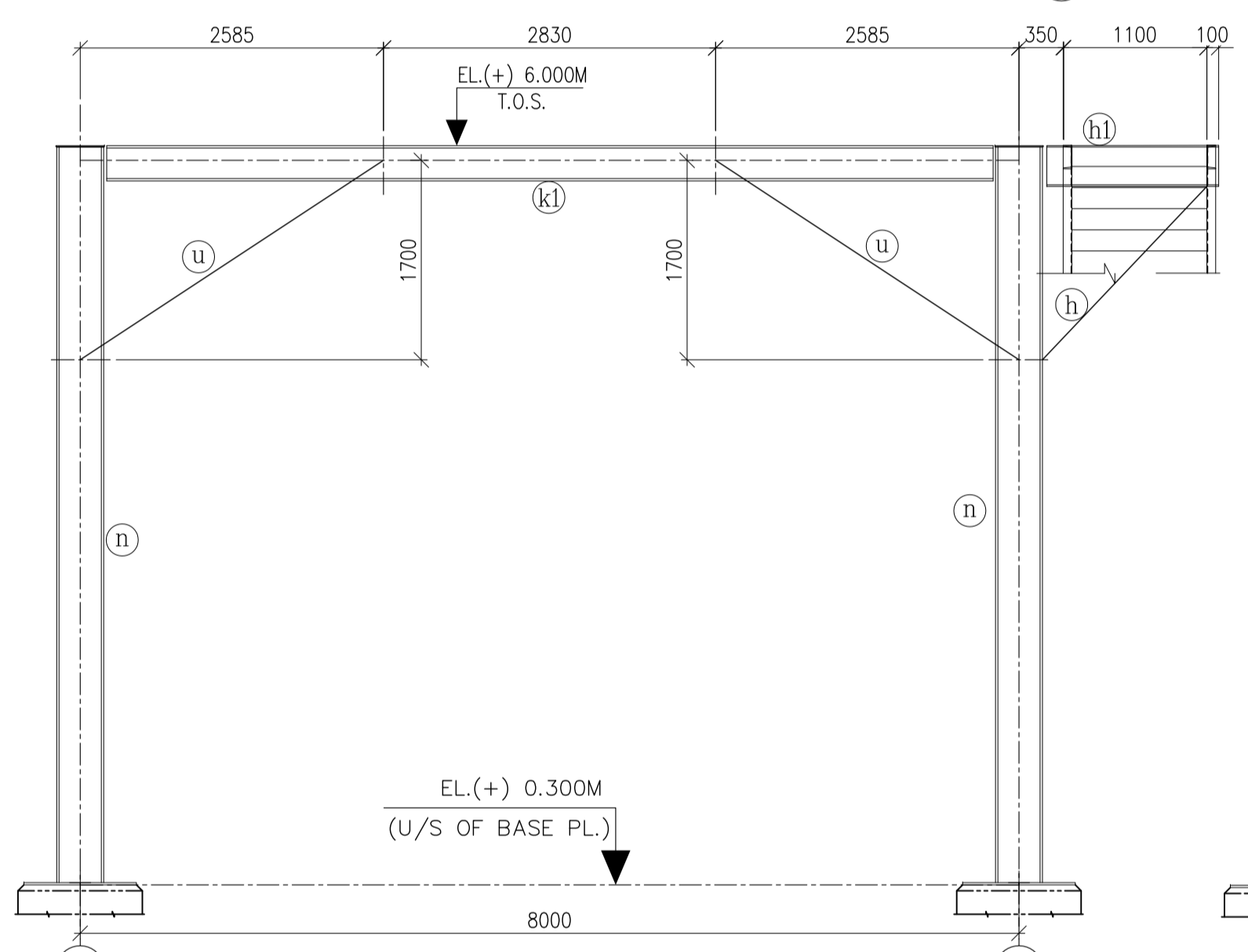


ELEVATION ON LINE (C)

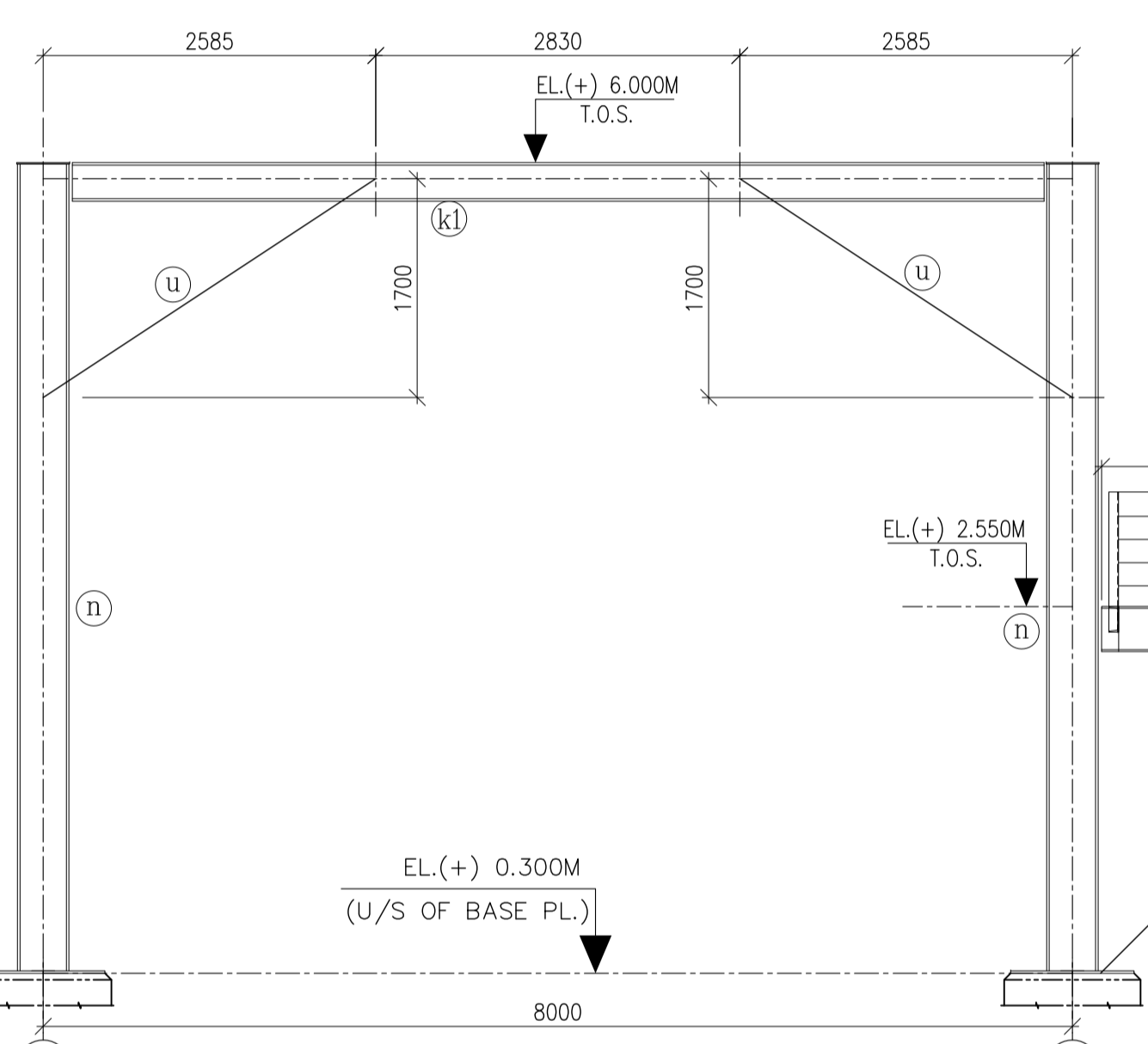


ELEVATION ON LINE (A)

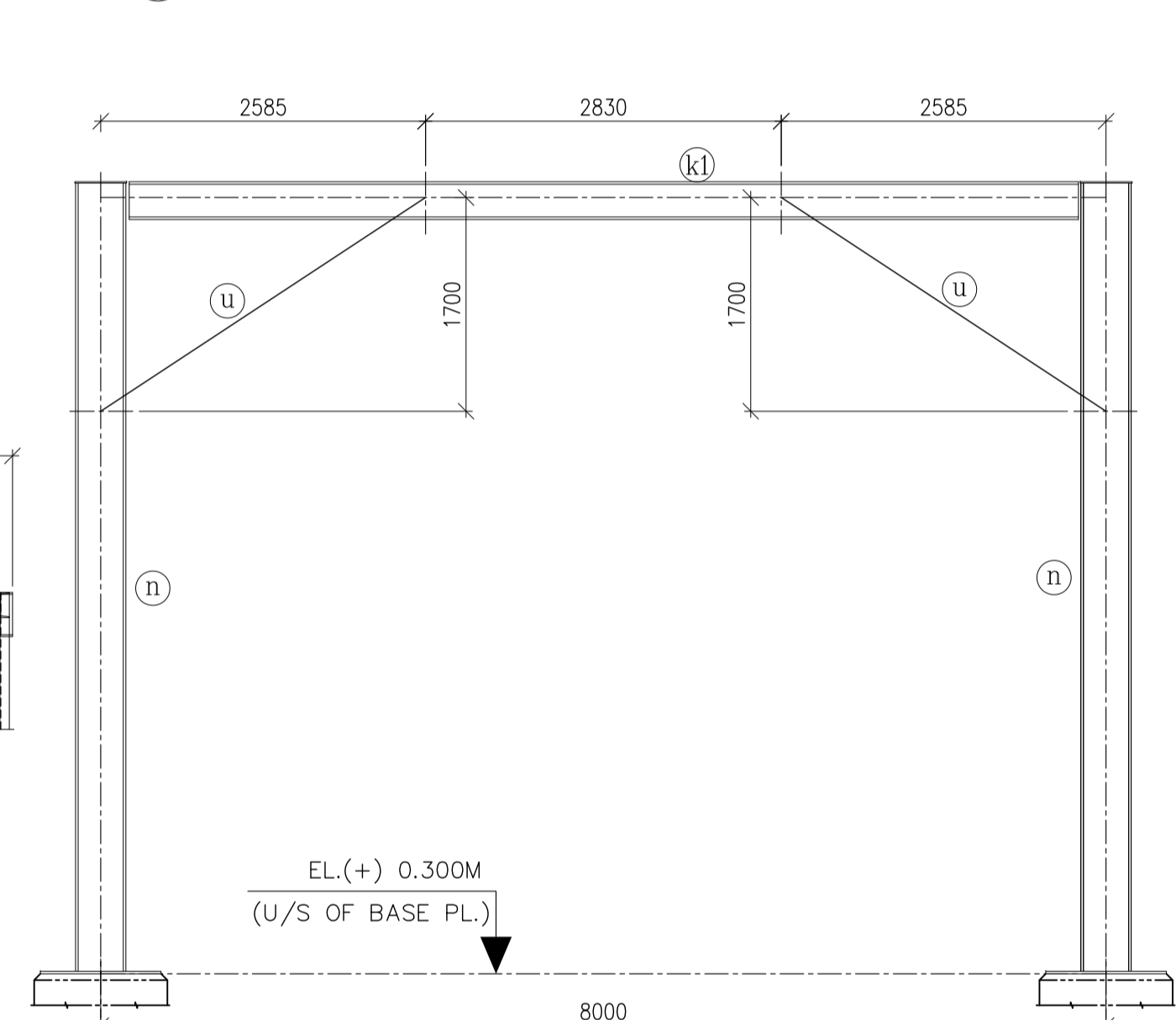
SCHEDULE OF MEMBERS		
MARK.	PROFILE	SECTION
a	□	BOX MC150
b	T	2/ISA 75X75X8
c	I	ISMB 500
d	I	ISMB 400
e	□	BOX MC200
f	I	ISMB 250
g	L	L 65x65x6
h	□	BOX MC100
h1	I	ISMB 350
j	⊙	① PL. 200x20 THK. ② PL. 410x16 THK.
k	T	2/ISA 50x50x6
k1	⊙	① PL. 180x20 THK. ② PL. 260x12 THK.
m	I	ISMB 300
n	I	ISMB 600
p	T	2/ISA 65x65x6
q	⊙	① PL. 200x20 THK. ② PL. 310x20 THK.
r	L	L 90x90x6
s	T	2/ISA 110x110x12
t	150	ISMC 400
u	□	ISMC 200
v	T	2/ISA 90x90x6
w	]	ISMC 150
r1	T	2/ISA 90x90x6
r2	T	2/ISA 65x65x6
u1	150	ISMC 200
p1	150	ISMC 100
q1	I	ISMB 150
q2	⊙	① PL. 220x25 THK. ② PL. 400x20 THK.
h2	□	BOX MC 300



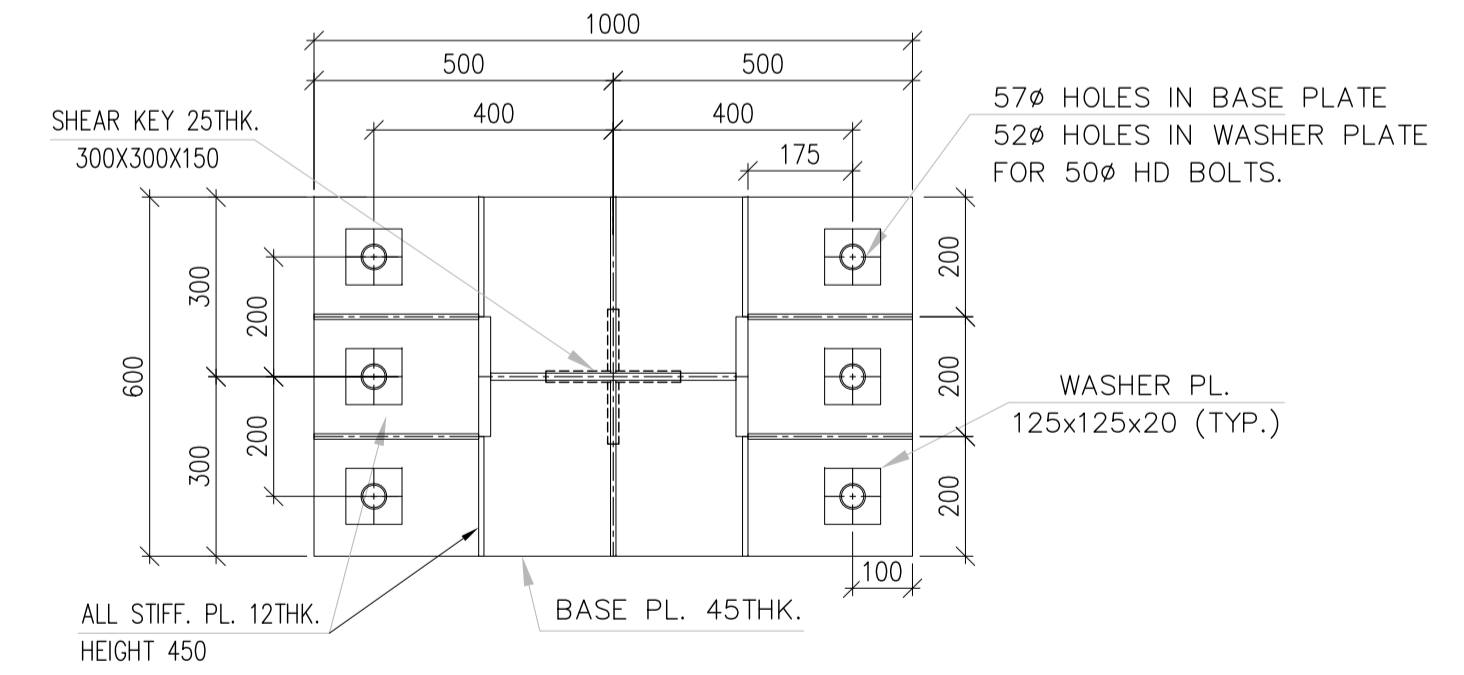
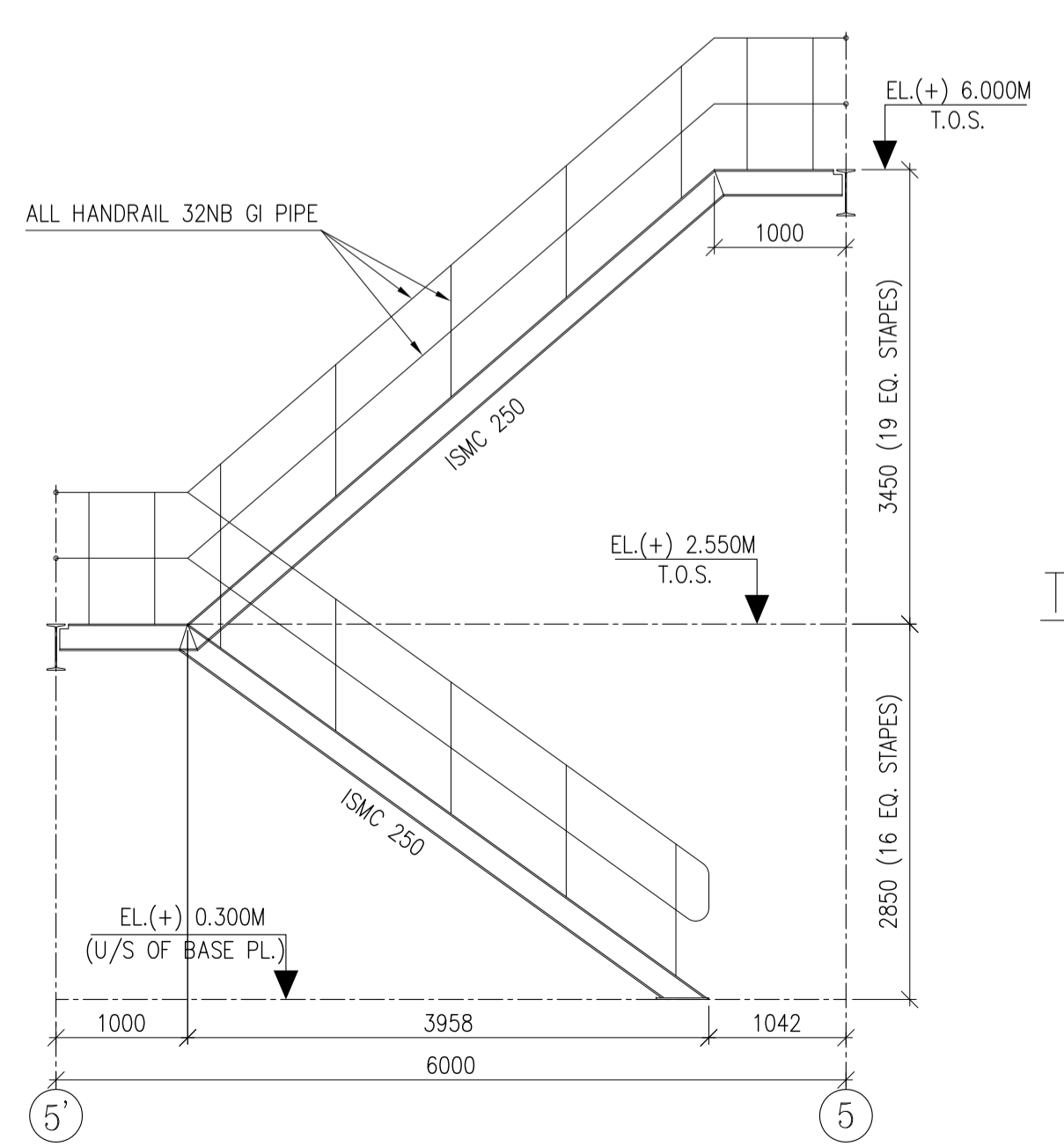
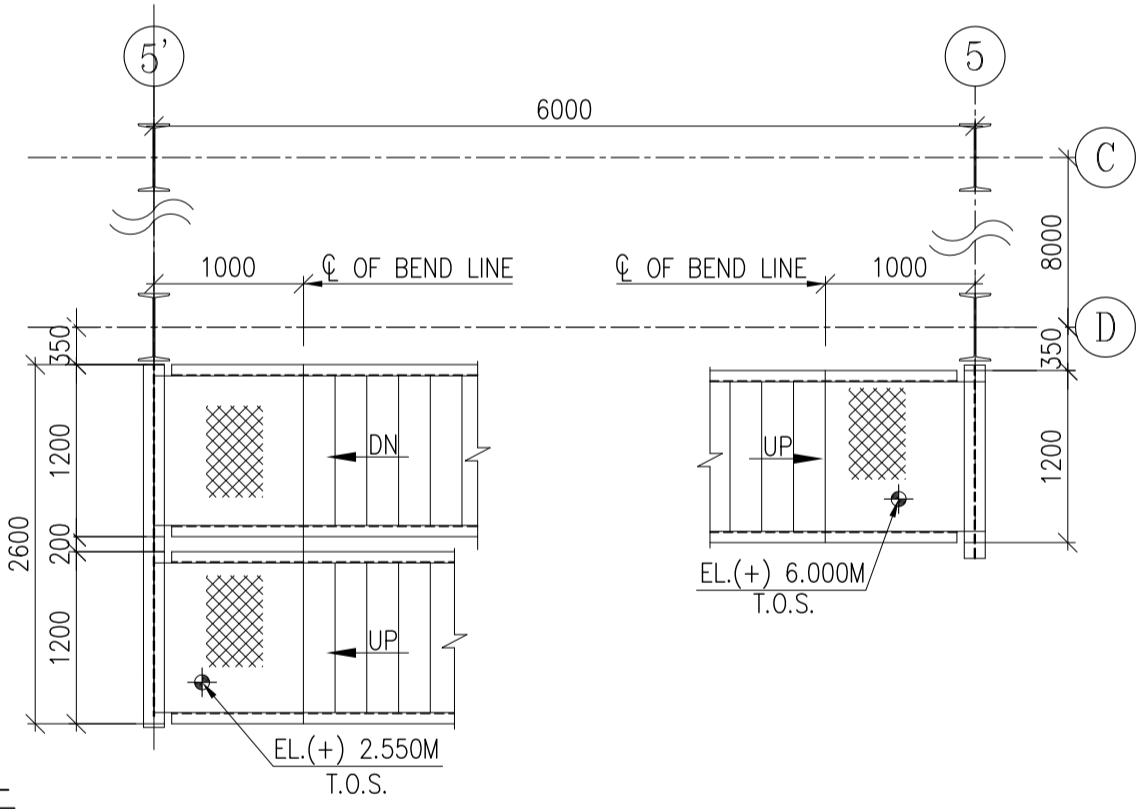
ELEVATION ON LINE (5)



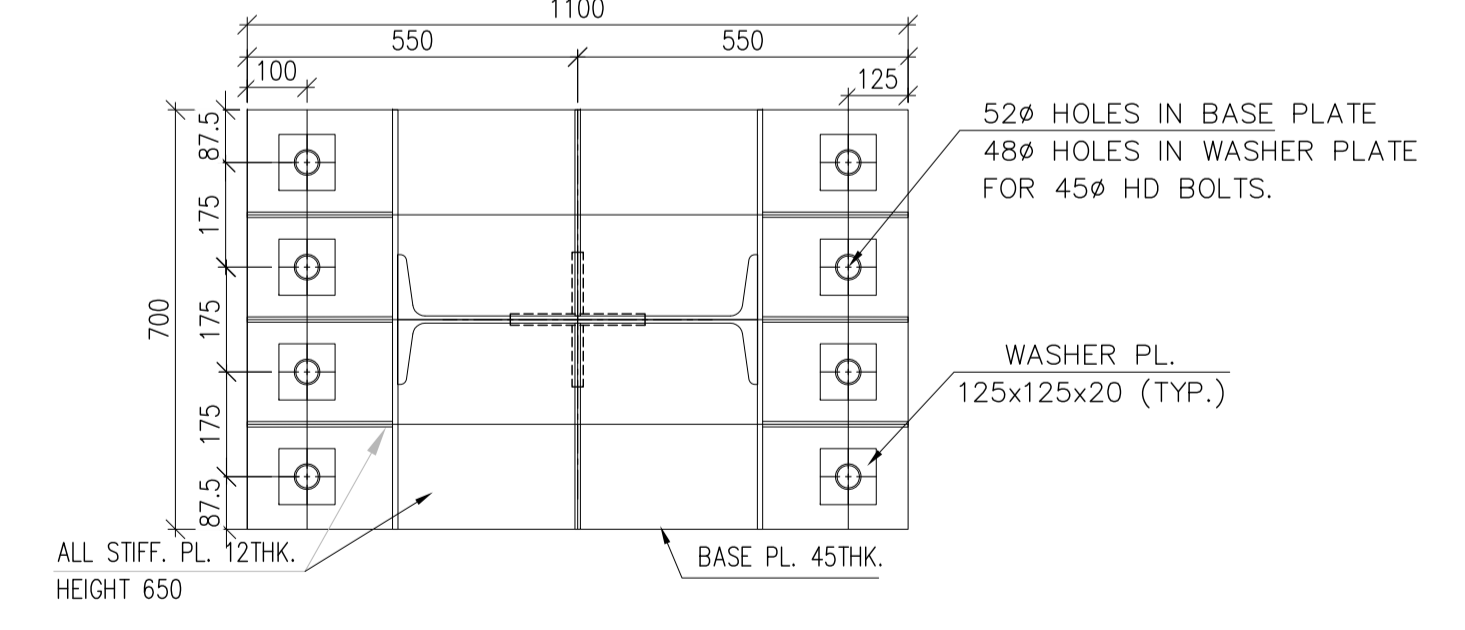
ELEVATION ON LINE (5)



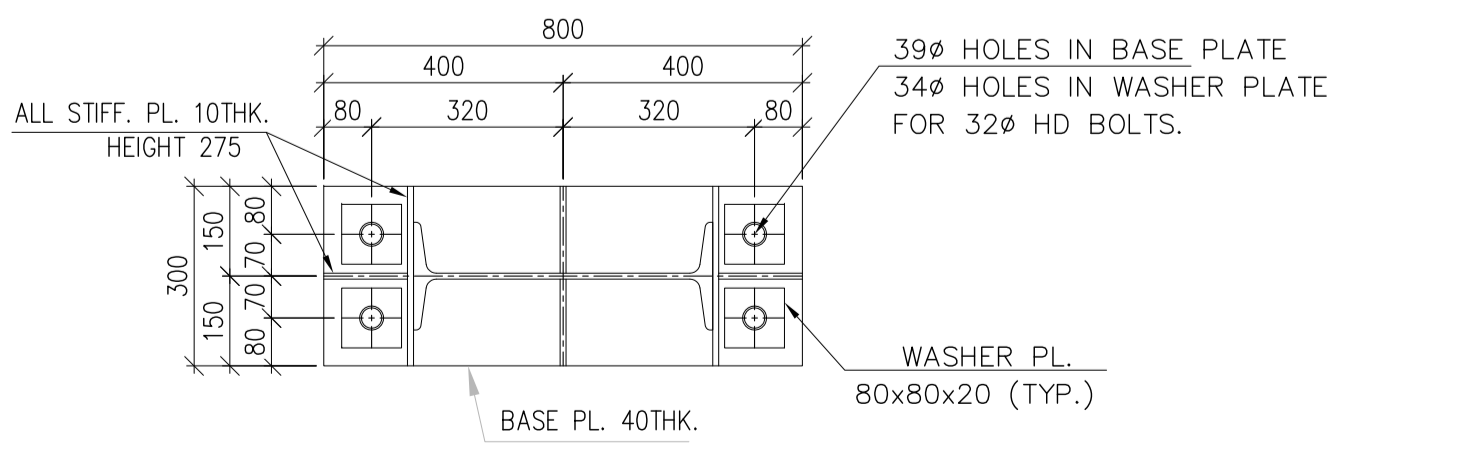
ELEVATION ON LINE (4)



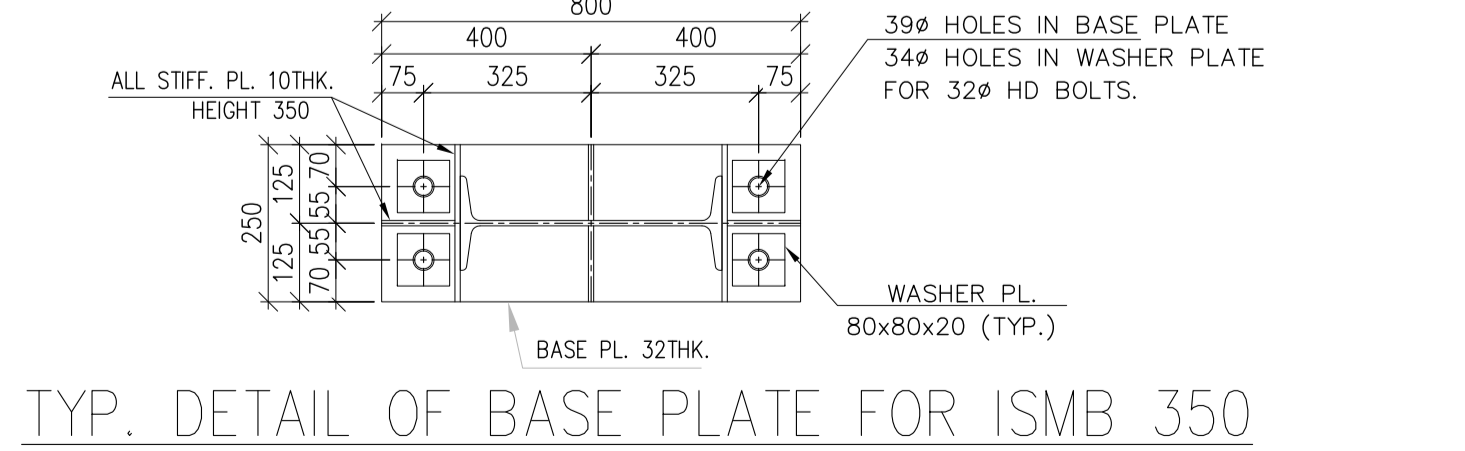
TYP. DETAIL OF BASE PLATE FOR TAPER 450



TYP. DETAIL OF BASE PLATE FOR ISMB 600



TYP. DETAIL OF BASE PLATE FOR ISMB500

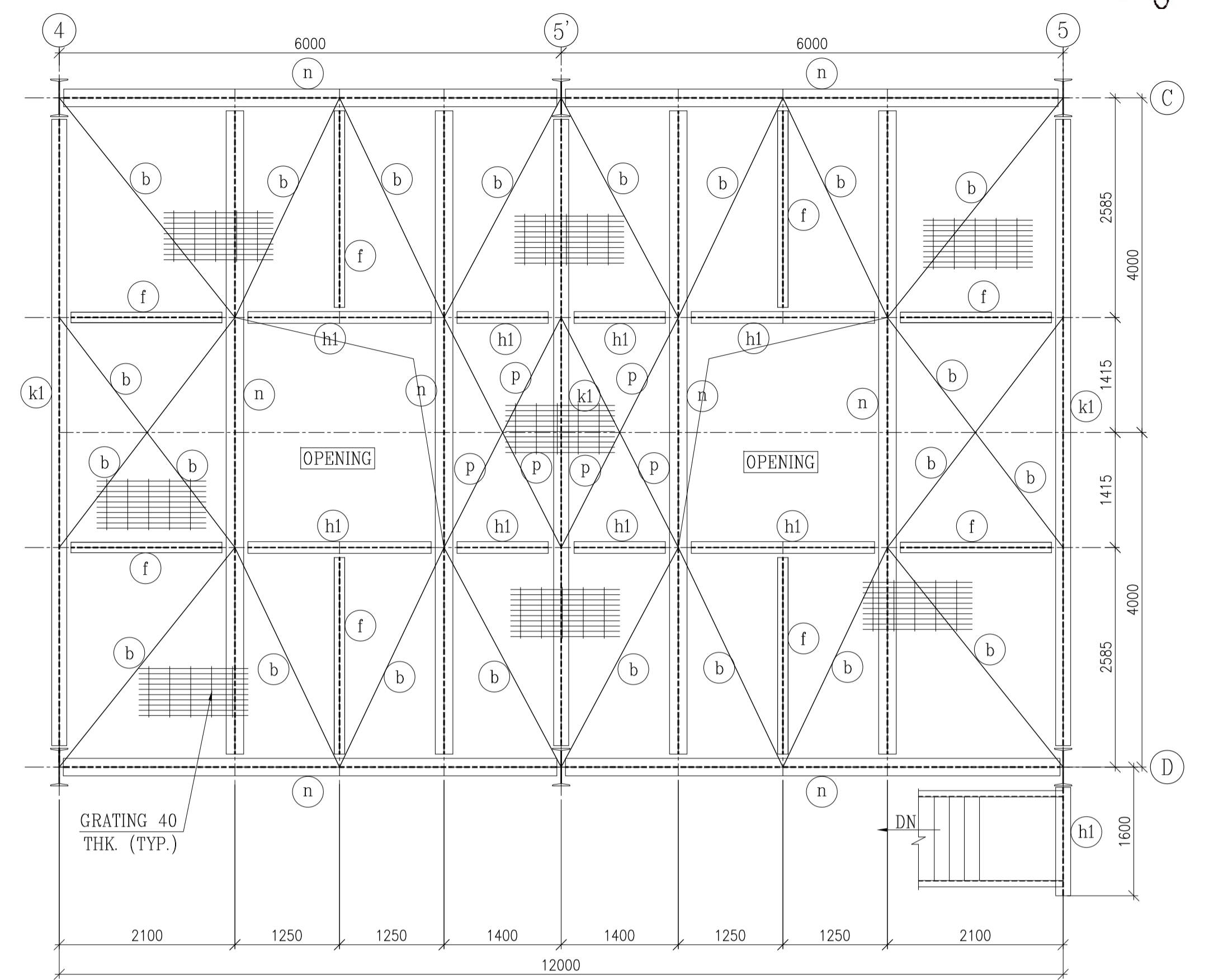
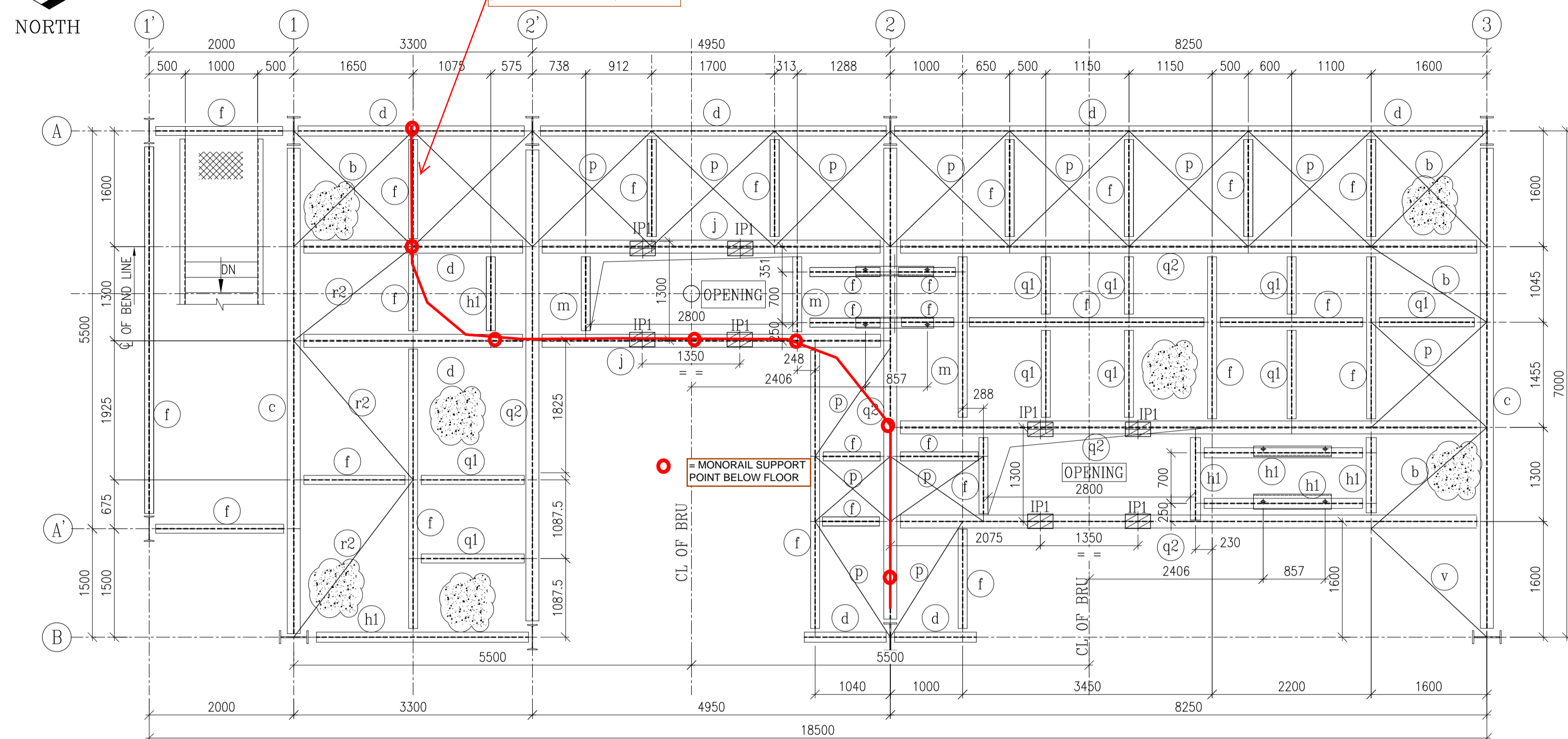
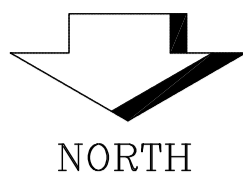


TYP. DETAIL OF BASE PLATE FOR ISMB 350

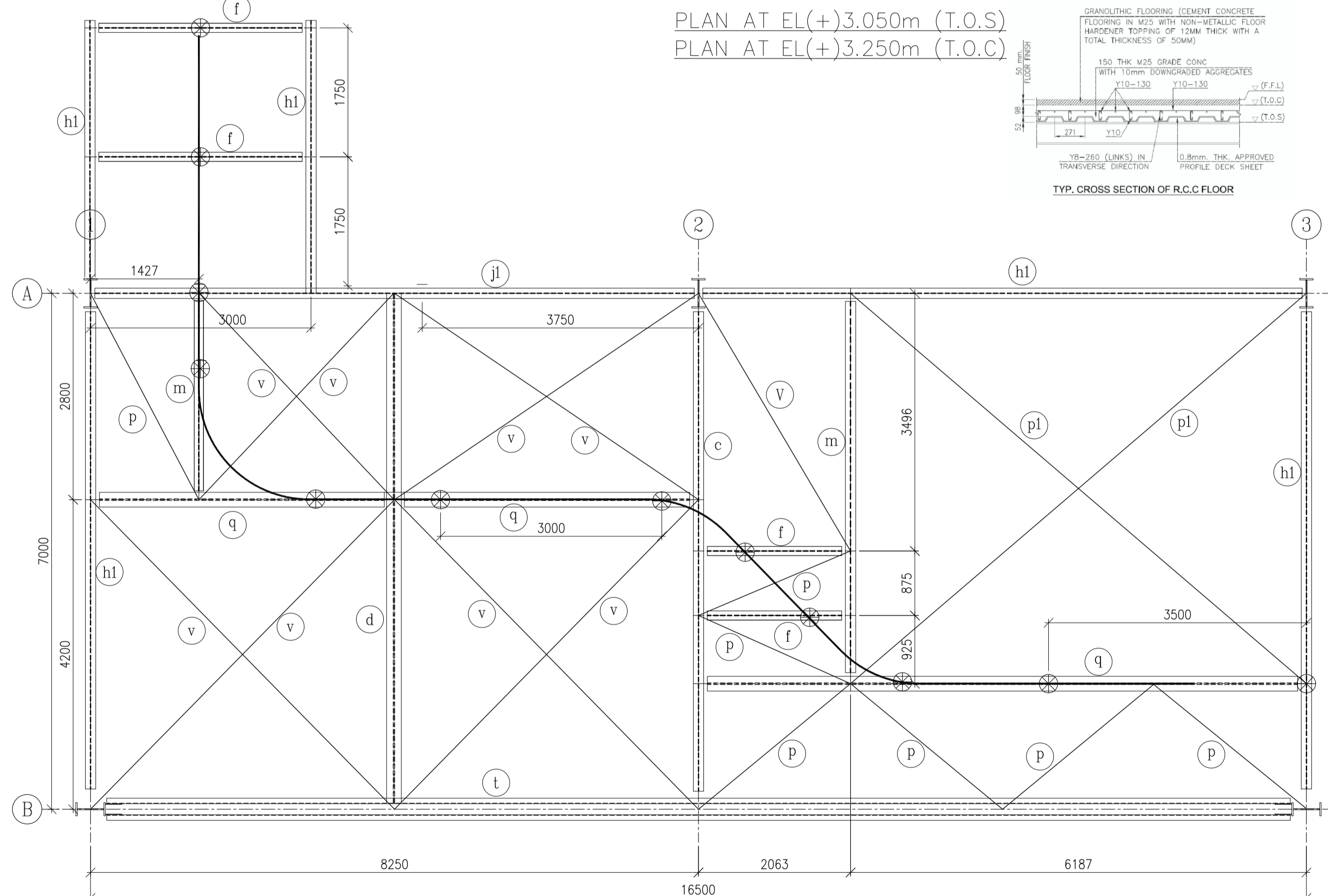
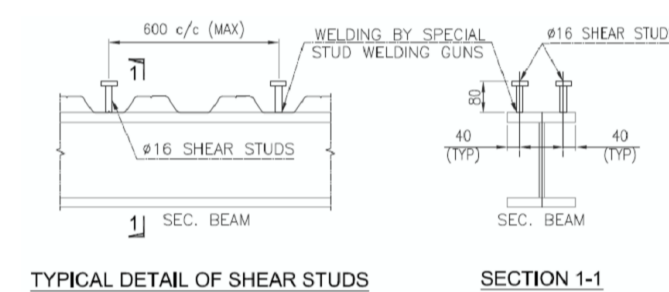
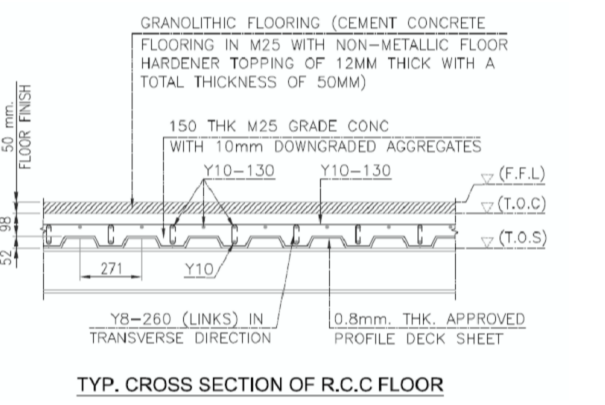
**REFERENCE:-**  
 1. MECH. DRG. NO. 9558-109-LGH-PVM-B-010 REV-04

**NOTES:**  
 1. ALL DIMENSIONS ARE IN MILLIMETER & ELEVATIONS ARE IN METER.  
 2. ALL FILLET WELDS SHALL BE MINIMUM 6mm THK UNLESS NOTED OTHERWISE.  
 3. ALL HOLES ARE 21.5Ø DRILLED HOLES FOR M20 ERECTION BOLTS UNLESS NOTED OTHERWISE.  
 4. ALL GUSSET PLATES ARE 10mm THK UNLESS NOTED OTHERWISE.  
 5. GRADE OF STEEL E 250 AS PER IS:2062.  
 6. THIS DRAWING READ IN CONJUNCTION WITH DRAWING NO. 9558-001-109-PVC-C-032 & 9558-001-109-PVC-C-033

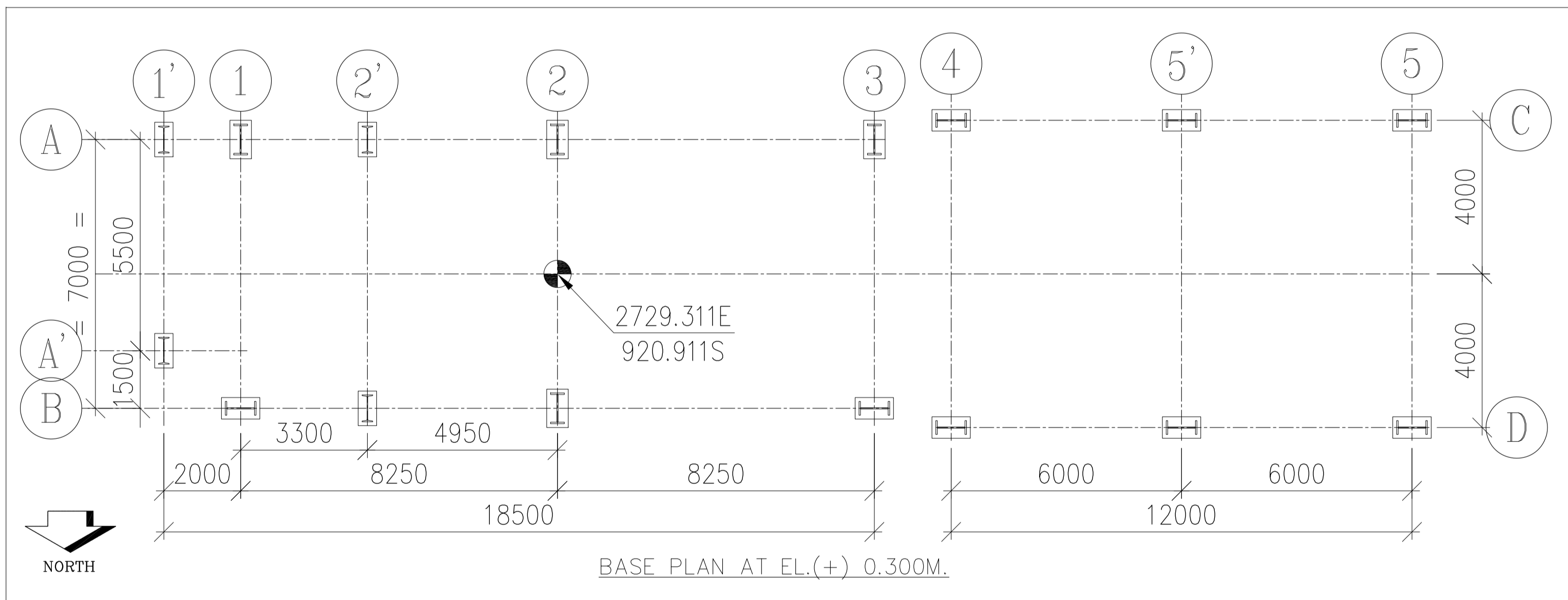
OWNER & CONSULTANT: <b>NTPC Limited</b> (A GOVERNMENT OF INDIA ENTERPRISE)		PROJECT: 3X660MW NTPC BARH STAGE-I FGD	
CONTRACTOR: <b>BHARAT HEAVY ELECTRICALS LIMITED</b> INDUSTRIAL SYSTEMS GROUP, BANGALORE.		TITLE: LTP-1 GA OF ELEVATION AND STAIRCASE	
JOB No.	STATUS OF DRAWING	CUSTOMER PACKAGE CODE	LHP
DISTRIBUTION OF PRINTS	QTY.	DISCIPLINE	M C E I L
REV.	ALTERED	NAME	SIGN.
01	CHECKED	PANCHU	-SD-
	APPROVED	P. REDDY	-SD-
ZONE	RCC FLOOR SLAB INTRODUCED AS PER LATEST MECH. GA	DATE	11.11.2019
		DATE	16.08.19
		DATE	20.08.19
		DATE	21.08.19
		DATE	23.08.19
NTPC DRG. NO.: 9558-001-109-PVC-C-031		REV. NO.: 01	
BHEL DRG. NO.: IS-1-GA-723-404-C032		SCALE: 1:1	
SHEET NO.: 2		NO. OF SHEETS: 2	



PLAN AT EL(+).3.050m (T.O.S)  
PLAN AT EL(+).3.250m (T.O.C)



PLAN AT TIE LEVEL AT EL(+).9.700M.



BASE PLAN AT EL.(+) 0.300M.

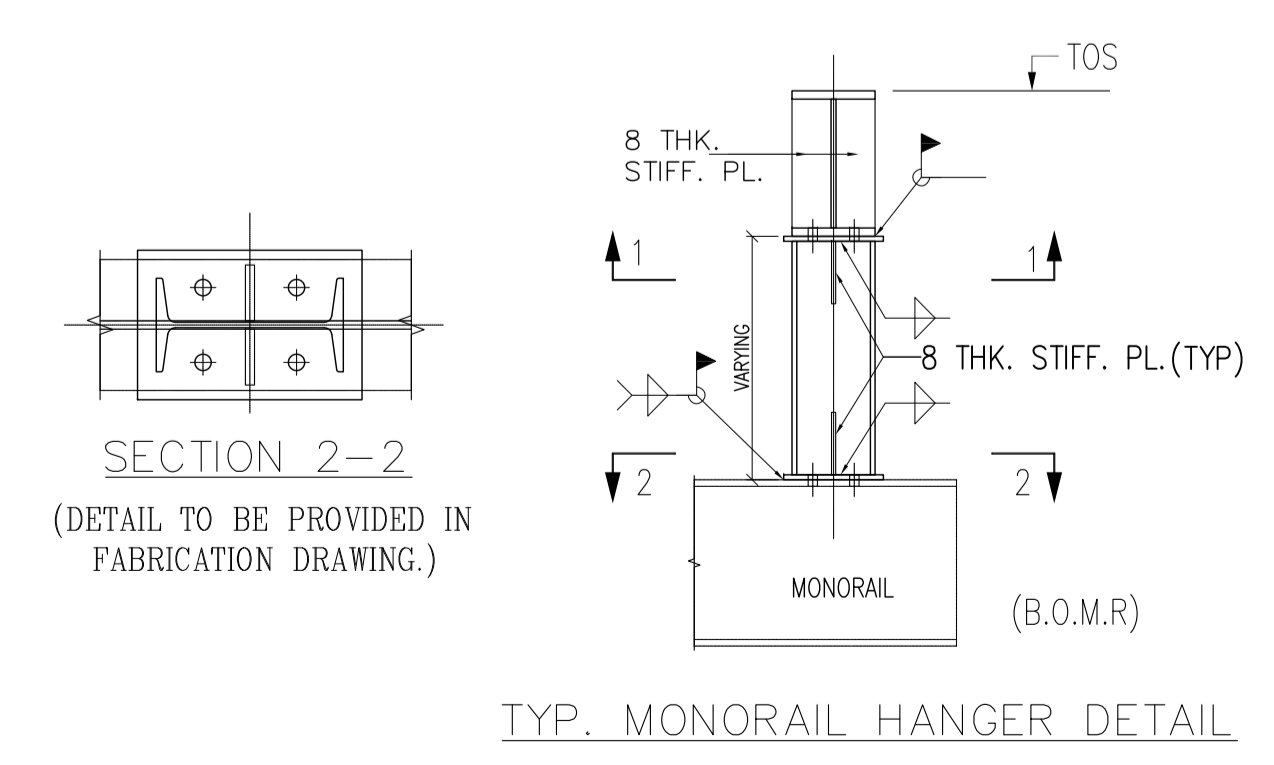
- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETER & ELEVATIONS ARE IN METER.
  2. ALL FILLET WELDS SHALL BE MINIMUM 6mm THK UNLESS NOTED OTHERWISE.
  3. ALL HOLES ARE 21.5Ø DRILLED HOLES FOR M20 ERECTION BOLTS UNLESS NOTED OTHERWISE.
  4. ALL GUSSET PLATES ARE 10mm THK UNLESS NOTED OTHERWISE.
  5. GRADE OF STEEL E 250 AS PER IS:2062.
  6. THIS DRAWING READ IN CONJUNCTION WITH DRAWING NO. 9558-001-109-PVC-C-031 & 9558-001-109-PVC-C-033

**LEGEND:**

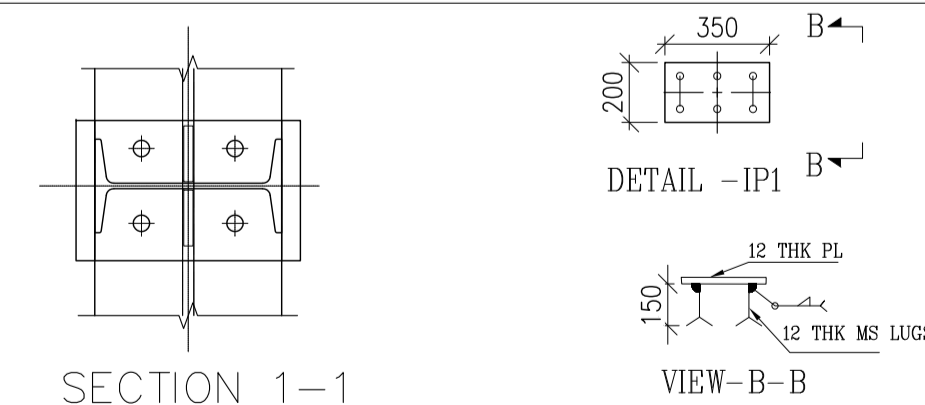
F.F.L	- FINISHED FLOOR LEVEL
F.G.L	- FINISHED GRADE LEVEL E.L.
-	- ELEVATION LEVEL
	- RCC FLOOR
	- 40 THICK GRATING

**REFERENCE: -**

1. MECH. DRG. NO. 9558-109-LGH-PVM-B-010 REV-04



TYP. DETAIL OF END STOPPER OF MONORAIL



SECTION 1-1  
(DETAIL TO BE PROVIDED IN FABRICATION DRAWING.)

OWNER & CONSULTANT: <b>NTPC Limited</b> (A GOVERNMENT OF INDIA ENTERPRISE)					
PROJECT: 3X660MW NTPC BARH STAGE-I FGD					
CUSTOMER PACKAGE CODE: LHP					
CONTRACTOR: <b>BHARAT HEAVY ELECTRICALS LIMITED</b> INDUSTRIAL SYSTEMS GROUP, BANGALORE					
JOB NO.:					
TITLE: LTP-1 GA OF FLOOR PLAN					
REV. No.	NAME	SIGN.	DATE	DEPT.	CODE
01	ALTERED PANCHU	-SD-	11.11.2019		
	CHECKED ABD	-SD-	11.11.2019		
	APPROVED P. REDDY	-SD-	11.11.2019		
ZONE	RCC FLOOR SLAB INTRODUCED AS PER LATEST MECH. GA	DRN.	SANTANU	UNTO. DWG. C/M/S	ISO : 2768
APPD.	SCC		23.08.19		
NTPC DRG. NO. : 9558-001-109-PVC-C-032		REV. NO. :			
BH&EL DRG. NO. : IS-1-GA-723-404-C033		SCALE : 1:1		SHEET NO. : 1	
		NO. OF SHEETS : 1			

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FORM-66.101

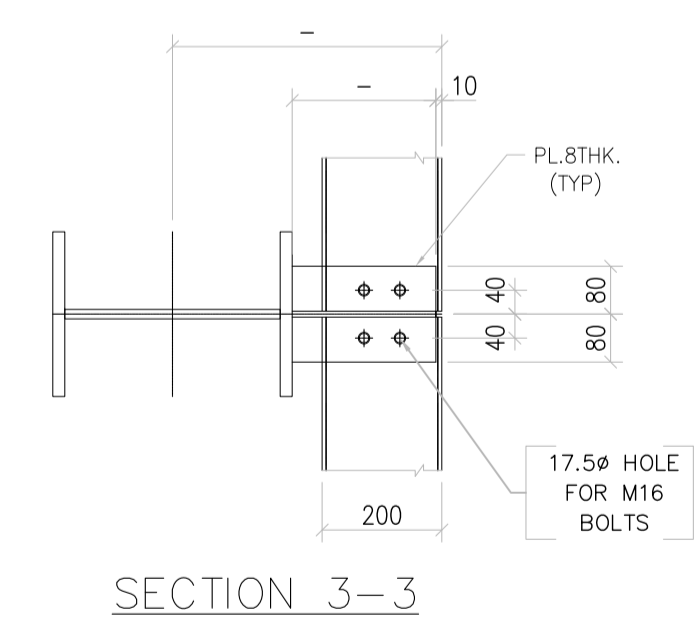
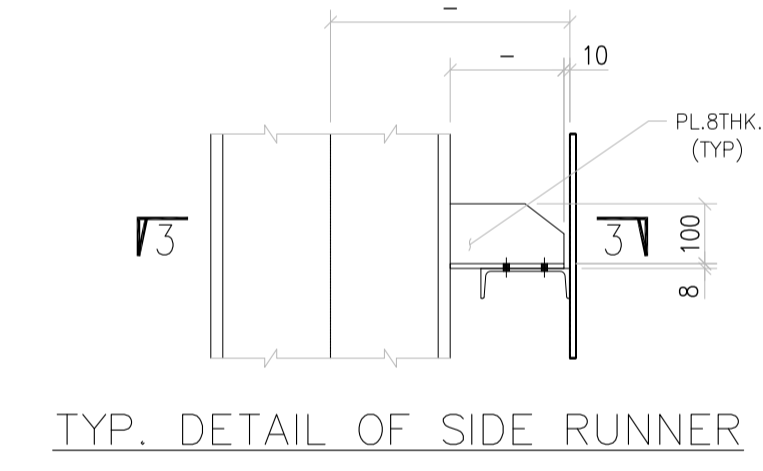
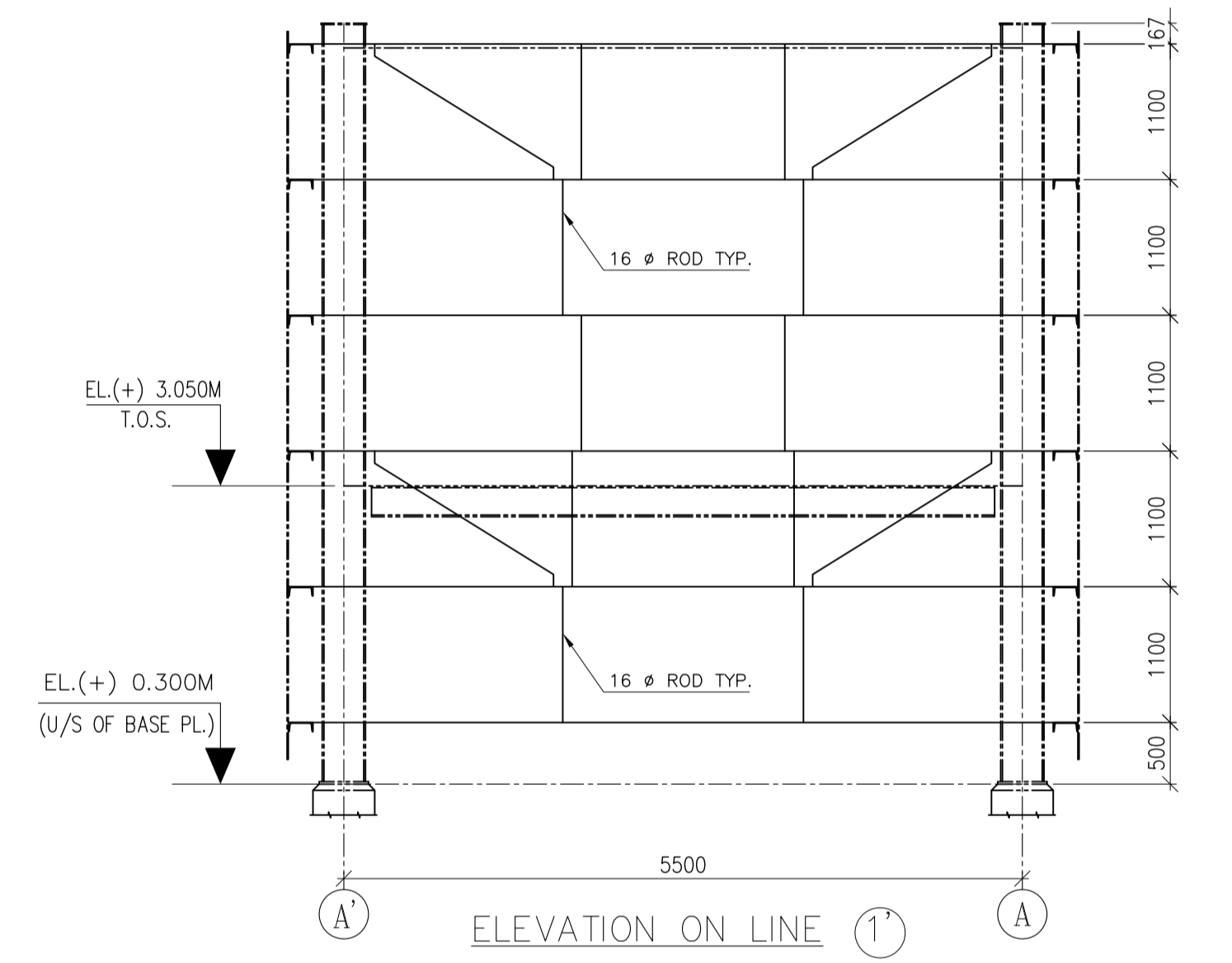
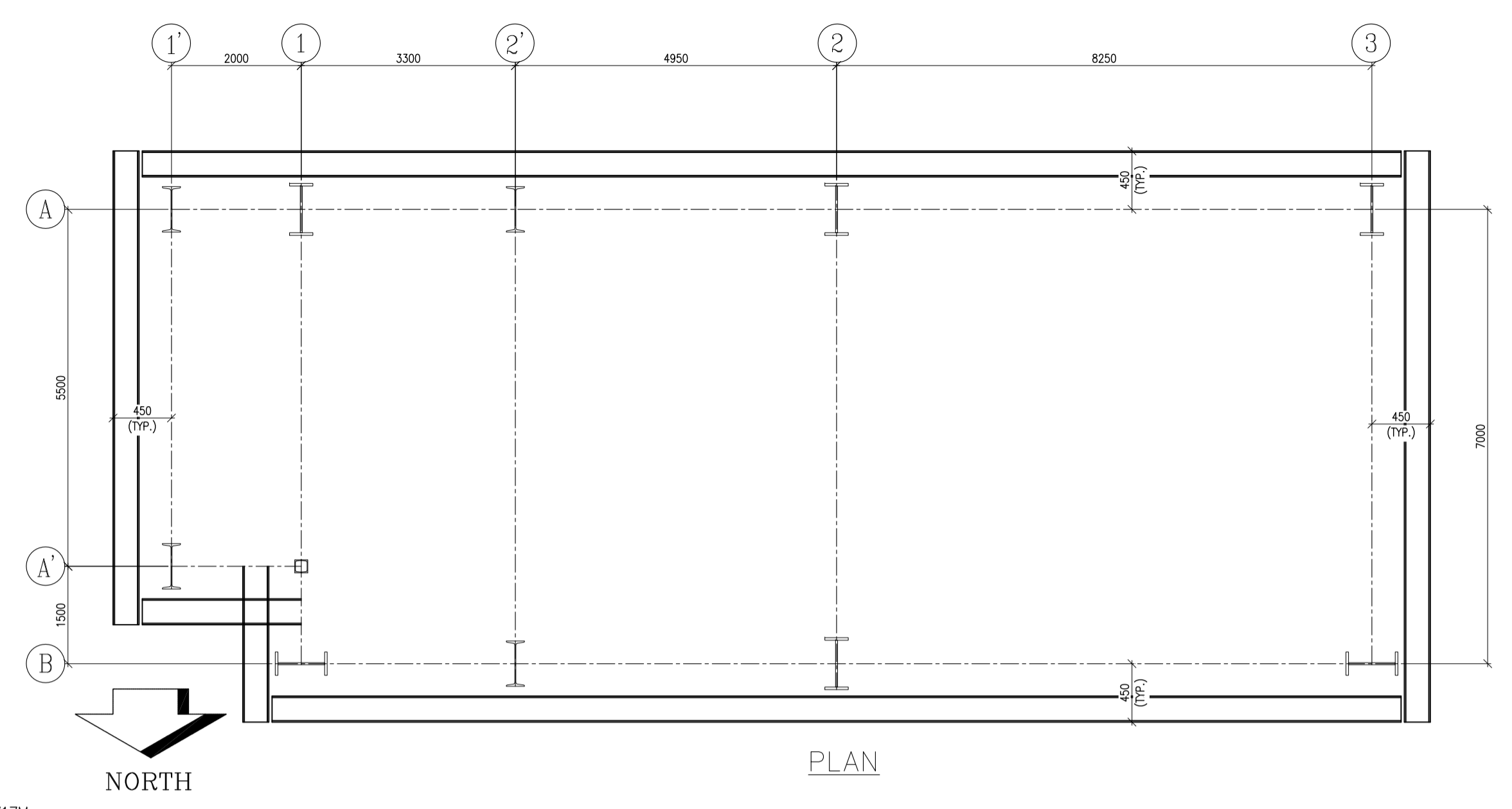
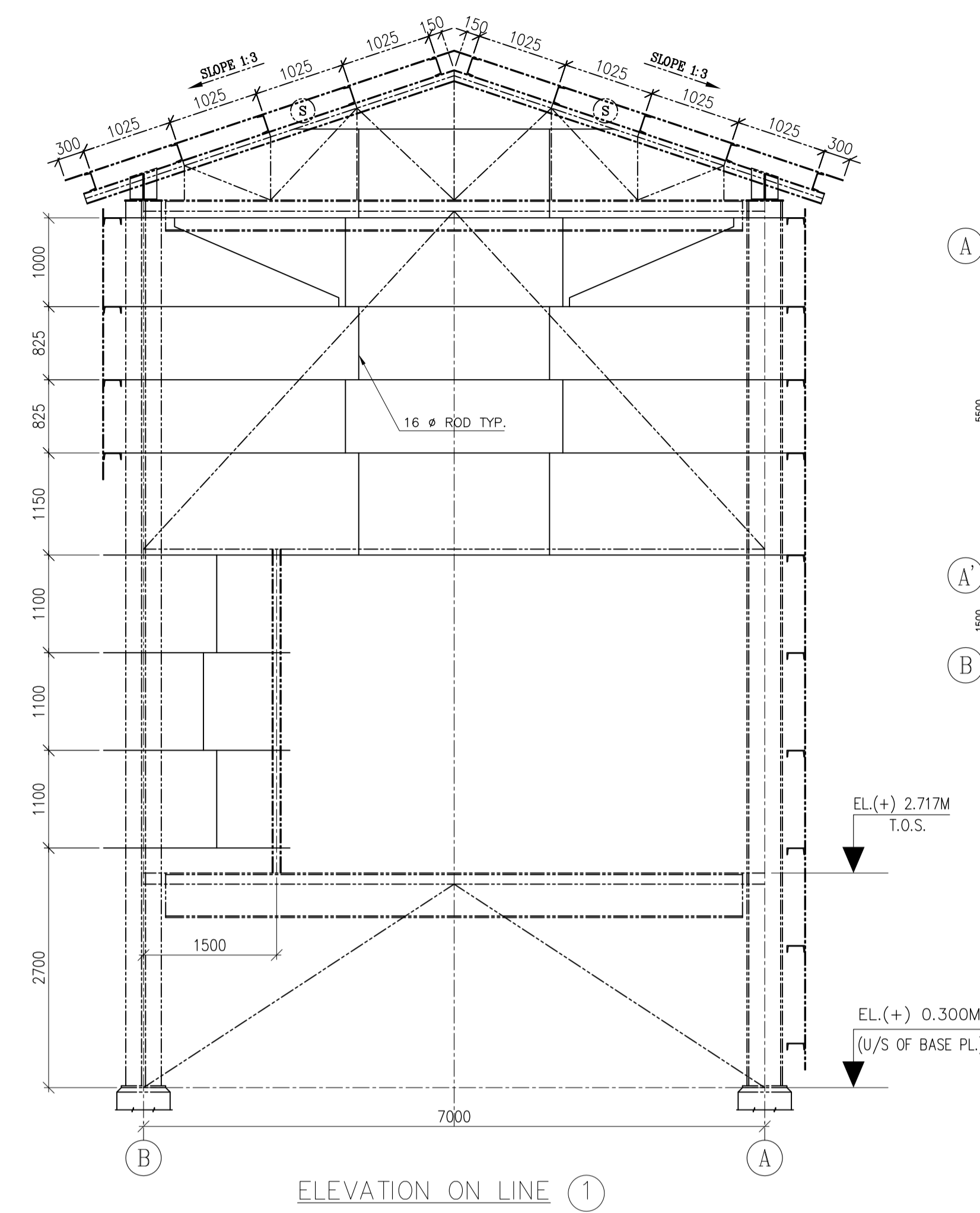
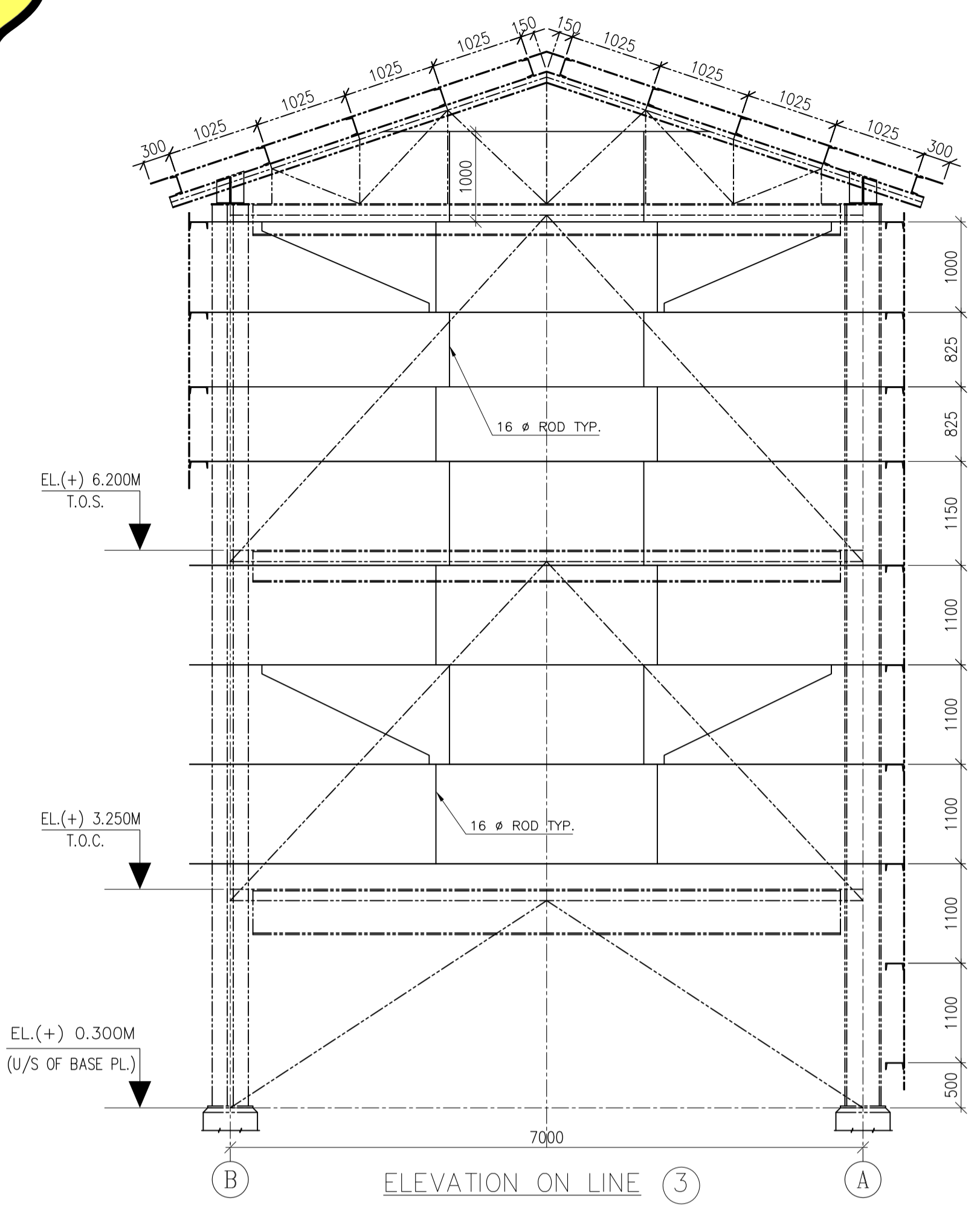
Digitally signed by Ashish Ranjan  
 Date: 2019.11.19 19:08:18 IST  
 Reason: CAT catrel  
 Location: NTPCEOC

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FIRST ANGLE PROJECTION

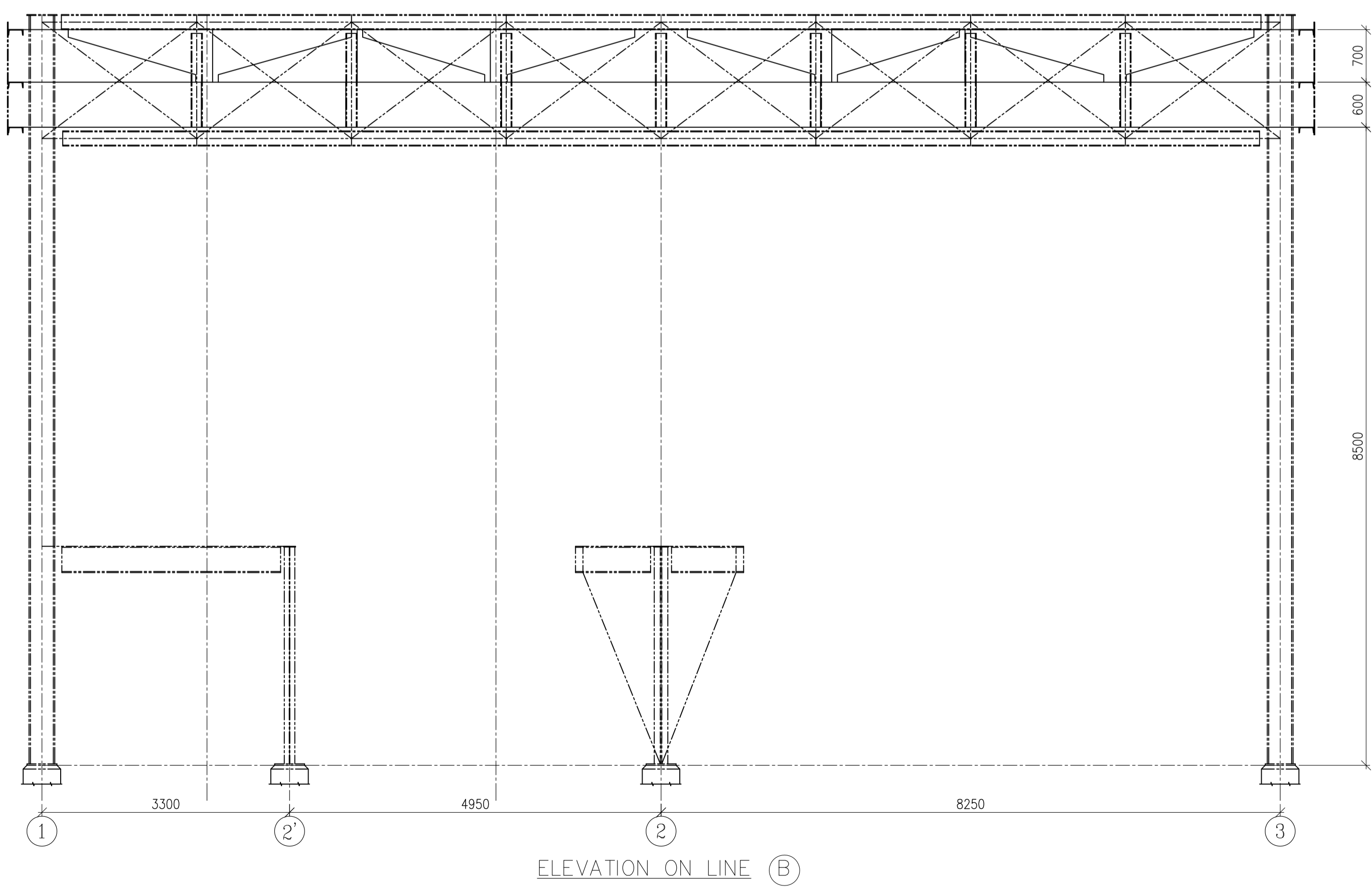
ALL DIMENSIONS ARE IN MM

DO NOT SCALE. IF IN DOUBT, ASK.

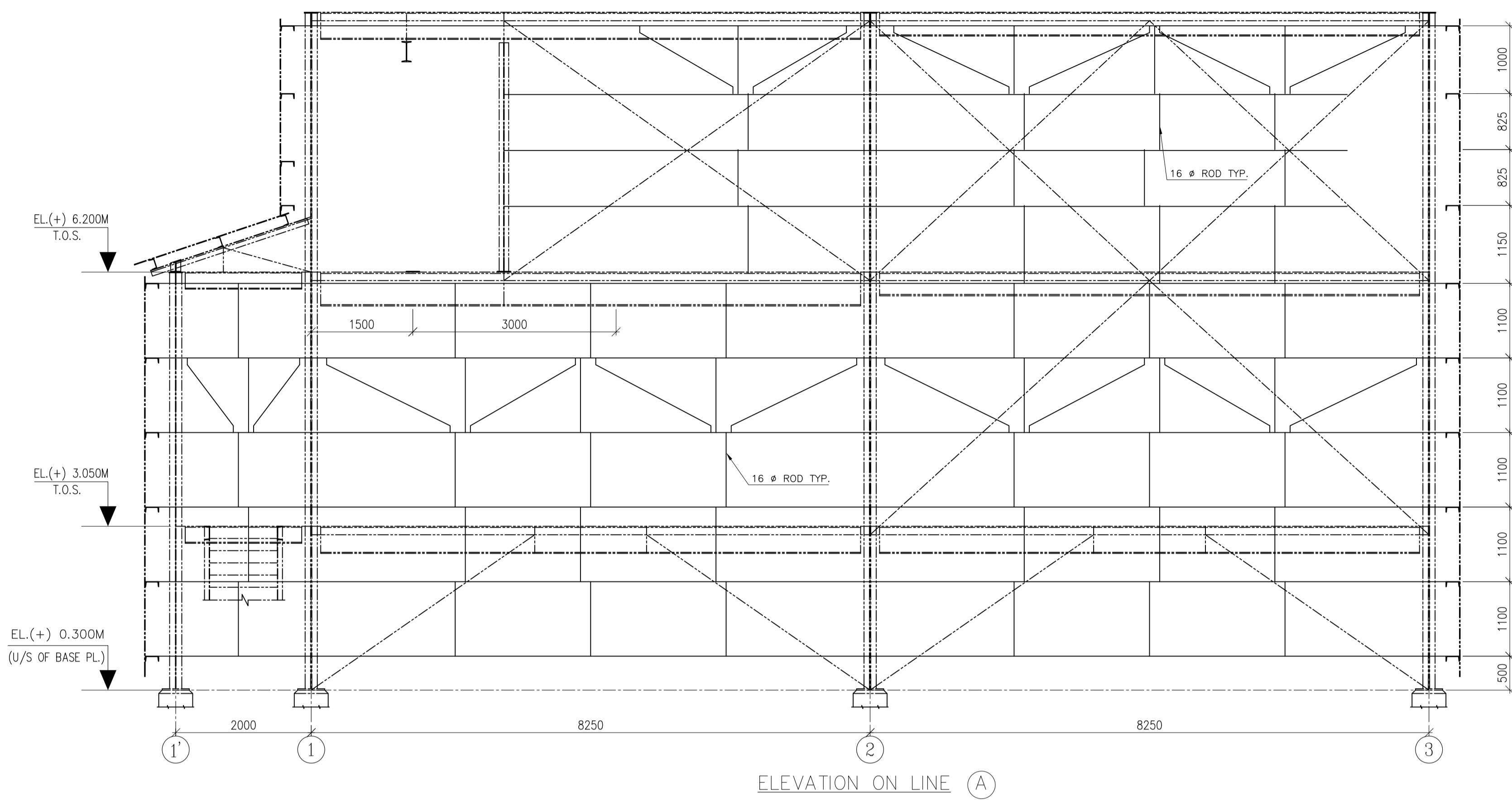


NOTES: -  
 1. THIS DRAWING READ IN CONJUNCTION WITH DRAWING NO. 9558-001-109-PVC-C-033 (SH. 2)

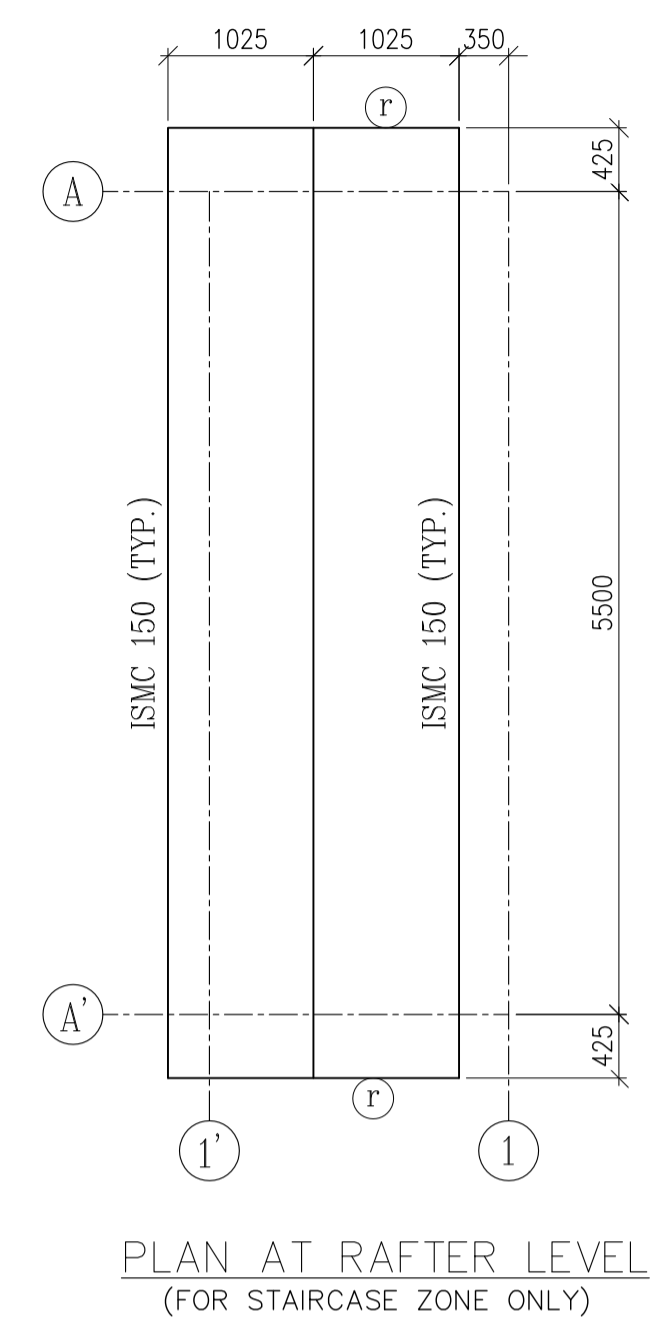
SCHEDULE OF SIDE RUNNER		
SPAN (S)	MEMBER	SYMBOLS
S > 0.000M & < 4.000M	ISMC 125	⌋
S > 4.000M & < 8.250M	ISMC 200	⌋



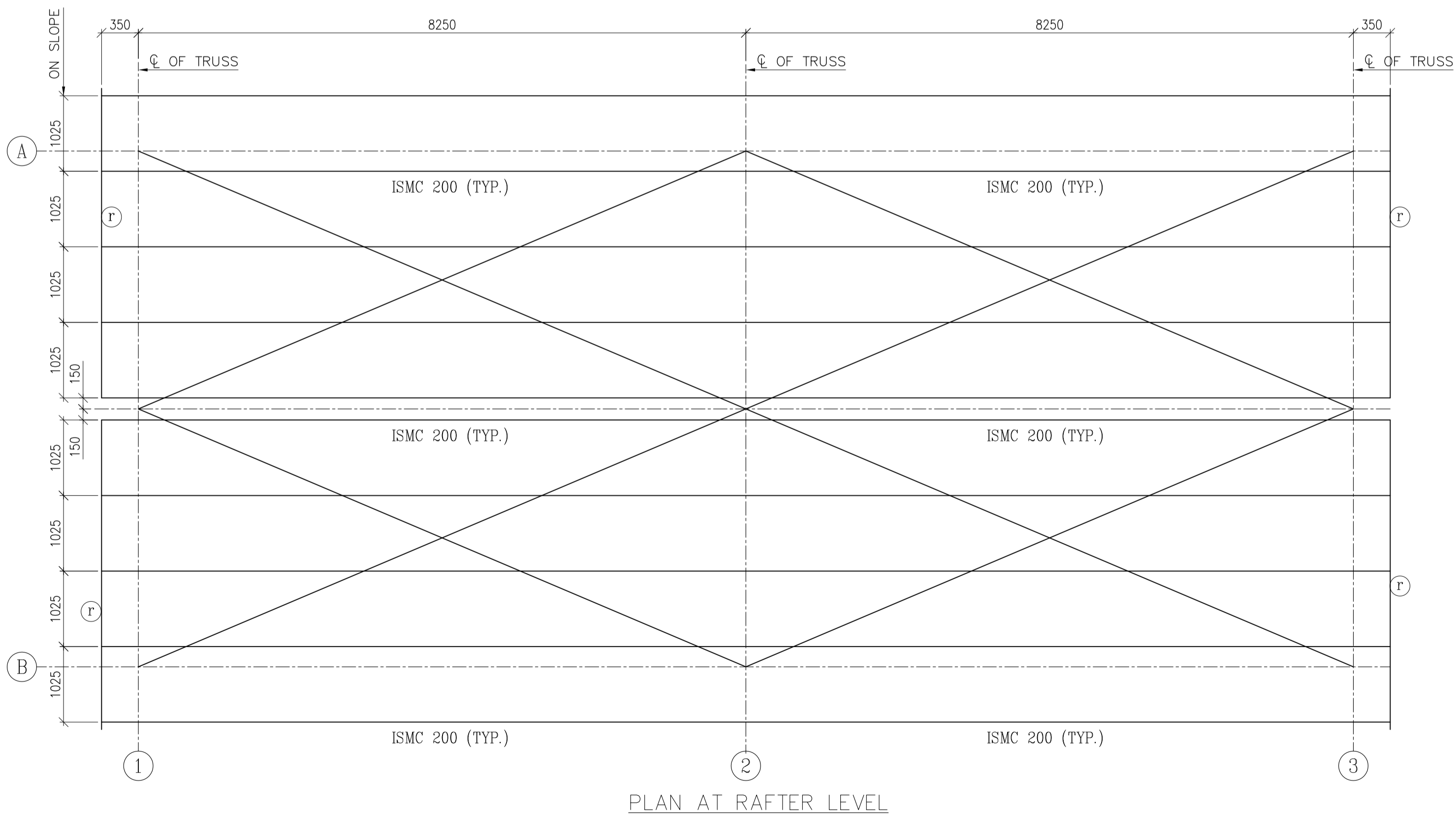
OWNER & CONSULTANT: <b>NTPC Limited</b> (A GOVERNMENT OF INDIA ENTERPRISE)		PROJECT: 3X660MW NTPC BARH STAGE-I FGD	
JOB No.:		CONTRACTOR: <b>BHARAT HEAVY ELECTRICALS LIMITED</b> INDUSTRIAL SYSTEMS GROUP, BANGALORE	
STATUS OF DRAWING:		TITLE: LTP-1 GA OF SIDE RUNNER	
DISTRIBUTION OF PRINTS:		NTPC DRG. NO: 9558-001-109-PVC-C-033	
REV. No.:		BHEL DRG. NO: IS-1-CA-723-404-C036	
REV. 01	ALTERED PANCHUJ -SD- 11.11.2019	NAME	DATE
	CHECKED ABD -SD- 11.11.2019	DESN.	16.08.19
	APPROVED P. REDDY -SD- 11.11.2019	DRN.	20.08.19
ZONE	REVISAS PER NTPC COMMENTS & LATEST MECH. GA	CHKD. P. REDDY	21.08.19
		APPD. SCC	23.08.19



ELEVATION ON LINE A



PLAN AT RAFTER LEVEL  
(FOR STAIRCASE ZONE ONLY)



PLAN AT RAFTER LEVEL

REFERENCE: -

- 1. MECH. DRG. NO. 9558-109-LGH-PVM-B-010 REV-04

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETER & ELEVATIONS ARE IN METER.
2. ALL FILLET WELDS SHALL BE MINIMUM 6mm THK UNLESS NOTED OTHERWISE.
3. ALL HOLES ARE 21.5Ø DRILLED HOLES FOR M20 ERECTION BOLTS UNLESS NOTED OTHERWISE.
4. ALL GUSSET PLATES ARE 10mm THK UNLESS NOTED OTHERWISE.
5. GRADE OF STEEL E 250 AS PER IS:2062.
6. THIS DRAWING READ IN CONJUNCTION WITH DRAWING NO. 9558-001-109-PVC-C-031 & 9558-001-109-PVC-C-032

NOTES: -

1. THIS DRAWING READ IN CONJUNCTION WITH DRAWING NO. 9558-001-109-PVC-C-033 (SH. 1)

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 INVENTORY NO. SIGN & DATE REF.DRG.NO. FORM-66.101

OWNER & CONSULTANT: <b>NTPC Limited</b> (A GOVERNMENT OF INDIA ENTERPRISE)		PROJECT: 3X660MW NTPC BARH STAGE-I FGD	
CUSTOMER PACKAGE CODE: LHP		CONTRACTOR: BHARAT HEAVY ELECTRICALS LIMITED INDUSTRIAL SYSTEMS GROUP, BANGALORE	
JOB No.:		TITLE: LTP-1 GA OF SIDE RUNNER AND RAFTER PLAN	
STATUS OF DRAWING		DISCIPLINE: <input checked="" type="checkbox"/> M <input type="checkbox"/> C <input type="checkbox"/> E <input type="checkbox"/> I <input type="checkbox"/> L	
DISTRIBUTION OF PRINTS QTY.:		JOB No.:	
REV. No.	NAME	SIGN.	DATE
01	ALTERED PANCHUJ	-SD-	11.11.2019
	CHECKED ABD	-SD-	11.11.2019
	APPROVED P. REDDY	-SD-	11.11.2019
ZONE	REVISED AS PER NTPC COMMENTS & LATEST MECH. GA		
	NAME	SIGN.	DATE
	DESIGNER ABD		16.08.19
	CHKD. SANTANU		20.08.19
	APPD. P. REDDY		23.08.19
UNTO. DWG. NO. C/M/18 ISD : 2768		NTPC DRG. NO: 9558-001-109-PVC-C-033 REV. NO: 01	
BHEL DRG. NO: IS-1-CA-723-404-C036		SCALE: 1:1 SHEET NO.: 2 NO. OF SHEETS: 2	