



**MANOHAR PARRIKAR INSTITUTE FOR
DEFENCE STUDIES AND ANALYSES**

मनोहर पर्रिकर रक्षा अध्ययन एवं विश्लेषण संस्थान

**TENDER DOCUMENT FOR “FOR “ Supply , Installation , testing and Commissioning
of shed for DG Sets at MP-IDSA ”. (IN TWO BID SYSTEM).**

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No 1, Development Enclave, Rao Tula Ram Marg, Delhi Cantt, New Delhi – 110 010.

Ph. No., 26717983-7305

Email: estatecell.idsa @nic.in

F.No. MP-IDSA/EM/Outsourcing/Day to Day maint/2021. Date: 15.09.2021

E-TENDER NOTICE FOR “Supply , Installation , testing and commissioning of shed for DG Sets”

(IN TWO BID SYSTEM)

Online bids are invited under two bid system from experienced contractors / agencies **for SITC of shed** at MP-IDSA premises located at No. 1 Development Enclave, Rao Tula Ram Marg, Delhi Cantt, New Delhi -110 010 as per details given in formats. **The bids should remain valid up to 90 days from the last date of submission of bids.**

Detailed Tender Documents are available on line from the date of tender publication at **<https://www.mstcecommerce.com>, www.idsa.in** and **<https://www.eprocure.gov.in>**. The interested bidders are advised to register themselves with e-procurement Portal at - <https://www.mstcecommerce.com> to participate in the e-Tender. The bidders should download and then upload duly signed tender form and their bids along with scanned copies of all the relevant certificates, documents etc. in support of their technical bids and financial bids on the <https://www.mstcecommerce.com>, latest by 11th Oct 2021 by 1500 hrs. Hard copies of the relevant documents also to be submitted along with (1) Demand Draft for Rs. 35000/- (**Rupees Thirty Five thousand only**) in favour of “**MP-IDSA**” payable at **New Delhi** as Earnest Money Deposit and (2) all documents signed and stamped, which shall be submitted in sealed cover addressed to the **Assistant Director (admin)** , **Manohar Parrikar Institute for Defence Studies and Analyses**, may be sent at the Institute’s address mentioned above either by Speed Post / By hand delivery at Tender Box kept at the reception office, should reach on or before **1500 hrs, 11th Oct 2021** duly mentioning on top right hand corner of the sealed

envelope “EMD/ and other supporting documents for “ SITC of DG set Shed ”.

All the tenders are to be submitted on the prescribed forms, as enclosed, duly signed, stamped and dated on each page of tender and Annexures as their unconditional and explicit concurrence to the terms and conditions laid down by the Institute.

The online financial bids shall only be opened for technically qualified firms in presence of the bidders or their authorized representative, not more than one person, may be present at the time of opening of the bids, if they desire so.

MP-IDSA reserves the right to accept or reject any or all quotations including the lowest bidder without assigning any reason at its sole discretion and the decision of the MP-IDSA will be final and binding to all concerned.

Critical Dates of Tender:

(i) Publish Date & Time	15/09/2021, 10:00 hrs
(ii) Document Download Start Date & Time	15/09/2021, 10:30 hrs
(iii) Bid Submission Start Date & Time	15/09/2021, 11:00 hrs
(iv) Bid Submission End Date & Time	11/10/2021, 15:00 hrs
(v) Offline submission ,EMD, and other supporting documents	11/10/2021, 15:00 hrs
(vi) Bid Opening Date & Time	12/10/2021, 10:30 hrs
(vii) Cost of Tender	Free of cost

Note : Contractor may inspect the Campus & assess its requirement before bidding the tender. Bidders are also advised to go through e-tendering process which is attached as Annexure I.

Corrigendum / addendum / modification to this tender, if any, will be notified through <https://www.mstcecommerce.com> ,www.idsa.in and <https://eprocure.gov.in> only.

Col Rajeev Agarwal (Retd)
Assistant Director (Admin)

Annexure I

Process of E-tender:

Registration: The process involves bidder's registration with MSTC e-procurement portal free of cost. Only after registration, the bidder(s) can submit his/their bids electronically. Electronic Bidding for submission of Technical Bid as well as commercial Bid will be done over the internet. The Bidder should possess Class II or Class III signing type digital certificate. Bidders shall make their own arrangement for bidding from a P.C. connected with Internet. MSTC or MP-IDSA is not responsible for making such arrangement. (Bids will not be recorded without Digital Signature). At <https://www.mstcecommerce.com>

- 1). Bidders are required to register themselves online with <https://www.mstcecommerce.com>
- 2). Bidders will receive a system generated mail confirming their registration in their email which has been provided during filling the registration form. In case of any clarification, please contact MSTC, (before the scheduled time of the e-tender).

MSTC Help Desk: 033-22901004, 011-23212357, 011-23215163, 011-23217850.

The technical Bid and the Price Bid shall have to be submitted online at <https://www.mstcecommerce.com> tenders will be opened electronically on specified date and time as given in the Tender. All entries in the tender should be entered in online Technical & Financial bid Formats without any ambiguity. Information about tenders /corrigendum uploaded shall be sent by email only during the process till finalization of tender by MP-IDSA. Hence, the bidders are required to ensure that their official email I.D. provided is valid and updated at the time of registration of bidder with MSTC (i.e. Agency). Bidders are also requested to ensure validity of their DSC (Digital Signature Certificate).

E-tender cannot be accessed after the due date and time mentioned in NIT.

Bidding in e-tender:-

- a) The process involves Electronic Bidding for submission of Technical and Commercial Bid.

b) The bidder(s) can submit their Technical Bid and Financial Bid through internet in MSTC website <https://www.mstcecommerce.com>

c) System Requirement:

- i) Windows 7 Operating System and above
- ii) Internet Explorer (IE-7) and above Internet browser.
- iii) Signing type digital signature
- iv) Java Runtime Environment 8 update 191 (windows X86 offline) and above software to be downloaded and installed in the system.

To enable ALL active X controls and disables “use pop up blocker” under Tools Internet Options → custom level

Appendix A

Tender Document for Supply , Installation, testing and commissioning of shed for DG Set (Two Bid System)

MEMORANDUM OF WORK IN BRIEF

1	Name of work	SITC of Shed for DG Sets
2.	Earnest Money	Rs 35000/-
3.	Validity period	90 days
4.	Security Deposit	3 % of Annual contract value
5.	Last date of Submission of Tender	11 th Oct 2021 1500 Hrs.
6	Cost of Tender document	Free of cost
7.	Mode of Sending	a. EMD and relevant documents of Technical bid In sealed cover by Speed post/Hand Delivery in the tender box kept at reception . b. Tender sent by ordinary post will be rejected out rightly .
8	Financial Bid	Only technically qualified firm , through online mode only
9.	Description essential to be made on sealed cover	1. Name of work ,Tender No and name of Bidder.

Col Rajeev Agarwal (Retd)
Assistant Director (Admin)

**Manohar Parrikar Institute for Defence Studies and Analyses
No 1, Development Enclave, Rao Tula Ram Marg, New Delhi-110010**

MP-IDSA/Maint of Building /2021-22
Dated: 15/09/ 2021

To,

Subject: SITC of Shed for DG Sets

Online bids are invited as per scope/specifications of work given at Annexure-'A' (enclosed). Conditions of the tender shall be as follows: -

1. Time Schedule

The work shall be completed within 60 days from the date of placing the order. A sum of Rs 500 per day will be charged for delay. Director General MP-IDSA's decision in this regard shall be final and binding.

2. Execution of Work

The materials supplied and /or incorporated into the work shall be best available and strictly conforming to specifications, catalogue, .No, size and dimensions as mentioned and shall be ISI marked as far as possible. The job work shall be executed in best workmanship like manner according to standard engineering practices to the entire satisfaction of the Estate Manager, MP-IDSA.

3. Unit Rate

Unit rate quoted for the work shall be deemed to include for all material and labour, tools & plants ,accessories, as required for proper execution of work complete in all respects. Any missing minor details which are not spelt out in the description of items but are required for proper completion of job work, shall be deemed to have been taken into account in the quoted rates. The rates shall also include for all taxes (excluding the GST) octroi, excise duty, transportation etc. including price escalations, contractor's overheads and profits. Nothing extra shall be admissible on any such account.

4. Approval of Material and Workmanship

All the material and workmanship shall be approved by the Estate Manger . The rejected material shall be removed from the site forthwith and replaced with approved materials at no extra cost. The site shall be cleared of all debris and un-used materials after completing the work . The Contractor will obtain certificate of satisfactory work done from the Estate Cell alongwith architect , then only their bill will be cleared .

5. Delivery of Materials/Items and Completion

Pre-delivery inspection of the material (to be used) will be carried out by the representative of MP- I D S A. These shall be accompanied with delivery challans, indicating description of items/materials, their sizes and quantity. Delivery challans shall be got signed by the user's representative. No payment against the supplies shall be admissible without furnishing signed delivery challans along with Bills. The work shall be completed to the entire

satisfaction of the Estate Manager, MP-IDSA. On Completion of the work, the contractor shall inform in writing with the date of physical completion of work for final approval and issues of completion certificate.

6. Defect Liability :The work completed shall have defect liability period of 12 months from the certified date of completion. The contractor shall rectify, re-do and/or replace all the components/item of works wherein defects have developed during this period under the direction of the Estate Manager at no extra cost.

7. Earnest Money Deposit : The bidders has to deposit Rs 35000/-in form of Demand Draft . The Demand Draft shall be submitted in sealed envelop alongwith technical bid to office of the Assistant Director . Bids of those bidders who has deposited the demand Draft shall be opened . Demand Draft shall be made in favour of MP-IDSA, New Delhi , Payable at New Delhi . EMD of unsuccessful bidders shall be return immediately after finalizing the tendering process.

8. Submission of Quotation :

The bids duly quoted and signed on all pages along with this letter as token of the acceptance of terms and conditions mentioned herein, should be submitted online "SITC of shed for DG set ", so as to reach on or before 1500 hrs on 11th October , 2021. No Quotation shall be entertained after the last date and time .

8. Payment : Payment shall be made on the basis of completed actual measurement as follows :

- (i) 100% Payment shall be made on satisfactory completion of work
- (ii) Performance guarantee shall be released after completion of defect liability period. (12 months after completion)

9. Penalty due to non performance :

The successful bidder shall nominate a supervisor who will be present during the

operations and shall report to nominated staff of MP-IDSA . In case the contractor failing to honour the terms and conditions of contract/agreement Institute shall be at complete liberty to make alternate arrangement at bidders “ RISK AND COST” and additional cost incurred by the MP-IDSA in this regard shall be fully recovered from successful bidders bills. MP-IDSA shall also be at liberty to recover in full charges incurred due to non performance from the contractor. .

10. **SOP before work** : Contractor is required to get the police verification within a period of one month . The person to be deploy must be covid-19 vaccinated . All employees of the contractor must be free from infectious diseases and medically fit .

Any indecent behavior /suspicious activities of the staff employed shall be viewed seriously and a suitable action shall be taken . The contractor is also required to submit list of workers with Photo ID, educational qualifications, address proof etc before deputing the worker

Contractor shall be solely responsible for the credential / acts of his staff / workers.

MP-IDSA reserve the right to reject the deployment of any person(s) by the contractor and contractor shall cease to deploy any such person/persons forthwith, upon receipt instruction in writing from the Estate Cell. No claim shall be entertained on account of any such rejection.

11.**Dispute Resolution/Arbitration** Disputes if any, with regards to the interpretation, execution and/or implementation of these terms and conditions shall rest exclusively with the Director General, MP-IDSA whose decision shall be final and binding upon the parties. Disputes, if any, with regard to the decision of the Director General, in this regard, shall be referred to arbitration at the hands of a sole arbitrator to be appointed by MP-IDSA and all proceedings in this regard shall be subjected to the sole and exclusive jurisdiction of courts of competent jurisdiction at New Delhi.

12.Bidders have to attach following document with the bid :-

- (i) GST registration No/detail.
- (ii) Proof of current account operating in any of nationalized bank.
- (iii) Proof of registration detail/work order with Government. /Autonomous body (civil /E&M work)
- (iv) Pan Card Copy
- (v) Two references where previous works has been carried out.
- (vi) The Firm should have at least 03 years' experience in relevant field.
- (vii) The firm's average annual turnover during last 3 financial years should not be less than 20 Lakhs .
- (viii) **MSME : Run by Degree Engineer/Diploma Engineer in Mechanical/Civil /Architecture Engineering from AICTE approved Institute shall only be considered . This may be considered as technical specification for MSME participants.**

13. Upon acceptance of bid, no sub letting/transfer would be allowed by the Contractor except with the prior written permission of Estate Manager , MP-IDSA

14. Standard force-majeure conditions shall be applied.

15. **INDENMITY** : The contractor shall indemnify the Institute for an indefinite period and will for over the action/inaction on the part of contractor .

16. No additional payment will be made for minor civil work which come in the way of work. . This should be deemed as a part of the work .

Director General, MP-IDSA reserves the right to accept or reject the lowest or any offer or all offers without assigning any reasons.

Please acknowledge.

Yours Sincerely,

Col Rajeev Agarwal (Retd)
Assistant Director (Admin)

Additional Conditions

1. Only power and water will be provided by us . same has to be used judiciously to avoid wastage of resources .
2. Non other than skilled workmen are to be employed . A proper qualified foreman has to be posted for constant supervision on the job , while the work is proceeding.
3. Proper firefighting cylinders to be kept to avoid any eventuality as the work is over the storage of diesel Generator sets .
4. Whenever any worker is engaged on work at place (elevation above 2 Mtres) from which he is liable to fall, he shall be provided with safety belts equipped which are secured with a minimum of slack , to a fixed structure unless any other effective means such as provision of guard rails or ropes are taken to prevent his falling.
5. All debris to be cleared time to time as it accumulates, and the premises left clean .Workmen shall follow all environmental regulation .
6. The contractor is to make good at his own expense any damage to the structure , equipments , pipes fittings or decorations from his operations .
7. All the T& P is to be arranged by Contractor and nothing extra shall be paid on this account .
8. All the labour bye laws & regulations are to be followed by the contractor. All health and safety regulations to be followed such as goggles , masks, Helmet& safety shoes shall be provided by the contractor to their workmen .
9. The contractor shall make his own arrangement electric connections to equipment like drill machine, welding sets/ Cutter machine etc.
10. The Contractor shall be bound to follow the restrictions on the movement of labour , material imposed by MP-IDSA or any other authority connected with site due to security or any other reason(s) . No Claim shall be entertained on this account .
11. The Contractor shall take all precautions to a accidents by exhibiting necessary cautions boards, lights flags etc . He shall be responsible for all the damages , accidents , caused due to negligence.
12. The contractor shall personally responsible for violation of any guidelines and shall have to pay the fine /penalty imposed by appropriate authority . No claim on this account shall be entertained .

13. The rate quoted by the contractor shall be include with all lead lift and height and nothing extra shall be paid .
14. TDS and WCT will be deducted as per applicable rules .
- 15.The contractor shall be fully responsible for safe custody of the material even if the material are under double lock system.
16. Standard force-majeure conditions would be apply.
17. Contractors are advised to Visit the site before quoting . After opening the bids no excuse will be entertained with regards to site conditions , security restrictions etc.
18. Night stay shall not be permitted. If the contractor wants to work in prolonged hours, them prior permission from Estate cell needs to be obtain.

Director General, MP-IDSA reserves the right to accept or reject the lowest or any offer or all offers without assigning any reasons thereto.

Please acknowledge.

Yours sincerely,

Col Rajeev Agarwal (Retd)
Assistant Director (Admin)

Form of Tender

(Note: the appendix forms part of the tender)

To,

MP-IDSA

No 1, Development Enclave

Rao Tularam Marg, New Delhi-110010.

Sir,

Name of work : Fabrication and Installation of Rain shed .

- a. Having visited the site and examined the conditions of contract, specifications and schedule of quantities for the above named work, we offer to undertake and complete the whole of subject work in conformity with the said conditions of the contract, specifications and schedule of quantities of this tender documents or such other sum as may be ascertained in accordance with the said condition of contract.
- b. We undertake to complete and deliver the whole of the works comprised in the contract within the time started in appendix hereto.
- c. We have independently considered the amount of liquidated damages shown in the appendix hereto and agree that it represents a fair estimates of loss likely to be suffered by you in the event of the works not being completed properly.
- d. We agree to abide by this tender for the period of one year from the date fixed for receiving the same or agreed

extended period and it shall remain binding upon us may be accepted at any time before the expiry of the period.

- e. Unless and until a formal agreement is prepared and executed, this tender together with your written acceptance thereof shall constitute a binding contract between us.
- f. We understand that if our tender is accepted, we are to be jointly and severally responsible for the due performance of the contract.
- g. We understand that you are not bound to accept the lowest or any tender you may receive.

.....

Dated Day of

Signature.....In the capacity of

Duly authorized to sign for and on behalf of.....

Name and address of the tenderer.

(IN BLACK CAPITALS)

Scope of work & Technical specifications

The scope of work includes :

1. Preparation of structural as per approved drawings .
2. Construction /fabrication/Installation of Rain shed complete in all respect .
3. Painting

Sl. No	Item	Approved brand name
1.	Cement	ACC/Ultratech/Ambuja/Lafarge
2.	Reinforcement Steel	TATA/SAIL/Jindal
3.	Structural Steel	TATA/SAIL/JINDAL
4.	Synthetic Enamel Paint & primer	ICI DULUX/ASIAN/BERGER/NEROLAC
5.	HPL wood	Alstone or equivalent

Price Bid

(Through online mode only)

Sr No	Description	Qty	Rate	Amount
1.	Supply, Installation, testing and commissioning of shed for DG sets as per Annexure I . The work is inclusive of all cost, contractor overhead and profit, transportation , labour, etc. Except GST	01 Unit		
Total Amount				

Amount in words :

Note 1. TDS and GST shall be deducted as applicable .

Note 2. If any discrepancy found with the quoted amount in figures and words, higher of the two would be considered.

Annexure I

Itemwise Rates

S.No	Description	Unit	Quantity	Rate	Amount
1	Earth work				
A	Excavation				
	Earth work in excavation in all kind of soils and top layer of plain cement concrete (150mm to 200mm) thick by mechanical means (Hydraulic Excavator)/ by manual for foundation, trenches, plinths or drains including dressing of sides and ramming of bottoms, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50mt.				
	Excavation for Foundation	Cu m	25.92		
	Excavation for Plinth Beam	cum	13.62		
B	Earth Back filling				
	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation and beam etc., consolidating each deposited layer by ramming, watering, brick ballast and reday for plain cement concrete etc, lead up to 50mt. and lift upto 1.5 mt.	Cu m	20.88		
2	CONCRETE WORK- PLAIN & REINFORCED				
A)	Plain Cement Concrete Work				
	Providing & laying in position plain cement concrete with 40mm and down size graded stone aggregate as base or sub-base for foundation and plinth beam etc., including form-work and shuttering. The mix proportion shall be by volume, de-watering if required.				

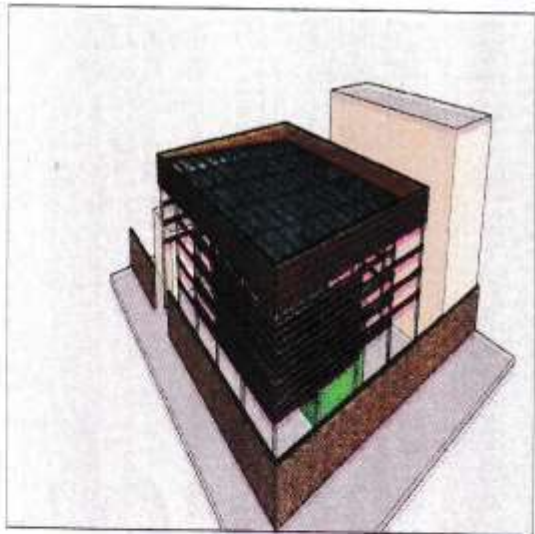
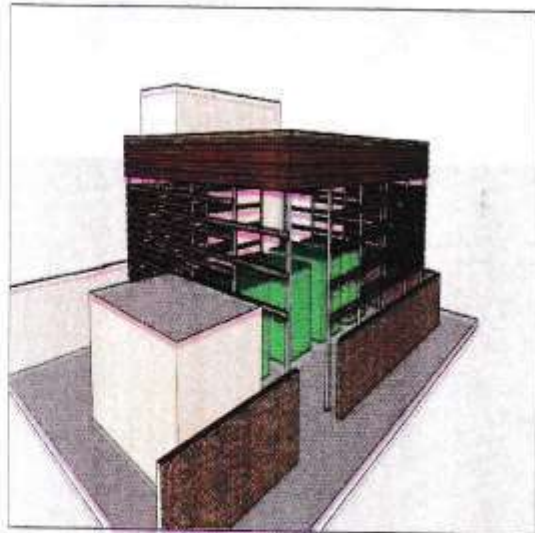
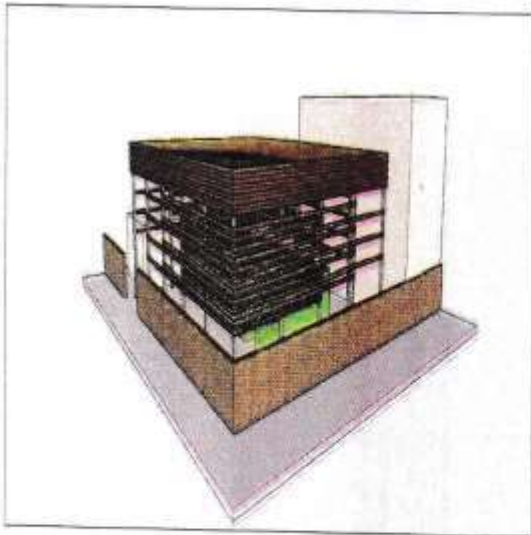
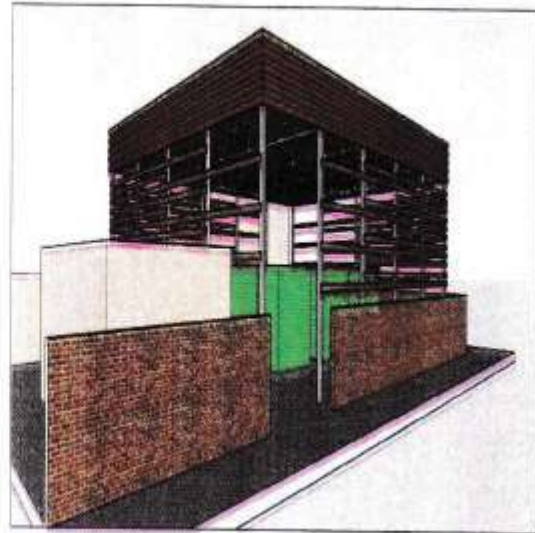
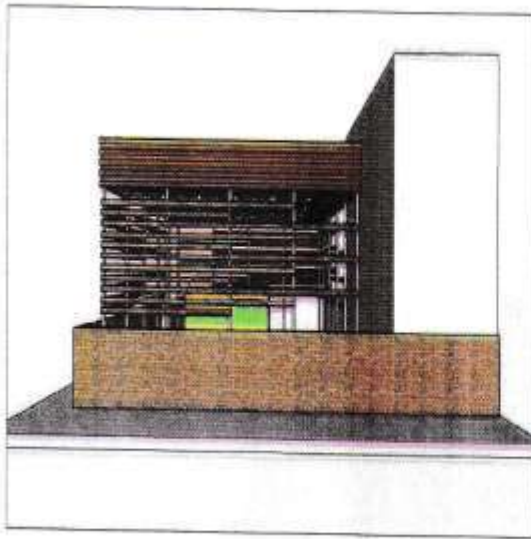
	1:4:8 (1 Cement : 4 Coarse sand : 8 Aggregate)	Cu m	4.096		
	1:2:4 (1 Cement : 2 Coarse sand : 2 Aggregate)	cum	2.24		
B)	Reinforced Cement Concrete Work				
	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge.				
	All works upto plinth level	cum	8.5		
C)	Steel and Reinforcement				
	Steel reinforcement bar (FE-500) for reinforced cement concrete work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Approved make of steel reinforcement bar, TATA, SAIL or equivalent.				
	16mm Dia. (TMT) Steel reinforcement	Kg	985		
	10mm Dia. (TMT) Steel reinforcement	Kg	378.72		
	8mm Dia. (TMT) Steel reinforcement	kg	120		
D	Form Work				
	Providing & Centering and shuttering including strutting, propping etc. and removal of form for Foundations, footings, plinth beam, etc. for mass concrete.	sq. mt	65		
3	M.S WORK				
	Providing & fixing structural steel work using with M.S tubular hollow section, M.S plate, Flat Section & J-Bolt etc. for				

	trusses, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc., including scaffolding, Complete as per drawing. Steel Brand- Jindal, TATA or equivalent.				
	M.S Hollow Section (150mm X 150mm X 4mm) - Vertical post	kg	1870		
	M.S Hollow Section (75mm X 75mm X 3mm) - Purlins	kg	1240		
	M.S Hollow Section (50mm X 50mm X 3mm) - Rafters & Cross Members	kg	1545		
	M.S Plate (450mm X 450mm) - Base Plate	kg	343.36		
	M.S Plate (300mm X 300mm) - Base Plate	kg	305.28		
	M.S Plate Cleat	kg	175		
	J-Bolt - 16mm Dia.	kg	170		
	Flat Section (25mm X 3mm)	kg	750		
4	HIGH PRESSURE LAMINATED WOOD WORK				
	Providing & fixing high pressure laminated wood on fascia using with 6mm thick high pressure laminated wood fixing with rivet on 50mm X 25mm Aluminium channel including cutting, welding, bolted with special shaped washer fixing of aluminium channel on M.S member etc., including scaffolding, complete as per drawing.	Sqft	1065		
5	GALVONIZED IRON WORK				
A)	Galvanized Iron sheet Roofing work				
	Providing and fixing precoated galvanized iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of	Sq. mtr	260		

	the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineerincharge. The sheet shall be fixed using self drilling / self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required. G.I sheet make- Jindal,TATA, Essar or equivalent				
B)	Galvanized iron sheet Gutter work				
	Providing and fixing precoated galvanised iron gutter (200mm width and 600mm deep) ,.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqmas per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineerincharge. The sheet shall be fixed using self drilling / self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required. G.I sheet make- Jindal,TATA, Essar or equivalent	R.m t	19		
6	PAINT WORK				
A	Enamel paint Work				
	Providing & applying enamel paint on M.S member of approved brand and manufacture of required colour to give an even shade, appying two or more coats including a coat of approved steel	Sq. Mtr	182		

	primer and scaffolding. Brand of Paint- Nerolac, Asian Paint or Equivalent.				
7.	PLUMBING WORK				
	Rain water pipe work				
	Providing & fixing 150mm Dia. Pvc pipe for rain water from gutter to bottom surface along with vertical post with the support of bracket to hold the pipe and bottom end fothe pipe connect half shoe. In cluding scaffolding etc.				
	150mm Dia. Pvc pipe with 2 Nos. Of half shoe.	R.m t	1400		
8.	ELECTRICAL WORK				
	Supply and wiring for <u>Light point, 16-Amp power point etc.</u> with PVC insulated multistranded copper conductor cable (FRLS Type) on surface / recess 4mm thick for 16-Amp point & 1.5mm thick for light point, Fire retardent (FR) PVC conduit fixing on M.S member including providing & fixing of water proof M.S. switch box, separate M.S. box for socket and switch, switch plate and cover plate etc. complete as required & as per specifications.				
	Light Point including wire, Conduit, M.S box, Switch + Socket etc.	Nos	04		
	16-Amp power point including wire, Conduit, M.S box, Switch + Socket etc.	Nos	01		
	Flood Light (200W)	Nos	04		
	Total amount				

Amount in words :



NOTES:-
1. ALL DIMENSIONS ARE IN MM
2. DIMENSIONS TO BE USED NOT INDICATED

CLIENT:-
MANOHAR PARIKAR
INSTITUTE FOR DEFENCE
STUDIES AND ANALYSIS

REVISIONS:-		
PERSON	DATE	REMARKS

DRAWN BY:-
R.V. RAJAR

SHEET NO:-
EP-AP-07

CHECKED BY:-
KARL

SCALE:-
N.T.S.

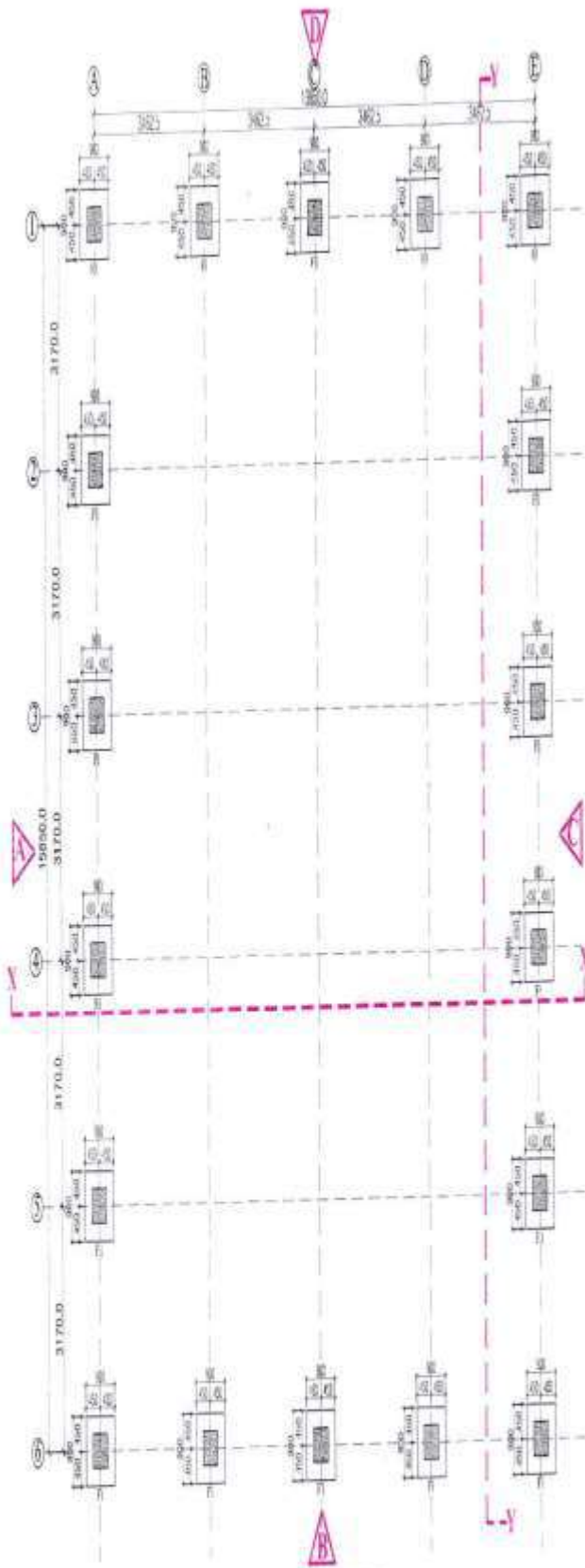
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ADVANCE COPY

DATE:-
21-08-2021

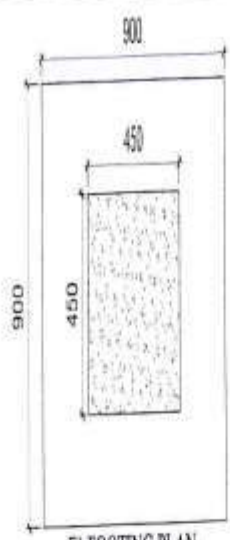
PROJECT TITLE:-
DG SHED AT KISA

DRAWING TITLE:-
3D-VIEWS

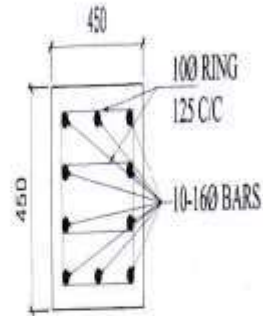
PROJECT ARCHITECT:-
SHIV CONSTRUCTIONS
Architect & Interior Design Consultant
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Noida (UP), India (201301)
Mob: +91-9826001111, +91-9826001111
E-Mail: shivcon44@gmail.com



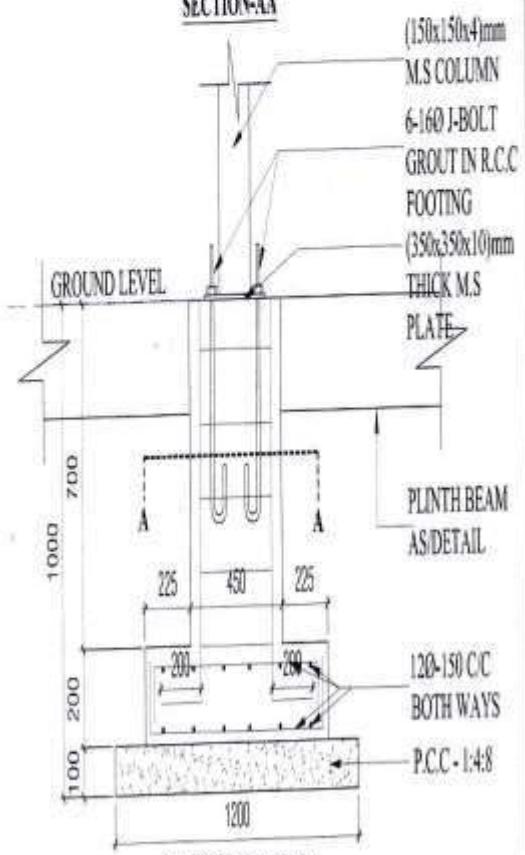
FOOTING LAYOUT



F1 FOOTING PLAN

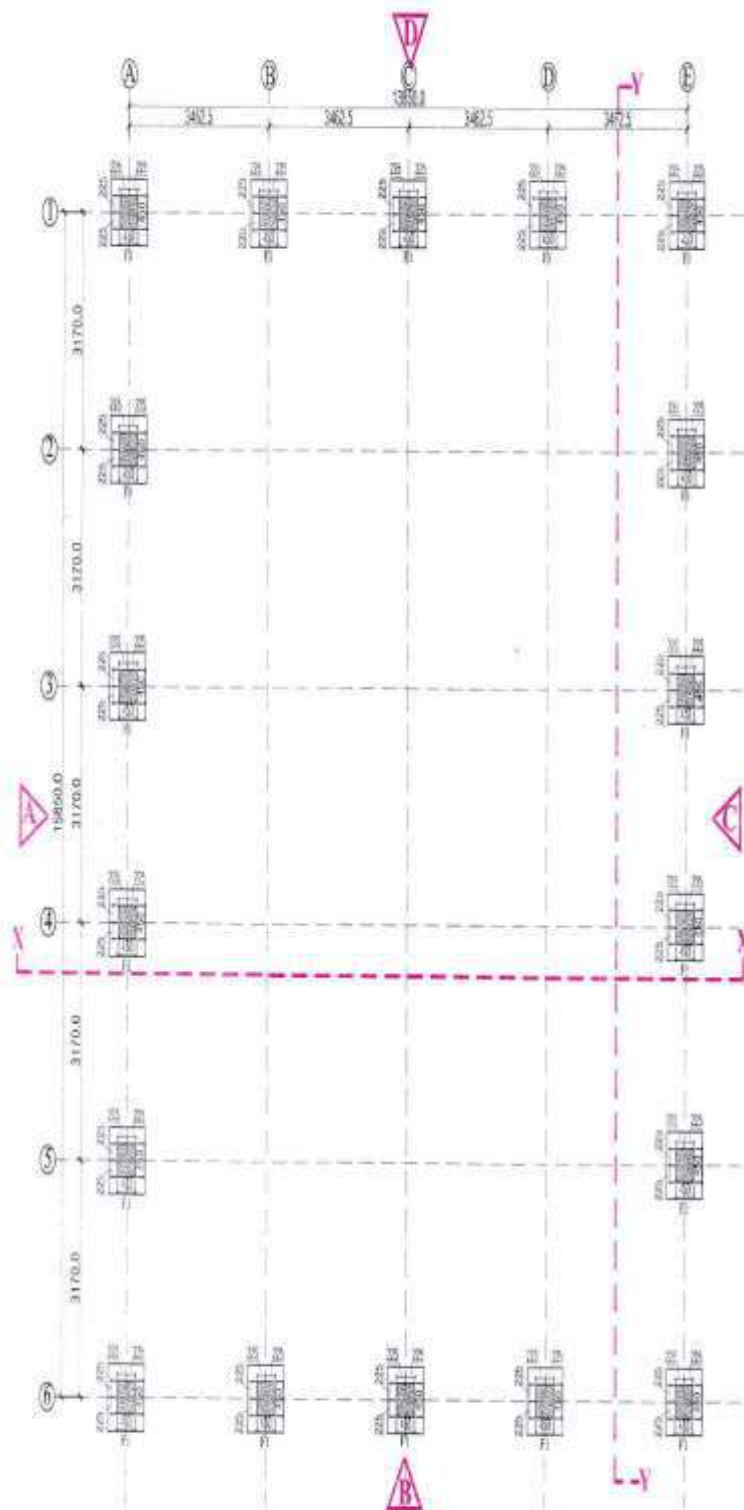


SECTION-AA



F1 FOOTING DETAIL

NOTES:- 1. ALL DIMENSIONS ARE IN MM 2. DIMENSIONS TO BE SHOWN AS REQUIRED	CLIENT:- MANOCHAR PARIKAR INSTITUTE FOR DEFENCE STUDIES AND ANALYSES	REVISIONS:-	DRAWN BY:-	CHECKED BY:-	STATUS:-	PROJECT TITLE:-	PROJECT ARCHITECT:-				
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			SHEET NO:-	SCALE:-	DATE:-	DRAWING TITLE:-					
				M.T.C	14/08/2022	FOOTING DRAWING					

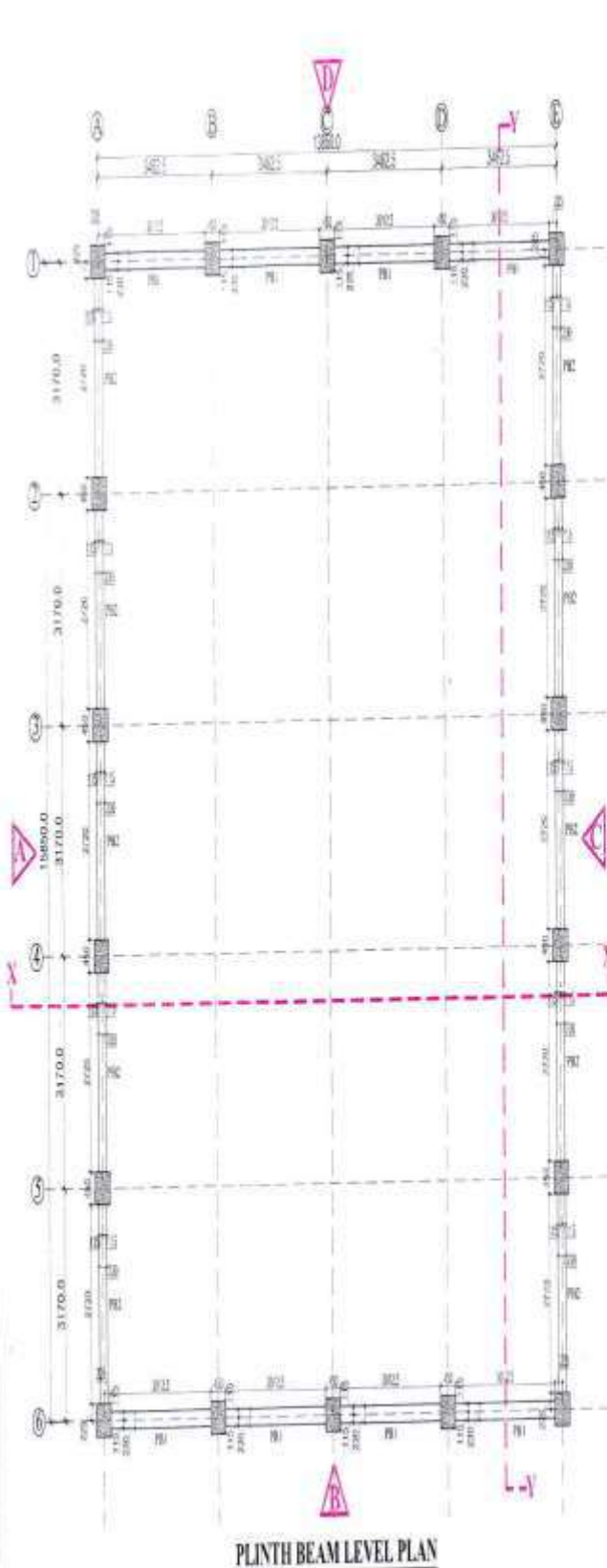


SUB STRUCTURE LEVEL LAYOUT

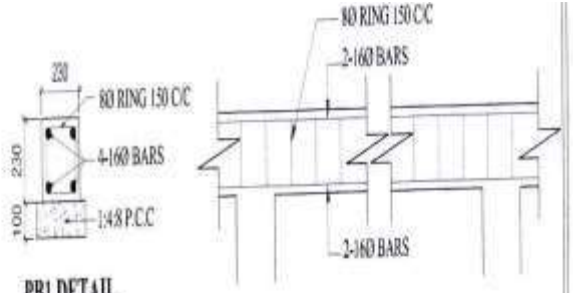
**GENERAL NOTES -
NOTES & REFERENCES**

1. READ THIS DRAWING IN CONJUNCTION WITH RELEVANT ARCHITECTURAL DRAWINGS. ANY DISCREPANCY IF FOUND SHALL BE BROUGHT TO THE NOTICE OF CONSULTANT
2. ALL DIMENSIONS ARE IN MM & LEVELS IN MILLIMETERS.
3. DO NOT SCALE ANY DIMENSION.
4. CONFIRM LOCATION OF WALLS WITH RELEVANT ARCH. DRGS.
5. CONCRETE GRADE IS M25
6. THE REINFORCEMENT SHALL BE COLTWISTED DEFORMED BARS (C.T.D) OR T.M.T. BARS HAVING YIELD STRENGTH NOT LESS THAN 500 N/mm² AND CONFORMING TO I.S. 1786 - 2008.
7. THE CLEAR COVER TO THE REINFORCEMENT SHALL BE AS FOLLOWS:-
 - (a) FOUNDATION : 50 MM
 - (b) COLUMNS : 40 MM
 - (c) BEAMS (top & bottom) 30 MM side cover 30mm
 - (d) SLABS : 25 MM
 - (e) CHAJJAS/CANOPY : 25 MM
 - (f) R.C.C. WALL 30 MM(EARTH FACE) & 25MM(INNER FACE)
8. NOT MORE THAN 50% OF THE BARS SHALL BE LAPPED AT ANY SECTION. LAPS CLOSE TO THE MID SPAN IN BOTTOM BARS & CLOSE TO SUPPORTS IN TOP BARS SHALL BE AVOIDED.
9.
 - INDICATES TOP BARS
 - INDICATES BOTTOM BARS
 - Opening in structural element
 - p.c.c work
 - Brick work
10. ALL R.C.C. TO BE MACHINE MIXED, VIBRATED AND CURED THOROUGHLY AS PER I.S 456-LATEST.
11. ALL FOOTING ARE CENTRALLY PLACED WITH RESPECTED TO THE CENTER LINE OF COLUMN
12. REINFORCEMENT SHALL BE PROVIDED IN TWO LAYERS WHEREVER FOUND NECESSARY WITH SPACER BAR TO BE PROVIDED BETWEEN TWO LAYERS OF REINFORCEMENTS AS PER IS:456.
 - SPACER BAR
13. ALL DIMENSIONS MUST BE CHECKED WITH ARCHITECT'S DRGS. IN CASE OF ANY DISCREPANCY ARCHITECTS DRGS. SHALL PREVAIL.
14. ALL CONSTRUCTION JOINTS SHALL BE APPROVED BY CONSULTANT ON THE BASIS OF SCHEME PREPARED BY CONTRACTOR.
15. TOP AND BOTTOM EXTRA BARS IN BEAMS TO EXTEND BEYOND THE FACE OF SUPPORT AS SHOWN IN DRG UNLESS OTHERWISE SHOWN.
16. THE FIRST STIRRUPS IN BEAMS SHALL BE AT A DISTANCE OF 50MM FROM JOINT FACE THE SPECIAL CONFINING REINFORCEMENT SHALL BE PROVIDED THROUGH THE JOINT AT THE GIVEN SPACING IN COLUMNS.
17. ALL ANGLES ARE RIGHT ANGLES UNLESS OTHERWISE SPECIFIED.
18. PROVIDE DIST STEEL OVER EXTRA TOP BARS IS:8 @200 c/c (5")
 - IS:8 @200 c/c (5")
19. BLACK COTTON SOIL IF ENCOUNTERED IN FDN PITS, SHALL BE FULLY REMOVED
20. ALL LOOSE POCKETS OF SOIL BELOW FOUNDATION SHALL BE FILLED WITH P.C.C.1:4:8

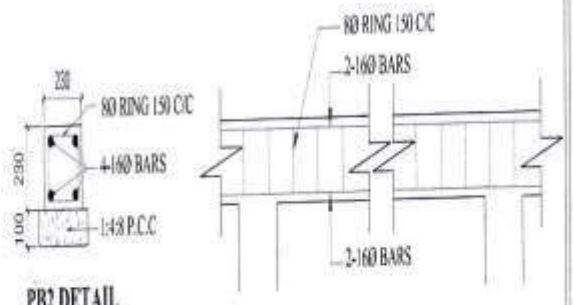
NOTES - 1. ALL DIMENSIONS ARE IN MM DIMENSIONS TO BE INDICATED WHERE REQUIRED	CLIENT - MANOJHAR PARRIKAR INSTITUTE FOR DEFENCE STUDIES AND ANALYSES	REVISIONS-	DRAWN BY:-	CHECKED BY:-	STATUS:-	PROJECT TITLE:-	PROJECT ARCHITECT:-
		REVISION DATE Remarks	ANIL KUMAR	KAPL	ADVANCE COPY	D.G. SHED AT IDGA	SHIV CONSTRUCTION
			SHEET NO:- ER-ST-02	SCALE:- N.T.S.	DATE:- 21-08-2021	DRAWING TITLE:- SUB-STRUCTURE LEVEL LAYOUT	Architect & Interior Design Consultancy 3/22, Street No-11, Sagar Vihar, New Delhi-110044 Mob: +91-9899891111, +91-9810282828 E-Mail: sapkumar444@gmail.com



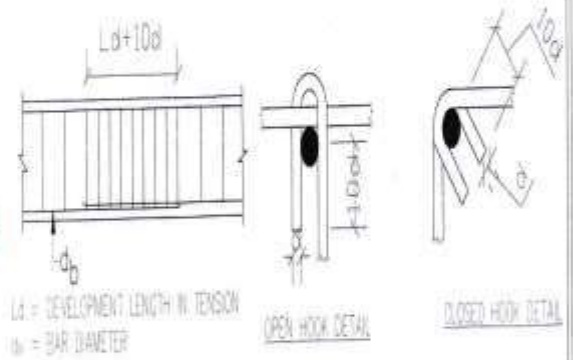
PLINTH BEAM LEVEL PLAN



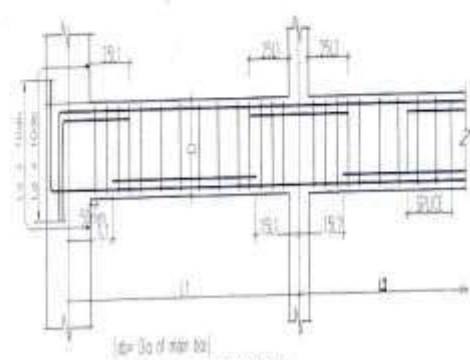
PB1 DETAIL



PB2 DETAIL

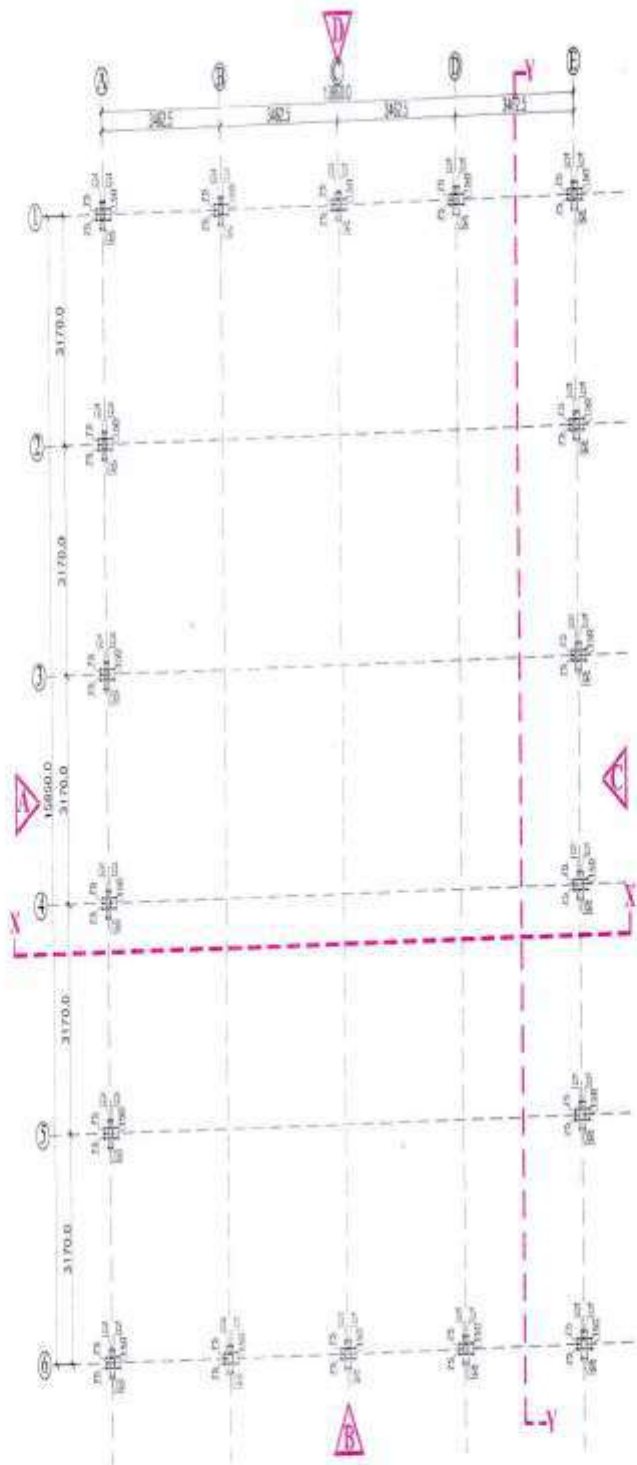


LAP DETAIL IN BEAM



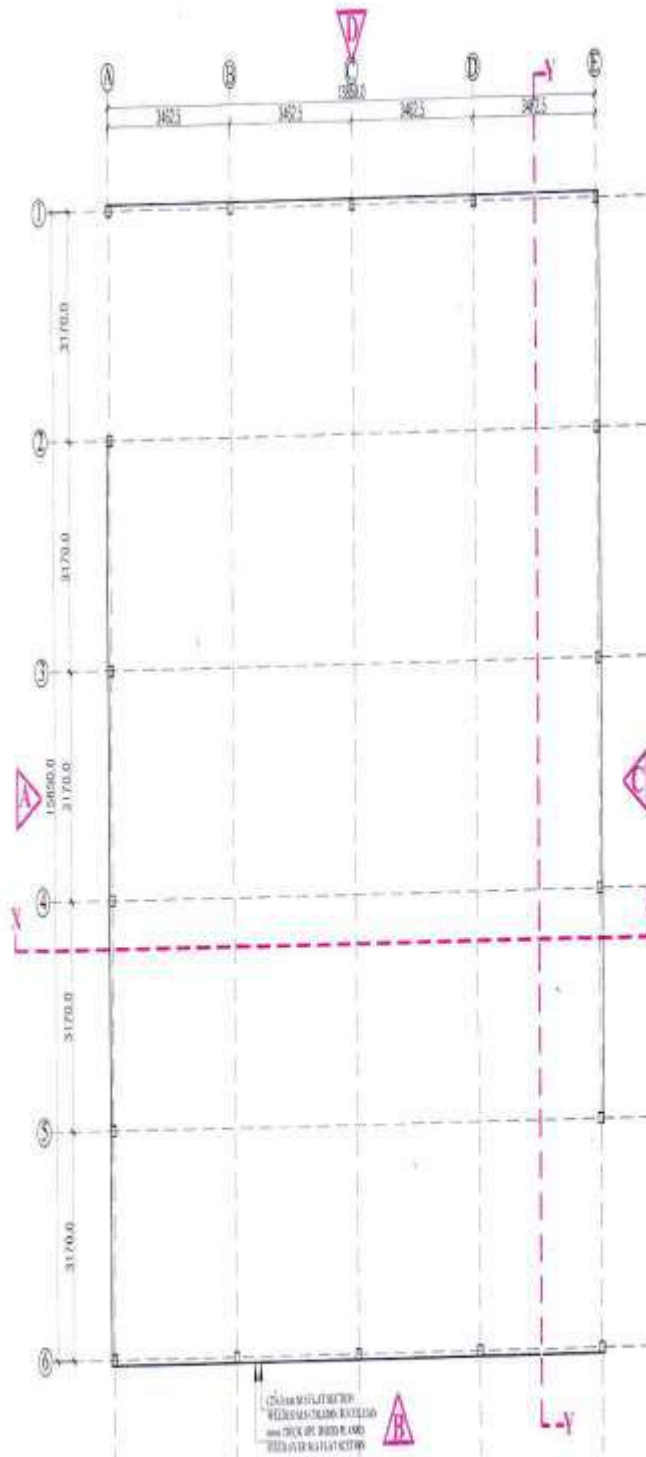
TYP. BEAM/COLUMN JUNCTION DETAILS

NOTES:- 1 ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED	CLIENT:- MANOJ K PARIKHAR INSTITUTE FOR DEFENCE STUDIES AND ANALYSES	REVISIONS:- <table border="1"> <thead> <tr> <th>REVISION</th> <th>DATE</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REVISION	DATE	REMARKS										DRAWN BY:- ANIL KUMAR	CHECKED BY:- KAPL	STATUS:- ADVANCE COPY	PROJECT TITLE:- D.G. SHED AT DGA	PROJECT ARCHITECT:- SHIV CONSTRUCTIONS Architects & Interior Design Consultant 4-12, Sector 16, Gurgaon, Haryana New Delhi, India Ph: +91 9958011111, +91 9958011111 Email: shivconstructions@gmail.com
		REVISION	DATE	REMARKS															
SHEET NO.: ER-07-01	SCALE:- N.T.S.	DATE:- 21-08-2021	DRAWING TITLE:- PLINTH BEAM LAYOUT AND DETAIL																



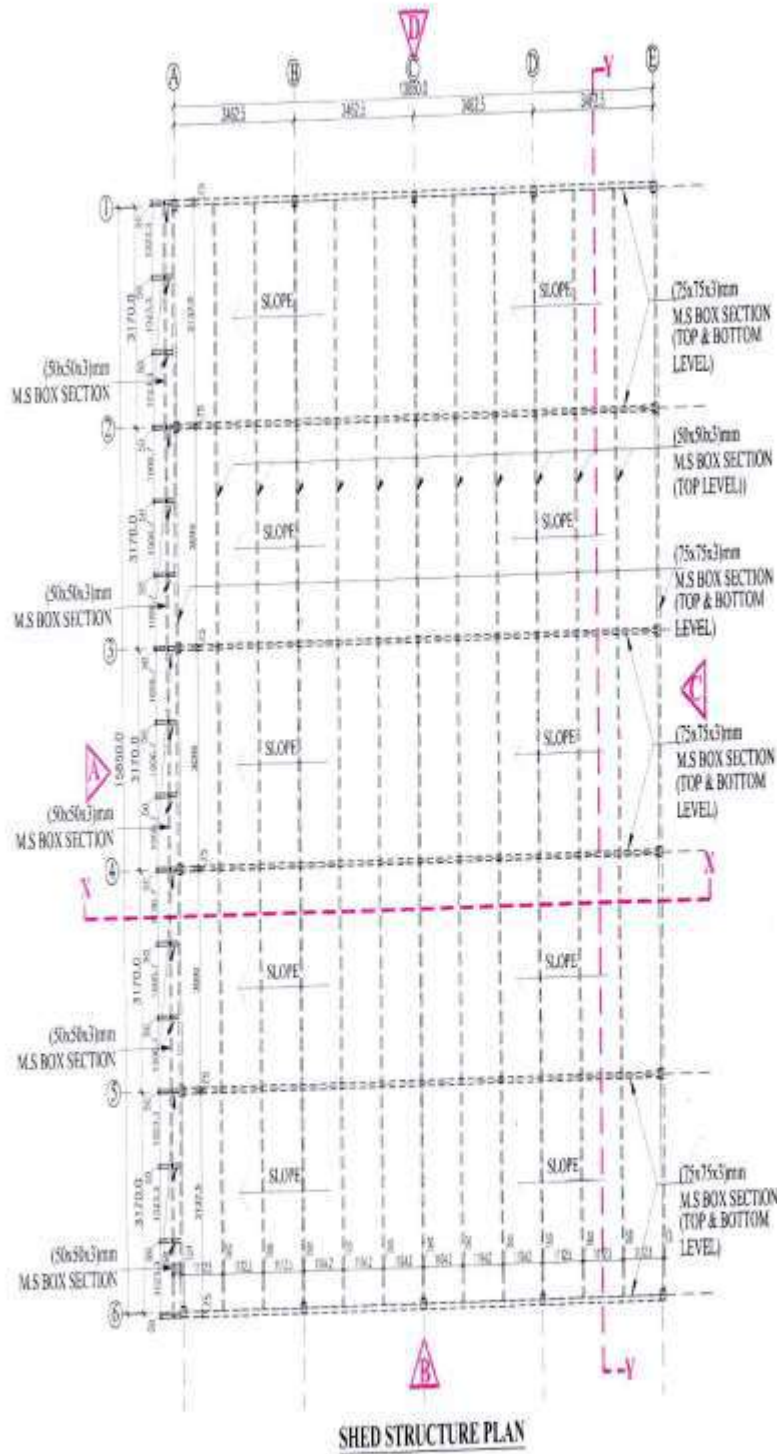
COLUMN LAYOUT PLAN

NOTES - 1. ALL DIMENSIONS ARE IN MM 2. DIMENSIONS TO BE REVIEWED & RECORDED	CLIENT - MANCHAR PARIKHAR INSTITUTE FOR DEFENCE STUDIES AND ANALYSES	REVISIONS - <table border="1"> <thead> <tr> <th>REVISION</th> <th>DATE</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	REVISION	DATE	REMARKS													DRAWN BY:- ANIL KUMAR	CHECKED BY:- KARIL	STATUS:- ADVANCE COPY	PROJECT TITLE:- D/G SHED AT DSA	PROJECT ARCHITECT:- SHIV CONSTRUCTIONS Plot No. 3, Phase 2, Sector 10, Gurgaon Haryana, India. Pin Code - 122001 Mob: +91-9899900000, +91-9846888888 E-Mail: shivconstructions@gmail.com
			REVISION	DATE	REMARKS																	
SHEET NO:- ER-07-04	SCALE:- N.T.S.	DATE:- 21-06-2021	DRAWING TITLE:- COLUMN LAYOUT PLAN																			



GROUND LEVEL FLOOR PLAN

NOTES:- 1. ALL DIMENSIONS ARE IN MM. DIMENSIONS TO BE RECHECKED.	CLIENT:- MANOHAR PARIKHAR INSTITUTE FOR DEFENCE STUDIES AND ANALYSES	REVISIONS:-	DRAWN BY:- AVIL KUMAR	CHECKED BY:- KAPIL	STATUS:- ADVANCE COPY	PROJECT TITLE:- D.G. SHED AT DEA	PROJECT ARCHITECT:- SHIV CONSTRUCTIONS Architects & Interior Design Consultant 3-75, 3rd Fl., 11, Opp. R.K. Sharma Park, New Delhi-110044 Mob. +91-9820011111, +91-9820011111 E-Mail: shivconstruction4@gmail.com												
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REVISION	DATE	Remarks																	



NOTES-
 1. ALL DIMENSIONS ARE IN MM
 2. COMMON TO THE REST NOT MARKED

CLIENT:-
 MANO-HAR PARIKAR
 INSTITUTE FOR DEFENCE
 STUDIES AND ANALYSES

REVISIONS		
REVISION	DATE	REMARKS

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 ANIL KUMAR

SHEET NO.:-
 ER-4R02

CHECKED BY:-
 A/P/L

SCALE:-
 N.T.S.

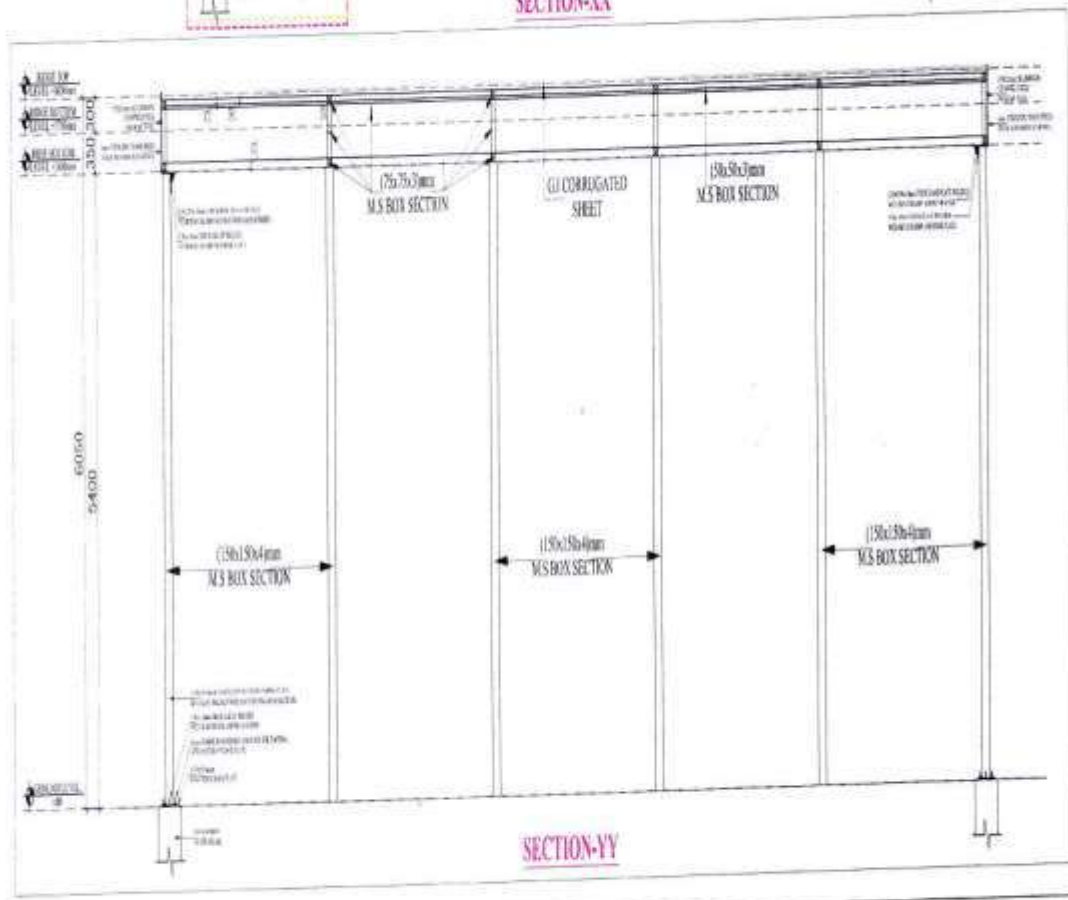
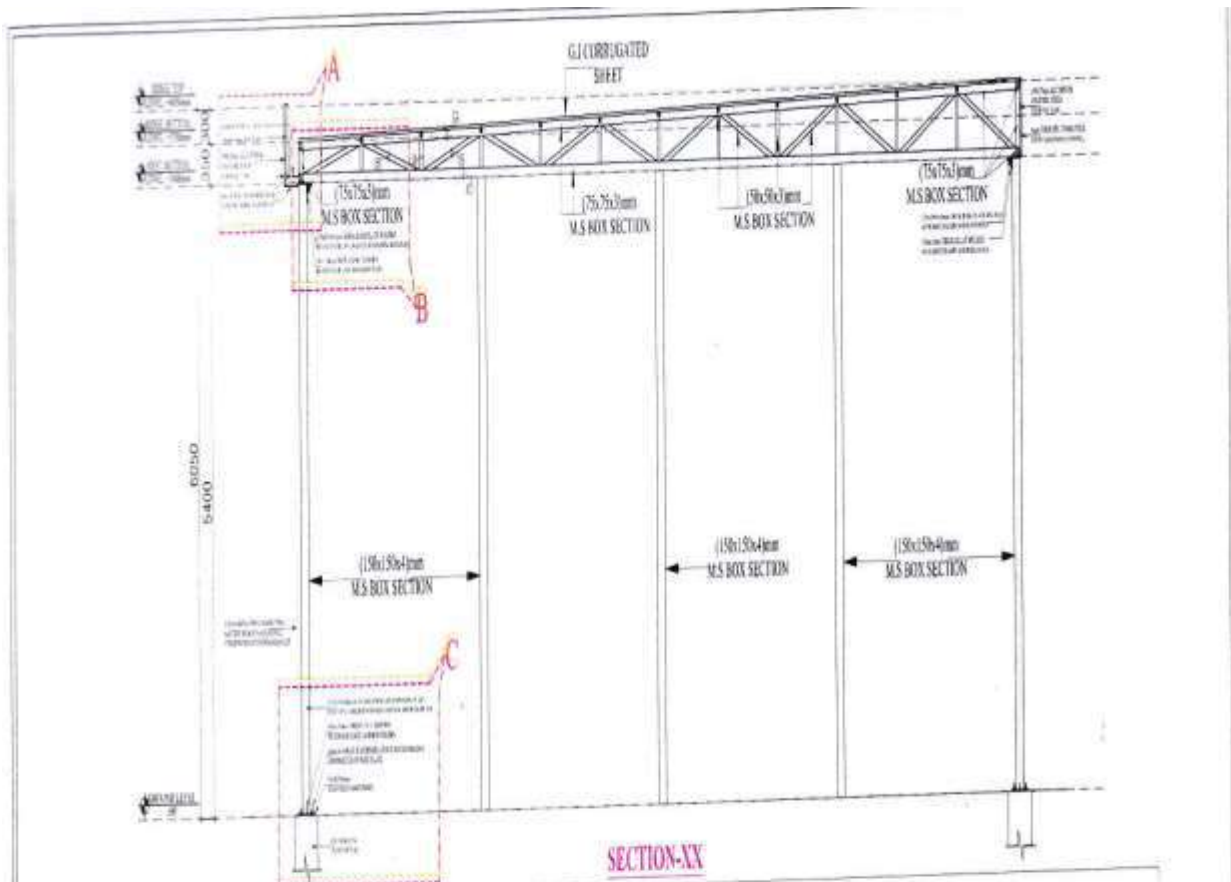
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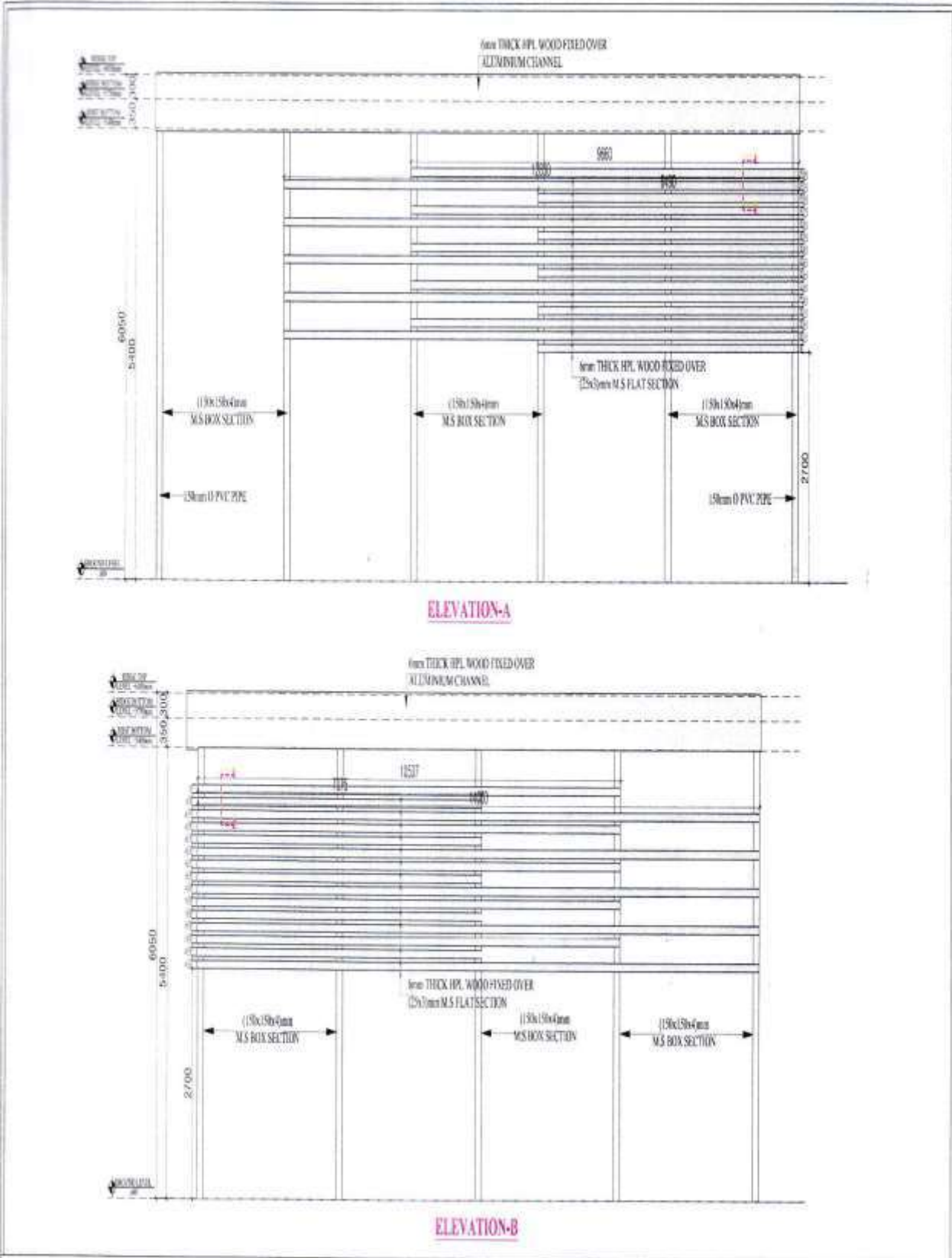
PROJECT TITLE:-
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DRAWING TITLE:-
 ROOF LEVEL PLAN

PROJECT ARCHITECT:-
SHIV CONSTRUCTIONS
 Architects & Interior Design Consultant
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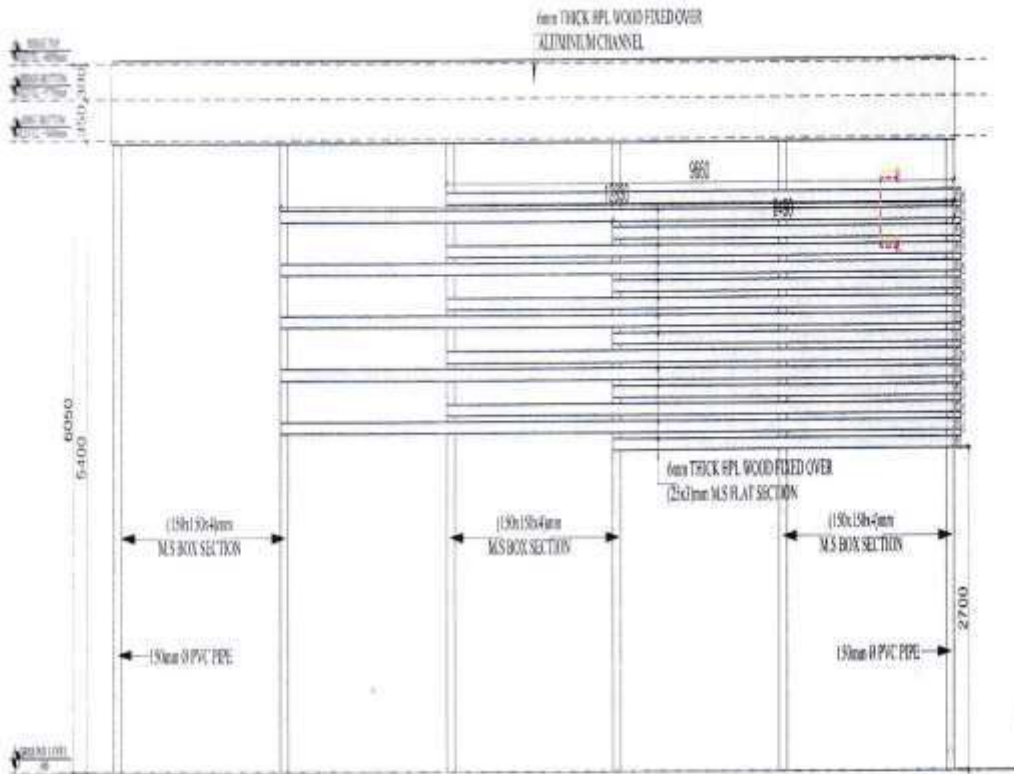
NOTES - 1. ALL DIMENSIONS ARE IN MM. 2. DIMENSIONS TO THE CENTER OF MEMBER.	CLIENT - MANOJHAR PARIKHAR INSTITUTE FOR DEFENCE STUDIES AND ANALYSIS	REVISIONS -	DRAWN BY -	CHECKED BY -	STATUS -	PROJECT TITLE -	PROJECT ARCHITECT - SHIV CONSTRUCTIONS Kirti & Harsh Deep Creators K-28, Sector-14, Gurgaon Gurgaon, Haryana - 122004 Mob: +91-9899020115, +91-9844881111 Email: shivconstr@gmail.com
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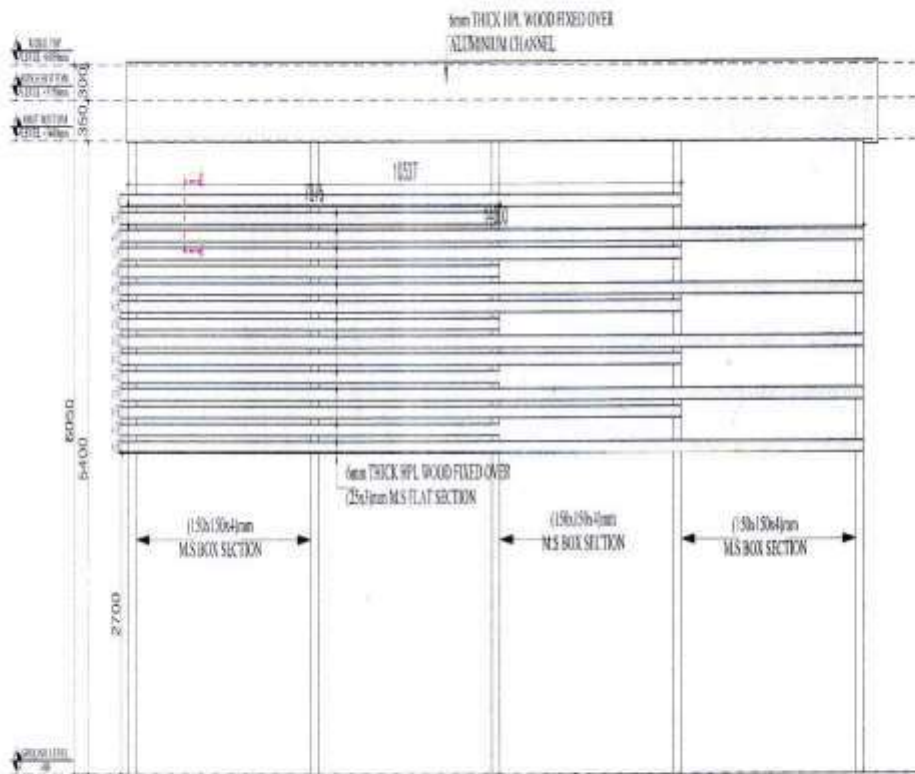
ELEVATION-A

ELEVATION-B

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			SHEET NO:- ER-AR-04	SCALE:- N.T.S.	DATE:- 21-08-2021	DRAWING TITLE:- BUILDING ELEVATION-A & ELEVATION-B	

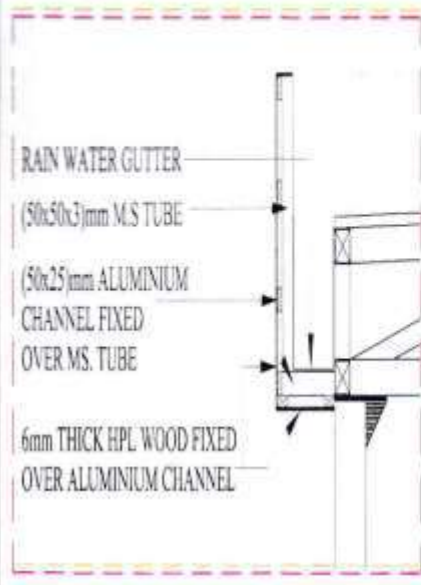


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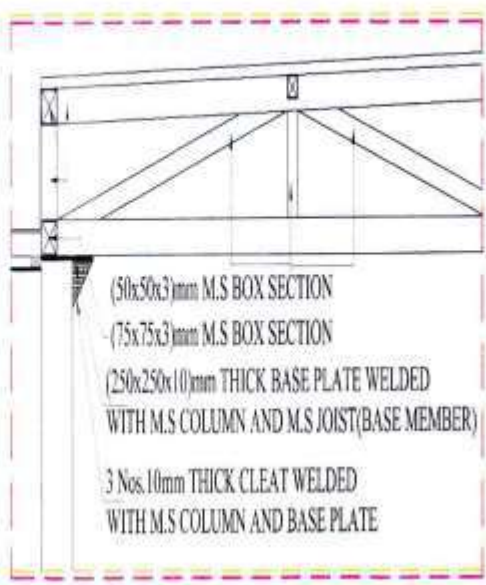


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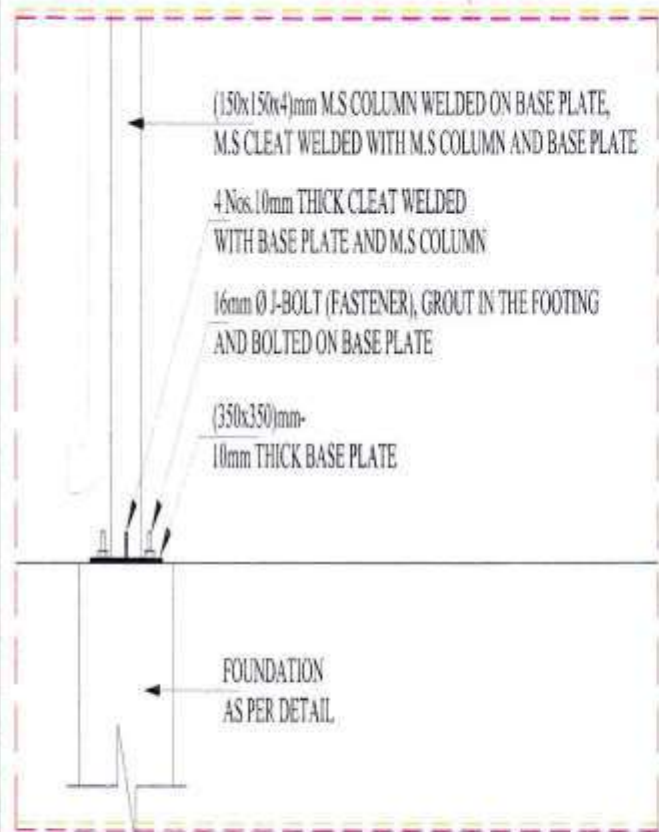
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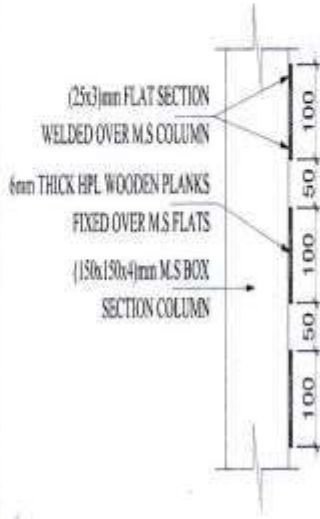
DETAIL-A



DETAIL-B



DETAIL-C



DETAIL-E



DETAIL-D

NOTES:- 1. ALL DIMENSIONS ARE IN MM 2. DIMENSIONS TO BE EXACTLY MAINTAINED	CLIENT:- MANOHAR PARIKHAR INSTITUTE FOR DEFENCE STUDIES AND ANALYSES	REVISIONS:-	DRAWN BY:-	CHECKED BY:-	STATUS:-	PROJECT TITLE:-	PROJECT ARCHITECT:- SHIV CONSTRUCTIONS <small>Workshop & Home Design Consultant B-72, Sector-14, Gurgaon, Haryana New Delhi, India 122004 Mob: +91-9826012121, +91-9826012122 Email: shivconstruction@gmail.com</small>												
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