



## REQUEST FOR QUOTATION (RFQ)

To: All Interested Bidders	DATE: December 4, 2019
	REFERENCE: RFQ/UNDP/ENV-PBDE/67243/066/2019 - <b>Construction of mini depot in Depok</b>

Dear Sir / Madam:

We kindly request you to submit your quotation for **Construction of mini depot in Depok**, as detailed in Annex 1 of this RFQ. When preparing your quotation, please be guided by the form attached hereto as Annex 2.

Quotations may be submitted on or before December 10, 2019, COB (GMT +7) and via ☒ e-mail, to the address below:

**United Nations Development Programme**  
Attention: Procurement Unit  
**Email Address: *bids.id@undp.org***

Quotations submitted by email must be limited to a maximum of 10 (ten) MB per transmission, virus-free and no more than 10 (ten) email transmissions. They must be free from any form of virus or corrupted contents, or the quotations shall be rejected.

It shall remain your responsibility to ensure that your quotation will reach the address above on or before the deadline. Quotations that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation. If you are submitting your quotation by email, kindly ensure that they are signed and in the .pdf format, and free from any virus or corrupted files.

Please take note of the following requirements and conditions pertaining to the supply of the abovementioned good/s:

Delivery Terms [INCOTERMS 2010] (Pls. link this to price schedule)	<input type="checkbox"/> FCA <input type="checkbox"/> CPT <input type="checkbox"/> CIP <input checked="" type="checkbox"/> DAP <input type="checkbox"/> Other [pls. specify]	
Customs clearance <sup>1</sup> , if needed, shall be done by:	<input type="checkbox"/> UNDP <input checked="" type="checkbox"/> Supplier/Offeror <input type="checkbox"/> Freight Forwarder	
Exact Address/es of Delivery Location/s (identify all, if multiple)	Jalan Raya Tapos, Depok, West Java, next to TPU Tapos	
UNDP Preferred Freight Forwarder, if any <sup>2</sup>	N/A	
Distribution of shipping documents (if using freight forwarder)	N/A	
Latest Expected Delivery Date and Time (if delivery time exceeds this, quote may be rejected by UNDP)	<input checked="" type="checkbox"/> 120 (one hundred twenty) days from the issuance of the Contract for Civil Work.	
Delivery Schedule	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required	
Packing Requirements	As required in Annex 1 – Scope of Work	
Mode of Transport	<input type="checkbox"/> AIR <input type="checkbox"/> SEA	<input type="checkbox"/> LAND <input checked="" type="checkbox"/> OTHER as proposed by bidder.
Preferred Currency of Quotation <sup>3</sup>	<input checked="" type="checkbox"/> United States Dollars <input type="checkbox"/> Euro <input checked="" type="checkbox"/> Local Currency : IDR For Local Bidders	
Value Added Tax on Price Quotation <sup>4</sup>	<input type="checkbox"/> Must be inclusive of VAT and other applicable indirect taxes <input checked="" type="checkbox"/> Must be exclusive of VAT and other applicable indirect taxes	

<sup>1</sup> Must be linked to INCO Terms chosen.

<sup>2</sup> Depends on INCO Terms. The suggestion to use a UNDP preferred courier is only for purposes of familiarity with procedures and documentary requirements applicable to the UNDP when clearing with customs.

<sup>3</sup> Local vendors must comply with any applicable laws regarding doing business in other currencies. Conversion of currency into the UNDP preferred currency, if the offer is quoted differently from what is required, shall be based only on UN Operational Exchange Rate prevailing at the time of UNDP's issuance of Purchase Order.

<sup>4</sup> This must be reconciled with the INCO Terms required by the RFQ. Furthermore, VAT exemption status varies from one country to another. Pls. tick whatever is applicable to the UNDP CO/BU requiring the goods.

After-sales services required	<input type="checkbox"/> Warranty on Parts and Labor for minimum period of Click to type <input type="checkbox"/> Technical Support <input type="checkbox"/> Provision of Service Unit when pulled out for maintenance/ repair <input checked="" type="checkbox"/> Others 10% out of total contract amount will be retained for 3 (three) months.
Deadline for the Submission of Quotation	<i>Tuesday, December 10, 2019 and COB (GMT+7)</i>
All documentations, including catalogs, instructions and operating manuals, shall be in this language	<input checked="" type="checkbox"/> English <input type="checkbox"/> French <input type="checkbox"/> Spanish <input checked="" type="checkbox"/> Others for any certificates, notarial deed issued by local government
Documents to be submitted <sup>5</sup>	<input checked="" type="checkbox"/> Duly Accomplished Form as provided in Annex 2, and in accordance with the list of requirements in Annex 1; <input type="checkbox"/> A statement whether any import or export licenses are required in respect of the goods to be purchased including any restrictions on the country of origin, use/dual use nature of goods or services, including and disposition to end users; <input type="checkbox"/> Confirmation that licenses of this nature have been obtained in the past and an expectation of obtaining all the necessary licenses should the quotation be selected; <input type="checkbox"/> Quality Certificates (ISO, etc.); <input checked="" type="checkbox"/> Latest Business Registration Certificate ; <input checked="" type="checkbox"/> Latest Internal Revenue Certificate / Tax Clearance; <input type="checkbox"/> Manufacturer's Authorization of the Company as a Sales Agent (if Supplier is not the manufacturer); <input type="checkbox"/> Certificate of Exclusive Distributorship in the country (if applicable, and if Supplier is not the manufacturer); <input type="checkbox"/> Evidence/Certification of Environmental Sustainability ("Green" Standards) of the Company or the Product being supplied ; <input type="checkbox"/> Complete documentation, information and declaration of any goods classified or may be classified as "Dangerous Goods". <input type="checkbox"/> Patent Registration Certificates (if any of technologies submitted in the quotation is patented by the Supplier); <input checked="" type="checkbox"/> Written Self-Declaration of not being included in the UN Security Council 1267/1989 list, UN Procurement Division List or other UN Ineligibility List; <input type="checkbox"/> Others All requirement as specified in Annex 1
Period of Validity of Quotes starting the Submission Date	<input type="checkbox"/> 60 days <input checked="" type="checkbox"/> 90 days <input type="checkbox"/> 120 days

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<sup>5</sup> First 2 items in this list are mandatory for the supply of imported goods

	In exceptional circumstances, UNDP may request the Vendor to extend the validity of the Quotation beyond what has been initially indicated in this RFQ. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Quotation.
Partial Quotes	<input checked="" type="checkbox"/> Not permitted <input type="checkbox"/> Permitted : Interested bidders may quote for one or more locations specified above
Payment Terms <sup>6</sup>	<input type="checkbox"/> 100% upon complete delivery of goods <input checked="" type="checkbox"/> Others Please refer to payment terms stated in Annex I
Liquidated Damages	<input type="checkbox"/> will not be imposed <input checked="" type="checkbox"/> will be imposed under the following conditions: Percentage of contract price per day of delay: 0.5% Max. No. of days of delays: 2 (two) weeks After which UNDP may terminate the contract.
Evaluation Criteria [check as many as applicable]	<input checked="" type="checkbox"/> Technical responsiveness/Full compliance to requirements and lowest price <sup>7</sup> Comprehensiveness of after-sales services <input checked="" type="checkbox"/> Full acceptance of the PO/Contract General Terms and Conditions [this is a mandatory criteria and cannot be deleted regardless of the nature of services required] <input type="checkbox"/> Earliest Delivery / Shortest Lead Time <sup>8</sup> <input type="checkbox"/> Others [pls. specify]
UNDP will award to:	<input checked="" type="checkbox"/> One and only one supplier <input type="checkbox"/> One or more Supplier, depending on the following factors:
Type of Contract to be Signed	<input type="checkbox"/> Purchase Order <input checked="" type="checkbox"/> Contract Face Sheet (Contract for Civil Works) UNDP (this template is also utilized for Long-Term Agreement <sup>9</sup> and if LTA will be signed, specify the document that will trigger the call-off, e.g. PO, etc). <input type="checkbox"/> Other Type/s of Contract
Contract General Terms and Conditions	<input checked="" type="checkbox"/> General Terms and Conditions for contracts (contract for civil works).

<sup>6</sup> UNDP preference is not to pay advanced amount upon signing of contract. If vendor strictly requires advanced payment, it will be limited only up to 20% of the total price quoted. For any higher percentage, or advanced payment of \$30,000 or higher, UNDP shall require the vendor to submit a bank guarantee or bank cheque payable to UNDP, in the same amount as the advanced payment made by UNDP to the vendor.

<sup>7</sup> UNDP reserves the right not to award the contract to the lowest priced offer, if the second lowest price among the responsive offer is found to be significantly more superior, and the price is higher than the lowest priced compliant offer by not more than 10%, and the budget can sufficiently cover the price difference. The term "more superior" as used in this provision shall refer to offers that have exceeded the pre-determined requirements established in the specifications.

<sup>8</sup> This shall be used for time-critical and/or exigent requirements (e.g., post-crisis emergencies, elections, etc.).



	<input type="checkbox"/> General Terms and Conditions for de minimis contracts (services only, less than \$50,000).  Applicable terms and conditions are available at <a href="http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html">http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</a>
Special conditions of Contract	<input checked="" type="checkbox"/> Cancellation of PO/Contract if the delivery/completion is delayed by 2 (two) weeks for each months <input type="checkbox"/> Others <i>[pls. specify]</i>
Conditions for Release of Payment	<input checked="" type="checkbox"/> Passing inspection <input checked="" type="checkbox"/> Written Acceptance of works by a consultant assigned by UNDP.
Annexes to this RFQ9	<input checked="" type="checkbox"/> Scope of works required (Annex 1) <input checked="" type="checkbox"/> Form for Submission of Quotation (Annex 2) <input checked="" type="checkbox"/> General Terms and Condition for Works (Annex 3) <input checked="" type="checkbox"/> General Terms and Conditions / Special Conditions: <a href="http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html">http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</a> <input type="checkbox"/> Others <i>[pls. specify, if any]</i>  Non-acceptance of the terms of the General Terms and Conditions (GTC) shall be grounds for disqualification from this procurement process.
Contact Person for Inquiries (Written inquiries only) <sup>10</sup>	Agneta Silvia and Yusef Saiful Millah Procurement Unit <a href="mailto:agneta.silvia@undp.org">agneta.silvia@undp.org</a> and <a href="mailto:yusef.millah@undp.org">yusef.millah@undp.org</a> Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.

Goods offered shall be reviewed based on completeness and compliance of the quotation with the minimum specifications described above and any other annexes providing details of UNDP requirements.

The quotation that complies with all of the specifications, requirements and offers the lowest price, as well as all other evaluation criteria indicated, shall be selected. Any offer that does not meet the requirements shall be rejected.

Any discrepancy between the unit price and the total price (obtained by multiplying the unit price and quantity) shall be re-computed by UNDP. The unit price shall prevail and the total price shall be

<sup>9</sup> Where the information is available in the web, a URL for the information may simply be provided.

<sup>10</sup> This contact person and address is officially designated by UNDP. If inquiries are sent to other person/s or address/es, even if they are UNDP staff, UNDP shall have no obligation to respond nor can UNDP confirm that the query was received.

corrected. If the supplier does not accept the final price based on UNDP's re-computation and correction of errors, its quotation will be rejected.

After UNDP has identified the lowest price offer, UNDP reserves the right to award the contract based only on the prices of the goods in the event that the transportation cost (freight and insurance) is found to be higher than UNDP's own estimated cost if sourced from its own freight forwarder and insurance provider.

At any time during the validity of the quotation, no price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the quotation. At the time of award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Purchase Order that will be issued as a result of this RFQ shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a quotation implies that the vendor accepts without question the General Terms and Conditions of UNDP herein attached as Annex 3.

UNDP is not bound to accept any quotation, nor award a contract/Purchase Order, nor be responsible for any costs associated with a Supplier's preparation and submission of a quotation, regardless of the outcome or the manner of conducting the selection process.

Please be advised that UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a purchase order or contract in a competitive procurement process. In the event that you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link:

<http://www.undp.org/content/undp/en/home/operations/procurement/protestandsanctions/>

UNDP encourages every prospective Vendor to avoid and prevent conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, specifications, cost estimates, and other information used in this RFQ.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its suppliers to adhere to the UN Supplier Code of Conduct found in this link : [http://www.un.org/depts/ptd/pdf/conduct\\_english.pdf](http://www.un.org/depts/ptd/pdf/conduct_english.pdf)

Thank you and we look forward to receiving your quotation.

Sincerely yours,



*Martin Stephanus Kurnia*  
Head of Procurement Unit  
4 December 2019

## SCOPE OF WORK

### Construction of one unit of Mini Depot in Depok

#### 11. Background Information

Trash has long been a major problem in big cities. Domestic waste produced by households needs proper handling. In addition to household waste, there is also waste generated by chemical processes. This type of waste needs to be handled more thoroughly because of its toxic nature.

There is also a positive aspect of the waste. It has economic value, as waste can be recycled and reproduced to be other goods. Knowing this value, it is suggested that when managing waste, as much as possible we need to recycle the waste. However, we need to make sure that the recyclers know how to handle the waste and are able to separate the hazardous materials and the materials that can be used further.

PBDE (*Polybromo Dyphenil Ethers*) & UOPs (*Unintentional Persistant Pollutants*) Project is a project focusing on the reducing of release of PBDE and UOPs. The project is managed by UNDP with Ministry of Industry, and funded by Global Environment Facility (GEF). One activity conducted by PBDE & UOPs Project is developing mini depots, as the centers of waste management and processing, including preventing the transmission of hazardous chemical substances, especially PBDE.

PBDE & UOPs Project has established one unit mini depot in Cirebon. Following the mini depot in Cirebon, there will be more mini depots to establish, one of which is a mini depot in Depok, West Java.

The mini depot in Depok will be an intermediary post and it has crucial functions such as:

1. It helps preventing the transmission of dangerous pollutant;
2. It increases the value of waste. Some of the waste can be processed and transformed into new products;
3. It brings economic benefit for the management of the depot, by selling the useful waste (mostly plastic);
4. It becomes learning center

#### 2 Description of required service

The service required is the development of one unit of mini depot in Depok. The depot in Depok functions as the center of waste management and the activities conducted, including waste collection, waste sorting, and waste transportation for disposal.

### **3 Location of work**

Desa Tapos, Depok, West Java.

### **4 Objectives of the Program**

19.0 To manage waste effectively and to prevent the spread of PBDE and other hazardous waste;

20.0 To manage electronic waste in compliance with regulations.

### **5 Expected Outputs of the Mini Depot**

9 Mini depot is expected to support the government in managing electronic waste and decrease the negative impacts of electronic waste;

10 The depot will prevent the spread of PBDE and other hazardous waste, and it will be a learning center for electronic waste management.

### **6 Period of Performance**

[120 calendar days].

### **7 Scope of Work**

- Construction work (please refer to work description on Bill Of Quantity/BoQ and detail drawing).
- Mobilization of adequate workers.
- Mobilization of adequate construction work supporting equipment.
- Mobilization of expertise resources to manage construction work on site.
- Provision of building materials and transportation to project sites.
- Final clearing work upon completion of construction work.
- One (1) month of defect and liability period.
- Reporting and documentation.

## Details on the building

No	Work Description	Specification	Unit	Volume
<b>I</b>	<b>MANPOWER</b>			
1	Project Manager		Person	1
2	Project Administration		Person	1
3	Civil Engineer		Person	1
4	Site Supervisor		Person	1
5	Skilled labors/workers		Persons	10
6	Quality Controller		Person	1
<b>II</b>	<b>PRELIMINARIES WORKS</b>			
1	Measuring / Uitzet	Wooden frame with strings	ls	1,00
2	Water and electricity for project		mnth	5,00
3	Accommodation for workmen	Simple Wooden hut	m2	21,60
4	Goverment / site coordination		mnth	5,00
5	Project Insurance ( Jamsostek )		ls	1,00
6	Debris Clearance		mnth	5,00
7	Building electricity 5.500		unit	1,00
8	Mobilization and Demobilization		ls	1,00
<b>III</b>	<b>FOUNDATION WORKS</b>			
1	Excavation for Footing, Tie beam and Column Stump	Not exceeding 2.00 m deep	m3	36,00
2	Sand bedding 100 mm		m3	4,44
3	Plain concrete 50 mm ( underside footing, tie beam )	Site mix concrete	m2	44,40
4	Bore pile dia. 300 mm	K-250 Concrete; Main rebar dia. 13 BJTP 40 ; Ring Rebar dia. 8 BJTP 24	m'	144,00
5	Pile Cap PC1 - K.300 ( 750x750x600 )= 12 units	K-250 Concrete; Main rebar dia. 16 BJTP 40 ; Ring Rebar dia. 13 BJTP 40	m3	4,05

6	Tie beam TB1 300/500 - K.300	K-250 Concrete; Main rebar dia. 16 BJTP 40 ; Ring Rebar dia. 10 BJTP 24	m3	9,00
7	Filling excavation soil back		m3	22,95
8	Column Stump K1 300/400 t = 1.6 m = 8 bh K.300	K-250 Concrete; Main rebar dia. 16 BJTP 40 ; Ring Rebar dia. 10 BJTP 24	m3	1,54
9	Column Stump K2 300/200 t = 1.6 m = 4 bh K.300	K-250 Concrete; Main rebar dia. 16 BJTP 40 ; Ring Rebar dia. 10 BJTP 24	m3	0,39
10	Column Stump Finishing & grouting	Non Shrink Grout ex. Sika or equivalent.	unit	12,00
IV	<b>FLOOR WORKS</b>			
	<b>1st Floor</b>			
1	Site clearance		m2	216,00
2	Limestone bedding 150 mm	Limestone	m3	32,40
3	Plastic formwork		m2	216,00
4	Paving Block thickness 6 cm, width 1 m around building Include sand bedding and flyash		m2	84,00
5	Concrete decking with rebar	Rebar dia. 8 BJTP 24	kg	127,84
6	Wiremesh	Wiremesh M-10 , 2 layers	m2	216,00
7	Concrete Floor 150 mm	K-250 Concrete ex. Pioneer or equivalent	m2	216,00
8	Trowel Finish	Trowel Finish for concrete floor	m2	210,00
9	Floor Ceramic Tile 300 x 300 mm - Office Area	Ceramic Tile ex. China Rate 40.000/m2 or equivalent.	m2	6,00
10	Floor Ceramic Tile 200 x 200 mm - Bathroom Area	Ceramic Tile ex. Asia Tile Rate 40.000/m2 equivalent	m2	6,00
11	Wall Ceramic Tile 200 x 400 - Bathroom Area Wall height 2000 mm	Ceramic Tile ex. Asia Tile Rate 40.000/m2 equivalent	m2	14,00

12	Gypsum Ceiling + List	Gypsum Board ex. Gyproc , List Shadowline	m2	12,00
<b>V</b>	<b>STEEL FRAME WORKS</b>			
1	Anchor Bolt dia. 22 mm x 600 mm		set	32,00
2	Anchor Bolt dia. 16 mm x 600 mm		set	16,00
3	Column K1 WF 250.125.6.9	Wide Flange ex. Gunung Garuda or equivalent	kg	781,00
4	Column K3 WF 200.100.5,5.7	Wide Flange ex. Gunung Garuda or equivalent	kg	938,67
5	Rafter R1 WF 250.125.6.9 + voute	Wide Flange ex. Gunung Garuda or equivalent	kg	2.212,84
6	Purlin C 125.50.20.2,3	CNP Channel	kg	1.443,20
7	Purlin Voute	Steel plate thickness 4 mm	bh	64,00
8	Column Support B1 WF 200.100.5,5.7	Wide Flange ex. Gunung Garuda or equivalent	kg	806,40
9	Secondary Rafter WF 200.100.5,5.7	Wide Flange ex. Gunung Garuda or equivalent	kg	341,34
10	Wind Circulation C125.50.20.2,3 + Rebar dia. 12	CNP Channel + Rebar dia. 12 BJTP 24	kg	720,00
11	Roof Drain Voute plat 5/50 @ 500 mm	Steel Plate Thickness 5 mm	bh	160,00
12	Sagrod dia. 10 mm	Rebar dia. 10 BJTP 24	btg	432,00
13	Wind Resistant dia. 16 mm	Rebar dia. 16 BJTP 40	set	12,00
14	Roof List C 100.50.20.2,3	CNP Channel	kg	803,25
15	Plate 12 mm + 10 mm + 8 mm & 6 mm	Steel plate thickness 12, 8 , 10 , 6 mm	kg	586,14
16	HTB bolt dia. 22 mm x 2,5"		pcs	300,00
17	HTB bolt dia. 19 mm x 2,5"		pcs	200,00
18	Black bolt dia. 12 x 1"		pcs	300,00
19	Roof cover	Zincalume thickness 0.45 mm ex. Kepuh Kencana Arum or equivalent	m2	320,00

20	Roof top ( Nok )	Mild Plate thickness 5 mm	m'	20,00
21	Roof Drain	Mild Plate thickness 5 mm	m'	40,00
22	Roof Flashing	Mild Plate thickness 5 mm	m'	68,00
23	Zincromate Paint	Zincromate paint ex. Kansai Paint or equivalent	kg	7.571,50
24	Finish Paint	Finish Paint ex. Kansai Paint or equivalent	kg	7.571,50
25	Transportasi material		kg	7.571,50
26	Roof Ridge Alumunium Capping	Zincalume thickness 0.45 mm ex. Kepuh Kencana Arum or equivalent	m'	68,00
<b>VI</b>	<b>WALL WORKS</b>			
	<b>OFFICE &amp; DEPO WALL</b>			
1	Wall Thickness 100 mm	ALC Wall ex. Power Block or equivalent	m2	220,18
2	Scaffolding		m2	220,18
3	Plaster + Finish wall	Cement : sand = 1 : 3 ex. Merah Putih or equivalent	m2	440,36
4	Practical Column	Site mix concrete	m3	2,20
5	Interior Paint	Paint ex. Metrolight or equivalent	m2	206,36
6	Exterior Paint	Paint ex. Metrolight or equivalent	m2	234,00
<b>VII</b>	<b>DOOR AND WINDOW WORKS</b>			
1	Door Frame ( 400 x 400 )	Site mix concrete	m'	18,00
2	Window J1 ( 1800 x 1200 )	Alumunium frame 3" CA ex. Alexindo + Clear glass 6 mm or equivalent	unit	3,00
3	Door P1 ( 800 x 2400 )	Alumunium frame 3" CA ex. Alexindo + Clear glass 6 mm or equivalent	unit	1,00
4	Pintu P2 PVC ( 700 x 2000 )	PVC door ex. Murico or equivalent	unit	1,00



5	Sliding Door ( 2000 x 3000 )	Steel Frame door	unit	2,00
<b>VIII</b>	<b>PLUMBING WORKS</b>			
1	Rain drainage			
	a. Vertikal drain dia. 4 " type D	PVC Pipe 4" type D ex. Wavin Rucika or equivalent	m'	83,20
	b. Klem pipe + accessories		set	8,00
	c. Boral pipe , dia 40 cm for water drainage	Boral Pipe dia 40 cm ex. Local or equivalent	m'	60,00
	d Accessories + Control box		unit	4,00
	e. Roof drain	ex. Local brand or equivalent	unit	8,00
2	Closet + Jet Washer	ex. Local brand or equivalent	unit	1,00
3	Wastafel + Aksesoris	ex. Local brand or equivalent	unit	1,00
4	Shower Set	ex. Local brand or equivalent	unit	1,00
5	Floor drain	ex. Local brand or equivalent	unit	1,00
6	Waste water instalation	PVC Pipe 3 + 6" type D ex. Wavin Rucika or equivalent	ls	1,00
7	Clean water instalation	PVC Pipe 1" + 3/4" type AW ex. Wavin Rucika or equivalent	ls	1,00
8	Septic Tank	Bio Septic Tank ex. Local or equivalent	unit	1,00
9	Rooftank 1 m3	Fiber Roof Tank ex. Penguin + Frame or equivalent	unit	1,00
10	Jet Pump	Ex. Shimizu 150 Hp or equivalent	unit	1,00
11	Deep well depth 20 m'	Manual labour excavation	ls	1,00
<b>IX</b>	<b>ELECTRICAL WORKS</b>			
	<b>1st Floor</b>			
1	Main Panel		unit	1,00
2	Toevoer cable 4 x 16 mm		m'	25,00

3	Lamp Installation	3 x 4 mm cable Ex. Eterna or equivalent	unit	6,00
4	Fitting + Mercury Lamp 250 Watt	Fitting ex. China , Mercury Lamp 250 Watt ex. China or equivalent	unit	6,00
5	Lamp Installation for office	3 x 4 mm cable Ex. Eterna or equivalent	unit	4,00
6	Fitting + Downlight lamp 18 watt	Fitting ex. China , Downlight Lamp ex. Philips or equivalent	unit	4,00
7	Electric Socket Installation	3 x 4 mm cable Ex. Eterna or equivalent	unit	8,00
8	Electric Socket	ex. Broco or equivalent	unit	8,00
9	Double Switch	ex. Broco or equivalent	unit	12,00
10	Lighting Rod	Lighting Rod Resistance ex. Local or equivalent	unit	3,00
11	Grounding	Until 0 ohm	ls	1,00

- **Qualification**

1. Contractor with legal company certificate.
2. Contractor with classification for building construction work who has minimum 3 years of relevant experiences.
3. Contractor with financial ability
4. Personnel availability.
5. Availability of construction equipment.

- **Personnel**

The contractor should provide the following personnel:

- Project Manager
- Project Administration
- Civil engineer
- Site Supervisor
- Skilled labor / worker
- Quality Controller & Logistic
- Support personnel.

- **Supervision, Monitoring and Reporting**

- The contractor should maintain daily supervision.

- The daily activity should be compiled in one specific format in weekly basis (Weekly report).
- Prepare monthly report as progress report in monthly basis and the supporting document for payment installment.
- Final report upon completion of construction work and first hand over note.
- Second hand over note upon completion with full satisfactory of defect and liability period.

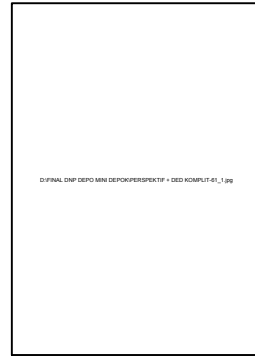
#### • **PAYMENT TERMS**

Payment will be made after satisfactory acceptance by UNDP the services provided on the following schedule:

**First payment – 40% of the total contract value** upon the completion on 50% of the total work volume and first construction work progress has been approved by PBDE Project.

**Second payment – 50% of the total contract value** upon the completion on 100% of the total work volume and upon the acceptance of certificate of substantial completion by PBDE Project.

**Final payment – 10% of the total contract value** after the completion of defect and liability period for 3 months (90 calendar days) and upon the acceptance of second handover statement by PBDE Project.



# MINI DEPOV

DEPOK - Y ÒUVÁΡΧΕ

## DRAWINGS

## ARCHITECTURE, ELECTRICAL & PLUMBING

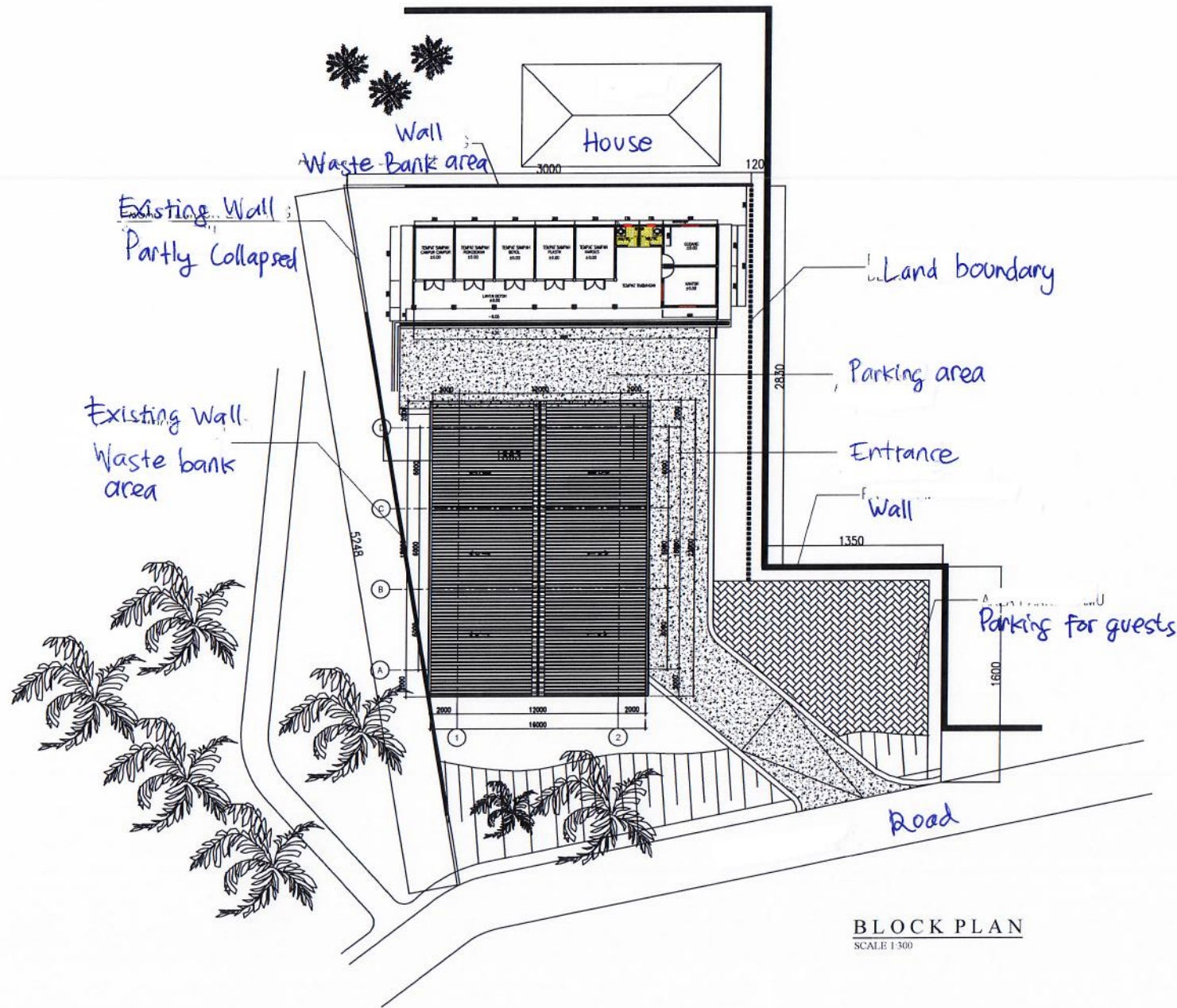
**MINI DEPO  
DEPOK – WEST JAVA**

**DRAWINGS  
ARCHITECTURAL, ELECTRICAL, PLUMBING**

No	Picture No.	Theme	Scale
	ARCHITECTURAL DRAWING		
1	AR-01	SITE PLAN	1:250
2	AR-02	BLOCK PLAN	1:250
3	AR-03	GROUND FLOOR AND MEZZANINE FLOOR PLAN	1:150
4	AR-04	ROOF PLAN	1:150
5	AR-05	FRONT VIEW	1:125
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No	Picture No.	Theme	Scale
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19	EL-01	LAMP INSTALLATION	1:250
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24	PL-01	FRESH WATER INSTALLATION	1:125
25	PL-02	WASTE WATER INSTALLATION	1:125
26	PL-03	SEPTIC TANK DETAIL	1:125



**BLOCK PLAN**  
SCALE 1:300

LEGEND / KEY PLAN:



Rev. Catatan: DATE

OWNER  
UNDP ( United Nation  
Development Program )

PROJECT  
Mini Depo Depok

ARCHITECT  
DAVID CHANDRA, S.ARS

DRAWING  
BLOCK PLAN

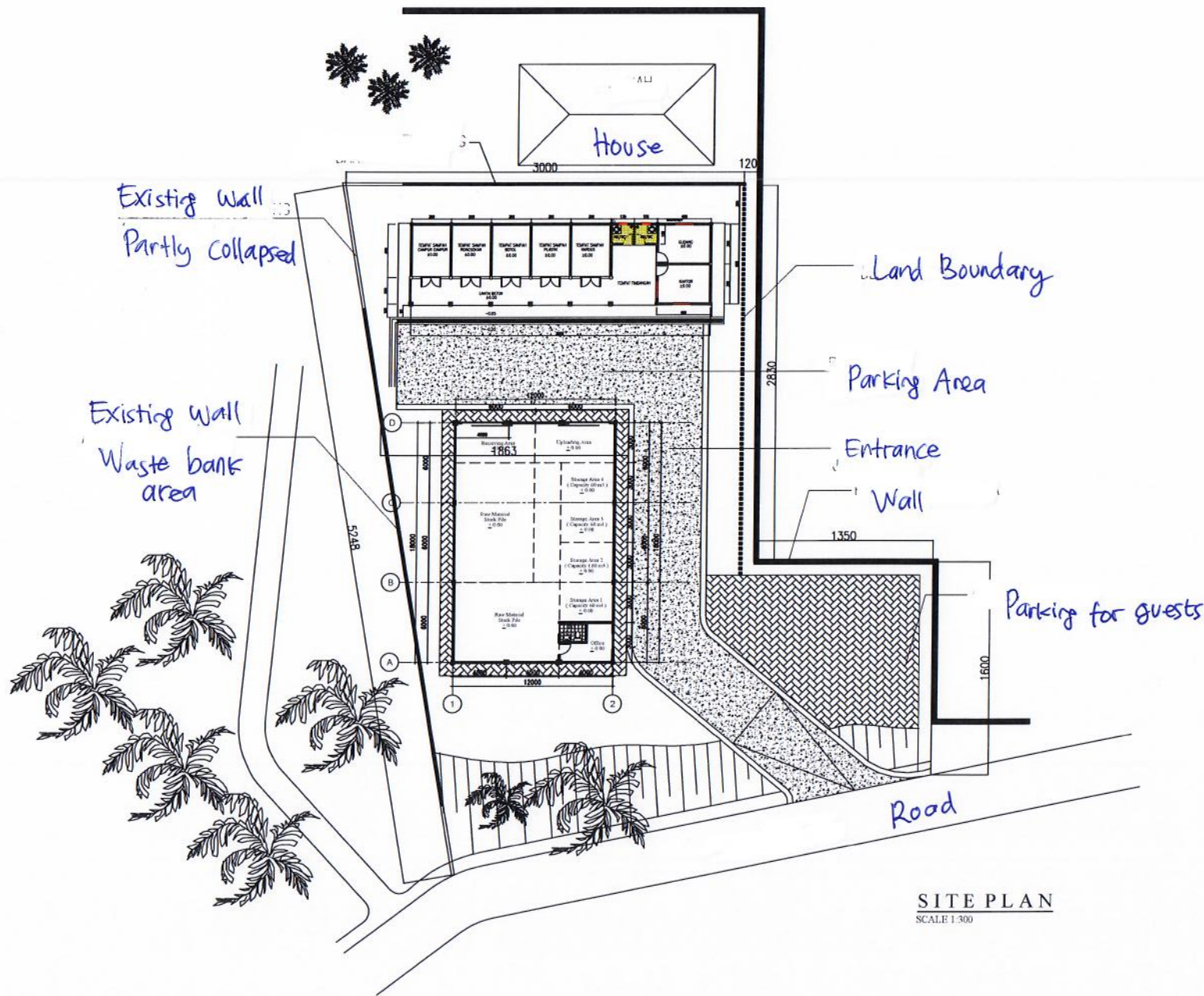
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SCALE: DRAWING NO.  
1:250 AR-02

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**SITE PLAN**  
SCALE 1:300

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ARCHITECT  
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SITE PLAN

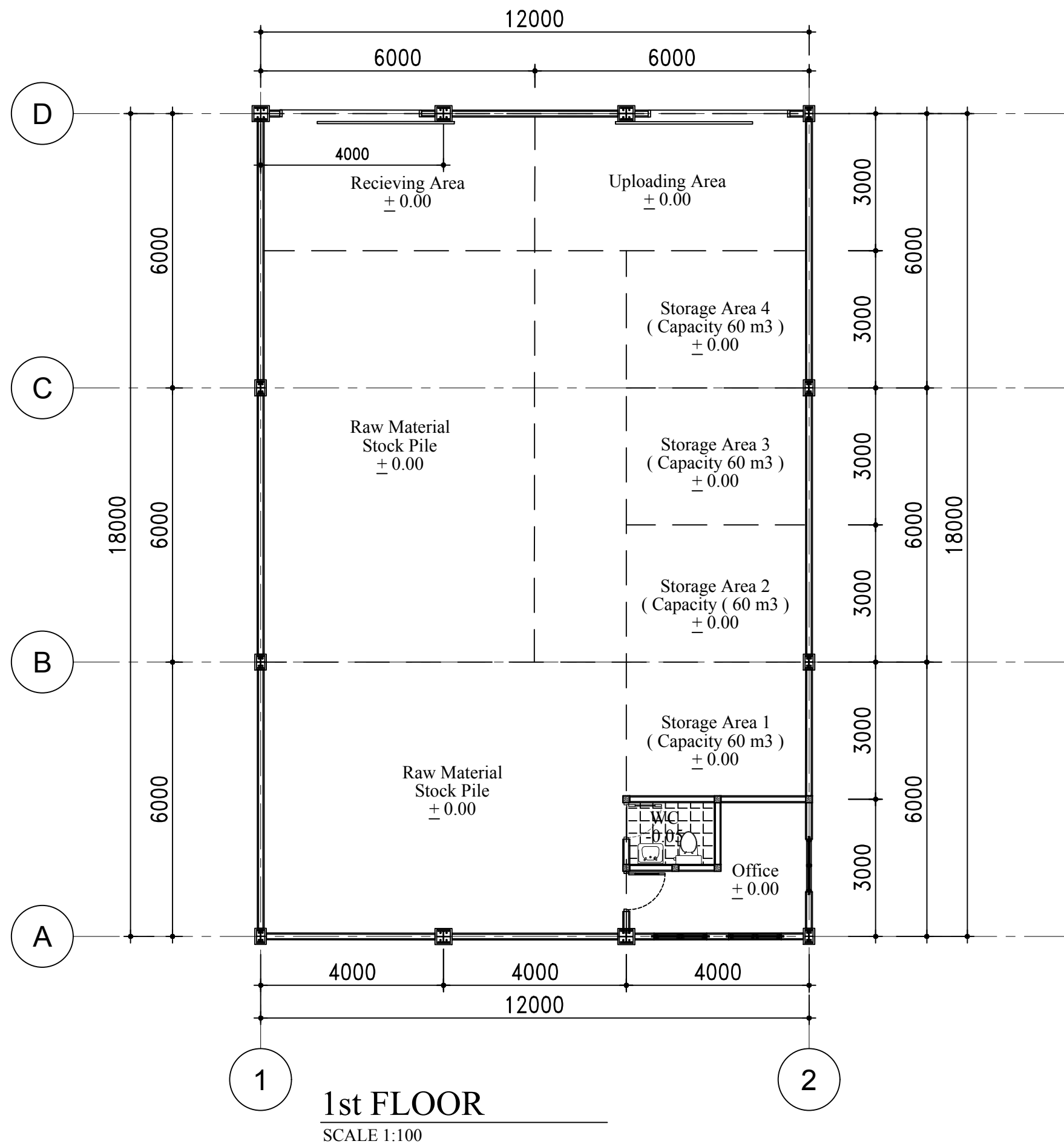
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1:250	AR-01

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ARCHITECT  
DAVID CHANDRA, S.ARS

DRAWING  
FIRST FLOOR PLAN

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6 Agustus 2019

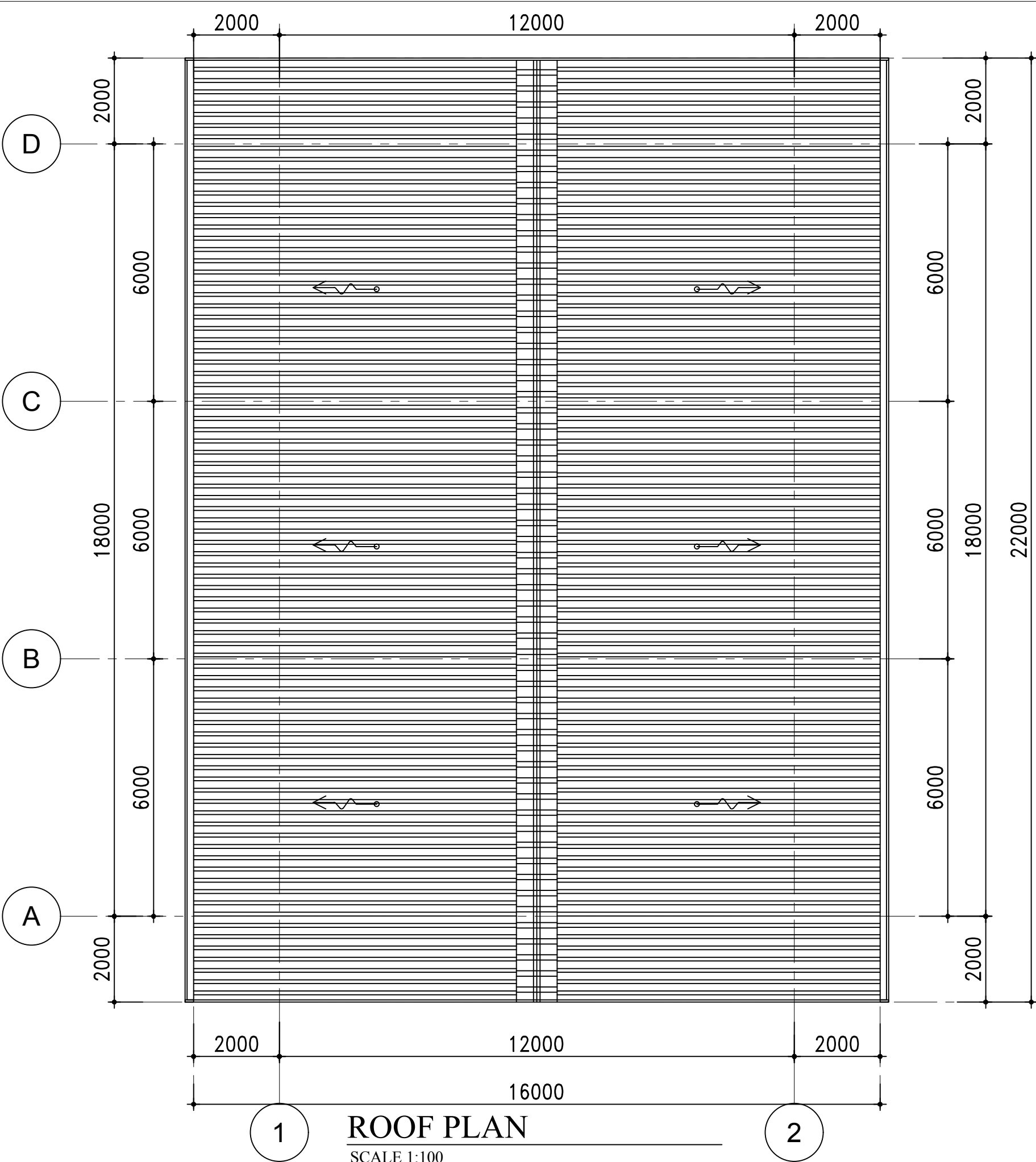
SCALE :  
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DRAWING NO.  
AR-03

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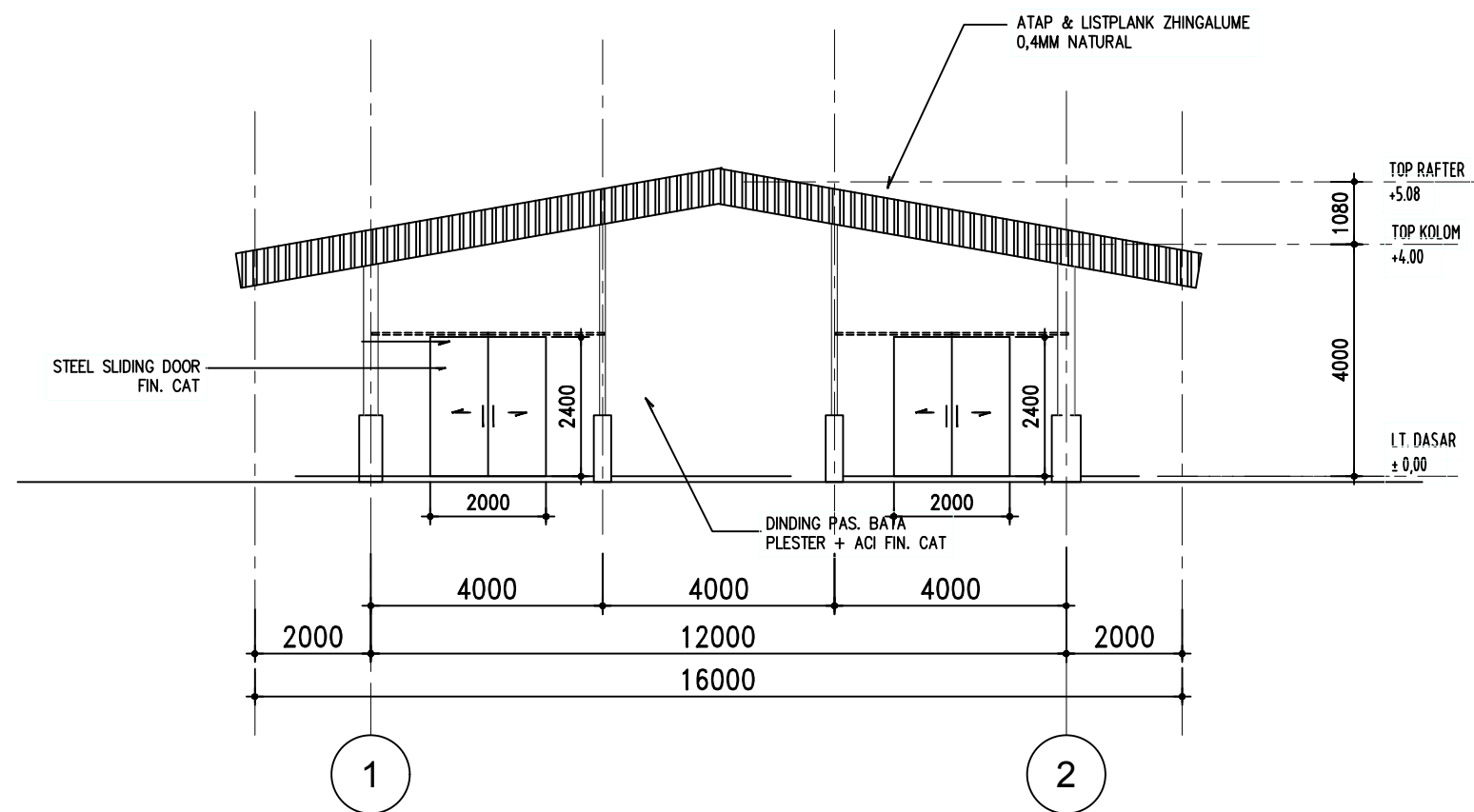


1 ROOF PLAN  
SCALE 1:100

2

KETERANGAN :  
 ATAP ZHINGALUME 0,4MM NATURAL

LEGEND / KEY PLAN :		
<div><div></div></div>		
Rev.	Catatan :	DATE
OWNER		
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PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
ROOF PLAN		
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1:100	AR-04	
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FRONT VIEW  
SCALE 1:125

LEGEND / KEY PLAN :



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Mini Depo Depok

ARCHITECT

DAVID CHANDRA, S.ARS

DRAWING

TAMPAK DEPAN

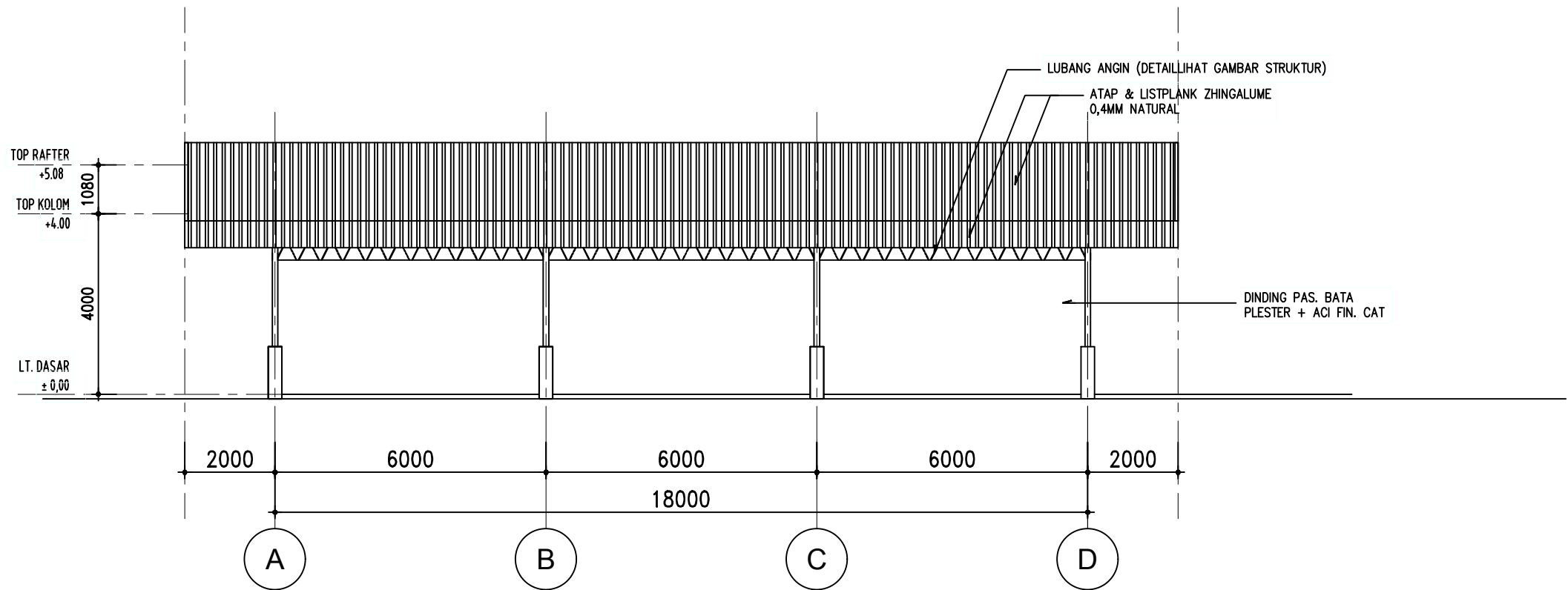
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1:125	AR-05

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LEFT SIDE VIEW  
SCALE 1:125

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Mini Depo Depok

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DRAWING  
LEFT SIDE VIEW

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DLH

DRAFTED BY : CHECKED BY : DATE:

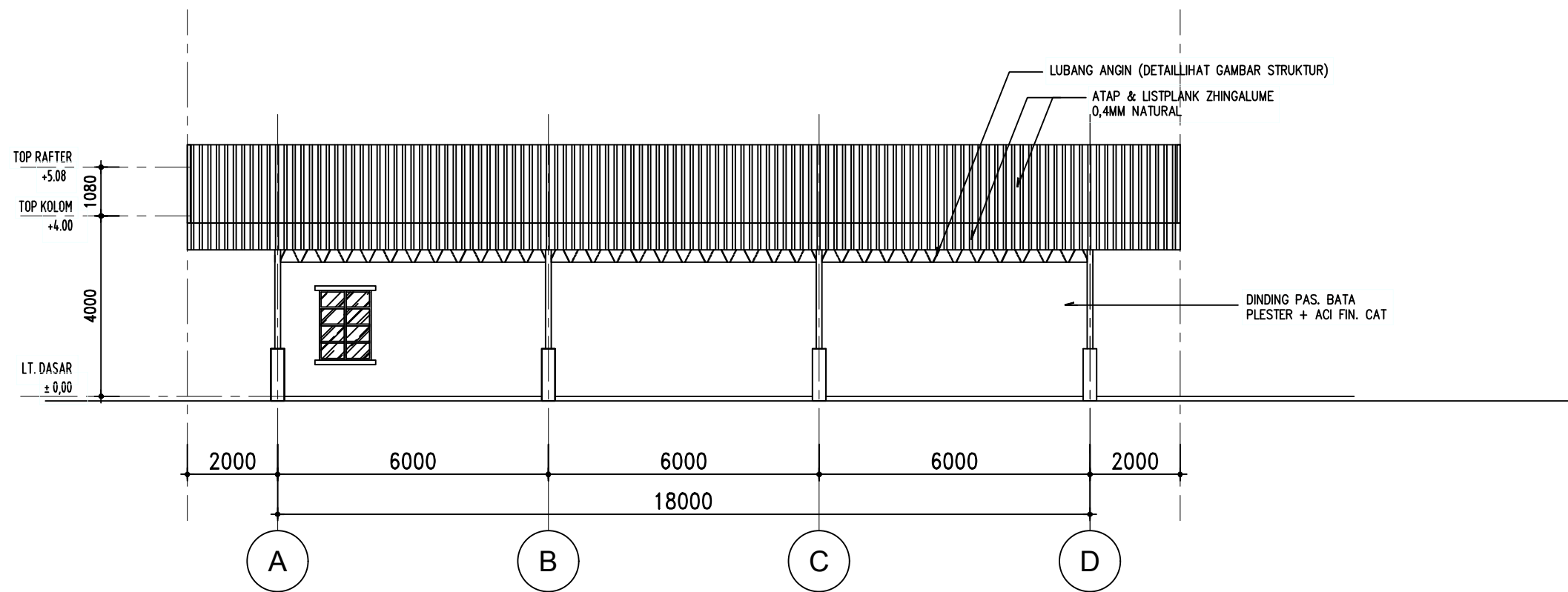
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SCALE : DRAWING NO.

1:125 AR-06

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RIGHT SIDE VIEW  
SCALE 1:125

LEGEND / KEY PLAN :



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Mini Depo Depok

ARCHITECT  
DAVID CHANDRA, S.ARS

DRAWING  
RIGHT SIDE VIEW

APPROVED BY :  
UNDP

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DLH

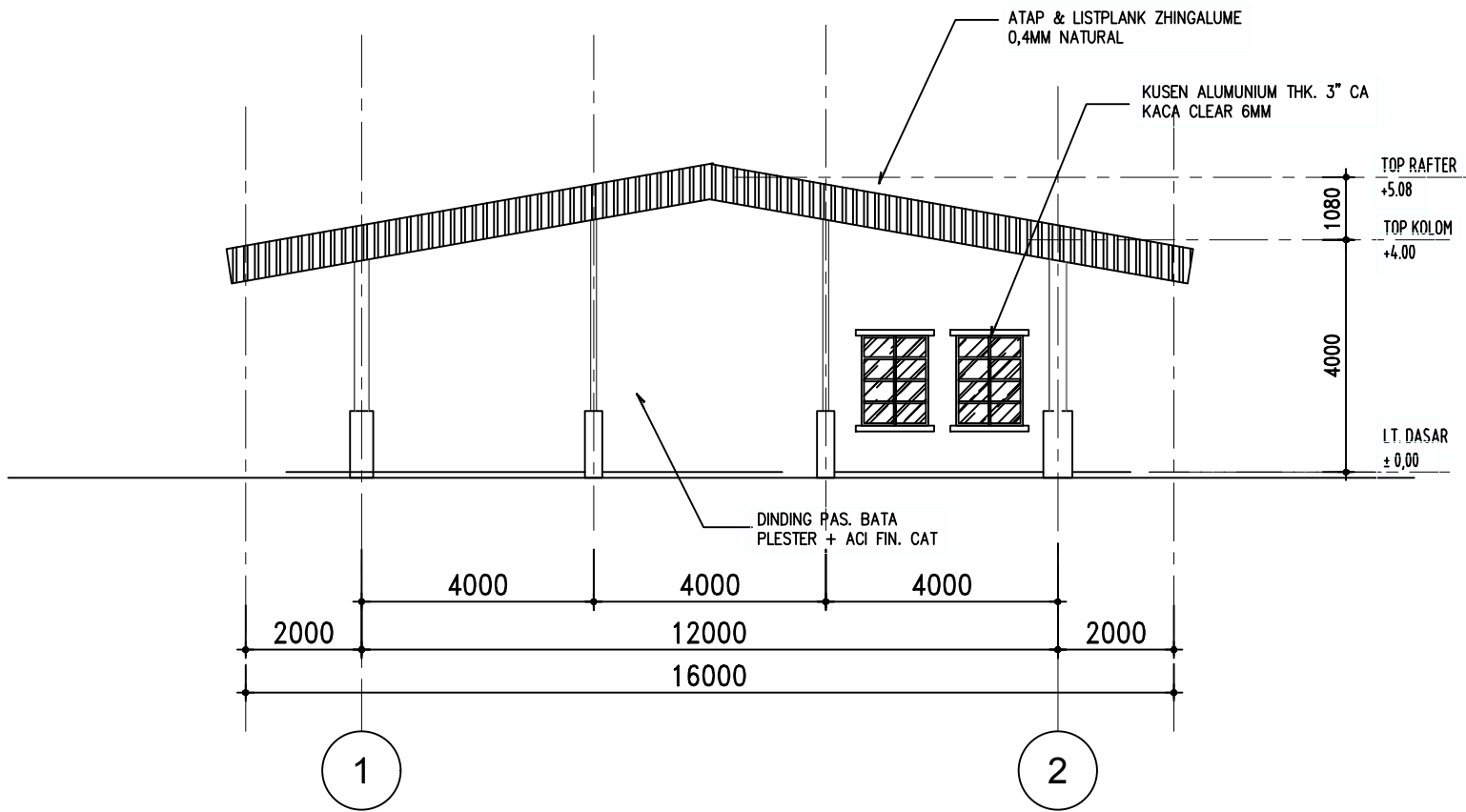
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DATE:  
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SCALE :  
1:125

DRAWING NO.  
AR-07R

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REAR VIEW

SCALE 1:125

LEGEND / KEY PLAN :



Rev. Catatan : DATE

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Development Program )

PROJECT  
Mini Depo Depok

ARCHITECT  
DAVID CHANDRA, S.ARS

DRAWING  
REAR VIEW

APPROVED BY :  
UNDP

APPROVED BY :  
DLH

DRAFTED BY : CHECKED BY : DATE:

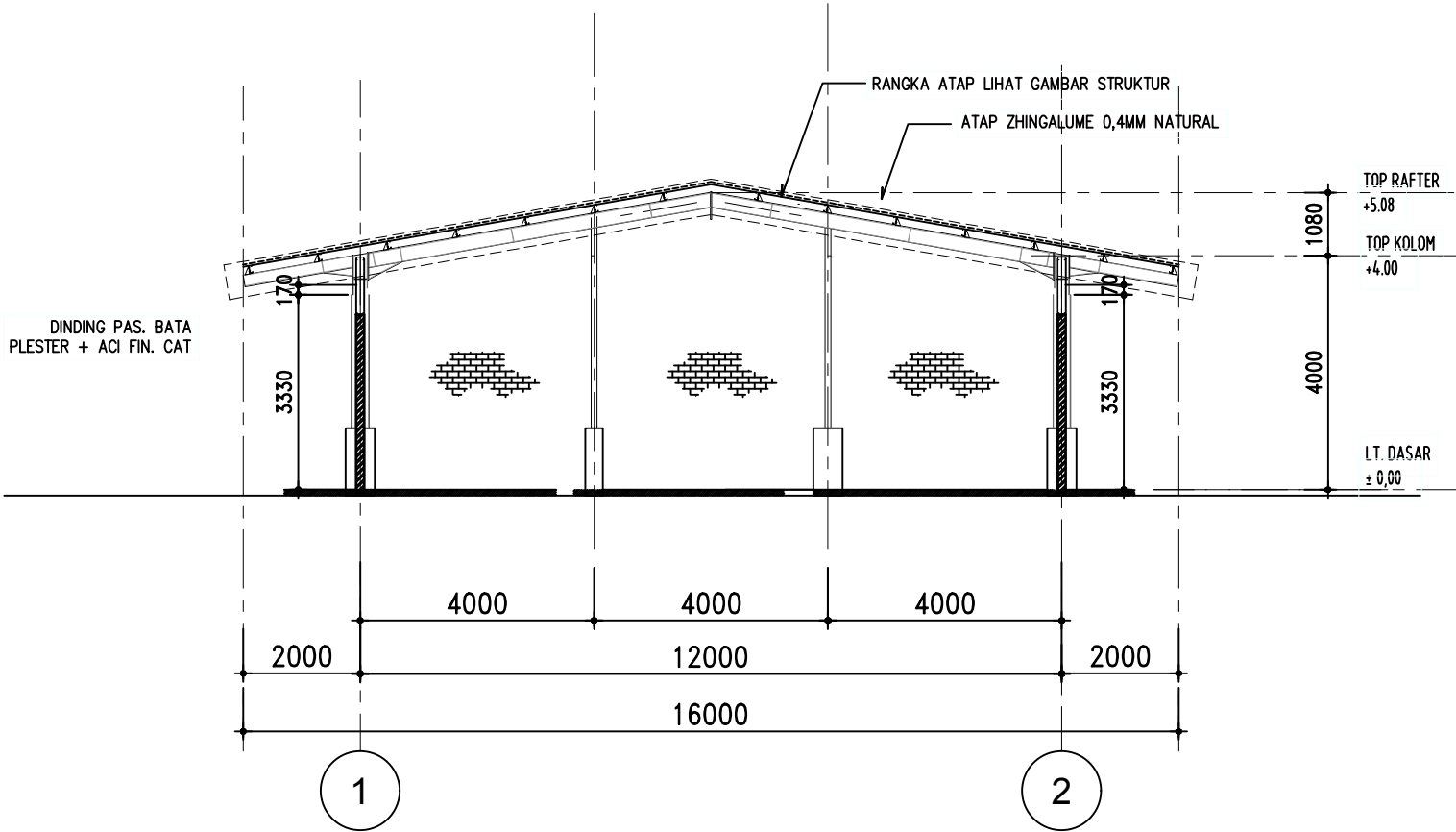
6 Agustus 2019

SCALE : DRAWING NO.

1:125 AR-08

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**SECTION A - A**  
SCALE 1:125

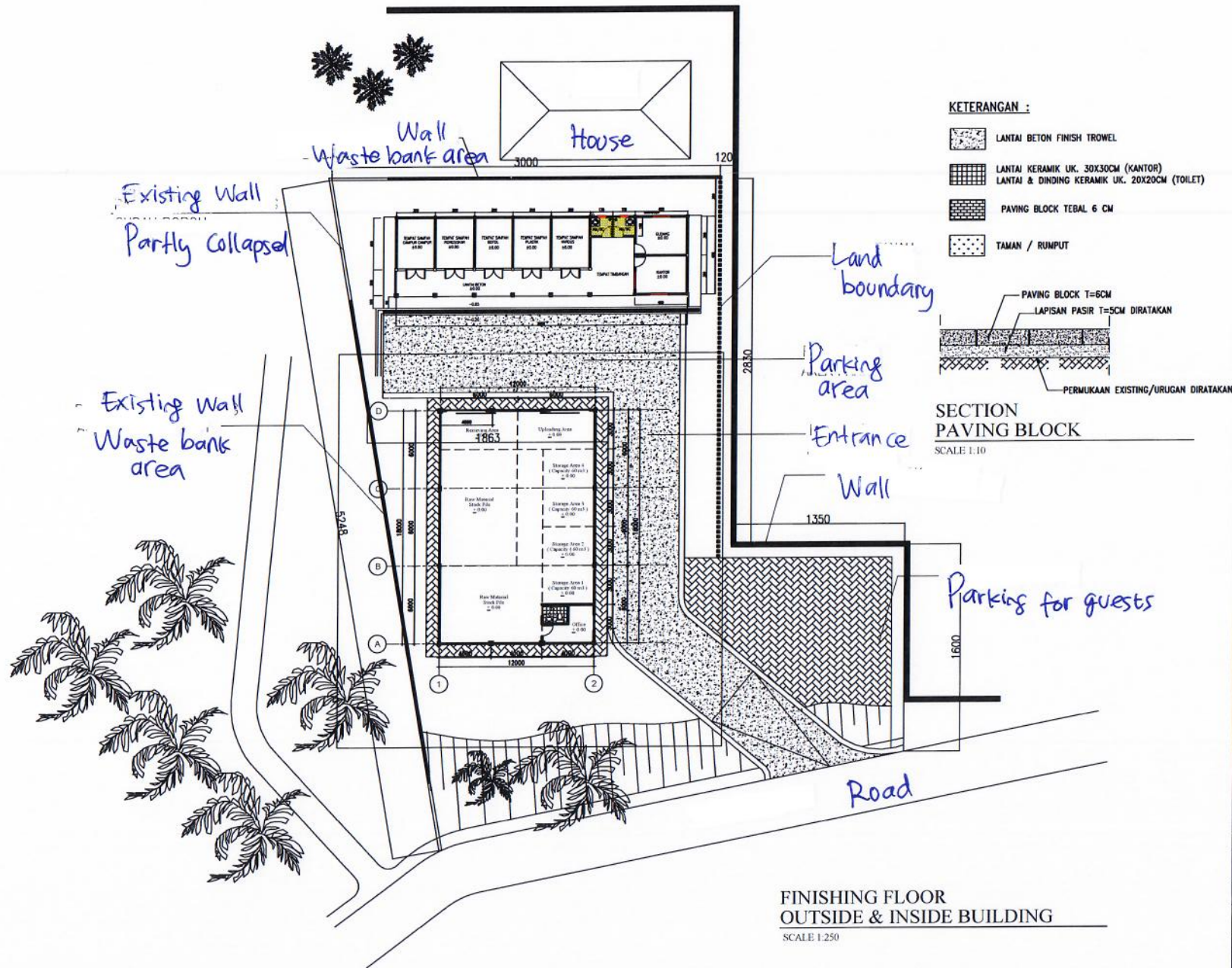
LEGEND / KEY PLAN :



Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
SECTION A - A		
APPROVED BY :		APPROVED BY :
UNDP		DLH
DRAFTED BY :	CHECKED BY :	DATE:
		6 Agustus 2019
SCALE :	DRAWING NO.	
1:125	AR-09SSSSS	

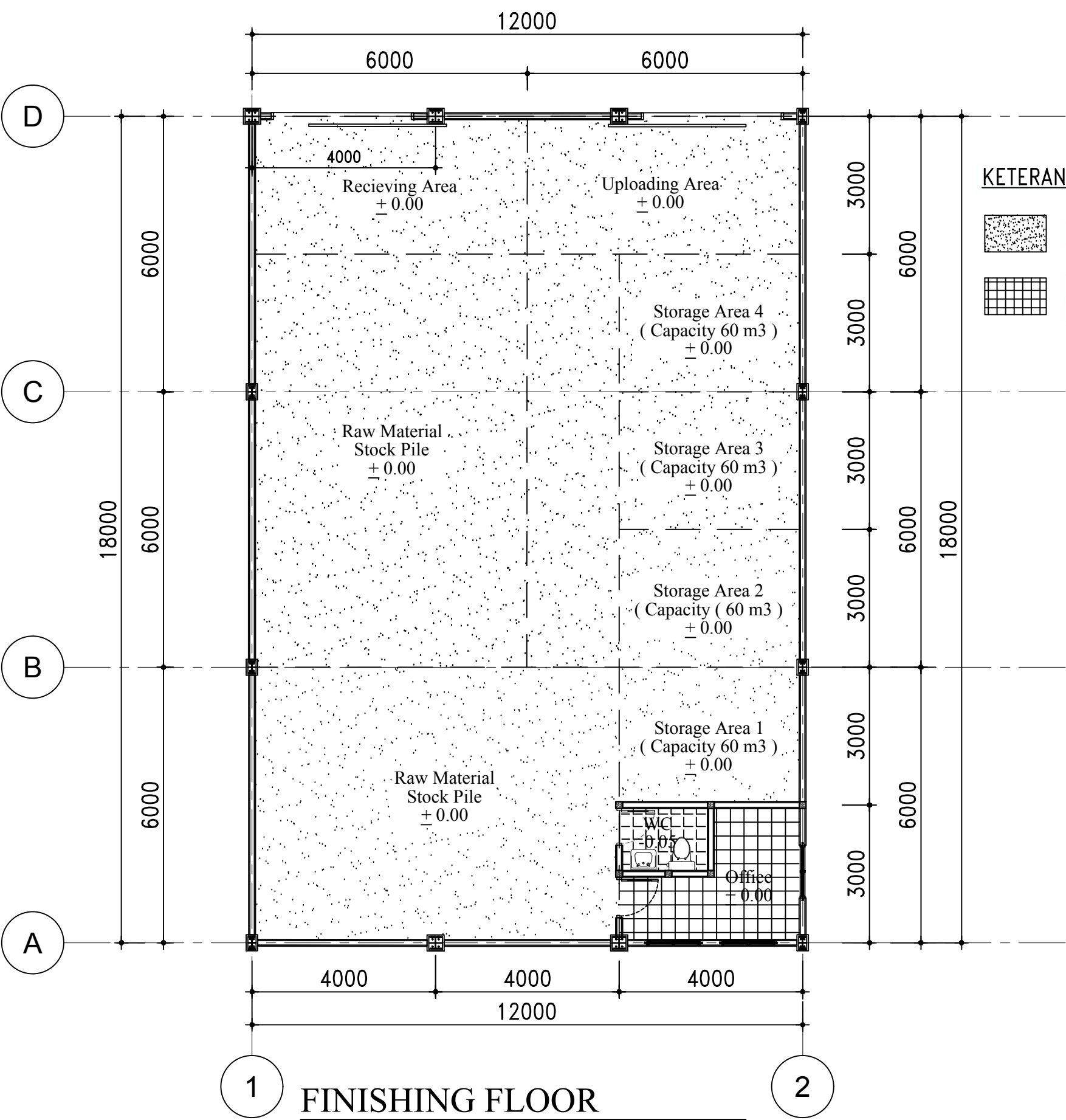
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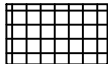
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LEGEND / KEY PLAN :		
<div></div>		
Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
FINISHING FLOOR OUTSIDE & INSIDE BUILDING		
APPROVED BY :		APPROVED BY :
UNDP		DLH
DRAFTED BY :	CHECKED BY :	DATE
		6 Agustus 2019
SCALE :		DRAWING NO.
1:250		AR-10FF
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- KETERANGAN :**
-  LANTAI BETON FINISH TROWEL
  -  LANTAI KERAMIK UK. 30X30CM (KANTOR)  
LANTAI & DINDING KERAMIK UK. 20X20CM (TOILET)

**FINISHING FLOOR**  
SCALE 1:100

LEGEND / KEY PLAN :



Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
FINISHING FLOOR		
APPROVED BY :		APPROVED BY :
UNDP		DLH
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SCALE :	DRAWING NO.	
1:100	AR-11	

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LEGEND / KEY PLAN :



Rev. Catatan : DATE

OWNER

UNDP ( United Nation  
Development Program )

PROJECT

Mini Depo Depok

ARCHITECT

DAVID CHANDRA, S.ARS

DRAWING

DETAIL OF TOILET  
GROUND FLOOR

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UNDP

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DLH

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CHECKED BY :

DATE:

6 Agustus 2019

SCALE :

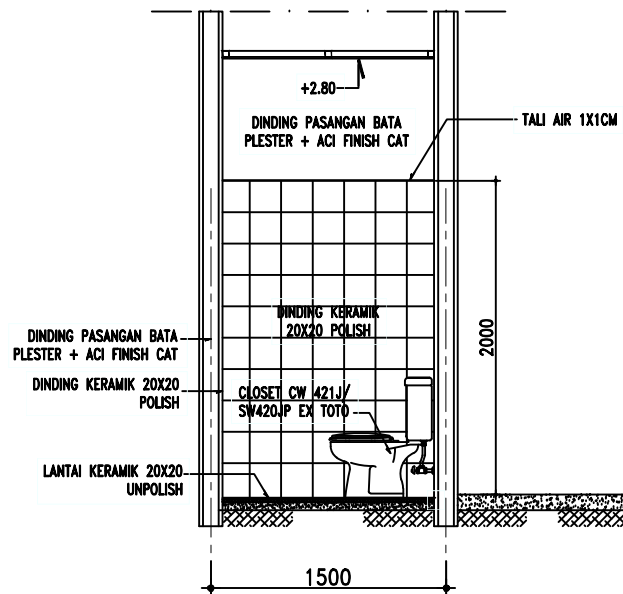
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DRAWING NO.

AR-12

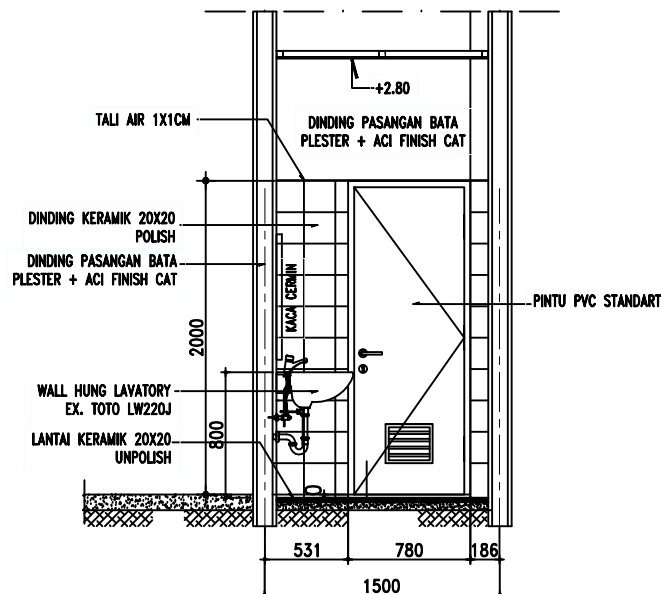
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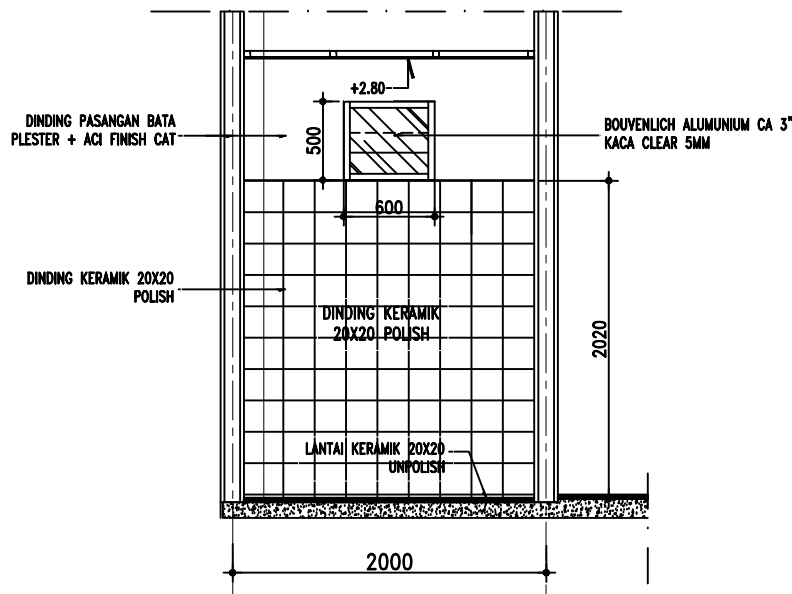
SECTION D - D

SCALE 1:50



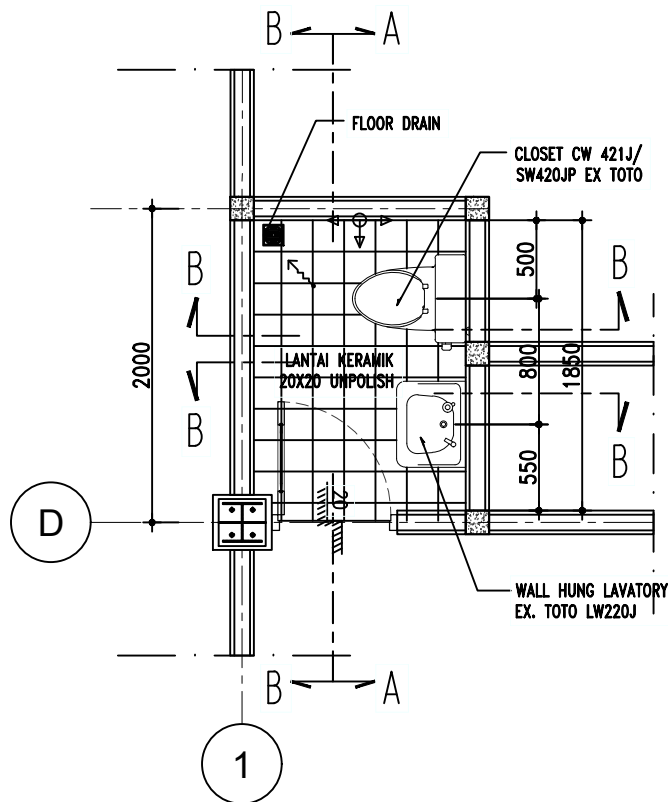
SECTION C - C

SCALE 1:50



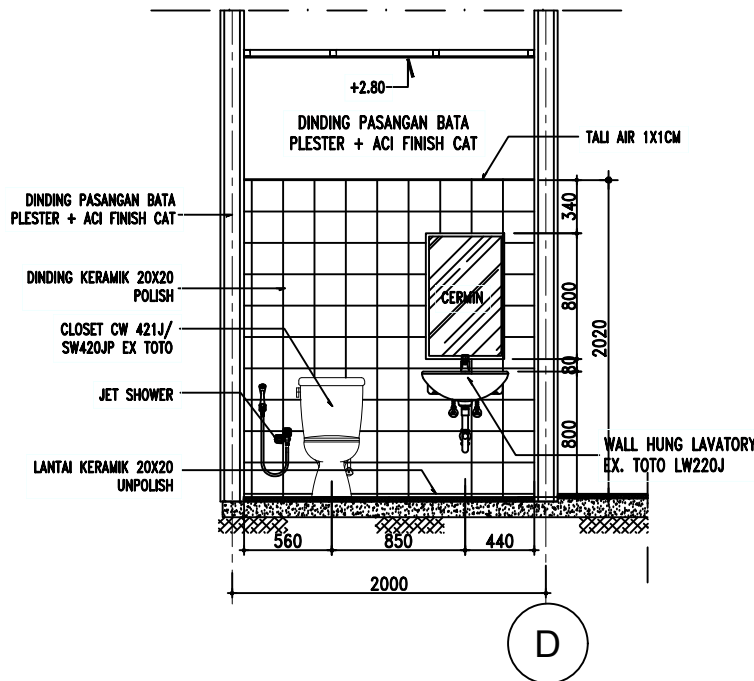
SECTION B - B

SCALE 1:50



TOILET GROUND FLOOR

SCALE 1:50

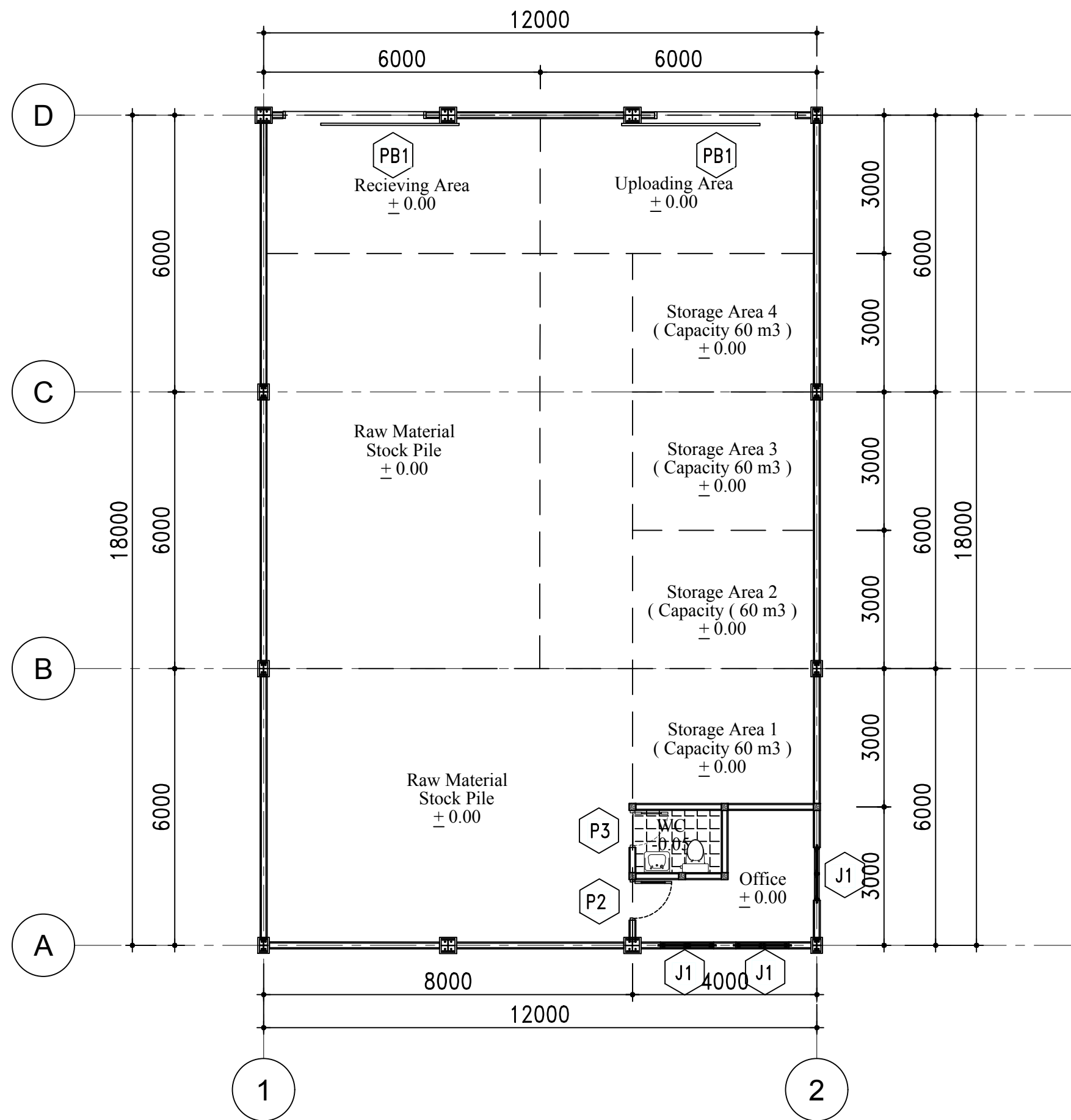


SECTION A - A

SCALE 1:50

KETERANGAN :

- CLOSET JONGKOK CE 7 EX. TOTO
- LAVATORY L38V1 EX. TOTO
- KERAMIK LANTAI UK. 20X20CM
- KERAMIK DINDING UK. 20X20CM



**SIL PLAN**  
SCALE 1:100

LEGEND / KEY PLAN :



Rev. Catalan : DATE

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Development Program )

PROJECT

Mini Depo Depok

ARCHITECT

DAVID CHANDRA, S.ARS

DRAWING

SIL PLAN

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DATE:

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SCALE :

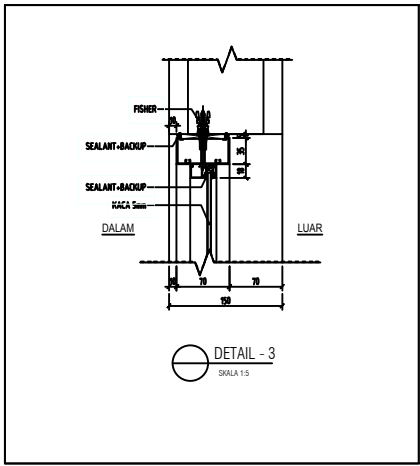
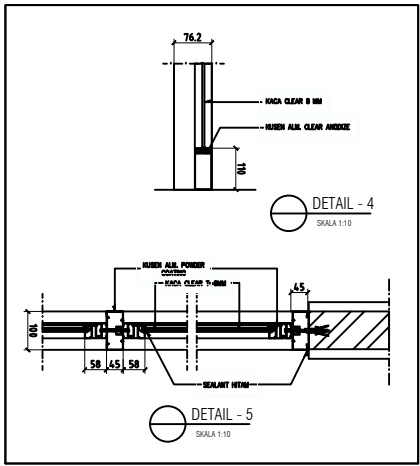
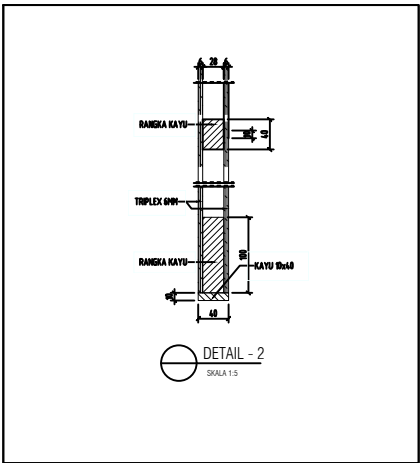
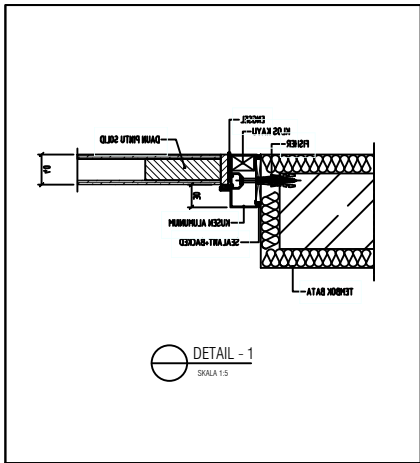
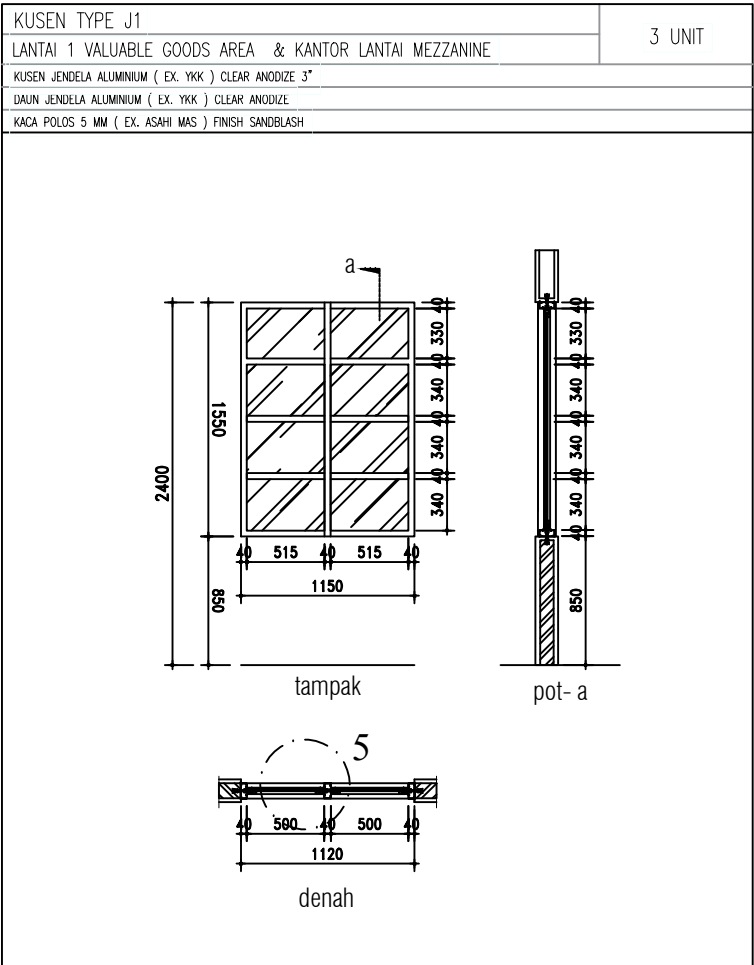
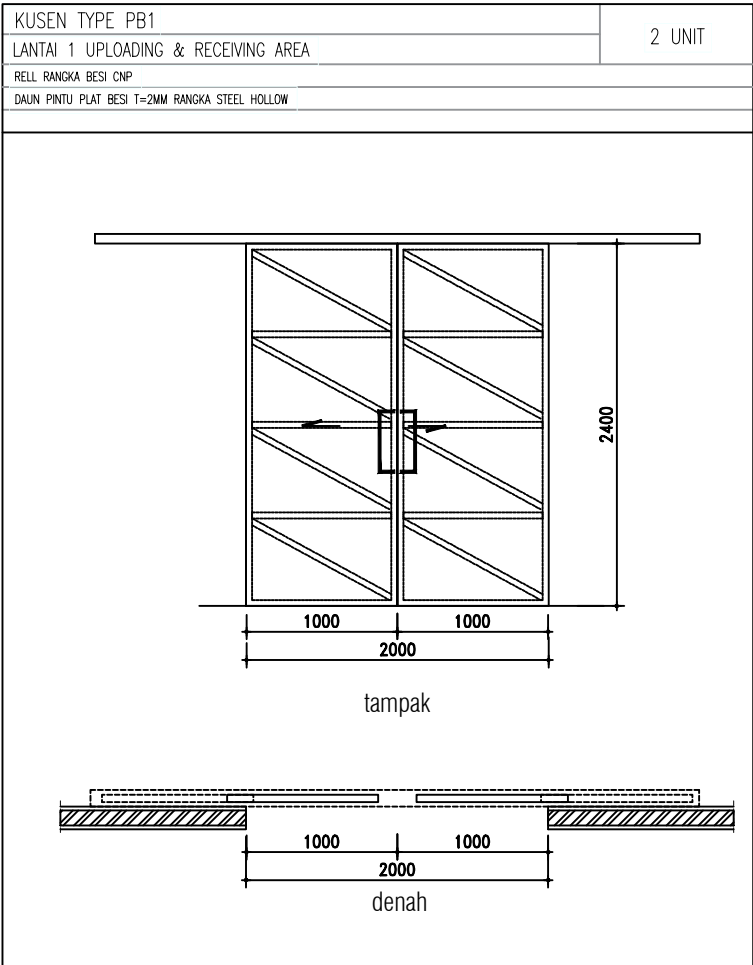
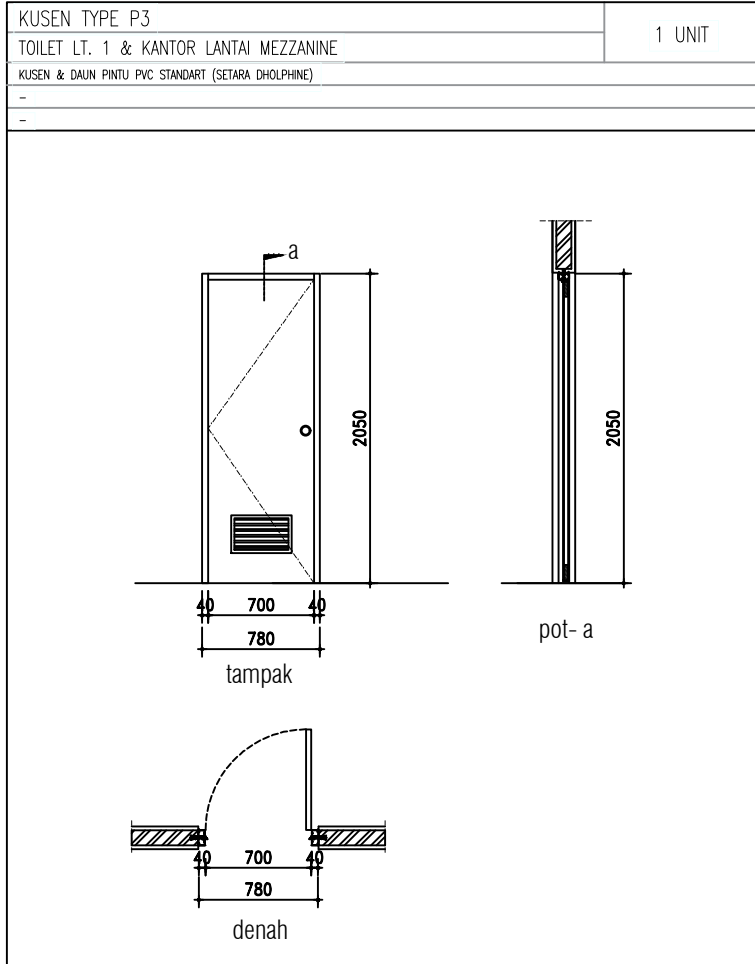
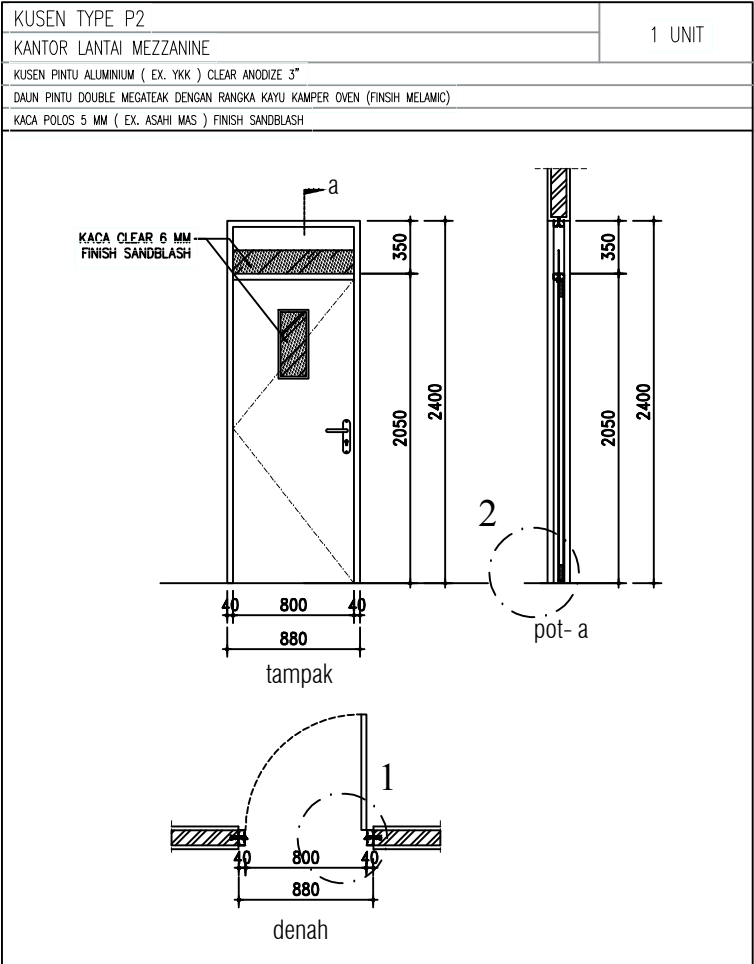
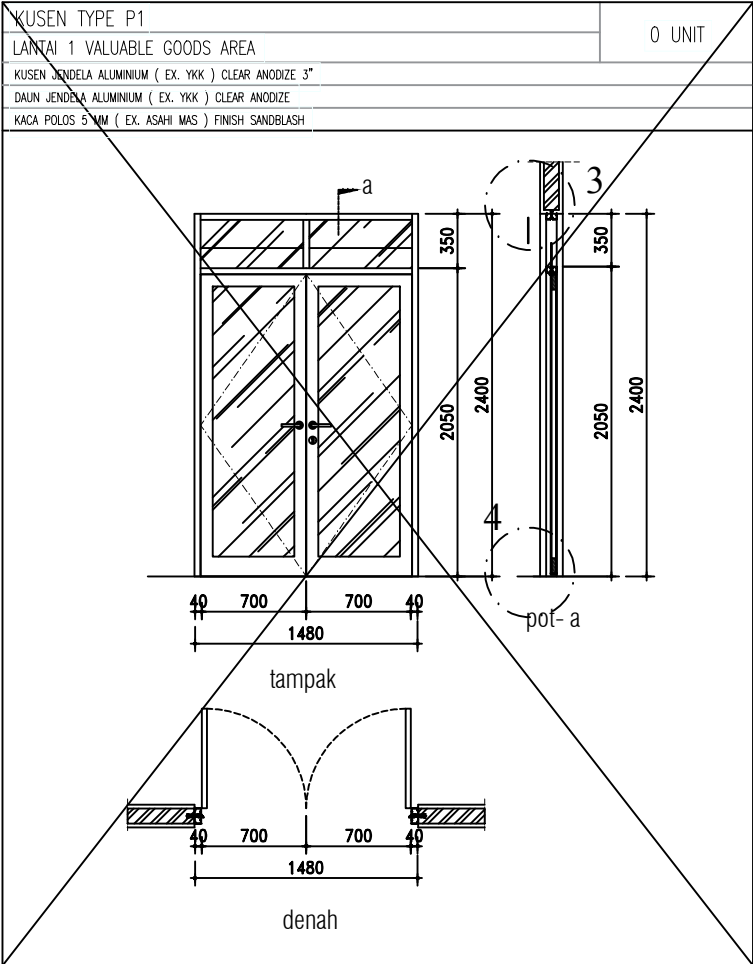
1:100

DRAWING NO.

AR-14

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LEGEND / KEY PLAN :



Rev. Catatan : DATE

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UNDP ( United Nation  
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PROJECT

Mini Depo Depok

ARCHITECT

DAVID CHANDRA, S.ARS

DRAWING

DETAIL OF SIL

APPROVED BY :

UNDP

APPROVED BY :

DLH

DRAFTED BY :

CHECKED BY :

DATE:

6 Agustus 2019

SCALE :

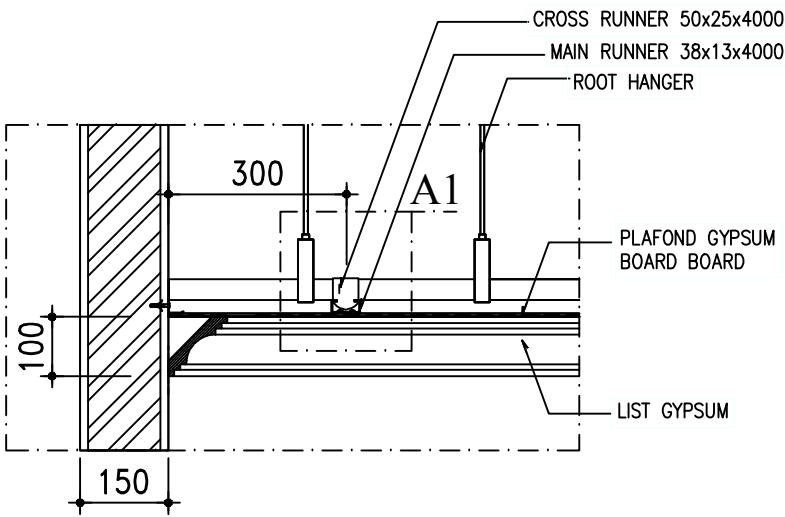
DRAWING NO.

1:25/1:5

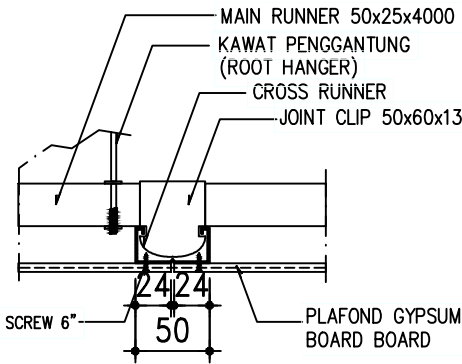
AR-15

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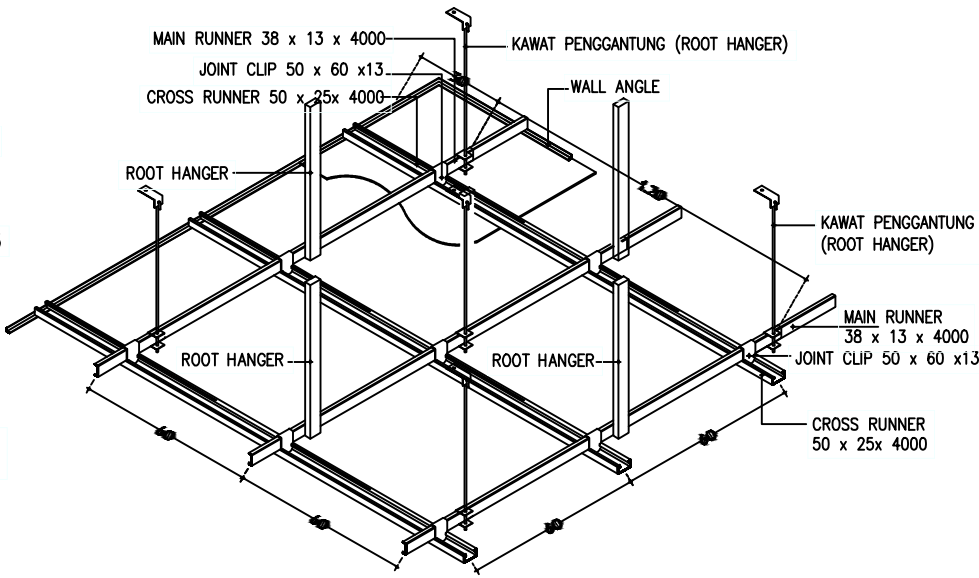
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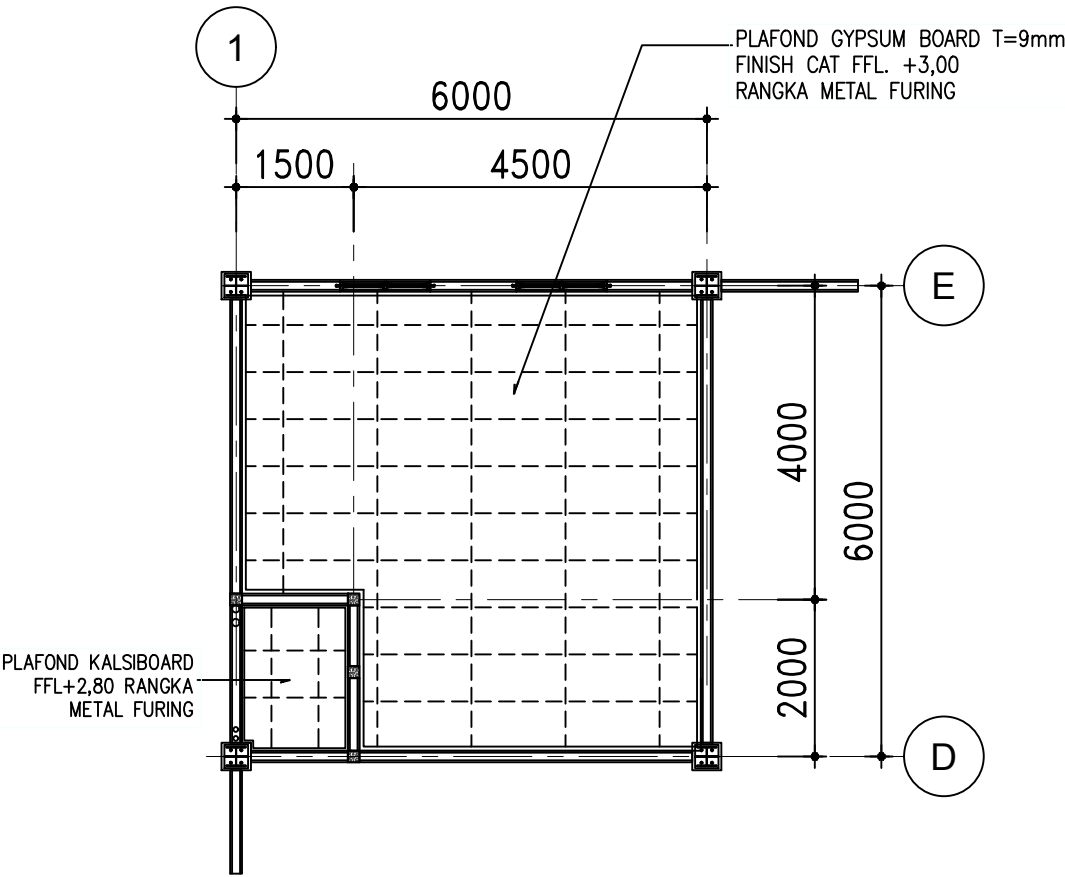
SECTION A  
NTS



DETAIL A1  
NTS



ISOMETRI PLAFOND



CEILING GROUND FLOOR  
SCALE 1:100

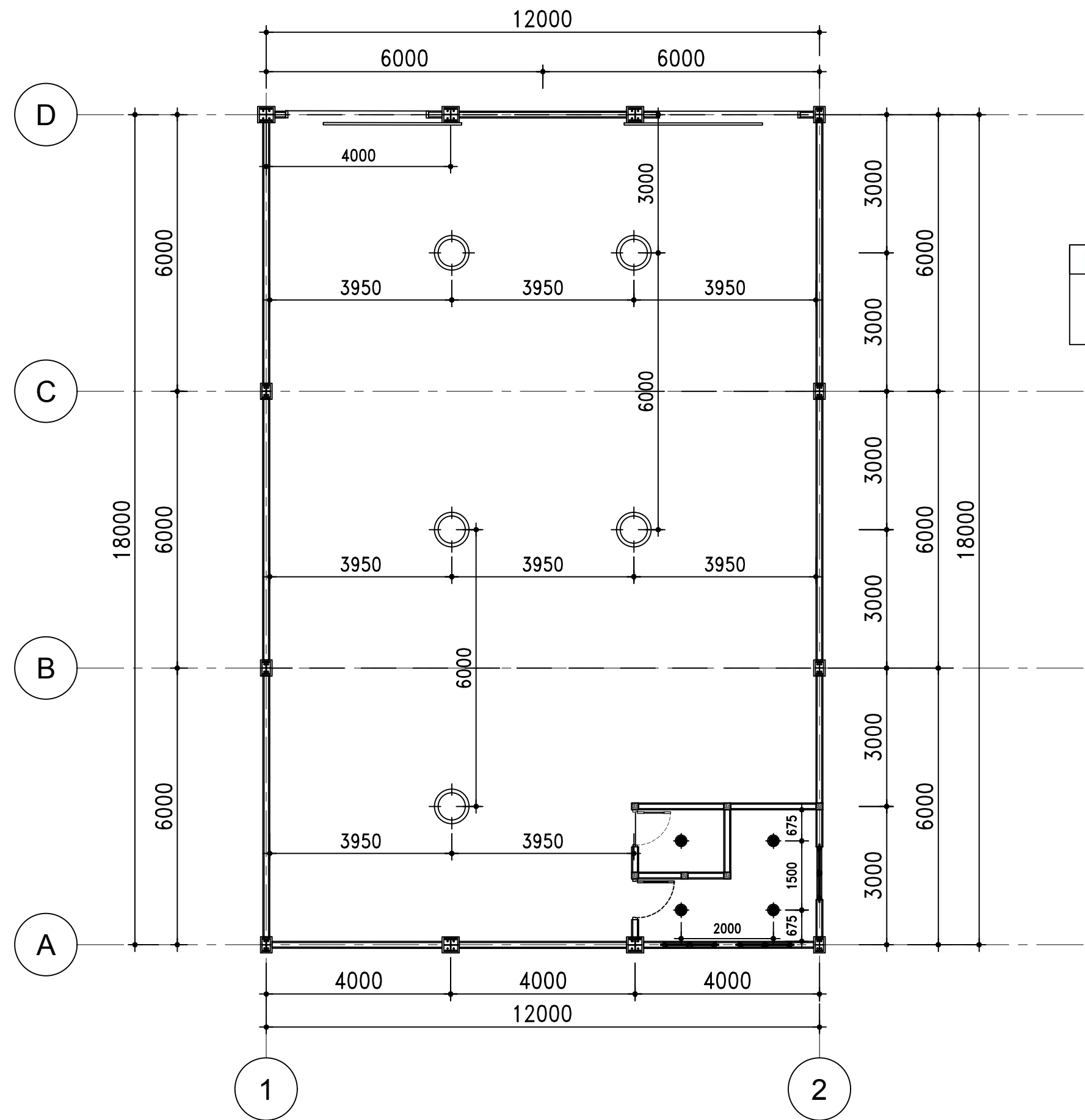
LEGEND / KEY PLAN :



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OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
DETAIL OF CEILING		
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SCALE :	DRAWING NO.	
1:100	AR-16	

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LAMP SPOT  
SCALE 1:100

LEGEND / KEY PLAN :



SIMBOL	KETERANGAN
	LAMPU LED INDUSTRI 150 WATT
	DOWNLIGHT LED-18W dia. 6"

Rev.	Catatan :	DATE

OWNER		
UNDP ( United Nation Development Program )		

PROJECT		
Mini Depo Depok		

ARCHITECT		
DAVID CHANDRA, S.ARS		

DRAWING		
LAMP SPOT		

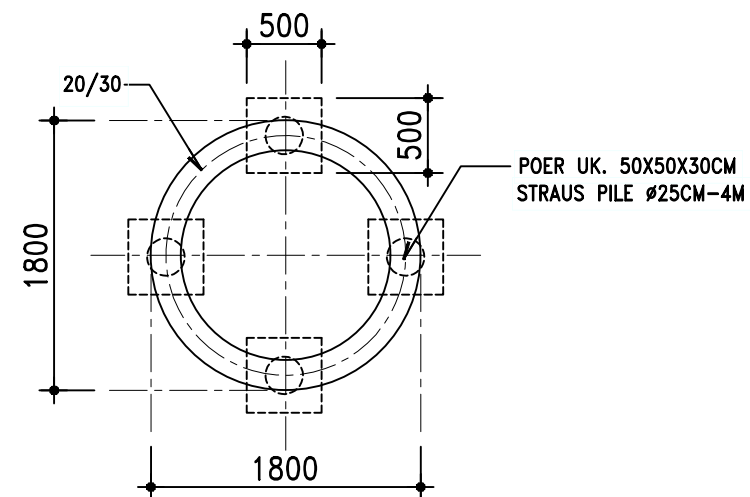
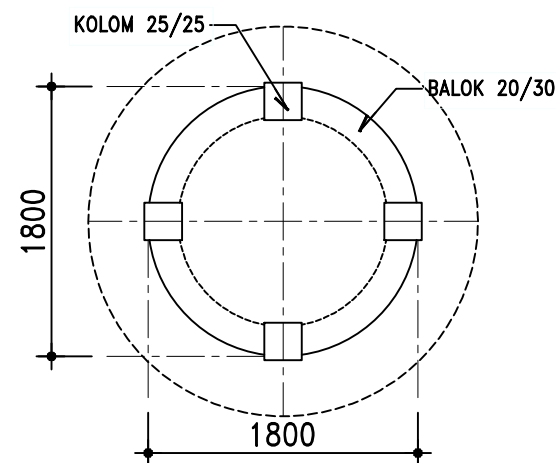
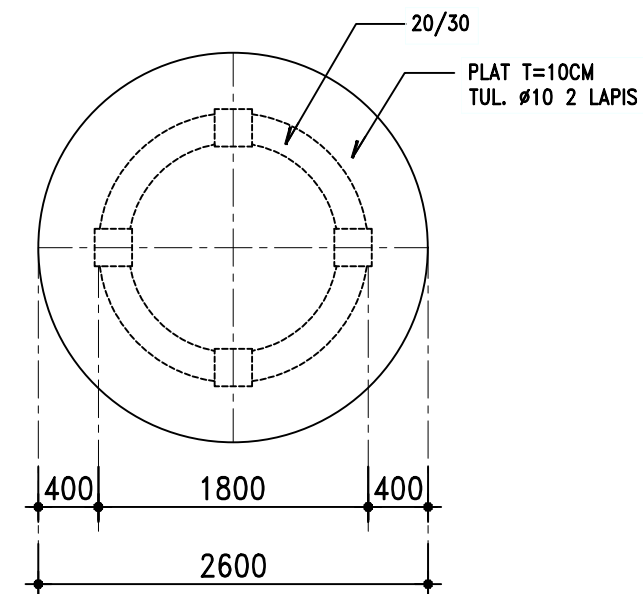
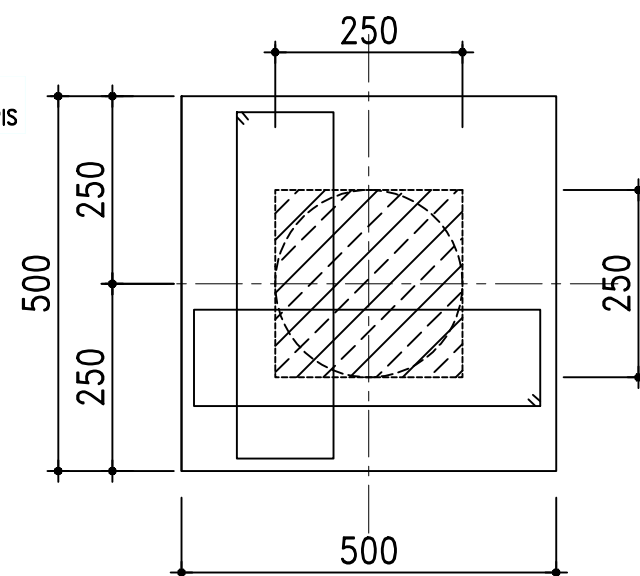
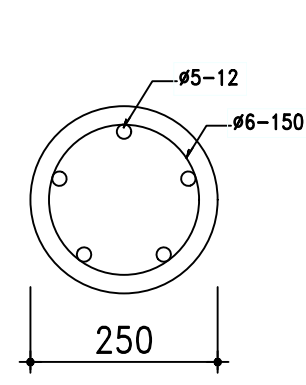
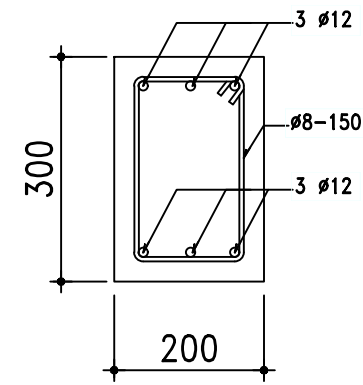
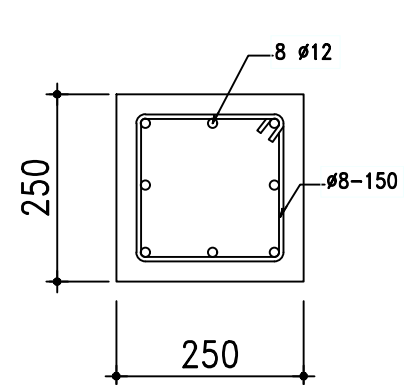
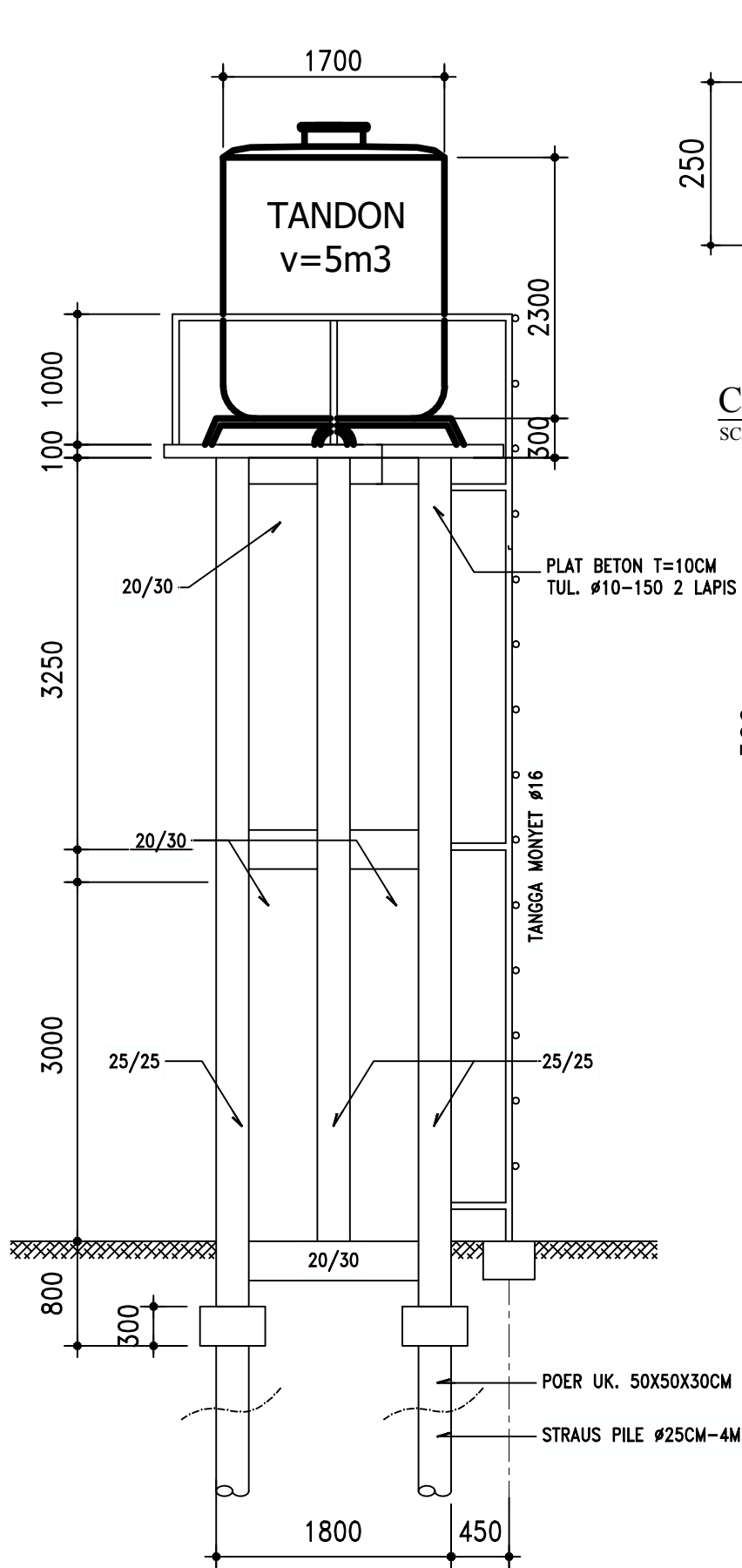
APPROVED BY :		APPROVED BY :	
UNDP		DLH	

DRAFTED BY :	CHECKED BY :	DATE:
		6 Agustus 2019

SCALE :	DRAWING NO.
1:100	AR-17

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LEGEND / KEY PLAN :



Rev. Catatan : DATE

OWNER

UNDP ( United Nation  
Development Program )

PROJECT

Mini Depo Depok

ARCHITECT

DAVID CHANDRA, S.ARS

DRAWING

DET. OF WATER TOWER

APPROVED BY :

UNDP DLH

DRAFTED BY :

CHECKED BY :

DATE:

6 Agustus 2019

SCALE :

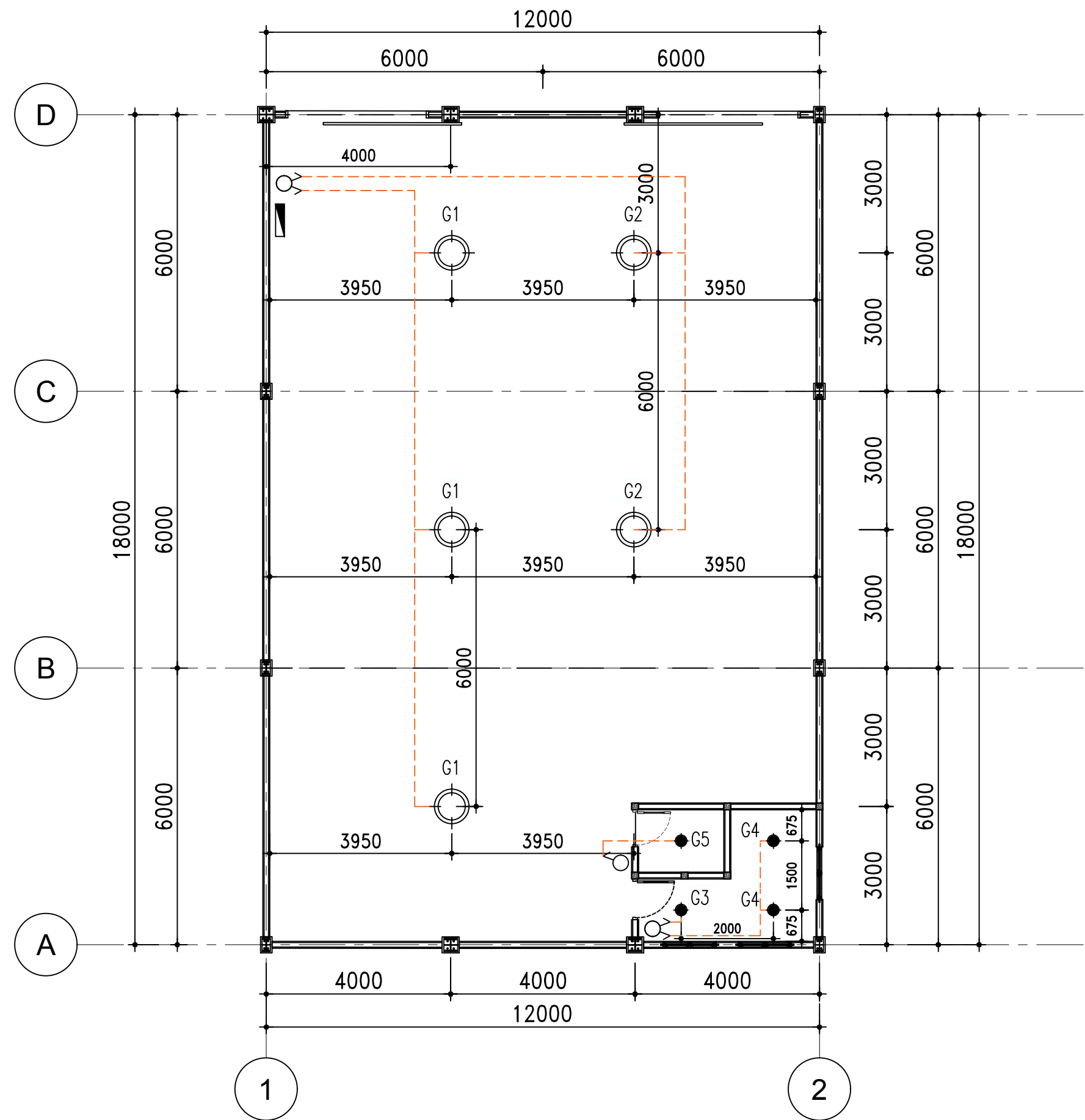
DRAWING NO.

1:50 / 1:10

AR-18.

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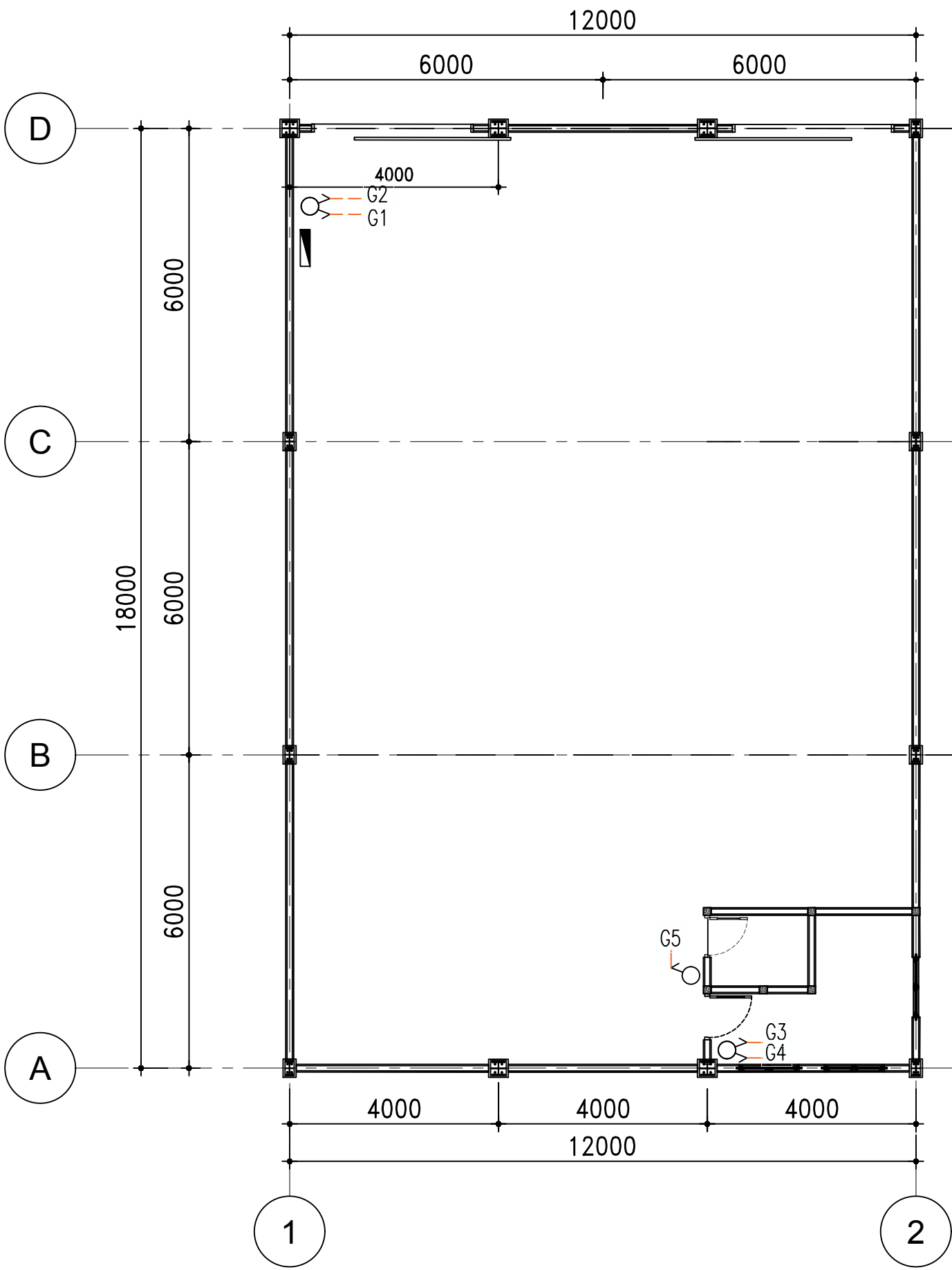
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SIMBOL	KETERANGAN
	LAMPU LED INDUSTRI 150 WATT
	DOWNLIGHT LED-18W dia. 6"
	SAKLAR TUNGGAL H=1500 TO FLOOR
	SAKLAR GANDA H=1500 TO FLOOR
	INSTALASI KABEL
	BOX PANEL

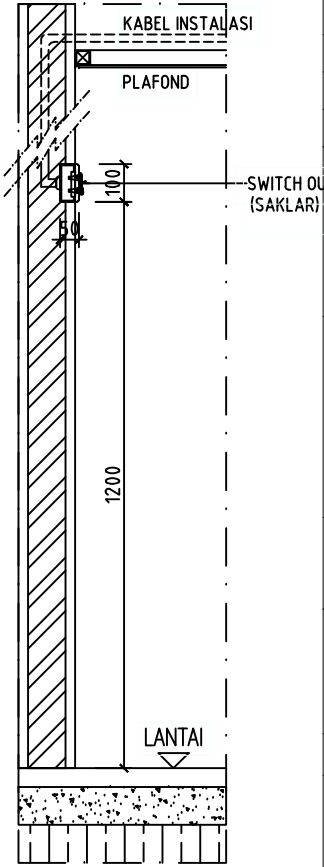
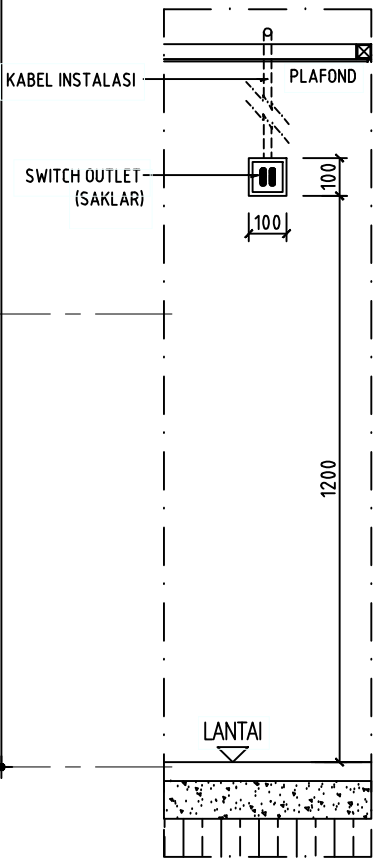
LEGEND / KEY PLAN :		
Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
LAMP SPOT		
APPROVED BY :		APPROVED BY :
UNDP		DLH
DRAFTED BY :	CHECKED BY :	DATE:
		6 Agustus 2019
SCALE :	DRAWING NO.	
1:100	EL-01	
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LAMP SPOT  
SCALE 1:100



LAMP SPOT  
SCALE 1:100

SIMBOL	KETERANGAN
⌚	SAKLAR TUNGGAL H=1500 TO FLOOR
⌚⌚	SAKLAR GANDA H=1500 TO FLOOR
---	INSTALASI KABEL



DETAIL SOCKET INSTALLATION  
SCALE 1:20

LEGEND / KEY PLAN :



Rev. Catatan : DATE

OWNER  
UNDP ( United Nation  
Development Program )

PROJECT  
Mini Depo Depok

ARCHITECT  
DAVID CHANDRA, S.ARS

DRAWING  
LAMP SPOT

APPROVED BY : UNDP	APPROVED BY : DLH
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DRAFTED BY :	CHECKED BY :	DATE: 6 Agustus 2019
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SCALE : 1:100	DRAWING NO. EL-02
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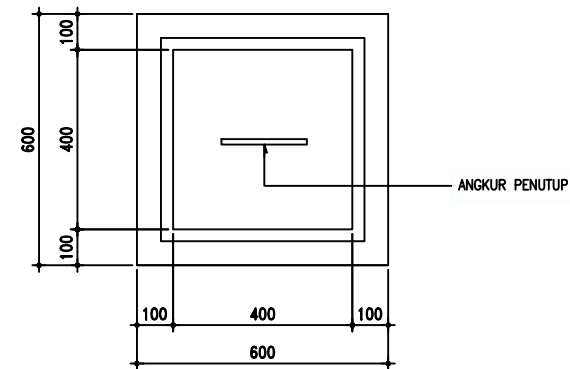
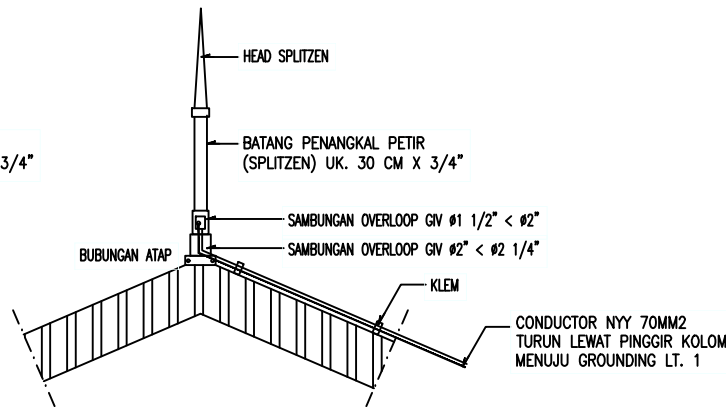
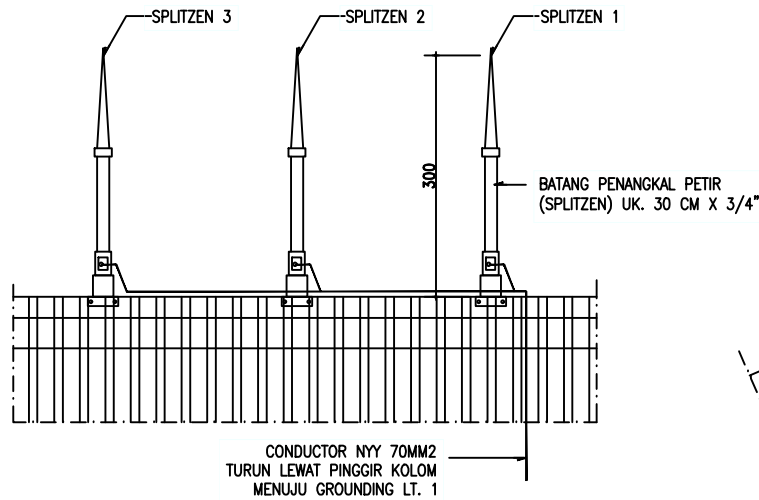
## DETAIL ON SOCKET INSTALLATION



A large, empty rectangular box with a black border, representing a redacted area. The box is centered on the page and occupies most of the vertical space. It is completely blank, with no text or markings inside.

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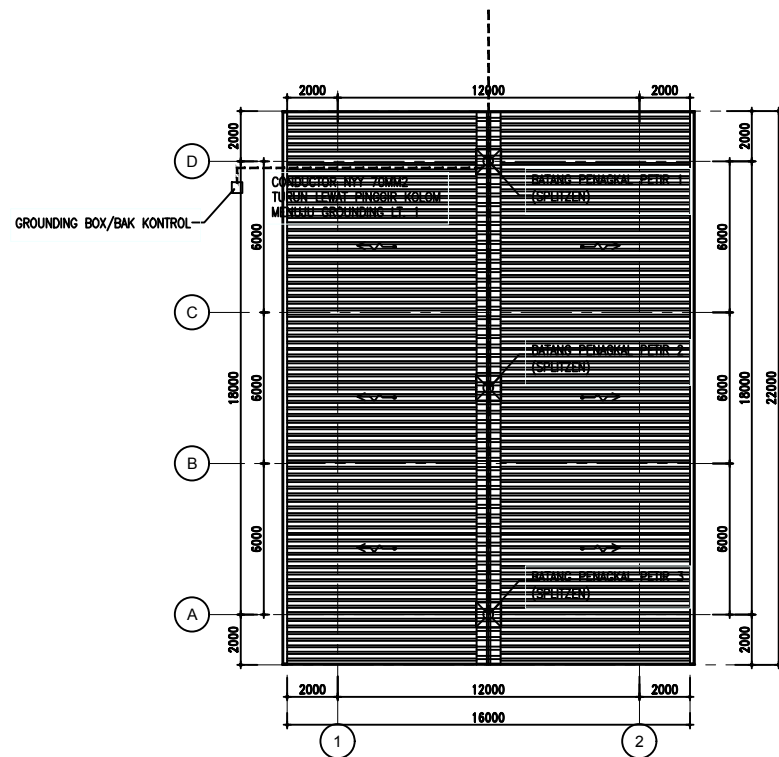


CONTROL TUB

SCALE : NTS

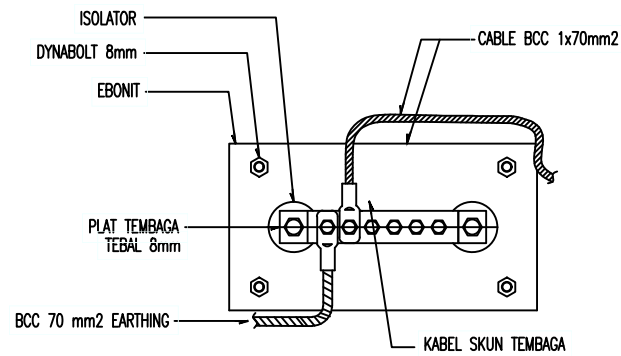
DETAIL ON LIGHTNING ROD

SCALE : NTS



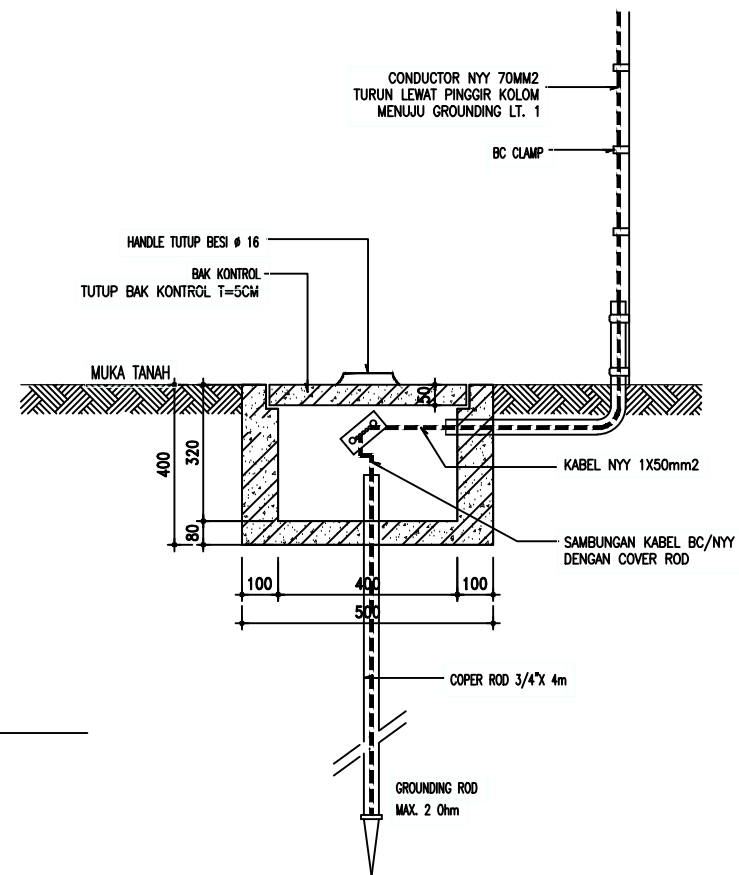
INSTALATION OF LIGHTNING ROD

SCALE : NTS



GROUNDING JOINT DETAIL

SCALE : NTS



CONTROL TUB DETAIL

SCALE : NTS

LEGEND / KEY PLAN :



Rev. Catatan : DATE

OWNER

UNDP ( United Nation  
Development Program )

PROJECT

Mini Depo Depok

ARCHITECT

DAVID CHANDRA, S.ARS

DRAWING

PLAN & DETAIL  
LIGHTNING ROD INSTALATION

APPROVED BY :

UNDP DLH

DRAFTED BY : CHECKED BY : DATE:

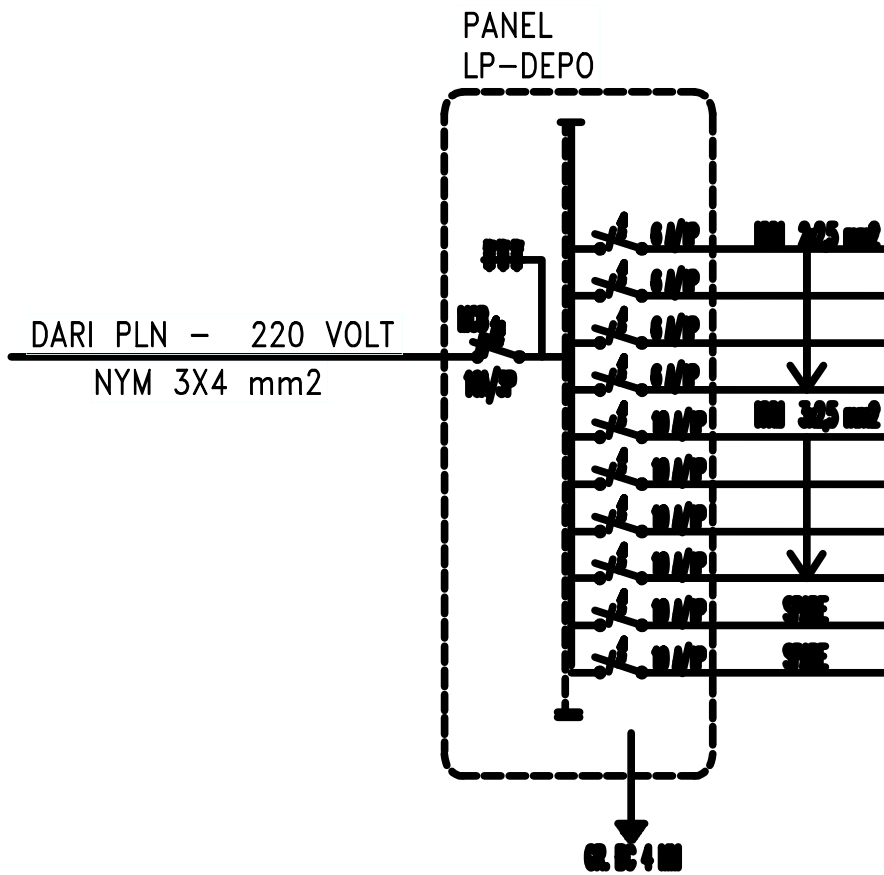
6 Agustus 2019

SCALE : DRAWING NO.

1:150 EL-04

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GROUP NO.	FUNGSI	LAMPU LED 150 W	LAMPU DL LED 9 W	LAMPU LED 40 W	STOP KONTAK 200W			LOADING/BEBAN		
								R	S	T
1	INST. PENERANGAN	3	1					459		
2	↓	2	2						318	
3	INST. STOP KONTAK				3					600
4	↓				3			600		
5	↓				2				400	
6										
6										
7										
8	S P A R E									
9	S P A R E									
JUMLAH								1.059	718	600
TOTAL									2.377	
								3500 VA		

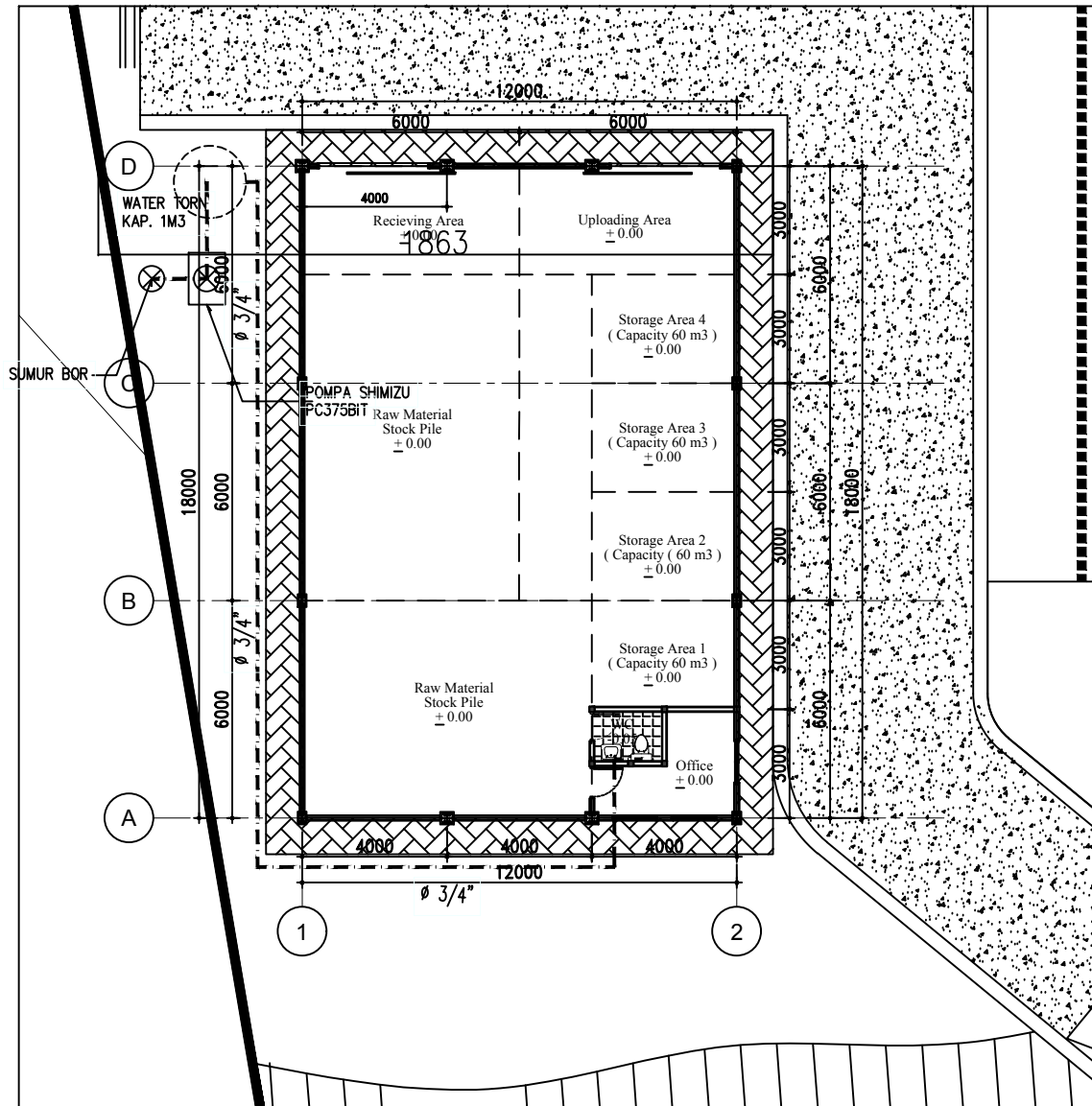
SINGLE DIAGRAM ELECTRICAL  
SCALE : NTS

LEGEND / KEY PLAN :

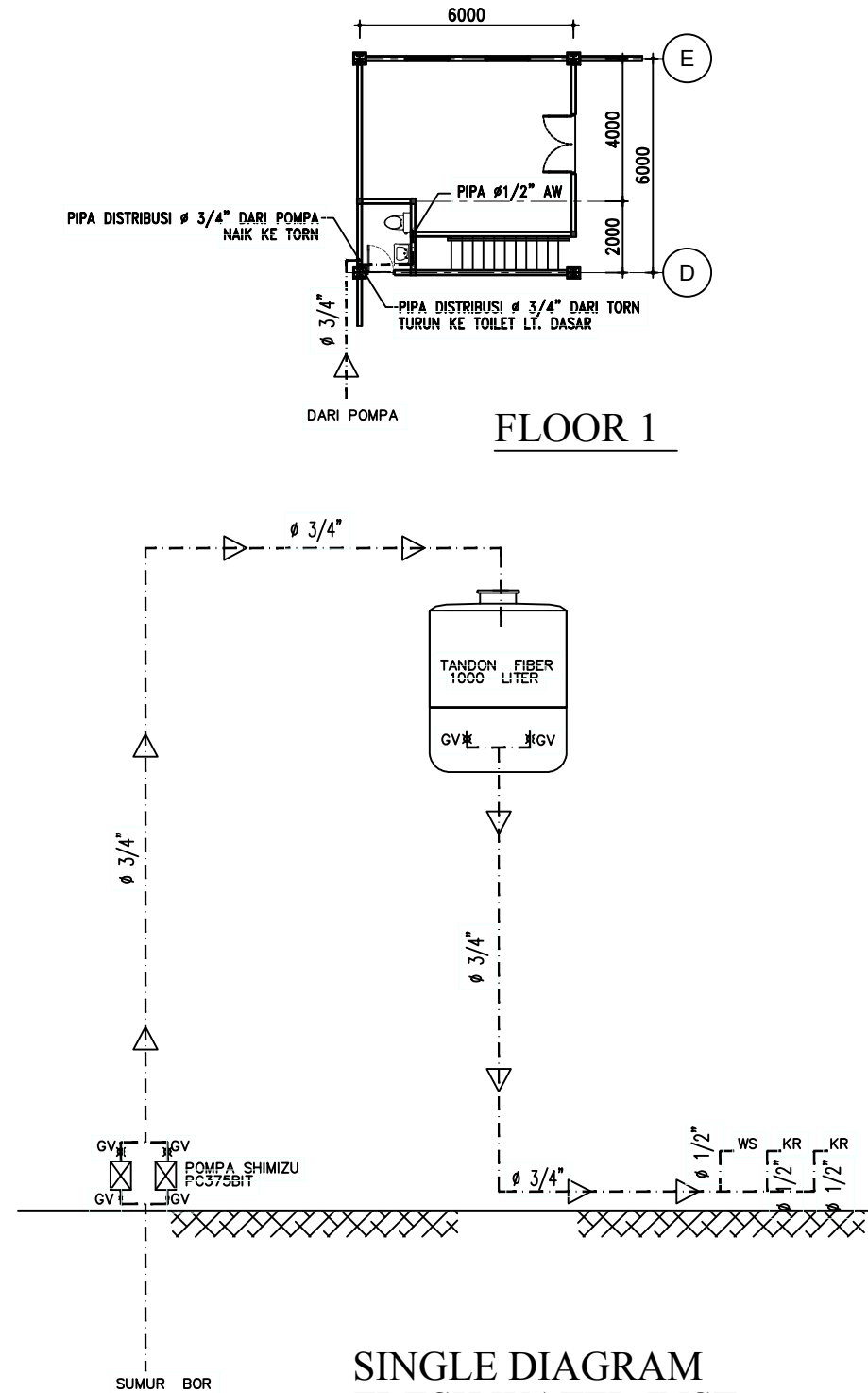
Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
SINGLE DIAGRAM ELECTRICAL		
APPROVED BY :		APPROVED BY :
UNDP		DLH
DRAFTED BY :	CHECKED BY :	DATE:
		6 Agustus 2019
SCALE :	DRAWING NO.	
NTS	EL-05	

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FRESH WATER INSTALATION  
SCALE 1:200



SINGLE DIAGRAM  
FRESH WATER INST.  
NTS

LEGEND / KEY PLAN :



Rev. Catatan : DATE

OWNER  
UNDP ( United Nation  
Development Program )

PROJECT  
Mini Depo Depok

ARCHITECT  
DAVID CHANDRA, S.ARS

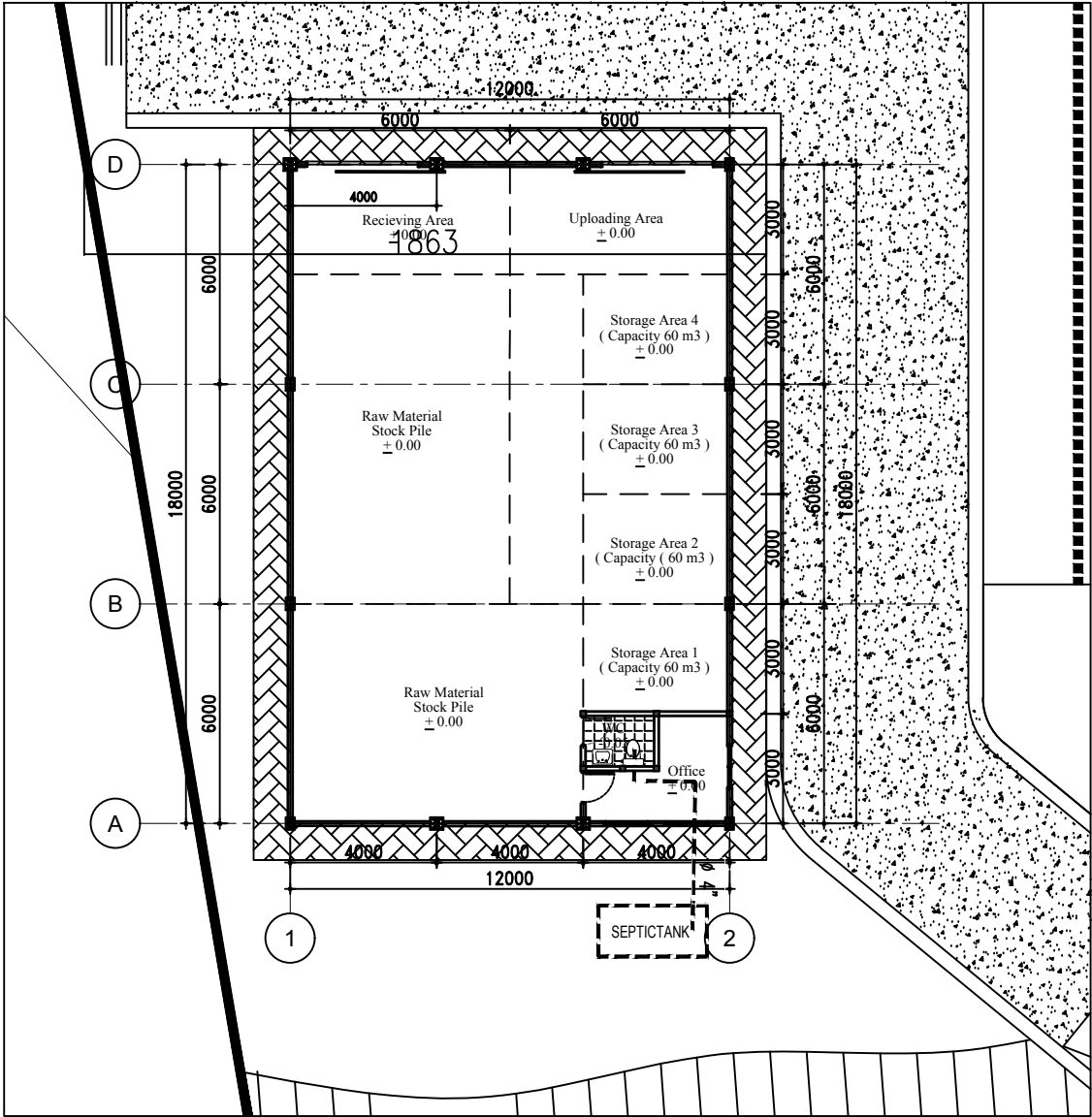
DRAWING  
INSTALLATION  
FRESH WATER

APPROVED BY :  
UNDP  
APPROVED BY :  
DLH

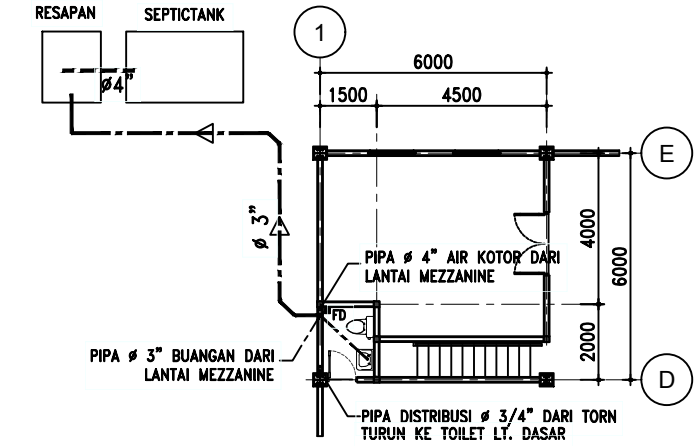
DRAFTED BY :  
CHECKED BY :  
DATE:  
6 Agustus 2019

SCALE :  
1:200  
DRAWING NO.  
PL-01

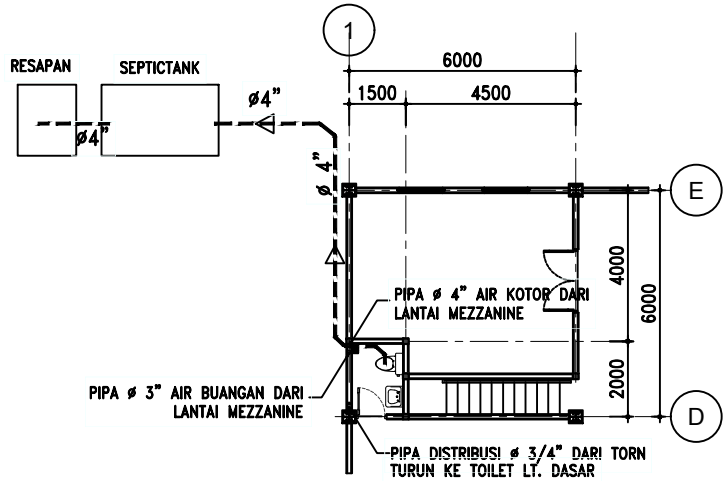
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WASTER WATER INSTALLATION PLAN  
SCALE 1:200



INST. WASTE WATER 1ST FL.



INST. WASTE WATER 1ST FL.

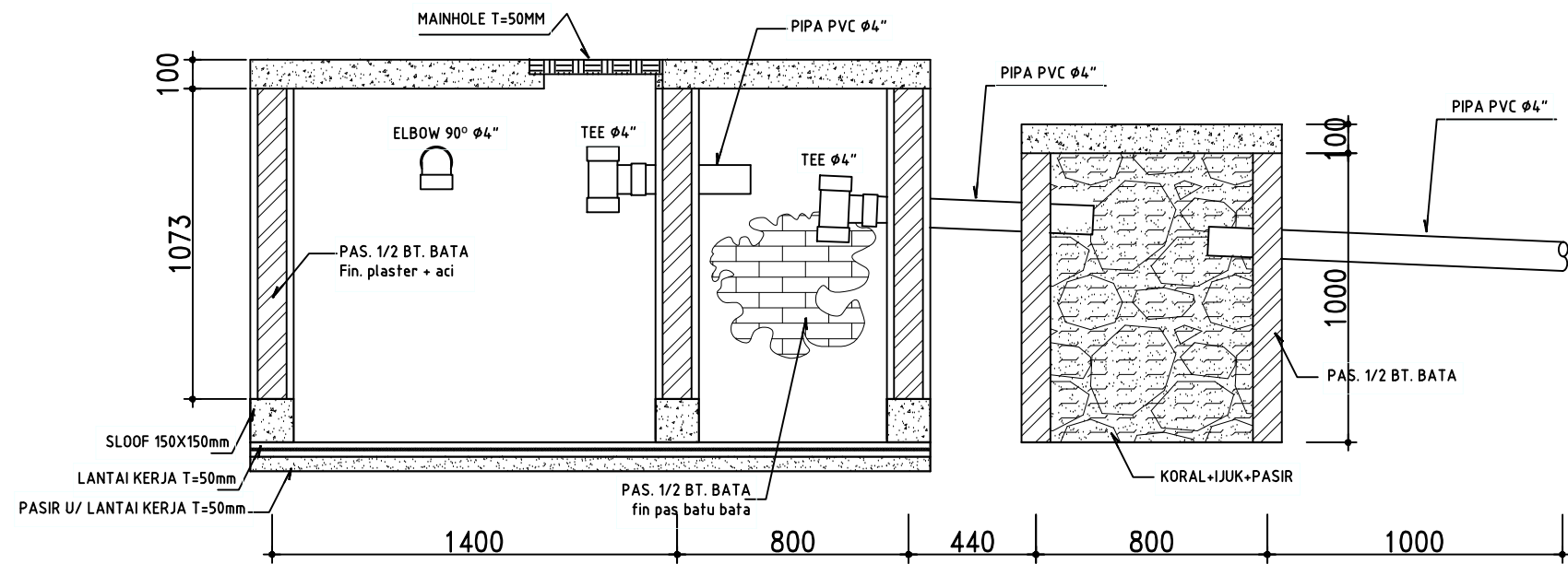
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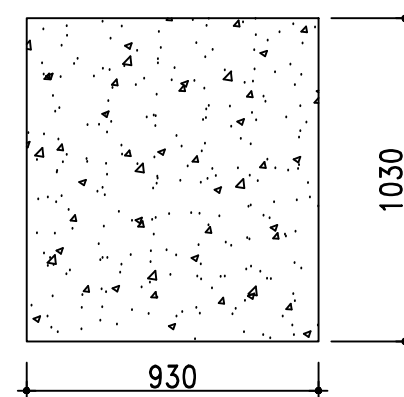
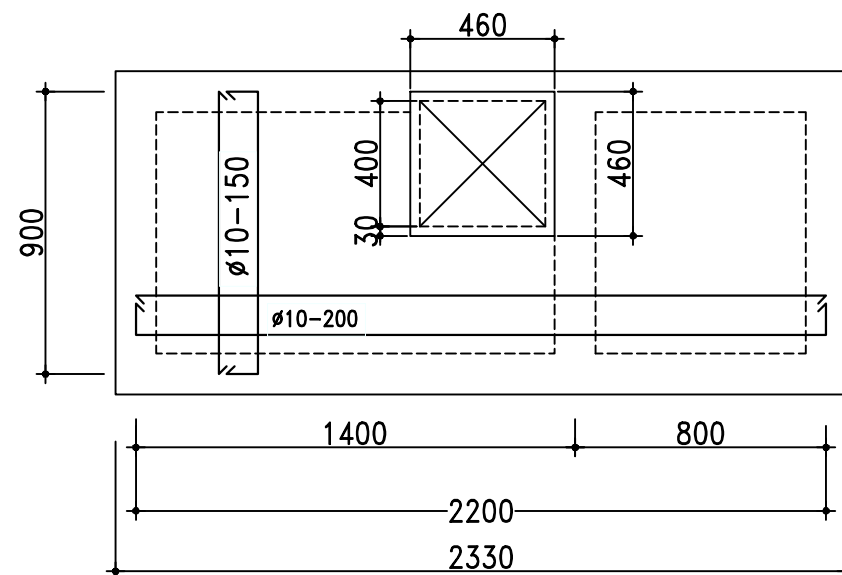
Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
DENAH INSTALASI AIR KOTOR & BUANGAN		
APPROVED BY :		APPROVED BY :
UNDP		DLH
DRAFTED BY :	CHECKED BY :	DATE:
		6 Agustus 2019
SCALE :	DRAWING NO.	
1:200	PL-02	

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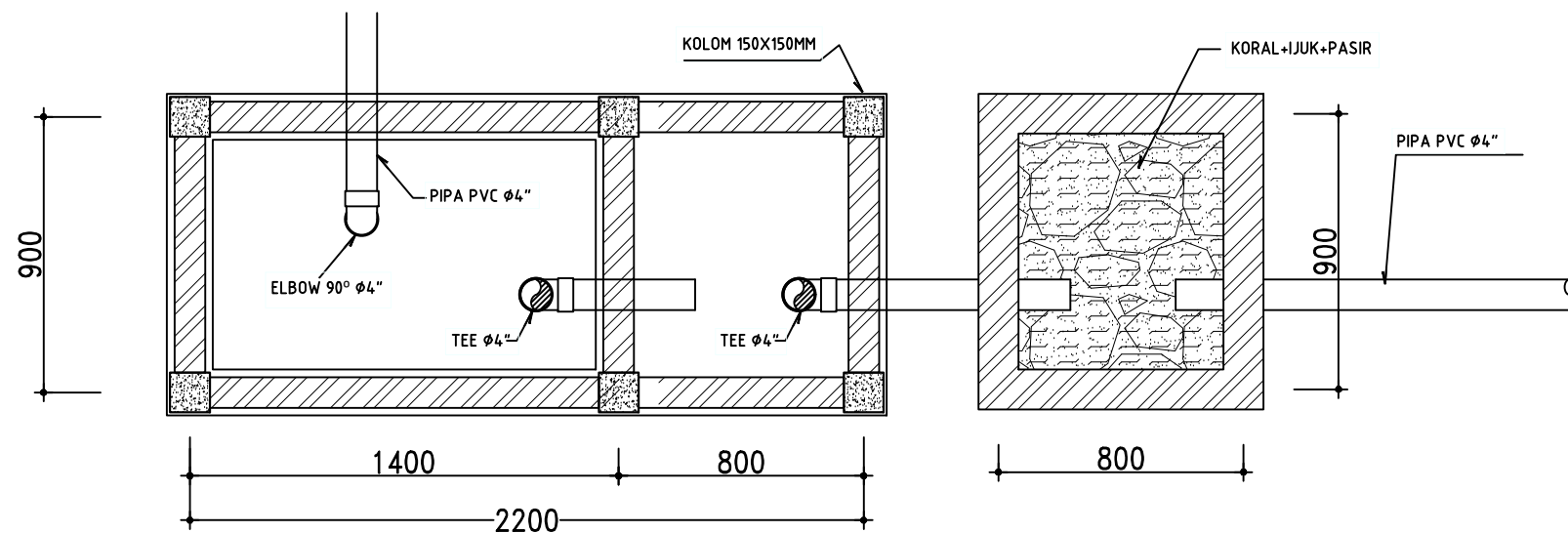
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SECTION A - A  
SCALE 1:25



SEPTIC TANK & INFILTRATION  
SCALE 1:25



SEPTIC TANK & INFILTRATION  
SCALE 1:25

LEGEND / KEY PLAN :



Rev. Catatan : DATE

OWNER

UNDP ( United Nation  
Development Program )

PROJECT

Mini Depo Depok

ARCHITECT

DAVID CHANDRA, S.ARS

DRAWING

DETAIL, VIEW &SECTION OF  
SEPTIC TANK

APPROVED BY :

UNDP

APPROVED BY :

DLH

DRAFTED BY :

CHECKED BY :

DATE:

6 Agustus 2019

SCALE :

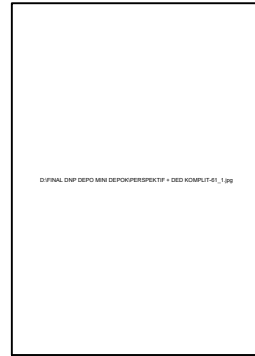
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DRAWING NO.

PL-03

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# MINI DEPO

DEPOK - JAWA BARAT

GAMBAR  
ARSITEKTUR, ELEKTRIKAL & PLUMBING

# MINI DEPO

DEPOK - JAWA BARAT

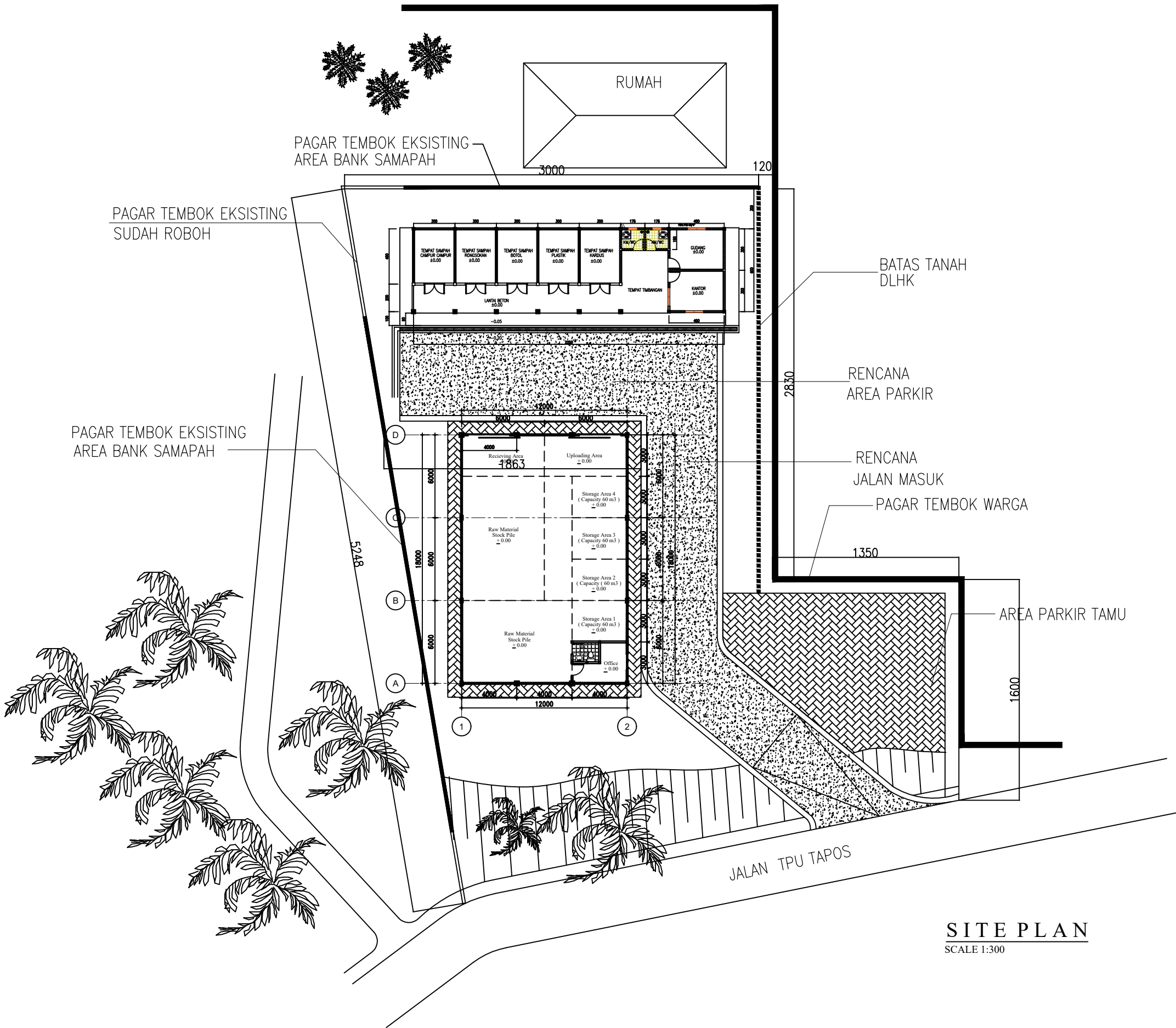
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### ARSITEKTUR, ELEKTRIKAL & PLUMBING

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2	AR-02	BLOCK PLAN	1 : 250
3	AR-03	DENAH DEPO LT. DASAR & LT. MEZZANINE	1 : 150
4	AR-04	DENAH RENCANA ATAP	1 : 150
5	AR-05	TAMPAK DEPAN	1 : 125
6	AR-06	TAMPAK SAMPING KIRI	1 : 125
7	AR-07	TAMPAK SAMPING KANAN	1 : 125
8	AR-08	TAMPAK BELAKANG	1 : 125
9	AR-09	POTONGAN A – A	1 : 125
10	AR-10	DENAH FINISHING LANTAI AREA LUAR & DALAM	1 : 250
11	AR-11	DENAH FINISHING LANTAI BANGUNAN	1 : 150
12	AR-12	DETAIL TOILET LT. DASAR	1 : 50
13	AR-13	DETAIL TOILET LT. MEZZANINE	1 : 50
14	AR-14	DENAH KUSEN	1 : 150
15	AR-15	DETAIL KUSEN	1:25/1:5
16	AR-16	DENAH PLAFOND AREA KANTOR	1 : 100
17	AR-17	DENAH TITIK LAMPU	1 : 150
18	AR-18	DETAIL MENARA AIR	1:100/1:10

[illegible]





**SITE PLAN**  
SCALE 1:300

LEGEND / KEY PLAN :



Rev. Catatan : DATE

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UNDP ( United Nation  
Development Program )

PROJECT  
Mini Depo Depok

ARCHITECT  
DAVID CHANDRA, S.ARS

DRAWING  
SITE PLAN

APPROVED BY :  
UNDP

APPROVED BY :  
DLH

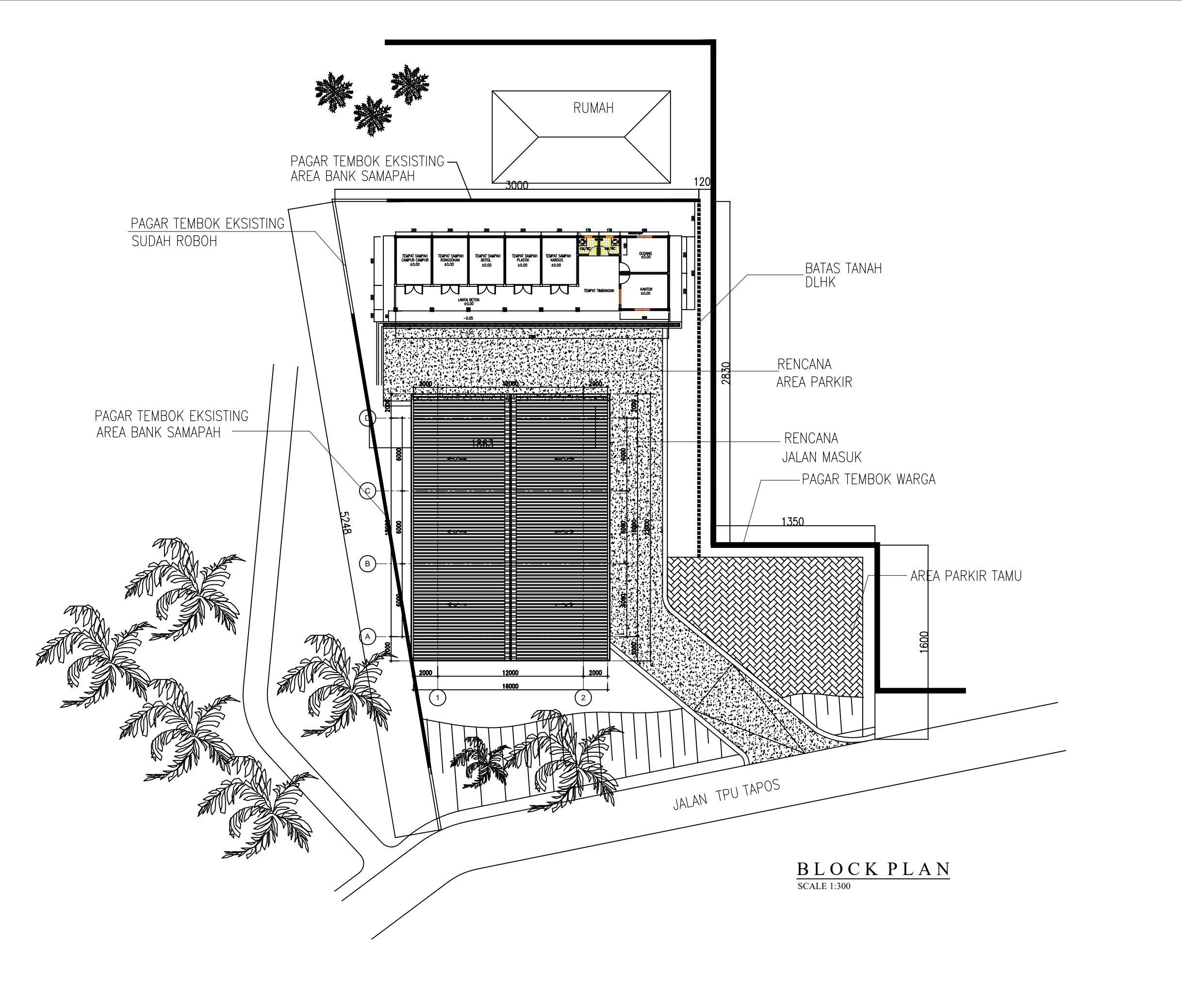
DRAFTED BY :  
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DATE:  
6 Agustus 2019

SCALE :  
1:250

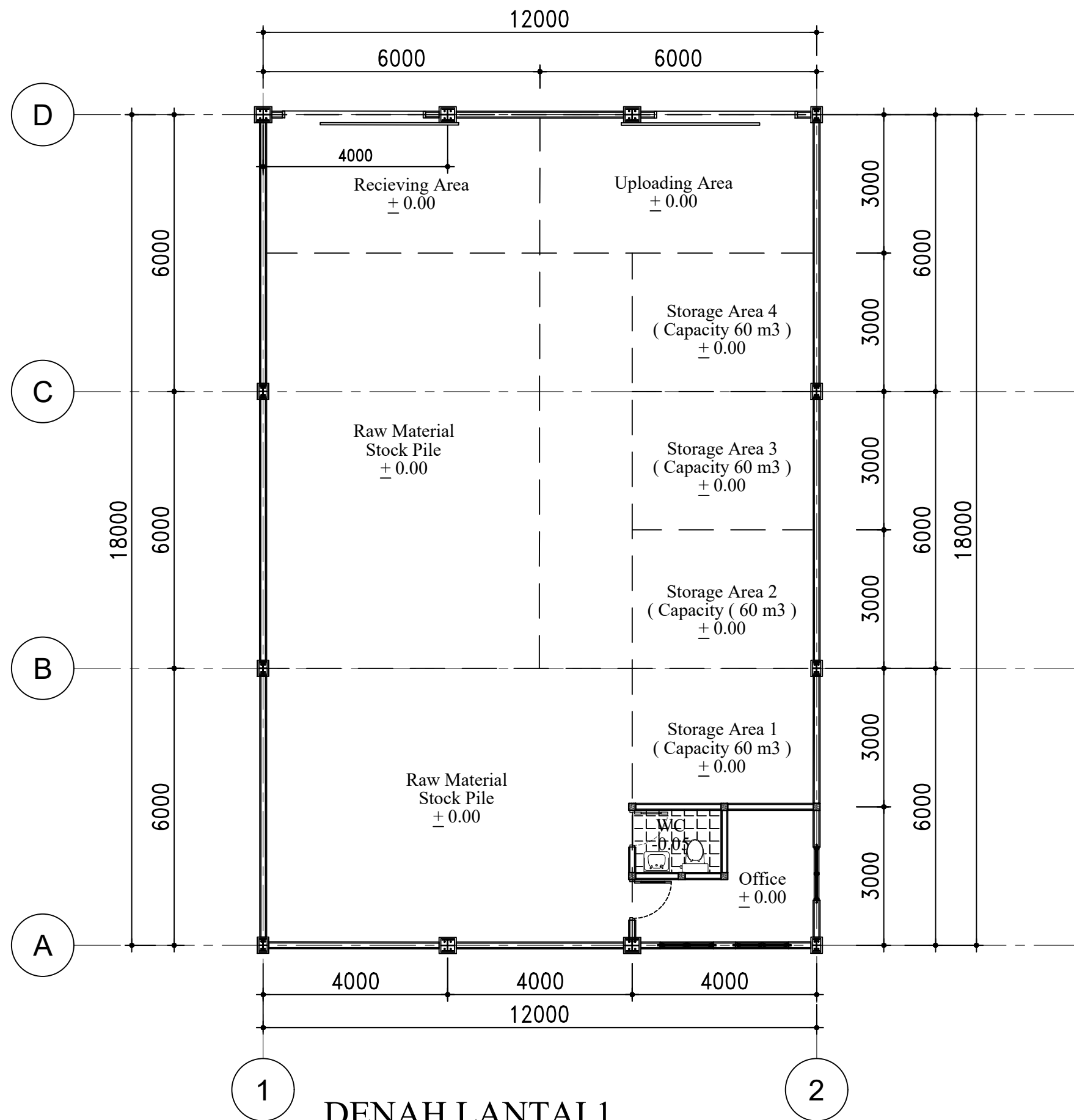
DRAWING NO.  
AR-01

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LEGEND / KEY PLAN :				
<div></div>				
Rev.	Catatan :	DATE		
OWNER				
UNDP ( United Nation Development Program )				
PROJECT				
Mini Depo Depok				
ARCHITECT				
DAVID CHANDRA, S.ARS				
DRAWING				
BLOCK PLAN				
APPROVED BY :		APPROVED BY :		
UNDP		DLH		
DRAFTED BY :	CHECKED BY :	DATE:		
		6 Agustus 2019		
SCALE:	DRAWING NO.			
1:250	AR-02			
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**DENAH LANTAI 1**  
SCALE 1:100

LEGEND / KEY PLAN :



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Development Program )

PROJECT  
Mini Depo Depok

ARCHITECT  
DAVID CHANDRA, S.ARS

DRAWING  
DENAH LANTAI 1 & 2

APPROVED BY :  
UNDP

APPROVED BY :  
DLH

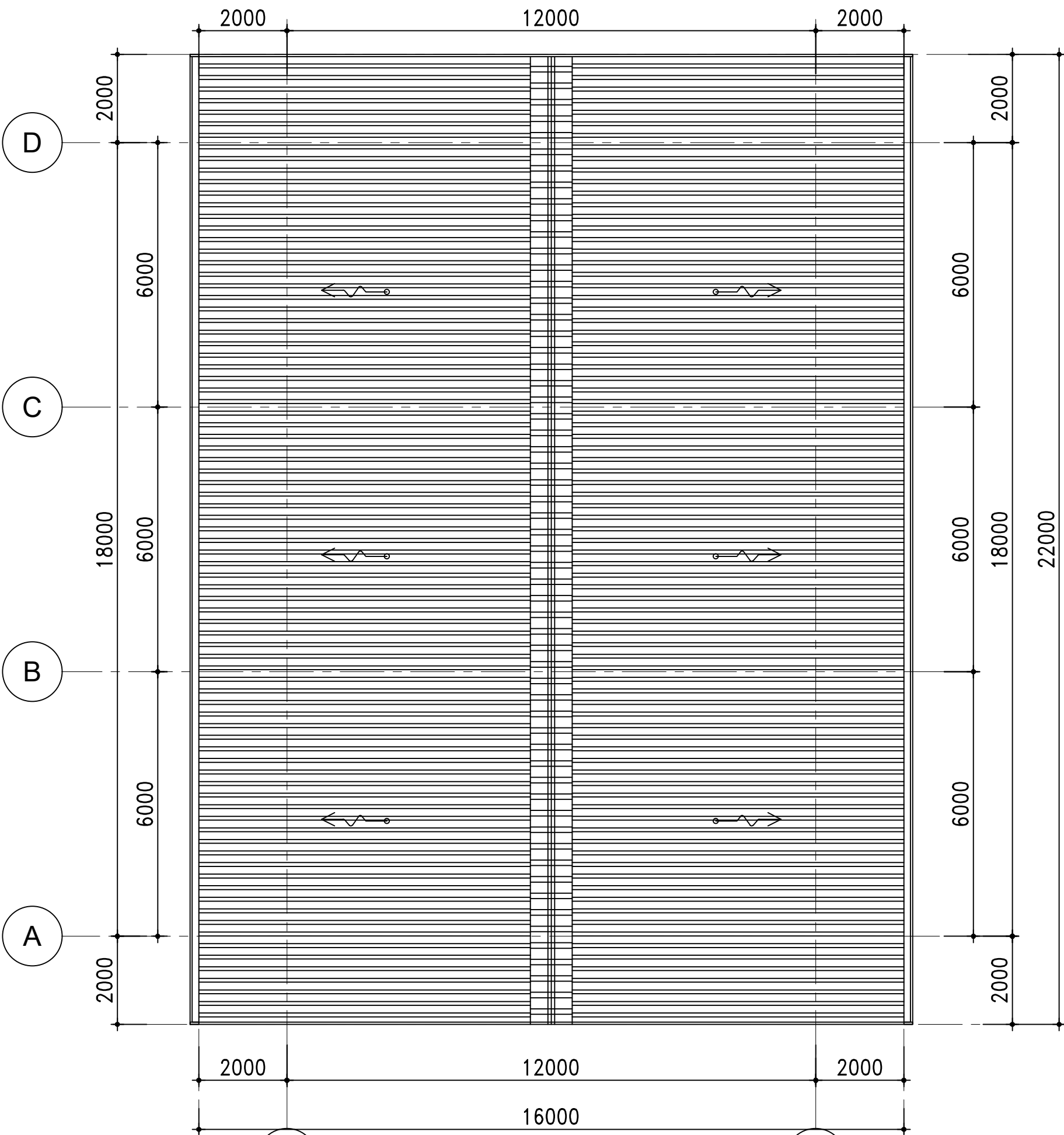
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6 Agustus 2019

SCALE :  
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DRAWING NO.  
AR-03

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**DENAH RENCANA ATAP**  
SCALE 1:100

KETERANGAN :

 ATAP ZHINGALUME 0,4MM NATURAL

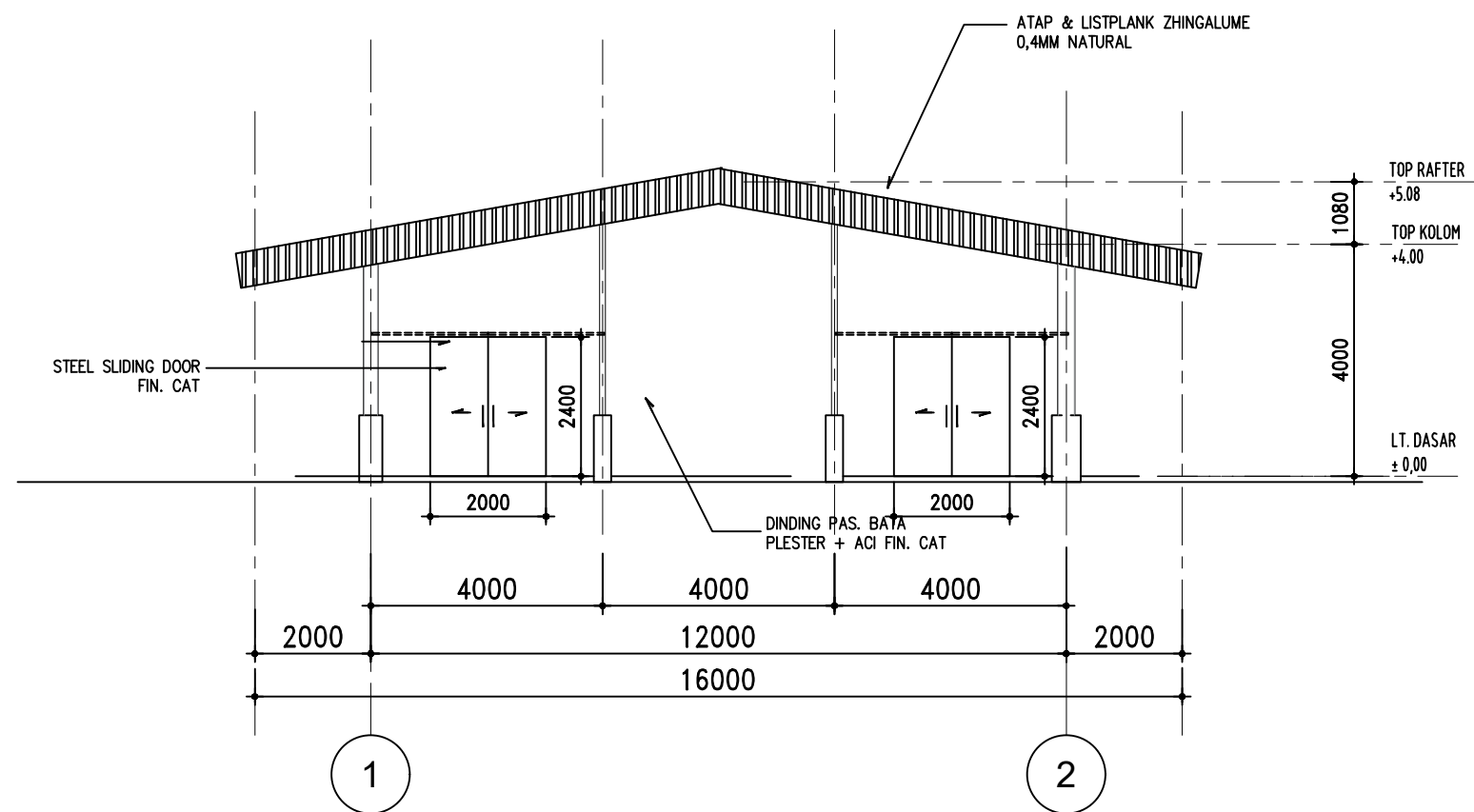
LEGEND / KEY PLAN :



Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
DENAH ATAP		
APPROVED BY :		APPROVED BY :
UNDP		DLH
DRAFTED BY :	CHECKED BY :	DATE:
		6 Agustus 2019
SCALE :	DRAWING NO.	
1:100	AR-04	

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**TAMPAK DEPAN**  
SCALE 1:125

LEGEND / KEY PLAN :



Rev. Catatan : DATE

OWNER  
UNDP ( United Nation  
Development Program )

PROJECT  
Mini Depo Depok

ARCHITECT  
DAVID CHANDRA, S.ARS

DRAWING  
TAMPAK DEPAN

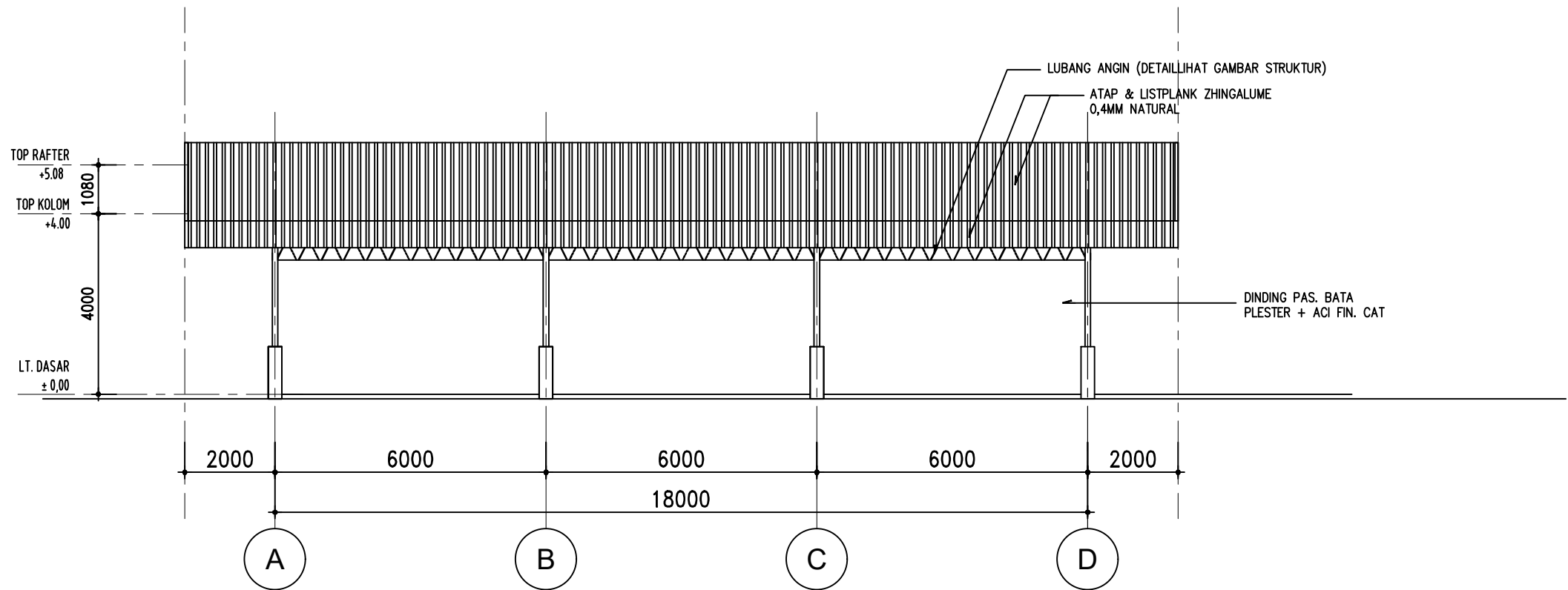
APPROVED BY : UNDP	APPROVED BY : DLH
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DRAFTED BY :	CHECKED BY :	DATE: 6 Agustus 2019
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SCALE : 1:125	DRAWING NO. AR-05
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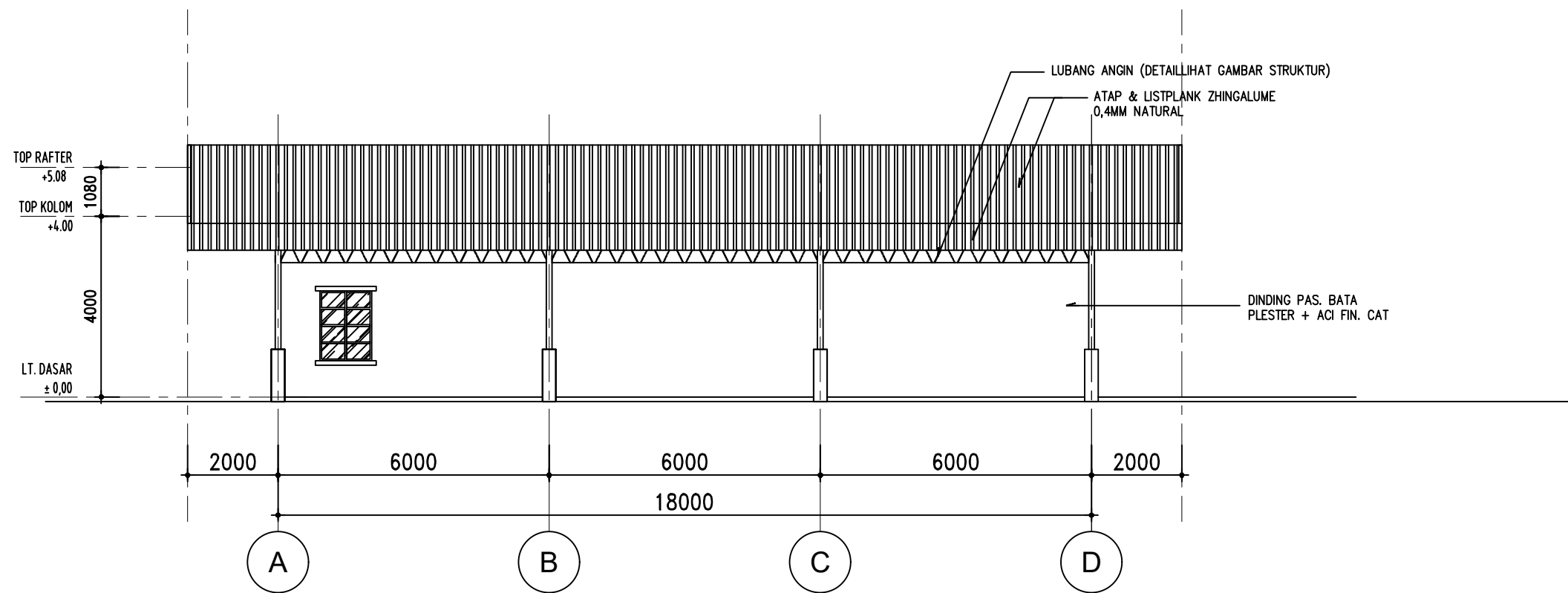
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**TAMPAK SAMPING KIRI**  
SCALE 1:125

LEGEND / KEY PLAN :		
<div></div>		
Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
TAMPAK SAMPING KIRI		
APPROVED BY :		APPROVED BY :
UNDP		DLH
DRAFTED BY :	CHECKED BY :	DATE:
		6 Agustus 2019
SCALE :	DRAWING NO.	
1:125	AR-06	
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**TAMPAK SAMPING KANAN**  
SCALE 1:125

LEGEND / KEY PLAN :



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OWNER  
UNDP ( United Nation  
Development Program )

PROJECT  
Mini Depo Depok

ARCHITECT  
DAVID CHANDRA, S.ARS

DRAWING  
**TAMPAK  
SAMPING KANAN**

APPROVED BY :  
UNDP

APPROVED BY :  
DLH

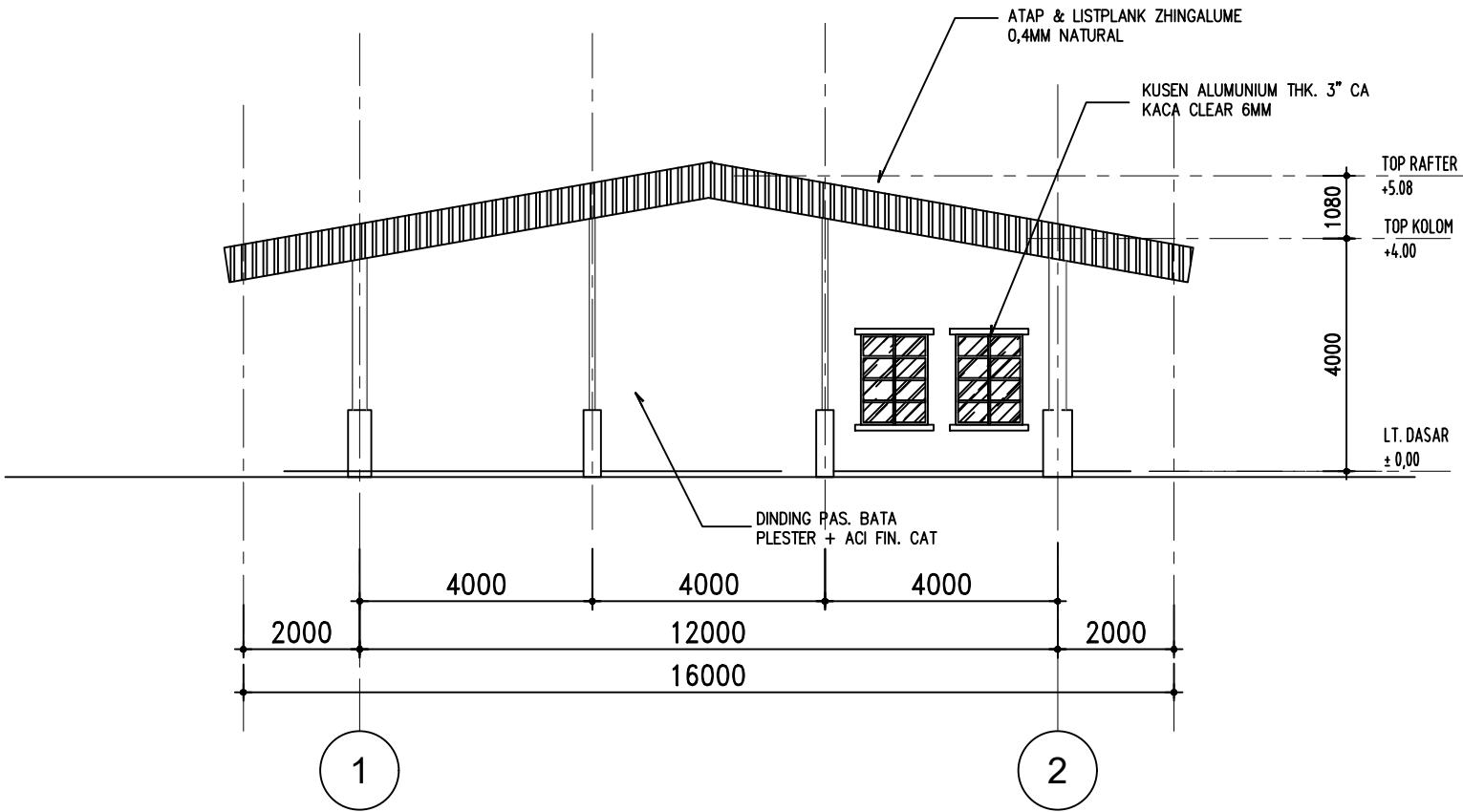
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CHECKED BY :  
DATE:  
6 Agustus 2019

SCALE :  
1:125

DRAWING NO.  
AR-07

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**TAMPAK BELAKANG**  
SCALE 1:125

LEGEND / KEY PLAN :



Rev. Catatan : DATE

OWNER  
UNDP ( United Nation  
Development Program )

PROJECT  
Mini Depo Depok

ARCHITECT  
DAVID CHANDRA, S.ARS

DRAWING  
TAMPAK BELAKANG

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UNDP

APPROVED BY :  
DLH

DRAFTED BY :  
CHECKED BY :  
DATE:  
6 Agustus 2019

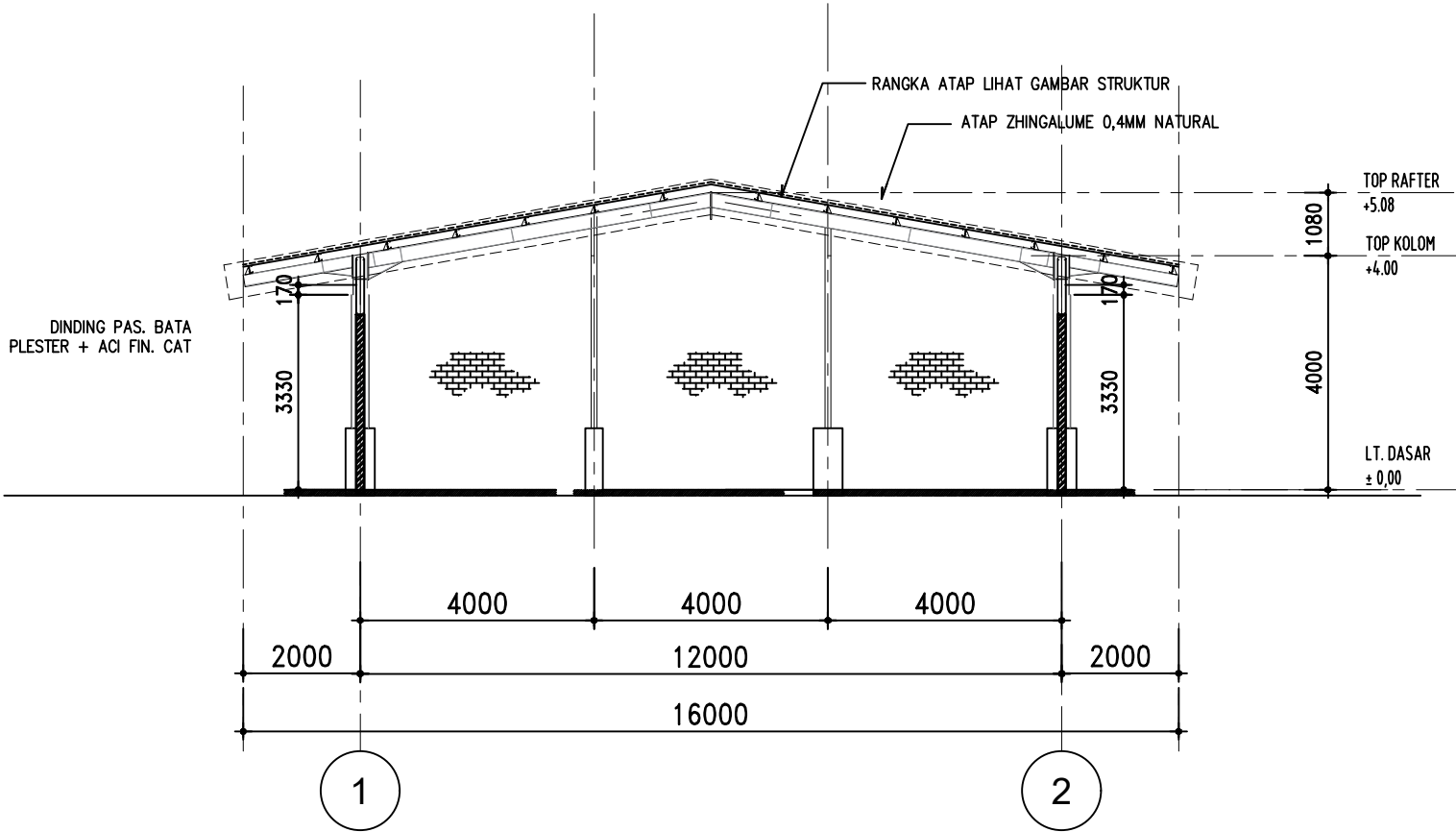
SCALE :  
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DRAWING NO.  
AR-08

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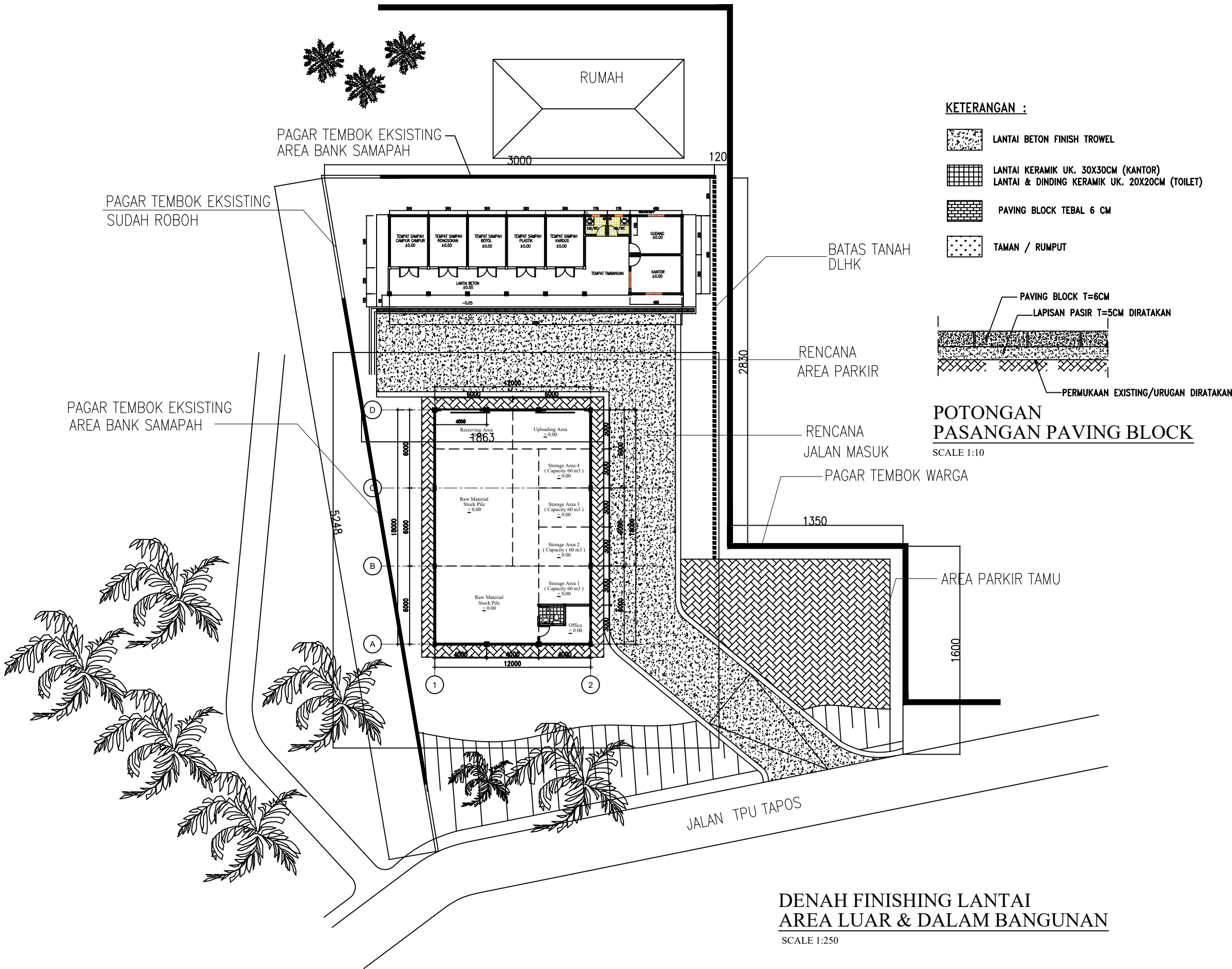
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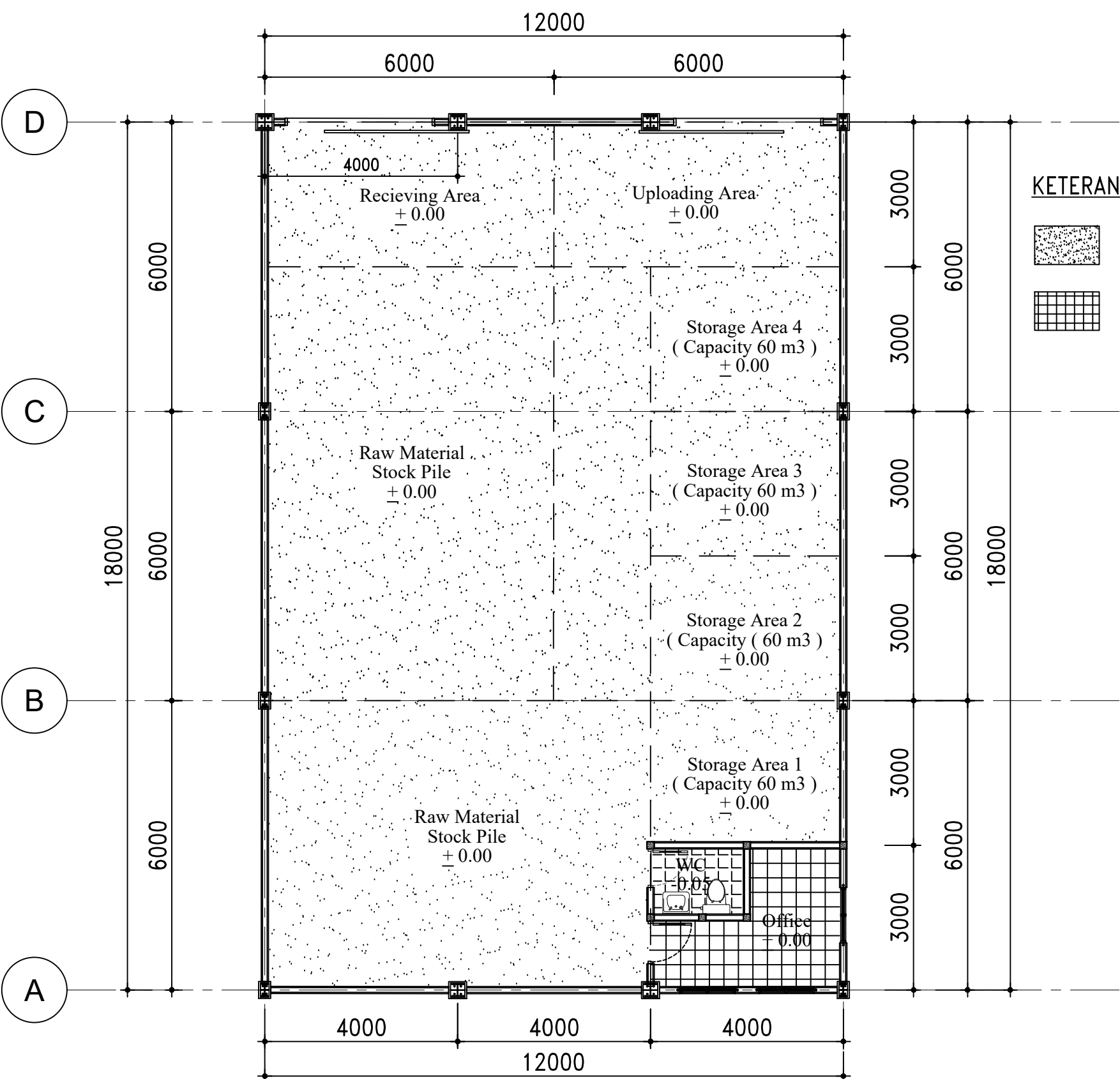



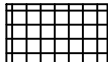
POTONGAN A - A  
SCALE 1:125

LEGEND / KEY PLAN :		
<div></div>		
Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
POTONGAN A - A		
APPROVED BY :		APPROVED BY :
UNDP		DLH
DRAFTED BY :	CHECKED BY :	DATE:
		6 Agustus 2019
SCALE :	DRAWING NO.	
1:125	AR-09	
<div><p>THIS DRAWING IS FOR INFORMATION AND GUIDELINES ONLY TO BE USED BY THE CONTRACTORS AS A GENERAL ARRANGEMENT OF INTERIOR CONDITION IT HAS BEEN MADE FROM AVAILABLE INFORMATION. HOWEVER, MEASUREMENT ARE TO BE VERIFIED ON THE PROJECT SITE.</p><p>THIS DRAWING IS THE PROPERTY OF DAVID CHANDRA, S.ARS AND IS NOT TO BE REPRODUCE OR COPIED IN WHOLE OR IN PART IT IS TO BE USED FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HERE IN AND NOT TO BE USED ON ANY OTHER PROJECT. IT HAS TO BE RETURNED UPON REQUEST</p></div>		




LEGEND / KEY PLAN :				
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Rev.	Catatan :	DATE		
OWNER				
UNDP ( United Nation Development Program )				
PROJECT				
Mini Depo Depok				
ARCHITECT				
DAVID CHANDRA, S.ARS				
DRAWING				
DENAH FINISHING LANTAI AREA LUAR & DALAM BANGUNAN				
APPROVED BY :		APPROVED BY :		
UNDP		DLH		
DRAFTED BY :	CHECKED BY :	DATE:		
		6 Agustus 2019		
SCALE :	DRAWING NO.			
1:250	AR-10			
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- KETERANGAN :**
-  LANTAI BETON FINISH TROWEL
  -  LANTAI KERAMIK UK. 30X30CM (KANTOR)  
LANTAI & DINDING KERAMIK UK. 20X20CM (TOILET)

**DENAH FINISHING LANTAI**  
SCALE 1:100

LEGEND / KEY PLAN :		
		
Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
DENAH FINISHING LANTAI		
APPROVED BY :		APPROVED BY :
UNDP		DLH
DRAFTED BY :	CHECKED BY :	DATE:
		6 Agustus 2019
SCALE :	DRAWING NO.	
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LEGEND / KEY PLAN :



Rev. Catatan : DATE

OWNER

UNDP ( United Nation  
Development Program )

PROJECT

Mini Depo Depok

ARCHITECT

DAVID CHANDRA, S.ARS

DRAWING

DETAIL TOILET  
LT. DASAR

APPROVED BY :

UNDP

APPROVED BY :

DLH

DRAFTED BY :

CHECKED BY :

SCALE :

1:50

DATE:

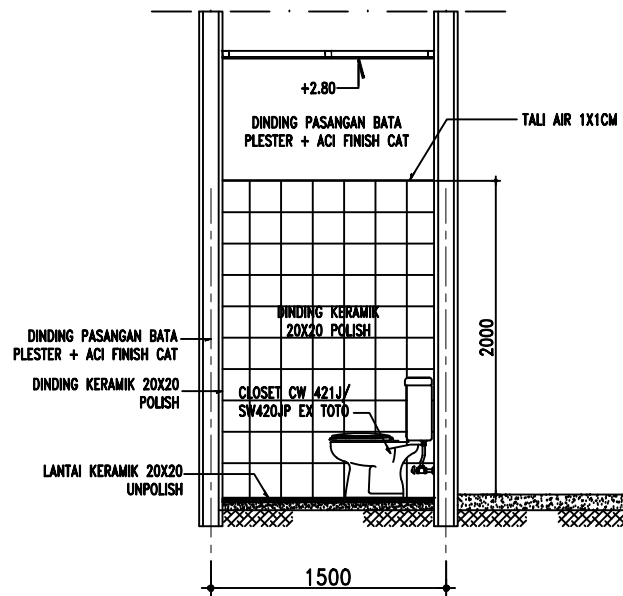
6 Agustus 2019

DRAWING NO.

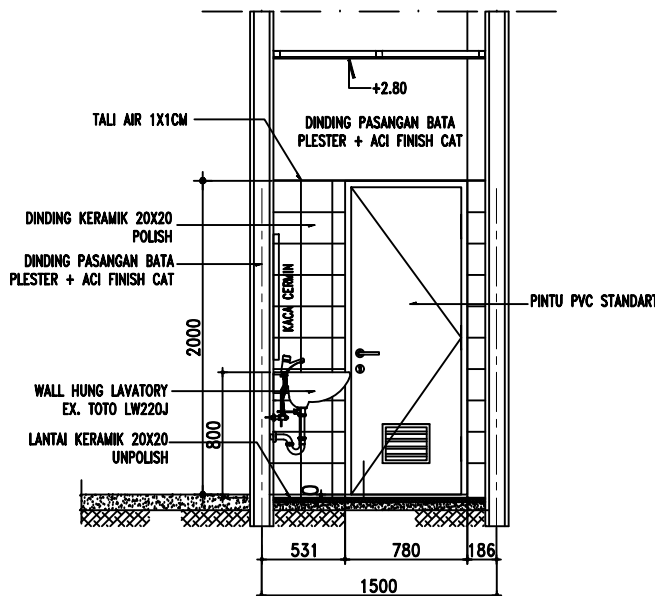
AR-12

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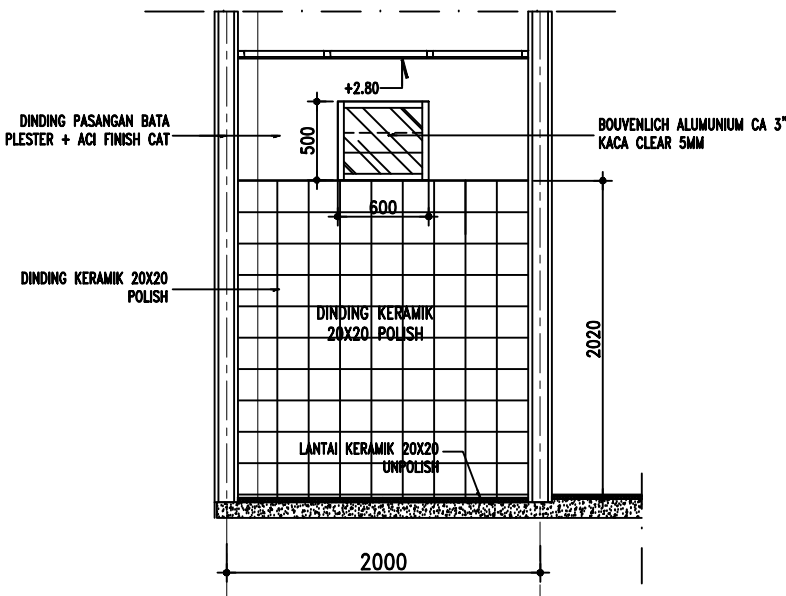
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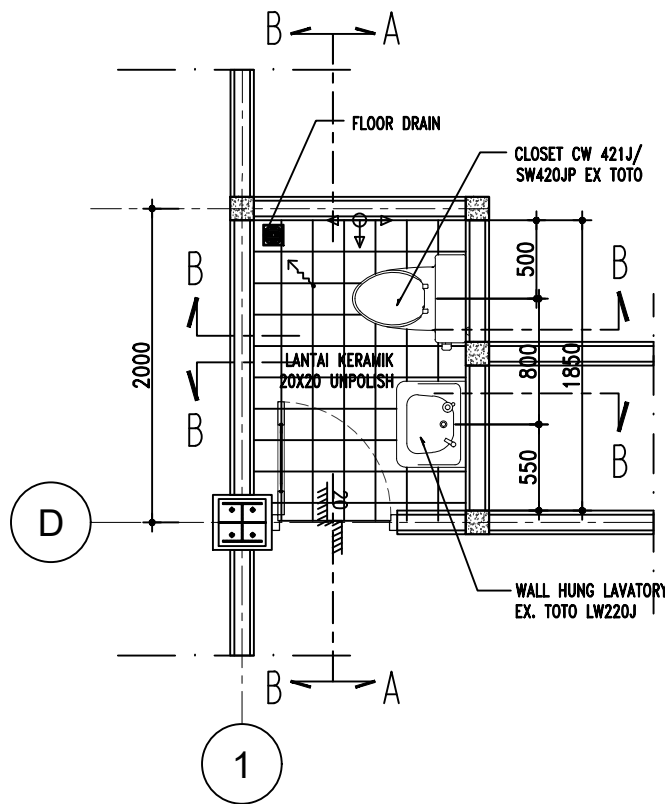
POTONGAN D - D  
SCALE 1:50



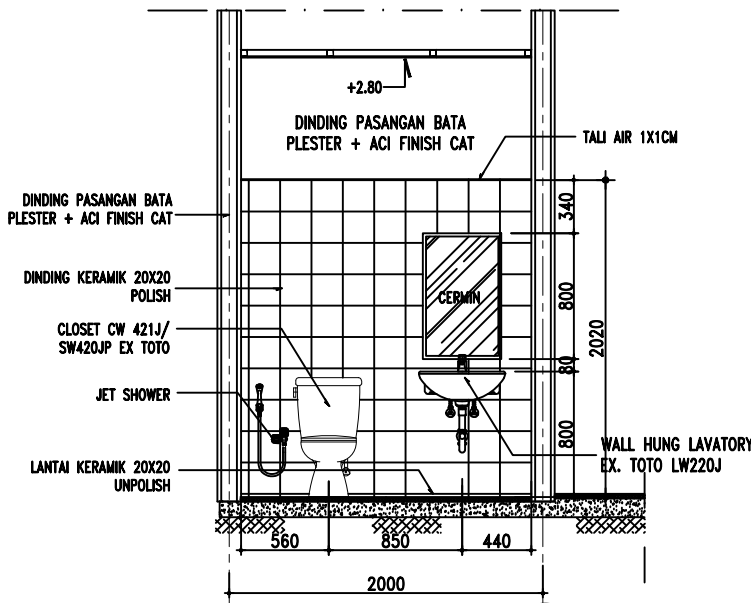
POTONGAN C - C  
SCALE 1:50



POTONGAN B - B  
SCALE 1:50



DENAH TOILET LT. DASAR  
SCALE 1:50

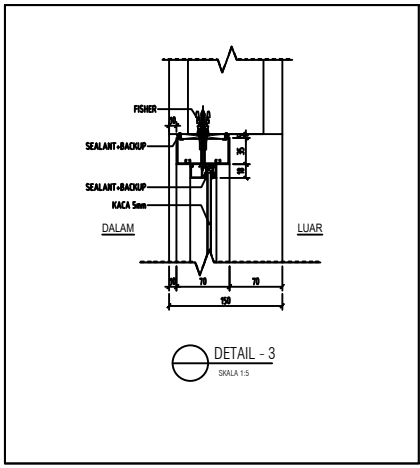
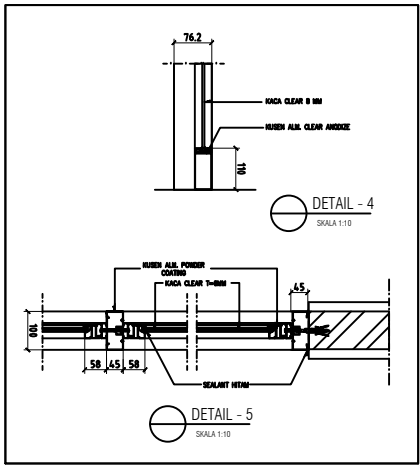
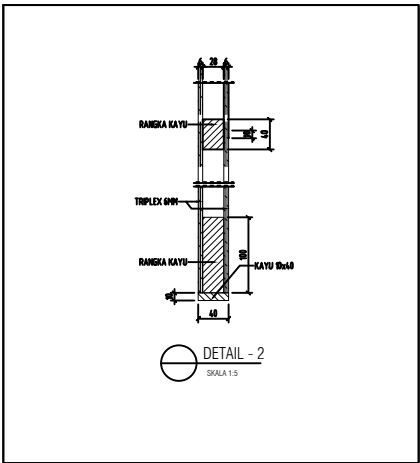
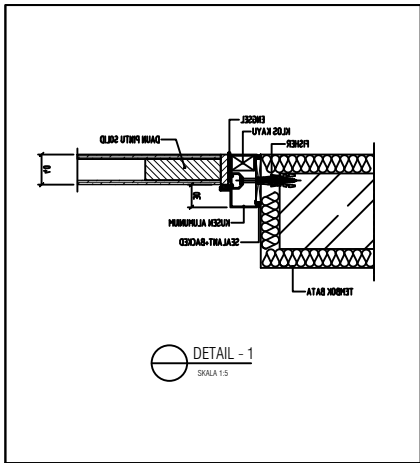
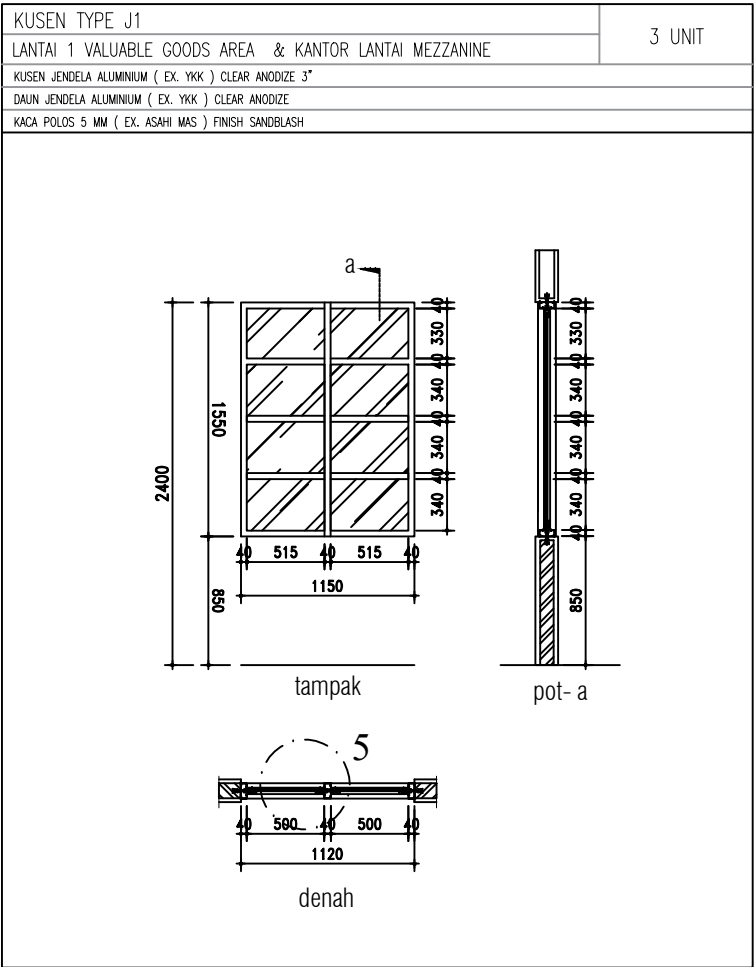
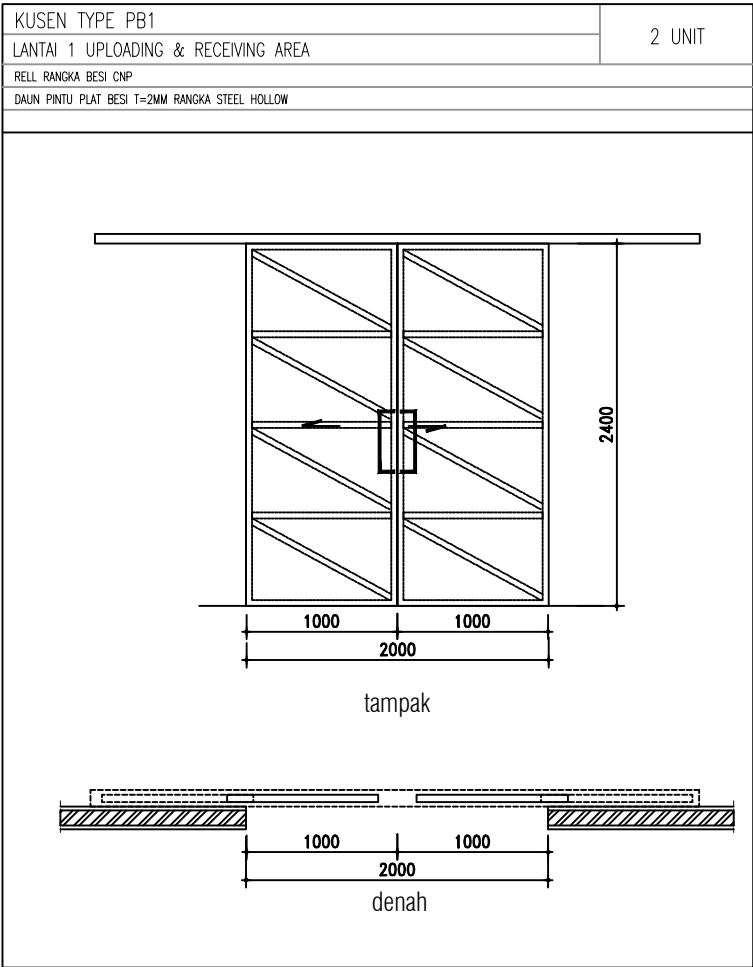
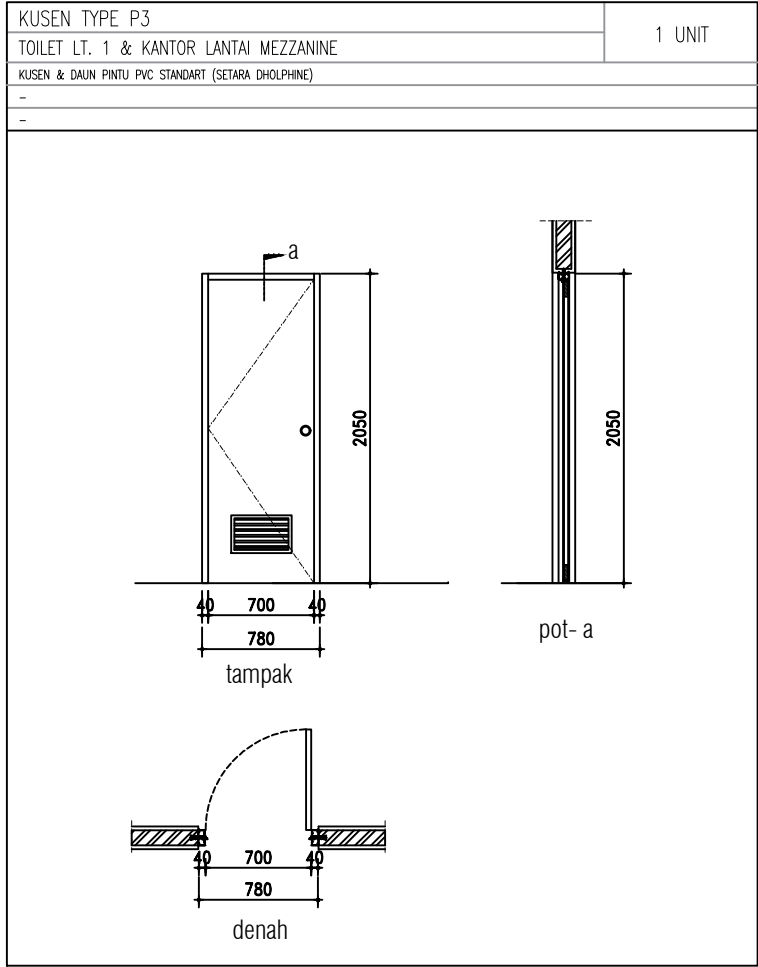
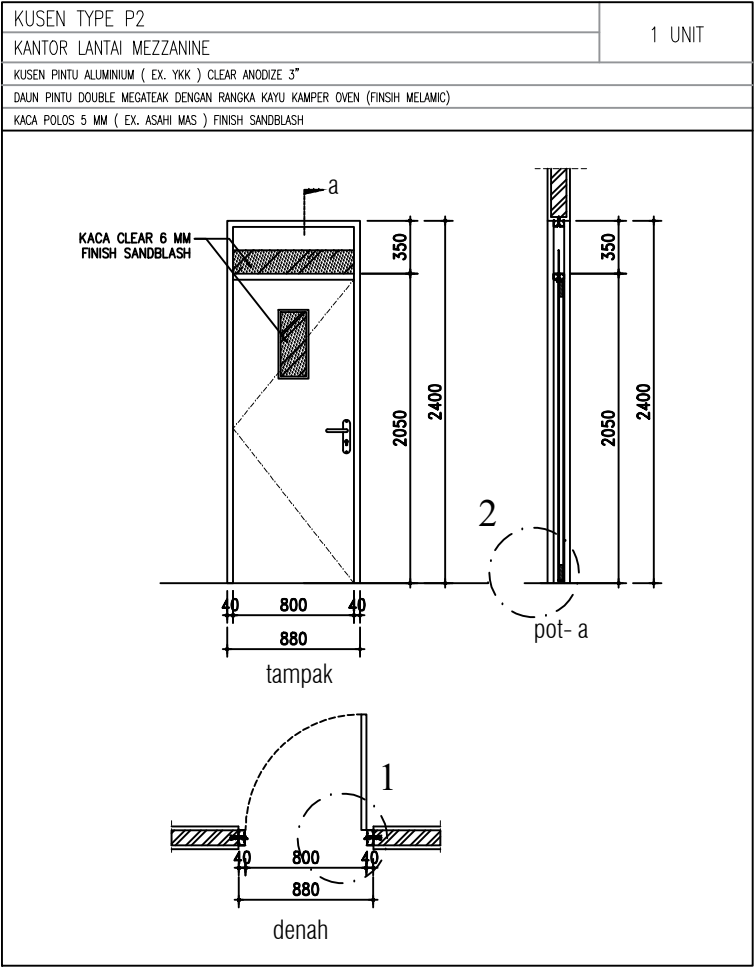
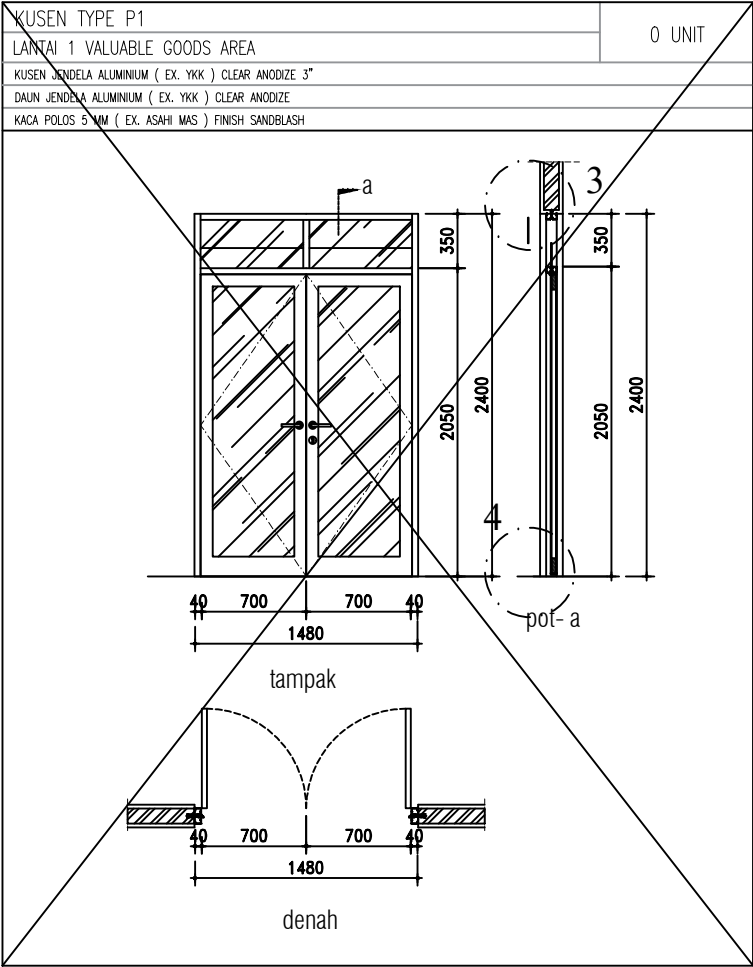


POTONGAN A - A  
SCALE 1:50

KETERANGAN :

- CLOSET JONGKOK CE 7 EX. TOTO
- LAVATORY L38V1 EX. TOTO
- KERAMIK LANTAI UK. 20X20CM
- KERAMIK DINDING UK. 20X20CM





LEGEND / KEY PLAN :



Rev. Catatan : DATE

OWNER

UNDP ( United Nation  
Development Program )

PROJECT

Mini Depo Depok

ARCHITECT

DAVID CHANDRA, S.ARS

DRAWING

DETAIL KUSEN

APPROVED BY :

UNDP

APPROVED BY :

DLH

DRAFTED BY :

CHECKED BY :

DATE:

6 Agustus 2019

SCALE :

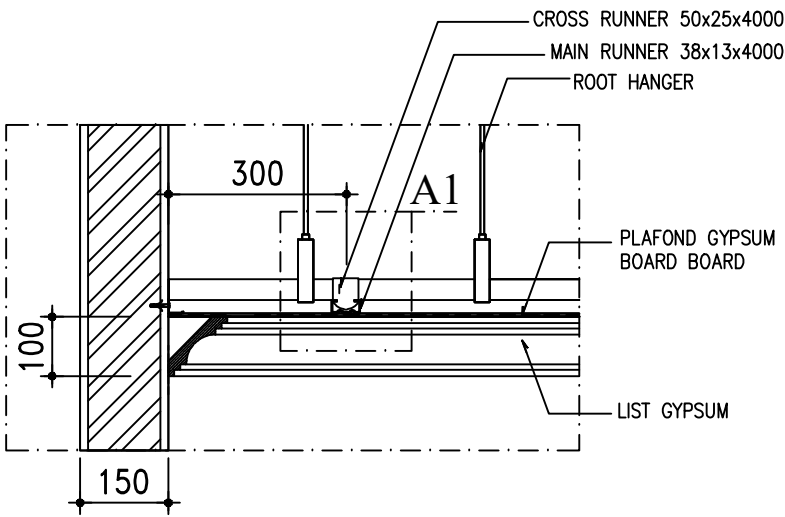
DRAWING NO.

1:25/1:5

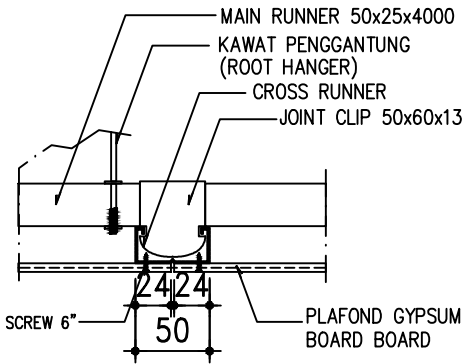
AR-15

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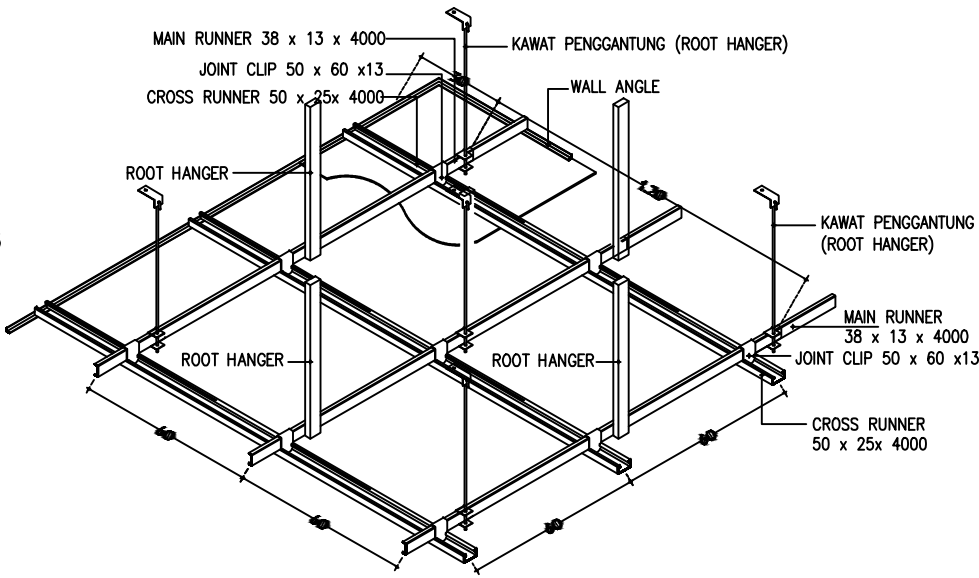
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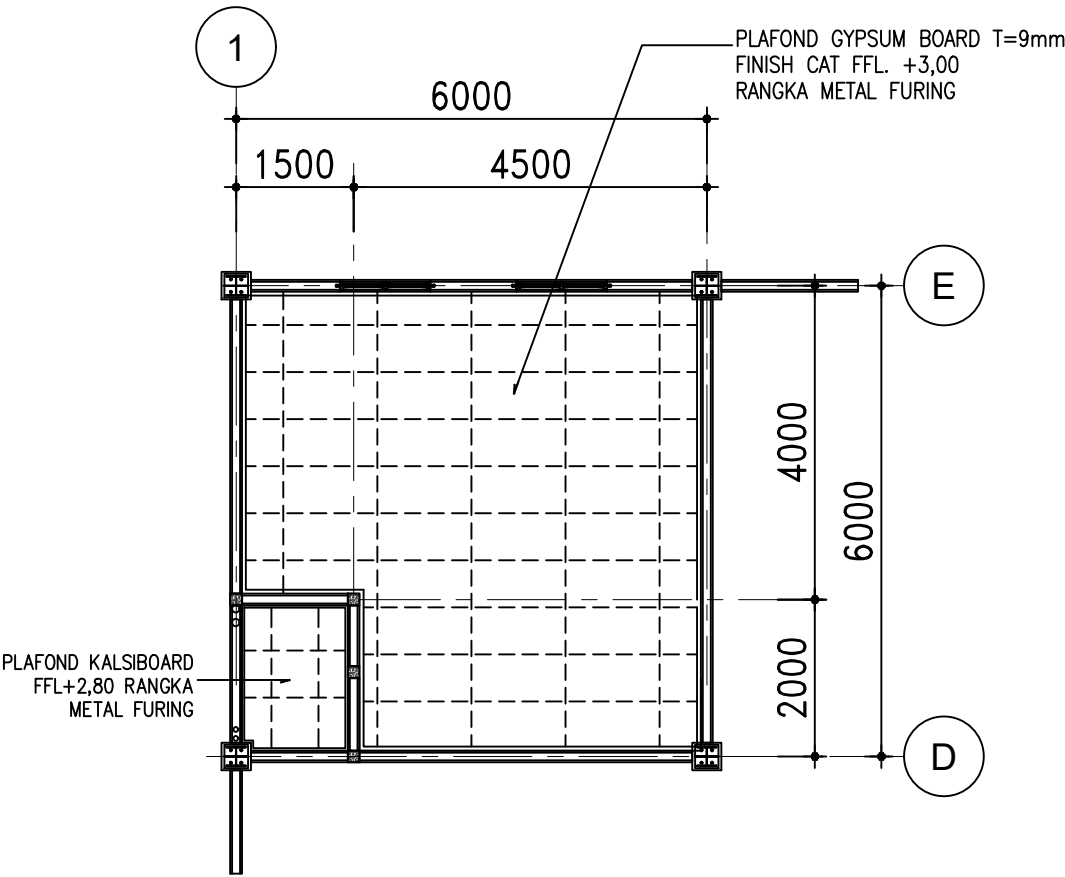
POTONGAN A  
NTS



DETAIL A1  
NTS



ISOMETRI PLAFOND



DENAH PLAFOND LT. DASAR  
SCALE 1:100

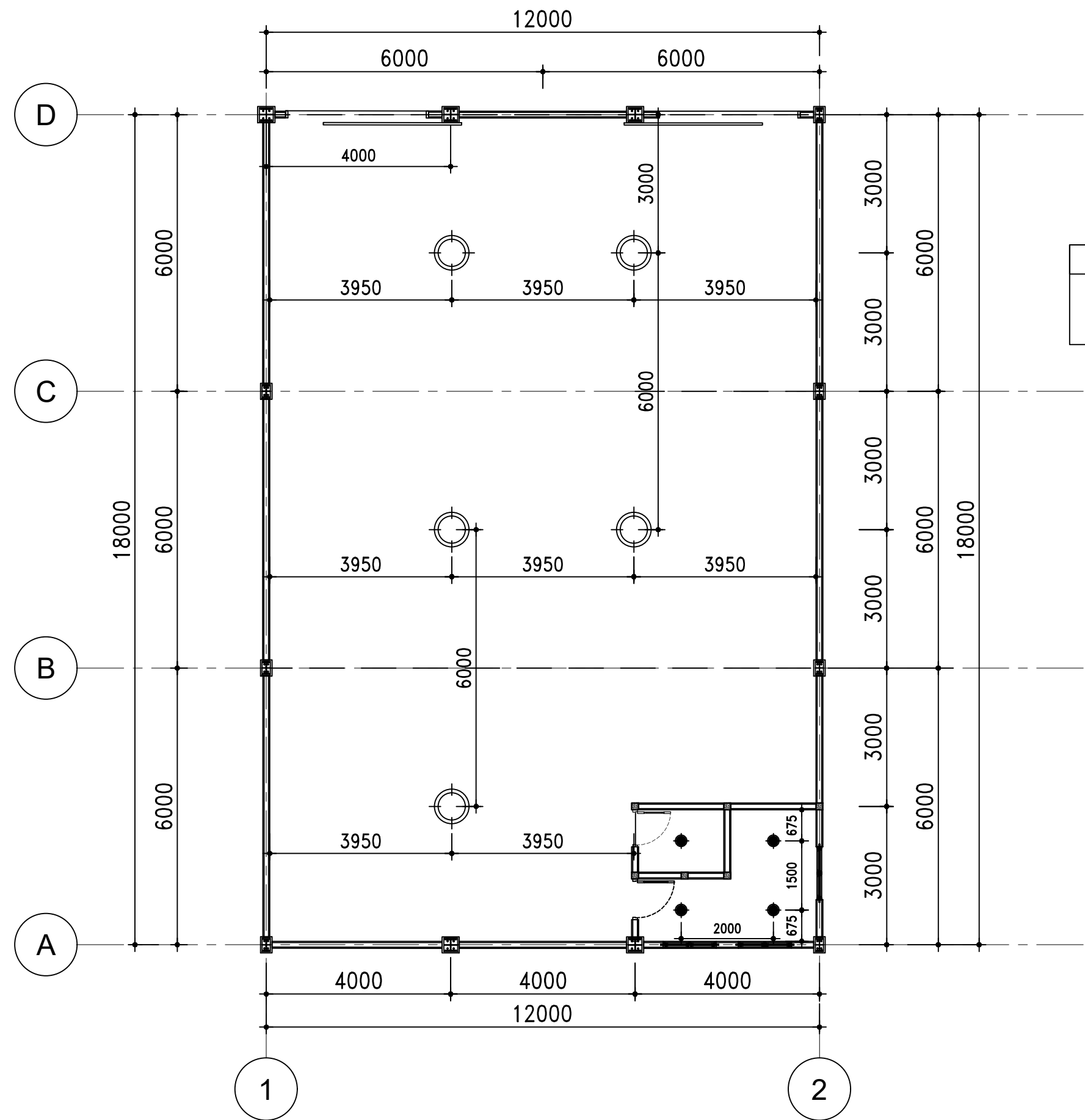
LEGEND / KEY PLAN :



Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
DENAH & DETAIL PLAFOND		
APPROVED BY :		APPROVED BY :
UNDP		DLH
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		6 Agustus 2019
SCALE :	DRAWING NO.	
1:100	AR-16	

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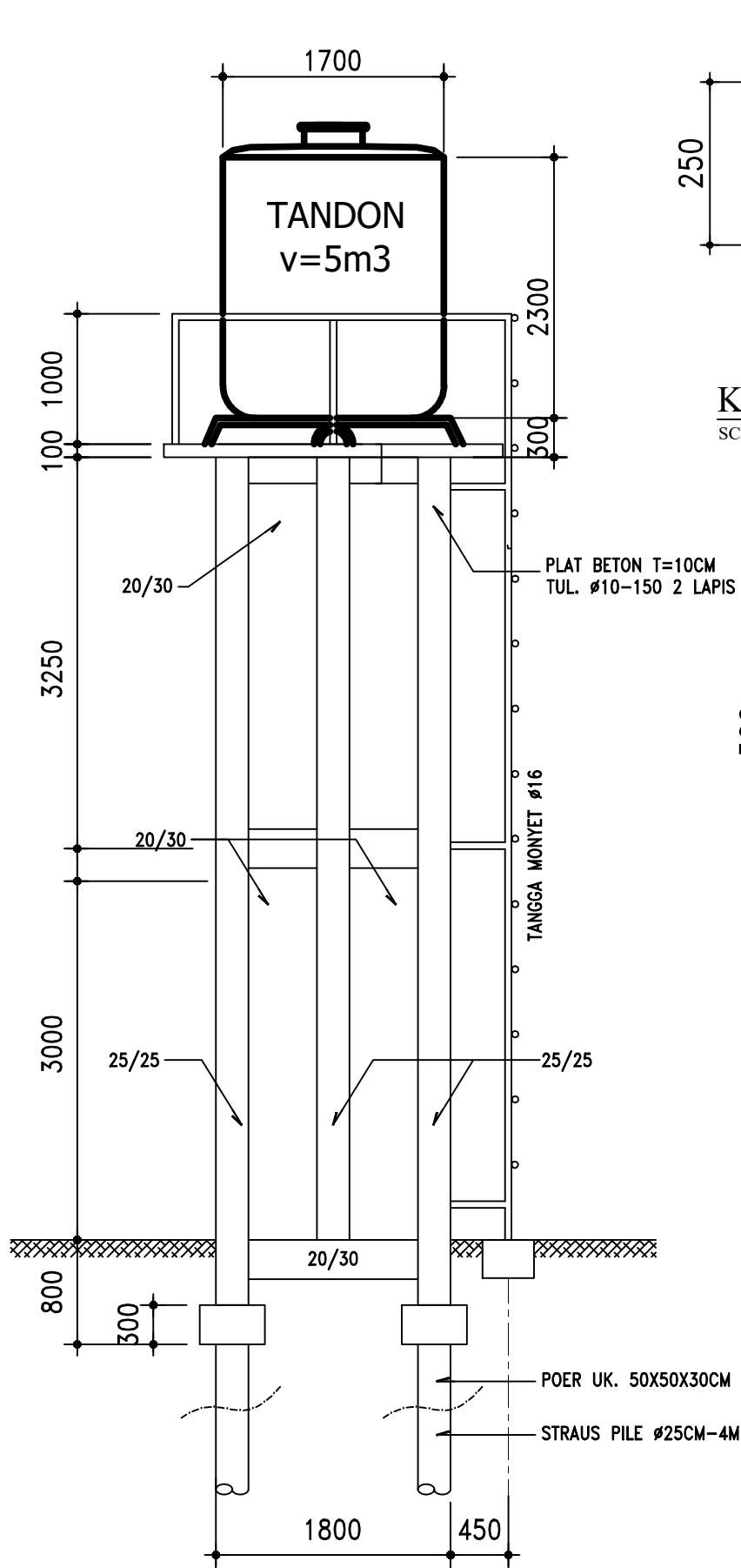
DENAH TITIK LAMPU  
SCALE 1:100

SIMBOL	KETERANGAN
	LAMPU LED INDUSTRI 150 WATT
	DOWNLIGHT LED-18W dia. 6"

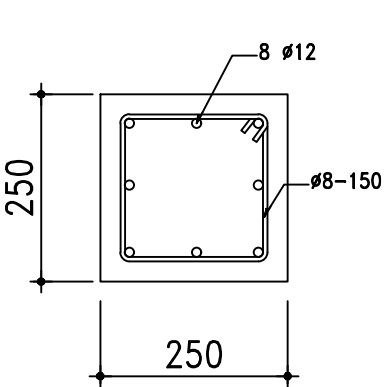
LEGEND / KEY PLAN :

Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
DENAH TITIK LAMPU		
APPROVED BY :		APPROVED BY :
UNDP		DLH
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		6 Agustus 2019
SCALE :	DRAWING NO.	
1:100	AR-17	
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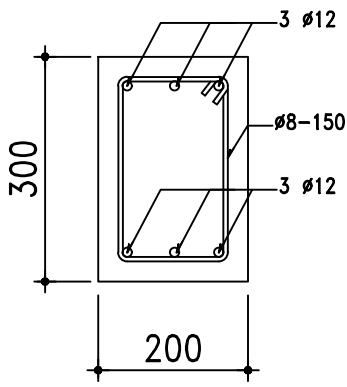




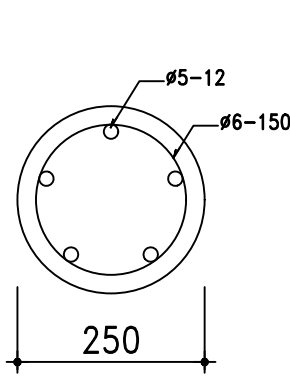
POTONGAN MENARA AIR  
SCALE 1:50



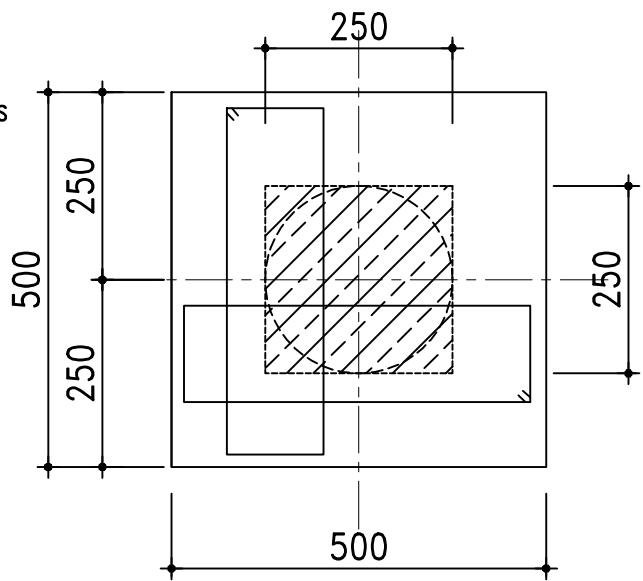
KOLOM UK. 25X25  
SCALE 1:10



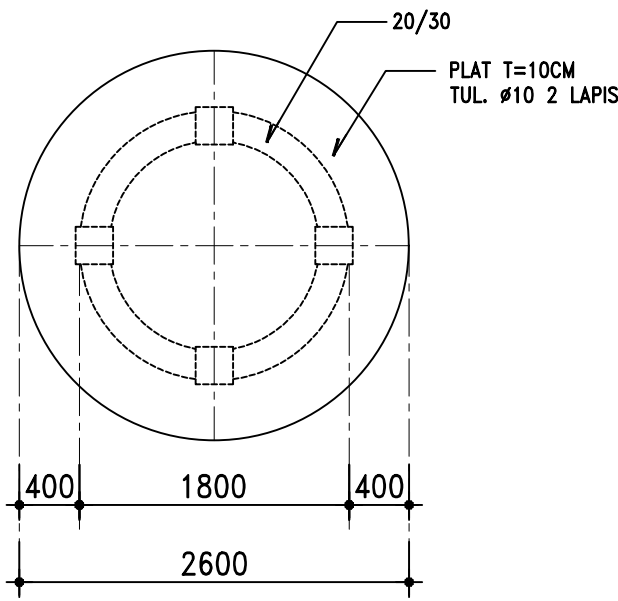
BALOK UK. 20X30  
SCALE 1:10



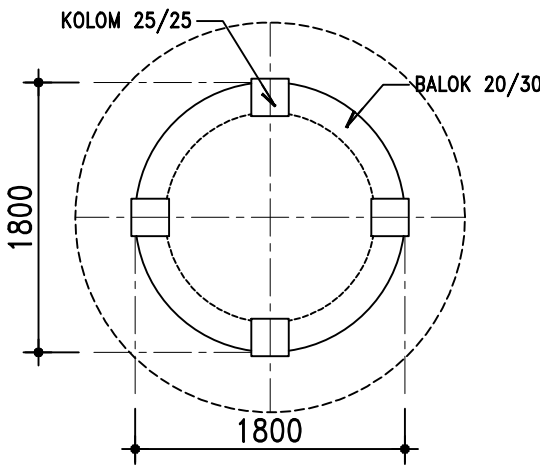
STROUS PILE UK. Ø 25  
SCALE 1:10



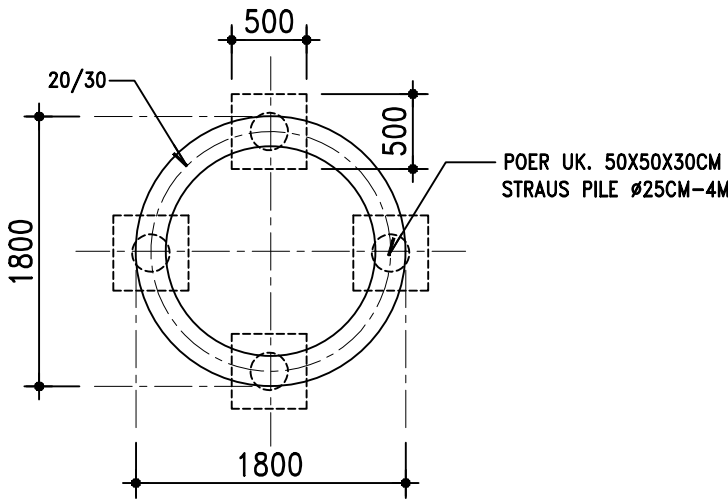
DETAIL POOR UK. 30X50X50  
SCALE 1:50



DENAH BALOK & PLAT  
SCALE 1:50

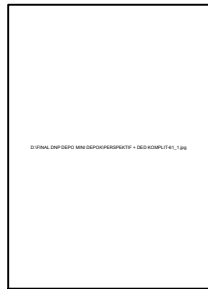


DENAH MENARA AIR  
SCALE 1:50



DENAH PONDASI  
SCALE 1:50

LEGEND / KEY PLAN :



Rev. Catatan : DATE

OWNER

UNDP ( United Nation  
Development Program )

PROJECT

Mini Depo Depok

ARCHITECT

DAVID CHANDRA, S.ARS

DRAWING

DETAIL MENARA AIR

APPROVED BY :

UNDP DLH

DRAFTED BY : CHECKED BY : DATE:

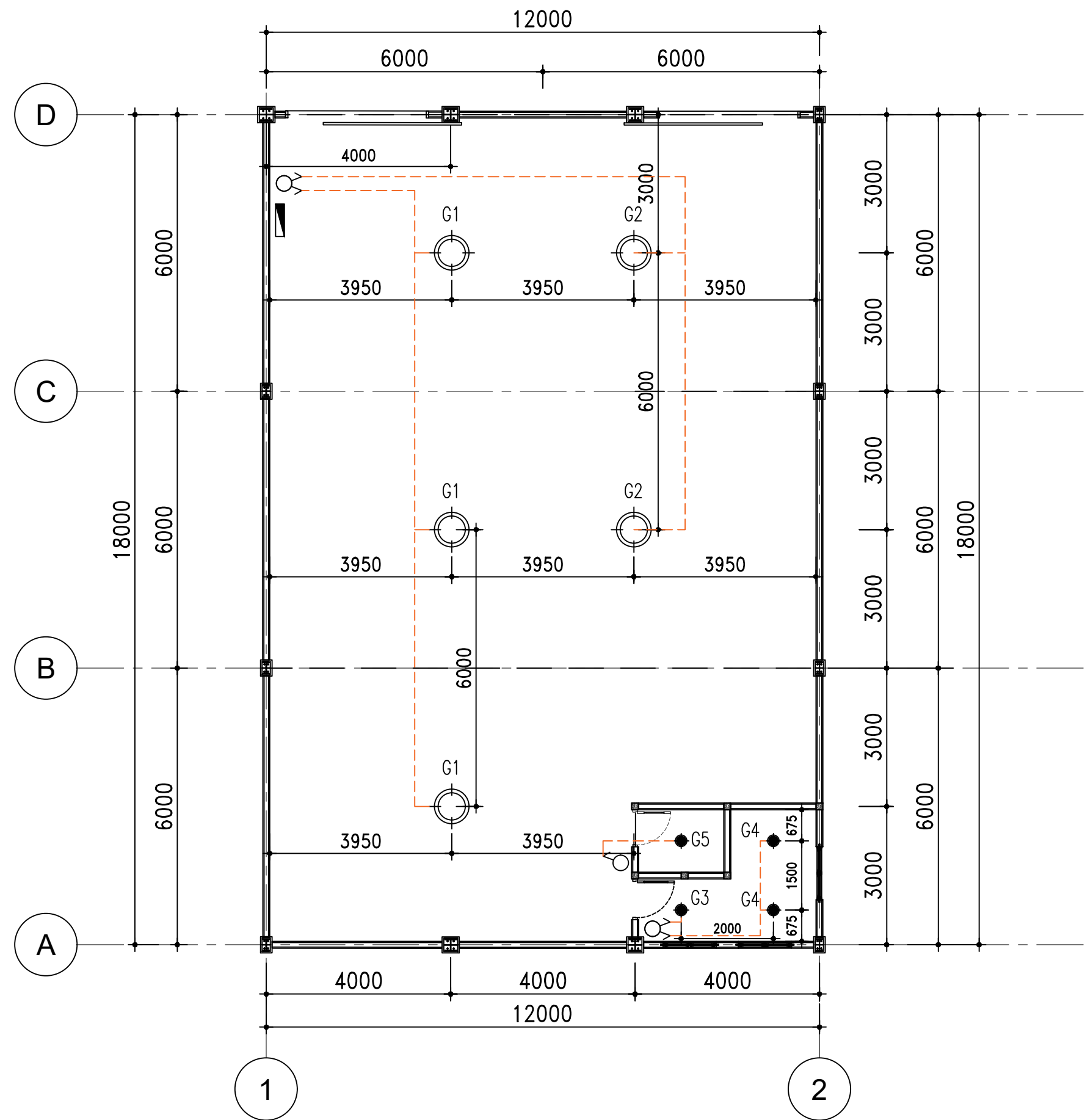
6 Agustus 2019

SCALE : DRAWING NO.

1:50 / 1:10 AR-18

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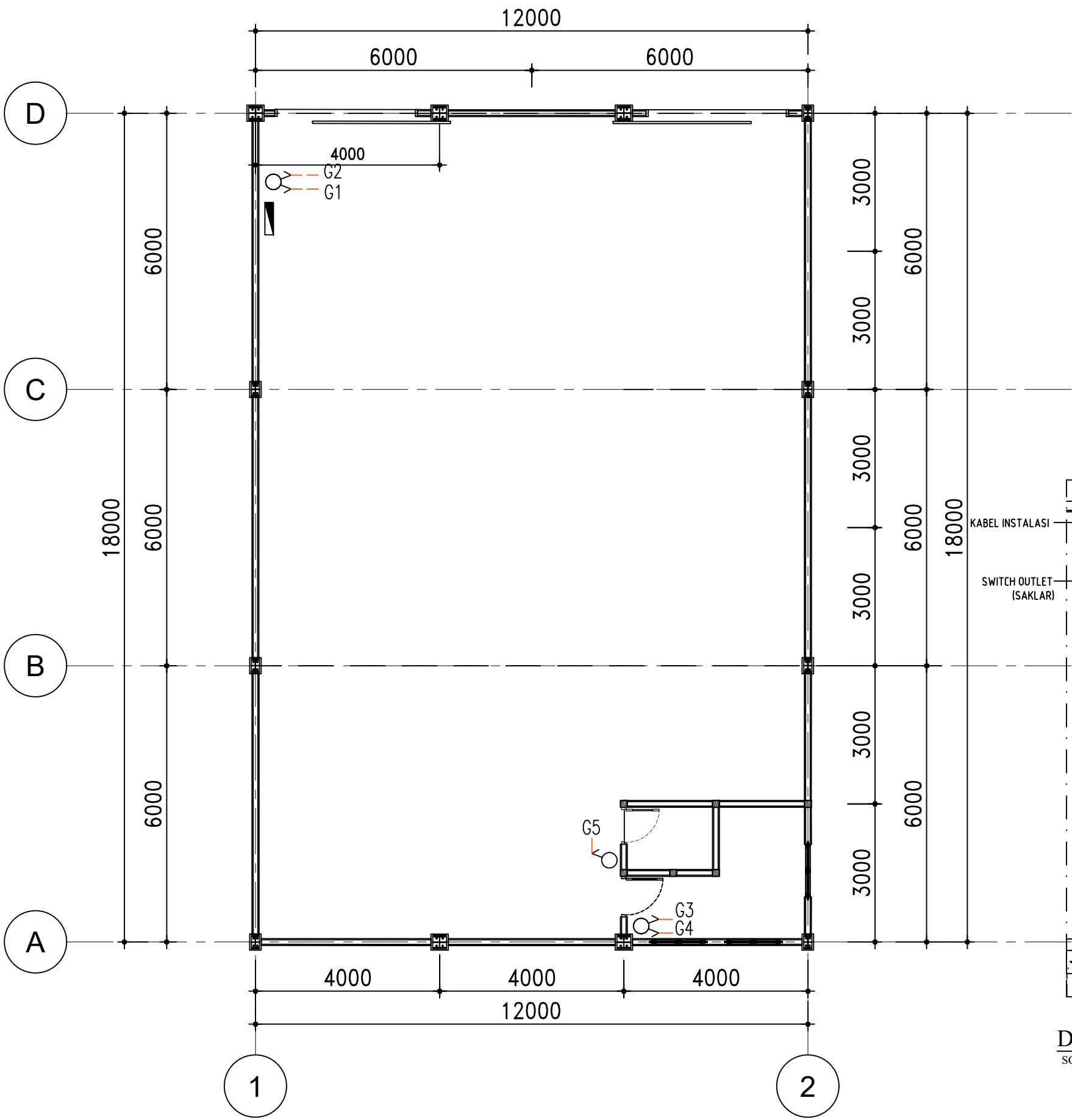
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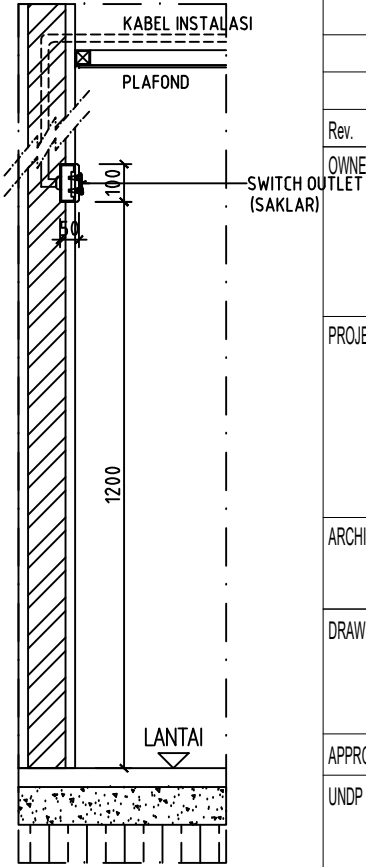
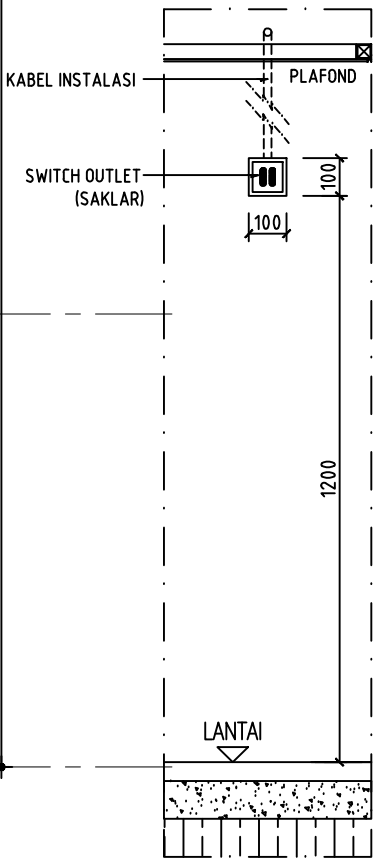
**DENAH TITIK LAMPU**  
SCALE 1:100

SIMBOL	KETERANGAN
	LAMPU LED INDUSTRI 150 WATT
	DOWNLIGHT LED-18W dia. 6"
	SAKLAR TUNGGAL H=1500 TO FLOOR
	SAKLAR GANDA H=1500 TO FLOOR
	INSTALASI KABEL
	BOX PANEL

LEGEND / KEY PLAN :				
Rev.	Catatan :	DATE		
OWNER				
UNDP ( United Nation Development Program )				
PROJECT				
Mini Depo Depok				
ARCHITECT				
DAVID CHANDRA, S.ARS				
DRAWING				
DENAH TITIK LAMPU				
APPROVED BY :		APPROVED BY :		
UNDP		DLH		
DRAFTED BY :	CHECKED BY :	DATE:		
		6 Agustus 2019		
SCALE :	DRAWING NO.			
1:100	EL-01			
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SIMBOL	KETERANGAN
⌚	SAKLAR TUNGGAL H=1500 TO FLOOR
⌚⌚	SAKLAR GANDA H=1500 TO FLOOR
- - -	INSTALASI KABEL



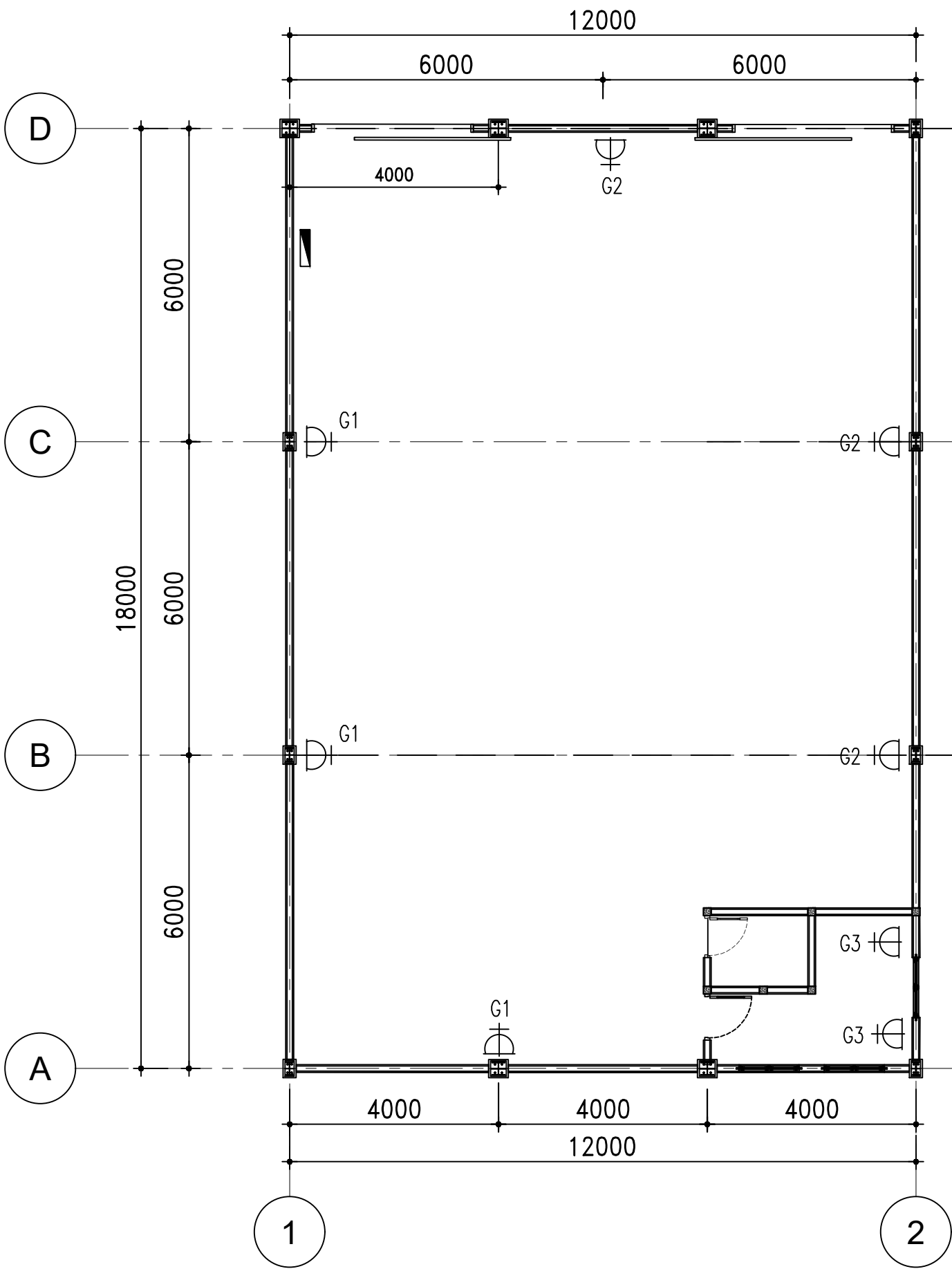
DETAIL PEMASANGAN SAKLAR  
SCALE 1:20

DENAH TITIK LAMPU  
SCALE 1:100

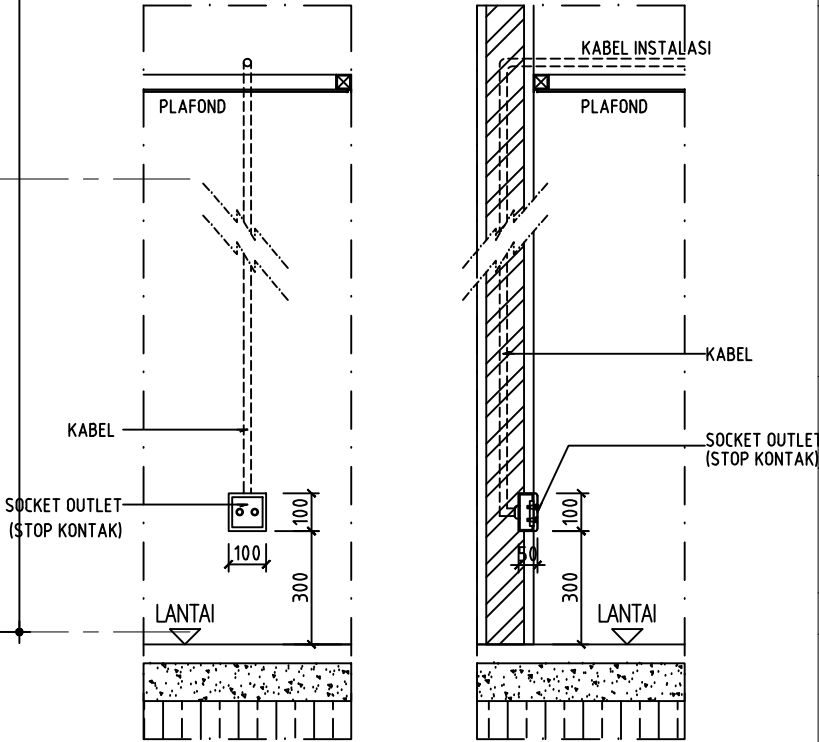
LEGEND / KEY PLAN :

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Rev.	Catatan :	DATE
OWNER UNDP ( United Nation Development Program )		
PROJECT Mini Depo Depok		
ARCHITECT DAVID CHANDRA, S.ARS		
DRAWING DENAH TITIK LAMPU		
APPROVED BY : UNDP		APPROVED BY : DLH
DRAFTED BY :	CHECKED BY :	DATE: 6 Agustus 2019
SCALE :	DRAWING NO. EL-02	
THIS DRAWING IS FOR INFORMATION AND GUIDELINES ONLY TO BE USED BY THE CONTRACTORS AS A GENERAL ARRANGEMENT OF INTERIOR CONDITION IT HAS BEEN MADE FROM AVAILABLE INFORMATION. HOWEVER, MEASUREMENT ARE TO BE VERIFIED ON THE PROJECT SITE.  THIS DRAWING IS THE PROPERTY OF DAVID CHANDRA, S.ARS AND IS NOT TO BE REPRODUCE OR COPIED IN WHOLE OR IN PART IT IS TO BE USED FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HERE IN AND NOT TO BE USED ON ANY OTHER PROJECT. IT HAS TO BE RETURNED UPON REQUEST		



SIMBOL	KETERANGAN
	STOP KONTAK H=400 TO FLOOR
	PANEL MCB



DETAIL PEMASANGAN STOP KONTAK  
SCALE 1:20

DENAH TITIK LAMPU  
SCALE 1:100

LEGEND / KEY PLAN :



Rev. Catatan : DATE

OWNER  
UNDP ( United Nation  
Development Program )

PROJECT  
Mini Depo Depok

ARCHITECT  
DAVID CHANDRA, S.ARS

DRAWING  
DENAH TITIK LAMPU

APPROVED BY :  
UNDP

APPROVED BY :  
DLH

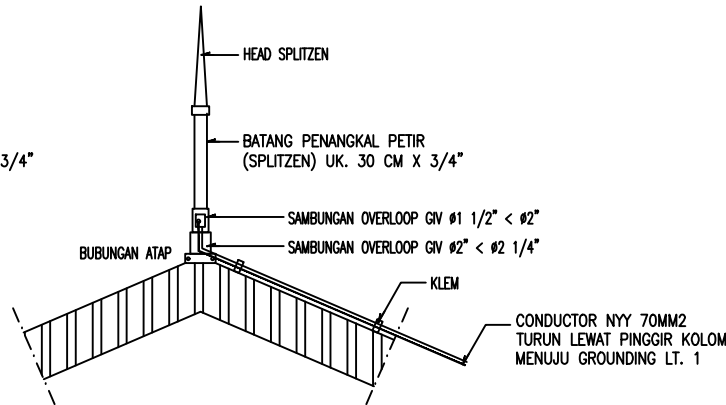
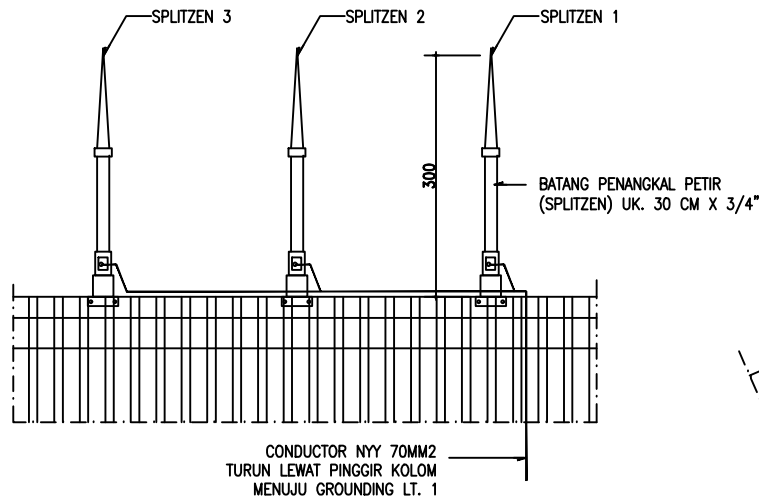
DRAFTED BY :  
CHECKED BY :  
DATE:  
6 Agustus 2019

SCALE :  
1:100

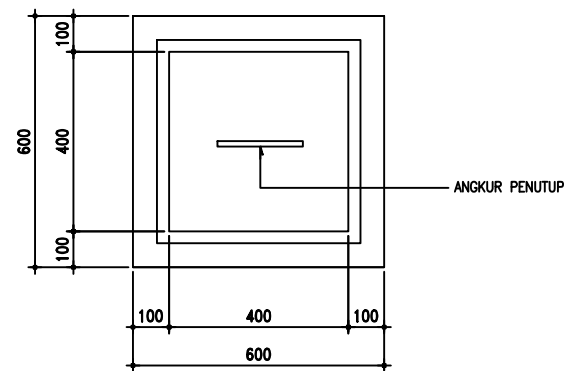
DRAWING NO.  
EL-03

THIS DRAWING IS FOR INFORMATION AND GUIDELINES ONLY TO BE USED BY THE CONTRACTORS AS A GENERAL ARRANGEMENT OF INTERIOR CONDITION IT HAS BEEN MADE FROM AVAILABLE INFORMATION. HOWEVER, MEASUREMENT ARE TO BE VERIFIED ON THE PROJECT SITE.

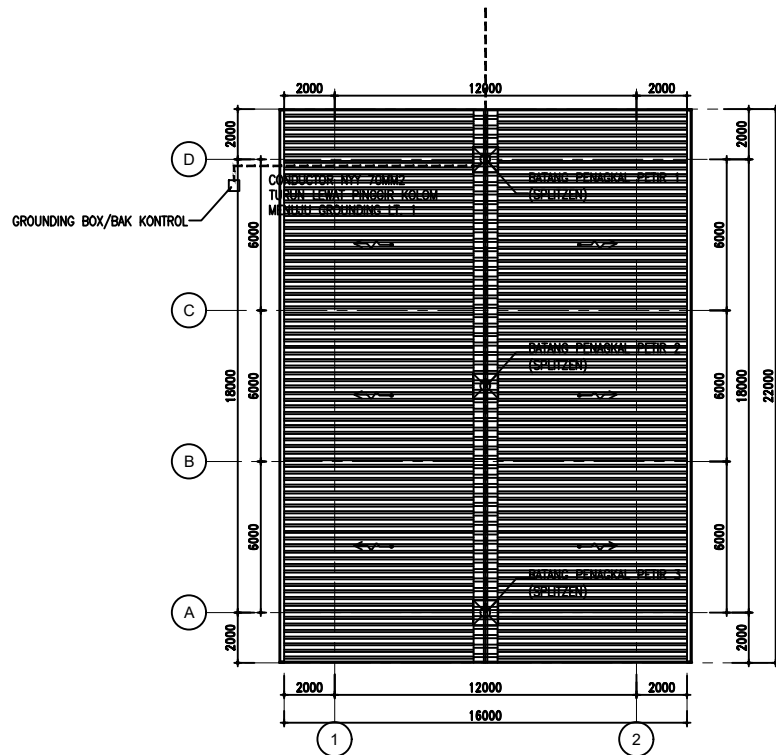
THIS DRAWING IS THE PROPERTY OF DAVID CHANDRA, S.ARS AND IS NOT TO BE REPRODUCE OR COPIED IN WHOLE OR IN PART IT IS TO BE USED FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HERE IN AND NOT TO BE USED ON ANY OTHER PROJECT. IT HAS TO BE RETURNED UPON REQUEST



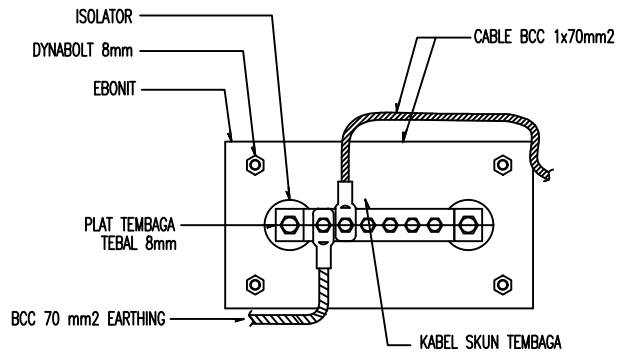
DETAIL PENANGKAL PETIR  
SCALE : NTS



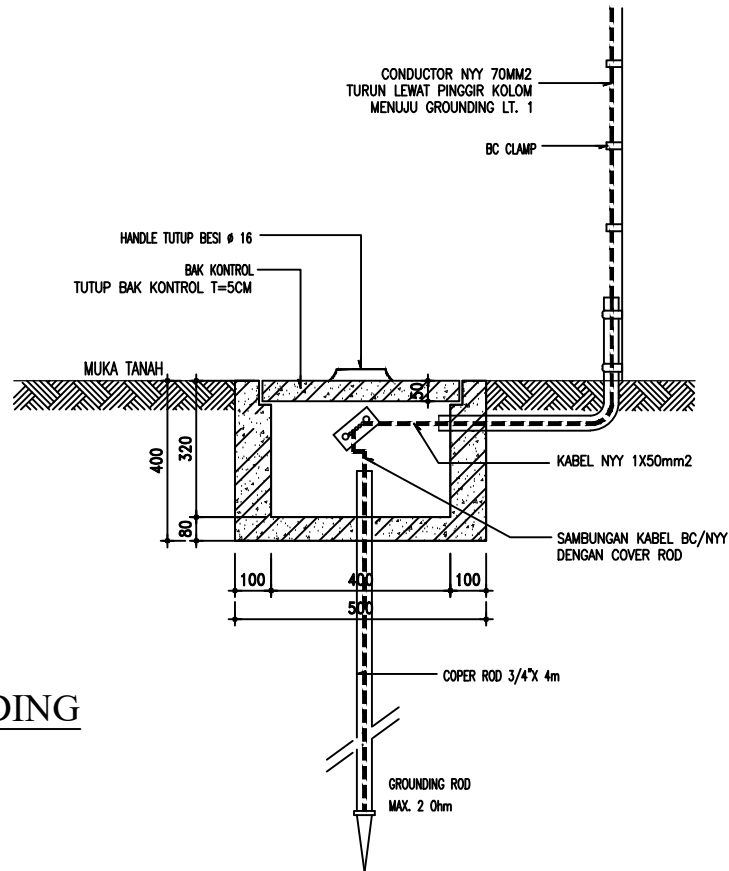
DENAH BAK KONTROL  
SCALE : NTS



DENAH INSTALASI PENANGKAL PETIR  
SCALE : NTS



DETAIL SAMBUNGAN GROUNDING  
SCALE : NTS



DETAIL BAK KONTROL  
SCALE : NTS

LEGEND / KEY PLAN :



Rev. Catatan : DATE

OWNER

UNDP ( United Nation  
Development Program )

PROJECT

Mini Depo Depok

ARCHITECT

DAVID CHANDRA, S.ARS

DRAWING

DENAH & DETAIL  
INSTALASI PENANGKAL PETIR

APPROVED BY :

UNDP DLH

DRAFTED BY : CHECKED BY : DATE:

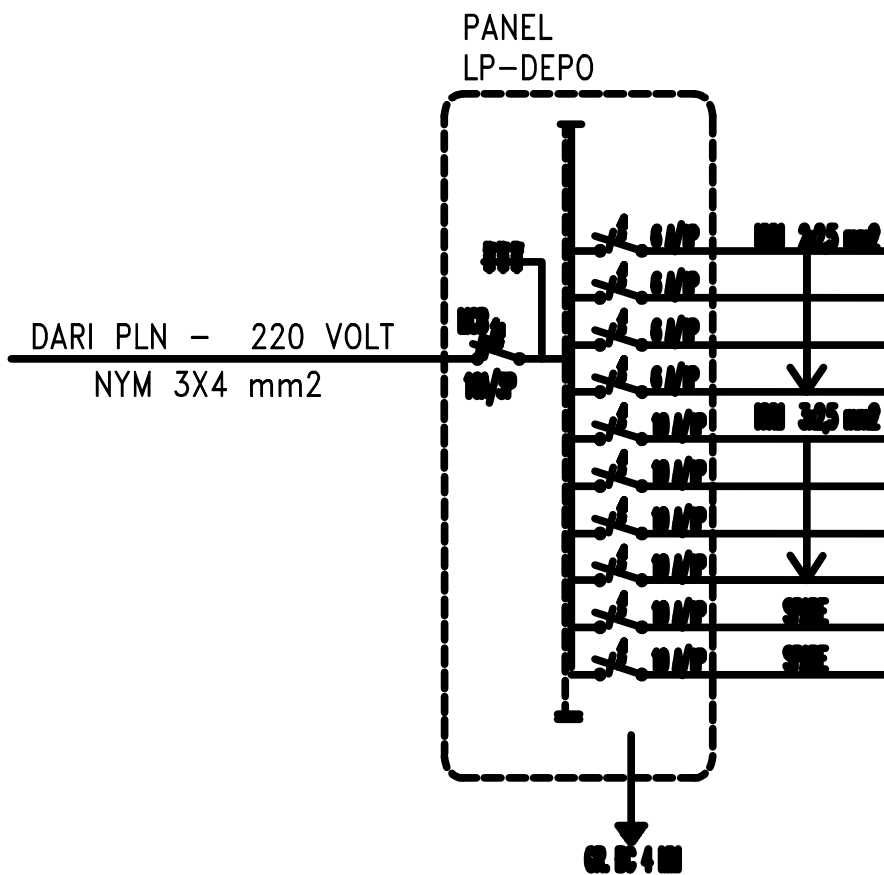
6 Agustus 2019

SCALE : DRAWING NO.

1:150 EL-04

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GROUP NO.	FUNGSI	LAMPU LED 150 W	LAMPU DL LED 9 W	LAMPU LED 40 W	STOP KONTAK 200W			LOADING/BEBAN		
								R	S	T
1	INST. PENERANGAN	3	1					459		
2	↓	2	2						318	
3	INST. STOP KONTAK				3					600
4	↓				3			600		
5	↓				2				400	
6										
6										
7										
8	S P A R E									
9	S P A R E									
JUMLAH								1.059	718	600
TOTAL									2.377	
								3500 VA		

SINGLE DIAGRAM ELEKTRIKAL  
SCALE : NTS

LEGEND / KEY PLAN :

Rev.	Catatan :	DATE
------	-----------	------

OWNER

UNDP ( United Nation Development Program )

PROJECT

Mini Depo Depok

ARCHITECT

DAVID CHANDRA, S.ARS

DRAWING

SINGLE DIAGRAM ELEKTRIKAL

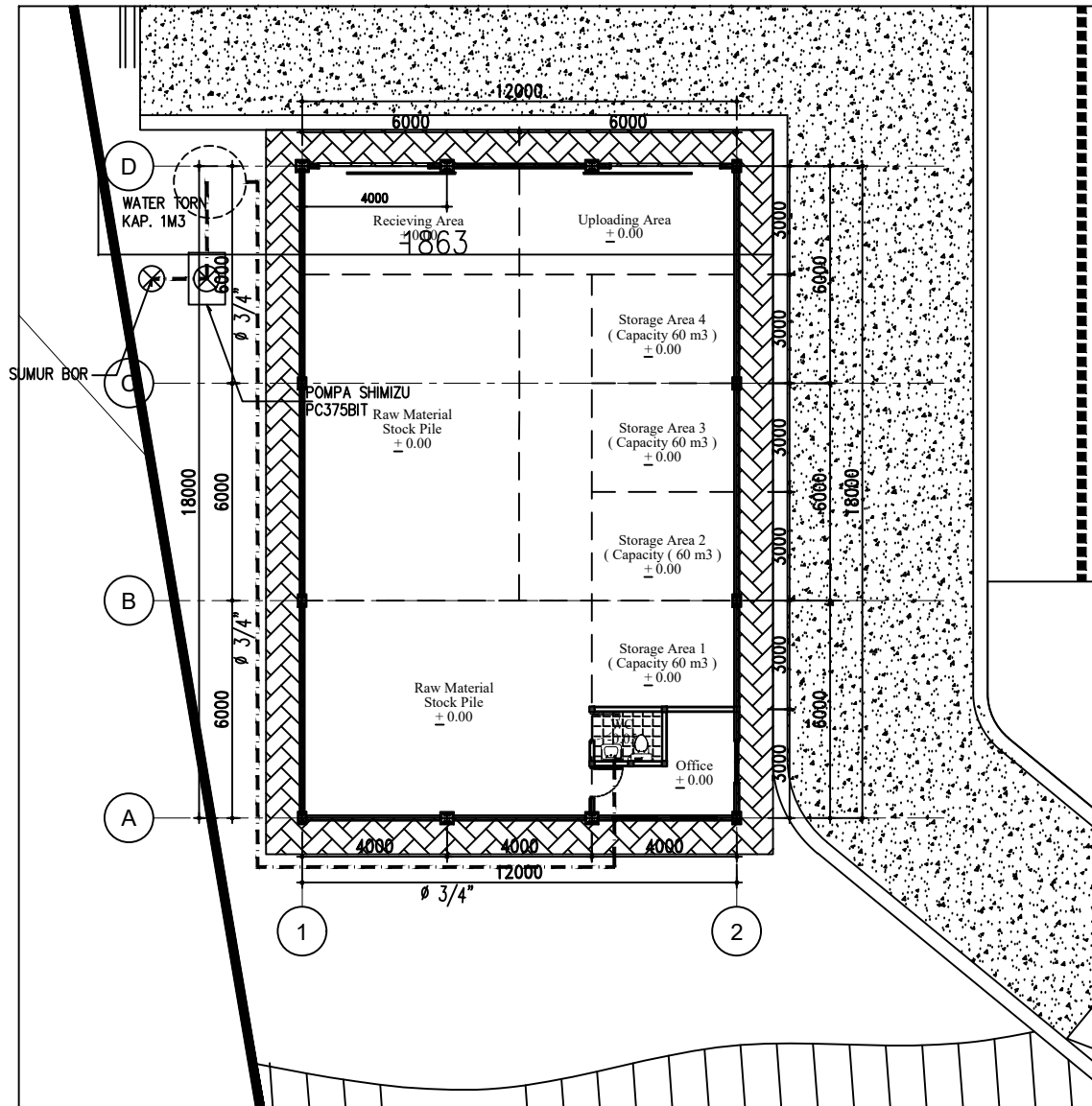
APPROVED BY :	APPROVED BY :
UNDP	DLH

DRAFTED BY :	CHECKED BY :	DATE:
		6 Agustus 2019

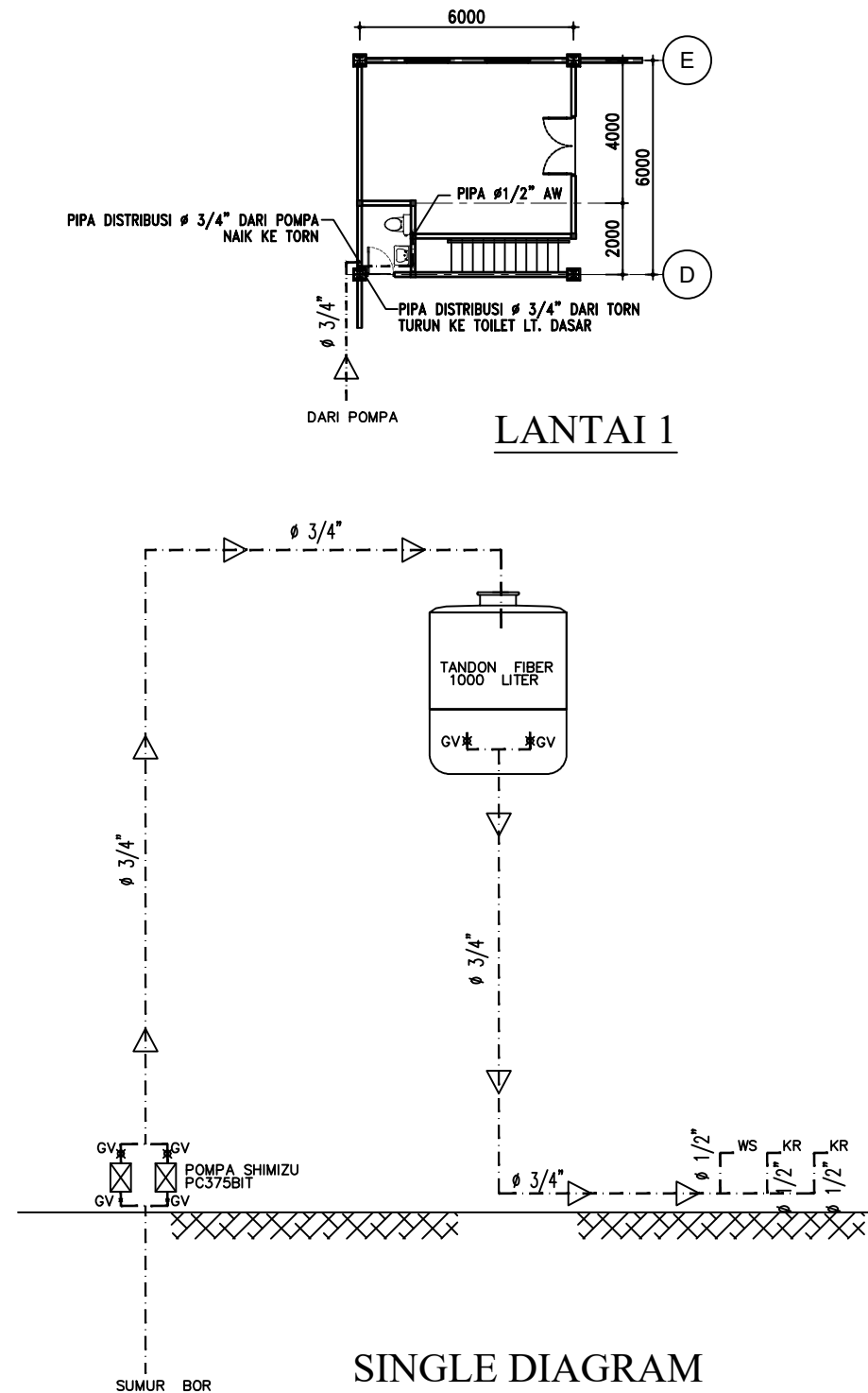
SCALE :	DRAWING NO.
NTS	EL-05

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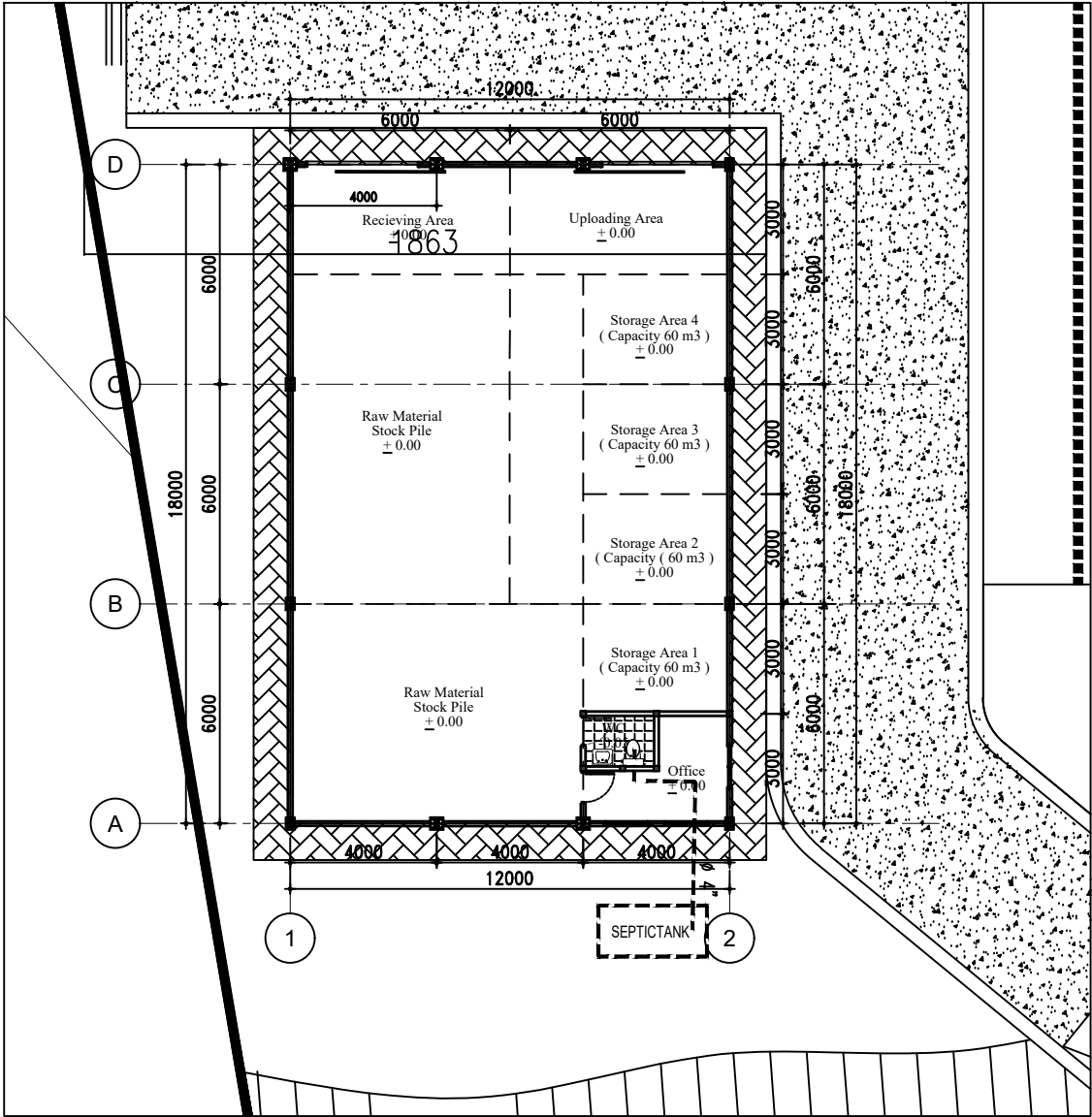


DENAH INSTALASI AIR BERSIH  
SCALE 1:200



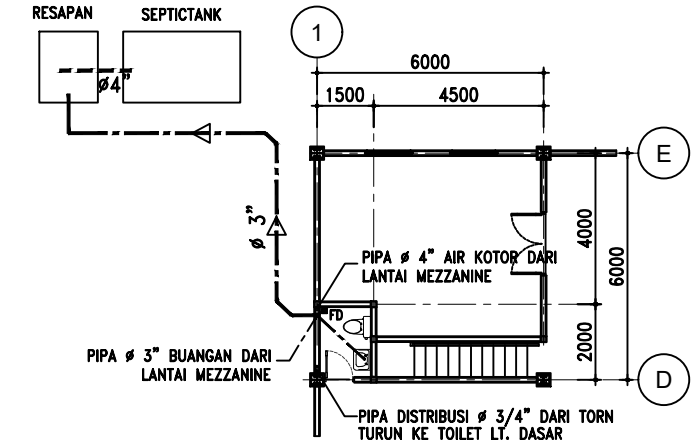
SINGLE DIAGRAM  
INSTALASI AIR BERSIH  
NTS

LEGEND / KEY PLAN :		
<div><div></div></div>		
Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
DENAH INSTALASI AIR BERSIH		
APPROVED BY :		APPROVED BY :
UNDP		DLH
DRAFTED BY :	CHECKED BY :	DATE:
		6 Agustus 2019
SCALE :	DRAWING NO.	
1:200	PL-01	
<p>THIS DRAWING IS FOR INFORMATION AND GUIDELINES ONLY TO BE USED BY THE CONTRACTORS AS A GENERAL ARRENGEMENT OF INTERIOR CONDITION IT HAS BEEN MADE FROM AVAILABLE INFORMATION. HOWEVER, MEASUREMENT ARE TO BE VERIFIED ON THE PROJECT SITE.</p> <p>THIS DRAWING IS THE PROPERTY OF DAVID CHANDRA, S.ARS AND IS NOT TO BE REPRODUCE OR COPIED IN WHOLE OR IN PART IT IS TO BE USED FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HERE IN AND NOT TO BE USED ON ANY OTHER PROJECT. IT HAS TO BE RETURNED UPON REQUEST</p>		

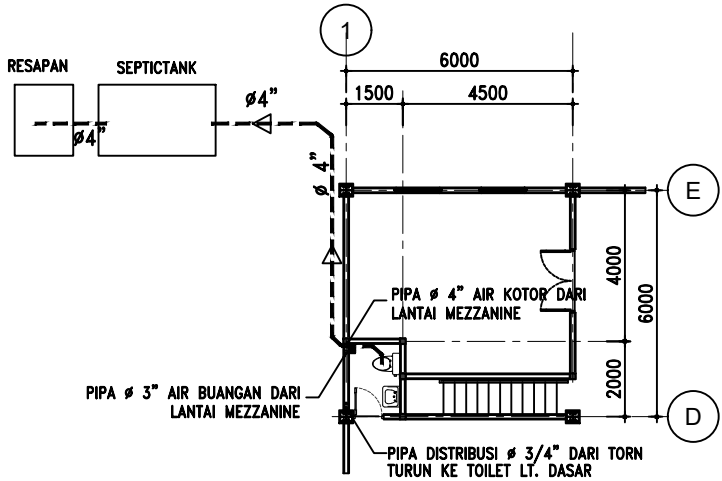


DENAH INSTALASI AIR KOTOR

SCALE 1:200



INST. AIR BUANGAN LANTAI 1



INST. AIR KOTOR LANTAI 1

LEGEND / KEY PLAN :

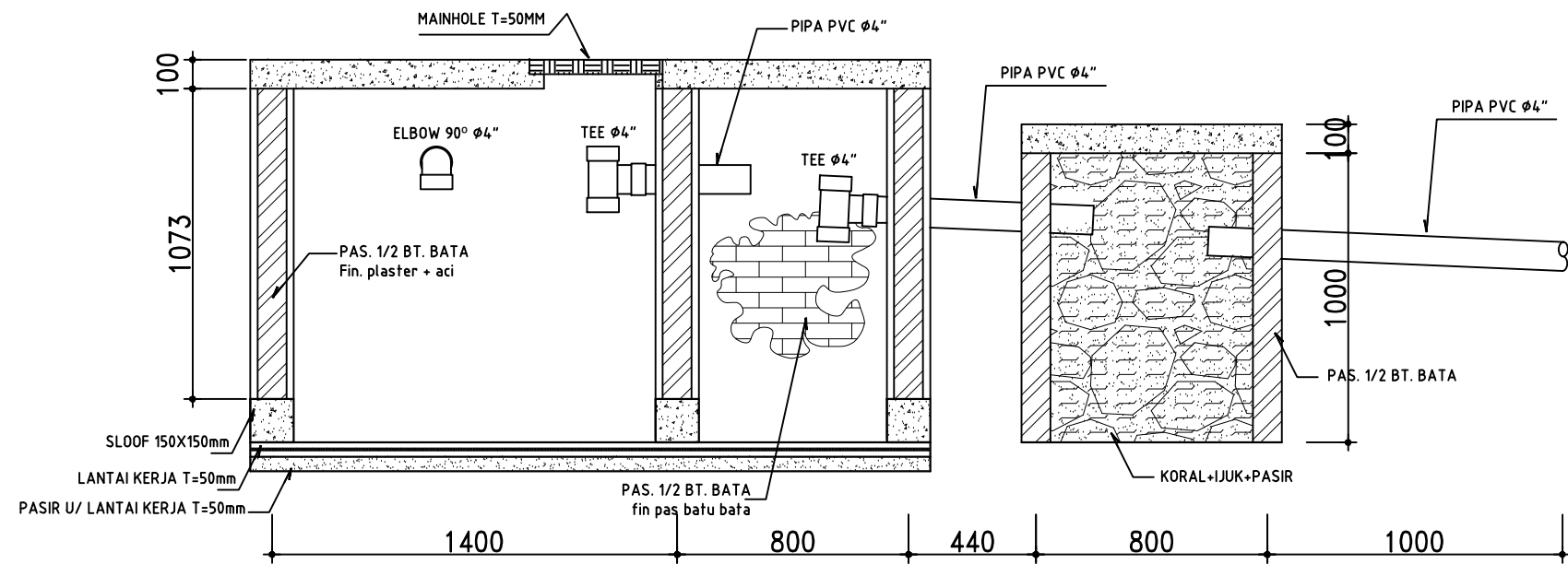


Rev.	Catatan :	DATE
OWNER		
UNDP ( United Nation Development Program )		
PROJECT		
Mini Depo Depok		
ARCHITECT		
DAVID CHANDRA, S.ARS		
DRAWING		
DENAH INSTALASI AIR KOTOR & BUANGAN		
APPROVED BY :		APPROVED BY :
UNDP		DLH
DRAFTED BY :	CHECKED BY :	DATE:
		6 Agustus 2019
SCALE :		DRAWING NO.
1:200		PL-02

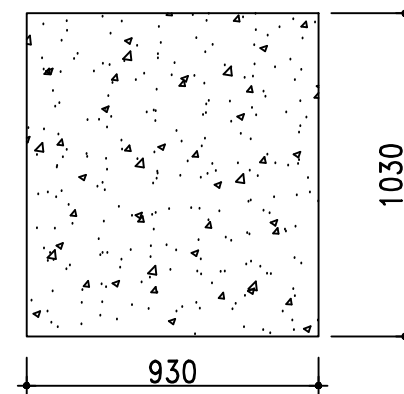
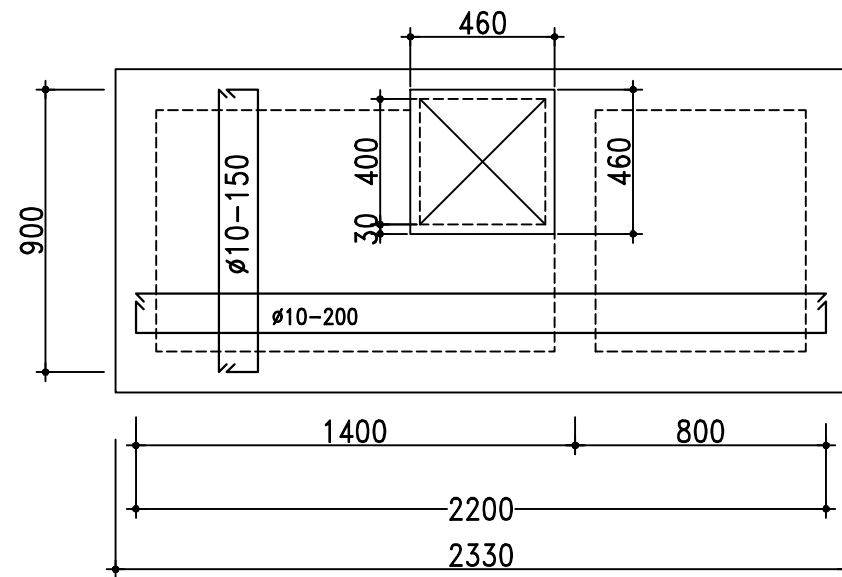
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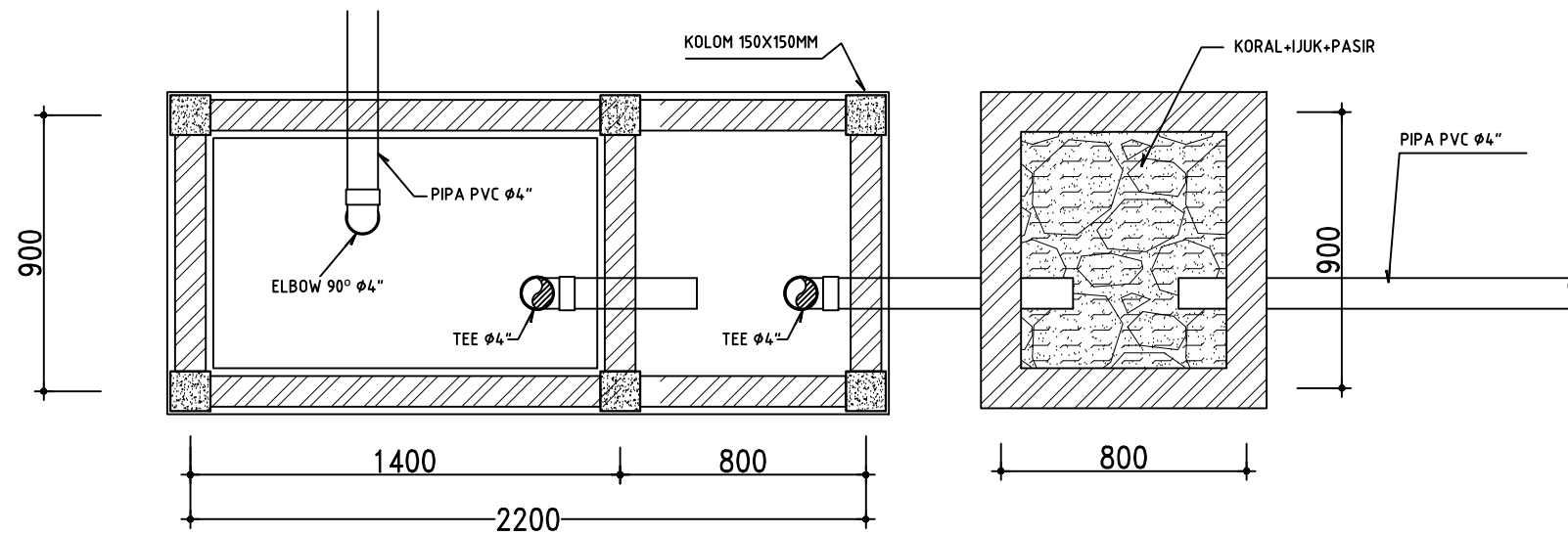




**POTONGAN A - A**  
SCALE 1:25



**DENAH TUTUP SEPTICTANK & RESAPAN**  
SCALE 1:25



**DENAH SEPTICTANK & RESAPAN**  
SCALE 1:25

LEGEND / KEY PLAN :



Rev.	Catatan :	DATE

OWNER

UNDP ( United Nation  
Development Program )

PROJECT

Mini Depo Depok

ARCHITECT

DAVID CHANDRA, S.ARS

DRAWING

DETAIL, TAMPAK &  
POTONGAN SEPTIC TANK

APPROVED BY :	APPROVED BY :
UNDP	DLH

DRAFTED BY :	CHECKED BY :	DATE:
		6 Agustus 2019

SCALE :	DRAWING NO.
1:25	PL-03

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PILECAP	
TYPE	REMARK (PxLxT)
PC1	750x750x600

TIEBEAM	
TYPE	REMARK
TB1	300x500

PEDESTAL	
TYPE	REMARK
K1	300x400
K2	450x600



KETERANGAN:
REFERENCE:
MUTU BUKAN :
- STRUKTUR :
- PASIRAN, LOJONG : K-250 (t: 20 mm)
- PASIRAN, LOJONG : K-350 (t: 30 mm)
MUTU TULANGAN BUKAN :
- # BURT 24 (POLOS), $f_y = 240 \text{ MPa}$
- 0 BURT 40 (ULIR), $f_y = 400 \text{ MPa}$
- WERKSTAH (ULIR), $f_y = 500 \text{ MPa}$
MUTU BATA STRUKTURAL :
- ASB / BMT, $f_y = 250 \text{ MPa}$
MUTU BATA :
- HIT ASB, $f_{at} = 620 \text{ MPa}$
MUTU ANJANG :
- ASB, $f_y = 250 \text{ MPa}$
MUTU JAS :
- ELEKTROD E70XX

[illegible]

KONSULTAN STRUKTUR  
STRUCTURE CONSULTANT

MECHANICAL/ELECTRICAL CONSULTANTDepo  
Depok - Jawa Barat

BOREPILE, PILECAP, SLOOF

ORGANISATION	NZR
DEPARTMENT	
SKALA	1 : 150
SCALE	
TANGGAL	
DATE	28/11/2019

NO PROYEK	PERENCANA	DIFERENSA	KODE PERUB
PROJECT NO	DESIGNED BY	CHECKED BY	REVISION CODE
-	-	-	-
KODE PROYEK	KODE GAMBAR	NO GAMBAR	NO LEMBAR

PROJECT CODE	DRAWING CODE	DRAWING NO	SHEET NO
DPK	STR	S01	01

DPK ELUARIAN UNTUK  
ISSUED FOR

FOR DESIGN

<p>PEMERINTH TUMAS OWMIR</p>
<p>KETERANGAN : REFERENCE :</p>

[illegible]





[illegible]



**REFERENCE:**

- STRUKTUR

MUTU TULANGAN BE

1

MUTU BAKA SIKUKI  
MUTU BAKI

MUTU LAS

10

10

- PERIKSA SEMUA D

NO. 1	RE
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KONSULTAN ARSITEKTUR

KONSULTAN STRUKTUR  
STRUKTUR KONSULTAN

**CONSULTANT MECHANICAL & ELECTRICAL**

1000

PROJECT

Dep

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DRAWING TITLE

POL

DIGAMBAR	1778
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SKALA	1 : 150
SCALA	

TANGGAL	26/11/20
DATE	

PROJECT NO.	DESIGNED
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PROJECT CODE	DRAWING
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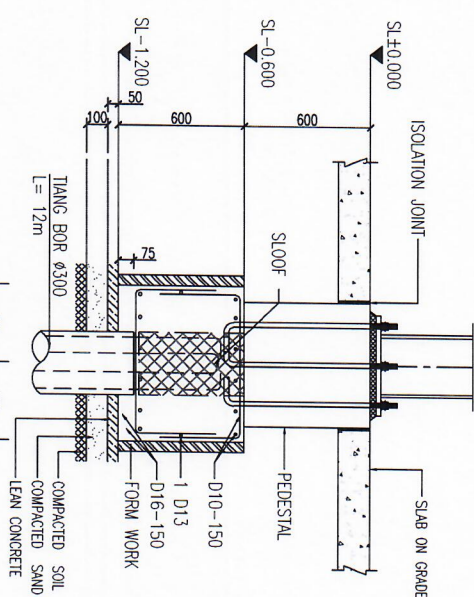
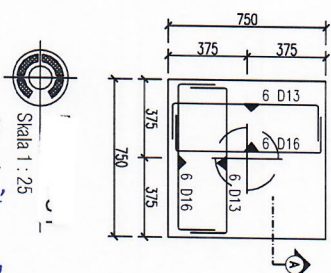
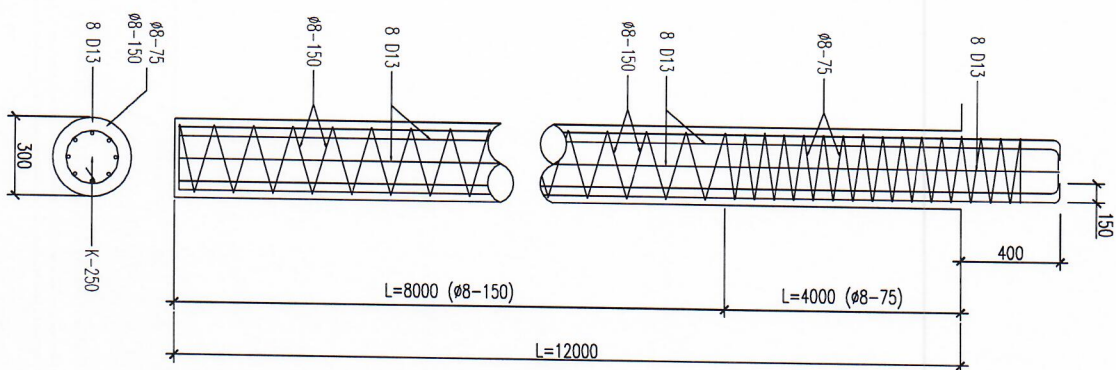
DPK	STP
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## KEKUALAHAN UNTUK DISEDIAKAN

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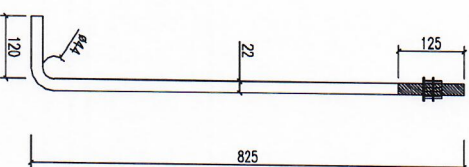
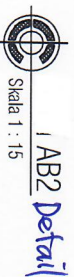
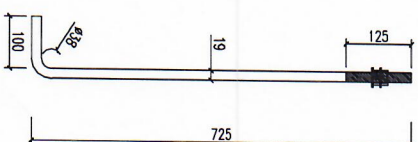
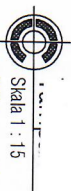
[illegible]

TIPE BALOK		TB1	
	TUMPUHAN/END	LAPANGAN/MIDDLE	
DIMENSI	300x500	300x500	
TULANGAN ATAS	4 D16	4 D16	
TULANGAN PINGANG	2 D10	2 D10	
TULANGAN BAWAH	4 D16	4 D16	
SENGKANG	D10 – 100	D10 – 200	

[illegible]



KOLOM		K2
LEVEL	DIMENSI	
SL=+1,000 ↓ V	450x600	
	TULANGAN 18 D16	
	SEKANGS D10-100	
	PENGKAT D10-100	
SL=-0,600 ↑ V	SELIMUT t = 50mm	



- PERIKSA SEMUA DIMENSI DI LAPANGAN, KONFIRMASIKAN KEPADA ARSITEK SEBELUM MENULAI PEKERJAAN

NO.	REVISION	REQ BY	TANGGAL DATE
NO.	REVISION	BY	DATE

[illegible]KONSULTAN ARSITEKTUR  
ARCHITECTURE CONSULTANT

KONSULTAN STRUKTUR  
STRUCTURE CONSULTANT

KONSULTAN MEKANIKAL & ELEKTRIKAL  
MECHANICAL ELECTRICAL CONSULTANT

---

---

PROYEK  
PROJECT

Depo  
Depok - Jawa Bara

SOUTH CAMPBELL	
DRAWING TITLE	
PEDESTAL DETAIL	
ANCHOR DETAIL & BASEPLATE	
DECAHEDRON	
DRAWING BY	NZR
SCALE	1:10, 1:15, 1:25

TANGKAL		DATE	
20/11/2019			
NO PROJEK	PERENCANA	DI-PERUSA	NO PERUB.
PROJECT NO	DESIGNED BY	CHECKED BY	REVISION CODE
-	-	-	-
NO PROJEK	NO GAMBAR	NO GAMBAR	NO. TEBUKAR
PROJECT CODE	DRAWING CODE	DRAWING NO	SHEET NO
DPK	STR	S07	07

FOR DESIGN



KETERANGAN

UNIT BOKOR  
STANDARD : K-250 (K-20 MPa)  
- PROJEKSI LONJOK : K-350 (K-30 MPa)  
UNIT TUBUKAN BOKOR  
- 8 BOP 24 (PQUS),  $F_y = 240 \text{ MPa}$   
- 8 BOP 40 (QUS),  $F_y = 400 \text{ MPa}$   
- WIREMESH (QUS),  $F_y = 500 \text{ MPa}$   
UNIT BUA STRUKTURAL : A35 / B44,  $F_y = 250 \text{ MPa}$   
UNIT BOP : H18 A35,  $F_y = 620 \text{ MPa}$   
UNIT JAGUAR : A35,  $F_y = 250 \text{ MPa}$   
UNIT US : ELEPHANT EXOX

\* PERIKSA SUDUT GUNUNG DI LUBUKAN, KONSTRUKSI  
KEPADA ARSITEK SEBELUM MULAI PERIKSA

NO	REVISI	REVISI	TAMBAH
1	1	1	1

NO	REVISI	REVISI	TAMBAH
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10

KONSTRUKSI TUGAS  
KONSTRUKSI TUGAS

KONSTRUKSI TUGAS  
KONSTRUKSI TUGAS

KONSTRUKSI TUGAS  
KONSTRUKSI TUGAS

KONSTRUKSI TUGAS  
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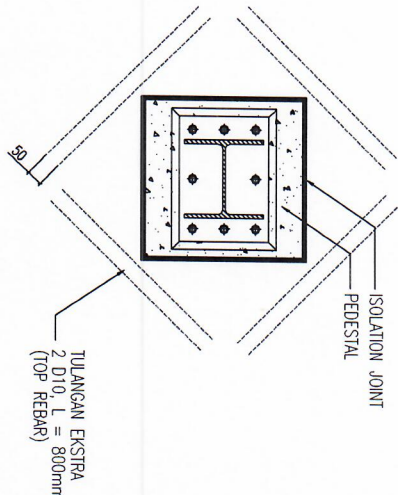
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KONSTRUKSI TUGAS

KONSTRUKSI TUGAS  
KONSTRUKSI TUGAS

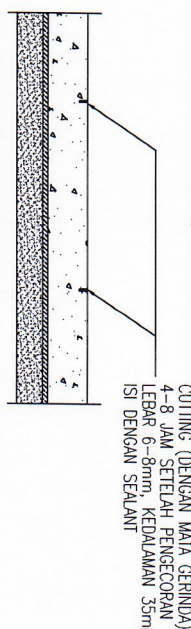
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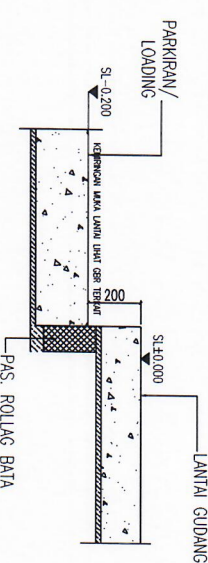


Detail on Extra Plate  
Reinforcement Bar



NOTE : CONTRACTION JOINT PADA PLAT LANTAI S.O.G HARIIS  
DISEDIAKAN DENGAN MODUL PLAT MAKSIMUM 30m2

Contraction Joint



Detail on Elevation Difference

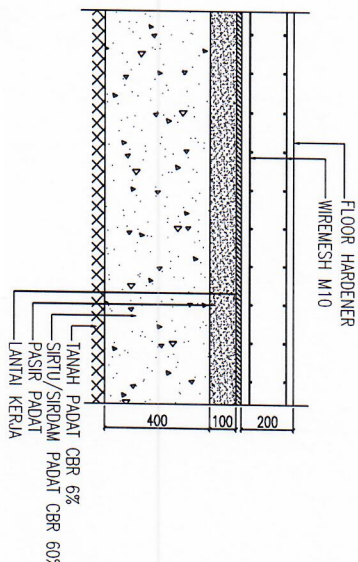
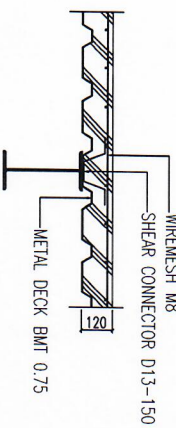
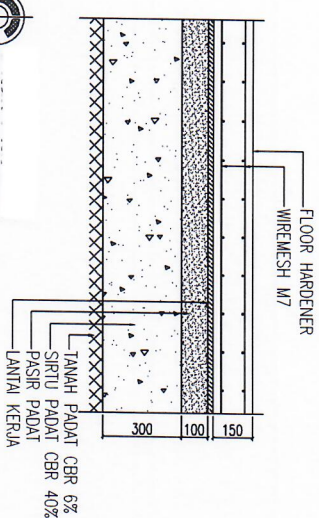


Plate Detail on Loading Area



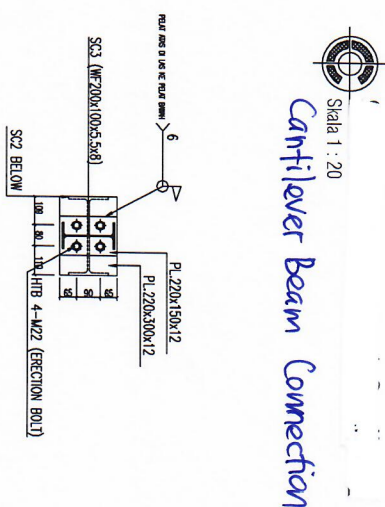
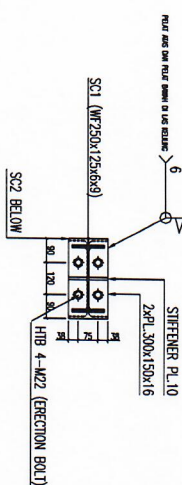
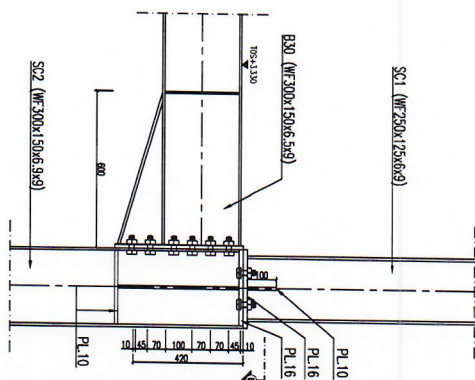
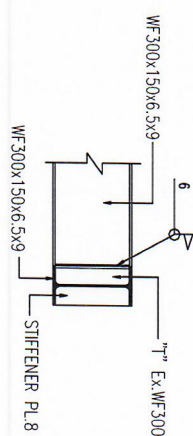
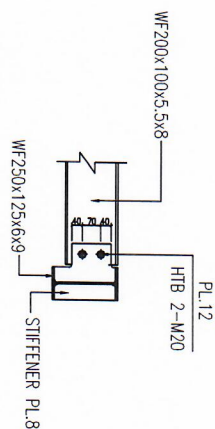
Detail on Plate S2



Detail on Plate S1







## Beam Connection

## Cantilever Beam Connection



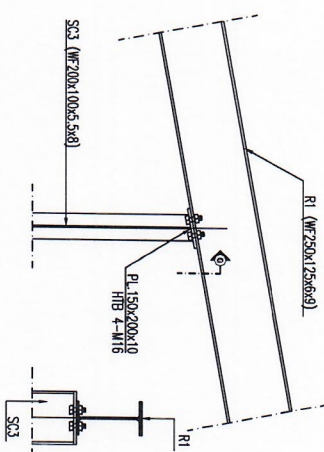
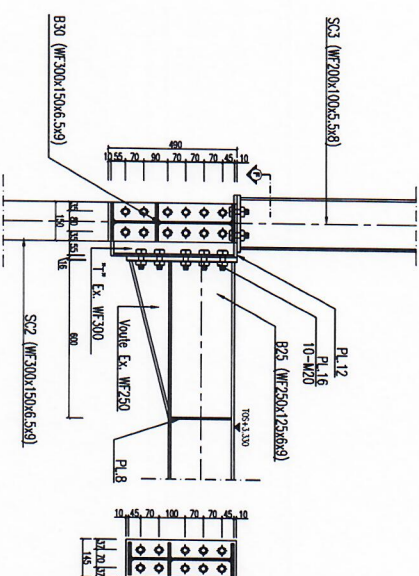
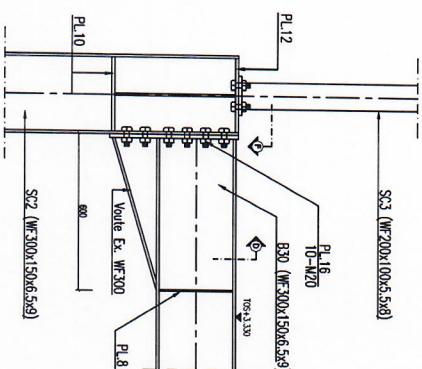
### Detail 4



## Section E



## Section F

[illegible][illegible]

ARCHITECTURE CONSULTANT  
KONSTANTIN STUHLER  
STRASSE 100/101  
D-10119 BERLIN  
TEL. 030 2060 100  
FAX 030 2060 101  
E-MAIL: KSTUHLER@STUHLER-STRASSE.DE  
WWW.STUHLER-STRASSE.DE

MECHANICAL ELECTRICAL CONSULTANT

PROJECT  
Depo  
Depok - Jawa Barat

2000L COMPANY  
DRAWING TITLE

DETAIL ON CONNECTION #2

ORANGNYA	ILIR		
SKALA	1 : 20		
SCALE			
TANGKAL			
PROJEK	2011/2019		
PERENCANA			
DIPERIKSA			
KODE PERUB			

PROJECT NAME	DESCRIBED BY	CHECKED BY	PREPARED BY
CODE PROJEX	CODE GAMBAR	NO. GAMBAR	NO. LEMBAR
PROJECT CODE	DRAWING CODE	DRAWING NO.	SHEET NO.

DPK	STR	S10	10
MODEL URBAN UNIT DESIGNED FOR			

[illegible]





TIANG BOR K-250	
TYPE	REMARK
P1	ø300, L= 12m

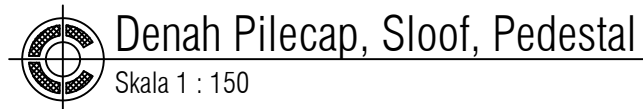
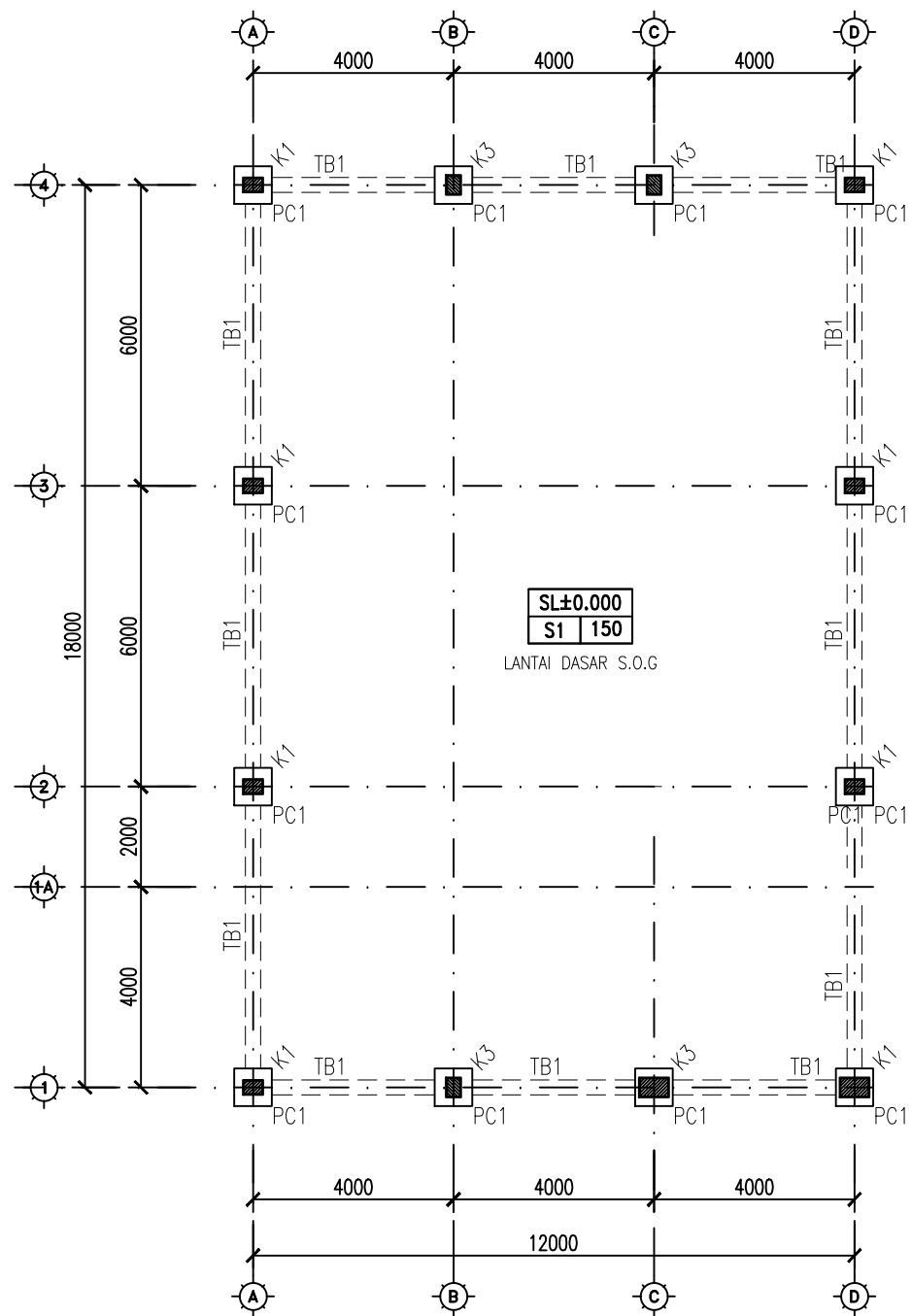
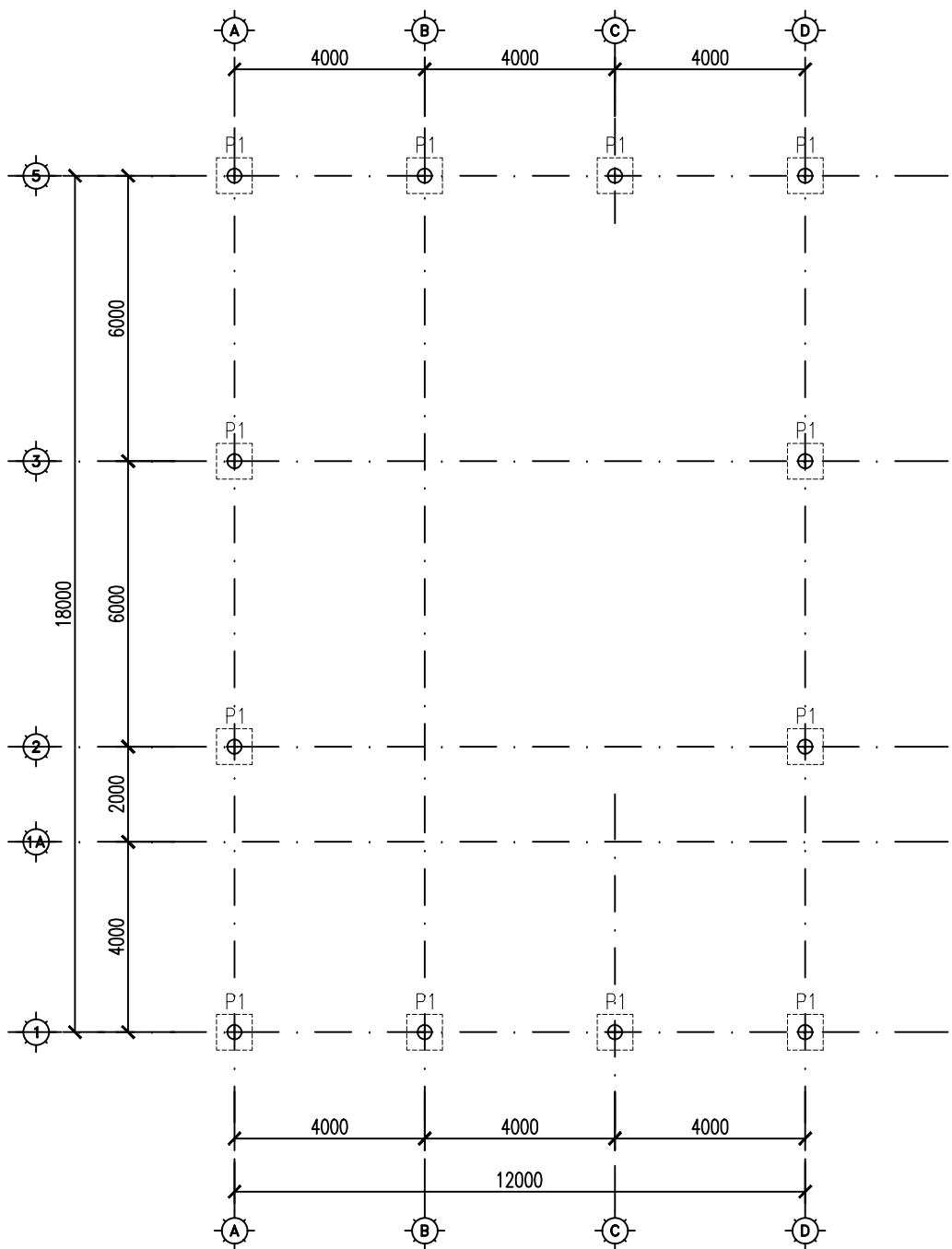
PILECAP	
TYPE	REMARK (PxLxT)
PC1	750x750x600

TIEBEAM	
TYPE	REMARK
TB1	300x500

PEDESTAL	
TYPE	REMARK
K1	300x400
K2	450x600

PEMBERI TUGAS  
OWNER

KETERANGAN :  
*REFERENCE :*

MUTU BETON :

- STRUKTUR : K-250 (fc' 20 MPa)
- PARKIRAN, LOADING : K-350 (fc' 30 MPa)

MUTU TULANGAN BETON :

- Ø BJT P 24 (POLOS),  $F_y = 240$  MPa
- Ø BJT D 40 (ULIR),  $F_y = 400$  MPa
- WIREMESH (ULIR),  $F_y = 500$  MPa

MUTU BAJA STRUKTURAL : A36 / BJ41,  $F_y = 250$  MPa

MUTU BAJT : HTB A325,  $F_{nt} = 620$  MPa

MUTU ANGKUR : A36,  $F_y = 250$  MPa

MUTU LAS : ELEKTRODA E70XX

\* PERIKSA SEMUA DIMENSI DI LAPANGAN, KONFIRMASIKAN KEPADA ARSITEK SEBELUM MEMULAI PEKERJAAN

[illegible]

KONSULTAN ARSITEKTUR  
ARCHITECTURE CONSULTANT

KONSULTAN STRUKTUR  
STRUCTURE CONSULTANT

KONSULTAN MEKANIKAL & ELEKTRIKAL  
MECHANICAL ELECTRICAL CONSULTANT

PROYEK  
PROJECT

Depo  
Depok - Jawa Barat

JUDUL GAMBAR  
DRAWING TITLE

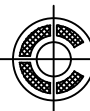
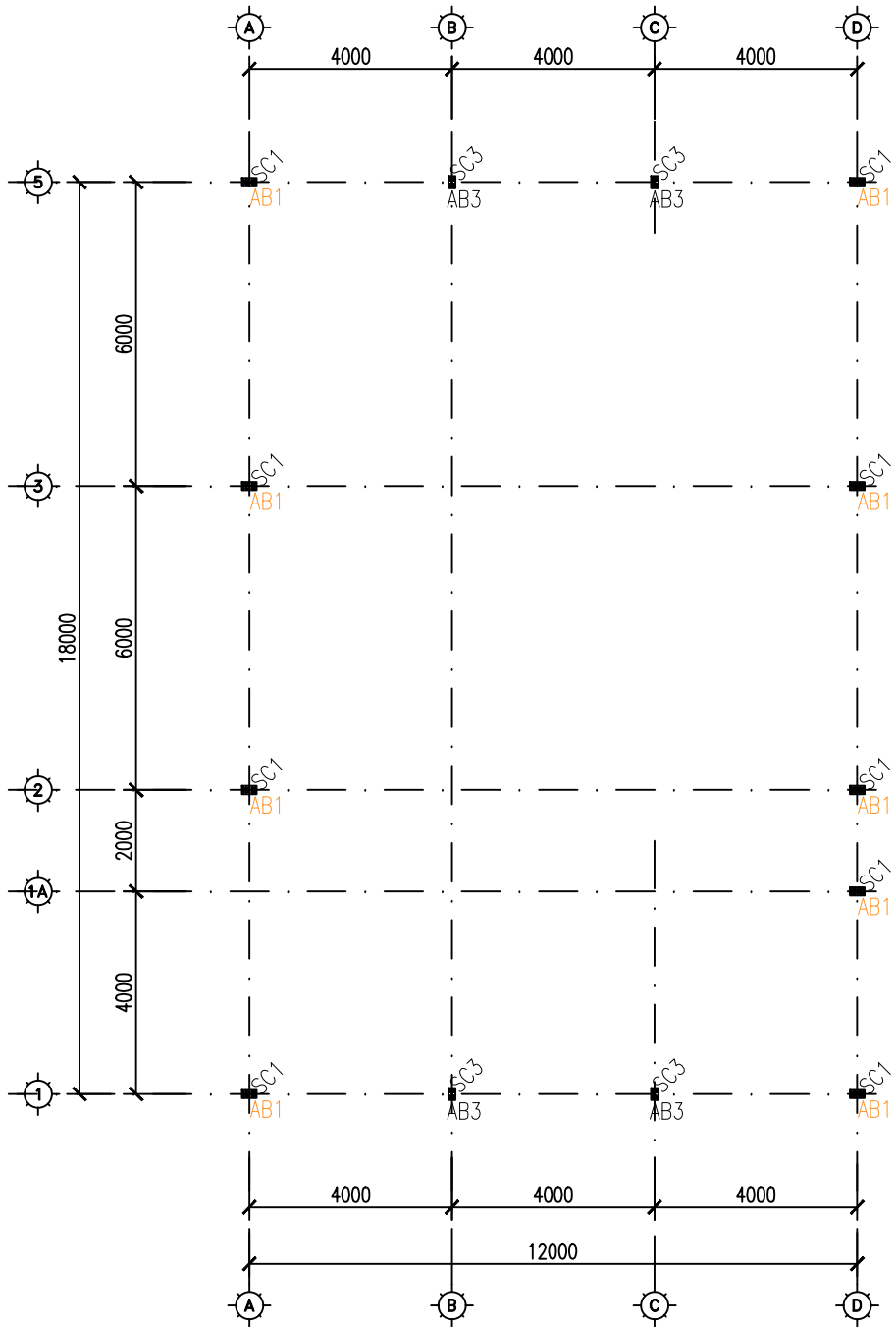
DENAH TIANG BOR  
DENAH PILECAP, SLOOF, PEDESTAL

DIGAMBAR DRAWN BY:		NZR	
SKALA SCALE		1 : 150	
TANGGAL DATE		28/11/2019	
NO. PROYEK PROJECT NO.	PERENCANA DESIGNED BY.	DIPERIKSA CHECKED BY.	KODE PERUB. REVISION CODE
-	-	-	-
KODE PROYEK PROJECT CODE	KODE GAMBAR DRAWING CODE	NO. GAMBAR DRAWING NO.	NO. LEMBAR SHEET NO.
DPK	STR	S01	01

DIKELUARKAN UNTUK  
ISSUED FOR

FOR DESIGN

KOLOM & BALOK	
TYPE	REMARK
SC1	WF 250x125x6x9
SC2	WF 300x150x6.5x9
SC3	WF 200x100x5.5x8
B30	WF 300x150x6.5x9
B25	WF 250x125x6x9
B20	WF 200x100x5.5x8

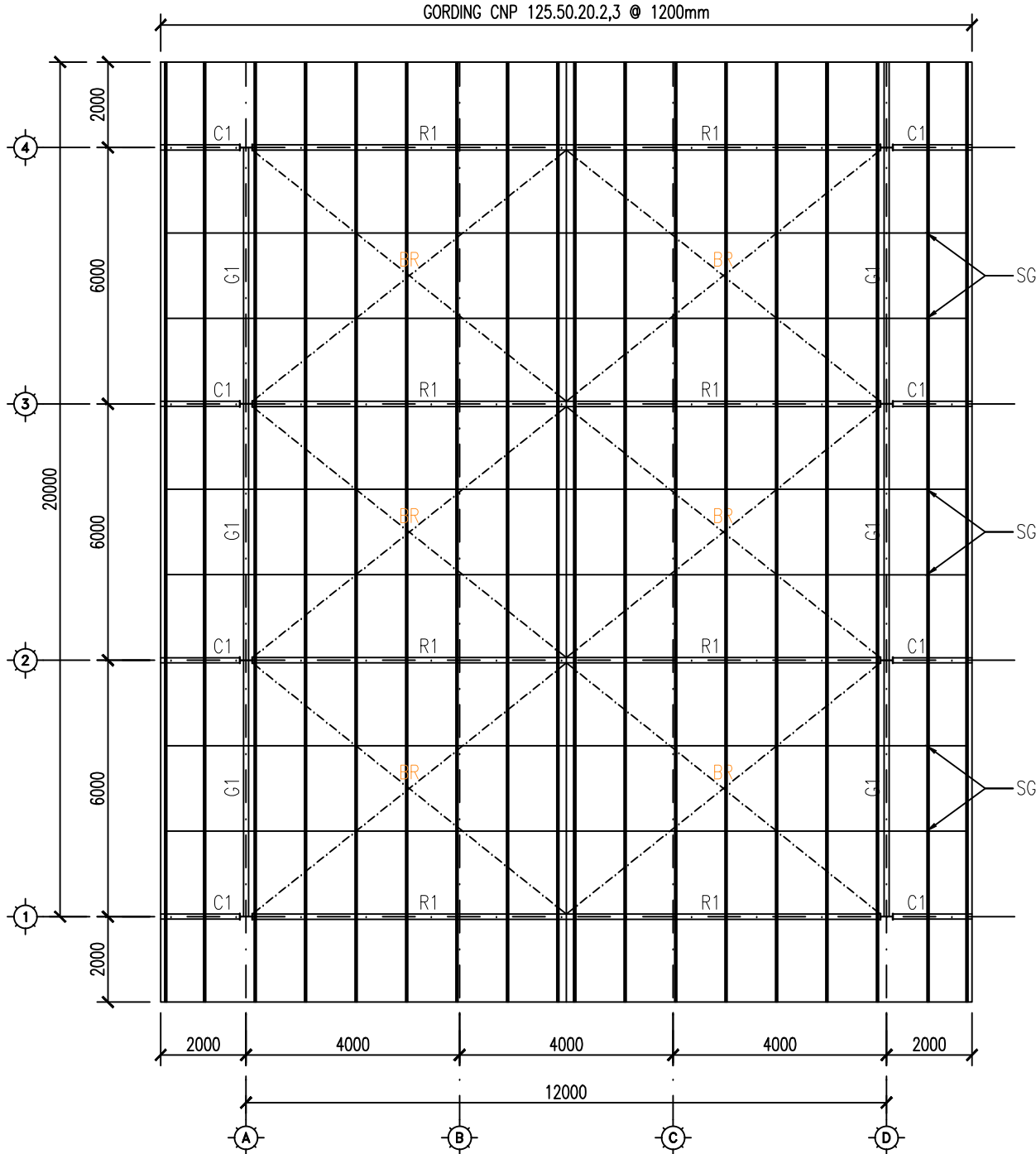


## Denah Angkur & Kolom Baja

Skala 1 : 150

[illegible]

RANGKA ATAP	
TYPE	REMARK
R1	WF 250x125x6x9
C1	WF 150x75x5x7
G1	CNP 125x50x20x2,3 BESI BETON $\phi$ 12mm
BR	Bracing $\phi$ 16
SG	Sagrod $\phi$ 10
Gording	CNP 125x50x20x2.3
FB	Flybrace L.40.40.3



# Denah Rangka Atap

Skala 1 : 150

ANGGARAN PERAKSI  
OWNER

---

**KETERANGAN :**

**REFERENCE :**

MUTU BETON :

- STRUKTUR : K-250 (f'c' 20 MPa)
- PARKIRAN, LOADING : K-350 (f'c' 30 MPa)

MUTU TULANGAN BETON :

- Ø BJTP 24 (POLOS), Fy = 240 MPa
- D BJTD 40 (ULIR), Fy = 400 MPa
- WIREMESH (ULIR), Fy = 500 MPa

MUTU BAJA STRUKTURAL : A36 / BJ41, Fy = 250 MPa

MUTU BAUT : HTB A325, Fnt = 620 MPa

MUTU ANGKUR : A36, Fy = 250 MPa

MUTU LAS : ELEKTRODA E70XX

\* PERIKSA SEMUA DIMENSI DI LAPANGAN, KONFIRMASIKAN KEPADA ARSITEK SEBELUM MEMULAI PEKERJAAN

[illegible]

KONSULTAN ARSITEKTUR  
ARCHITECTURE CONSULTANT

KONSULTAN STRUKTUR  
STRUCTURE CONSULTANT

**KONSULTAN MEKANIKAL & ELEKTRIKAL**  
**MECHANICAL ELECTRICAL CONSULTANT**

PROYEK	
PROJECT	

Depo  
Depok - Jawa Barat

JUDUL GAMBAR  
DRAWING TITLE

DENAH RANGKA ATAP  
DENAH RANGKA MONITOR

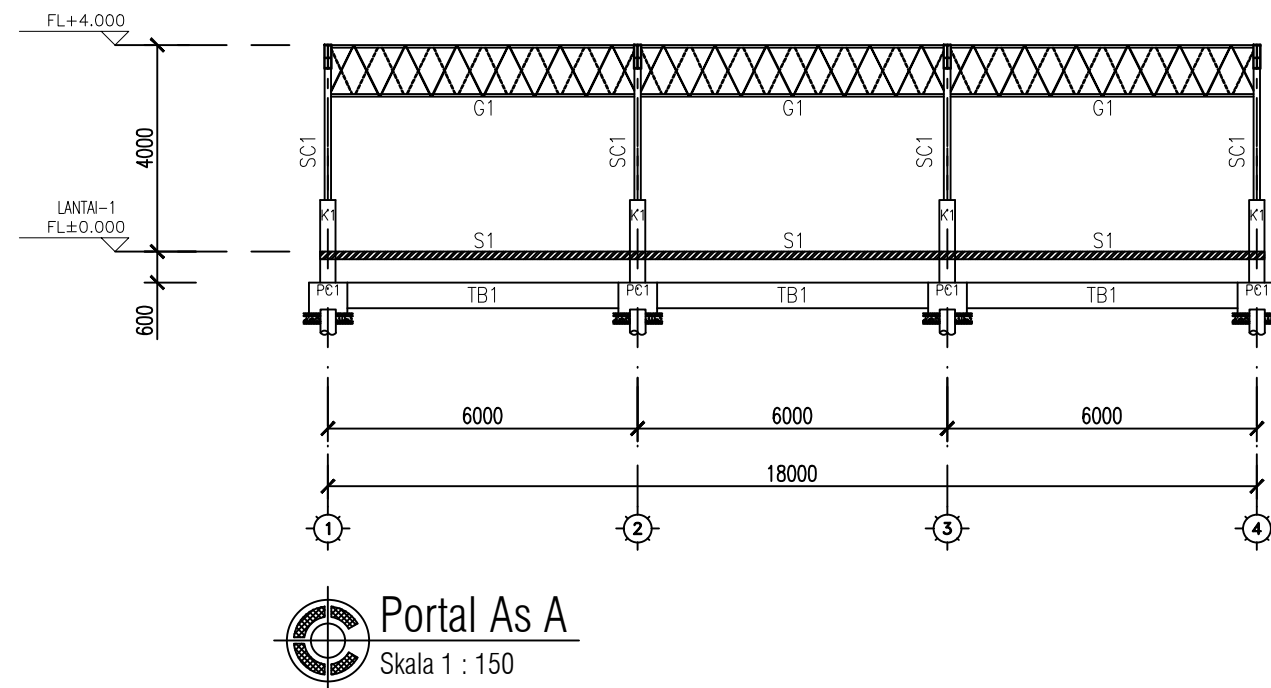
DIGAMBAR DRAWN BY.	NZR		
SKALA SCALE	1 : 150		
TANGGAL DATE	26/11/2019		
NO. PROYEK PROJECT NO.	PERENCANA DESIGNED BY.	DIPERIKSA CHECKED BY.	KODE PERUB. REVISION CODE
-	-	-	-
KODE PROYEK PROJECT CODE	KODE GAMBAR DRAWING CODE	NO. GAMBAR DRAWING NO.	NO. LEMBAR SHEET NO.
DPK	STR	S03	03

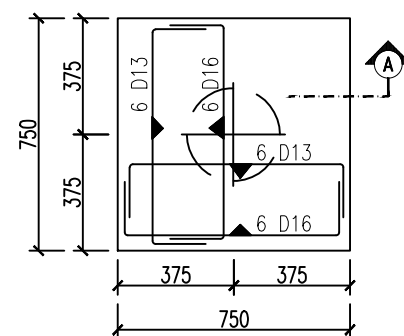
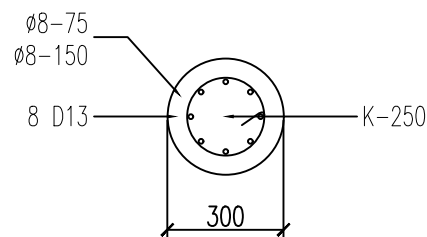
DIKELUARKAN UNTUK  
ISSUED FOR





DIKELUARKAN UNTUK ISSUED FOR	FOR DESIGN
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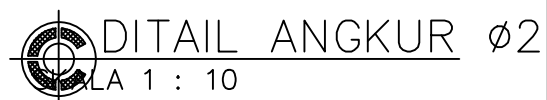
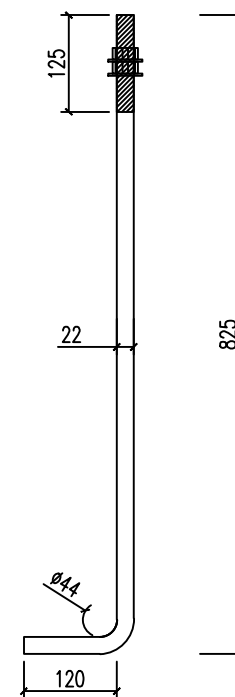
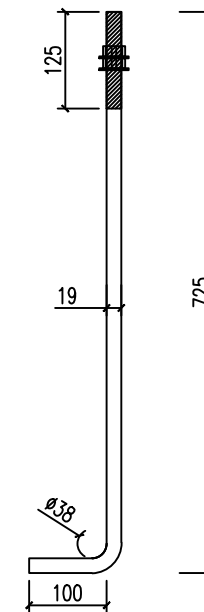
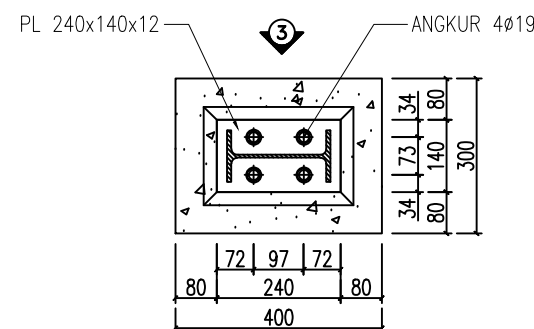
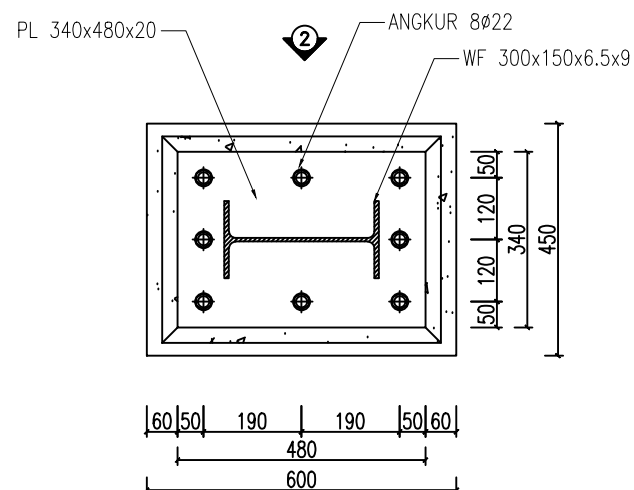
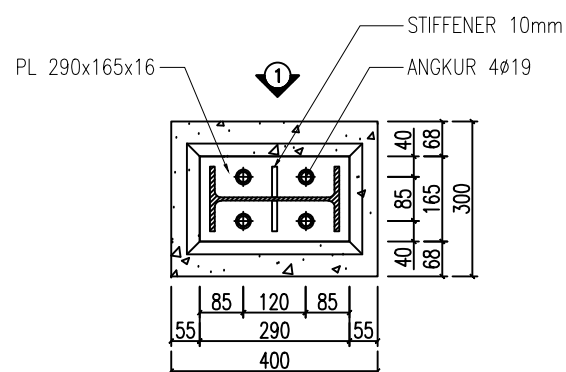
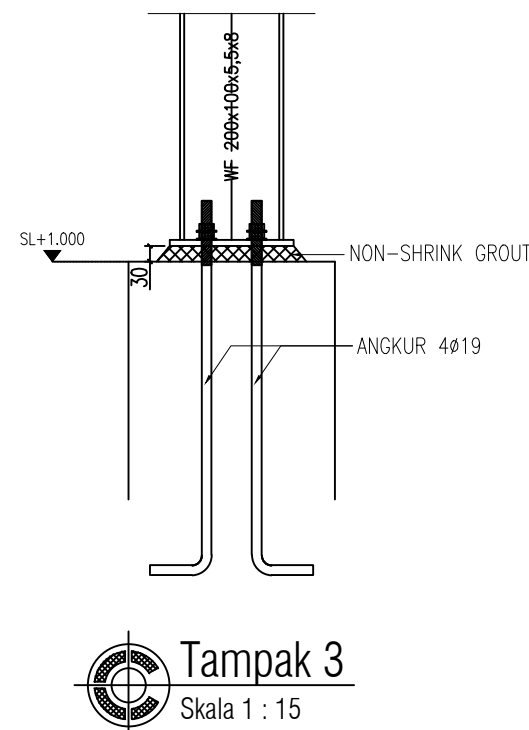
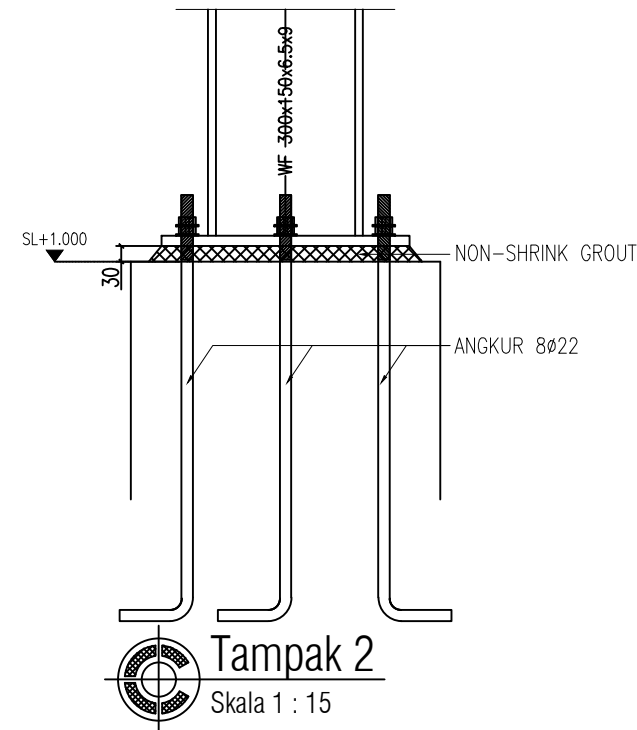
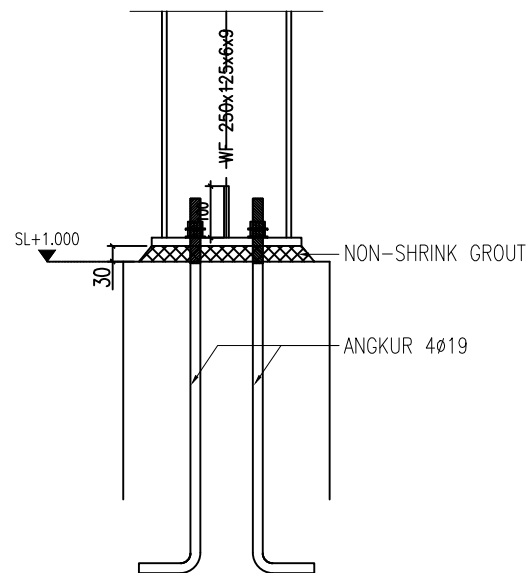
TIPE BALOK	TB1	
	TUMPUAN/END 	LAPANGAN/MIDDLE 
DIMENSI	300x500	300x500
TULANGAN ATAS	4 D16	4 D16
TULANGAN PINGGANG	2 D10	2 D10
TULANGAN BAWAH	4 D16	4 D16
SENGKANG	D10 – 100	D10 – 200



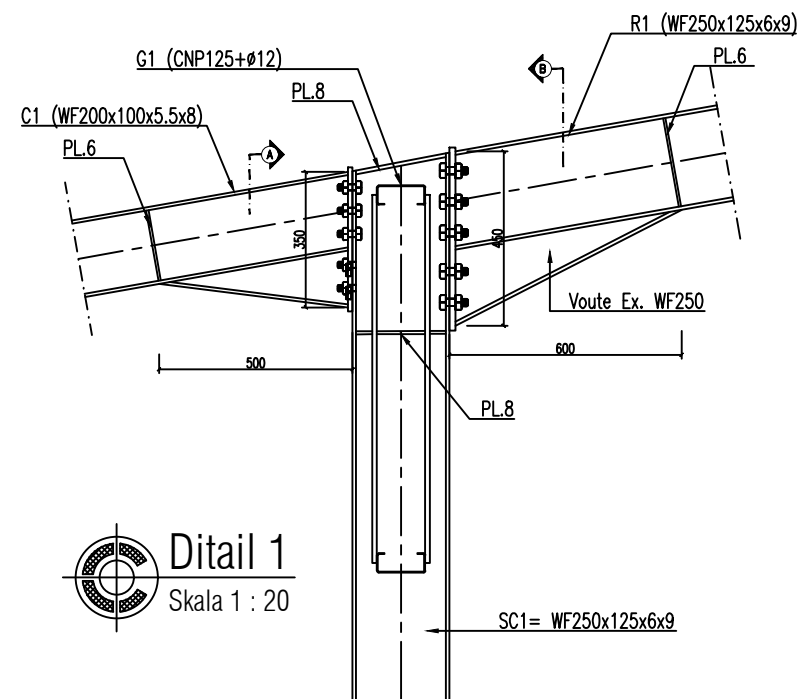
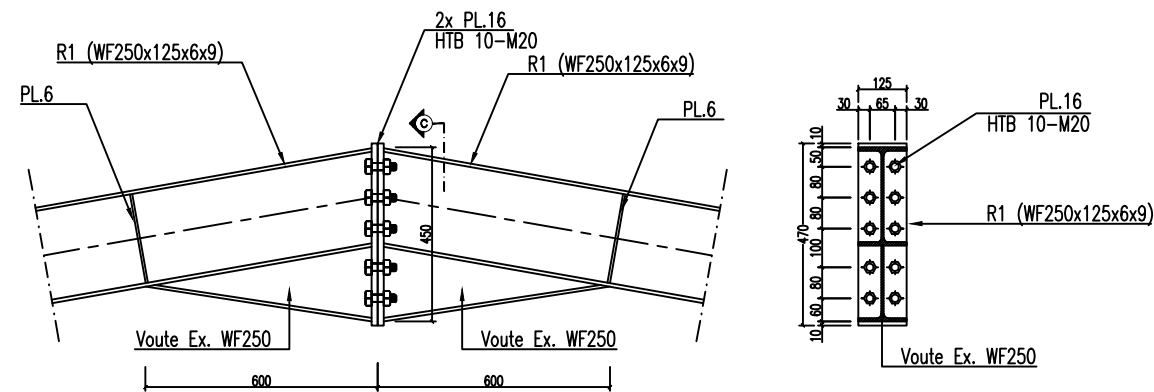
DIKELUARKAN UNTUK ISSUED FOR	FOR DESIGN
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LEVEL	<div> <div>KOLOM</div> <div>ID</div> </div>	K1	
<div> <div>SL=+1.000</div> <div>↑</div> <div>↓</div> <div>SL=-0.600</div> </div>	DIMENSI	300x400	
	TULANGAN	10 D16	
	SENGKANG	D10-100	
	PENGIKAT	-	
	SELIMUT	t = 50mm	

LEVEL	<div> <div>KOLOM</div> <div>ID</div> </div>	K2	
<div> <div>SL=+1.000</div> <div>↑</div> <div>↓</div> <div>SL=-0.600</div> </div>	DIMENSI	450x600	
	TULANGAN	18 D16	
	SENGKANG	D10-100	
	PENGIKAT	D10-100	
	SELIMUT	t = 50mm	

[illegible]





ISSUED FOR

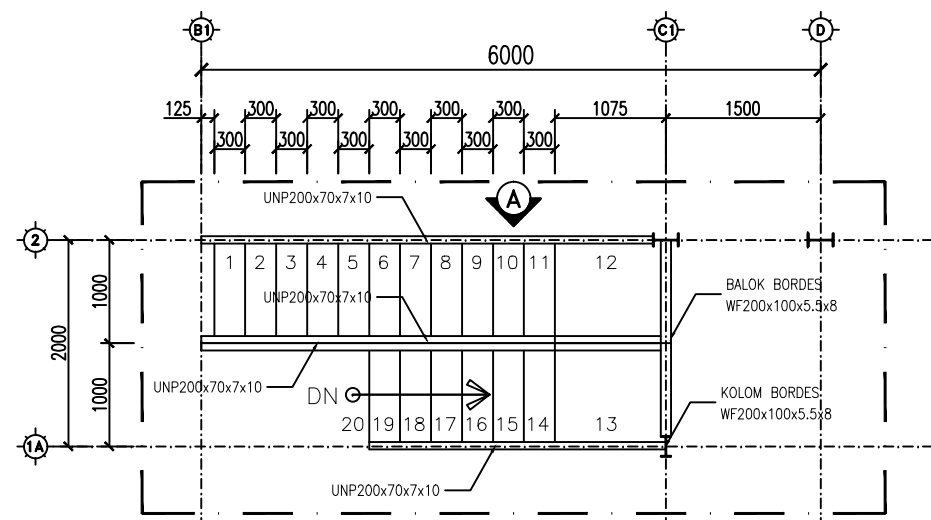


DIKELUARKAN UNTUK ISSUED FOR	FOR DESIGN
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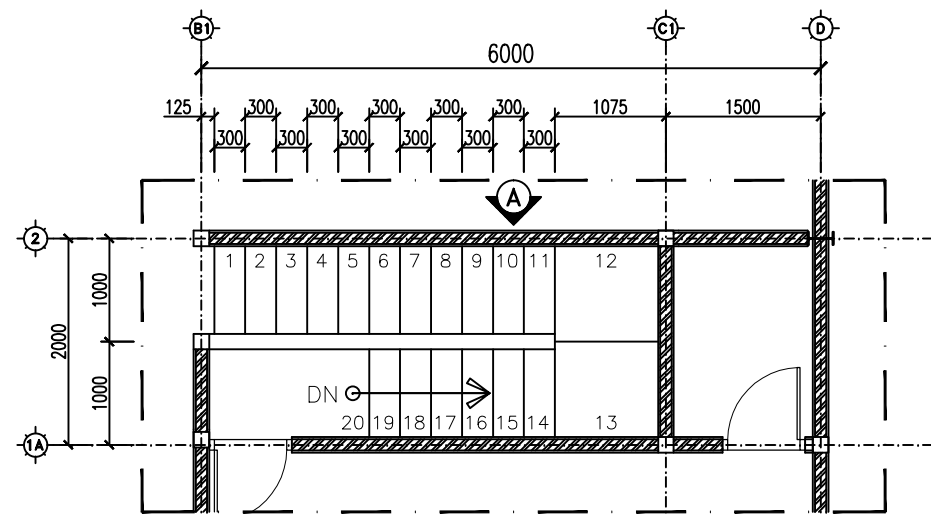


DPK	STR	S11	11
DIKELUARKAN UNTUK ISSUED FOR		FOR DESIGN	

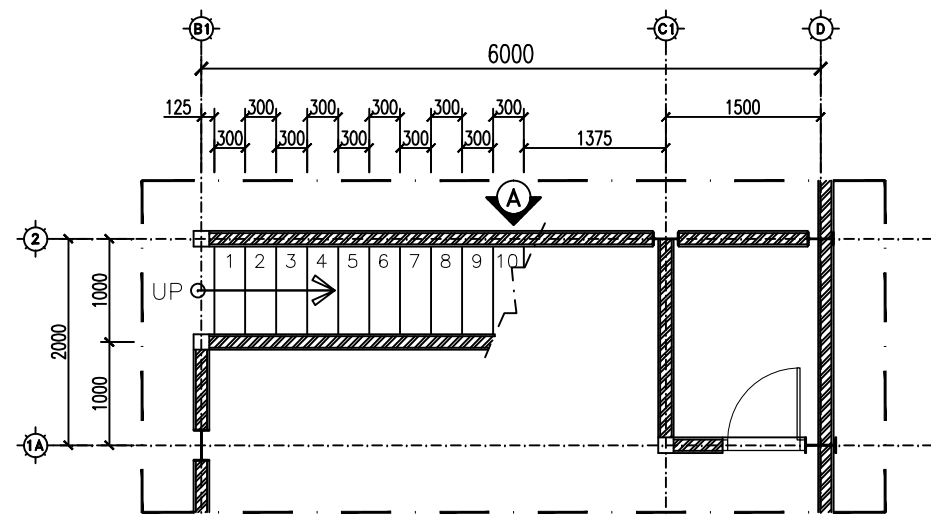




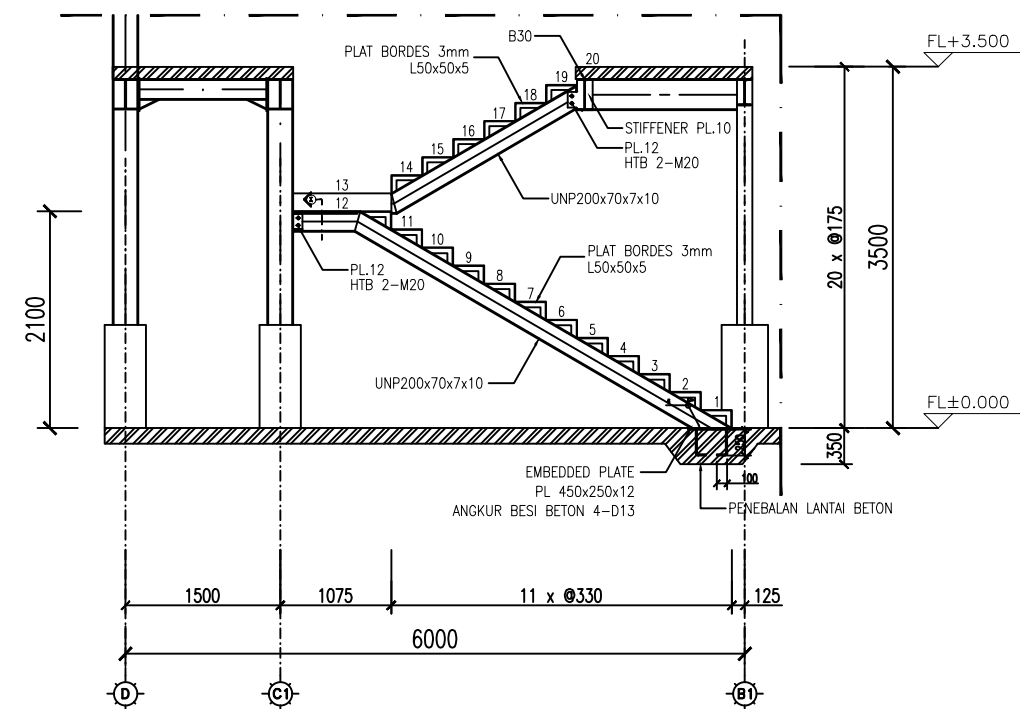
 Denah Struktur Tangga ( DITIADAKAN )  
Skala 1 : 75



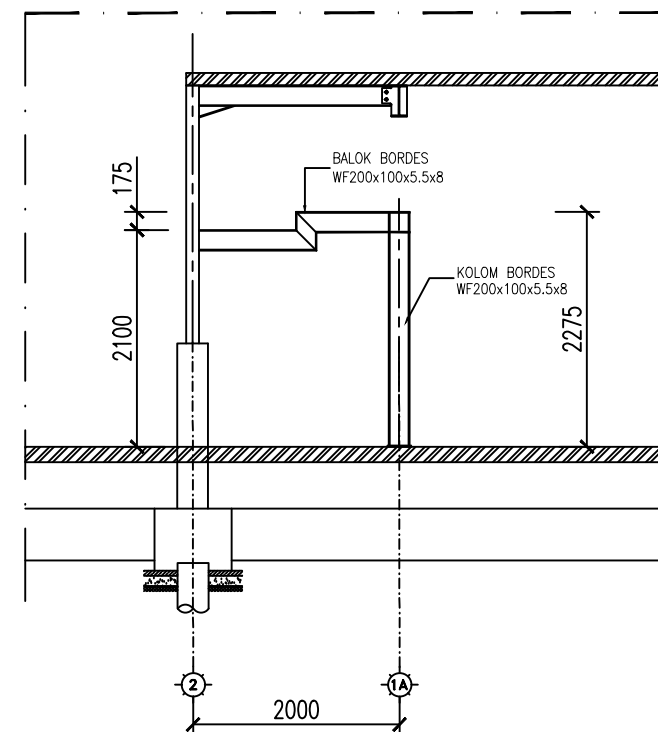
 Denah Tangga Lantai 2 ( DITIADAKAN )  
Skala 1 : 75



 Denah Tangga Lantai 1 ( DITIADAKAN )  
Skala 1 : 75



Tampak A ( DITIADAKAN )  
Skala 1 : 75



Potongan X ( DITIADAKAN )  
Skala 1 : 75

PEMBERI TUGAS  
OWNER

KETERANGAN :  
*REFERENCE :*

MUTU BETON :

- STRUKTUR : K-250 (fc' 20 MPa)
- PARKIRAN, LOADING : K-350 (fc' 30 MPa)

MUTU TULANGAN BETON :

- Ø BJTP 24 (POLOS), Fy = 240 MPa
- D BJTD 40 (ULIR), Fy = 400 MPa
- WIREMESH (ULIR), Fy = 500 MPa

MUTU BAJA STRUKTURAL : A36 / BJ41, Fy = 250 MPa

MUTU BAUT : HTB A325, Fnt = 620 MPa

MUTU ANGKUR : A36, Fy = 250 MPa

MUTU LAS : ELEKTRODA E70XX

\* PERIKSA SEMUA DIMENSI DI LAPANGAN, KONFIRMASIKAN KEPADA ARSITEK SEBELUM MEMULAI PEKERJAAN

[illegible]

KONSULTAN ARSITEKTUR  
ARCHITECTURE CONSULTANT

KONSULTAN STRUKTUR  
STRUCTURE CONSULTANT

KONSULTAN MEKANIKAL & ELEKTRIKAL  
MECHANICAL ELECTRICAL CONSULTANT

PROYEK  
PROJECT

Depo  
Depok - Jawa Barat

JUDUL GAMBAR  
DRAWING TITLE

## DITAIL TANGGA BAJA

DIGAMBAR DRAWN BY:	NZR		
SKALA SCALE	1:75		
TANGGAL DATE	26/11/2019		
NO. PROYEK PROJECT NO.	PERENCANA DESIGNED BY:	DIPERIKSA CHECKED BY:	KODE PERUB. REVISION CODE
-	-	-	-
KODE PROYEK PROJECT CODE	KODE GAMBAR DRAWING CODE	NO. GAMBAR DRAWING NO.	NO. LEMBAR SHEET NO.
DPK	STR	S12	12

DIKELUARKAN UNTUK  
ISSUED FOR

## FORM FOR SUBMITTING SUPPLIER'S QUOTATION<sup>11</sup>

*(This Form must be submitted only using the Supplier's Official Letterhead/Stationery<sup>12</sup>)*

We, the undersigned, hereby accept in full the UNDP General Terms and Conditions, and hereby offer to supply the items listed below in conformity with the specification and requirements of UNDP as per RFQ Reference No. \_\_\_\_\_:

**TABLE 1 : Offer to Supply Goods Compliant with Technical Specifications and Requirements**

No	Work Description	Specification	Unit	Volume	Unit Price (IDR/USD)	Total Price (IDR/USD)
I	<b>MANPOWER</b>					
1	Project Manager		Person	1		
2	Project Administration		Person	1		
3	Civil Engineer		Person	1		
4	Site Supervisor		Person	1		
5	Skilled labors/workers		Persons	10		
6	Quality Controller		Person	1		
II	<b>PRELIMINARIES WORKS</b>					
1	Measuring / Uitzet	Wooden frame with strings	ls	1,00		
2	Water and electricity for project		mnth	5,00		
3	Accommodation for workmen	Simple Wooden hut	m2	21,60		
4	Goverment / site coordination		mnth	5,00		
5	Project Insurance ( Jamsostek )		ls	1,00		
6	Debris Clearance		mnth	5,00		

<sup>11</sup> This serves as a guide to the Supplier in preparing the quotation and price schedule.

<sup>12</sup> Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes

7	Building electricity 5.500		unit	1,00		
8	Mobilization and Demobilization		ls	1,00		
					<b>TOTAL I</b>	-
<b>III</b>	<b>FOUNDATION WORKS</b>					
1	Excavation for Footing, Tie beam and Column Stump	Not exceeding 2.00 m deep	m3	36,00		
2	Sand bedding 100 mm		m3	4,44		
3	Plain concrete 50 mm ( underside footing, tie beam )	Site mix concrete	m2	44,40		
4	Bore pile dia. 300 mm	K-250 Concrete; Main rebar dia. 13 BJTP 40 ; Ring Rebar dia. 8 BJTP 24	m'	144,00		
5	Pile Cap PC1 - K.300 ( 750x750x600 )= 12 units	K-250 Concrete; Main rebar dia. 16 BJTP 40 ; Ring Rebar dia. 13 BJTP 40	m3	4,05		
6	Tie beam TB1 300/500 - K.300	K-250 Concrete; Main rebar dia. 16 BJTP 40 ; Ring Rebar dia. 10 BJTP 24	m3	9,00		
7	Filling excavation soil back		m3	22,95		
8	Column Stump K1 300/400 t = 1.6 m = 8 bh K.300	K-250 Concrete; Main rebar dia. 16 BJTP 40 ; Ring Rebar dia. 10 BJTP 24	m3	1,54		
9	Column Stump K2 300/200 t = 1.6 m = 4 bh K.300	K-250 Concrete; Main rebar	m3	0,39		

		dia. 16 BJTP 40 ; Ring Rebar dia. 10 BJTP 24				
10	Column Stump Finishing & grouting	Non Shrink Grout ex. Sika or equivalent.	unit	12,00		
					<b>TOTAL III</b>	-
<b>IV</b>	<b>FLOOR WORKS</b>					
	<b>1st Floor</b>					
1	Site clearance		m2	216,00		
2	Limestone bedding 150 mm	Limestone	m3	32,40		
3	Plastic formwork		m2	216,00		
4	Paving Block thickness 6 cm, width 1 m around building Include sand bedding and flyash		m2	84,00		
5	Concrete decking with rebar	Rebar dia. 8 BJTP 24	kg	127,84		
6	Wiremesh	Wiremesh M- 10 , 2 layers	m2	216,00		
7	Concrete Floor 150 mm	K-250 Concrete ex. Pioneer or equivalent	m2	216,00		
8	Trowel Finish	Trowel Finish for concrete floor	m2	210,00		
9	Floor Ceramic Tile 300 x 300 mm - Office Area	Ceramic Tile ex. China Rate 40.000/m2 or equivalent.	m2	6,00		
10	Floor Ceramic Tile 200 x 200 mm - Bathroom Area	Ceramic Tile ex. Asia Tile Rate 40.000/m2 equivalent	m2	6,00		
11	Wall Ceramic Tile 200 x 400 - Bathroom Area Wall height 2000 mm	Ceramic Tile ex. Asia Tile Rate	m2	14,00		

		40.000/m2 equivalent				
12	Gypsum Ceiling + List	Gypsum Board ex. Gyproc , List Shadowline	m2	12,00		
					<b>TOTAL IV</b>	-
<b>V</b>	<b>STEEL FRAME WORKS</b>					
1	Anchor Bolt dia. 22 mm x 600 mm		set	32,00		
2	Anchor Bolt dia. 16 mm x 600 mm		set	16,00		
3	Column K1 WF 250.125.6.9	Wide Flange ex. Gunung Garuda or equivalent	kg	781,00		
4	Column K3 WF 200.100.5,5.7	Wide Flange ex. Gunung Garuda or equivalent	kg	938,67		
5	Rafter R1 WF 250.125.6.9 + voute	Wide Flange ex. Gunung Garuda or equivalent	kg	2.212,84		
6	Purlin C 125.50.20.2,3	CNP Channel	kg	1.443,20		
7	Purlin Voute	Steel plate thickness 4 mm	bh	64,00		
8	Column Support B1 WF 200.100.5,5.7	Wide Flange ex. Gunung Garuda or equivalent	kg	806,40		
9	Secondary Rafter WF 200.100.5,5.7	Wide Flange ex. Gunung Garuda or equivalent	kg	341,34		
10	Wind Circulation C125.50.20.2,3 + Rebar dia. 12	CNP Channel + Rebar dia. 12 BJTP 24	kg	720,00		
11	Roof Drain Voute plat 5/50 @ 500 mm	Steel Plate Thickness 5 mm	bh	160,00		

12	Sagrod dia. 10 mm	Rebar dia. 10 BJTP 24	btg	432,00		
13	Wind Resistant dia. 16 mm	Rebar dia. 16 BJTP 40	set	12,00		
14	Roof List C 100.50.20.2,3	CNP Channel	kg	803,25		
15	Plate 12 mm + 10 mm + 8 mm & 6 mm	Steel plate thickness 12, 8 , 10, 6 mm	kg	586,14		
16	HTB bolt dia. 22 mm x 2,5"		pcs	300,00		
17	HTB bolt dia. 19 mm x 2,5"		pcs	200,00		
18	Black bolt dia. 12 x 1"		pcs	300,00		
19	Roof cover	Zincalume thickness 0.45 mm ex. Kepuh Kencana Arum or equivalent	m2	320,00		
20	Roof top ( Nok )	Mild Plate thickness 5 mm	m'	20,00		
21	Roof Drain	Mild Plate thickness 5 mm	m'	40,00		
22	Roof Flashing	Mild Plate thickness 5 mm	m'	68,00		
23	Zincromate Paint	Zincromate paint ex. Kansai Paint or equivalent	kg	7.571,50		
24	Finish Paint	Finish Paint ex. Kansai Paint or equivalent	kg	7.571,50		
25	Transportasi material		kg	7.571,50		
26	Roof Ridge Alumunium Capping	Zincalume thickness 0.45 mm ex. Kepuh Kencana Arum or equivalent	m'	68,00		
					<b>TOTAL V</b>	-
<b>VI</b>	<b>WALL WORKS</b>					

	<b>OFFICE &amp; DEPO WALL</b>					
1	Wall Thickness 100 mm	ALC Wall ex. Power Block or equivalent	m2	220,18		
2	Scaffolding		m2	220,18		
3	Plaster + Finish wall	Cement : sand = 1 : 3 ex. Merah Putih or equivalent	m2	440,36		
4	Practical Column	Site mix concrete	m3	2,20		
5	Interior Paint	Paint ex. Metrolight or equivalent	m2	206,36		
6	Exterior Paint	Paint ex. Metrolight or equivalent	m2	234,00		
					<b>TOTAL VI</b>	-
<b>VII</b>	<b>DOOR AND WINDOW WORKS</b>					
1	Door Frame ( 400 x 400 )	Site mix concrete	m'	18,00		
2	Window J1 ( 1800 x 1200 )	Alumunium frame 3" CA ex. Alexindo + Clear glass 6 mm or equivalent	unit	3,00		
3	Door P1 ( 800 x 2400 )	Alumunium frame 3" CA ex. Alexindo + Clear glass 6 mm or equivalent	unit	1,00		
4	Pintu P2 PVC ( 700 x 2000 )	PVC door ex. Murico or equivalent	unit	1,00		
5	Sliding Door ( 2000 x 3000 )	Steel Frame door	unit	2,00		
					<b>TOTAL VII</b>	-
<b>VIII</b>	<b>PLUMBING WORKS</b>					
1	Rain drainage					

	a. Vertikal drain dia. 4 " type D	PVC Pipe 4" type D ex. Wavin Rucika or equivalent	m'	83,20		
	b. Klem pipe + accessories		set	8,00		
	c. Boral pipe , dia 40 cm for water drainage	Boral Pipe dia 40 cm ex. Local or equivalent	m'	60,00		
	d Accessories + Control box		unit	4,00		
	e. Roof drain	ex. Local brand or equivalent	unit	8,00		
2	Closet + Jet Washer	ex. Local brand or equivalent	unit	1,00		
3	Wastafel + Aksesoris	ex. Local brand or equivalent	unit	1,00		
4	Shower Set	ex. Local brand or equivalent	unit	1,00		
5	Floor drain	ex. Local brand or equivalent	unit	1,00		
6	Waste water instalation	PVC Pipe 3 + 6" type D ex. Wavin Rucika or equivalent	ls	1,00		
7	Clean water instalation	PVC Pipe 1" + 3/4" type AW ex. Wavin Rucika or equivalent	ls	1,00		
8	Septic Tank	Bio Septic Tank ex. Local or equivalent	unit	1,00		
9	Rooftank 1 m3	Fiber Roof Tank ex. Pinguin + Frame or equivalent	unit	1,00		
10	Jet Pump	Ex. Shimizu 150 Hp or equivalent	unit	1,00		
11	Deep well depth 20 m'	Manual labour excavation	ls	1,00		
					<b>TOTAL VIII</b>	-
<b>IX</b>	<b>ELECTRICAL WORKS</b>					



	<b>1st Floor</b>					
1	Main Panel		unit	1,00		
2	Toevoer cable 4 x 16 mm		m'	25,00		
3	Lamp Installation	3 x 4 mm cable Ex. Eterna or equivalent	unit	6,00		
4	Fitting + Mercury Lamp 250 Watt	Fitting ex. China , Mercury Lamp 250 Watt ex. China or equivalent	unit	6,00		
5	Lamp Installation for office	3 x 4 mm cable Ex. Eterna or equivalent	unit	4,00		
6	Fitting + Downlight lamp 18 watt	Fitting ex. China , Downlight Lamp ex. Philips or equivalent	unit	4,00		
7	Electric Socket Installation	3 x 4 mm cable Ex. Eterna or equivalent	unit	8,00		
8	Electric Socket	ex. Broco or equivalent	unit	8,00		
9	Double Switch	ex. Broco or equivalent	unit	12,00		
10	Lighting Rod	Lighting Rod Resistance ex. Local or equivalent	unit	3,00		
11	Grounding	Until 0 ohm	ls	1,00		
					<b>TOTAL IX</b>	-
			<b>Total I sd IX</b>			-

**TABLE 2 : Estimated Operating Costs (if applicable)**

	Estimated Average Consumption	Unit of Measure	Unit Price	Total Price per Item
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List of Consumable Item/s (Include fast moving parts, if any)				

**TABLE 3 : Offer to Comply with Other Conditions and Related Requirements**

Other Information pertaining to our Quotation are as follows :	Your Responses		
	<i>Yes, we will comply</i>	<i>No, we cannot comply</i>	<i>If you cannot comply, pls. indicate counter proposal</i>
Comply to meet the requirement stated in Annex 1 Scope of Work			
Validity of quotation of 90 days.			
All provisions of the UNDP General Terms and Conditions.			

All other information that we have not provided automatically implies our full compliance with the requirements, terms and conditions of the RFQ.

*[Name and Signature of the Supplier's Authorized Person]*  
*[Designation]*  
*[Date]*



## **General Conditions of Contract for Civil Works**

1. Definitions
2. Singular and Plural
3. Headings or Notes
4. Legal Relationships
5. General Duties/Powers of Engineer
6. Contractor's General Obligations/Responsibilities
7. Assignment and Subcontracting
8. Drawings
9. Work Book
10. Performance Security
11. Inspection of Site
12. Sufficiency of Tender
13. Programme of Work to be Furnished
14. Weekly Site Meeting
15. Change Orders
16. Contractor's Superintendence
17. Contractor's Employees
18. Setting-Out
19. Watching and Lighting
20. Care of Works
21. Insurance of Works, Etc.
22. Damage to Persons and Property
23. Liability Insurance
24. Accident or Injury to Workmen
25. Remedy on Contractor's Failure to Insure
26. Compliance with Statutes, Regulations, Etc.
27. Fossils, Etc.
28. Copyright, Patents and Other Proprietary Rights, and Royalties
29. Interference With Traffic and Adjoining Properties
30. Extraordinary Traffic and Special Loads
31. Opportunities for Other Contractors
32. Contractor to Keep Site Clean
33. Clearance of Site on Substantial Completion
34. Labour
35. Returns of Labour, Plant, Etc.
36. Materials, Workmanship and Testing
37. Access to Site
38. Examination of Work Before Covering Up
39. Removal of Improper Work and Materials
40. Suspension of Work

41. Possession of Site
42. Time for Completion
43. Extension of Time for Completion
44. Rate of Progress
45. Liquidated Damages for Delay
46. Certificate of Substantial Completion
47. Defects Liability
48. Alterations, Additions and Omissions
49. Plant, Temporary Works and Materials
50. Approval of Materials, Etc., Not Implied
51. Measurement of Works
52. Liability of the Parties
53. Authorities
54. Urgent Repairs
55. Increase and Decrease of Costs
56. Taxation
57. Blasting
58. Machinery
59. Temporary Works and Reinstatement
60. Photographs and Advertising
61. Prevention of Corruption
62. Date Falling on Holiday
63. Notices
64. Language, Weights and Measures
65. Records, Accounts, Information and Audit
66. Force Majeure
67. Suspension by the UNDP
68. Termination by the UNDP
69. Termination by the Contractor
70. Rights and Remedies of the UNDP
71. Settlement of Disputes
72. Privileges and Immunities
73. Security
74. Audit and Investigations
75. Anti-Terrorism

Appendix I: Formats of Performance Security  
Performance Bank Guarantee  
Performance Bond

## **1. DEFINITIONS**

For the purpose of the Contract Documents the words and expressions below shall have the following meanings:

- a) "Employer" means the United Nations Development Programme (UNDP).
- b) "Contractor" means the person whose tender has been accepted and with whom the Contract has been entered into.
- c) "Engineer" means the person whose services have been engaged by UNDP to administer the Contract as provided therein, as will be notified in writing to the Contractor.
- d) "Contract" means the written agreement between the Employer and the Contractor, to which these General Conditions are annexed.
- e) "The Works" means the works to be executed and completed under the Contract.
- f) "Temporary Works" shall include items to be constructed which are not intended to be permanent and form part of the Works.
- g) "Drawings" and "Specifications" mean the Drawings and Specifications referred to in the Contract and any modification thereof or addition thereto furnished by the Engineer or submitted by the Contractor and approved in writing by the Engineer in accordance with the Contract.
- h) "Bill of Quantities" is the document in which the Contractor indicates the cost of the Works, on the basis of the foreseen quantities of items of work and the fixed unit prices applicable to them.
- i) "Contract Price" means the sum agreed in the Contract as payable to the Contractor for the execution and completion of the Works and for remedying of any defects therein in accordance with the Contract.
- j) "Site" means the land and other places on, under, in or through which the Works or Temporary Works are to be constructed.

## **2. SINGULAR AND PLURAL**

Words importing persons or parties shall include firms or companies and words importing the singular only shall also include the plural and vice versa where the context requires.

## **3. HEADINGS OR NOTES**

The headings or notes in the Contract Documents shall not be deemed to be part thereof or be taken into consideration in their interpretation.

#### **4. LEGAL RELATIONSHIPS**

The Contractor and the sub-contractor(s), if any, shall have the status of an independent contractor vis-à-vis the Employer. The Contract Documents shall not be construed to create any contractual relationship of any kind between the Engineer and the Contractor, but the Engineer shall, in the exercise of his duties and powers under the Contract, be entitled to performance by the Contractor of its obligations, and to enforcement thereof. Nothing contained in the Contract Documents shall create any contractual relationship between the Employer or the Engineer and any subcontractor(s) of the Contractor.

#### **5. GENERAL DUTIES/POWERS OF ENGINEER**

- a) The Engineer shall provide administration of Contract as provided in the Contract Documents. In particular, he shall perform the functions hereinafter described.
- b) The Engineer shall be the Employer's representative vis-à-vis the Contractor during construction and until final payment is due. The Engineer shall advise and consult with the Employer. The Employer's instructions to the Contractor shall be forwarded through the Engineer. The Engineer shall have authority to act on behalf of the Employer only to the extent provided in the Contract Documents as they may be amended in writing in accordance with the Contract. The duties, responsibilities and limitations of authority of the Engineer as the Employer's representative during construction as set forth in the Contract shall not be modified or extended without the written consent of the Employer, the Contractor and the Engineer.
- c) The Engineer shall visit the Site at intervals appropriate to the stage of construction to familiarize himself generally with the progress and quality of the Works and to determine in general if the Works are proceeding in accordance with the Contract Documents. On the basis of his on-site observations as an Engineer, he shall keep the Employer informed of the progress of the Works.
- d) The Engineer shall not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Works or the Temporary Works. The Engineer shall not be responsible for or have control or charge over the acts or omissions of the Contractor (including the Contractor's failure to carry out the Works in accordance with the Contract) and of Sub-contractors or any of their agents or employees, or any other persons performing services for the Works, except if such acts or omissions are caused by the Engineer's failure to perform his functions in accordance with the contract between the Employer and the Engineer.
- e) The Engineer shall at all times have access to the Works wherever and whether in preparation or progress. The Contractor shall provide facilities for such access so that the Engineer may perform his functions under the Contract.

- f) Based on the Engineer's observations and an evaluation of the documentation submitted by the Contractor together with the invoices, the Engineer shall determine the amounts owed to the Contractor and shall issue Certificates for Payment as appropriate.
- g) The Engineer shall review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformity with the design concept of the Works and with the provisions of the Contract Documents. Such action shall be taken with reasonable promptness so as to cause no delay. The Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- h) The Engineer shall interpret the requirements of the Contract Documents and judge the performance thereunder by the Contractor. All interpretations and orders of the Engineer shall be consistent with the intent of and reasonably inferable from the Contract Documents and shall be in writing or in the form of drawings. Either party may make a written request to the Engineer for such interpretation. The Engineer shall render the interpretation necessary for the proper execution of the Works with reasonable promptness and in accordance with any time limit agreed upon. Any claim or dispute arising from the interpretation of the Contract Documents by the Engineer or relating to the execution or progress of the Works shall be settled as provided in Clause 71 of these General Conditions.
- i) Except as otherwise provided in the Contract, the Engineer shall have no authority to relieve the Contractor of any of his obligations under the Contract nor to order any work involving delay in completion of the Works or any extra payment to the Contractor by the Employer, or to make any variations to the Works.
- j) In the event of termination of the employment of the Engineer, the Employer shall appoint another suitable professional to perform the Engineer's duties.
- k) The Engineer shall have authority to reject work which does not conform to the Contract Documents. Whenever, in his opinion, he considers it necessary or advisable for the implementation of the intent of the Contract Documents, he will have authority to require special inspection or testing of the work whether or not such work be then fabricated, installed or completed. However, neither the Engineer's authority to act nor any reasonable decision made by him in good faith either to exercise or not to exercise such authority shall give rise to any duty or responsibility of the Engineer to the Contractor, any subcontractor, any of their agents or employees, or any other person performing services for the Works.
- l) The Engineer shall conduct inspections to determine the dates of Substantial Completion and Final Completion, shall receive and forward to the Employer for the Employer's review written warranties and related documents required by the Contract and assembled by the Contractor, and shall issue a final Certificate for Payment upon compliance with the requirements of Clause 47 hereof and in accordance with the Contract.
- m) If the Employer and Engineer so agree, the Engineer shall provide one or more Engineer's Representative(s) to assist the Engineer in carrying out his responsibilities at the site. The



Engineer shall notify in writing to the Contractor and the Employer the duties, responsibilities and limitations of authority of any such Engineer's Representative(s).

## **6. CONTRACTOR'S GENERAL OBLIGATIONS/RESPONSIBILITIES**

### **6.1.Obligation to Perform in Accordance with Contract**

The Contractor shall execute and complete the Works and remedy any defects therein in strict accordance with the Contract, with due care and diligence and to the satisfaction of the Engineer, and shall provide all labor, including the supervision thereof, materials, Constructional Plant and all other things, whether of a temporary or permanent nature, required in and for such execution, completion and remedying of defects, as far as the necessity for providing the same is specified in or is reasonably to be inferred from the Contract. The Contractor shall comply with and adhere strictly to the Engineer's instructions and directions on any matter, touching or concerning the Works.

### **6.2 Responsibility for Site Operations**

The Contractor shall take full responsibility for the adequacy, stability and safety of all site operations and methods of construction, provided that the Contractor shall not be responsible, except as may be expressly provided in the Contract, for the design or specification of the Permanent Works or of any Temporary Works prepared by the Engineer.

### **6.3.Responsibility for Employees**

The Contractor shall be responsible for the professional and technical competence of his employees and will select for work under this Contract, reliable individuals who will perform effectively in the implementation of the Contract, respect local customs and conform to a high standard of moral and ethical conduct.

### **6.4.Source of Instructions**

The Contractor shall neither seek nor accept instructions from any authority external to the Employer, the Engineer or their authorized representatives in connection with the performance of his services under this Contract. The Contractor shall refrain from any action which may adversely affect the Employer and shall fulfill his commitments with fullest regard for the interest of the Employer.

### **6.5.Officials Not to Benefit**

The Contractor warrants that no official of the Employer has been or shall be admitted by the Contractor to any direct or indirect benefit arising from this Contract or the award thereof. The Contractor agrees that breach of this provision is a breach of an essential term of the Contract.

### **6.6.Use of Name, Emblem or Official Seal of UNDP or the United Nations**

The Contractor shall not advertise or otherwise make public the fact that he is performing, or has performed services for the Employer or use the name, emblem or official seal of the Employer or the United Nations or any abbreviation of the name of the Employer or the United Nations for advertising purposes or any other purposes.

#### **6.7. Confidential Nature of Documents**

All maps, drawings, photographs, mosaics, plans, reports, recommendations, estimates, documents and all other data compiled by or received by the Contractor under the Contract shall be the property of the Employer, shall be treated as confidential and shall be delivered only to the duly authorized representative of the Employer on completion of the Works; their contents shall not be made known by the Contractor to any person other than the personnel of the Contractor performing services under this Contract without the prior written consent of the Employer.

### **7. ASSIGNMENT AND SUBCONTRACTING**

#### **7.1. Assignment of Contract**

The Contractor shall not, except after obtaining the prior written approval of the Employer, assign, transfer, pledge or make other disposition of the Contract or any part thereof or of any of the Contractor's rights, claims or obligations under the Contract.

#### **7.2. Subcontracting**

In the event the Contractor requires the services of subcontractors, the Contractor shall obtain the prior written approval of the Employer for all such subcontractors. The approval of the Employer shall not relieve the Contractor of any of his obligations under the Contract, and the terms of any subcontract shall be subject to and be in conformity with the provisions of the Contract.

#### **7.3. Assignment of Subcontractor's Obligations**

In the event of a subcontractor having undertaken towards the Contractor in respect of the work executed or the goods, materials, Plant or services supplied by such subcontractor for the Works, any continuing obligation extending for a period exceeding that of the Defects Liability Period under the Contract, the Contractor shall at any time after the expiration of such Period, assign to the Employer, at the Employer's request and cost, the benefit of such obligation for the unexpired duration thereof.

### **8. DRAWINGS**

#### **8.1. Custody of drawings**

The drawings shall remain in the sole custody of the Employer but two (2) copies thereof shall be furnished to the Contractor free of cost. The Contractor shall provide and make at his own expense any further copies required by him. At the completion of the Works, the Contractor shall return to the Employer all drawings provided under the Contract.

### **8.2. One copy of Drawings to be kept on Site**

One copy of the Drawings furnished to the Contractor as aforesaid shall be kept by the Contractor on the Site and the same shall at all reasonable times be available for inspection and use by the Engineer and by any other person authorized in writing by the Engineer.

### **8.3. Disruption of Progress**

The Contractor shall give written notice to the Engineer whenever planning or progress of the Works is likely to be delayed or disrupted unless any further drawing or order, including a direction, instruction or approval, is issued by the Engineer within a reasonable time. The notice shall include details of drawing or order required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.

## **9. WORK BOOK**

The Contractor shall maintain a Work Book at the Site with numbered pages, in one original and two copies. The Engineer shall have full authority to issue new orders, drawings and instructions to the Contractor, from time to time and as required for the correct execution of the Works. The Contractor shall be bound to follow such orders, drawings and instructions.

Every order shall be dated and signed by the Engineer and the Contractor, in order to account for its receipt.

Should the Contractor want to refuse an order in the Work Book, he shall so inform the Employer, through the Engineer, by means of an annotation in the Work Book made within three (3) days from the date of the order that the Contractor intends to refuse. Failure by the Contractor to adhere to this procedure shall result in the order being deemed accepted with no further possibility of refusal.

The original of the Work Book shall be delivered to the Employer at the time of Final Acceptance of the Works. A copy shall be kept by the Engineer and another copy by the Contractor.

## **10. PERFORMANCE SECURITY**

- a) As guarantee for his proper and efficient performance of the Contract, the Contractor shall on signature of the Contract furnish the Employer with a Performance Security issued for the benefit of the Employer. The amount and character of such security (bond or guarantee) shall be as indicated in the Contract.

- b) The Performance Bond or Bank Guarantee must be issued by an acceptable insurance company or accredited bank, in the format included in Appendix I to these General Conditions, and must be valid up to twenty-eight days after issuance by the Engineer of the Certificate of Final Completion. The Performance Bond or Bank Guarantee shall be returned to the Contractor within twenty-eight days after the issuance by the Engineer of the Certificate of Final Completion, provided that the Contractor shall have paid all money owed to the Employer under the Contract.
- c) If the surety of the Performance Bond or Bank Guarantee is declared bankrupt or becomes insolvent or its right to do business in the country of execution of the Works is terminated, the Contractor shall within five (5) days thereafter substitute another bond or guarantee and surety, both of which must be acceptable to the Employer.

## **11. INSPECTION OF SITE**

The Contractor shall be deemed to have inspected and examined the site and its surroundings and to have satisfied himself before submitting his Tender and signing the Contract as to all matters relative to the nature of the land and subsoil, the form and nature of the Site, details and levels of existing pipe lines, conduits, sewers, drains, cables or other existing services, the quantities and nature of the work and materials necessary for the completion of the Works, the means of access to the Site, and the accommodation he may require, and in general to have himself obtained all necessary information as to risk contingencies, climatic, hydrological and natural conditions and other circumstances which may influence or affect his Tender, and no claims will be entertained in this connection against the Employer.

## **12. SUFFICIENCY OF TENDER**

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his Tender for the construction of the Works and of the rates and prices, which rates and prices shall, except in so far as it is otherwise provided in the Contract, cover all his obligations under the Contract and all matters and things necessary for the proper execution and completion of the Works.

## **13. PROGRAMME OF WORK TO BE FURNISHED**

Within the time limit specified in the Contract, the Contractor shall submit to the Engineer for his consent a detailed Programme of Work showing the order of procedure and the method in which he proposes to carry out the Works. In preparing his Programme of Work the Contractor shall pay due regard to the priority required by certain works. Should the Engineer, during the progress of work, require further modifications to the Programme of Work, the Contractor shall review the said program. The Contractor shall also whenever required by the Engineer submit particulars in writing of the Contractor's arrangements for carrying out the Works and of the Constructional Plant and Temporary Works which the Contractor intends to supply, use or construct as the case may be. The submission of such program, or any modifications thereto, or the particulars required by the Engineer, shall not relieve the Contractor of any of his duties or obligations under the Contract nor shall the

incorporation of any modification to the Programme of Work either at the commencement of the contract or during its course entitle the Contractor to any additional payments in consequence thereof.

#### **14. WEEKLY SITE MEETING**

A weekly site meeting shall be held between the UNDP Project Coordinator or engineer, if any, the representative of the Contractor and the Engineer or the Engineer's Representative, in order to verify that the Works are progressing normally and are executed in accordance with the Contract.

#### **15. CHANGE ORDERS**

- a) The Engineer may instruct the Contractor, with the approval of the Employer and by means of Change Orders, all variations in quantity or quality of the Works, in whole or in part, that are deemed necessary by the Engineer.
- b) Processing of change orders shall be governed by clause 48 of these General Conditions.

#### **16. CONTRACTOR'S SUPERINTENDENCE**

The Contractor shall provide all necessary superintendence during the execution of the Works and as long thereafter as the Engineer may consider necessary for the proper fulfillment of the Contractor's obligations under the Contract. The Contractor or a competent and authorized agent or representative of the Contractor approved in writing by the Engineer, which approval may at any time be withdrawn, shall be constantly on the site and shall devote his entire time to the superintendence of the Works. Such authorized agent or representative shall receive on behalf of the Contractor directions and instructions from the Engineer. If the approval of such agent or representative shall be withdrawn by the Engineer, as provided in Clause 17(2) hereinafter, or if the removal of such agent or representative shall be requested by the Employer under Clause 17(3) hereinafter, the Contractor shall as soon as it is practicable after receiving notice of such withdrawal remove the agent or representative from the Site, and replace him by another agent or representative approved by the Engineer. Notwithstanding the provision of Clause 17(2) hereinafter, the Contractor shall not thereafter employ, in any capacity whatsoever, a removed agent or representative again on the Site.

#### **17. CONTRACTOR'S EMPLOYEES**

- a) The Contractor shall provide and employ on the Site in connection with the execution and completion of the Works and the remedying of any defects therein:
  - i. Only such technical assistants as are skilled and experienced in their respective callings and such sub-agent foremen and leading hands as are competent to give proper supervision to the work they are required to supervise, and

- ii. Such skilled, semi-skilled, and unskilled labour as is necessary for the proper and timely execution and completion of the Works.
- b) The Engineer shall be at liberty to object to and require the Contractor to remove forthwith from the Works any person employed by the Contractor in or about the execution or completion of the Works, who in the opinion of the Engineer is misconducting himself, or is incompetent or negligent in the proper performance of his duties, or whose employment is otherwise considered reasonably by the Engineer to be undesirable, and such person shall not be again employed on the Site without the written permission of the Engineer. Any person so removed from the Works shall be replaced as soon as reasonably possible by a competent substitute approved by the Engineer.
- c) Upon written request by the Employer, the Contractor shall withdraw or replace from the Site any agent, representative or other personnel who does not conform to the standards set forth in paragraph (1) of this Clause. Such request for withdrawal or replacement shall not be considered as termination in part or in whole of this Contract. All costs and additional expenses resulting from any withdrawal or replacement for whatever reason of any of the Contractor's personnel shall be at the Contractor's expense.

## **18. SETTING-OUT**

The Contractor shall be responsible for the true and proper setting out of the Works in relation to original points, lines and levels of reference given by the Engineer in writing and for the correctness of the position, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labor in connection therewith. If, at any time during the progress of the Works, any error shall appear or arise in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required so to do by the Engineer, shall, at his own cost, rectify such error to the satisfaction of the Engineer.

## **19. WATCHING AND LIGHTING**

The Contractor shall in connection with the Works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or required by the Engineer or by any duly constituted authority for the protection of the Works and the materials and equipment utilized therefor or for the safety and convenience of the public or others.

## **20. CARE OF WORKS**

- a) From the commencement date of the Works to the date of substantial completion as stated in the Certificate of Substantial Completion, the Contractor shall take full responsibility for the care thereof and of all Temporary Works. In the event that any damage or loss should happen to the Works or to any part thereof or to any Temporary Works from any cause whatsoever (save and except as shall be due to Force Majeure as defined in Clause 66 of these General Conditions), the Contractor shall at his own cost repair and make good the same so that, at completion, the Works shall be in good order and condition and in conformity in every

respect with the requirements of the Contract and the Engineer's instructions. The Contractor shall also be liable for any damage to the Works occasioned by him in the course of any operations carried out by him for the purpose of complying with his obligations Clause 47 hereof.

- b) The Contractor shall be fully responsible for the review of the Engineering design and details of the Works and shall inform the Employer of any mistakes or incorrectness in such design and details which would affect the Works.

## **21. INSURANCE OF WORKS, ETC.**

Without limiting his obligations and responsibilities under Clause 20 hereof, the Contractor shall insure immediately following signature of this Contract, in the joint names of the Employer and the Contractor (a) for the period stipulated in Clause 20(1) hereof, against all loss or damage from whatever cause arising, other than cause of Force majeure as defined in clause 66 of these General Conditions, and (b) against loss or damage for which the Contractor is responsible, in such manner that the Employer and the Contractor are covered for the period stipulated in Clause 20 (1) hereof and are also covered during the Defects Liability Period for loss or damage arising from a cause occurring prior to the commencement of the Defects Liability Period and for any loss or damage occasioned by the Contractor in the course of any operations carried out by him for the purpose of complying with his obligations under Clause 47 hereof:

- a) The Works, together with the materials and Plant for incorporation therein, to their full replacement cost, plus an additional sum of ten (10) per cent of such replacement cost, to cover any additional costs of and incidental to the rectification of loss or damage including professional fees and the cost of demolishing and removing any part of the Works and of removing debris of whatsoever nature;
- b) The Contractor's equipment and other things brought on to the Site by the Contractor to the replacement value of such equipment and other things;
- c) An insurance to cover the liabilities and warranties of Section 52(4);

Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and the Contractor shall, whenever required, produce to the Engineer the policy or policies of insurance and the receipts for payment of the current premiums.

## **22. DAMAGE TO PERSONS AND PROPERTY**

The Contractor shall (except if and so far as the Contract provides otherwise) indemnify, hold and save harmless and defend at his own expense the Employer, its officers, agents, employees and servants from and against all suits, claims, demands, proceedings, and liability of any nature or kind, including costs and expenses, for injuries or damages to any person or any property whatsoever which may arise out of or in consequence of acts or

omissions of the Contractor or its agents, employees, servants or subcontractors in the execution of the Contract. The provision of this Clause shall extend to suits, claims, demands, proceedings and liability in the nature of workmen's compensation claims and arising out of the use of patented inventions and devices. Provided always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or with respect to:

- a) The permanent use or occupation of land by the Works or any part thereof;
- b) The right of the Employer to construct the Works or any part thereof on, over, under, or through any land.
- c) Interference whether temporary or permanent with any right of light, airway or water or other easement or quasi-easement which is the unavoidable result of the construction of the Works in accordance with the Contract.
- d) Death, injuries or damage to persons or property resulting from any act or neglect of the Employer, his agents, servants or other contractors, done or committed during the validity of the Contract.

## **23. LIABILITY INSURANCE**

### **23.1. Obligation to take out Liability Insurance**

Before commencing the execution of the Works, but without limiting his obligations and responsibility under Clause 20 hereof, the Contractor shall insure against his liability for any death, material or physical damage, loss or injury which may occur to any property, including that of the Employer or to any person, including any employee of the Employer by or arising out of the execution of the Works or in the carrying out of the Contract, other than due to the matters referred to in the proviso to Clause 22 hereof.

### **23.2. Minimum Amount of Liability Insurance**

Such insurance shall be effected with an insurer and in terms approved by the Employer, which approval shall not be unreasonably withheld, and for at least the amount specified in the contract. The Contractor shall, whenever required by the Employer or the Engineer, produce to the Engineer the policy or policies of insurance and the receipts for payment of the current premiums.

### **23.3. Provision to Indemnify Employer**

The insurance policy shall include a provision whereby, in the event of any claim in respect of which the Contractor would be entitled to receive indemnity under the policy, being brought or made against the Employer, the insurer shall indemnify the Employer against such claims and any costs, charges and expenses in respect thereof.



## **24. ACCIDENT OR INJURY TO WORKMEN**

- a) The Employer shall not be liable for or in respect of any damages or compensation payable at law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-Contractor, save and except an accident or injury resulting from any act or default of the Employer, his agents or servants. The Contractor shall indemnify, hold and save harmless the Employer against all such damages and compensation, save and except as aforesaid, and against all claims, proceedings, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

- b) Insurance Against Accident, etc., to Workmen

The Contractor shall insure against such liability with an insurer approved by the Employer, which approval shall not be unreasonably withheld, and shall continue such insurance during the whole of the time that any persons are employed by him for the Works and shall, when required, produce to the Engineer such policy of insurance and the receipt for payment of the current premium. Provided always that, in respect of any persons employed by any subcontractor, the Contractor's obligation to insure as aforesaid under this sub-clause shall be satisfied if the subcontractor shall have insured against the liability in respect of such persons in such manner that the Employer is indemnified under the policy but the Contractor shall require such subcontractor to produce to the Engineer when required such policy of insurance and the receipt for the current premium, and obtain the insertion of a provision to that effect in its contract with the subcontractor.

## **25. REMEDY ON CONTRACTOR'S FAILURE TO INSURE**

If the Contractor shall fail to effect and keep in force any of the insurances referred to in Clauses 21, 23 and 24 hereof, or any other insurance which he may be required to effect under the terms of the Contract, the Employer may in any such case effect and keep in force any such insurance and pay such premium as may be necessary for that purpose and from time to time deduct the amount so paid by the Employer as aforesaid from any monies due or which may become due to the Contractor, or recover the same as a debt due from the Contractor.

## **26. COMPLIANCE WITH STATUTES, REGULATIONS, ETC.**

- a) The Contractor shall give all notices and pay all fees and charges required to be given or paid by any national or State Statutes, Ordinances, Laws, Regulations or By-laws, or any local or other duly constituted authority in relation to the execution of the Works or of any Temporary Works and by the Rules and Regulations of all public bodies and companies whose property or rights are affected or may be affected in any way by the Works or any Temporary Works.
- b) The Contractor shall conform in all respects with any such Statutes, Ordinances, Laws, Regulations, By-laws or requirements of any such local or other authority which may be applicable to the Works and shall keep the Employer indemnified against all penalties and

liabilities of every kind for breach of any such Statutes, Ordinances, Laws, Regulations, By-laws or requirements.

## **27. FOSSILS, ETC.**

All fossils, coins, articles of value or antiquity and structures and other remains or things of geological or archaeological interest discovered on the Site of the Works shall as between the Employer and the Contractor be deemed to be the absolute property of the Employer and the Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article or thing and shall immediately upon discovery thereof and before removal acquaint the Employer of such discovery and carry out at the expense of the Employer the Engineer's orders as to the disposal of the same.

## **28. COPYRIGHT, PATENT AND OTHER PROPRIETARY RIGHTS, AND ROYALTIES**

- a) The Contractor shall hold harmless and fully indemnify the Employer from and against all claims and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of any Plant, equipment, machine, work or material used for or in connection with the Works or Temporary Works and from and against all claims, demands proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto, except where such infringement results from compliance with the design or Specification provided by the Engineer.
- b) Except where otherwise specified, the Contractor shall pay all tonnage and other royalties, rent and other payments or compensation, if any, for getting stone, sand, gravel, clay or other materials required for the Works or Temporary Works.

## **29. INTERFERENCE WITH TRAFFIC AND ADJOINING PROPERTIES**

All operations necessary for the execution of the Works and for the Construction of any Temporary Works shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with the public convenience, or the access to, use and occupation of, public or private roads and footpaths to or of properties whether in the possession of the Employer or of any other person. The Contractor shall hold harmless and indemnify the Employer in respect of all claims, demands, proceedings, damages, costs, charges and expenses whatsoever arising out of or in relation to any such matters in so far as the Contractor is responsible therefor.

## **30. EXTRAORDINARY TRAFFIC AND SPECIAL LOADS**

- a) The Contractor shall use every reasonable means to prevent any of the roads or bridges communicating with or on the routes to the Site from being damaged by any traffic of the Contractor or any of his sub-contractors and, in particular, shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will

inevitably arise from the moving of plant and material from and to the Site shall be limited as far as reasonably possible and so that no unnecessary damage may be occasioned to such roads and bridges.

- b) Should it be found necessary for the Contractor to move any load of Constructional Plant, machinery, preconstructed units or parts of units of work, or other thing, over part of a road or bridge, the moving whereof is likely to damage any such road or bridge unless special protection or strengthening is carried out, then the Contractor shall before moving the load on to such road or bridge, save insofar as the Contract otherwise provide, be responsible for and shall pay for the cost of strengthening any such bridge or altering or improving any such road to avoid such damage, and the Contractor shall indemnify and keep the Employer indemnified against all claims for damage to any such road or bridge caused by such movement, including such claim as may be made directly against the Employer, and shall negotiate and pay all claims arising solely out of such damage.

### **31. OPPORTUNITIES FOR OTHER CONTRACTORS**

The Contractor shall in accordance with the requirements of the Engineer afford all reasonable opportunities for carrying out their work to any other contractors employed by the Employer and their workmen and to the workmen of the Employer and of any other duly constituted authorities who may be employed in the execution on or near the Site of any work not included in the Contract or of any contract which the Employer may enter into in connection with or ancillary to the Works. If work by other contractors of the Employer as above-mentioned involves the Contractor in any direct expenses as a result of using his Site facilities, the Employer shall consider payment to the Contractor of such sum or sums as may be recommended by the Engineer.

### **32. CONTRACTOR TO KEEP SITE CLEAN**

During the progress of the Works, the Contractor shall keep the Site reasonably free from all unnecessary obstruction and shall store or dispose of any Constructional Plant and surplus materials and clear away and remove from the Site any wreckage, rubbish or Temporary Works no longer required.

### **33. CLEARANCE OF SITE ON SUBSTANTIAL COMPLETION**

On the substantial completion of the Works, the Contractor shall clear away and remove from the Site all Constructional Plant surplus materials, rubbish and Temporary Works of every kind and leave the whole of the Site and Works clean and in a workmanlike condition to the satisfaction of the Engineer.

## **34. LABOUR**

### **34.1 Engagement of Labour**

The Contractor shall make his own arrangements for the engagement of all labour local or otherwise.

### **34.2 Supply of Water**

The Contractor shall provide on the Site to the satisfaction of the Engineer an adequate supply of drinking and other water for the use of the Contractor's staff and work people.

### **34.3 Alcoholic Drinks or Drugs**

The Contractor shall comply with Government laws and regulations and orders in force as regards the import, sale, barter or disposal of alcoholic drinks or narcotics and he shall not allow or facilitate such importation, sale, gift, barter or disposal by his sub-contractors, agents or employees.

### **34.4 Arms and Ammunition**

The restrictions specified in clause 34.3 above shall include all kinds of arms and ammunition.

### **34.5 Holiday and Religious Customs**

The Contractor shall in all dealings with labour in his employ have due regard to all holiday, recognized festivals and religious or other customs.

### **34.6 Epidemics**

In the event of any outbreak of illness of an epidemic nature the Contractor shall comply with and carry out such regulations, orders, and requirements as may be made by the Government or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.

### **34.7 Disorderly Conduct, etc.**

The Contractor shall at all times take all reasonable precautions to prevent any unlawful riotous or disorderly conduct by or amongst his employees and for the preservation of peace and the protection of persons and property in the neighborhood of the Works against the same.

### **34.8 Observance by Sub-Contractors**

The Contractor shall be considered responsible for the observance of the above provisions by his Sub-Contractors.

### **34.9 Legislation applicable to Labour**

The Contractor shall abide by all applicable legislation and regulation with regard to labour.

## **35 RETURNS OF LABOUR, PLANT, ETC.**

The Contractor shall, if required by the Engineer, deliver to the Engineer at his office, a return in detail in the form and at such intervals as the Engineer may prescribe showing the supervisory staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such information respecting Constructional plant as the Engineer may require.

## **36 MATERIALS, WORKMANSHIP AND TESTING**

### **36.1 Materials and Workmanship**

- a) All materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer's instructions and shall be subjected from time to time to such tests as the Engineer may direct at the place of manufacture or fabrication, or on the Site or at all or any of such places. The Contractor shall provide such assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any materials used and shall supply samples of materials before incorporation in the Works for testing as may be selected and required by the Engineer. All testing equipment and instruments provided by the Contractor shall be used only by the Engineer or by the Contractor in accordance with the instructions of the Engineer.
- b) No material not conforming with the Specifications in the Contract may be used for the Works without prior written approval of the Employer and instruction of the Engineer, provided always that if the use of such material results or may result in increasing the Contract Price, the procedure in Clause 48 shall apply.

### **36.2 Cost of Samples**

All samples shall be supplied by the Contractor at his own cost unless the supply thereof is clearly intended in the Specifications or Bill of Quantities to be at the cost of the Employer. Payment will not be made for samples which do not comply with the Specifications.

### **36.3 Cost of Tests**

The Contractor shall bear the costs of any of the following tests:

- a) Those clearly intended by or provided for in the Contract Documents.

- b) Those involving load testing or tests to ensure that the design of the whole of the Works or any part of the Works is appropriate for the purpose which it was intended to fulfill.

### **37 ACCESS TO SITE**

The Employer and the Engineer and any persons authorized by either of them shall, at all times, have access to the Works and to the Site and to all workshops and places where work is being prepared or whence materials, manufactured articles or machinery are being obtained for the Works and the Contractor shall afford every facility for and every assistance in or in obtaining the right to such access.

### **38 EXAMINATION OF WORK BEFORE COVERING UP**

No work shall be covered up or put out of view without the approval of the Engineer and the Contractor shall afford full opportunity for the Engineer to examine and measure any work which is about to be covered up or put out of view and to examine foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer whenever any such work or foundations is or are ready or about to be ready for examination and the Engineer shall without unreasonable delay unless he considers it unnecessary and advises the Contractor accordingly attend for the purpose of examining and measuring such work or of examining such foundations.

### **39 REMOVAL OF IMPROPER WORK AND MATERIALS**

#### **39.1 Engineer's power to order removal**

The Engineer shall during the progress of the Works have power to order in writing from time to time, and the Contractor shall execute at his cost and expense, the following operations:

- a) The removal from the Site within such time or times as may be specified in the order of any materials which in the opinion of the Engineer are not in accordance with the Contract;
- b) The substitution of proper and suitable materials; and
- c) The removal and proper re-execution (notwithstanding any previous test thereof or interim payment therefore) of any work which in respect of materials or workmanship is not in the opinion of the Engineer in accordance with the Contract.

#### **39.2 Default of Contractor in carrying out Engineer's Instructions**

In case of default on the part of the Contractor in carrying out an instruction of the Engineer, the Employer shall be entitled to employ and pay other persons to carry out the same and all expenses consequent thereon or incidental thereto shall be borne by the Contractor and shall

be recoverable from him by the Employer and may be deducted by the Employer from any monies due or which may become due to the Contractor.

#### **40 SUSPENSION OF WORK**

The Contractor shall on the written order of the Engineer suspend the progress of the Works or any part thereof for such time or times and in such manner as the Engineer may consider necessary and shall, during such suspension, properly protect and secure the Works so far as it is necessary in the opinion of the Engineer. The Employer should be notified and his written approval should be sought for any suspension of work in excess of three (3) days.

#### **41 POSSESSION OF SITE**

##### **41.1 Access to Site**

The Employer shall with the Engineer's written order to commence the Works, give to the Contractor possession of so much of the Site as may be required to enable the Contractor to commence and proceed with the construction of the Works in accordance with the Programme referred to in Clause 13 hereof and otherwise in accordance with such reasonable proposals of the Contractor as he shall make to the Engineer by notice in writing, and shall from time to time as the Works proceed give to the Contractor possession of such further portions of the Site as may be required to enable the Contractor to proceed with the construction of the Works with due dispatch in accordance with the said Programme or proposals, as the case may be.

##### **41.2 Wayleaves, etc.**

The Contractor shall bear all expenses and charges for special temporary wayleaves required by him in connection with access to the Site. The Contractor shall also provide at his own cost any additional accommodation outside the Site required by him for the purpose of the Works.

##### **41.3 Limits of the Site**

Except as defined below, the limits of the Site shall be as defined in the Contract. Should the Contractor require land beyond the Site, he shall provide it entirely at his own expense and before taking possession shall supply the Engineer with a copy of the necessary permits. Access to the Site is available where the Site adjoins a public road but it is not provided unless shown on the Drawings. When necessary for the safety and convenience of workmen, public or livestock or for the protection of the Works, the Contractor shall, at his own expense, provide adequate temporary fencing to the whole or part of the Site. The Contractor shall not disturb, damage or pull down any hedge, tree or building within the Site without the written consent of the Engineer.



## **42 TIME FOR COMPLETION**

- a) Subject to any requirement in the Contract as to completion of any section of the Works before completion of the whole, the whole of the Works shall be completed, in accordance with the provisions of Clause 46 and 47 hereof, within the time stated in the Contract.
- b) The completion time includes weekly rest days, official holidays, and days of inclement weather.

## **43 EXTENSION OF TIME FOR COMPLETION**

If, subject to the provisions of the Contract, the Engineer orders alterations or additions in the Works in accordance with Clause 48 hereof, or if circumstances constituting force majeure as defined in the Contract have occurred, the Contractor shall be entitled to apply for an extension of the time for completion of the Works specified in the Contract. The Employer shall, upon such application, determine the period of any such extension of time; provided that in the case of alterations or additions in the Works, the application for such an extension must be made before the alterations or additions in the Works are undertaken by the Contractor.

## **44 RATE OF PROGRESS**

The whole of the materials, plant and labour to be provided by the Contractor and the mode, manner and speed of execution and completion of the Works are to be of a kind and conducted in a manner to the satisfaction of the Engineer. Should the rate of progress of the Works or any part thereof be at any time in the opinion of the Engineer too slow to ensure the completion of the Works by the prescribed time or extended time for completion, the Engineer shall so notify the Contractor in writing and the Contractor shall thereupon take such steps as the Contractor may think necessary and the Engineer may approve to expedite progress so as to complete the Works by the prescribed time or extended time for completion. If the work is not being carried on by day and by night and the Contractor shall request permission to work by night as well as by day, then, if the Engineer shall grant such permission, the Contractor shall not be entitled to any additional payment. All work at night shall be carried out without unreasonable noise and disturbance. The contractor shall indemnify the Employer from and against any claims or liability for damages on account of noise or other disturbance created while or in carrying out the work and from and against all claims, demands, proceedings, costs and expenses whatsoever in regard or in relation to such noise or other disturbance. The Contractor shall submit in triplicate to the Engineer at the end of each month signed copies of explanatory Drawings or any other material showing the progress of the Works.

## **45 LIQUIDATED DAMAGES FOR DELAY**

- a) If the Contractor shall fail to complete the Works within the time for completion prescribed in the Contract, or any extended time for completion in accordance with the Contract, then the Contractor shall pay to the Employer the sum specified in the Contract as liquidated

damages, for the delay between the time prescribed in the Contract or the extended time for completion, as the case may be, and the date of substantial completion of the Works as stated in the Certificate of Substantial Completion, subject to the applicable limit stated in the Contract. The said sum shall be payable by the sole fact of the delay without the need for any previous notice or any legal proceedings, or proof of damage, which shall in all cases be considered as ascertained. The Employer may, without prejudice to any other method of recovery, deduct the amount of such liquidated damages from any monies in its hands due or which may become due to the Contractor. The payment or deduction of such damages shall not relieve the Contractor from his obligation to complete the Works or from any other of his obligations and liabilities under the Contract.

- b) If, before the time for completion of the whole of the Works or of a Section of the Works, a Certificate of Substantial Completion has been issued for any part or Section of the Works, the liquidated damages for delay in completion of the remainder of the Works or of that Section may, for any period of delay after the date stated in such Certificate of Substantial Completion, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part or Section so certified bears to the total value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.

## **46 CERTIFICATE OF SUBSTANTIAL COMPLETION**

### **46.1 Substantial Completion of the Works**

When the whole of the Works have been substantially completed and have satisfactorily passed any test on completion prescribed by the Contract, the Contractor may give a notice to that effect to the Engineer accompanied by an undertaking to finish any outstanding work during the Defects Liability Period. Such notice and undertaking shall be in writing and shall be deemed to be a request by the Contractor, for the Engineer to issue a Certificate of Substantial Completion in respect of the Works. The Engineer shall, within twenty-one (21) days of the date of delivery of such notice either issue to the Contractor, with a copy to the Employer, a Certificate of Substantial Completion stating the date on which, in his opinion, the Works were substantially completed in accordance with the Contract or give instructions in writing to the Contractor specifying all the work which, in the Engineer's opinion, requires to be done by the Contractor before the issuance of such Certificate. The Engineer shall also notify the Contractor of any defects in the Works affecting substantial completion that may appear after such instructions and before completion of the work specified therein. The Contractor shall be entitled to receive such Certificate of Substantial Completion within twenty-one (21) days of completion, to the satisfaction of the Engineer, of the work so specified and making good any defect so notified. Upon issuance of the Certificate of Substantial Completion of the Works, the Contractor shall be deemed to have undertaken to complete with due expedition any outstanding work during the Defects Liability Period.

### **46.2 Substantial Completion of Sections or Parts of the Works**

In accordance with the procedure in Sub-Clause (1) of this Clause and on the same conditions as provided therein, the Contractor may request the Engineer to issue, and the Engineer may issue, a Certificate of Substantial Completion in respect of any Section or part of the Works which has been substantially completed and has satisfactorily passed any tests on completion prescribed by the Contract, if:

- a) a separate time for completion is provided in the Contract in respect of such Section or part of the Works;
- b) such Section or part of the Works has been completed to the satisfaction of the Engineer and is required by the Employer for his occupation or use.

Upon the issuance of such Certificate, the Contractor shall be deemed to have undertaken to complete any outstanding work during the Defects Liability Period.

## **47 DEFECTS LIABILITY**

### **47.1 Defects Liability Period**

The expression "Defects Liability Period" shall mean the period of twelve (12) months, calculated from the date of completion of the Works stated in the Certificate of Substantial Completion issued by the Engineer or, in respect of any Section or part of the Works for which a separate Certificate of Substantial Completion has been issued, from the date of completion of that Section or part as stated in the relevant Certificate. The expression "the Works" shall, in respect of the Defects Liability Period, be construed accordingly.

### **47.2 Completion of Outstanding Work and Remedying of Defects**

During the Defects Liability Period, the Contractor shall finish the work, if any, outstanding at the date of the Certificate of Substantial Completion, and shall execute all such work of repair, amendment, reconstruction, rectification and making good defects, imperfections, shrinkages or other faults as may be required of the Contractor in writing by the Engineer during the Defects Liability Period and within fourteen (14) days after its expiration, as a result of an inspection made by or on behalf of the Engineer prior to expiration of the Defects Liability Period.

### **47.3 Cost of Execution of Work of Repair, etc.**

All such outstanding work shall be carried out by the Contractor at his own expense if the necessity thereof shall, in the opinion of the Engineer, be due to the use of material or workmanship not in accordance with the Contract, or to neglect or failure on the part of the Contractor to comply with any obligation expressed or implied, on the Contractor's part under the Contract.

#### **47.4 Remedy on Contractor's Failure to Carry Out Work Required**

If the Contractor shall fail to do any such work outstanding on the Works, the Employer shall be entitled to employ and pay other persons to carry out the same, and all expenses consequent thereon or incidental thereto shall be recoverable from the Contractor by the Employer, and may be deducted by the Employer from any monies due or which may become due to the Contractor.

#### **47.5 Certificate of Final Completion**

Upon satisfactory completion of the work outstanding on the Works, the Engineer shall within twenty eight (28) days of the expiration of the Defects Liability period issue a Certificate of Final Completion to the Contractor. The Contract shall be deemed to be completed upon issuance of such Certificate, provided that the provisions of the Contract which remain unperformed and the Settlement of Disputes provision in the Contract shall remain in force for as long as is necessary to dispose of any outstanding matters or issues between the Parties.

### **48 ALTERATIONS, ADDITIONS AND OMISSIONS**

#### **1 Variations**

The Engineer may within his powers introduce any variations to the form, type or quality of the Works or any part thereof which he considers necessary and for that purpose or if for any other reasons it shall, in his opinion be desirable, he shall have power to order the Contractor to do and the Contractor shall do any of the following:

- (a) increase or decrease the quantity of any work under the Contract;
- (b) omit any such work;
- (c) change the character or quality or kind of any such work;
- (d) change the levels, lines, positions and dimensions of any part of the Works;
- (e) execute additional work of any kind necessary for the completion of the Works, and no such variation shall in any way vitiate or invalidate the Contract.

#### **2 Variations Increasing Cost of Contract or altering the Works.**

The Engineer shall, however, obtain the written approval of the Employer before giving any order for any variations which may result in an increase of the Contract Price or in an essential alteration of the quantity, quality or character of the Works.

### **3 Orders for Variations to be in Writing**

No variations shall be made by the Contractor without an order in writing from the Engineer. Variations requiring the written approval of the Employer under paragraph (2) of this Clause shall be made by the Contractor only upon written order from the Engineer accompanied by a copy of the Employer's approval. Provided that, subject to the provisions of the Contract, no order in writing shall be required for any increase or decrease in the quantity of any work where such increase or decrease is not the result of an order given under this Clause but is the result of the quantities exceeding or being less than those stated in the Bill of Quantities.

### **4 Valuation of Variations**

The Engineer shall estimate to the Employer the amount to be added or deducted from the Contract Price in respect of any variation, addition or omission. In the case of any variation, addition or omission which may result in an increase of the Contract Price, the Engineer shall communicate such estimate to the Employer together with his request for the Employer's written approval of such variation, addition or omission. The value of any variation, addition or omission shall be calculated on the basis of the unit prices contained in the Bill of Quantities.

## **49 PLANT, TEMPORARY WORKS AND MATERIALS**

### **1 Plant, etc., Exclusive Use for the Works**

All Constructional Plant, Temporary Works and Materials provided by the Contractor shall, when brought on the Site, be deemed to be exclusively intended for the construction and completion of the Works and the Contractor shall not remove the same or any part thereof (save for the purpose of moving it from one part of the Site to another) without the consent in writing of the Engineer which shall not be unreasonably withheld.

### **2 Removal of Plant, etc.**

Upon completion of the Works the Contractor shall remove from the Site all the said Constructional Plant and Temporary Works remaining thereon and any unused materials provided by the Contractor.

### **3 Employer not liable for Damage to Plant**

The Employer shall not be at any time liable for the loss of any of the said Constructional plant, Temporary Works or Materials save if such loss results from the act or neglect of the Employer, its employees or agents.

### **4 Ownership of paid material and work**

All material and work covered by payments made by the Employer to the Contractor shall thereupon become the sole property of the Employer, but this provision shall not be

construed as relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work or as waiving the right of the Employer to require the fulfillment of all of the terms of the Contract.

## **5 Equipment and supplies furnished by Employer**

Title to any equipment and supplies which may be furnished by the Employer shall rest with the Employer and any such equipment and supplies shall be returned to the Employer at the conclusion of the Contract or when no longer needed by the Contractor. Such equipment when returned to the Employer, shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear.

## **50 APPROVAL OF MATERIALS ETC., NOT IMPLIED**

The operation of Clause 49 hereof shall not be deemed to imply any approval by the Engineer of the materials or other matters referred to therein nor shall it prevent the rejection of any such materials at any time by the Engineer.

## **51 MEASUREMENT OF WORKS**

The Engineer shall, when he requires any part or parts of the Works to be measured, give notice to the Contractor or the Contractor's authorized agent or representative who shall forthwith attend or send a qualified agent to assist the Engineer in making such measurement and shall furnish all particulars required by either of them. Should the Contractor not attend or neglect or omit to send such agent, then the measurement made by the Engineer or approved by him shall be taken to be the correct measurement of the work. The purpose of measuring is to ascertain the volume of work executed by the Contractor and therefore determine the amount of the monthly payments.

## **52 LIABILITY OF THE PARTIES**

- 1 The Works shall not be considered as completed until a Certificate of Final Completion shall have been signed by the Engineer and delivered to the Employer stating that the Works have been completed and that the Contractor has fulfilled all his obligations under Clause 47 to his satisfaction.
- 2 The Employer shall not be liable to the Contractor for any matter arising out of or in connection with the Contract or the execution of the Works unless the Contractor shall have made a claim in writing in respect thereof before the giving of the Certificate of Final Completion and in accordance with the Contract.

### **3 Unfulfilled Obligations**

Notwithstanding the issue of the Certificate of Final Completion, the Contractor shall remain liable for the fulfillment of any obligation incurred under the provisions of the Contract prior to the issuance of the Certificate of Final Completion and which remains unperformed at the time such Certificate is issued. For the purpose of determining the nature and extent of any such obligation the Contract shall be deemed to remain in force between the parties hereto.

### **4 Contractor Responsible**

Notwithstanding any other provisions in the Contract documents, the Contractor shall be totally responsible for and shall bear any and all risks of loss or damage to or failure of the Works or any part thereof for a period of ten years after issuance of the Certificate of Final Completion, provided always that such risks, damage or failure result from acts, defaults and negligence of the Contractor, his agents, employees or workmen and such contractors.

## **53 AUTHORITIES**

- 1** The Employer shall have the right to enter upon the Site and expel the Contractor therefrom without thereby voiding the Contract or releasing the Contractor from any of his obligations or liabilities under the Contract or affecting the rights and powers conferred on the Employer and the Engineer by the Contract in any of the following cases:
  - (a) If the Contractor is declared bankrupt or claims bankruptcy or court protection against his creditors or if the Contractor is a company or member of a company which was dissolved by legal action;
  - (b) If the Contractor makes arrangements with his creditors or agrees to carry out the Contract under an inspection committee of his creditors;
  - (c) If the Contractor withdraws from the Works or assigns the Contract to others in whole or in part without the Employer's prior written approval;
  - (d) If the Contractor fails to commence the Works or shows insufficient progress to the extent which in the opinion of the Engineer will not enable him to meet the target completion date of the Works;
  - (e) If the Contractor suspends the progress of the Works without due cause for fifteen (15) days after receiving from the Engineer written notice to proceed;
  - (f) If the Contractor fails to comply with any of the Contract conditions or fails to fulfill his obligations and does not remedy the cause of his failure within fifteen (15) days after being notified to do so in writing;

- (g) If the Contractor is not executing the work in accordance with standards of workmanship specified in the Contract;
- (h) If the Contractor gives or promises to give a present or loan or reward to any employee of the Employer or of the Engineer.

Then the Employer may himself complete the Works or may employ any other contractor to complete the Works and the Employer or such other contractor may use for such completion so much of Constructional Plant, Temporary Works and Materials, which have been deemed to be reserved exclusively for the construction and completion of the Works under the provision of the Contract as he or they may think proper and the Employer may at any time sell any of the said Constructional Plant, Temporary Works and unused materials and apply the proceeds of sale in or towards the satisfaction of any sums due or which may become due to him from the Contractor under the Contract.

## **2 Evaluation after Re-entry**

The Engineer shall as soon as may be practicable after any such entry and expulsion by the Employer notify the Contractor to attend the necessary evaluation of the Works. In the event that for any reason the Contractor does not attend such evaluation the Engineer shall undertake the said evaluation in the absence of the Contractor and shall issue a certificate stating the sum, if any, due to the Contractor for work done in accordance with the Contract up to the time of entry and expulsion by the Employer which has been reasonably accumulated to the Contractor in respect of the Works he has executed in such case in accordance with the Contract. The Engineer shall indicate the value of the materials whether unused or partially used and the value of construction equipment and any part of the Temporary Works.

## **3 Payment After Re-entry**

If the Employer shall enter and expel the Contractor under this Clause he shall not be liable to pay the Contractor any money on account of the Contract until the expiration of the Defects Liability Period, and thereafter until the costs of completion and making good any defects of the Works, damages for delay in completion (if any), and all other expenses incurred by the Employer have been ascertained and their amount certified by the Engineer. The Contractor shall then be entitled to receive only such sum or sums (if any) as the Engineer may certify would have been due to him upon due completion by him after deducting the said amount. But if such amount shall exceed the sum which would have been payable to the Contractor on due completion by him, then the Contractor shall upon demand pay to the Employer the amount of such excess. The Employer in such case may recover this amount from any money due to the Contractor from the Employer without the need to resort to legal procedures.



## **54 URGENT REPAIRS**

If by reason of any accident or failure or other event occurring to, in or in connection with the Works or any part thereof either during the execution of the Works or during the Defects Liability Period any remedial or other work or repair shall in the opinion of the Engineer be urgently necessary for security and the Contractor is unable or unwilling at once to do such work or repair, the Employer may by his own or other workmen do such work or repair as the Engineer may consider necessary. If the work or repair so done by the Employer is work which in the opinion of the Engineer the Contractor was liable to do at his own expense under the Contract, all costs and charges properly incurred by the Employer in so doing shall on demand be paid by the Contractor to the Employer or may be deducted by the Employer from any monies due or which may become due to the Contractor provided always that the Engineer shall as soon after the occurrence of any such emergency as may be reasonably practicable notify the Contractor thereof in writing.

## **55 INCREASE AND DECREASE OF COSTS**

Except if otherwise provided by the Contract, no adjustment of the Contract Price shall be made in respect of fluctuations of market, prices of labour, materials, plant or equipment, neither due to fluctuation in interest rates nor devaluation or any other matters affecting the Works.

## **56 TAXATION**

The Contractor shall be responsible for the payment of all charges and taxes in respect of income including value added tax, all in accordance with and subject to the provisions of the income tax laws and regulations in force and all amendments thereto. It is the Contractor's responsibility to make all the necessary inquiries in this respect and he shall be deemed to have satisfied himself regarding the application of all relevant tax laws.

## **57 BLASTING**

The Contractor shall not use any explosives without the written permission of the Engineer who shall require that the Contractor has complied in full with the regulations in force regarding the use of explosives. However, the Contractor, before applying to obtain these explosives, has to provide well arranged storage facilities. The Engineer's approval or refusal to permit the use of explosives shall not constitute ground for claims by the Contractor.

## **58 MACHINERY**

The Contractor shall be responsible for coordinating the manufacture, delivery, erection and commissioning of plant machinery and equipment which are to form a part of the Works. He

shall place all necessary orders as soon as possible after the signing of the Contract. These orders and their acceptance shall be produced to the Engineer on request. The Contractor shall also be responsible for ensuring that all sub-contractors adhere to such programs as are agreed and are needed to ensure completion of the Works within the period for completion. Should any sub-contracted works be delayed, the Contractor shall initiate the necessary action to speed up such completion. This shall not prejudice the Employer's right to exercise his remedies for delay in accordance with the Contract.

## **59 TEMPORARY WORKS AND REINSTATEMENT**

The Contractor shall provide and maintain all temporary roads and tracks necessary for movement of plant and materials and clear same away at completion and make good all works damaged or disturbed. The Contractor shall submit drawings and full particulars of all Temporary Works to the Engineer before commencing same. The Engineer may require modifications to be made if he considers them to be insufficient and the Contractor shall give effect to such modifications but shall not be relieved of his responsibilities. The Contractor shall provide and maintain weather-proof sheds for storage of material pertinent to the Works both for his own use and for the use of the Employer and clear same away at the completion of the Works. The Contractor shall divert as required, at his own cost and subject to the approval of the Engineer, all public utilities encountered during the progress of the Works, except those specially indicated on the drawings as being included in the Contract. Where diversions of services are not required in connection with the Works, the Contractor shall uphold, maintain and keep the same in working order in existing locations. The Contractor shall make good, at his own expense, all damage to telephone, telegraph and electric cable or wires, sewers, water or other pipes and other services, except where the Public Authority or Private Party owning or responsible for the same elects to make good the damage. The costs incurred in so doing shall be paid by the Contractor to the Public Authority or Private Party on demand.

## **60 PHOTOGRAPHS AND ADVERTISING**

The Contractor shall not publish any photographs of the Works or allow the Works to be used in any form of advertising whatsoever without the prior approval in writing from the Employer.

## **61 PREVENTION OF CORRUPTION**

The Employer shall be entitled to cancel the Contract and to recover from the Contractor the amount of any loss resulting from such cancellation, if the Contractor has offered or given any person any gift or consideration of any kind as an inducement or reward for doing or intending to do any action in relation to the obtaining or the execution of the Contract or any other contract with the Employer or for showing or intending to show favour or disfavour to any person in relation to the Contract or any other contract with the Employer, if the like acts

shall have been done by any persons employed by him or acting on his behalf whether with or without the knowledge of the Contractor in relation to this or any other Contract with the Employer.

## **62 DATE FALLING ON HOLIDAY**

Where under the terms of the Contract any act is to be done or any period is to expire upon a certain day and that day or that period fall on a day of rest or recognized holiday, the Contract shall have effect as if the act were to be done or the period to expire upon the working day following such day.

## **63 NOTICES**

- 1 Unless otherwise expressly specified, any notice, consent, approval, certificate or determination by any person for which provision is made in the Contract Documents shall be in writing. Any such notice, consent, approval, certificate or determination to be given or made by the Employer, the Contractor or the Engineer shall not be
- 2 unreasonably withheld or delayed.
- 3 Any notice, certificate or instruction to be given to the Contractor by the Engineer or the Employer under the terms of the Contract shall be sent by post, cable, telex or facsimile at the Contractor's principal place of business specified in the Contract or such other address as the Contractor shall nominate in writing for that purpose, or by
- 4 delivering the same at the said address against an authorized signature certifying the receipt.
- 5 Any notice to be given to the Employer under the terms of the Contract shall be sent by post, cable, telex or facsimile at the Employer's address specified in the Contract, or by delivering the same at the said address against an authorized signature certifying the receipt.
- 6 Any notice to be given to the Engineer under the terms of this Contract shall be sent by post, cable, telex or facsimile at the Engineer's address specified in the Contract, or by delivering the same at the said address against an authorized signature certifying the receipt.

## **64 LANGUAGE, WEIGHTS AND MEASURES**

Except as may be otherwise specified in the Contract, English shall be used by the Contractor in all written communications to the Employer or the Engineer with respect to the services to be rendered and with respect to all documents procured or prepared by the Contractor pertaining to the Works. The metric system of weights and measures shall be used in all instances.

## **65 RECORDS, ACCOUNTS, INFORMATION AND AUDIT**

The Contractor shall maintain accurate and systematic records and accounts in respect of the work performed under this Contract.

The Contractor shall furnish, compile or make available at all times to the UNDP any records or information, oral or written, which the UNDP may reasonably request in respect of the Works or the Contractor's performance thereof.

The Contractor shall allow the UNDP or its authorized agents to inspect and audit such records or information upon reasonable notice.

## **66 FORCE MAJEURE**

Force majeure as used herein means Acts of God, war (whether declared or not), invasion, revolution, insurrection or other acts or events of a similar nature or force.

In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the Contractor shall give notice and full particulars in writing to the UNDP and to the Engineer of such force majeure if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this Contract. Subject to acceptance by the UNDP of the existence of such force majeure, which acceptance shall not be unreasonably withheld, the following provisions shall apply:

- (a) The obligations and responsibilities of the Contractor under this Contract shall be suspended to the extent of his inability to perform them and for as long as such inability continues. During such suspension and in respect of work suspended, the Contractor shall be reimbursed by the UNDP substantiated costs of maintenance of the Contractor's equipment and of per diem of the Contractor's permanent personnel rendered idle by such suspension;
- (b) The Contractor shall within fifteen (15) days of the notice to the UNDP of the occurrence of the force majeure submit a statement to the UNDP of estimated costs referred to in subparagraph (a) above during the period of suspension followed by a complete statement of actual expenditures within thirty (30) days after the end of the
- (c) suspension;
- (d) The term of this Contract shall be extended for a period equal to the period of suspension taking however into account any special condition which may cause the additional time for completion of the Works to be different from the period of suspension;
- (e) If the Contractor is rendered permanently unable, wholly or in part, by reason of force majeure, to perform his obligations and meet his responsibilities under the Contract, the UNDP shall have the right to terminate the Contract on the same terms and conditions as provided for in Clause 68 of these General Conditions, except that the period of notice shall be seven (7) days instead of fourteen (14) days, and

- (f) For the purpose of the preceding sub-paragraph, the UNDP may consider the Contractor permanently unable to perform in case of any suspension period of more than ninety (90) days.

## **67 SUSPENSION BY THE UNDP**

The UNDP may by written notice to the Contractor suspend for a specified period, in whole or in part, payments to the Contractor and/or the Contractor's obligation to continue to perform the Works under this Contract, if in the UNDP's sole discretion:

- (a) any conditions arise which interfere, or threaten to interfere with the successful execution of the Works or the accomplishment of the purpose thereof, or
- (b) the Contractor shall have failed, in whole or in part, to perform any of the terms and conditions of this Contract.

After suspension under sub-paragraph (a) above, the Contractor shall be entitled to reimbursement by the UNDP of such costs as shall have been duly incurred in accordance with this Contract prior to the commencement of the period of such suspension.

The term of this Contract may be extended by the UNDP for a period equal to any period of suspension, taking into account any special conditions which may cause the additional time for completion of the Works to be different from the period of suspension.

## **68 TERMINATION BY THE UNDP**

The UNDP may, notwithstanding any suspension under Clause 67 above, terminate this Contract for cause or convenience in the interest of the UNDP upon not less than fourteen (14) days written notice to the Contractor.

Upon termination of this Contract:

- (a) The Contractor shall take immediate steps to terminate his performance of the Contract in a prompt and orderly manner and to reduce losses and to keep further expenditures to a minimum, and
- (b) The Contractor shall be entitled (unless such termination has been occasioned by the Contractor's breach of this Contract), to be paid for the part of the Works satisfactorily completed and for the materials and equipment properly delivered to the Site as of the date of termination for incorporation to the Works, plus substantiated costs resulting from commitments entered into prior to the date of termination as well as any reasonable substantiated direct costs incurred by the Contractor as a result of the termination, but shall not be entitled to receive any other or further payment or damages.

## **69 TERMINATION BY THE CONTRACTOR**

In the case of any alleged breach by the UNDP of the Contract or in any other situation which the Contractor reasonably considers to entitle him to terminate his performance of the Contract, the Contractor shall promptly give written notice to the UNDP detailing the nature and the circumstances of the breach or other situation. Upon acknowledgement in writing by the UNDP of the existence of such breach and the UNDP' inability to remedy it, or upon failure of the UNDP to respond to such notice within twenty (20) days of receipt thereof, the Contractor shall be entitled to terminate this Contract by giving 30 days written notice thereof. In the event of disagreement between the Parties as to the existence of such breach or other situation referred to above, the matter shall be resolved in accordance with Clause 71 of these General Conditions.

Upon termination of this Contract under this Clause the provisions of sub-paragraph (b) of Clause 68 hereof shall apply.

## **70 RIGHTS AND REMEDIES OF THE UNDP**

Nothing in or relating to this Contract shall be deemed to prejudice or constitute a waiver of any other rights or remedies of the UNDP.

The UNDP shall not be liable for any consequences of, or claim based upon, any act or omission on the part of the Government.

## **71 SETTLEMENT OF DISPUTES**

In the case of any claim, controversy or dispute arising out of, or in connection with this Contract or any breach thereof, the following procedure for resolution of such claim, controversy or dispute shall apply.

### **1 Notification**

The aggrieved party shall immediately notify the other party in writing of the nature of the alleged claim, controversy or dispute, not later than seven (7) days from awareness of the existence thereof.

### **2 Consultation**

On receipt of the notification provided above, the representatives of the Parties shall start consultations with a view to reaching an amicable resolution of the claim, controversy or dispute without causing interruption of the Works.

### **3 Conciliation**

Where the representatives of the Parties are unable to reach such an amicable settlement, either party may request the submission of the matter to conciliation in accordance with the UNCITRAL Rules of Conciliation then obtaining.

### **4 Arbitration**

Any claim, controversy or dispute which is not settled as provided under clauses 71.1 through 3 above shall be referred to arbitration in accordance with the UNCITRAL Arbitration Rules then obtaining. The Parties shall be bound by the arbitration award rendered in accordance with such arbitration as the final adjudication of any such controversy or claim.

## **72 PRIVILEGES AND IMMUNITIES**

Nothing in or relating to this Contract shall be deemed a waiver of any of the privileges and immunities of the United Nations of which the UNDP is an integral part.

## **73 SECURITY**

The Contractor shall:

- (a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the services are being provided;
- (b) assume all risks and liabilities related to the Contractor's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this contract. Notwithstanding the foregoing, the Contractor shall remain solely responsible for the security of its personnel and for UNDP's property in its custody as set forth in paragraph 4.1 above.

## **74 AUDIT AND INVESTIGATIONS**

Each invoice paid by UNDP shall be subject to a post-payment audit by auditors, whether internal or external, of UNDP or the authorized agents of the UNDP at any time during the term of the Contract and for a period of three (3) years following the expiration or prior termination of the Contract. The UNDP shall be entitled to a refund from the Contractor for any amounts shown by such audits to have been paid by the UNDP other than in accordance with the terms and conditions of the Contract. Should the audit determine that any funds paid by UNDP have not been used as per contract clauses, the company shall

reimburse such funds forthwith. Where the company fails to reimburse such funds, UNDP reserves the right to seek recovery and/or to take any other action as it deems necessary.

The Contractor acknowledges and agrees that, at anytime, UNDP may conduct investigations relating to any aspect of the Contract, the obligations performed under the Contract, and the operations of the Contractor generally. The right of UNDP to conduct an investigation and the Contractor's obligation to comply with such an investigation shall not lapse upon expiration or prior termination of the Contract. The Contractor shall provide its full and timely cooperation with any such inspections, post-payment audits or investigations. Such cooperation shall include, but shall not be limited to, the Contractor's obligation to make available its personnel and any documentation for such purposes and to grant to UNDP access to the Contractor's premises. The Contractor shall require its agents, including, but not limited to, the Contractor's attorneys, accountants or other advisers, to reasonably cooperate with any inspections, post-payment audits or investigations carried out by UNDP hereunder.

## **75 ANTI-TERRORISM**

The Contractor agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received under this Contract are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>. This provision must be included in all sub-contracts or sub-agreements entered into under this Contract.

## **APPENDIX I: FORMATS OF PERFORMANCE SECURITY**



## PERFORMANCE BANK GUARANTEE

To:.....

[INSERT FULL NAME AND ADDRESS OF RR or BUREAU/DIVISION  
DIRECTOR AT UNDP]

WHEREAS.....[INSERT NAME AND  
ADDRESS OF THE CONTRACTOR] (hereinafter called "the Contractor") has undertaken, in  
pursuance of Contract No....., dated....., to  
execute.....[INSERT TITLE OF CONTRACT AND  
BRIEF DESCRIPTION OF WORKS], (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall  
furnish you with a Bank Guarantee by a recognized Bank for the sum specified therein as  
security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee;

NOW THEREFORE we hereby irrevocably affirm that we are the Guarantor and responsible to  
you, on behalf of the Contractor, up to a total of.....[INSERT AMOUNT  
OF GUARANTEE IN FIGURES AND IN WORDS], such sum being payable in the types and  
proportions of currencies in which the Contract Price is payable, and we undertake to pay you,  
upon your first written demand and without cavil or argument, any sum or sums within the limits  
of .....[INSERT AMOUNT OF GUARANTEE] as aforesaid without  
your needing to prove or to show grounds or reasons for your demand for the sum specified  
therein.

We hereby waive the necessity of your demanding the said debt from the Contractor before  
presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract  
or of the Works to be performed thereunder or of any of the Contract Documents which may be  
made between you and the Contractor shall in any way release us from any liability under this  
guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until twenty eight calendar days after issuance of the Certificate of  
Final Completion.

SIGNATURE AND SEAL OF THE GUARANTOR

.....

NAME OF BANK .....

ADDRESS .....

DATE .....

## PERFORMANCE BOND

By this Bond .....[INSERT NAME AND ADDRESS OF THE CONTRACTOR] as Principal (hereinafter called "the Contractor") and .....[INSERT NAME, LEGAL TITLE AND ADDRESS OF SURETY, BONDING COMPANY OR INSURANCE COMPANY] as Surety (hereinafter called "the Surety") are held and firmly bound unto .....[INSERT NAME AND ADDRESS OF EMPLOYER] as Obligee (hereinafter called "the Employer") in the amount of. ....[INSERT AMOUNT OF BOND IN FIGURES AND IN WORDS], for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Contractor and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Contractor has entered into a contract with the Employer dated for ..... [INSERT TITLE OF CONTRACT AND BRIEF DESCRIPTION OF THE WORKS] in accordance with the documents, plans, specifications and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

NOW, THEREFORE, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto) then this obligation shall be null and void; otherwise it shall remain in full force and effect. Whenever the Contractor shall be , and declared by the Employer to be, in default under the Contract, the Employer having performed the Employer's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

(1) complete the Contract in accordance with its terms and conditions; or

(2) obtain a bid or bids from qualified Bidders for submission to the Employer for completing the Contract in accordance with its terms and conditions, and upon determination by the Employer and the Surety of the lowest responsible Bidder, arrange for a Contract between such Bidder and Employer and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term " Balance of the Contract Price", as used in this paragraph, shall mean the total amount payable by Employer to Contractor under the Contract, less the amount properly paid by Employer to Contractor; or

(3) pay the Employer the amount required by Employer to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Employer named herein or the heirs, executors, administrators, successors and assigns of the Employer.

In testimony whereof, the Contractor has hereunto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this.....day of.....2000

SIGNED ON:

SIGNED ON:

ON BEHALF OF:

ON BEHALF OF:

NAME & TITLE:

NAME & TITLE: