

S. No. = 78

OFFICE OF THE CHIEF ENGINEER PW(R&B) DEPARTMENT, JAMMU

No.: CEJ/DB/S/ 655-59
Dated 29-05-2010

The Commissioner Secretary
Public Works (R&B) Department
Civil Secretariat,
Srinagar.

Subject: Application for Administrative Approvals for construction of Bheli Lal Draman
road km 4th to 19th by way of earthwork & walling (Phase I) under CRF.

Sir,

Kindly find enclosed herewith the Application for Administrative Approval for
the above noted work amounting to Rs.803.26 lacs framed on standard data book of
Ministry of Shipping, Road, Transport & Highways Govt. of India, New Delhi.

The Application for Administrative Approval has been prepared as per the verbal
orders of Hon'ble Chief Minister, Jammu & Kashmir State.

It is requested that the scheme may kindly be forwarded to the Ministry of Road,
Transport and Highways, New Delhi for sanction.

Yours faithfully,

[Signature]
Chief Engineer
PW(R&B) Department,
Jammu.

Encl.: Booklets.
Copy to the:-

1. Superintending Engineer PWD(R&B) Circle, Doda for information.
2. Executive Engineer, PWD(R&B) Division, Doda for information.
3-4. D.D.(P) / H.D. Direction office Jammu for information.

[Signature]
17-6-10

~~S. No. 51~~

Tendered length

APPROVED
DDR
CRF=2

(2)

Government of Jammu & Kashmir
OFFICE OF THE DISTRICT SUPERINTENDING ENGINEER
PWD(R&B) CIRCLE DODA.

The Chief Engineer
PW(R&B) Department
Jammu.

NO.DSED/R&B/DB/ 2517-21
Dated: 26-05-2010

Sub: Submission of DPR under CRF.

Sir,

Kindly find enclosed herewith DPR for below mentioned work along with General Abstract of Cost, Typical estimates, Drawings, and Technical report explaining all physical / financial aspects and salient features of the Project in requisite number of copies for favour of further necessary action at your end please.

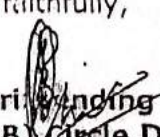
S.No	Name of the Scheme	AA Cost
1	Construction of Bheli Lal Draman road km 4 th to 19 th by way of Earth work & walling (Phase-1 st) under CRF	Rs.803.26 lacs

The DPR has been framed by the Executive Engineer concerned as per the verbal orders of Hon'ble Chief Minister J&K State.

It is, therefore, requested that the DPR may kindly be forwarded to concerned quarter for taking further necessary action.

Yours faithfully,

Encl:


District Superintending Engineer
PWD(R&B) Circle Doda

Copy to the:-

1. District Development Commissioner Doda for favour of information
2. ✓ Executive Engineer PWD(R&B) Division Doda for information.
3. SO(P&S) Circle office Doda for information.
4. HD Circle Office Doda along with copy of DPR's for record and reference

d/ce.
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(3)

GOVT OF JAMMU & KASHMIR

PUBLIC WORK DEPARTMENT (R&B)

Application for Accord of Administrative
Approval for Constt: of Bheli Lal Draman
Road Km: 4th to 19th by way of Earth work &
walling { PHASE Ist }
Under C.R.F.

Total Length	= 19.00 km.
Proposed Project Length	= 16.00 km.
Present status.	BT= 3.00 km
Cost.	= Rs: 803.26 lacs

Chief Engineer,
PW(R&B) Department
Jammu

PROJECT STATISTICS.

(4)

Name of Project :	CONSTRUCTION OF BEHLI LAL DRAMAN ROAD KM 4 TH TO 19 TH BY WAY OF E/WORK AND & Walling {PHASE IST} .
1. Length of Road .	16 Km.
2. COST	Rs: 803.26 lacs
3. Terrain	Hilly
4. Right of way	12.00 Mtrs.
5. Formation width	6.0 mtr.
6. Carriage way	3.75 mtr.
7. Pavement	(A) Existing = ----- (B) Proposed = -----
8. Time of completion	3 years


Asstt. Executive Engineer,
PWD (R&B) East Sub-Divn
Doda.


Executive Engineer,
PWD (R&B) Spl Sub-Divn,
Doda.

5

CERTIFICATE

Construction of Bheli Lal Draman road by way of Earth work & walling Km 4th to km 19th Phase Ist

1. The land is free from encumbrances and is available with PWD/Government. No land Acquisition is required for this project.
2. No original work on the reach as mentioned above has been under taken in last three years and no original works has been sanctioned in these reaches under any scheme by the State Government / Central Government.
3. The proposed work is as per the IRC Codes & specifications and rates are realistic analysed on the basis of standard Data book of MORT&H with respect to market rates duly approved by the competent authority.
4. The above proposed work is for Major District Road.


Executive Engineer,
PWD(R&B) Divn.
Doda

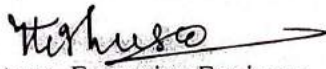
Superintending Engineer,
PWD (R&B) Circle
Doda

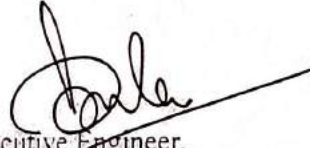
Chief Engineer,
PW (R&B) Deptt.
Jammu

SALIENT FEATURES.

Name of Scheme : CONSTRUCTION OF BEHLI LAL DRAMAN ROAD KM 4TH TO 19TH
BY WAY OF E/WORK {PHASE IST} .

1. Road falls in Tehsil and Distt: Doda in Doda constituency :
2. The road is off shoot of Doda Bharth road and other feeder Road to other roads in area.
3. The vast population of more than five thousand souls of the area shall be connected to the Distt. HQ i.e Doda town.
4. The area has a huge produce in the shape of walnuts, Agriculture products , other forest items besides tourist spot Lal Draman.
5. On funding under CRF can keep the hopes of the people of the area alive.
6. A viable single line connectivity of the main feeder road to the Distt: head quarter will ensure the safe and smooth connectivity to Batote Kishtwar National Highwah IBalso.
7. More than ten villages shall get benefited by construction of this road.
8. The Proposed Earth work cutting under CRF with formation width of 6.0 mtr and carriage way width 3.75 mtr. Will definitely boost the socio economic status of area, besides development of tourism in Distt: Doda.

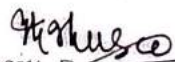

Asstt. Executive Engineer,
PWD (R&B) East Sub-Divn
Doda.


Executive Engineer,
PWD (R&B) Spl Sub-Divn,
Doda.

⑦

BREAK UP OF COST

S.No	Items of work	Cost (in lacs)	Percent of Total cost.
01	EARTH WORK	761.39	94.79 %
02	MISCELLANEOUS	41.87	5.21 %
	TOTAL	803.26	100.00


Asstt. Executive Engineer,
PWD (R&B) East Sub-Divn
Doda.

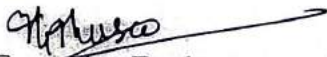

Executive Engineer,
PWD (R&B) Spl Sub-Divn.
Doda.

8

ABSTRACT OF COST

Name of Scheme:- Construction of Bheli Lal Draman road by way of E/work from km 4th to km 19th {Phase Ist }

S.No	PARTICULARS	Amount (IN lacs)
01	Earth work and walling km 4 th to 19 th (Estt: and Charts enclosed)	Rs. 761.39
	Total	Rs 761.39 ✓
	Add 3 % for work charge and contingencies .	Rs: 22.84
	Add 1 % for quality control	Rs: 7.61 ~
	Add 1.5% for establishment charge	Rs: 11.42
	Grant Total	Rs:803.26


Asstt:Executive Engineer,
PWD(R&B) East Sub-Divn.


Executive Engineer,
PWD(R&B) Spl. Sub-
Division, Doda

Distt: Superintending Engineer.
PWD(R&B) Circle ,Doda

⑨

DETAILED ESTIMATE FOR CONSTRUCTION OF BHELI LAL DRAMAN ROAD KM 4TH TO 19TH BY WAY OF E/WORK AND WALLING.

S.No	Description	Qty.	Rate/unit	Amount.
1.	Falling of trees of the girth (measured at ht. 1 mtr. above GL) including cutting of trunks & branches, removing the roots and staking of serviceable materials:- 1. Beyond 30 cm girth upto and incl. 60 cm girth.	224 170	156/each	34944.00 26520
2.	E/work in excavation over areas (exceeding 30 cm in depth. 1.5 mtr. width as well as 10.0 sqm on plan) incl: disposal of excavated earth, and lift upto 1.5 mtr. disposed earth to be leveled and neatly dressed:- i. In all kinds of soils ii. Ordinary rock iii. Hard rock(requiring blasting)	147246.60 98888.79 95623.00	143.00/m ³ 216.50/m ³ 266.50/m ³	21056264.00 21409423.00 25483529.00
3.	Random rubble masonry in cement mortar 1.6 (1 cement : 6 coarse sand) with nallah stone in foundation and plinth incl: leveling up with C.conc. 1:6:12 (1 cement : 12 coarse sand 6 graded stone aggre. 20 mm nominal size) at plinth level: i. Excl: cost of stone @ 40%	3267.82	1781.00/m ³	5819987.00
4.	Dry Random rubble masonry in foundation and plinth (nallah stone) i. Excl: cost of stone @ 60%	4901.73	458.00/m ³	2244992.00
5.	Hand packed filling stone or spall on horizontal. i. Excl: cost of stone	674.12	133.80/m ³	90197.00
				76139336.00

Jr. Engineer

Signature
Asstt. Executive Engineer,
PWD(R&B) East Sub-Divn.
Doda

Says Rs. 761.39 lacs.

Signature
Executive Engineer,
PWD(R&B) Spl. Sub- Division.
Doda

5/20/1
b

MINISTRY OF SHIPPING ROAD
TRANSPORT AND HIGHWAY

STANDARD DATA BOOK FOR
ANALYSIS OF RATES
(FIRST REVISION)

(W)

USAGE BASIC RATES OF LABOUR, MATERIAL AND MACHINERY FOR
BHELI LAL DRAMAN ROAD.

Part "A" Labour

S.No:	Description	Unit	Rate
01	Mason Ist Class	Each	Rs: 350.00
02	Mason 2 nd Class	Each	Rs: 300.00
03	Blaster	Each	Rs: 250.00
04	Driller	Each	Rs: 250.00
05	Mate	Each	Rs: 200.00
06	Mazdoor	Each	Rs: 150.00

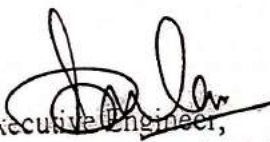
Part "B" Material .

S.No:	Description	Unit	Rate
01	Cement	M.T	Rs: 6900.00
02	Sand (incl: load, un-loading and carriage	M3	Rs: 750.00
03	Water	K.L	Rs:50.00
04	Gelatine	KG	Rs: 82.80
05	Detonators i. (ordinary) ii. (Electronic)	Each Each	Rs: 4.00 Rs: 12.00
06	Fuse Coil	Each	21.00

Part "C" Machinery .

S.No:	Description	Unit	Rate
01	Dozer D80-A,12	Hour	Rs: 3600.00
02	Front loader 1 CUM bucket Capacity	Hour	Rs: 780.00
03	Tipper- 5 cum	Hour	Rs: 300.00
04	Air Compressor	Hour	Rs:309.00




Executive Engineer,
PWD(R&B) Special Sub- Div.
Doda

12

CUTTING OF TRESS, INCLUDING CUTTING OF TRUNKS, BRANCHES AND REMOVAL,

Cutting of Trees, including cutting of Trunks; branches and removal of stumps, roots stacking of serviceable material with all lifts and upto a lead of 1000m and earth filling in the depressions/ pit.

UNIT = EACH

(i) GIRTH from 300mm to 600mm

S.No	Reference to MORT & H Specifications	Description	Unit	Qty	Rate	Amount Rs:in lacs
2.1	201	Part (A) Labour				
		i) Mate	day	0.02	200.00	4.00
		ii) Mazdoor for cutting trees incl: cutting, refilling, compaction of back filling and stacking of serviceable materials within 1000m lead by manual means	day	0.60	150.00	90.00
		Part(B) Machinery.				
		i) Tractor- trolley .	Hour	0.10	351.00	35.10
					Sum	129.10
		Add 10% for over head charges				12.91
					Total	142.01
		Add 10% for contractor's profit				14.20
					Total	156.21

Says Rs: 156/ each


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PWD (R&B) Spl. Sub. Divn.
4 DODA

(13)

EARTH WORK ON HILL ROAD.

EXCAVATION IN HILLY AREAS IN SOIL BY MECHANICAL MEANS

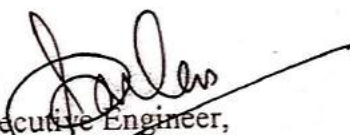
Excavation in soil in hilly area by mechanical means including cutting and trimming of side slopes and disposing of excavated earth with all lifts and lead upto 1000mt.

UNIT= CUM

TAKING OUT PUT = 260 CUM

S.No	Reference to MORT & H Specifications	Description	Unit	Qty	Rate	Amount Rs:in lacs
3.32	301	Part (A) Labour Component.				
		i) Mate	day	0.24	200.00	48.00
		ii) Mazdoor for trimming slopes & helping in excavation etc	day	6.00	150.00	900.00
		Part (B) Machinery.				
		i) Dozer 180 HP (D-80 A 12) @ 43.28 cum per hour	hour	6.00	3600.00	21600.00
		ii) Front and loader	hour	6.00	780.00	4680.00
		iii) Tipper 5.5 cum capacity 4 trips per hour.	hour	12.00	300.00	3600.00
					Sum	30828.00
		Add 10% for over head charges				3082.80
						Total 33910.80
		Add 10% for contractor's profit				3391.08
						Total 37301.88
		.. Rate per Cum = $\frac{37301.88}{260}$				143.46

Say Rs: 143.00/ m3


 Executive Engineer,
 PWD(R&B) Special Sub- Div.
 Doda

(14)

Excavation in hilly areas in ordinary rock by Mechanical means not requiring blasting for disposal lead upto 1000 mt

UNIT = CUM TAKING OUT PUT = 170 CUM

S.No	Reference to MORT & H Specifications	Description	Unit	Qty	Rate	Amount Rs:in lacs
3.33	301	Part (A) Labour				
		i) Mate.	day	0.32	200.00	64.00
		ii) Mazdoor	day	8.00	150.00	1200.00
		Part (B) Machinery.				
		i) Dozer 180 HP (D-80 A 12) @ 28.32 cum per hour	hour	6.00	3600.00	21600.00
		ii) Front and loader	hour	7.00	780.00	5460.00
		iii) Tipper 5.5 cum capacity 4 trips per hour.	hour	7.00	300.00	2100.00
					Sum	30424.00
		Add 10% for over head charges				3042.40
					Total	33466.40
		Add 10% for contractor's profit				3346.64
					Total	36813.04
		.. Rate per Cum = $\frac{36813.04}{170}$				216.54

Say Rs: 216.50/ m3


 Executive Engineer,
 PWD(R&B) Special Sub- Div.
 Doda

15

Excavation in hilly areas in Hard rock by requiring blasting disposal lead upto 1000 mt

UNIT = CUM TAKING OUT PUT = 170 CUM

S.No	Reference to MORT & H Specifications	Description	Unit	Qty	Rate	Amount Rs:in lacs
3.34	301	Part (A) Labour				
		i) Mate.	day	0.49	200.00	98.00
		ii) Mazdoor	day	10.00	150.00	1500.00
		iii) Driller	day	2.00	250.00	500.00
		iv) Blaster	day	0.25	250.00	62.50
		Part (B) Machinery.				
		i) Dozer 180 HP (D-80 A 12) @ 28.32 cum per hour	hour	6.00	3600.00	21600.00
		ii) Air Compressor 250 Cfm with two jack hammer @ 20 cum per hour	hour	5.00	309.00	1545.00
		ii) Front and loader	hour	7.00	780.00	5460.00
		iii) Tipper 5.5 cum capacity 4 trips per hour.	hour	7.00	300.00	2100.00
		Part © Materials				
		i) Gelatine 80 percent	KG	35.00	82.80	2898.00
		ii) Electric Detonators @ 1 detonator for 2 Gelatine sticks of 125 gms each	Nos	140.00	12.00	1680.00
					Sum	37443.50
		Add 10% for over head charges				3744.35
		Add 10% for contractor's profit				41187.85
						4118.78
					.. Rate per Cum = $\frac{45306.63}{170}$	45306.63
						266.50

Says Rs: 266.50/Cum


 Executive Engineer,
 PWD(R&B) Special Sub- Div.
 Doda

16

Stone masonry Work in cement mortar 1:6 in foundation complete as per Drawing and technical specification using available stone from cutting of Hard rock (labour rate only)

UNIT = CUM TAKING OUT PUT = 5 CUM (Random Rubble masonry coursed/uncoursed)

S.No	Reference to MORT & H Specifications	Description	Unit	Qty	Rate	Amount Rs:in lacs
		Part (A)				
		i) Cement mortar.	cum	1.55	2443.02	3786.68
		Part (B) Labour				
		i) Mate	day	0.62	200.00	124.00
		ii) Mason	day	6.00	350.00	2100.00
		iii) Mazdoor	day	9.00	150.00	1350.00
					Sum	7360.68
		Add 10% for over head charges				736.06
					Total	8096.76
		Add 10% for contractor's profit				809.67
		.. Rate per Cum = $\frac{8906.42}{5}$			1781.28	8906.42

Says Rs: 1781.00/Cum

sd


Executive Engineer,
PWD(R&B) Special Sub- Div.
Doda

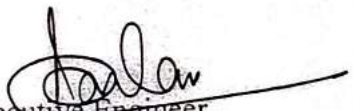
(17)

Random Rubble masonry coursed/uncoursed laid dry in foundation using available stone from cutting of Hard rock.

UNIT = CUM TAKING OUT PUT = 5 CUM

S.No	Reference to MORT & H Specifications	Description	Unit	Qty	Rate	Amount Rs:in lacs
3.34	301	Part (A) Labour				
		i) Mason 2 nd class.	day	3.15	2300.00	945.00
		ii) Mate	day	0.62	200.00	124.00
		iii) Mazdoor	day	5.50	150.00	825.00
					Sum	1894.00
		Add 10% for over head charges				189.40
						2083.40
		Add 10% for contractor's profit				208.34
						2291.74
		.. Rate per Cum = $\frac{2291.74}{5}$				458.34

Says Rs: 458/M3


 Executive Engineer,
 PWD(R&B) Special Sub- Div.
 Doda



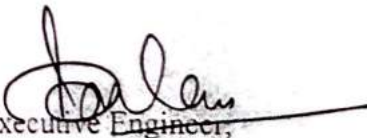
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Back filling behind R/Walls with available stones from cutting of Hard rock.

UNIT = CUM TAKING OUT PUT = 10 CUM

S.No	Reference to MORT & H Specifications	Description	Unit	Qty	Rate	Amount Rs:in lacs
13.9		Part (A) Labour				
		i) Mate	day	0.28	200.00	56.00
		ii) Mazdoor	day	7.00	150.00	1050.00
					Sum	1106.00
		Add 10% for over head charges				110.60
						1216.60
		Add 10% for contractor's profit				121.66
					Total	1338.26
					.. Rate per Cum = $\frac{1338.26}{10}$	133.82

Says Rs: 133.80/M3


Executive Engineer,
PWD(R&B) Special Sub- Div.
Doda

Carriage of material i.e Sand
Loading and un loading of sand.

UNIT = CUM TAKING OUT PUT = 5.5 CUM

S.No	Reference to MORT & H Specifications	Description	Unit	Qty	Rate	Amount Rs:in lacs
1.1		Part (A) Machinery				
		i) Tipper 5.5 tonnes capacity	hour	0.33	300.00	99.00
		ii) Front end loader/ cum bucket capacity @ 25 cum/hour	hour	0.33	780.00	257.40
					Sum	356.40
		Add 10% for over head charges				35.64
				Total		392.04
		Add 10% for contractor's profit				39.20
		.. Rate per Cum = $\frac{431.24}{5.5}$			78.40	431.24

Says Rs: 78/M3


 Executive Engineer,
 PWD(R&B) Special Sub- Div.
 Doda

(20)

ANALYSIS FOR SAND RATE AT SITE.

S.No:	Description	Unit	Rates:
01/-	Supply at Source	M3	Rs:467.00
02/-	Loading un-loading	M3	Rs: 78.00
03/-	Carriage from Prem Nagar to site of work		
	i) in surfaced road from 32 kms weight 1.6MT/M3 1.60x32x2.50	M3	Rs:128.00
	ii) In kacha portion 1.60x8.0x6.0	M3	Rs: 76.80
Total:			Rs:749.80 lacs

Says Rs: 750/M3


Executive Engineer,
PWD(R&B) Special Sub- Div.
Doda

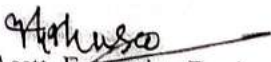
(21)

APPLICATION FOR ACCORD OF ADMINISTRATIVE APPROVAL

Name of Scheme	CONSTRUCTION OF BEHLI LAL DRAMAN ROAD KM 4 TH TO 19 TH BY WAY OF E/WORK AND WALLING IN PHASE IST
Project length	16.00 km
Authority:-	Verbal orders of Hon'ble Chief Minister Jammu & Kashmir state.
History & Necessity	The construction of the road was taken up in the hand during the year 1987-88 as per the decision of the Distt. Development Borad meeting held at Batote. The main beneficiaries of the said road are the people residing in villages Dudhot, Dhar, Shurian, Barshalla, Koti, Phulel, Bijarni, Sazan and finally Lal Draman comprising of a populace of 5000 souls. The construction of the road continued upto 1990-91 within the scope of funds available but the construction work slowed down since then due to restrictions in using of explosives in view of the circumstances which prevailed in the state and District Doda in particular during past years. A length of 3.00 kms stands made to B.T status and 0.5 km upto F.W status in km 4th. An expenditure of Rs 15.08 lacs stands incurred on the schemes ending 31/3/1997. upto km 5th (partly) & an expenditure of Rs 85.80 lacs under RIDF VII by way of Earth work and walling in bringing the road to above mentioned status. The A/A/A to the extent of expenditure incurred stands accorded vide Chief Engineer PWD(R&B) Deptt. Jammu's No.J/2429-35 dated 28-02-97 The construction of road was taken up in hand by R.E.W during the year 1994-95 from km 6th to 8th and have executed the work partly. This A/A/A envisages the completion of balance the earth work and walling from km 4th to 8th, E/work and walling km 9th to 19th, dry B/Wall and other required provisions of the road construction. The constt. of this road besides benefiting the people of the area falling enroute the alignment will develop the tourist potential because Lal Draman the target spot of the road is a naturally developed tourist resort but short of a other motarable communication link from the Distt. Head quarter as well as the parts of the area.
Proposals	The formations of the road is proposed to be 6 OM almost cutting with extra width at curves and crossing places. The ruling gradient of the road will be 5%. An up hill side drain of the order of 0.6 mtr.x 0.60m shall invariably be constructed because drainages are life of the road. The back slopes in E/work vary from 1:6 to 1:12 as per classification of the strata.

22

Proposal	a) Road formation : - The formation of the road is proposed to be 6.0 mtr. almost incutting with extra width at curves and crossing places. The ruling gradient of the road will be 5 %	x
(B.) Availability of Labour	The skilled as well as unskilled labour is guaranteed throughout the year as the population enroute the proposed alignment and adjoining areas are living below poverty line and dependent on such labour generating development projects	x
✓ (C) Time and Cost	The Scheme shall cost <u>Rs: 803.00</u> lacs as per General Abstract of cost and take 3 year for completion subject to availability of funds and early sanction of the project	


Asstt. Executive Engineer,
PWD (R&B) East Sub-Divn
Doda.


Executive Engineer,
PWD (R&B) Spl Sub-Divn.
Doda.

(21)

ABSTRACT EARTHWORK CHART FOR CONSTRUCTION OF BHELI LAL-DRAMAN ROAD FROM KM 5TH TO 19TH

KM	ALL KINDS OF SOILS (M ³)	SOFT ROCK (M ³)	HARD ROCK (M ³)	R.R. MAS DRY (M ³)	H.P.S FILL (M ³)
4TH	5581.59	3234.27			
5TH	4069.09	4930.48	5736.97	500.00	38.52
6TH	6545.12	7641.30	9266.02	201.42	20.7
7TH	5978.21	5711.57	6190.19	201.92	24.5
8TH	5339.19	5825.69	4124.84	354.04	172.3
9TH	6921.90	9229.20	5127.82	352.17	10.06
10TH	9150.00	6862.50	6921.90	500.00	—
11TH	12218.40	6109.20	6862.50	500.00	—
12TH	6389.40	8519.20	2036.40	500.00	70.4
13TH	14835.00	8901.00	6389.40	500.00	—
14TH	9820.00	592	5934.00	500.00	—
15TH	9735.50	3928.00	3928.00	700.00	216.2
16TH	12096.00	3894.20	5841.30	700.00	114.6
17TH	12539.70	4837.40	7257.60	500.00	—
18TH	12536.50	9753.10	5573.20	500.00	—
19TH	13491.00	5014.60	7521.90	500.00	—
Total	147246.60	98888.79	4497.00	500.00	—
No. of trees km 9TH TO 19TH = 15+20+17+15+12+17+13+10+10+45+50 = 224 Nos					0189.55 674.
(Girth 30cm upto 60cm)					

Assistant Engineer

Executive Engineer

RD(0-1000) OF

9/2

E/W		CUTTING		CLASSIFICATION		CLASSIFICATION / QTY		R.R. MAZ. DRY		H.P.S. FILLING		
RD	L	A (M)	T.A	M.A	QTY (M ³)	CL ASSIFICATION	QTY	L	A	T.A	M.A	QTY (M ³)
-	-	-	8.8.8	-	-	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
-	-	-	-	-	-	RD (500-600)	25%	25	-	2.92	1.46	36.50
-	-	-	-	-	-	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	4.60	4.60	2.30	57.50	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	5.45	10.05	5.02	125.50	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	19.61	25.06	12.53	313.25	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	6.64	26.25	13.12	320.00	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	14.45	21.09	10.54	263.50	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
-	-	-	-	-	-	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	55.20	76.04	30.02	950.50	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	3.17	58.45	29.22	730.50	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	7.99	11.16	5.58	139.50	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	9.09	17.88	8.94	223.50	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	20.95	30.84	15.42	385.50	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	9.36	30.31	15.15	370.75	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
-	-	-	-	-	-	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	6.00	27.87	13.83	345.75	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	12.46	18.46	9.23	230.75	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	32.96	45.42	22.71	567.75	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	16.55	49.51	24.75	418.75	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	19.10	35.85	17.82	445.50	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
25	25	8.72	27.82	13.91	347.75	RD (500-600)	40%	25	2.92	2.92	1.46	36.50
Add for piling zone:						RD (500-600)	40%	25	2.92	2.92	1.46	36.50
Total						RD (500-600)	40%	25	2.92	2.92	1.46	36.50
Total for piling zone:						RD (500-600)	40%	25	2.92	2.92	1.46	36.50
Total						RD (500-600)	40%	25	2.92	2.92	1.46	36.50

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EXECUTIVE ENGINEER
P.W.D. (R&B) SPL. SUB DIVN
DODA

ASSISTANT EX. ENGINEER
R&B SUB DIVN
DODA

EARTHWORK AND WALLS
OF BHELI

LAL DRAMAN ROAD:

[illegible]

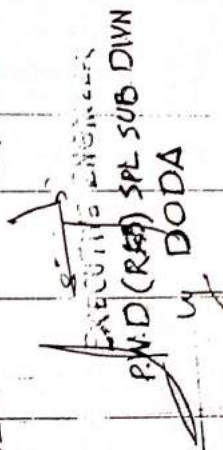
Asst. Executive Engineer
P.W.D. (C.C.) East Sub-Divn

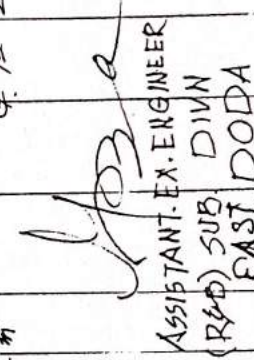
Executive Engineer
P.W.D. (R&B) Spl. Sub. Div.
14 Dec.

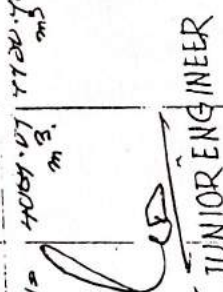
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P. 2nd.

CUTTING				CLASSIFICATION / QTY				R.R. MAS. DRY				H.P.S. FILLING				
RD	E/W	L	A (M)	T-A	M.A	QTY (M)	CLAS. WISE QTY	SOILS	S.R	H.R	L	A	T-A	M.A	QTY (M)	QTY (M)
525	25	8.76	22.59	11.29	202.25	202.25	1647.58	2745.97	40%	6590.34					75.50	20.75
550	25	16.09	24.05	12.42	310.50	310.50	RD (500 - 1000)	30%								
575	25	6.98	23.07	11.53	200.25	200.25										
600	25	7.47	14.45	7.22	180.50	180.50										
625	25	7.86	15.33	7.66	191.50	191.50										
650	25	19.43	27.29	13.84	341.00	341.00										
675	25	11.01	30.44	15.22	380.50	380.50										
700	25	7.54	18.55	9.27	231.75	231.75										
725	25	15.37	23.11	11.55	288.75	288.75										
750	25	5.10	20.67	10.33	258.25	258.25										
775	25	22.18	27.28	13.84	341.00	341.00										
800	25	4.07	26.25	13.12	320.00	320.00										
825	25	4.24	8.31	4.15	103.75	103.75										
850	25	20.38	24.62	12.84	307.75	307.75										
875	25	8.75	29.13	14.56	364.00	364.00										
900	25	3.62	12.37	6.18	154.50	154.50										
915	15	15.29	18.91	9.45	141.75	141.75										
925	10	32.06	47.35	23.67	236.70	236.70										
950	25	13.24	45.30	22.65	566.25	566.25										
975	25	14.57	27.81	13.90	347.50	347.50										
100	25	32.26	36.83	18.41	460.25	460.25	6098.74	1829.01		2438.68					75.50	20.75
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 P.W.D. (R&B) SPL SUB DIVN
 DODA


 ASSISTANT EX. ENGINEER
 (R&B) SUB DIVN
 EAST. DODA


 JUNIOR ENGINEER

EARTHWORK AND WALLING CHAKI FOR CONSTRUCTION OF KM 8.12. KU. (D. T. H. A.)

OF BHELI LAL DRAMAY ROAD.

E/WORK					CUTTING		CLASSIFI- CATION - WISE QTY.	CLASSIFICATION/84			R.R. MAZ. DRY				H.P.S. FILLING			
RD	L	A (M)	T.A.	M.A	QTY (M ³)	ALL KIND SOILS		S.R	H.R	L	A	T.A	M.A	QTY (M ³)	A	T.A	M.A	QTY
0	-	16.23	-	-	-		25%	50 1/2	25%									
150	150	12.77	29.07	14.50	2175.00													
200	50	20.76	33.53	16.675	833.75													
250	50	13.56	34.32	17.16	855.00													
300	50	30.78	44.30	22.17	1108.50													
350	200	6.21	36.97	18.495	349.00													
400	100	7.50	13.71	6.855	685.50													
450	100	14.54	22.76	11.02	1102.00													
500	25	46.83	64.37	30.685	3067.12													
550	75	16.26	63.09	31.895	3189.50													
600	100	48.20	64.48	32.24	3224.00													
650	100	40.76	89.16	44.58	4458.00													
App for constn. of					Total													
Laying 30mm = 3 x 2.5m x 1500m					= 1125 m ²													
with 50% 0.5m ²																		
30% 8R																		
20% 11R																		

BHEL - LAL DRAMAN ROAD.

E/W		CUTTING			CLASSIFICATION / QTY				R.R. MA9. DRY			H.P.S. FILLING						
RD	L	A (m)	T.A	M.A	QTY (m³)	CLAS. WISE	SOILS	GR	H.R	L	A	T.A	M.A	QTY (m³)	A	T.A	M.A	QTY (m³)
0	-	24.58	-	-	-	RD (0-75)	20%	30%	50%									
75	75	30.77	55.35	27.85	2075.62	2075.62	415.12	622.63	1037.81									
125	50	18.28	49.05	24.50	1226.25	RD (75-500)	35%	40%	25%									
400	275	12.11	30.39	15.19	4178.62													
500	100	15.57	27.62	13.80	1381.00	6785.87	2375.05	2744.34	1696.48									
700	200	6.26	21.77	10.88	2177.00	RD (500-1000)	45%	35%	20%	50	3.00	3.00	1.50	75.00	3.52	1.76		88.00
800	100	9.56	15.02	7.91	791.00													
825	25	2.74	12.27	6.13	153.37					25	2.85	2.85	1.42	35.62	6.75	3.375		84.37
850	25	15.69	18.40	9.20	230.00					50	1.50	1.50	0.75	37.50	-	-		-
1000	150	16.53	32.22	16.11	2416.50	5767.87	2595.56	2018.75	1153.57	108	2.86	2.86	1.43	148.12	-	-		172.374
APR for passing zones:					Total		5385.71	5355.77	3087.84					205.92				
5 x 25 m x 15-80 m ²						1185.00	592.80	355.80	237.41									
with 50% dry quarry soil.						C.T	5978.24	5711.57	4124.84									
80% left stock.																		
20% hard rock.																		

27

JUNIOR ENGINEER

ASSISTANT EX. ENGINEER
(R&D) SUB. DIVN
EAST DODA

EXECUTIVE ENGINEER
P.W.D. (R&D) SPL. SUB. DIVN
EAST DODA

EARTHWORK AND WALLING CHART FOR CONSTRUCTION OF
RD (0-1000) OF BHELI LAL DRAMAN ROAD

[illegible]

Call for passing forms
5 x 25 in x 15-80 in
with 50 1/2" attacks of rods
20 1/2" soft rock.
20 1/2" hard rock.

20/11/2021

Approved by Engineer
(RGS) Sub-Inspector
Post Office.

[Handwritten signature]

EARTHWORK AND WALLING CHART FOR CONSTRUCTION OF KM 9TH RD (0-1000) OF BHELLAL DRAMAN ROAD

EARTH WORK CUTTING					CLASSIFICATION	R.R. - MAS - DRY			H.P.S. FILLING		
RD	L	A	T-A	M-A	QTY (M ³)	TO CLASSIFICATION OF SOILS	L	A	T-A	M-A	QTY (M ³)
0	-	19.08	-	-	-	30% HARD ROCK	30%	40%	30%	286 × 2.0 × 0.5 × 0.50 = 205.92 M ³	205.92 M ³
250	250	20.50	40.38	20.19	5047.50	40%	40%	40%	40%	40%	40%
500	250	30.65	57.15	25.57	6392.50	30%	30%	30%	30%	30%	30%
750	250	15.80	46.45	23.22	5805.50	40%	40%	40%	40%	40%	40%
900	250	21.34	37.14	18.57	4642.50	40%	40%	40%	40%	40%	40%
Area for passing zones:-						30%	30%	30%	30%	30%	30%
5 × 25 m × 15-80 m						40%	40%	40%	40%	40%	40%

29

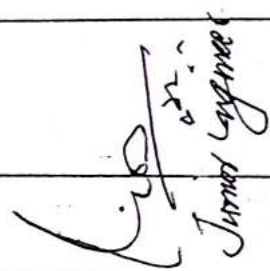
for passing zones:-

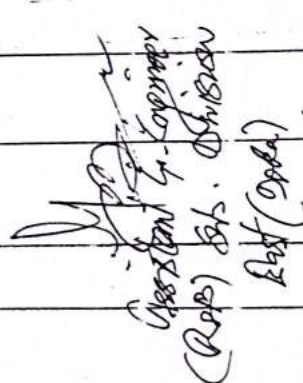
(R.R.) 286 × 2.0 × 0.5 × 0.50 = 205.92 M³

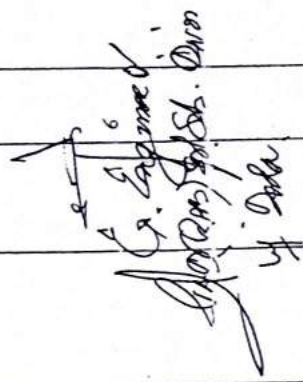
for passing zones:-

EARTHWORK AND WALLING CHART FOR CONSTRUCTION OF KM 10TH RD (0-1000) OF BHELI LAL DRAMAN ROAD.

EARTHWORK CUTTING					TOTAL	CLASSIFICATION			R.R. MAS ORY			H. P. S. FILLING			
RD	L	A	T-A	M.A	QTY (m ³)	ALL KINDS OF SOILS	SOFT ROCK	HARD ROCK	F	A	T-A	M.A	T-A	M.A	QTY (m ³)
0	—	21.34	—	—	—	40%	30%	30%	1	288.2	2.0	20.80	2059.24		
250	250	21.82	43.16	21.58	5395.00				Add for edges likely to be damaged during construction = 294.28.						
500	250	23.04	44.86	22.43	5507.50										
750	250	16.70	39.74	19.87	4967.50										
1000	250	29.26	45.76	22.88	5720.00	8676.00	6507.00	6507.00							
Add for passing roads:						474.00	355.50	355.50							
5 A 2.5m x 15.00m						1185.00									
						G.T.	9150.00	4882.50	4882.50			7.0			
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 J. S. Engineer


 J. S. Engineer
 (R.R.S) S.K. Division
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 J. S. Engineer
 (R.R.S) S.K. Division
 Bhat (Dada)

EARTHWORK AND WALLING CHART FOR CONSTRUCTION OF KM ~~10~~¹¹TH
RD (0-1000) OF BHELI LAL-DRA MAN ROAD.

EARTHWORK CUTTING						CLASSIFICATION			R.R. MAS. DRY			H.P.S. FILLING								
RD	L	A	T.A	M.A.	Qty	ALL KINDS OF SOILS	S.R.	H.R.	L	A	T-A	M-A	QTY(M ³)	A	T.A	MA	QTY(M ³)			
0	-	29.06	-	-		60%	30%	10%												
250	250	22.60	57.66	25.83	6457.00				200	1-80	1.80	0.90	180.00	0.70	0.70	0.35	70.00			
500	250	16.75	39.35	19.67	4910.00				Pts=286x2.0x0.60x0.60=205.92 Provision for edges likely to be damaged during = 114.00 of encasement											
750	250	15.45	32.60	18.34	4005.00															
200	250	13.02	29.75	14.87	3719.00															
Apr for passing zone:- = 3 x 25m x 15.00 m																				
						11507.40	5753.70	1917.90												
						1185.00	741.00	118.50												
						20364	12218.40	6109.20												
						G.Total														

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Sum of squares = 22

(Signature)
Prof. C. Lagman
PhD (R&B) J. S. Dina
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EARTHWORK AND WALLING CHART FOR CONSTRUCTION OF K.M. 12TH RD (0-1000) OF BHEIL LAL DRAMAN ROAD

EARTHWORK CUTTINGS				TOTAL	CLASSIFICATION			R.R. MAX. DRY			H.P.S. FILLING					
RD	L	A	T.A	MA QTY (M ³)	QTY	ALL KINDS OF SLOES	S.R	H.R	L	A	T.A	MA QTY (M ³)	A	T.A	MA QTY (M ³)	
0	—	13.82	—	—		30%	40%	30%	1	285	20	60	205	92		
250	250	13.66	27.48	13743435.00					Provisions for edges likely to be damaged during excavation = 294.08							
500	250	18.77	32.43	16.21	4054.00											
750	250	24.25	43.02	21.51	5377.00											
1000	250	33.73	57.98	28.99	7247.00											
Add for passing zone = 25m x 15-80m					20113.00	6033.90	8045.20	6033.90				70	500.00			
					1185.00	355.50	474.00	355.50								
Total						6389.40	8519.20	6389.40								
					Jurnal Log meor			Assesment Log meor			K.P. Log meor					
					(R.S.S) S.W.S. Dindia			K.P. Log meor			K.P. Log meor					
					K.P. Log meor			K.P. Log meor			K.P. Log meor					

EARTHWORK AND WALLING CHART FOR CONSTRUCTION OF K.M. 13 IH RD (0.1000) OF BHELI LAL - DRAMAN ROAD

EARTHWORK CUTTING										CLASSIFICATION			R.R. MAS. DRY			H.P.S. FILLING				
RD	L	A	T.A	M.A	Qty (m ³)	Total Qty	ALL KINDS OF SOILS	%	%	H.R	L	A	T.A	M.A	Qty (m ³)	L	A	T.A	M.A	Qty (m ³)
0	-	33.73	-	-	-		50%	30%	20%		1	288	28.9	1060	205.92					
250	250	34.15	67.88	33.94	0485.00															
500	250	32.04	66.19	33.09	8274.00															
750	250	18.25	50.30	25.15	6287.00															
1000	250	24.25	43.57	21.75	5439.00															
Add for passing zone:-						28485.00	14242.50	8545.50	5697.00											
3x 25m x 15-80 m						1185.00	592.50	355.50	237.00											
Total						14835.00	901.00	5934.00												
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EARTHWORK AND WALLING CHART FOR CONSTRUCTION OF K.M.B.H. RD (0-1000) OF BHELI LAL DRAMAN ROAD

EARTHWORK CUTTING				CLASSIFICATION			R.R. MAS. DRY			H.P.S. FILLING		
RD	L	A	T.A.	M.A.	QTY (M ³)	ALL KINDS OF SOILS	S.R.	H.R.	L.A.	T.A.	M.A.	QTY (M ³)
0	-	38.50	-	-	-	50%	20%	30%	R.R.S.:- 288 x 2-0 x 0.60 x 0.60 = 205.92			
250	250	11.77	50.27	251.3	6282.00				C.R.S. etc. (L-S) = 294.08			
500	250	27.82	39.69	19.84	4981.00							
750	250	21.89	49.71	24.85	6214.00							
1000	250	22.61	44.40	22.20	5550.00							
Add for passing 200mm												
3 x 25m x 15-80 m												
Total						1185.4	592.50	355.50				
Total						12096.00	4837.40	7257.60				

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[Signature]
J. S. Engineer

[Signature]
Assistant Engr. Engineer
(R.R.S.) Engr. - Division
Dist. (Doda)

[Signature]
A. S. Engineer
R.R.S. Engr. S. Division
4 Doda

EARTHWORK AND WALLING CHART FOR CONSTRUCTION OF KM. ETH RD (0-1000) OF BHELIL LAL DRAMAN ROAD

EARTHWORK CUTTING					TOTAL QTY	CLASSIFICATION			R.R. MAS. DRY			H.P.S. FILLING				
RD	L	A	T.A	M.A. QTY(M ³)		ALL KINDS OF SOILS	SR	HR	L	A	T.A	M.A	QTY(M ³)	T.A	M.A	QTY(M ³)
0	-	22.81	-	-		45%	35%	20%	10%	20%	20%	20%	20%	20%	20%	20%
250	250	24.39	47.00	23.50	5075.00											
500	250	29.84	54.03	27.01	6753.00											
750	250	30.19	57.83	29.91	7478.00											
1000	250	22.41	52.60	24.30	6575.00											
Add for passing zone:					26681.00	12006.45	9338.35	5336.20								
3 x 35m x 15-80m ² →					1185.00	533.25	414.75	237.00								
					12539.70	1753.10	5573.20									

[Signature]
Junior Engineer

[Signature]
Assistant Engineer
(R.R.) Sub. Division
Bhelil (R.R.) Sub. Division

[Signature]
Es. Engineer
Bhelil (R.R.) Sub. Division
w. Data.

EARTHWORK AND WALLING CHART FOR CONSTRUCTION OF KM. BITH RD (0-1000) OF BHELI LAL - DRAMAN ROAD

EARTHWORK CUTTING					CLASSIFICATION			R.R. MAS DRY			H.P.S. FILLING		
RD	L	A	T.A	MA. QTY (m ³)	TOTAL QTY	ALL KINDS OF SOILS	S-R	H-R	L	A	T.A	M.A.	QTY (m ³)
0	-	22.41	-	-		50%	20%	30%	286	20	10.60	20.60	20.592
250	250	30.48	52.89	26.44	641.00								
500	250	26.80	57.28	28.64	716.00								
750	250	19.34	46.14	23.07	457.00								
1000	250	25.47	44.81	22.40	560.00								
Add for passing zones:					23888.00	11944.00	4777.60	7186.40					
3 x 3.5m x 15-80 m ²					1185.4	592.50	237.40	355.50					
Total						12536.50	5014.00	7521.90					

[Signature]
Junior Engineer

[Signature]
Assistant En. Engineer
(RPS) Sub. Division
East (Doda)

[Signature]
En. Engineer
R.O. (RPS) Sub. Division
W. Doda

EARTHWORK AND WALLING CHART FOR CONSTRUCTION OF KM 19TH RD (0-1000) OF BHEELI LAL DRAMAN ROAD

EARTHWORK CUTTING				CLASSIFICATION			R.R. MAS. DRX			H.P.S. FILLING		
L	A	T.A	M-A	Qty (M ³)	ALL KINDS OF SOILS	SR	H.R	L	A	TA	MA	M-A (M ³)
-	25.47	-	-	-	60%	20%	20%	Notes: - 286 x 20 x 0.80 x 60 = 20592	MA	DTX (M ³)		
0 250	19.05	44.52	22.26	5555.00				Edges etc.			-294.08	
0 250	26.62	45.67	22.83	5709.00								
0 250	19.92	46.54	23.27	5817.00								
0 250	13.75	33.67	16.83	4209.00								
Add for passing zone.												
3 x 25m x 15.80 m												
				1105.4	711.00	237.00	237.00					
				21302.00	12780.00	4960.00	4260.00					
Total					18491.00	4497.00	4497.00					

39

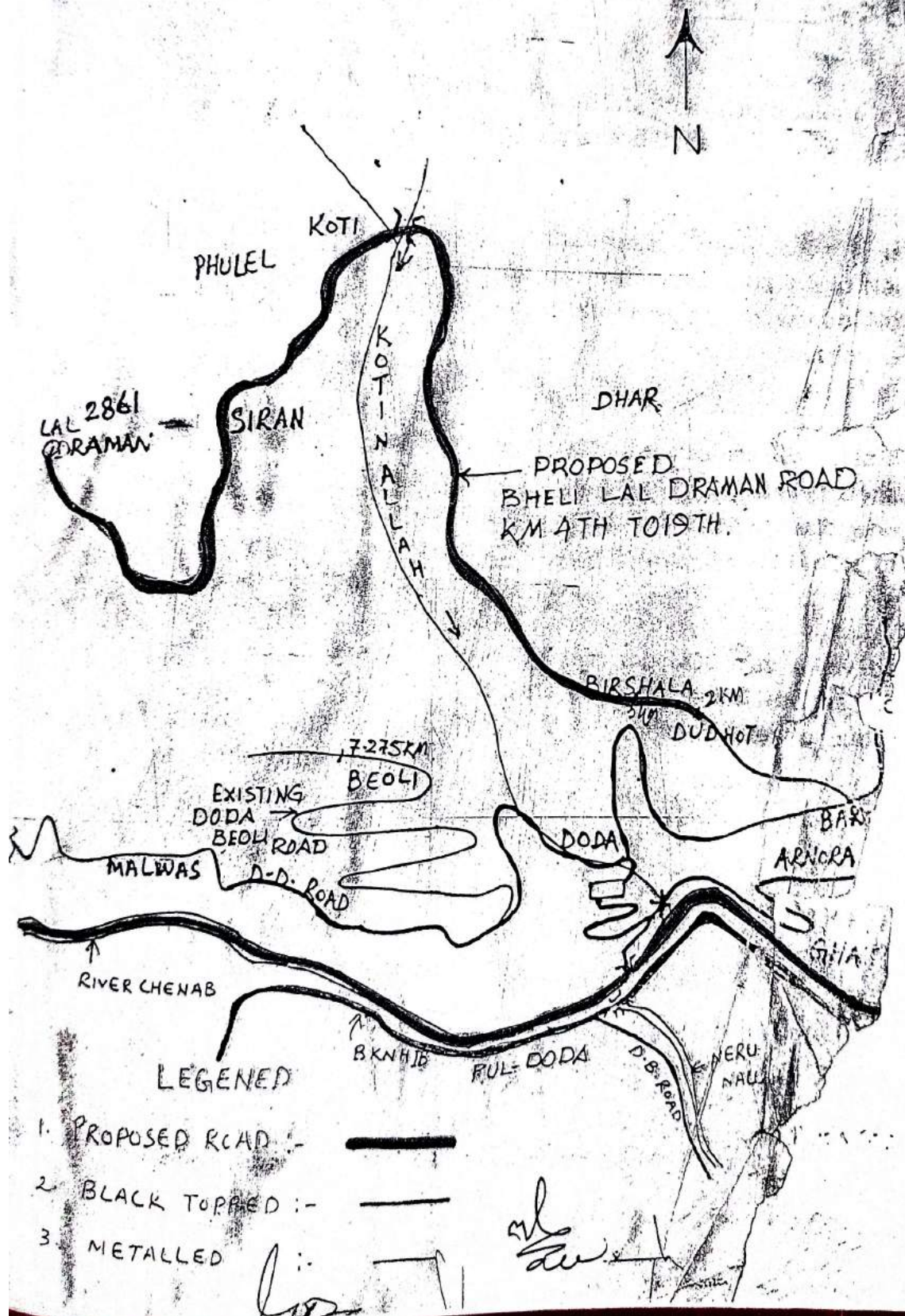
[Signature]
James Engineer

[Signature]
Assistant Engineer
(R.R.S) Sls. Division
East Doda.

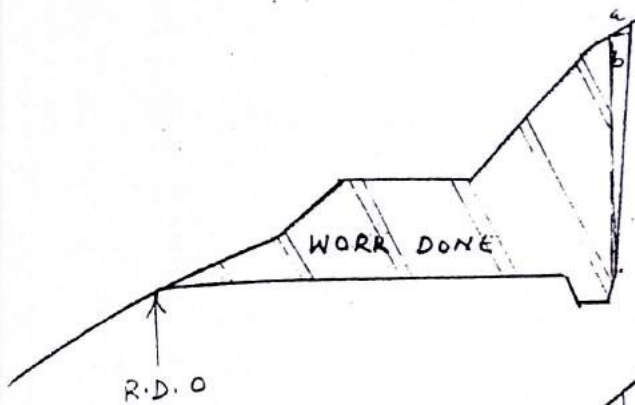
[Signature]
En. Engineer
(R.R.S) Sls. Division
W. Doda.

490

INDEX MAP OF BHELI LAL DRAMAN ROAD

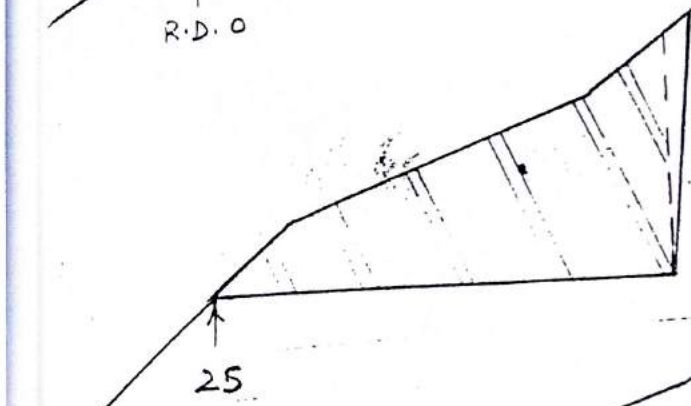


41



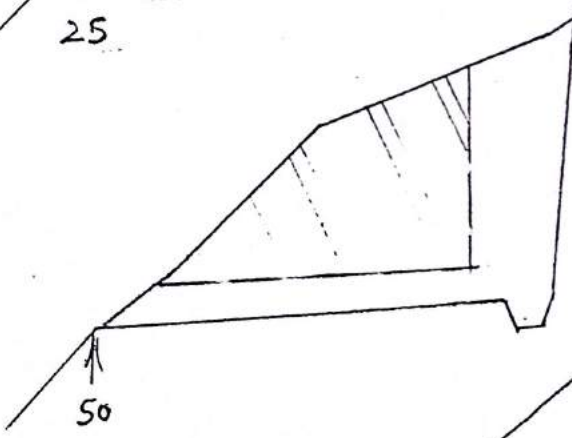
Balance E/work:-

$$T.A = 0.51 \text{ m}^2$$



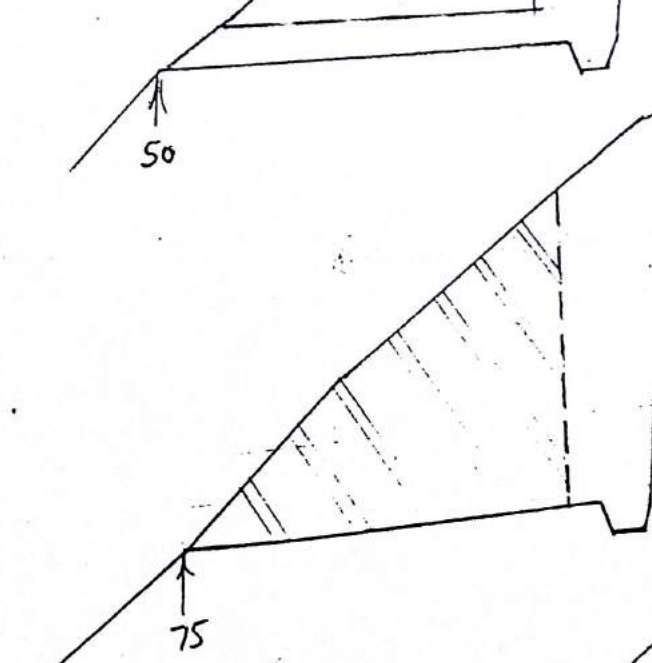
B/E/WORK

$$T.A = 0.52 \text{ m}^2$$



B/E/WORK

$$T.A = 6.90 \text{ m}^2$$



B/E/W

$$T.A = 6.05 \text{ m}^2$$

B/E/WORK
 $T.A = 9.61 \text{ m}^2$

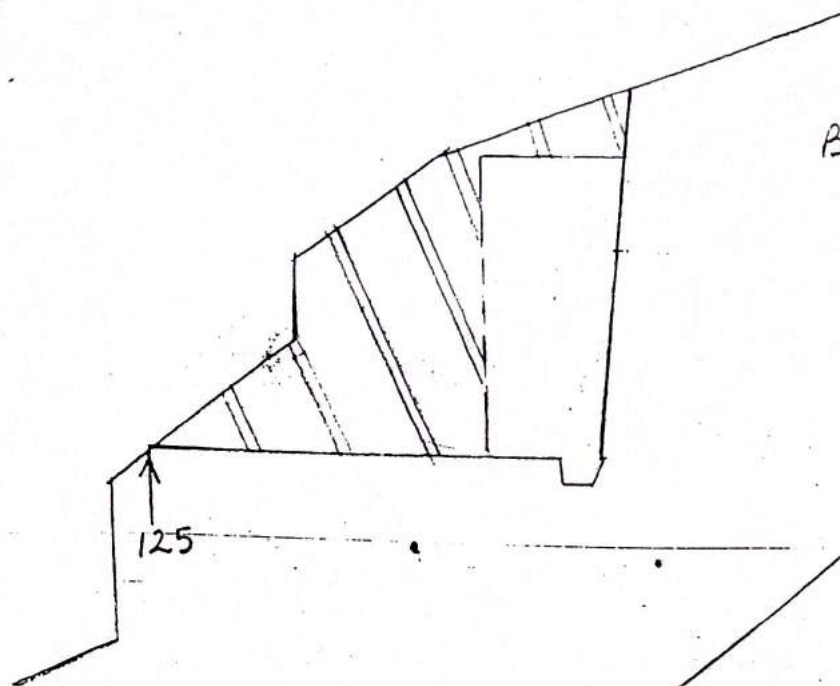
Km 41/2 R.D. (0-100)

[Signature]

Executive Engi

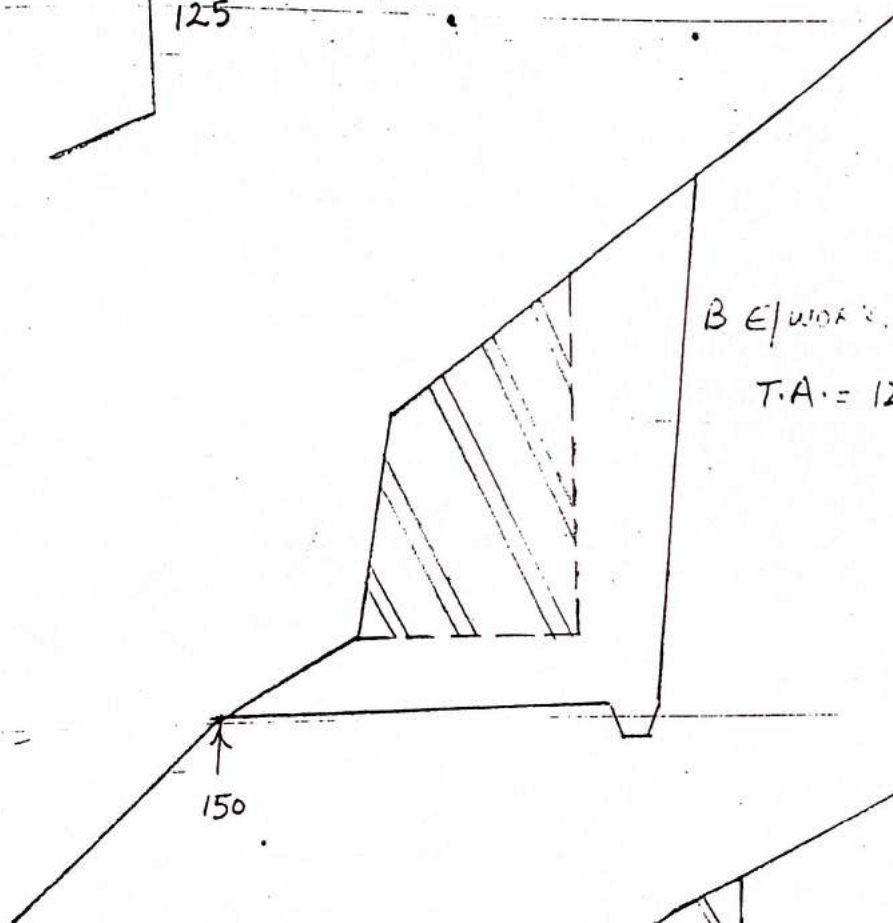
Asst Executive Engineer

42



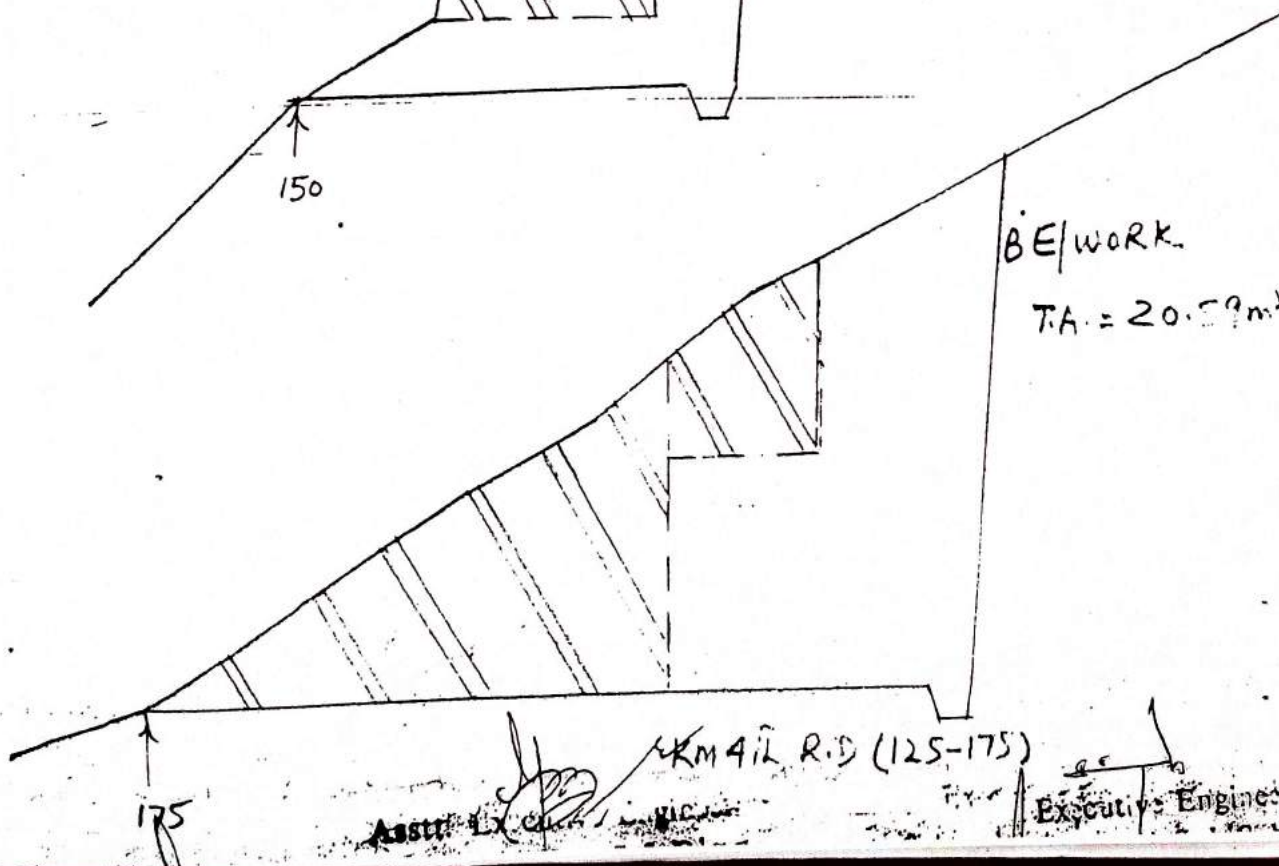
B. E/WORK

$$T.A. = 7.00 m^2$$



B E/WORK

$$T.A. = 12.77 m^2$$



B E/WORK

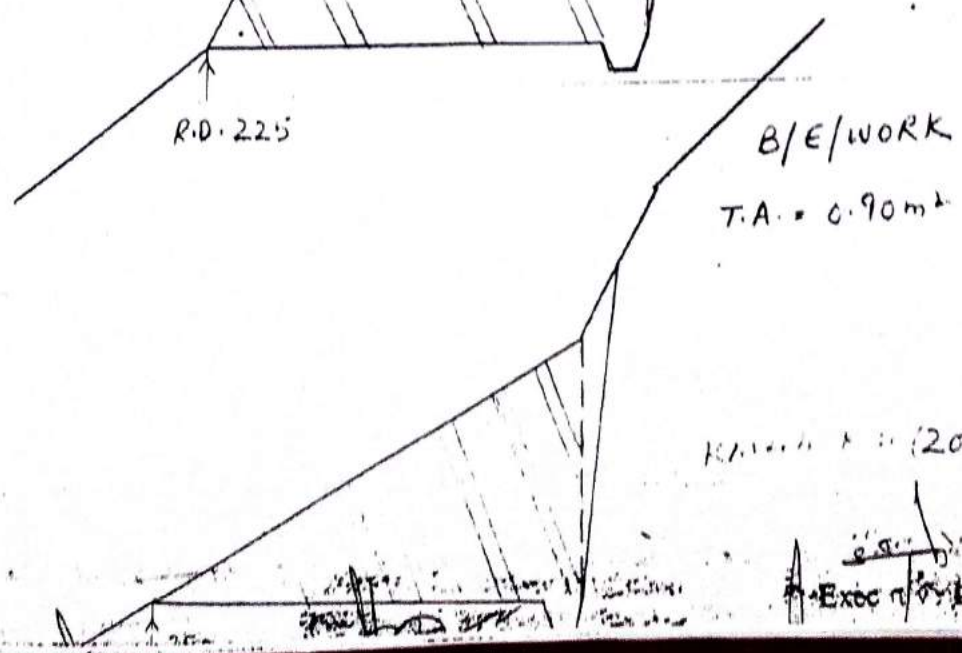
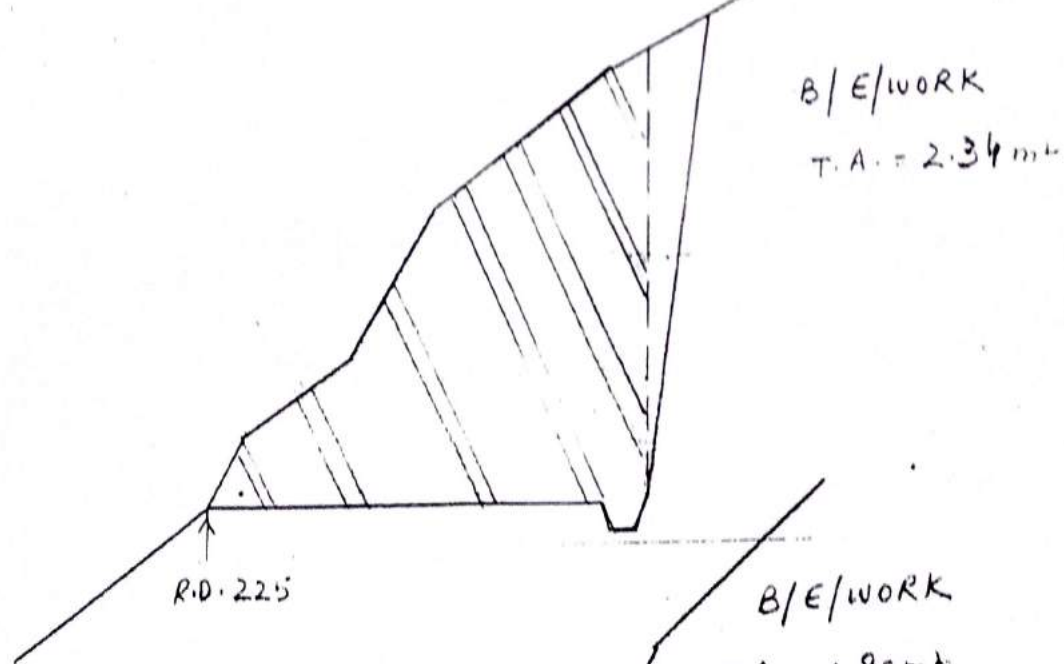
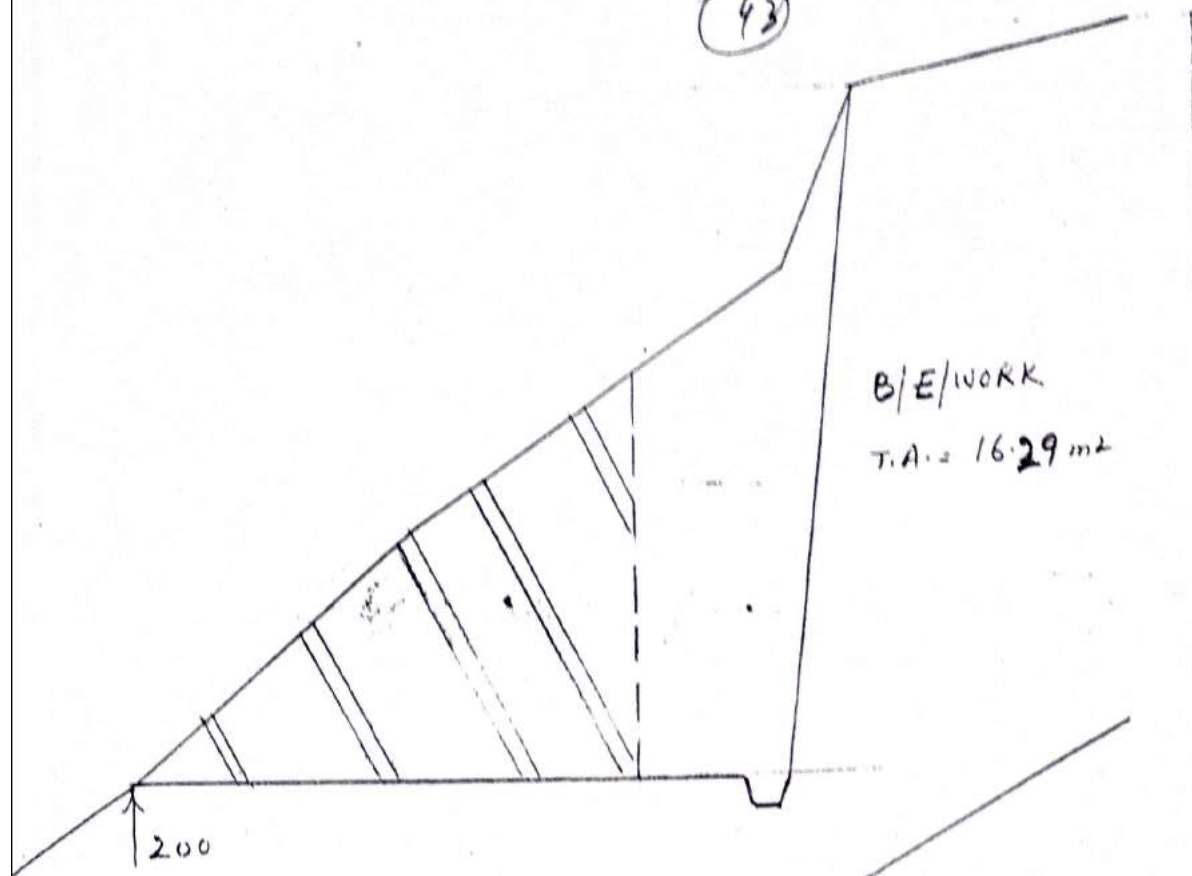
$$T.A. = 20.59 m^2$$

KM 412 R.D (125-175)

Asstt. Engr.

Executive Engineer

43

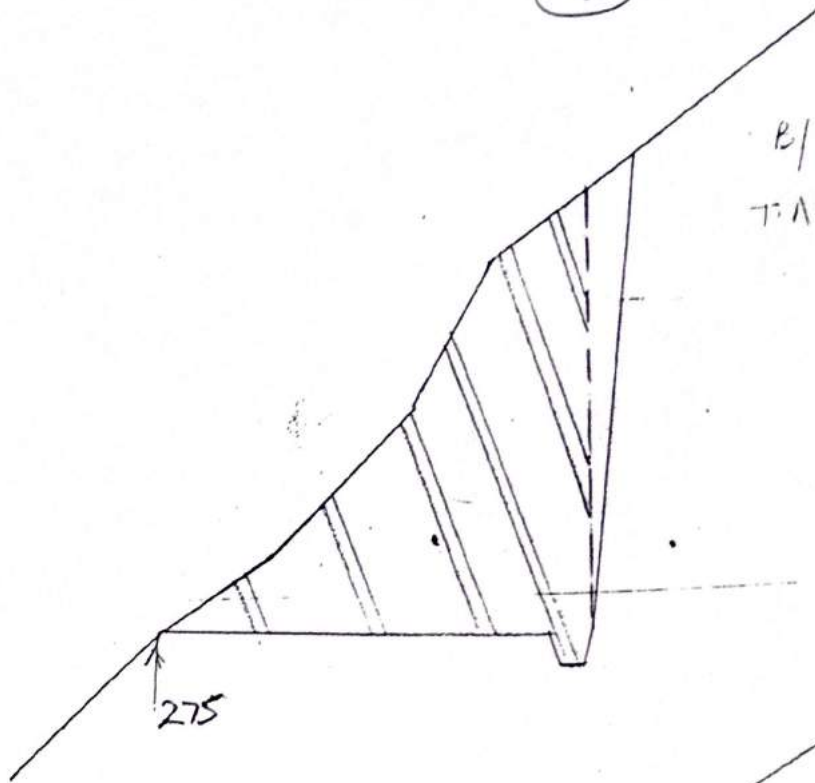


RAILWAY (20m - 25m)

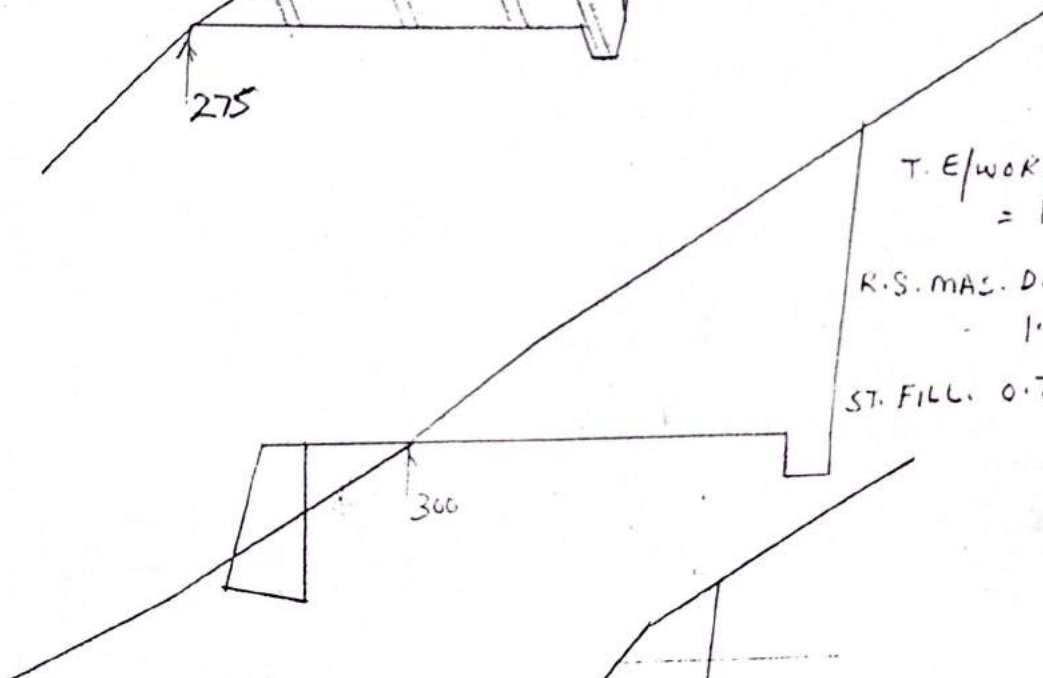
Exec. Engineer

(4W)

B/E/WORK.
T.A. = 1.98m²

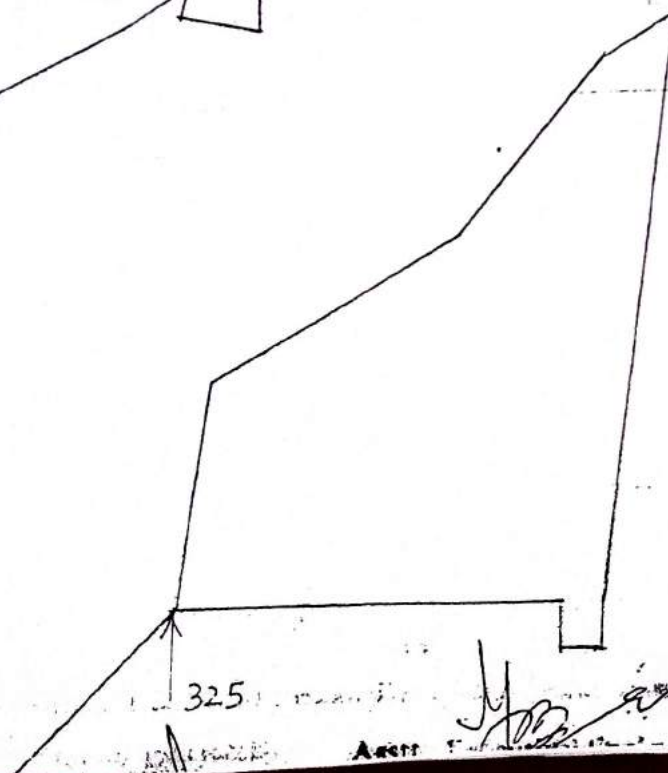


T.E/WORK
= 14.14m²
R.S. MAS. DRY
= 1.70
ST. FILL. 0.70m²



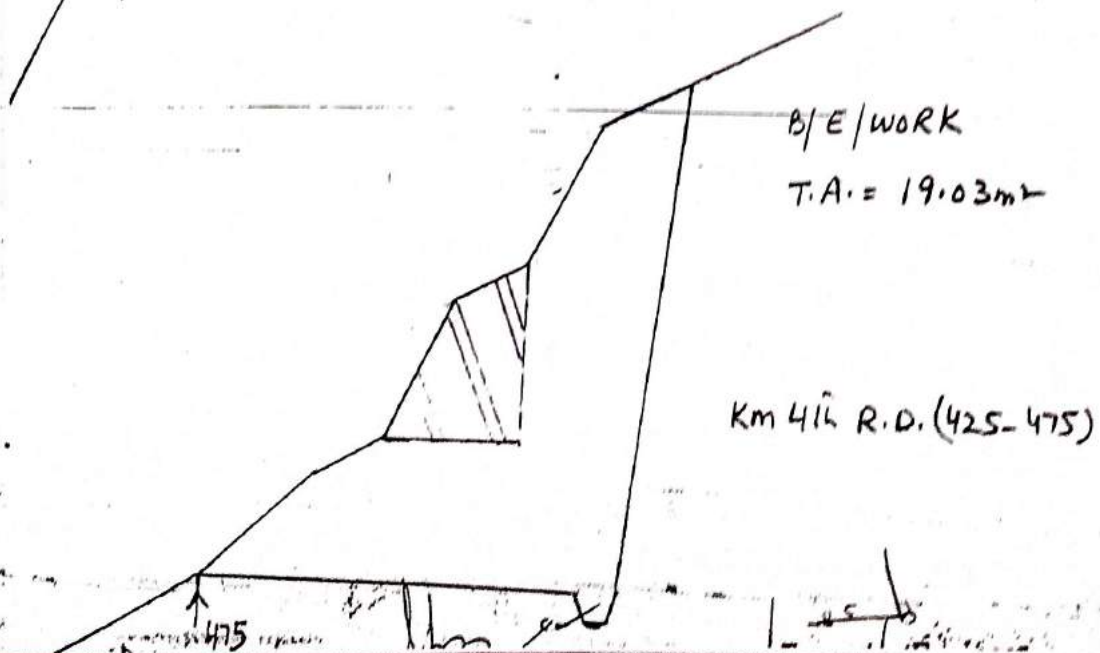
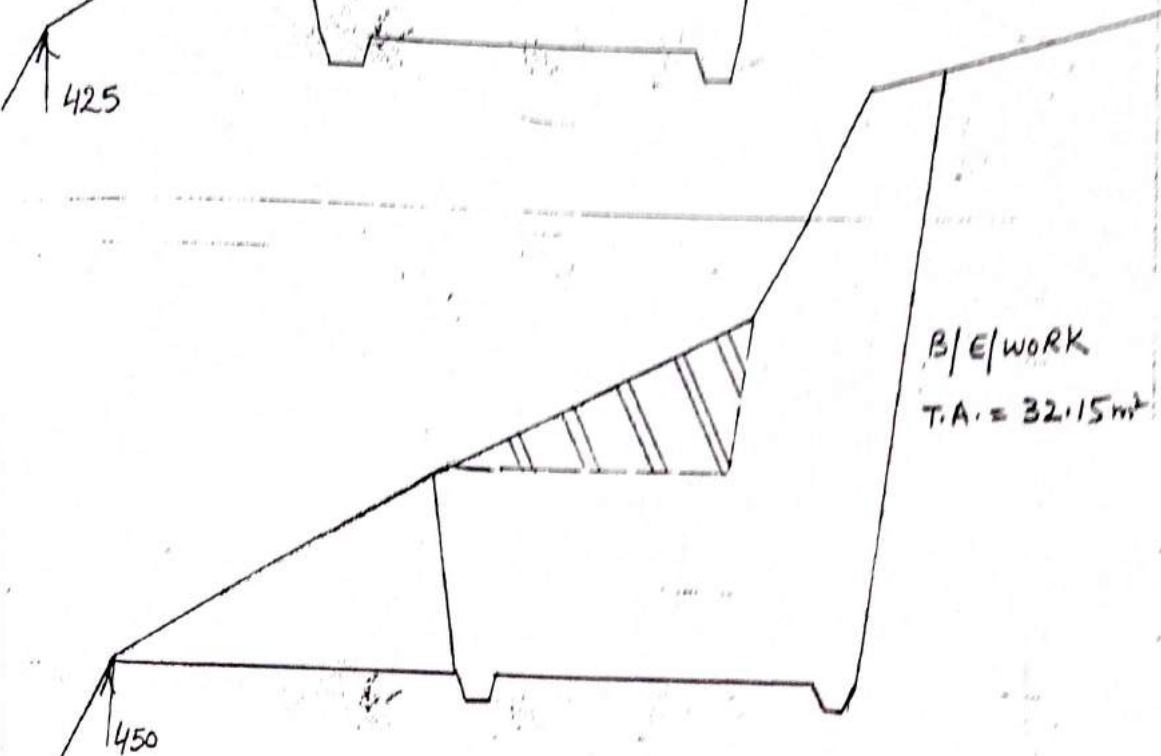
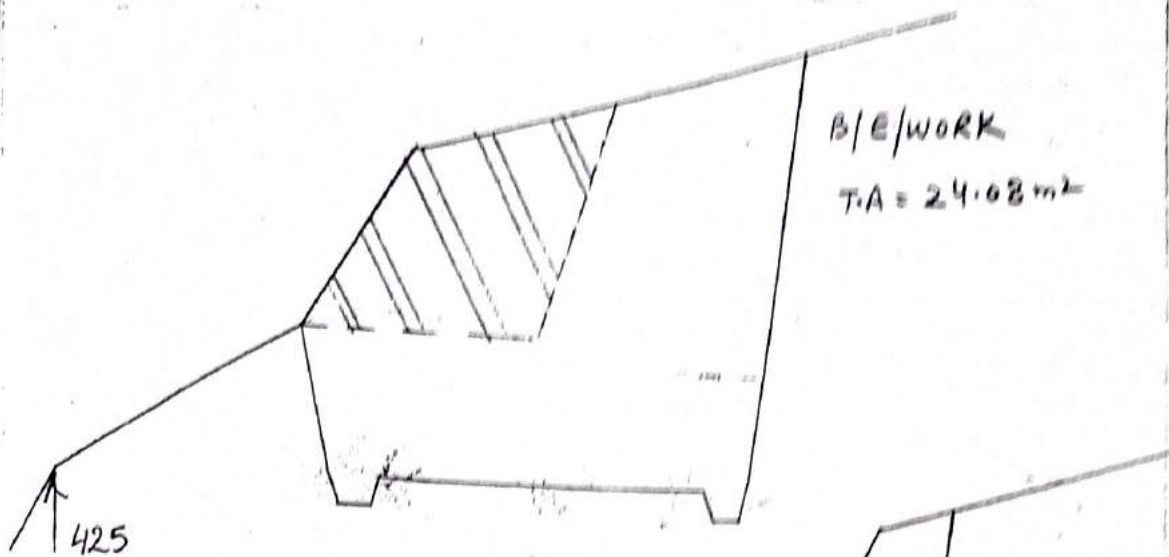
T.E/WORK = 31.05m²

Km 4¹/₂ R.D (275-325)

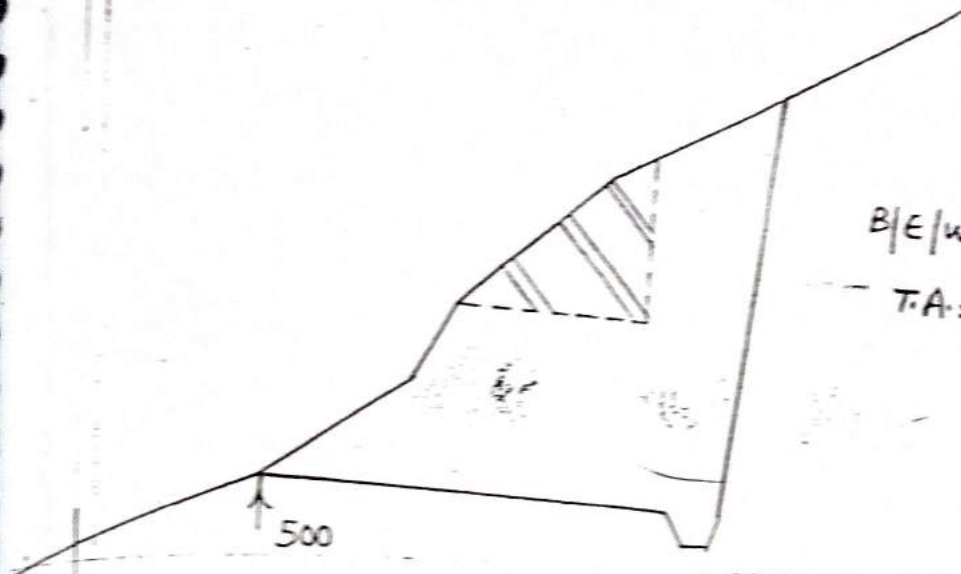


Execut Engineers.

95

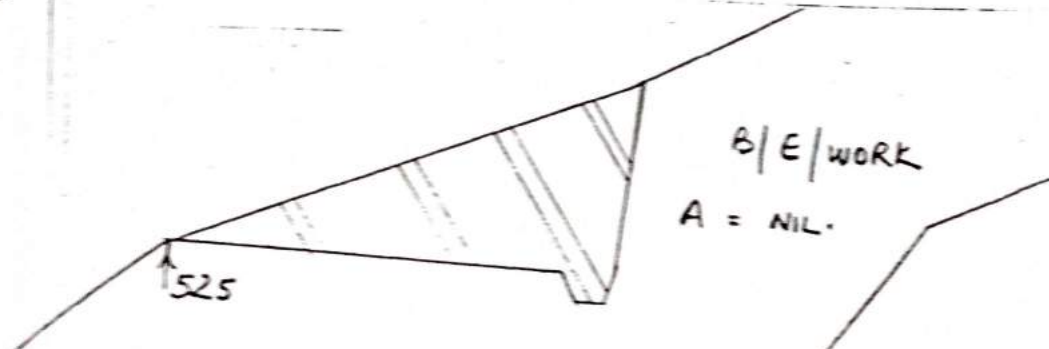


46



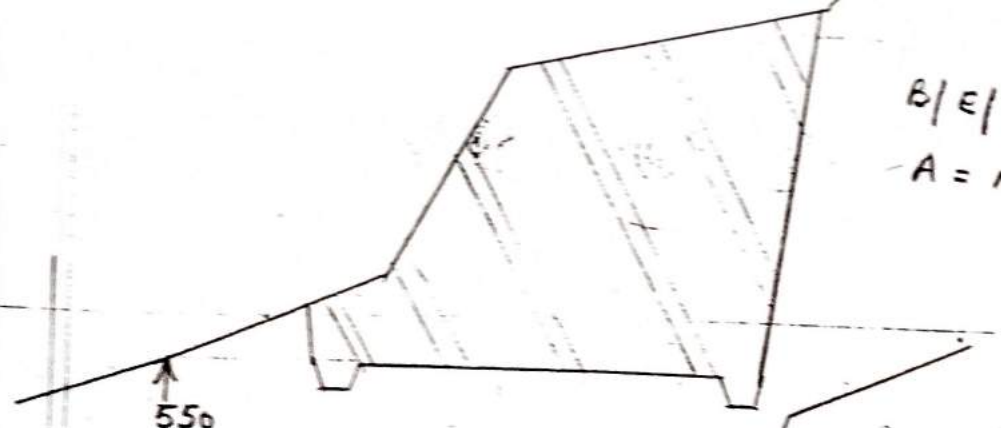
B/E/WORK

T.A. = 15.75 m²



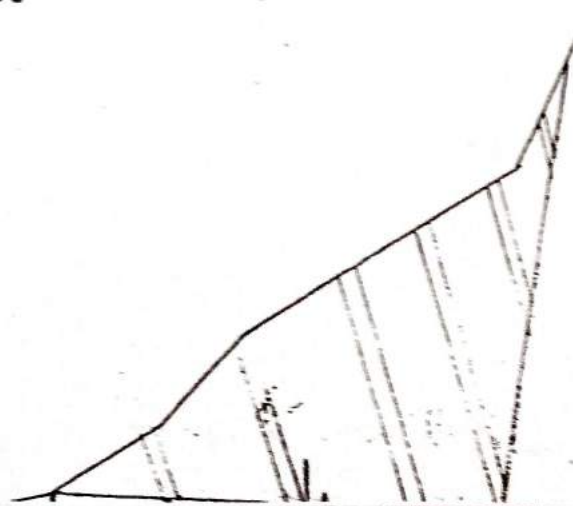
B/E/WORK

A = NIL.



B/E/WORK

A = NIL.



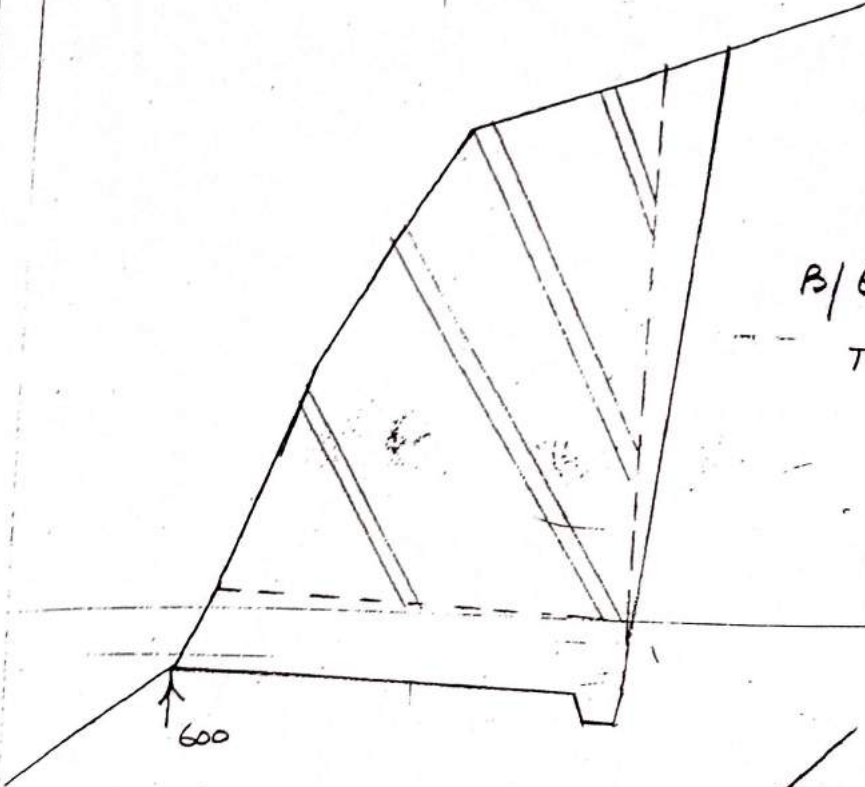
B/E/WORK

A = NIL.

KM 4 1/2 R.D. (500-575)

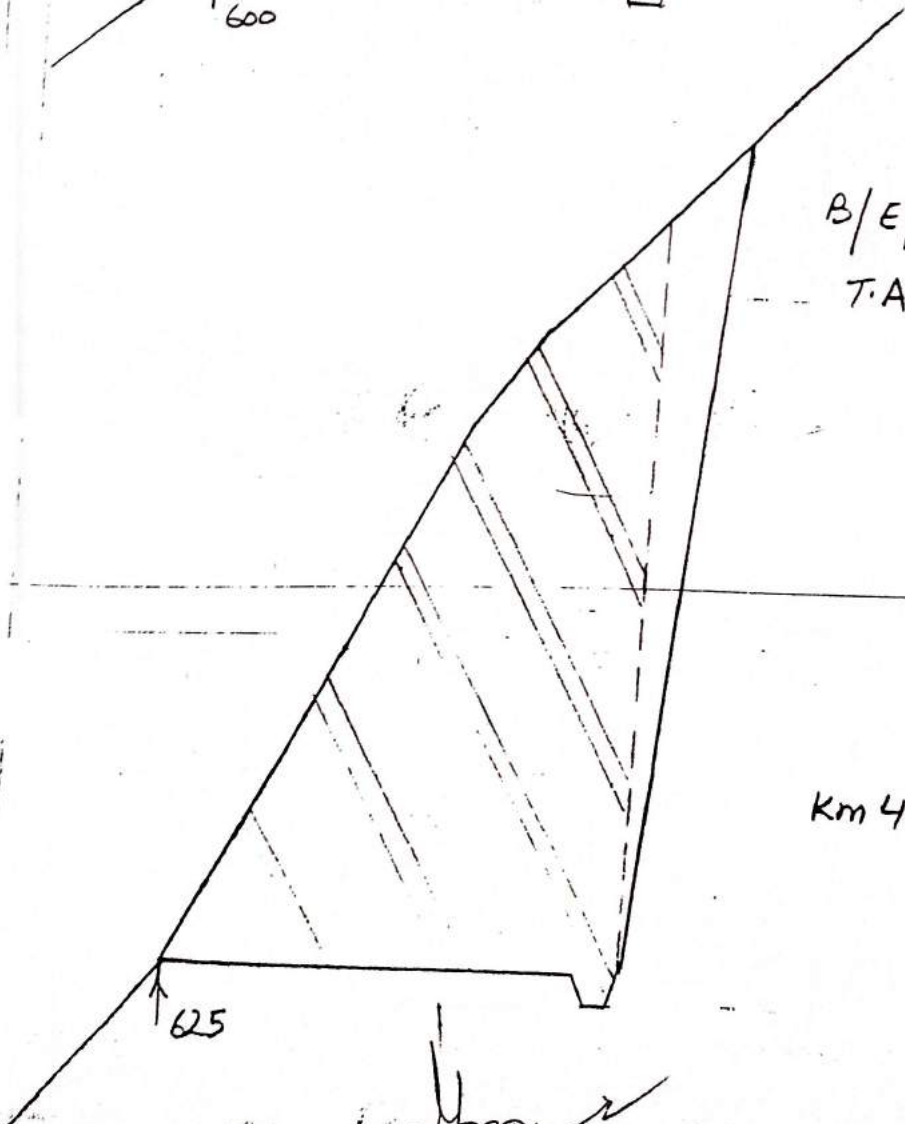
1

(42)



B/E/WORK

$$T.A = 4.60m^2$$



B/E/WORK

$$T.A = 5.45m^2$$

Km 41 $\frac{1}{2}$ R.O. (600-625)

(48)

B/E/WORK

$$T.A. = 19.61 m^2$$

650

B/E/WORK

$$T.A. = 6.64 m^2$$

$$R.S. MAS. DRY = 2.92 m^2$$

$$ST. FILL. = 0.77 m^2$$

R.D. 675

B/E/WORK

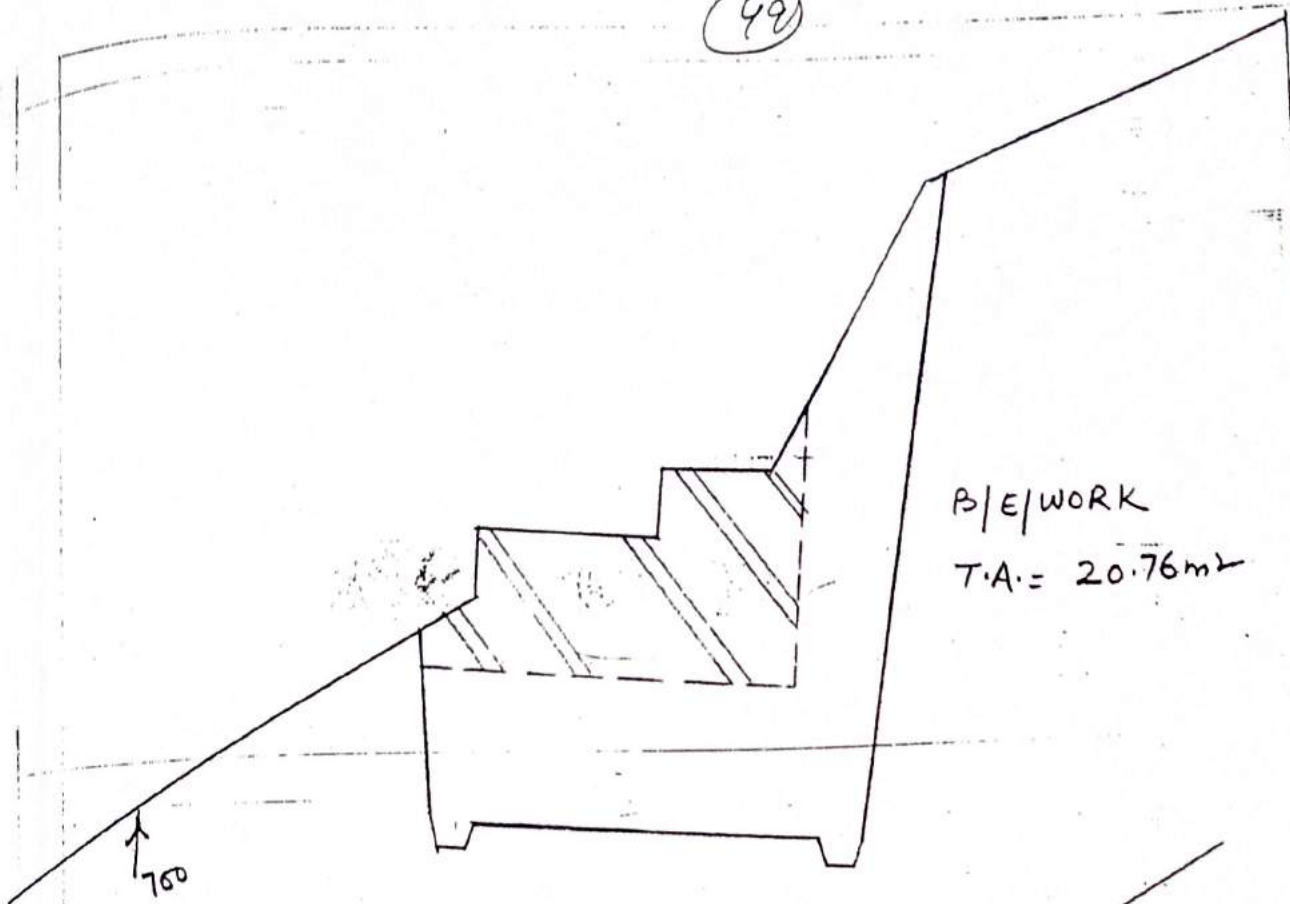
$$T.A. = 14.45 m^2$$

Km 4 R R.D. (650-700)

Asstt. Executive Engineer
P.W.D. CARRI & C&D. Divn

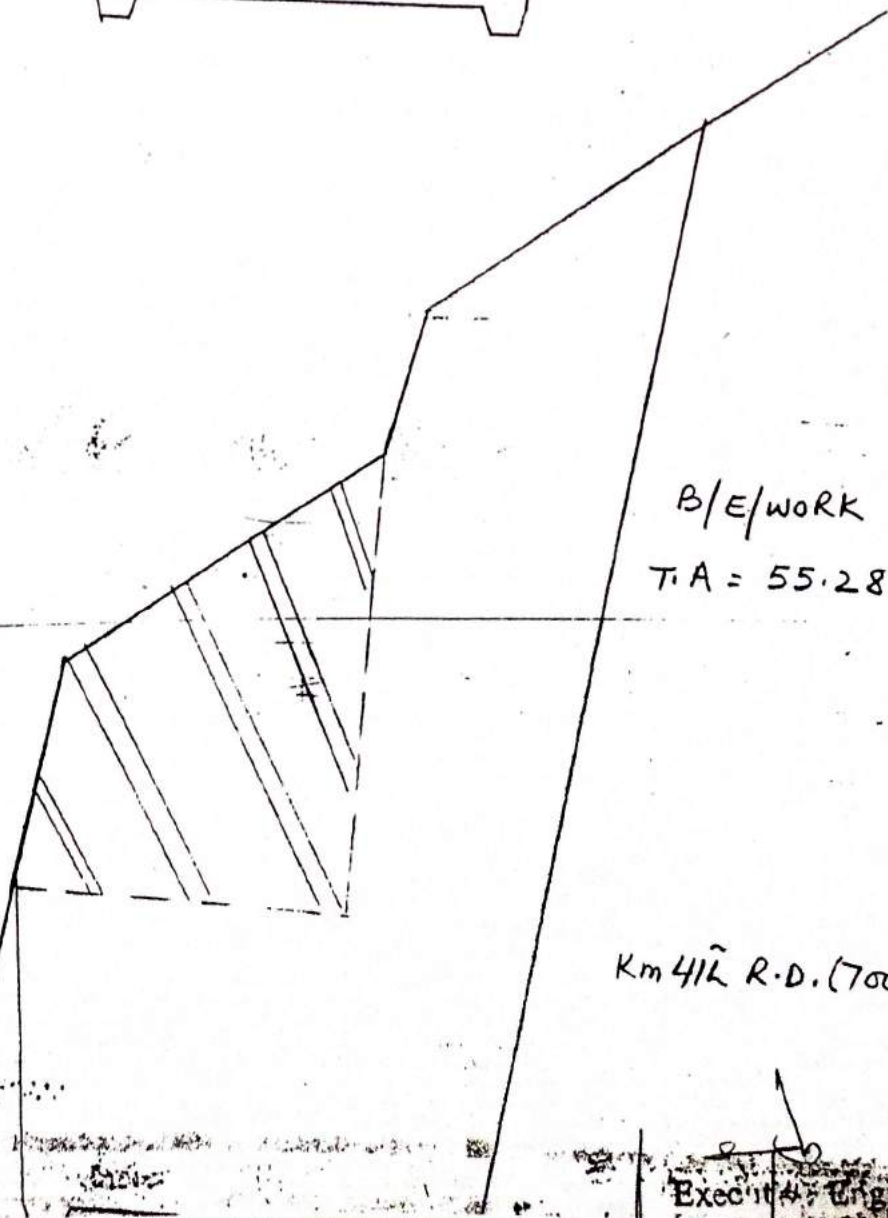
Executive Engineer

49



B/E/WORK

T.A. = 20.76m



B/E/WORK

T.A. = 55.28m

Km 4 1/2 R.D. (700-725)

Asstt. Executive Engineer
WD (R&B) East Sub-Div.
DODA

Execut Engineer

50

B/E/WORK
T.A. = 3.17 m²

750

B/E/WORK
T.A. = 7.99 m²

775

800

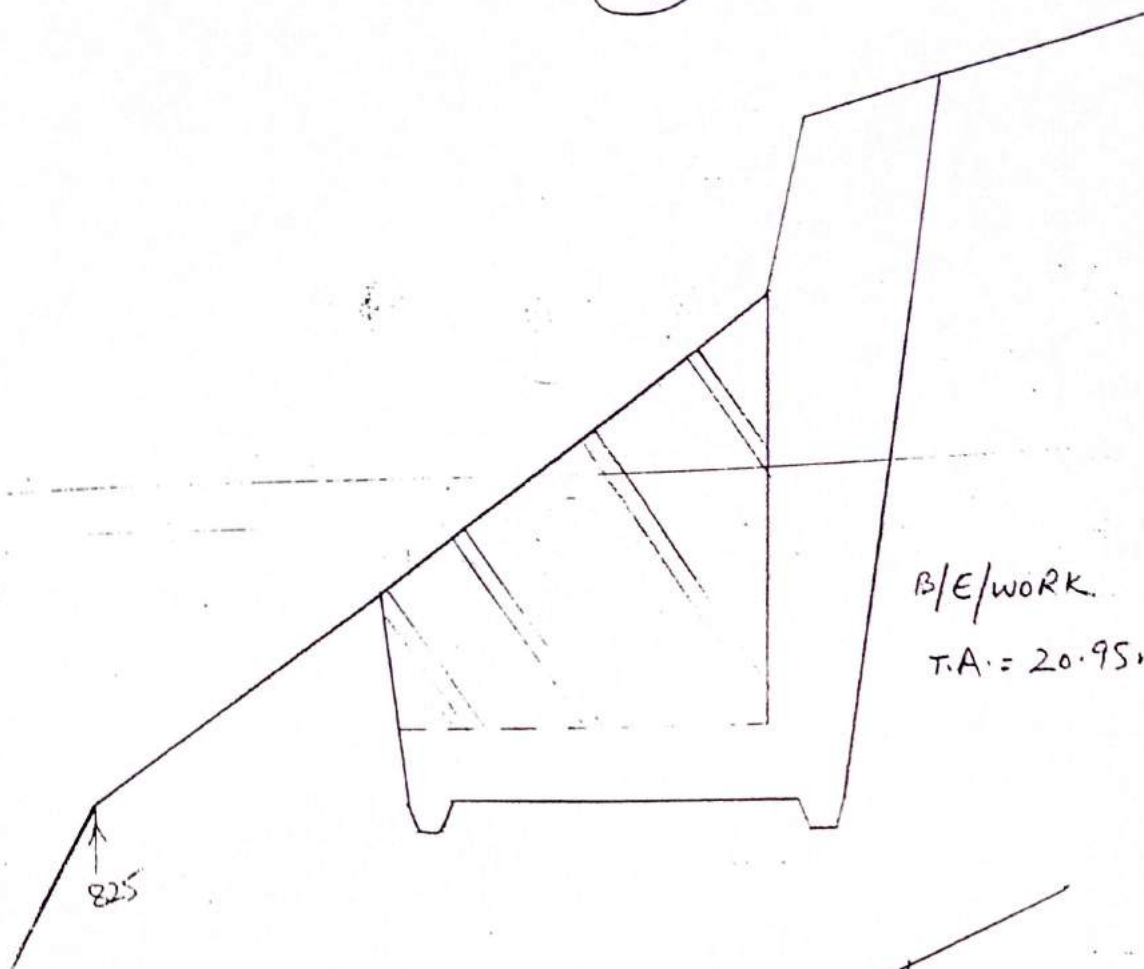
B/E/WORK T.A. = 9.89 m²

KM 41 R.D. (750-800)

Asst. Executive Engineer

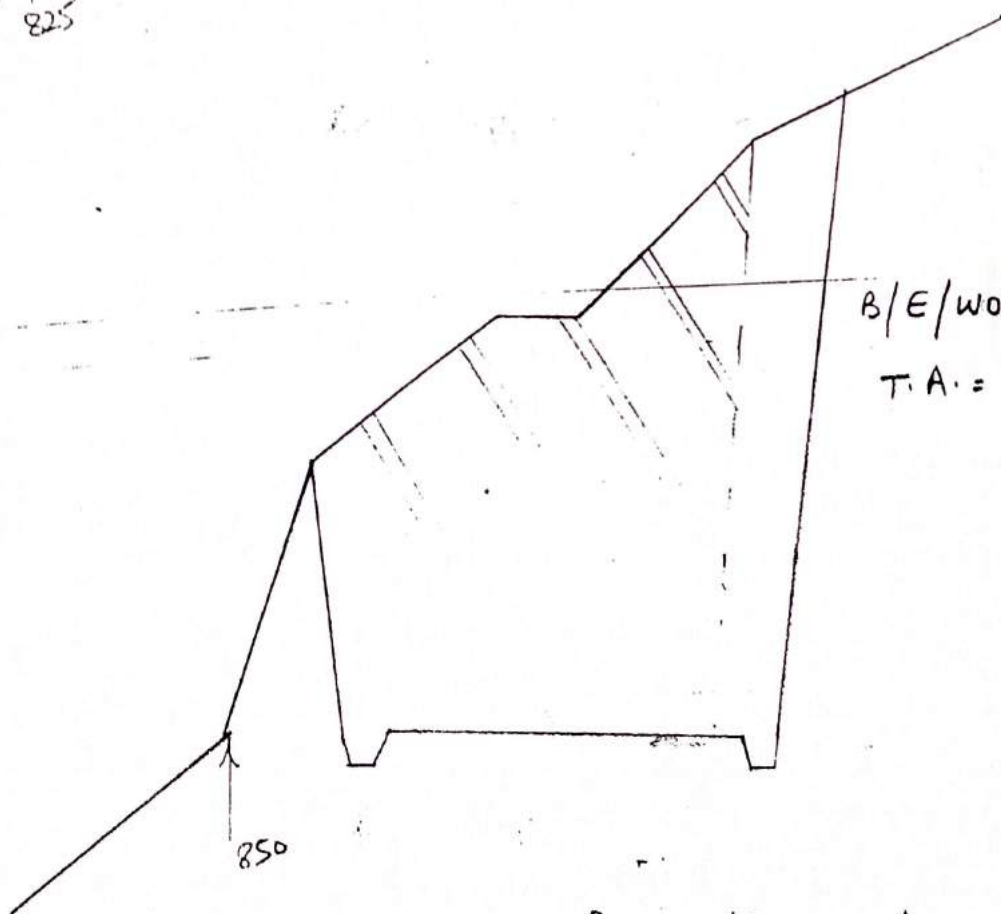
Executive Engineer
D. (R&B) Spl. Sub.

57



B/E/WORK

T.A. = 20.95 m²



B/E/WORK

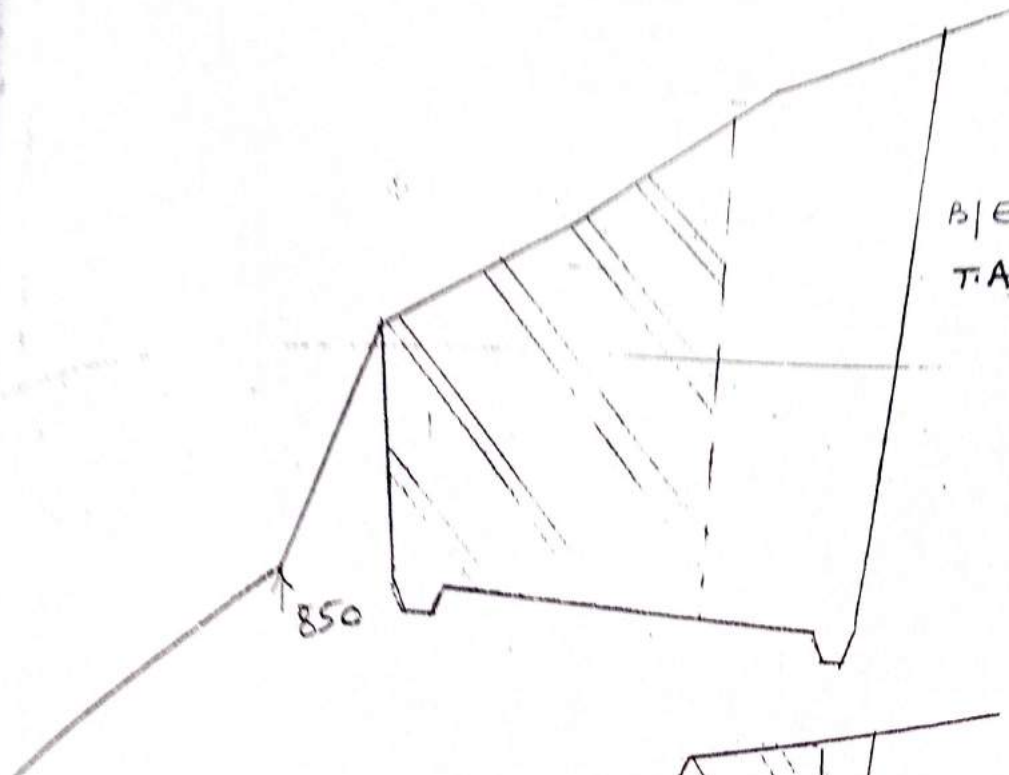
T.A. = 9.36 m²

Km 4 1/2 R.D. (82.5-85.0)

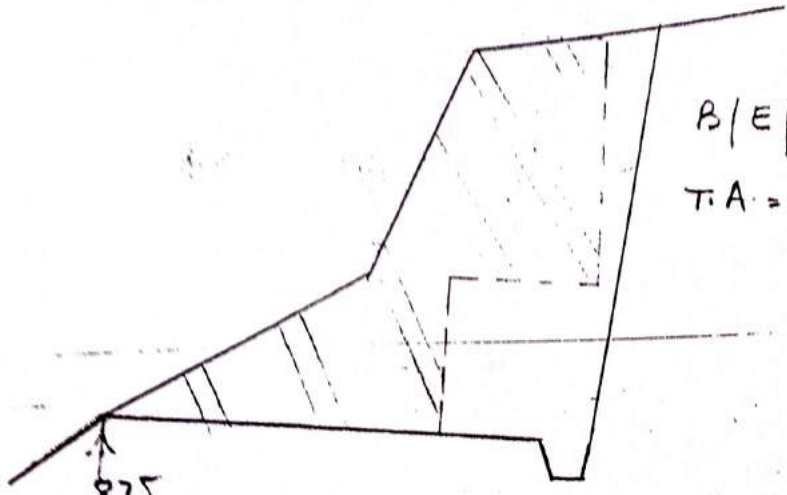
Asstt. Executive Engineer

Public Works Department

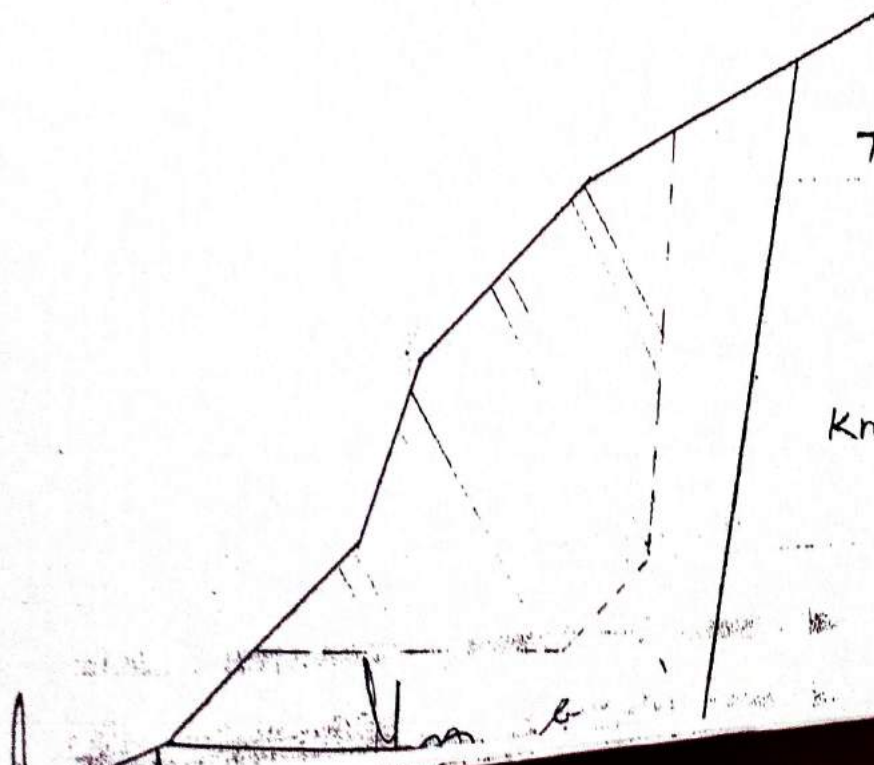
Signature



B/E/WORK
T.A = 21.67 m²

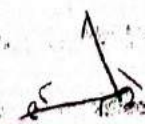


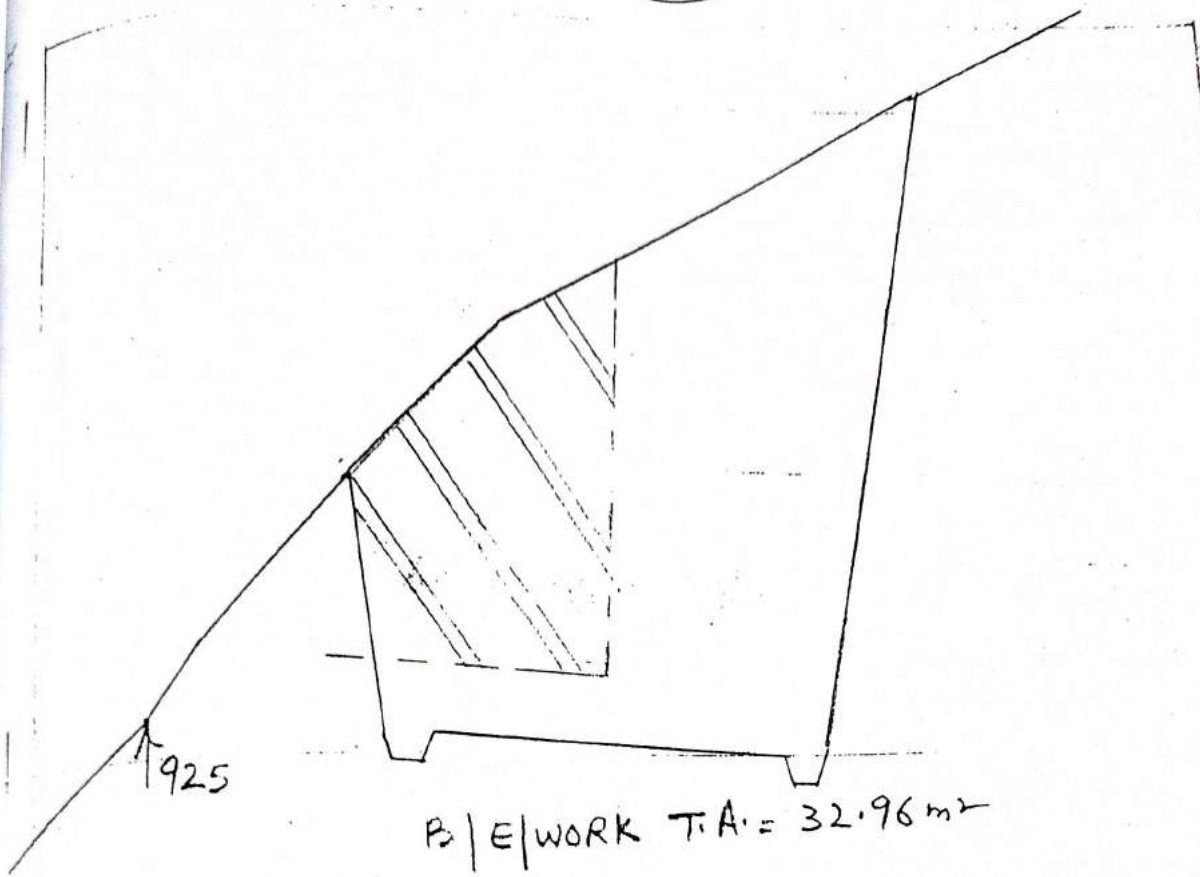
B/E/WORK
T.A = 6.00 m²



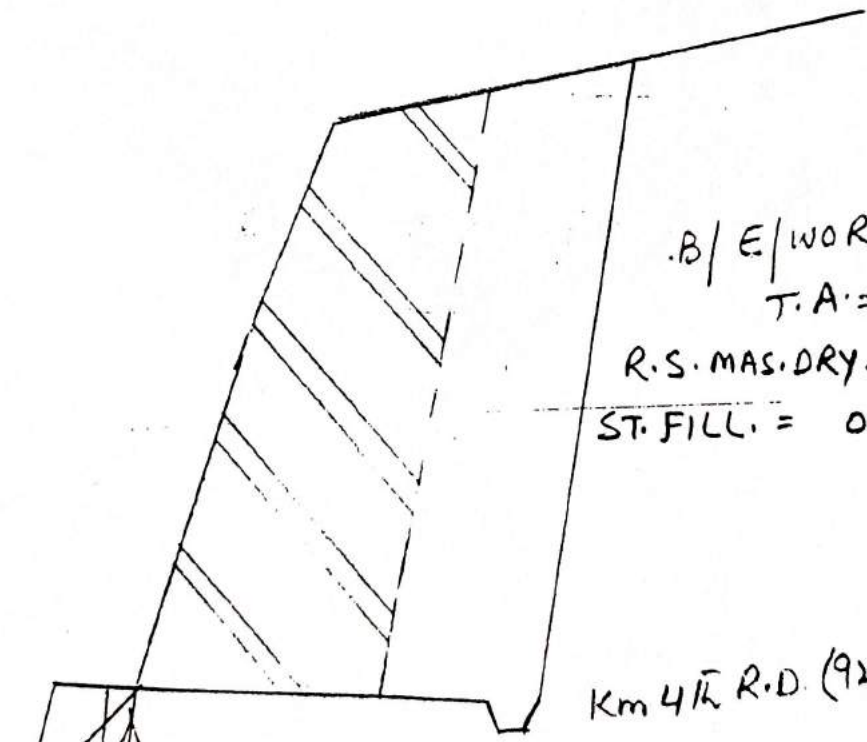
B/E/WORK
T.A = 12.46 m²

Km 4 1/2 R.D. (850-900)





B/E/WORK T.A. = 32.96 m²



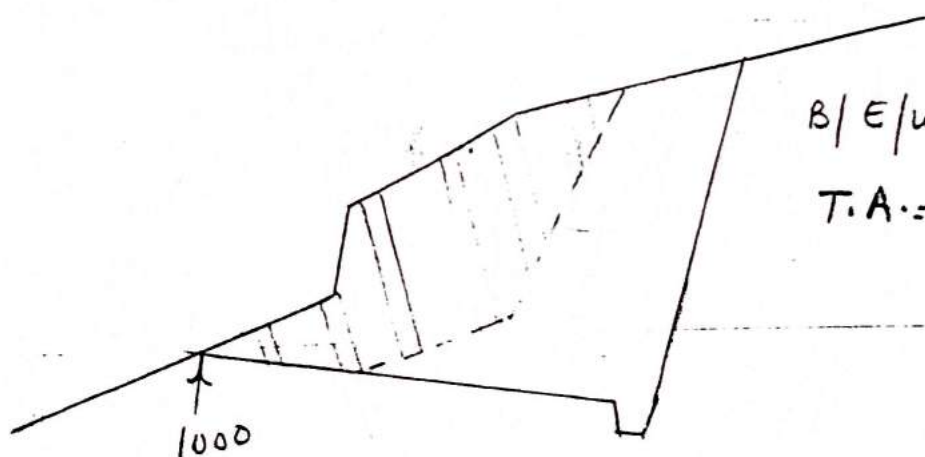
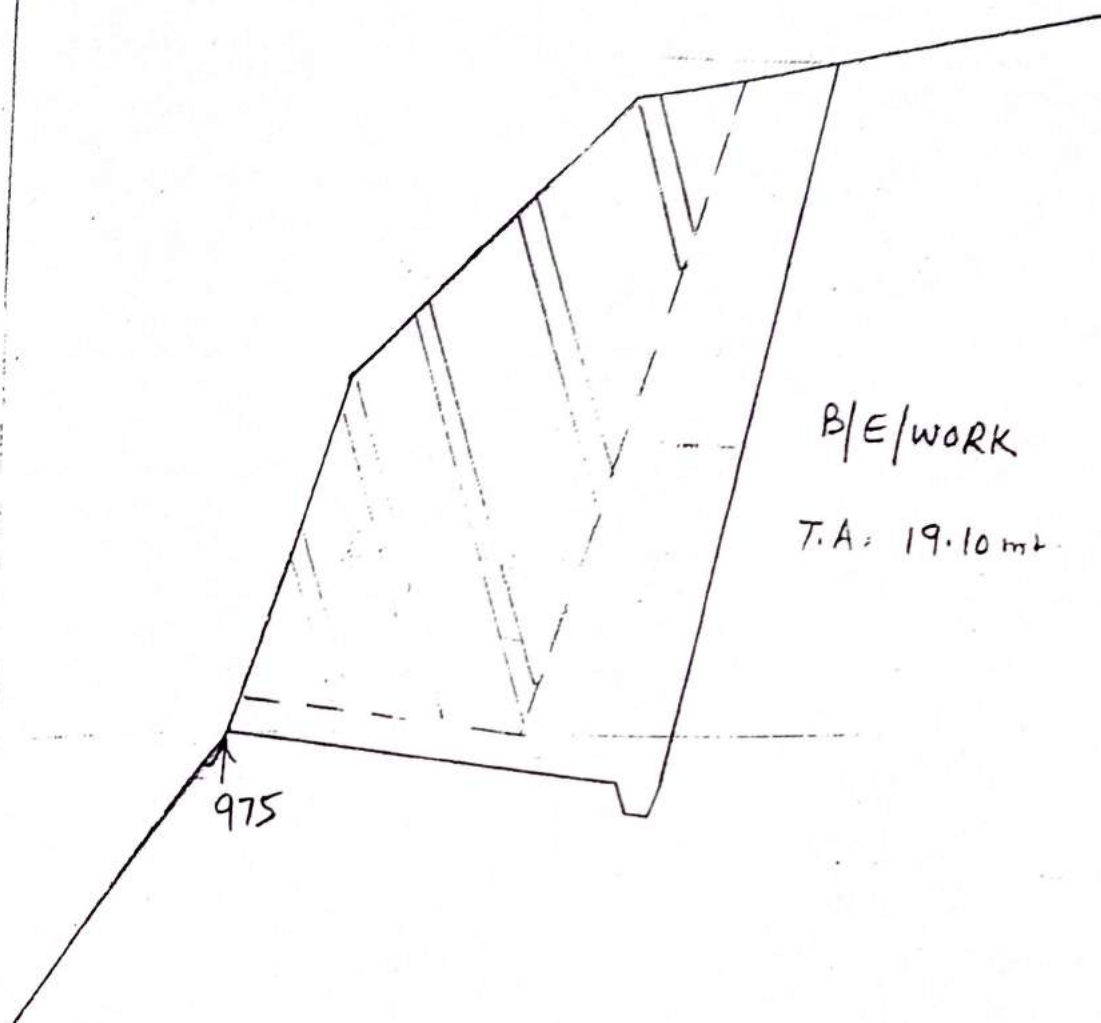
B/E/WORK
T.A. = 16.55 m²
R.S. MAS. DRY = 1.70 m²
ST. FILL. = 0.08 m²

Km 4 1/2 R.D. (925-950)

[Handwritten signature]



(54)

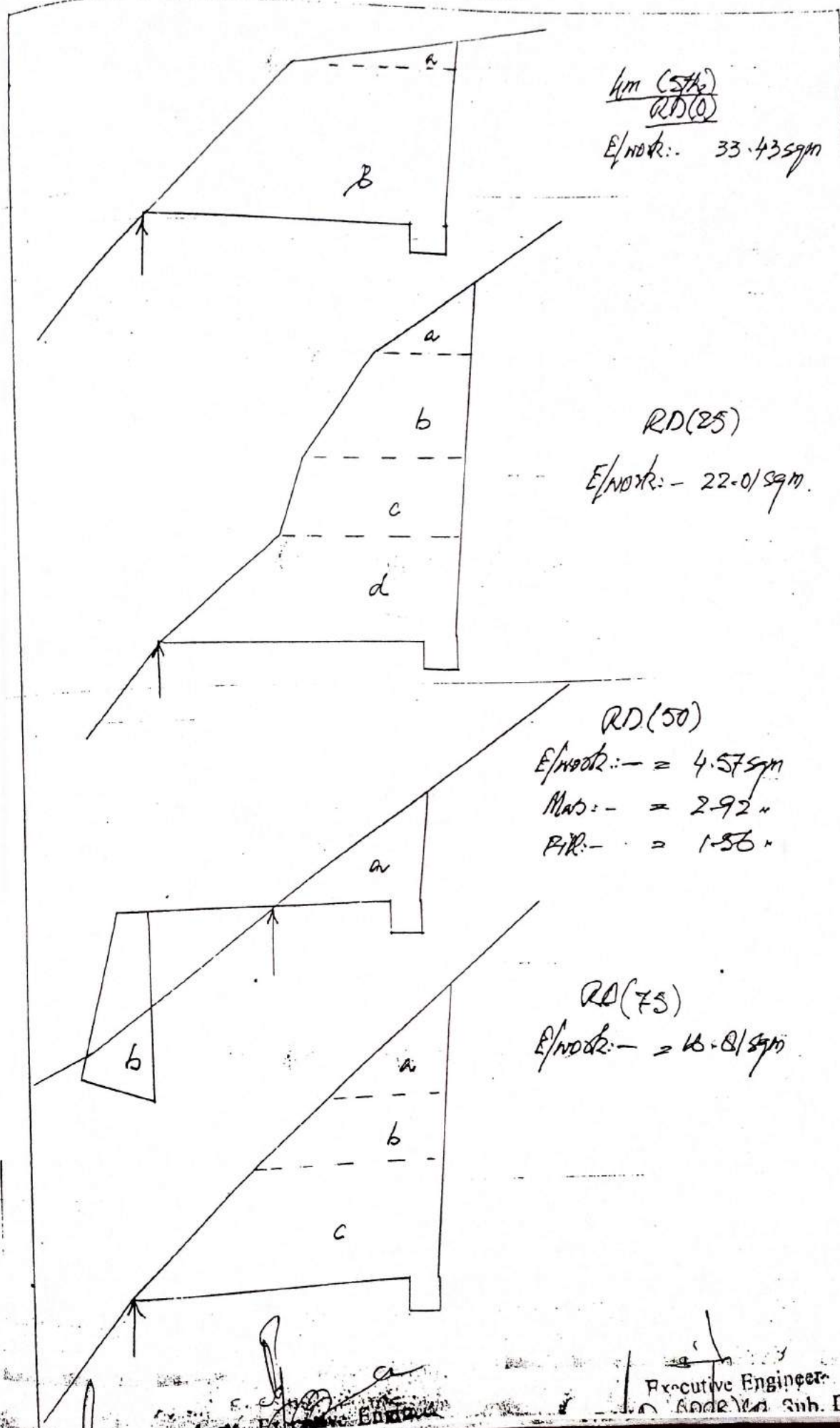


Km 4 1/2 R.D. (975-1000)

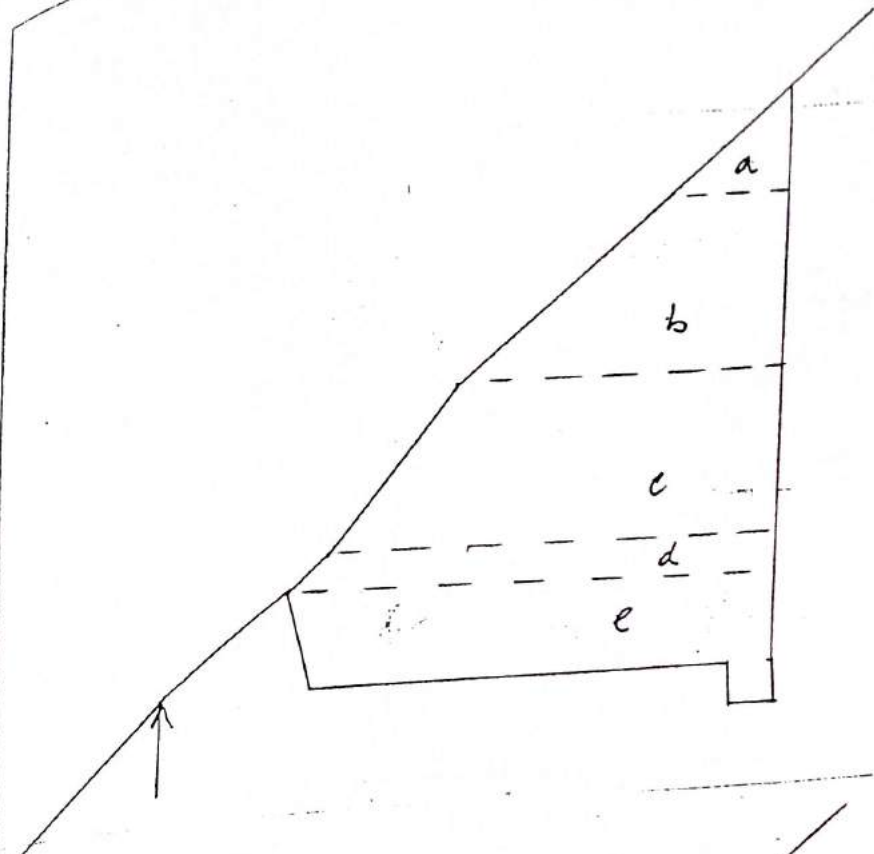
Asstt. Executive Engineer
EWD (R&B) East Sub-Div

DODA

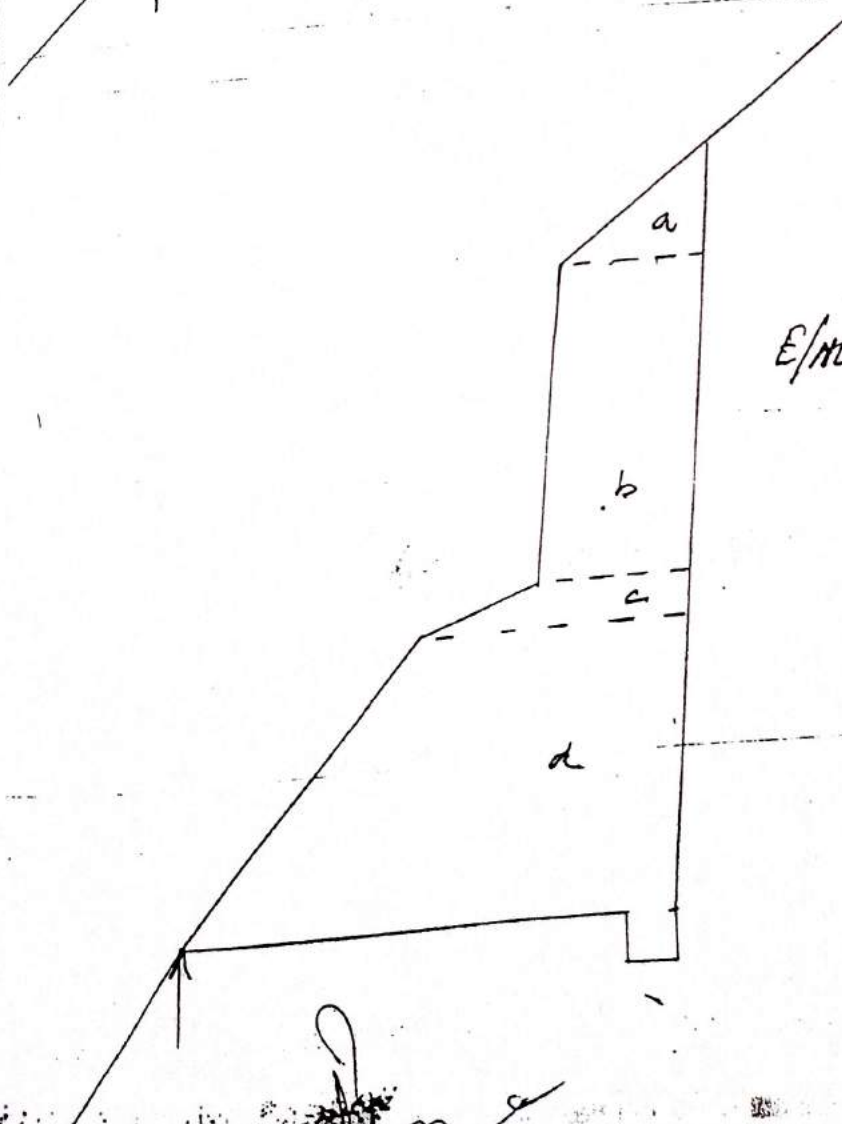
Executive Engineer



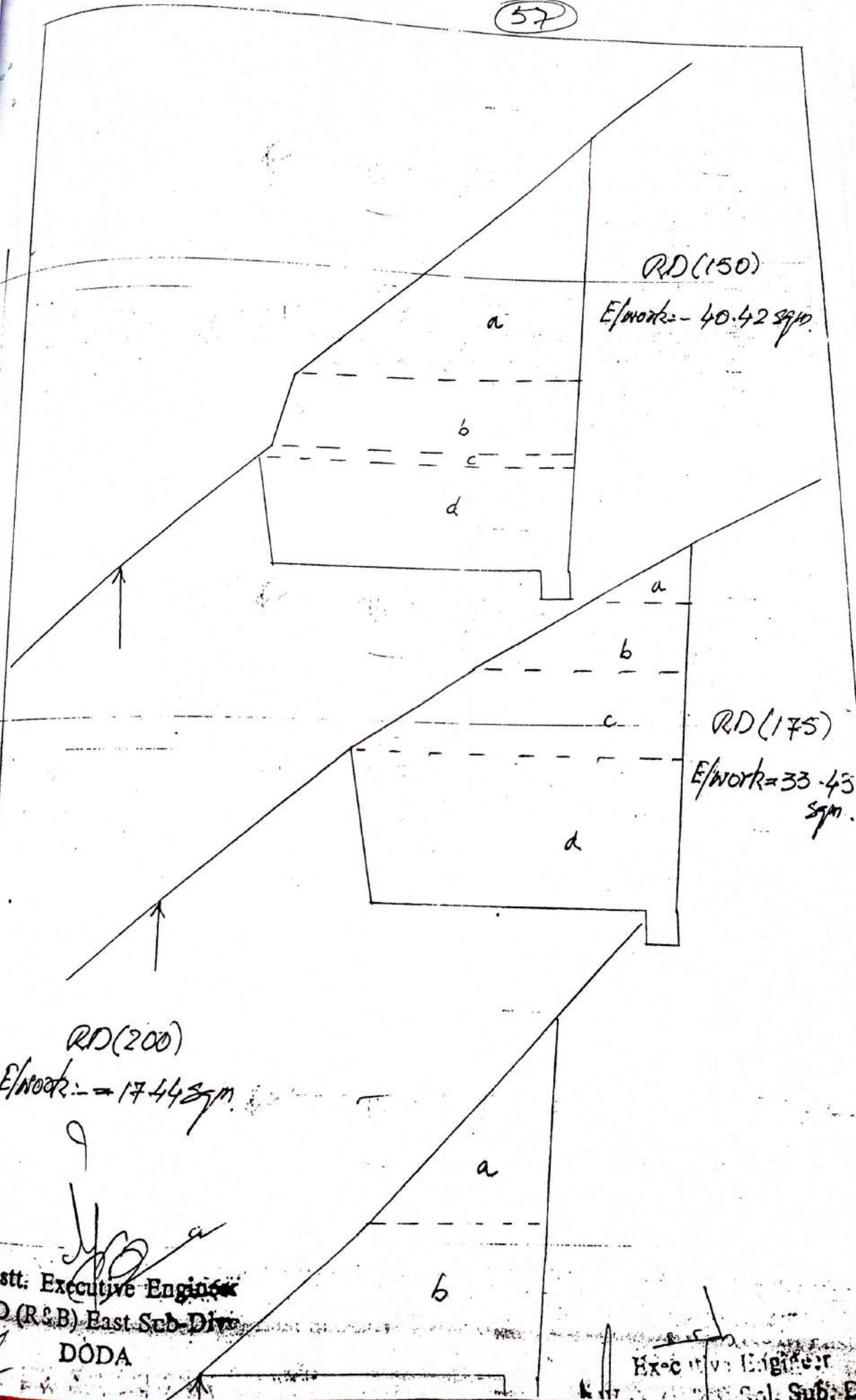
Executive Engineer
 Andhra Pradesh Sub. Div.



RD(100)
E/work:- = 31.33 sqm.



RD(110)
E/work:- = 27.64 sqm.



RD(150)

E/work:- 40.42 sqm

RD(175)

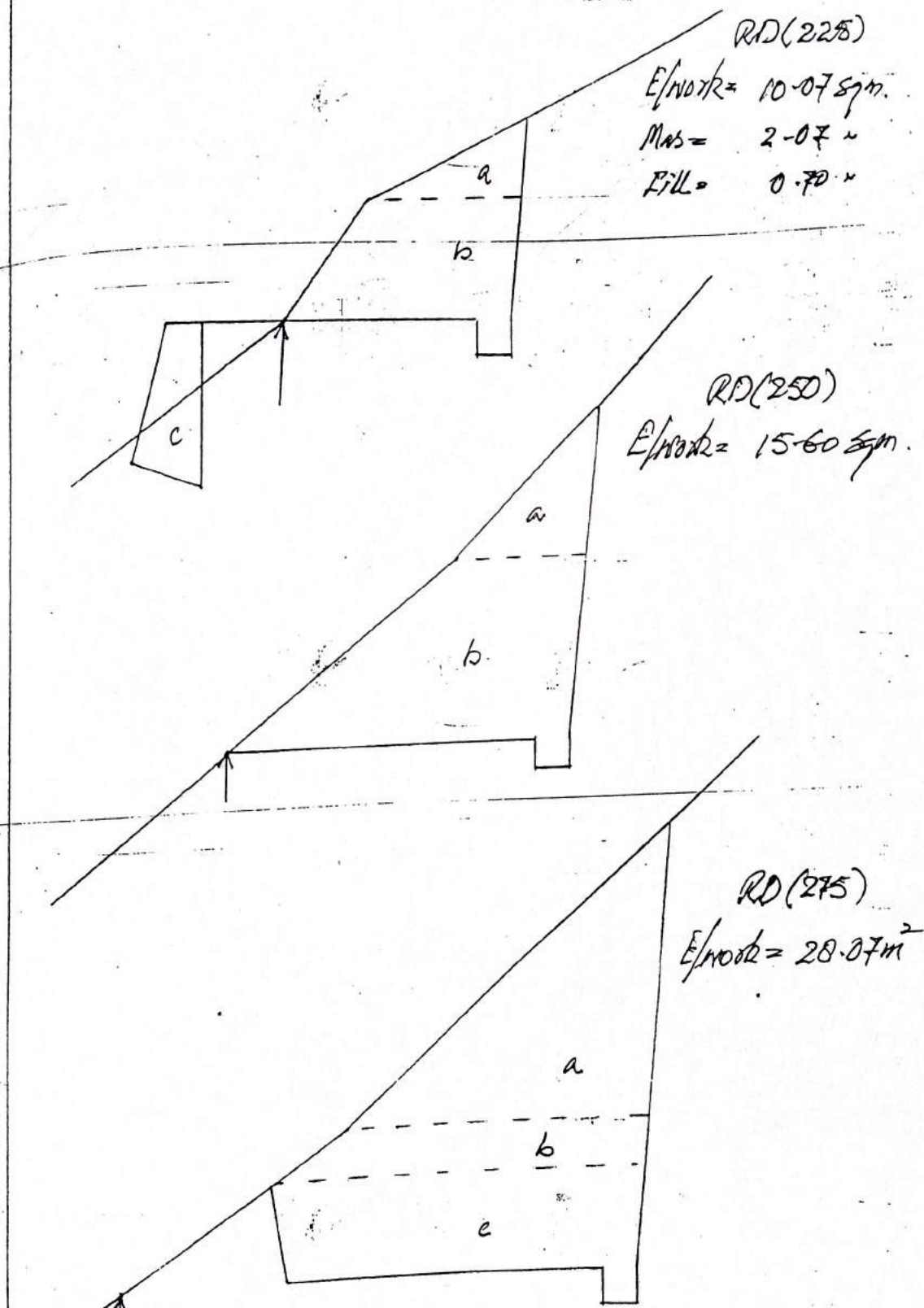
E/work=33.43
sqm.

RD(200)

E/work:- 17.44 sqm.

Asstt. Executive Engineer
WD (R&B) East Sub-Div.
DODA

Exec. Engineer
Sol. Sub-D

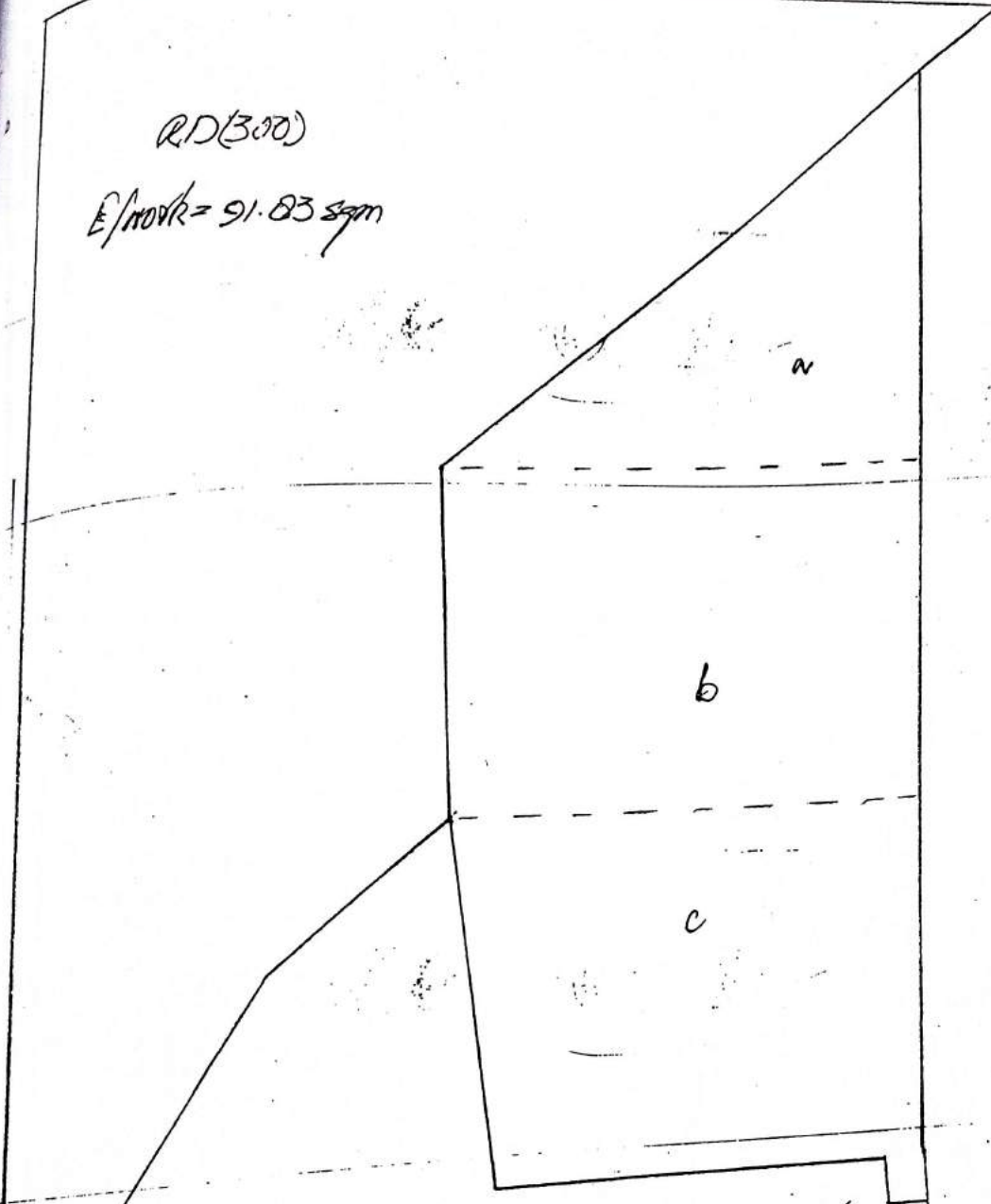


Asstt. Executive Engineer
 PWD (R.E.B.) East Sub-Div.

Executive Engineer
 PWD (R.E.B.) Sub-Div.
 W. Doda.

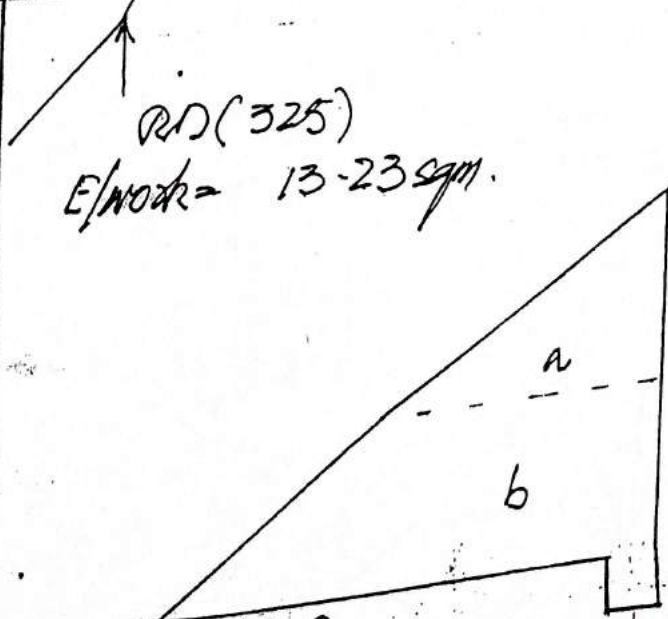
RD(300)

E/work = 91.83 sqm



RD(325)

E/work = 13.23 sqm.



[Signature]
Asstt. Executive Engineer

Exc. Engr.
P.W.D. (C & B) Spl
W Doda

60

RD(350)

$$E/\text{work} = 10.70 \text{ s/m}$$

RD(375)

$$E/\text{work} = 24.58 \text{ s/m}$$

work done

RD(400)

$$E/\text{work} = 3.18$$

work done

RD(425)

$$E/\text{work} = 5.87 \text{ s/m}$$

$$= 1.08 \text{ m}$$

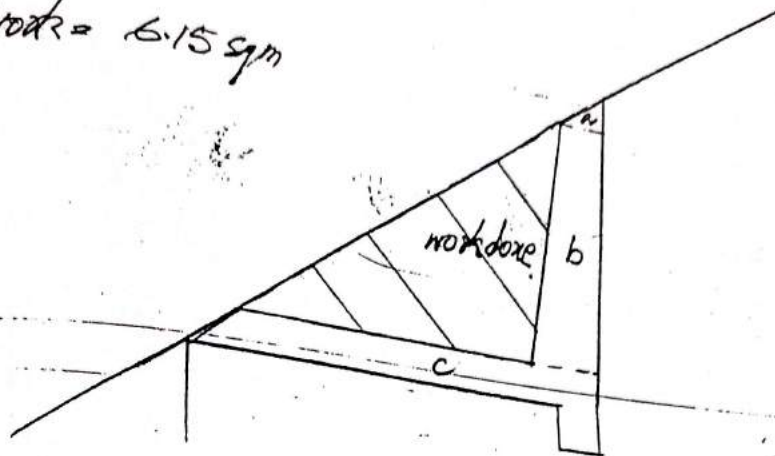
$$= 0.84 \text{ m}$$

work done

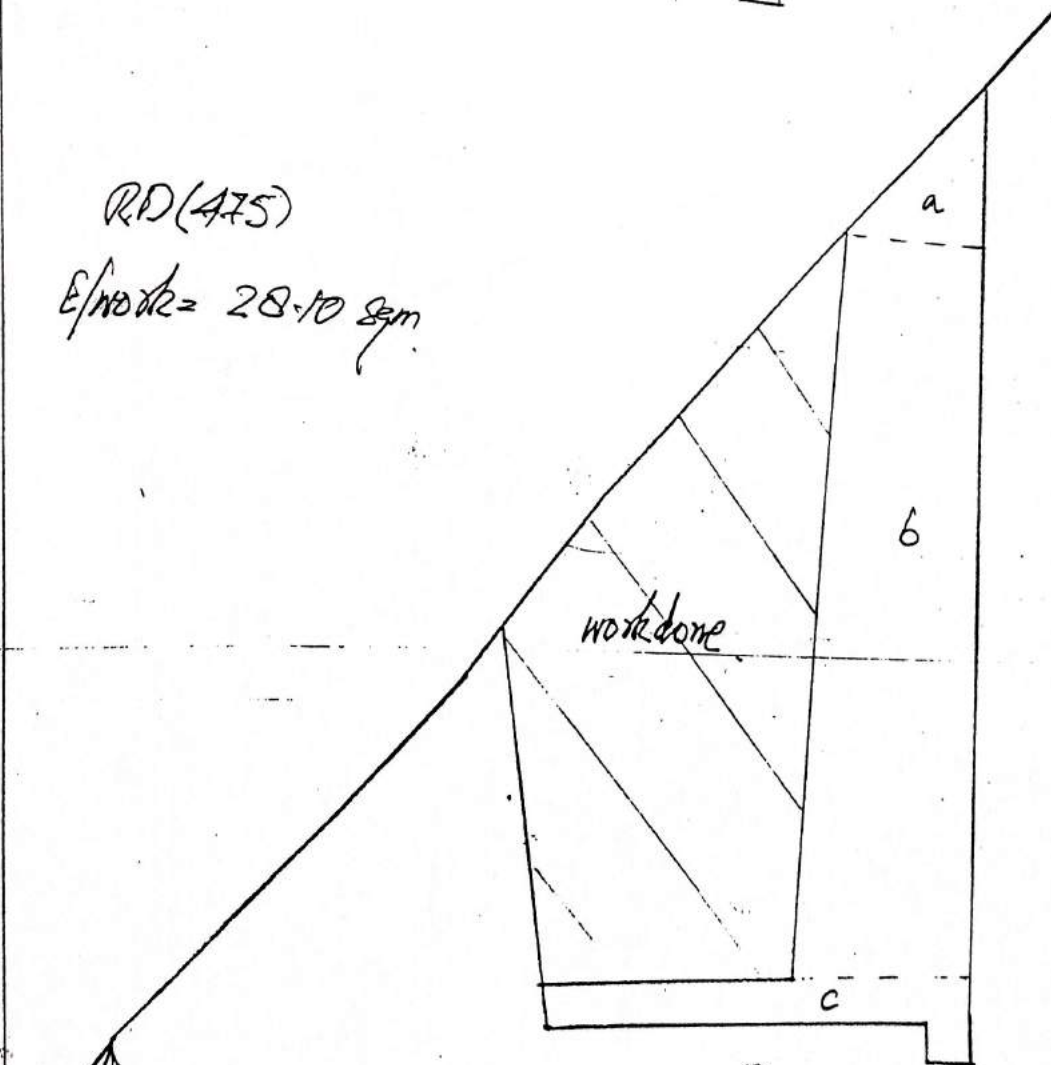
Excavation Engineer
P.W.D. (R&B) Spt. Supt. Div.

61

RD(450)
E/work = 6.15 gpm



RD(475)
E/work = 28.10 gpm

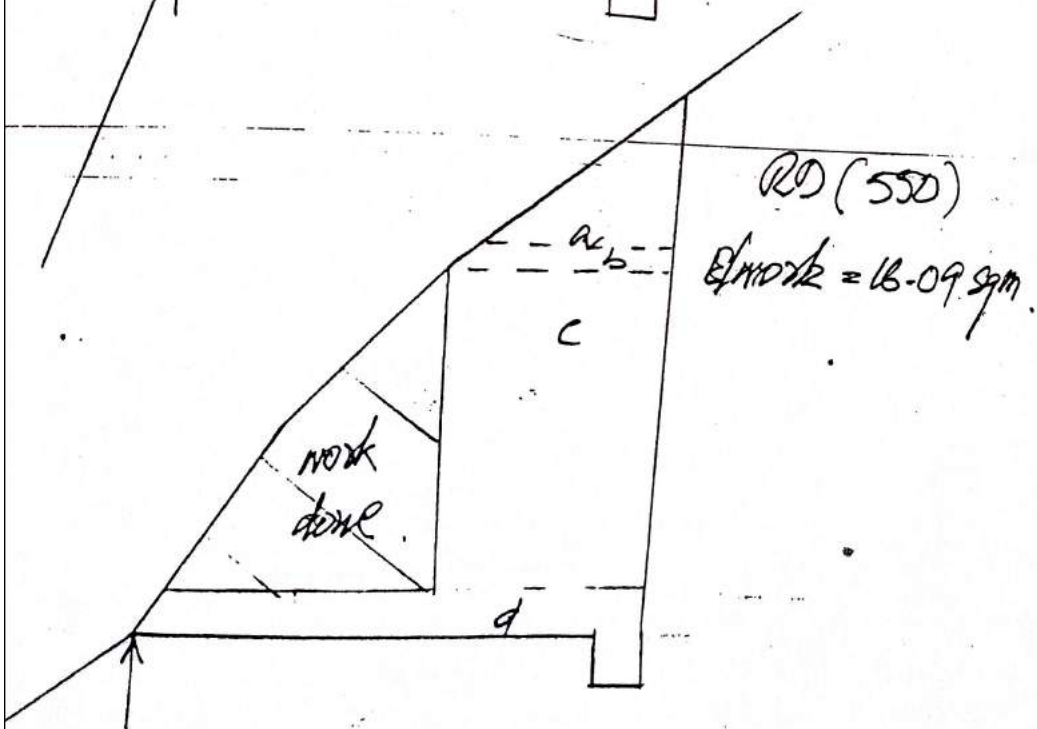
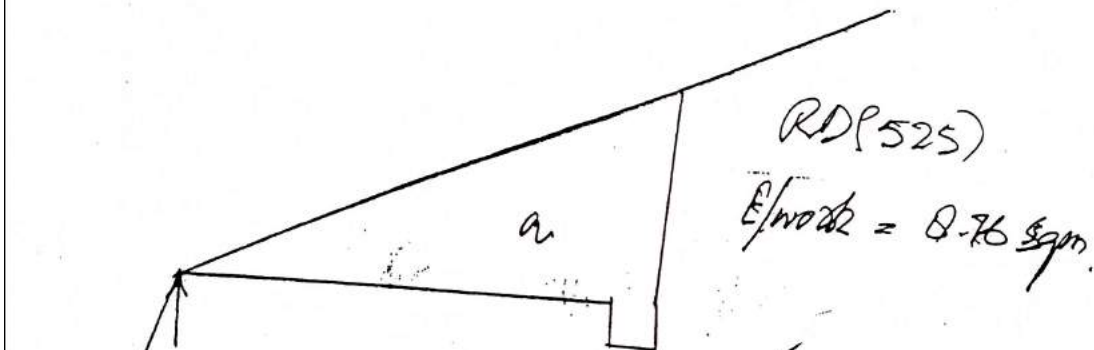
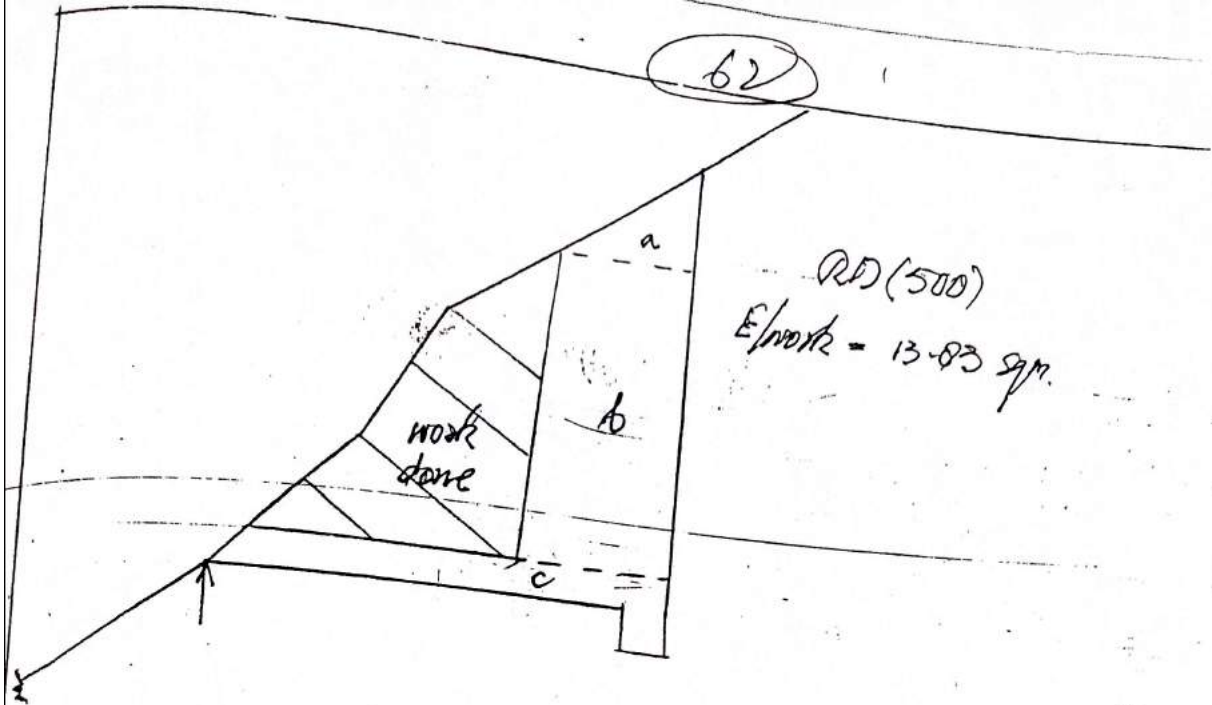


Asstt. Executive Engineer
PWD (R & B) East Sub-Div.

DODA

Executive Engineer
P.W.D. (R&B) Spl.
Doda

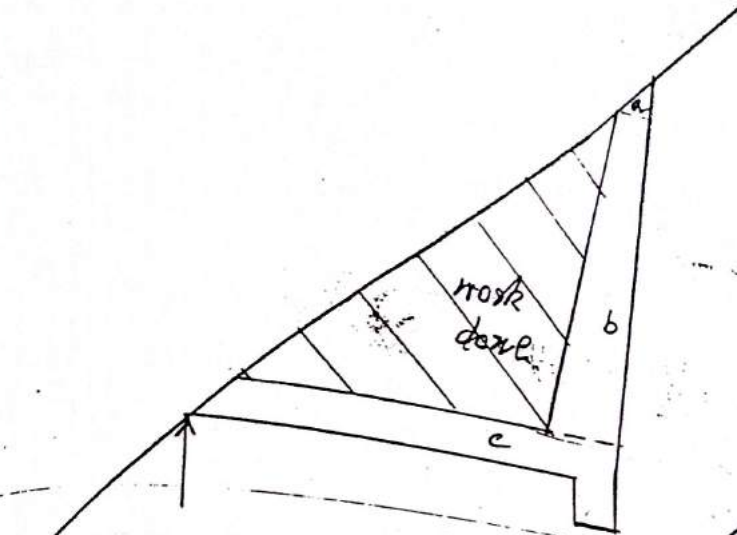
62



Asstt. Executive Engineer.
P.W.D. 2) East Sub-Div.
DODA

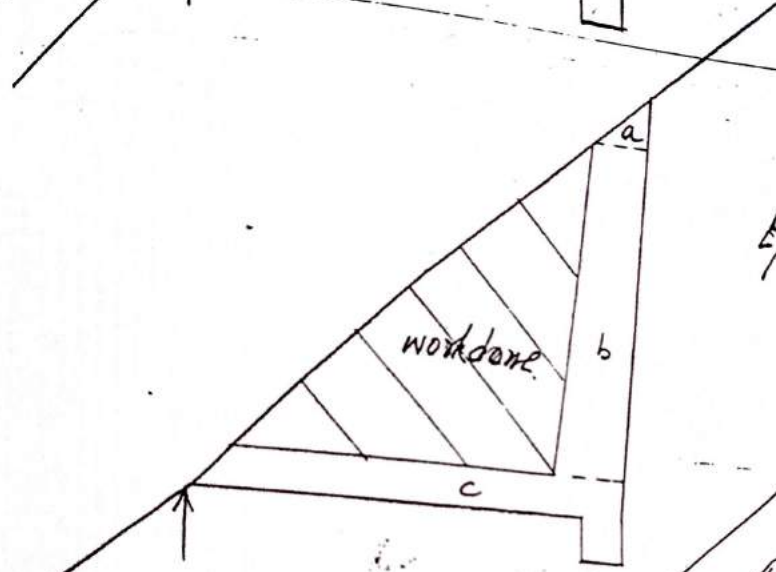
Executive Engineer
DODA

63



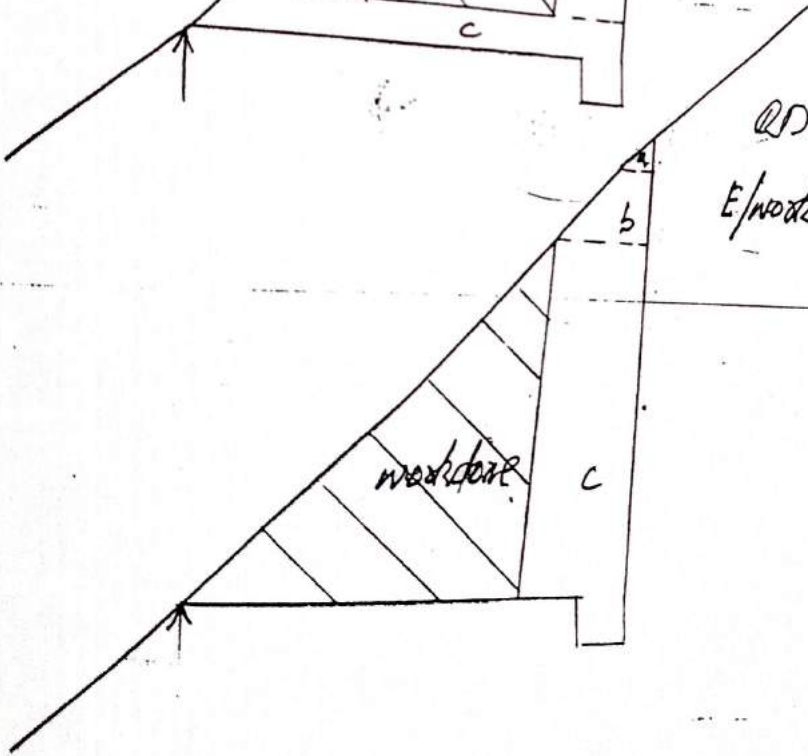
RD (575)

$$E/\text{work} = 6.98 \text{ sym.}$$



RD (600)

$$E/\text{work} = 7.47 \text{ sym.}$$



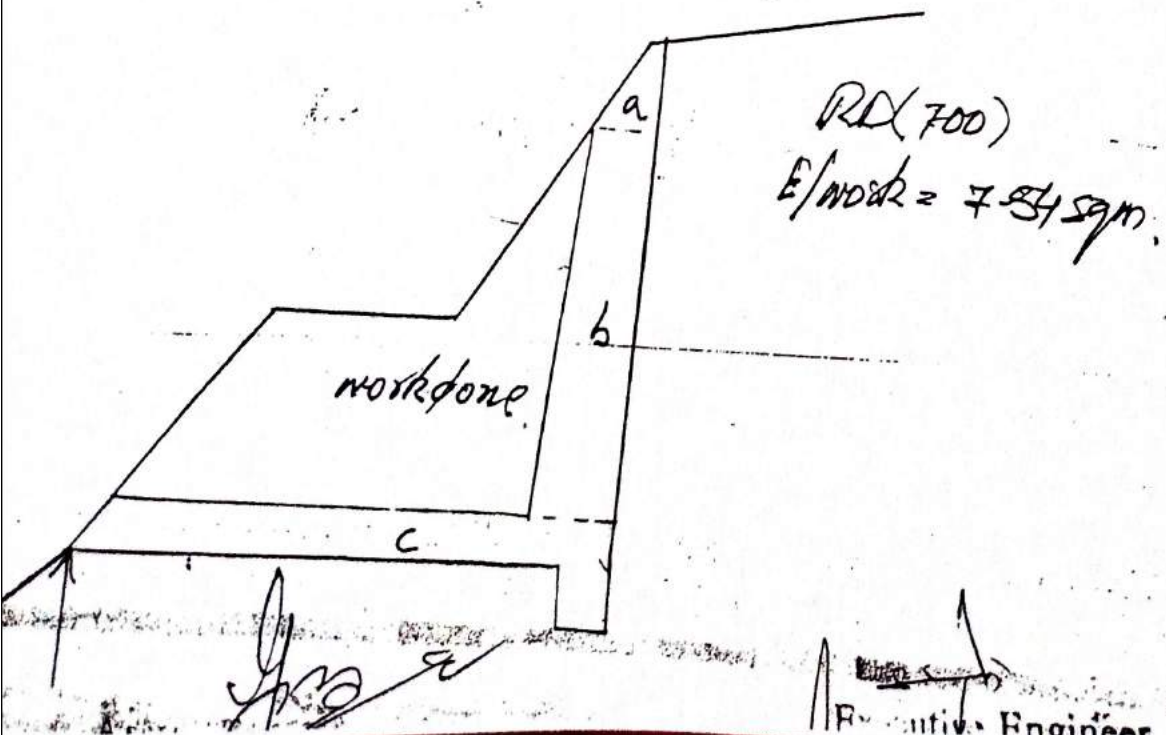
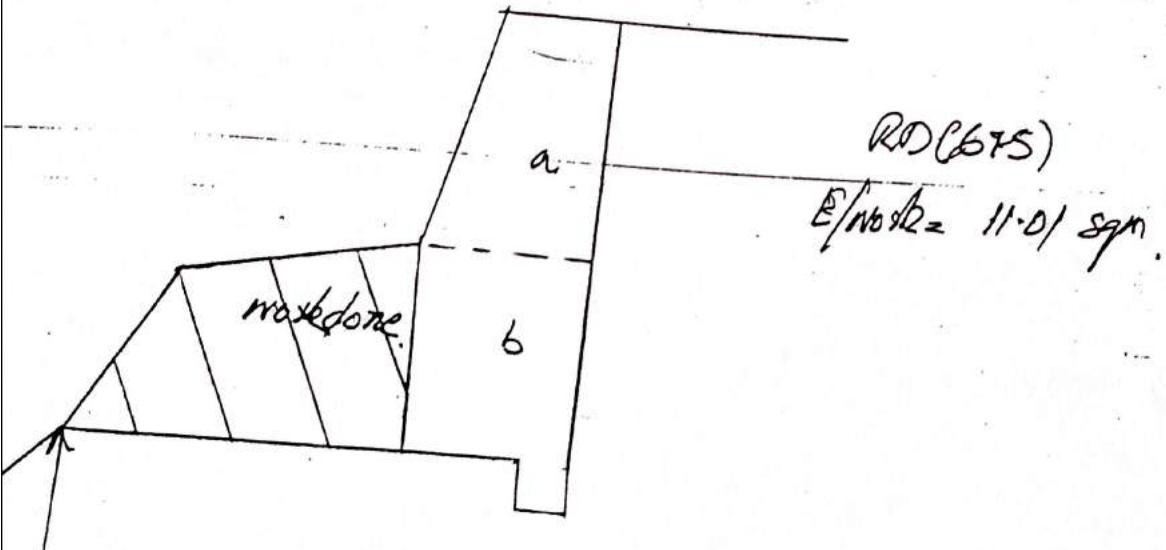
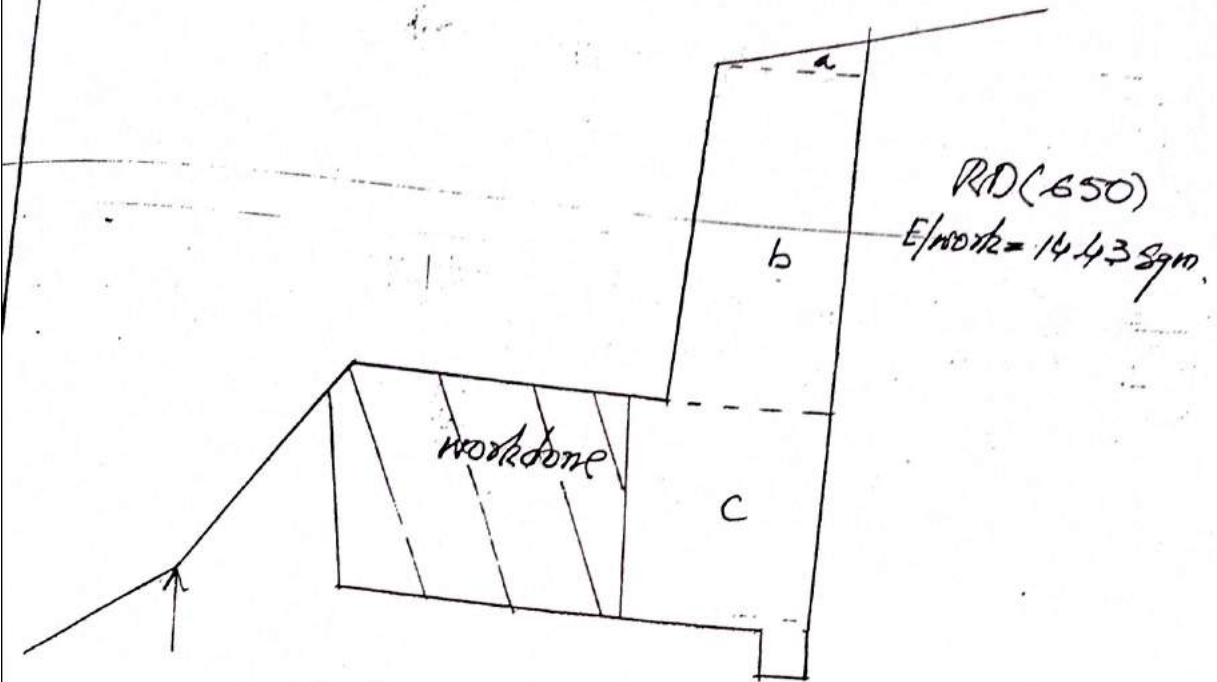
RD (625)

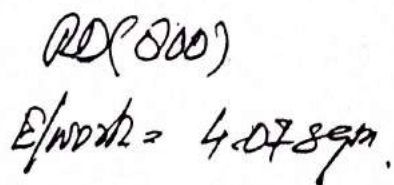
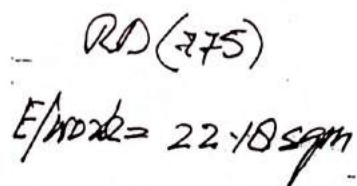
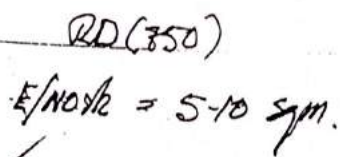
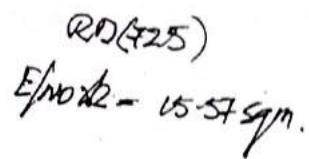
$$E/\text{work} = 7.86 \text{ sym.}$$

[Signature]
Executive Engineer
East Sea Div.

[Signature]
P. Sub. Engineer
Sub. Div.

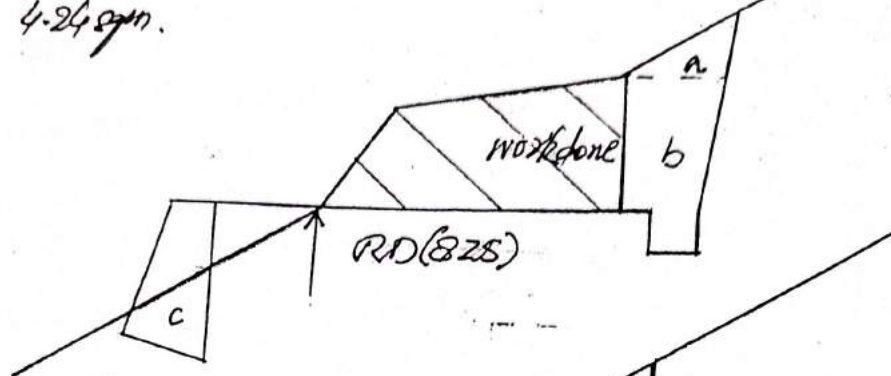
64



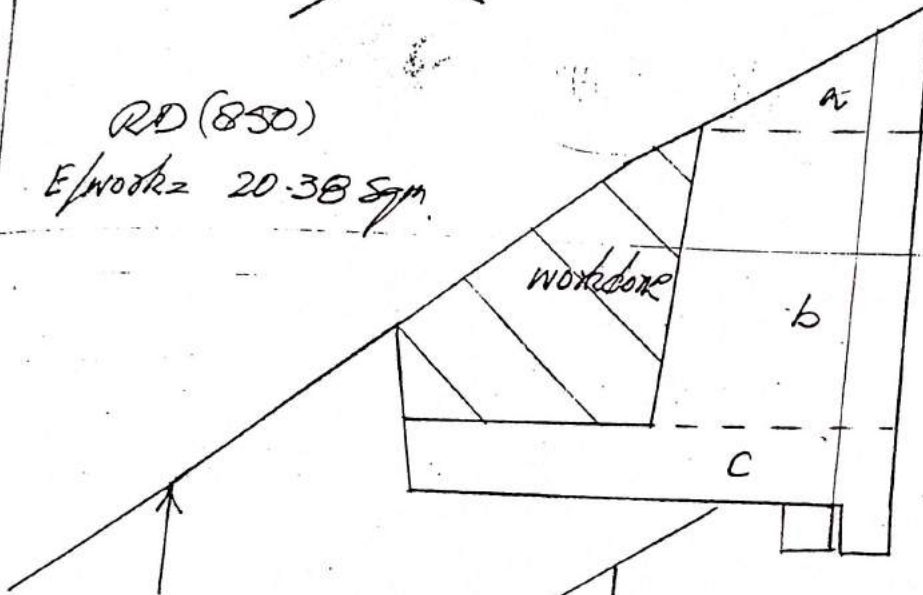


Handwritten signature and initials, possibly "J. J. J." and "F. J. J." with a large "X" mark.

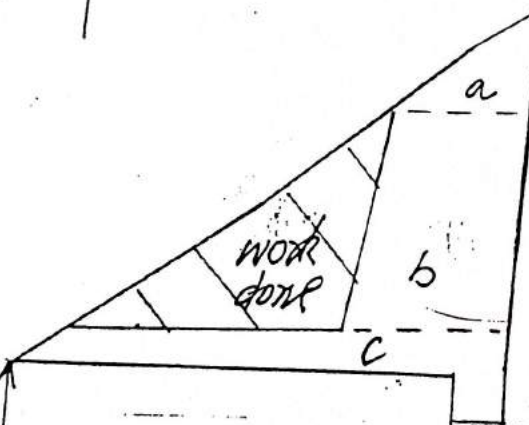
RD(825)
 E/work = 4.24 sqm.
 Mass -
 Pilling*



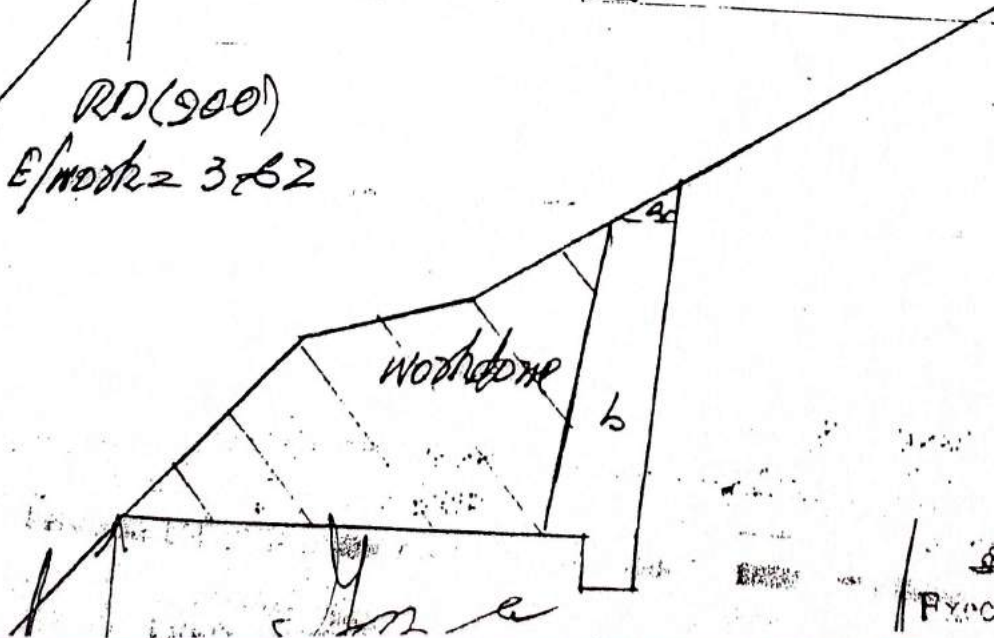
RD(850)
 E/work = 20.38 sqm.



RD(875)
 E/work = 8.75 sqm.

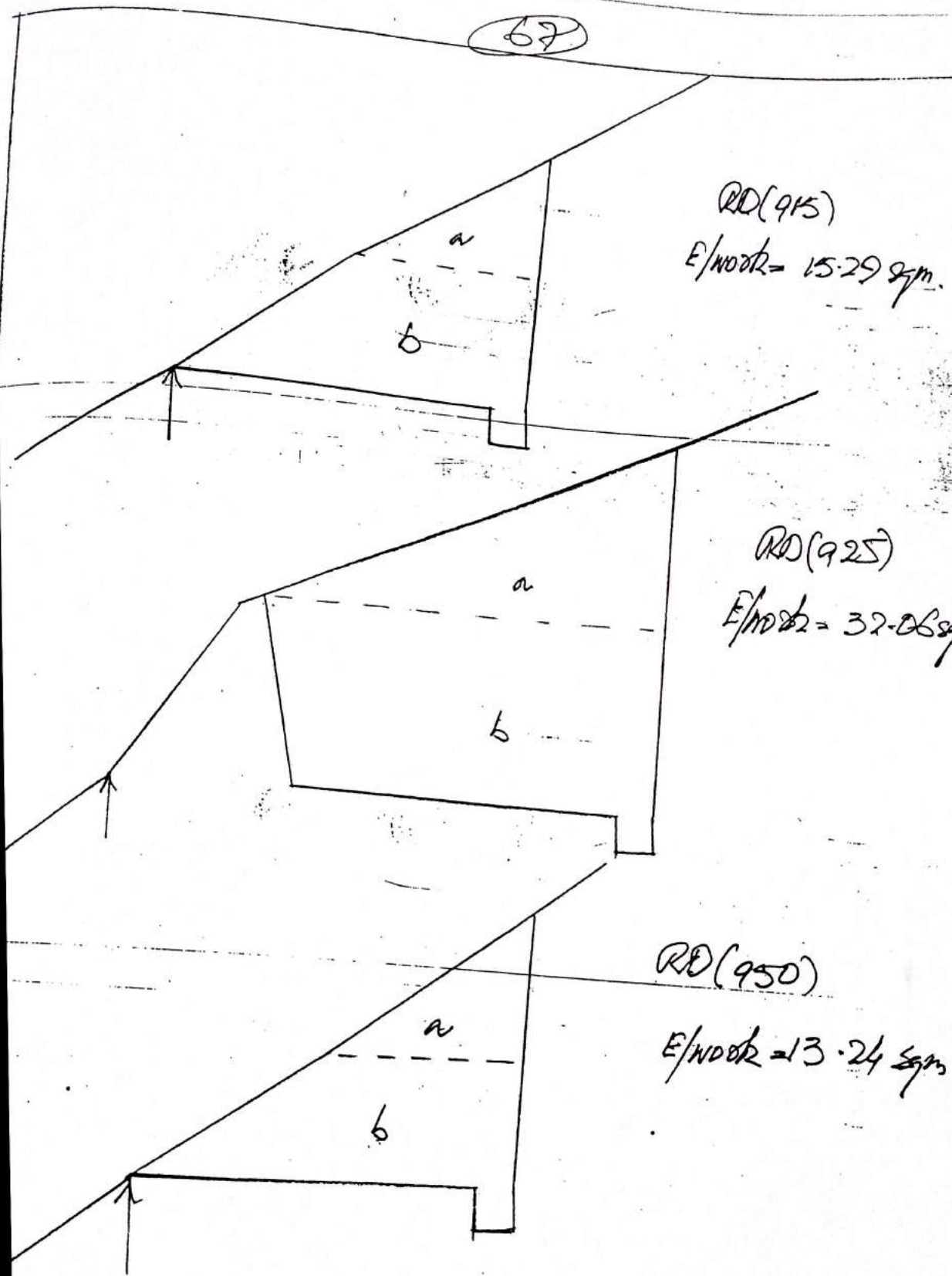


RD(900)
 E/work = 3.62



Percent along

67



Asstt. Executive Engineer
WD (R&B) East Sub-Div
DODA

Executive Engineer
P.W.D. (R&B) Spl. Sub. Div
Doda

68

RD(975)

E/WORK = ~~15.24~~ sqm.
14.56 m²

a

b

a

b

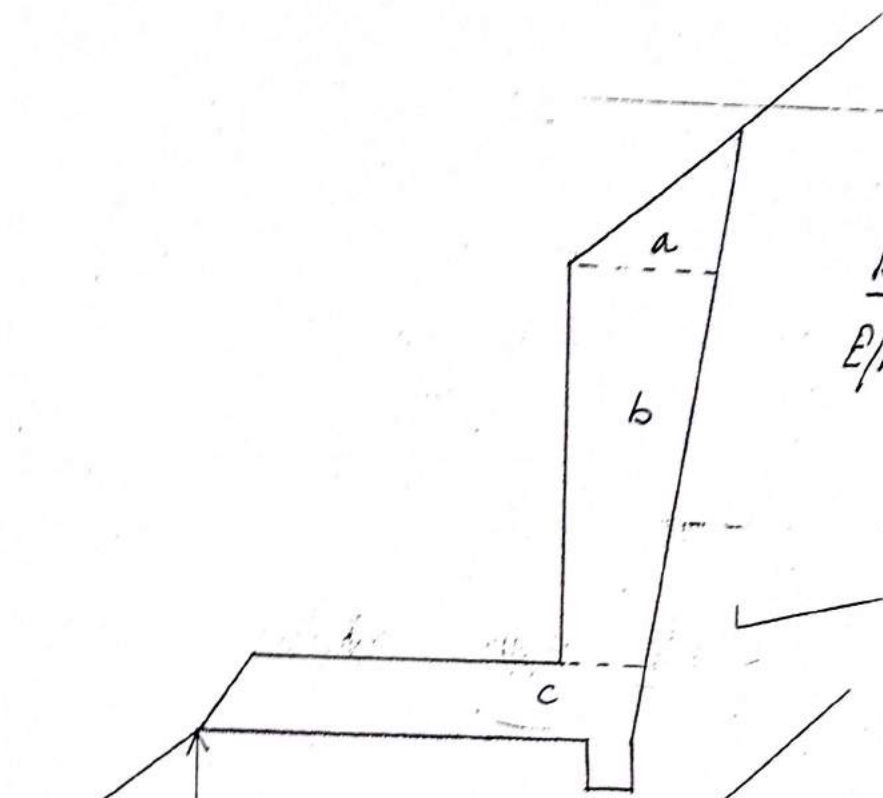
E/WORK 22.26 m²

RD(1000)

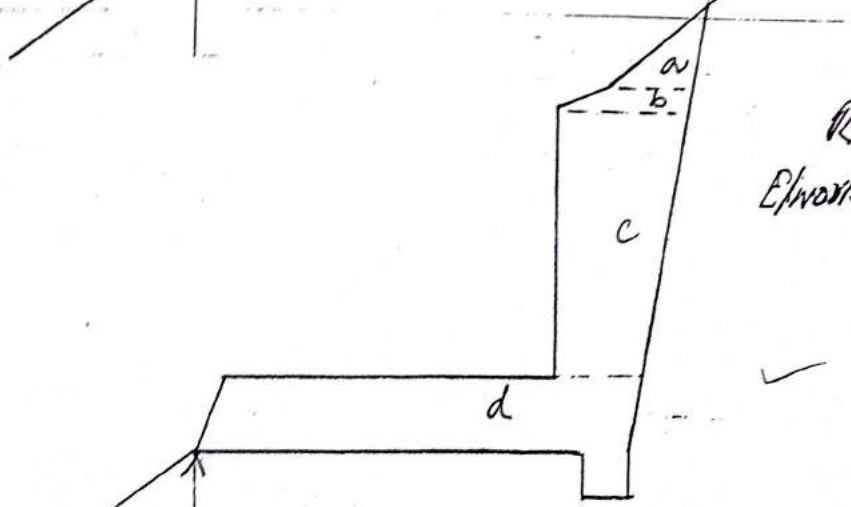
Asstt. Executive Engineer
P.W.D. (R&B) East Sub-Div.
DODA

Executive Engineer
P.W.D. (R&B) Spl. Sub. Div.
DODA

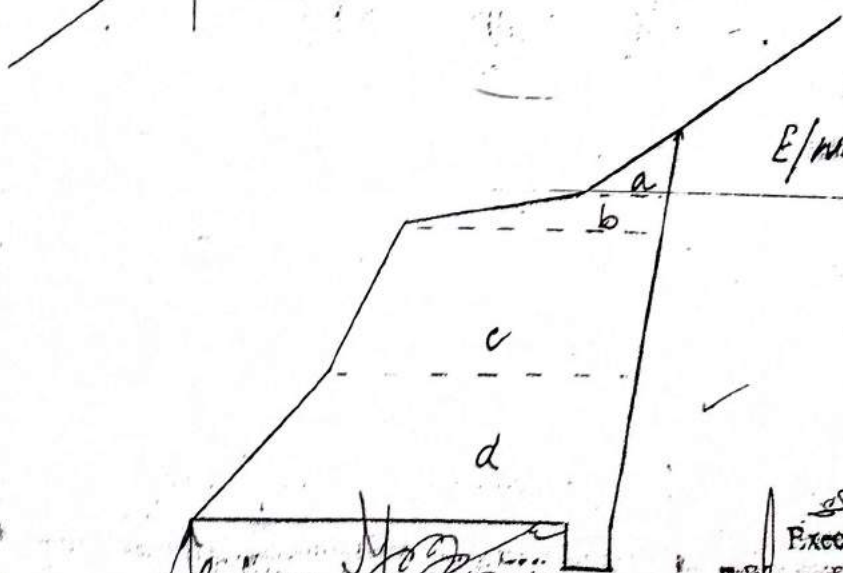
(69)



km 6th RD(0)
 $E/work = 16.23 \text{ sgm}$



RD(150)
 $E/work = 12.77 \text{ sgm}$

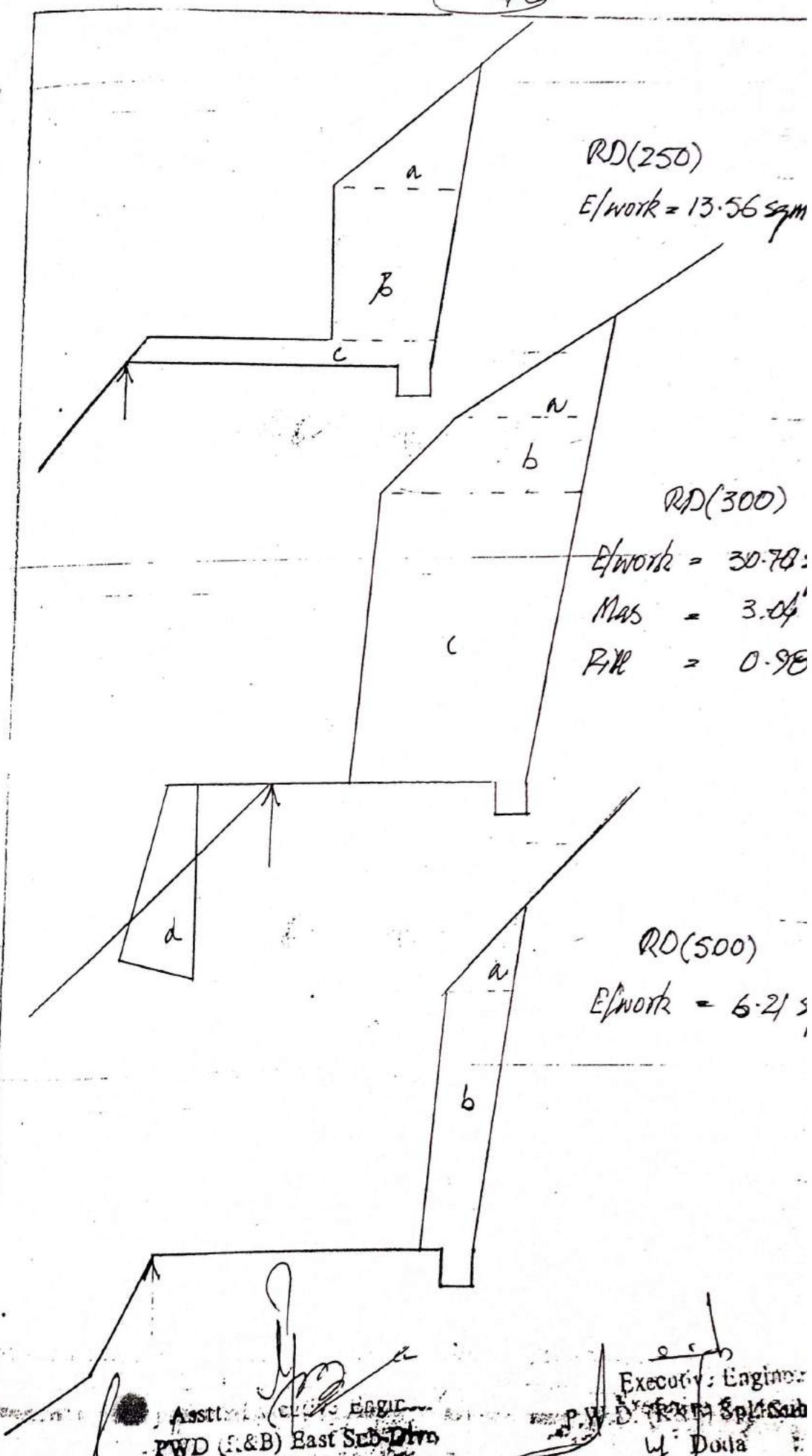


RD(200)
 $E/work = 20.76 \text{ sgm}$

Asstt. Engr. in Charge
P.W.D. (P&R) Road Section

Executive Engineer
P.W.D. (P&R) Sd. Sub. Div.

70



RD(250)
 $E/work = 13.56 \text{ sqm}$

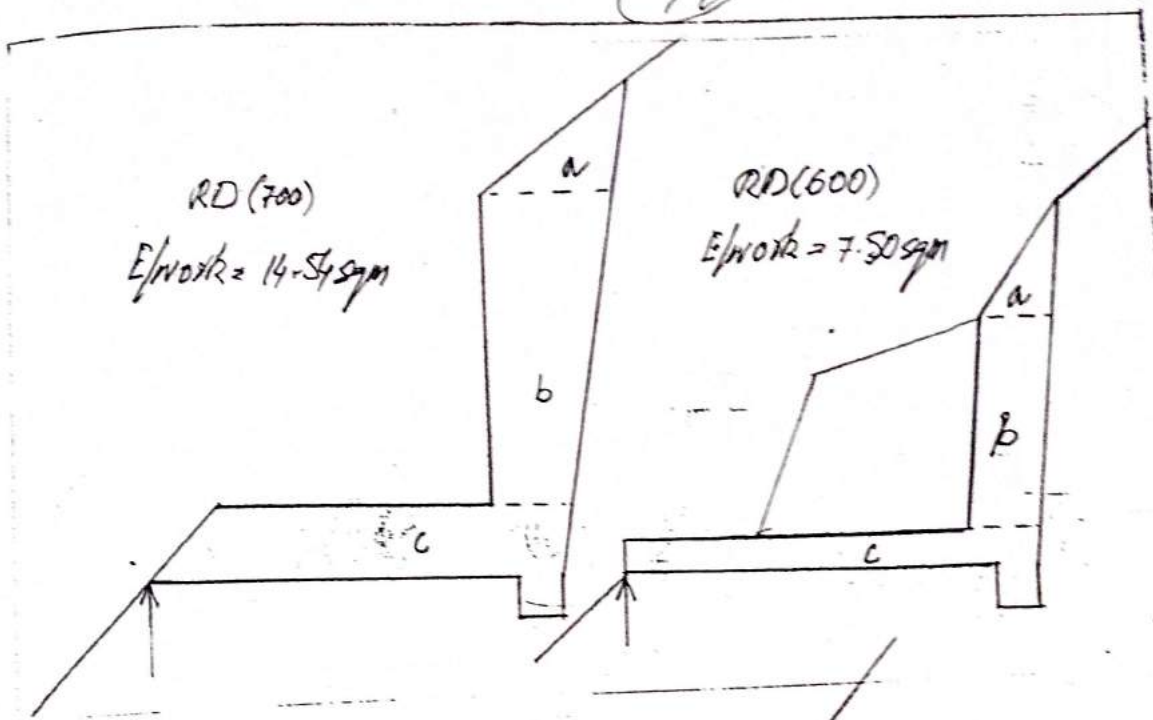
RD(300)
 $E/work = 30.78$
Mas = 3.04
R/R = 0.98

RD(500)
 $E/work = 6.21$

Asstt. Engineer
PWD (R&B) East Sec. Divn
DODA

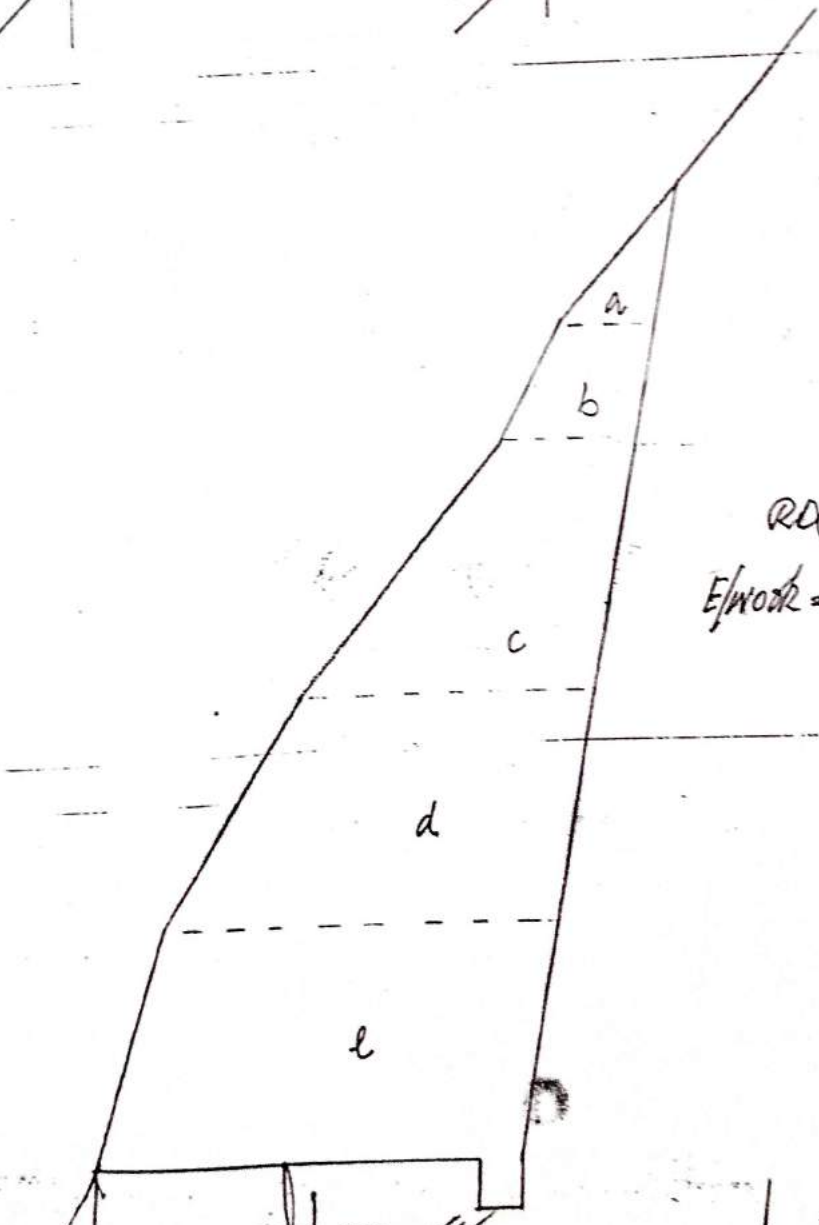
Executive Engineer
P.W. D. & R. Sub
Doda

71



RD(700)
 $E/work = 14.54 \text{ s/m}$

RD(600)
 $E/work = 7.50 \text{ s/m}$



RD(725)
 $E/work = 46.83 \text{ s/m}$

Asstt. Executive Engineer
P.W.D. (R & B) East Sub-Div.

Executive Engineer

P.W.D. (R & B) Sp. Sub-Div.
Doda

72

RD(800)

$E_{work} = 13.26 \text{ Spm}$

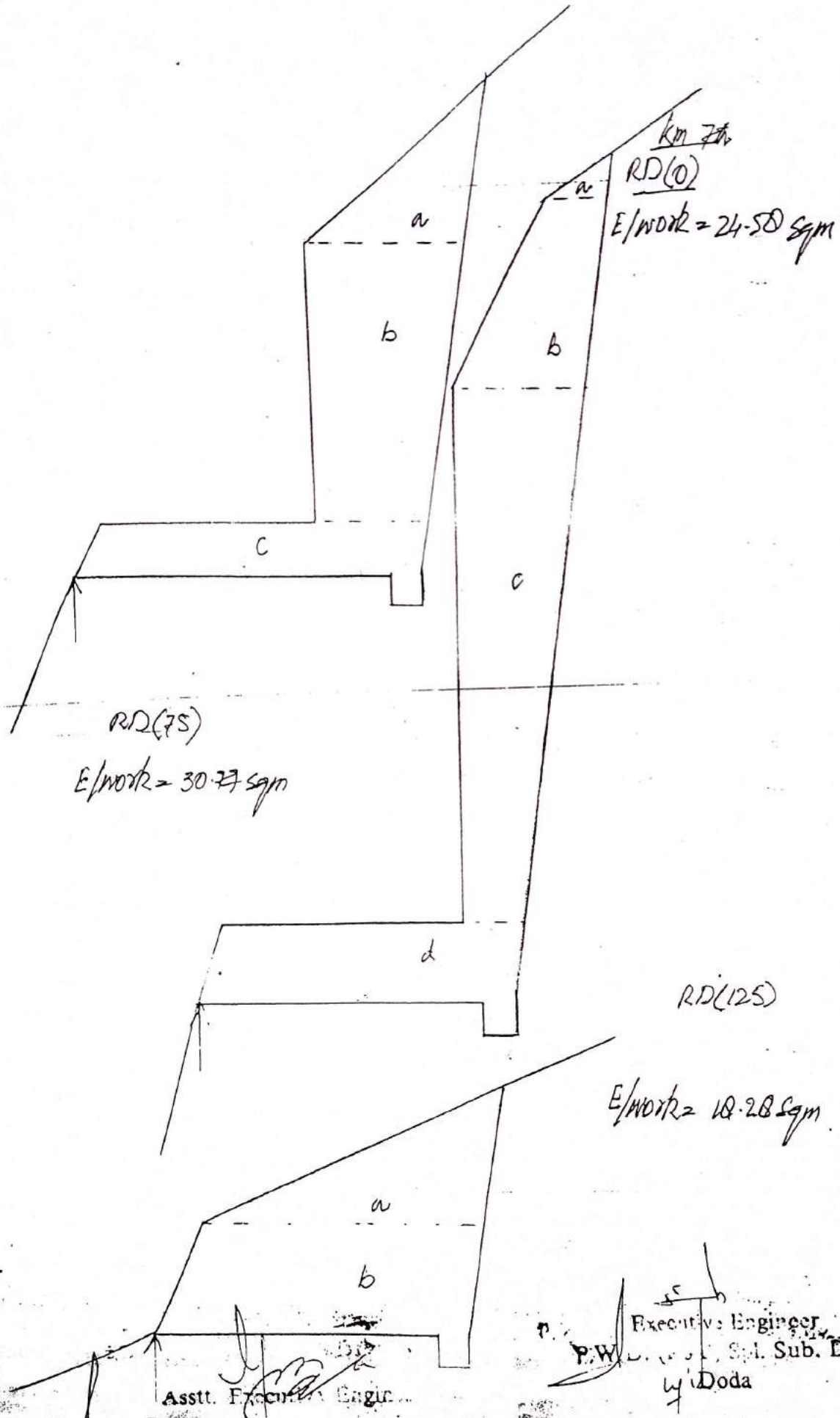
RD(900)

$E_{work} = 48.20 \text{ Spm}$

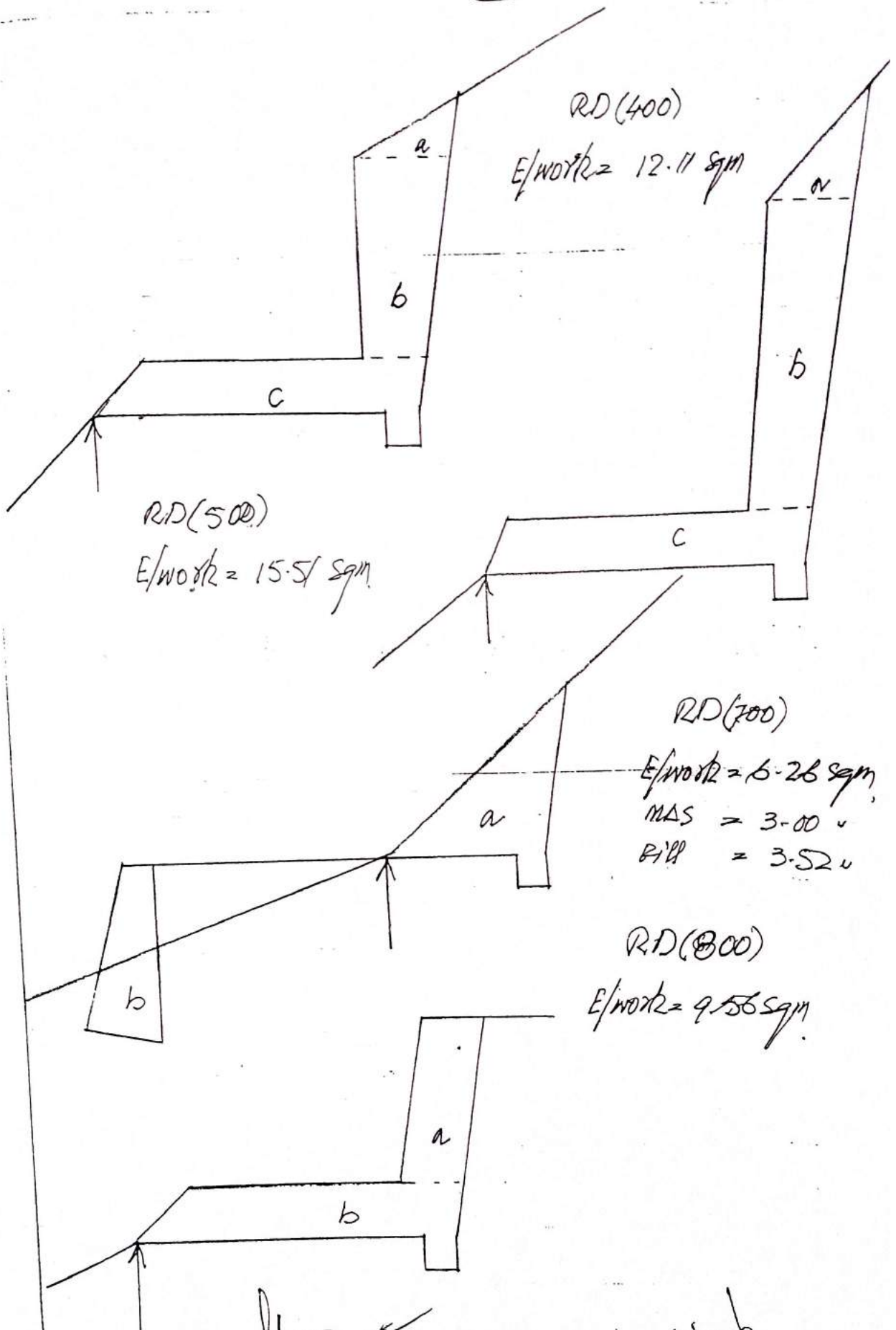
RD(1000)

$E_{work} = 40.96 \text{ Spm}$

Executive Engineer
(R & H) Sol. Sub. D



(74)



Asstt. Executive Engineer
P.W.D. ... Test Sub-Div.
DODA

Executive Engineer
P.W.D. ... Spl. Sub. Div.
Doda

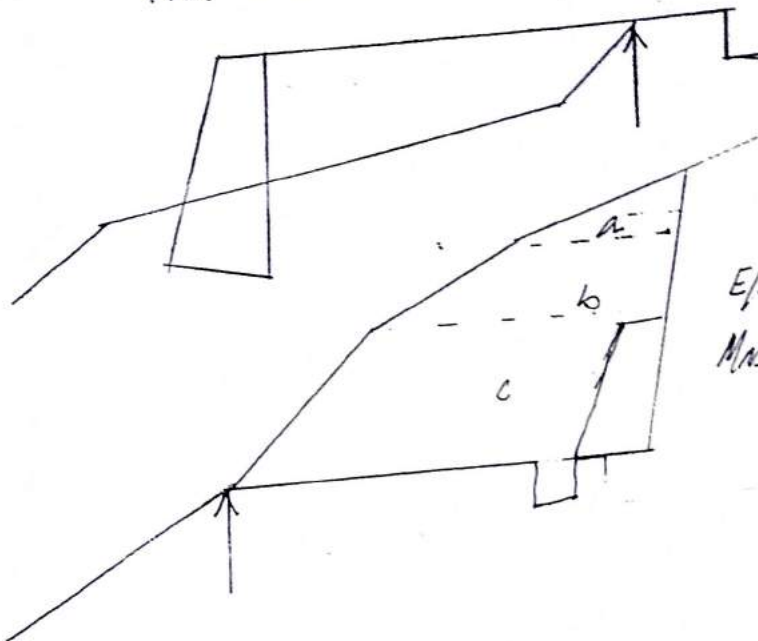
75

RD(825)

$$E/width = 2.71 m$$

$$MAS = 2.85$$

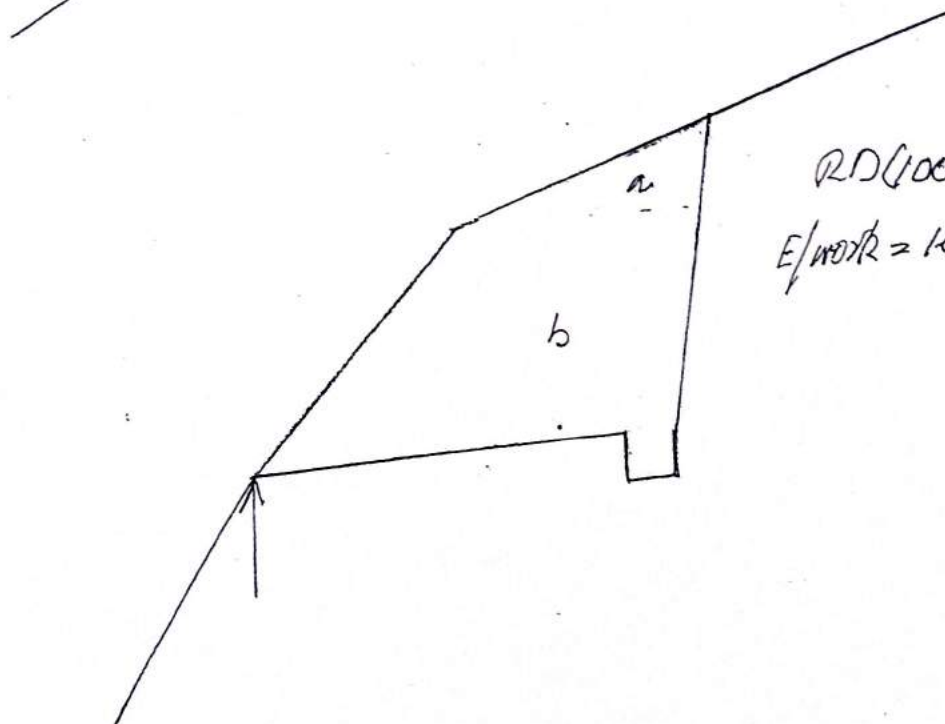
$$FIR = 6.75$$



RD(850)

$$E/width = 15.69 \text{ sqm}$$

$$MAS = 1.50 \text{ sqm}$$



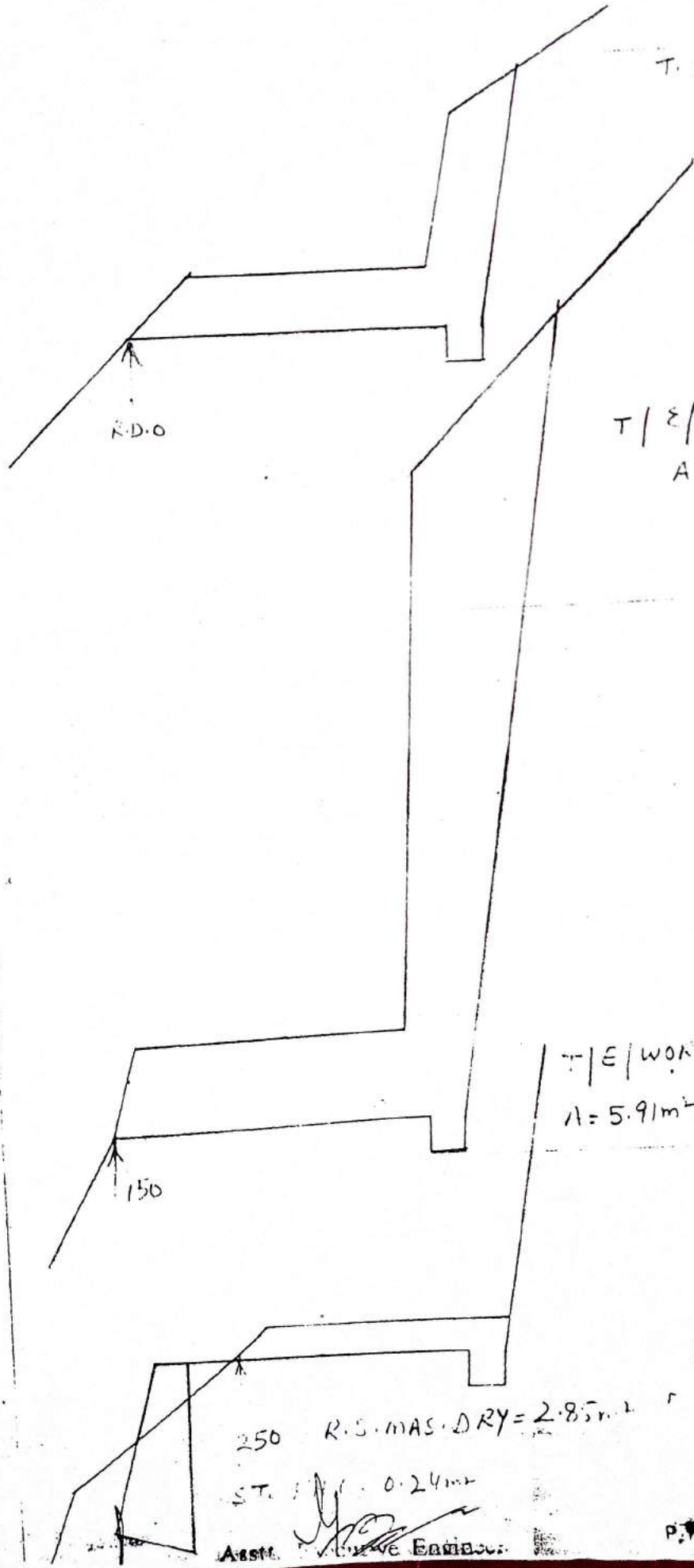
RD(1000)

$$E/width = 16.53 \text{ sqm}$$

[Signature]
 PPA
 CODA
 100-DIR

[Signature]
 PPA
 D(R7B)
 4
 Engineer
 Sub. Div

76



T. E / WORK

A = 9.06 m²

T / E / WORK

A = 28.44 m²

T / E / WORK

A = 5.91 m²

Kn 81% R. 10 - 250

250 R.S. MAS. DRY = 2.85 m²

ST. 100 0.24 m²

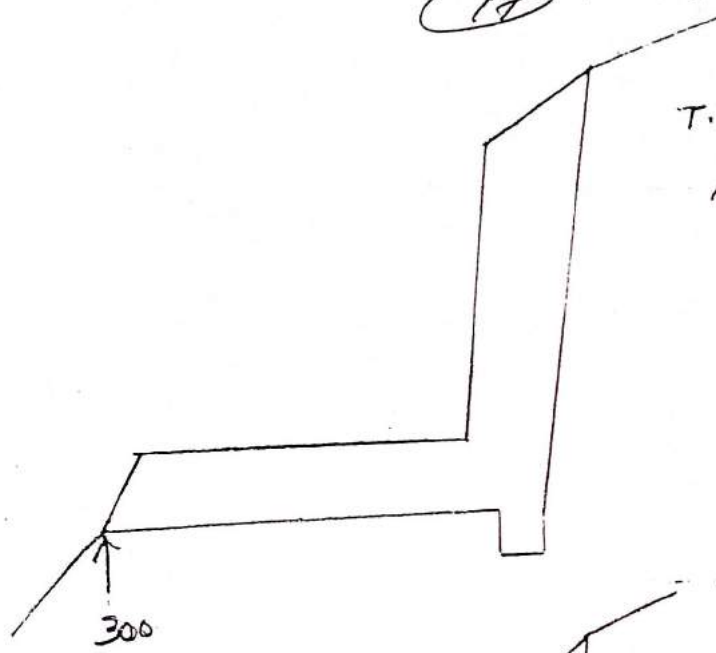
Asstt.

Engr. Engrs.

P.W.D.

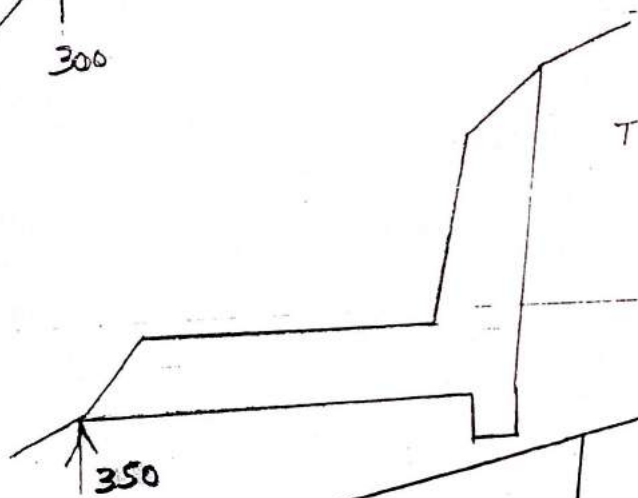
Spl. Sub. D

72



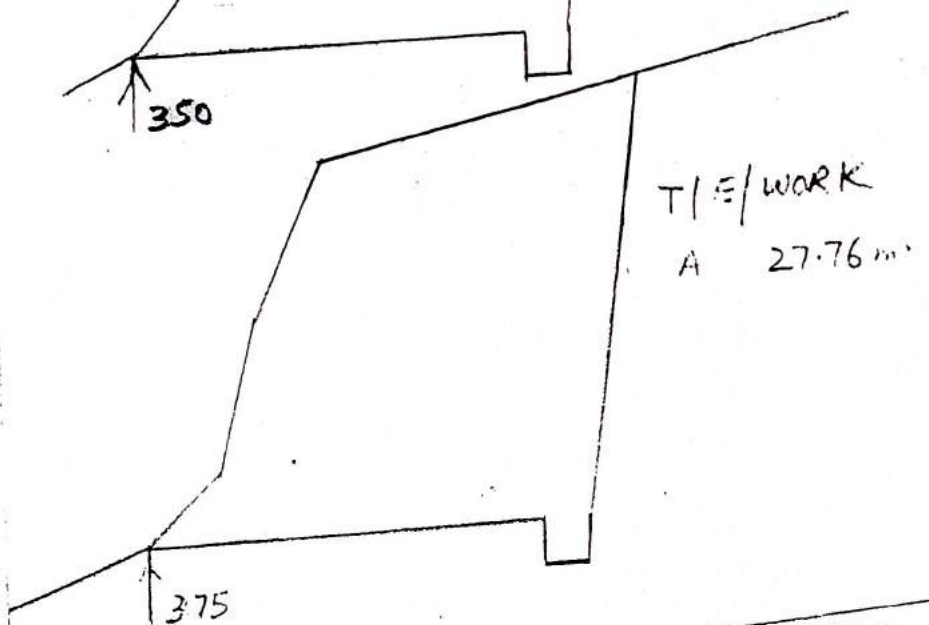
T. E/WORK

AREA = 11.79 m²



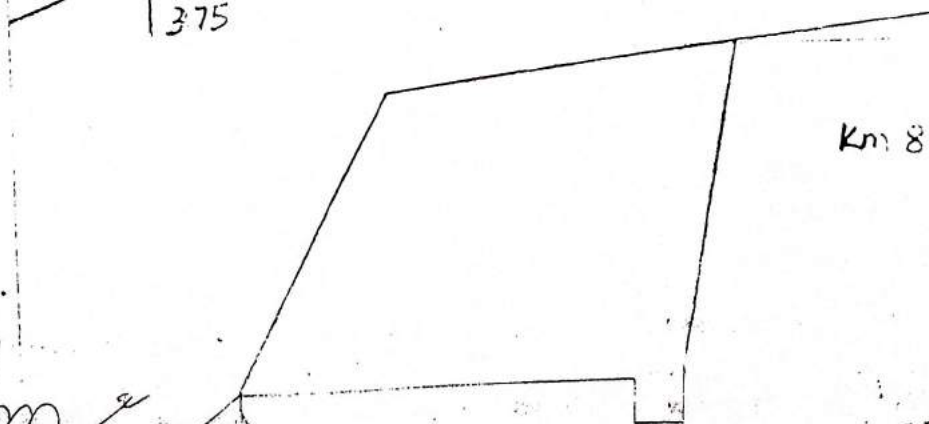
T/E/WORK

A = 9.11 m²



T/E/WORK

A 27.76 m²

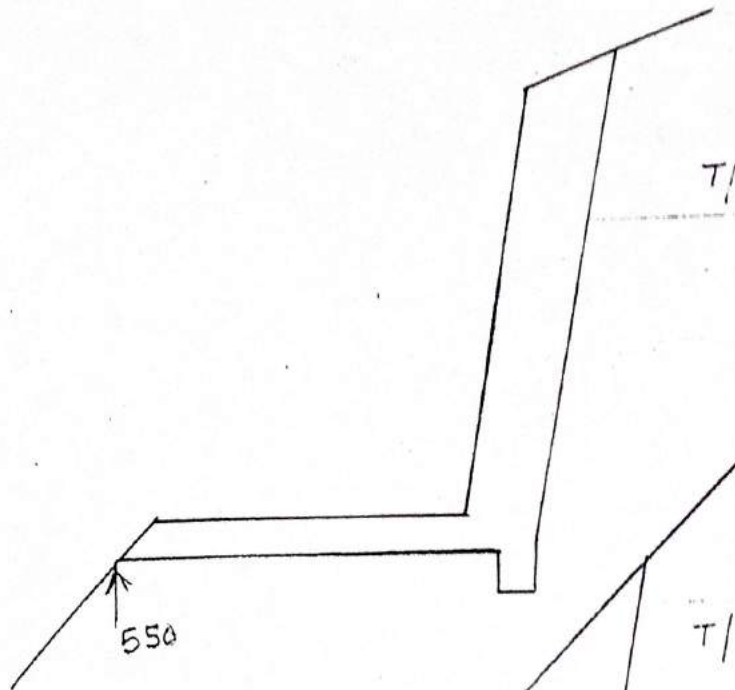


Km 8TH R.O (300-4

Engineer
1425
T/E/WORK A 22.89 m²

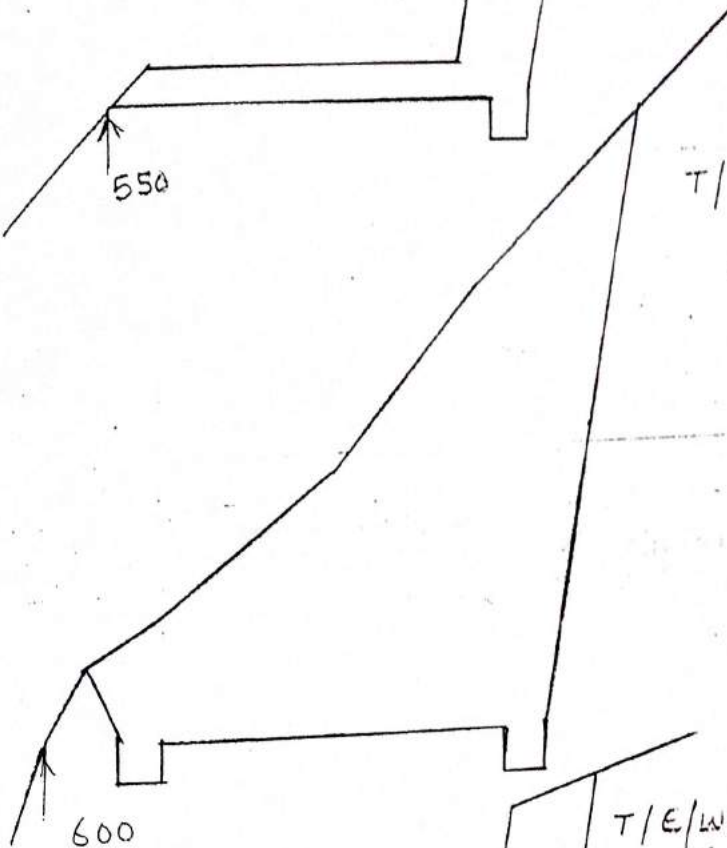
Executive Eng
P.W.D.
W. Dada

(78)



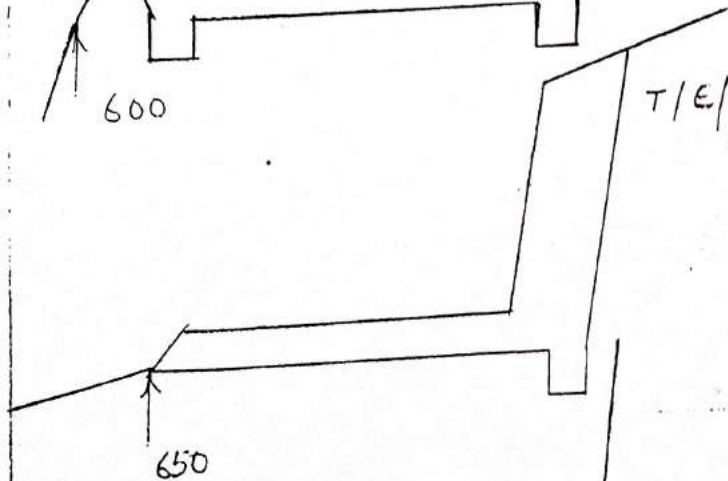
T/E/WORK

$$A = 10.46 m^2$$



T/E/WORK

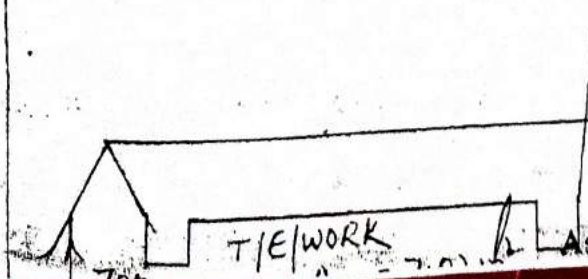
$$A = 24.09 m^2$$



T/E/WORK

$$A = 6.82 m^2$$

Km 8th R.D (550-700)



T/E/WORK

Asstt. Executive Engineer

[Signature]

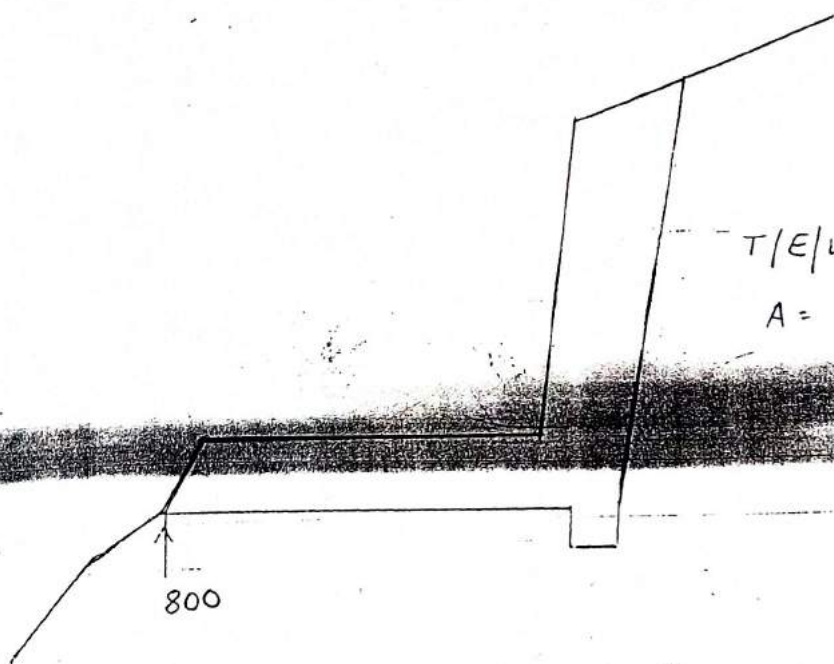
P.W.

Executive Engineer

Sub. D

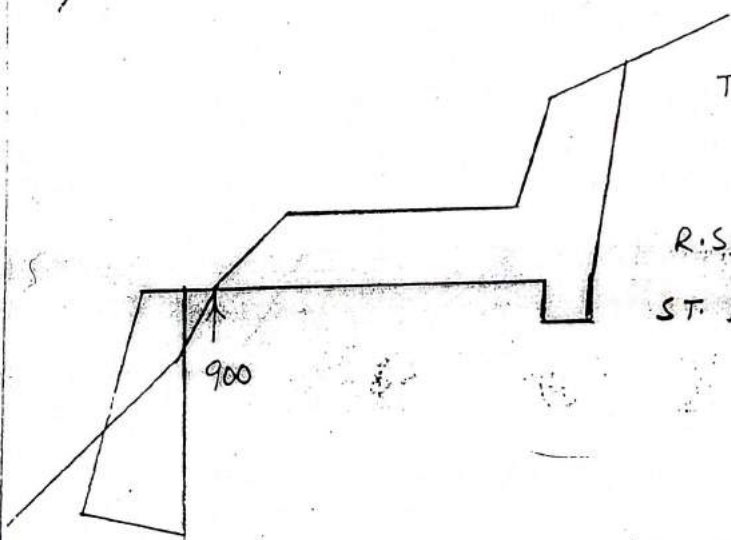
Y. Dada

79



T/E/WORK

$$A = 12.41 m^2$$

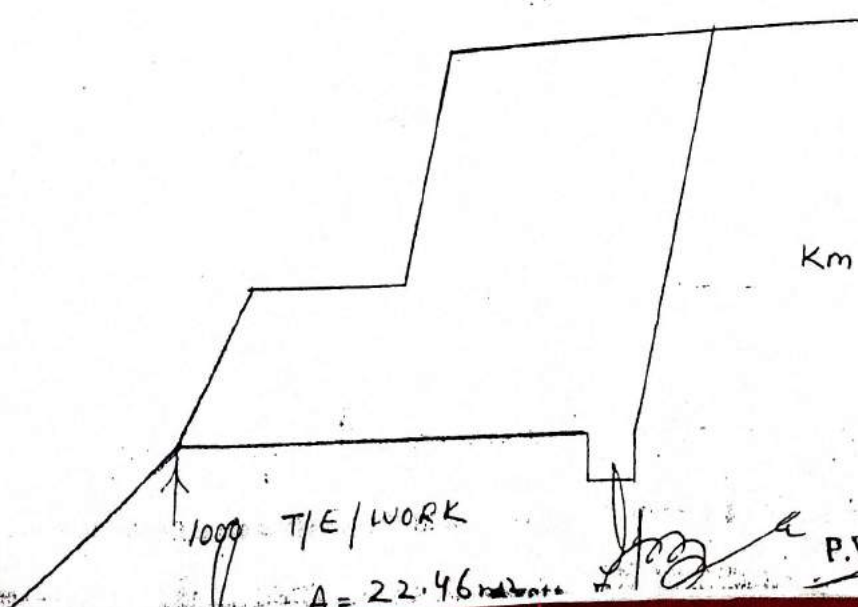


T/E/WORK

$$A = 9.05 m^2$$

$$R.S. MAS. DRY = 3.00 m^2$$

$$ST. FILL. = 0.16 m^2$$



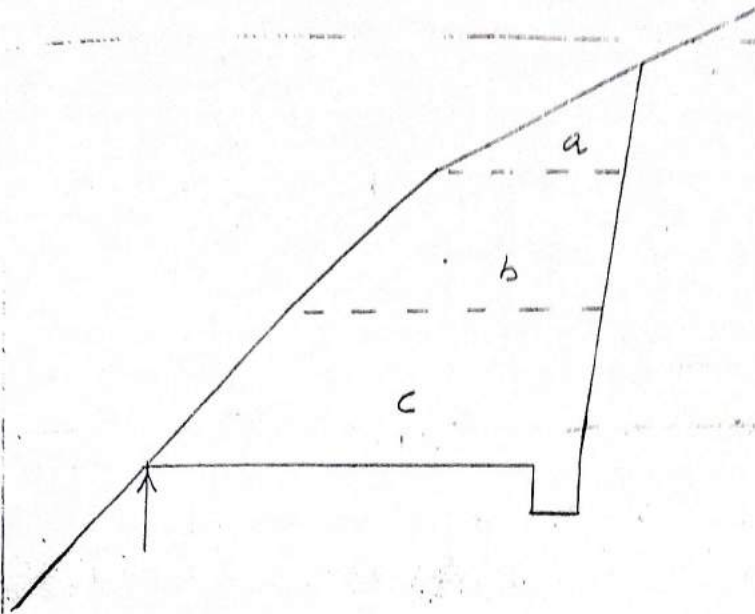
T/E/WORK

$$A = 22.46 m^2$$

Km 8 TH. R.D. (800-1000)

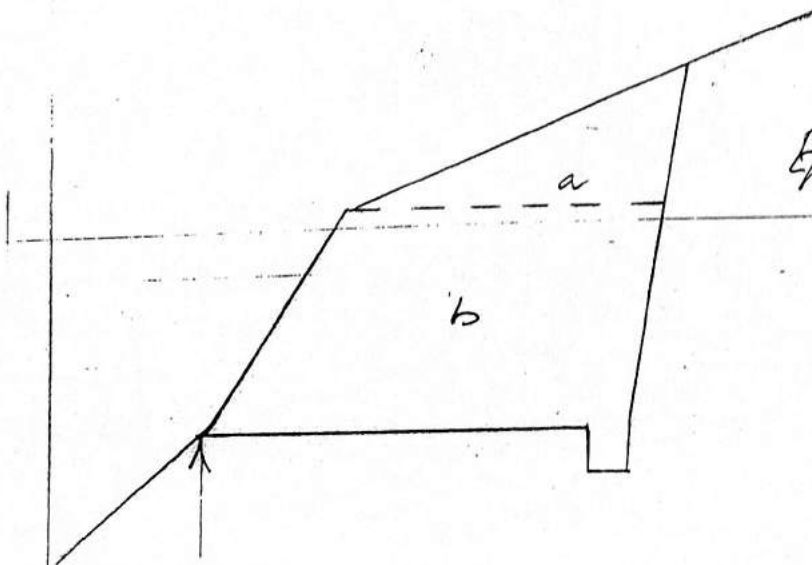
Executive Engineer
Spt. Sub. Div.
P.W.
El. Vada

80



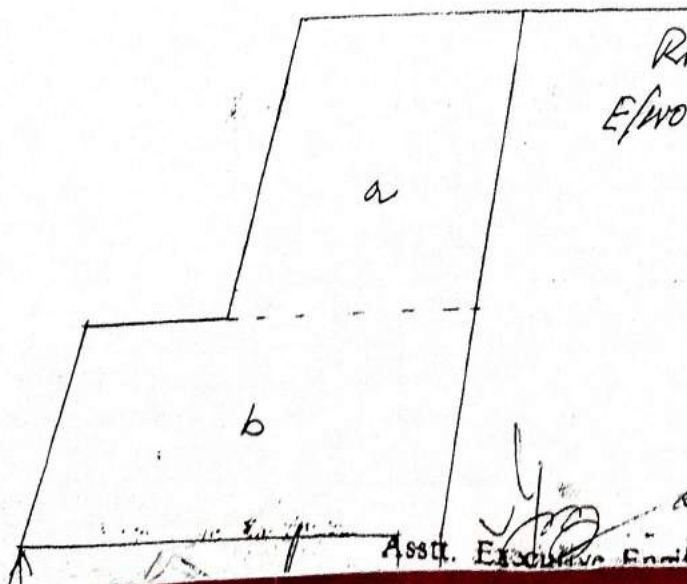
km 94 RD(10)

$E/\text{work} = 19.88 \text{ sqm}$



RD(250)

$E/\text{work} = 20.50 \text{ sqm}$



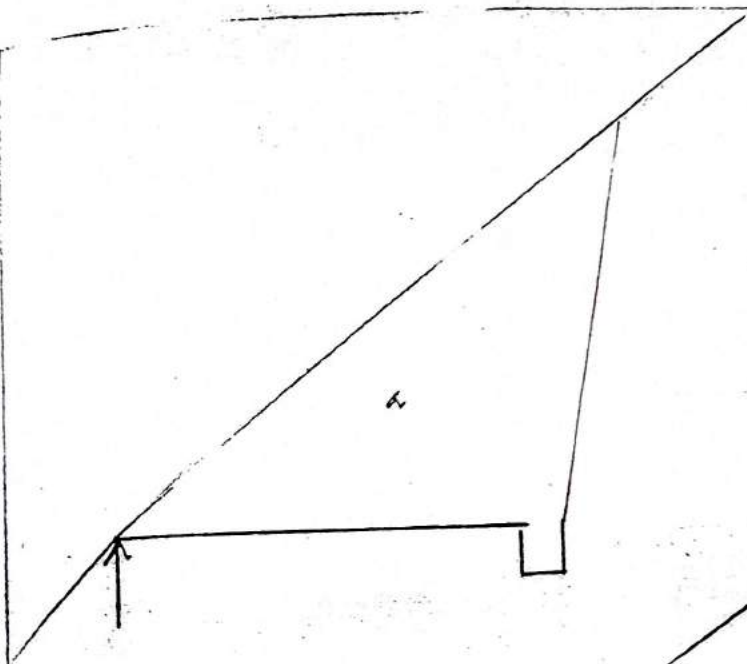
RD(500)

$E/\text{work} = 30.65 \text{ sqm}$

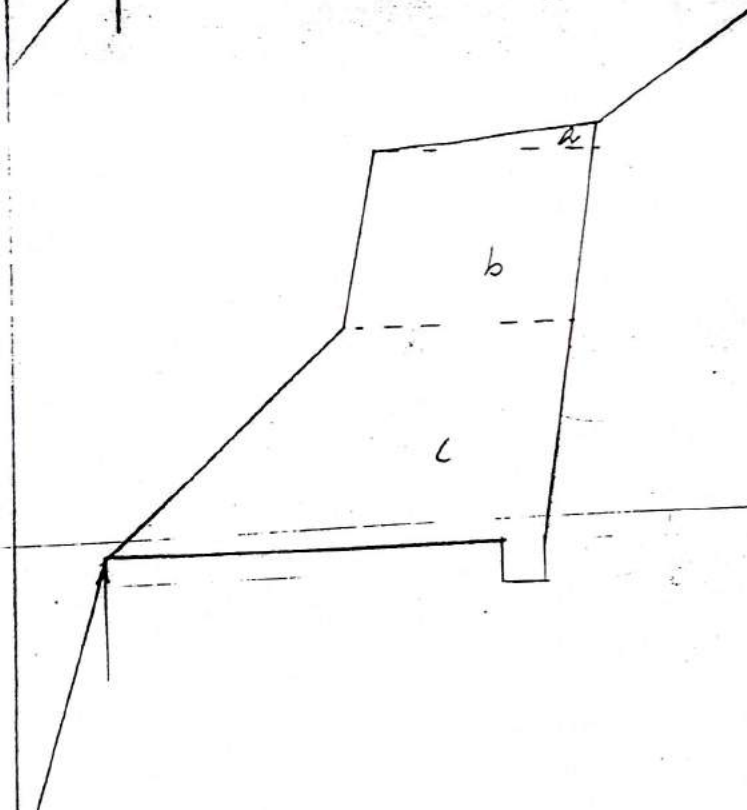
Asst. Executive Engineer W.D.

Sub. Div.

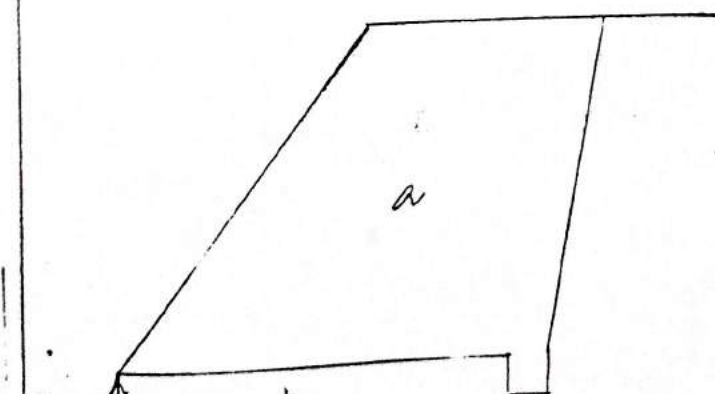
(80)



RD(750)
 $E/\text{work} = 15.80 \text{ sqm}$



RD(9/0)
 $E/\text{work} = 21.34$

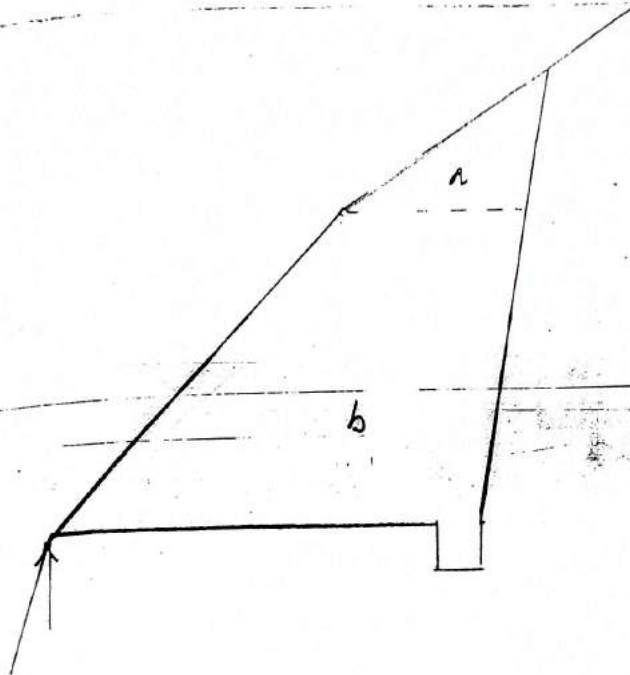


RD(9/250)
 $E/\text{work} = 21.82 \text{ sqm}$

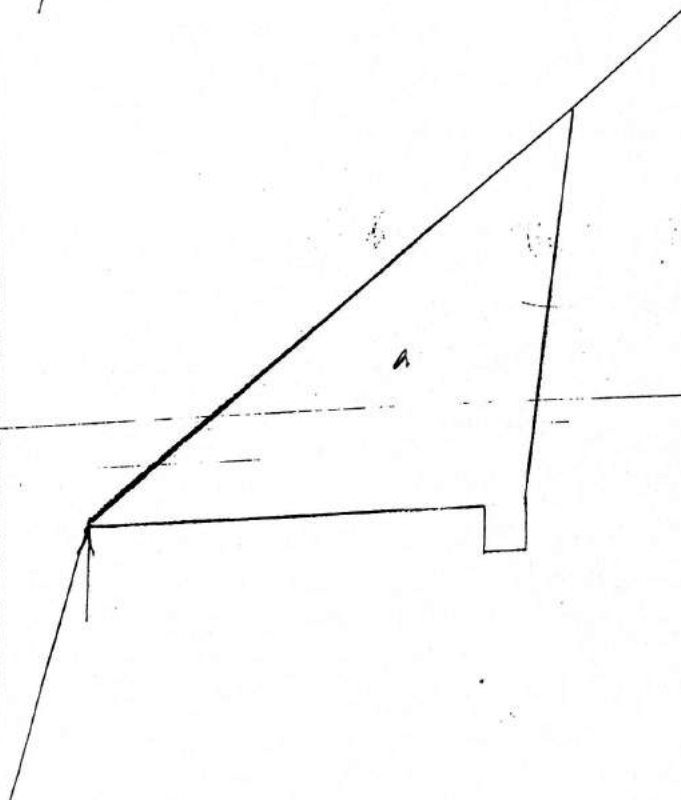
At tt. Executive Eng
PW. CRBB East Sub. m

Engineer
Sub. Div.
P.W.
4.4.000

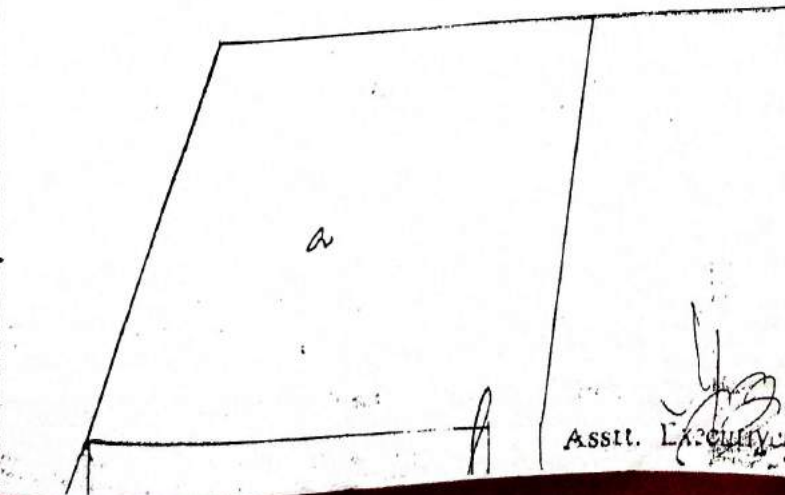
82



RD (9/500)
 $E/wdth = 23.04 \text{ sqm.}$



RD (750)
 $E/wdth = 16.70 \text{ sqm.}$



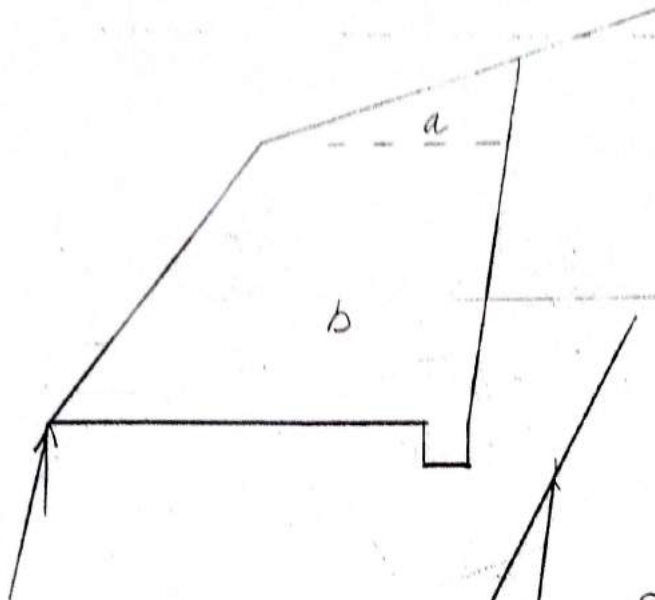
RD (10/0)
 $E/wdth = 29.06 \text{ sqm.}$

Assit. Executive Engil... P.W.D. (R...)
Executive Eng...
W. Doda

(83)

RD(10/250)

E/work = 22.60 sqm.

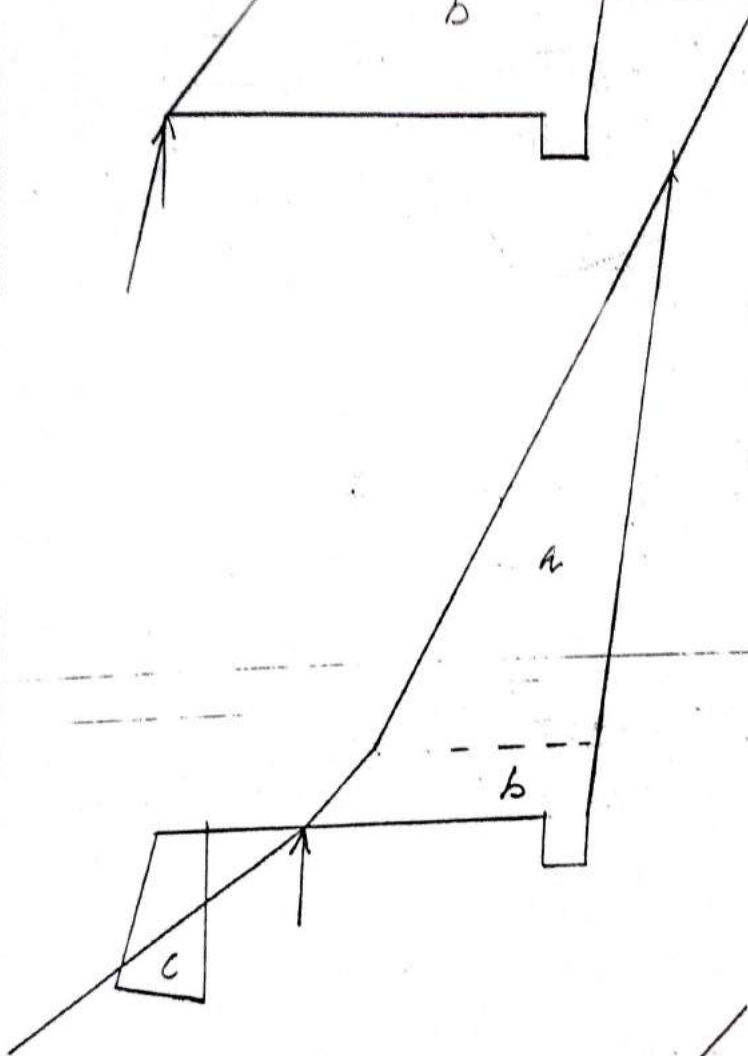


RD(10/500)

E/work = 16.75 sqm

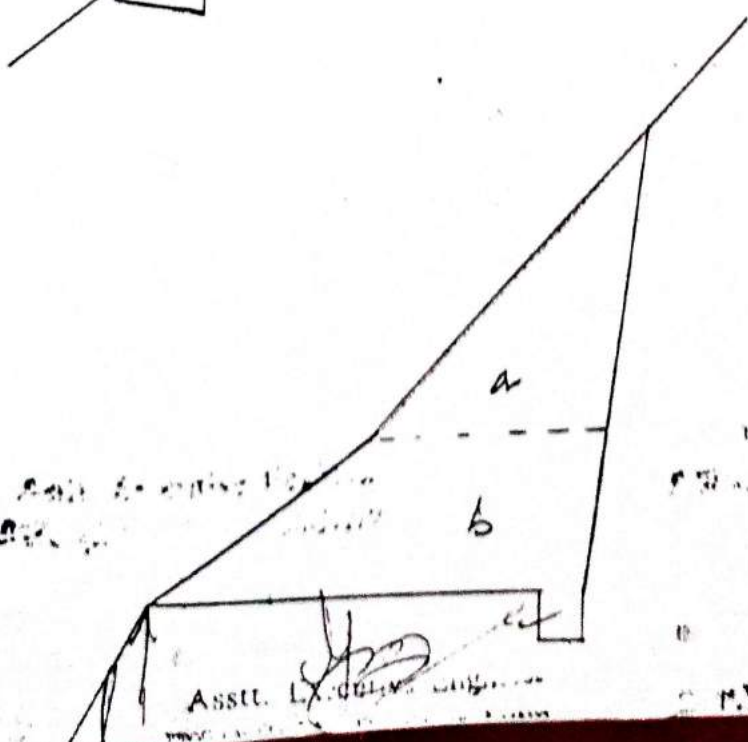
Has = 1.80 sqm

R/K = 0.70 sqm



RD(10/750)

E/work = 15.93 sqm



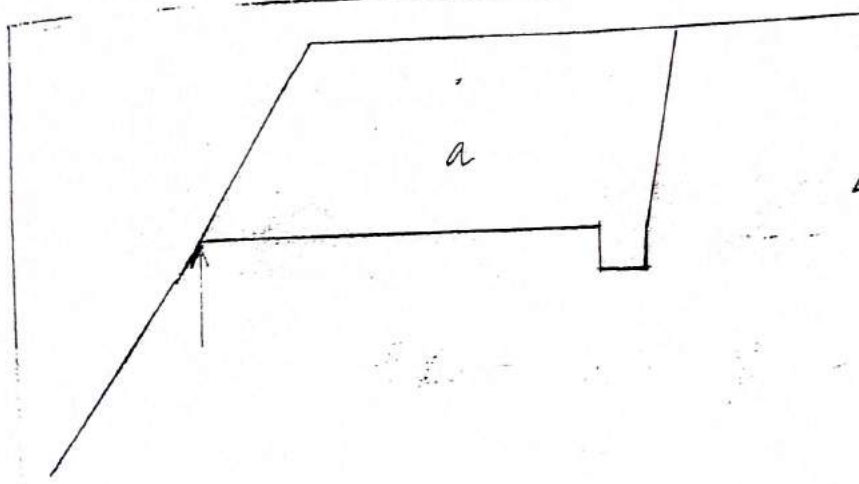
Asst. Executive Engineer

Asst. Executive Engineer

Executive Engineer

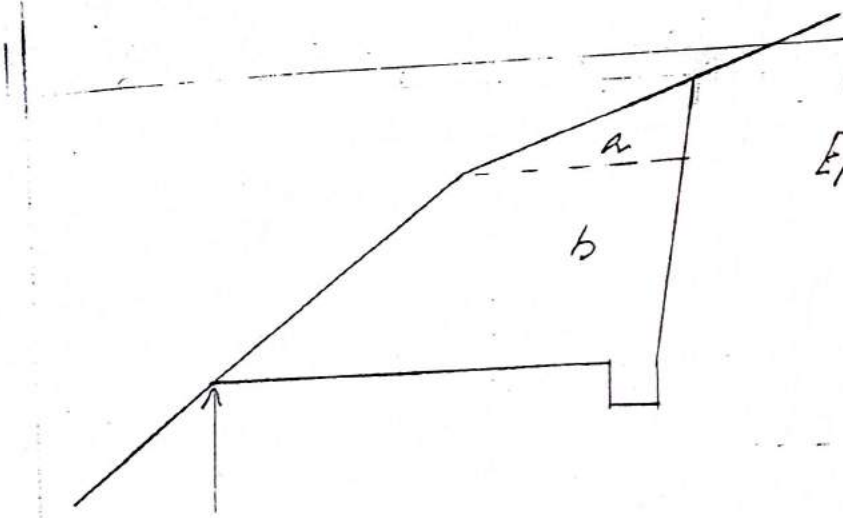
Executive Engineer
Sub. Div.

84



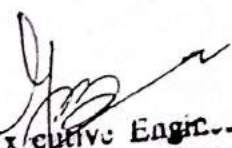
RD(11/0)

$E/100\% = 13.82 \text{ Sgm}$



RD(11/250)

$E/100\% = 13.66 \text{ Sgm}$


Asstt. Executive Engineer
FWD (R&T) East Sub-Div
DODA


Executive Engineer
F.W.D. Sub. Div.
DODA

85

T/E/WORK

A = 18.77 m²

11/500

T/E/WORK

A = 24.25 m²

11/750

T/E/WORK

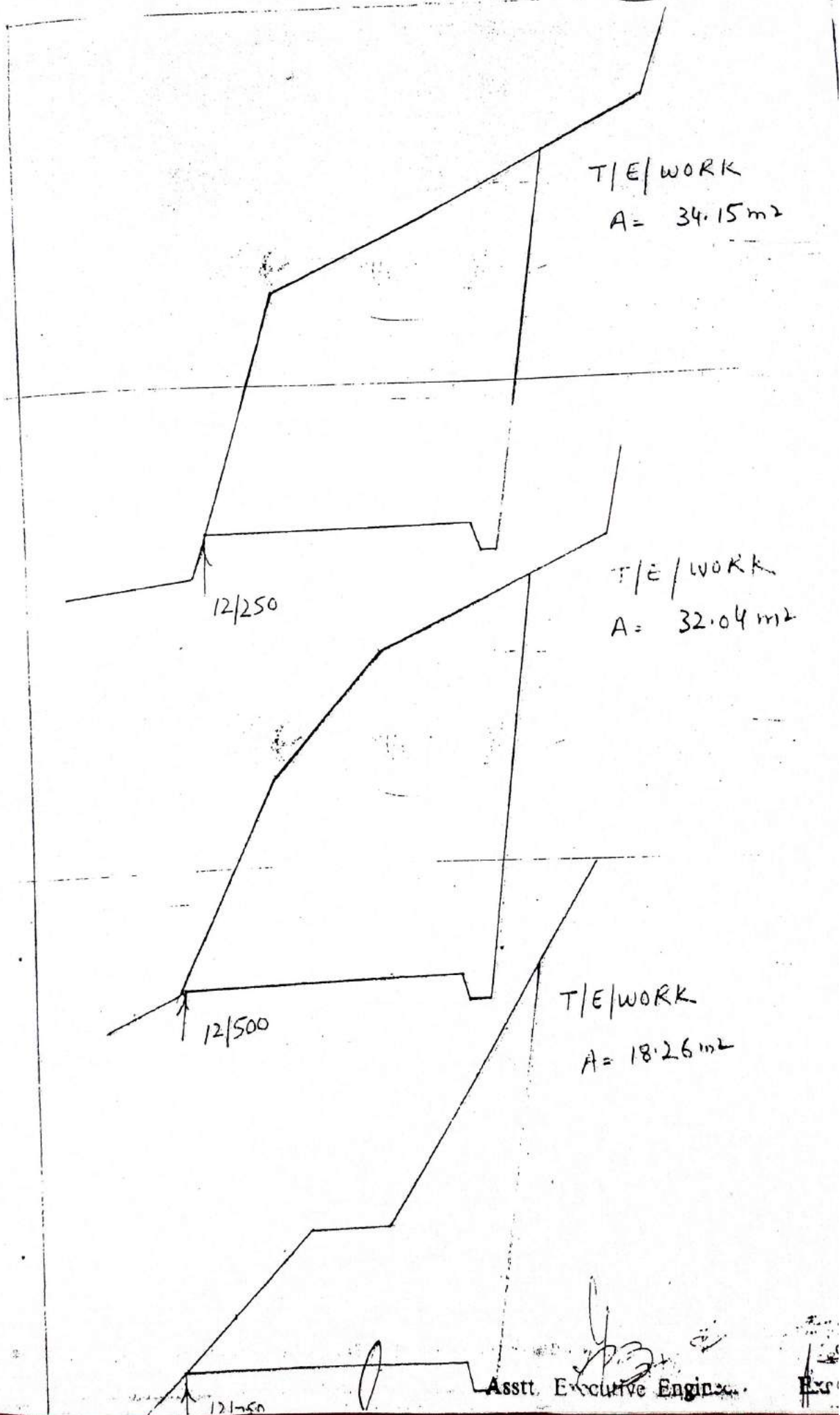
A = 33.73 m²

Executive Engineer

12/0

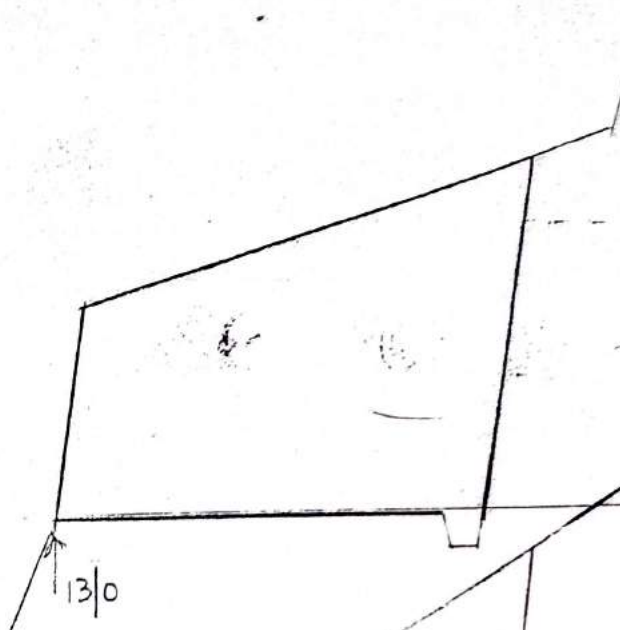
Executive Engineer

86



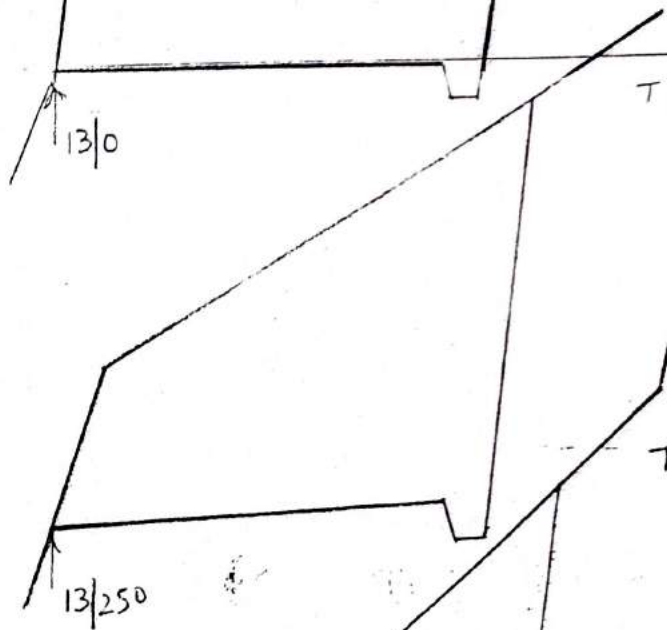
Asstt. Executive Engineer

82



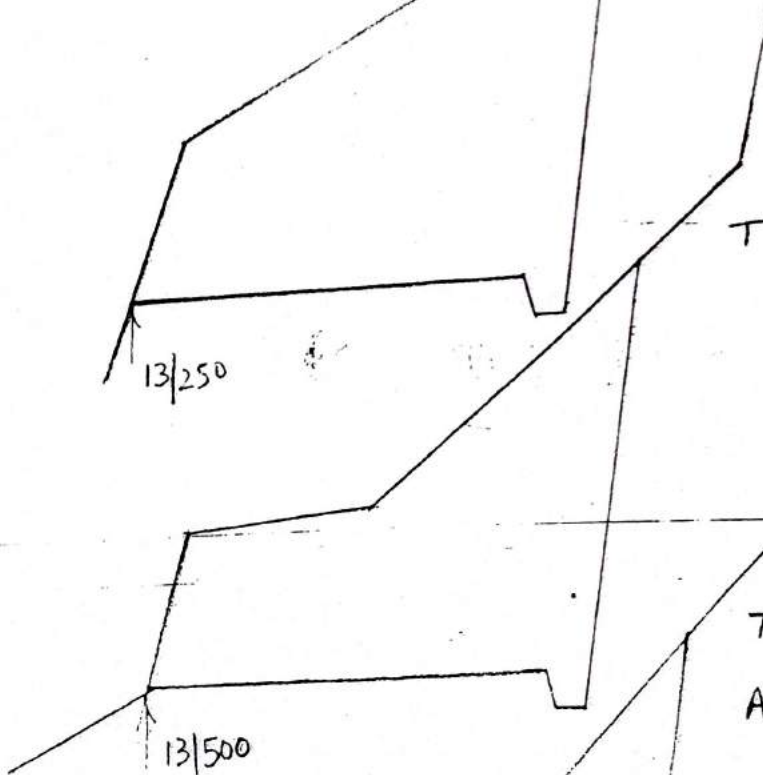
T/E/WORK

A = 24.25 m²



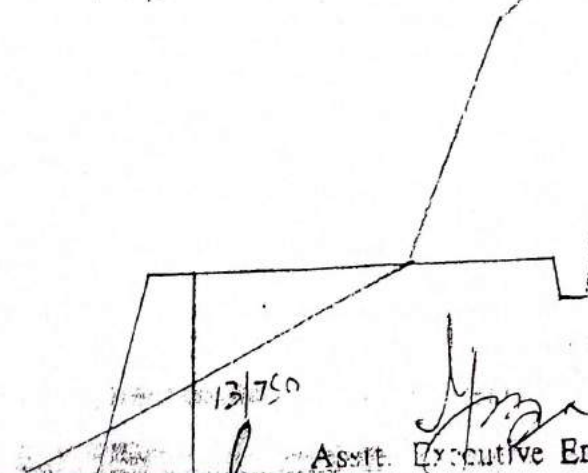
T/E/WORK

A = 21.60 m²



T/E/WORK

A = 18.12 m²



T/E/WORK

A = 10.00 m²

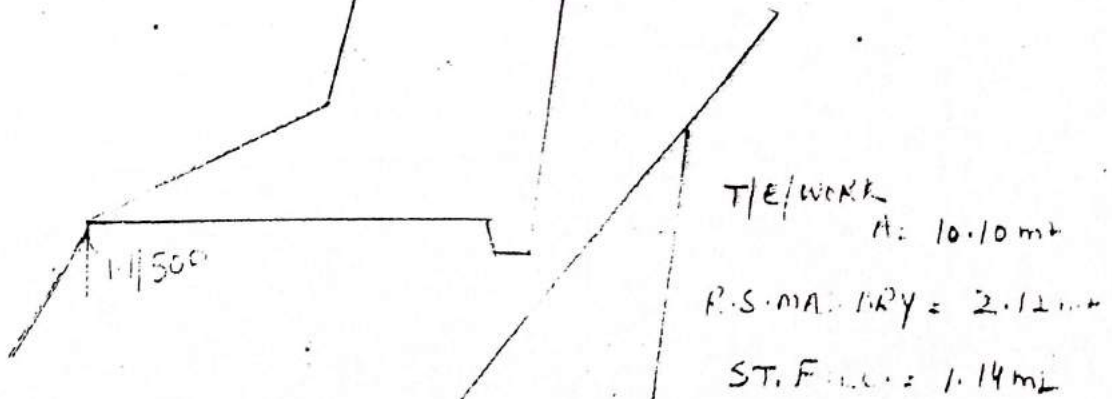
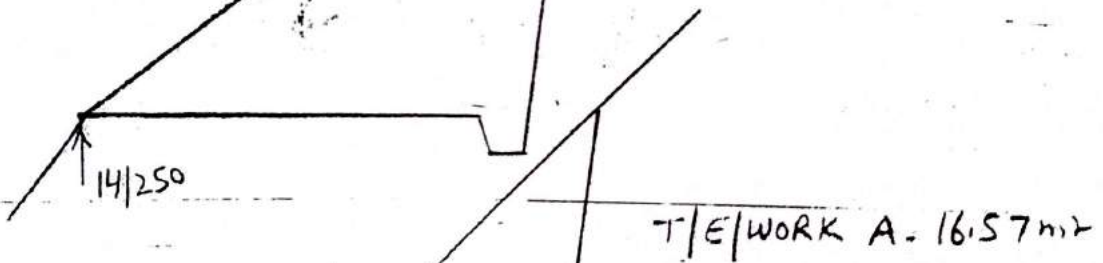
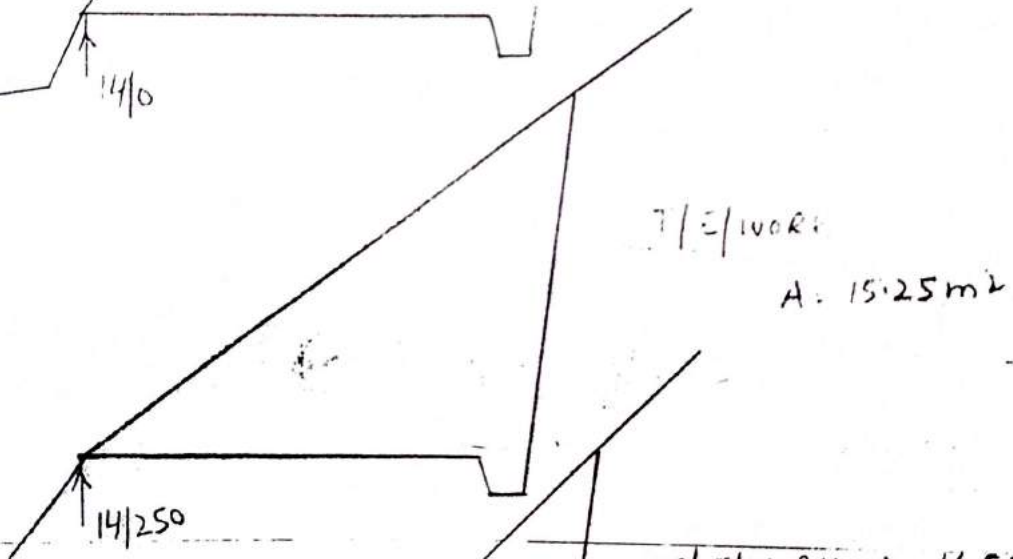
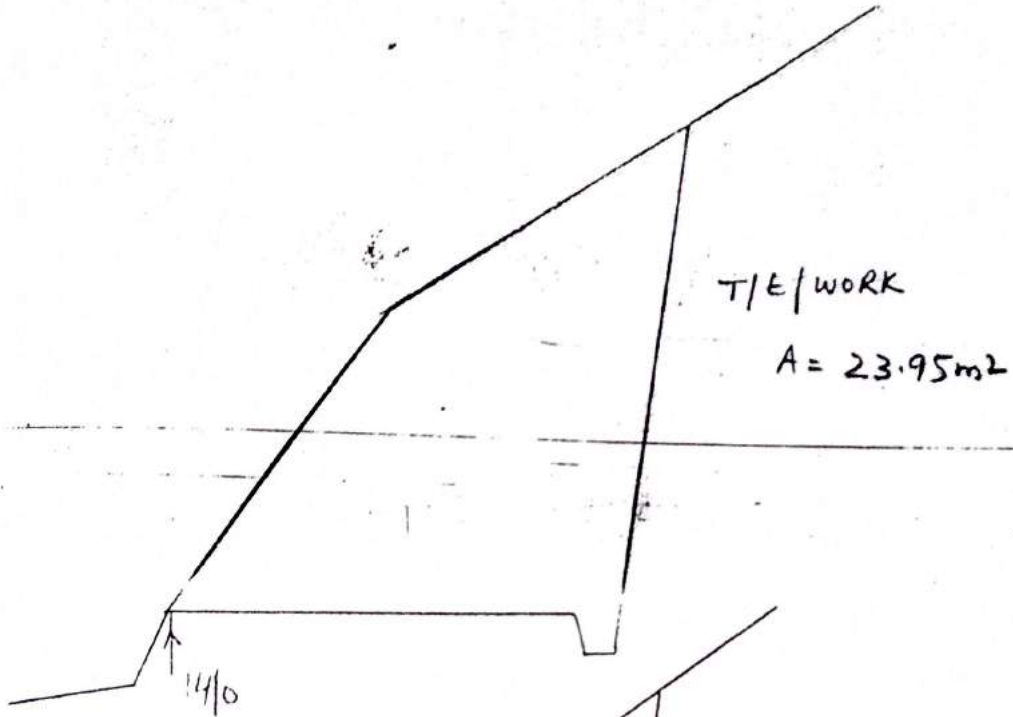
Exc. WORK DRY = 2.85 m²

ST. FILL = 2.17 m²

Ass't. Executive Engineer

Executive Engineer
Sub. B

880

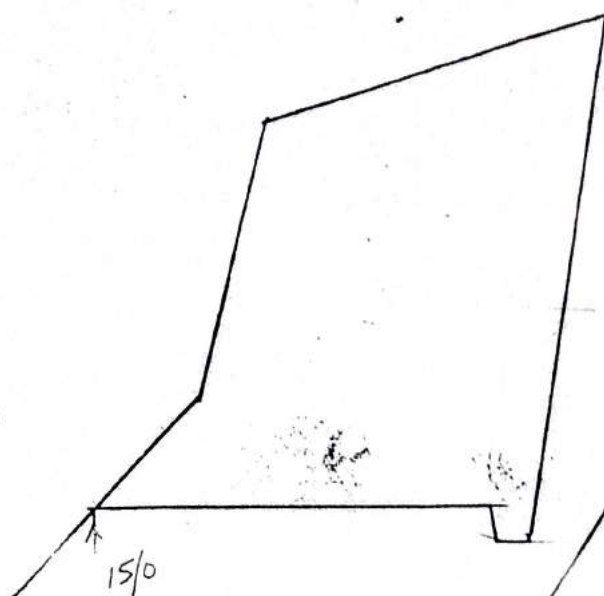


14.750

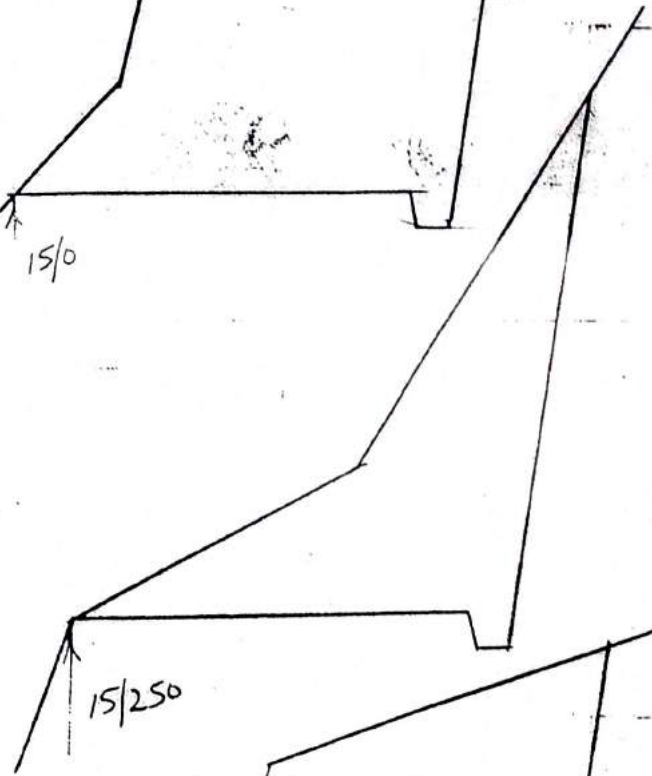
Asstt Executive Engineer.

Executive Engineer

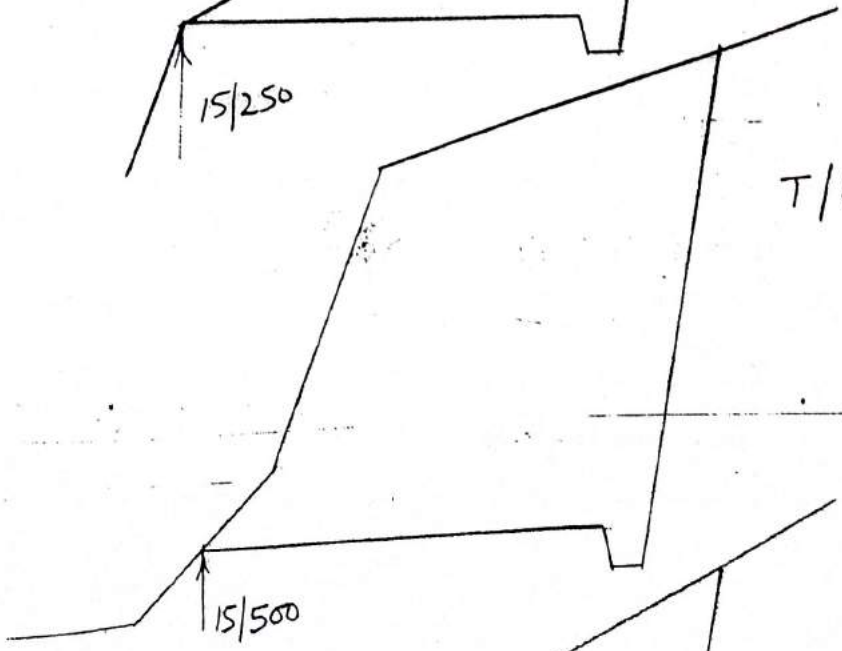
89



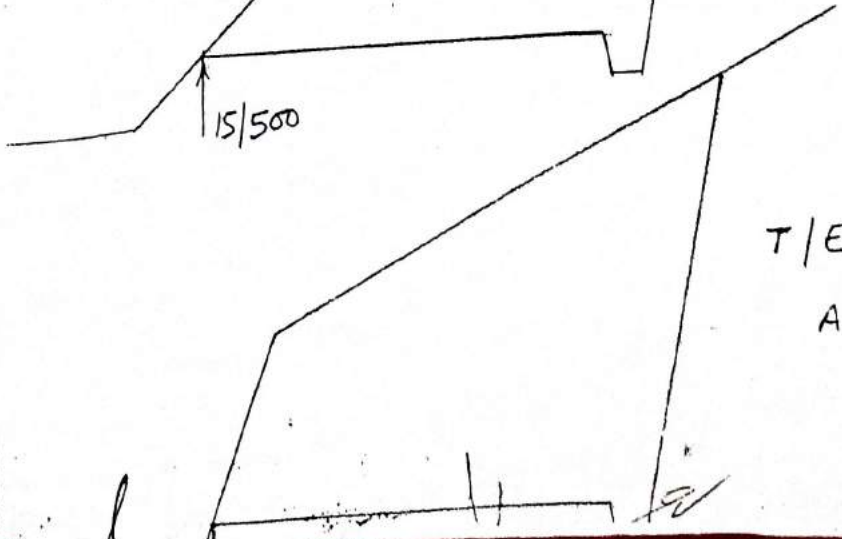
T/E/WORK
 $A = 38.50 \text{ m}^2$



T/E/WORK
 $A = 11.77 \text{ m}^2$



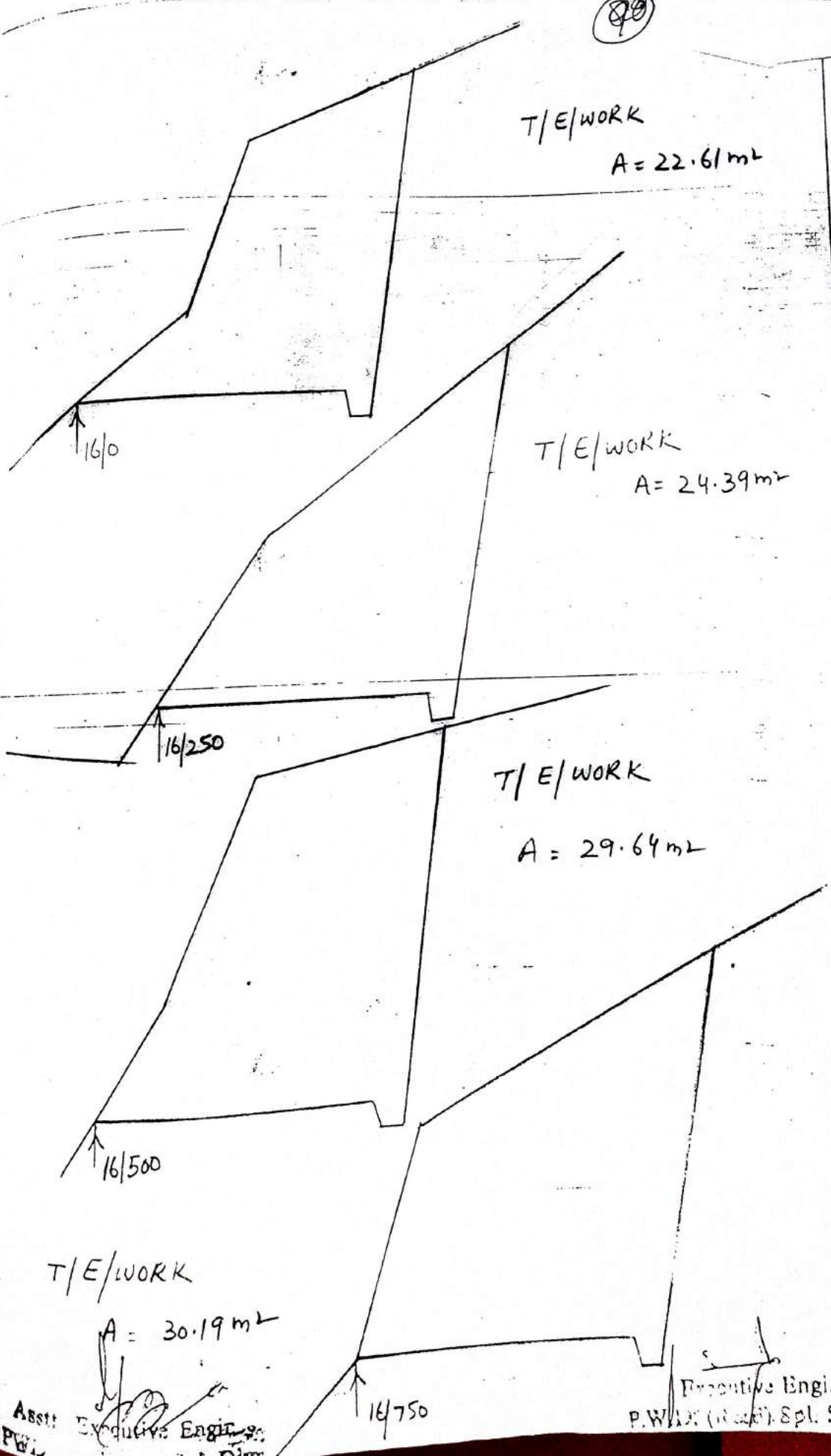
T/E/WORK
 $A = 27.82 \text{ m}^2$



T/E/WORK
 $A = 21.89 \text{ m}^2$

11/10/2018

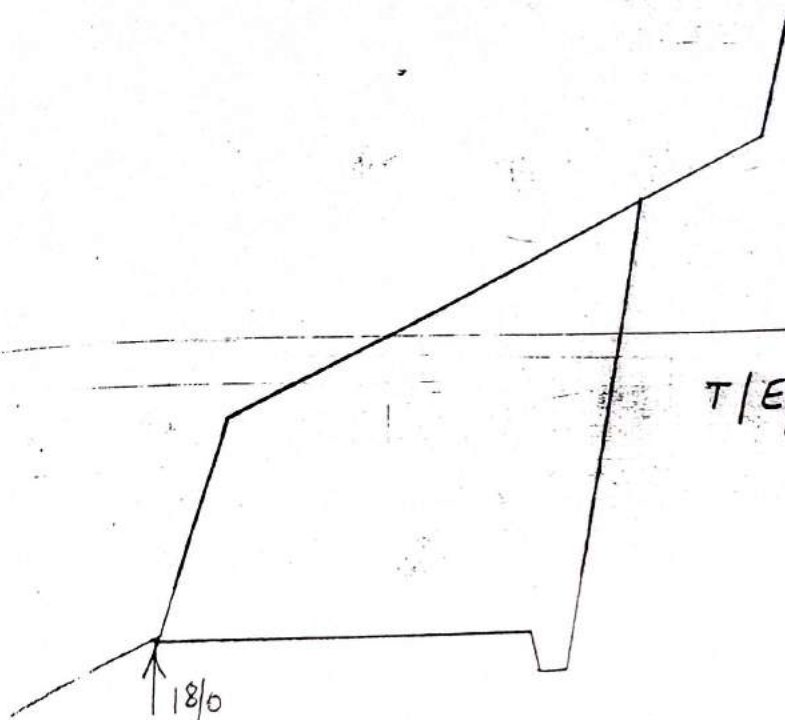
80



Asstt
P.W.D.
Executive Engineer
S. A. Dim

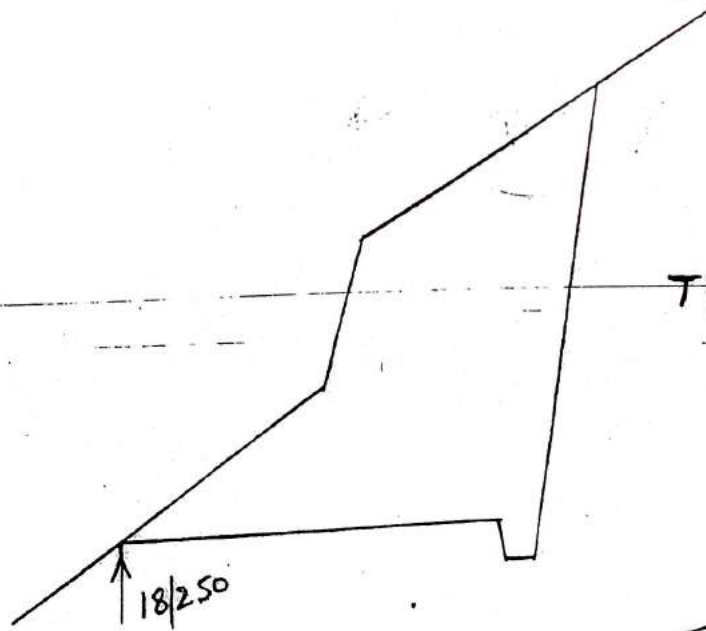
Executive Engineer
P.W.D. (Roads) Spl. Sub.

(92)



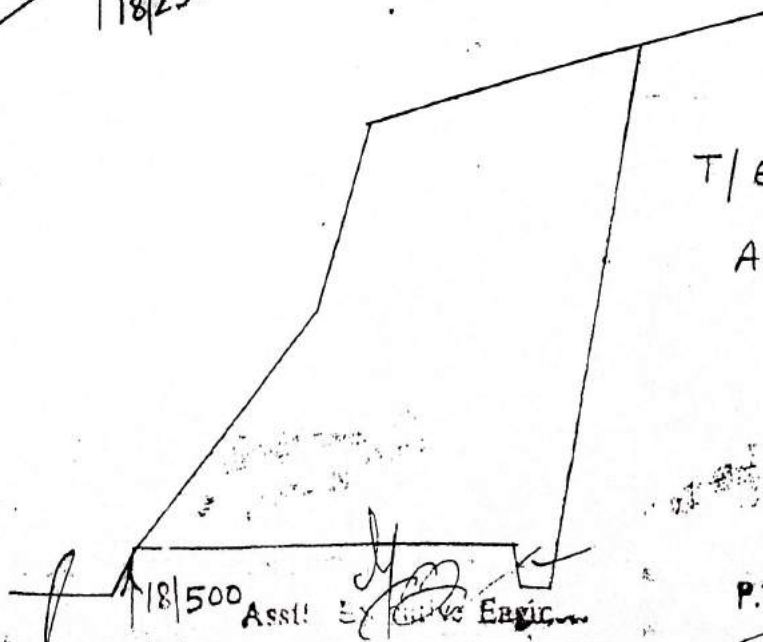
T/E/WORK

$$A = 25.47 \text{ m}^2$$



T/E/WORK

$$A = 19.05 \text{ m}^2$$



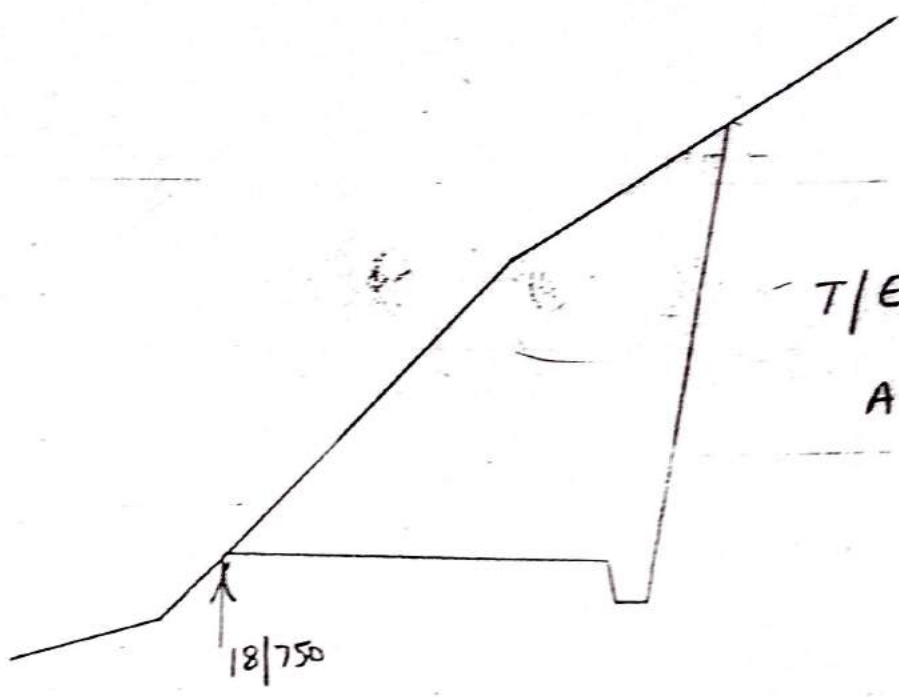
T/E/WORK

$$A = 26.62 \text{ m}^2$$

Asst. Engr. [Signature]

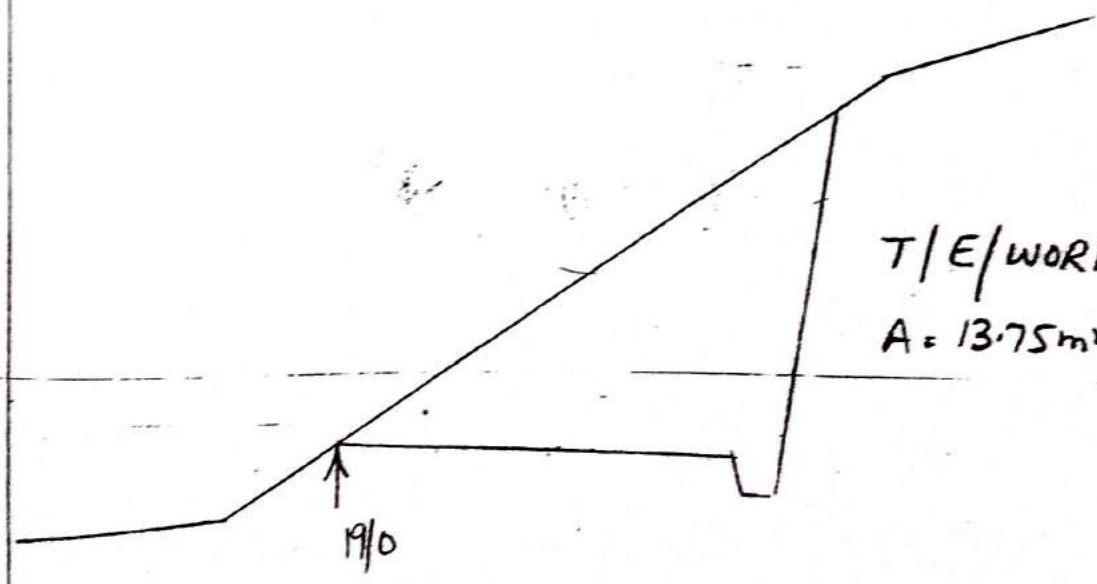
Executive Engineer
P.W.D. (R&B) Spl. Sub. Div.
[Signature]

(92)



T/E/WORK

A = 19.92 m²



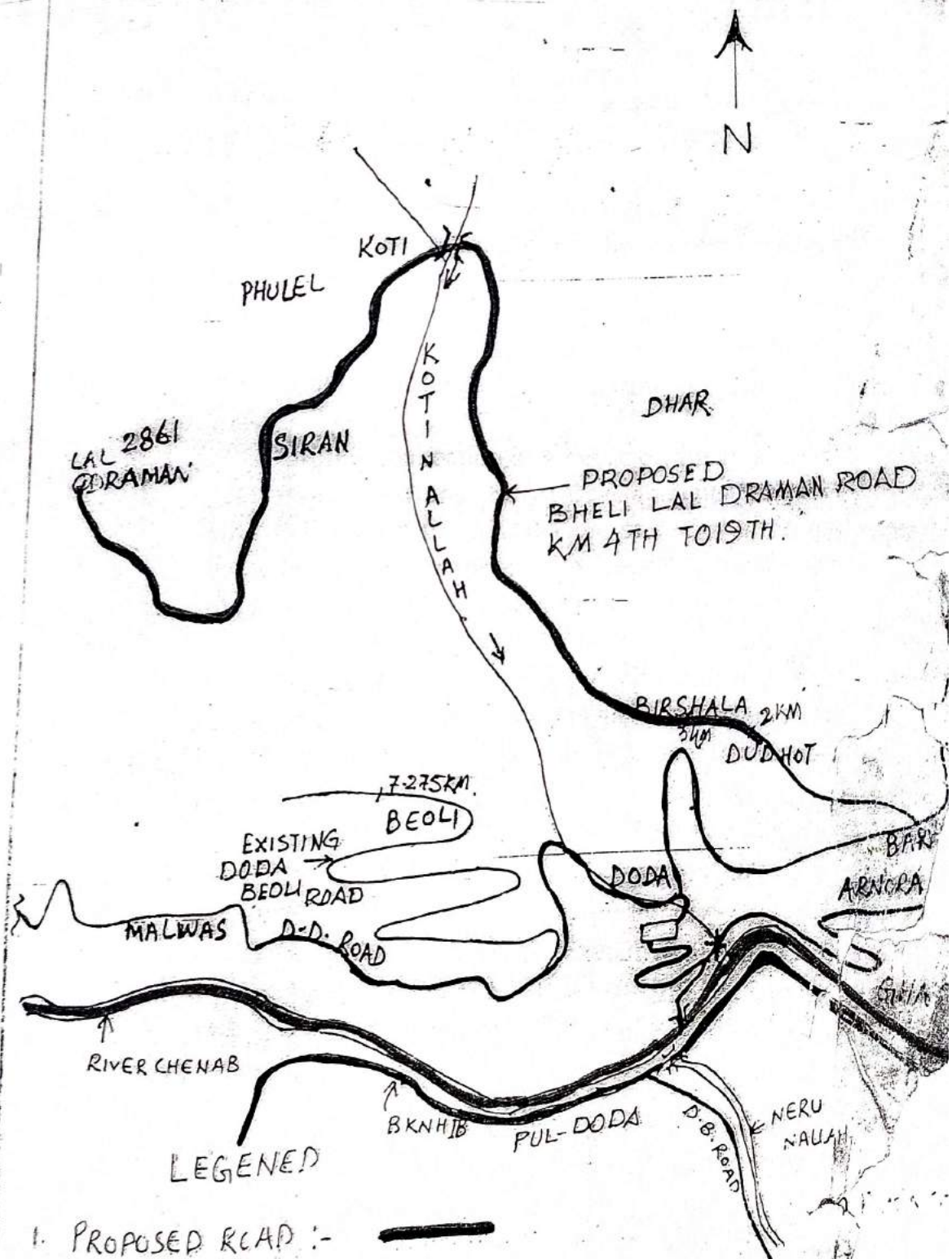
T/E/WORK

A = 13.75 m²

Asst. Executive Engineer
P.W.D. Dist. Sub-Div.
Doda

Executive Engineer
P.W.D. (R&B) Spl. Sub-Div.
Doda

(94)
INDEX MAP OF BHELI LAL DRAMAN ROAD.



1. PROPOSED ROAD :-
2. BLACK TOPPED :-
3. METALLED :-

Handwritten signature/initials