



महाराष्ट्र शासन

उप वनसंरक्षक, अलिबाग यांचे कार्यालय, अलिबाग

"वृक्षवल्ली आम्हा सोयरे वनघरे"

मु.पो.हिराकोट तलावाजवळ अलिबाग ता.अलिबाग जि.रायगड पी.नं. ४०२ २०१

दूरध्वनी क्र ०२१४१-२२२०१६/२२२२१६ Email ID:dyclalibag@mahaforest.gov.in

जावक क्रमांक:ब/२०/जमिन/वसं/ २६७२ /२०२५-२६.

दिनांक: २८/०८/२०२५.

पत्र

प्रति,

उप मुख्य परियोजना प्रबंधक- १,  
मुंबई रेल विकास कॉर्पोरेशन लि.,  
दुसरी मंजिल, चर्चगेट स्टेशन भवन, मुंबई

विषय:- वन जमिन रायगड.

Diversion of 9.1321 ha of forest land in favour of Mumbai Railway Vikas Corporation Limited for construction of Panvel-Karjat suburban corridor project (Double Railway Line) in Raigad district in the state of Maharashtra- regarding

- संदर्भ:- १) केंद्रशासनाचे पत्र क्र. एफसी/एमएच-१५६/२०२१-एनजीपी/९७७७,  
दिनांक ३०/०५/२०२२.
- २) प्रकल्प यंत्रणेचे पत्र क्रमांक MRVC/W/LA/PKD/Forest land  
दिनांक ०४.०३.२०२५
- ३) या कार्यालयाचे पत्र क्र. ब/२०/जमीन/वसं/३३, दिनांक ०२.०४.२०२५
- ४) केंद्रशासनाचे पत्र क्र. एफसी/एमएच-१५६/२०२१-एनजीपी/१४३२०,  
दिनांक ०४.०६.२०२५
- ५) या कार्यालयाचे पत्र क्र. ब/२०/जमीन/वसं/१२४५, दिनांक १२.०६.२०२५
- ६) प्रकल्प यंत्रणेचे पत्र क्रमांक MRVC/W/LA/PKD/Forest land  
दिनांक १७.०६.२०२५
- ७) वन परिक्षेत्र अधिकारी, कर्जत पश्चिम यांचे पत्र क्रमांक अ/२०/जमीन/२२४,  
दिनांक १०.०६.२०२५
- ८) सहा. वनसंरक्षक, पनवेल यांचे पत्र क्रमांक अ/२०/जमीन/२९४,  
दिनांक २०.०६.२०२५
- ९) वन परिक्षेत्र अधिकारी, पनवेल यांचे पत्र क्रमांक अ/२०/जमीन/२८९,  
दिनांक २४.०७.२०२५
- १०) सहा. वनसंरक्षक, पनवेल यांचे पत्र क्रमांक अ/२०/जमीन/४५७,  
दिनांक २६.०७.२०२५

११) वन परिक्षेत्र अधिकारी, कर्जत प. यांचे पत्र क्रमांक अ/२०/जमीन/४१८,  
दिनांक १९.०८.२०२५

१२) सहायक वनसंरक्षक, पनवेल यांचे पत्र क्रमांक अ/२०/जमीन/५३५,  
दिनांक २०.०८.२०२५

केंद्र शासनाचे संदर्भिय पत्र क्रमांक १ अन्वये वन (संवर्धन) अधिनियम, १९८० अंतर्गत विषयांकित वनजमिन मागणी प्रस्तावास अट क्रमांक १ ते २५ चे अधिन राहून तत्त्वतः मंजूरी प्रदान करण्यात आली आहे. त्याअनुषंगाने केंद्रशासनाचे तत्त्वतः मंजूरी पत्रातील अटी / शर्तीनिहाय पूर्तता अहवाल विहित मार्गाने केंद्रशासनास सादर करणेत आलेला होता. तदनंतर केंद्र शासनाचे संदर्भित पत्र क्रमांक ४ अन्वये तत्त्वतः मंजूरी पत्रातील अटी/शर्तीचा पूर्तता अहवालाच्या अनुषंगाने अट क्रमांक ६, १३, १४ व १८ बाबतच्या रक्कमा प्रकल्प यंत्रणेकडून वसूल करून, ते कॅम्पाकडे वर्ग करणेबाबत सुचना देण्यात आलेल्या आहेत.

त्याअनुषंगाने केंद्रशासनाचे तत्त्वतः मंजूरी पत्रातील अट क्रमांक ६, १३, १४ व १८ चे अनुषंगाने अतिरिक्त मागणी पत्र (Additional Demand Note) तयार करून, लगतप्रमाणे पाठविण्यात येत आहे. सदर अतिरिक्त मागणी पत्रानुसार रक्कम कॅम्पाचे खात्यामध्ये भरणा करून पूर्तता अहवाल (आंग्ल भाषेत) आवश्यक दस्तऐवजासह पाच प्रतीत या कार्यालयास सादर करावा.

सहपत्र:- वरील प्रमाणे.

(राहुल पाटील, भा.व.से.)

उप वनसंरक्षक,

अलिबाग वनविभाग, अलिबाग.

प्रतिलिपी:- अपर प्रधान मुख्य वनसंरक्षक व केंद्रस्थ अधिकारी, महाराष्ट्र राज्य, नागपूर यांचेकडे  
माहितीसाठी सादर.

प्रतिलिपी:- मुख्य वनसंरक्षक, ठाणे यांचेकडे माहितीसाठी सादर.

प्रत:- सहायक वनसंरक्षक, पनवेल यांचेकडे माहितीसाठी रवाना.

प्रत:- वन परिक्षेत्र अधिकारी, पनवेल व कर्जत पश्चिम यांना माहितीसाठी



महाराष्ट्र शासन

OFFICE OF THE DEPUTY CONSERVATOR OF FOREST, ALIBAG

वृक्षवन्शी आमहा सोयरे वनधरे

AT POST TAL ALIBAG DIST. RAIGAD TELE 02141-222016

E-mail- dycfalibag@mahaforest.gov.in

**Additiona Demand Note**

(See rule 8(1)(b) of the Forest (Conservation) Amendment Rules, 2014)

To,

Deputy Chief Project Manager-I,  
Mumbai Railway Vikas Corporation,  
2<sup>nd</sup> Floor, Churchgate station Bldg.  
Churchgate, Mumbai -400020.

Sub:- Diversion of 9.1321 ha. of forest land in favour of Mumbai Railway Vikas Corporation Limited for construction of Panvel-Karjat suburban corridor project (Double Railway line) in Raigad district in the state of Maharashtra-regarding.

- Ref: - 1) Govt. of India Ministry of Environment, Forest and Climate Change, Regional Office (WCZ), Nagpur's order No. F.No. FC-II/MH-156/2021-NGP/9777, dtd. 30.05.2022.  
2) Govt. of India Ministry of Environment, forest and Climate Change, Regional Office (WCZ), Nagpur's order No. F.No. FC-II/MH-156/2021-NGP/14320, dtd. 04.06.2025.

As per the reference cited above, Chief Project Manager-I, Mumbai Railway Vikas Corporation, 2<sup>nd</sup> Floor, Churchgate station Bldg., Churchgate, Mumbai -400020 is requested to pay the item-wise amount of compensatory levies as per the following details.

**Compensatory Levies**

Sr. No.	Item	Condition No. as mentioned in-principal approval	Amount in Rs.	Remark
1	<b>Cost of Wildlife Management Plan.</b> (Amount as per estimate received from Range Forest Officer, Karjat (West) by item in approved wildlife plan)	vi	64,18,611	This amount transfer to Ad Hoc CAMPA through E-Portal
	<b>2% of the Project cost.</b> (As per PCCF (Wildlife) MS, Nagpur vide letter dated 29.07.2024 and User Agency vide letter 04.03.2025)		2,48,61,088	

2	Cost of avenue plantation (Amount as per estimate received from Divisinal Forest Officer, (Social Forestry Division) Raigad-Alibag)	xiii	33,07,282
3	Cost of 25000 seedling of forestry species for 10 years (Amount as per estimate received from Range Forest Officer, Karjat West)	xiv	43,33,820
4	Cost of demarcation of pillars (Boundary of the diverted forest land) / (Amount as per estimate received from Range Forest Officer, Karjat West & Panvel)	xviii	17,81,656
<b>Total amount sends to CAMPA as per GoI conditions:</b>			<b>4,07,02,457</b>

The condition No. on the document/undertaking/certificates at the time of submission of compliance report.

  
 (Rahul Patil, IFS)  
 Deputy Conservator of Forests,  
 Alibag.

Copy submitted to the Addl. Principal Chief Conservator of Forests & Nodal Officer, M.S. Nagpur for favour of information.

Copy submitted to the Chief Conservator of Forests, Thane for favour of information.

Copy the Assistant Conservator of Forest, Panvel for information.

Copy the Range Forest Officer, Panvel & Karjat West for information.



मुंबई रेलवे विकास कॉर्पोरेशन लि.  
(भारत सरकार, रेल मंत्रालय का एक सार्वजनिक उपक्रम)  
**MUMBAI RAILWAY VIKAS CORPORATION LTD.**  
(A PSU of Govt. of India, Ministry of Railways)

No. MRVC/W/LA/PKD/Forest Land

Date: 04/03/2025

To,  
Dy. Conservator of Forest  
Alibag, Dist. Raigad  
Maharashtra - 402 201  
e-Mail: [dycfoalibag@mahaforest.gov.in](mailto:dycfoalibag@mahaforest.gov.in)

Dear Sir,

**Sub:** Diversion of 9.1321 ha of forest land in favour of Mumbai Railway Vikas Corporation Limited for construction of Panvel-Karjat suburban corridor project (Double Railway Line) in Raigad district in the state of Maharashtra- regarding.

- Ref:** 1. GoI, MoEF&CC, Regional Office, Nagpur's order No. FC-II /MH-156/ 2021 NGP /9777 dated 30.05.2022.  
2. No. MRVC/W/LA/PKD/Forest Land letter dated: 19-03-2024  
3. APCCF (Wildlife) West Zone Mumbai letter no. वा. अ. अक-3/वनीय/CA ए. अ. 84/255/2024-25 दिनांक 10.07.2024.  
4. PCCF (Wildlife) letter no. वाअ-28 (2)/व नी/लवै/अ. अ. 108/1296/2024-25 दिनांक 29.08.2024

With reference to above subject, The compliances regarding wild life management plan as per query raised by DFC ( Alibag) by dated 08.12.2023 based on APCCF (Wildlife) West Zone Mumbai letter dated 17.10.23 has been sent to DCF alibag vide MRVC's letter of dated 19.03.2024.

Further, PCCF (wild life) Maharashtra state Mumbai has forwarded copy to APCCF cum central Officer , Maharashtra state Nagpur on 29.07.2024 vide above reference letter of sr. no.4. In this letter it is mentioned that, Project Proponent i.e. MRVC has to deposit the amount of 2 % cost for the project alignment passing through forest portion and also have to wild life management plan for specific period of 10 years .

The summary page of cost abstract is enclosed herewith for issuing of demand note to MRVC to deposit 2% project cost and 10 yers mitigation measures agreed cost to comply the condition of Stage 1 compliances.

1. The summary for 2 % cost as per following table is as under,

<b>Amount Calculation for 2 % cost of Project for forest land 9.1321 hectare</b>			
<i>s. No</i>	<i>Description of item</i>	<i>Item</i>	<i>Amount</i>
1	Detailed Estimated cost of project for 29.60 km	Detailed Estimated Cost of Project	₹ 25,55,99,88,792.00
4	Pvt. Land	less private land acquisition cost paid by MRVC to state authority 57.8	₹ 6,14,00,00,000.00
5	Govt land	Less for Govt land cost paid to authority	₹ 9,00,00,000.00
6	Amount to forest	Amount paid already to forest Stage I compliances	₹ 3,49,14,514.00
7	Utility shifting cost of project Provision		₹ 11,21,35,950.00
		<b>Net cost of project</b>	<b>Rs. 19,18,29,38,328.00</b>

**Total land area required for the project**

1	Railway land available	69.419 hectare
2	Private land	57.16 hectare
3	Govt land	4.407 hectare
4	forest land	9.9321 hectare
	<b>Total Land in hectare of project</b>	<b>140.918 hectare</b>

**Proportional cost of project for Forest land calculations**

<i>S. No.</i>	<i>Land details</i>	<i>Land in hectares</i>
1	Project land	140.9181
2	Forest land	9.1321 hectare
3	% of forest land in comparative to total land	6.48%
4	Cost of project	₹ 19,18,29,38,328.00
5	Equivalent cost project in forest land for 6.48%	₹ 1,24,30,54,403.65
6	<b>Now 2 % cost of Project to be deposited as per condition</b>	<b>₹ 2,48,61,088.00</b>

2. Amount Calculation for 10 years mitigation Measures to be taken as per Decided as per approved Wild Life Management Plan

**II Amount Calculation for 10 years mitigation Measures to be taken as per Decided as per approved Wild Life Management Plan**

<i>s. No</i>	<i>Description of item</i>	<i>Item required for</i>	<i>Num ber/ m</i>	<i>Rate</i>	<i>Amount</i>
1	Cost of 50 nos. Trapp Camera eudde Digital type	As per forest requirement to capture Images of Wild life in forest land	50		

*Okad*

both Sr. DIST.

Be

S No	Description of item	Item required for	Number/ m	Rate	Amount
2	Cost of under ground water tanks 3 nos. in forest land (size 10x 5 x 1.5 mtr)	Construction of 3 nos. under ground water tanks of size 10x 5 x 1.5 mtr for Drinking Water Facility for Wild life in forest land	3	22,500 (Lum Sum)	₹ 67,500.00
3	One small Watch Tower	One small Watch Tower will be erected of 5 m (20 feet) height in forest area by user agency in top portion of affected forest and for security purpose.	1	5,00,000.00	₹ 5,00,000.00
6	100 m chain link fencing on both side of Tunnel	100 m chain link fencing of 8 m height on both ends of Tunnel on both approaches ( length 2x2x100 + 35x2) =470m	470 m	1,000	₹ 4,70,000.00
Cost for mitigation measures for 10 years as per wild life management plans					₹ 10,37,500.00
				add cost of cameras	

Total cost Rs.2,48,61,088.00 + Rs. 10,37,500.00 = Rs. 2,58,98,588.00 + cost of 50 nos camera

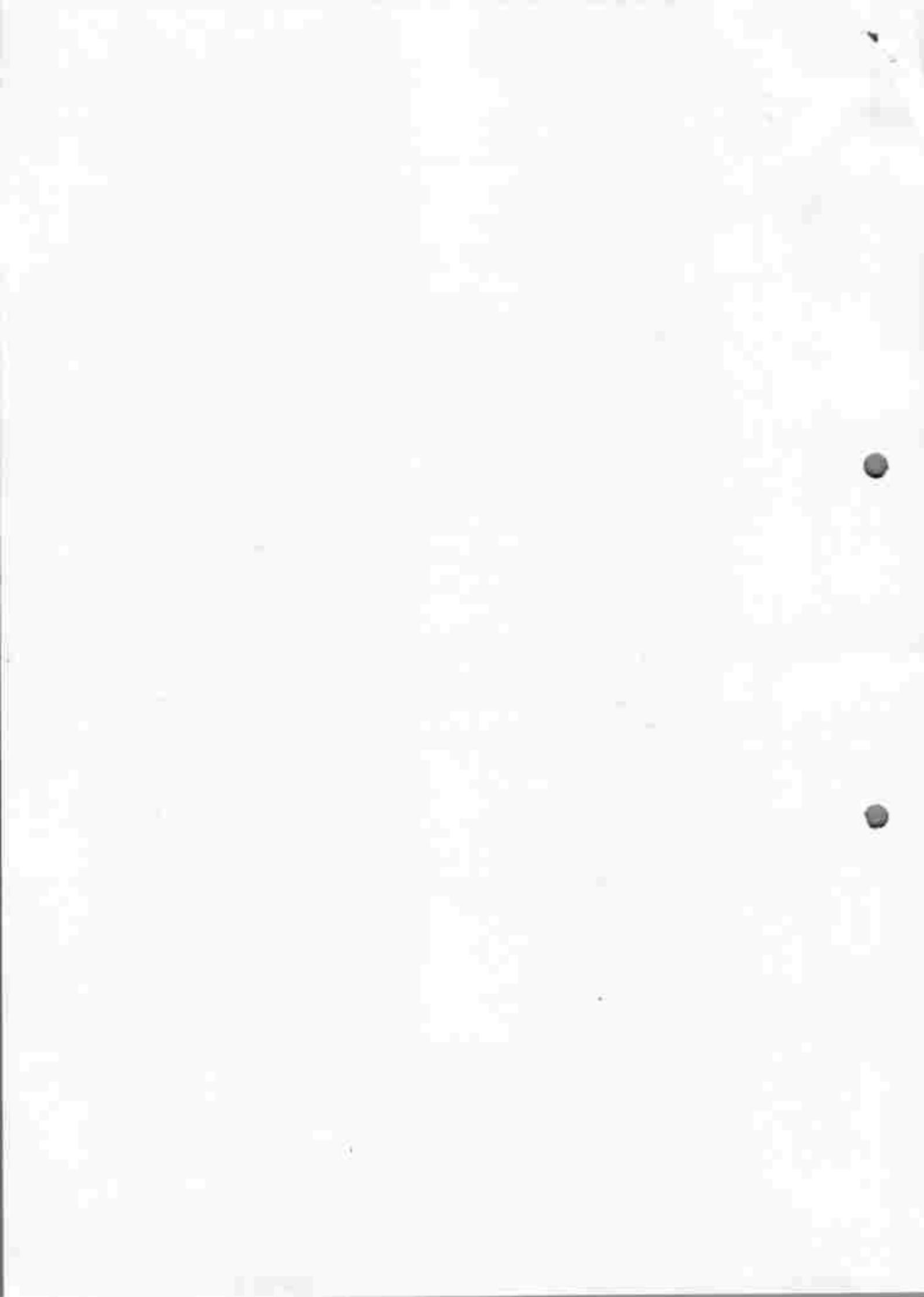
Hence it is requested to kindly send the demand note for complying the condition as mentioned in the PCCF (Wildlife) letter no. ५३३-११ (१)/५३३/१९.३.३०.१९९९/१९९९-१५ दिनांक १९.०३.१९९९ so that amount can be deposited by MRVC to comply the condition as per requirement.

*(Signature)*  
 03/03/2025  
 (K. A. Patil)  
 Dy. CPM-II

**Copy to**

- i. APCCF (Wildlife) West Zone Mumbai for information
- ii. GM (Civil)-I for information

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## ESTIMATE

**DIVISION:** Alibag Forest Division Alibag

**RANGE:** Range Forest Office Karjat West

**FUND HEAD :** Panvel To Karjat Railway Project

The Estimate is prepared in Office of the Deputy Conservator of Forest, Alibag Forest Division, Alibag.. The Probable Expenses incurred in the **Construction of Class - II Permanent Boundary Pillars for Forest Area in Karjat West** in range of Round Chowk VIII- Lodhivali S.No.17/1 Tal: Karjat. Dist: Raigad.

Class II Pillars 5 Nos

Estimated cost: Rs. 59,486.00

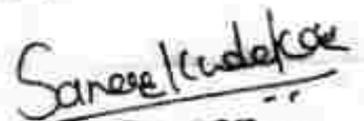
Estimate is prepared by : Range Forest Officer Karjat West

Estimate is checked by .

**Specifications:** Entire work is to be carried out as per standard specifications of the P.W.D. Hand book Vol.I & II latest Edition.

**Certification:**

1. Rates adopted are as per SSR of PWD Dept. for the year 2022-2023
2. All calculations have been checked 100% arithmetically.
3. Additional 10% for Notified Hilly area is considered.

  
Range Forest Officer  
Karjat West

  
(Renu Patil, IFS)  
Deputy Conservator of Forest,  
Alibag Forest Division, Alibag

Name of  
Work:-

Construction of Class - II Permanent Boundary Pillars for Forest Area  
in Karjat West in range of Round Chowk Vill- Lodhivali S.No.17/1 Tal:  
Karjat. Dist: Raigad.

RECAPITULATION SHEET

1	Total Amount of work Portion	=	Rs:	41,719.99
2	Add 4% Contingencies	=	Rs:	1,668.80
3	Add 18 % For GST as per Note on SSR	=	Rs:	7,509.60
4	Add 0.1% For Labour Insurance	=	Rs:	208.60
5	Estimate Charges 2.25 %	=	Rs:	938.70
6	Add For Royalty Charges	=	Rs:	380.00
7	Add For Material Testing Charges	=	Rs:	7,060.00
	Net Total	=	Rs:	59,485.69
	Say	=	Rs:	59,486.00

*Suresh Kulkarni*  
Range Forest Officer  
Karjat West

Instruction of Class - II Permanent Boundary Pillars for Forest Area in Karjat West in  
 Range of Round Chowk Vill- Lodhivali S.No.17/1 Tal: Karjat. Dist: Raigad.

ABSTRACT

Quantity	Item Of Work	Rate	Per	Amount
1000.000	Item No:1:- Removing grass, gazer grass and disposing off out of building premises including making clean the ground by shovel and phavaras etc. complete. (21.34)	6.59	Sqm	6594.00
1.440	Item No:2:-Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (21.02)	262.66	Cum	378.23
3.520	Item No:3:- Providing soling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete. (21.40)	2648.74	Cum	9323.55
1.505	Item No:4:-Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. (24.01)	8777.87	Cum	13218.02
12.038	Item No:5:- Providing internal cement plaster 6 mm thick in a single coat in cement mortar 1:4 without neeru finish to concrete surface in all positions including scaffolding and curing etc. complete. (32.02)	291.36	Sqm	3507.25
1.323	Item No:7:-Providing and applying two coats of flat oil paint of approved colour and shade to internal / external plastered surfaces including scaffolding if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete. (35.12)	111.10	Sqm	146.93
160.000	Item No:8:-Painting letters upto 20 cm height complete brushes, coir brushers, dusting, cleaning, including cost of paint etc. complete. (6.05)	31.87	No	5099.20
12.038	Item No:9:- Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning ,preparing the plaster surface ,applying primer coat ,scaffolding if necessary, and watering the surface for two days etc complete. (35.26)	286.84	Sqm	3452.81
		<b>Total</b>	<b>Rs:</b>	<b>41719.99</b>
	Item No:10:-Royalty Charges :-			
0.799	1. Sand	237.37	Cum	380.00
0.000	2. Rubble	216.18	Cum	0.00
		<b>Total</b>	<b>Rs:</b>	<b>380.00</b>
	Item No:11:- Materials Checking Charges	<b>Total</b>	<b>Rs:</b>	<b>7060.00</b>

*S. S. K. D. K.*  
 Range Forest Officer  
 Karjat West

**Construction of Class - II Permanent Boundary Pillars for Forest Area in Karjat West  
In range of Round Chowk VIII- Lodhivali S.No.17/1 Tal: Karjat. Dist: Raigad.**

**MEASUREMENT SHEET**

Item No:1:- Removing grass, gazer grass and disposing off out of building premises including making clean the ground by shovel and phavaras etc. complete. (21.34)

Class II Pillars 5 X 100.00 X 2.00 = 1000.00 Sqm

Item No:2:-Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (21.02)

Class II Pillars 5 X 0.80 X 0.80 X 0.45 = 1.440 Cum

Item No:3:- Providing soling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete. (21.40)

Class II Pillars 5 X 0.80 X 1.10 X 0.80 = 3.520 Cum

Item No:4:-Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. (24.01)

Volume of one Class II Pillar (Ref. Drawing) = 0.289 Cum

Class II Pillars	5	X		X	0.289	=	1.445	Cum
Pedastal at Top	5	X	0.23	X	0.23	=	0.061	Cum
							<b>Total</b>	<b>= 1.506 Cum</b>

Item No:5:- Providing internal cement plaster 6 mm thick in a single coat in cement mortar 1:3 without neeru finish to concrete surface in all positions including scaffolding and curing etc. complete. (32.02)

Class II Pillars	5	X	4.00	X	0.53	X	1.05	=	11.025	Sqm
Side										
Top	5	X		X	0.45	X	0.45	=	1.013	Sqm
									<b>Total</b>	<b>= 12.038 Sqm</b>

Item No:6:-Providing and applying two coats of flat oil paint of approved colour and shade to internal / external plastered surfaces including scaffolding if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete. (35.12)

Class II Pillars										
Pedestal Block Sides	5	X	4.00	X	0.23	X	0.23	=	1.058	Sqm
Top	5	X	0.00	X	0.23	X	0.23	=	0.265	Sqm
									<b>Total</b>	<b>= 1.323 Sqm</b>

Item No:7:-Painting letters upto 20 cm height complete brushes, cair brushes, dusting, cleaning, including cost of paint etc. complete. (6.05)

Class II Pillars 5 X 8.00 X 4.00 = 160.000 Nos

Item No:8:- Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning, preparing the plaster surface, applying primer coat, scaffolding if necessary, and watering the surface for two days etc complete. (35.26)

	5	X		X	0.45	X	0.45	=	1.013	Cum
	5	X	4.00	X	0.53	X	1.05	=	11.025	Cum
									<b>Total</b>	<b>= 12.038 Cum</b>

**Construction of Class - II Permanent Boundary Pillars for Forest Area In  
Karjat West in range of Round Chowk Vill- Lodhivali S.No.17/1 Tal: Karjat.  
Dist: Raigad.**

**The Royalty Charges as per R & F Department's Gazette No:146 Dated 4 June 20215 are  
Rs:237.37/Cum for sand & Rs:216.18/Cum for other materials**

Item No	Qty	Description	Sand		Rubble	
			Factor	Qty	Factor	Qty
3	1.505895	M 10 PCC For foundation	0.470	0.71	0.000	0.000
4	12.0375	Cement plaster 6mm 1:3	0.0076	0.09	0.000	0.000
			<b>Total</b>	<b>0.799</b>	<b>0.000</b>	
				<b>Cum</b>	<b>Cum</b>	

*Suresh K. Desai*  
Range Forest Officer  
Karjat West

**Construction of Class - II Permanent Boundary Pillars for Forest Area in Karjat West in range of Round Chowk Vill- Lodhivali S.No.17/1 Tal: Karjat. Dist: Raigad.**

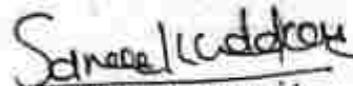
**Note:** Provision for laboratory testing charges for reimbursement of actual amount of testing charges paid by the contractor he should produce documentary evidences along with laboratory reports from approved registered Government Laboratory of PWD/ Engineering Colleges etc.

**Provision of Quality Control Test and materials Testing charges (as per CSR Sr. No:9 Page No:iv) Rate as per Vigilance & Quality Control Circle**

Sr. No	Name of Test	No. Of Test	Rate Per Test	Frequency	Amount
1	Basic Test Of Cement : Standard Consistency Finess, Specific Gravity, Setting Time(Initial & Final), Compressive Strength, Soundness.	1.00	3770.00	1.00	3770.00
2	Basic Test Of Aggregate : Water Absortion, Specific Gravity, Impact Value/Crushing Value	1.00	2600.00	1.00	2600.00
3	Concrete Compressive Strength of CC Cubes (Set of 3 Cubes)	1.00	690.00	1.00	690.00

Total in Rs:

**7060.00**

  
Range Forest Officer  
Karjat West

**Construction of Class - II Permanent Boundary Pillars for Forest Area in Karjat West in range of Round Chowk VIII- Lodhivali S.No.17/1 Tal: Karjat. Dist: Raigad.**

Average Height of Demarcation Site is about 70 m above road level  
 Head Load for materials is considered as 1% for Each 3.00m height as per SSR Note  
 (Floor Height of Building is considered as 3.00m)  
 Increase in basic rate is considered is 23.33 %

**RATE ANALYSIS**

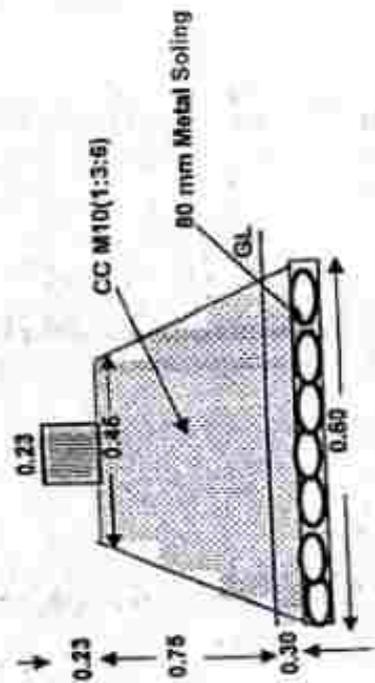
Sr. No.	Material	Location	Total lead kms.	Total Charges Rs.		Cost diff of material	Net Rate (per cum) Rs.
1	Metal Below 40mm	Karjat	25	566.86		0	566.86
	Metal Above 40mm	Karjat	25	543.24		0	543.24
2	Sand	Karjat	50	888.61		0	888.61
3	Cement	Karjat	25	413.27		0	413.27
1	Removing grass, gazer grass and disposing 1000				Rs.	6.00	6.00
	Deduct 1% Labour amenities					0.06	
						5.94	
	Add 10 % for Notified Hilly area					0.59	
	Add 1% Labour amenities					0.06	
					m <sup>2</sup>	Total	6.59
							6.60
2	Excavation in soil/SM 1.44				Rs.	239.00	239.00
	Deduct 1% Labour amenities					2.39	
						236.61	
	Add 10 % for Notified Hilly area					23.66	
	Add 1% Labour amenities					2.39	
					m <sup>3</sup>	Total	262.66
							262.66
3	80 mm Metal soiling 3.52				Rs.	1454.00	1454.00
	Deduct 1% Labour amenities					14.54	
						1439.46	
	Add 10 % for Notified Hilly area					143.95	
	Metal 1.0000			543.24		543.24	
	Sand 0.15000			888.61		133.29	
	Add 1% Labour amenities					14.54	
	Head Load Charges					335.83	
					m <sup>2</sup>	Total	2610.30
							2610.31
4	PCC M10 for foundation 1.505835				Rs.	5830.00	5830.00
	Deduct for SCADA					126.00	
	Deduct 1% Labour amenities					58.30	
						5645.70	
	Add 10 % for Notified Hilly area					564.57	
	Metal 0.840			566.86		532.85	
	Sand 0.470			888.61		417.65	
	cement 0.220			413.27		90.92	
	Add 1% Labour amenities					58.30	
	Head Load Charges					1317.14	
					m <sup>3</sup>	Total	8627.13
							8627.13
5	Cement Plaster 6mm thick in CM 1:3 32.02				Rs.	209.00	209.00
	Deduct 1% Labour amenities					2.09	
						206.91	
	Add 10 % for Notified Hilly area					20.69	
	Sand 0.0076			888.61		6.75	
	Cement 0.00270			413.27		1.12	
	Add 1% Labour amenities					2.09	
	Head Load Charges					48.27	

6	Two coats of flat oil paint 35.21+35.12	Deduct 1% Labour amenities	m <sup>2</sup>	Total	285.83	285.83
			Rs.	123.00	123.00	
22	101	Add 10 % for Notified Hilly area Add 1% Labour amenities Head Load Charges	m <sup>3</sup>	Total	1.23	
					121.77	
					12.18	
					1.23	
					28.41	
					163.59	163.59
7	Painting letters upto 20 cm height 6.05	Deduct 1% Labour amenities	Rs.	29.00	29.00	
					0.29	
		Add 10 % for Notified Hilly area Add 1% Labour amenities Head Load Charges	m <sup>3</sup>	Total	28.71	
					2.87	
					0.29	
					6.70	
					38.57	38.57
8	Two coats of exterior weather shield paint 35.26	Deduct 1% Labour amenities	Rs.	261.00	261.00	
					2.61	
		Add 10 % for Notified Hilly area Add 1% Labour amenities Head Load Charges	m <sup>3</sup>	Total	258.39	
					25.84	
					2.61	
					60.28	
					347.12	347.12

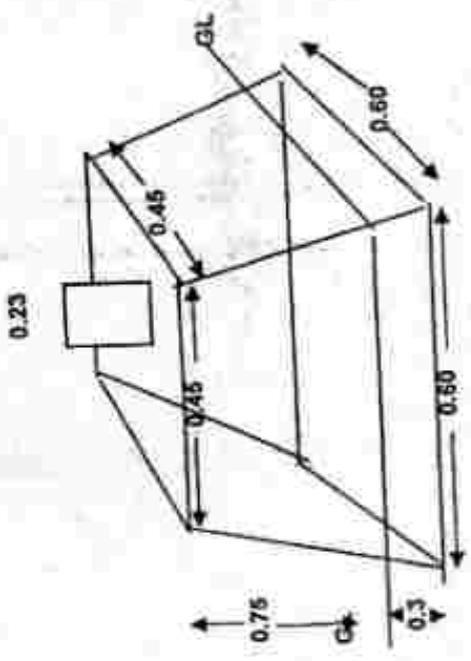
*Suresh Kulkarni*  
Range Forest Officer  
Karjat West

**Construction of Class - II Permanent Boundary Pillars for Forest Area in Karjat West in range of Round Chowk Vill- Lodhivali S.No.17/1 Tal: Karjat. Dist: Raigad.**

Class - II



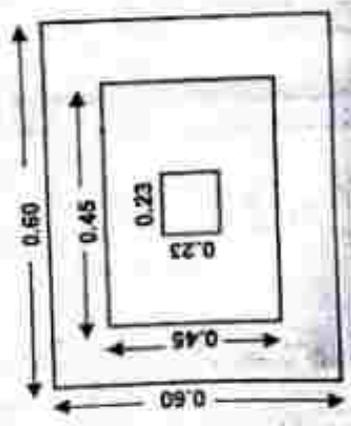
SECTIONAL ELEVATION



ISOMETRIC ELEVATION

DATAS:

A1 (Top Area)	=	$0.45 \times 0.45$	Sqm	=	0.20
A2 (Bottom Area)	=	$0.60 \times 0.60$	Sqm	=	0.36
H Total Height	=	1.05 M			
H1 Below GL	=	0.75 M			
H2 Above GL	=	$H/3 (A1 + A2 + \sqrt{A1A2})$			
Volume	=	$1.05/3 \times (0.20 + 0.36 + \sqrt{0.20 \times 0.36})$			
	=	0.299 Cum			



PLAN

*Sarvesh Kuderkar*  
Range Forest Officer  
Karjat West

ESTIMATE

**DIVISION:** Alibag Forest Division Alibag  
**RANGE:** Range Forest Office Karjat West

**FUND HEAD :** Panvel To Karjat Railway Project.

The Estimate is prepared in Office of the Deputy Conservator of Forest, Alibag Forest Division, Alibag.. The Probable Expenses incurred in the Construction of Class - I Permanent Boundary Pillars for Forest Area in Karjat range Round Chowk of vil-Lodhivali S. No:17/1 Tal: Karjat. Dist: Raigad.

**Class I Pillars 10.00 Nos**

**Estimated cost: Rs. 166,319.00**

Estimate is prepared by : Range Forest Officer Karjat West

Estimate is checked by .

**Specifications:** Entire work is to be carried out as per standard specifications of the P.W.D. Hand book Vol.I & II latest Edition.

**Certification:**  
1. Rates adopted are as per SSR of PWD Dept. for the year 2022-2023  
2. All calculations have been checked 100% arithematically.  
3. Additional 10% for Notified Hilly area is considered.

*Srinasa K. G. D. K.*  
Range Forest Officer  
Karjat West

*R*  
(Rahul Patil, IFS)  
Deputy Conservator of Forest,  
Alibag Forest Division, Alibag

Name of  
Work:-

Construction of Class - I Permanent Boundary Pillars for Forest Area in  
Karjat range Round Chowk of vil-Lodhivali S. No:17/1 Tal: Karjat. Dist:  
Raigad.

RECAPITULATION SHEET

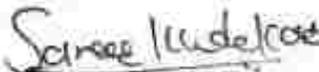
1	Total Amount of work Portion	=	Rs:	131,461.68
2	Add 4% Contingencies	=	Rs:	5,258.47
3	Add 18 % For GST as per Note on SSR	=	Rs:	23,663.10
4	Add 0.1% For Labour Insurance	=	Rs:	657.31
5	Estimate Charges 2.25 %	=	Rs:	2,957.89
6	Add For Royalty Charges	=	Rs:	1,160.14
7	Add For Material Testing Charges	=	Rs:	1,160.14
	Net Total	=	Rs:	166,318.72
	Say	=	Rs:	166,319.00

*Suresh Kulkarni*  
Range Forest Officer  
Karjat West

**Construction of Class - I Permanent Boundary Pillars for Forest Area in Karjat range Round  
Chowk of vii-Lodhivall S. No:17/1 Tal: Karjat. Dist: Raigad.**

**ABSTRACT**

Quantity	Item Of Work	Rate	Per	Amount
2000.000	Item No:1:- Removing grass, gazor grass and disposing off out of building premises including making clean the ground by shovel and shovels etc. complete. (71.34)	6.60	Sqm	13200.00
5.445	Item No:2:- Excavation for foundation in earth, soil of all types, sand, gravel and soft mudum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (21.02)	262.66	Cum	1430.18
1.815	Item No:3:- Providing soling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete. (21.40)	2610.36	Cum	4737.80
9.710	Item No:4:-Providing and laying Coat in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. (24.01)	8627.31	Cum	83771.18
42.600	Item No:5:- Providing internal cement plaster 6 mm thick in a single coat in cement mortar 1:4 without neeru finish to concrete surface in all positions including scaffolding and curing etc. complete..(32.02)	285.84	Sqm	12176.78
2.645	Item No:7:-Providing and applying two coats of flat oil paint of approved colour and shade to internal / external plastered surfaces including scaffolding if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete.. (35.12)	163.59	Sqm	432.70
320.000	Item No:8:-Painting letters upto 20 cm height complete brushes, coil brushes, dusting, cleaning, including cost of paint etc. complete.. (6.05)	38.57	No	12342.40
9.710	Item No:9:- Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning, preparing the plaster surface, applying primer coat, scaffolding if necessary, and watering the surface for two days etc complete. (35.26)	347.13	Sqm	3370.63
		<b>Total</b>	<b>Rs:</b>	<b>131461.68</b>
	<b>Item No:10:-Royalty Charges :-</b>			
4.887	1. Sand	237.37	Cum	1160.14
0.000	2. Rubble	216.18	Cum	0.00
		<b>Total</b>	<b>Rs:</b>	<b>1160.14</b>
	<b>Item No:11:- Materials Checking Charges</b>			
		<b>Total</b>	<b>Rs:</b>	<b>7060.00</b>

  
 Range Forest Officer  
 Karjat West

**Construction of Class - I Permanent Boundary Pillars for Forest Area in Karjat range  
Round Chowk of vil-Lodhivali S. No:17/1 Tal: Karjat. Dist: Raigad.**

**MEASUREMENT SHEET**

Item No:1:- Removing grass, gazer grass and disposing off out of building premises including making clean the ground by shovel and phavaras etc. complete. (21.34)

Class I Pillars 10 X 100.00 X 2.00 = 2000.00 Sqm

Item No:2:-Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (21.02)

Class I Pillars 10 X 1.10 X 1.10 X 0.45 = 5.445 Cum

Item No:3:- Providing soiling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete. (21.40)

Class I Pillars 10 X 1.10 X 1.10 X 0.15 = 1.815 Cum

Item No:4:-Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. (24.01)

Volume of one Class I Pillar (Ref. Drawing) = 0.741 Cum

Class I Pillars	10	X		X	0.741	=	7.410	Cum	
Pedastal at Top	10	X	0.23	X	0.23	=	2.300	Cum	
<b>Total</b>							<b>=</b>	<b>9.710</b>	<b>Cum</b>

Item No:5:- Providing internal cement plaster 5 mm thick in a single coat in cement mortar 1:3 without neeru finish to concrete surface in all positions including scaffolding and curing etc. complete. (32.02)

Class I Pillars	10	X	4.00	X	0.75	X	1.30	=	39.000	Sqm
Side										
Top	10	X	1.00	X	0.50	X	0.60	=	3.600	Sqm
<b>Total</b>							<b>=</b>	<b>42.600</b>	<b>Sqm</b>	

Item No:6:-Providing and applying two coats of flat oil paint of approved colour and shade to internal / external plastered surfaces including scaffolding if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete., (35.12)

Class I Pillars										
Pedestal Block Sides	10	X	4.00	X	0.23	X	0.23	=	2.116	Sqm
Top	10	X	0.00	X	0.23	X	0.23	=	0.529	Sqm
<b>Total</b>							<b>=</b>	<b>2.645</b>	<b>Sqm</b>	

Item No:7:-Painting letters upto 20 cm height complete brushes, coir brushers, dusting, cleaning, including cost of paint etc. complete., (6.05)

Class I Pillars 10 X 8.00 X 4.00 = 320.000 Nos

Item No:8:- Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning, preparing the plaster surface, applying primer coat, scaffolding if necessary, and watering the surface for two days etc complete. (35.26)

	10	X		X	0.741	=	7.410	Cum	
	10	X	0.23	X	0.23	=	2.300	Cum	
<b>Total</b>							<b>=</b>	<b>9.710</b>	<b>Cum</b>

Construction of Class - I Permanent Boundary Pillars for Forest Area in  
Karjat range Round Chowk of vil-Lodhivall S. No:17/1 Tal: Karjat. Dist:  
Raigad.

The Royalty Charges as per R & F Department's Gazette No:146 Dated 4 June 20215 are  
Rs:237.37/Cum for sand & Rs:216.18/Cum for other materials

Item No	Qty	Description	Sand		Rubble	
			Factor	Qty	Factor	Qty
3	9.71	M 10 PCC For foundation	0.470	4.56	0.000	0.000
4	42.6	Cement plaster 6mm 1:3	0.0076	0.32	0.000	0.000
			<b>Total</b>	<b>4.887</b>	<b>0.000</b>	
				<b>Cum</b>	<b>Cum</b>	

*Suresh Kudake*  
Range Forest Officer  
Karjat West

**Construction of Class - I Permanent Boundary Pillars for Forest Area In  
Karjat range Round Chowk of vil-Lodhivali S. No:17/1 Tal: Karjat. Dist:  
Raigad.**

**Note:** Provision for laboratory testing charges for reimbursement of actual amount of testing charges paid by the contractor he should produce documentary evidences along with laboratory reports from approved registered Government Laboratory of PWD/ Engineering Colleges etc.

**Provision of Quality Control Test and materials Testing charges (as per CSR Sr. No:9 Page No:iv) Rate as per Vigilance & Quality Control Circle**

Sr. No	Name of Test	No. Of Test	Rate Per Test	Frequency	Amount
1	Basic Test Of Cement : Standard Consistency, Fineness, Specific Gravity, Setting Time (Initial & Final), Compressive Strength, Soundness.	1.00	3770.00	1.00	3770.00
2	Basic Test Of Aggregate : Water Absorption, Specific Gravity, Impact Value/Crushing Value	1.00	2600.00	1.00	2600.00
3	Concrete Compressive Strength of CC Cubes (Set of 3 Cubes)	1.00	690.00	1.00	690.00

Total in Rs: 7060.00

  
Range Forest Officer  
Karjat West

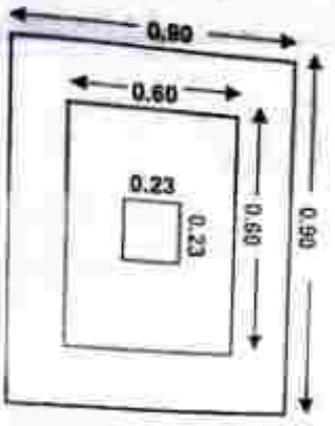
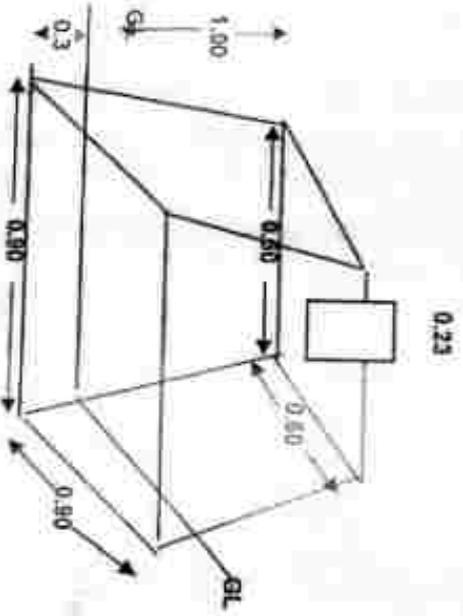
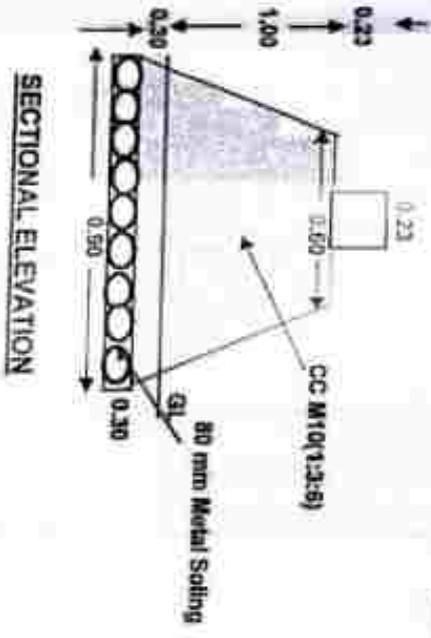


6	Two coats of flat oil paint 35.21+35.12	Deduct 1% Labour amenities	Rs.	123.00	123.00		
					1.23		
					121.77		
					12.18		
					1.23		
	22	Add 10 % for Notified Hilly area			12.18		
	101	Add 1% Labour amenities			1.23		
		Head Load Charges			28.41		
			m <sup>3</sup>	Total	163.59	163.59	
Z	Painting letters upto 20 cm height 8.05	Deduct 1% Labour amenities	Rs.	29.00	29.00		
					0.29		
					28.71		
					2.87		
					0.29		
		Add 10 % for Notified Hilly area			2.87		
		Add 1% Labour amenities			0.29		
		Head Load Charges			6.70		
			m <sup>2</sup>	Total	38.57	38.57	
B	Two coats of exterior weather shield paint 35.26	Deduct 1% Labour amenities	Rs.	261.00	261.00		
					2.61		
					258.39		
					25.84		
					2.61		
		Add 10 % for Notified Hilly area			25.84		
		Add 1% Labour amenities			2.61		
		Head Load Charges			60.28		
			m <sup>3</sup>	Total	347.12	347.12	

*Suresh Kudakar*  
Range Forest Officer  
Karjat West

**Construction of Class - I Permanent Boundary Pillars for Forest Area in Karjat range Round Chowk of vil-Lodhivali S. No:17/1 Tal: Karjat. Dist: Raigad.**

**Class - I**



DATA:  
 A1 (Top Area)  
 A2 (Bottom Area)  
 H Total Height  
 H1 Below GL  
 H2 Above GL  
 Volume

=	0.80X0.60	=	0.36	Sqm
=	0.90X0.90	=	0.81	Sqm
=	1.30 M			
=	0.30 M			
=	1.00 M			
=	H <sub>1</sub> X(A <sub>1</sub> +A <sub>2</sub> +√A <sub>1</sub> A <sub>2</sub> )			
=	1.30X(0.36+0.81+√0.36x0.81)			
=	0.741			Cum

*Surekha*  
 Range Forest Officer  
 Karjat West

## ESTIMATE

DIVISION: Alibag Forest Division Alibag  
RANGE: Range Forest Office Karjat West

FUND HEAD :

The Estimate is prepared in Office of the Deputy Conservator of Forest, Alibag Forest Division, Alibag. The Probable Expenses incurred in the Construction of Class - II Permanent Boundary Pillars for Forest Area in Karjat beat Karjat West in range of karjat ~~east~~ <sup>west</sup> sr. No:170 Tal: Karjat. Dist: Raigad.

Class II Pillars 5 Nos

Estimated cost: Rs. 59,486.00

Estimate is prepared by : Range Forest Officer Karjat West

Estimate is checked by .

Specifications: Entire work is to be carried out as per standard specifications of the P.W.D. Hand book Vol.I & II latest Edition.

Certification: 1. Rates adopted are as per SSR of PWD Dept. for the year 2022-2023  
2. All calculations have been checked 100% arithematically.  
3. Additional 10% for Notified Hilly area is considered.

*Somasekharkar*  
Range Forest Officer  
Karjat West

*Mandira*  
वरिष्ठ लेखिका

*Arman*  
वनपाल कर्जत  
परिपंडित वन अधिकारी  
कर्जत

*Rahul Patil*  
(Rahul Patil, IFS)  
Deputy Conservator of Forest,  
Alibag Forest Division, Alibag

Name of  
Work:-

Construction of Class - II Permanent Boundary Pillars for Forest Area  
in Karjat beat Karjat West in range of karjat ~~east~~ sr. No:170 Tal: Karjat.  
Dist: Raigad. West

### RECAPITULATION SHEET

1	Total Amount of work Portion	=	Rs:	41,719.99
2	Add 4% Contingencies	=	Rs:	1,688.80
3	Add 18 % For GST as per Note on SSR	=	Rs:	7,509.60
4	Add 0.1% For Labour Insurance	=	Rs:	208.60
5	Estimate Charges 2.25 %	=	Rs:	938.70
6	Add For Royalty Charges	=	Rs:	380.00
7	Add For Material Testing Charges	=	Rs:	7,060.00
Net Total =				Rs: 59,485.69
Say =				Rs: 59,485.00

*S. N. Kulkarni*  
Range Forest Officer  
Karjat West

*Prandix*  
कारजात कार्यालय

*Prandix*  
वनपाल कार्यालय  
परिमंडळ वन अधिकारी  
कारजात

Construction of Class - II Permanent Boundary Pillars for Forest Area in Karjat beat  
Karjat West in range of karjat east sr. No:170 Tal: Karjat. Dist: Raigad.

ABSTRACT

Quantity	Item Of Work	Rate	Per	Amount
1000.000	Item No.1:- Removing grass, gazer grass and disposing off out of building premises including making clean the ground by shovel and phavaras etc. complete. (21.34)	6.59	Sqm	6594.00
1.440	Item No.2:-Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (21.02)	262.66	Cum	378.23
3.520	Item No.3:- Providing soling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete. (21.40)	2648.74	Cum	9323.55
1.506	Item No.4:-Providing and laying Cast in-situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. (24.01)	8777.87	Cum	13218.02
12.038	Item No.5:- Providing internal cement plaster 6 mm thick in a single coat in cement mortar 1:4 without neeru finish to concrete surface in all positions including scaffolding and curing etc. complete. (32.02)	291.38	Sqm	3507.25
1.323	Item No.7:-Providing and applying two coats of flat oil paint of approved colour and shade to internal / external plastered surfaces including scaffolding if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete. (35.12)	111.10	Sqm	146.93
160.000	Item No.8:-Painting letters upto 20 cm height complete brushes, coir brushers, dusting, cleaning, including cost of paint etc. complete. (6.05)	31.87	No	5099.20
12.038	Item No.9:- Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning, preparing the plaster surface, applying primer coat, scaffolding if necessary, and watering the surface for two days etc complete. (35.26)	286.84	Sqm	3452.81
		<b>Total</b>	<b>Rs:</b>	<b>41719.99</b>
	Item No.10:-Royalty Charges :-			
0.799	1. Sand	237.37	Cum	380.00
0.000	2. Rubble	216.18	Cum	0.00
		<b>Total</b>	<b>Rs:</b>	<b>380.00</b>
	Item No.11:- Materials Checking Charges	<b>Total</b>	<b>Rs:</b>	<b>7060.00</b>

*S. N. Kulkarni*  
Range Forest Officer  
Karjat West

*Mandarin*  
कारजत

*Shri. N. N. Kulkarni*  
वनपाल कारजत  
परिपड्ड वन अधिकारी  
कारजत



Construction of Class - II Permanent Boundary Pillars for Forest Area in Karjat beat Karjat West in range of karjat east sr. No:170 Tal: Karjat. Dist: Raigad.

The Royalty Charges as per R & F Department's Gazette No:146 Dated 4 June 20215 are Rs:237.37/Cum for sand & Rs:216.18/Cum for other materials

Item No	Qty	Description	Sand		Rubble	
			Factor	Qty	Factor	Qty
3	1.505835	M 10 PCC For foundation	0.470	0.71	0.000	0.000
4	12.0375	Cement plaster 6mm 1:3	0.0076	0.09	0.000	0.000
			Total	0.799	0.000	
				Cum	Cum	

*Suresh Kulkarni*  
Range Forest Officer  
Karjat West

*Arundh*  
वनसंरक्षक कार्यालय

*K. Kulkarni*  
वनपाल कार्यालय  
परिबंधन वन अधिकारी  
करजत

**Construction of Class - II Permanent Boundary Pillars for Forest Area in Karjat beat Karjat West in range of karjat east sr. No:170 Tal: Karjat. Dist: Raigad.**

**Note:** Provision for laboratory testing charges for reimbursement of actual amount of testing charges paid by the contractor he should produce documentary evidences along with laboratory reports from approved registered Government Laboratory of PWD/ Engineering Colleges etc.

**Provision of Quality Control Test and materials Testing charges (as per CSR Sr. No:9 Page No:iv) Rate as per Vigilance & Quality Control Circle**

Sr. No	Name of Test	No. Of Test	Rate Per Test	Frequency	Amount
1	<b>Basic Test Of Cement :</b> Standard Consistency, Fineness, Specific Gravity, Setting Time (Initial & Final), Compressive Strength, Soundness.	1.00	3770.00	1.00	3770.00
2	<b>Basic Test Of Aggregate :</b> Water Absorption, Specific Gravity, Impact Value/Crushing Value	1.00	2600.00	1.00	2600.00
3	<b>Concrete</b> Compressive Strength of CC Cubes (Set of 3 Cubes)	1.00	690.00	1.00	690.00

Total in Rs: **7060.00**

*Srinivas Redkar*  
Range Forest Officer  
Karjat West

*Pranavli*  
परमंडळ कार्यालय

*Pranav*  
वनपाल कार्यालय  
परमंडळ वन अधिकारी  
कार्यालय



6	Two coats of flat oil paint 35.21+35.12	Deduct 1% Labour amenities	Rs.	123.00	123.00	
					1.23	
					121.77	
	22	Add 10 % for Notified Hilly area			12.18	
	101	Add 1% Labour amenities			1.23	
		Head Load Charges			26.41	
			m <sup>2</sup>	Total	163.59	163.59
7	Painting letters upto 20 cm height 6.05	Deduct 1% Labour amenities	Rs.	29.00	29.00	
					0.29	
					28.71	
		Add 10 % for Notified Hilly area			2.87	
		Add 1% Labour amenities			0.29	
		Head Load Charges			5.70	
			m <sup>2</sup>	Total	38.57	38.57
8	Two coats of exterior weather shield paint 35.26	Deduct 1% Labour amenities	Rs.	261.00	261.00	
					2.61	
					258.39	
		Add 10 % for Notified Hilly area			25.84	
		Add 1% Labour amenities			2.61	
		Head Load Charges			60.28	
			m <sup>2</sup>	Total	347.12	347.12

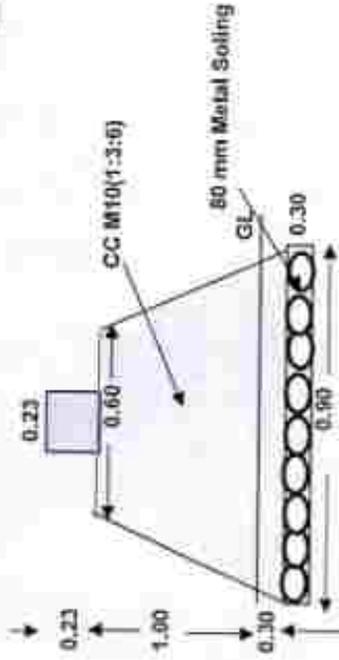
*Suresh Kulkarni*  
Range Forest Officer  
Karjat West

*Pranali*  
वनसंरक्षक कर्मचारी

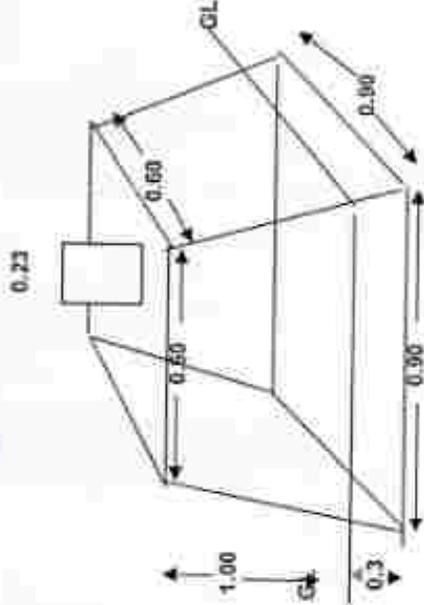
*Khan*  
वनसंरक्षक कर्मचारी  
परिबंधक वन अधिकारी  
कर्मचारी

Construction of Class - II Permanent Boundary Pillars for Forest Area in Karjat beat Karjat West in range of karjat east sr. No:170 Tal: Karjat. Dist: Raigad.

Class - I



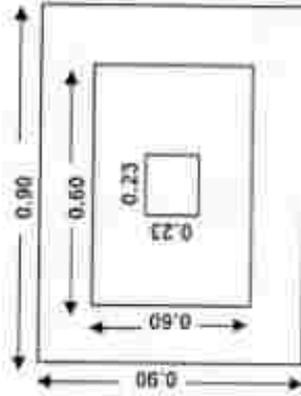
SECTIONAL ELEVATION



ISOMETRIC ELEVATION

DATAS:

A1 (Top Area)	=	0.60x0.60	=	0.36	Sqm
A2 (Bottom Area)	=	0.90x0.90	=	0.81	Sqm
H Total Height	=	1.30 M			
H1 Below GL	=	0.30 M			
H2 Above GL	=	1.00 M			
Volume	=	H/3x (A1+A2+A1A2)			
	=	1.30/3x(0.36+0.81+0.36x0.81)			
	=	0.741	Cum		



PLAN

*Savare Indekar*  
Range Forest Officer  
Karjat West

*franchisee*  
*amrutesh chavan*

*पान्धन*  
*अधिकतम दस्त*  
*परिपत्रक का अधिकांश*  
*कर्मचारी*

ESTIMATE

DIVISION: Alibag Forest Division Alibag  
RANGE: Range Forest Office Karjat West

FUND HEAD :

The Estimate is prepared in Office of the Deputy Conservator of Forest, Alibag Forest Division, Alibag. The Probable Expenses incurred in the Construction of Class - I Permanent Boundary Pillars for Forest Area in Karjat beat Karjat West in range of karjat West sr. No:170 Tal: Karjat. Dist: Raigad.

Class I Pillars 6.00 Nos

Estimated cost: Rs. 99,792.00

Estimate is prepared by : Range Forest Officer Karjat West

Estimate is checked by .

Specifications: Entire work is to be carried out as per standard specifications of the P.W.D. Hand book Vol. I & II latest Edition.

Certification: 1. Rates adopted are as per SSR of PWD Dept. for the year 2022-2023  
2. All calculations have been checked 100% arithmetically.  
3. Additional 10% for Notified Hilly area is considered.

  
Range Forest Officer  
Karjat West

  
काजापूर कार्यालय

  
कापाल कर्जत  
परिबंधक वन अधिकारी  
कर्जत

  
(Rahul Patil, IFS)  
Deputy Conservator of Forest,  
Alibag Forest Division, Alibag

Name of  
Work:-

Construction of Class - I Permanent Boundary Pillars for Forest Area in  
Karjat beat Karjat West in range of karjat West sr. No:170 Tal: Karjat. Dist:  
Raigad.

RECAPITULATION SHEET

1	Total Amount of work Portion	=	Rs:	78,877.01
2	Add 4% Contingencies	=	Rs:	3,155.08
3	Add 18 % For GST as per Note on SSR	=	Rs:	14,197.86
4	Add 0.1% For Labour Insurance	=	Rs:	394.39
5	Estimate Charges 2.25 %	=	Rs:	1,774.73
6	Add For Royalty Charges	=	Rs:	696.08
7	Add For Material Testing Charges	=	Rs:	696.08
	<b>Net Total</b>	=	Rs:	<b>99,791.23</b>
	<b>Say</b>	=	Rs:	<b>99,792.00</b>

*Suresh Lakshmi*  
Range Forest Officer  
Karjat West

*frandix*  
कार्जत कार्यालय

*Raman*  
कार्जत कार्यालय  
कार्जत

**Construction of Class - I Permanent Boundary Pillars for Forest Area in Karjat beat Karjat West in range of karjat West sr. No:170 Tal: Karjat. Dist: Raigad.**

**ABSTRACT**

Quantity	Item Of Work	Rate	Per	Amount
1200.000	Item No:1:- Removing grass, gazer grass and disposing off out of building premises including making clean the ground by shovel and phavaras etc. complete. (21.34)	6.60	Sqm	7920.00
3.267	Item No:2:-Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (21.02)	262.66	Cum	858.11
1.089	Item No:3:- Providing soling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete. (21.40)	2610.36	Cum	2842.68
5.826	Item No:4:-Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. (24.01)	8627.31	Cum	50252.71
26.560	Item No:5:- Providing internal cement plaster 6 mm thick in a single coat in cement mortar 1:4 without neeru finish to concrete surface in all positions including scaffolding and curing etc. complete..(32.02)	285.84	Sqm	7306.07
1.587	Item No:7:-Providing and applying two coats of flat oil paint of approved colour and shade to internal / external plastered surfaces including scaffolding if necessary, cleaning and prepering the surface (excluding primer coat) etc. complete.. (35.12)	163.59	Sqm	259.62
192.000	Item No:8:-Painting letters upto 20 cm height complete brushes, coir brushes, dusting, cleaning, including cost of paint etc. complete.. (6.05)	38.57	No	7405.44
5.826	Item No:9:- Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning, preparing the plaster surface, applying primer coat, scaffolding if necessary, and watering the surface for two days etc complete. (35.26)	347.13	Sqm	2022.38
		<b>Total</b>	<b>Rs:</b>	<b>78877.01</b>
	Item No:10:-Royalty Charges :-			
2.932	1. Sand	237.37	Cum	696.08
0.000	2. Rubble	218.18	Cum	0.00
		<b>Total</b>	<b>Rs:</b>	<b>696.08</b>
	Item No:11:- Materials Checking Charges	<b>Total</b>	<b>Rs:</b>	<b>7060.00</b>

*Suresh Kudatkar*  
Range Forest Officer  
Karjat West

*Arundhan*  
कारजत कर्मचारी

*Rohan*  
जमशाल - कुर्जत  
परिमंडळ वन अधिकारी  
कारजत



Construction of Class - I Permanent Boundary Pillars for Forest Area in Karjat beat Karjat West in range of karjat West sr. No:170 Tal: Karjat. Dist: Raigad.

The Royalty Charges as per R & F Department's Gazette No:146 Dated 4 June 20215 are Rs:237.37/Cum for sand & Rs:216.18/Cum for other materials

Item No	Qty	Description	Sand		Rubble	
			Factor	Qty	Factor	Qty
3	5.826	M 10 PCC For foundation	0.470	2.74	0.000	0.000
4	25.56	Cement plaster 5mm 1:3	0.0076	0.19	0.000	0.000
			Total	2.932	0.000	
				Cum	Cum	

*Suresh Kulkarni*  
Range Forest Officer  
Karjat West

*frandee*  
नमस्कार

*Jhachan*  
वनपाल कर्जा  
परिगंडक वन अधिकारी  
कर्जा

**Construction of Class - I Permanent Boundary Pillars for Forest Area in Karjat beat Karjat West in range of karjat West sr. No:170 Tal: Karjat. Dist: Raigad.**

**Note:** Provision for laboratory testing charges for reimbursement of actual amount of testing charges paid by the contractor he should produce documentary evidences along with laboratory reports from approved registered Government Laboratory of PWD/ Engineering Colleges etc.

**Provision of Quality Control Test and materials Testing charges (as per CSR Sr. No:9 Page No:iv) Rate as per Vigilance & Quality Control Circle**

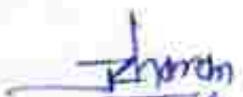
Sr. No	Name of Test	No. Of Test	Rate Per Test	Frequency	Amount
1	<b>Basic Test Of Cement :</b> Standard Consistency Finess, Specific Gravity, Setting Time(Initial & Final), Compressive Strength, Soundness.	1.00	3770.00	1.00	3770.00
2	<b>Basic Test Of Aggregate :</b> Water Absortion, Specific Gravity, Impact Value/Crushing Value	1.00	2600.00	1.00	2600.00
3	<b>Concrete</b> Compressive Strength of CC Cubes (Set of 3 Cubes)	1.00	690.00	1.00	690.00

Total in Rs:

**7060.00**

  
Range Forest Officer  
Karjat West



  
वनरक्षक कर्तव्य  
परिपंढर वन अधिकारी  
करजत



5	Two coats of flat oil paint 35.21+35.12	Deduct 1% Labour amenities	Rs.	123.00	123.00	
					1.23	
					121.77	
	22	Add 10 % for Notified Hilly area			12.18	
	101	Add 1% Labour amenities			1.23	
		Head Load Charges			28.41	
			m <sup>2</sup>	Total	163.59	163.59
7	Painting letters upto 20 cm height 8.05	Deduct 1% Labour amenities	Rs.	29.00	29.00	
					0.29	
					28.71	
		Add 10 % for Notified Hilly area			2.87	
		Add 1% Labour amenities			0.29	
		Head Load Charges			6.70	
			m <sup>2</sup>	Total	38.57	38.57
8	Two coats of exterior weather shield paint 35.28	Deduct 1% Labour amenities	Rs.	261.00	261.00	
					2.61	
					258.39	
		Add 10 % for Notified Hilly area			25.84	
		Add 1% Labour amenities			2.61	
		Head Load Charges			60.28	
			m <sup>2</sup>	Total	347.12	347.12

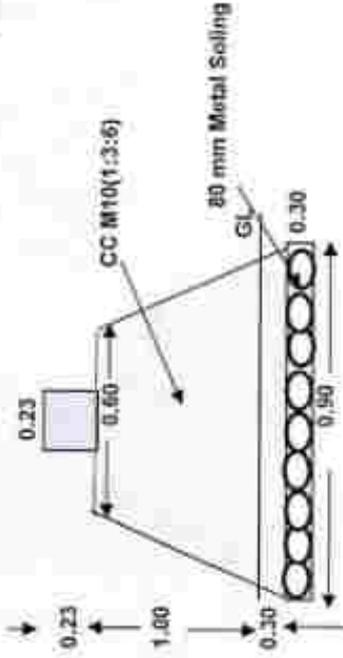
*Sange Lakshya*  
Range Forest Officer  
Karjat West

*Pranali*  
वनाध्यक्ष कार्जत

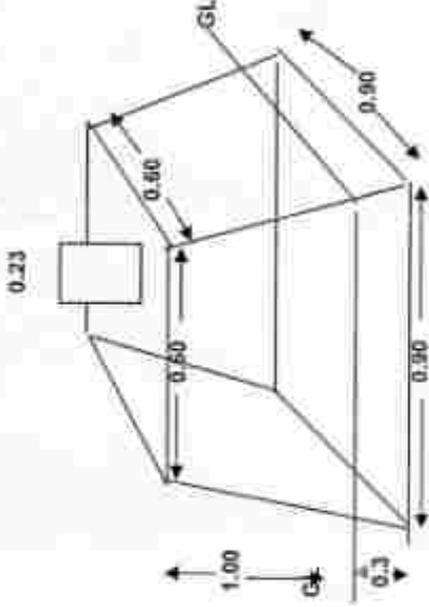
*Pranali*  
वनाध्यक्ष कार्जत  
परिमंडळ वन अधिकारी  
कार्जत

**Construction of Class - I Permanent Boundary Pillars for Forest Area in Karjat beat Karjat West in range of karjat West sr. No:170 Tal: Karjat. Dist: Raigad.**

Class - I



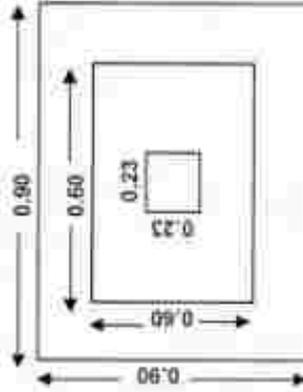
SECTIONAL ELEVATION



ISOMETRIC ELEVATION

DATA:

A1 (Top Area)	=	0.60X0.60	=	0.36	Sqm
A2 (Bottom Area)	=	0.90X0.90	=	0.81	Sqm
H Total Height	=	1.30 M			
H1 Below GL	=	0.30 M			
H2 Above GL	=	1.00 M			
Volume	=	H <sub>2</sub> X (A1+A2)			
	=	1.30X(0.36+0.81+0.36x0.81)			
	=	0.741	Cum		



PLAN

*Sayee Ludeke*  
Range Forest Officer  
Karjat West

*Ramesh*  
अध्याय कर्ता  
परिचय व अधिकारी  
कर्ता

*Arundha*  
अध्याय कर्ता

## FACE SHEET

Division :- Alibag Division  
Sanction Estimate :-  
Fund Head :-  
Major Head :-  
Minor Head :-  
Service Head :-  
Departmental Head :-

Estimate framed in the office of the Range Forest Office, Panvel Range in Alibag Division and the probable expenses that will incurred in the Construction of Class-I & Class-II Permanent Boundary Mark for Boundary Demarcation in village belavli surve no. 136, bhingar surve no.26, barwai surve no. 58, 36, 35, 27,37, Bherale surve no. 41, 42/1A, 42/2A, 62/31,/31 /b in Panvel Range of Forest Division, Alibag

**Total Cost Rs. 1396573.00**

Administrative approved by

Technically sanctioned by

Estimate prepared by Range forest officer

Estimate Checked by

Call of Authority Divisional Forest Officer, Alibag Division

Specification- All these item of above work are to be carried out as per respective standard specification of PWD given read book

Certification 1. rates adopted are as per SSR of Maharashtra PWD for the year 2022-23

2. All calculations have been checked cent percent arithmetically
3. additional 10 % charges for tribal area is considered

  
Range Forest officer  
Panvel

  
(Rahul Patil, IFS)  
Deputy Conservator of Forest,  
Alibag Forest Division, Alibag

## GENERAL REPORT

**Name Of Work :- Construction of Class-I & Class-II Permanent Boundary Mark for Boundary Demarcation in village belavli surve no. 136, bhangar surve no.26, barwai surve no. 58, 36, 35, 27,37, Bherale surve no. 41, 42/1A, 42/2A, 62/31,/31 /b in Panvel Range of Forest Division,Alibag**

**Authority** Divisional Forest Officer,Alibag Division

**Necessity** Demarcation of the outer boundary of compartment (forest land boundary) is eccential.Hence this estimate is prepared.

**Provision** Following provision are made in this Estimate.

- 1 Clearing the site before given layout
- 2 Excavation 0.23mt below ground level in soft & hard murrum,
- 3 Providing and laying in situ, cement concrete M-10/(1:3:6)
- 4 Providing internal cement plaster 6 mm thick in a single coat in cement mortar 1:4
- 5 Providing and applying two coats of flat oil paint of approved colour
- 6 Providing and applying primer coat on concrete surface
- 7 Painting letters upto 20 cm height complete
- 8 Providing and applying two coats of exterior weather shield paint.

**Rates** Rates adopted in the Estimate are as per SSR 2022-23 w.e.f. 25-07- 2022

**Specification** The work will be carried out as per standard specification of Public Work Department, and as directed by Engineer-incharge from time to time

**Lead** Lead for Material Considered in Estimate is Given by RFO,Panvel

Follow the instruction given by the chief conservator of forest (PCCF) Ms Nagpur wiede his circular no. D-27/2/Ce.86/682/2019-20 date 27/01/2020 for forest boundary demarcation and erection of permanent boundary marks

  
Range Forest Officer  
Panvel

Name Of Work :-Construction of Class-I & Class-II Permanent Boundary Mark for Boundary Demarcation in village belavli surve no. 136, bhangar surve no.26, barwai surve no. 58, 36, 35, 27,37, Bherale surve no. 41, 42/1A, 42/2A, 62/31,/31 /b in Panvel Range of Forest Division,Alibag

RECAPITULATION SHEET

Sr. No.	ITEM OF WORK	AMOUNT (Rs.)
A	Total Work Portion Amount for Boundary Pillar (Class-I & II)	Rs. 1110953.00
	Add 3 % contingencies	33329
	Add 18.0% For GST On (A)	199972
	Add Royalty Charges for Boundary Pillar (Class-I & II) Amount	Rs. 37356.00
	Add Quality Control & Testing Charges for B.Pillar (Class-I & II)	Rs. 9409.00
	Total Amount (A + B + C) = D	Rs. 1391018.13
F	Add 0.50% for Labour Insurance On (A)	Rs. 5554.77
G	Gross Total Amount Rs (D+E +F)	Rs. 1396572.90
	Say	Rs. 1396573.00

  
Range Forest Officer  
Panvel

**Name Of Work :- Construction of Class-I & Class-II Permanent Boundary Mark for Boundary Demarcation in village belavli surve no. 136, bhingar surve no.26, barwai surve no. 58, 36, 35, 27,37, Bherale surve no. 41, 42/1A, 42/2A, 62/31,/31 /b in Panvel Range of Forest Division,Alibag**

**ABSTRACT**

Sr. No.	ITEM OF WORK	Unit	QTY.	RATE	AMOUNT
1	Removing grass, gazer grass and disposing off out of building premises including making clean the ground by shovel and phavares etc. complete.	Sqmt	327.15	6.50	2126
2	Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5 m.) By Mechanical Means.	Cum	48.35	223.40	10800
3	Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, com packing, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc)	Cum	89.62	6795.70	609020
4	Providing internal cement plaster 6mm. thick in a single coat in cement mortar 1:4 without Nessler finish to concrete surface in all positions, including scaffolding and curing etc. complete.	Sqmt	573.93	237.40	136250
5	Providing and applying two coats of flat oil paint of approved colour and shade to internal/external plastered surfaces including scaffolding if necessary, cleaning and pre paring the surface (excluding primer coat) etc. complete.	Sqmt	60.85	109.00	6632
6	Painting letters upto 20 cm height complete brushes, coil brushes, dusting, cleaning, including cost of paint etc. complete.	Nos	5920.00	31.30	185296
7	Providing and applying two coats of exterior weather shield paint of approved manufac ture and of approved colour to the plastered surfaces including cleaning ,preparing the plaster surface ,applying primer coat ,scaffolding if necessary, and watering the surface for two days etc complete. NOTE: For Item No. 15 to 18 prior approval of Superintending Engineer will be necessary	Sqmt	505.28	318.30	160829

1110953.40

- 8 Royalty charges for sand separate statement attached  
9 Materials testing charges separate statement attached

37356.00  
9409.00

**Total Work Portion Amount Rs 1110953.00**

  
**Range Forest Office**  
Panvel

Name Of Work :-Construction of Class-I & Class-II Permanent Boundary Mark for Boundary Demarcation in village belavli surve no. 136, bhingar surve no.26, barwai surve no. 58, 36, 35, 27,37, Bherale surve no. 41, 42/1A, 42/2A, 62/31,/31 /b in Panvel Range of Forest Division,Alibag

**MEASUREMENT SHEET**

Total Nos of Class-I Boundary Mark = 75.00 Nos Length of Boundary = KM  
 Total Nos of Class-II Boundary Mark = 110.00 Nos

ITEM OF WORK	Unit	NO	L	B	D/H	QTY.
<b>ITEM NO.1</b>						
Removing grass, gazer grass and disposing off out of building premises including making clean the ground by shovel and shaveras etc. complete.						
As directed by Engineer in charge.						
S.S.R. Item No.21.34/Page No.157						
For Total No. of Class-I Boundary Piller	Sqmt	75.00	1.30	1.50		168.75
			<b>(A) Net Qty. for Class-I Piller</b>			<b>168.75</b>
For Total No. of Class -II Boundary Piller	Sqmt	110.00	1.20	1.20		158.40
			<b>(B) Net Qty. for Class-II Piller</b>			<b>158.40</b>
			<b>Net Qty.For Class-I &amp; II Piller(A+B)</b>			<b>327.150</b>

**ITEM NO. 2**  
 Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5 m.) By Mechanical Means

Spec.No. :Bd.A1 Page No.259

S.S.R. Item No.21.02/Page No.153

For Total No. of Class-I Boundary Piller

Cum	75.00	1.10	1.10	0.30		27.23
			<b>(A) Net Qty. for Class-I Piller</b>			<b>27.23</b>

For Total No. of Class -II Boundary Piller

Cum	110.00	0.80	0.80	0.30		21.12
			<b>(B) Net Qty. for Class-II Piller</b>			<b>21.12</b>
			<b>Net Qty.For Class-I &amp; II Piller(A+B)</b>			<b>48.345</b>

**ITEM NO-3**

Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, com pacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc)

Spec.No. :Bd. E. 1 Page No. 287

S.S.R. Item No.24.01/Page No.175

For Total No. of Class-I Boundary Piller

$$(1.30/3) \times ((0.36+0.81+\sqrt{0.36 \times 0.81}))$$

For Trapezoidal Area

Cum	75.00		0.741			55.58
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Volume of Piller = H/3 (A1+A2+  $\sqrt{A1A2}$ )

$$A1=0.60 \times 0.60 = 0.36 \text{ Sqmt}, A2=0.90 \times 0.90 = 0.81 \text{ Sqmt}, H = 1.30 \text{ mt}$$

For Pedastal at top

Cum	75.00	0.23	0.23	0.23		0.91
		<b>(A) Net Qty. for Class-I Piller</b>				<b>56.49</b>

Total Nos of Class-I Boundary Mark = 75 Nos  
 Total Nos of Class-II Boundary Mark = 110 Nos

Length of Boundary = KM

ITEM OF WORK	Unit	NO	L	B	D/H	QTY.
<b>For Total No. of Class -II Boundary Pillar</b>						
For Trapezoidal Area Volume of Pillar = $H/3 (A1+A2+ \sqrt{A1A2})$ $A1=0.45 \times 0.45 = 0.20 \text{ Sqmt}, A2=0.60 \times 0.60 = 0.36 \text{ Sqmt}, H = 1.05 \text{ mt.}$	Cum	110.00		0.289		31.79
For Pedestal at top	Cum	110.00	0.23	0.23	0.23	1.34
<b>(B) Net Qty. for Class-II Pillar</b>						<b>89.618</b>
<b>Net Qty. For Class-I &amp; II Pillar(A+B)</b>						

**ITEM NO.4**

Providing internal cement plaster 6mm. thick in a single coat in cement mortar 1:4 without Neeru finish to concrete surface in all positions, including scaffolding and curing etc. complete.

Spec. No. Bd.L.1 Page No. 367

S.S.R. Item No.32.01 /Page No.209

For Total No. of Class-I Boundary Pillar

$4 \times ((0.90+0.60)/2) \times 1.30 = 3.90$	Sqmt	75.00	4.00	0.75	1.30	292.5
For Top area $0.60 \times 0.60 = 0.36$	Sqmt	75.00	1.00	0.60	0.60	27.00
<b>(A) Net Qty. for Class-I Pillar</b>						<b>573.925</b>
<b>(B) Net Qty. for Class-II Pillar Net Qty. For Class-I &amp; II Pillar(A+B)</b>						

**For Total No. of Class -II Boundary Pillar**

$4 \times ((0.60+0.45)/2) \times 1.05 = 3.30$

For Top area  $0.45 \times 0.45 = 0.20$

Sqmt	110 x 4	0.53	1.05	232.15
Sqmt	110 x 1	0.45	0.45	22.275

**ITEM NO.5**

Providing and applying two coats of flat oil paint of approved colour and shade to internal/external plastered surfaces including scaffolding if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete.

Spec.No.: Bd.O.7 Page No. 406

S.S.R. Item No.35.12/ Page No.224

For Total No. of Class-I Boundary Pillar

White Oil paint is to be used for painting of top Stone

For Sides

For Top

Sqmt	75.00	1.00	0.92	0.30	20.7
Sqmt	75.00	1.00	0.23	0.23	3.9675

**(A) Net Qty. for Class-I Pillar** **60.8465**  
**(B) Net Qty. for Class-II Pillar Net Qty. For Class-I & II Pillar(A+B)**

**For Total No. of Class -II Boundary Pillar**

White Oil paint is to be used for painting of top Stone

For Sides

For Top

Sqmt	110 x 1	0.92	0.30	30.360
Sqmt	110 x 1	0.23	0.23	5.819

**ITEM OF WORK**

**Unit NO L B D/H QTY.**

**ITEM NO.6**

Painting letters upto 20 cm height complete brushes, coil brushes, dusting, cleaning, including cost of paint etc. complete.

Spec.No.: MORTH 801

S.S.R. Item No.6.05/Page No.46

For Total No. of Class-I Boundary Pillar

Nos	75.00	4.00	8.00		2400.00
	<b>(A) Net Qty. for Class-I Pillar</b>				<b>2400.00</b>
Nos	110.00	4.00	8.00		3520.00
	<b>(B) Net Qty. for Class-II Pillar</b>				<b>3520.00</b>
	<b>Net Qty.For Class-I &amp; II Pillar(A+B)</b>				<b>5920.00</b>

For Total No. of Class -II Boundary Pillar

**ITEM NO.7**

Providing and applying two coats of exterior weather shield paint of approved manufacture and of approved colour to the plastered surfaces including cleaning, preparing the plaster surface, applying primer coat, scaffolding if necessary, and watering the surface for two days etc complete. NOTE:

For Item No.

15 to 18 prior approval of Superintending Engineer will As directed by Engineer incharge.

S.S.R. Item No.35.26/Page No.225

For Total No. of Class-I Boundary Pillar

$4 \times ((0.90+0.60)/2) \times 1.0 = 3.00$

For Top area  $0.60 \times 0.60 = 0.36$

Sqmt	75.00	4.00	0.75	1.00	225.00
Sqmt	75.00	1.00	0.60	0.60	27.00
	<b>(A) Net Qty. for Class-I Pillar</b>				<b>252.00</b>

For Total No. of Class -II Boundary Pillar

$4 \times ((0.60+0.45)/2) \times 1.05 = 3.38$

For Top area  $0.45 \times 0.45 = 0.20$

Sqmt	110.00	4.00	0.525	1.00	231.00
Sqmt	110.00	1.00	0.45	0.45	22.28
	<b>(B) Net Qty. for Class-II Pillar</b>				<b>253.28</b>
	<b>Net Qty.For Class-I &amp; II Pillar(A+B)</b>				<b>505.28</b>

Royalty charges for sand separate statement attached

sand

157.376

Materials testing charges separate statement attached

  
**Range Project Officer**  
**Panval**

Name Of Work :- Construction of Class-I & Class-II Permanent Boundary Mark for Boundary Demarcation in village belavli surve no. 136, bhingar surve no.26, barwal surve no. 58, 36, 35, 27,37, Bherale surve no. 41, 42/1A, 42/2A, 42/3A, 62/31,31 /b in Panvel Range of Forest Division,Alibag

**Lead Statement**

Sr.No	Material	Name of Quarry	Lead in KM	Rate	Unit
1	Metal 6mm to 40mm	uran	25 KM	566.86	Cu.M
2	Stone /Metal 80mm	uran	25 KM	543.24	Cu.M
3	Sand	uran	20 KM	488.73	Cu.M
4	Marum	Local	05 KM	252.22	Cu.M
5	Bricks	Local	05 KM	531.38	Per 1000 No.
				0.53	Per 1.0 No.
6	Steel	uran	25 KM	413.27	M.T.
7	Cement	uran	25 KM	413.27	M.T.
				20.66	Per bag
8	Floaing Tiles	uran	25 KM	41.33	Sq.M

**TRIAL PIT**



*(Signature)*  
**Range Forest Officer**  
 Panvel

**Construction of Class-I & Class-II Permanent Boundary Mark for Boundary Demarcation in village belavli surve no. 136, bhingar surve no.26, burwai surve no. 58, 36, 35, 27,37, Bherale surve no. 41, 42/1A, 42/2A, 62/31,31 /b in Paavel Range of Forest Division,Alibag**

**RATE ANALYSIS**

sr. no	Material	location	total lead kms	lead charges
1	Metal below 40 mm	Paavel	8	313.21
2	Metal above 40 mm	Paavel	8	300.16
3	sand	Paavel	8	313.21
4	cement	Paavel	8	208.43

1	Removing grass gazer grass 21.34 Deduction 21% for labour amenities and cess in R.A. Add 10% for Tribal Area Add 21% for labour Amenities And cess in R.A.	Basic Rate Rs.	52	6 -1.26 4.74 0.47 1.26	Total	6.47	6.50
2	Excavation in Soil and Soft Murum 21.02 Deduction 21% for labour amenities and cess in R.A. Add 10% for Tribal Area Add 21% for labour Amenities And cess in R.A.	Basic Rate rs.	239	207 -43.47 163.53 16.35 42.47	Total	223.35	223.40
3	PCC M10 for foundation 24.01 Deduct for SCADA Deduction 21% for labour amenities and cess in R.A. Add 10% for Tribal Area metal 0.94 313.21 sand 0.47 313.21 cement 0.22 208.43 Add 21% for labour Amenities And cess in R.A.	Basic Rate	5830	5830 -126 5704 -1197.84 4506.16 450.62 294.42 147.21 45.85 1197.84	Total	6642.1	6642.1
4	6mm thick plaster in cm 1:4 with neeru finish 32.01 Deduction 21% for labour amenities and cess in R.A. Add 10% for Tribal Area sand 0.0076 313.21 cement 0.054 208.42	Basic Rate	203	203 -42.63 160.37 16.04 2.38 11.26 42.63	Total	232.68	232.70
5	Providing and applying two coats of flat oil paint 32.12 Deduction 21% for labour amenities and cess in R.A. Add 10% for Tribal Area Add 21% for labour Amenities And cess in R.A.	Basic Rate	101	101 -21.21 79.79 7.98 21.21	Total	108.98	109.0

6	<p>painting letters upto 20 cm height 6.05</p> <p>Deduction 21% for labour amenities and cess in R.A.</p> <p>Add 10% for Tribal Area</p> <p>Add 21% for labour Amenities And cess in R.A.</p>	<p>Basic Rate</p> <p>29</p>	<p>29.0</p> <p>-6.09</p> <p>22.91</p> <p>2.29</p> <p>6.09</p> <p>31.29</p>	<p>31.3</p>
7	<p>exterior weather shield paint 35.26</p> <p>Deduction 21% for labour amenities and cess in R.A.</p> <p>Add 10% for Tribal Area</p> <p>Add 21% for labour Amenities And cess in R.A.</p>	<p>295</p>	<p>295</p> <p>-61.95</p> <p>233.05</p> <p>23.31</p> <p>61.95</p> <p>318.31</p>	<p>318.3</p>

  
**Raige Forest Officer**  
 PUNE

### Royalty Statement

Name Of Work :-Construction of Class-I & Class-II Permanent Boundary Mark for Boundary Demarcation in village belavli surve no. 136, bhingar surve no.26, barwai surve no. 58, 36, 35, 27,37, Bherale surve no. 41, 42/1A, 42/2A, 62/31,/31 /b in Panvel Range of Forest Division,Alibao

Sr.No	Description of the Item	Unit	Total Qty of Item	80mm. Metal		Munum		Sand		Rubble	
				Coefl.	QTY	Coefl.	QTY	Coefl.	QTY	Coefl.	QTY
<b>I Royalty Statement For Class -I Boundary Mark</b>											
1	Providing and laying Cast in situ/Ready Mix cement concrete in M-10	Cum	6.78	0.00	0.00	0.00	0.00	0.470	3.19	0.00	0.00
2	Providing internal cement plaster 6mm. thick in a single coat in cement mortar 1:4	Sqmt.	38.34	0.00	0.00	0.00	0.0076	0.0076	0.29	0.00	0.00
	<b>Total Qty.</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>			<b>3.48</b>		<b>0.00</b>
	<b>Royalty Charges per Cum</b>			<b>216.18</b>	<b>216.18</b>				<b>237.37</b>		<b>216.18</b>
	<b>Deduct Royalty Amount Rs.</b>			<b>0.00</b>	<b>0.00</b>				<b>825.40</b>		<b>0.00</b>
	<b>Total Amount Rs.</b>								<b>825.00</b>		
<b>II Royalty Statement For Class -II Boundary Mark</b>											
1	Providing and laying Cast in situ/Ready Mix cement concrete in M-10	Cum	2.72	0.00	0.00	0.00	0.470	0.470	1.28	0.00	0.00
2	Providing internal cement plaster 6mm. thick in a single coat in cement mortar 1:4	Sqmt.	21.67	0.00	0.00	0.00	0.0076	0.0076	0.16	0.00	0.00
	<b>Total Qty.</b>			<b>0.00</b>	<b>0.00</b>	<b>0.00</b>			<b>1.44</b>		<b>0.00</b>
	<b>Royalty Charges per Cum</b>			<b>216.18</b>	<b>216.18</b>				<b>237.37</b>		<b>216.18</b>
	<b>Deduct Royalty Amount Rs.</b>			<b>0.00</b>	<b>0.00</b>				<b>342.49</b>		<b>0.00</b>
	<b>Total Amount Rs.</b>								<b>342.00</b>		
<b>Total Amount of Royalty for Class-I &amp; Class -II Boundary mark</b>										<b>1167.00</b>	

  
Range Forest Officer  
Panvel

**Name Of Work :- Construction of Class-I & Class-II Permanent Boundary Mark for Boundary Demarcation in village belavli surve no. 136, bhingar surve no.26, barwal surve no. 58, 36, 35, 27,37, Bherale surve no. 41, 42/1A, 42/2A, 62/31,/31 /b in Panvel Range of Forest Division,Alibag**

**NOTE :** Provision for laboratory testing charges. For reimbursement of actual amount of testing charges paid by the contractor, he should produce documentary evidences along with laboratory reports from approved registered Govt. Laboratory of Pwd/Engineering College Etc.

**Provision of Quality Control Test and Materials Testing Charges (as per CSR Sr.No.9, Page No. iv) Rate as per Vigilance & Quality Control Circle.**

Name of Tests	No. of Test	Rate per Test	Frequency	Amount
<b>Testing Charges For Class - I &amp; Class - II Boundary Mark</b>				
<b>1) Basic Test of Cement</b>				
Standard Consistency Finess, Specific Gravity, Setting Time (Initial & Final), Compressive Strength, Soundness.	0.00	3770	1.00	3770.00
Test of concrete Compressive strength of cc cub	0.00	3770	1.00	3770.00
<b>Test for metal</b>				
Sieve analysis	1.00	699	1.00	699.00
abrasion value	1.00	1170	1.00	1170.00
<b>Total Amount Rs.</b>				<b>9409.00</b>

  
**Range Forest Officer**  
**Panvel**

**Range Forest Office Social Forestry Panel  
Road/Canal/Railway Side Plantation**

Model Estimate for - USARLI TO BARVAHI, BHOKARPADA RAILWAY LEFT SIDE PLANTATION.

No. of Seedling / Row per Km 250 (at spacing of 4m)

No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings

Work Name- USARLI TO BARVAHI, BHOKARPADA RAILWAY LEFT SIDE PLANTATION.

Total Dist. 3 KM

Nos. of plants- 750

**ABSTRACT**

Sr. No.	Particulars	Per K.M.				1.50 K.M.				Remarks
		Man days	Wages	Material Supply	Total (Rs./Ha.)	Man days	Wages	Material Supply	Total (Rs.)	
1	2	3	4	5	6	7	8	9	10	11
1	P.P.O.	124.05	51318	2435	53753	186.08	76977	3652	80629	
2	First Year Works	399.7	200571.0	219078.0	419649	509.95	300850.0	328617.0	629473	
3	Second Year Works	247.30	147086.00	6860.00	154046	370.95	220628.00	18448.00	231066	
4	Third Year Works	228.80	135283.00	6405.00	141688	343.20	201935.00	9608	312533	
	<b>Total</b>	<b>999.85</b>	<b>534256</b>	<b>234878</b>	<b>769136</b>	<b>1499.78</b>	<b>801386</b>	<b>352317</b>	<b>1153703</b>	

*अधिकारी*  
(शि. उ. पार्टील)  
वन परिक्षेत्र अधिकारी  
सामाजिक वनीकरण  
मनवेस

*Ashish*  
(ASHISH THAKARE IFS)  
Deputy Conservator of Forests  
Alibag

**Range Forest Office Social Forestry Panel**

**Road/Canal/Railway Side Plantation**

**Model Estimate for - USARJ TO BARVAHI, BHOKARPADA RAILWAY LEFT SIDE PLANTATION**

No. of Seedling / Row per Km 250 (at spacing of 4m)

No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings

Work Name- USARJ TO BARVAHI, BHOKARPADA RAILWAY LEFT SIDE PLANTATION.

Total Dis. 3 KM

No. of plants- 750

Daily Wages Rate :- 413.69

**PPO Works**

Sr. No.	Particulars	Per K.M.				1.50 K.M.				Remarks
		Man days	Wages	Material Supply	Total (Rs./Rs.)	Man days	Wages	Material Supply	Total (Rs.)	
1	2	3	4	5	6	7	8	9	10	11
1	Survey & Demarcation (0.03 man-days for 50 pits)	0.30	124.11	0.00	124.11	0.45	186.16	0.00	186.16	
2	Clearing of bushes and preparation of site (As per requirement) 2000 square meter 0.0228 man-days per Square meter.	45.65	18984.95	0.00	18984.95	68.48	28327.42	0.00	28327.42	
3	Marking of pits (0.13 man-days for 50 pits and Material supply 2.24 for 50 pits)	1.30	537.80	22.00	559.80	1.93	806.70	33.00	839.70	
4	Digging of Pits Size 60X60X60 Cms. (7.68 man-days for 50 pits)	76.80	31771.39	0.00	31771.39	115.20	47657.09	0.00	47657.09	
	<b>Total</b>	<b>124.05</b>	<b>51318.24</b>	<b>22.00</b>	<b>51340.24</b>	<b>186.08</b>	<b>76977.37</b>	<b>33.00</b>	<b>77010.37</b>	
	Labour Welfare 2.70 %	0	0.00	1386.19	1386.19	0	0.00	2079.28	2079.28	
	Contingency 2%	0	0.00	1026.80	1026.80	0	0.00	1540.21	1540.21	
	<b>Grand Total</b>	<b>0</b>	<b>0.00</b>	<b>2434.99</b>	<b>33753.24</b>	<b>0</b>	<b>76977.37</b>	<b>3652.40</b>	<b>80629.85</b>	
	Say as Total	124.05	51318	2506	55347	186.08	76977	3652	80629	

*(Signature)*

**(पि. उ. पाटील)**  
वन परिक्षेत्र अधिकारी  
सामाजिक वनीकरण  
पन्थेल

**Range Forest Office Social Forestry Panel**  
**Road/Cannal/Railway Side Plantation**

Model Estimate for - USABLI TO HARVAHL, BIDKARPADA RAILWAY LEFT SIDE PLANTATION.

No. of Seedling / Row per Km 250 (as spacing of 4m)

No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings

Work Name- USABLI TO HARVAHL, BIDKARPADA RAILWAY LEFT SIDE PLANTATION.

Total Dist. 3 KM

No. of items- 150

Daily Wages Rate :- 455.06

Sl. No.	Particulars	for 1 K.M.			for 1.50 K.M.			Remarks		
		Man days	Wages	Material Supply	Man days	Wages	Material Supply			
1	2	3	4	5	6	7	8	9	10	11
1	Filling planting pits. (50% allowed cost + 25% Manium + 25% Local soil) (2.5 mandays for 50 pits)	25.00	11376.50	1000.00	12376.50	37.50	17064.75	1500.00	18564.75	
2	Seedling Purchase 550 plants (Height of the sapling at the time of planting 8 feet) (DMC 2015-16, USBL item no. 3, Category (B)/No. Seedling 350 kg)	0.00	0.00	192500.00	192500.00	0.00	0.00	288750.00	288750.00	
3	Transportation of 550 seedlings from nursery to planting site including loading & unloading. (0.0000 mandays for 50 Seedlings)	10.00	4500.00	500.00	750.00	15.00	6823.50	4500.00	11323.50	
4	Planting Seedlings (2.01 mandays for 50 Seedlings)	20.10	9146.71	0.00	9146.71	30.15	13720.06	0.00	13720.06	
5	Classy replacers 15% seedlings (50 Seedlings) (2.01 mandays for 50 Seedlings)	2.00	910.12	0.00	910.12	3.00	1365.18	0.00	1365.18	
6	Fencing by dummy branches around the seedlings and repairing as required (3.29 mandays for 50 Seedlings)	133.90	60932.53	3515.00	64447.53	200.85	91308.30	5272.50	96671.30	
7	Watering and weeding and watering 3.40 mandays for 50 pits and Providing fertilizer as per requirement 3.40 mandays for 50 pits	34.00	15472.04	223.00	15697.04	51.00	23208.06	337.50	23545.56	
8	Brush and weed 10 mania-1 washer per 2 km	150.00	68259.00	0.00	68259.00	224.00	102308.80	0.00	102308.80	
10	Watering of seedling (Per Seedling 20 liters water) in the month Oct. Nov. Dec. Jan. Feb. Mar.)	24.70	29923.00	0.00	29923.00	37.05	44884.39	0.00	44884.39	
	<b>Total</b>	<b>399.70</b>	<b>206370.50</b>	<b>200240.00</b>	<b>406610.50</b>	<b>599.55</b>	<b>300855.84</b>	<b>300300.00</b>	<b>601215.84</b>	
	Labour Woffers 2.70 %	0	0.00	10821.88	10821.88	0	0.00	16232.83	16232.83	
	Contingency 2%	0	0.00	8016.21	8016.21	0	0.00	12024.32	12024.32	
	<b>Grand Total</b>	<b>0</b>	<b>0.00</b>	<b>219078.09</b>	<b>419648.59</b>	<b>0</b>	<b>300855.84</b>	<b>328617.14</b>	<b>629472.98</b>	
	<b>Say as Total</b>	<b>399.70</b>	<b>178370</b>	<b>218053</b>	<b>396423</b>	<b>599.55</b>	<b>300856</b>	<b>328617</b>	<b>629473</b>	

**मुद्रा**  
**(सि. उ. पाटील)**  
**वन परिचय अधिकारी**  
**सामाजिक वनीकरण**  
**कलेक्ट**

**Range Forest Office Social Forestry Panvel  
Road/Canal/Railway Side Plantation**

Model Estimate for - USARLI TO BARVAHI, BHOKARPADA RAILWAY LEFT SIDE PLANTATION

No. of Seedling / Row per Km 250 (at spacing of 4m)

No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings

Work Name- USARLI TO BARVAHI, BHOKARPADA RAILWAY LEFT SIDE PLANTATION

Total Dist. 3 KM

No. of plants- 750

Daily Wages Rate -> 500.56

**SYO Works**

Sr. No.	Particulars	Per K.M.			1.50 K.M.			Remarks		
		Man days	Wages	Material Supply	Total (Rs./Hrs.)	Man days	Wages		Material Supply	
1	2	3	4	5	6	7	8	10	11	
1	Weeding, soil working and watering 3.40 mandays for 50 pits and Providing fertilizer as per requirement 3.40 mandays for 50 pits	34.00	17019.04	45.00	17064.04	51.00	25528.56	67.50	25596.06	
2	Watch and wait 12 months-1 watcher per 2 km	182.50	91352.20	0.00	91352.20	273.75	137028.30	0.00	137028.30	
3	Watering of seedling (Per Seedling 20 liters water) in the month April, May, Oct, Nov, Dec, Jan, Feb, Mar.)	30.80	38714.37	0.00	38714.37	46.20	58071.55	0.00	58071.55	
	<b>Total</b>	<b>247.30</b>	<b>147085.61</b>	<b>45.00</b>	<b>147130.61</b>	<b>370.95</b>	<b>220628.41</b>	<b>67.50</b>	<b>220695.91</b>	
	Labour Welfare 2.70 %	0	0.00	3972.53	3972.53	0	0.00	5938.79	5938.79	
	Contingency 2%	0	0.00	2942.61	2942.61	0	0.00	4413.92	4413.92	
	<b>Grand Total</b>	<b>0</b>	<b>0.00</b>	<b>6960.14</b>	<b>154045.75</b>	<b>370.95</b>	<b>230628.41</b>	<b>10440.21</b>	<b>231068.62</b>	
	Say as Total	<b>247.30</b>	<b>116137</b>	<b>5505</b>	<b>121643</b>	<b>370.95</b>	<b>220628</b>	<b>10440</b>	<b>231068</b>	

  
**(Mr. U. Patil)**  
 वन परिक्षेत्र अधिकारी  
 सामाजिक वनीकरण  
 पनवेल

**Rangsi Forest Office Social Forestry Parvat  
Road/Canal/Railway Side Plantation**

Model Estimate for - USARLI TO BARVAHI, BHOKARPADA RAILWAY LEFT SIDE PLANTATION.

No. of Seedling / Row per Km 250 (at spacing of 4m)

No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings

Work Name- USARLI TO BARVAHI, BHOKARPADA RAILWAY LEFT SIDE PLANTATION.

Total Dist. 3 KM

No. of planks- 750

Daily Wages Rate :- 350.61

**TYO Works**

Sr. No.	Particulars	1 Per K.M.				1.50 K.M.				Remarks
		Min days	Wages	Material Supply	Total (Rs./Ha.)	Min days	Wages	Material Supply	Total (Rs.)	
1	2 Weeding, soil working and watering 3.40 man/days for 50 pits and Providing fertilizer as per requirement 3.60 man/days for 50 pits	3	4	5	6	7	8	9	10	11
2	Wash and sand 12 man/days-1 watcher per 2 km	182.50	100406.33	0.00	100406.33	273.75	150728.49	0.00	150728.49	
3	Watering of seedling (Per Seedling 20 liters water) in the month April, May, Oct, Nov, Dec, Jan, Feb, Mar.)	12.30	16076.22	0.00	16076.22	18.45	24114.33	0.00	24114.33	
	<b>Total</b>	<b>228.80</b>	<b>135283.29</b>	<b>45.00</b>	<b>135328.29</b>	<b>343.20</b>	<b>202924.93</b>	<b>67.50</b>	<b>202992.43</b>	
	Labour Welfare 2.70 %	0	0.00	3653.86	3653.86	0	0.00	5480.80	5480.80	
	Contingency 2%	0	0.00	2706.57	2706.57	0	0.00	4059.85	4059.85	
	<b>Grand Total</b>	<b>0</b>	<b>0.00</b>	<b>6405.43</b>	<b>141688.71</b>	<b>0</b>	<b>202924.93</b>	<b>9608.14</b>	<b>212533.07</b>	
	<b>Say as Total</b>	<b>228.80</b>	<b>112821</b>	<b>5350</b>	<b>118171</b>	<b>343.20</b>	<b>202925</b>	<b>9608</b>	<b>212533</b>	

  
**(श्री. उ. पाटील)**  
 वन परिश्रेत्र अधिकारी  
 सामाजिक वनीकरण  
 पन्वेल

**Range Forest Office Social Forestry Karjat  
Road/Canal/Railway Side Plantation**

Model Estimate for - Mumbai-Vadodara Phase II SPUR Roadside Plantation.  
 No. of Seedling / Row per Km 250 (at spacing of 4m)  
 No. Of Row / Km in each side of the road = 2  
 No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings  
 Work Name - Karvali To Karjat Railway Side Plantation

**ABSTRACT**

Sr. No.	Particulars	Per K.M.				0.80 K.M.				Remarks
		Man days	Wages	Material Supply	Total (Rs./Ha.)	Man days	Wages	Material Supply	Total (Rs.)	
1	2	3	4	5	6	7	8	9	10	11
1	P.P.O	124	51318	2435	53753	99	41055	1948	43002	
2	First Year Works	399.7	200570.6	219078.1	419648.7	319.8	160456.4	175262.5	335718.0	
3	Second Year Works	247.30	147085.61	6960.14	154045.75	197.84	117688.49	5568.11	123236.00	
4	Third Year Works	228.80	135283.29	6405.43	141688.72	183.04	108226.63	5124	113351	
	<b>Total</b>	<b>1000</b>	<b>534258</b>	<b>234879</b>	<b>769136</b>	<b>800</b>	<b>427406</b>	<b>187903</b>	<b>615307</b>	



Range Forest Officer  
Social Forestry Karjat

**Range Forest Office Social Forestry Karjat  
Road/Canal/Railway Side Plantation**

Model Estimate for - Mumbai-Vadodara Phase II SPUR Roadside Plantation.

No. of Seedling / Row per Km 250 (at spacing of 4m)

No. Of Row / Km in each side of the road = 2.

No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings

Work Name - Kirvali To Karjat. Railway Side Plantation

400 Plants Daily Wages Rate :- 413.69

**PPO Works**

Sr. No.	Particulars	Per K.M.				0.80 K.M.				Remarks
		Man days	Wages	Material Supply	Total (Rs./Ha.)	Man days	Wages	Material Supply	Total (Rs.)	
1	2	3	4	5	6	7	8	9	10	11
1	Survey & Demarcation (0.03 mandays for 50 pits)	0.30	124.11	0.00	124.11	0.24	99.29	0.00	99.29	
2	Clearing of bushes and preparation of site (As per requirement) 2000 square meter 0.0228 mandays per	45.65	18884.95	0.00	18884.95	36.52	15107.96	0.00	15107.96	
3	Marking of pits (0.13 mandays for 50 pits and Material supply 2.24 for 50 pits)	1.30	537.80	22.00	559.80	1.04	430.24	17.60	447.84	
4	Digging of Pits Size 60X60X60 Cm. (7.68 mandays for 50 pits)	76.80	31771.39	0.00	31771.39	61.44	25417.11	0.00	25417.11	
	<b>Total</b>	<b>124.05</b>	<b>51318.24</b>	<b>22.00</b>	<b>51340.24</b>	<b>99.24</b>	<b>41054.60</b>	<b>17.60</b>	<b>41072.20</b>	
	<b>Labour Welfare 2.70 %</b>	0	0.00	1386.19	1386.19	0	0.00	1108.95	1108.95	
	<b>Contingency 2%</b>	0	0.00	1026.80	1026.80	0	0.00	821.44	821.44	
	<b>Grand Total</b>	0	0.00	2434.99	53753.24	0	0.00	1947.99	43002.59	
	<b>Say as Total</b>	<b>124.05</b>	<b>51318</b>	<b>2435</b>	<b>53753</b>	<b>99.24</b>	<b>41055</b>	<b>1948</b>	<b>43002.0</b>	

  
**Range Forest Office**  
**Social Forestry Karjat**

Range Forest Office Social Forestry Karjat  
Road/Canal/Railway Side Plantation

Model Estimate for - Mumbai-Vadodra Phase II SPUR Roadside Plantation.  
No. of Seedling / Row per Km 250 (at spacing of 4m)  
No. Of Row / Km in each side of the road = 2  
No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings  
Work Name - Karjat To Karjat Railway Side Plantation

400 Plants Daily Wages Rate :- 455.06

FYO Works

Sr. No.	Particulars	For 1 K.M.				0.80 K.M.				Remarks	
		Man days	Wages	Material Supply	Total (Rs./Ha.)	Man days	Wages	Material Supply	Total (Rs.)		
		3	4	5	6	7	8	9	10		
1	2										
1	Filling planting pits. (50% alluvial soil + 25% Manure + 25% Local soil) (2.5 mandays for 50 pits)	25.00	11376.50	1000.00	12376.50	20.00	9101.20	800.00	9901.20		
2	Seedling Purchase 550 plants (Height of the sapling at the time of planting 8 feet) (BMC 2015-16, USB Item no 5-A-nestum (B) Per Seedling 350 Rs.)	0.00	0.00	192500.00	192500.00	0.00	0.00	154000.00	154000.00		
3	Transportation of 550 seedlings from nursery to planting site including loading & unloading. (0.9090 mandays for 50	10.00	4550.60	3000.00	7550.60	8.00	3640.48	2400.00	6040.48		
4	Planting Seedlings (2.01 mandays for 50 Seedlings)	20.10	9146.71	0.00	9146.71	16.08	7317.36	0.00	7317.36		
5	Cowdung replacement 10% seedlings (50 Seedlings) (2.01 mandays for 50 Seedlings)	2.00	910.12	0.00	910.12	1.60	728.10	0.00	728.10		
6	Fencing by sturdy brackets around the seedlings and repairing as required (3.39 mandays for 50 Seedlings)	133.90	60932.53	3515.00	64447.53	107.12	48746.03	2812.00	51558.03		
7	Weeding, soil working and watering 3.40 mandays for 50 pits and Providing fertilizer as per requirement 3.40 mandays for 50 pits	34.00	15472.04	225.00	15697.04	27.20	12377.63	180.00	12557.63		
8	Watch and ward 10 months-1 watcher per 2 km.	130.00	68259.00	0.00	68259.00	120.00	54667.20	0.00	54667.20		
10	Watering 300 plants as per requirement (20 Liter/plant X 4 times) Rs.1211.46/Man day's including all material as per (Government Resolution Dated 01/04/2017) For October, January, Feb, March.	24.70	29923.06	0.00	29923.06	19.76	23938.45	0.00	23938.45		
	<b>Total</b>	399.70	200570.56	200240.00	400810.56	319.76	160456.45	160192.00	320648.45		
	Labour Welfare 2.70 %	0	0.00	10821.89	10821.89	0	0.00	8657.51	8657.51		
	Contingency 2%	0	0.00	8016.21	8016.21	0	0.00	6412.97	6412.97		
	<b>Grand Total</b>	0	0.00	219078.10	419648.66	0	0.00	175262.48	335718.93		
	<b>Sav as Total</b>	399.70	200571	219078	419649	319.76	160456	175262	335718.00		

*Signature*  
Social Forestry Karjat

**Range Forest Office Social Forestry Karjat  
Road/Canal/Railway Side Plantation**

Model Estimate for - Mumbai-Vadodra Phase II SPUR Roadside Plantation.  
No. of Seedling / Row per Km 250 (at spacing of 4m)  
No. Of Row / Km in each side of the road = 2.  
No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings  
Work Name - Karjat - Railway Side Plantation

400 Plants      Daily Wages Rate - 500.56

**SYO Works**

Sr. No.	Particulars	Per K.M.				0.80 K.M.				Remarks
		Man days	Wages	Material Supply	Total (Rs./Ha.)	Man days	Wages	Material Supply	Total (Rs.)	
1	2	3	4	5	6	7	8	9	10	11
1	Weeding, soil working and watering 3.40 mandays for 50 pits and Providing fertilizer as per requirement 3.40 mandays for 50 pits	34.00	17019.04	45.00	17064.04	27.20	13615.23	36.00	13651.23	
2	Wash and ward 12 months-1 watcher per 2 km	182.50	91352.20	0.00	91352.20	146.00	73081.76	0.00	73081.76	
3	Watering 500 plant's as per requirement (20 Lines/plans X 4 lines) Rs.1256.96/Man day's including all material as per	30.80	38714.37	0.00	38714.37	24.64	30971.49	0.00	30971.49	
	<b>Total</b>	<b>247.30</b>	<b>147085.61</b>	<b>45.00</b>	<b>147130.61</b>	<b>197.84</b>	<b>117668.49</b>	<b>36.00</b>	<b>117704.49</b>	
	Labour Welfare 2.70 %	0	0.00	3972.53	3972.53	0	0.00	3178.02	3178.02	
	Contingency 2%	0	0.00	2942.61	2942.61	0	0.00	2354.09	2354.09	
	<b>Grand Total</b>	<b>0</b>	<b>0.00</b>	<b>6960.14</b>	<b>154045.75</b>	<b>0</b>	<b>0.00</b>	<b>5568.11</b>	<b>123236.60</b>	
	Say as Total	<b>247.30</b>	<b>147086</b>	<b>6960</b>	<b>154046</b>	<b>197.84</b>	<b>117668</b>	<b>5568</b>	<b>123236.0</b>	

  
**Range Forest Officer**  
**Social Forestry Karjat**

**Range Forest Office Social Forestry Karjat  
Road/Canal/Railway Side Plantation**

Model Estimate for - Mumbai-Vadodra Phase II SFUR Roadside Plantation.  
 No. of Seedling / Row per Km 250 (at spacing of 4m)  
 No. of Row / Km in each side of the road = 2  
 No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings  
 Work Name - Karjat To Karjin Railway Side Plantation

400 Plants      Daily Wages Rate :- 550.61

**TYO Works**

Sr. No.	Particulars	1 Per K.M.			0.80 K.M.			Remarks		
		Man days	Wages	Material Supply	Man days	Wages	Material Supply			
1	2	3	4	5	6	7	8	9	10	11
1	Weeding, soil weeding and watering 3.40 mandays for 50 pits and Providing fertilizer as per requirement 3.40 mandays for 50 pits	34.00	18730.74	45.00	18765.74	27.20	14976.59	36.00	15012.59	
2	Watch and ward 12 manhr- 1 watcher per 2 km	182.50	100496.33	0.00	100496.33	146.00	80399.06	0.00	80399.06	
3	Watering 500 plants as per requirement (20 Liter/plum X 4 times) Rs.1307.01/Mon. day's including all material as per	12.50	16076.22	0.00	16076.22	9.84	12860.98	0.00	12860.98	
	<b>Total</b>	<b>228.80</b>	<b>135283.29</b>	<b>45.00</b>	<b>135328.29</b>	<b>183.04</b>	<b>108226.63</b>	<b>36.00</b>	<b>108262.63</b>	
	<b>Labour Welfare 2.70 %</b>	0	0.00	3653.86	3653.86	0	0.00	2923.09	2923.09	
	<b>Contingency 2%</b>	0	0.00	2706.57	2706.57	0	0.00	2165.25	2165.25	
	<b>Grand Total</b>	0	0.00	6405.43	141688.72	0	0.00	5128.34	113350.97	
	<b>Say as Total</b>	<b>228.80</b>	<b>135283</b>	<b>6405</b>	<b>141689</b>	<b>183.04</b>	<b>108227</b>	<b>5124</b>	<b>113350.97</b>	

  
**(ASHISH THAKARE IFS)**  
 Deputy Conservator of Forests  
 Alibag

  
 Range Forest Officer  
 Social Forestry Karjat

**Range Forest Office Social Forestry Sudhagad  
Road/Canal/Railway Side Plantation**

Model Estimate for - Mumbai-Vadodara Phase II SPUR Roadside Plantation.

No. of Seedling / Row per Km 250 (at spacing of 4m)

No. Of Row / Km in each side of the road = 2

No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings

Work Name - Nadal To Morbe Railway Side Plantation

**ABSTRACT**

Sr. No.	Particulars	Per K.M.				2.00 K.M.				Remarks
		Man days	Wages	Material Supply	Total (Rs./Ha.)	Men days	Wages	Material Supply	Total (Rs.)	
1	2	3	4	5	6	7	8	9	10	11
1	P.P.O	124	51318	2435	53753	248	102636	4870	107506	
2	First Year Works	399.7	200570.5	219078.1	419648.7	799.4	401141.1	438156.2	839297.3	
3	Second Year Works	247.30	147085.00	6960.14	154045.00	494.60	294171.22	13920.28	308091.49	
4	Third Year Works	228.80	112821.00	5350.00	118171.00	457.60	270566.00	12810	283377	
	<b>Total</b>	<b>1000</b>	<b>511795</b>	<b>233823</b>	<b>745618</b>	<b>2000</b>	<b>1068515</b>	<b>469756</b>	<b>1538272</b>	

  
**(ASHISH THAKARE IFS)**  
 Deputy Conservator of Forests  
 Alibag

  
 Range Forest Officer  
 Social Forestry Sudhagad.

**Range Forest Office Social Forestry Sudhagad  
Road/Canal/Railway Side Plantation**

Model Estimate for - Mumbai-Vadodara Phase II SPUR Roadside Plantation.

No. of Seedling / Row per Km 250 (at spacing of 4m)

No. Of Row / Km in each side of the road = 2

No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings

Work Name - Nadal To Morbe Railway Side Plantation

1000 Plant/Daily Wages Rate :- 413.69

**PPO Works**

Sr. No.	Particulars	Per K.M.				2.00 K.M.				Remarks
		Man days	Wages	Material Supply	Total (Rs./Ha.)	Man days	Wages	Material Supply	Total (Rs.)	
1	2	3	4	5	6	7	8	9	10	11
1	Survey & Demarcation (0.03 mandays for 50 pits)	0.30	124.11	0.00	124.11	0.60	248.21	0.00	248.21	
2	Clearing of bushes and preparation of site (As per requirement) 2000 square meter 0.0228 mandays per	45.65	18884.95	0.00	18884.95	91.30	37769.90	0.00	37769.90	
3	Marking of pits (0.13 mandays for 50 pits and Material supply 2.24 for 50 pits)	1.30	537.80	22.00	559.80	2.60	1075.59	44.00	1119.59	
4	Digging of Pits Size 60X60X60 Cm. (7.68 mandays for 50 pits)	76.80	31771.39	0.00	31771.39	153.60	63542.78	0.00	63542.78	
	<b>Total</b>	<b>124.05</b>	<b>51318.24</b>	<b>22.00</b>	<b>51340.24</b>	<b>248.10</b>	<b>102636.49</b>	<b>44.00</b>	<b>102680.49</b>	
	<b>Labour Welfare 2.70 %</b>	0	0.00	1386.19	1386.19	0	0.00	2772.37	2772.37	
	<b>Contingency 2%</b>	0	0.00	1026.80	1026.80	0	0.00	2053.61	2053.61	
	<b>Grand Total</b>	0	0.00	2434.99	53753.24	0	0.00	4869.98	107506.47	
	<b>Say as Total</b>	<b>124.05</b>	<b>51318</b>	<b>2435</b>	<b>53753</b>	<b>248.10</b>	<b>102636</b>	<b>4870</b>	<b>107506</b>	

  
**Range Forest Officer**  
**Social Forestry Sudhagad.**

**Range Forest Office Social Forestry Sindhgadh  
Road/Canal/Railway Side Plantation**

Model Estimate for - Mirabai-Vadodra Phase II SPUR Roadside Plantation.  
 No. of Seedling / Row per Km 250 (at spacing of 4m)  
 No. Of Row / Km in each side of the road = 2  
 No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings  
 Work Name - Nalaj To Marbe-Railway Side Plantation

1000 Plants      Daily Wages Rate :-      455.06

**FYO Works**

Sr. No.	Particulars	for 1 K.M.				2.00 K.M.				Remarks
		Man days	Wages	Material Supply	Total (Rs./Ha.)	Man days	Wages	Material Supply	Total (Rs.)	
1	2	3	4	5	6	7	8	9	10	11
1	Filling planting pits. (50% alluvial soil + 25% Minum + 25% Local soil) (2.5 man/days for 50 pits)	25.00	11376.50	1000.00	12376.50	50.00	22753.00	2000.00	24753.00	
2	Seedling Purchase 550 plants (Height of the sapling at the time of planting 8 feet) (BMC 2015-16) LSR item no 5. Aesture (B)/Per Seedling 350 Rs)	0.00	0.00	192500.00	192500.00	0.00	0.00	385000.00	385000.00	
3	Transportation of 550 seedlings from nursery to planting site including loading & unloading - (0.9090 man/days for 50	10.00	4550.60	3000.00	7550.60	20.00	9101.20	6000.00	15101.20	
4	Planting Seedlings (2.01 man/days for 50 Seedlings)	20.10	9146.71	0.00	9146.71	40.20	18293.41	0.00	18293.41	
5	Causeway replacement (0% seedlings (50 Seedlings) (2.01 man/days for 50 Seedlings)	2.00	910.12	0.00	910.12	4.00	1820.24	0.00	1820.24	
6	Forcing by thorny branches around the seedlings and repairing as required (13.39 man/days for 50 Seedlings)	13.90	60932.53	3515.00	64447.53	267.80	121865.07	7030.00	128895.07	
7	Weeding, soil working and watering 3-40 man/days for 50 pits and Providing fertilizer as per requirements 3-40 man/days for 50 pits	34.00	15472.04	225.00	15697.04	68.00	30944.08	430.00	31394.08	
8	Watch and ward 10 months-1 watch per 2 km	150.00	68259.00	0.00	68259.00	300.00	136518.00	0.00	136518.00	
10	Watering 500 plant's as per requirement (20 Liter/plant X 4 times) Rs.1211.46/Man day's including all material as per (Government Resolution Dated 01/04/2017) For October, January, Feb, March.	24.70	29923.06	0.00	29923.06	49.40	59846.12	0.00	59846.12	
	<b>Total</b>	399.70	200570.56	200240.00	400810.56	799.40	401141.12	400480.00	801621.12	
	Labour Welfare 2.70 %	0	0.00	10823.89	10823.89	0	0.00	21643.77	21643.77	
	Contingency 2%	0	0.00	8016.21	8016.21	0	0.00	16032.42	16032.42	
	<b>Grand Total</b>	0	0.00	219078.10	419648.66	0	0.00	438156.19	839297.32	
	<b>Qty as Total</b>	399.70	200571	219078	419649	799.40	401141	438156	839297	

  
**Range Forest Officer**  
**Social Forestry Sindhgadh.**

**Range Forest Office Social Forestry Sindhagad  
Road/Canal/Railway Side Plantation**

Model Estimate for - Mambali-Vaidolara Phase II SPU/R: Roadside Plantations.  
 No. of Seedling / Row per Km 250 (at spacing of 4m)  
 No. Of Row / Km in each side of the road = 2  
 No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings  
 Work Name - Naddal To Murke Railway Side Plantation

1000 Plants      Daily Wages Rate :- 500.56

**SYO Works**

Sr. No.	Particulars	Per K.M.						2.00 K.M.			Remarks
		Man days	Wages	Material Supply	Total (Rs./Kil.)	Main days	Wages	Material Supply	Total (Rs.)		
1	2 Weeding, soil working and watering 3.40 mandays for 50 pits and Providing fertilizer as per requirement 3.40 mandays for 50 pits	34.00	17019.04	45.00	17064.04	68.00	34038.08	90.00	34128.08		
2	Watch and ward 12 months-1 watchman per 2 km	182.50	91352.26	0.00	91352.26	365.00	182704.40	0.00	182704.40		
3	Watering 500 plants as per requirement (20 Liter/plant X 4 lines) Rs.1255.96/Man day's including all material as per (Government Resolution Dated 01/04/2017) For October, January, Feb, March.	30.80	38714.37	0.00	38714.37	61.60	77428.74	0.00	77428.74		
	<b>Total</b>	<b>247.30</b>	<b>147085.61</b>	<b>45.00</b>	<b>147130.61</b>	<b>494.60</b>	<b>294171.22</b>	<b>90.00</b>	<b>294261.22</b>		
	Labour Welfare 2.70 %	0	0.00	3972.53	2972.53	0	0.00	7945.05	7945.05		
	Contingency 2%	0	0.00	2942.61	2942.61	0	0.00	5885.22	5885.22		
	<b>Grand Total</b>	<b>0</b>	<b>0.00</b>	<b>6900.14</b>	<b>154045.75</b>	<b>0</b>	<b>0.00</b>	<b>13920.28</b>	<b>308091.49</b>		
	<b>Say as Total</b>	<b>247.30</b>	<b>147085</b>	<b>6960</b>	<b>154045</b>	<b>494.60</b>	<b>294171</b>	<b>13920</b>	<b>308091</b>		

  
**Range Forest Officer**  
**Social Forestry Sindhagad.**

**Range Forest Office Social Forestry Sudhagad  
Road/Canal/Railway Side Plantation**

Model Estimate for - Mumbai-Vadodra Phase II PCR Roadside Plantation.  
 No. of seedling / Row per Km 250 (at spacing of 4m)  
 No. Of Row / Km in each side of the road = 2  
 No. of Seedling required for 2 rows = 250 seedlings X 2 rows = 500 Seedlings  
 Work Name - Noida To Morbe Railway Side Plantation

1000 Plants      Daily Wages Rate -> 550.61

**TYO Works**

Sl. No.	Particulars	1 Per K.M.			2.00 K.M.			Remarks		
		Man. days	Wages	Material Supply	Total (Rs./Ha.)	Man. days	Wages		Material Supply	
1	2	3	4	5	6	7	8	9	10	11
1	Weeding, soil working and weeding 3.40 man-days for 50 pits used Providing fertilizer as per requirement 3.40 man-days for 50 pits	34.00	18720.74	65.00	18765.74	68.00	37441.48	90.00	37531.48	
2	Watch and ward 12 months-1 wipchar per 2 km	182.50	100450.33	0.00	100450.33	365.00	200972.65	0.00	200972.65	
3	Weeding 500 plants as per requirements (20 Liter/plant X 4 liter) Rs.1307.01/man day's including all material as per	12.30	16076.22	0.00	16076.22	24.60	32152.45	0.00	32152.45	
	<b>Total</b>	<b>228.80</b>	<b>135283.29</b>	<b>65.00</b>	<b>135328.29</b>	<b>457.60</b>	<b>270566.58</b>	<b>90.00</b>	<b>270656.58</b>	
	Labour Welfare 2.70 %	0	0.00	3653.86	3653.86	0	0.00	7307.73	7307.73	
	Contingency 2%	0	0.00	2706.57	2706.57	0	0.00	5413.13	5413.13	
	<b>Grand Total</b>	<b>0</b>	<b>0.00</b>	<b>6405.43</b>	<b>141688.72</b>	<b>0</b>	<b>0.00</b>	<b>12810.86</b>	<b>283377.44</b>	
	<b>Say as Total</b>	<b>228.80</b>	<b>112821</b>	<b>5350</b>	<b>118171</b>	<b>457.60</b>	<b>270566</b>	<b>12810</b>	<b>283377</b>	

*A. Kulkarni*  
**Range Forest Officer  
 Social Forestry Sudhagad.**

**ALIBAG FOREST DIVISION**

Name of Proposal :- Diversion of 9.1321 ha. Of forest land in favour of Mumbai Railway Vikas Corporation Limited for construction of Panvel-Karjat suburban corridor project (Double Railway Line) in Raigad district in State of Maharashtra -reg.

वनक्षेत्र - कर्जत परिचय

परिमंडळ - कर्जत

नियतक्षेत्र - कर्जत

गाव - माळवाडी मा.स.नं.55/6/2

रोपवाडीका दरपत्रक  
गोषवारा

(अंशुभा वलभकृष्णभाऊ) ममती किचलानी

अ.क्र.	रोपवाडीका घेण्यात येणारे वर्ष	दैनंदिन मनुरी दर	पॉलीथीन पिचवीतील (12.50 x 25 सॅ.मी. आकाराचे) रोप तयार करणे	दैनंदिन मनुरी दर	पॉलीथीन पिचवीतील (20 x 30 सॅ.मी. आकाराचे) रोप तयार करणे	शेरा
1	2022-23	425.96	156259			
2	2023-24	488.56	170994	425.96	281314	
3	2024-25	515.41	187198	468.56	306928	
4	2025-26	586.95	208024	515.41	335098	
5	2026-27	623.65	216609	566.95	366087	
6	2027-28	686.01	216754	623.65	400180	
7	2028-29	754.61	223514	686.01	437675	
8	2029-30	830.08	296035	754.61	478923	
9	2030-31	913.08	324743	830.08	524301	
10	2031-32	1074.39	346516	913.08	574207	
11	2032-33			1004.39	629109	
			एकूण		4333820.23	

S.S. I. v. d. d.

परिक्षेत्र वन अधिकारी  
कर्जत परिचय

2

(Rahul Patil, IFS)  
Deputy Conservator of Forests  
Alibag Forest Division, Alibag













Name of Proposal :- Diversion of 9,132.1 ha. Of forest land in favour of Mumbai Railway Vikas Corporation Limited for construction of Panvel-Karjat suburban corridor project (Double Railway Line) in Raigad district in the State of Maharashtra -reg-

परिशिष्ट - अ

रोपवाटीचा दरपत्रक: भाग - 1

पॉलिमीन विरासतीचा (12.50 x 25 सी.मी. आकाराचा) रोप तयार करणे (मालवकी 9 मंदिने)

सन - 2028-29

सर्वीचे विवरण: मालवकी भा.म.स.नं.56/6/2 ता. कर्जत जि. रावणगड

पंचायती नाव - पंचविकास अभिवाण - कर्जत पंचायत

दैनंदिन मजुरीचा दर रु. 754.61

क्र.सं.	कारणाचा तपसिस	1000 रोपवाटींचा दर (रु.)																			
		मनुष्य दिवस (मजुरी)	साहित्य पुरवठा	एकूण खर्च	समुच्च दिवस	2.75	मजुरी	साहित्य पुरवठा	एकूण खर्च	समुच्च दिवस	2.75										
1		0.00	0.00	463.00	0.00	0.00	0.00	463.00	0.00	0.00	0.00	463.00	0.00	0.00	463.00	0.00	0.00	463.00	0.00	0.00	463.00
2	पॉलिमीन विरासती भिन्न 12.50 x 25 सी.मी. 200 रोप (रोपवाटी) पॉलिमीन विरासती दर रुपये 131 प्रतिक्वितरी दरम्यान (1.31 क्व.मी) रोपवाटीकंपर्तून एकूण 3000 रोपवाटी	3.00	2716.60	183.00	2896.60	0.00	0.00	2896.60	0.00	0.00	0.00	2896.60	0.00	0.00	2896.60	0.00	0.00	2896.60	0.00	0.00	2896.60
3	रोपवाटीकंपर्तून जावईचे सगळे कच्चे जावईचे मालवकी करणे, निरीक्षण, पथ व अंतिम राखण करणे (12.50 x 25 x 1.31) व कारीरी मजुरी देणे	2.00	1509.22	81.00	1600.22	0.00	0.00	1600.22	0.00	0.00	0.00	1600.22	0.00	0.00	1600.22	0.00	0.00	1600.22	0.00	0.00	1600.22
4	जावईचे मालवकी, रोपवाटीकंपर्तून (21:1) पुरवठा व रोपवाटीकंपर्तून जावईचे मालवकी करणे, मालवकी 0.67, रोपवाटी 0.34, एकूण 0.34 च.मी. मिळून 1.35 च.मी. प्रति 1000 विरासती, मालवकी रु. 5487 प्रति च.मी., रोपवाटी रु. 12807 प्रति च.मी. व रोपवाटी रु. 12807 प्रति च.मी. पुरवठा	0.50	377.31	0.00	377.31	0.00	0.00	377.31	0.00	0.00	0.00	377.31	0.00	0.00	377.31	0.00	0.00	377.31	0.00	0.00	377.31
5	जावईचे मालवकी, रोपवाटी, सगळे कच्चे जावईचे मालवकी करणे 21:1 घनमात्राने निष्काशन करणे, पॉलिमीन विरासतीकंपर्तून जावईचे मालवकी देणे	15.00	11922.84	771.00	12693.84	0.00	0.00	12693.84	0.00	0.00	0.00	12693.84	0.00	0.00	12693.84	0.00	0.00	12693.84	0.00	0.00	12693.84
6	विवाही पुरवठा (मालवकी करणे साठवणूक करणे 2. क्व.मी.कंपर्तून)	2.00	1509.22	81.00	1600.22	0.00	0.00	1600.22	0.00	0.00	0.00	1600.22	0.00	0.00	1600.22	0.00	0.00	1600.22	0.00	0.00	1600.22
7	पॉलिमीन विरासती वी देणे	0.50	377.31	0.00	377.31	0.00	0.00	377.31	0.00	0.00	0.00	377.31	0.00	0.00	377.31	0.00	0.00	377.31	0.00	0.00	377.31
8	पॉलिमीन विरासती देणे व मालवकी देणे (पॉलिमीन विरासतीकंपर्तून जावईचे मालवकी देणे)	1.00	754.61	0.00	754.61	0.00	0.00	754.61	0.00	0.00	0.00	754.61	0.00	0.00	754.61	0.00	0.00	754.61	0.00	0.00	754.61
9	रोपवाटीकंपर्तून जावईचे मालवकी देणे व मालवकी देणे (पॉलिमीन विरासतीकंपर्तून जावईचे मालवकी देणे)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	पॉलिमीन विरासती (मालवकी देणे)	6.00	4527.66	0.00	4527.66	0.00	0.00	4527.66	0.00	0.00	0.00	4527.66	0.00	0.00	4527.66	0.00	0.00	4527.66	0.00	0.00	4527.66
11	पॉलिमीन विरासती देणेची 10 टक्के निवृत्ती करणे	1.00	754.61	0.00	754.61	0.00	0.00	754.61	0.00	0.00	0.00	754.61	0.00	0.00	754.61	0.00	0.00	754.61	0.00	0.00	754.61
12	पॉलिमीन विरासती देणेची 10 टक्के निवृत्ती करणे व मालवकी देणेची 10 टक्के निवृत्ती करणे	2.00	1509.22	163.00	1672.22	0.00	0.00	1672.22	0.00	0.00	0.00	1672.22	0.00	0.00	1672.22	0.00	0.00	1672.22	0.00	0.00	1672.22
13	रोपवाटीकंपर्तून जावईचे मालवकी देणे व मालवकी देणे (पॉलिमीन विरासतीकंपर्तून जावईचे मालवकी देणे)	26.00	16740.44	0.00	16740.44	0.00	0.00	16740.44	0.00	0.00	0.00	16740.44	0.00	0.00	16740.44	0.00	0.00	16740.44	0.00	0.00	16740.44
	एकूण	59.00	40321.72	3072.00	43393.72	0.00	0.00	43393.72	0.00	0.00	0.00	43393.72	0.00	0.00	43393.72	0.00	0.00	43393.72	0.00	0.00	43393.72
	मजुरी मजुरी रु. 754.61 प्रति च.मी. देणे																				
	जावईचे मालवकी देणेची 10 टक्के निवृत्ती करणे																				
	एकूण एकूण	59.00	40321.72	4538.36	44860.08	0.00	0.00	44860.08	0.00	0.00	0.00	44860.08	0.00	0.00	44860.08	0.00	0.00	44860.08	0.00	0.00	44860.08

सदरचे अंदाजपत्रक एकूण रु. 22,35,144/- (अक्षरी रु. दोन लाख दोन हजार पंधराशे चौदा सव्हाय) एवढी राशी मालवकी देणेची देणेची आहे.

दिनांक - 9/8/2023

S.S. Kulkarni  
पंचायत वन अधिकारी,  
कर्जत पंचायत











महाराष्ट्र शासन



## उप वनसंरक्षक, अलिबाग यांचे कार्यालय

सुधषष्ठी आगळी सावरे वनचर

पत्ता-हिराकोट चलापजण्ड, अलिबागता. अलिबाग जि. रायगड ४०२ २०१

दुरध्मनोळ. ०२१४१-२२२०१६/२२२२१६ ईमेल- dyc/alibag@mahaforest.gov.in

जावक क्रमांक ब/संकिण/३५१९/२०२४-२५

दिनांक ११/१०/२०२४

विषय-अलिबाग वन विभागाअंतर्गत वन विभागातील फ्रंट लाईन फिल्डस्टाफ यांच्याकरीता साहित्य खरेदीचे दरपत्रक मंजूर करणेबाबत.

संदर्भ-वनपरीक्षेत्र अधिकारी अलिबाग यांचेकडील जा.क्र अ/३०/योजना/५५१/२०२४-२५  
दिनांक.०८.१०.२०२४

अलिबाग वन विभागाअंतर्गत वन विभागातील फ्रंट लाईन फिल्डस्टाफ यांच्याकरीता साहित्य खरेदीचे मंजुरी मिळणेबाबत स्थानिक पुरवठादाराकडून खालीलप्रमाणे दरपत्रके प्राप्त करून घेतली आहेत.

### दुलनात्मक दरपत्रक तक्ता

अ. क्र.	तपशिल	परिमाण	दुकानाचे नांव व रक्कम रु.		
			राजनांदी	वर्शा	मोरया एन्टरप्रायजेस,
			RAJNANDINI ENTERPRISES B- २०५, Chitamani Plaza Opp. Akashwani, Hadapsar, Pune- ४११०२८	VARSHA ENTERPRISES Rajeshwari Enclave, Flat no.५०७, Phursungi, Hadapsar, Pune-४१२३०८	मु.पो. भरणेवाडी (अंयुणे), ता. इंदापूर, जि.पुणे पिन-४१३ ११४
१	Protection Helmet	१	१८००	१८६०	१९७०
२	Fiber Stick	१	१०००	११३०	१२५०
३	First aid kit	१	५९५०	६१२०	६३५०
४	Rechargeable Head Lamp	१	११७०	१२००	१३००

५	Pocket torch	१	११५०	१३६०	१४००
६	Trap Camera	१	४७०००	४७७००	४९२००
७	Shoes	१	२५५०	२७९०	२९२००
	Total Amount Including GST		६०,६२०/-	६२,१६०/-	६४,३९०/-

वरील नमुद दरपत्रकामध्ये RAJNANDINI ENTERPRISES B- २०५, Chitamani Plaza Opp. Akashwani, Hadapsar, Pune-४११०२८ यांचे दरपत्रक सर्वात कमी दराचे असल्याने त्यास मंजुरी मिळणेबाबत वनक्षेत्रपाल अलिबाग यांनी वरील संदर्भान्वये विनंती केली आहे.

तरी वनक्षेत्रपाल अलिबाग यांचे विनंती प्रमाणे RAJNANDINI ENTERPRISES B- २०५, Chitamani Plaza Opp. Akashwani, Hadapsar, Pune-४११०२८ यांचे दरपत्रक सर्वात कमी दराचे असल्यामुळे सदर दरपत्रकास मंजुरी देण्यात येत आहे.  
सहपत्रा मंजूर दरपत्रक

OIC  
Kramy  
Rishy  
2  
(राहुल पाटील, मा.व.से.)  
उप वनसंरक्षक,  
अलिबाग वनविभाग, अलिबाग

प्रति,  
वनक्षेत्रपाल अलिबाग,  
प्रतिलिपी - सहा. वनसंरक्षक, अलिबाग यांचेकडे माहिती व आवश्यक कार्यवाहीसाठी.  
प्रत - लेखापाल योजना कक्ष व लेखा कक्ष यांना माहिती व जरूर त्या कार्यवाहीस.

Estimate No:

2025-26  
ESTIMATE

Division : Alibaug Forest Division, Alibaug  
Sanctioned estimate No. :  
Fund Head :  
Major Head :  
Minor Head :  
Service Head :  
Departmental Head :

Estimate Framed in the office of the Dy. Conservator of Forest, Alibaug Forest Division, Alibaug for the probable expenses to be incurred in

**Providing and Erecting M.S.Watch Tower at Vil: Wanjle, Compartment No:170.  
Tal: Karjat Dist: Raigad.**

Total Cost Rs. : 932054

Adm. Approval by :  
Tech. Sanction by :  
Estimate prepared by : Range Forest Officer Karjat (west)  
Estimate checked by :  
Call or authority :

#### GENERAL DESCRIPTION

The plan and Detailed estimate for

**Providing and Erecting M.S.Watch Tower at Vil: Wanjle, Compartment No:170.  
Tal: Karjat Dist: Raigad.**

The plan and Detailed estimate for This work is proposed for protection of Forests from fire, grazing & illicit felling etc. This estimate mainly consists of clearing the site & making approach road, excavation for foundation for pit of size 0.75 x 0.75 x 1.75 m, P.C.C. 1:3:6 for foundation G.I. Pipe with M.S. bar railing, G.I. sheet roofing, wooden planks 25 mm thick for wooden flooring, oil painting both side to wooden planks, M.S. Ladder including painting as per drawing etc. provision for transportation & guy rope, etc. provision are made in the estimate.

**Specifications** The entire work shall be carried out as per respective std. specification given in P.W.D. red book.

- Certification :**
1. Rates adopted are as per S.S.R. of P.W.D. of Maharashtra State for the year 2022-23
  2. All calculations have been checked cent percent arithmetically.
  3. Additional 10% of rate is considered as the work is in Notified Hilly area.

franklin  
वरयुक्त कर्ता

Shrinani  
रक्षितक वन अभियंता  
करजत

Suresh Kulkarni  
Range Forest Officer  
Karjat (west)

Rahul Patil  
(Rahul Patil, IFS)  
Deputy Conservator of Forest,  
Alibaug Forest Division, Alibaug

Providing and Erecting M.S.Watch Tower at VII: Wanje, Compartment No:170.  
Tal: Karjat Dist: Raigad,

RECAPUTILATION SHEET

[A]	<u>Subestimate 1</u> Total Amount of work Portion	Rs.	733,075.72
[B]	Add 4% Contingencies on	Rs.	29,323.03
C)	Add 18% for GST		131,953.63
D)	Add 1% for Labour Insurance		7,330.76
E)	Royalty Charges		3,436.17
F)	Quality Control Charges		6,425.00
		Total Amount Rs.	Rs. 911,544.31
		ADD 2.25% for DTP / Technical Sanction Charges	20509.75
		Net Total	932,054.05
		Say. Rs.	932,054.05

mandir  
कारजात कारजात

Shrihan  
रिजिस्ट्रार वन अधिकारी  
कारजात

Somnath Kudal  
Range Forest Officer,  
Karjat (west)

**Providing and Erecting M.S.Watch Tower at Vil: Wanjle, Compartment  
No:170. Tal: Karjat Dist: Raigad.**

**ABSTRACT**

Quantity	Item	Item of work	Rate	Per	Amount
400.000	1	Labour charges for removing grass, thorny shrubs, Jungli shrub, Kubabul and alike grass along roadside making the ground clean by shovel and phavaras etc. complete. (21.33)	7.70		3080.00
48.851	2	Excavation for foundation in earth, soil of all types sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5 m.) By Manual Means. (21.01)	262.90	Cum	12842.90
20.381	3	Providing soling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand /grit, ramming, watering etc. complete (21.40)	2517.91	Cum	51318.41
10.459	4	Providing and laying Cast in situ /Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer /concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate. (Natural Sand / Crushed sand VSI Grade	8417.84	Cum	88040.13
2.913	5	Providing and laying Cast in situ /Ready Mix cement concrete M-25 of trap / granite /quartzite/ gneiss metal for R.C.C. columns as per detailed designs and drawings or as directed including steel centering formwork, cover blocks, laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete.(Excluding reinforcement and structural steel) with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant	18763.26	Cum	54650.33
1.512	6	Providing and laying Cast in situ /Ready Mix cement concrete in M-25 of trap/ granite/ quartzite/ gneiss metal for R.C.C. beams and lintels as per detailed designs and drawings or as directed including steel centering formwork, cover blocks, laying/pumping, compaction and roughening the surface if special finish is to be provided and curing etc. complete. (Excluding reinforcement and structural steel) with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc.)	16844.67	Cum	25489.14

180	13	Providing and fixing mild steel grill work for windows ventilators etc . 20 kg/sqm as per drawing including fixtures, necessary welding and painting with one coats of anticorrosive paint and two coats of oil painting complete. (40.01)	2666.19	Sqm	24475.56
0.130	14	Providing and fixing in position to the exact profile and prestressing the high tensile strands to specified ultimate strength , standard end anchorages , cable ducts, grouting ducts after prestressing and bearing	203610.00	Kg	26469.30
38.500	15	Providing and erecting chain link fencing 1.8 M. height with G.I chain link of size 50 x 50 mm, 8 gauge thick and fixed 75 mm above ground level on vertical M . S. Angles of 40 x 40 x 6 mm size , including excavating pits for foundation and embedded in C . C. block of 1:4:8 mix of size 450 x 450 x 670 mm. at 1.75 M. c/c with iron bar 15mm dia as hold fast including welding link with angle frame at 30 cm c /c with nuts and bolts and horizontal M . S. Angles at top and bottom of 25 x 25 x 5 mm size and vertical M . S. flat 35 x 5 mm and 25 x 5 mm horizontal including cross support of 40 x 40 x 6 mm angles both side at every corner or bend embedded in concrete blocks of 1:4:8 of size 450 x 450 x 670 mm including 3 coats of oil painting etc complete (46.39)	3228.16	Rmt	124284.05
2.100	16	Providing and fixing mild steel grill gate with angle iron frame 65mm x 65mm x 10mm with iron bars at 150mm C/C and diagonal flats as per the detailed drawing including hinges , pivot block locking arrangement welding riveting and oil painting of three coats of approved shade Weight of gate 35 Kg/Smt.(44.10)	4055.86	Sqm	8517.30
		<b>Total</b>			<b>733075.72</b>
14.476	17	Royalty Charges (Separate Statement attached)	237.37	Cum	3436.00
	18	Quality Control (Testing charges) (Separate Statement attached)			7805.00

*frandik*  
वरिष्ठ वन अधिकारी

*pharon*  
परिचालक वन अधिकारी  
करजत

*Suresh Kadekar*  
Range Forest Officer  
Karjat (west)

**MEASUREMENT & ABSTRACT**

No.			Nos	L	B	D/H	Qty.	Unit	Total
1	2	3	4	5	6	7	8	9	10

- 1 Labour charges for removing grass, thorny shrubs, Jungli shrub, Kubabul and alike grass along roadside making the ground clean by shovel and phavaras etc. complete. (21.33)

Platform	1	20.00	20.00	400.00
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- 2 Excavation for foundation in earth, soil of all types, sand, gravel and soft murum, including removing the excavated material up to a distance of 50 m. beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5 m) By Manual Means. (21.01)

Excavation for Pits	4	0.75	0.75	1.80	4.050	
For Pipe	1	0.30	0.30	1.05	0.095	
For ladder	1	1	0.75	0.45	1.05	0.354
				Total	4.499 (A) m <sup>3</sup>	
Area of Platform	1	10.00	10.00	100.000		
Deduct for pillars	-4	0.60	0.60	-1.440		
				98.560		
Depth of Excavtion				0.450		
Qty of excavation				44.35 (B) m <sup>3</sup>		
			Total A + B	48.851		

- 3 Providing soiling using 80 mm size trap metal in 15 cm. layer including filling voids with Crushed sand/grit, ramming, watering etc. complete (21.40)

	4	0.75	0.75	0.25	0.563
	1	0.30	0.30	0.25	0.023
	1	0.75	0.45	0.25	0.084
				Total	0.669 (A) m <sup>3</sup>
Area of Platform	1	10.00	10.00	100.000	
Deduct for pillars	-4	0.60	0.60	-1.440	
				98.560	
Depth of Excavtion				0.200	
Qty of excavation				19.71 (B) m <sup>3</sup>	
			Total A + B	20.381	

4. Providing and laying Cast in situ /Ready Mix cement concrete in M<sub>20</sub> of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, Steel centering, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer /concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand / Crushed sand VS: Grade finely washed etc) (24.01)

Pit For foundation	4	0.75	0.75	0.20	0.450
For ladder	1	1	0.75	0.45	0.068
For pipe	1	0.30	0.30	0.20	0.015
For ladder & Pipe Foundation	1	0.75	0.45	0.20	0.068
				Total	0.603 (A) m <sup>3</sup>
Area of Platform	1	10.00	10.00	100.000	
Deduct for pillars	-4	0.60	0.60	-1.440	
				98.560	
Depth of CC				0.100	
Qty of CC				9.86 (B) m <sup>3</sup>	
			Total A + B	10.459	

1	2	3	4	5	6	7	8	9	10
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- 5 Providing and laying Cast in situ Ready Mix cement concrete M -25 of trap / granite / quartzite/ gneiss metal for R .C.C. columns as per detailed designs and drawings or as directed including steel centering , formwork, cover blocks , laying/pumping, compaction finishing the formed surfaces with cement mortar 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc . complete (Excluding reinforcement and structural steel ).with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc) (25.33)

Pit for ladder	4	0.60	0.60	1.80	2.592
Ladder	1	0.75	0.45	0.75	0.253
For bottom of pipe	1	0.30	0.30	0.75	0.068
				Total	2.913 m <sup>3</sup>

- 6 Providing and laying Cast in situ Ready Mix cement concrete in M -25 of trap/ granite/ quartzite/ gneiss metal for R .C.C. beams and lintels as per detailed designs and drawings or as directed (including steel centering, formwork, cover blocks, laying/pumping, compaction and roughening the surface if special finish is to be provided and curing etc . complete. (Excluding reinforcement and structural steel). with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer / concrete Batch mix plant (Pan mixer) etc. complete. With fine aggregate (Natural Sand / Crushed sand VSI Grade finely washed etc) (25.52)

R.C.C. Beam					
Long side	2	2.40	0.60	0.30	0.864
Cross side	2	1.80	0.80	0.30	0.648
				Total	1.512 m <sup>3</sup>

- 7 Providing and fixing in position TMT - FE - 500 bar reinforcement of various diameters for R .C.C. pile caps , footings, foundations, slabs, beams columns , canopies, staircase, newels, chajjas, lintels, pards, copings, fins, arches etc . as per detailed designs , drawings and schedules including cutting, bending, hooking the bars, binding with wires or tack welding and supporting as required complete. (26.33)

R.C.C beams Qty as per Item No 4	2.91	⊗	100	Kg/ cum	291.300
R.C.C beams Qty as per Item No.5	1.51	⊗	100	Kg/ cum	151.200
				Total	442.500
				i.e	0.443 MT

- 8 Providing structural steel work in trusses , other similar trussed purlins and members with all bracing, gusset plates etc , as per detailed designs and drawings or as directed including cutting , fabricating, hoisting, erecting fixing in position, Making riveted/ bolted/ welded connection and one coat of anticorrosive paint and over it 2 coats of oil painting approved quality and shade etc . complete (23.04)

**A) Main Vertical Angle ( 75 x75 x6 mm)**

(Height = (1.60 x 4) + 0.30+1.05)	4	7.75		31.00
For M.S. Ladder				
1 <sup>st</sup> Flight (5.41+0.35 = 5.76)	4	5.76		23.04
2 <sup>nd</sup> Flight	2	3.67		7.34
			Total	51.38 m <sup>2</sup>
		6.80	Kg/Rmt	417 Kgs

**B) M.S. Angle (50 x 50 x 6 mm)**

Vertical Post for Cabin	4	2.00		8.00
Horizontal support to all sides	6	1.80		43.20
Bottom support to 1 <sup>st</sup> landing	2	2.55		5.10
	4	0.75		3.00
	2	1.06		2.12
	1	1.50		1.50
Bottom support to 2 <sup>nd</sup> landing	1	2.55		2.55
(1.80 + 0.75 =2.55 )	1	2.55		2.55
(0.90+0.75)	3	0.75		2.25

1	2	3	4	5	6	7	8	9	10
	Bottom inclined support		1	1.06			1.06		
	Cross Support main angle of all sides 1 x 2 x 4 x 5				2.41		96.40		
						Total	167.73	Rmt	
	Wt @		4.50		Kg/Rmt		754.79	Kgs	
	Below wooden Floor		4	1.80			7.20		
	Long side & cross side					Total	7.20	Rmt	
	Wt @		4.50		Kg/Rmt		32.40	Kgs	
						Net	787.19	Kgs	
<b>C)</b>	<b>M.S.Angle (40 x 40 x 6 mm)</b>								
	For cabin Tie beam		4	2.30			9.20		
			4	1.25			5.00		
			4	0.50			2.00		
			4	2.30			9.20		
						Total	25.40	Rmt	
	Wt @		3.50		Kg/Rmt		68.90	Kgs	
<b>D)</b>	<b>M.S.Angle (25 x25 x 5 mm)</b>								
	Step for Ladder								
	1 <sup>st</sup> Flight (L = 4.41)		24		0.45		10.80		
	Step @ 20 cm c/c								
	2 <sup>nd</sup> Flight (L = 3.67)		16		0.45		7.20		
	Support to ladder Railing								
	1 <sup>st</sup> Flight	4	2		0.75		6.00		
	2 <sup>nd</sup> Flight	3	2		0.75		4.50		
	For Anchor to angle	4	3		0.30		3.60		
	to bottom of ladder	1.00	2		0.30		0.60		
	to Bottom of 60 mm dia. Pipe	1.00	1		0.30		0.30		
	Purlins	1.00	4		1.15		4.60		
						Total	37.60	Rmt	
	Wt @		1.80		Kg/Rmt		67.68	Kgs	
<b>E)</b>	<b>M.S. plate 5 mm thick</b>								
	At corner of main angle	2 x 6 x 4 x 0.12 x 0.25					1.44		
		4 x 5 x 0.20 x 0.20					0.80		
	M.S. plate to top of 65 mm	Kg/Sqm	1	0.20	0.20		0.04		
						Total	2.28	m <sup>3</sup>	
	Wt @		39.20		Kg/m <sup>2</sup>		69.38	Kgs	
<b>F)</b>	<b>25 mm dia M.S. Pipe for ladder</b>								
	Railing								
	1 <sup>st</sup> Flight		1	2.10			2.10		
	2 <sup>nd</sup> landing		2	0.75			1.50		
	(5.41 + 0.75)		1	1.80			1.80		
			1	0.30			0.30		
	2 <sup>nd</sup> Flight & landing		1	1.65			1.65		
			2	0.75			1.50		
			1	0.90			0.90		
			1	0.30			0.30		
						Total	10.05	Rmt	
	Wt @		2.44		Kg/Rmt		24.52	Kgs	
<b>G)</b>	<b>12 mm Sq.bar to Railing of landing</b>								
	Total Railing								
	Length of 1st landing = 5.70 m								
	Railing length of 2nd landing = 4.35m								
	Total Length = 5.70 + 4.35 = 10.05 Rmt								
	No of Bars = 102 Nos		102		0.75		76.50	Rmt	
	Wt @		1.13		Kg/Rmt		66.45	Kgs	

1	2	3	4	5	6	7	8	9	10
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H) M.S. Grill to landing portion

(Provide M.S. Flat 40 mm width & 4 mm Thick)

Size of 1<sup>st</sup> landing = 0.75 x 2.55

	52	0.75		39.00
	16	2.55		40.80
2 <sup>nd</sup> landing	34	0.75		25.50
	16	1.65		26.40

Total 131.70 Rmt

Wt @ 1.30 Kg/Rmt 171.21 Kgs

I) M.S. Pipe 65 mm dia

Length of pipe 1 4.50 4.50 Rmt

Wt @ 6.85 Kg/Rmt 30.83 Kgs

Total (A to I) 1346.14 Kgs

i.e 1.3461 M.T

- 9 Providing and fixing Indian teak wood joists and girders in timber floors of single double or framed type including scaffolding if necessary, and one coat of primer etc. complete. (37.03)

Wooden Flooring 1 2.10 2.10 0.100 0.4410

- 10 Providing and applying two coats of synthetic enamel paint of approved colour to new old structural steel work and wood work in buildings including scaffolding if necessary, cleaning and preparing the surface (excluding primer coat) etc. complete. (35.20+35.07)

Wooden Flooring 1 2 2.10 2.10 8.820

- 11 Providing and fixing of colour coated Zinc aluminium (R) AZ150 (min 150 gms/sq.mt. total on each side) profiled sheets for roofing. The feed material is manufactured out of nominal 0.45 mm Base Metal Thickness (BMT) (0.5 mm TCT), Hi-strength steel with min 550 MPa yield strength, metallic hot dip coated with Aluminium-Zinc alloy (55% aluminium 43.4% zinc 1.6% silicon) with COLORBOND (R) steel quality super durable polyester paint coat (with inorganic pigment). The paint shall have a total coating thickness of nominal 35 um, comprising of nominal 25um exterior coat on top surface and nominal 10 um reverse coat on back surface. Profile sheet shall have nom. 950-1050 mm effective cover width and nominal 25-30 mm deep ribs with subtle square fluting in the five pan at nominal 180-250 mm center-to-center. The end rib shall be designed for anti-capacity groove, and return leg. The feed material should have coil manufacturers product details marked a regular interval including fasteners with min. fastened with min. 25 um Zinc-Tin alloy coated, Hex head, self-drilling screw etc. complete. (weight of profile 4.52 kg/sqm) 900 mm girth (Surface Width). (38.36)

2 4.50 3.50 31.5000

- 12 Providing and fixing PVC coloured Ridge tiles over UPVC roofing where required having size 113cm x 41cm and height 9.5 cm for ridge including fastening with self drilling screw having washers made of stainless steel etc. complete. (38.38)

G.I Sheet For Ridge Hip 1 4.50 1.20 5.400

- 13 Providing and fixing mild steel grill work for windows ventilators etc. 20 kg/sqm as per drawing including fixtures, necessary welding and painting with one coats of anticorrosive paint and two coats of oil painting complete. (40.01)

Railing to all side 3 2.10 1.20 7.560

1 1.35 1.20 1.620

Total 9.180

1	2	3	4	5	6	7	8	9	10
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- 14 Providing and fixing in position to the exact profile and prestressing the high tensile strands to specified ultimate strength, standard end anchorages, cable ducts, grouting ducts after prestressing and bearing plates with wedges as per detailed drawings including necessary plant and machinery for prestressing etc. complete. (14.06)

2 sides	2	65.00	130.00	Kgs.
			=	0.13 MT

- 15 Providing and erecting chain link fencing: 1.6 M. height with G.I. chain link of size 50 x 50 mm, 5 gauge thick and fixed 75 mm above ground level on vertical M. S. Angles of 40 x 40 x 6 mm size, including excavating pits for foundation and embedded in C/C, block of 1:4:8 mix of size 450 x 450 x 670 mm. at 1.75 M. c/c with iron bar 16mm dia as hold fast including welding link with angle frame at 30 cm c/c with nuts and bolts and horizontal M.S. Angles at top and bottom of 25 x 25 x 5 mm size and vertical M.S. flat 35 x 5 mm and 25 x 5 mm horizontal including cross support of 40 x 40 x 6 mm angles both side at every corner or bend embedded in concrete blocks of 1:4:8 of size 450 x 450 x 670 mm including 3 coats of oil painting etc. complete. (46.39)

3 sides	3	10.00	30.00	Rmt
1 sides	1	8.50	8.50	Rmt
			<b>Total</b>	<b>38.50 Rmt</b>

- 16 Providing and fixing mild steel grill gate with angle iron frame 65mm x 65mm x 10mm with iron bars at 150mm C/C and diagonal flats as per the detailed drawing including hinges, pivot block locking arrangement, welding riveting and oil painting of three coats of approved shade Weight of gate 35 Kg/Smt.(44.10)

1	1.50	1.40	2.1000	Sqm
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- 17 Royalty Charges ( Separate Statement attached)

=	14.476	Cum
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- 18 Quality Control (Testing charges)

**Providing and Erecting M.S.Watch Tower at Vil: Wanjle, Compartment No:170.  
Tal: Karjat Dist: Raigad.**

Average Height of Demarcation Site is about **60** m above road level

Head Load for materials is considered as 1% for Each 3.00m height as per SSR Note  
(Floor Height of Building is considered as 3.00m)

Increase in basic rate is considered is **17.14** %

**RATE ANALYSIS**

Sr No	Material	Location	Total lead	Total Charcons		Cost diff of	Net Rate (per
1	Metal Below 40mm	Karjat	20	488.73		0	488.73
	Metal Abv. 40mm	Karjat	20	488.37		0	488.37
2	Sand	Ambet	125	1339.20		0	1339.20
3	Cement	Karjat	20	348.11		0	348.11
4	Steel	Karjat	20	348.11		0	348.11
Sr No	Item Details				Item Rate	Total Rate	
	DSR-I/P	Details	Ratio	Load	Unit		
1	Removing grass 21.33	Add 10 % for Notified Hilly area			Rs. m <sup>2</sup>	7.00 0.70	Say Rs. 7.70
2	Excavation in soil & 21.01	Soft Murum by manual Add 10 % for Notified Hilly area			Rs. m <sup>3</sup>	239.00 23.90	Say Rs. 262.90
3	80 mm metal soiling 21.40	Add 10 % for Notified Hilly area Metal Sand Head Load Charges	1.000 0.15	488.37 1339.20	Rs. m <sup>3</sup>	1454.00 145.40 488.37 200.68 249.26	Say Rs. 2517.91
4	M 10 PCC For foundation 24.01	Deduct SADA Charges Add 10 % for Notified Hilly area Metal Sand cement Head Load Charges	0.940 0.47 0.220	488.73 1339.20 348.11	Rs. m <sup>3</sup>	5830.00 126.00 5704.00 570.40 459.41 629.42 76.58 977.83	Say Rs. 8417.64
5	M 25 RCC Column 25.33	Deduct SADA Charges Add 10 % for Notified Hilly area Metal Sand cement Head Load Charges	0.940 0.47 0.220	488.73 1339.20 348.11	Rs. m <sup>3</sup>	13967.00 126.00 13841.00 1384.10 459.41 629.42 76.58 2372.74	Say Rs. 16763.26
6	M 25 RCC Beams 25.52	Deduct SADA Charges Add 10 % for Notified Hilly area Metal Sand cement Head Load Charges	0.940 0.47 0.220	488.73 1339.20 348.11	Rs. m <sup>3</sup>	12452.00 120.00 12332.00 1233.20 459.41 629.42 76.58 2114.06	Say Rs. 16644.67
7	TMT Bar Reinforcement 26.33	Add 10 % for Notified Hilly area Steel Head Load Charges	1.000	348.11	Rs. m <sup>3</sup>	89703.00 8970.30 348.11 15377.66	Say Rs.

Providing and Erecting M.S.Watch Tower at VII: Wanjle, Compartment No:170.  
Tal: Karjat Dist: Raigad.

The Royalty Charges as per R & F Department's Gazette Dated 4 June 2021 are  
Rs:237.37/Cum Including Taxes

Item No	Qty	Description	Sand	
			Factor	Qty
4	20.381	Providing & Laying M 10 for foundation	0.470	9.579
5	10.010	Providing & Laying M 25 for Column	0.425	4.254
6	1.512	Providing & Laying M 25 for Beams	0.425	0.643
			Total in M <sup>3</sup>	14.476
			Rs:	3438.17

Mandik  
वास्तविक कर्तो

Shanm  
सिंधु वन अधिकारी  
करज

Saraga Kulkarni  
Range Forest Officer  
Karjat (west)

Providing and Erecting M.S.Watch Tower at Vil: Wanjle, Compartment No:170.  
Tal: Karjat Dist: Raigad.

Note: Provision for laboratory testing charges for reimbursement of actual amount of testing charges paid by the contractor he should produce documentary evidences along with laboratory reports from approved registered Government Laboratory of PWD/ Engineering Colleges etc.

Provision of Quality Control Test and materials Testing charges (as per CSR Sr. No:9 Page No:iv)  
Rate as per Vigilance & Quality Control Circle

Sr. No	Name of Test	No. Of Test	Rate Per Test	Frequency	Amount
1	<b>Basic Test Of Cement :</b> Standard Consistency, Fineness, Specific Gravity, Setting Time (Initial & Final), Compressive Strength, Soundness.	1.00	3770.00	1.00	3770.00
6	<b>Concrete</b> Compressive Strength of CC Cubes (Set of 3 Cubes)	2.00	690.00	2.00	1380.00
7	<b>Steel Bar Testing</b> Upto 16mm (Set of 3 Bars)	1.00	1275.00	1.00	1275.00

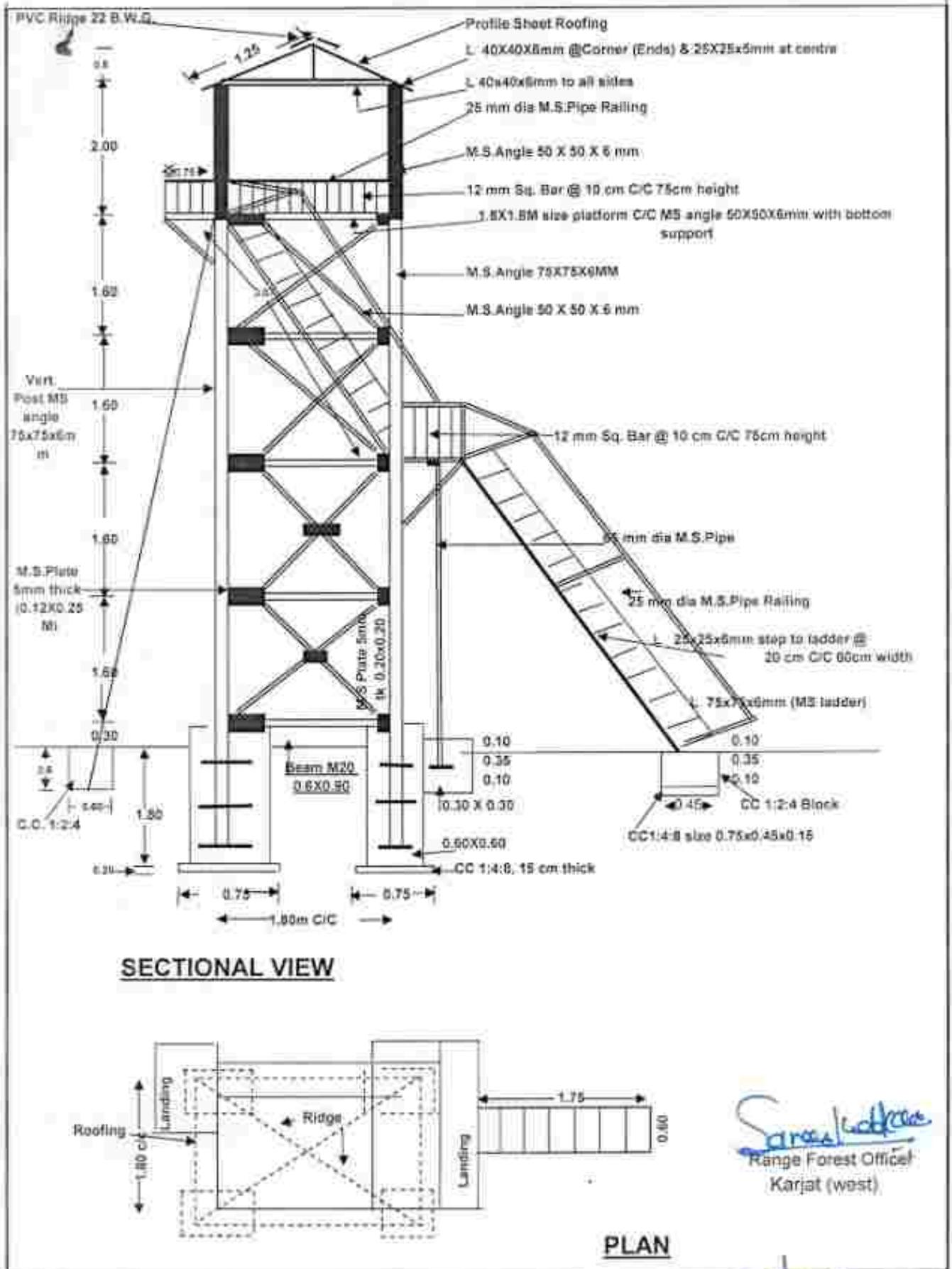
Total in Rs: 6425.00

Prandika  
अनुमोदित करीत

Prandika  
अनुमोदित करीत  
करा

Suresh K. Kulkarni  
Range Forest Officer  
Karjat (west)

Providing and Erecting M.S. Watch Tower at Vil: Wanje, Compartment No:170.  
Tal: Karjat Dist: Raigad.



*Suresh Kulkarni*  
Range Forest Officer  
Karjat (west)

*Shantanu*  
अभिहित वन अधिकारी  
कराज

*Anandhu*  
अभिहित वन अधिकारी

## ESTIMATE

DIVISION : Alibag Forest Division ,

RANGE : Range Forest Office Karjat (West)

SANCTIONED ESTIMATE NO.

FUND HEAD

MAJOR HEAD

MINOR HEAD

SERVICE HEAD

DEPARTMENTAL HEAD

THE ESTIMATE IS PREPARED IN OFFICE OF DEPUTY CONSERVATOR OF FOREST ALIBAG FOREST DIVISION, ALIBAG. THE PROBABLE EXPENSES INCURRED IN THE

Const. of Channelling & Fencing for Railway Tunnel in Karjat West Range. Round - Karjat. Seat Karjat At Wanje Sr.No-170 Part -01 Tal-Karjat Dist- Raigad.

ESTIMATED COST 994117

ADMINISTRATIVELY APPROVED UNDER NO.

DATE:-

TECHNICALLY SANCTIONED UNDER NO.

DATED:-

ESTIMATE PREPARED BY: Range forest officer karjat (west)

ESTIMATE CHECKED BY:

CALL OR AUTHORITY:

### GENERAL DESCRIPTION

The Following estimate is

The following items are included in this estimate.

Excavation for foundation in earth soils of all types sand gravel and soft murum including removing the excavated material up to a distance 50 Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soiling 15 cm to 20 cm thick Providing and laying Cast in situ/Ready Mix cement concrete in M-10 Providing and erecting chain link fencing 1.5 M. height with G.I. chain link of size 50 x 50 mm, 8 gauge thick and fixed 75 mm above ground

The Rates are Adopted from DSR-2022-23

frandic  
वन संरक्षण अधिकारी (सं.)

Phanm  
परिपालक वन अधिकारी  
कराज

Saneer Ichdekar  
Range Forest Officer  
Karjat (West)

R  
(Rahul Patil, IFS)  
Deputy Conservator of Forest,  
Alibag Forest Division, Alibag

Name of Work:-

Const. of Channeling & Fencing for Railway Tunnel in Karjat West Range. Round - Karjat. Beat Karjat At.Wanjle Sr.No-170 Part -01 Tal-Karjat Dist- Raigad.

### RECAPITULATION SHEET

1	Total Amount of work Portion	= Rs:	803859.78
2	Add 4% Contingencies	= Rs:	32154.39
3	Add 18 % For GST as per Note on SSR	= Rs:	144694.76
4	Add 1 % For Labour Insurance	= Rs:	8038.60
5	Add For Royalty Charges	= Rs:	5369.91

Net Total = Rs: 994117.43

Say = Rs: 994118.00

Prandik  
प्राणिक कर्म (प.)

Sharon  
परिबंधन अधिकारी  
करजत

Sarav Kulkarni  
Range Forest Officer  
Karjat(West)

**NAME OF WORK:-**

Const. of Channeling & Fencing for Railway Tunnel in Karjat West Range, Round - Karjat, Boat Karjat At Wanje Sr.No-170 Part -01 Tal-Karjat Dist- Raigad.

**ABSTRACT**

QUANTITY		ITEM OF WORK	RATE	UNIT	AMOUNT
1		2	3	4	5
82.80	Cmt	Item No. 01:- Excavation for foundation in earth soils of all types sand gravel and soft murum including removing the excavated material up to a distance 50 metres, beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming watering including shoring and strutting etc. complete. (Lift upto 1.5m.) SSR 22-23 SR.no/1 - 721/21.02 Rs 207.00 Add 10% for Hilly area Rs 20.70 Total Rs 227.70 Spec.No. BD-A-01 / Pg No.259	227.70	Per One Cubic Meter	18853.56
20.70	Cmt	Item No 02:- Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete. Rate Analysis No- Spec.No. BD-A-12 / Pg No.264	2215.86	Per One Cubic Meter	45858.10
13.80	Cmt	Item No.03:-Providing and laying Cast in situ Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand Rate Analysis No- Spec.No.BD-E-01 / Pg No.267	7012.40	Per One Cubic Meter	96771.12
230.00	Rmt	Item No. 04:- Providing and erecting chain link fencing 1.8 M. height with G.I. chain link of size 50 x 50 mm, 8 gauge thick and fixed 75 mm above ground level on vertical M.S. Angles of 40 x 40 x 6 mm size, including excavating pits for foundation and embedded in C.C. block of 1:4:8 mix of size 450 x 450 x 670 mm; at 1.75 M. c/c with iron bar 16mm dia as hold fast including welding link with angle frame at 30 cm c/c with nuts and bolts and horizontal M.S. Angles at top and bottom of 25 x 25 x 5 mm size and vertical M.S. flat 36 x 5 mm and 25 x 5 mm horizontal including cross support of 40 x 40 x 6 mm angles both side at every corner or bend embedded in concrete blocks of 1:4:8 of size 450 x 450 x 670 mm including 3 coats of oil painting etc. complete. SSR 22-23 SR.no/1 -1575/46.29 Rs 2539.00 Add 10% for Hilly area Rs 253.90 Total RS, 2792.90 Spec.No. As directed by Engineer in charge.	2792.90	Per One Running metre	642367.00
			<b>Total Rs.</b>		<b>803859.78</b>
24.84	Cmt	Item No.05 -Disbursement of Royalty charges for construction materials like metal, rubble, murum, and earth etc. complete.	216.16	Per One Cubic Meter	5369.91
			Add 18% for GST Charges Rs.		144694.76
			Add 4 % for Contingencies Charges Rs.		32154.39
			Add 1% for Labour Insurance Charges Rs.		8038.60
			<b>Total Rs</b>		<b>994117</b>

*Indran*  
अभिषेक बाबुराव  
करा

*Suresh Kulkarni*  
Range Forest Officer  
Karjat (West)

*franklin*  
नारायण बाबू (७२)

**NAME OF WORK:-**

Const. of Channeling & Fencing for Railway Tunnel in Karjat West Range, Round - Karjat.  
Beat Karjat At.Wanjle Sr.No-170 Part -01 Tal-Karjat Dist- Raigad.

**MEASUREMENTS**

Item No. 01:- Excavation for foundation in earth soils of all types sand gravel and soft murum including removing the excavated material up to a distance 50 metres, beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5m.)

1 x	230.00 x	0.50 x	0.50	52.80 Cmt
			<b>Total</b>	52.80 Cmt
			<b>Say</b>	52.80 Cmt

Item No 02 -Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete.

1 x	230.00 x	0.50 x	0.150	20.70 Cmt
			<b>Total</b>	20.70 Cmt
			<b>Say</b>	20.70 Cmt

Item No.03:-Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand

1 x	230.00 x	0.50 x	0.100	13.80 Cmt
			<b>Total</b>	13.80 Cmt
			<b>Say</b>	13.80 Cmt

Item No. 04:- Providing and erecting chain link fencing 1.6 M. height with G.I. chain link of size 50 x 50 mm, 8 gauge thick and fixed 75 mm above ground level on vertical M.S. Angles of 40 x 40 x 6 mm size, including excavating pits for foundation and embedded in C.C. block of 1:4:8 mix of size 450 x 450 x 670 mm, at 1.75 M. c/c with iron bar 16mm dia as hold fast including welding link with angle frame at 30 cm c/c with nuts and bolts and horizontal M.S. Angles at top and bottom of 25 x 25 x 5 mm size and vertical M.S. flat 35 x 5 mm and 25 x 5 mm horizontal including cross support of 40 x 40 x 6 mm angles both side at every corner or bend embedded in concrete blocks of 1:4:8 of size 450 x 450 x 670 mm including 3 coats of oil painting etc. complete.

1 x	230.00			230.00 Rmt
			<b>Total</b>	230.00 Rmt
			<b>Say</b>	230.00 Rmt

Item No.05 --Disbursement of Royalty charges for construction materials like metal, rubble,murum, and earth etc. complete.

As per Seperate sheet attached		24.84
	Total qty	24.84
	say	24.84

**NAME OF WORK:-**

**Const. of Channeling & Fencing for Railway Tunnel in Karjat West Range, Round - Karjat, Beat Karjat At Wanjle Sr.No-170 Part -01 Tal Karjat Dist- Raigad.**

**Rate Analysis**

Sl No / Q.	Item of work	Material	Required Material	Lead charges	Lead charges Required	Total lead charges	QIR (0021-23)	QIR (0022-23)	QIR (24-25)	SSR Rate	Deduction For Scaffolding %	Deduction For Royalty	Rate Proposed	Add 10% For City Allow	Add Unit Charges	Total rate	Unit
1	Item No 02 - Providing and laying 150mm dia. 100mm thick concrete in 10-10 of traps granular quartzite gneiss rubble stone having 15 cm to 20 cm thick including nail packing and compacting etc. contingent.	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
		Rubble Metal	1.00	597.52	597.52											2215.97	Cmt
			0.20	455.73	91.15	686.67	21.28	752	1382.00				686.67	138.20		2215.85	Cmt
2	Item No 03 - Providing and laying C/S in situ ready mix concrete in 10-10 of traps granular quartzite gneiss rubble for foundation and bedding including leading out water, formwork, tying, casting, compaction, roughening them if special finish is to be provided. Finishing if required and curing complete, with fully automatic system processor based PLC with SCADA enabled reversible Drum Type mixer/concrete batch mix plant (Pan mixer) etc. complete. With natural sand V.S.I. quality Artificial Sand	Client's Sand Metal	0.22	164.90	36.30												
			0.47	455.73	229.70												
			0.94	455.73	459.41												
						725.41	24.01	877	5832.00			Say		563.00	725.41	7012.40	Cmt
																7012.41	Cmt

*Sarav Kulkarni*  
Range Forest Officer  
Karjat (West)

*Pravin*  
Kulkarni  
SDEO

*Pranav*  
Kulkarni

**NAME OF WORK:-**

Const. of Channeling & Fencing for Railway Tunnel in Karjat West Range, Round  
- Karjat. Beat Karjat At.Wanjle Sr.No-170 Part -01 Tal-Karjat Dist- Raigad.

**Lead Charges Statement**

Sr No.	Particulars	Total Lead in Kms	Initial lead in Kms	Total lead charges
				Rs/Paise
1	2	3	4	5
1	Metal	5.00	0.00	488.73
2	H.B.metal	5.00	0.00	468.37
2	Rubble	5.00	0.00	597.92
3	Sand	5.00	0.00	488.73
4	Cement	5.00	0.000	164.99

*Pranav*  
सिंचक वन कार्यालय  
कराज

*Suresh Kudarkar*  
Range Forest Officer  
Karjat (west)

*Pranav*  
सिंचक वन कार्यालय

**NAME OF WORK:-**

Contract of Channeling & Fencing for Railway Tunnel in Karjat West Range- Round - Karjat. Beat Karjat Al.Wanjle Sr.No-170 Part-01 Tal-Karjat Dist- Raigad.

**Royalty Statement**

Sr.No.	Item Of work	Rubble		H.B Metal		Sand		Earth		Cement		Metal																
		Req./Unit	Qty	Req./Unit	Qty	Req./Unit	Qty	Req./Unit	Qty	Req./Unit	Qty	Req./Unit	Qty															
1	Item No 02-Providing dry trap granular crushed granite rubble stone bedding 15 cms to 20 cms thick including hand packing and compacting etc. complete.	3	20.70	4	24.84	5	24.84	6	0	7	0	8	0	9	0	10	0	11	0	12	0	13	0	14	0.2	15	4.14	
	<b>Total</b>				24.84		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00				0.00	4.14

Total Qty of Royalty  
Total Qty of Royalty

(A+B+D)  
(C)

0

24.84  
0.00

Cmt  
Cmt

*Shantanu*  
शिवराव एम. शिंदे

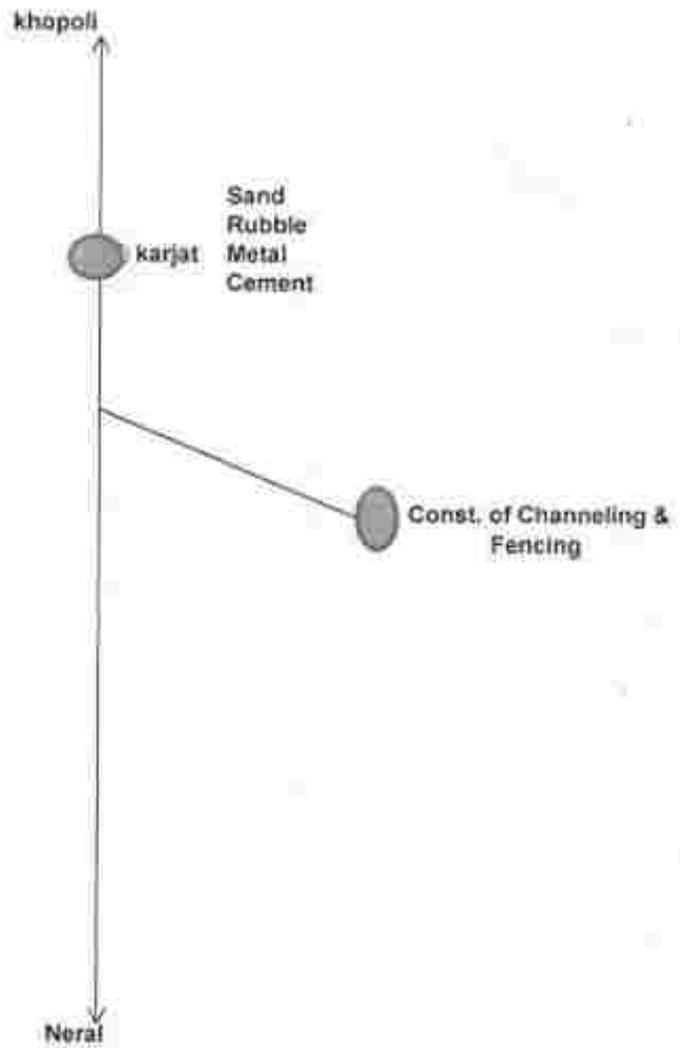
*Suresh K. Dabekar*  
Range Forest Officer,  
Karjat (west)

*Anandik*  
अनंदिका शिंदे

**NAME OF WORK:-**

Const. of Channeling & Fencing for Railway Tunnel in Karjat West Range. Round - Karjat.  
Beat Karjat At. Warjele Sr.No-170 Part -01 Tal-Karjat Dist- Raigad.

**QUARRY AND LEAD CHART**



*frankie*  
*अभिषेक शर्मा*

*Jehson*  
**जिंझन बन अधिकारी**  
**कराज**

Range Forest Officer  
Karjat (west)

## ESTIMATE

DIVISION: Alibag Forest Division,  
RANGE: Range Forest Office Karjat (West)  
SANCTIONED ESTIMATE NO.  
FUND HEAD  
MAJOR HEAD  
MINOR HEAD  
SERVICE HEAD  
DEPARTMENTAL HEAD

THE ESTIMATE IS PREPARED IN OFFICE OF DEPUTY CONSERVATOR OF FOREST, ALIBAG FOREST DIVISION, ALIBAG. THE PROBABLE EXPENSES INCURRED IN THE

Const. of Channeling & Fencing for Railway Tunnel in Karjat West Range, Round - Karjat, Beat Karjat At Wanje Sr.No-170 Part -02 Tal-Karjat Dist- Raigad.

ESTIMATED COST 998440

ADMINISTRATIVELY APPROVED UNDER NO.

DATED:-

TECHNICALLY SANCTIONED UNDER NO.

DATED:-

ESTIMATE PREPARED BY: Range forest officer karjat (west)

ESTIMATE CHECKED BY:

CALL OR AUTHORITY:

### GENERAL DESCRIPTION

The Following estimate is

The following items are included in this estimate.

Excavation for foundation in earth soils of all types sand gravel and soft murum including removing the excavated material up to a distance 50. Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick. Providing and laying Cast in situ/Ready Mix cement concrete in M-10. Providing and erecting chain link fencing 1.6 M. height with G.I. chain link of size 50 x 50 mm, 8 gauge thick and fixed 75 mm above ground.

The Rates are Adopted from DSR-2022-23

*Pranali*  
अनुसंधान कर्मिणी

*Pranali*  
अनुसंधान कर्मिणी  
कर्जत

*Sonay Kulkarni*  
Range Forest Officer  
Karjat (West)

*Rahul Patil*  
(Rahul Patil, IFS)  
Deputy Conservator of Forest,  
Alibag Forest Division, Alibag

Name of Work:-

Const. of Channeling & Fencing for Railway Tunnel in Karjat West Range.  
Round - Karjat. Beat Karjat At.Wanjle Sr.No-170 Part -02 Tal-Karjat Dist- Raigad.

### RECAPITULATION SHEET

1	Total Amount of work Portion	= Rs:	807354.82
2	Add 4% Contingencies	= Rs:	32294.19
3	Add 18 % For GST as per Note on SSR	= Rs:	145323.87
4	Add 1 % For Labour Insurance	= Rs:	8073.55
5	Add For Royalty Charges	= Rs:	5393.26

Net Total = Rs: 998439.68

Say = Rs: 998440.00

franchise  
कारजात वन

Sham  
परिचालक वन अधिकारी  
कारजात

Sonasa Kudalgaon  
Range Forest Officer  
Karjat(West)

NAME OF WORK:-

Const. of Channeling & Fencing for Railway Tunnel in Karjat West Range. Round - Karjat. Beat Karjat  
At Wanjle Sr.No-170 Part -02 Tal-Karjat Dist-Rajgad.

ABSTRACT

QUANTITY	ITEM OF WORK	RATE	UNIT	AMOUNT
1	2	3	4	5
83.15	Cmt Item No. 01:- Excavation for foundation in earth soils of all types sand gravel and soft murum including removing the excavated material up to a distance 50 metres, beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5m) SSR 22-23 SR.no# - 721/21.02 Rs 207.00 Add 10% for Hilly area Rs 20.70 Total Rs 227.70 Spec.No. BD-A-01 / Pg No.259	227.70	Per One Cubic Meter	18935.53
20.79	Cmt Item No 02-Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soling 15 cm to 20 cm thick including hand packing and compacting etc. complete. Rate Analysis No- Spec.No. BD-A-12 / Pg No.254	2215.55	Per One Cubic Meter	46067.52
13.86	Cmt Item No 03-Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand Rate Analysis No- Spec.No.BD-E-01 / Pg No.287	7012.40	Per One Cubic Meter	97191.86
221.00	Rmt Item No. 04:- Providing and erecting chain link fencing 1.8 M. height with G.I. chain link of size 50 x 50 mm, 8 gauge thick and fixed 75 mm above ground level on vertical M.S. Angles of 40 x 40 x 6 mm size, including excavating pits for foundation and embedded in C.C. block of 1'4"8 mix of size 450 x 450 x 670 mm. at 1.75 M. c/c with iron bar 16mm dia as hold fast including welding link with angle frame at 30 cm c/c with nuts and bolts and horizontal M.S. Angles at top and bottom of 25 x 25 x 5 mm size and vertical M.S. flat 35 x 5 mm and 25 x 5 mm horizontal including cross support of 40 x 40 x 6 mm angles both side at every corner or bend embedded in concrete blocks of 1'4"8 of size 450 x 450 x 670 mm including 3 coats of oil painting etc. complete. SSR 22-23 SR.no# -1575/48.39 Rs 2539.00 Add 10% for Hilly area Rs 253.90 Total Rs. 2792.90 Spec.No. As directed by Engineer in charge.	2792.90	Per One Running metre	645159.00
		<b>Total Rs.</b>		<b>807354.82</b>
24.95	Cmt Item No.05 --Disbursement of Royalty charges for construction materials like metal, rubble,murum, and earth etc. complete Add 18% for GST Charges Rs. 145323.87 Add 4 % for Contingencies Charges Rs. 32294.19 Add 1% for Labour Insurance Charges Rs. 8073.55 Total Rs 998440	216.18	Per One Cubic meter	5393.26

frandiu  
कार्यालय कार्यालय

रणम  
रजिस्ट्रार एवं अभियंता  
कराज

रणम  
Range Forest Officer  
Karjat (West)

**NAME OF WORK:-**

Const. of Channeling & Fencing for Railway Tunnel in Karjat West Range. Round - Karjat.  
Beat Karjat AtWanjle Sr.No-170 Part -02 Tal-Karjat Dist- Raigad.

**MEASUREMENTS**

Item No. 01:- Excavation for foundation in earth soils of all types sand gravel and soft murum including removing the excavated material up to a distance 50 metres, beyond the building area and stacking and spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering including shoring and strutting etc. complete. (Lift upto 1.5m)

1 x	231.00 x	0.60 x	0.60	83.16 Cmt
			<b>Total</b>	83.16 Cmt
			<b>Say</b>	83.16 Cmt

Item No 02:-Providing dry/ trap/ granite/ quartzite/ gneiss rubble stone soiling 15 cm to 20 cm thick including hand packing and compacting etc. complete.

1 x	231.00 x	0.60 x	0.150	20.79 Cmt
			<b>Total</b>	20.79 Cmt
			<b>Say</b>	20.79 Cmt

Item No.03:-Providing and laying Cast in situ/Ready Mix cement concrete in M-10 of trap/ granite/ quartzite/ gneiss metal for foundation and bedding including bailing out water, formwork, laying/pumping, compacting, roughening them if special finish is to be provided, finishing if required and curing complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer/concrete Batch mix plant (Pan mixer) etc. complete. With natural sand/V.S.I. quality Artificial Sand

1 x	231.00 x	0.60 x	0.100	13.86 Cmt
			<b>Total</b>	13.86 Cmt
			<b>Say</b>	13.86 Cmt

Item No. 04:- Providing and erecting chain link fencing 1.6 M. height with G.I. chain link of size 50 x 50 mm, 8 gauge thick and fixed 75 mm above ground level on vertical M.S. Angles of 40 x 40 x 6 mm size, including excavating pits for foundation and embedded in C.C. block of 1:4:8 mix of size 450 x 450 x 670 mm. at 1.75 M. c/o with iron bar 16mm dia as hold fast including welding link with angle frame at 30 cm c/c with nuts and bolts and horizontal M.S. Angles at top and bottom of 25 x 25 x 5 mm size and vertical M.S. flat 35 x 5 mm and 25 x 5 mm horizontal including cross support of 40 x 40 x 6 mm angles both side at every corner or bend embedded in concrete blocks of 1:4:8 of size 450 x 450 x 670 mm including 3 coats of oil painting etc. complete.

1 x	231.00			231.00 Rmt
			<b>Total</b>	231.00 Rmt
			<b>Say</b>	231.00 Rmt

Item No.05 --Disbursement of Royalty charges for construction materials like metal, rubble,murum, and earth etc. complete.

As per Seperate sheet attached		24.95
	Total qty	24.95
	say	24.95

NAME OF WORK:-

Contd. of Chaining & Fencing for Railway Tunnel in Karjat West Range. Round - Karjat. Boat Karjat At Wanjale Sr.No-170 Part -02 Tai-Karjat Dist- Raigad.

Rate Analysis

Sr. No.	Item of work	Material	Required (Meters)	Lead charges (Rs/quant)	Lead changes (Rs/quant)	Total lead charges (Rs)	EST 2022-23 Item No.	EST 2022-23 Item No.	EST Rate	Deduction For Scada 6 %	Deduction For Rigidity	Rate Proposed	Add 10% for 10% Rise	Add Lead Charges	Total Rs.	Unit
1	Item No. 02. Providing of 1/2" (granite) quarries/ gneiss rubble above 15 cm to 30 cm thick including hard packing and compacting etc. complete.	3	4	5	5	7	8	9	10	11	11	12	13	14	15	16
1		Bubble Metal	1.00 0.20	592.92 468.75	597.02 97.75	695.67	21.38	752	1180.00	(-)	0.00	1282.00	138.20	495.87	2216.88	1.00 0.20
2	Item No. 05. Providing and laying Cast in situ (ready Mix) concrete in M-10 of 1/2" (granite) quarries/ gneiss rubble for foundation and bedding including sapping out water, formwork, tying/pumping, compaction, supporting them if special finish is to be provided, finishing if required and curing complete, with fully automatic mixer processor (batch) P.C. with SCADA enabled reversible drum type mixer concrete batch mix plant (P.M. mixer) etc. complete. With natural sand/S.S.I. quality artificial sand.	Concrete Sand Metal	0.22 0.47 0.94	194.89 498.73 488.73	36.30 225.70 459.41	725.41	24.01	857	5830.00	(-)	0.00	3704.00	583.00	725.41	7012.40	0.22 0.47 0.94

*S. S. Kulkarni*  
Range Forest Officer  
Karjat (West)

*Shrikanth*  
प्रियंका व. शिंदे  
कार्जत

*Pranali*  
प्र. शिंदे कार्जत

NAME OF WORK:-

Const. of Channeling & Fencing for Railway Tunnel in Karjat West Range. Round  
- Karjat. Beat Karjat At.Wanjle Sr.No-170 Part -02 Tal-Karjat Dist- Raigad.

Lead Charges Statement

Sr No.	Particulars	Total Lead in Kms	Initial lead in Kms	Total lead charges
				Rs/Paise
1	2	3	4	5
1	Metal	5.00	0.00	488.73
2	H.B.metal	5.00	0.00	468.37
2	Rubble	5.00	0.00	597.92
3	Sand	5.00	0.00	488.73
4	Cement	5.00	0.000	164.99

franchise  
कराज वन विभाग

Phan  
इसिपुड वन विभाग  
कराज

Srinivas  
Range Forest Officer  
Karjat (west)

**NAME OF WORK:-**

Const. of Channelling & Fencing for Railway Tunnel in Karjat West Range, Round - Karjat, Beat Karjat At Wanjale Sr.No-170 Part -02 Tal-Karjat Dist. Raigad.

**Royalty Statement**

Sr.No.	Name Of work	Rubble		H.B Metal		Sand		Earth		Cement		Metal	
		Req./Unit	Qty	Req./Unit	Qty	Req./Unit	Qty	Req./Unit	Qty	Req./Unit	Qty	Req./Unit	Qty
1	2	4	6	6	7	8	8	10	11	12	13	14	15
1	Item No 02 -Providing dry/ trap/ grates/ quartzite/ gneiss rubble stone having 15 cm to 20 cm thick including sand packing and compacting etc. complete.	1.2	24.96	0	0	0	0	0	0	0	0	0.2	4.158
	<b>Total:</b>		24.95		0.00		0.00		0.00		0.00		4.16

Total Qty of Royalty  
Total Qty of Royalty

(A+B+D)  
(C)

24.95 Cmt.  
0.00 Cmt.

*S. Narayan*  
Range Forest Officer  
Karjat (west)

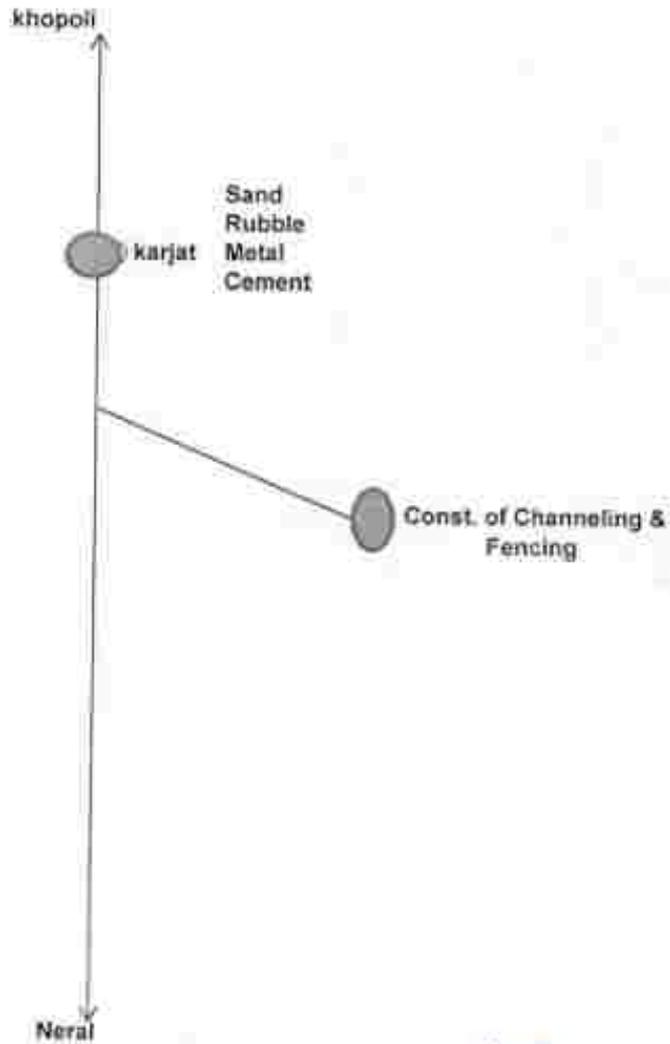
*Pravin*  
*अभिषेक रव शिंदे*  
*बॉस*

*Pravin*  
*अभिषेक रव शिंदे*

**NAME OF WORK:-**

Const. of Channeling & Fencing for Railway Tunnel in Karjat West Range. Round -  
Karjat. Beat Karjat At.Wanjle Sr.No-170 Part -02 Tal-Karjat Dist- Raigad.

**QUARRY AND LEAD CHART**



*mandru*  
*arizaa 25/12*

*Sham*  
*परिचालन वन अधिकारी*  
*करजत*

*Srinivas K. Deshpande*  
Range Forest Officer  
Karjat (west)

## ESTIMATE

DIVISION: Alibag Forest Division Alibag

RANGE Range Forest Officer, Karjat (west)

FUND HEAD :

The Estimate is prepared in the office of the Deputy Conservator of Forest, Division, Alibag for the probable expenses incurred in the

Construction of surface forest tank No.01 at Vil:wanjale. Compartment No / sr.no:

170 Tal: Karjat. Dist: Raigad.

Estimated cost: Rs. 398,000

Estimate is prepared by Range Forest Officer Karjat (west)

Estimate is checked by

Specifications: Entire work is to be carried out as per standard specifications of the P.W.D. Hand book Vol.I & II latest Edition.

Certification: 1. Rates adopted are as per CSR of Soil Water Conservation Department for the year 2022-2023  
2. All calculations have been checked 100% arithmetically.  
3. This Site is under Notified Hilly Area.

Mandlik  
अनुमोदक कार्यालय (पु.)  
कराज

Phavan  
अनुमोदक कार्यालय  
कराज

Suresh K. Godekar  
Range Forest Officer  
Karjat (west)

Rahul Patil  
(Rahul Patil, IFS)  
Deputy Conservator of Forest,  
Alibag Forest Division, Alibag

Construction of surface forest tank No.01 at Vil:wanjale, Compartment No /  
sr.no: ~~107~~ 170 Tal: Karjat, Dist: Raigad.

RECAPUTILATION SHEET

[A] <u>Subestimate 1</u>			
Total cost of Work Portion	Rs.		323,450.00
[B] Add 4% Contingencies on	Rs.		12,938.00
[C] Add 1% Labour Insurance	Rs.		3,235.00
F) Add 18% for GST			58,221.00
	Net Total		397,844.00
	Say. Rs.		398,000.00

Mandlik  
अनुराधा कार्जत (व.)

Phonon  
परिचय व अग्रिम  
कार्त

Suresh Kudkare  
Range Forest Officer,  
Karjat (west)

Technical Sanction for: 09/00506
Rs. 398000/-
(In Words)
Three lakh ninety eight thousand rupees only
Vide no.
For 20/

**Construction of surface forest tank No.01 at Vil:wanjale. Compartment No  
/ sr.no: 107 Tal: Karjat. Dist: Raigad.**

**ABSTRACT SHEET**

Quantity	Item of work	Rate	Per	Amount
2025.00	Item No:1:Clearing and removing grass bushes and shrubs etc stacking the stuffs upto a lead of 15m and lift 1.50m. (Item No:104)	4.70	Sqm	9,517.50
261.544	Item No :2:Excavation in all kinds of soil including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment , filter drains / catch water drains etc . and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials machinery, labour, dressing bed and sides to required level and profile etc . complete with lead up to 15 m and all lifts as directed. (CSR Item No:1)	42.00	Cum	10,984.85
163.530	Item No :3: Excavation in hard murum including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment , filter drains / catch water drains etc . and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials machinery, labour, dressing bed and sides to required level and profile etc ., complete with lead up to 15 m and all lifts as directed. (CSR Item No:2)	54.30	Cum	8,879.68
458.520	Item No :4: Excavation in soft rock without blasting including boulders up to 0.6 m diameter ( 0.113 cum) for canal, seating of embankment, filter drain / catch water drains etc ., and placing the excavated soft rock neatly in dump area or for formation of service road including cost of all materials machinery, labour, dressing bed and sides to required level and profile etc . complete with lead up to 15 m and all lifts as directed.(CSR Item No:3)	70.60	Cum	32,371.51
196.560	Item No: 5: Excavation in hard rock of all toughness by breaker including boulders above 0.6 m dia.(0.113Cum) minimizing damage to side slopes of excavation and placing the excavated rock neatly in approved dump area including cost of all materials, machinery, labour, leveling bed etc ., complete with lead up to 15 m and all lifts as directed (CSR Item No:6A)	577.90	Cum	113,592.02

816.000	Item No :6.Providing hearing embankment using selected impervious material available directly from excavation in layers including cost of all materials machinery, labour, all other operations such as collection of material , spreading soil in layer of specified thickness , sorting out , breaking clods , leveling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using vibratory compactor including cost of water etc . complete with lead up to 1 km and all lifts as directed .(CSR Item No: 10&11)	84.80	Cum	69,196.80
13.530	Item No :7:- Providing and constructing longitudinal and cross graded filter drains using sand and 20mm down approved clean, hard, graded aggregates and rubble satisfying specified filter criteria in layers of specified thickness including cost of all materials machinery, labour, laying to required slopes, compaction etc., complete as per specifications and approved drawings with all leads and lifts (CSR Item No:18A)	1495.70	Cum	20,236.82
123.300	Item No :8:- Providing and constructing 300 mm thick dry rubble stone pitching with pin headers at 2 per sqm using stones and stone chips from approved source including cost of all materials labour, hand packing / wedging stone chips, finishing etc complete with lead up to 50 m and all lifts as directed. (CSR Item No:15)	462.20	Sqm	56,985.26
120.000	Item No :9: Dewatering by pumping out water collected with 10 to 19 HP Diesel & Electrical pumps including cost of all materials , machinery, labour, providing sump and all other ancillary operations whenever necessary etc . complete under specific and indispensable circumstances with prior approval from competent authority with authentic evidence of records justifying dewatering etc complete as directed.(CSR Item No:20)	14.00	BHP Hrs	1,680.00

Total  
Say

Rs: 323,448.42  
Rs: 323,450.00

frandik  
पारखण्ड कार्यालय (प.)

izhovan  
परिचालक वन अधिकारी  
करजत

Sarvesh Kuddekar  
Range Forest Officer  
Karjat (west)

**Construction of surface forest tank No.01 at Vil:wanjale. Compartment  
No / sr.no: ~~107~~ Tal: Karjat. Dist: Raigad.**

**Measurement Sheet**

**Item No:1:** Clearing and removing grass bushes and shrubs etc stacking the stuffs upto a lead of 15m and lift 1.50m. (Item No:188)

$$1 \times 45.00 \times 45.00 = 2025.00 \text{ Sqm}$$

**Item No:2:** Excavation in all kinds of soil including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed. (CSR Item No:1A)

Top Area	= 25.00 X 25.00	= 625.00 Sqm
Bottom Area	= 24.40 X 23.40	= 568.28 Sqm
Mean Area		= 595.64 Sqm
Depth of Excavation in Soil		= 0.400 M
Quantity of Excavation		= 238.256 Cum
For Inlet	1 X 8.00 X 1.80 X 0.75	= 10.800
For Outlet	1 X 9.00 X 1.85 X 0.75	= 12.488
	<b>Total</b>	<b>= 261.544 Cum</b>

**Item No:3:** Excavation in hard murum including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed. (CSR Item No:2A)

Top Area	= 24.20 X 23.40	= 566.28 Sqm
Bottom Area	= 23.60 X 22.20	= 523.92 Sqm
Mean Area		= 545.10 Sqm
Depth of Excavation in Hard murum Boulders		= 0.300 M
Quantity of Excavation		= 163.530 Cum

**Item No:4:** Excavation in soft rock without blasting including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drain / catch water drains etc., and placing the excavated soft rock neatly in dump area or for formation of service road including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed. (CSR Item No:3A)

Top Area	= 23.60 X 22.20	= 523.92 Sqm
Bottom Area	= 21.60 X 18.20	= 393.12 Sqm
Mean Area		= 458.52 Sqm
Depth of Excavation in Soft Rock		= 1.000 M
Quantity of Excavation		= 458.520 Cum

**Item No: 5:** Excavation in hard rock of all toughness by breaker including boulders above 0.6 m dia. (0.113Cum) minimizing damage to side slopes of excavation and placing the excavated rock neatly in approved dump area including cost of all materials, machinery, labour, leveling bed etc. complete with lead up to 15 m and all lifts as directed (CSR Item No:6A)

$$1 \times 21.60 \times 18.20 \times 0.50 = 196.560 \text{ Cum}$$

**Item No :6:** Providing hearing embankment using selected impervious material available directly from excavation in layers including cost of all materials, machinery, labour, all other operations such as collection of material, spreading soil in layer of specified thickness, sorting out, breaking clods, leveling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using vibratory compactor including cost of water etc. complete with lead up to 1 km and all lifts as directed. (CSR Item No: 15)

$$2 \times 34.00 \times \frac{5.00 + 1.00}{2} \times 2.00 = 408.00$$

$$2 \times 34.00 \times \frac{5.00 + 1.00}{2} \times 2.00 = 408.00$$

$$\text{Total} = 816.00$$

**Item No:7:-** Providing and constructing longitudinal and cross graded filter drains using sand and 20mm down approved clean, hard, graded aggregates and rubble satisfying specified filter criteria in layers of specified thickness including cost of all materials, machinery, labour, laying to required slopes, compaction etc., complete as per specifications and approved drawings with all leads and lifts (CSR Item No:24)

Inlet	1	X	8.00	X	1.30	X	0.60	=	6.240 Cum
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Outlet	1	X	9.00	X	1.35	X	0.60	=	7.290 Cum
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$$\text{Total} = 13.530 \text{ Cum}$$

**Item No:8:-** Providing and constructing 300 mm thick dry rubble stone pitching with pin headers at 2 per sqm using stones and stone chips from approved source including cost of all materials, labour, hand packing / wedging stone chips, finishing etc complete with lead up to 50 m and all lifts as directed. (CSR Item No:21)

$$3.00 \times \frac{18.20 \times 21.20}{2} \times 1.50 = 88.65$$

$$1.00 \times \frac{21.60 \times 24.60}{2} \times 1.50 = 34.65$$

$$\text{Total} = 123.00$$

**Item No:9:** Dewatering by pumping out water collected with 10 to 19 HP Diesel & Electrical pumps including cost of all materials, machinery, labour, providing sump and all other ancillary operations whenever necessary etc. complete under specific and indispensable circumstances with prior approval from competent authority with authentic evidence of records justifying dewatering etc. complete as directed. (CSR Item No:27)

5	HP Engine	4 Days	6 Hrs	120.00 Bhp Hrs
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**Construction of surface forest tank No.01 at Vil:wanjale. Compartment No / sr.no: 170**  
**Tal: Karjat. Dist: Raigad.**

**RATE ANALYSIS**

Item No:1: Clearing and removing grass bushes and shrubs etc stacking the stuffs upto a lead of 15m and lift 1.50m. (Item No:168)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item : 168) Rs. 4.20  
 Add 10 % for Notified Hilly area 0.42

Total Rs. 4.62  
 Add 1% for Labour Cess 0.04

Net Total 4.66

Say Rs. 4.70 /sqm

Item No:2: Excavation in all kinds of soil including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc. complete with lead up to 15 m and all lifts as directed. (CSR Item No:1A)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item : 1a) Rs. 37.80  
 Add 10 % for Notified Hilly area 3.78

Total Rs. 41.58  
 Add 1% for Labour Cess 0.38

Net Total 41.96

Say Rs. 42.00 /Cum

Item No:3: Excavation in hard murum including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed. (CSR Item No:2A)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item : 2a) Rs. 49.90 /cum  
 Add 10 % for Notified Hilly area 4.89

Total Rs. 53.79  
 Add 1% for Labour Cess 0.49

Net Total 54.28

Say Rs. 54.30 /Cum

Item No:4: Excavation in soft rock without blasting including boulders up to 0.6 m diameter ( 0.113 cum) for canal, seating of embankment, filter drain / catch water drains etc., and placing the excavated soft rock neatly in dump area or for formation of service road including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc. complete with lead up to 15 m and all lifts as directed (CSR Item No:3A)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item : 3a) Rs. 63.60 /cum  
 Add 10 % for Notified Hilly area 6.36

Total Rs. 69.96  
 Add 1% for Labour Cess 0.64

Net Total 70.60

Say Rs. 70.60 /Cum

Item No : 5: Excavation in hard rock of all toughness by breaker including boulders above 0.6 m dia (0.113Cum) minimizing damage to side slopes of excavation and placing the excavated rock neatly in approved dump area including cost of all materials, machinery, labour, leveling bed etc., complete with lead up to 15 m and all lifts as directed (CSR Item No:6A)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item : 6a) Rs. 520.60 /cum  
 Add 10 % for Notified Hilly area 52.06

Total Rs. 572.66  
 Add 1% for Labour Cess 5.21

Net Total 577.87

Say Rs. 577.90 /Cum

Item No.6: Providing hearing embankment using selected impervious material available directly from excavation in layers including cost of all materials , machinery, labour, all other operations such as collection of material , spreading soil in layer of specified thickness , sorting out , breaking clods , leveling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using vibratory compactor including cost of water etc . complete with lead up to 1 km and all lifts as directed. (CSR Item No: 15)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item : 15)	Rs.	76.40 /cum
Add 10 % for Notified Hilly area		7.64
<b>Total</b>	<b>Rs.</b>	<b>84.04</b>
Add 1% for Labour Cess		0.76
<b>Net Total</b>		<b>84.80</b>
<b>Say</b>	<b>Rs.</b>	<b>84.80 /Cum</b>

Item No.7:- Providing and constructing longitudinal and cross graded filter drains using sand and 20mm down approved clean , hard, graded aggregates and rubble satisfying specified filter criteria in layers of specified thickness including cost of all materials , machinery, labour, laying to required slopes, compaction etc., complete as per specifications and approved drawings with all leads and lifts (CSR Item No:24)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item : 24)	Rs.	1347.45 /cum
Add 10 % for Notified Hilly area		134.75
<b>Total</b>	<b>Rs.</b>	<b>1482.20</b>
Add 1% for Labour Cess		13.47
<b>Net Total</b>		<b>1495.67</b>
<b>Say</b>	<b>Rs.</b>	<b>1495.70 /Cum</b>

Item No.8:- Providing and constructing 300 mm thick dry rubble stone pitching with pin headers at 2 per sqm using stones and stone chips from approved source including cost of all materials , labour, hand packing / wedging stone chips , finishing etc complete with lead up to 50 m and all lifts as directed. (CSR Item No:21)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item :21)	Rs.	301.85 /cum
Add lead Charges for 15 KM (0.42X289.04)	Rs.	115.62
	Rs.	417.47
Add 10 % for Notified Hilly area		41.75
<b>Total</b>	<b>Rs.</b>	<b>459.22</b>
Add 1% for Labour Cess		3.02
<b>Net Total</b>		<b>462.24</b>
<b>Say</b>	<b>Rs.</b>	<b>462.20 /Cum</b>

Item No.9: Dewatering by pumping out water collected with 10 to 19 HP Diesel & Electrical pumps including cost of all materials , machinery, labour, providing sump and all other ancillary operations whenever necessary etc . complete under specific and indispensable circumstances with prior approval from competent authority with authentic evidence of records justifying dewatering etc complete as directed. (CSR Item No:27)

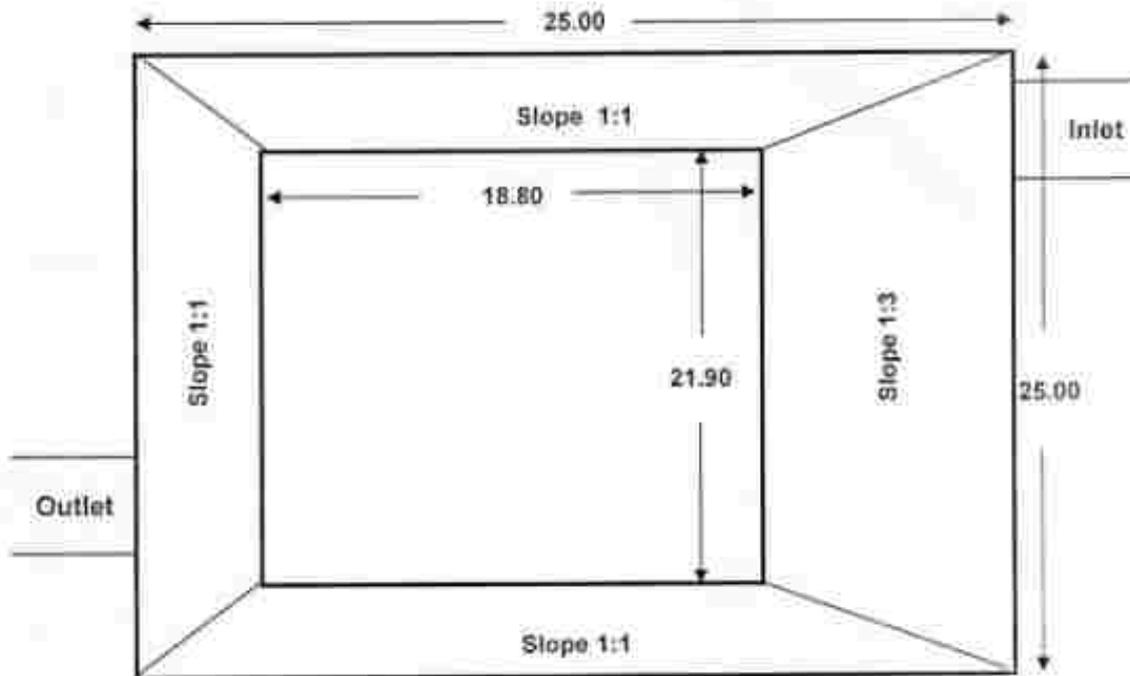
Basic Rate as per S & WC Dept. CSR 2022-23 (Item 27)	Rs.	12.60 /BHP Hr
Add 10 % for Notified Hilly area		1.26
<b>Total</b>	<b>Rs.</b>	<b>13.86</b>
Add 1% for Labour Cess		0.13
<b>Net Total</b>		<b>13.99</b>
<b>Say</b>	<b>Rs.</b>	<b>14.00 /BHP Hr</b>

frandik  
कार्जत कार्यालय (पु.)

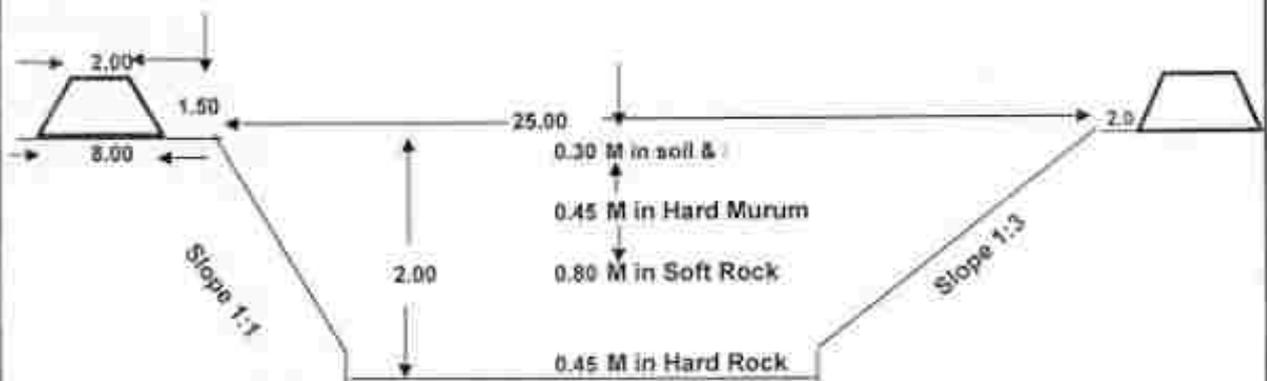
Pranav  
परिवहन एवं वाणिज्य  
कार्जत

Sarav Kulkarni  
Range Forest Officer  
Karjat (west)

Construction of surface forest tank No.01 at Vil:wanjale. Compartment No  
 / sr.no: ~~107~~ 170 Tal: Karjat. Dist: Raigad.



PLAN OF VENTALAV



SECTION OF VANTALAV

*frandix*  
 वनरक्षक कार्यालय (प.)

*Jhant*  
 ग्रामिण वन अधिकारी  
 कार्यालय

*Santosh K. Kulkarni*  
 Range Forest Officer  
 Karjat (west)

## ESTIMATE

DIVISION: Alibag Forest Division Alibag

RANGE Range Forest Officer, Karjat (west)

FUND HEAD :

The Estimate is prepared in the office of the Deputy Conservator of Forest Division, Alibag for the probable expenses incurred in the

Construction of surface forest tank No.02 at Vil:wanjale. Compartment No / sr.no:  
170 Tal: Karjat. Dist: Raigad.

Estimated cost: Rs. 398,000

Estimate is prepared by Range Forest Officer Karjat (west)

Estimate is checked by

Specifications: Entire work is to be carried out as per standard specifications of the P.W.D. Hand book Vol.I & II latest Edition.

Certification: 1. Rates adopted are as per CSR of Soil Water Conservation Department for the year 2022-2023  
2. All calculations have been checked 100% arithmetically.  
3. This Site is under Notified Hilly Area.

Mandik  
अनुराधा कर्जत (प.)

Srinivas K. D. K.  
Range Forest Officer  
Karjat (west)

Rehul Patil  
(Rehul Patil, IFS)  
Deputy Conservator of Forest,  
Alibag Forest Division, Alibag

Construction of surface forest tank No.02 at Vil:wanjale, Compartment No /  
sr.no: ~~107~~ Tal: Karjat. Dist: Raigad.

170  
RECAPUTILATION SHEET

[A] <u>Subestimate 1</u>			
Total cost of Work Portion	Rs.		323,450.00
[B] Add 4% Contingencies on:	Rs.		12,938.00
[C] Add 1% Labour Insurance	Rs.		3,235.00
F) Add 18% for GST			58,221.00
		Net Total	397,844.00
		Say. Rs.	398,000.00

franchise  
मालिक अर्जा (U)

phamon  
शिवराव वन अधिकारी  
कार्जत

Sonasekhardekar  
Range Forest Officer  
Karjat (west)

Technical Sanction for 01/2015-2016  
Rs. 398000  
(In Words)  
three lakh ninety eight  
thousand rupees only  
Vide no. For 20 4524

**Construction of surface forest tank No.02 at Vil:wanjale. Compartment No  
/ sr.no: 107 Tal: Karjat. Dist: Raigad.**

**ABSTRACT SHEET**

Quantity	Item of work	Rate	Per	Amount
2025.00	Item No:1:Clearing and removing grass bushes and shrubs etc stacking the stuffs upto a lead of 15m and lift 1.50m. (Item No:104)	4.70	Sqm	9,517.50
261.544	Item No :2:Excavation in all kinds of soil including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment , filter drains / catch water drains etc .. and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials machinery, labour, dressing bed and sides to required level and profile etc . complete with lead up to 15 m and all lifts as directed. (CSR Item No:1)	42.00	Cum	10,984.85
163.530	Item No :3: Excavation in hard murum including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment , filter drains / catch water drains etc .. and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials machinery, labour, dressing bed and sides to required level and profile etc ., complete with lead up to 15 m and all lifts as directed. (CSR Item No:2)	54.30	Cum	8,879.68
458.520	Item No :4: Excavation in soft rock without blasting including boulders up to 0.6 m diameter ( 0.113 cum) for canal, seating of embankment, filter drain / catch water drains etc .., and placing the excavated soft rock neatly in dump area or for formation of service road including cost of all materials machinery, labour, dressing bed and sides to required level and profile etc . complete with lead up to 15 m and all lifts as directed.(CSR Item No:3)	70.60	Cum	32,371.51
196.560	Item No: 5: Excavation in hard rock of all toughness by breaker including boulders above 0.6 m dia.(0.113Cum) minimizing damage to side slopes of excavation and placing the excavated rock neatly in approved dump area including cost of all materials, machinery, labour, leveling bed etc .. complete with lead up to 15 m and all lifts as directed (CSR Item No:6A)	577.90	Cum	113,592.02

816.000	Item No :6:Providing hearing embankment using selected impervious material available directly from excavation in layers including cost of all materials machinery, labour, all other operations such as collection of material , spreading soil in layer of specified thickness , sorting out , breaking clods , leveling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using vibratory compactor including cost of water etc. complete with lead up to 1 km and all lifts as directed (CSR Item No: 10&11)	84.80	Cum	69,196.80
13.530	Item No :7:- Providing and constructing longitudinal and cross graded filter drains using sand and 20mm down approved clean, hard, graded aggregates and rubble satisfying specified filter criteria in layers of specified thickness including cost of all materials machinery, labour, laying to required slopes compaction etc., complete as per specifications and approved drawings with all leads and lifts (CSR Item No:18A)	1495.70	Cum	20,236.82
123.300	Item No :8:- Providing and constructing 300 mm thick dry rubble stone pitching with pin headers at 2 per sqm using stones and stone chips from approved source including cost of all materials labour, hand packing / wedging stone chips finishing etc complete with lead up to 50 m and all lifts as directed. (CSR Item No:15)	462.20	Sqm	58,969.26
120.000	Item No :9: Dewatering by pumping out water collected with 10 to 19 HP Diesel & Electrical pumps including cost of all materials , machinery, labour, providing sump and all other ancillary operations whenever necessary etc . complete under specific and indispensable circumstances with prior approval from competent authority with authentic evidence of records justifying dewatering etc complete as directed.(CSR Item No:20)	14.00	BHP Hrs	1,660.00

Total  
Say

Rs: 323,448.42  
Rs: 323,450.00

*Prandik*  
अवकाश कार्यालय (प)

*Pranav*  
अवकाश कार्यालय  
अवकाश

*Suresh Chaudhary*  
Range Forest Officer  
Karjat (west)

**Construction of surface forest tank No.02 at Vil:wanjale. Compartment  
No / sr.no: ~~107~~ Tal: Karjat. Dist: Raigad.**

**Measurement Sheet**

**Item No:1:** Clearing and removing grass bushes and shrubs etc stacking the stuffs upto a lead of 15m and lift 1.50m. (Item No:168)

$$1 \times 45.00 \times 45.00 = 2025.00 \text{ Sqm}$$

**Item No:2:** Excavation in all kinds of soil including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed. (CSR Item No:1A)

Top Area	=	25.00	X	25.00	=	625.00	Sqm
Bottom Area	=	24.40	X	23.40	=	566.28	Sqm
Mean Area					=	595.64	Sqm
Depth of Excavation in Soil					=	0.400	M
Quantity of Excavation					=	238.256	Cum
For Inlet	1 X	8.00	X	1.80	X	0.75	= 10.800
For Outlet	1 X	9.00	X	1.85	X	0.75	= 12.488
<b>Total</b>					<b>=</b>	<b>261.544</b>	<b>Cum</b>

**Item No:3:** Excavation in hard murum including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed. (CSR Item No:2A)

Top Area	=	24.20	X	23.40	=	566.28	Sqm
Bottom Area	=	23.60	X	22.20	=	523.92	Sqm
Mean Area					=	545.10	Sqm
Depth of Excavation in Hard murum Boulders					=	0.300	M
Quantity of Excavation					=	163.530	Cum

**Item No:4:** Excavation in soft rock without blasting including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drain / catch water drains etc., and placing the excavated soft rock neatly in dump area or for formation of service road including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed. (CSR Item No:3A)

Top Area	=	23.60	X	22.20	=	523.92	Sqm
Bottom Area	=	21.80	X	18.20	=	396.76	Sqm
Mean Area					=	460.34	Sqm
Depth of Excavation in Soft Rock					=	1.000	M
Quantity of Excavation					=	460.340	Cum

**Item No: 5:** Excavation in hard rock of all toughness by breaker including boulders above 0.6 m dia (2.113Cum) minimizing damage to side slopes of excavation and placing the excavated rock neatly in approved dump area including cost of all materials, machinery, labour, leveling bed etc. complete with lead up to 15 m and all lifts as directed (CSR Item No.6A)

$$1 \times 21.60 \times 18.20 \times 0.50 = 196.560 \text{ Cum}$$

**Item No :6:** Providing hearing embankment using selected impervious material available directly from excavation in layers including cost of all materials, machinery, labour, all other operations such as collection of material, spreading soil in layer of specified thickness, sorting out, breaking clods, leveling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using vibratory compactor including cost of water etc. complete with lead up to 1 km and all lifts as directed. (CSR Item No: 15)

$$2 \times 34.00 \times \frac{5.00 + 1.00}{2} \times 2.00 = 408.00$$

$$2 \times 34.00 \times \frac{5.00 + 1.00}{2} \times 2.00 = 408.00$$

$$\text{Total} = 816.00$$

**Item No.7:-** Providing and constructing longitudinal and cross graded filter drains using sand and 20mm down approved clean, hard, graded aggregates and rubble satisfying specified filter criteria in layers of specified thickness including cost of all materials, machinery, labour, laying to required slopes, compaction etc., complete as per specifications and approved drawings with all leads and lifts (CSR Item No.24)

Inlet	1	X	8.00	X	1.30	X	0.60	=	6.240 Cum
Outlet	1	X	9.00	X	1.35	X	0.60	=	7.290 Cum
								<b>Total</b>	<b>= 13.530 Cum</b>

**Item No.8:-** Providing and constructing 300 mm thick dry rubble stone pitching with pin headers at 2 per sqm using stones and stone chips from approved source including cost of all materials, labour, hand packing / wedging stone chips, finishing etc complete with lead up to 50 m and all lifts as directed. (CSR Item No.21)

$$3.00 \times \frac{18.20 \times 21.20}{2} \times 1.50 = 88.65$$

$$1.00 \times \frac{21.60 \times 24.60}{2} \times 1.50 = 34.65$$

$$\text{Total} = 123.00$$

**Item No:9:** Dewatering by pumping out water collected with 10 to 19 HP Diesel & Electrical pumps including cost of all materials, machinery, labour, providing sump and all other ancillary operations whenever necessary etc. complete under specific and indispensable circumstances with prior approval from competent authority with authentic evidence of records justifying dewatering etc. complete as directed (CSR Item No:27)

5	HP Engine	4 Days	6 Hrs	120.00 Bhp Hrs
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**Construction of surface forest tank No.02 at Vil:wanjale. Compartment No / sr.no: 170**  
**Tal: Karjat. Dist: Raigad.**

**RATE ANALYSIS**

Item No:1: Clearing and removing grass bushes and shrubs etc stacking the stuffs upto a lead of 15m and lift 1.50m. (Item No:168)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item : 168) Rs. 4.20  
 Add 10 % for Notified Hilly area 0.42

Total Rs: 4.62

Add 1% for Labour Cess 0.04

Net Total 4.66

Say Rs. 4.70 /sqm

Item No:2: Excavation in all kinds of soil including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed. (CSR Item No:1A)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item :1a) Rs. 37.80  
 Add 10 % for Notified Hilly area 3.78

Total Rs. 41.58

Add 1% for Labour Cess 0.38

Net Total 41.96

Say Rs. 42.00 /Cum

Item No:3: Excavation in hard murum including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed. (CSR Item No:2A)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item :2a) Rs. 49.90 /cum  
 Add 10 % for Notified Hilly area 4.89

Total Rs: 53.79

Add 1% for Labour Cess 0.49

Net Total 54.28

Say Rs. 54.30 /Cum

Item No:4: Excavation in soft rock without blasting including boulders up to 0.6 m diameter ( 0.113 cum) for canal, seating of embankment, filter drain / catch water drains etc., and placing the excavated soft rock neatly in dump area or for formation of service road including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed.(CSR Item No:3A)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item :3a) Rs. 63.60 /cum  
 Add 10 % for Notified Hilly area 6.36

Total Rs: 69.96

Add 1% for Labour Cess 0.64

Net Total 70.60

Say Rs. 70.60 /Cum

Item No:5: Excavation in hard rock of all toughness by breaker including boulders above 0.6 m dia.(0.113Cum) minimizing damage to side slopes of excavation and placing the excavated rock neatly in approved dump area including cost of all materials, machinery, labour, leveling bed etc., complete with lead up to 15 m and all lifts as directed (CSR Item No:6A)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item :6a) Rs. 520.60 /cum  
 Add 10 % for Notified Hilly area 52.06

Total Rs: 572.66

Add 1% for Labour Cess 5.21

Net Total 577.87

Say Rs. 577.90 /Cum

Item No:6 Providing hearing embankment using selected impervious material available directly from excavation in layers including cost of all materials , machinery, labour, all other operations such as collection of material , spreading soil in layer of specified thickness , sorting out , breaking clods , leveling, sectioning edges / sides, watering, compacting each layer to density control of not less than 85 percent or as stipulated using vibratory compactor including cost of water etc . complete with lead up to 1 km and all lifts as directed.(CSR Item No: 15)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item : 15)	Rs.	76.40 /cum
Add 10 % for Notified Hilly area		7.64
<b>Total</b>	<b>Rs.</b>	<b>84.04</b>
Add 1% for Labour Cess		0.76
<b>Net Total</b>		<b>84.80</b>
<b>Say</b>	<b>Rs.</b>	<b>84.80 /Cum</b>

Item No. 7.- Providing and constructing longitudinal and cross graded filter drains using sand and 20mm down approved clean , hard, graded aggregates and rubble satisfying specified filter criteria in layers of specified thickness including cost of all materials , machinery, labour, laying to required slopes, compaction etc., complete as per specifications and approved drawings with all leads and lifts (CSR Item No:24)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item : 24)	Rs.	1347.45 /cum
Add 10 % for Notified Hilly area		134.75
<b>Total</b>	<b>Rs.</b>	<b>1482.20</b>
Add 1% for Labour Cess		13.47
<b>Net Total</b>		<b>1495.67</b>
<b>Say</b>	<b>Rs.</b>	<b>1495.70 /Cum</b>

Item No. 8.- Providing and constructing 300 mm thick dry rubble stone pitching with pin headers at 2 per sqm using stones and stone chips from approved source including cost of all materials , labour, hand packing / wedging stone chips , finishing etc complete with lead up to 50 m and all lifts as directed. (CSR Item No:21)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item :21)	Rs.	301.85 /cum
Add lead Charges for 15 KM (0.42X289.04)	Rs.	115.62
	Rs.	417.47
Add 10 % for Notified Hilly area		41.75
<b>Total</b>	<b>Rs.</b>	<b>459.22</b>
Add 1% for Labour Cess		3.02
<b>Net Total</b>		<b>462.24</b>
<b>Say</b>	<b>Rs.</b>	<b>462.20 /Cum</b>

Item No:9) Dewatering by pumping out water collected with 10 to 19 HP Diesel & Electrical pumps including cost of all materials , machinery, labour, providing sump and all other ancillary operations whenever necessary etc . complete under specific and indispensable circumstances with prior approval from competent authority with authentic evidence of records justifying dewatering etc complete as directed.(CSR Item No:27)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item :27)	Rs.	12.60 /BHP Hr
Add 10 % for Notified Hilly area		1.26
<b>Total</b>	<b>Rs.</b>	<b>13.86</b>
Add 1% for Labour Cess		0.13
<b>Net Total</b>		<b>13.99</b>
<b>Say</b>	<b>Rs.</b>	<b>14.00 /BHP Hr</b>

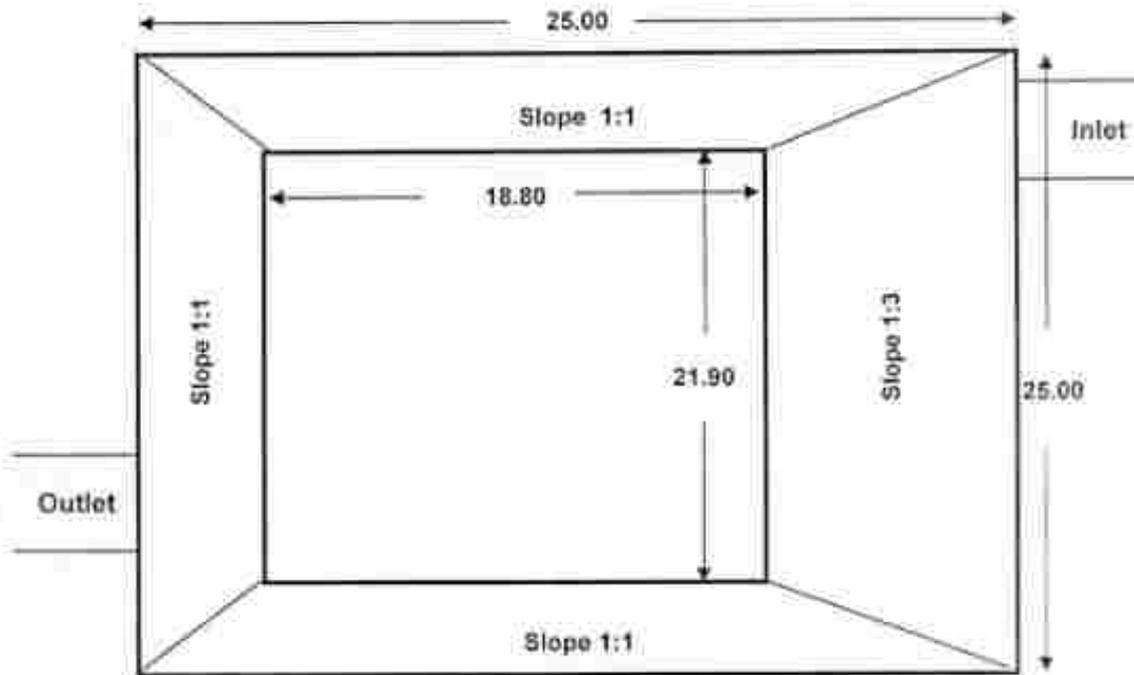
*frandive*  
कारजा (G)

*Sham*  
रिजिस्ट्रार कारजा

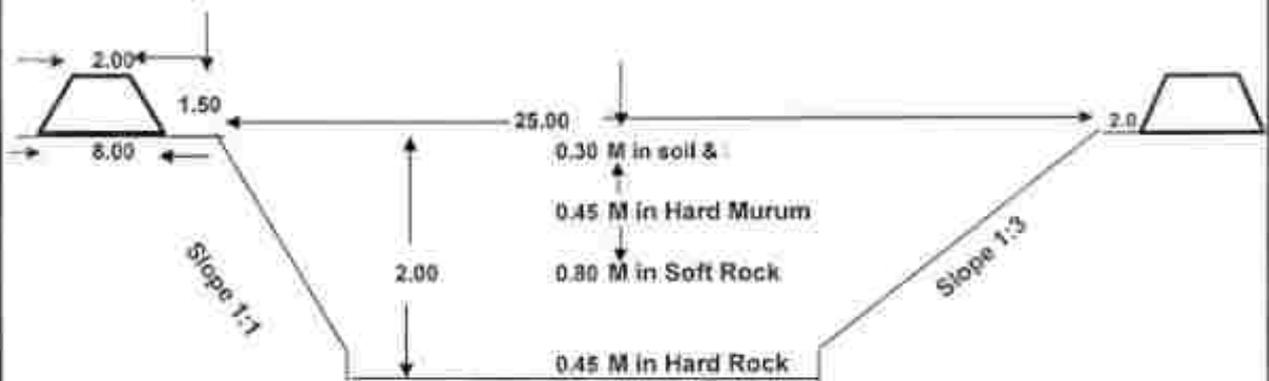
*Suresh Deokar*  
Range Forest Officer  
Karjat (west)

Construction of surface forest tank No.02 at Vil:wanjale. Compartment No / sr.no: ~~107~~ Tal: Karjat. Dist: Raigad.

170



PLAN OF VENTALAV



SECTION OF VANTALAV

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 अशोक बाबा (G)

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 पवित्रराव वन अधिकारी  
 कार्जत

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 Range Forest Officer  
 Karjat (west)

## ESTIMATE

DIVISION: Alibag Forest Division Alibag

RANGE: Range Forest Officer, Karjat (west)

FUND HEAD :

The Estimate is prepared in the office of the Deputy Conservator of Forest Division, Alibag for the probable expenses incurred in the Construction of surface forest tank No.03 at Vil:wanjale. Compartment No / sr.no: 170 103 Tal: Karjat. Dist: Raigad.

Estimated cost: Rs. 398,000

Estimate is prepared by Range Forest Officer Karjat (west)

Estimate is checked by

Specifications: Entire work is to be carried out as per standard specifications of the P.W.D. Hand book Vol.I & II latest Edition.

Certification: 1. Rates adopted are as per CSR of Soil Water Conservation Department for the year 2022-2023  
2. All calculations have been checked 100% arithmetically.  
3. This Site is under Notified Hilly Area.

Shri  
श्रीमंजळ वन अधिकाारी  
कराज

Suresh Kulkarni  
Range Forest Officer  
Karjat (west)

Pranav  
वास्तुकार कराज (प.)

Rahul Patil  
(Rahul Patil, IFS)  
Deputy Conservator of Forest,  
Alibag Forest Division, Alibag

Construction of surface forest tank No.03 at Vil:wanjale. Compartment No /  
sr.no: ~~167~~ 170 Tal: Karjat. Dist: Raigad.

RECAPUTILATION SHEET

[A]	<u>Subestimate 1</u>		
	Total cost of Work Portion	Rs.	323,450.00
[B]	Add 4% Contingencies on	Rs.	12,938.00
[C]	Add 1% Labour Insurance	Rs.	3,235.00
F)	Add 18% for GST		58,221.00
		Net Total	397,844.00
		Say. Rs.	398,000.00

frandiu  
नगरपालिका कार्यालय

Pharvin  
कार्यालय नगरपालिका  
कार्यालय

Sarvesh Kulkarni  
Range Forest Officer,  
Karjat (west)

Technical Sanction for 02/02/2025
Rs. 398000/-
(in Words) three lakh ninety eight thousand rupees only
Vide no. For 20-

Construction of surface forest tank No.03 at Vil:wanjale. Compartment No

/ sr.no: ~~107~~ Tal: Karjat. Dist: Raigad.

17<sup>0</sup> ABSTRACT SHEET

Quantity	Item of work	Rate	Per	Amount
2025.00	Item No :1:Clearing and removing grass bushes and shrubs etc stacking the stuffs upto a lead of 15m and lift 1.50m. (Item No: 104)	4.70	Sqm	9,517.50
261.544	Item No :2:Excavation in all kinds of soil including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials machinery, labour, dressing bed and sides to required level and profile etc. complete with lead up to 15 m and all lifts as directed. (CSR Item No:1)	42.00	Cum	10,984.85
163.530	Item No :3: Excavation in hard murum including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed. (CSR Item No:2)	54.30	Cum	8,879.68
458.520	Item No :4: Excavation in soft rock without blasting including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drain / catch water drains etc., and placing the excavated soft rock neatly in dump area or for formation of service road including cost of all materials machinery, labour, dressing bed and sides to required level and profile etc. complete with lead up to 15 m and all lifts as directed.(CSR Item No:3)	70.60	Cum	32,371.51
196.560	Item No: 5: Excavation in hard rock of all toughness by breaker including boulders above 0.6 m dia.(0.113Cum) minimizing damage to side slopes of excavation and placing the excavated rock neatly in approved dump area including cost of all materials, machinery, labour, leveling bed etc complete with lead up to 15 m and all lifts as directed (CSR Item No:6A)	577.90	Cum	113,592.02

816.000	Item No :6.Providing hearing embankment using selected impervious material available directly from excavation in layers including cost of all materials machinery, labour, all other operations such as collection of material , spreading soil in layer of specified thickness , sorting out , breaking clods , leveling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using vibratory compactor including cost of water etc. complete with lead up to 1 km and all lifts as directed. (CSR Item No: 10&11)	84.80	Cum	69,196.80
13.530	Item No :7:- Providing and constructing longitudinal and cross graded filter drains using sand and 20mm down approved clean, hard, graded aggregates and rubble satisfying specified filter criteria in layers of specified thickness including cost of all materials machinery, labour, laying to required slopes compaction etc., complete as per specifications and approved drawings with all leads and lifts (CSR Item No:18A)	1495.70	Cum	20,236.82
123.300	Item No :8:- Providing and constructing 300 mm thick dry rubble stone pitching with pin headers at 2 per sqm using stones and stone chips from approved source including cost of all materials labour, hand packing / wedging stone chips finishing etc complete with lead up to 50 m and all lifts as directed. (CSR Item No:15)	462.20	Sqm	56,989.26
120.000	Item No :9: Dewatering by pumping out water collected with 10 to 19 HP Diesel & Electrical pumps including cost of all materials , machinery, labour, providing sump and all other ancillary operations whenever necessary etc . complete under specific and indispensable circumstances with prior approval from competent authority with authentic evidence of records justifying dewatering etc complete as directed.(CSR Item No:20)	14.00	BHP Hrs	1,680.00

Total  
Say

Rs: 323,448.42  
Rs: 323,450.00

Franchise  
वनस्पति कर्म (प)

Johansen  
सिवाजी वन अधीन  
कार्जत

Sreenivasulu  
Range Forest Officer  
Karjat (west)

**Construction of surface forest tank No.03 at Vil:wanjale. Compartment  
No / sr.no: ~~167~~ Tal: Karjat. Dist: Raigad.**

**Measurement Sheet**

**Item No:1:** Clearing and removing grass bushes and shrubs etc stacking the stuffs upto a lead of 15m and lift 1.50m. (Item No:168)

$$1 \times 45.00 \times 45.00 = 2025.00 \text{ Sqm}$$

**Item No:2:** Excavation in all kinds of soil including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed. (CSR Item No:1A)

Top Area	=	25.00	X	25.00	=	625.00	Sqm
Bottom Area	=	24.40	X	23.40	=	566.28	Sqm
Mean Area	=				=	595.64	Sqm
Depth of Excavation in Soil	=				=	0.400	M
Quantity of Excavation	=				=	238.256	Cum
For Inlet	1 X	8.00	X	1.80	X	0.75	= 10.800
For Outlet	1 X	9.00	X	1.85	X	0.75	= 12.488
<b>Total</b>	=				=	<b>261.544</b>	<b>Cum</b>

**Item No:3:** Excavation in hard murum including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drains / catch water drains etc., and placing the excavated stuff neatly in dump area or for formation of service road / embankment including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed. (CSR Item No:2A)

Top Area	=	24.20	X	23.40	=	566.28	Sqm
Bottom Area	=	23.60	X	22.20	=	523.92	Sqm
Mean Area	=				=	545.10	Sqm
Depth of Excavation in Hard murum Boulders:	=				=	0.300	M
Quantity of Excavation	=				=	163.530	Cum

**Item No:4:** Excavation in soft rock without blasting including boulders up to 0.6 m diameter (0.113 cum) for canal, seating of embankment, filter drain / catch water drains etc., and placing the excavated soft rock neatly in dump area or for formation of service road including cost of all materials, machinery, labour, dressing bed and sides to required level and profile etc., complete with lead up to 15 m and all lifts as directed.(CSR Item No:3A)

Top Area	=	23.60	X	22.20	=	523.92	Sqm
Bottom Area	=	21.60	X	18.20	=	393.12	Sqm
Mean Area	=				=	458.52	Sqm
Depth of Excavation in Soft Rock	=				=	1.000	M
Quantity of Excavation	=				=	458.520	Cum

**Item No: 5:** Excavation in hard rock of all toughness by breaker including boulders above 0.6 m dia (113Cum) minimizing damage to side slopes of excavation and placing the excavated rock neatly in approved dump area including cost of all materials, machinery, labour, leveling bed etc. complete with lead up to 15 m and all lifts as directed (CSR Item No.6A)

$$1 \times 21.60 \times 18.20 \times 0.50 = 196.560 \text{ Cum}$$

**Item No :6:** Providing hearing embankment using selected impervious material available directly from excavation in layers including cost of all materials, machinery, labour, all other operations such as collection of material, spreading soil in layer of specified thickness, sorting out, breaking clods, leveling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using vibratory compactor including cost of water etc complete with lead up to 1 km and all lifts as directed. (CSR Item No: 15)

$$2 \times 34.00 \times \frac{5.00 + 1.00}{2} \times 2.00 = 408.00$$

$$2 \times 34.00 \times \frac{5.00 + 1.00}{2} \times 2.00 = 408.00$$

$$\text{Total} = 816.00$$

**Item No. 7:-** Providing and constructing longitudinal and cross graded filter drains using sand and 20mm down approved clean, hard, graded aggregates and rubble satisfying specified filter criteria in layers of specified thickness including cost of all materials, machinery, labour, laying to required slopes, compaction etc., complete as per specifications and approved drawings with all leads and lifts (CSR Item No:24)

Inlet	1	X	8.00	X	1.30	X	0.60	=	6.240 Cum
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Outlet	1	X	9.00	X	1.35	X	0.60	=	7.290 Cum
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$$\text{Total} = 13.530 \text{ Cum}$$

**Item No.8:-** Providing and constructing 300 mm thick dry rubble stone pitching with pin headers at 2 per sqm using stones and stone chips from approved source including cost of all materials, labour, hand packing / wedging stone chips, finishing etc complete with lead up to 50 m and all lifts as directed. (CSR Item No.21)

$$3.00 \times \frac{18.20 \times 21.20}{2} \times 1.50 = 88.65$$

$$1.00 \times \frac{21.60 \times 24.60}{2} \times 1.50 = 34.65$$

$$\text{Total} = 123.00$$

**Item No:9:** Dewatering by pumping out water collected with 10 to 18 HP Diesel & Electrical pumps including cost of all materials, machinery, labour, providing sump and all other ancillary operations whenever necessary etc. complete under specific and indispensable circumstances with prior approval from competent authority with authentic evidence of records justifying dewatering etc complete as directed. (CSR Item No:27)

5	HP Engine	4 Days	6 Hrs	120.00 Bhp
				Hrs



Item No:6: Providing heaving embankment using selected impervious material available directly from excavation in layers including cost of all materials , machinery, labour, all other operations such as collection of material , spreading soil in layer of specified thickness , sorting out , breaking clods , leveling, sectioning edges / sides, watering, compacting each layer to density control of not less than 95 percent or as stipulated using vibratory compactor including cost of water etc . complete with lead up to 1 km and all lifts as directed.(CSR Item No: 15)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item : 15)	Rs.	76.40 /cum
Add 10 % for Notified Hilly area		7.64
<b>Total</b>	<b>Rs.</b>	<b>84.04</b>
Add 1% for Labour Cess		0.76
<b>Net Total</b>		<b>84.80</b>
<b>Say</b>	<b>Rs.</b>	<b>84.80 /Cum</b>

Item No: 7:- Providing and constructing longitudinal and cross graded filter drains using sand and 20mm down approved clean , hard, graded aggregates and rubble satisfying specified filter criteria in layers of specified thickness including cost of all materials , machinery, labour, laying to required slopes, compaction etc., complete as per specifications and approved drawings with all leads and lifts (CSR Item No:24)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item : 24)	Rs.	1347.45 /cum
Add 10 % for Notified Hilly area		134.75
<b>Total</b>	<b>Rs.</b>	<b>1482.20</b>
Add 1% for Labour Cess		13.47
<b>Net Total</b>		<b>1495.67</b>
<b>Say</b>	<b>Rs.</b>	<b>1495.70 /Cum</b>

Item No:8:- Providing and constructing 300 mm thick dry rubble stone pitching with pin headers at 2 per sqm using stones and stone chips from approved source including cost of all materials , labour, hand packing / wedging stone chips , finishing etc complete with lead up to 50 m and all lifts as directed. (CSR Item No:21)

Basic Rate as per S & WC Dept. CSR 2022-23 (Item :21)	Rs.	301.85 /cum
Add lead Charges for 15 KM (0.42X289.04)	Rs.	115.62
	Rs.	417.47
Add 10 % for Notified Hilly area		41.75
<b>Total</b>	<b>Rs.</b>	<b>459.22</b>
Add 1% for Labour Cess		3.02
<b>Net Total</b>		<b>462.24</b>
<b>Say</b>	<b>Rs.</b>	<b>462.20 /Cum</b>

Item No:9: Dewatering by pumping out water collected with 10 to 19 HP Diesel & Electrical pumps including cost of all materials , machinery, labour, providing sump and all other ancillary operations whenever necessary etc . complete under specific and indispensable circumstances with prior approval from competent authority with authentic evidence of records justifying dewatering etc complete as directed.(CSR Item No:27)

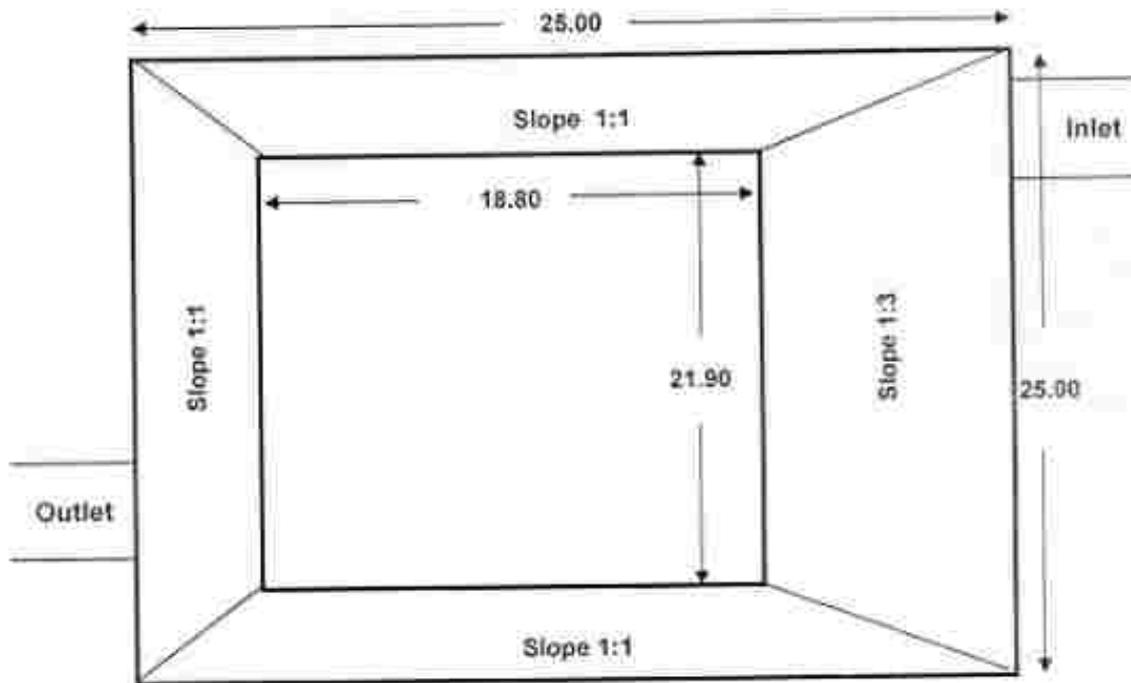
Basic Rate as per S & WC Dept. CSR 2022-23 (Item :27)	Rs.	12.60 /BHP Hr
Add 10 % for Notified Hilly area		1.26
<b>Total</b>	<b>Rs.</b>	<b>13.86</b>
Add 1% for Labour Cess		0.13
<b>Net Total</b>		<b>13.99</b>
<b>Say</b>	<b>Rs.</b>	<b>14.00 /BHP Hr</b>

frandix  
वनरक्षक कार्यालय (प)

Pravin  
सिंचित वन अधिकारी  
करजत

Suresh Chandra  
Range Forest Officer  
Karjat (west)

Construction of surface forest tank No.03 at Vil:wanjale. Compartment No / sr.no: ~~107~~ Tal: Karjat. Dist: Raigad.  
170



PLAN OF VENTALAV



SECTION OF VENTALAV

*Anandhu*  
कार्जत कर्मचारी (स.)

*शंभु*  
रिजिस्ट्रार वन अधिकारी  
कार्जत

*Suresh Kedar*  
Range Forest Officer  
Karjat (west)



# परिक्षेत्र वनअधिकारी कर्जत प.यांचे कार्यालय

मु.पो.ता.कर्जत, जि. रायगड, पिन नं. ४१० २०१, दुरध्वनी क्र. ०२१४८-२२२ १२२



पत्र

विषय :- वनजमिन रायगड. पनवेल ते कर्जत उपनगरीय कॉरीडॉरसाठी भुसंपादन (रेल्वे मार्गाचे दुहेरीकरणसाठी) क्षेत्र 9.1321 हेक्टर.

जा.क्र.अ/20/जमीन/ 224 /2025-26

कर्जत 410 201 दि. 10 /06/2025

प्रति,

✓ मा. उपवनसंरक्षक  
अलिबाग, वनविभाग  
अलिबाग

संदर्भ :- आपल्याकडील पत्र क्र. ब/20/जमीन/व.सं/33/2024-25 दि.02/04/2025 अन्वये.

महोदय,

उपरोक्त विषयानुसार पनवेल ते कर्जत उपनगरीय कॉरीडॉरसाठी भुसंपादन (रेल्वेमार्गाचे दुहेरीकरणसाठी वन्यजीव आराखड्यांच्या संबंधित प्रकल्प यंत्रणेचे पत्र देणे बाबत रेल्वे प्रशासनाकडे विनंती केली आहे. सदर आराखडयामध्ये 50 ट्रॅप कॅमेरे, 3 वन तलाव (Water Tank), 1 वॉच टॉवर व बोगदयाचा दोन्ही बाजुस 100 मी. चैनलिंग फेन्सींग (470 र.मी.) या कार्यालयाकडील प्रस्ताव तयार करण्यात आला असुन खालील प्रमाणे प्रपत्रात सादर करित आहोत.

अ.क्र.	कामाचे नाव	संख्या	रक्कम
1	Trap Camera	50 नग	2300000
2	Watch Tower	1 नग	932054
3	Chanling & Fencing for Railway Tunnel	230 रिंग	994117
4	Chanling & Fencing for Railway Tunnel	231 रिंग	998440
5	Water Tank	3 नग	1194000
			6418611

वरीलप्रमाणे सदरील प्रस्तावासोबत अंदाजपत्रके मंजुरीकरिता आपणाकडे सविनय सादर करित आहोत. त्या अनुषंगाने आपणाकडुन अंदाजपत्रकास मंजुरी व कामाचे आदेश मिळावे हि आपणांस नम विनंती.

*Sameer Kulkarni*  
(एस.एस.खंडेकर)

परिक्षेत्र वनधिकारी  
कर्जत पश्चिम

प्रतिलिपी - मा. सहा. वनसंरक्षक पनवेल यांचेकडे माहितीसाठी सविनय सादर  
वरील अंदाज पत्रके जोडली आहेत.



मुंबई रेलवे विकास कॉर्पोरेशन लि.  
(भारत सरकार, रेल मंत्रालय का एक सार्वजनिक उपक्रम)

**MUMBAI RAILWAY VIKAS CORPORATION LTD.**  
(A PSU of Govt. of India, Ministry of Railways)

Date: 09/09/2025

No. MRVC/W/LA/PKD/Forest Land

Dy. Conservator of Forest

Alibag, Dist. Raigad

Maharashtra - 402 201

e-Mail: [dycfalibag@mahaforest.gov.in](mailto:dycfalibag@mahaforest.gov.in)

Dear Sir,

**Sub:** Diversion of 9.1321 ha of forest land in favour of Mumbai Railway Vikas Corporation Limited for construction of Panvel-Karjat suburban corridor project (Double Railway Line) in Raigad district in the state of Maharashtra- (Regarding issue of Demand note).

**Ref:** 1. GoI, MoEF&CC, Regional Office, Nagpur's order No. FC-II /MH-156/ 2021 NGP /9777 dated 30.05.2022.

2. MRVC letter No. MRVC/W/LA/PKD/Forest Land letter dated: 19-03-2024

3. APCCF (Wildlife) West Zone Mumbai letter no. ना. क्र. कक्ष-3/जमीन/FCA प्र. क्र. 84/255/2024-25 दिनांक 10.07.2024.

4. PCCF (Wildlife) letter no. कक्ष -23 (2)/व जी /सर्वो/प्र. क्र. १०३/१२९८/२०२४-२५ दिनांक २९.०७.२०२४

5. MRVC Letter No. MRVC/W/LA/PKD/Forest Land dated 04.03.2025

6. Ministry of Environment, Forest & Climate Change under Government of India Letter No. FC11/MH-156/2021-NGP/14320 Dt 04.06.2025.

7. DCF Alibag Letter No. क्र/२०/जमीन/वस/१२४५/२०२५-२६ दिनांक १२.०६.२०२५

With reference to above subject, the compliances regarding wild life management plan as per query raised by DFC ( Alibag) by dated 08.12.2023 based on APCCF (Wildlife) West Zone Mumbai letter dated 17.10.23 has been sent to DCF Alibag vide MRVC;s letter of dated 19.03.2024.

Further, PCCF (wild life) Maharashtra state Mumbai has forwarded copy to APCCF cum central Officer , Maharashtra state Nagpur on 29.07.2024 vide above reference letter of sr. no.4. In this letter it is mentioned that, Project Proponent i.e MRVC has to deposit the amount of 2 % cost for the project alignment passing through forest portion and also have to wild life management plan for specific period of 10 years .

The details of amount for which demand note to be issued.

- I. **Amount Calculation for 2 % cost of Project for forest land 9.1321 hectare.**  
(condition no. VI as mentioned in principal approval)

**Amount Calculation for 2 % cost of Project for forest land 9.1321 hectare**

<i>s. No</i>	<i>Description of item</i>	<i>Item</i>	<i>Amount</i>
1	Detailed Estimated cost of project for 29.60 km	Detailed Estimated Cost of Project	₹ 25,55,99,88,792.00
4	Pvt. Land	less private land acquisition cost paid by MRVC to state authority 57.8	₹ 6,14,00,00,000.00
5	Govt land	Less for Govt land cost paid to authority	₹ 9,00,00,000.00
6	Amount to forest	Amount paid already to forest Stage I compliances	₹ 3,49,14,514.00
7	Utility shifting cost of project Provision		₹ 11,21,35,950.00
		<b>Net cost of project</b>	<b>Rs. 19,18,29,38,328.00</b>

**Total land area required for the project**

1	Railway land available	69.419 hectare
2	Private land	57.16 hectare
3	Govt land	4.407 hectare
4	forest land	9.9321 hectare
	<b>Total Land in hectare of project</b>	<b>140.918 hectare</b>

**Proportional cost of project for Forest land calculations**

<i>S. No.</i>	<i>Land details</i>	<i>Land in hectares</i>
1	Project land	140.9181 hectare
2	Forest land	9.1321 hectare
3	<b>% of forest land in comparative to total land</b>	<b>6.48%</b>
4	Cost of project	₹ 19,18,29,38,328.00
5	Equivalent cost project in forest land for 6.48%	₹ 1,24,30,54,403.65
6	<b>Now 2 % cost of Project to be deposited as per condition</b>	<b>₹ 2,48,61,088.00</b>

**II. Cost of wild life management plan (condition no. VI as mentioned in principal approval)**

<i>s. No</i>	<i>Description of item</i>	<i>Remark</i>	<i>Amount</i>
1	Wild life mitigation measures as per wild life mitigation measures in plan	Estimate received from DCF/Alibag office ( copy attached)	Rs. 64,18,611.00

*[Signature]*

**III. Cost of avenue plantation - (condition no. Xiii as mentioned in principal approval)**

S. No	Description of item	Remark	Amount
1	Cost of avenue plantation	Estimate received from DCF/Alibag office (copy attached)	Rs. 33,07,282.00

**IV. Cost of 25000 seedling of forestry species for 10 years (condition no. Xiv as mentioned in principal approval)**

S. No	Description of item	Remark	Amount
1	Cost of 25000 seedling of forestry species for 10 years	Estimate received from DCF/Alibag office (copy attached)	Rs. 43,33,820.00

**V. Cost of demarcation of pillars for boundary of diverted forest land. (condition no. Xviii as mentioned in principal approval)**

S. No	Description of item	Remark	Amount
1	Cost of demarcation of pillars for boundary of diverted forest land	Estimate received from DCF/Alibag office (copy attached)	Rs. 17,81,656.00

**Total cost I+II+III+IV+V+VI= Rs. 40702457.00**

Hence it is requested to kindly send the demand note for complying the condition as mentioned in the PCCF (Wildlife) letter no. कक -२३ (२)/व जी /सर्वो/प्र. क्र. १०३/१२१८/२०२४-२५ दिनांक २१.०९.२०२४, so that demand note can be sent for verification to nodal officer Nagpur for verification and further amount can be deposited by MRVC to CAMPA fund as suggested to comply the condition as per requirement.

Thanking you.

*K. A. Patil*  
09/09/2025  
(K. A. Patil)  
Dy. CPM-II  
Dy. Chief Project Manager-I  
Maharashtra State

**Copy to**

- Additional Principal Chief Conservator of Forests cum Nodal officer Maharashtra state, Nagpur for information
- CPM V for kind information