



OFFICE OF THE DIVISIONAL FOREST OFFICER, DHENKANAL FOREST DIVISION
Tele Fax No-06762226717, E-mail ld-dfo.dhenkanal@odisha.gov.in

Memo No 3961 4F/Misc/638/2023/dt. 06.5.2023

- To: The Regional Chief Conservator of Forests,
Angul.
- Sub: Proposal for diversion of 11.853 ha. forest land for establishment of industries i.e. Expansion and modernization of existing Integrated Steel Plant at village Kulei under Parjang Tahasil, District-Dhenkanal under Dhenkanal Forest Division by M/s GM Iron and Steel Company Ltd-Compliance regarding.
- Ref: Memo No.6556 dt.03.04.2023 of Conservator of Forests (Nodal) O/o the PCCF & HoFF, Odisha, Bhubaneswar.

On the above mentioned subject under reference, I would furnish the compliance report in point wise as detailed below for favour of kind information and necessary action.

- (i) **The length of the periphery of the identified CA land to the fenced by Iron angle with chain link wire mesh has not been furnished instead hectare wise calculation has been made.**

The length of the periphery of the identified CA land is 2865.020 M as verified by the ORSAC and same has been reflected in the DGPS Map. Accordingly calculation has been made in the CA Scheme against fencing of Iron angle with chain link wire mesh.

- (ii) **Provision of watering to the CA site has not been proposed in the write-up but has been mentioned in the financial outlay. Further, watering model and no. of bore wells to be installed has also not been mentioned.**

Provision of watering to the CA site has been proposed in the write-up of the CA Scheme in serial number-07. In the said serial number- watering model-W-II and 4 nos of Bore wells to be installed has been mentioned.

In this context, the CA Scheme in 04 nos along with DGPS Map are sent here with for favour of your kind perusal and further needful action.

In case of violation, it is pointed out that one Santanu Kumar Bhukta & Anr. has filed a case before the Hon'able NGT (EZ), Bench, Kolkata vide O.A No.45/2022 (EZ) Vs M/s GM Iron & Steel Co. Ltd. & Others. As per direction of the Hon'able NGT the Tahasildar Parjang has dismantled the temple and compound wall and removed the encroachment over an area of 3.237 ha. Forest Land as constructed by the User Agency. In case of other forest land, the same has been reflected in the Site Inspection Report and on violation the User Agency will be liable for penal conditions under FC, Act 1980 and as per existing rules there. Besides, the Tahasildar, Parjang has booked encroachment case vide EN Case No-11/2022-23 and recovered of Rs.1,10,484/- vide receipt No.AAA-5376604 dt.26.05.2022 (Copy enclosed).

This is submitted for favour of kind information and necessary action.

Encl: As Above.

Sumit
6/5/23
Divisional Forest Officer,
Dhenkanal Division

Memo No 3962 /Dt. 06.05.2023 5

Copy submitted to the Conservator of Forests, (Nodal) O/o the Principal Chief Conservator of Forests & HoFF, Odisha, Bhubaneswar for favour of kind information and necessary action with reference to his Memo No.6555/9F(IND)-379/2022 dt.03.04.2023.

Sumit
6/5/23
Divisional Forest Officer,
Dhenkanal Division

Memo No 3963 /Dt. 06.05.2023 5

Copy forwarded to the Chief General Manager (EVN) IDCO Janapatha, Bhubaneswar for information and necessary action.

Sumit
6/5/23
Divisional Forest Officer,
Dhenkanal Division



ସୂଚକ ସଂଖ୍ୟା AAA 5376604

DUE ନିମ୍ନ ପ୍ରଦତ୍ତ ବର୍ଷର
ବିଶେଷକରି ବର୍ଷର ପ୍ରଦତ୍ତ ସାଧନା
କ୍ର.ସଂ. ୨ ମୋଡ. ୨୦୨୨-୨୩ ବର୍ଷ

୧. ପ୍ରକାର ନାମ : M/S. G.M. Iron & Steel Co. - Deepak K u Bhandra
୨. ଶାଖା ନାମ : ଜମିର ପରିମାଣ : ଏକର ୧୨୦୦

ସେବା ବାବଦ ପାତ୍ରଣା	ବଜେୟା	ସମ୍ଭା (ବର୍ଷ)	ମୋଟ ପାତ୍ରଣା
ଭୂମିକର			
ଅନ୍ୟାନ୍ୟ କର (ସେସ)	EN case 100 - 11/2022-23		
ଜଳକର (ବାଧ୍ୟତାମୂଳକ ମୌଳିକ ଜଳକର)	କମ୍ପା ଲେଉଟିମା -		PPD୪୮୪.୦୦
ଜଳକର (ଉଚ୍ଚ ଜଳକର)			
ବନକର			
ବନ୍ଧ			
ସର୍ବମୋଟ			PPD୪୮୪.୦୦



ସେବା ବାବଦ ପାତ୍ରଣା	ବଜେୟା	ସମ୍ଭା (ବର୍ଷ)	ଅନ୍ୟାନ୍ୟ	ମୋଟ ପାତ୍ରଣା
ଭୂମିକର				
ଅନ୍ୟାନ୍ୟ କର (ସେସ)				
ଜଳକର (ବାଧ୍ୟତାମୂଳକ ମୌଳିକ ଜଳକର)				
ଜଳକର (ଉଚ୍ଚ ଜଳକର)				
ବନକର				
ବନ୍ଧ				
ସୂ				
ସର୍ବମୋଟ				PPD୪୮୪.୦୦

୫. ସର୍ବମୋଟ ଦାଖଲ ହେବା (ହେବା ଓ ପରମାରେ) : ୪୮୪.୦୦ ଟଙ୍କା ମଧ୍ୟରେ
୬. ସାହାଯ୍ୟ ଦାଖଲ ହେବା : ୦.୦୦
୭. ତାରିଖ : ୨୫/୦୪/୨୦୨୨

Revenue Inspector
Ganguta Circle



Form XIV - 931 (Revised)

Ench. Case No. 11/2022

ପାରମ୍ପରା 'କ'

ଓଡ଼ିଶା ଜମି ଅନୁଧିକାର ଦଖଲ ନିବାରଣ ଅଧିନିୟମ, 1972 ଧାରା 9 ଅନୁଯାୟୀ ନୋଟିସ

[ନିୟମ 6 (1) ବ୍ରହ୍ମଣ୍ୟ]

ଶ୍ରୀ ... M/s. Iron & Steel Co. Ltd. Deepak K. Nayak ...
 ଠିକଣା ... R. office, Geogatia ...

ଯେହେତୁ ପ୍ରତୀତ ହୋଇଅଛି ଯେ, ଆପଣ ନିମ୍ନ ଅନୁସୂଚୀରେ ଦର୍ଶାଯାଇଥିବା ସରକାରୀ ଜମିକୁ ଅନୁମତି ବିନା ଦଖଲ କରିଅଛନ୍ତି । ଆପଣଙ୍କ ପ୍ରତି ଏତଦ୍ୱାରା ଏହି ଆଦେଶ ହେଉଅଛି ଯେ ଆପଣ ସ୍ୱୟଂ ବା ଆପଣଙ୍କର କ୍ଷମତାପୂର୍ଣ୍ଣ ପ୍ରତିନିଧିଙ୍କ ଜରିଆରେ ତା ୨୫.୧.୨୦୨୨ ରିଖି ୧୦.୧୨.୨୦୨୨ ସମୟରେ ନିମ୍ନ ସ୍ୱାକ୍ଷରକାରୀଙ୍କ ସମ୍ମୁଖରେ ହାଜରହୋଇ ଓଡ଼ିଶା ଜମି ଅନୁଧିକାର ଦଖଲ ନିବାରଣ ଅଧିନିୟମ, 1972 ର ଧାରା 4 ଏବଂ 6 ଅନୁଯାୟୀ କାହିଁକି ଆପଣଙ୍କ ପ୍ରତି କାର୍ଯ୍ୟାନୁଷ୍ଠାନ କରା ନ ଯିବ ତାହାର କାରଣ ଦର୍ଶାଇବେ ।

R. office, Geogatia
 ଅନୁସୂଚୀ

ଗ୍ରାମ, ଥାନା ଓ ଜିଲ୍ଲାର ନାମ	ଖସଡ଼ା ସଂଖ୍ୟା	ବିବରଣୀ	ପଞ୍ଜାରେ ଦରଜ କରାଯାଇଥିବା ମୂତାବକ ଖସଡ଼ାର ସମ୍ବନ୍ଧ ରକ୍ତକା	ଅନୁମତି ବିନା ଦଖଲ କରିଥିବା ଜମିର ପରିମାଣ	ଦଖଲ କରିଥିବା ଜମି ବ୍ୟବହୃତ ହୋଇଛି
1	2	3	4	5	6
R. office, Geogatia	୩୮୨	୪୦୨୩	୦.୨୫	୦.୨୫	
		୪୦୨୨	୦.୮୫	୦.୮୫	
		୪୦୨୪	୧୫.୨୦	୮.୧୦	
		୪୧୦୧	୦.୦୮	୦.୦୮	
		୪୧୦୨	୦.୨୨	୦.୨୨	
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				୧୦.୫୫	

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Tahasildar, Parjang

**SCHEME FOR COMPENSATORY AFFORESTATION
OVER AN AREA OF AC 58.58 OR 23.7064 HECT. IN
AR MODULE (BLOCK PLANTATION) IN THE
VILLAGE JAKA UNDER PARJANG TAHASIL OF
MAHABIROD RANGE IN DHENKANAL FOREST
DIVISION.**

**AGAINST THE FOREST LAND USED BY IDCO
FOR EXPANSION OF EXISTING PLANT OF M/S.
GM IRON & STEEL COMPANY LTD. IN
VILLAGE IN KULEI UNDER PARJANG TAHASIL OF
DHENKANAL DISTRICT.**

**DHENKANAL FOREST DIVISION
DHENKANAL**

CERTIFICATE ON DSS ANALYSIS FOR CA/ACA/PCA

This is certify that DSS Analysis of land identified for CA/ACA/PCA and subsequent ground truthing have been done. The outcome is as mentioned below:

GM IRON & STEEL COMPANY LTD.

Sl. No.	Name of the Range	Name of the Forest Block (RF/PRF/PF/DPF /Revenue Forest)	Area identified for CA/ACA/PCA/ (in Ha.)	Classification of identified land (in Ha.)										Area suitable for plantation (in Ha.)			Plantation Model (AR/ ANR)	Remarks
				Very Dense Forest	Moderately Dense Forest	Open Forest	Non forest	Scrub	Water	Total	Open Forest	Non-Forest	Scrub	Total				
1	Mahabir od	Jaka Revenue Forest	CA	5	6	7	8	9	10	11	12	13	14	15	16	17		
				-	-	23.7064 Ha.	-	-	-	23.7064 Ha.	23.7064 Ha.	-	-	23.7064 Ha.	AR	-		

Countersigned


 Regional Chief Conservator of Forests,
 Angul Circle
Regional Chief Conservator of Forests, Angul Circle.


 Divisional Forest Officer,
 Dhenkanal Forest Division
Divisional Forest Officer Dhenkanal Division

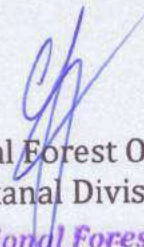
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03	AR (Block Plantation) Plantation @ 1000 Plants per Ha. over an area of 23.7064Ha.	5-12
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05	Surveyed map	Packet

**LAND SUITABILITY CERTIFICATE BY DIVISIONAL FOREST OFFICER,
DHENKANAL (T) DIVISION**

This is to certify that AC 58.58 or 23.7064Ha. land bearing Survey No./Compartment Khata No. 105 (Rakhita), Plot No. 02 of Kissam- Gramya Jungle of village- Jaka of Tahasil Parjang of District Dhenkanal identified for Compensatory Afforestation is suitable for AR Module (Block Plantation @ 1000 Plants per Ha.), from management point of view and is free and all sorts of encumbrances and encroachments as per report of Tahasildar, Parjang (copy enclosed).

Place: Dhenkanal
Date: 20 / 10 / 2022


Divisional Forest Officer
Dhenkanal Division
Divisional Forest Officer
Official Seal Dhenkanal Division

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CERTIFICATE

This is to certify that the degraded Revenue Forest Land as per the enclosed land schedule and map has been identified for compensatory afforestation against diversion of forest land to the extent of 23.7064 Hectares involved in the expansion of plant **M/S. GM IRON & STEEL CO. LTD** and are free from encroachment and will be handed over to Divisional forest officer, Dhenkanal, Odisha for the purpose of compensatory afforestation only.

LAND SCHEDULE

**MOUZA - JAKA
TAHASIL - PARJANG**

SL.NO	KHATA NO.	PLOT NO.	NAME OF TENANT	KISAM	TOTAL AREA IN AC.	AREA TAKEN FOR CA IN AC.
1.	105	02	GOVT. OF ODISHA	GRAMYA JUNGLE	93.50	58.58

[Signature]
27/4/22
**TAHASILDAR
PARJANG**
Tahasildar
Parjang

[Signature]
30/04/2022
FOREST RANGE OFFICER
Mahabirod Range
MAHABIROD RANGE

SCHEME FOR COMPENSATORY AFFORESTATION OVER AN AREA OF AC 58.58 OR 23.7064 HECT. IN AR MODULE (BLOCK PLANTATION) IN THE VILLAGE JAKA UNDER PARJANG TAHASIL OF MAHABIROD RANGE IN DHENKANAL FOREST DIVISION.

Introduction:

The IDCO, Bhubaneswar has submitted a forest diversion proposal to the Divisional Forest Officer, Dhenkanal Forest Division for expansion of existing plant of M/s GM Iron & Steel Company Ltd. in village- Kulei under Parjang Tahasil of Dhenkanal District for diversion of 11.853Ha. of forest land for non-forestry purpose.

Selection of Sites

As a matter of principle and as per guidelines of Forest (Conservation) Act, 1980 much efforts have been exerted to identify non-forest land for the purpose of Compensatory Afforestation. However, as per para 2.3 (iii) of guideline to the Forest (Conservation) Act, due to Kissam- Gramya Jungle, so twice extent of following land against the forest land proposed for diversion has been identified in Parjang Tahasil of Dhenkanal District. Hence, the Compensatory Afforestation Scheme is prepared in AR (Block Plantation) in village- Jaka. The land schedule has been furnished below. The following land is located in Mahabirod Range of Dhenkanal Division.

Tahasil	Village.	Khata No.	Plot No.	Area (in ha)	Kissam.
Parjang	Jaka	105	02	58.58	Gramya Jungle
Total				58.58 Ac or 23.7064 Ha.	

- **Description of the existing vegetation**

The existing vegetation is of miscellaneous type like only bushes.

- **Soil & Topography**

The topography of area is undulating. But the depth of the soil is good being a valley and the existing vegetation indicates the PH value to be above 07, hence the soil is basic.

- **Temperature**

The average temperature varies from 13.5° C minimum in December to 45°C maximum in May.

- **Rainfall**

The annual rainfall varies from 1200 mm to 1500 mm. The maximum rainfall is received during the rainy season from July to September.

- **Objective of the Scheme**

The main objective of the scheme is to re-stock the Gramya Jungle land identified with mostly indigenous species with admixture of fuel wood, small timber, N.T.F.P., medicinal plants, bamboo etc.

It also aims at defining the boundaries of the Gramya Jungle land with Chain Link Fencing and enforcing protection measures of the plantations by involving people around under JFM. It further seeks to dovetail suitable soil conservation measures with the afforestation works, so as to conserve soil and water for enrichment of the eco-system.

- **Item of works to be taken up**

To achieve the above objectives, the following item of works is mainly prescribed to be taken up.

- 1. Survey & Demarcation of boundary**

This work shall be taken up by the User Agency while arranging for advance possession/mutation of the Gramya Jungle land in favour of Forest Department.

The boundary shall be surveyed with reference to the Village map and demarcated by posting RCC pillars of size **1.25m x 20cm x 20cm** which shall be embedded at every corner/turning of boundary line. The pillars shall be embedded 0.625 meter deep in the ground with a foundation of 50 cm x 40 cm. Top of the pillar shall be kept slanting with the lower side facing outer side of the area. Numbering shall be done in the same sequence as done in the map, which should start from the north-western corner and proceed in a clock-wise direction. The demarcation of the land shall be done in presence of the local Revenue Inspector and Range Officer or Forester to avoid future complication. As on date the land is free from encroachment and encumbrance and attempts will be kept in force to keep the land free from encroachment.

- 2. Planting and post-planting**

AR (Block Plantation) Plantation over an area of 23.7064Ha. shall be taken up in blanks with 1000 plants per hect. at a spacing of 2.5m x 2.5m.

- 3. Choice of species**

As far as possible, indigenous species like, Bamboo, Sisoo, Gambhar, Neem, Asana, Arjun, Simaruba, Mango, etc. shall be planted. In areas subjected to heavily grazing incidences, some mix of Chakunda, Simaruba may be given that to on the periphery only.

- 4. Points of importance**

While taking up plantation, the following vital points shall be taken up for consideration.

- All cares be taken to raise healthy seedlings of minimum 2' height. 10% extra of the required stock shall be raised to accommodate casualties both at the nursery stage as well as transportation of seedling to the site for planting. Complete 1 year seedlings shall be used in case of Bamboo, Sisoo, Asan, Arjun, Neem, Simaruba, Gambhari etc.
- Pitting shall invariably be done during February – April, i.e. before onset of monsoon. In hilly areas, pits shall be dug along the contours.
- Planting shall be done on the onset of monsoon and should not be delayed.

- Basal dose of 50 grams of NPK and 10 grams of Aldrin be applied at the time of planting for the growth of the plant and to avoid insect attack respectively.
- Causality replacement, weeding and soil working, application of fertilizer and insecticides shall be taken up as per the provisions in the cost-norm at the proper time.
- Engaging requisite watchers as per norm will be done who shall also take up tracing of inspection path and fire line and maintenance of fence as and when required. A temporary watcher shed be constructed at suitable place for proper upkeep of the plantation and for the watcher to take shelter during rains.
- All out efforts shall be taken to keep the plantation free from grazing, fire and other biotic interference.
- This Plantation shall be maintained for 10 years to achieve the better rate of survivalist.

5. Soil and moisture Conservation Measures

Soil Conservation measure structures like Staggered Trench, Percolation pit, Contour trench, Graded earthen bund, LBCD, Wire mesh LBCD, Sub-surface Dyke & WHS as per the slope & site requirement on LS as per Annexure-II of onetime cost norm in Compensatory Afforestation.

6. Fencing.

To protect the plantation from grazing and other biotic interference, fencing shall be taken up in and around whole area by Angle Iron with Chain Link wire mesh as per Fencing Model- F-II of onetime cost norm in Compensatory Afforestation.

7. Watering.


Watering will be done for five years through Diesel Pump set fitted with Bore Well by adopting Watering Model-W-II. For the purpose, 4 bore wells will be excavated in the plantation site. Accordingly, 4 nos of Diesel Pump sets and other accessories will be procured as per requirement for installation.

8. Monitoring and Evaluation

The scheme shall be executed and monitored by the Divisional Forest Officer, Dhenkanal Division from time to time. To facilitate this, the User Agency shall bear the cost of infrastructure required and shall provide also the infrastructural facilities.

9. Total cost of the Project

The total cost of the project will be **Rs. 2,48,65,000/-**.


Divisional Forest Officer,
Dhenkanal Division
Divisional Forest Officer
Dhenkanal Division

**BASE COST NORM FOR COMPENSATORY AFFORESTATION (BLOCK PLANTATION)
@ 1000 PLANTS PER HECTARE (18 MONTHS OLD SEEDLING)**

WAGE RATE Rs. 311/- PER MANDAY

Sl. No.	Items of work	Preferable period of Execution	No of Men days	Labour Cost (In Rs.)	Material Cost (In Rs.)	Total Cost (In Rs.)
1	2	3	4	5	6	6
0th Year (Advance works) Per-Planting Operation						
1	Survey, Demarcation and Pillar Posting	Nov/Dec	2	622	0	622
2	Preparation of Treatment Map (Digital Map)	Nov/Dec	1	311	100	411
3	Site Preparation (Cleaning & removal of debris)	Nov/Dec	12	3732	0	3732
4	Creation of 4.00 mt. wide Inspection Path	Feb/Mar	1	311	0	311
5	Alignment and stacking of pits	Feb/Mar	1	311	0	311
6	Digging of pits (45 cm × 45 cm × 45 cm) in hard and gravelly soil	Feb/Mar	40	12440	0	12440
7	Construction of Temporary Labour Shed, Drinking Water facility and First-Aid etc.	Jan/Mar	0	0	3500	3500
Total			57	17727	3600	21327
1th Year/Planting Year						
1	Refilling of pits by altering the dugout soil of the pits, application of organic compounds/CDM/FYM & mixing the same properly.	Jun/Jul	7.5	2332.50	5000	73322.50
2	Transportation of 18 months old Polythene bag seedling in hired truck/tractor from the Permanent/Mega nursery to planting site including loading & unloading.	Jul/Aug	0	0	6600	6600
3	Watering Polypot seedling at planting site	Jul/Aug	2	622	0	622
4	Conveyance of polypot seedling on head load from the stacking site to individual dugout pits within the planting site, applying insecticide, fertilizers & planting after scooping the soil with other applied materials & pressing the soil perfectly around the planted seedlings.	Jul/Aug	22.5	6997.50	0	6997.50
5	<u>Cost of Fertilizer & Insecticide</u> (a)NPK/Bio-Fertilizer @ 50 gms/plant as basal dose=50kg@ Rs.30/-per kg=Rs.1500.00 (b)Urea/Vermicompost/Mo Khata/any other fertilizer in two subsequent doses @ Rs.750.00 (c)Insecticide/Bio-pesticide @ 5gms/plant=5kg @ Rs.150/-per kg=Rs.750.00	Jul/Aug	0	0	3000	3000
6	Casualty Replacement @ 10% (100 nos.)	Jul/Aug	2.5	777.5	0	777.5
7	1 st weeding & Manuring	Jul/Sept	12	3732	0	3732
8	2 nd Weeding. Soil working (1mt. diameter around the plants) & Manuring	Oct/Nov	15	4665	0	4665
9	Fire line tracing (2m. wide fire line over 400m long)including maintenance of inspection path	Feb/Mar	3	933	0	933
10	Watch & Ward including watering per requirement	Aug/Mar	12	3732	0	3732
Total			76.50	23791.50	14600.00	38391.50
2nd Year Maintenance						
1	Transportation of 100 seedling from Nursery to plantation site including loading, unloading & conveyance by Tractor @ Rs.6/-per seedling	Jul	0	0	600	600

	Casualty replacement-10%	Jul	2.5	777.5	0	777.5
	Cost of Fertilizer & Insecticide (a) Cost of Insecticide/Bio-Fertilizer @ 5 gms/plant =0.5 kg@ Rs.150/-per kg=Rs.75/- (b)Urea/NPK/Bio-fertilizer/Vermicompost/Mo Khata/any other fertilizer in two subsequent doses @ Rs.2800/-	July/Aug	0	0	2875	2875
4	Weeding (Complete weeding). Manuring & soil working.(1mt. diameter around the plants)	Sep/Oct	15	4665	0	4665
5	Fire line tracing 92m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
6	Watch & Ward including watering as per requirement	Feb/Mar	18	5598	0	5598
7	Maintenance of Temporary Labour Shed. Drinking water facility and First Aid etc.	Feb/Mar	-	0	1000	1000
	Total		38.5	11973.5	4475	16448.5
3rd Year Maintenance						
1	Cost of fertilizer(Urea/NPK/Bio-fertilizer/Vermicompost/Mo Khata/any other fertilizer	July/Aug	0	0	2800	2800
2	Weeding (Complete weeding). Manuring & soil working.(1mt. diameter around the plants)	Sep/Oct	15	4665	0	4665
3	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
4	Watch & Ward including watering as per requirement	Apr/Mar	18	5598	0	5598
5	Maintenance of Temporary Labour Shed. Drinking water facility and First Aid etc.	Apr/Mar	0	0	1000	1000
	Total		36.0	11196	3800	14996
4th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward including maintenance of vegetative fencing	Apr/Mar	18	5598	0	5598
	Total		21	6531	0	6531
5th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward	Apr/Mar	18	5598	0	5598
	Total		21	6531	0	6531
6th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Pruning of branches, Singling out of multiple shoots	Jan/Mar	3	933	0	933
3	Watch & Ward	Apr/Mar	18	5598	0	5598
	Total		24	7464	0	7464
7th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward	Apr/Mar	18	5598	0	5598
	Total		21	6531	0	6531
8th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward	Apr/Mar	18	5598	0	5598
	Total		21	6531	0	6531

9 th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward	Apr/Mar	18	5598	0	5598
Total			21	6531	0	6531
10 th Year Maintenance						
1	Fire line tracing(2m.wide fire line over 400m long) including maintenance of inspection path	Feb/Mar	3	933	0	933
2	Watch & Ward	Apr/Mar	18	5598	0	5598
Total			21	6531	0	6531

Year wise Abstract of cost Norm (showing seedling cost separately)

SL. NO	Year	No of Mendays	Labour Cost (In Rs.)	Material Cost (In Rs.)	Monitoring,Evaluation, Learning, Documentation and Other Contingency (5%) of (4+5)	Cost of Seedlings @ Rs.50.31 pre seedlings	Total Cost (In Rs.)
1	2	3	4	5	6	7	8
1	0 th	57.0	17727.0	3600.0	973.00	0.00	22300.00
2	1 th	76.5	23791.5	14600.0	1918.50	55341.00	95651.00
3	2 th	38.5	11973.5	4475.0	821.50	5031.00	22301.00
4	3 th	36.0	11196.0	3800.0	749.00	0.00	15745.00
5	4 th	21.0	6531.0	0.0	326.00	0.00	6857.00
6	5 th	21.0	6531.0	0.0	326.00	0.00	6857.00
7	6 th	24.0	7464.0	0.0	373.00	0.00	7837.00
8	7 th	21.0	6531.0	0.0	326.00	0.00	6857.00
9	8 th	21.0	6531.0	0.0	326.00	0.00	6857.00
10	9 th	21.0	6531.0	0.0	326.00	0.00	6857.00
11	10 th	21.0	6531.0	0.0	326.00	0.00	6857.00
Total		358.0	111338.0	26475.0	6791.0	60372.0	204976.0

Cost Norms for creation of Compensatory Afforestation with Stabilization of Soil & Conservation of Moisture (1000)			
WAGE RATE Rs.311/-per day			
Sl.No.	Item of Works	Preferable Peroid of Execution	Total Cost
0th Year (Pre-Planting Operation)			
1	Nil		0
1th Year			
2	Soil Conservation measure structures like Staggered Trench, Percolation pit, Contour trench, Graded earthen bund, LBCD. Wire mesh LBCD, Sub surface Dyke & WHS as per the slope & site requirement on LS	Apr/Sept.	20,215
2th Year			
3	Maintenance of SMC structures @ 15 % of initial year cost	Apr/Jul	3,032
3rd Year			
4	Maintenance of SMC structures @ 15 % of initial year cost	Apr/Jul	3,032
4th Year			
5	Maintenance of SMC structures @ 15 % of initial year cost	Apr/Jul	3,032
5th Year			
6	Maintenance of SMC structures @ 15 % of initial year cost	Apr/Jul	3,032
Total			32,343,0

Abstract

Sl. No.	Year	No. Person Days	Labour Cost @ Rs.311/- per day	Material Cost	Total Cost (Rs.)
1	0 th	0.0	0.0	0.0	0.0
2	1 th	0.0	0.0	20,215.00	20,215.00
3	2 th	0.0	0.0	3,032.00	3,032.00
4	3 th	0.0	0.0	3,032.00	3,032.00
5	4 th	0.0	0.0	3,032.00	3,032.00
6	5 th	0.0	0.0	3,032.00	32,343.00
Total		0.00	0.00	32,343.00	32,343.00

Watering Model-W=II		
Watering Provision to CA Plantation		
Diesel pump set with Bore Well (1 pump set+ Bore Well for 5 Ha. Plantation), Wage rate @ Rs.311/- Year of Installation (0th Year)		
1	Cost of Borewell	1,50,000
2	Cost of Diesel pump set 5HP	60,000
3	Diesel pump set & accessories like commander, Pipes, etc.	30,000
4	Water Storage	1,50,000
TOTAL		2,55,000
Cost of Water per plant (2,55,000/5000)=Rs.51/-		51,000
Cost of Water per Ha. =Rs.51,000/-		
1st Year Watering		
1	Recurring expenditure i.e Diesel, Mobil, Engine Oil, etc.for pumping Water-21 × 1000=	21,000
2	Watering 1000 Plants (April-June & Nov-Mar-8 Months) @ 200 plants/MD with 7 days rotation 20 MD× 8 Months=160 MD×311=	31,100
Total		52,100
2st Year Watering		
1	Recurring expenditure i.e. Diesel, Mobil, Engine Oil, etc. for pumping Water-21 × 1000=	21,000
	Maintenance Diesel pump set etc. @ 15 % of the installation cost.	7,650
2	Watering 1000 Plants (April-June & Nov-Mar-8 Months) @ 200 plants/MD with 7 days rotation 20 MD× 8 Months=160 MD×311=	49,760
Total		78,410
3rd Year Watering		
1	Recurring expenditure i.e Diesel, Mobil, Engine Oil, etc. for pumping Water-21 × 1000=	21,000
	Maintenance Diesel pump set etc. @ 15 % of the installation cost.	7,650
2	Watering 1000 Plants (April-June & Nov-Mar-8 Months) @ 200 plants/MD with 7 days rotation 20 MD× 8 Months=160 MD×311=	49,760
Total		78,410
4th Year Watering		
1	Recurring expenditure i.e Diesel, Mobil, Engine Oil, etc.for pumping Water-21 × 1000=	21,000
	Maintenance Diesel pump set etc. @ 15 % of the installation cost.	7,650
2	Watering 1000 Plants (April-June & Nov-Mar-8 Months) @ 200 plants/MD with 7 days rotation 20 MD× 8 Months=160 MD×311=	49,760
Total		78,410
5th Year Watering		
1	Recurring expenditure i.e Diesel, Mobil, Engine Oil, etc. for pumping Water-21 × 1000=	21,000
	Maintenance Diesel pump set etc. @ 15 % of the installation cost.	7,650
2	Watering 1000 Plants (April-June & Nov-Mar-8 Months) @ 200 plants/MD with 7 days rotation 20 MD× 8 Months=160 MD×311=	49,760
Total		87,410

Abstract					
Sl. No	Year	No. Person days	Labour cost @ Rs. 311/-per day	Material Cost	Total Cost (Rs.)
1	0 th Year	0.0	0.00	51000.00	51000.00
2	1 st Year	100.0	31100.00	21000.00	52100.00
3	2 nd Year	160.0	49760.00	28650.00	78410.00
4	3 rd Year	160.0	49760.00	28650.00	78410.00
5	4 th Year	160.0	49760.00	28650.00	78410.00
6	5 th Year	160.0	49760.00	28650.00	78410.00
Total		740.0	230140.00	186600.00	4,16,740.00

Fencing Modal-F-II

Fencing for Compensatory Plantation raised outside the Forest Areas using Angle Iron & Chain Link Wire mesh (250 Rmt/Ha.)						
WAGE RATE Rs.311/-PER DAY						
Sl. No	Item of work	Preferable Period of Execution	Man days	Wages	Material Cost (Rs.)	Total Cost (Rs. Per Ha.)
0th Year (PPO)						
1	Earth work (Excavation of hole) in Hard soil at a distance 3mt. 0.40m × 0.40m × 0.40m= 0.064 × 84= 5.376 cum @Rs.140/cum=Rs.753.		2.42	752.62	0.0	752.6
2	Cement concrete(1:4:8) using 40mm BHG metal 84 × 0.40m × 0.40m × 0.10m= 1.344@3755.94/cum.		0	0	5,047.4	5,047.4
3	Angle Iron poli of size 50mm × 50mm × 6mm of height 2.40mt. 84 × 2.40= 201.60Sqmt. @ 4.50/ kg/ Sqmt.= 907.20kg @ 69.50 per kg.				63,050.0	63,050.0
4	Cement concrete(1:2:4)for fixing the Iron angle pole using 12mm BHG Chip 84×0.40m×0.40m×0.30m=4.032 cum @ 5486.77/cum				22,123.0	22,123.0
5	Cost of Chain link mess using 4mm Dia GI Wire having gap size 50mm×50mm. 250 Rmt.× 2.10mt.= 525sq.mt@331/Sqmt.=Rs.1,73,775				1,73,775.0	1,73,775.0
6	Double cost painting of Iron angle pole over a cost of primer using good quality enamale paint. 84 × 2.10 × 0.20= 35.28 Sqmt. @Rs.108.80 Sqmt.				3,838.0	3,838.0
7	Painting of GI chain link mess 250 × 2.10 × 2=1050/10=105 Sqmt.@ Rs.108.80 Sqmt.				11,424.0	11,424.0
8	Transportation of Chain link mess, Iron angle, Straightening & teeing of chain link mess etc,@ 2% of the total cost.				5,600.0	5,600.0
Total			2.42	752.62	2,84,857.4	2,85,610.0
Rate per running mt. 2,85,610/250=Rs.1142/Rmt						
1th Year Maintenance						
1	No Maintenance is required	Sept./Oct	0	0	0	0
2nd Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. 1142 ×1%=11.42 say Rs.11	Sept./Oct	0	0	11000	11000
3rd Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. 1142 ×1%=11.42 say Rs.11	Sept./Oct	0	0	11000	11000
4th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. 1142 ×1%=11.42 say Rs.11	Sept./Oct	0	0	11000	11000

5 th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000
6th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000
7th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000
8th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000
9th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000
10th Year Maintenance						
1	Maintenance od wire mess fence @ 1% per running mt. cost of installation in 1 st yr. $1142 \times 1\% = 11.42$ say Rs.11	Sept./Oct	0	0	11000	11000

Abstract

Sl. No.	Year	No. Person days	Labour cost @ Rs. 311/-per day	Material Cost	Total Cost (Rs.)
1	0 th Year	2.42	752.62	284857.4	285610.0
2	1 st Year	0.0	0.0	0.0	0.0
3	2 nd Year	0.0	0.0	11000.0	11000.0
4	3 rd Year	0.0	0.0	11000.0	11000.0
5	4 th Year	0.0	0.0	11000.0	11000.0
6	5 th Year	0.0	0.0	11000.0	11000.0
7	6 th Year	0.0	0.0	11000.0	11000.0
8	7 st Year	0.0	0.0	11000.0	11000.0
9	8 nd Year	0.0	0.0	11000.0	11000.0
10	9 rd Year	0.0	0.0	11000.0	11000.0
11	10 th Year	0.0	0.0	11000.0	11000.0
Total		2.42	752.62	383857.4	3,84,610.0

Matrix for Model-I A Conventional CA Plantation (AR) 1000 PLANTS PER Ha.

Year→	2023-24 (Pre-Plantation Operation)	2024-25 (1 st Year Creation)	2025-26 (2 nd Year) Maintenance	2026-27 (3 rd Year) Maintenance	2027-28 (4 th Year) Maintenance	2028-29 (5 th Year) Maintenance	2029-30 (6 th Year) Maintenance	2030-31 (7 th Year) Maintenance	2031-32 (8 th Year) Maintenance	3032-33 (9 th Year) Maintenance	2033-34 (10 th Year) Maintenance	Total per Ha.
Cost of Plantation per Ha.	24586	110729	27105	20094	9190	9648	11578	10637	11170	11727	12313	258777

Matrix for (SMC)

Year→	2023-24 (Pre-Plantation Operation)	2024-25 (1 st Year Creation)	2025-26 (2 nd Year) Maintenance	2026-27 (3 rd Year) Maintenance	2027-28 (4 th Year) Maintenance	2028-29 (5 th Year) Maintenance	Total per Ha.
Cost of SMC per Ha.	0	23401	3684	3870	4062	4267	39284

Matrix for Fencing Model-F-II (Iron angle with Chain link wire mesh)

Year→	2023-24 (Pre-Plantation Operation)	2024-25 (1 st Year Creation)	2025-26 (2 nd Year) Maintenance	2026-27 (3 rd Year) Maintenance	2027-28 (4 th Year) Maintenance	2028-29 (5 th Year) Maintenance	2029-30 (6 th Year) Maintenance	2030-31 (7 th Year) Maintenance	2031-32 (8 th Year) Maintenance	3032-33 (9 th Year) Maintenance	2033-34 (10 th Year) Maintenance	Total per Ha.
Cost of Fencing per Ha.	314886	0	13369	14040	14741	15478	16251	17065	17918	18813	19755	462316

Matrix for Watering Model-W-II (Diesel Pump set Fitted with Bore well per Ha.

Year →	2023-24 (Pre-Plantation Operation)	2024-25 (1 st Year Creation)	2025-26 (2 nd Year) Maintenance	2026-27 (3 rd Year) Maintenance	2027-28 (4 th Year) Maintenance	2028-29 (5 th Year) Maintenance	Total per Ha.
Cost of Watering per Ha.	56228	60312	95299	100076	105076	110330	527321

Matrix for Fencing Modal-F-II Fencing (Iron angle with Chain link wire mesh)

Gramya Jungle Kissam Land-23.7064 Ha.= 2865.020 Perimeter_MT.

Fencing- 01Ha.=250MT.

Fencing- 01Ha.= Rs. 462316

250MT.= Rs. 462316


01 MT.= Rs. 462316 ÷ 250= Rs.- 1849.26

Gramya Jungle Kissam Land-2865.020 Perimeter_MT.=Rs.1849.26×2865.020=Rs. 52,98,167/-

**TOTAL FINANCIAL OUTLAY OF THE 10 YEARS PLANTATION PROGRAMME WITH
MAINTENANCE ONE TIME COST NORM**

ABSTRACT

Sl. No	Item	Base Cost Per Ha. (Rs.)	Total Cost Per Hectare for 10 years plantation from 2023-24 to 2033-34(Rs.)	Total cost of 23.7064 Ha. from 2023-24 to 2033-34 (Rs.)
1	Block Plantation	2,04,976/-	2,58,777/-	61,34,671/-
2	SMC	32,343/-	39,284/-	9,31,282/-
3	Fencing	3,84,610/-	46,23,16/- 23.7064Ha.= 2865.020_MT.	52,98,167/-
4	Watering	4,16,740/-	5,27,321/-	1,25,00,883/-
Total				2,48,65,003 /- or 2,48,,65,000/-

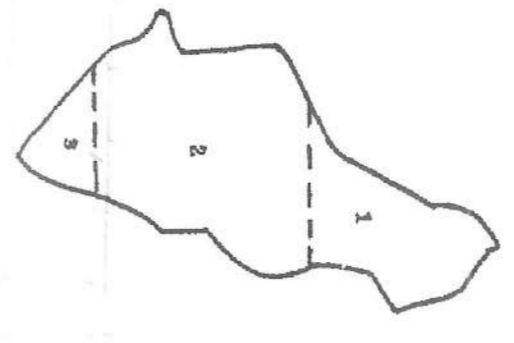

Divisional Forest Officer,
Dhenkanal Division.
Divisional Forest Officer
Dhenkanal Division

DGPS SURVEYED MAP SHOWING IDENTIFIED COMPENSATORY AFFORESTATION LAND AT VILLAGE JAKA OF PARJANG TAHASIL IN LIEU OF FOREST AREA TO BE DIVERTED FOR EXPANSION OF EXISTING PLANT OF M/S GM IRON & STEEL COMPANY LTD.

ଜା-ରଜା, ସିରନୱର

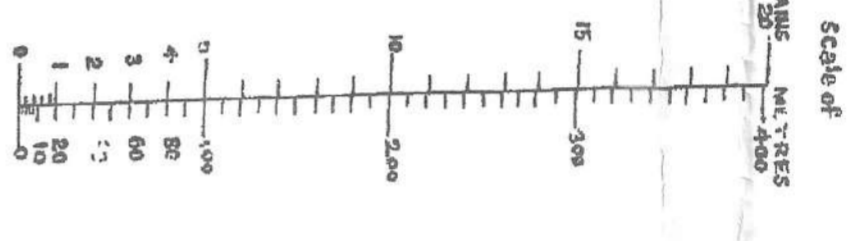
ମାମା - ଚଉକୋଳ ନୂର
ସିଲିକ - କାମାମା ନରୋ ନୂର
ଆକା, SHEET No.1
ପାରଙ୍ଗ - Parjang No.1

ମାପ - ୧ ଇଞ୍ଚକୁ ୧ ମାଇଲ
୧୯୮୨-୮୩ Year 1982-83



Index to sheets

Scale 16 inches to 1 mile



- DGPS Survey of Compensatory Afforestation land in Jaka village, Parjang Tahsil, Dhenkanal district in lieu of forest areas proposed for diversion for expansion of existing Steel Plant of M/s GM Iron & Steel Company Ltd. has been carried out by the user agency through M/s Areal Constructions & Geo-India Services, Cuttack.
- DGPS survey co-ordinates are verified by ORSAC. Also map showing identified Compensatory land is verified with geo-referenced cadastral sheets/surveyed points & compared with ortho rectified Cartosat-1 satellite image and found that maps are correct at a confidence level of 95%.
- All the Compensatory Afforestation land comes Plot No. 2(Part), Jaka Village, Parjang Tahsil, Dhenkanal district.
- Total Compensatory Afforestation area works out to 23.778Ha. Revenue forest from the submitted ship files against the allotted area of 23.707Ha.(converted)/58.58Ac. as per submitted land record.



Sub-Divisional Officer, General Manager (Genl)
IDCO, BBSR

Divisional Engineer
IDCO, BBSR

Sub-Divisional Officer
IDCO, BBSR

Sub-Divisional Officer
IDCO, BBSR

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IDCO, BBSR

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IDCO, BBSR

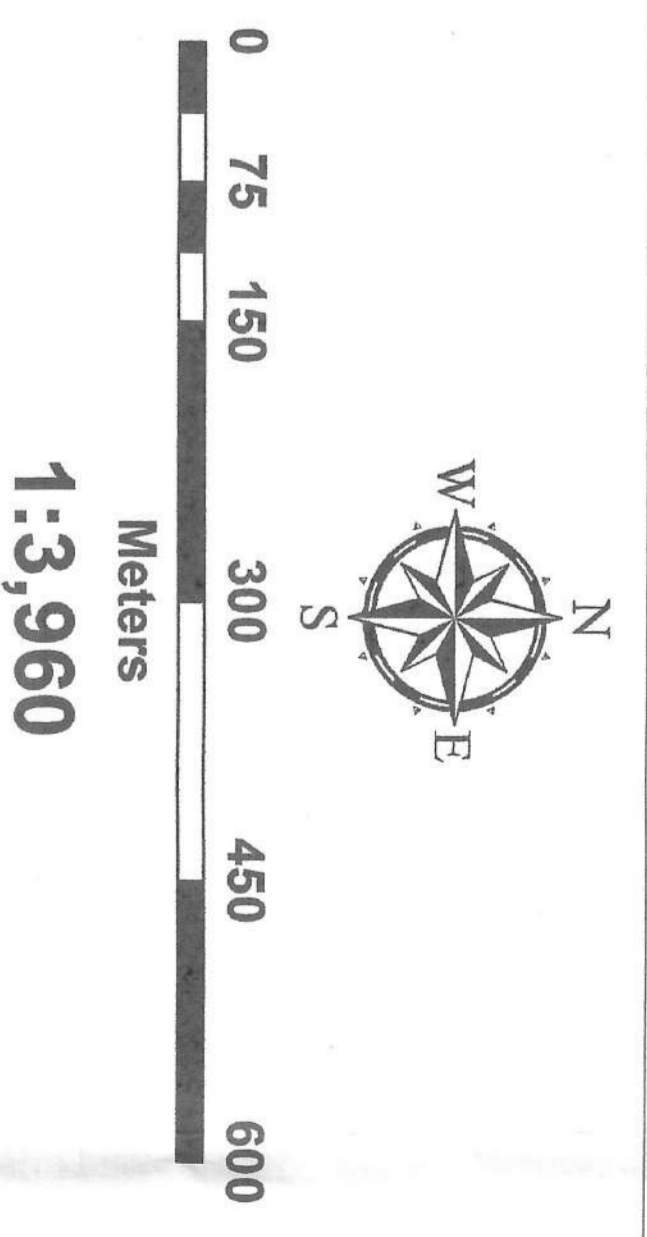
Sub-Divisional Officer
IDCO, BBSR

Sub-Divisional Officer
IDCO, BBSR



Certified that this map has been finally framed a copy of it has been finally published in accordance with the read with rule 60 of O.S. & S. Rules on 2nd February 1983.

Settlement Officer



1:3,960
Meters

- Legend
- DGPS SURVEYED GEO-REFERENCE POINTS
 - DGPS SURVEYED CA LAND BOUNDARY PILLAR POINTS
 - COMPENSATORY AFFORESTATION LAND

DGPS SURVEYED POINTS USED FOR GEO-REFERENCING

SL.NO. POINT ID	LONGITUDE	LATITUDE	EASTING	NORTHING
1 3gp	85°10'31.05075"	21°04'00.66129"	310420.89	2330631.556
2 4gp	85°10'51.99724"	21°04'00.21277"	311025.397	2330610.848
3 J-1fb	85°11'02.54813"	21°04'14.20818"	311394.877	2331037.792
4 J-2	85°11'00.49805"	21°03'55.56411"	311269.161	2330465.083
5 J-5	85°10'40.27905"	21°04'20.73421"	310694.345	2332245.836

DGPS SURVEYED CA LAND BOUNDARY COORDINATES

PILLAR ID	LONGITUDE	LATITUDE	EASTING	NORTHING
1	85°10'40.18156"	21°04'23.18721"	310692.393	2331321.308
2	85°10'56.66915"	21°04'23.09595"	311168.29	2331313.064
3	85°10'56.54510"	21°04'28.02225"	311166.439	2331464.61
4	85°11'12.93338"	21°04'27.93785"	311639.466	2331456.623
5	85°11'13.20770"	21°04'25.47229"	311646.522	2331380.706
6	85°11'13.88886"	21°04'23.75870"	311665.584	2331327.782
7	85°11'14.65399"	21°04'21.15172"	311686.7578	2331247.355
8	85°11'06.55714"	21°04'20.97841"	311452.974	2331244.686
9	85°11'06.19675"	21°04'17.17012"	311441.237	2331127.684
10	85°10'53.92974"	21°04'17.45834"	311087.236	2331140.586
11	85°10'54.05761"	21°04'18.37403"	311091.249	2331168.705
12	85°10'47.47485"	21°04'18.61445"	310901.314	2331178.269
13	85°10'47.15046"	21°04'15.05094"	310890.698	2331068.783
14	85°10'38.20165"	21°04'15.09110"	310632.393	2331072.971
15	85°10'38.63416"	21°04'18.20436"	310645.973	2331168.575

AREA STATISTICS

SL.NO. VILLAGE PLOT_NO	KISSAM	ALLOTTED AREA IN AC	ALLOTTED AREA IN HA	MAP AREA IN HA
1 JAKA 2(P)	GRAMVA/JUNGLE	58.58	23.707	23.778

Perimeter of the C.A. land = 2865.020 M.

Sri M. K. Sanabata
Senior Asst. Engineer
Bhubaneswar

SURVEYED & PREPARED BY

AREAL CONSTRUCTIONS & GEO-INDIA SERVICES
BHUBANESWAR