

**Compensary Afforestation Scheme for double degraded area**

Diversion of 22.80 ha. PF land for construction of Road from Pal RTO Hajira Road Palanpur Village or Pal- Palanpur-Bhesan Gauravpath Road to Vankala Jakatnaka Road (Km. 0/0 to 4/0 Km. & 0/0 to 12/0) by Executive Engineer, Road Development Department, Surat Municipal Corporation Surat.

Detailed scheme of Compensatory Afforestation for degraded area 46.00 ha. to be carried out in lieu of 22.80 ha. of Protected forest land to be diverted in Surat district.

**1. Details of degraded land.**

Village	Mandan
Taluka	Mangrol
Range	Vankal
District	Surat
Division	Surat
Block/ Haldari, Compt No.	112 (585) Pt.
Area to be afforested	46.00 Ha.
Working circle	Plantation

**2. Description of Area.**

Soil type	Black & Starey
Topography	Plain
Slope	Medium & Gentle
Whether the area is bearing any root stock of Vegetation	Yes

**3. Name of Plantation Programme:-**

Compensatory Afforestation Scheme for Degraded Area.

**4. Schedule of Plantation Programme:-**

(i)	The Compensatory Afforestation on degraded area would be started by Dy.Conservator of Forest Surat Division as early as possible after the proposal is formally approved.
(ii)	Compensatory Afforestation will be done in 46.00 ha. area. The total afforestation cost will be about Rs.2,51,39,000/- Executive Engineer, Road Development Department, Surat Municipal Corporation has given an undertaking to pay the cost of Compensatory Afforestation as per the prevailing wages (including the price escalation and supervision charges).

**5. Technical Details:-**

Technical details of Compensatory Afforestation are as Follows:

Sr. No.	Details	Specifications																											
a	General Details	The C.A. will be taken under Compensatory Afforestation for double land on degraded Forest Areas. The prevailing wage rate is 307.90 per day.																											
b	Spacement	3 X 3 mtr., 1111 plants per ha.																											
c	Species to be planted (No. of plants per ha.)	<table> <tr> <td>Khair</td><td>200</td><td>70cm</td></tr> <tr> <td>Teak</td><td>300</td><td>90cm</td></tr> <tr> <td>Bamboo</td><td>100</td><td>65cm</td></tr> <tr> <td>Bahedo, Herde, Aritha</td><td>100</td><td>90cm</td></tr> <tr> <td>Haldu, Sadad, Arjun Sadad</td><td>100</td><td>90cm</td></tr> <tr> <td>Bhilamo, Kadayo, Sadad, Tandol etc.</td><td>100</td><td>75cm</td></tr> <tr> <td>Albizzia, Ficus, Jamun, Anjan, Neem, etc.</td><td>100</td><td>75cm</td></tr> <tr> <td>Bordi, Karanj, Khakhro &amp; others</td><td>111</td><td>75cm</td></tr> <tr> <td><b>Total</b></td><td><b>1111</b></td><td></td></tr> </table>	Khair	200	70cm	Teak	300	90cm	Bamboo	100	65cm	Bahedo, Herde, Aritha	100	90cm	Haldu, Sadad, Arjun Sadad	100	90cm	Bhilamo, Kadayo, Sadad, Tandol etc.	100	75cm	Albizzia, Ficus, Jamun, Anjan, Neem, etc.	100	75cm	Bordi, Karanj, Khakhro & others	111	75cm	<b>Total</b>	<b>1111</b>	
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<b>Total</b>	<b>1111</b>																												
d	Nursery Technique	Nine months old polypot raised plants will be planted at the onset of monsoon.																											
e	Site Preparation	The malformed rootstock present in the area will be cutback & the site will be cleaned in the month of Nov-Dec. Alignment & pit digging 45 x 45 x 45 cms. will be carried out in the month of Dec-Jan.																											
f	Plantation Method	Polypot raised plants will be planted during monsoon.																											
g	Soil & Moisture Conservation Works	<p>(i) Pucca structure like Check dam, check wall, retaining wall</p> <p>(ii) Contour trenches 2.00 x 0.45 x 0.30, 300 Nos/ha. will be dug along the contour line. the dug out soil will be heaped on the down ward side. Gully plugging &amp; Nala Banding using The loose stone available in the area will be carried out as per requirement. Seeds of Jatropha, Agave plants ...etc. will be planted during monsoon in the upper side of nala as per suitability.</p>																											
h	Protection Trench	Barbed wire fencing, Seed sowing And planting of cuttings of Ipomea/ Glarcidia along the fence																											

## Model No - 3

### Annexure-4 (1)

**Compensatory Afforestation Scheme for double degradation areas & Non Forest area  
acquired Under FCA Proposals.**

**Daily wages Rs.307.90**

Spacemnts = 3 m x 3 m				
1111 seedling / Ha				
1st year replacement 10 % = 111 seedling /ha				
2nd year replacement 20 % = 111+111 seedling /ha				
3rd year replacement 10 % = 111 seedling /ha				
Total Seedlings = 1333 seedling /ha				
Polypot size : 15 cm x 25 cm x 200				
Item of work	Qty.	Labour	Material	Total
1	2	3	4	5
<b>0 year</b>				
Nursery				
(a) Cost of soil, ,manure, seeds, water, fertililizer, insecticides, implements, rent of lands. Shade, etc. (including 10 % for casualty replacement)	1222	0	1815	1815
(b) labour : Preparation of beds, filling and arranging of bags,showing of seeds, watering shifting, weeding etc.	1222	4442	230	4672
(c ) Seedling cost for casualty replacement in one year old (20%)	222	1404	419	1823
(d) Seedling cost for casualty replacement in two year old (10%)	111	703	209	912
<b>Total</b>		<b>6549</b>	<b>2673</b>	<b>9222</b>
<b>2. Area Development ( Land Preparation )</b>				
(a) Survey, cutback and promotion of root suckers		3337	0	3337
(b) Aligment and digging of pits 0.45 X 0.45 X 0.45	1111@ 6.00	9637	0	9637
<b>Total</b>		<b>12974</b>	<b>0</b>	<b>12974</b>
(a) Natural fertilizer (Neem cake/ Castor cake)	1111 @ 5.00	0	9830	9830
<b>Total</b>		<b>0</b>	<b>9830</b>	<b>9830</b>
<b>3. SMC Works</b>				
(a) Check wall/ retaining wall /checkdem (all pucca only)	L.S.	11856	23535	35391
(b) Contour trench 2 M x 45 Cm x 30 Cm as per Rs.17.00/rmt (300 trench)	600 rmt.	9024	0	9024
<b>Total</b>		<b>20880</b>	<b>23535</b>	<b>44415</b>

<b>4. Protection</b>				
(a) Barbed wire fencing	L.S.	3539	35391	38930
(b) Seed sowing and planting of cuttings of Ipomea/ Glarcidia along the fence		1101	473	1574
<b>Total</b>		<b>4640</b>	<b>35864</b>	<b>40504</b>
<b>Sub Total of 0 year</b>		<b>45043</b>	<b>71901</b>	<b>116944</b>
<b>1st Year</b>				
(a) Maintenance of nursery (April to June)	1222	3407	340	3747
(b) Transport of seedling for plantation	1111	18444	386	18830
(c) Planting with khamna of Min 1 m dia	1111	5744	0	5744
(d) Transport of seedling for casualty replacement	111	199	44	243
(e) 3 weeding cum soil working	1111	23393	0	23393
(f) Support watering 5 times @ 3.25		14314	20539	34853
(g) Protection / tending operation		4612	0	4612
(h) Tending to natural vegetation		1158	0	1158
(i) Contingency		0	1158	1158
(j) Barbed Wire fencing (400/- Per Meter)	205 RM	32000	48000	80000
<b>Total for 1st year</b>		<b>103271</b>	<b>70467</b>	<b>173738</b>
<b>2nd Year</b>				
(a) 2 weeding & soil working		12567	0	12567
(b) 20 % Casually replcement, transport and planting	111+111	209	1041	1250
(c) Natural fertilizer (neem cake / caster cake ) etc.	Rs.5/ plant	0	11617	11617
(d ) Support watering 3 times @ 3.25		9301	13351	22652
(e) Protection / tending operation		5019	0	5019
<b>Total for 2nd year</b>		<b>27096</b>	<b>26009</b>	<b>53105</b>
<b>3rd Year</b>				
(a) 2 weeding & soil working		13264	0	13264
(b) 10 % Casually replcement, transport and planting	111	112	561	673
(c) Natural fertilizer, neem cake etc.	Rs.5/ plant	0	12735	12735
(d ) Support watering 1 times @ 3.25		3340	4792	8132
(e) Protection & maintenance of fencing / tending operation	L.S.	8673	0	8673
<b>Total for 3rd year</b>		<b>25389</b>	<b>18088</b>	<b>43477</b>

<b>4thYear</b>				
(a) 1 weeding & soil working		7325	0	7325
(b) Protection & Maintenance of fencing/ Tending operation	L.S.	7239	0	7239
<b>Total for 4th year</b>		<b>14564</b>	<b>0</b>	<b>14564</b>
<b>5thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	7722	0	7722
<b>Total for 5th year</b>		<b>7722</b>	<b>0</b>	<b>7722</b>
<b>6thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	8204	0	8204
<b>Total for 6th year</b>		<b>8204</b>	<b>0</b>	<b>8204</b>
<b>7thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	8687	0	8687
<b>Total for 7th year</b>		<b>8687</b>	<b>0</b>	<b>8687</b>
<b>8thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	9169	0	9169
<b>Total for 8th year</b>		<b>9169</b>	<b>0</b>	<b>9169</b>
<b>9thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	9652	0	9652
<b>Total for 9th year</b>		<b>9652</b>	<b>0</b>	<b>9652</b>
<b>10thYear</b>				
Protection & maintenance of fencing/ tending operation	L.S.	10135	0	10135
<b>Total for 10th year</b>		<b>10135</b>	<b>0</b>	<b>10135</b>
<b>SUB TOTAL :</b>		<b>291379</b>	<b>186465</b>	<b>455397</b>
The Cost of Supervision/subsequential silvicultureal Operations	20%	58276	37293	91079
		<b>349655</b>	<b>223758</b>	<b>546476</b>
		<b>SAY</b>		<b>5,46,500</b>

**Note :-**

- (1) Seed sowing along fencing towards the inner side, and also in the plot.
- (2) Planting of cutting of ipomea//Glarcidia along the fencing towards outer side.

Compensatory afforestation will be done in 46.00 ha. Area.  
The Total afforestation cost will be Rs. 2,51,39,000/-

**Total Cost Rs. : 2,51,39,000/-**

i	Silvicultural Operations	1 <sup>st</sup> year three weeding soil working, Support watering will be provided if needed. 2 <sup>nd</sup> year two weeding soil working. 3 <sup>rd</sup> year one weeding soil working.
j	Maintenance	It is proposed to maintain the Plantation up to ten years.
k	Subsequent silvicultural Operation	Cleaning, cutbacks, thinning etc. (as per species specific requirement) will be carried out at the age as per prescribed in the working plan.
l	Proposed monitoring mechanism	(i) A plantation register is to be maintained. (ii) Monitoring is to be done as per the following norms. Forester – 100% RFO – 100% ACF – 20% DCF – 10% (iii) The results of survival etc. are maintained in the plantation register on a periodical basis, which is updated at the end of September and March each year. (iv) The collar girth is also to be reordered at the end of each year. (v) At the end of maintenance period, the area is aimed at full stocking and pole crop girth for all the species, except bamboo. (vi) Bamboo would be of the harvestable size by the end of 4 <sup>th</sup> year. (vii) Third party monitoring mechanism is also in the State and if the plantation is in the sample selected, it will also be monitored by the third party selected for this purpose.
m	Regeneration cleaning	Cut-back and promotion of root suckers.
n	Silviculture & other activities	Only afforestation aimed plantation will be taken up, as the area falls under degraded forest land.

  
Dy. Conservator of Forest  
Surat

The Compensatory Afforestation scheme at the cost of **Rs. 2,51,39,000/-** is technically and administrative approved by the undersigned.


  
Dy. Conservator of Forest  
Surat

## INDEX SR.NO.13

**Statement showing the details of degraded forest area identified  
for the Compensation for afforestation.**

Sr. No	Dist.	Taluka	Village	Compt .No	Total area ha.	Area in degrade d forest in other scheme ha.	Area under this scheme ha.	Balance area. ha.
1	2	3	4	5	6	7	8	9
1	Surat	Mangrol	Mandan	112	353.00	00	46.00	337.00

Date: 22/07/2020  
Place: SURAT

  
Dy.Conservator of Forests  
Surat.



**CERTIFICATE**

This is to Certify that the Compensatory Afforestation Scheme of 46.00 ha. (Double area of diverted area 22.80 ha ) received from the Executive Engineer, Road Development Department, Surat Municipal Corporation Surat. has given an undertaking to pay the cost of Compensatory Afforestation as per the prevailing wages (including the price escalation and supervision charges).

The Scheme in Question has been checked and found correct as per the prevailing wage rate structure and approved Model-3 Models of plantation.

The Compensatory Afforestation has to be carried out in **R.F.Compt. No.112 Pt. of Village Mandan, Taluka Mangrol, Range : Vankal of Surat division at the cost of Rs. 2,51,39,000/- (In words Two Crore Fifty one lakh Thirty nine Thousand rupees Only).**

There of the Compensatory afforestation Scheme in question here by technically approved by the undersigned.

Date: 22/07/2020

Place: SURAT


  
Dy. Conservator of Forests  
Surat.



LAND SUITABILITY CERTIFICATE

This is to certify that I have visited 353.00 ha. area of degraded RF forest (for taking up 46.00 Ha. Of CA), of block No - / Comptt. No/ Survey No - 112 of Village- Mandan, Taluka- Mangrol, District Surat on dt- which has been identified for Compensatory afforestation as shown in the location map attached with the Compensatory Afforestation Scheme against the proposal for diversion of 22.80 ha. Of forest land and the said area is Suitable for Compensatory afforestation. It is also certified that the Compensatory afforestation scheme suggested in the area is in consonance with the working plan prescriptions, specified for the said area.

Date: 22/07/2020  
Place: SURAT

  
Dy. Conservator of Forests  
Surat.



# GeoRef Map

Village- Mandan  
Ta- Mangrol  
Dist- Surat  
C\_No- 585  
Area- 46 ha

## Legend

- CA Polygon
- GPS Point



Google Earth

Image © 2020 Maxar Technologies

Mandan

900 m

