

## END LINE ASSESSMENT REPORT FOR TREE PLANTATION AT

 NASHIK HIGHWAY
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## 1. Introduction

YES BANK has become the first private sector player to enter into a Corporate Social Responsibility (CSR) commitment with the National Highways Authority of India (NHAI) under its 'Adopt a Green Highway' program. The 'Adopt a Green Highway' program is an initiative of the National Green Highways Mission (NGHM) under NHAI. Through this partnership, YES BANK is committed to developing green corridors along Mumbai-Nashik-Pimpalgaon Highway, approx. identified $\mathbf{4 0}$ KM from Pimpalgaon to Igatpuri except Nashik city.

This report is the End line assessment report of year 2022 for verification of report submitted for 40 Km of identified stretch from Pimpalgaon- Igatpuri national highway ( $\mathrm{NH}-3$ ). As part of verification, number of newly planted trees/shrubs and species in right of way (ROW) both on right and left side were assessed. Filed observation like height of plant, girth of plant, distance from road and embankment, distance between ROW and Plants, encroachments in ROW, damaged tree guard, damaged plants were conducted.

## 2. Survey Methodology

Visual field survey of trees/shrubs along both side of highway (avenue) and median was conducted between Date 09/03/2022 to $\mathbf{2 4 / 0 3 / 2 0 2 2}$ by field team consists of taxonomists and filed investigators. The entire member were trained and having more than five years of working experience in nursery/plantation.

## 3. Objective

1. To verify the report from Plantation agency Harit Path
a. To verify total number of newly planted tree on LHS, RHS and Median
b. To find out any damaged tree guards if any
c. To find out any damaged plant if any
d. To find out distance of plant from road and embankment
e. To find out distance between plants and Row
f. To find out drip irrigation system for median if any
g. To find out Watering schedules for plant

## 4. Analysis and Findings

Results and findings are presented for every 100-meter Chainage for both avenue and median plantation. In avenue plantation, findings were presented for left hand side (LHS) and right hand side (RHS) of surveyed highway.

### 4.1 Number of Newly Planted Tree/shrubs

Avenue Plantation

| Chainage | No of Planted Tree by Hariih Path |
| :--- | :--- |
|  | Exicon field finding |
| $\mathbf{3 8 0} \mathbf{- 4 4 0}$ (LHS) | 4852 |
| $\mathbf{3 8 0} \mathbf{- 4 4 0}$ (RHS) | 5956 |
| Total Plantation | 10808 |

## Median Plantation

No New Plants have been planted in median. The number were found same as previous one. Trimming and cutting of median were well observed and still ongoing process.

| Chainage | No of Newly Planted Tree by Harith Paih |
| :--- | :--- |
|  | Exicon field finding |
| $\mathbf{3 8 0 - 4 4 0}$ | 682 |
| Total Plantation ( only newly Planted) | 682 |

Below are some picture evidence showing Median.


### 4.2 Species of trees at Avenue Plantation - Left Hand Side (LHS) and Right Hand Side (RHS)

| Name of Tree | Scientific Name | No. of Planted <br> (LHS) | No. of Planted <br> (RHS) |
| :--- | :--- | :--- | :--- |
| Shankasur | Caesalpinia Phulcherim | 1758 | 1790 |
| Jarul | Longerstromia Speciosa | 607 | 433 |
| Tikoma | Tecoma stans | 373 | 676 |
| Amaltas | Cassia fistula | 139 | 263 |
| Neem | Azadirachta indica | 584 | 953 |
| Kadamb | Anthocephalus cadamba | 56 | 93 |
| Mango | Mangifera indica | 69 | 55 |
| Peepal | Ficus religiosa | 147 | 454 |
| Saptarni |  | 54 | 0 |
| Banyan | Ficus benghalensis | 67 | 18 |
| Apta | N/A | 147 | 0 |
| Akashneem | Milingtonia hortensis | 0 | 62 |
| Madhukamini | N/A | 30 | 170 |
| Kachnaar | Bauhinea Variegata | 76 | 343 |
| Karanj | Pongamia pinnata | 82 | 297 |
| Bakana | N/A | 51 | 0 |
| Trumpet Tree | Tabubea rosea | 252 | 190 |
| Sheshum |  | 174 | 0 |
| Bottle Brush | N/A | 17 | 0 |
| (kassod) | Cassia siamea | 0 | 156 |
| Ashoka |  | 61 | 0 |
| Jamun |  | 108 | 0 |
| Total |  | 4852 | 5956 |
| Grand Total |  | 10808 |  |
|  |  |  |  |

Note: The Number of tree are presented after field survey done by Exicon Social Team

Graphic representation of no of tree present at Left Hand Side \& Right-Hand Side


No of Plant in RHS


### 4.3 No of Plant Chainage wise(LHS)

|  | S(Le |  |
| :---: | :---: | :---: |
| From | To | No. of Plant |
| 380 | 381 | 342 |
| 381 | 382 | 271 |
| 382 | 383 | 127 |
| 383 | 384 | 213 |
| 384 | 385 | 180 |
| 385 | 393 | 106 |
| 393 | 394 | 0 |
| 394 | 395 | 293 |
| 395 | 396 | 91 |
| 396 | 397 | 0 |
| 397 | 403 | 301 |
| 403 | 404 | 208 |
| 404 | 405 | 267 |
| 405 | 406 | 198 |
| 426 | 428 | 144 |
| 428 | 433 | 81 |
| 433 | 434 | 437 |
| 434 | 435 | 639 |
| 435 | 436 | 341 |
| 436 | 437 | 188 |
| 437 | 438 | 119 |
| 438 | 439 | 306 |
| 439 | 440 | 0 |
| TOTAL |  | 4852 |

### 4.4 No of Plant Chainage wise (RHS)

| To RHS(Right Hand side) |  |  |
| :---: | :---: | :---: |
| From | 381 | No. of Plant |
| 380 | 382 | 195 |
| 381 | 383 | 132 |
| 382 | 384 | 66 |
| 383 | 385 | 64 |
| 384 | 393 | 51 |
| 385 | 394 | 90 |
| 393 | 395 | 114 |
| 394 | 396 | 298 |
| 395 | 397 | 594 |
| 396 | 403 | 44 |
| 397 | 404 | 230 |
| 403 | 405 | 0 |
| 404 | 406 | 148 |
| 405 | 427 | 315 |
| 426 | 430 | 320 |
| 427 | 431 | 269 |
| 430 | 432 | 272 |
| 431 | 433 | 109 |
| 432 | 434 | 356 |
| 433 | 435 | 345 |
| 434 | 436 | 371 |
| 435 | 437 | 347 |
| 436 | 438 | 567 |
| 437 | 439 | 279 |
| 438 | 440 | 380 |
| 439 |  | $0 T A L$ |
|  |  | 056 |
|  |  |  |
|  |  |  |
|  |  |  |

### 4.5 No. of Plant (Median)

| Chainage Details | Name of Plant | Number |
| :--- | :--- | :--- |
| $380.00-406.00$ | Kaner, Bougainvillae, Tecoma, <br> Kaneri | 16254 |
| TOTAL |  | 10568 |
| TOT.00-440.00 |  |  |

### 4.6 Details of Encroachment - in ROW of Left Hand Side

| Chainage (KM) |  | Encroachment Type | Partial / <br> No Plantation |
| :---: | :---: | :---: | :---: |
| 380.1 | 380.2 | Hotel | Total- No plantation |
| 382.2 | 382.5 | Restaurant | Total- No plantation |
| 382.6 | 382.8 | Restaurant | Partial |
| 383.1 | 383.6 | Hotel, Garage, Shop | Total- No plantation |
| 383.9 | 384.0 | Shop | Total- No plantation |
| 385.0 | 386.0 | Shop | Total- No plantation |
| 386.0 | 387.0 | Shop | Total- No plantation |
| 387.0 | 388.0 | Hotel, Garage, Shop | Total- No plantation |
| 388.0 | 389.0 | Private Property | Total- No plantation |
| 389.0 | 390.0 | Private Property | Total- No plantation |
| 391.5 | 392.7 | Agriculture Field and shop | Total- No plantation |
| 396.0 | 397.0 | Private Property | Total- No plantation |
| 397.0 | 398.0 | Structural Work | Total- No plantation |
| 398.0 | 399.0 | Structural Work | Total- No plantation |
| 400.1 | 400.8 | Private Property | Total- No plantation |
| 401.6 | 402.0 | Hotel \& Private Property | Partial |
| 402.3 | 402.5 | Private Property | Partial |
| 403.0 | 403.1 | Hotel | Partial |
| 403.5 | 404.6 | Private Property | Partial |
| 405.1 | 405.2 | Private Property, Hotel | Partial |
| 405.2 | 405.3 | Private Property | Total- No plantation |
| 405.4 | 405.6 | Garage | Total- No plantation |
| 426.0 | 426.6 | Private Property | Total- No plantation |
| 428.1 | 428.2 | Private Property | Partial |
| 428.4 | 428.7 | Hotel, Shop | Partial |
| 428.9 | 429.0 | Hotel, Private Property | Partial |
| 429.0 | 429.1 | Private Property | Partial |
| 429.3 | 431.6 | Hotel, Private Property and Agriculture Field | Partial |


| $\mathbf{4 3 2 . 0}$ | 433.0 | Private Property | Partial |
| :--- | :--- | :--- | :--- |
| $\mathbf{4 3 7 . 9}$ | 438.8 | Private Property | Partial |
| $\mathbf{4 3 9 . 0}$ | 440.0 | Hotel \& Private Property | Partial |
|  |  |  |  |

### 4.7 Details of Encroachment Areas - in ROW of Right Hand Side

| Chainage (KM) |  | Encroachment Type | Partial / <br> No Plantation |
| :---: | :---: | :--- | :--- |
| $\mathbf{3 8 0 . 3}$ | 380.5 | hotel | Partial |
| $\mathbf{3 8 0 . 7}$ | 380.9 | Agriculture field | Total- No Plantation |
| $\mathbf{3 8 1}$ | 381.8 | Private Property | Partial |
| $\mathbf{3 8 2 . 3}$ | 382.6 | hotel | Partial |
| $\mathbf{3 8 2 . 9}$ | 383.1 | Hotel | Partial |
| $\mathbf{3 8 3}$ | 383.1 | Agriculture field | Total- No Plantation |
| $\mathbf{3 8 3 . 3}$ | 384 | Private Property | Partial |
| $\mathbf{3 8 5 . 0}$ | 386.0 | Structural work | Total- No Plantation |
| $\mathbf{3 9 1 . 3}$ | 392 | Private Property | Partial |
| $\mathbf{3 9 6 . 0}$ | 399.0 | Structural work | Total- No Plantation |
| $\mathbf{4 0 0 . 2}$ | 400.3 | Private Property | Partial |
| $\mathbf{4 0 0 . 7}$ | 400.9 | Hotel and Private Property | Total- No Plantation |
| $\mathbf{4 0 1}$ | 401.1 | Temple | Partial |
| $\mathbf{4 0 1 . 4}$ | 401.5 | Private Property | Partial |
| $\mathbf{4 0 1 . 9}$ | 402 | Hotel | Partial |
| $\mathbf{4 0 2}$ | 402.1 | Hotel | Partial |
| $\mathbf{4 0 2 . 8}$ | 403 | Private Property | Partial |
| $\mathbf{4 0 4 . 6}$ | 404.7 | Hotel and Garage | Total- No Plantation |


| $\mathbf{4 0 5}$ | 405.2 | Hotel and Garage | Total- No Plantation |
| :---: | :---: | :--- | :--- |
| $\mathbf{4 0 5 . 5}$ | 405.7 | Garage | Total- No Plantation |
| $\mathbf{4 0 5 . 8}$ | 406 | Garage | Total- No Plantation |
| $\mathbf{4 2 7 . 6}$ | 427.9 | Private Property | Partial |
| $\mathbf{4 2 8 . 1}$ | 428.2 | Shops, hotel | Total- No Plantation |
| $\mathbf{4 2 8 . 6}$ | 428.7 | shop | Partial |
| $\mathbf{4 3 2 . 5}$ | 433 | Agriculture field | Total- No Plantation |
| $\mathbf{4 3 3 . 9}$ | 434 | Private Property | Total- No Plantation |
| $\mathbf{4 3 4 . 5}$ | 434.9 | Agriculture field | Total- No Plantation |
| $\mathbf{4 3 4 . 6}$ | 434.8 | Agriculture field | Total- No Plantation |
| $\mathbf{4 3 6 . 1}$ | 436.2 | Agriculture field | Total- No Plantation |
| $\mathbf{4 3 6 . 4}$ | 436.5 | Private Property | Partial |
| $\mathbf{4 3 7}$ | 437.2 | Hotel | Partial |
| $\mathbf{4 3 9 . 1}$ | 440 | Agriculture field | Total- No Plantation |
|  |  |  |  |
|  |  |  |  |

### 4.8 Tree Condition

There are total 315 plants on Left hand side and 456 plants on Right hand side reported to be dead. Tree guard found were not in good shape also they were negligible in number.

| SIDE | Dead Tree | Alive Tree | Total Tree | Survival Rate |
| :--- | :--- | :--- | :--- | :--- |
| LHS | 358 | 4494 | 4852 | $92 . .62$ |
| RHS | 594 | 5362 | 5956 | 90.02 |
| Total | 952 | 9856 | 10808 | 91.19 |

## Dead Plants



Picture evidence showing Avenue Plantation


### 4.9 Survival Rate of Plants




### 4.10 Watering Schedule

During the survey, we found only one tanker watering for Avenue Plantation. As Discussed with Field Staff (Supervisor) of harith Path (Karan \& Rajesh0 frequency of water tanker has been reduced since March is ending so as the contract with the harith path.

### 4.11 Unique Identification Number

During this Visit, the number of Unique Identification Number written on plant were found same as last report i.e negligible number only $(40-50)$ of Unique Identification number written on tree guards were found. All unique identification number either were torn apart or does not exist anymore.

### 4.12 Distance of plants from Embankment and Median

|  | 1st Row | 2nd Row | 3rd Row |
| :--- | :--- | :--- | :--- |
| Average Distance from <br> Embankment | 2 Meter | 3 Meter from <br> Subsequent row | 6 Meter from <br> Subsequent Row |
| Average Distance from <br> Median | 15 meter | 3 Meter from <br> Subsequent row | 3 <br> Meter from Subsequent <br> Row |

Distance of Plants from Embankment and Median in case of Multiple Row

|  | 1s† <br> Row | 2nd Row | 3rd Row | $4^{\text {th }}$ Row | 5th Row | $6^{\text {th }}$ Row |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Distance from Embankment | 2 Meter | 3 Meter from Subsequent row | 3 Meter from Subsequent Row | 3 Meter from Subsequent Row | 3 Meter from Subsequent Row | 6 Meter from Subsequent Row |
| Average <br> Distance from <br> Median | 15 meter | 3 Meter from Subsequent row | 3 <br> Meter from <br> Subsequent <br> Row | 3 Meter from Subsequent Row | 3 Meter from Subsequent Row | 6 Meter from Subsequent Row |

### 4.13 Distance between Plants

|  | 1st Row | 2nd Row | 3rd Row |
| :--- | :--- | :--- | :--- |
| Av.Distance between plants | 3 Meter | 3 Meter | 6 Meter |
| Av.Distance between Rows | $1^{\text {st }}-2$ nd Row=3 Meter <br> $2^{\text {nd }}-3$ rd |  |  |

Distance between Plants in case of Multiple Row

|  | 1st 2nd Row Row | 3rd Row | 4*h Row | $5^{\text {th }}$ Row | $6^{\text {th }}$ Row |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Av.Distance between plants | 3 Meter 3 Meter | 3 Meter | 6 Meter | 6 Meter | 6 Meter |
| Av.Distance between Rows | $]^{\text {st}}-2^{\text {nd }}$ Row $=3$ Meter $2^{\text {nd }}-3$ rd Row $=6$ Meter $3^{\text {rd }}-4^{\text {th }}$ Row $=3$ Meter $4^{\text {th }}-5^{\text {th }}$ Row $=3$ meter $5^{\text {th }}-6^{\text {th }}$ Row $=3$ meter |  |  |  |  |

Note: $6^{\text {th }}$ row has been observed only once spreading over 100 m only in LHS.

### 4.14 Drip irrigation system for median plantation

We have not observed any drip irrigation system for median plantation.

### 4.15 Yes Bank Branding

Yes Bank Branding were found same as previous condition.

### 4.16 Average Height \& Girth of trees Species

| Name of Tree | Scientific Name | Height in Ft | Girth in Cm |
| :--- | :--- | :--- | :--- |
| Shankasur | Caesalpinia Phulcherim | $7-8$ | $4-5$ |
| Jarul | Longerstromia Speciosa | $8-10$ | $6-7$ |
| Tikama | Tecoma stans | $6-8$ | $3-4$ |
| Amaltas | Cassia fistula | $8-9$ | $4-5$ |
| Neem | Azadirachta indica | $9-10$ | $7-8$ |
| Kadamb | Anthocephalus cadamba | $9-10$ | $7-8$ |
| Mango | Mangifera indica | $8-9$ | $4-5$ |
| Peepal | Ficus religiosa | $8-9$ | $4-5$ |
| Saptarni |  | $7-8$ | $4-5$ |
| Banyan | Ficus benghalensis | $8-9$ | $6-8$ |
| Apta | N/A | $7-8$ | $7-8$ |
| Akashneem | Milingtonia hortensis | $7-8$ | $6-7$ |
| Madhukamini | N/A | $6-7$ | $4-5$ |
| Kachnaar | Bauhinea Variegata | $7-8$ | $6-7$ |
| Karanj | Pongamia pinnata | $10-12$ | $9-10$ |
| Bakana | N/A | $10-12$ | $8-9$ |
| Trumpet Tree | Tabubea rosea | $12-14$ | $9-10$ |
| Sheshum |  | $10-12$ | $8-9$ |
| Bottle Brush | N/A | $10-12$ | $8-9$ |
| (kassod) | Cassia siamea | $10-12$ | $8-9$ |
| Ashoka |  | $10-12$ | $8-10$ |
| Jamun |  | $10-12$ | $8-10$ |

### 5.0 Test Reports

### 5.1 Air Testing

On identified stretch at one locations air quality sample was taken and air quality testing was done from NABL accredited lab of Mumbai for different parameters. Since constrain of power source available on highway, only one air sampling was done at pimplegaon side at toll plaze.

The following general procedures was followed:

- Air Sampling Record was completed detailing time of sampling, sampling interval, and signed by the person collecting the sample.
- Grab Sampling method was used in which air sample is taken for particular period of time
- After the sample was collected, air-sampling instrument was properly capped to prevent contamination.
- Sampled air has been sent to NABL Accreditations Laboratory for analysis


## Results

| Sr . No | Parameters | Unit | NAAC Standard | Result |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Particulate Matter PM 10 | $\mu \mathrm{g} / \mathrm{m3}$ | $\leq 100$ | 72.8 |
| 2 | Particulate Matter PM 2.5 | $\mu \mathrm{g} / \mathrm{m3}$ | $\leq 60$ | 38.4 |
| 3 | Ozone $\mathbf{O}_{\mathbf{3}}$ | $\mu \mathrm{g} / \mathrm{m3}$ | $\leq 180$ | 18.0 |
| 4 | Ammonia $\mathbf{N H}_{3}$ | $\mu \mathrm{~g} / \mathrm{m3}$ | $\leq 400$ | 28.1 |
| 5 | Carbon Mono oxide CO | $\mathrm{Mg} / \mathrm{M}^{3}$ | $\leq 04$ | 2.8 |

NAAC- National Ambient Air Quality Sample

## All the results are within the limits.

Detail Report is attached as annexure.


### 5.2 Soil Testing

In total two samples of soil was collected from two different locations on identified stretch considering areas that differ in soil texture, soil color, and the kinds of plants grown.
Samples were collected using soil auger/spade. About 500 grams of soil was collected in each Sample and with systematic labelling these were transported to well-equipped lab of Mumbai by trained professional. All standard precautions were taken to prevent sample contamination and recommended sampling depth was ensured at all sites to get accurate test results.

## Steps of sample collection followed

- Cleaning of any contaminating chemicals or dirt on surface level has been done using tools like spade.
- Removable of any dead plants, scrape mulch and leaf litter from the soil surface. Soil digging was done about 3 to 4 inches deep.
- Removal of dead roots, worm, rock etc. had been done carefully
- Soil sample (500 gram) has been taken into bag/container and sealed to prevent contamination of sample
- Total of 2 sample has been taken in identified stretch except Nasik city limit
- Each sample has been levelled with respective location and sent to NABL accredited laboratory for analysis.


## Results

| Sr. No | Parameters | Results 1 <br> Pimplegaon side | Results 2 <br> Gonde Side | Units |
| :--- | :---: | :---: | :---: | :--- |
| 1 | pH | 7.78 | 8.14 | ----- |
| 2 | Magnesium | 1422 | 612 | $\mathrm{mg} / \mathrm{kg}$ |
| 3 | Sodium | 418 | 272 | $\mathrm{mg} / \mathrm{kg}$ |
| 4 | Potassium | 332 | 236 | $\mathrm{mg} / \mathrm{kg}$ |
| 5 | Organic Matter | 4.82 | 8.72 | ---- |

Details Report is attached as annexure.

All the results are within the limits.


Taking soil sample

Cleaning and digging before taking soil

### 6.0 Analysis of report comparing Baseline Study

Baseline study was done in 2017 covering 40Km of Identified Stretch of Nashik Highway. This survey was done for the existing tree along with the Highway Report have been submitted.

End line Assessment was done in 2022 for the same. This survey was done only for the tree planted by Harith Path and not for the existing trees. Results for the same have been shared in this report.

Below is results comparing findings the outcome.

### 6.1 No of Avenue Plantation \& Median Plantation

| Particulars | Baseline Report | End line Report |
| :--- | :---: | :---: |
| No. of Plant in LHS | 2681 | 4852 |
| No. of Plant in RHS | 1992 | 5956 |
| No of Plant in Median | 26140 | 26822 |



### 6.2 Plant Species

| Particulars | Baseline Report | End line Report |
| :--- | :---: | :---: |
| No. of Species in LHS | 39 | 20 |
| No. of Species in RHS | 35 | 15 |
| No. of Species in Median | 4 | 4 |

Plant Species are not unique and is repetitive along LHS, RHS and Median Side.


### 6.3 Air Test

In Baseline Study, Air testing conducted for two location whereas in end line report only one location for air testing have been done. This was due to the new norm of Air testing by National Ambient Air Quality, which require steady power supply, and was available only at toll plaza.

We have taken average of finding from two location for comparing it to the end line assessment report's findings.

Below are the comparable results of findings.

| Parameters | Baseline Report | End line Report |
| :---: | :---: | :---: |
| PM 10 | 22.51 | 72.8 |
| PM 2.5 | 22.02 | 38.4 |
| CO | Not Detected | 2.8 |
| O3 | 0.085 | 18 |
| NH3 | Not Detected | 28.1 |



All the results are within Limits.

### 6.4 Soil Test

In Baseline Study, Soil Sampling have been taken from four location whereas in end line report two soil testing have been done. One from Pimplegaon side and other from Gonde side.

We have taken average of finding from four location for comparing it to the end line assessment report's findings.

Below are the comparable results of findings.

| Parameters | Baseline Report | End line Report |
| :---: | :---: | :---: |
| pH | 8.385 | 7.96 |
| Magnesium | 670.05 | 1017 |
| Sodium | 124.46 | 345 |
| Potassium | 193.78 | 284 |
| Organic Matter | 6.6375 | 6.77 |

All Parameter values has improved means soil condition has improved.


## Annexure 1. Soil and Air Testing Report

## Air Testing Report

## GREEN ENVIROSAFE

 Dist. Pune-410501. Mob+ 9545084620, 8421365421 CIN No. : U74900PN2013PTC149666 Engineers \& Consultant pvt Ltd. E-mail : environsafetyeng@gmail.com, gesec12@gmail.com | www.greenenvirosafe.co.in and ISO/IEC 17025:2017 (NABL), ISO 9001:2015, ISO 45001: 2018 and ISO 14001: 2015 Certified Company

## Soil Testing Report from Pimple Gaon Side

## GREEN ENVIROSAFE

A-7/2/C-11, Capital City, Talwade - Chakan Road, Chakan MIDC, PH-IV, Village Nighoje, Tal. Khed, Dist. Pune-410501. Mob+9545084620, 8421365421 CIN No. : U74900PN2013PTC149666 Engineers \& Consultant Pvt Ltd. E-mail : environsafetyeng@gmail.com, gesec12@gmail.com | www.greenenvirosafe.co.in and ISO/IEC 17025:2017 (NABL), ISO 9001:2015, ISO 45001 : 2018 and ISO 14001: 2015 Certified Company

| TEST CERTIFICATE |  |  |  |
| :---: | :---: | :---: | :---: |
| Report No: GESEC/PRO/2022-23/04/62 <br> Sample Code: GESEC/PRO/2022-23/04/62 |  | Date of Report | 16/04/2022 |
|  |  | Date of Sampling | 12/04/2022 |
| Client Name and Address: <br> M/s. Exicon Social Consulting Private Limited B1-204, Kanakia Boomerang Building, Chandivali Farm Road, Andheri East, Mumbai - 400072. |  | Start Date of Analysis | 13/04/2022 |
|  |  | End Date of Analysis | 16/04/2022 |
|  |  | Sample Details | Soil Pimpalgaon RHS 394-395 |
|  |  | Nature of sample | Solid |
| Sample Collected By |  | M/s. Perfect Pollucon Services, Thane |  |
| Sr. No. | Parameter | Result | Unit |
| 1 | Sand | 34.98 | \% |
| 2 | Silt | 64.80 | \% |
| 3 | Clay | 0.22 | \% |
| 4 | pH | 7.78 | -- |
| 5 | Colour | Blackish | - |
| 6 | Electrical Conductivity | 0.28 | mmhos/cm |
| 7 | Bulk Density | 1.38 | $\mathrm{g} / \mathrm{cm}^{3}$ |
| 8 | Sulphate | 8.82 | $\mathrm{mg} / \mathrm{kg}$ |
| 9 | Cation Exchange Capacity | 52.34 | Meq/100gm |
| 10 | Calcium (Ca) | 4426 | $\mathrm{mg} / \mathrm{kg}$ |
| 11 | Magnesium (Mg) | 1422 | $\mathrm{mg} / \mathrm{kg}$ |
| 12 | Sodium (Na) | 418 | $\mathrm{mg} / \mathrm{kg}$ |
| 13 | Potassium (K) | 332 | $\mathrm{mg} / \mathrm{kg}$ |
| 14 | Chromium (Cr) | $<0.05$ | $\mathrm{mg} / \mathrm{kg}$ |
| 15 | Sodium Absorption Ratio | 7.73 | - |
| 16 | Total Organic Carbon | 4.82 | \% |
| 17 | Chloride | 52.6 | $\mathrm{mg} / \mathrm{kg}$ |
| BDL-Below Detection Limit. <br> This Test Report refers only to the sample tested |  |  |  |
|  |  | 1 | stande <br> Authorized By- |

1. The report is refer only to the sample tested and not applies to the bulk.
2. The results shown in this test report may differ based on various factors including temperature, humidity, pressure, retention time etc.

3. Samples will be retained for a period of seven (7) days after completion of analysis. Longer retention periods can be arranged, on request of the customer
4. We strictly maintain the confidentiality of all test result of sample(s) collected by us/ supplied by customer and not revel to third party unless required by the statutory or legal requirement.
5. MoEF approved Lab by Govt. of India. From date. 16/02/2022 to 16/12/2022.

## Soil Testing Report from Gonde Side

GREEN ENVIROSAFE
A-7/2/C-11, Capital City, Talwade - Chakan Road, Chakan MIDC, PH-IV, Village Nighoje, Tal. Khed, GREEN ENVIROSAFE Dist. Pune-410501. Mob+9545084620, 8421365421 CIN No. : U74900PN2013PTC149666 Engineers\& Consultant pvt Ltd. E-mail : environsafetyeng@gmail.com, gesec12@gmail.com | www.greenenvirosafe.co.in

Recognised by Ministry of Environment and Forests (MoEF) / Central Pollution Control Board Govt. of India (CPCB) and ISO/IEC 17025:2017 (NABL), ISO 9001:2015, ISO 45001: 2018 and ISO 14001: 2015 Certified Company

| TEST CERTIFICATE |  |  |  |
| :---: | :---: | :---: | :---: |
| Report No: GESEC/PRO/2022-23/04/63 |  | Date of Report | 16/04/2022 |
| Sample Code: GESEC/PRO/2022-23/04/63 |  | Date of Sampling | 12/04/2022 |
| Client Name and Address: <br> M/s. Exicon Social Consulting Private Limited B1-204, Kanakia Boomerang Building, Chandivali Farm Road, Andheri East, Mumbai - 400072. |  | Start Date of Analysis | 13/04/2022 |
|  |  | End Date of Analysis | 16/04/2022 |
|  |  | Sample Details | Soil Gondia RHS 427-428 |
|  |  | Nature of sample | Solid |
| Sample Collected By |  | M/s. Perfect Pollucon Services, Thane |  |
| Sr. No. | Parameter | Result | Unit |
| 1 | Sand | 72.8 | \% |
| 2 | Silt | 27.08 | \% |
| 3 | Clay | 0.12 | \% |
| 4 | pH | 8.14 | -- |
| 5 | Colour | Brownish | - |
| 6 | Electrical Conductivity | 0.14 | mmhos/cm |
| 7 | Bulk Density | 1.12 | $\mathrm{g} / \mathrm{cm}^{3}$ |
| 8 | Sulphate | 6.22 | $\mathrm{mg} / \mathrm{kg}$ |
| 9 | Cation Exchange Capacity | 48.14 | Meq/100gm |
| 10 | Calcium (Ca) | 1442 | $\mathrm{mg} / \mathrm{kg}$ |
| 11 | Magnesium (Mg) | 612 | $\mathrm{mg} / \mathrm{kg}$ |
| 12 | Sodium (Na) | 272 | $\mathrm{mg} / \mathrm{kg}$ |
| 13 | Potassium (K) | 236 | $\mathrm{mg} / \mathrm{kg}$ |
| 14 | Chromium (Cr) | $<0.05$ | $\mathrm{mg} / \mathrm{kg}$ |
| 15 | Sodium Absorption Ratio | 8.48 | - |
| 16 | Total Organic Carbon | 8.72 | \% |
| 17 | Chloride | 40.8 | $\mathrm{mg} / \mathrm{kg}$ |

BDL-Below Detection Limit.


Terms and conditions

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