

NATCO - FOREST CREATION. SITE VISIT - MARCH 26, 2019. OBSERVATIONS, OUTCOME AND WAY-FORWARD.

Objectives of the visit:

- Assess site conditions and check site-readiness.
- Collect soil samples.
- Explore possibilities of having a local supply chain for key consumable items.

Site-Readiness checks done and tasks to be accomplished:

The proposed location of forest creation is along a road outside the factory as shown in the photographs below. It will serve as a Forest Wall between the village and Natco, thus helping both these eco-systems with the same benefits.



Summary of checks done and status:			
S. No.	Key Checks	Responsibility	Status & Comments (OK/ X / NA / Comments)
1	Sunlight: The site should get sunlight for a minimum period of 8-9 hours in a day.	Afforestt	OK
2a	Underground clearance: No pipes/drains/wires should be present under the afforestation area, to a minimum depth of 1 meter.	Natco	OK
2b	If pipes, drains, wires etc. are present underground, then they should be clearly marked on the drawing.		
3	Clear the Site: Confirm that the site is clear from waste of any form (debris, metal etc.) and is nothing but an empty space to work.	Natco	To be cleared.
4a	Soil: Uniform presence of soil beneath the surface to be confirmed. Any presence of construction debris, rock boulders, bricks, inorganic waste, metal scrap etc. to be ruled out.	Afforestt	OK
4b	If this cannot be confirmed, then it is to be checked using excavation machine, by digging up to 1-1.5 meters at 4-5 random points across the site.	Afforestt	OK
5a	Water: Watering requirement: 5 Liters/ Sq. Meter/ Day. Total Requirement Per Day = 2500 L per day.	Natco	To be made available.
5b	Confirm presence of water connection, with main line running along the periphery of the site.	Natco	To be made available.
5c	Confirm connections with hose-pipes(+showers) that can cover the entire site.	Natco	To be made available.
6a	Biomass Unloading and Mixing Area: Identify and mark approx 100 sq m closest possible space to the site.	Afforestt	Area identified. Marking will be done by Afforestt after fencing work is completed, and before execution.
6b	Ensure clear connectivity to 'entry' and 'exit' gates of the <u>property</u> .	Afforestt/ Natco	OK
6c	Identify and mark the path connecting the "Biomass Unloading and Mixing Area" to the site.	Afforestt/ Natco	OK
7a	Sapling Unloading and Stocking Area: Identify and mark approx 100 sq m closest possible space to the site.	Afforestt/ Natco	Proposed location is inside the factory for shade and safety.
7b	Ensure clear connectivity to 'entry' and 'exit' gates of the <u>property</u> .	Afforestt/ Natco	OK
7c	This area should have proper water connections for watering of the saplings.	Afforestt/ Natco	OK
7d	Identify and mark the path connecting the "Sapling Unloading and Stocking Area" to the site.	Afforestt/ Natco	OK
8	Protection: Confirm presence of fence and security, to avoid any possible damage to the site in future from machines, humans or cattle.	Natco	Chain link fence to be built.
9	Onsite office: Confirm access to a room for Afforestt personnel for discussions, meetings and breaks.	Afforestt	To be created temporarily before execution.
10	Labor Resting Area: confirm presence of a designated area for the workers to rest and have water.	Afforestt	To be created temporarily before execution.
11	Equipment Storage Room: Confirm presence of a room that can be locked after the end of a work day.	Afforestt/ Natco	Available
12	Overhead wires: overhead wires to be accounted for and removed.	Natco	To be done before execution.

Key Details:

Total area to be covered with the forest wall = 500 sq m

Minimum density = 3.2 saplings per sq m

Minimum number of saplings to be planted = 1600

Proposed length of the forest = 125 sq m

Proposed width of the forest = 4 m

Major tasks for Natco before execution:

1. **Site cleaning:** The Conocarpus plants, waste, debris, weeds and other plants are to be cleared out.
Photographs below:



2. **Watering facility:** There is a functional bore-well available. It needs to be connected to the forest area using hose-pipes and showers so that the entire forest area gets water. Bore-well photograph below:



3. **Sapling unloading area:** It is proposed that the sapling unloading area is allocated inside the factory. This will ensure shade and protection. No additional preparation is required. Any one of the shaded areas shown below that are currently being used for storing plants can be used, and Afforestt will organise a tractor for transport of saplings during project execution:



4. **Fencing:** The proposed location for the forest is an open area. It should have a chain link fence before execution begins. Sample photograph:



There is a barbed-wire fence line running across. This should be removed:

Barbed
wire
fence.



5. **Overhead wires:** There are few overhead poles which will fall outside the proposed fence and are *not* a problem. However, 2 electricity poles and/or wires need to be relocated, as these are wires running across the proposed forest. Soil preparation will become a problem here, and with the forest-wall growing in future, it will touch the wires. Photographs below:

One of the poles inside the forest area.



Wires



Major site-check related tasks for Afforestt before execution:

1. Check soil depth and take soil samples: The soil was dug out from 5 points, by creating 1 cubic meter pits using a JCB, and samples were collected from the upper and lower level. The soil depth is reasonably good. Afforestt will submit a detailed soil analysis report on the basis of which quantities of nourishment materials will be fixed. Photographs below:



2. **Create temporary labor resting area and site-office before execution:** This will be done close to the *neem* tree using tents etc. It will also be a space for dignitaries and officials from Natco to use.



Above: Equipment Storage Room identified

3. Arrange all biomass locally: We visited the area where Natco has few *desi* cows, and the green house for vegetables. We found that soil microbiology enhancer *Jeevamrit*, perforation material husk, water retention material coco-peat, farmyard manure and mulching material straw can be easily procured through Mr Ravinder Babu of Natco. We will be in touch with him through Mr. M S Rao. This will also set up a local supply chain for key consumable items. Afforestt will make all the payments.



Important technical information to be submitted by Afforestt before execution:

- 1) Soil analysis report.
- 2) Species selection and quantification.
- 3) Bill of Materials.
- 4) Execution schedule.