



DESIGN CONCEPT

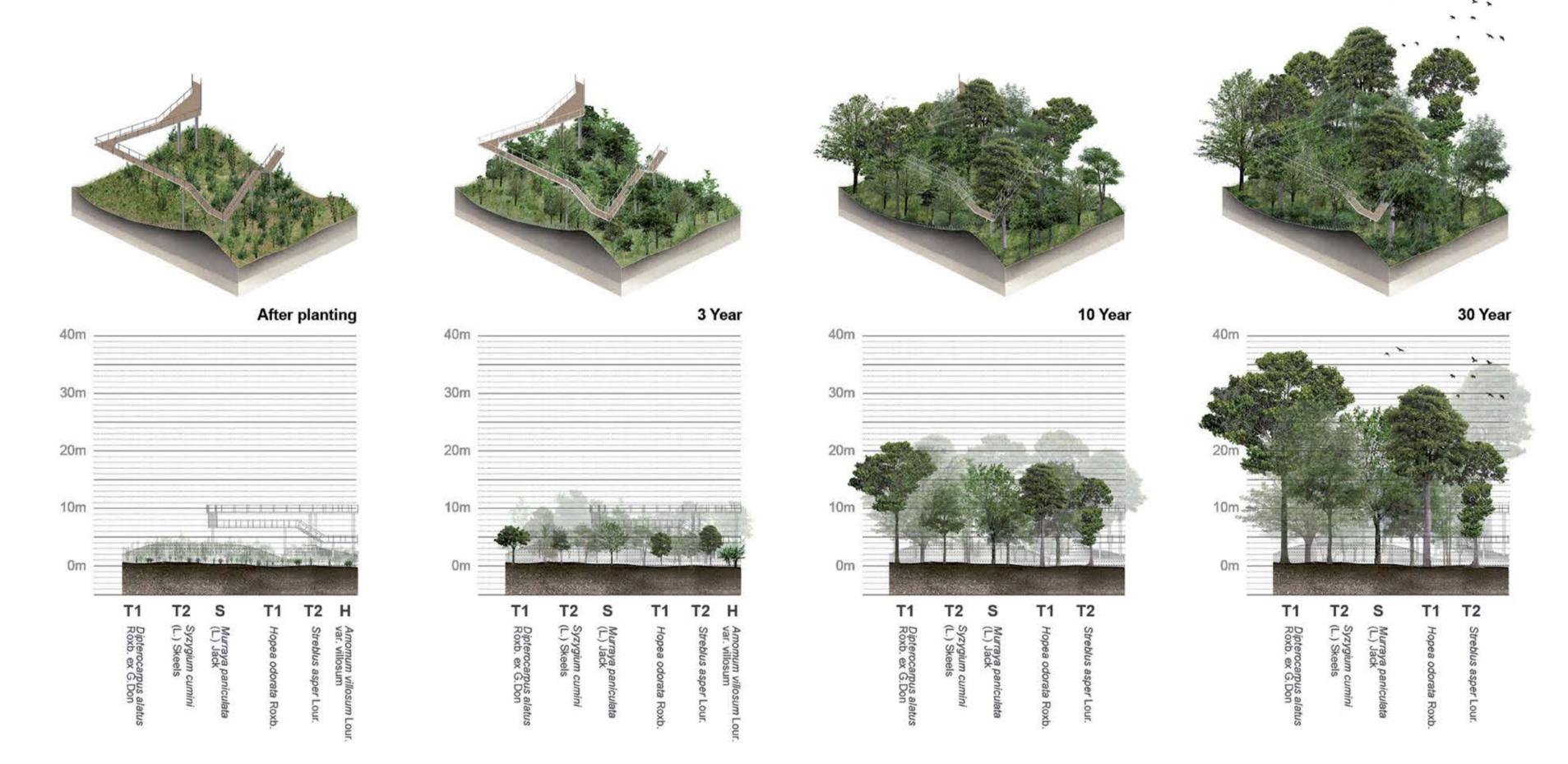
planned.

The Metro-Forest Project is situated in Prawet district which is a suburban sprawl at eastern fringe of Bangkok, and approximately 6 kilometers from the Suvarnabhumi International Airport. The whole district is located in a low land and designated as flood-prone zone protecting flooding of eastern Bangkok areas. Under initiatives set by the Petroleum Authority of Thailand (PTT) to increase forest areas for the whole country, and in commemoration to the forest stewardship efforts by the Royal Family and Her Royal Highness, Princess Maha Chakri Sirindhorn's, an urban forest that reflected Bangkok's former landscape was

To create diverse forest ecology and stimulate plant growth, the reforestation technique of Dr. Akira Miyawaki was implemented to create optimal growing environments of lowland Dipterocarp and other plants species. Through collaboration with the landscape architects, forest ecologists, and contractors, raised berms were designed, engineered and constructed to provide porosity and prevent compaction. A pre-mixture of highly fertile, organic soil was used as a soil medium suitable for the lowland species saplings. The layout of the species was carefully grouped according to successional rate and appropriate water to ground surface level growing conditions.

Approximately 60,000 trees of more than 279 unique species were planted on approximately 75% of the overall site. Planting locations for the trees were also carefully selected based on the type of coverage each successional group would provide. For the initial planting of saplings, a planting density of approximately 4 trees per square meter or a spacing of 50 centimeters was used to encourage natural selection, following Darwinian evolutionary theory "the survival of the fittest". The planting design intent also looked to create multiple layers of forest canopy as appear in nature, which could be created through selection of plant species with various heights with the same community.

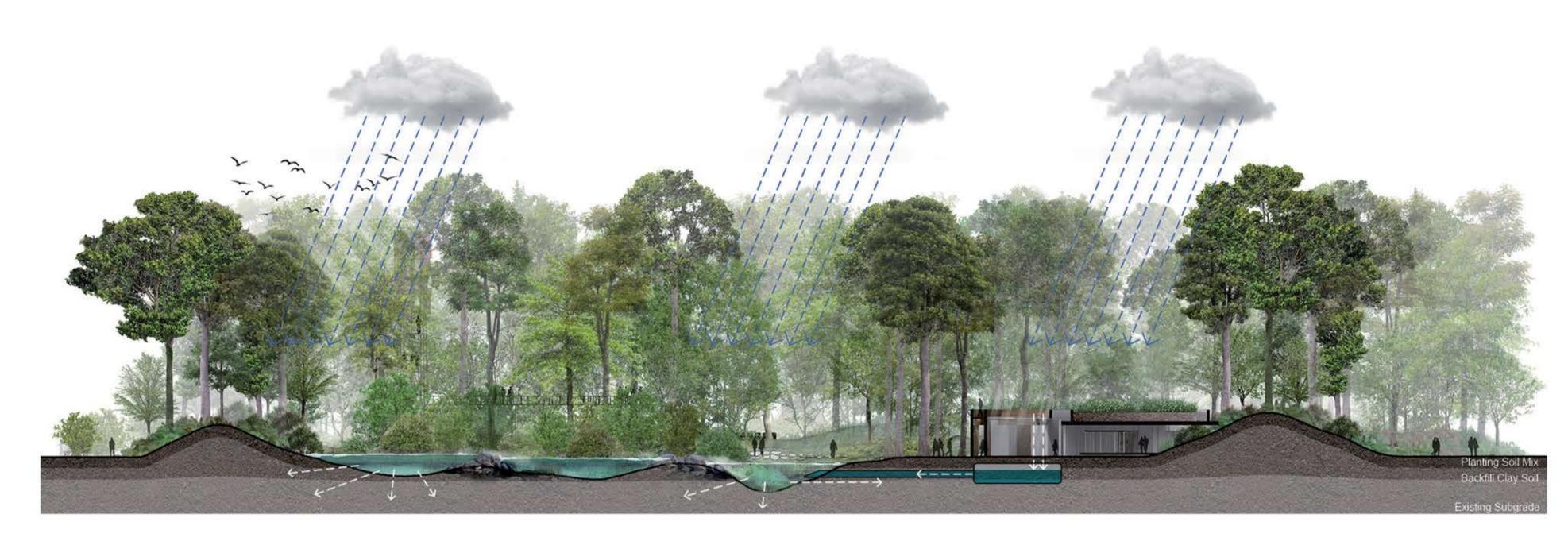
SUCCESSIONAL GROWTH OF THE LOWLAND DIPTEROCARP FOREST OVER TIME



VEGETATION DISTRIBUTION DIAGRAM

Banana Collection 9. Palm Collection 10. Roof Garden

FOREST SECTION



CONTRUCTION TIMELINE



1st Month In late 2012, any non-compostable waste was cleared from the site while the remaining waste was allowed to



7th Month Initial growth of saplings after just a weeks from planting.



2nd Month Initial eathwork of the site required excavation of existing soil while also mixing it with specified engineered soil.



19th Month Approximately a full year of growth and the new urban

forest is gradually taking shape.



3rd Month Highly-fertile engineered soil imported into the site to prevent compaction and allow for porosity of the designed



31st Month The water features are receiving some 'decorative'

treatment.



4th Month An early sculpted berm topped with a 1-meter deep Carving out and molding of the meandering stream and soon



32nd Month Water volume is increased to create the 'natural' flowing stream that was intended by the landscape architects.



5th Month

to be reparian edge.



33rd Month The initial planting of saplings are in full form in comparison to the newly planted lowland dipterocarpus alongside the obeservation tower.

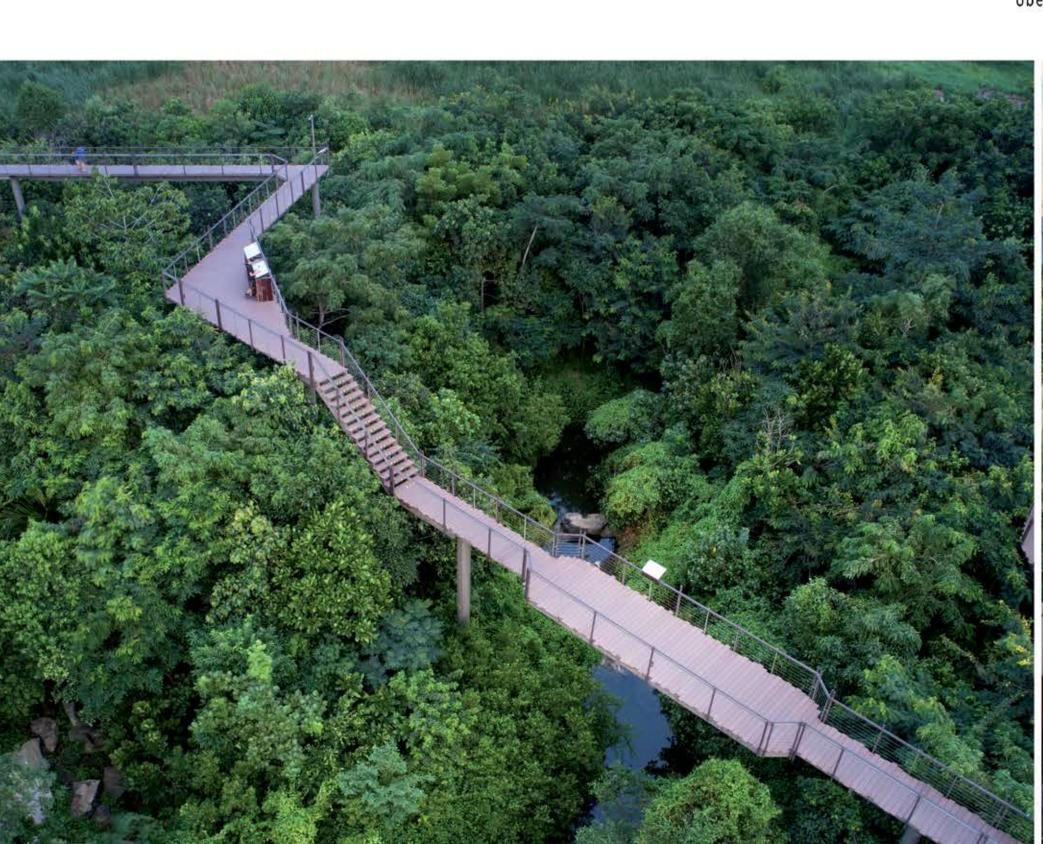


6th Month Graded earthwork completed and ready for sapling planting.



38th Month After only 3 years from the project's breaking ground, an exhibitive forest of rich foliage + textures is ready for visitors - May 2015.





topsoilmix.

