Measures to Remediate the Vitality of Ginkgo Trees (Implemented April–June, 2024)

Tokyo, Japan, July 19, 2024 – The developers of the Jingu Gaien District Urban Redevelopment Project (hereinafter, "the project") today announced measures to remediate the vitality of ginkgo trees have been implemented with the goal of improving the growing environment for these trees.

As outlined on the project website* and in other sources, regarding ownership and management classifications of the Four Rows of Ginkgo Trees, the inner two rows of the Four Rows of Gingko Trees are owned and managed by the Tokyo Metropolitan Government and the outer two rows are owned and managed by Meiji Jingu. All four rows are protected and no trees will be transplanted or cut down. We have carried out remedial measures on a portion of the trees owned and managed by Meiji Jingu on the west side, based on the results of vitality research conducted on Four Rows of Gingko Trees in 2023.

Developers will continue to monitor the status of the trees and consult with experts, including arborists, as we advance the project.

*Preservation & Creation of Greenery (Jingu Gaien District Urban Redevelopment Project website) https://www.jingugaienmachidukuri.jp/en/green/

1. Measures to remediate the vitality of ginkgo trees

Since April 2024, we have been implementing six measures to remediate the ginkgo trees circled in red in the diagram below. Details of these measures are as follows.



(1) Clearing of hedera and undergrowth

Over the upper layer of the ginkgo tree root system, there is an extremely vigorous growth of *hedera canariensis* ("hedera"). We thoroughly removed this layer of undergrowth, while taking care not to damage any roots, in order to remove the stress on the trees that comes from having to compete for water.

■Before clearing

■After clearing



(2) Using water injection to improve soil

Soil survey results have indicated that some of the soil around the trees is in a compacted state. To mitigate this and realize an environment that makes it easier for the ginkgo tree roots to grow, we used water injection to soften the hardened areas, which improved soil quality while avoiding damage to the roots as much as possible.

■Water injection



(3) Laying rice straw mulch

We laid a layer of rice straw mulch to prevent the soil from drying out, particularly in summer, and to keep it warm in fall and winter.

■Before mulching

■After mulching



(4) Installing an irrigation system

We have installed an irrigation system that can provide regular watering automatically in order to ensure the ginkgo tree root system has sufficient water.

■Hose network



■Irrigation system

(5) Removing the roadbed of a former road

The roadbed of a former road, which was laid before the current tennis courts were constructed, divides and obstructs the growth of the root system. Therefore, we carefully removed it in a way that does not damage the ginkgo roots and replaced it with good quality soil.



Before work started





Dismantling the roadbed



(6) Installing wood decking in the shops lining the road passing through the ginkgo tree rows

We removed the interlocking blocks used as flooring for the shop terraces and then carried out water injection to improve soil quality and realize a better environment for the ginkgo tree root system. To prevent it from drying out, we laid rice straw mulch and installed an irrigation system. Above this, we installed raised wooden decking as a way of avoiding stress on the root system from pedestrian foot pressure.

■Before installation







2. Research on the ginkgo trees

We are carrying out the following research to gauge the effects of the remedial measures outlined in 1. and to monitor the situation over a long period of time.

(1) Installing dendrometers

In April 2024, we installed dendrometers on eight of the ginkgo trees. Dendrometers are devices for measuring trunk circumference and as the condition of the tree is most noticeable in the trunk, dendrometers can be used to monitor the growth of the ginkgo trees and check if the remedial measures are having an effect. Installing dendrometers has no negative effects on the trees.

■A dendrometer



■After installation on one of the ginkgo trees



(2) Surveying soil moisture content

We are regularly measuring the moisture content of soil near the westernmost row of ginkgo trees. Through these measurements, we can monitor whether the soil is too wet, appropriately moist, or too dry, as well as whether the timing between watering and the amount of water being used is correct.

Measuring soil moisture content

