

1. PROJECT INFORMATION #202301

Project Title

HOOZUE: INDIGENOUS JAPANESE TECHNIQUES FOR LEGACY TREE CONSERVATION

Location (City / State / Country)

**PROVIDENCE / RHODE ISLAND / USA
AND ADDITIONAL SITES IN USA**

Completed Year

2022 / 2023 / ONGOING

Project Size

INDIVIDUAL TREES

Budget for Design + Construction

RANGES FROM \$6,000 TO \$22,000 PER TREE

Submitter's Role (Prime consultant, lead designer, etc.)

PRIME CONSULTANT AND PROJECT COORDINATOR

2. SUMMARY STATEMENT

The landscape architect and a master gardener from Kanazawa, Japan are leading workshops, demonstrations, and installations of indigenous Japanese arboriculture practices – such as *hoozue* (branch supports), pruning, and other techniques – for legacy tree conservation and health.

The work is being documented as part of global research on indigenous horticultural practices as well as to compare these techniques with prevailing models of arboriculture in North America.

This international collaboration has completed work in 2022 and 2023 at the 240-year-old Betsey Williams Sycamore at Roger Williams Park in Providence, Rhode Island; a pair of cherry trees at the United States National Arboretum in Washington, DC; one of the oldest katsura trees in America at Dumbarton Oaks in Washington, DC; redbud trees at Wrightwood Gallery in Chicago, Illinois; and a landmark oak tree at the historic Caldwell Farm in Bristol, Wisconsin.

In 2024, the collaboration will continue at Dumbarton Oaks with work at the Beech Terrace and Cherry Hill – the latter being one of the last portions of the garden designed by landscape architect, Beatrix Farrand.

3. NARRATIVE

BETSEY WILLIAMS SYCAMORE ROGER WILLIAMS PARK PROVIDENCE, RHODE ISLAND / 2022

The Providence Parks Department invited the landscape architect and a master gardener to lead workshops and demonstrations on indigenous Japanese arboriculture practices for tree conservation and health, including: branch supports, pruning, and tree shaping.

The workshops and demonstrations were held in May 2022 at the Japanese Garden and the Betsey Williams sycamore in Roger Williams Park.

The Betsey Williams Sycamore is one of the most iconic and revered trees of Rhode Island. As one enters Roger Williams Park from Elmwood Avenue, the tree forms a triumvirate of objects that include a statue of Roger Williams, the historic Betsey Williams Cottage that dates from 1773, and the Betsey Williams Sycamore that is speculated to be 240 years old.

Over the course of two days two braces were installed on the lowest and most accessible branch to great success. Methods and techniques were taught to Providence Parks department staff while collaborating on fabrication and installation of the hoozue.

LEGACY *PRUNUS ITOSAKURA* CHERRY TREES UNITED STATES NATIONAL ARBORETUM WASHINGTON, DC / 2023

This work is a partnership between the United States National Arboretum, the landscape architect and Japanese master gardener, with an array of regional arboreta, private gardens, local arborists, and the public to amplify and build research on the legacy tree collection at the arboretum.

The 17 branch supports that were installed structurally stabilize branches on these two cherry trees that are at risk of breaking as well as support the ends of branches in order to promote new growth at the extremities of the canopy which will produce additional biomass and leaf area to draw energy for photosynthesis and revive the two trees in our study.

This work is a national study model and site for emerging branches of arboricultural research, indigenous cultural practices, plant humanities, and other scholarly areas. We expect the importance of this project, at our nation's arboretum, to be the subject of research, study, publications - as well as public enjoyment for its elegant beauty - for a long time.

Given the Japanese examples of 1,500 year old cherry trees that the landscape architect shared in the Arboretum's "Cultivating Cultures" symposium, the Arboretum expects this to be a project that initiates a centuries-long conservation of these legacy cherry trees.

3. NARRATIVE (CONTINUED)

KATSURA TREE - ONE OF THE OLDEST IN NORTH AMERICA DUMBARTON OAKS WASHINGTON, DC / 2023

The katsura tree at Dumbarton Oaks is likely one of the five oldest katsura trees in North America and pre-dates the design of Dumbarton Oaks Garden by Beatrix Farrand.

The tree has suffered substantial die-back over the past few decades and the installation of hoozue is a traditional Japanese technique for revitalizing legacy trees by promoting new growth while also supporting at-risk branches and limbs.

The work at this katsura tree in 2023 will be followed by additional work on the historic beech tree on the Dumbarton Oaks Garden's Beech Terrace and conservation of numerous cherry trees on the garden's Cherry Hill – among the last portions of the gardens designed by Farrand – in 2024.

The staff of Dumbarton Oaks volunteered to help install the hoozue at the United States National Arboretum as part of an educational exchange among they and other garden organizations and institutions in the Washington, DC area. Educational workshops and field sessions accompanied the week-long work to install the hoozue at Dumbarton Oaks.

LANDMARK OAK TREE HISTORIC CALDWELL FARM BRISTOL, WISCONSIN / 2023

The Caldwell Farm is a historic mid-twentieth-century property owned by the descendants of noted Prairie School landscape architect, Alfred Caldwell and his wife, Geda. The house was constructed to overlook a mature oak tree which was framed by a low stone wall. Three hoozue, made from pine orchard poles, were installed in 2023 to support a low, ground-hugging branch.

GARDEN REDBUD TREES WRIGHTWOOD GALLERY CHICAGO, ILLINOIS / 2022

A small stand of redbud trees had grown out and over a pool at this gallery in Chicago. Several hoozue were installed to support the long, brittle branches of the redbud and cedar bark cushions were placed under branches that were resting (and rubbing) on an overhead concrete beam that frames the garden.

HOOZUE

BETSEY WILLIAMS SYCAMORE
ROGER WILLIAMS PARK, PROVIDENCE RI





THE EXISTING ICONIC BRANCH RECEIVED CONSTANT STRESS WITH PARK VISITORS SITTING ON IT HOOZUE 02



HOOZUE ON THE ICONIC 57 FEET LONG, LOW, HORIZONTAL, BRANCH ON THE BETSEY WILLIAMS SYCAMORE HOOZUE 03



A BLACK LOCUSTS TREE WAS HARVESTED FROM THE PARK WOODS, BARK STRIPPED, AND CUT FOR THE HOOZUE



THE HOOZUE ARE LASHED TO THE BRANCH WITH PALM ROPE AND A CEDAR BARK FABRIC CUSHION



HOOZUE

LEGACY CHERRY TREES
US NATIONAL ARBORETUM, WASHINGTON DC

17 HOOZUE WERE INSTALLED ON TWO LEGACY CHERRY TREES AT THE NATIONAL ARBORETUM

HOOZUE 06



EXISTING *PRUNUS ITOSAKURA* (BELOW) WITH LANDSCAPE ARCHITECT'S PRELIMINARY SKETCHES SHOWING LOCATIONS OF PROPOSED HOOZUE (ABOVE)



HISTORIC JAPANESE PRECEDENT: HOOZUE SUPPORTING THE BRANCHES OF THE 1,500 YEAR OLD USUZUMI-ZAKURA CHERRY TREE IN TARUMI, JAPAN HOOZUE 08

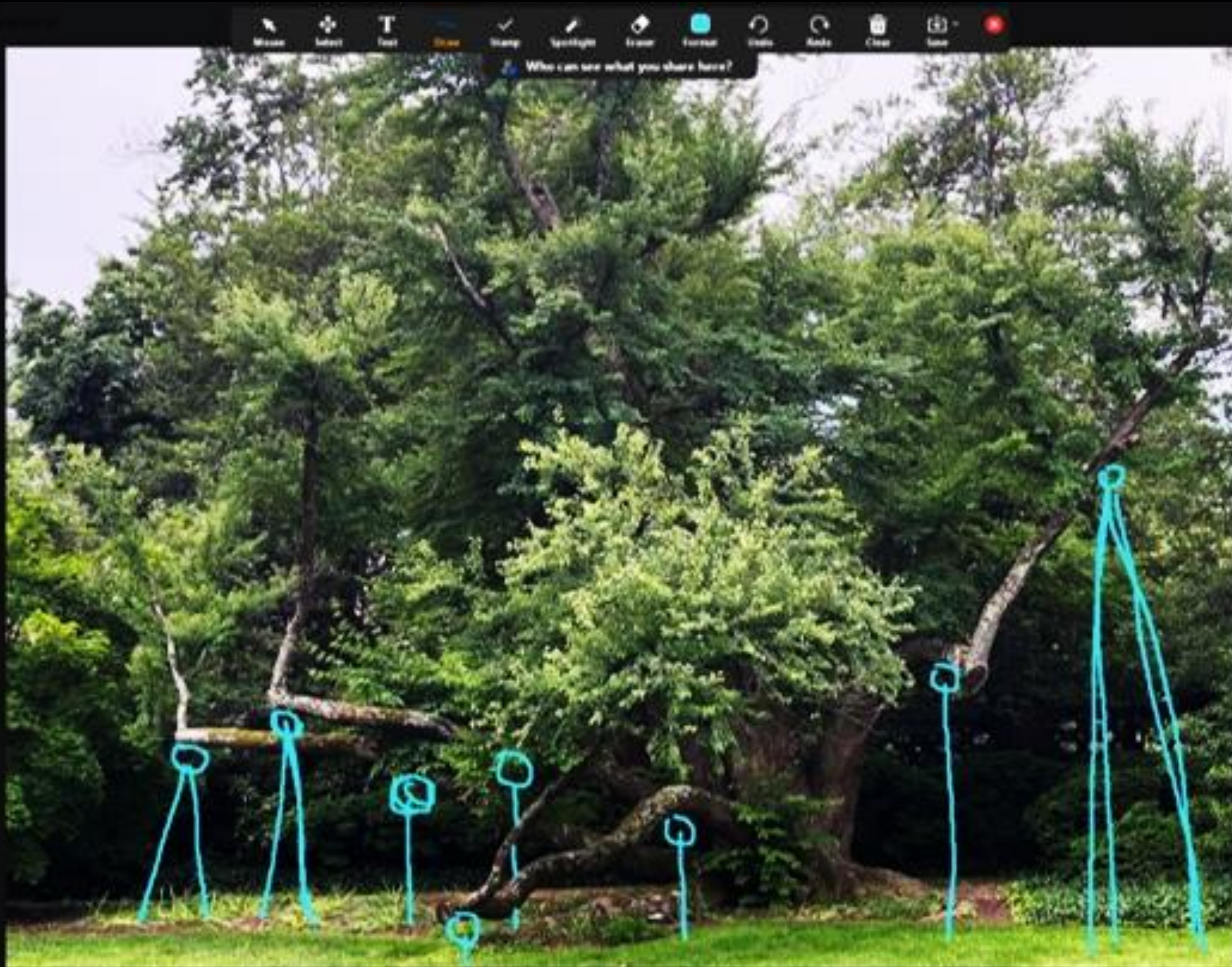


THE PENDULOUS BRANCHES OF THE CHERRY TREES ERUPTED WITH BLOSSOMS ON THE FINAL DAY OF INSTALLATION OF THE BLACK LOCUST HOOZUE

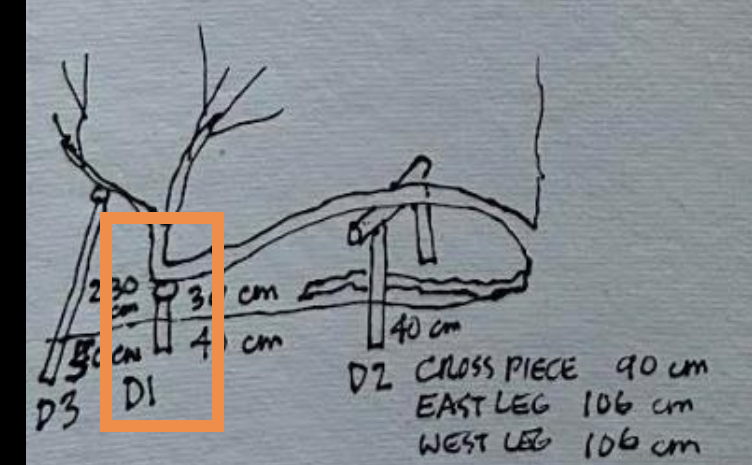
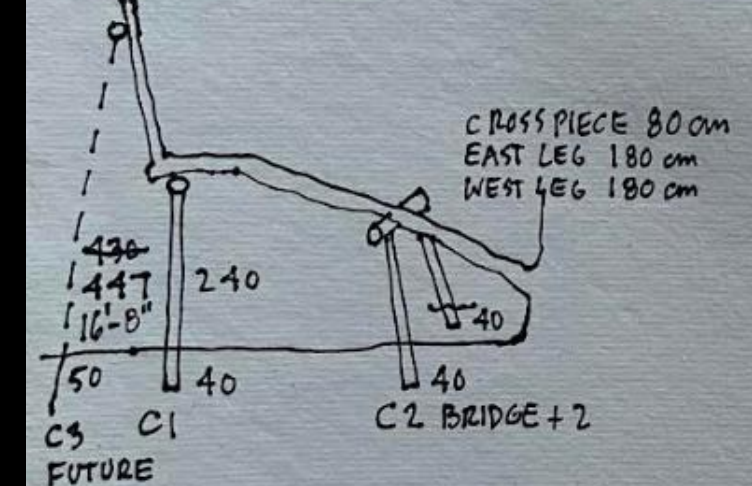
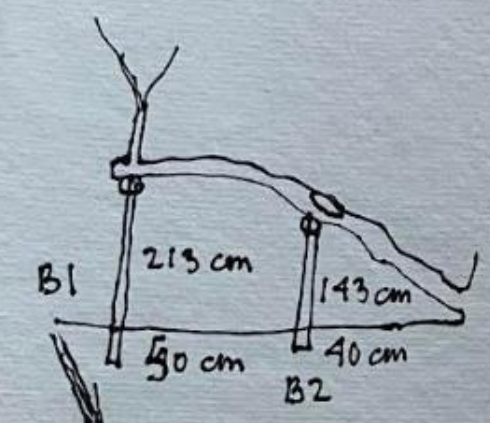
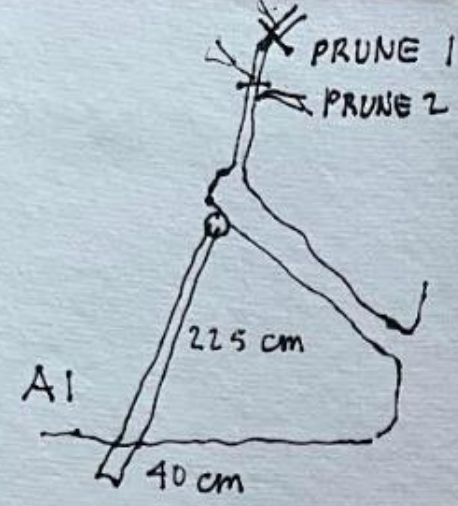
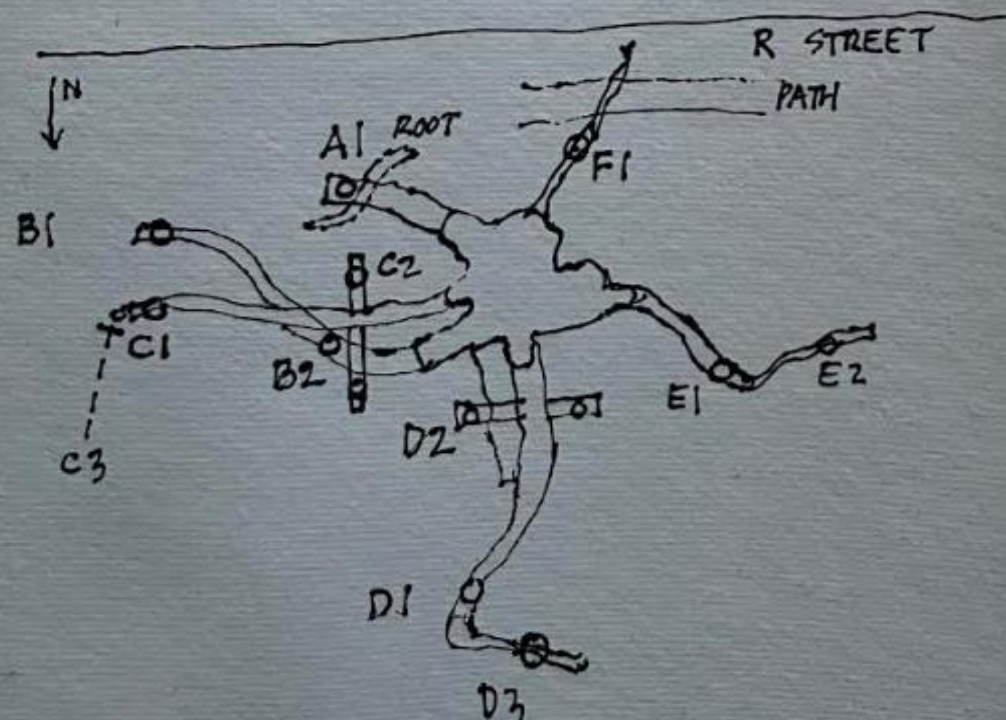
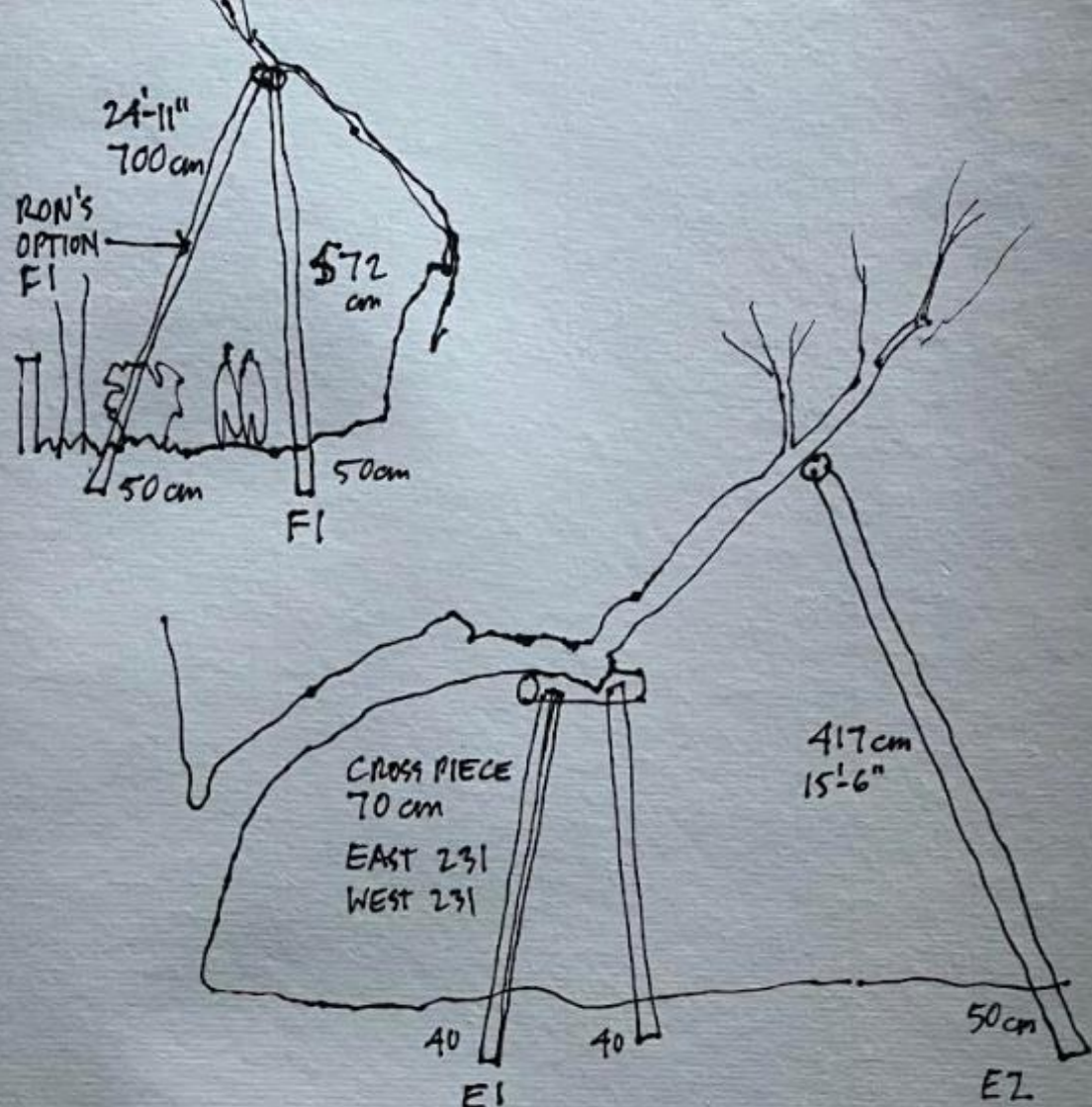
HOOZUE

KATSURA TREE
DUMBARTON OAKS, WASHINGTON DC











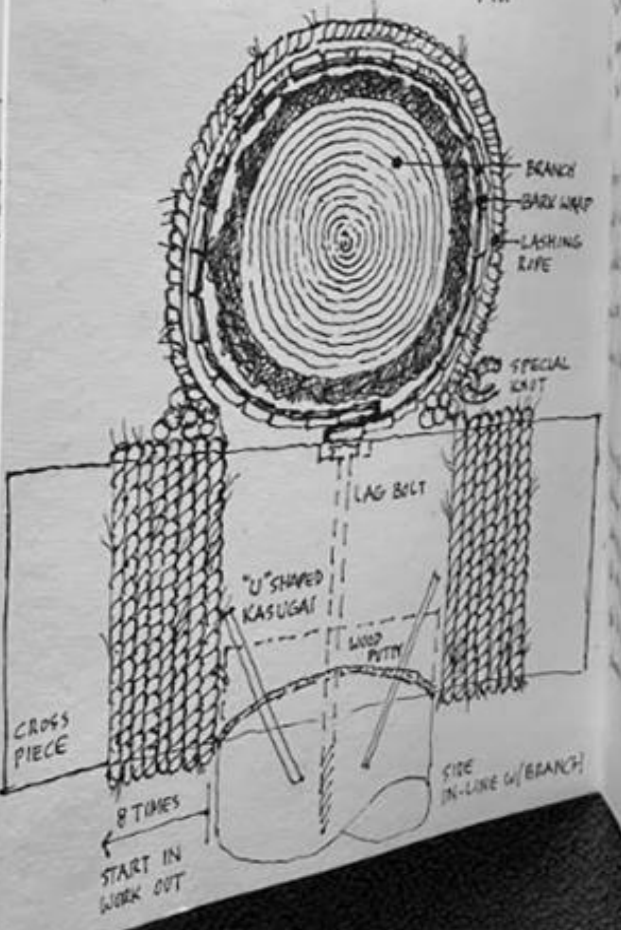
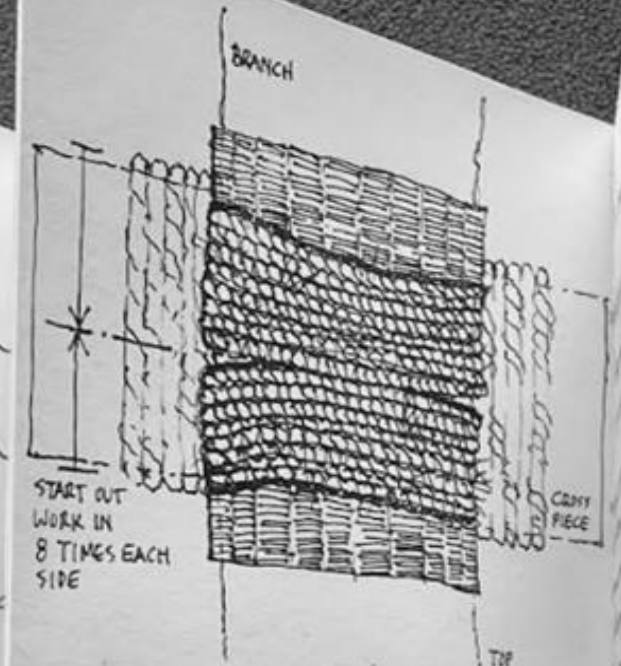
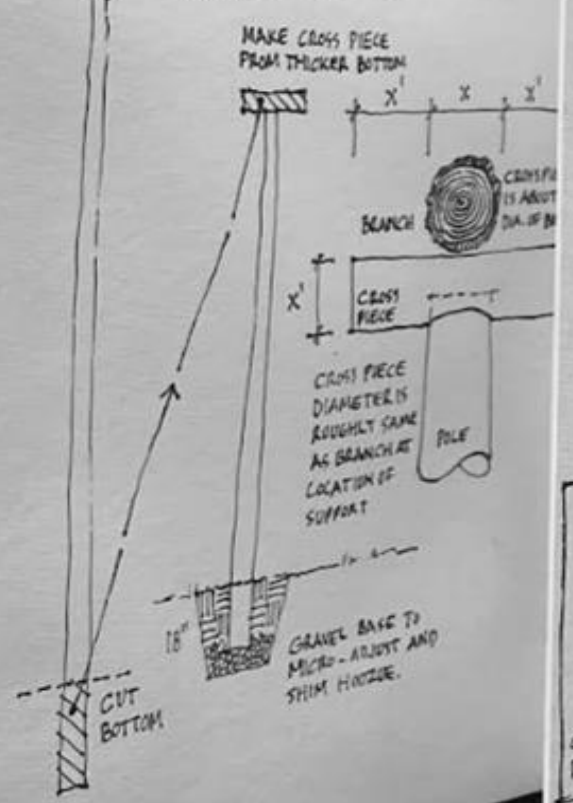
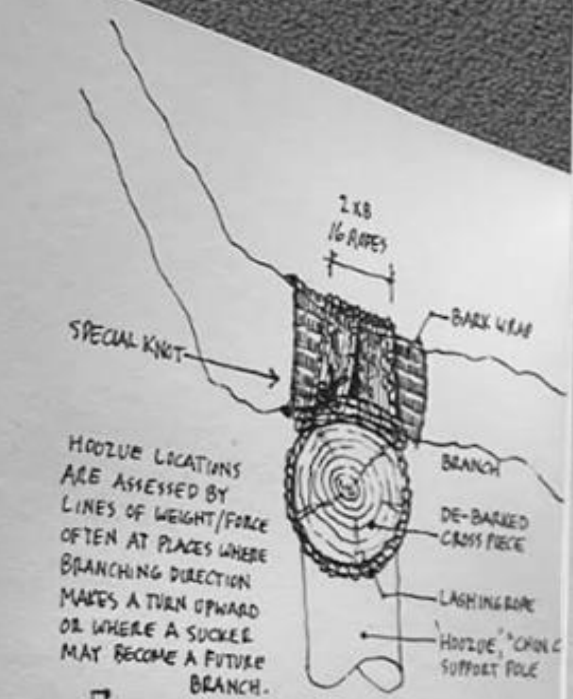










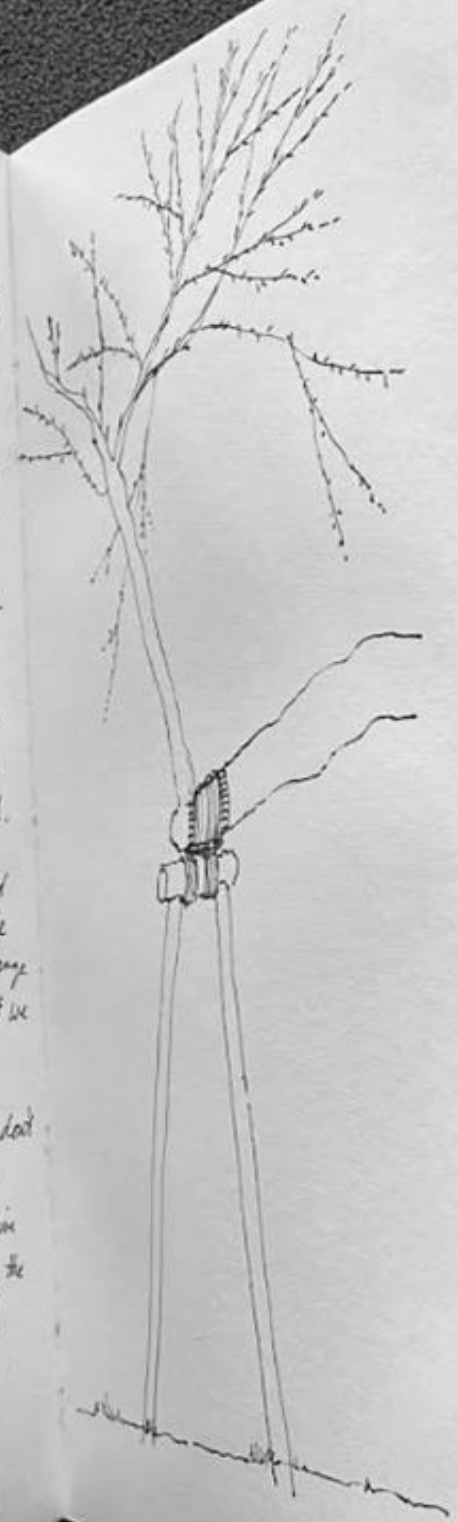


It must have both functionality and beauty. The supports are made of straight pine. Pine trees have sap and are strong against the rain. Fabrication is done by chiseling and inserting the team post into the cross piece. For lashing, I brought cedar wrap, palm rope, and "kasugai"-U-shaped nails from Japan.

I used balance and my many years of experience to decide which thickness and length to use on which part of the branch.

The work on the supports has been completed but this is not the end of everything. We must determine how the supports will change the way we protect the katana and what we should do going forward.

This support is the start of a series. I don't know what this katana will be like in 100 years and I don't think I will be alive to see. However, by doing this support, the katana will live a long time and this project was a great success.
Master Gensho, Kyoto Fujiwara
transcribed by R.H. Henderson



バランスと私の長年の経験で判断させてもらいました。支柱によってどの様に柱が変化していくのか今後どうしていくべきかを判断していかねければなりません。支柱の仕事は完了しました。これで全てが終わったのではないという事です。この柱をやるという事は、この支柱が新しい時代の初まりなのです。この柱が百年後どうなっているのかは分かりませんが、私を育ててくれたと思えます。しかし少なからずともこの支柱をした事で一年でも二年でも長く柱が生きても、もし百年後にそれを見た人が百年前の人もこの柱を大切にしていたのだと、思ってももらえればこのプロジェクトは大成功だったのだと思います。

石川 崇 金沢 匠 庭師
斎藤 元 齋人