

Submitted for:
IFLA AAPME Awards 2023 - 1.1 A) Cultural and Urban Landscape
Project Binder

Shibaura Institute of Technology, TOYOSU Campus



TABLE OF CONTENTS

1 PROJECT TITLE	P01
2 PROJECT STATEMENT	P02
3 PROJECT NARRATIVE	P03
4 IMAGES	P11

PROJECT TITLE

Shibaura Institute of Technology, TOYOSU Campus

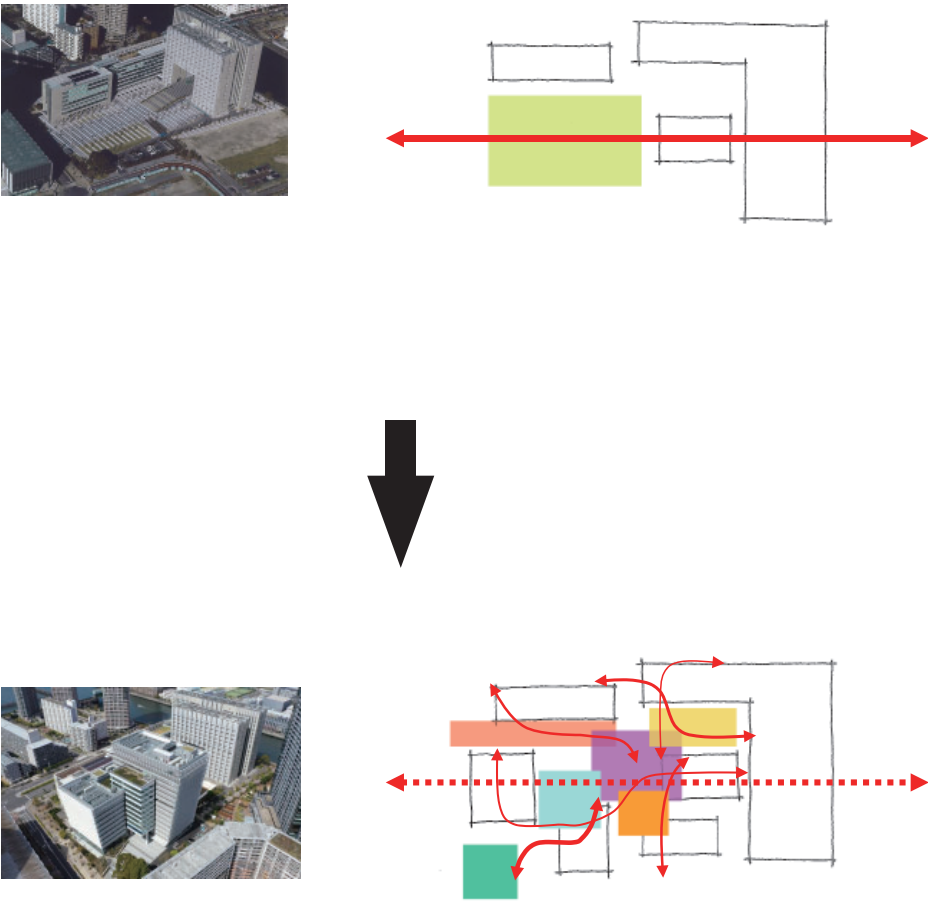


PROJECT STATEMENT

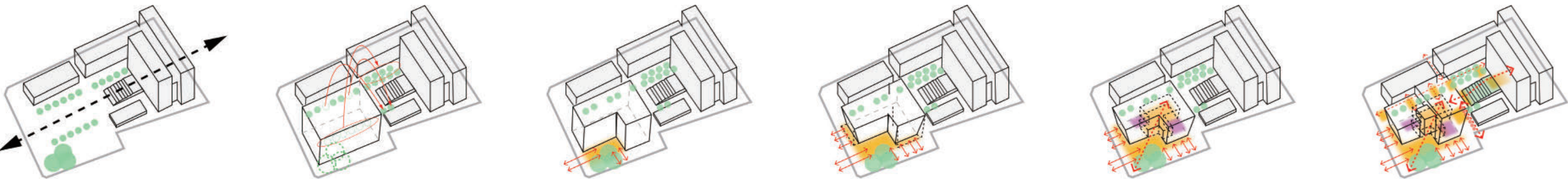
This project envisioned a landscape transformation for redevelopment of the Shibaura Institute of Technology campus in Toyosu. The previous homogenous landscape with a dominant axis was reimagined into a network of multi-directional, human-scale places to accommodate the changing environment of the campus, which is becoming increasingly dense as extensions are built, and to foster connections among campus functions, inherited land memories, and the surrounding community.

The architecture and landscape respond to each other, maximizing openness to the city and carefully respecting the memory of the land, including preserving the giant trees that have long been a symbol of the site. The semi-outdoor piloti leads people and cool summer breezes from the adjacent intersection to the central campus. Buildings have distinctive slanted facades facing the street to reduce the oppression of the cityscape and create a green amenity space open to the surroundings. Activities of people in the plaza and ground floor cafe are seamlessly connected to the outdoor space, creating a strong link between indoor activities and the city.

Immediately upon completion, a new pedestrian flow and sense of village-like complexity was created and people can now enjoy the outdoors while finding their own place on campus.



The diagram discribing for landscape transformation



Spatial development process of architecture and landscape

Inheritance of land memories

Inheritance of paving pattern

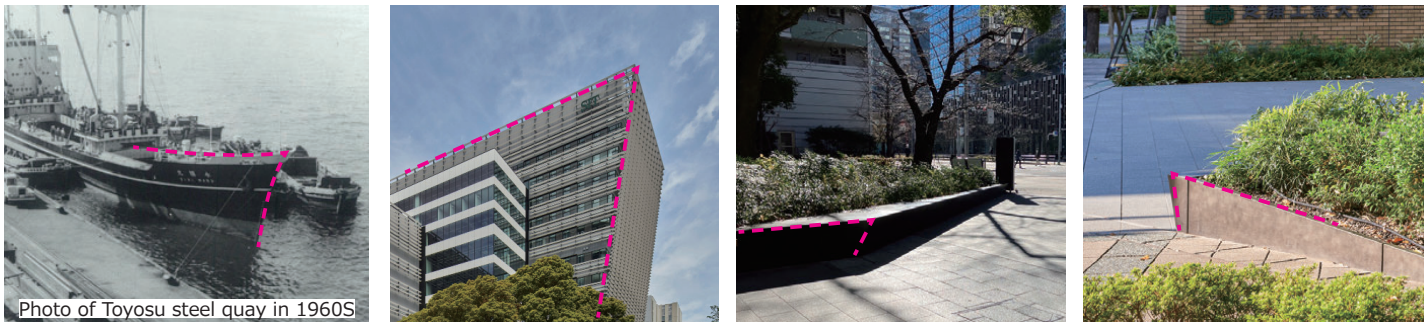
As the paving pattern was inherited, the pedestrian walkway was developed in harmony with the existing environment so as not to detract from the unified look of the entire campus. Some of the existing pavers removed during demolition were carefully stored and reused. By composing a hybrid stripe pattern with a mixture of old and new pavers, the value of the campus was enhanced as an eco-campus that takes CO2 emissions into consideration by reusing existing materials.

Inheritance of greenery

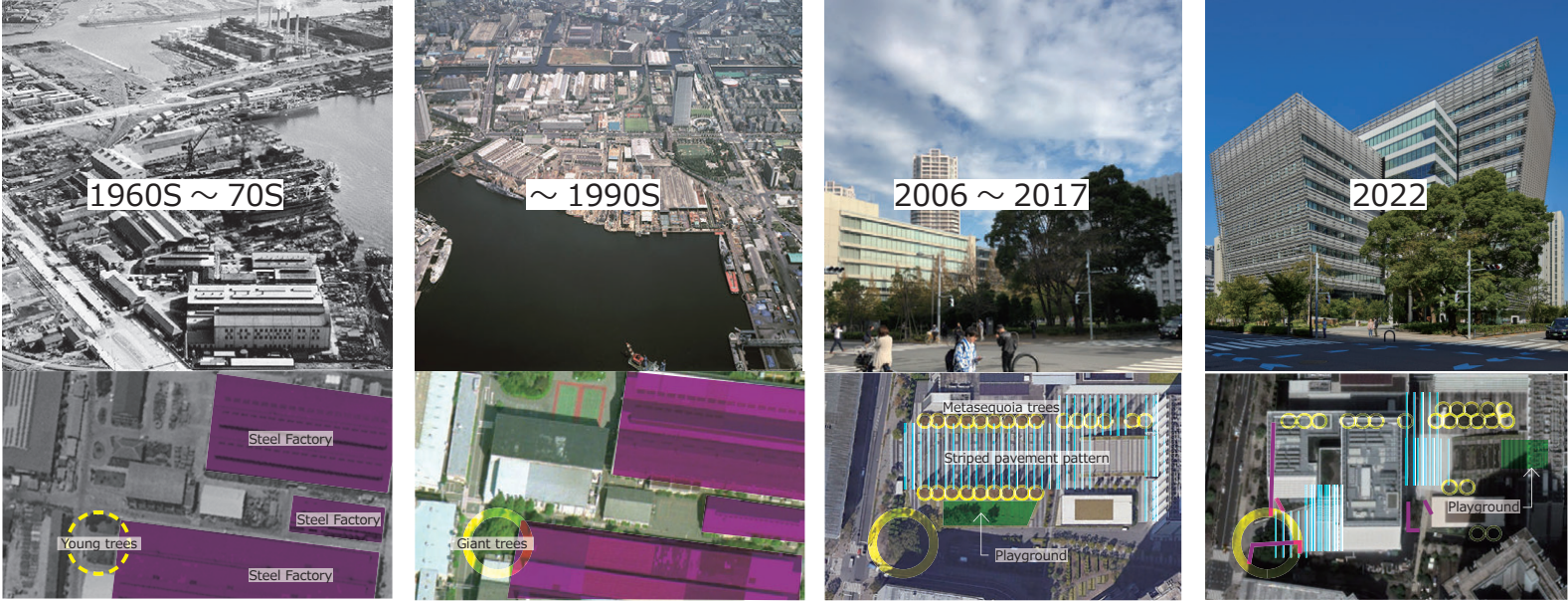
The existing trees were considered a valuable environmental asset to the university, and it was decided that they should be passed on to the next generation. A group of giant trees that had watched over the land from the southwest corner of the site was preserved to create a symbolic green core of overwhelming volume and shaded space at the main entrance of the campus. The rows of Metasequoia trees that had grown healthily and formed a green axis were also preserved and transplanted to maximize their value in the new campus.

Inheritance of industrial history

Respecting the history of steel production, especially shipbuilding, latent in the context of the city, steel walls were installed as elements that characterize the landscape. The shape of the wall was designed with reference to the form of a ship bow and the angle is harmonized with the facade of the architecture. The wall is not only a landscape element, but also serves as a bench to provide a shaded place to rest, to protect the base of the trees from pedestrians, and to ensure a healthy growing environment by protecting trees that are at risk of root rot due to the high water table.



The shape of the facade of the architecture and the steel walls are reminiscent of the bow of a ship



The renovated campus photos highlighting the land memories

Openness and connectivity with the local community

Improving connection with the neighborhood

Formerly, the intersection at the southwest corner of the site was surrounded by dense greenery and lacked pedestrian access to the campus from the station. In this project, this intersection was positioned as the face of the campus that most strongly connects to the city and was developed as a campus gateway plaza that can accommodate large numbers of students while also functioning as a public open space for the community.

Replacing playground for local children

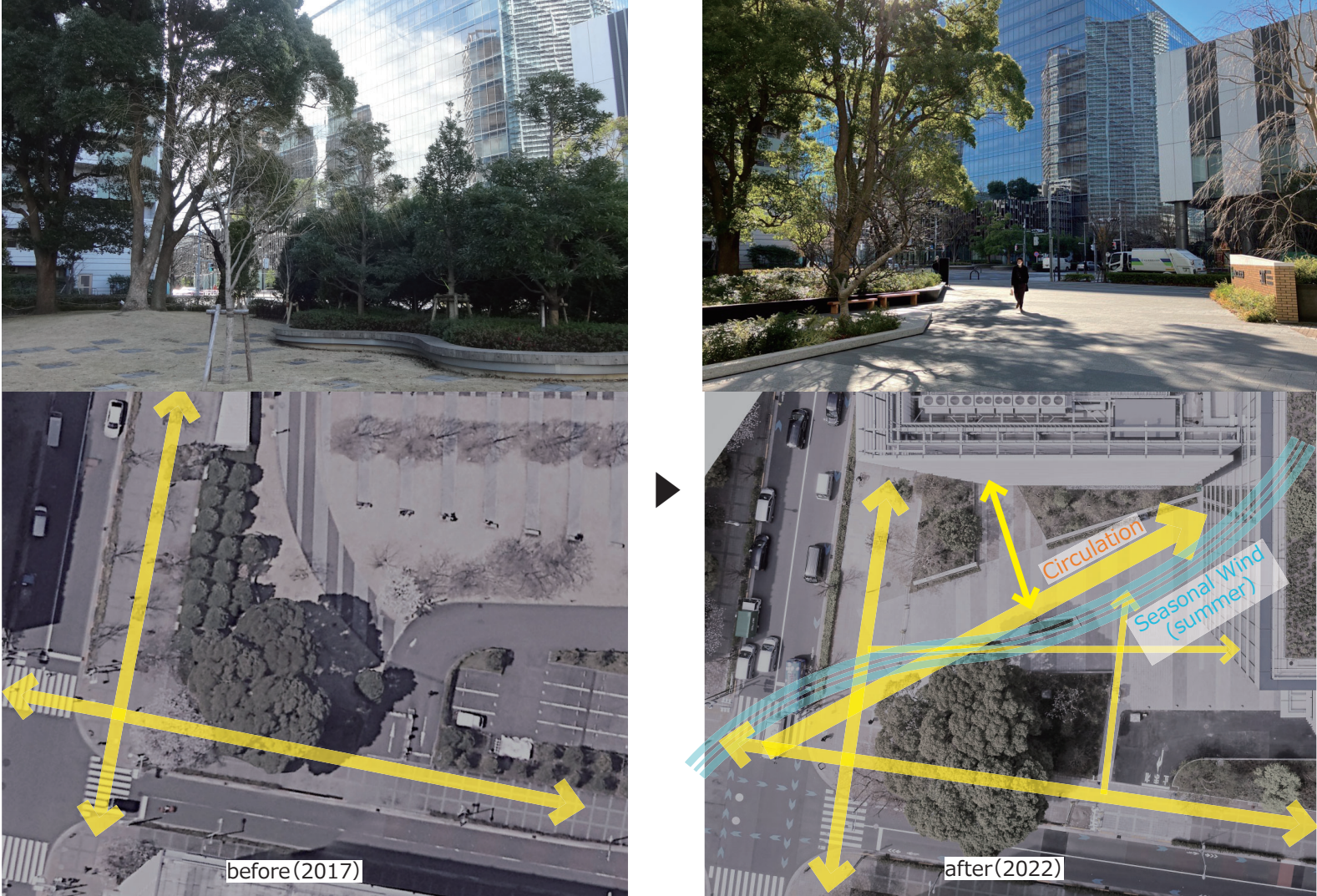
On the previous campus, nursery school children used to be seen running and playing freely on the lawn. To recover and update the "playground" that would be lost with the construction of the new building, a children's park for the neighborhood was constructed on the roof of the existing building and connected to the renovated giant steps.

Seasonal Step Flower Garden created by students and local residents

Students, local residents, faculty, staff, and gardeners work together in the Step Flower Garden to maintain the plantings and host various events. During the planting season, local residents and students select flowers and plant them with their own hands, making name tags to accompany the flowers, in an effort to encourage as many people as possible to get involved and connect with the area through the garden.



Various seasonal events by local residents and students



Changes in pedestrian circulation and open space at the southwest corner of the site



Creating pleasant spaces & places, not only for the students, but also open to the local community

Improving quality of outdoor space and place for the students

Outdoor space and place with human scale

Taking advantage of the spatial characteristics of the densely built campus, the aim was to create a village-like sense of pleasant complexity rooted in the human scale by softly dividing the space through switching paving patterns, placement of outdoor furniture, and green plantings.

Creating an amenity space for people among greenery

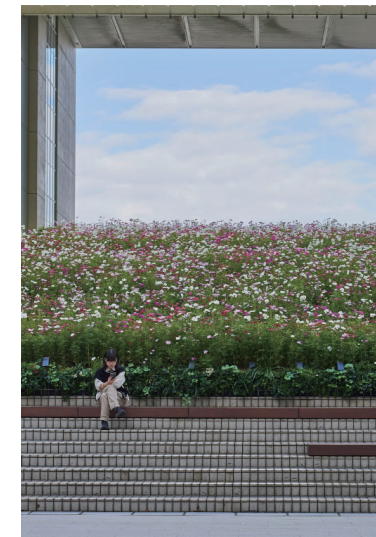
Establishing a place for people together with greenery achieves the creation of greenery that is not only beautiful to look at, but also enjoyable and comfortable to interact with – greenery that is not only beautiful in itself but also beautiful with the presence of people.

Particularly with regard to existing trees, preservation was conscious that the value of greenery is enhanced not by preserving trees only as they are, but by overlaying them with places for people.

Making outdoor rooms that keep moderate distance from pedestrian flow

In consideration of some points below, a pleasant atmosphere was created where students can spend time relaxing outdoors.

- Benches should be set back from the hustle and bustle of student traffic.
- Benches should not be placed parallel to pedestrian circulation, but in a line so that people do not walk directly in front of people sitting on the bench.
- Create cozy pocket spaces that provide a comfortable sense of occupancy by creating a slight difference in level or using different paving materials between the resting area and the surrounding area.



Creating cozy outdoor lounge spaces among greenery with human-scale



Preserving and transplanting trees provides students with cozy places to eat and chat among greenery

Rich variety of textures that make people want to get close and touch and can give insight to students studying manufacturing

The benches and floors that meet the hands and feet create expressive textures that make people want to get close and touch, and create opportunities for students studying different types of manufacturing to gain insights that they could not get at their desks by coming into direct contact with real materials that show various textures depending on their finish.

Delicate stripe paving with two different textures

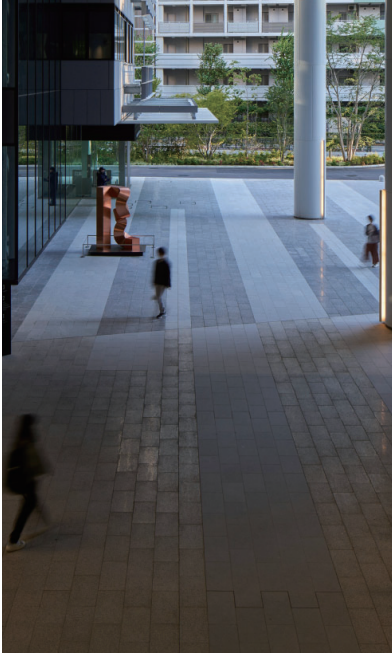
A new pavement stripe pattern is installed on the campus by combining different testures of concrete and stone. The campus floor has a more subtle expression, which will change in texture with age, so that visitors can enjoy the difference over time.

Irregular pattern finish that creates sense of depth

On the steel plate, an uneven surface texture with non-homogeneous depth is achieved. An authentic metallic feel is created which enhances the expression of the plants by adjusting the intensity of the painting and polishing of the finish,

Various types of texture for furnishings

For the finishing of outdoor furniture such as benches that come into contact with people's hands, hand-polished, sandblasted, and bush-hammered designs that combine a variety of textures are used to create a diverse feel of concrete.



Stripe paving with two different textures (concrete and stone)



Bush-hammered concrete to conctrast with the plants

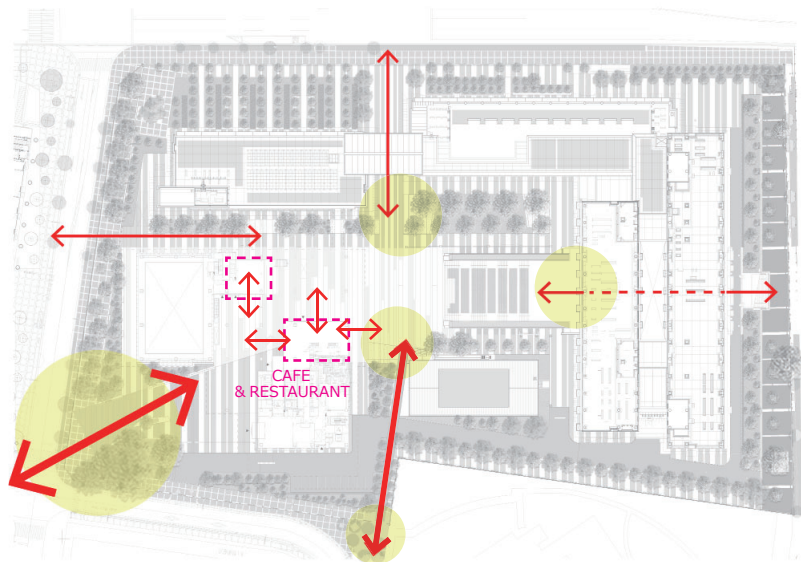


Various types of texture for furnishings



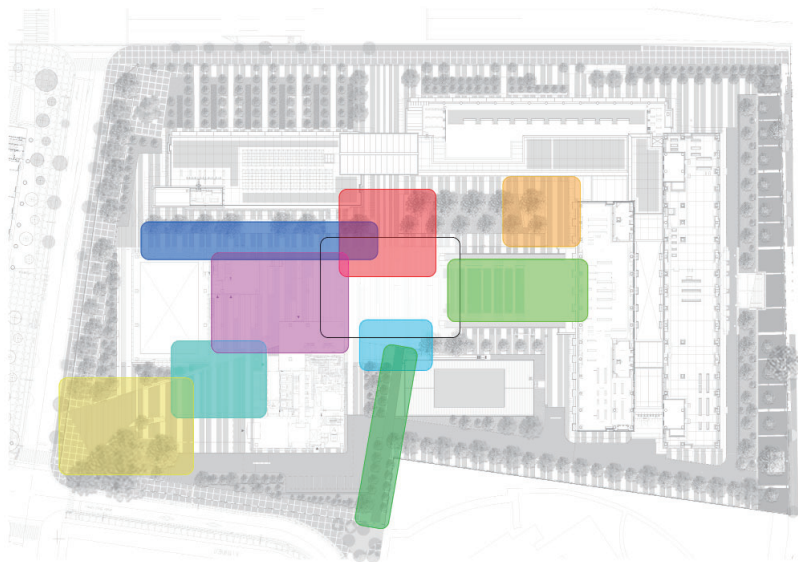
Irregular pattern finish that creates sense of depth on the steel plate

LANDSCAPE DESIGN STRATEGY



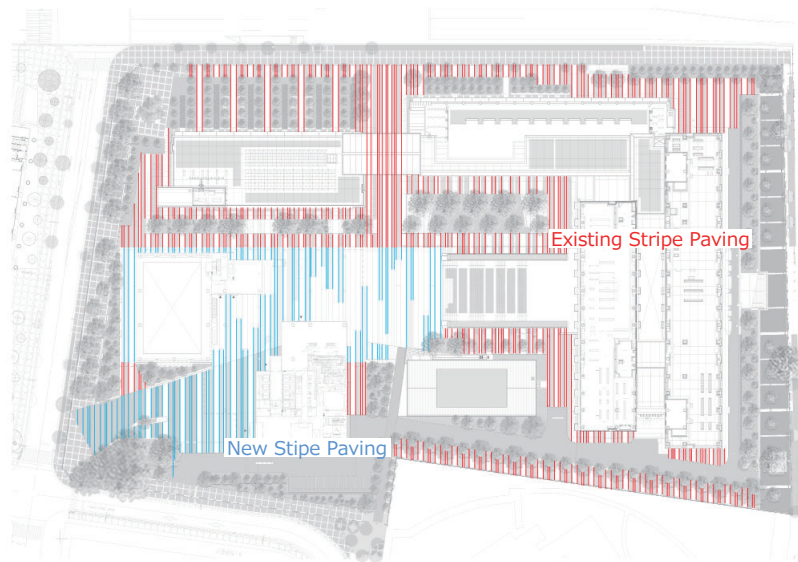
a) Openess and connectivity

#Open to the local residents #Campus gateway plaza
 #Shibaura Kids Park #Campus promenade



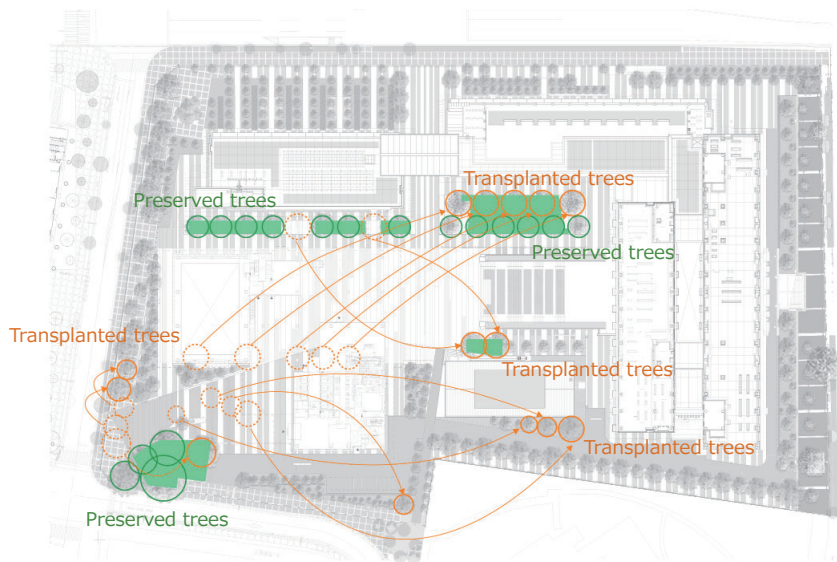
b) Sense of diversity and village-like complexity

#Human-scale design #Multi-directional places
 #Outdoor rooms among greenery



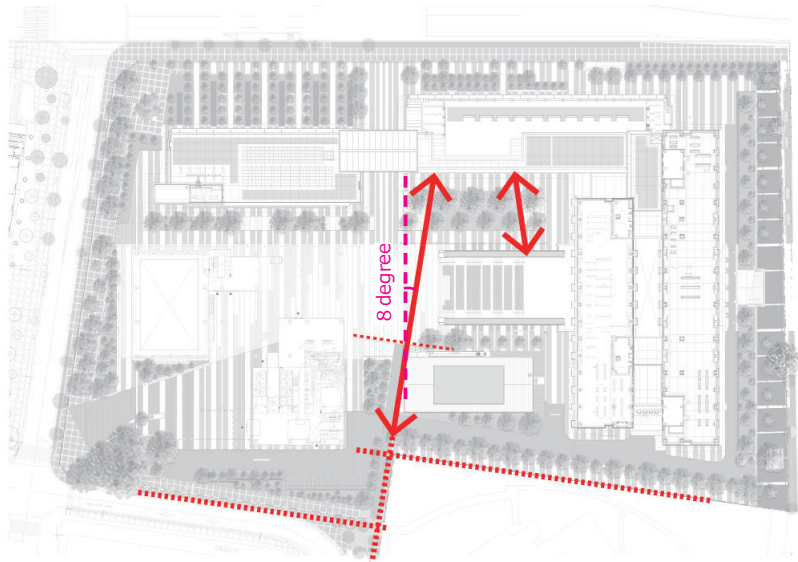
c) Harmony with the existing paving

#Stripe paving #Reused paving blocks
 #New striping pattern with two different textures



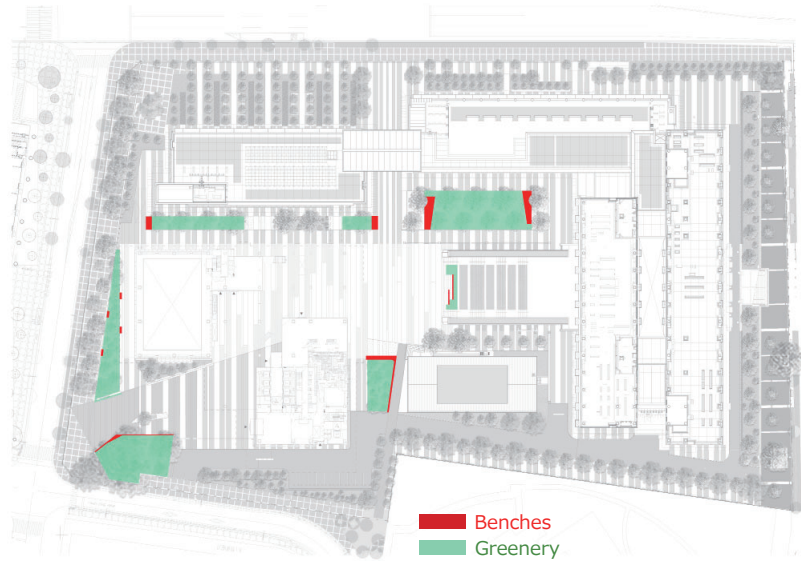
d) Inheritance of greenery

#Giant trees #Metasequoia trees #Tree preservation
 #Tree transplantation using an exclusive machine



e) Adopt to the peripheral block layout

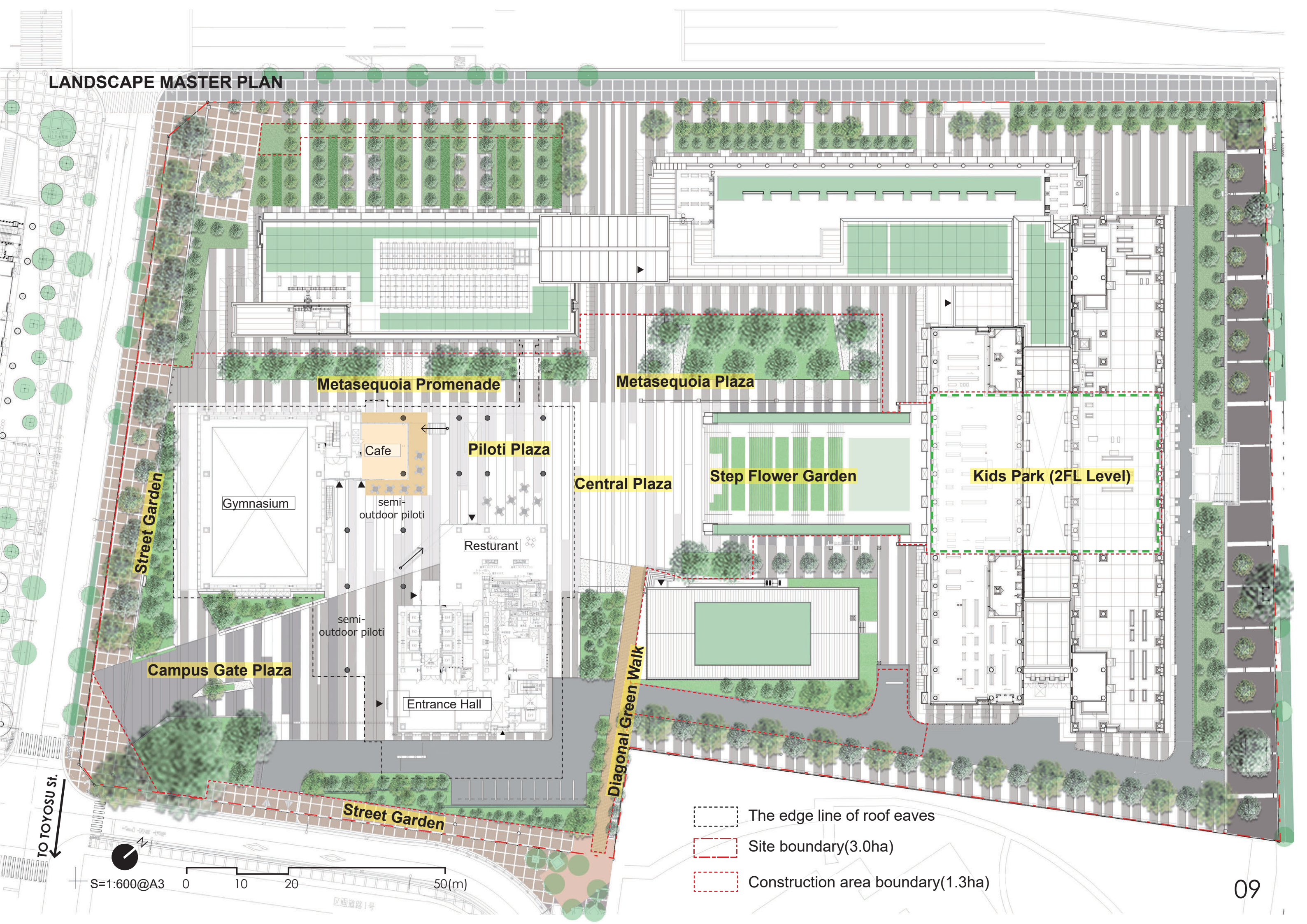
#8 degree angle #Harmony with the srrounding cityscape
 #Place for people with preserved trees



f) Establishing a place for people together with greenery

#Enjoyable and comfortable green space to interact with

LANDSCAPE MASTER PLAN



Metasequoia Promenade

Metasequoia Plaza

Piloti Plaza

Central Plaza

Step Flower Garden

Kids Park (2FL Level)

Campus Gate Plaza

Street Garden

Diagonal Green Walk

Street Garden

TO TOYOSU St.

S=1:600@A3

0

10

20

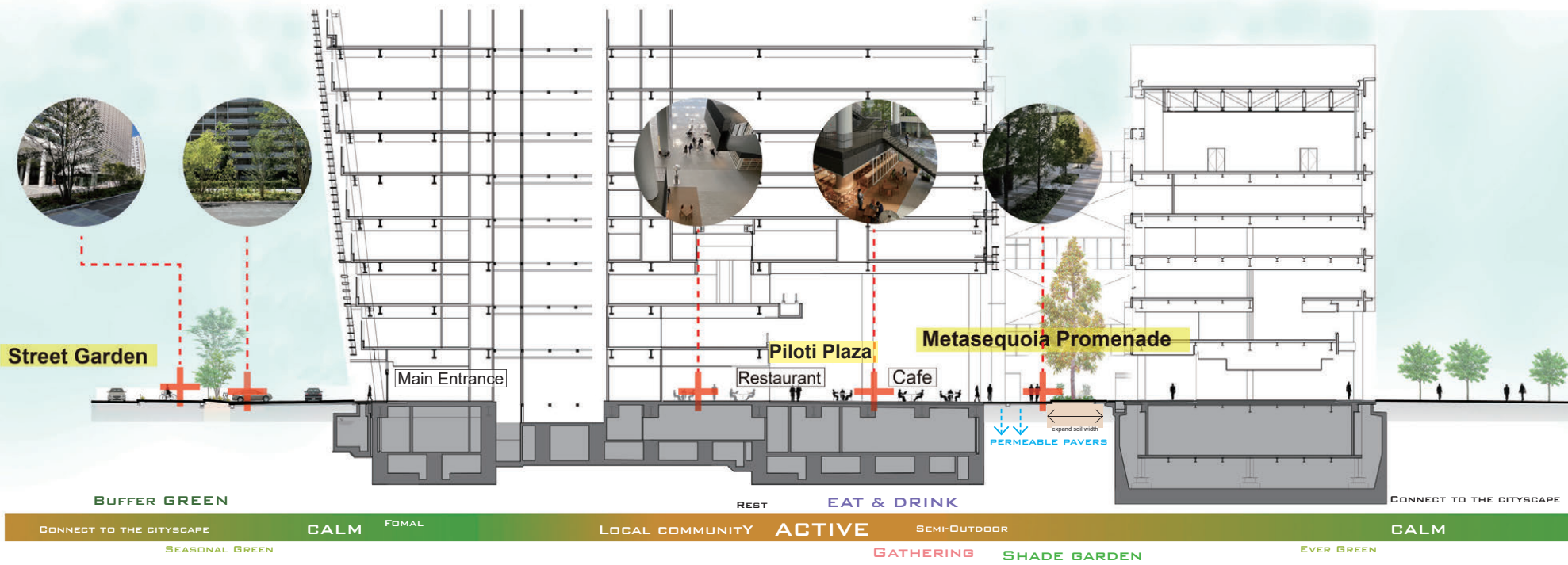
50(m)

The edge line of roof eaves

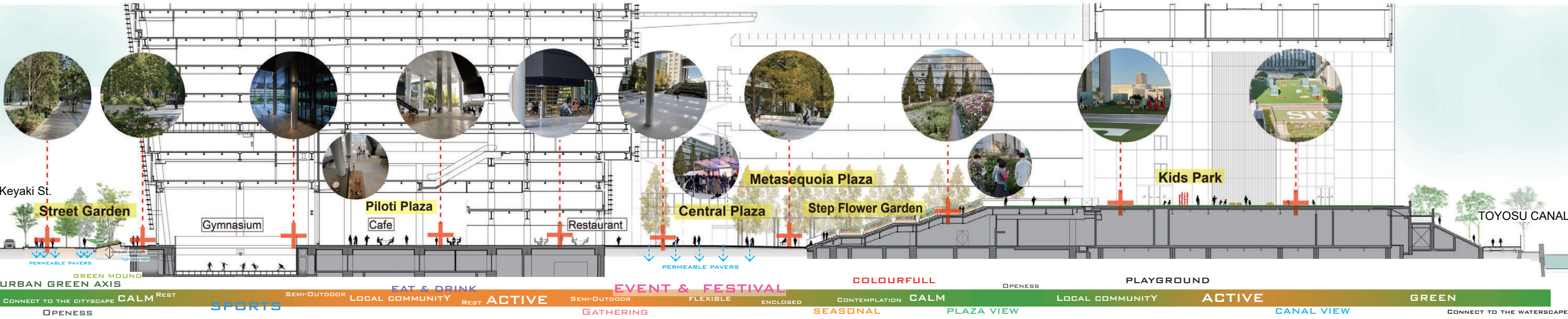
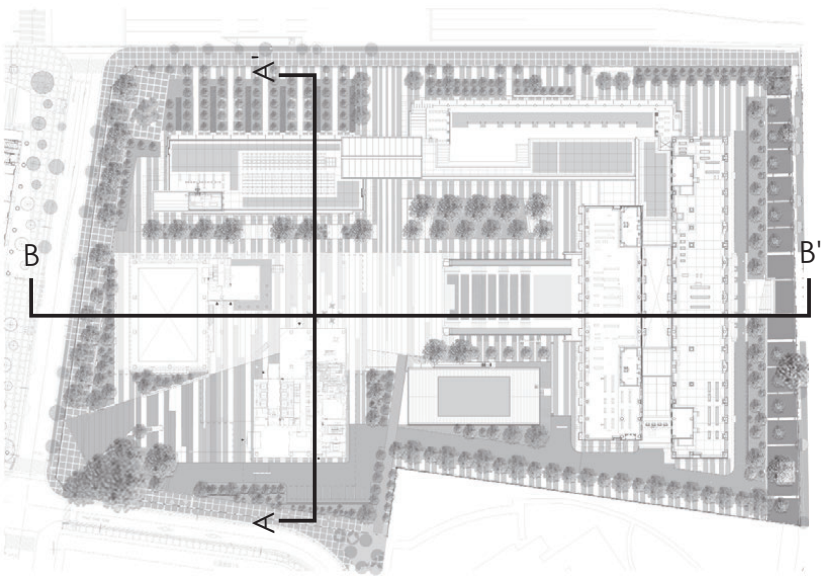
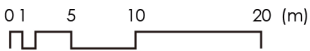
Site boundary(3.0ha)

Construction area boundary(1.3ha)

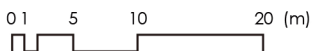
SITE SECTION



AA' section S=1:600



BB' section S=1:600



IMAGES



Approaching towards the building behind the preserved giant trees from the south corner of the site



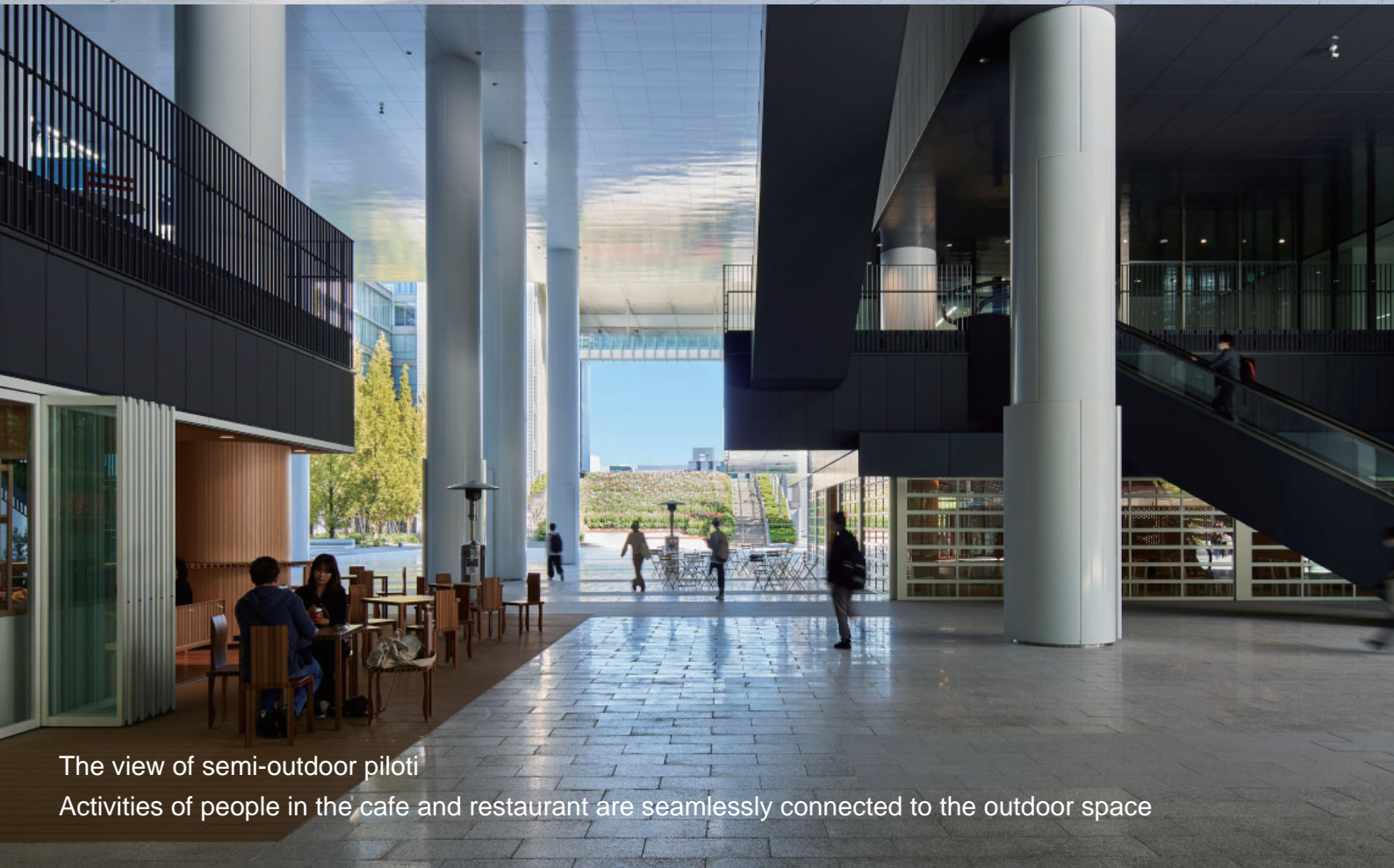
Looking down from the building to the Campus Gate Plaza, which can accommodate heavy pedestrian traffic while functioning as a public open space for the community



View of the campus gate plaza with stone/concrete strip paving from the piloti



Steel wall bench with preserved giant trees behind



The view of semi-outdoor piloti
Activities of people in the cafe and restaurant are seamlessly connected to the outdoor space



Viewing the new main building from the top of the Step Flower Garden



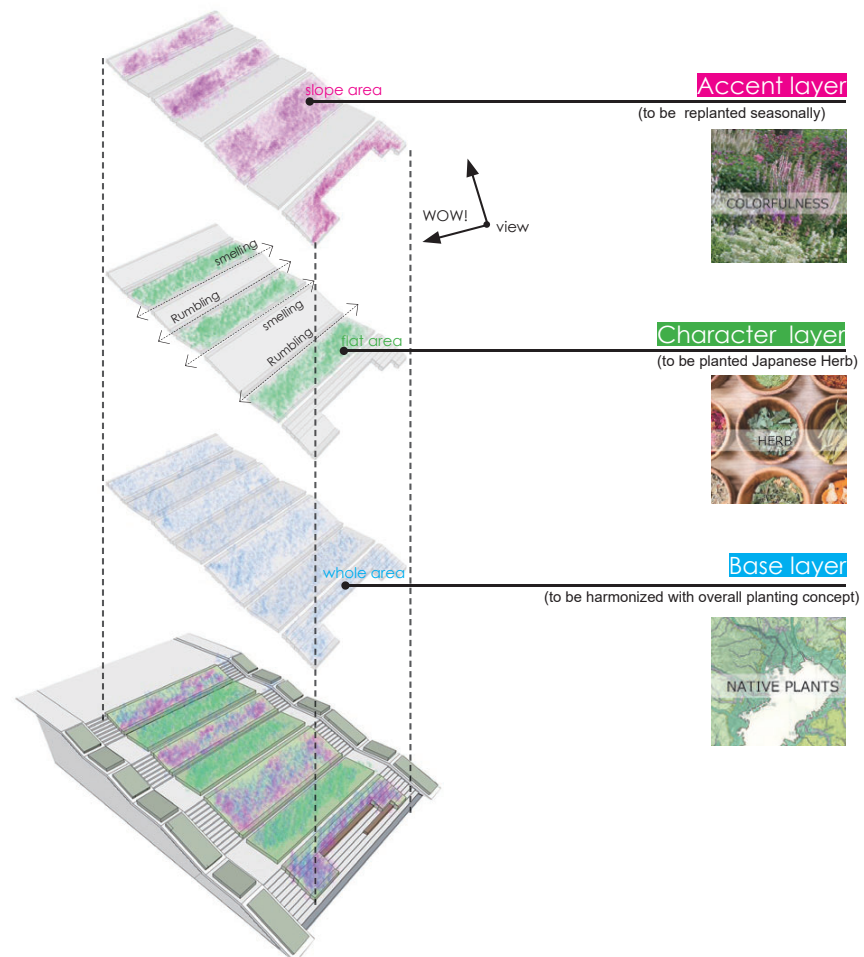
Looking up at the giant steps that have been transformed into vibrant seasonal greenery to be proactively maintained by the students and the local community.



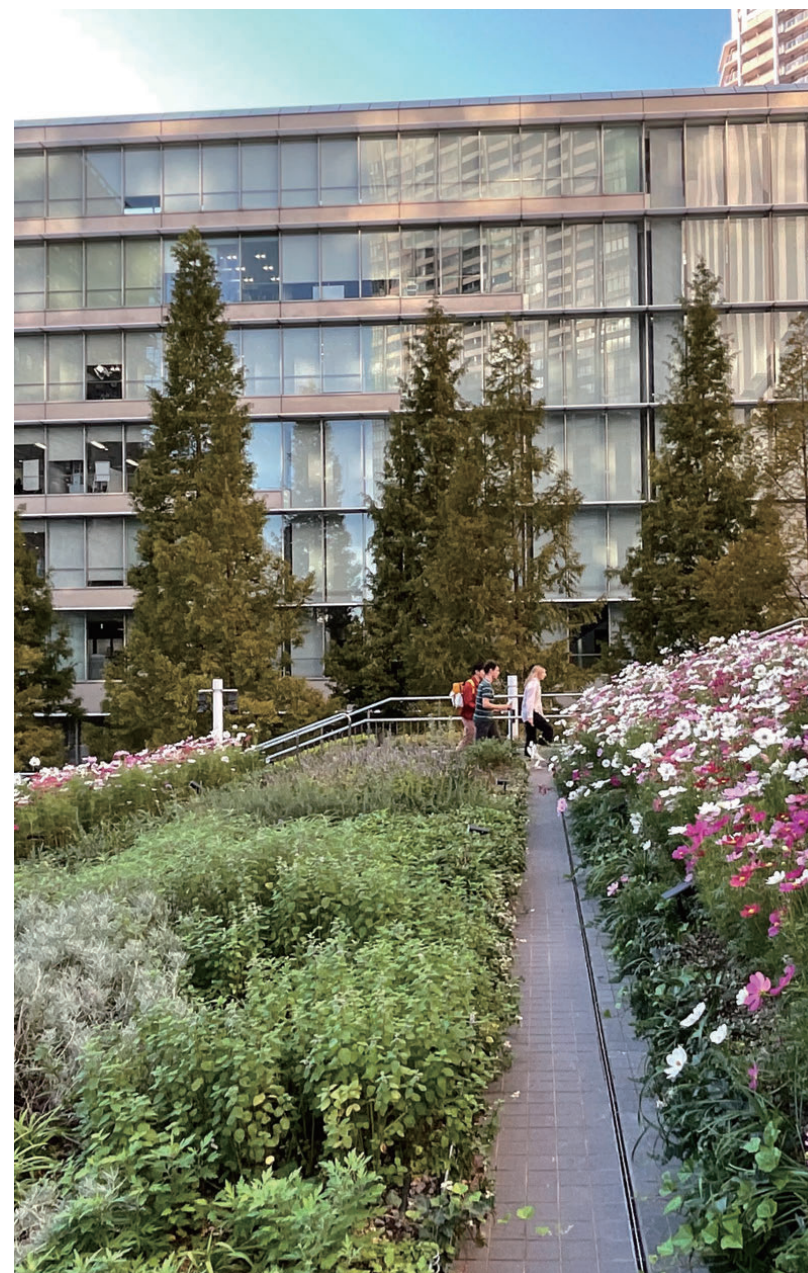
The lower area of the garden with wooden seats installed on top of the existing stairs



Before and after photo of the Step Flower Garden



The diagram showing the planting design concept for the Step Flower Garden



View towards to the Metasequoia trees from the east side of the garden



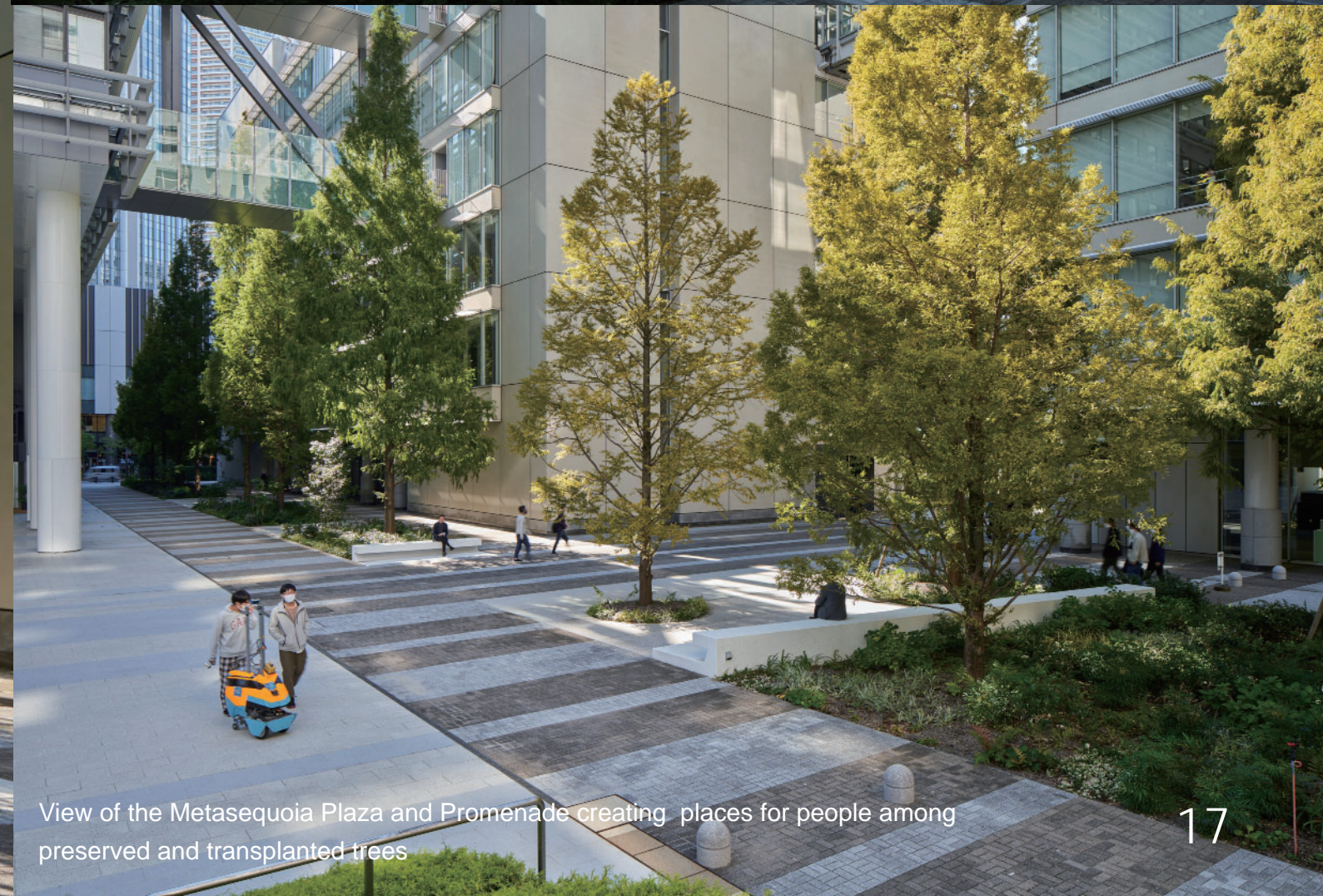
Outdoor class scene at the Step Flower Garden



View of the Preserved Metasequoia tree row



Widening of plantings at the foot of existing trees to prevent roots from breaking paving blocks



View of the Metasequoia Plaza and Promenade creating places for people among preserved and transplanted trees



Metasequoia Plaza with remaining trees and transplanted tree.

Preservation was conscious that the value of greenery is enhanced not by preserving trees only as they are, but by overlaying them with places for people.



View of the Diagonal Green Walk. Students spend their time sitting on the bench and residents walk their dogs along the promenade



The night view of semi-outdoor piloti from the south- east side of the site