5.3. Conceptual Design Guidelines

Waterway design is of fundamental importance for the city of Tokyo, but arbitrary design should be avoided to a certain degree. Although design should be original and creative, a set of basic concepts are needed in order to set the canvas for a better urban and architectural design. The question asked is, “How to formulate these guidelines?”.

One of the basic rules in any architectural or urban design, is to know the place we are working on. This means to visit the place, to comprehend its structure, its environment, its history, its culture. Following these premises and applying them to waterway design should be enough for good results. However, and considering that waterways in Tokyo have special problems, common to each other, and special potentialities, also common to each other, it is possible to create a set of regulations prior to the place itself.

These regulations should have as fundamental basis two factors: they should obey to known typical patterns of the specific culture they are integrated in and they should respond to problems and potentials common to all elements studied. In this sense it is important in this case to reconsider some factors in Japanese cities and architecture, as well as the basic problems and potentials to be focused in waterway design in Tokyo.

5.3.1. Water in Japanese Cities and Architecture

Japan has had a special relation to nature for a long time and water, as a natural element, was and is still viewed as an important element in architectural or landscape design. Since long ago, in temple or shrine design, residential architecture or garden design, water played simultaneous roles of protecting, purifying or simply improving the aesthetic pleasure of a certain place.

It is not rare to encounter several examples of this walking through almost every city in Japan which reinforces the assumption that water, in its several forms and functions, still plays an significant role in the way Japanese cities are and in the way Japanese people live their urban spaces.

It is not rare to find places in which architecture is completely surrounded by moats and entrances to the buildings are made by small stone “bridges”. In these places, water has not only a protection role, but it represents an area of transition, marking the difference between public and private space and telling us that when we go through it, we are entering an important, sacred space. This is common in shrines or temples, but also in many residential buildings throughout Japan. These moats could play also a functional role of diverging rain water or even as playing spots for children.

Fig253. Hiroshima Prefecture

Fig254. Yamaguchi Prefecture

Fig255. Kita-Kyushu

Fig256. Karuizawa

In castles around Japan, these moats take a more imperial tone and become places in which people come to admire their history, to enjoy some rest or just to observe ducks or fishes. Water can serve like this as a space of delimitation, as a natural barrier which differentiates a space from another. It can be a street from a castle, two houses, two neighborhoods, and so on.

In the case of Tokyo's waterways, this function can be applied when there is a need to mark a difference: to show an important building, to mark the scale between a park and a street, etc. This kind of structure, as already mentioned has also the power of changing a street, building or urban space completely: Water becomes a playing space where nature and people come together to enjoy their time. This playful character attributed to water spaces should be encouraged in Tokyo's waterways as much as possible.

Water functions also as a spiritual connector and a simple punctual presence can change the mood of a place grandly. This is usual in Japanese spiritual spaces, but also in most Japanese city streets. Small ponds with golden fish or the simple sound of water bubbling are very common in residential neighborhoods around Tokyo. Shrines and Temples include also small water features where people wash their hands or pass through in order to reach a "clean" state of body and mind.

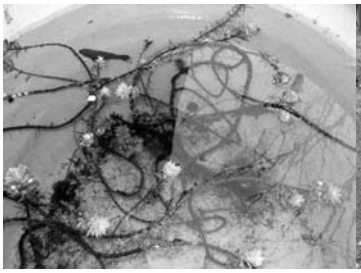


Fig257. Small Pond in Kamakura


Fig258. Hiroshima Prefecture

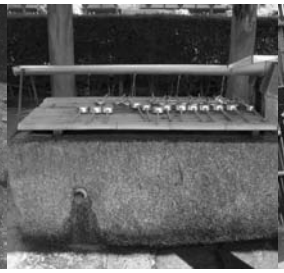


Fig259. Shrine, Kamakura


Fig260. Water and Sound in Kyoto

In Tokyo's waterways this can be achieved by including water features outside the river itself in which people can feel its presence: visual or sound. It can also be achieved by designing the edge between city and water in order to give importance to both water and architecture. Small details like these are found in every Japanese city and they should serve as inspiration to water spaces in the midst of the city.

Rivers are major centers of recreation in Japan, being it in the city or in the countryside. Landscape design or architectural design can completely activate this character or nullify it and several good examples are found outside of Tokyo.


Fig261. Kamo River, Kyoto


Fig262. Kamo River's Restaurants, Kyoto


Fig263. Nakasu, Fukuoka


Fig264. Oita Prefecture

In Kyoto, not only the major river is a central place in which people walk, rest, eat and enjoy themselves, it is also a structural element in the pride of the city. In Fukuoka, the canal area thrives with people both during the day or night due to its *Yatai*[11] proliferation (portable stands in which people gather to eat and drink), in the country side, rivers can be places in which to spend summer vacation swimming, fishing and playing enjoying the cool air, rare in Japanese summer.

Tokyo's waterways have the power to become spaces like this: by increasing riverbank landscape design and maintenance, by increasing activities in which people feel comfortable and attracted too, by turning the river into a friendly space in which to walk, eat or even sleep! (Fig261).

These are just some of the examples found in Japanese cities and they are a proof that it is possible to design rivers and it is possible to include them in cities: by designing the river and city edge, by including water features in and outside the river, by attracting people to the river and the river into the city.

5.3.2. Japanese Garden Design

Another important contribution to the formulation of Tokyo's Waterway Conceptual Guidelines is the study of Japanese Garden Design. City planning or design is not very common in Japan and it is often said that Japanese cities incorporate no urban planning whatsoever. This is a very simplistic affirmation and not true to the reality, but it is true that most of Japanese design concepts are not found in city design, but in garden design.

For this reason, and for the fact that conceptual design guidelines are being formulated based in cultural specificities, the understanding of basic Japanese Garden Design is considered of major importance for this study.

The Japanese Garden is a landscape art raised to the level of painting or poetry and ethnologists believe that its roots come down to primitive times. Experts observe that "farmers dug ponds on their own land and created streams to fill them because the sight and sound of flowing water calmed their minds (with the assurance of good crops)[12] Japanese didn't conceive of nature as hostile or something that should be controlled. On the other hand, they also didn't idealized it as something perfect in itself. Around houses, Japanese created a secondary, controlled nature in the form of an open space or *niwa*[13]. This was an idealized version of nature providing for a space where some farm work could be done and at the same time it worked as a "buffer" zone that protected the farm from high winds and snows regulating humidity and temperature. But the heart of the Japanese garden in its most developed form appeared from an interaction between indigenous forms and imported Chinese and Buddhist cultural elements. This import was not a complete copy of the Chinese garden, but modified and adapted to the Japanese reality and cultural realm, creating something new and original.

The basic concept of a Japanese garden is to mirror nature and to borrow its scenery that will then be arranged with a myriad of techniques usually used in painting. The garden is seen as a living place and also as an incomplete "masterpiece" because of its mutable character.

Things that change are incomplete. They have nothing of the absolute in them and can never achieve ideal forms.
The tree that flourishes now must someday wither and die.
The changing of the seasons is only a process, and the garden partakes of blessedness and eternity because it is always incomplete.[14]

To become a garden designer is a difficult task and it requires several steps in order to achieve enlightenment: the apprentice must know the works of past masters first and learn from nature. When these two first steps are mastered he/she will receive an oral transmission of the art of Japanese garden and then allowed to read "sacred texts" that contain fundamental teachings of gardening, composition or garden layout.

The deep understanding of nature, its observation and the perception of the feeling it provokes in oneself are then fundamental requirements to become a master of gardening. For only like this, he/she will be able to reproduce in a small space the feelings a mountain, or the sea provoke in humans when observe in all its immensity.

The three basic materials for the garden design are the earth, water and stones, *if one is missing, there can be no garden*[15]. The earth is molded to create hills, valleys or mountain-like sceneries, water flow is crucial for the whole garden and stones provide the static elements which correct position and allocation will compose the garden's sceneries. In river design these simple rules can be translated in a similar way. The earth should be molded along the riverbanks in order to create several types of topography, water flow exists already and can be controlled or diverted to create ponds, other canals or to help irrigation the soil and the surrounding greenery and finally stones, or buildings, should be composed along the river as stones in a garden. Its volume, shape or color should be carefully controlled or designed in order to create a harmony composition.

The original gardens had the purpose of creating beautiful nature-like sceneries which should be enjoyed from inside a house. In this sense, frame sceneries were carefully composed like a live painting to be viewed from the master's room. The tea-ceremony garden was the first in Japanese history to take walking into consideration in its composition. In fact, this type of garden is called *Roji* which means "passageway" or "alley". The Roji is usually never a main garden but it is often constructed in narrow spaces between buildings and fences. Its important feature "is the influence it has on the minds of those who walk through it and discover beauty in a sequence of experiences." This idea of incorporating movement in the garden design was then evolved into the "stroll garden" in which visitors were allowed to walk around the shores of a pond or lake and enjoy the vistas they purposed as they move:

The Katsura pond, fed by waters from the old course of the nearby Katsura River, is surrounded by paths: some of these are made of stepping stones, some of strips of stone pavement; some are spread with gravel, some are modified into stone staircases, and some are bare ground. Along the paths are garden elements of three kinds: Small rustic bowers for resting of the reception of guests, including the Shoka.tei, the Manji-tei, the Shoiken, and the Gepparo; miniaturizations of famous scenic attractions, including the Sumiyoshi pine, the Tsutsumi waterfall, the Oigawa river, and the famous wooded sand spit called Ama no Hashidate; and artistic stone objects, including a series of stone lanterns – the Mizu-hotaru lantern, whose light flickering on the surface of the pond resembled a host of fireflies, the Yukimi (snow-viewing) lantern, designed to look especially good in winter, and the Sanko lantern, with three windows around its light. [16]

If previews garden design had a more pictorial character, the garden for strolling could be more aptly described as musical. The reason is because it incorporates the effects of motion. The designers gave special attention to the elements they placed on both sides of the path, *but an equally important part of the design is the play and manipulation of space as experienced by the visitor as he moves from a wide open space to a narrow one, from a region of bright light into a gloom, from an expansive rural setting into a hilly region*[17].

Japanese garden design incorporates traditional views and aesthetics of how Japanese idealized and feel nature as well as how they designed in an completely artificial way. Considering the present study's thematic, Tokyo's waterways, it is believed that the basic principles and aesthetics of garden design can form an extremely helpful basis for the idealization and design of these spaces.

As affirmed before, rivers possess characteristics common to the pictorial type of garden in which certain views of sceneries are privileged and they posses the linear character common to a stroll garden. They possess the three basic elements necessary to a good garden design: earth, water and stone, and they should be thought of and designed as it a garden they were, borrowing natural sceneries and adjusting them to the artificial sceneries of the city.

It's frame composition, its linear strolling character are both crucial points for an improvement in their condition and the conceptual guidelines presented next have its fundamental basis in Japanese traditional aesthetics and garden landscape design.

Fig265. Yusentei Garden, Fukuoka

Fig266. "Borrowed Landscape" Miyajima

Fig267. Borrowed scenery, Dazaifu

Fig268. Rock Composition, Kyoto

5.3.3. Conceptual Guidelines

After understanding more about Japanese architecture, cities and landscape design related to water issues it is feasible to present the basic guidelines for Tokyo's Waterway design.

The next four concepts are to be used prior to any design and they should serve as indicators of the steps to follow when designing waterways. It is to be remembered that design is always something unique and each designer should be encouraged to diversify as much as possible the experience of the waterway. But it is also needed some "conductor string" and that is why these concepts are needed.

First it is important to refer that these four concepts respond to problems and advantages common to Tokyo's waterways. The most significant problem it the urban disconnection and the "autism" of the waterway in the urban realm. Their most important Advantage or Potential is their linear character which permits flow and movement "fiber-like" spaces in the city.

Considering these factors it is also possible to say that the problem deals with transversal issues and the potential deals with longitudinal issues. The first two strategies are suppose to fix the problem and focus on river transversal design. The following two strategies are supposed to reinforce the existing potential by focusing on longitudinal design.

1. Moss/ Membrane

The first concept takes its basis in the way moss is used in Japanese gardens and in the way greenery is used in typical Japanese residential alleys (*Roji*[18]). The purpose is that natural elements form a species of "membrane" that connects empty spaces from the river into the city. Like moss, it doesn't have a specific shape and it serves as a connector for different elements in the landscape. It can serve as a connector for the water and the water edge spaces, the edge and surrounding buildings, buildings and other buildings of private and public spaces. These connections can be made by manipulating the riverbank topography and creating direct green connections into the city, they can be done by the strategic allocation of greenery or trees in transversal important streets which can serve as direct connectors to the river or they can be done by the punctual usage of natural elements in spaces in which people can be guided into the river. As referred above, one of the greatest problems of Tokyo's waterways is its disconnection from the city and the fact that people don't feel the proximity of the river. Greenery and good topography design in strategic places can serve as a basis for the awareness of water proximity.

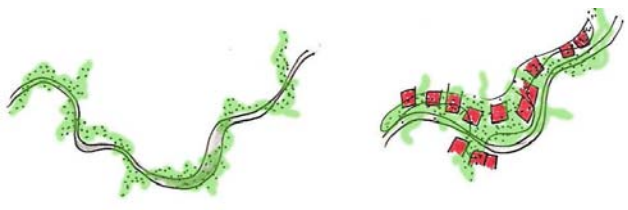


Fig269. Schematic Typology

Fig270. VIP Moss, Kyoto

Fig271. Moss as a Membrane, Kyoto

2. Bridge

This concept's objective is to reinforce important transversal axis of connection between the two riverbanks and the inner city beyond them. While the first concept has a more organic character and a more subtle approach the present one aims to a more direct resolution in urban and architectural design. Together it is possible to say that concept one and two combine each other to form a kind of "soft and hard" landscape.

The reinforcement of these axis should be very clear in its design and material selection in order for them to be easily perceived by the common pedestrian: pavements, greenery, illumination, building allocation, etc. In some cases, these axis are blocked by buildings in the riverbank, and in those cases, buildings should be removed in order to open the water space and show it to the inner city. Important bridges should also be taken in consideration as connectors and its design should be examined and altered when necessary.

The important point to focus is the opening of transversal connections to the river or through the river to the other side. City and waterway should be more directly connected and this can be done by street design, removing buildings in strategic locations, creating activities and public spaces in areas in which river and city come together and carefully weaving those spots in which different sets of landscapes come together.

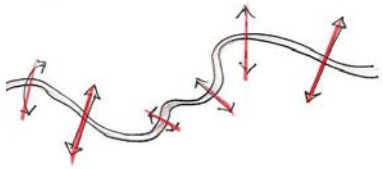


Fig272. Schematic Typology

Fig273. Bridge Design, Hiroshima Prefecture

Fig274. River View, Kyoto

3. Musical Landscape

A classical Japanese Garden- at least until the advent of the tea garden and its offspring, the stroll garden – was primarily viewed like a painting, from the shelter of the residential quarter.

Such gardens may be compared to a landscape scroll being unrolled horizontally before the eyes of a seated observer. This scroll like view or serial view is an important factor when dealing with linear spaces in the city and waterways should be design like this. Some sort of dynamism has to be created in order to avoid monotonous an dull spaces for long linear lengths.

This sort of design can be called “musical” since it is similar to musical composition: Both riverbanks include elements which together produce rhythm (buildings, trees, poles, ilumination elements, people themselves), melody (greenery and plants, colors, sounds, etc) and harmony (seasonal festivities, activities along the riverbank, and the correct conjugation between both riverbanks). The conjugation of elements playing in both riverbanks creates a sort of “musical landscape” in which movement and pause are combined to create a harmonious scenery.

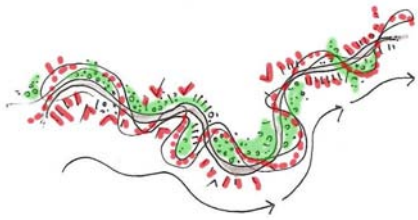


Fig275. Schematic Typology

Fig276. Water activities, Dazaifu

Fig277. Canal City, Fukuoka

The design of these edge spaces between water and city should be diverse, dynamic, and should not be isolated in itself. It has to be thought also in conjugation with the opposite side. Views, crossings, esplanades, and so on, should be allocated and designed according to the place in which they exist, the surrounding city and the opposite riverbank. The serial view experience along a riverbank should include spaces in which people move, rest, stop to breathe, watch the scenery and each other, stop and move again like a music sheet in which almost no compass is repeated, in which the flow from one note to another or one compass to another is linked through familiar elements to create a complete ,connected flow.

4. Watercolor Painting

When painting a landscape scenery, being it an imaginary or real one, it is always of utmost importance to think of its composition in the canvas. This is one of the basic rules for landscape design.

In the case of Tokyo's waterways, it is not possible to create painting-like sceneries throughout all rivers, but it is possible to improve some areas, specifically city and river views from bridges.

Bridges are extremely important elements in rivers and in Tokyo they are in many cases the only places in which the river can actually be seen. The view from these places should then be considered when designing any waterway and any design should take in consideration this frame view.

Some examples can include greenery allocation and species choice, building volume decision, open and enclosed spaces, etc. Like a painter chooses its perspective, the architect or urban planner should also take the view from these places into consideration when designing.

Fig278. Schematic Typology

Fig279. Garden View, Kyoto

Fig280. Water view, Yufuin

5.4. Conceptual Guidelines Application Examples

In this subchapter will be exposed examples of the previously described Conceptual Guidelines (Moss, Bridge, Musical landscape and Watercolor) applied to each of the analyzed waterways.

In subchapter 4.2, individual analysis of each waterway were presented, together with a collection of plans and zoning in annex. After this analysis, an area in each waterway was designated as a specific study area with the goal to utilize it as an illustration case of the application of these conceptual guidelines (the designated areas can be consulted in each waterway annex plan).

Subsequently is shown the process of application for each waterway with simple projects and sketches of possible interventions applied to these areas based on a deeper small scale analysis.

These cases should serve a basis to how any intervention in a river or canal should be faced from the beginning:

1. Photographical Analysis and Field Work Recognition: (photos, sketches, existing regulation plans, etc..)
2. Rough analysis based on personal considerations (SWOT, Important urban characteristics, interesting features, etc.)
3. Choice of a particular area and second analysis;
4. Application of design conceptual guidelines;
5. Design project;

Each example includes a small study area and a first list of problems. A second step is to divide the area into small areas, usually using bridges as dividers. These smaller fragments are then taken into consideration providing specific problems and advantages for each. Based on these results, four strategies are applied based on the previous subchapter design concepts. An actual plan of the site together with a proposal are shown in order to understand the differences and the type of project expected. Finally, for each area is set which type of intervention is needed: Renewal, Edit, Restructure, Redesign, and so on.

5.4.1. Kiba Canals

General Problems:

- The industrial area allocated in the river's south bank aggravates a "heavy" image common to this area;
- The alignment of trees along the bigger river is too dense creating a natural physical and visual barrier augmenting the sense of isolation and insecurity;
- Pedestrians are usually trapped between the river, its protection walls, trees and buildings, making the space along the river not attractive for any type of functions;
- There are no transversal openings from the city into the water;
- Activities along the riverbank are practically inexistent, with the exception of some playground areas;
- The smaller canal's bank became privatized and pedestrian access is impossible, the view of this canal is only possible from its bridges and there is a considerable concentration of vessels which are not being enjoyed by the common passerby;

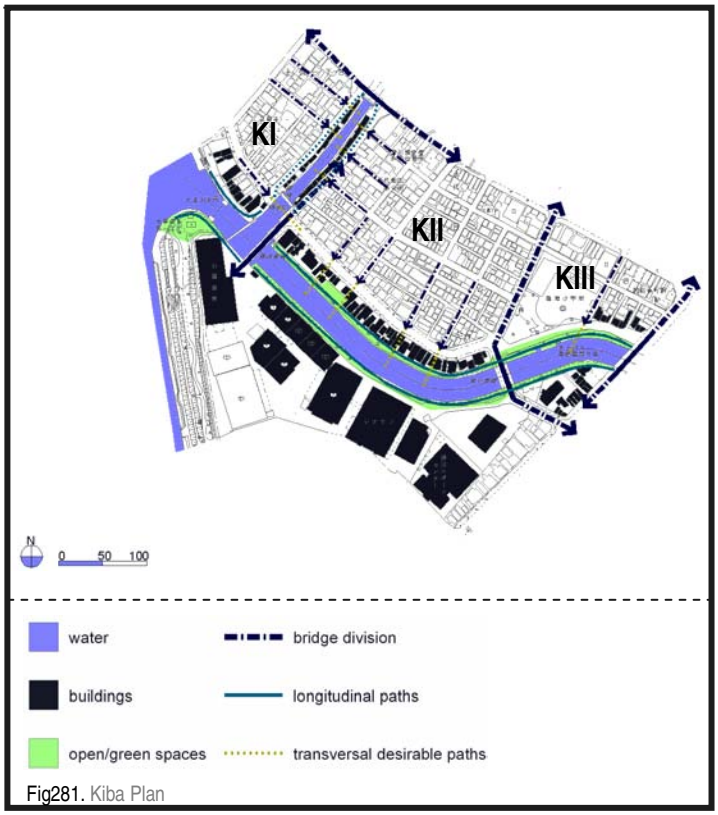


Fig281. Kiba Plan

KI:

Problems:

- The privatization of the canal impedes pedestrian access to the water;
- No transversal connection from the city to the water;
- Orientation of the canal and surrounding buildings provoke some shadow which interferes with the good usage of the canal;
- No greenery, except private vases and flowering;

Advantages:

- The area has an identity based on its neighborhood character and history;
- Water depth and stillness can provide for a basis in which direct water contact is possible;
- Vessels give a marine character to the place and can be a starting point for its renegeration;

Four Concept Guidelines:

1. To increase Semi-Public greenery spaces along and across the river in order to create some connection to the city; The canal's edge can be redefined to increase the contact surface between the city and the water;
2. To connect inner transversal streets to the water: these connections should reinforce the character of the area and its design should be sofisticated and thoughtful for pedestrians: street pavements, illumination, furniture are fundamental;
3. To improve boat access and to introduce neighborhood activities connected to the water:pleasure boats, neighborhood shops close to the water, etc. Replace old buildings, create community garden areas able to ne maintained by the inhabitants;
4. To design the area taking in consideration the North Bridge view: nowadays the view is disturbed by the factory buildings to the south which give an industrial character to the place: think of facades, greenery, murals, etc.

KI Intervention Typology:

DESIGN

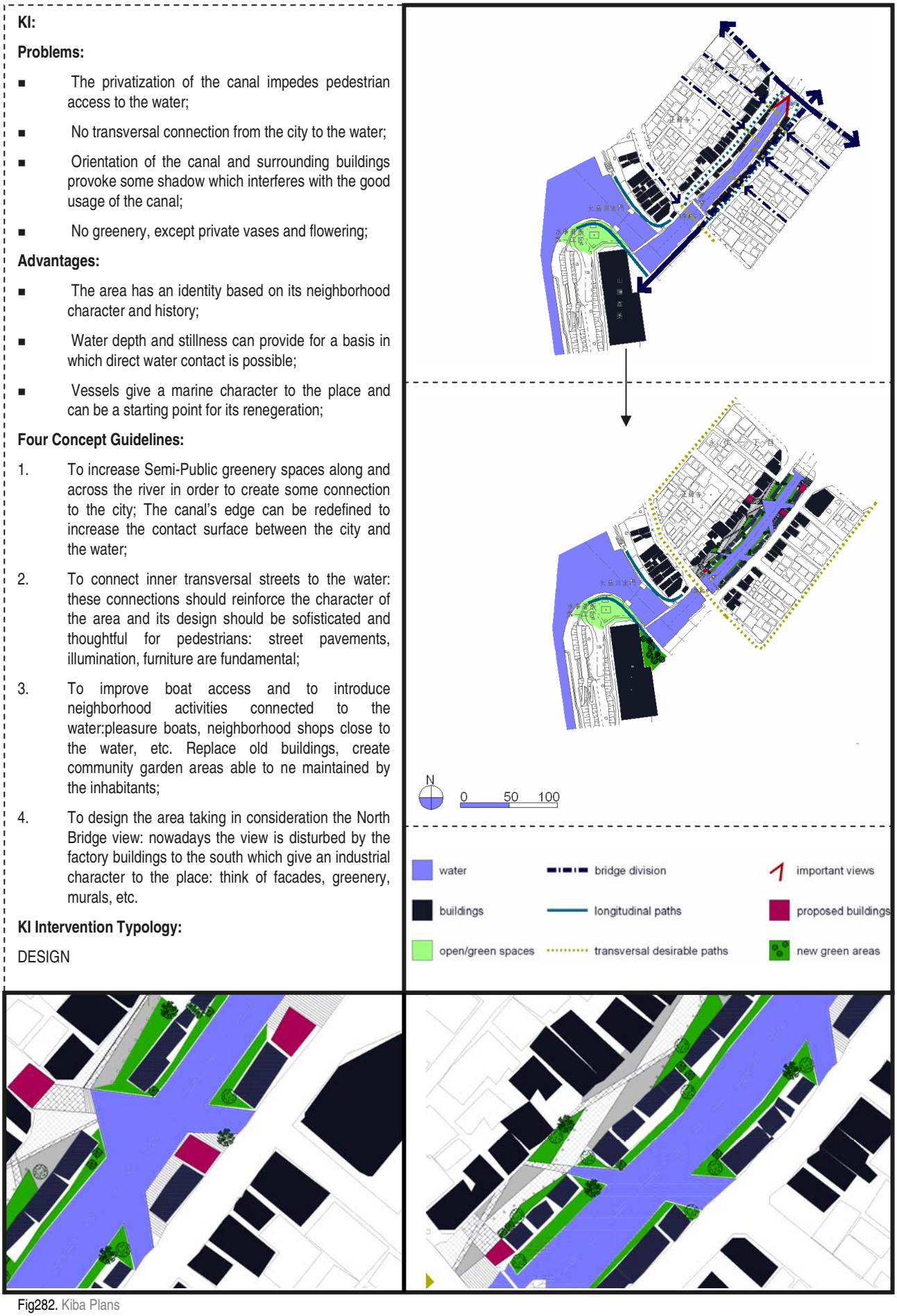


Fig282. Kiba Plans

KII:

Problems:

- The industrial warehouses area makes the river unattractive and dull;
- Trees along the riverbank provoke too much shadow and lack of visual connection to the river: increasing insecurity and isolation feeling;
- Pedestrian paths are very poorly maintained and the concern with material quality is null;
- No connection with the inner city, buildings together with trees and greenery form physical barriers that trapped the river and the pedestrian spaces in a tight, uncomfortable way;

Advantages:

- The design of old warehouses is interesting and these spaces could be converted to activity niches along the river;
- There exists one public space connecting city and river but abundant greenery still hides its existence from pedestrians;

Four Concept Guidelines:

1. To control greenery along the Riverbank and Increase tree diversity, especially in the South Bank in order to give the industrial area a more sophisticated, new "face";
2. To connect inner transversal streets with the river and improve its urban quality: pavements, illumination, greenery, furniture, etc;
3. To create diversity in the South Riverbank to improve the serial view from pedestrians from the opposite side: illumination, building volume control, greenery, public spaces, etc. Improve Pedestrian paths in the North Riverbank;
4. Redefine bridge View by controling trees, greenery, buildings image and volume..

KII Intervention Typology:

RENEWAL, DESIGN

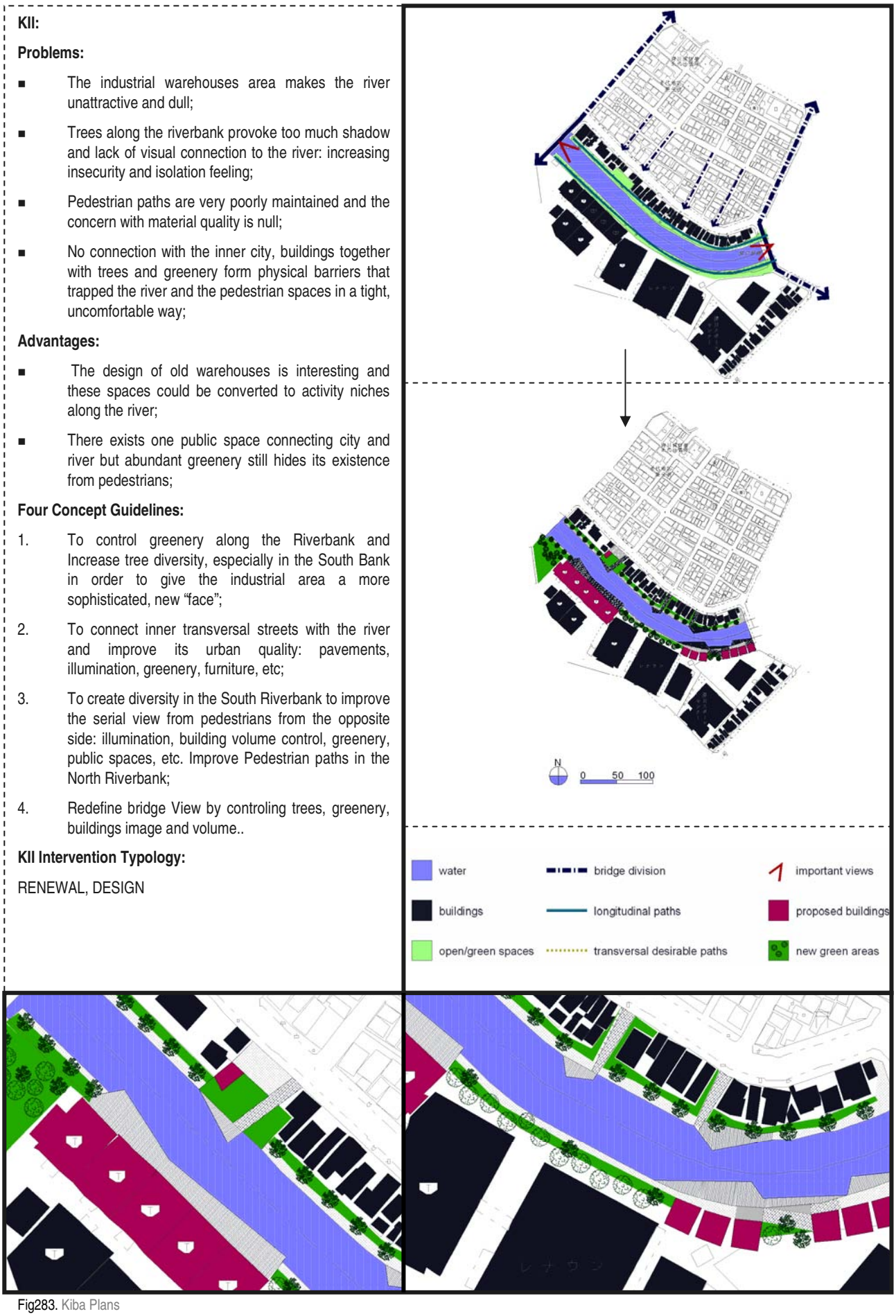


Fig283. Kiba Plans

KIII:

Problems:

- Dull, monotonous landscape and serial view;
- No activities to attract people to the river area;
- No quality in the design of public spaces (when they exist) and no preoccupation with pedestrian spaces;
- Roads block the direct contact with the river area;

Advantages:

- Existing free spaces along the riverbank;

Four Concept Guidelines:

1. To make the riverfront visible by manipulating topography access and greenery spaces in the North Riverbank;
2. To improve inner transversal street connection directly to the riverbank;
3. To create activities along the river to support the neighborhood facilites: urban park/garden, playground with public space features; to create spaces where people can interact and transform the city: art walls, sculpture gardens, etc;
4. Redefine bridge View by controling trees, greenery, buildings image and volume;

KIII Intervention Typology:

EDIT

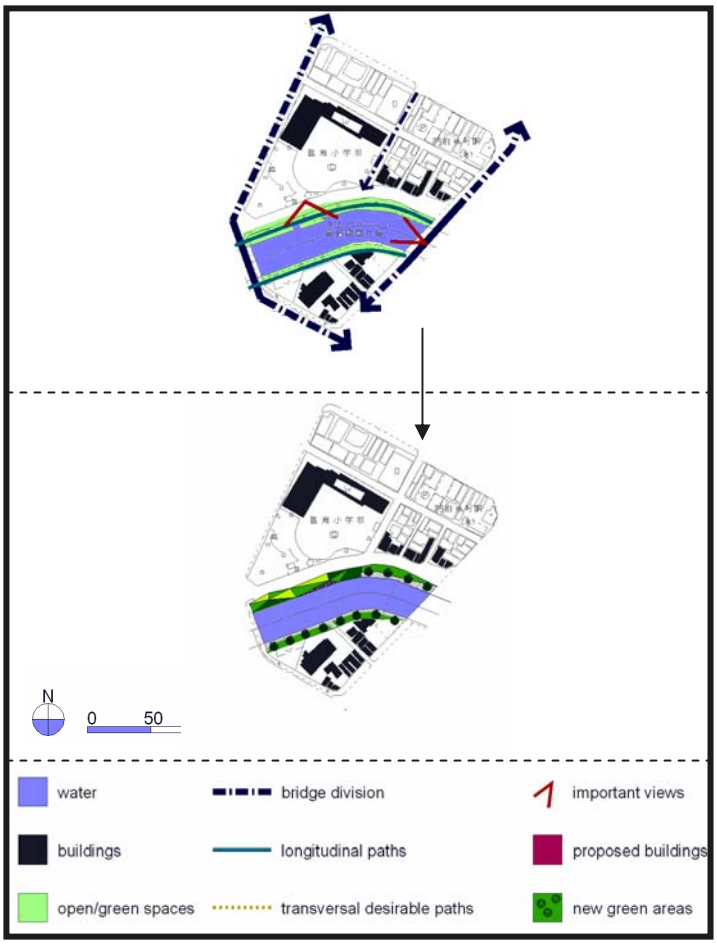


Fig283. Kiba Plans

5.4.2. Furukawa River

General Problems:

- The unilateral connection from the west part of the city to the Riverbank;
- The unilateral longitudinal pedestrian path on the west riverbank;
- The elevated expressway turns the river into a dark isolated space, not appropriate to daily activities;
- The dark areas under the expressway attract homeless and some sort of marginal activities;
- The east riverbank lacks space for urban activities;
- The river appears dirty and smelly;

Advantages:

- The central square has a good connection with the river although it appears dirty and old;
- The elevated expressway to the north only covers part the river and its design may be considered interesting for future design proposals;

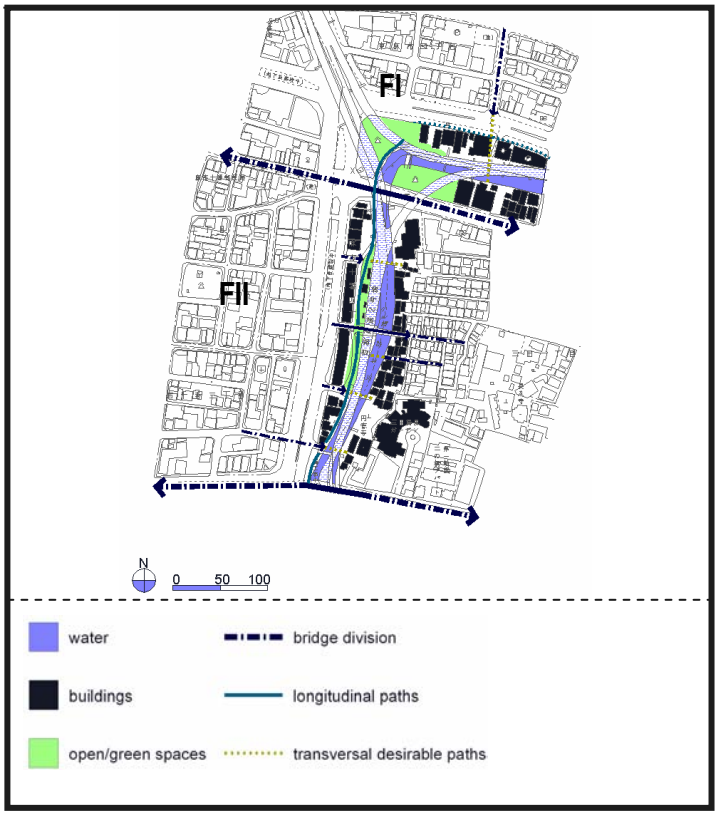


Fig284. Furukawa Plans

FI:

Problems:

- No pedestrian transversal connection to the river from inner streets;
- The area looks old and unattractive;
- Green areas are not well maintained and become clusters for homeless;

Advantages:

- The urban square works as a plus to the riverfront although its design is poor as well as its maintenance;
- There exists some amount of urban green which can turn into an advantage point for the design of these spaces;
- The elevated expressway's structure has a very interesting impact on the riverfront and its design can serve as a basis for some design proposal in the river;
- **Four Concept Guidelines:**

1. Trim greenery and adjust it to the urban space, create more surface contact with the water;
2. Open transversal pedestrian streets in the north and south banks in order to reconnect river and city;
3. Use the highway as a design asset and transform an ol structure into a historic monumental element (with colors, materials, lighting, small suspended structures, and so on), Think about the square space and its role in the urban realm: citizen participation, art fairs, water related functions, etc;
4. Rearrange the river view from the urban square;

FI Intervention Typology:

EDIT, DESIGN

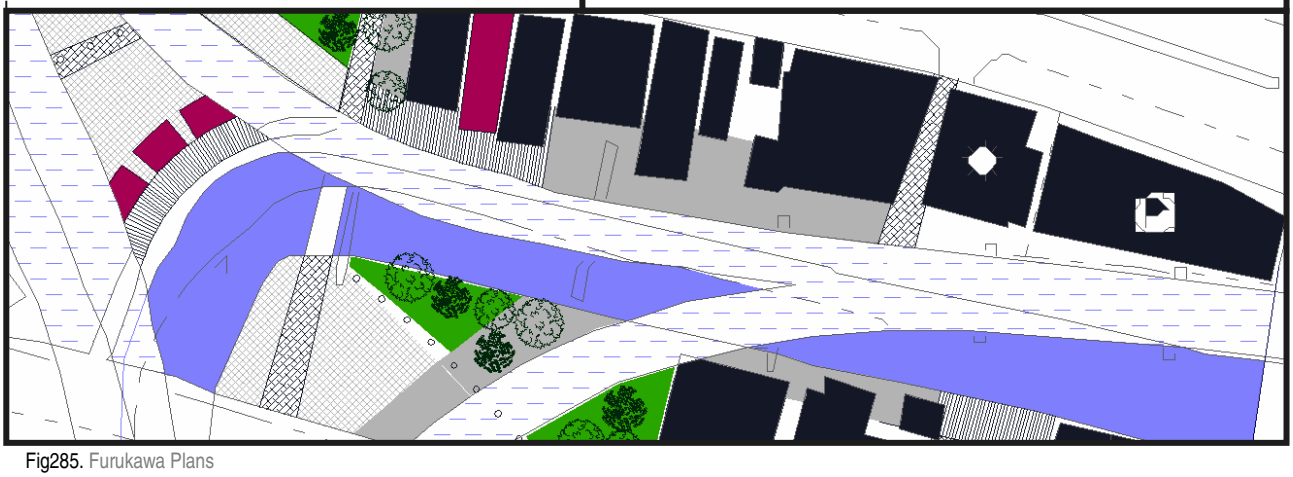


Fig285. Furukawa Plans

FII:

Problems:

- The river area is too dark and not appropriated to daily activities or spaces in which greenery is predominant;
- Some garden and playground spaces exist under the elevated highway along the riverbank but by its darkness and lack of maintenance they are unattractive and tend to become marginal spaces;
- East riverbank has no connection to the river, transversal or longitudinal;

Advantages:

- The closeness to a considerable big center;
- The existing space under the expressway;

Four Concept Guidelines:

1. Use greenery strategically: in bright places avoiding the space under the expressway- transversal streets connecting river and city; "Push" the water into the city;
2. Reinforce openings to the river from both banks;
3. Allocate new functions under the highway, improving illumination, think about night time activities along the water and improve the east bank's character;
4. Improve the view from each bridge thinking about river illumination;

FII Intervention Typology:

DESIGN, RESTRUCTURE

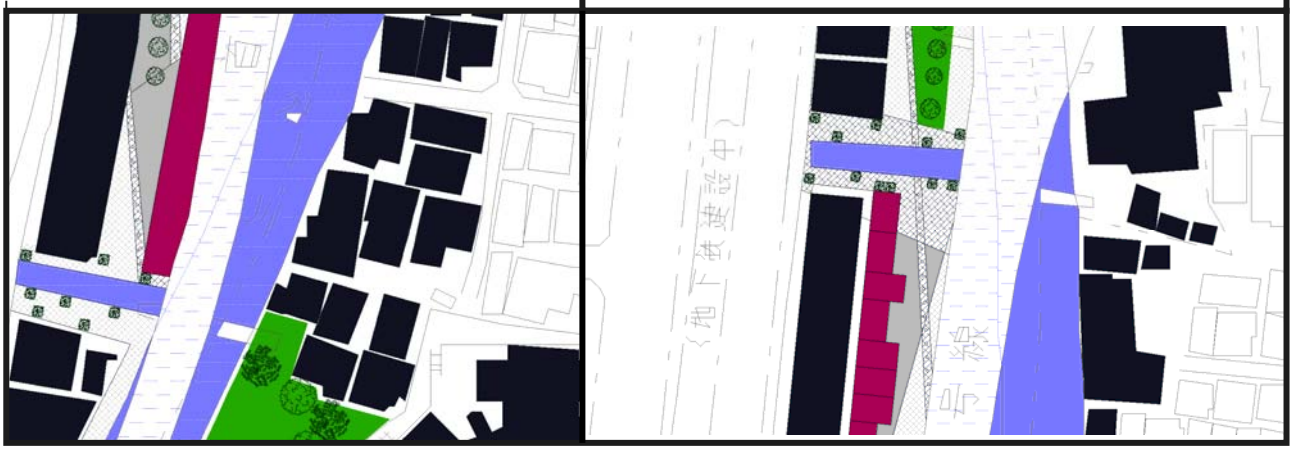


Fig286. Furukawa Plans

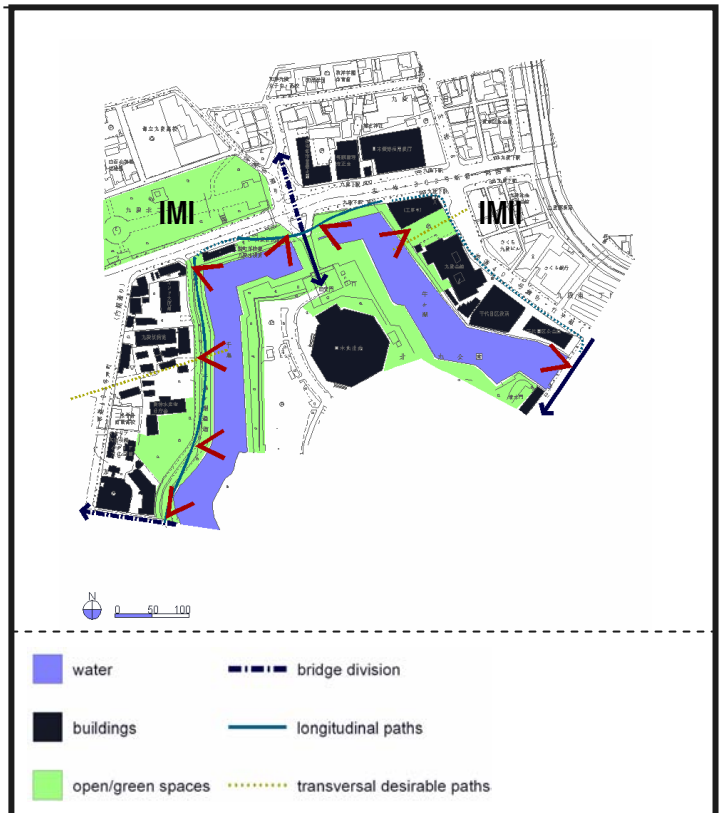
5.4.3. Imperial Moats

General Problems:

- Few openings from the city to enjoy the imperial garden's view;
- Building volumes to the East side block physical and visual connection to the "island";

Advantages:

- Greenery choice and maintenance is flawless;
- Cherry blossom park to the west has a peaceful and quiet character without feeling isolated;
- Boat activity is possible to the east;



IMI:

Problems:

- No direct access to the gardens from the inner city;
- Few support functions along the moat gardens;

Advantages:

- Flawless park maintenance and exceptional seasonal character;
- Exceptional views to the imperial "island";

Four Concept Guidelines:

1. Create transversal streets connecting the inner city and the parks along the moat – extend greenery to these streets;
2. Improve quality of pedestrian spaces by using proper materials, illumination, furniture, small quiosks or public interest activities (e.g.street art);
3. Increase urban functions and furniture along the bank park: some coffee shop or restaurant enjoying the view to the imperial palace area;
4. Increase resting spaces along strategic viewspots with proper supporting furniture;

IMI Intervention Typology:

MINOR EDITING

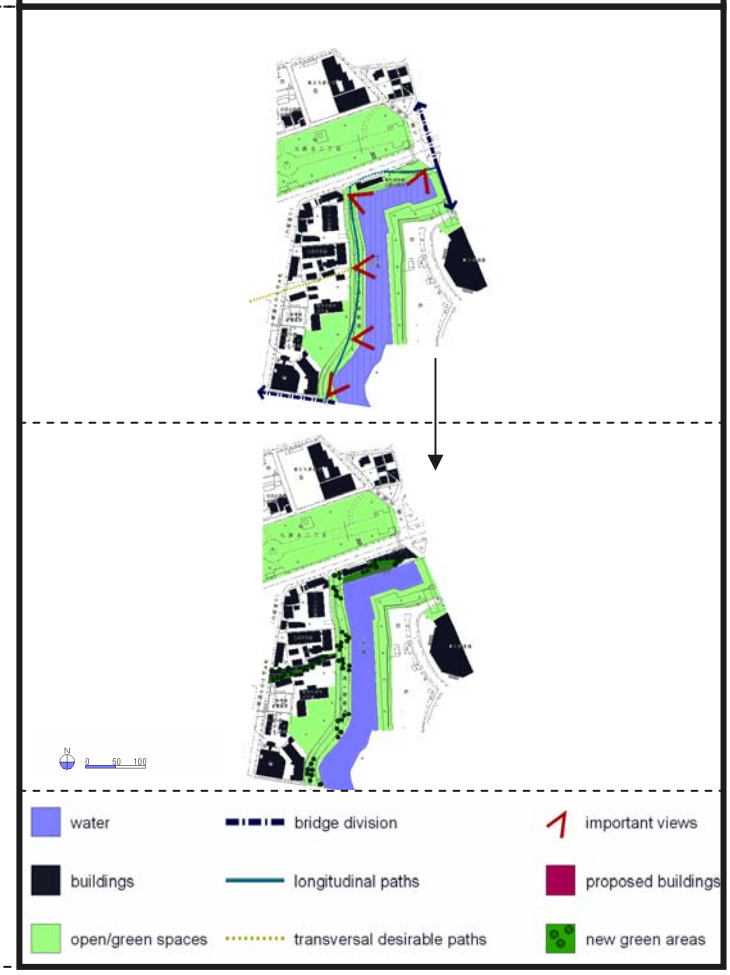


Fig287. Imperial Moat Plans

IMII:

Problems:

- East volumes break the physical and visual connection to the moat;
- Existing vacant land is used for parking avoiding pedestrians;
- No longitudinal connection to the East riverbank;

Advantages:

- There exists vacant spaces which can be manipulated to improve water connections extending the linear park coming from the worth side;
- The view to the imperial "island" is excellent;

Four Concept Guidelines:

1. Extend greenery along the east bank to continue the park and to the transversal streets also;
2. Open transversal streets and create piazza in the parking lot;
3. Increase urban furniture, pavement distinction and activities along the eastbank. When possible remove existing volumes and create a direct area in which people can enjoy the imperial garden's view;
4. Think about the view from the existing bridges and the east bank;

IMII Intervention Typology:

EDIT, EXTENSION

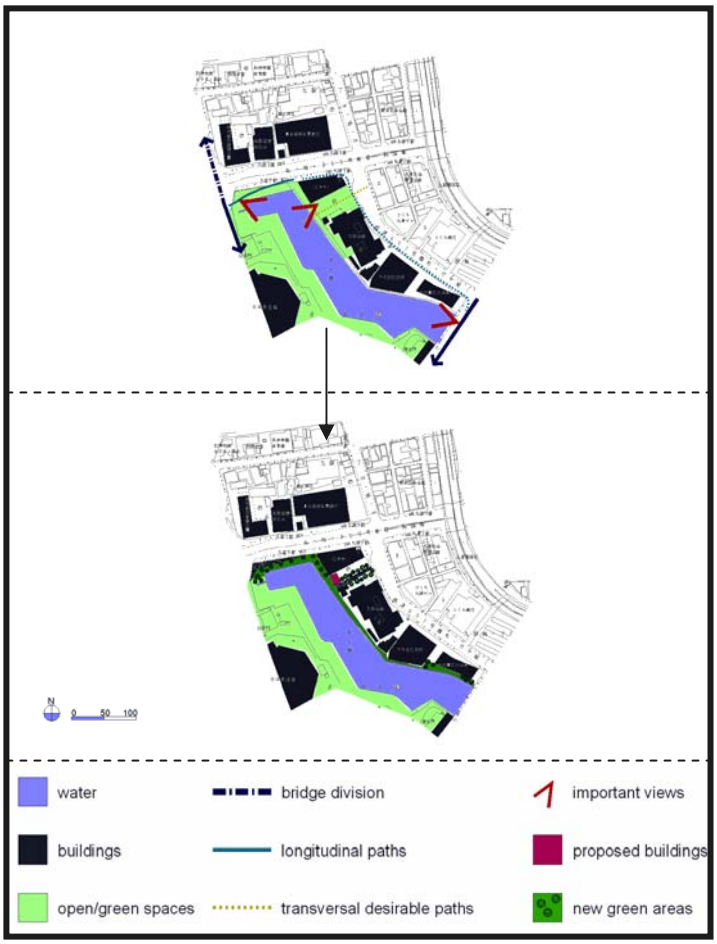


Fig288. Imperial Moat Plans

5.4.4. Kanda River

General Problems:

- There is no pedestrian direct connection into the riverbank area;
- Greenery and urban areas are unbalanced;
- Topography, train tracks and greenery block the view and access to the water;

Advantages:

- The historical character of the river;
- Diversity of activities and high population density;
- Ochanomizu valley landscape;

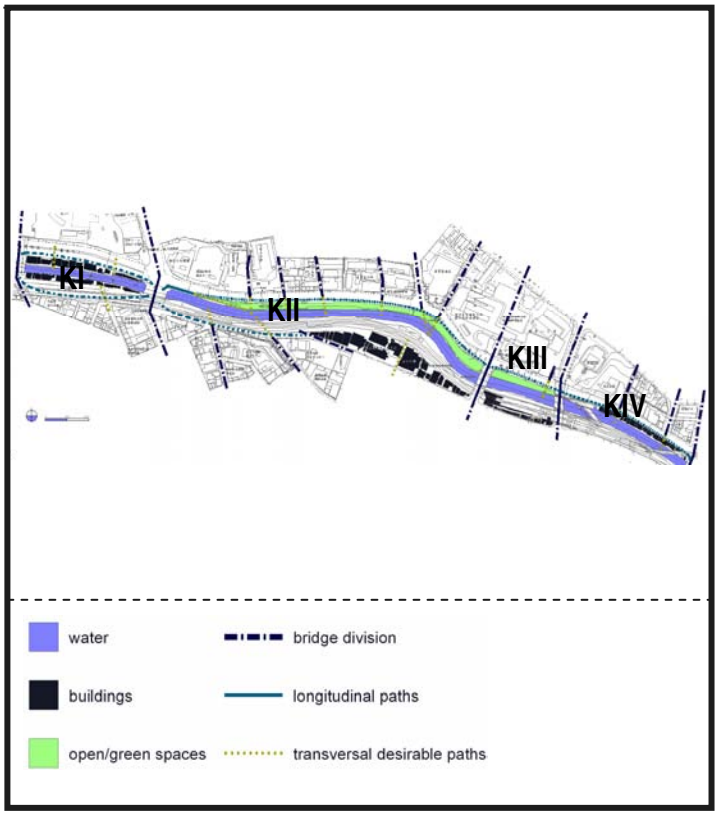


Fig289. Kanda Plans

KI:

Problems:

- The area presents a linear building blockage along the riverbank which impedes physical and visual access;
- The river presence is neglected and nearby neighborhoods turned its backs to its presence;

Advantages:

- Old buildings could be removed opening the riverbanks;

Four Concept Guidelines:

1. Increase neighborhood greenery and arrange it along station buildings and tracks";
2. Open one or two streets from both riverbanks directly to the water;
3. Introduce Rhythm – sound & silence to break monotony – river platforms, esplanades, small promenades, water contact spaces, lighting in the south bank, new functions in the southbank (apropriate to night functions);
4. The view from bridges should be considered when designing;

KI Intervention Typology:

DESIGN

KII:

Problems:

- Greenery is abundant and obstructs the vision;
- There is no activity in the riverbanks;
- The lenght without physical access to the river is very long and monotonous;
- Rough topography;

Advantages:

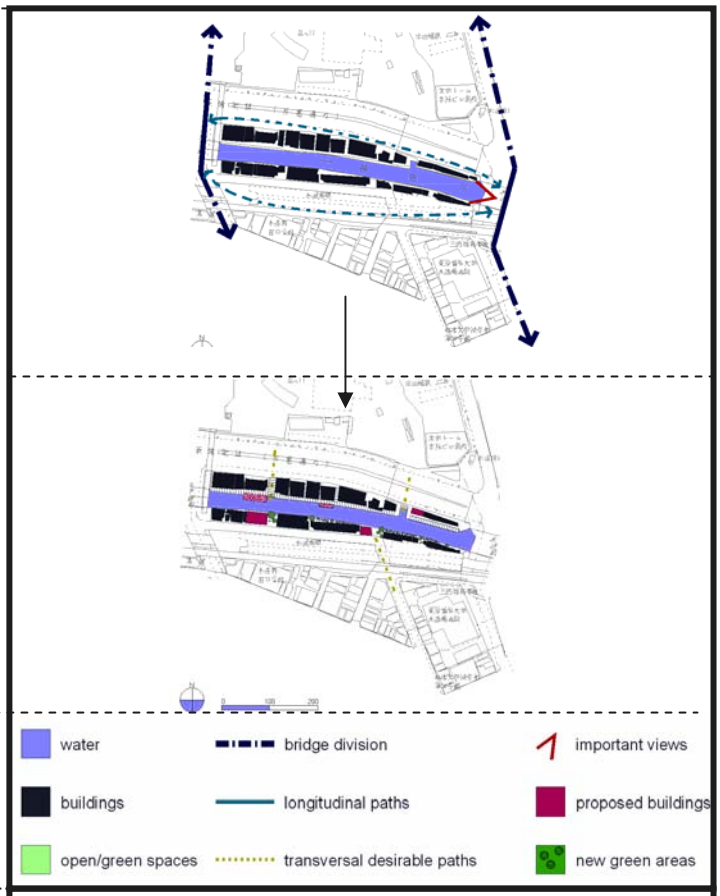
- The landscape is excellent;
- Greenery and history of the place;

Four Concept Guidelines:

1. To move greenery from the north bank to the south covering the train tracks partically and clearing the valley;
2. Create connections to the riverbank through greenery control and pedestrian paths;
3. Create functions along the river: "pleasure" boats terminal, promenade along the river and the valley, restaurants and cafes. The rain side can serve as a visual playground: play with lights, or greenery to partially hide the train tracks, mural walls can be used too by local artists;
4. Both bridges's views are important and should be considered when designing parks, new buildings and train tracks

KI Intervention Typology:

DESIGN, RESTRUCTURE



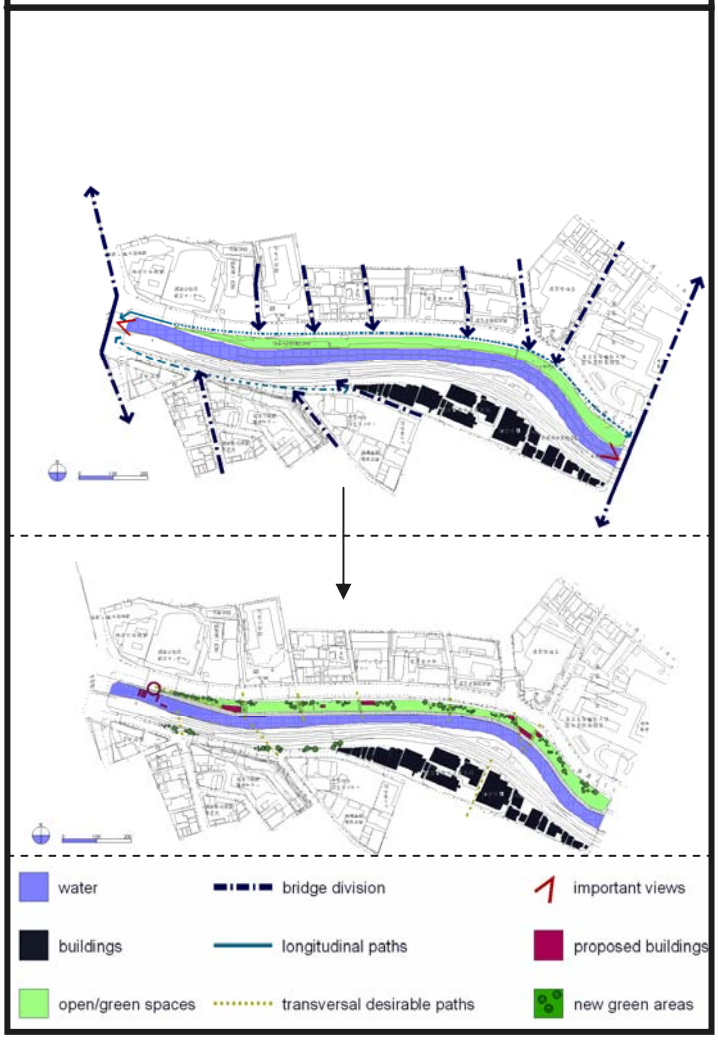


Fig290. Kanda Plans

KIII:

Problems:

- Greenery is abundant and obstructs the vision;
- There is no activity in the riverbanks;
- Rough topography;

Advantages:

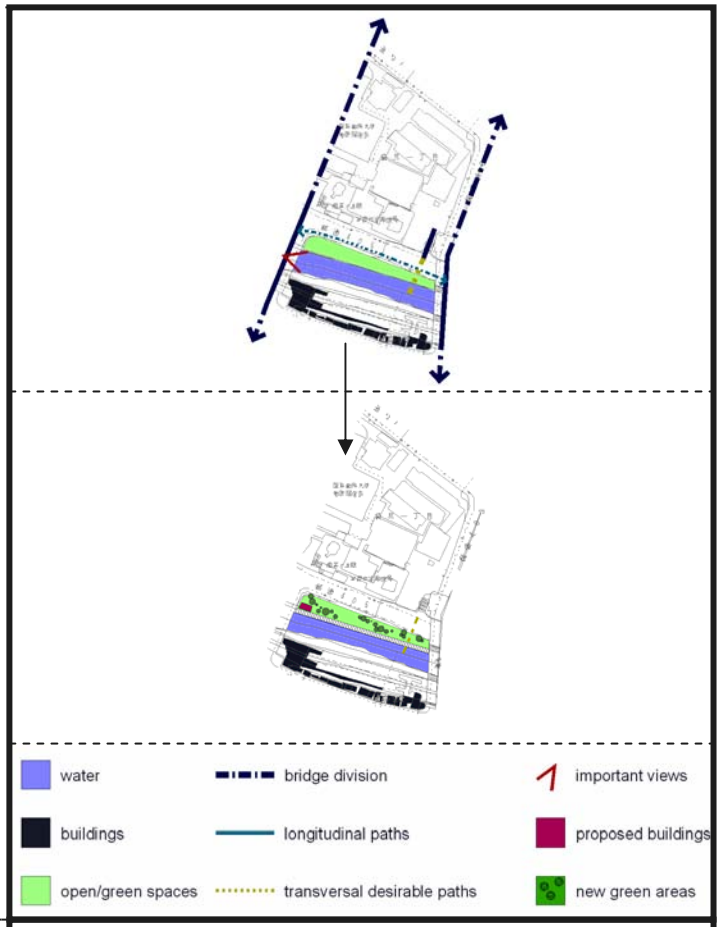
- Vacant space in the valley area;
- View from the West bridge;

Four Concept Guidelines:

1. Reduce greenery in the north bank and "clean" the valley;
2. Create clear accesses to the river thinking about the city connections in the upper level (e.g.temple);
3. Create river promenades with spaces to rest, eat, picnic and allocate portable kiosks alon the place;
4. Tree layout and greenery species should be chosen carefully thinking also about the West bridge view composition;

KIII Intervention Typology:

DESIGN



KIV:

Problems:

- Buildings along the north bank form a continuous "wall" blocking the access to the river;
- Train tracks and rough topography to the southbank block visual and physical access;
- The topography, river orientation and above bridges turn the place into a shadowy area;

Advantages:

- The small scale of the buildings can be a positive point when designing or removing them;
- Interesting view from the east bridge;

Four Concept Guidelines:

1. To "green" the train tracks and open places in which people can enjoy the river view;
2. Create transversal streets connecting the city an the river;
3. Ground level buildings should permit public view and access to the river. Public spaces should be created along the north riverbank with a few pocket spaces between buildings;
4. The view from the east side is important: think about night illumination of the river, train tracks landscape arrangement and building volumes;

KIV Intervention Typology:

DESIGN, RESTRUCTURE

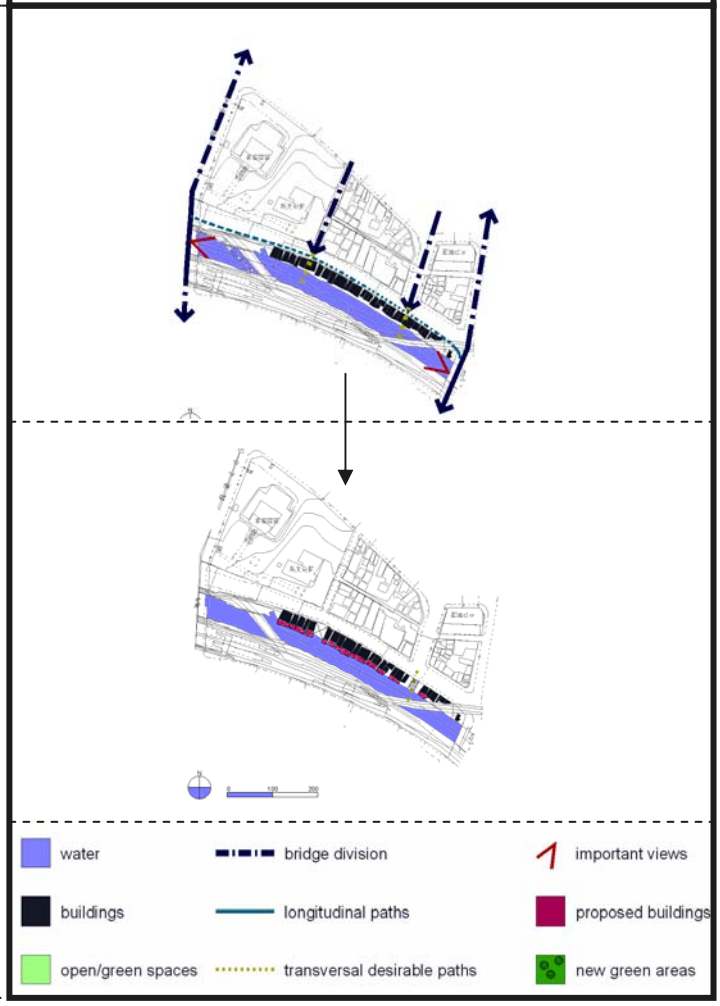


Fig291. Kanda Plans

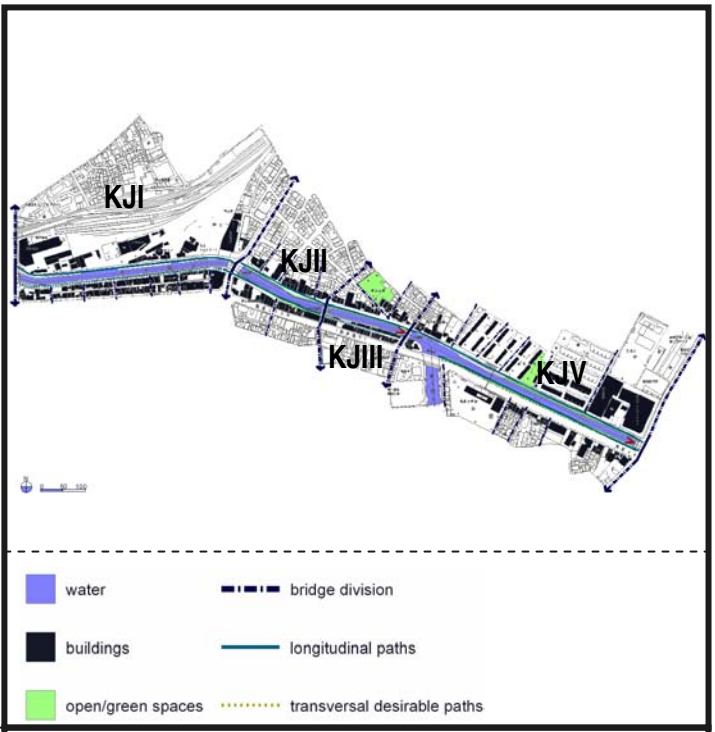
5.4.5. Kitajukken River

General Problems:

- Considerable amount of areas along the riverbank with poor maintenance;
- The area near the train station appears old and degraded resembling an old industrial area;
- The river area looks abandoned and there exists too many physical barriers for pedestrians;
- In the spaces in which maintenance is being done, there is no access to the river;
- Some neighborhoods are degraded;
- Lack of activity diversity and public infrastructures for residents;

Advantages:

- There exists space along the riverbank fro future interventions;
- The area has a good solar exposition and abundant greenery;
- The residential character can turn into a positive factor in the redevelopment of the area;



KJI:

Problems:

- The urban area to the north has an abandoned look: old warehouses/industrial area look;
- Riverbank is poorly maintained;
- No transversal openings form the city into the water and the river's longitudinal paths are dull and monotonous;
- Protection walls along the riverbank block the view and access to the riverbank;

Advantages:

- Vacant space exists along the riverbank;
- The water depth and stillness can be a positive aspect when approaching this area;

Four Concept Guidelines:

1. Increase greenery in the North bank to function as a "buffer" zone to the warehouse area – provide that water features are used along with greenery;
2. Create transversal connections by allocating activities in connecting spots;
3. Redesign the northbank by increasing greenery, activity diversity, manipulating the topography in order to redefine the river access. In the southbank create activities and spaces in which people can enjoy the opposite side view: coffee, restaurants,resting and walking areas, bycicle paths,;
4. The view from bridges should be considered when designing;

KJI Intervention Typology:

DESIGN; RESTRUCTURE

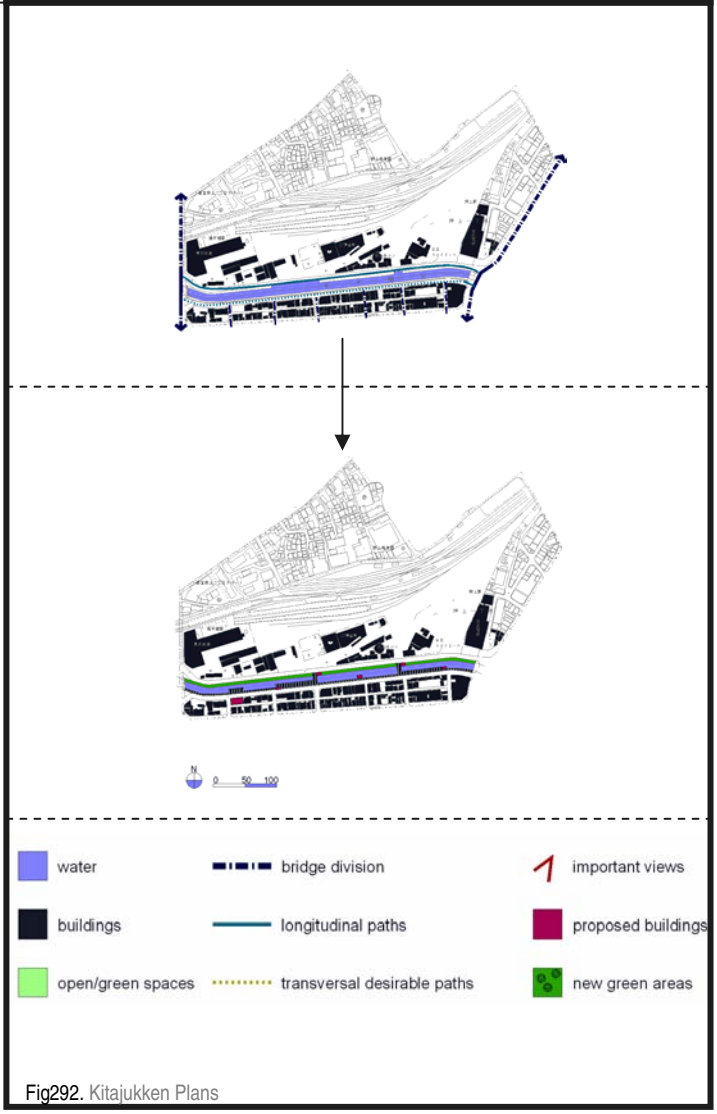


Fig292. Kitajukken Plans

KJII:

Problems:

- Protection walls block access to the riverbank;
- Monotonous serial view;

Advantages:

- Some parking lots could be converted;
- Greenery along the riverbanks;

Four Concept Guidelines:

1. Open spaces into the riverbank for pedestrians and extend greenery beyond riverbanks;
2. Connect inner transversal streets directly into the river;
3. Create paths along the river for pedestrians and bycicles, rearrange topography in order to create spaces for resting and observing;
4. The view from bridges should be considered when designing;

KJII Intervention Typology:

EDIT, DESIGN

KJIII:

Problems:

- The area is unattractive and dull;
- Old buildings along the riverbank block access;

Advantages:

- There is a park near the river;
- Degraded buildings can be removed to create direct access spaces to the river;

Four Concept Guidelines:

1. To control greenery and extend it to the nearby park creating water “esplanades” along the south bank;
2. Connect park and water spaces by greenery, illumination and pavement material differentiation;
3. Use the old buildings space to create new commercial areas directly facing the water. Manipulate topography creating water “hills” near public spaces;
4. The view from bridges should be considered when designing;

KJIII: Intervention Typology:

DESIGN, RESTRUCTURE

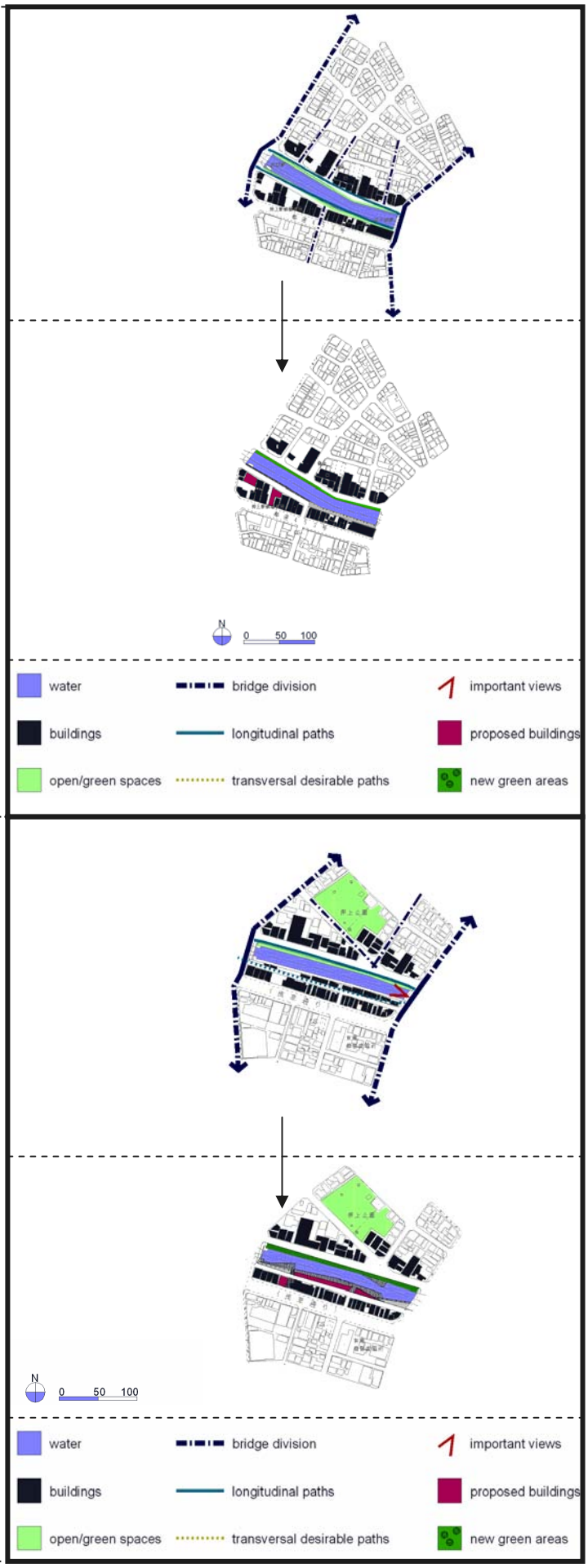


Fig293. Kitajukken Plans

KJIV

Problems:

- Dull, monotonous green spaces;
- Roads and protection walls block visual and physical access to the water;
- No urban activities along the river or adjacent urban areas;

Advantages:

- Good greenery maintenance;

Four Concept Guidelines:

1. To control greenery and topography in order to open riverbank view;
2. To create happenings in important crossing spots using proper materials;
3. Create paths along the river for pedestrians and bycicles, rearrange topography in order to create spaces for resting and observing, increase urban activities;
4. Rethink the view from bridges controlling volumes, tree's height or illumination;

KJIV Intervention Typology:

EDIT, RESTRUCTURE

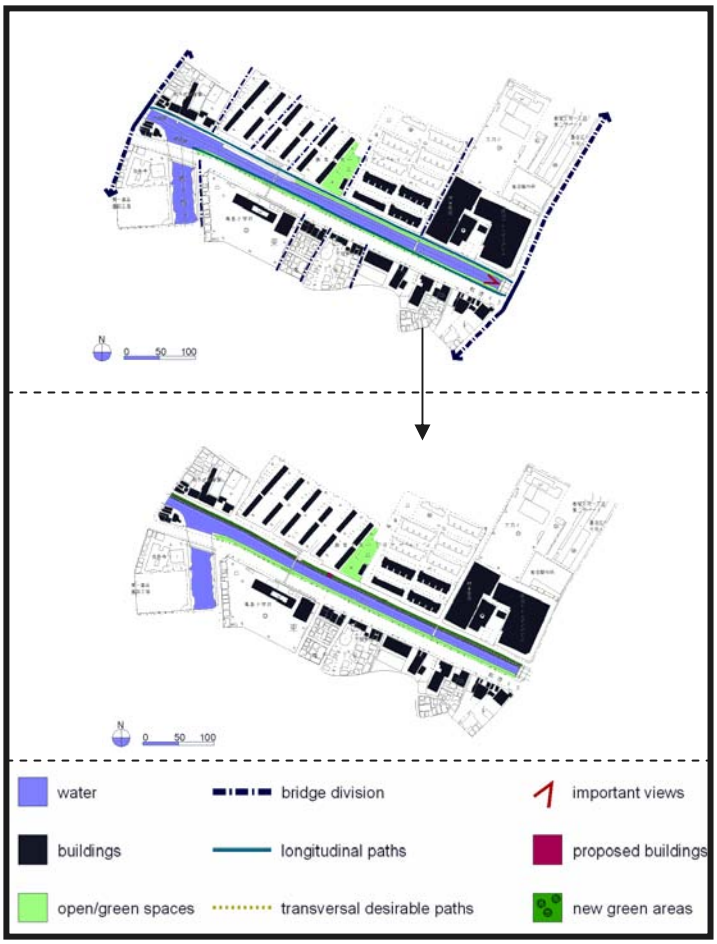


Fig294. Kitajukken Plans

5.4.6. Komatsu River

General Problems:

- The whole river area is very dark due to the coverage of the elevated expressway;
- There is practically no urban connectivity directly into the river, except from bridges;
- Parks along the river exist, but due to the darkness of the place they are not attractive;
- The area is noisy and feels unsafe;

Advantages:

- Vacant spaces are common under the expressway;

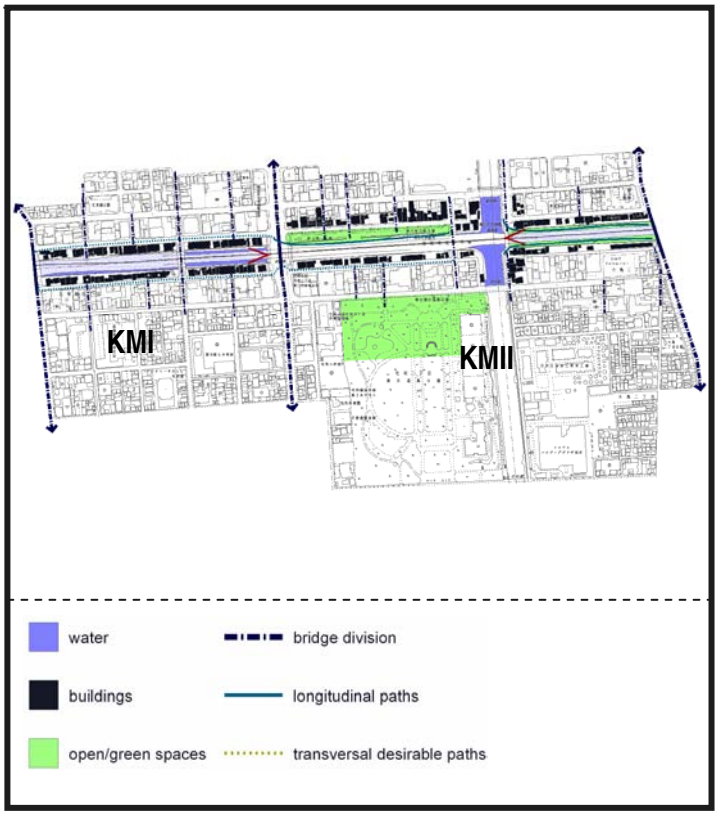


Fig295. Komatsu Plans

KMI:

Problems:

- The area is too dark;
- Buildings along the riverbank and the expressway trap the river space;
- Parks are dark and not attractive;
- River functions as city “sewage” space;

Advantages:

- The expressway can promote innovative design solutions;

Four Concept Guidelines:

1. Extend greenery outwards to the urban neighborhoods and change topography towards the river in order to improve illumination;
2. Increase connectivity to the inner banks by streets, small pocket “piazzas” or green areas, etc;
3. Increase highway illumination. Distribute greenery outwards the riverbank, allocate activities under the highway in order to create attractive spaces and increase “human density”;
4. Improve illumination to create nigth views from existing bridges;

KIII Intervention Typology:

EDIT, RESTRUCTURE

KMII:

Problems:

- The area is too dark;
- Builings and expressway block the river;
- River water condition is very poor;

Advantages:

- The expressway can promote innovative design solutions;

Four Concept Guidelines:

1. Increase water and city’s curface contact;
2. Open transversal streets by removing buildings along the riverbank;
3. Change character of the place by introducing new activity typologies: nigth type activities are preferable (karaoke boxes, pachinko parlors, restaurants, bars, etc);
4. Improve illumination to create nigth views from existing bridges;

KIV: Intervention Typology:

EDIT, RESTRUCTURE

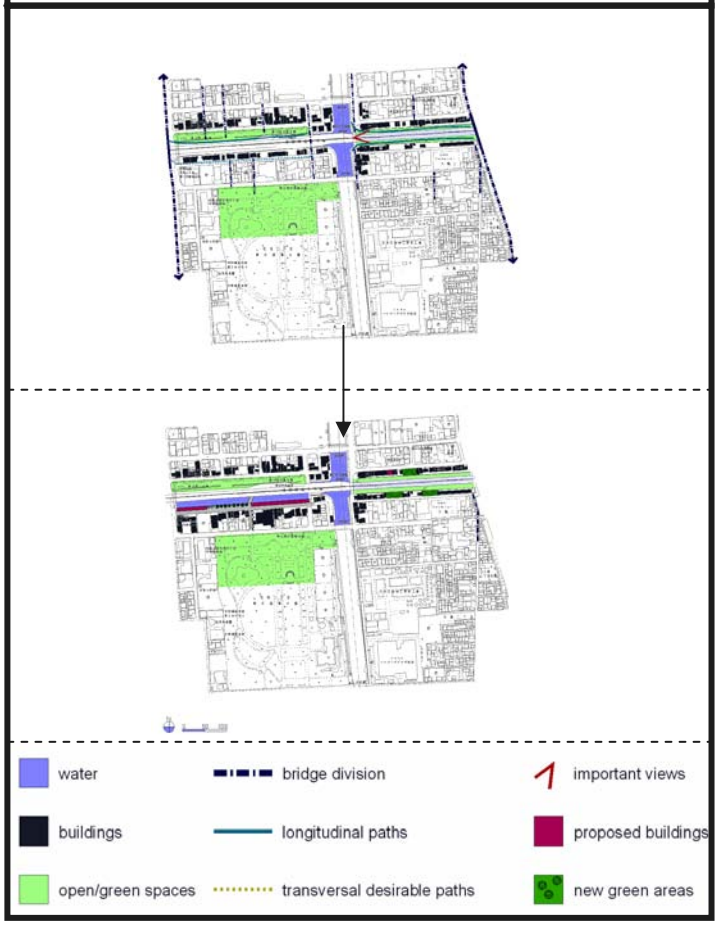


Fig296. Komatsu Plans

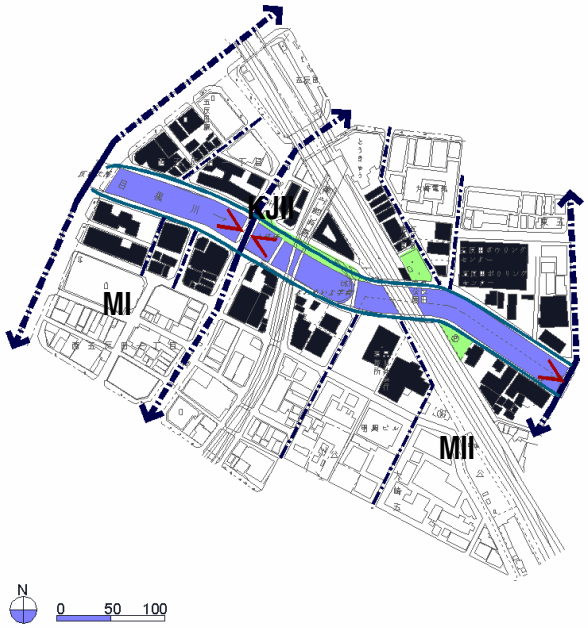
5.4.7. Meguro River

General Problems:

- There are no public spaces along the river except in the area around the train station;
- There are too many obstacles that impede a more direct contact with the river: fences, greenery, roads;
- Although it is possible to walk along the proximity of the river through the whole section, there is no feeling of proximity with a river or attractive spaces that pull people there;
- The volumes along the river have no relation to the water and their presence increases the “greyness” of the area;

Advantages:

- The station is a positive area;
- Land speculation in the area, if regulated could provide for investment in the river spaces;
- Bridges provide interesting views along the way;



General Problems:

- Public spaces are of very poor quality;
- The area’s greenery and tree alignment provide too many shadow spaces which in turn makes the area cold and unattractive;
- Connections to the inner city areas are few and not directly recognizable;
- There are too many spaces left to abandonment;

Advantages:

- Cherry blossoms function as a seasonal attraction;
- The history and character of the place;
- Vacant plots;

Fig297. Meguro Plans

MI:

Problems:

- There are practically no public spaces along the river and the existing ones are of poor quality;
- Fencing is too extensive and its scale closes the view into the river as well as its access;

Advantages:

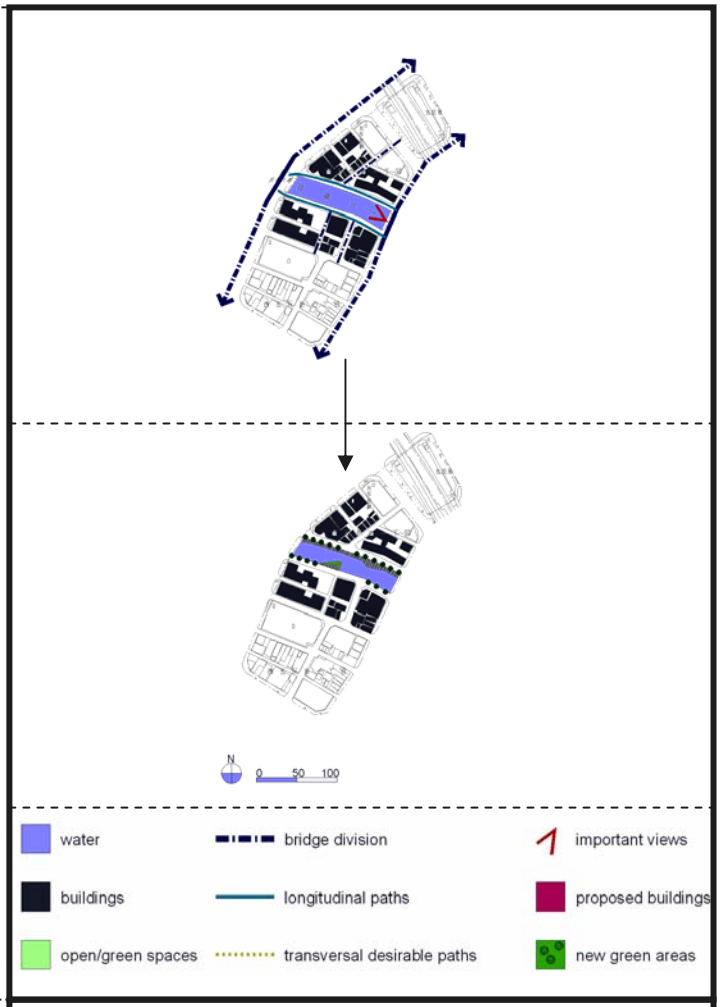
- There are urban activities in the surrounding area;
- The river itself has good characteristics of water depth and solar exposition;
- There exists some vacant spaces which could be used to reconnect the city and the river;

Four Concept Guidelines:

1. To control greenery along the Riverbank opening views into the water; Create spaces in which the user can be closer to the river while still feeling in the city;
2. To improve transversal inner street connection to the river;
3. To create promenades alont the riverfront with decks, squares, places to walk and rest and quality connections to the upper levels;
4. Control bridge view when designing promenades or chosing volumes and greenery;

MI Intervention Typology:

DESIGN



MII:

Problems:

- Non openness to the river although there are spaces;
- Poor public spaces;
- The train tracks blockage;

Advantages:

- Water depth and solar exposition;
- Vacant spaces along the riverbanks;

Four Concept Guidelines:

1. To increase strategic greenery in important spots in order to induce and attract people to the water, create water related activities;
2. To improve transversal inner street connection to the river;
3. To create dynamic river spaces at the image of the surrounding urban area with new public spaces and activities, promenades, cycling paths, decks, fishing spots or water “piazzas”;
4. Think about the overall view from both extreme’s bridges controlling the area’s greenery, building volumes and illumination;

MII: Intervention Typology:

DESIGN

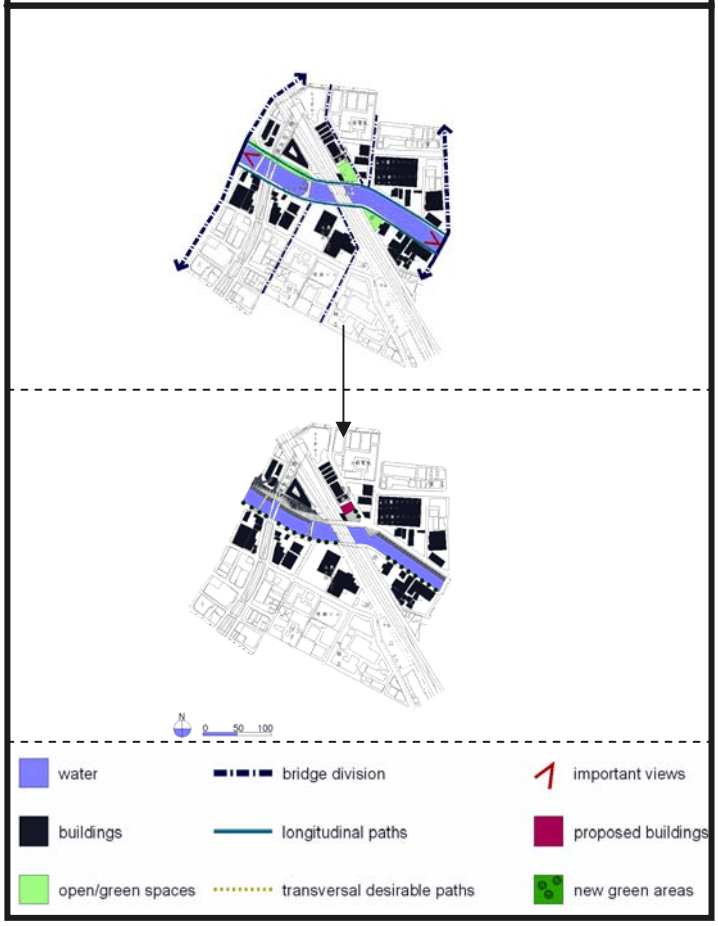


Fig298. Meguro Plans

MIII:

Problems:

- Public space quality is poor and looks abandoned and isolated;
- The space is dark due to many trees provoking shadows directly into the riverbanks and riverbed;
- No urban connection to the river from inner streets;

Advantages:

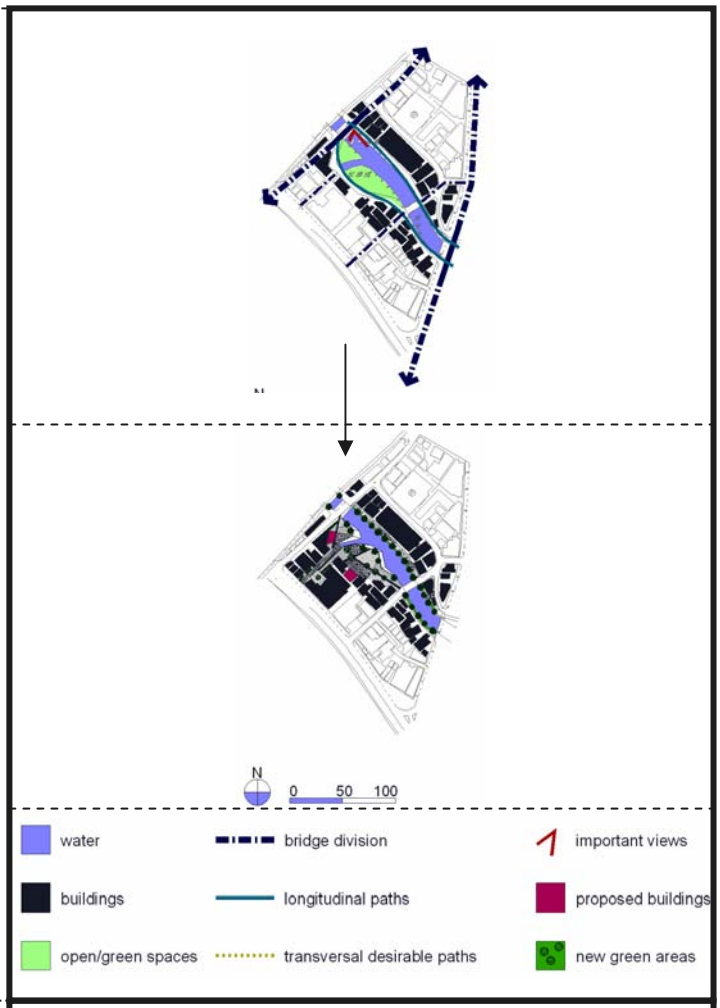
- Shallowness of the water;
- Cherry blossoms;

Four Concept Guidelines:

1. To improve greenery along and across the river trimming the existing trees and diversifying the species;
2. To improve connection existing open spaces alon the river connectin them to the inner city and the riverbank;
3. To create diversified activities and improve open spaces: design the space as it was a garden, taking advantage of the existin greenery;
4. Trim greenery to improve the river views;

MIII Intervention Typology:

EDIT, DESIGN



MIV:

Problems:

- The area along the riverbank looks abandoned and isolated;
- Poor urban connection to the river;
- The space is dark due to many trees provoking shadows directly into the riverbanks and riverbed;

Advantages:

- Vacant spaces along the riverbank;
- Cherry blossom trees and the historical and seasonal character of the area;

Four Concept Guidelines:

1. To control greenery in narrow areas and open spaces;
2. To create and/or improve the city and river connection spaces;
3. Design new river access, public spaces, gardens and include high-density medium-rise housing to bring people in;
4. Create water features in the higher level and design thinking of those points of view;

MIV: Intervention Typology:

EDIT, DESIGN

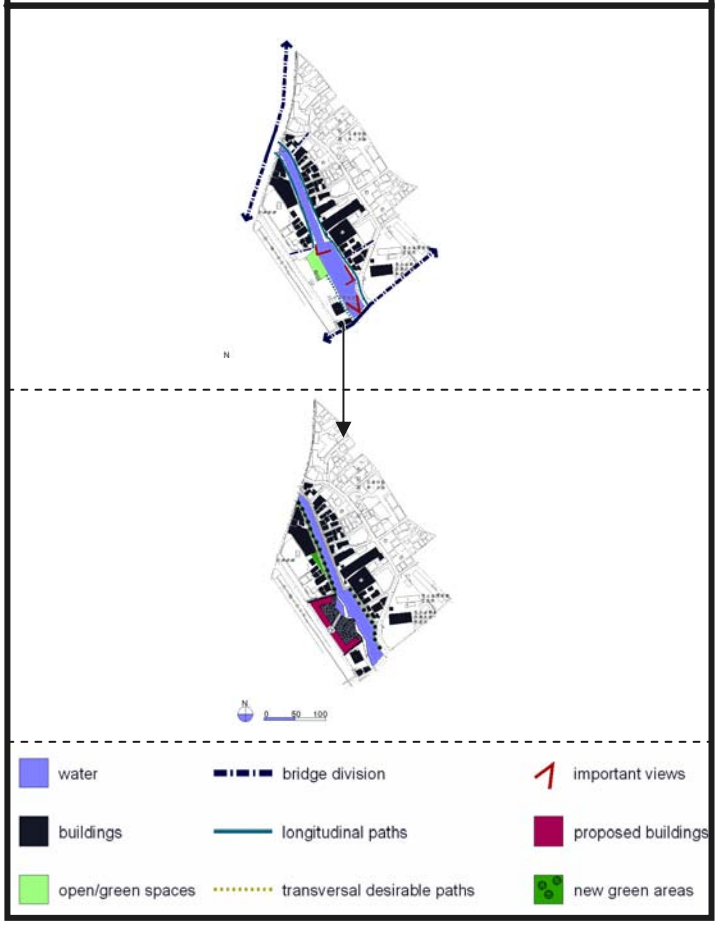


Fig299. Meguro Plans

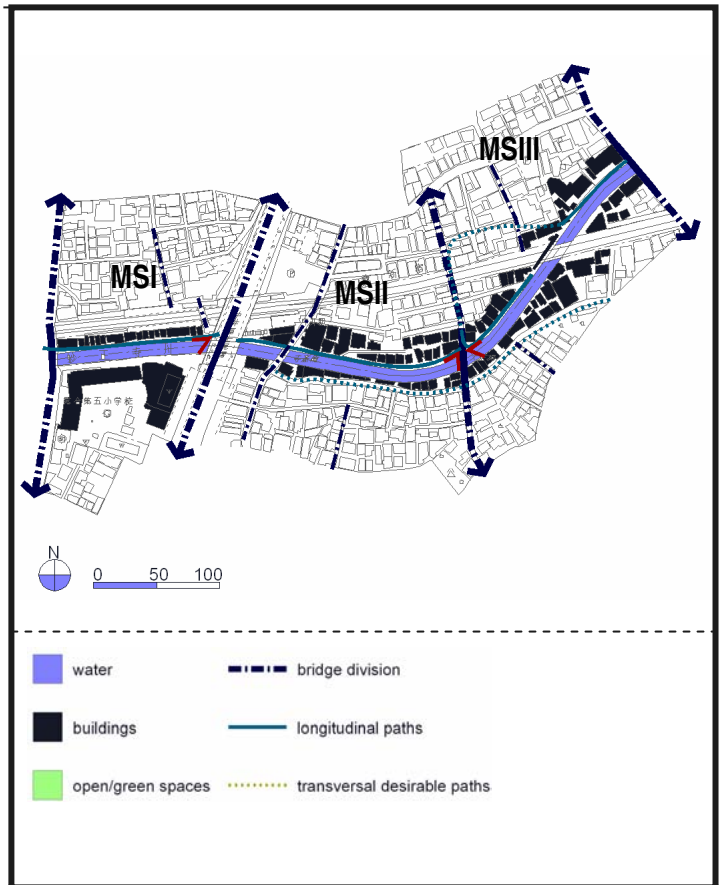
5.4.8. Myoshoji River

General Problems:

- The riverbank spaces are narrow and the canal is completely artificial (covered in concrete);
- Building density along the riverbank is high and it blocks physical access at times;
- Poor transversal access form the inner city to the water;
- Practically inexistent green areas and the space is “dry” and grey;

Advantages:

- Neighborhood character of the place;
- Smal shop activities;



MSI:

Problems:

- The riverbank spaces are narrow;
- South bank is not physically accessible;
- Buildings block most of the riverbank access;

Advantages:

- Neighborhood activity;
- Greenery (from existing school);
- Shallowness of the river;

Four Concept Guidelines:

1. Trim greenery and create small transversal “green” streets (similar to Japanese roji);
2. Create transversal openings to the river;;
3. Homogenize materials: pavements, urban furniture, illumination and create spaces where people can enjoy a variety of urban functions: walk, rest, etc;
4. East bridge view is important;

MSI Intervention Typology:

EDIT

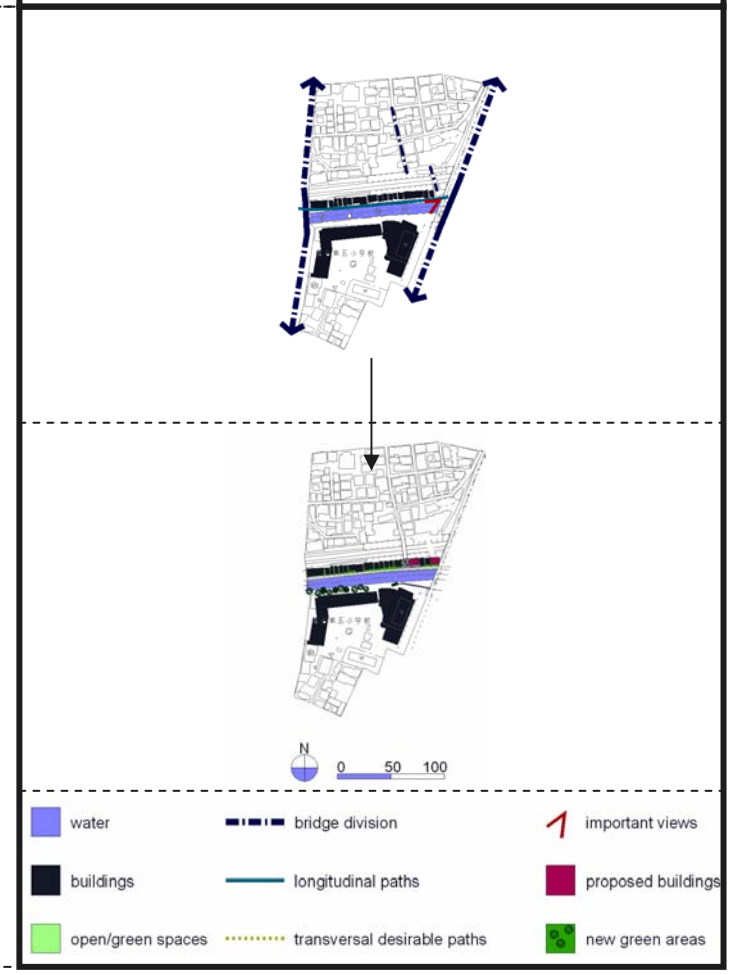


Fig300. Myoshoji Plans

MSII:

Problems:

- South riverbank is not inaccessible;
- North riverbank is too narrow;
- No public spaces and greenery;

Advantages:

- There are neighborhood activities;
- Shallowness of the river;

Four Concept Guidelines:

1. Redesign the riverbank: change topography, create green spaces, valleys to the water and increase green areas towards inner neighborhoods;
2. Open transversal streets to the water;;
3. Create resting spaces and promenades along the water with community spaces: small gardens or small farm garden;
4. Desing thinking the east bridge view;

MSII Intervention Typology:

DESIGN, RESTRUCTURE

MSIII

Problems:

- Scarce riverbank access in both riverbanks;
- Train physical blockage;
- Building density;

Four Concept Guidelines:

1. To increase green spaces and access to the water. Change the topography towards the water and create “green valleys”;
2. Open transversal streets connecting city and water and redefine the south bank;
3. Create diversity and city rhythm: promenades, pedestrian access to the water, resting spaces, shops, etc;
4. The view from the western bridge is important: illumination, greenery should be properly chosen and the place should be designed like a garden trying to balance wet and dry elements, green and artificial, etc.

MSIII: Intervention Typology:

DESIGN, RESTRUCTURE

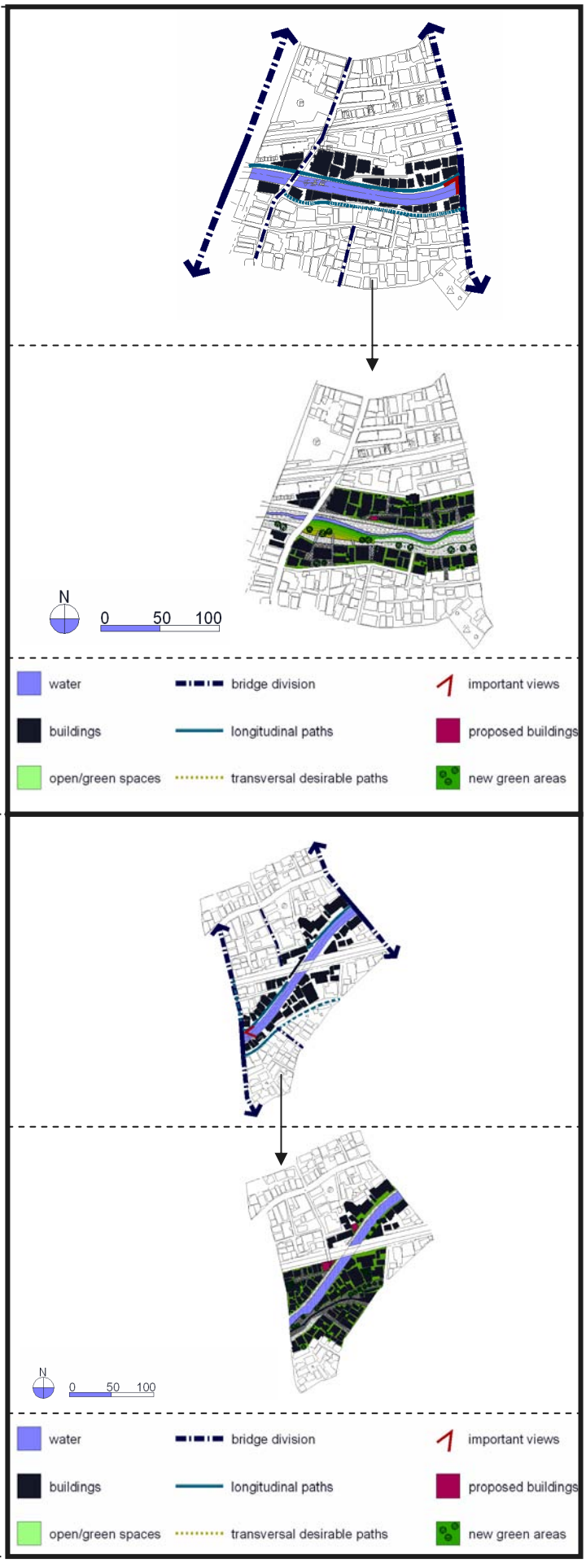


Fig301. Myoshoji Plans

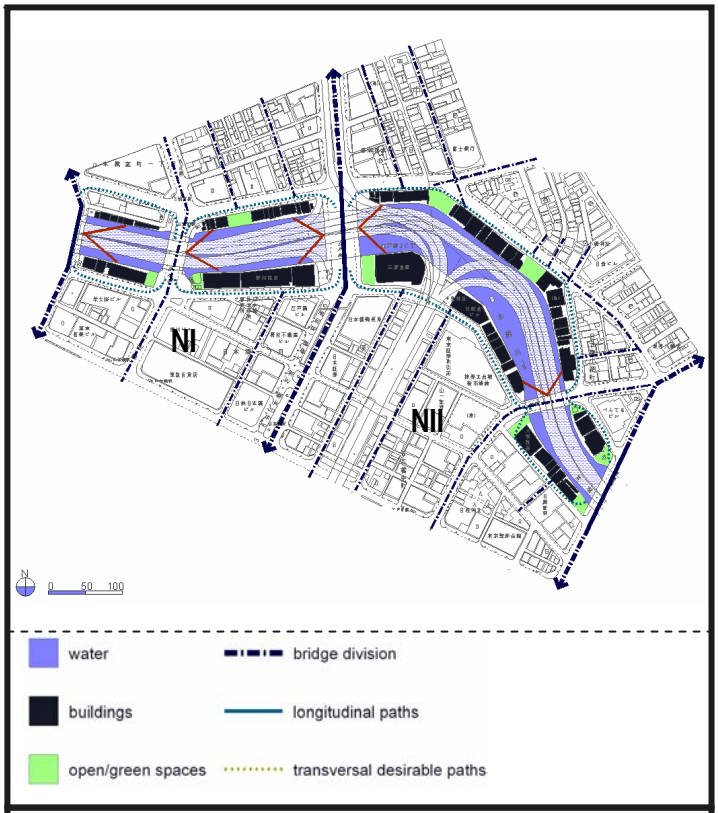
5.4.9. Nihombashi River

General Problems:

- The river space is too dark and noisy;
- Buildings along the riverbank block physical and visual access to the water;
- No space along the riverbank;

Advantages:

- The historical character of the place;
- Several important monuments;



NI:

Problems:

- Building volumes and elevated expressway "trap" the river and block pedestrian access;
- The river is too dark and noisy;
- There is no spaces along the riverbanks to permit longitudinal access;

Advantages:

- Several monuments: Nihombashi bridge, Edobashi bridge, the expressway;
- Besides the shaking of the expressway the riverspace is quiet and isolated: kind of city "oasis";
- The expressway structure is actually interesting and can provide for attractive designs;

Four Concept Guidelines:

1. Open areas along the river by manipulating topography and removing some buildings;
2. Reinforce pedestrian transversal access (city and river connection): by pavements, furniture, homogenized furniture, etc;
3. Create an "oasis" kind of space where people can come to contemplate the city's history and enjoy activities under the expressway (nigth activities better);
4. Design considering the Nihombashi bridge frame view;

NI Intervention Typology:

REDESIGN

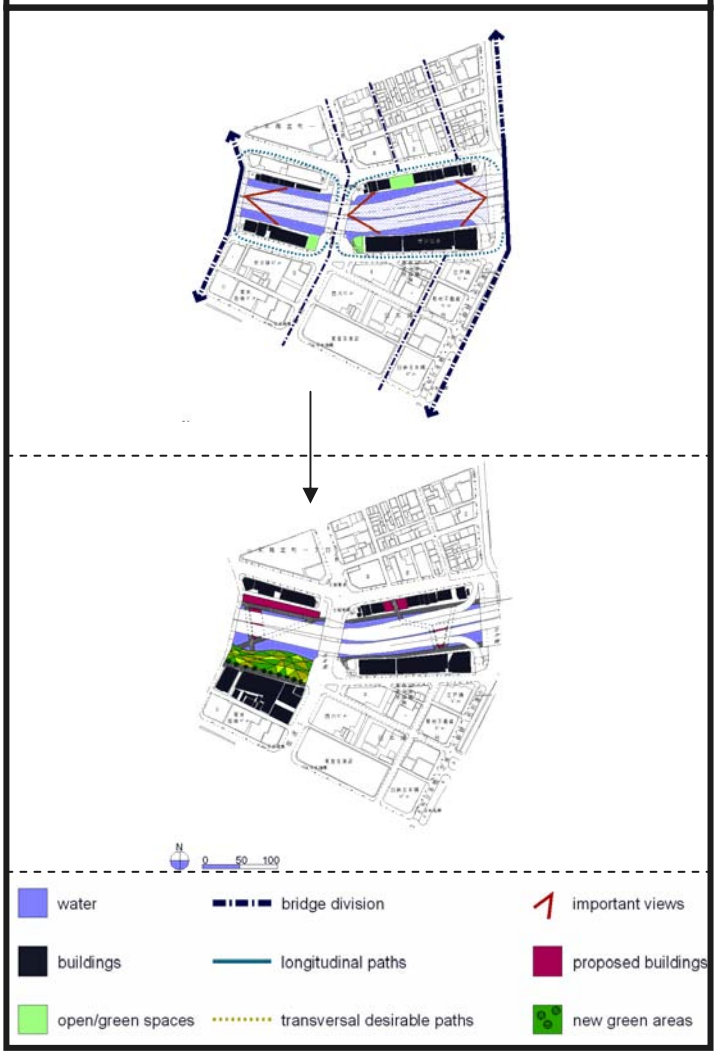


Fig302. Nihombashii Plans

NII

Problems:

- Building volumes and elevated expressway "trap" the river and block pedestrian access;
- The river is too dark and noisy;
- There is no spaces along the riverbanks to permit longitudinal access;

Advantages:

- Several monuments: Nihombashi bridge, Edobashi bridge, the expressway;
- Besides the shaking of the expressway the riverspace is quiet and isolated: kind of city "oasis";
- The expressway structure is actually interesting and can provide for attractive designs;

Four Concept Guidelines:

1. Open areas along the river by manipulating topography and removing some buildings and increase green spaces;
2. Reinforce pedestrian transversal access (city and river connection): by pavements, furniture, homogenized furniture, etc;
3. Create an "oasis" kind of space where people can come to contemplate the city's history and enjoy activities under the expressway (nigth activities better). Create japanese style spaces where public and private mix, pleasure boats along the canal, lanterns under the expressway, and so on.
4. Design considering the Nihombashi and Edobashi bridge frame views;

NII Intervention Typology:

REDESIGN

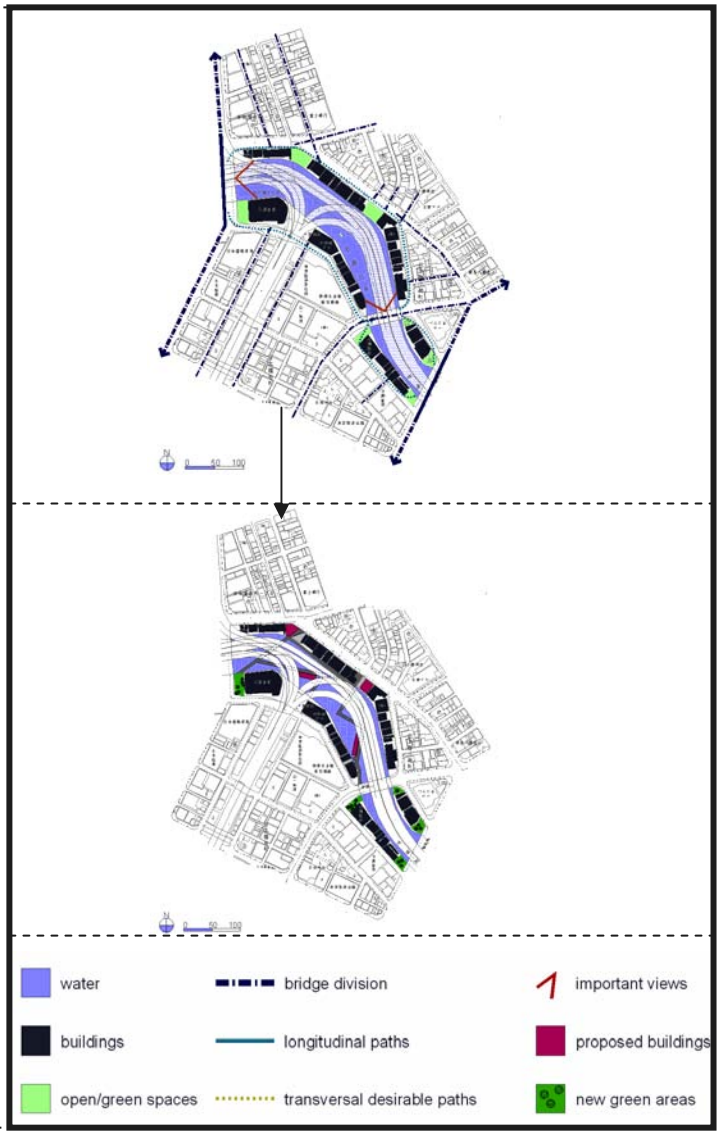


Fig303. Nhombashi Plans

5.4.10. Onagi River

General Problems:

- The apparently orderly designed gardens along the riverbank are actually disconnected from the inner city;
- Fencing disturbs the view of the river and creates a feeling of being trapped while walking in the riverbank spaces;
- There is no sense of openness or enclosure and the whole place is a bit cluttered;

Advantages:

- Greenery maintenance;
- Vacant spaces along the river are able to be successfully edited and reconnected to the inner city;
- Solar exposition and water depth;

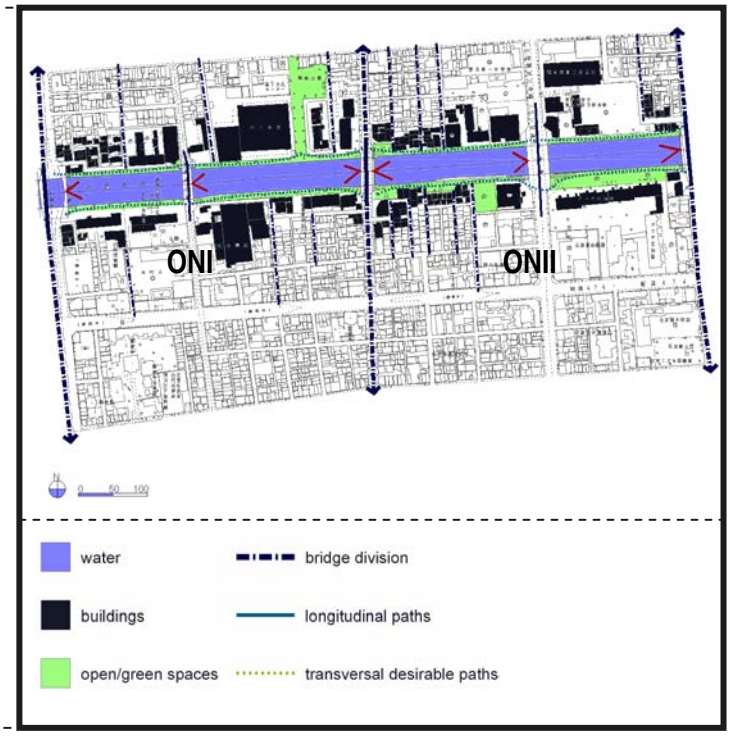


Fig304. OnagiPlans

ONI:

Problems:

- Poor public space infrastructures;
- The city, water and gardens are being “autistic” in relation to each other;
- Fencing disturbs visual approach to the water;
- No proximity feeling towards the river;

Advantages:

- Good water depth, solar exposure and garden maintenance;

Four Concept Guidelines:

1. Spread linear gardens into the city spaces and create water streets or water “piazzas”. Diversify greenery and improve topography;
2. Open transversal inner streets towards the river and the river’s public spaces;
3. Remove view blockers, create neighborhood attractive activities: playground spaces, bicycle paths, skateboarding places, community gardens, picnic infrastructure, etc;
4. Design with the bridge frame view in mind: Choose diversified greenery and control building volumes;

ONI Intervention Typology:

DESIGN, RESTRUCTURE

ONII

Problems:

- Existing open spaces along the river are disconnected from the city;
- Poor visual access to the water;
- Fencing blockage;
- Monotonous landscape;

Advantages:

- Good water depth, solar exposure and garden maintenance;

Four Concept Guidelines:

1. “Push” greenery and water towards the city;
2. Connect transversal streets to the water, create new activities in order to attract people to the water;
3. Diversify the experience of the river: promenades, decks, water gardens, boat usage, etc.
4. Both bridge frame view’s design is important;

ONII: Intervention Typology:

DESIGN, RESTRUCTURE

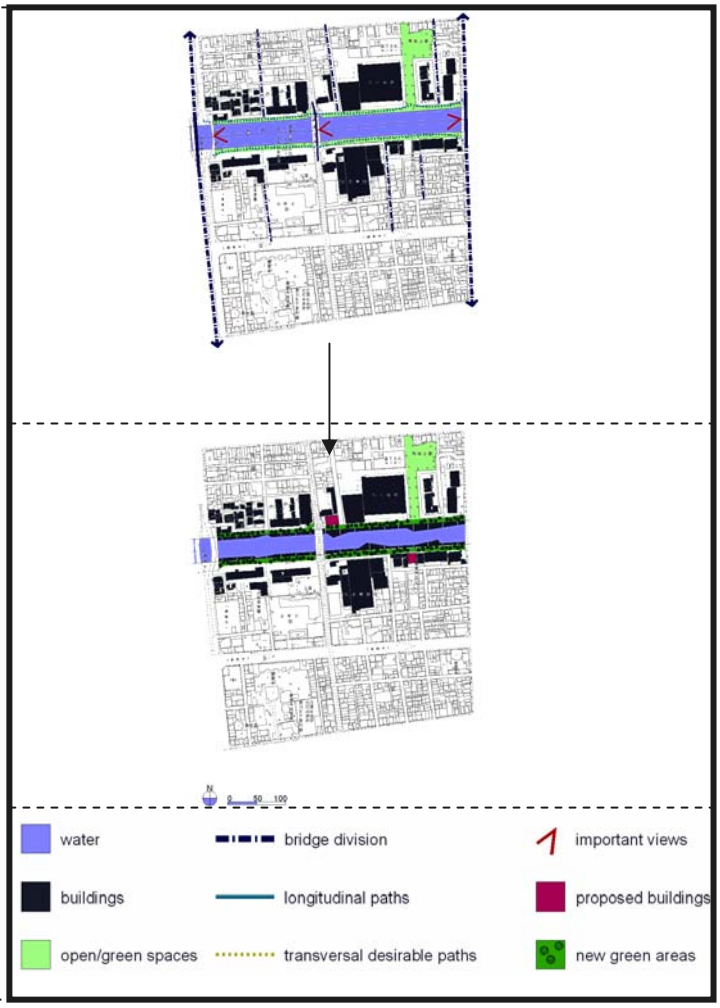


Fig305. Onagi Plans

5.4.11. Ooyoko River

General Problems:

- The space along the river is "trapped" between the water, the fences and the buildings;
- The only transversal access to the riverbank is through bridges;
- The riverbank spaces are isolated and feel unsafe;
- The landscape serial view is monotonous and dull.

Advantages:

- Vacant spaces;
- Maintenance;
- Greenery;

OOI:

Problems:

- The landscape serial view is monotonous and crossing river spaces have a poor relation;
- The riverbank is enclosed and feels isolated;

Advantages:

- Vacant spaces along the riverbank;
- Water depth and solar exposition;

Four Concept Guidelines:

1. To reduce greenery in narrow areas and diversify species across neighborhood areas, create water activities;
2. To open transversal streets to connect the city and the river;
3. Diversify tree species, give importance to the water crossing by transforming it into a landmark space;
4. Redefine the view from the water crossing and create spaces in which people can enjoy the view properly supported by urban furniture and ilumination;

OOI Intervention Typology:

EDIT, REDESIGN

Fig306. Ooyoko Plans

OOII

Problems:

- The narrow, enclosed riverbanks are isolated from the city and feel unsafe;
- There is no city and river connectivity;

Advantages:

- Existing free spaces along the riverbank;

Four Concept Guidelines:

1. "Push" greenery towards the city and redefine it along the riverbank. Create spaces in which water direct contact is possible: fishing spots, water squares, etc;
2. Create "roji" type streets;
3. Increase diversity of activities: walk, rest, play, and so on by alocating new function buildings and supportive infrastructures;
4. Redefine north bridge frame view;

OOII Intervention Typology:

EDIT, REDESIGN

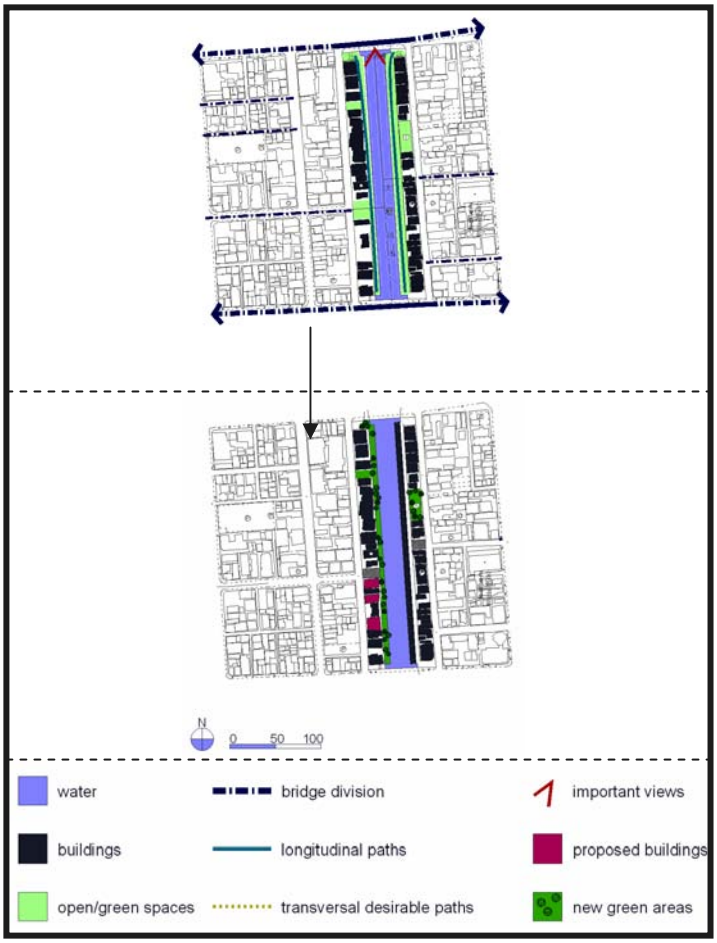


Fig307. Ooyoko Plans

5.4.12. Outer Moat Kagurazaka

General Problems:

- The road in the upper side of the west bank blocks city and moat connection and creates a strong barrier;
- Train tracks and rough topography in the east bank block moat access;
- Greenery in the upper east riverbank blocks the canal view;

Advantages:

- Presence of water activities;
- Strong character of the surrounding areas;
- Stillness of the water and possible water friendly activities: row boats, fishing, etc;

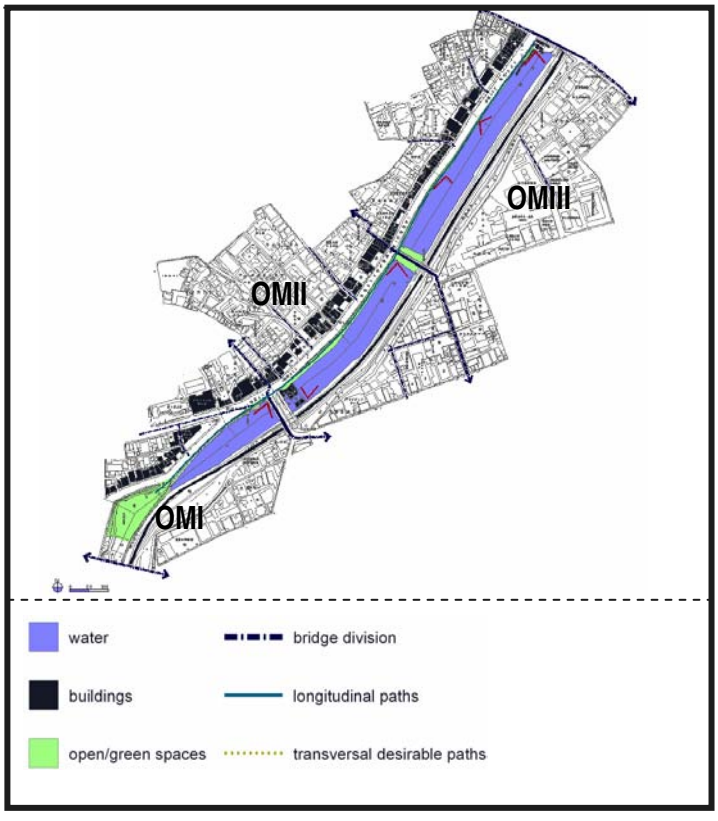


Fig308. Outer Moat Kagurazaka Plans

OMI:

Problems:

- No activities along the moat;
- Poor park and river connection;
- Road blocks city and river direct connection;

Advantages:

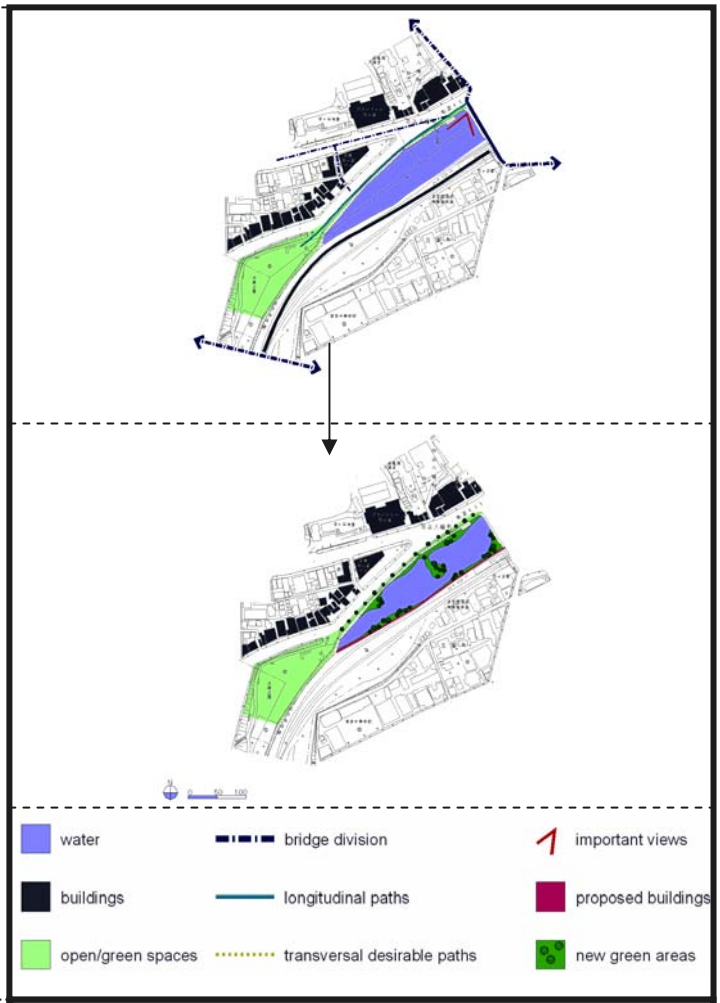
- Park proximity and abundant greenery;
- Moat's water stillness;

Four Concept Guidelines:

1. Extend the park to the water and create a water garden improving both elements connection;
2. Allocate greenery and activities properly in order to create openings to the city behind;
3. Illuminate the south bank train tracks and design that space as a performance stage: greenery, illumination, architectural structures, public art, and so on;
4. The view from the west bank should be privileged;

OMI Intervention Typology:

EDIT, REDESIGN



OMII

Problems:

- The train track blockage in the east bank;
- Linear monotony along west bank's upper side;
- No direct city and river connection;

Advantages:

- The view from both bridges;
- The proximity to a historical center with a strong , dense range of activities and people;
- The moat's stillness;

Four Concept Guidelines:

1. Design the landscape and manipulate the topography in the west bank in order to allow the view from the upper road and the direct pedestrian access to the water;
2. Control greenery to open urban views;
3. Create supporting activities along the new green areas, close to the fishing spot, and redesign the train track area like the in OMI;
4. The view from the west bank should be privileged;

OMII: Intervention Typology:

DESIGN

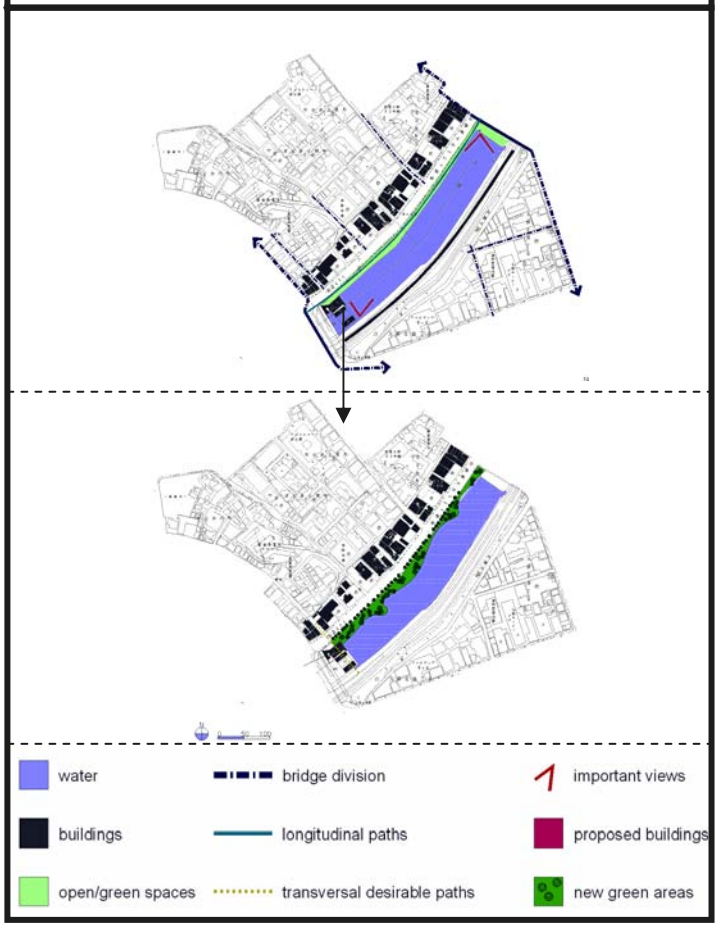


Fig309. Ooyoko Plans

OMIII

Problems:

- No activities along the moat;
- Poor park and river connection;
- Road blocks city and river direct connection;

Advantages:

- Park proximity and abundant greenery;
- Moat's water stillness;
- Water activities are present: cafe, restaurant and esplanades together with pleasure boat activities;

Four Concept Guidelines:

1. Extend the park to the water and create a water garden improving both elements connection;
2. Allocate greenery and activities properly in order to create openings to the city behind;
3. Continue the existing promenade and create other activities to enliven the area: more boat activities, picnic areas, and so on;
4. The view from the west bank should be privileged but the upper east view should also be trimmed in order to open views to the moat;

OMIII Intervention Typology:

DESIGN, RESTRUCTURE

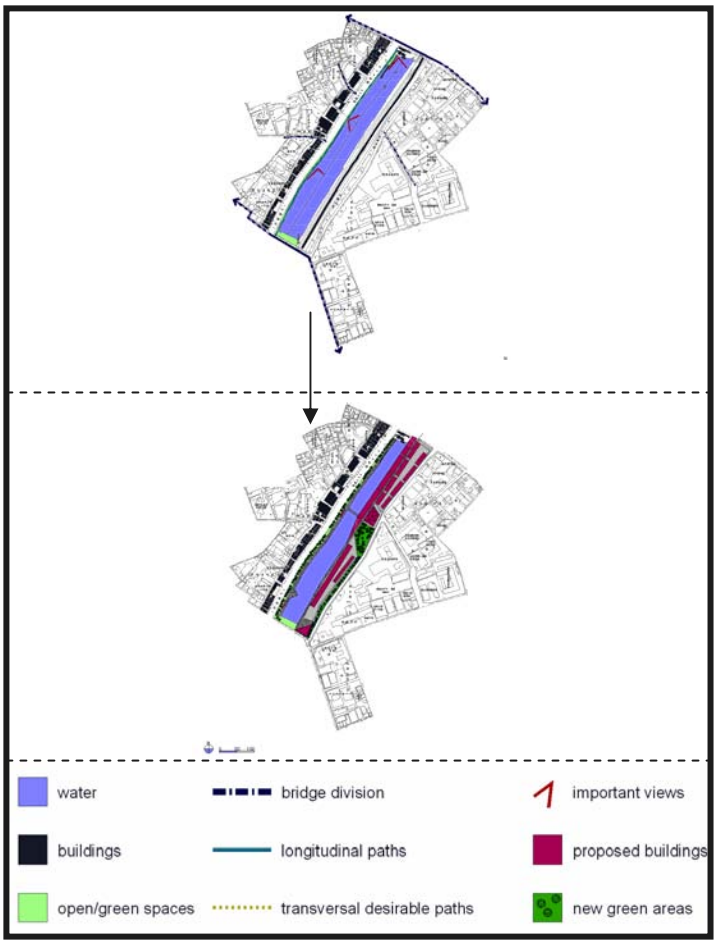


Fig310. Outer Moat Kagurazaka Plans

5.4.13. Sendaihori Moat

General Problems:

- The landscape serial view is monotonous and dull;
- Transversal city connections to the river are poor and not many;

Advantages:

- Water depth
- Vacant spaces;
- Neighborhood character;

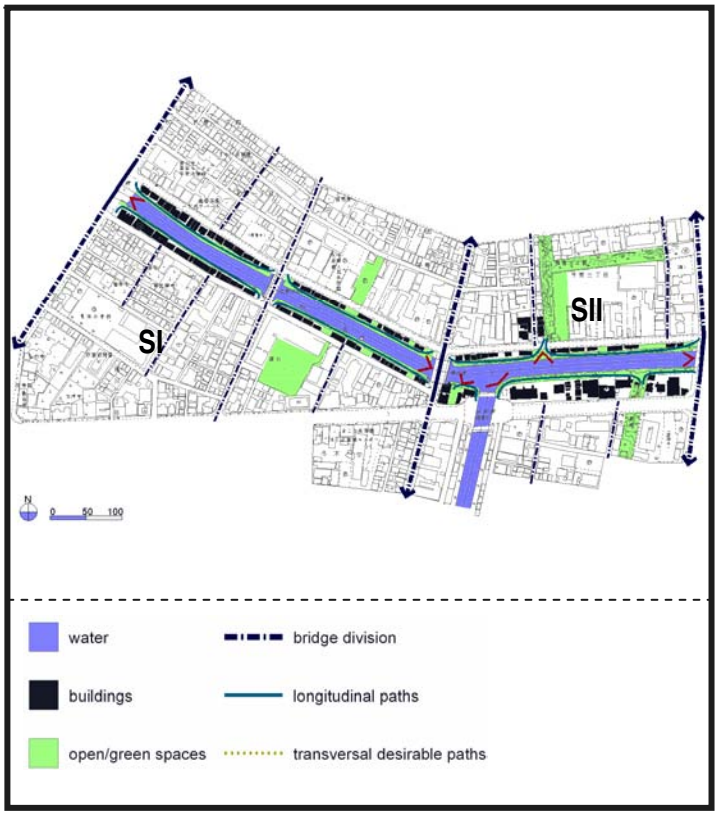


Fig311. Sendaihori Plans

SI:

Problems:

- Buildings along the riverbank block its access;
- Landscape serial view is monotonous and continuous;
- Extreme fencing blocks visual access;
- No water related activities;

Advantages:

- Water depth;
- Vacant spaces along the riverbank;

Four Concept Guidelines:

1. Diversify greenery and adjust topography while connecting neighborhoods areas into the water;
2. Open transversal inner streets to directly connect the river and the city;
3. Create water related activities: promenades, bicycle paths, boat activities, shops or restaurant near the riverbank and so on;
4. Design thinking about bridge frame view;

SI Intervention Typology:

EDIT, DESIGN

SII

Problems:

- Buildings along the riverbank block its access;
- Landscape serial view is monotonous and continuous;
- Extreme fencing blocks visual access;
- No water related activities;

Advantages:

- Water depth;
- Vacant spaces along the riverbank;
- Street park proximity;

Four Concept Guidelines:

1. Connect green spaces into the water and increase the water's sense of openness;
2. Open transversal streets and homogenize them through materials and illumination selection;
3. Increase water activities in promenades. Increase greenery diversity and public spaces with several functions;
4. Crossing river area view should be privileged;

SII: Intervention Typology:

EDIT

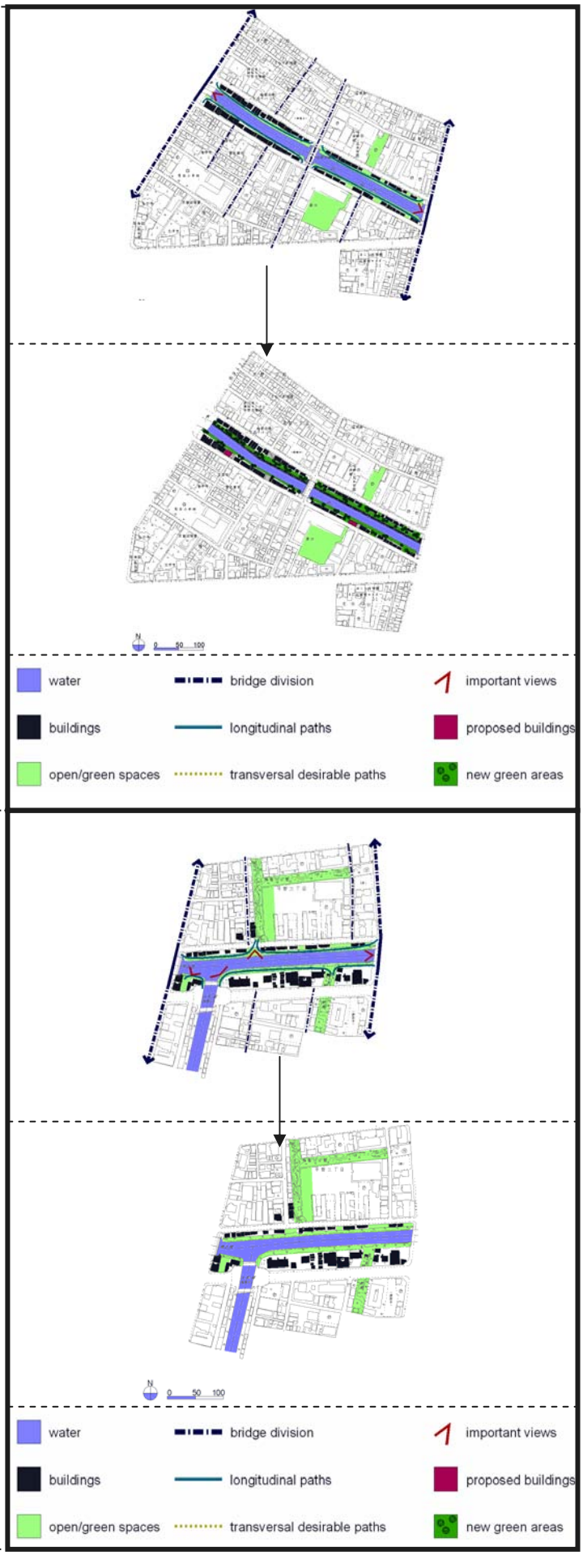


Fig312. Sendaihori Plans

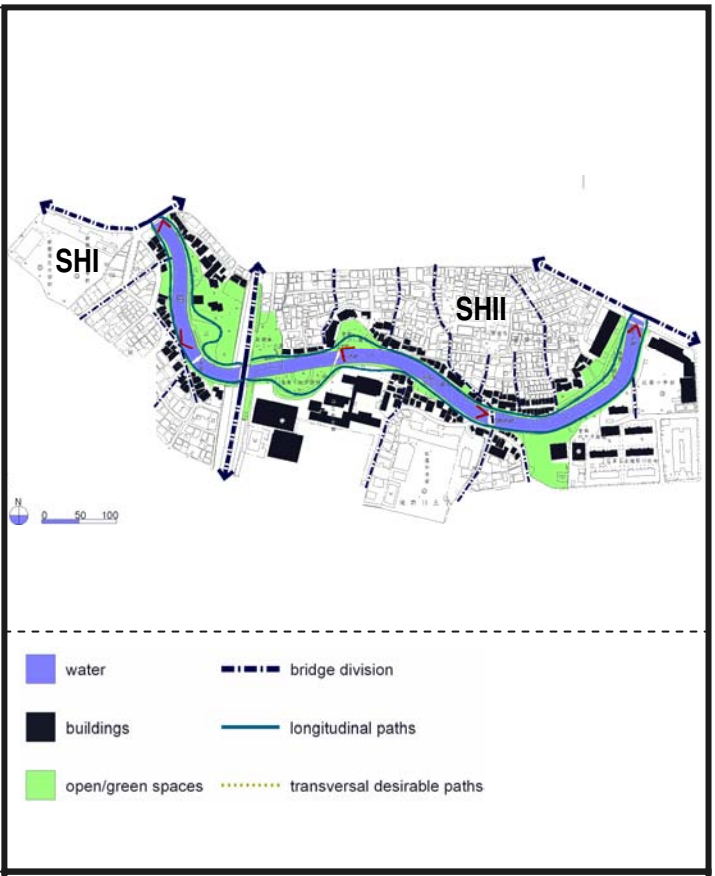
5.4.14. Shakujii River

General Problems:

- Greenery abundance and density increases river isolation and provokes too much shadow in the river area;
- No river activities;
- Poor city and river connection;

Advantages:

- River park and grenery;
- Neighborhood character;



SHI:

Problems:

- Dense greenery isolates the area making it unattractive and unsafe;
- Transversal connection is very poor;

Advantages:

- Neighborhood character;
- Vacant space along the riverbank;

Four Concept Guidelines:

1. To control greenery, open the area increasing shrubbery diversity;
2. Open axis to the riverbed: through new streets, green axis, through pavement diferenciation, ilumination, furniture, etc;
3. Create river activities: small shops, neighborhood character activities, flea market, community gardens/ farm, etc;
4. The frame view from bridges should be though of;

SHI Intervention Typology:

DESIGN, RESTRUCTURE

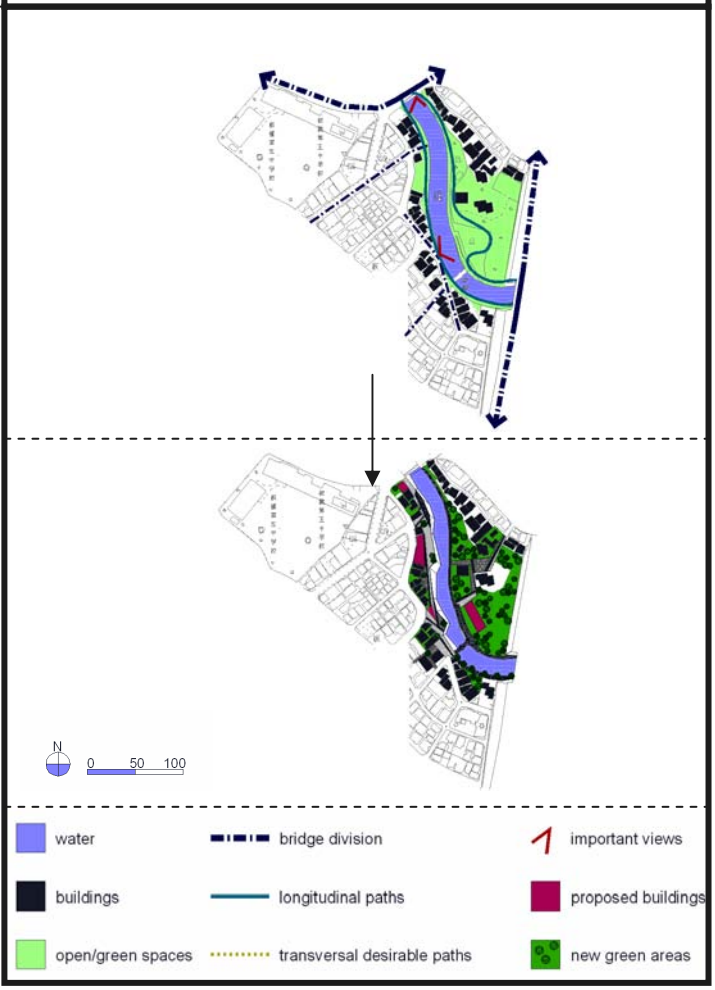


Fig313. Shakujii Plans

SHII

Problems:

- Dense greenery isolates the area making it unattractive and unsafe;
- Transversal connection is very poor;

Advantages:

- Neighborhood character;
- Vacant space along the riverbank;

Four Concept Guidelines:

1. To control greenery, open the area increasing shrubbery diversity;
2. Open axis to the riverbed: through new streets, green axis, through pavement diferenciation, ilumination, furniture, etc;
3. Create river activities: small shops, neighborhood character activities, flea market, community gardens/ farm, etc;
4. The frame view from bridges should be though of;

SHII Intervention Typology:

DESIGN, RESTRUCTURE

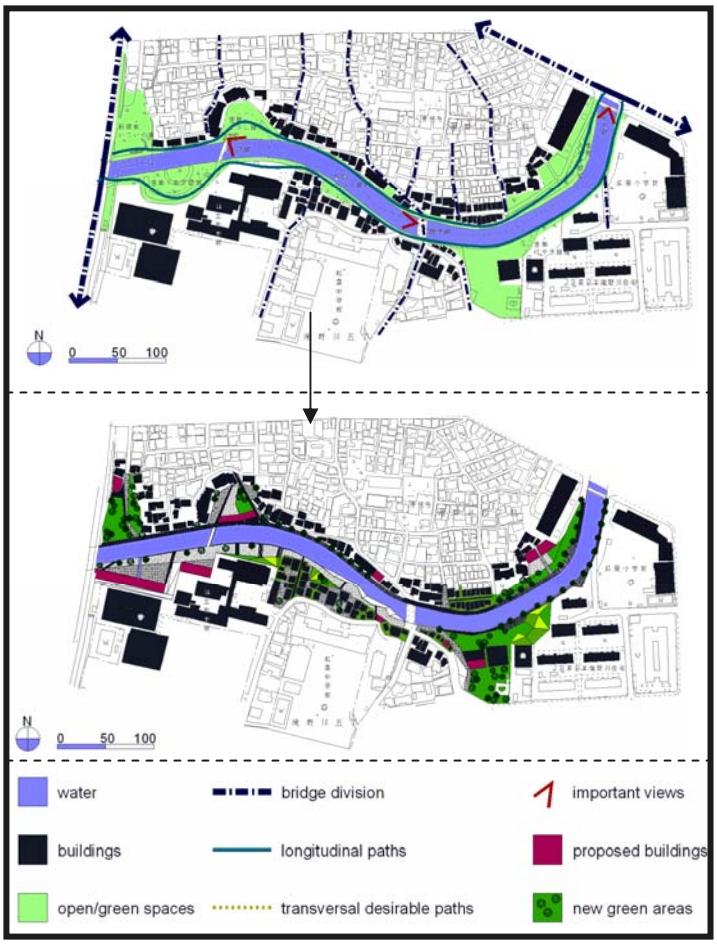


Fig314. Shakujii Plans

5.4.15. Shibuya River

General Problems:

- The river is "trapped" between concrete protection walls and buildings along its banks which provoke an almost continuous "wall" impeding the view and access to the water;
- The canal works as buildings "backyards" and its darkness and odd smell add to this situation;

Advantages;

- The proximity to a major urban center – Shibuya;
- River protection walls are very thick possessing enough space to convert them;
- Topography is mainly flat and the water is shallow permitting playing with minor topography manipulation and changing the riverbed design in order to create a stream in the midst of the city;

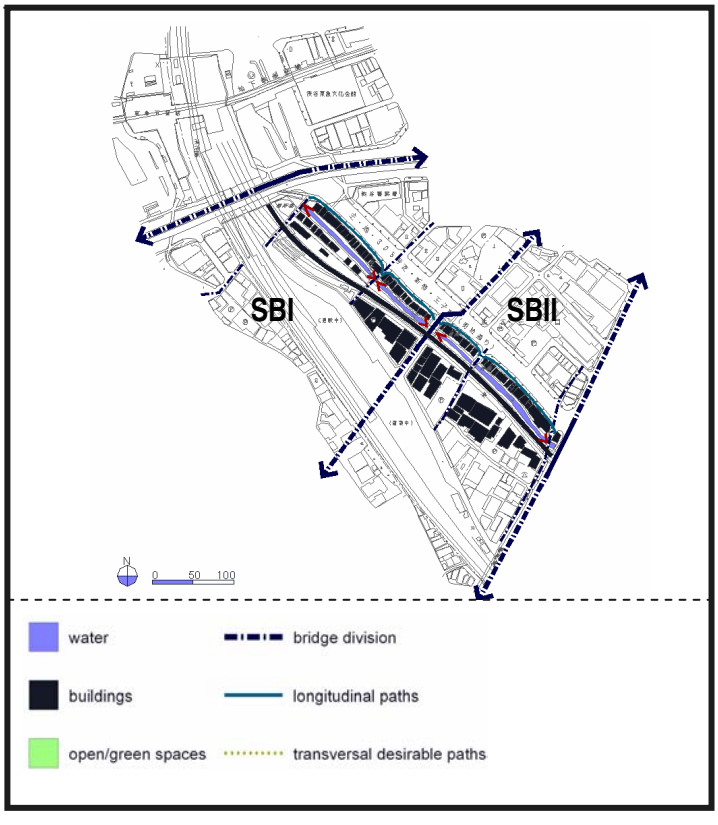


Fig315. Shibuya Plans

SBI:

Problems:

- Building density;
- Physical and visual access to the river is continuously being blocked by volumes, train tracks structure, vegetation, etc;

Advantages:

- Concrete walls are thick and can be converted into walkable spaces;
- Elevated train track structure can be used as an interesting element for design and its vacant space underneath as well;
- Proximity to a major urban centre;

Four Concept Guidelines:

1. Increase the sense of an existing water space from the surrounding city areas: increase greenery to the outskirts, create water features, use water sound, etc;
2. Open transversal alleys directly into the canal;
3. Create new functions along the canal: shopping, restauration using the space underneath the train track structure: outdoor shopping mall, shopping street, etc. Change the riverbed shape in order to give it some waterflow sense and stream typology;
4. Think about the river view and design it according to the surrounding city character improving its sophisticated image;

SBI Intervention Typology:

DESIGN, RESTRUCTURE

SBII

Problems:

- Building density;
- Physical and visual access to the river is continuously being blocked by volumes, train tracks structure, vegetation, etc;

Advantages:

- Concrete walls are thick and can be converted into walkable spaces;
- Proximity to a major urban centre;

Four Concept Guidelines:

1. Increase the sense of an existing water space from the surrounding city areas: increase greenery to the outskirts, create water features, use water sound, etc;
2. Open transversal alleys directly into the canal;
3. Continue the previous concept mentioned above but increase building density gradually to reach a more garden stream-like typology;
4. Think about the river view and design it according to the surrounding city character improving its sophisticated image;

SBII Intervention Typology:

DESIGN, RESTRUCTURE

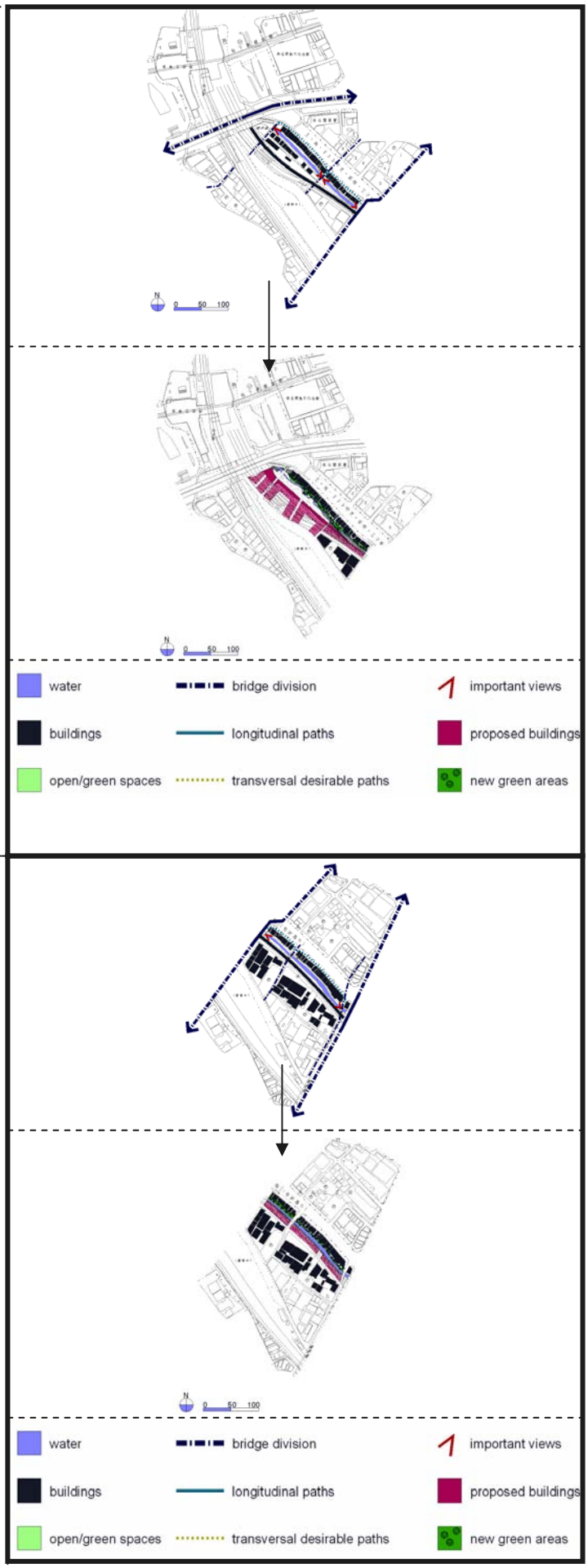


Fig316. Shibuya Plans

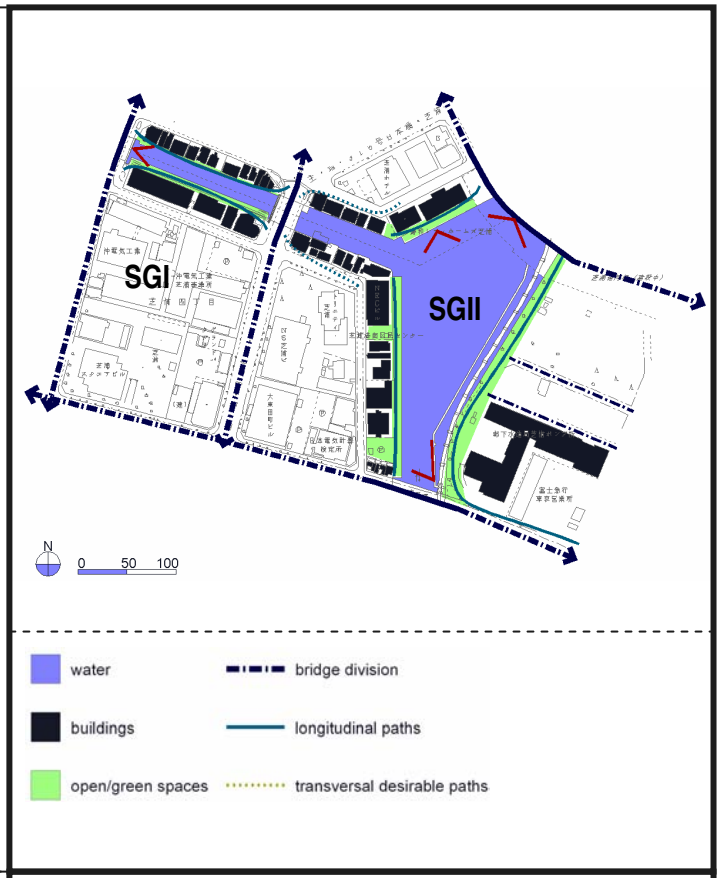
5.4.16. Shinagawa Canals

General Problems:

- The few existing public spaces in the western area are of very poor quality and not attractive;
- Main activities are residential and office types, but the area lacks in commercial activities and entertainment ones;

Advantages:

- Water depth and solar exposition;
- Enclosed bay-like space offers new opportunities for water activities;
- New island to the east offers a new life to the place;
- Boat activity is interesting and should be more explored;



SGI:

Problems:

- Public spaces are of very poor quality and not very well connected with the city;
- Monotonous landscape serial view;
- No urban activities near the canal;

Advantages:

- Water depth;
- Vacant spaces along the riverbank;

Four Concept Guidelines:

1. Diversify greenery and create water activities;
2. Create open spaces and improve its connection directly to the water;
3. Create functions near the water: boat bars, decks, resting spaces, walking and bicycle paths, etc;
4. West bridge view should be privileged;

SGI Intervention Typology:

DESIGN; RESTRUCTURE

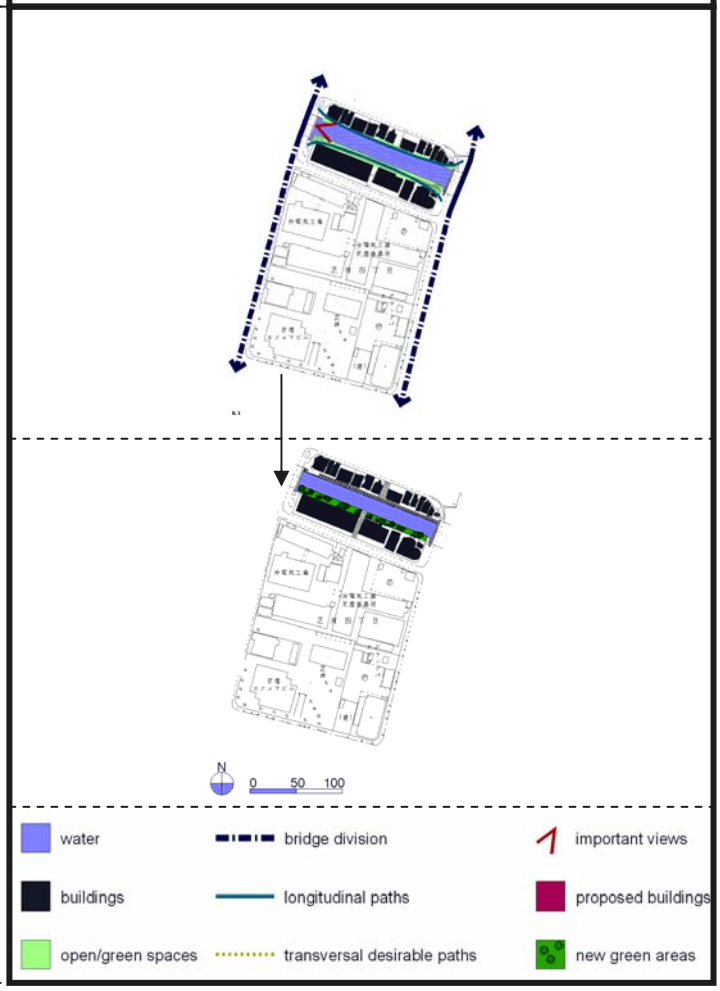


Fig317. Shinagawa Canals Plans

SGII

Problems:

- Public spaces are of very poor quality and not very well connected with the city;
- Monotonous landscape serial view;
- No urban activities near the canal;

Advantages:

- New Shibaura Island to the east is creating some urban regeneration in the area;
- Water depth and enclosed bay-like space can be used in creative ways of approaching people into the water area;

Four Concept Guidelines:

1. Diversify greenery and create water activities;
2. Create open spaces and improve its connection directly to the water;
3. Create functions near the water: boat bars, decks, resting spaces, walking and bicycle paths, etc. take advantage of the large body of water and motivate the usage of boats connected to new shopping and recreation areas;
4. The view from North bridge to the "bay" and from Shibaura Island should be privileged;

SGII Intervention Typology:

DESIGN, RESTRUCTURE

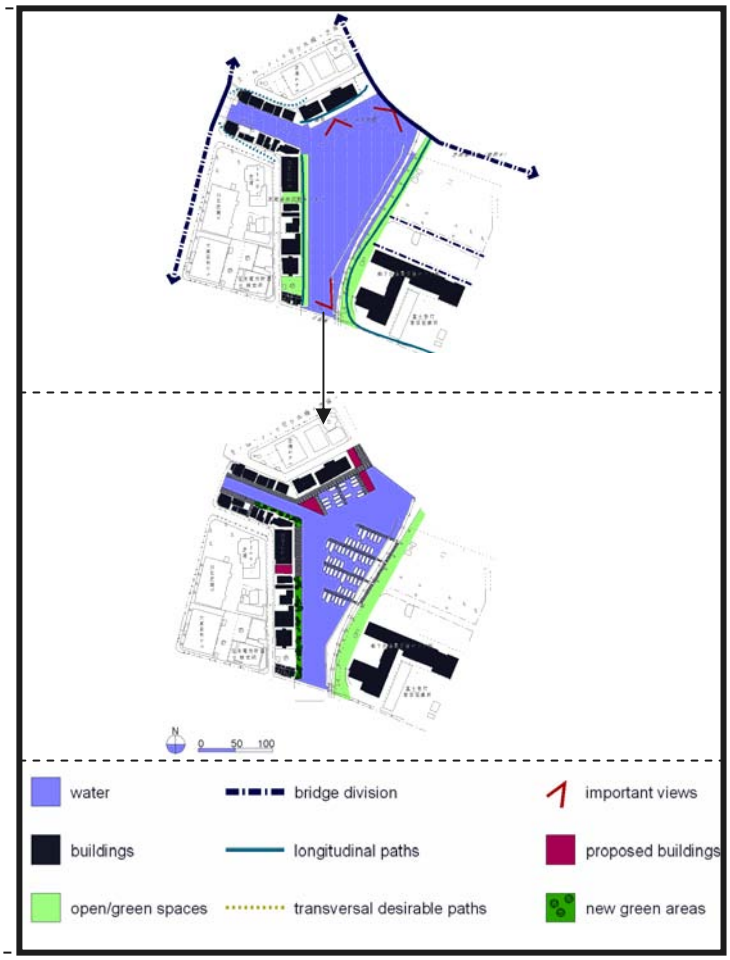


Fig318. Shinagawa Canals Plans

5.4.17. Sumida River

General Problems:

- There is practically no connectivity of Sumida river and the surrounding urban areas;
- Existing promenades along the riverbank are dull and not attractive to people;
- There are many vacant spaces left to abandon, usually occupied by marginal activities;
- Lack of green spaces;
- Risk of flood;

Advantages:

- The power of the river of becoming one of Tokyo's spinal elements;
- Its scale and vacant spaces along its banks;
- Investments are possible in this area because of its history, importance and urban scale;
- High density volumes are possible and encouraged to decrease the impact of the river in the human scale;

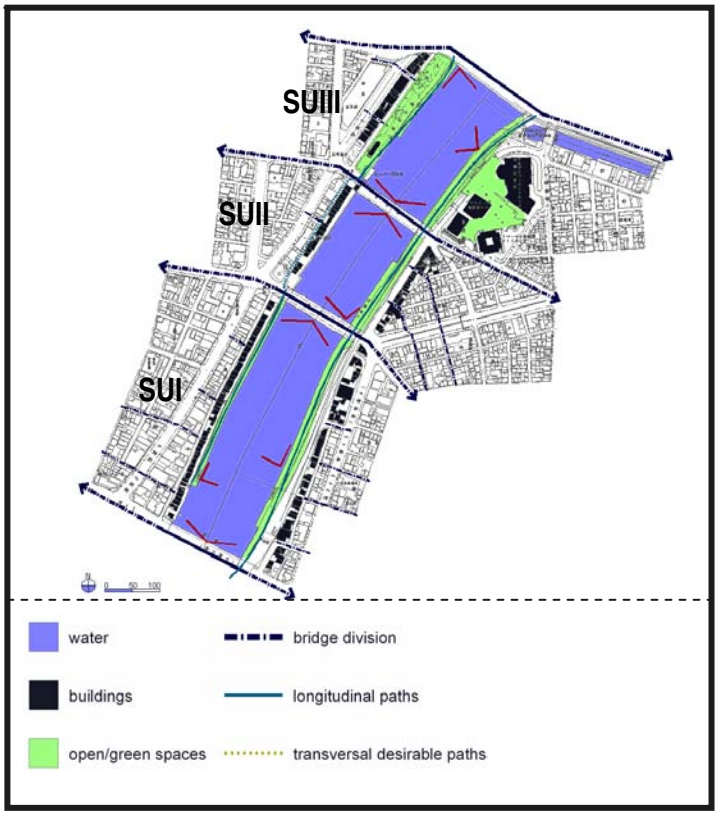


Fig319. Sumida Plans

SUI:

Problems:

- Urban disconnection;
- Abandoned, monotonous promenades along the riverbank at times occupied by homeless tents;

Advantages:

- Amazing views to the river and the city;
- Promenade space can be improved and used for other activities;
- Space under the elevated expressway has shadow (not common in Sumida river) and its structure could be used in the riverbank re-design;

Four Concept Guidelines:

1. Increase greenery and redesign the existing promenades as a garden: Include greenery, rocks, different pavement materials, water features, resting and strolling spaces, etc: approach people and the water, the water and the city;
2. Open transversal inner streets connecting directly the city and the river;
3. Increase public space infrastructure, create temporary activities, markets, festivals, etc. Improve boat activities, include homeless tents in the design, use the space under the highway in a useful way;
4. Night illumination should be thought to increase impact from bridge frame-views, carefully chose building volume taking in comparison the river scale;

SUI Intervention Typology:

DESIGN, RESTRUCTURE

SUII

- Urban disconnection;
- Abandoned, monotonous promenades along the riverbank, except in the west bank: there is no longitudinal or transversal connection;

Advantages:

- Amazing views to the river and the city;
- Promenade space can be improved and used for other activities;
- Space under the elevated expressway has shadow (not common in Sumida river) and its structure could be used in the riverbank re-design;

Four Concept Guidelines:

1. Increase greenery and redesign the existing promenades as a garden: Include greenery, rocks, different pavement materials, water features, resting and strolling spaces, etc: approach people and the water, the water and the city;
2. See SUI;
3. See SUI;
4. See SUI;

SUII: Intervention Typology:

DESIGN, RESTRUCTURE

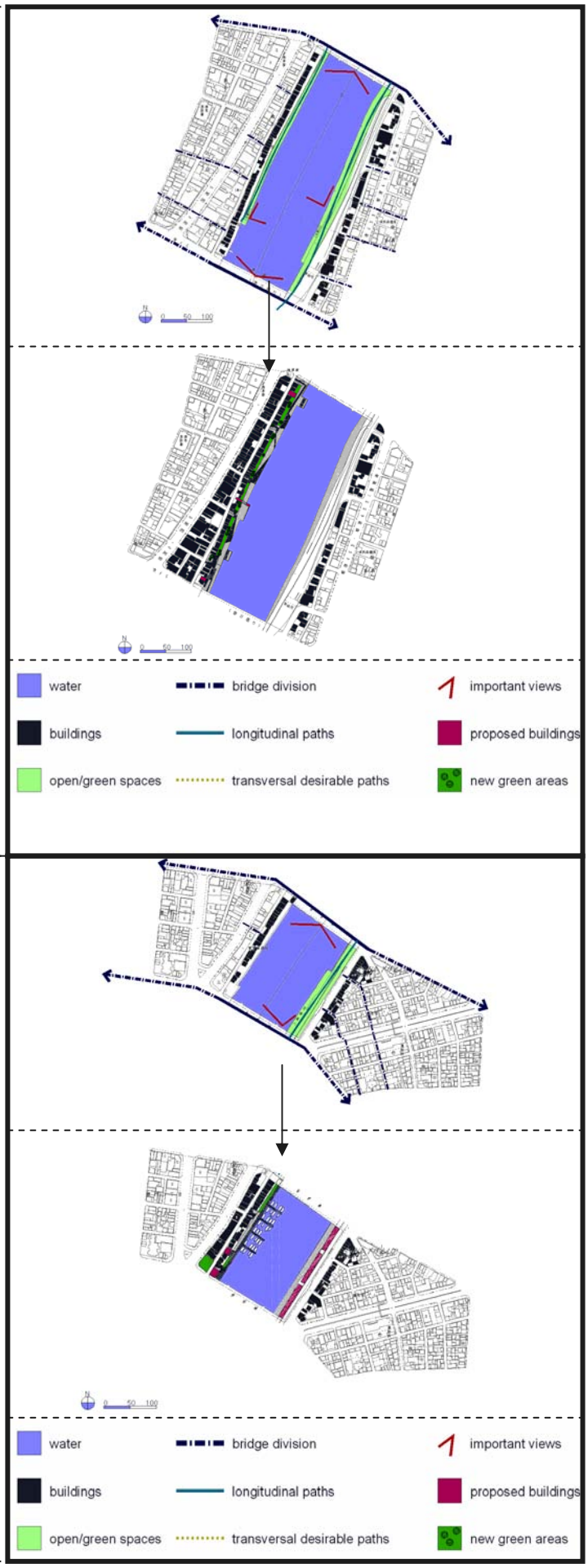


Fig320. Sumida Plans

SUIII

Problems:

- The east riverbank has an arid landscape and due to the elevated expressway its spaces are not that attractive;
- Linear garden to the west riverbank does not serve as a connector between the inner city and the water;
- Abandoned, monotonous promenades along the riverbank at times occupied by homeless tents;

Advantages:

- Some public spaces to the east riverbank;
- The garden space to the west can be edited and improved;

Four Concept Guidelines:

1. To control park greenery and open direct views from the city towards the river;
2. Connect the park (above) to the river promenade (below) and improve its night illumination;
3. Create activities to support public spaces in the east riverbank;
4. Night illumination should be thought to increase impact from bridge frame-views, carefully chose building volume taking in comparison the river scale;

SUIII Intervention Typology:

EDIT

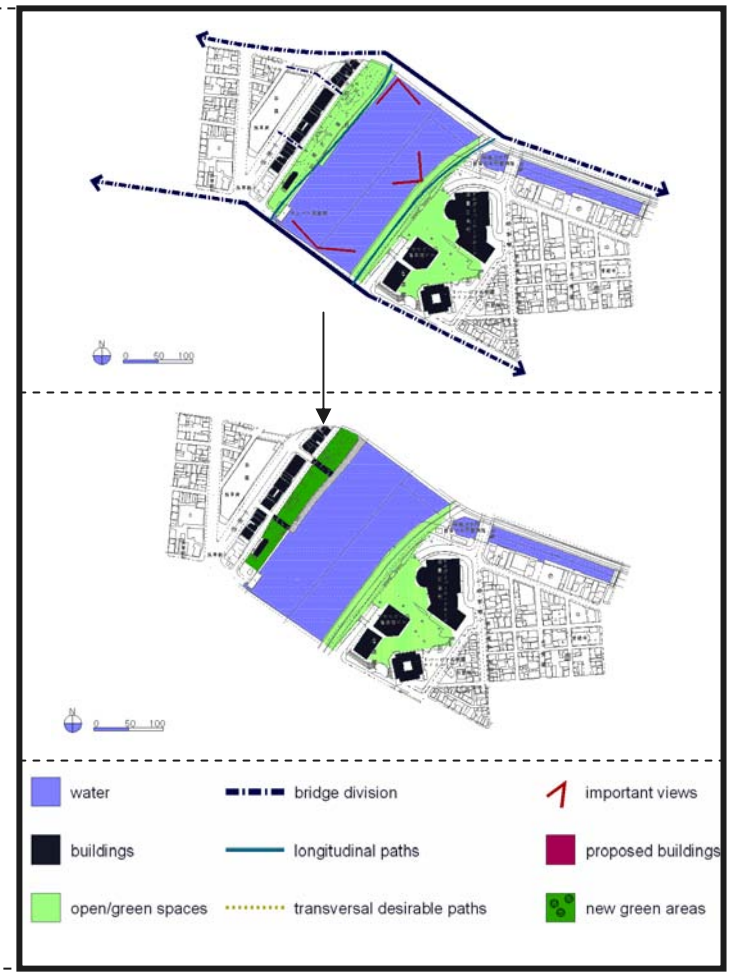


Fig321. Sumida Plans

5.4.18. Yokojukken River

General Problems:

- Few public spaces to the north side and the existing ones are not well connected to each other;
- Poor urban conection to the river;

Advantages:

- Existing promenades to the south are of very good quality and design and the river spaces is lively due to this;
- The park to the west could be used as a direct connector to the river creating interesting spaces in the water;

Fig322. Yokojukken Plans

YI:

Problems:

- The train tracks cut the longitudinal connectivity along the river;
- No urban connection to the water;
- Spaces along the river look abandoned;

Advantages:

- Vacant spaces;
- Good solar exposition and water depth;

Four Concept Guidelines:

1. Improve spaces along the river by controlling greenery and create spaces in direct contact with the water;
2. Improve city and river connection by providing public space infrastructures;
3. Create water sport activities (kayak, canoeing, jet sky, etc) and promenades where people can walk, run, rest, skate, etc.
4. The view from the north bridge should be privileged;

YI Intervention Typology:

DESIGN

YII

Problems:

- No urban connection to the water;
- Spaces along the river look abandoned;

Advantages:

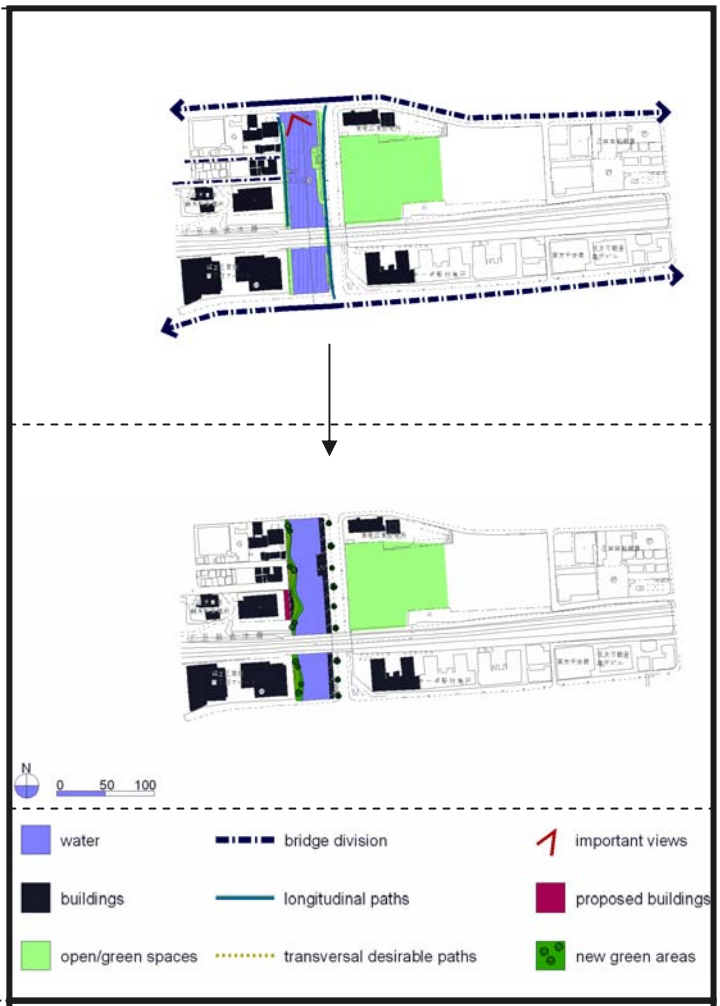
- Vacant spaces;
- Good solar exposition and water depth;

Four Concept Guidelines:

1. Improve spaces along the river by controlling greenery and create spaces in direct contact with the water;
2. Improve city and river connection by providing public space infrastructures;
3. Create water sport activities (kayak, canoeing, jet sky, etc) and promenades where people can walk, run, rest, skate, etc.
4. The view from the south bridge to north should be privileged;

YII: Intervention Typology:

DESIGN



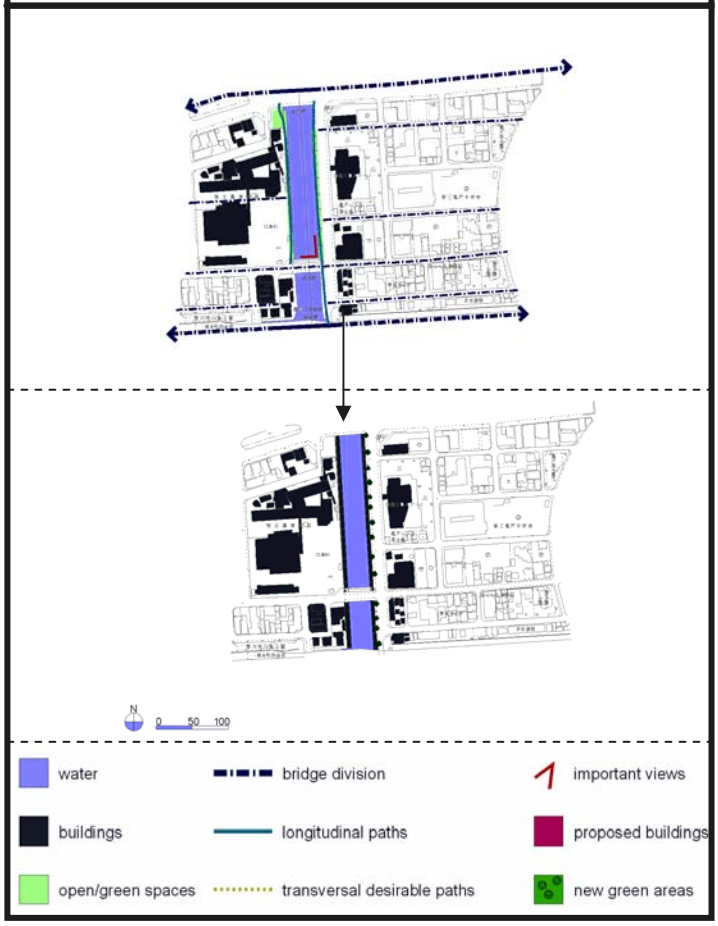


Fig323. Yokojukken Plans

YIII

Problems:

- Urban poor connection to the river;

Advantages:

- The park to the west;
- The promenades to the east;
- The view from north and south bridges;
- Water depth and solar exposition;

Four Concept Guidelines:

1. To connect the park and the water through topography manipulation and greenery control;
2. To improve East side city connection to the promenade by extending pavement materials and appropriate ilumination towards the city;
3. Design the park valley as a scenery "blanket" to the promenade in the opposite riverbank and vice versa, create some activities in proximity with the water in both riverbanks;
4. Both bridges and both riverbank views are important;

YIII Intervention Typology:

DESIGN

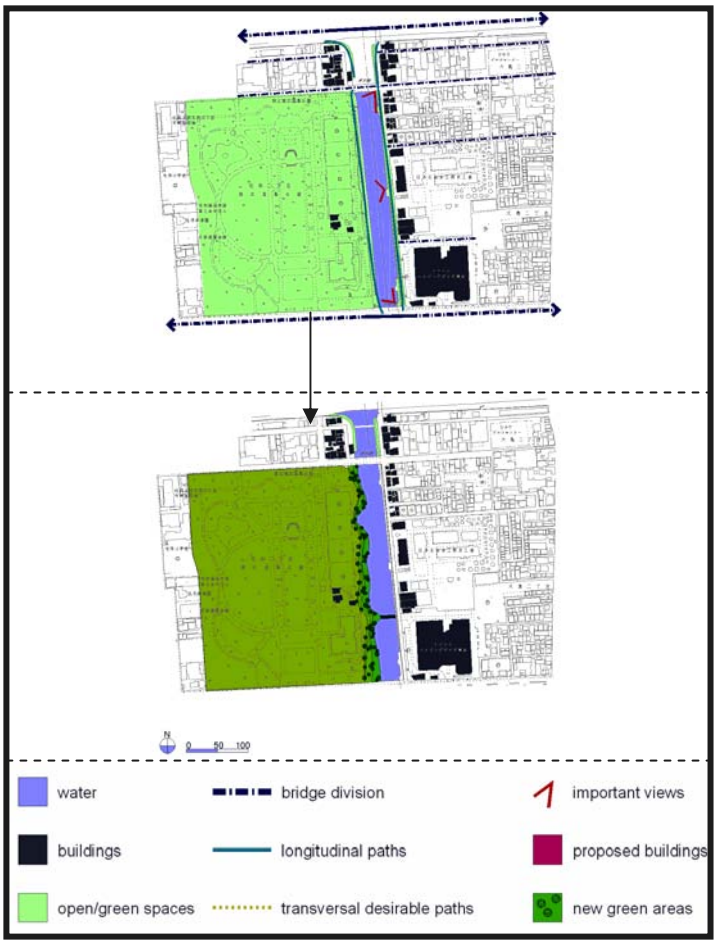


Fig324. Yokojukken Plans

5.4.19. Zenppukuji River

General Problems:

- The area presents abundant park areas with very dense green spaces and few activities which provokes a low "human density" making the space good only for day activities and still feeling isolated and dangerous;
- Serial landscape view becomes monotonous;

Advantages:

- Abundant greenery;
- Abundant vacant spaces;
- Suburban neighborhood character;

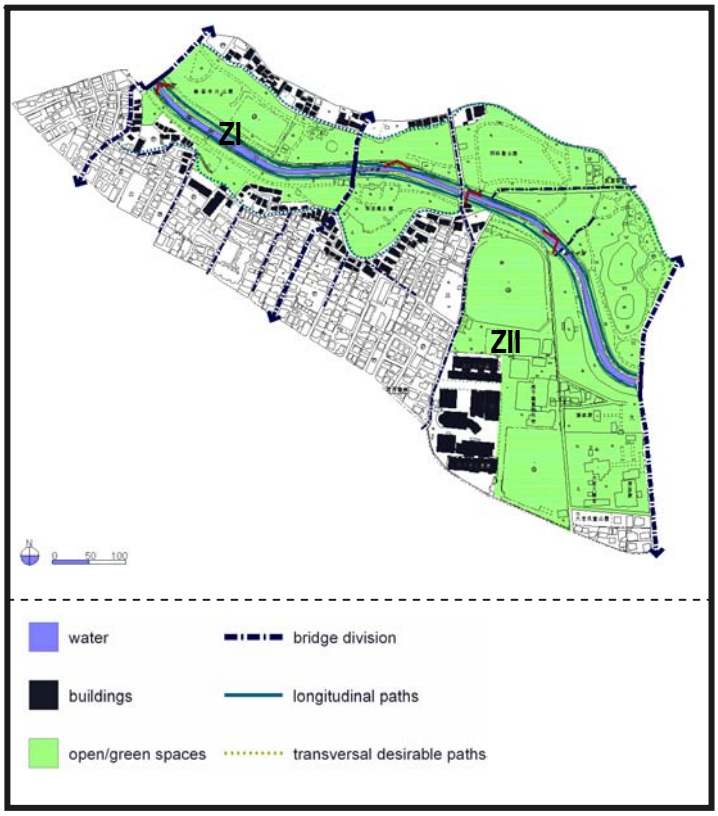


Fig325. Zenppukuji Plans

ZI:

Problems:

- Dense greenery;
- Monofunctional space;
- Urban disconection;

Advantages:

- Open spaces;
- Views and greenery;

Four Concept Guidelines:

1. Control greenery and open some spaces towards the river in direct connection to the urban areas. Redesign riverbank to look more natural;
2. Open transversal connections;
3. Create more diversity along the river: small shop, kiosks, public toilets, cafe, info box, restaurant, and so on;
4. Diversify views from the river;

ZI Intervention Typology:

EDIT, DESIGN

ZII

Problems:

- Dense greenery;
- Isolation and unsafe feeling;
- Urban disconnectivity;
- Lack of activities to attract people;

Advantages:

- Open spaces;
- Views and greenery;

Four Concept Guidelines:

1. To control greenery and the topography to the river;
2. Open transversal paths directly to the river from the urban areas;
3. Create new activities and reinforce paths through materials and illumination. Change the riverbed shape and generate spaces in which children can play directly in the water. Recover the river's ecosystem;
4. Serial view from the river should be thought and diversity of views should increase

ZII: Intervention Typology:

EDIT, DESIGN

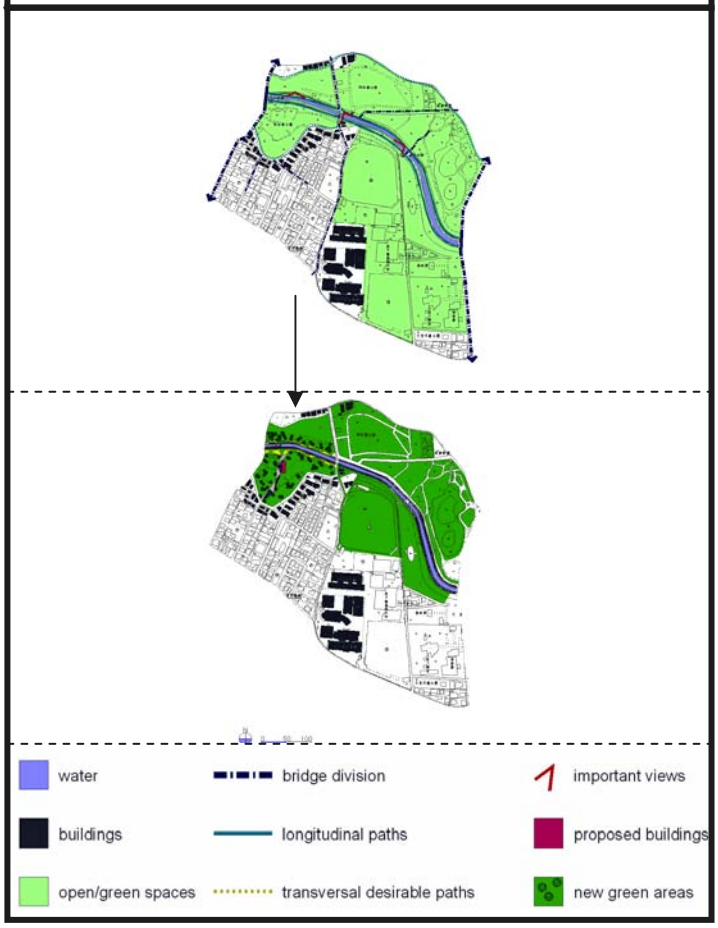


Fig326. Zenppukuji Plans

5.5. Six projects

This subchapter presents six projects in six different places: Kitajukken River (Oshiage), Meguro River (Naka Meguro), Nihombashi River (Nihombashi), Outer Moat (Kagurazaka), Shibuya River (Shibuya) and Zenppukuji River (Zenppukuji Park).

The criteria for the choice of these areas was done according to their urban typology/ character and the goal was to show examples of how river projects could look like and to provide project typologies for other areas with similar urban character.

Each project is explained in detail in the next pages, including typical sections and 3D photo simulations in order to provide a complete project description.

5.5.1. Kitajukken River - Residential Amenities

Fig327. Existing Situation

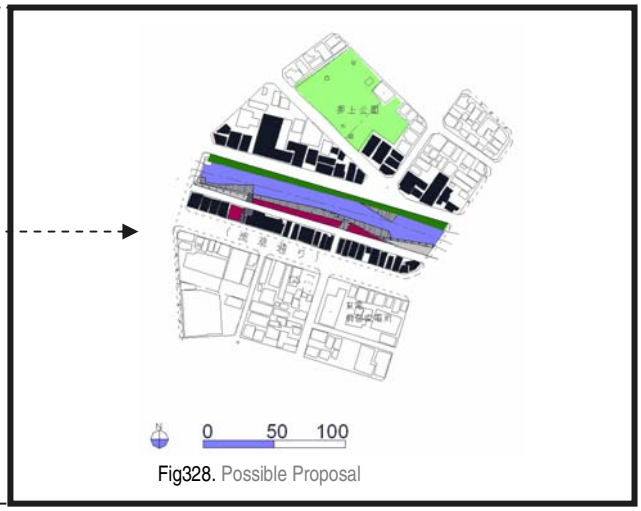


Fig328. Possible Proposal

Kitajukken River is situated to the East part of Tokyo, East of Sumida River and according to the previous analysis it is considered a Residential/ Residential Suburban Character River. Is was chosen to be a part of these six projects since it's structure and character can be found in several cases, such as most of waterways to the East of Sumida River in Kiba area and also some areas of Meguro River in Oosaki, and so on.

Among its characteristics, we can say that Kitajukken is an isolated river, with some level of pollution with strong physical and visual barriers along its banks running from East to West encountering Kyuunaka River and Sumida River in both extremes.

It presents a good solar exposition and it is visible some preoccupation to keep greenery inside and outside the banks, however, these spaces cannot be enjoyed by the citizens, since there are no connections and public spaces along and across the waterway.

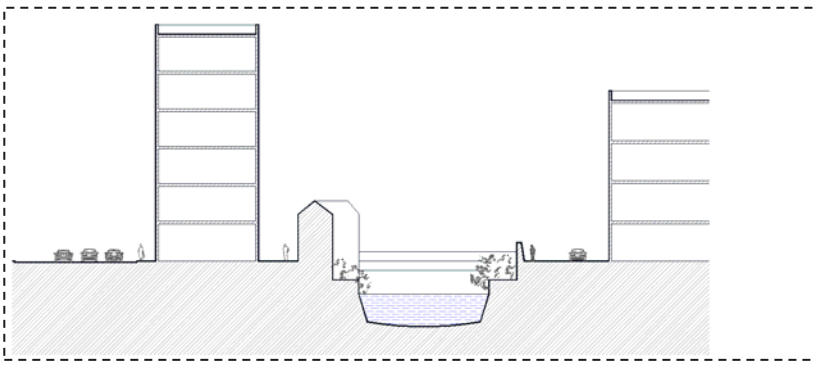


Fig329. Typical Section

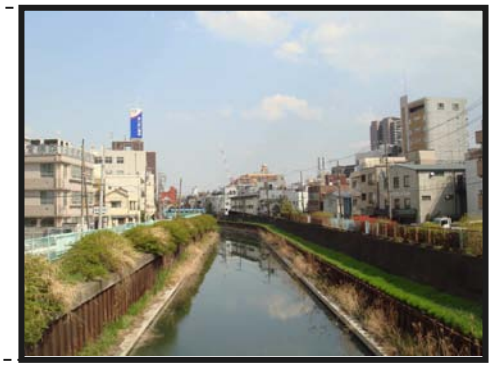


Fig330. Kitajukken River

Concerning projects for this area the crucial factor is to provide public spaces of a “familiar” character, since it is a quiet residential area. Some of the examples should include: promenades on the road level or below, small scale facilities along the river to provide diversity of functions and to attract visitors, e.g. small shops or restaurants, resting spaces with appropriate urban furniture as well as bicycle paths along the waterway fitly connected to the city. These areas should also have a good night illumination, above and below road level in order to provide a sense of safety when it becomes dark, and to provide the opportunity to use the spaces during nighttime as well. Greenery should be used at the road level and below, but it should be controlled in order not to close important views to the river and the city, it should be chosen accordingly to the scale of the place: taller trees along the road and shrubs and short vegetation closer to the river. The type of vegetation should take in consideration the proximity of water and local species should be chosen in detriment of alien species.

The next images provide some idea of what these projects could look like, including typical sections of the river bank. It is important to keep in mind, that although these images are to be seen as possible examples for Kitajukken, they could also serve as a base for similar situations in other waterways.

Fig331. Existing Situation

Fig332. Possible Proposal

Fig333. Existing Situation

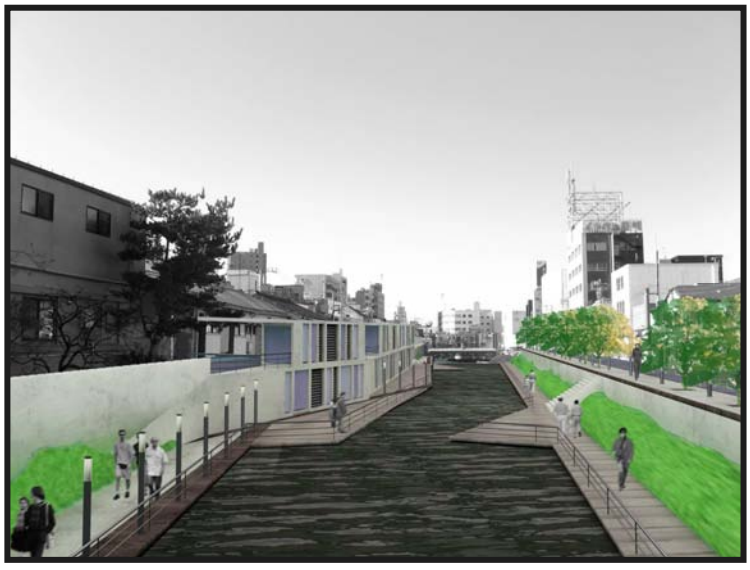


Fig334. Possible Proposal

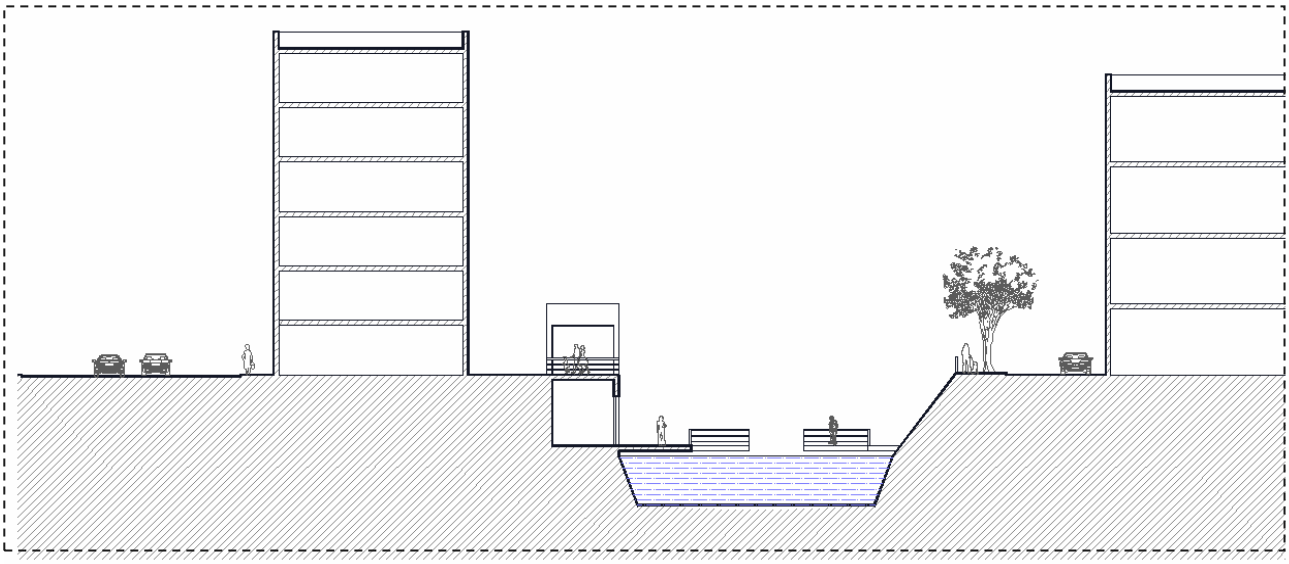


Fig335. Section Proposal

Fig336. Existing Situation

Fig337. Possible Proposal

Fig338. Existing Situation

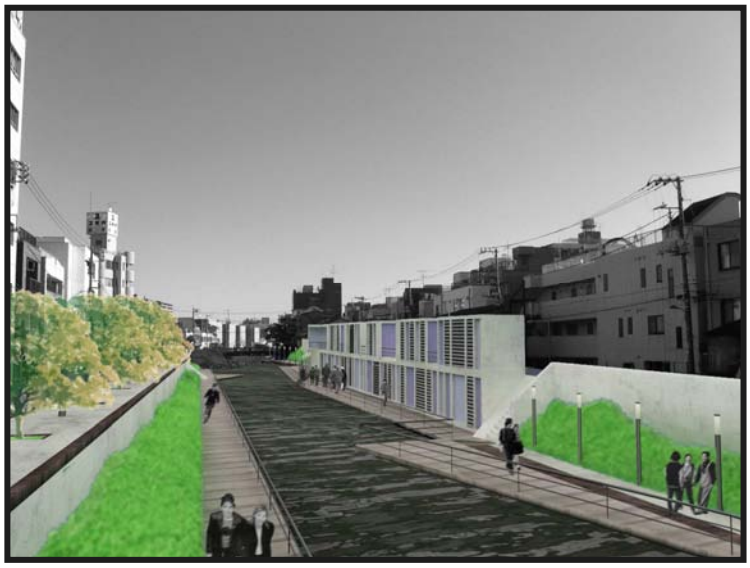


Fig339. Possible Proposal

5.5.2. Meguro River - Urban Oasis

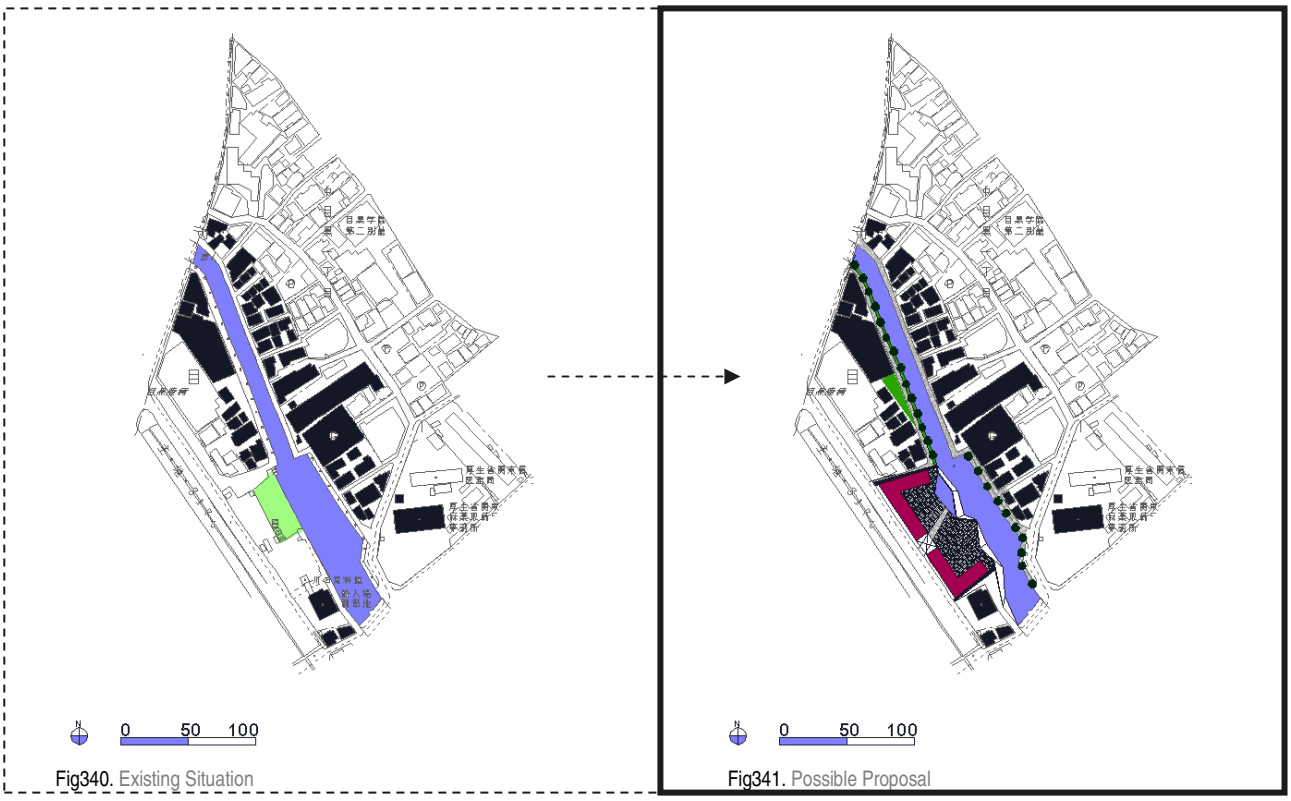


Fig340. Existing Situation

Fig341. Possible Proposal

Meguro River is situated to the southern part of central Tokyo and it is considered by Tokyoites as an example of a River with good environment and with reasonable public spaces. It is an area of excellence when it comes to Cherry Blossom Views in the Spring and in this sense it incorporates a very important role in Japanese Culture and Costumes.

It is a very extensive river running from the West (where it finishes abruptly due to the burial of its prolongation to use as commercial land) to the East encountering Tokyo Bay. Although it has a positive image among citizens, it is possible to affirm that Meguro River can be divided in at least three sections: to the West of Naka Meguro Station, between Naka Meguro Station and Oosaki Station and from Oosaki Station to Tokyo Bay.

The western section is characterized by a narrow section with shallow water flow, positive neighborhood environment with diversity of functions and an extensive area of Cherry Trees that give Meguro river its famous character. Although this area has many positive characteristics, it is also a fact that in terms of quality of public spaces is very poor: Pavements are mainly for cars, the pedestrian is not the priority and urban furniture is practically inexistent.

The middle section can be characterized by the enlargement of the river bank and the profundity of its waters. Here the heights of buildings become higher, and although it could be a pleasant space, for most of the time, pedestrians have no place to walk besides the road and the river is not very visible due to incredibly high fencing.

The final section is similar to the previous one in terms of bank characteristics, but it changes in urban character. Instead of a residential function like the two previous sections it is visible a more semi- industrial character that can be explained by the fact that the Tokyo Bay area is near: industrial area for a long time.

In conclusion it is fair to say that only two thirds of Meguro River are well know by Tokyoites, since they present a character and scale familiar to their culture. In this project it was chosen an area of transition in Naka Meguro where the river bank changes in scale. This is a Residential Area still close to a big Station and this kind of project aims to show an example of how a high density residential space along the river could look like.

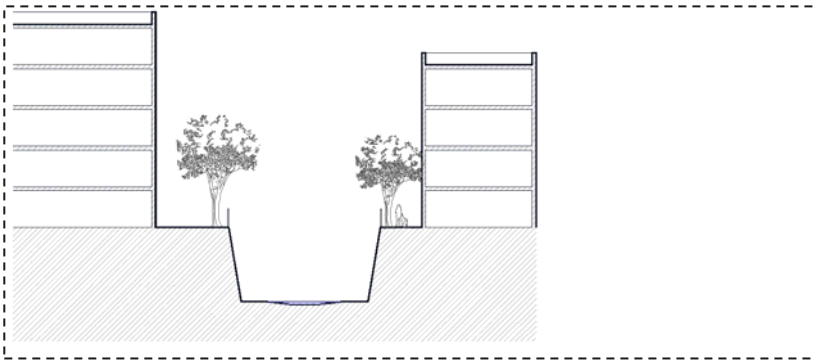


Fig342. Typical Section

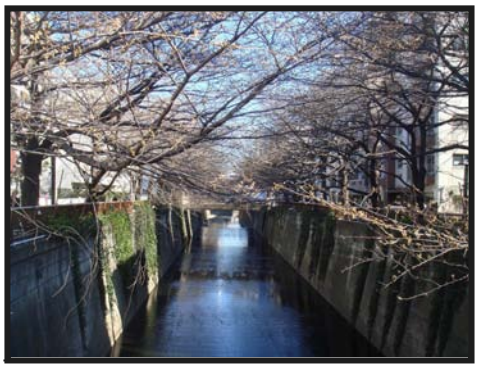


Fig343. Meguro River

A project in this area should provide the following characteristics: A strong connection from the river to its neighboring streets (by choice of pavements and its design, shrubbery allocation and illumination and building placement), public spaces where people can actually enjoy the river, carefully design of residential buildings in order to provide a river view to most apartments (the river should be enjoyed not only by citizens passing by, but by residents too) and finally safety along the riverbank without destroying the physical and visual connection from the city to the river.

Fig344. Existing Situation

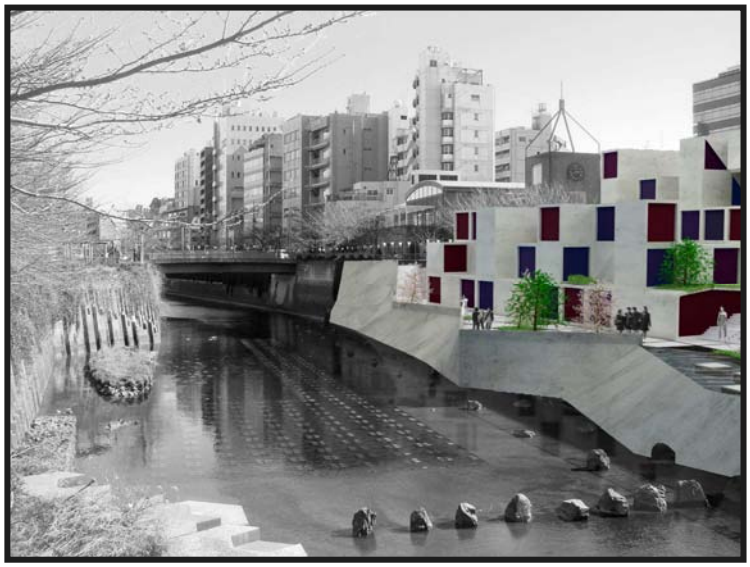


Fig345. Possible Proposal

Fig346. Existing Situation

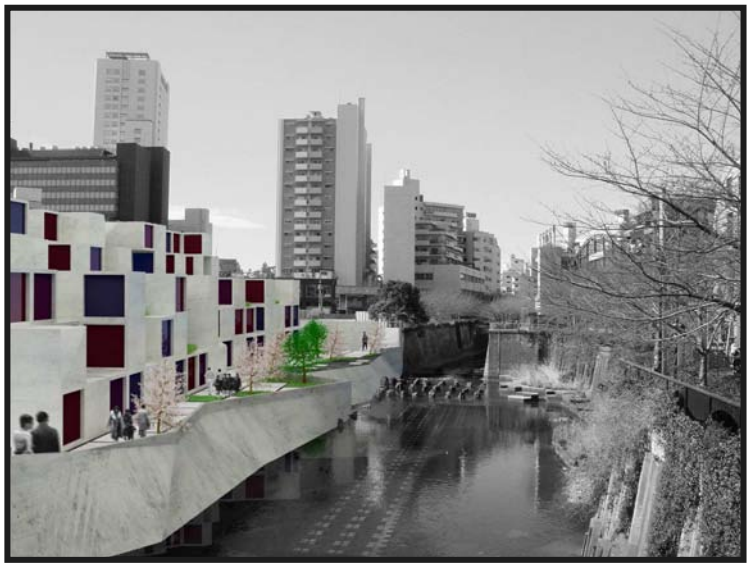


Fig347. Possible Proposal

Fig348. Existing Situation

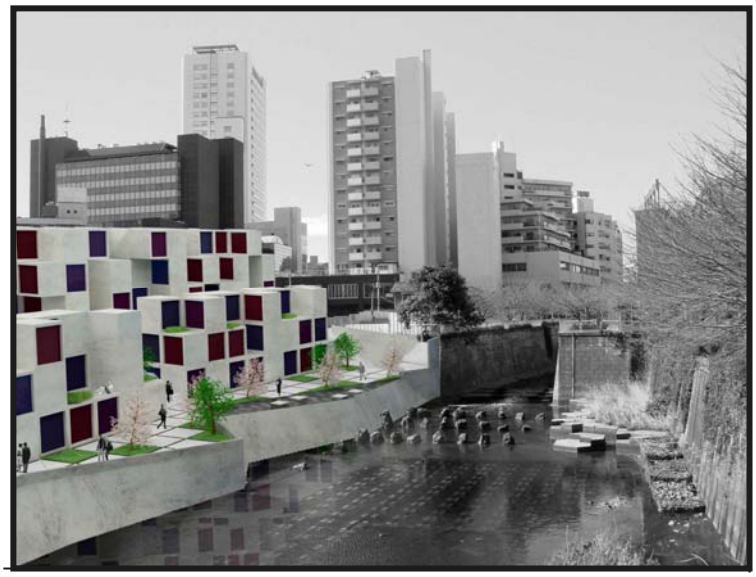


Fig349. Possible Proposal

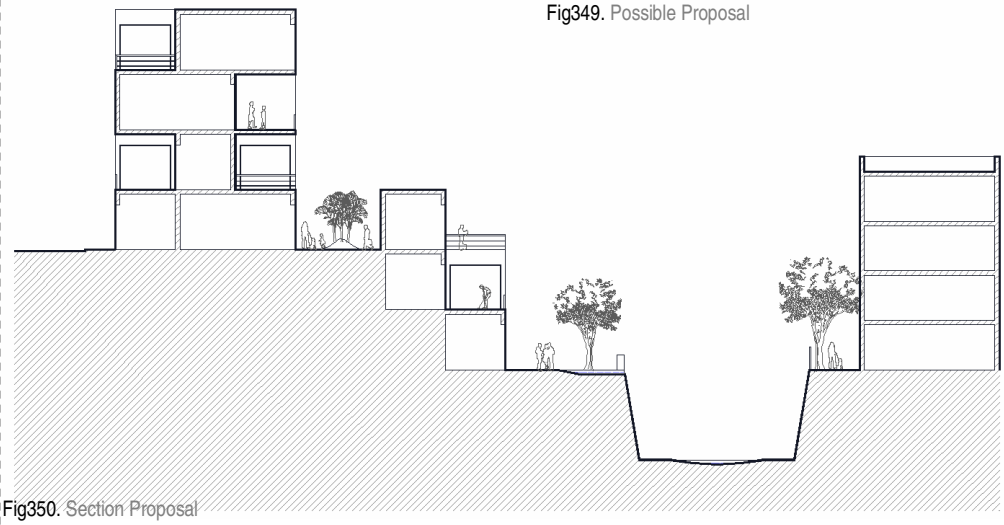


Fig350. Section Proposal

5.5.3. Nihombashi – Historical preservation

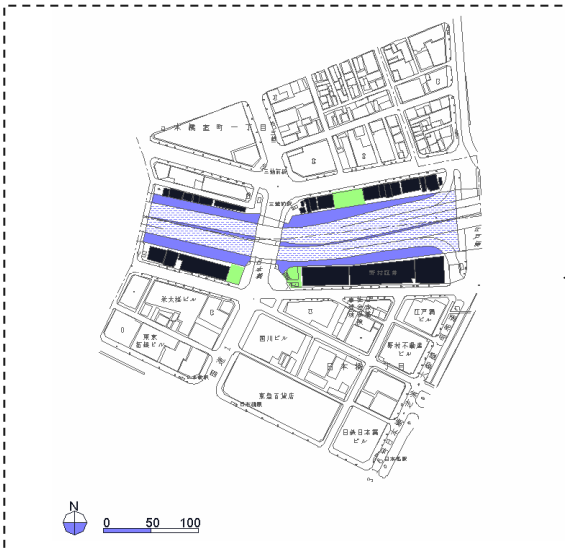


Fig351. Existing Situation

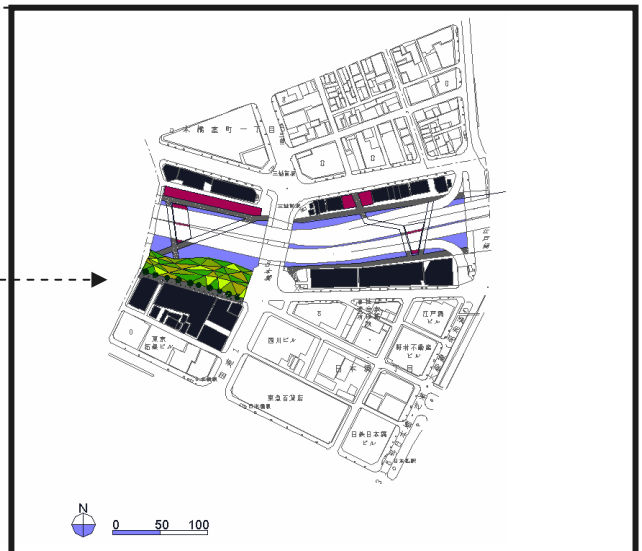


Fig352. Possible Proposal

Nihombashi River is a special case in Tokyo's waterways for two particular reasons: first because it is the only river completely covered by the elevated highway, and second by its particular historical context in the evolution of the city. It contains the most emblematic bridge in Japan: Nihombashi bridge which was the starting point for all the roads in the country.

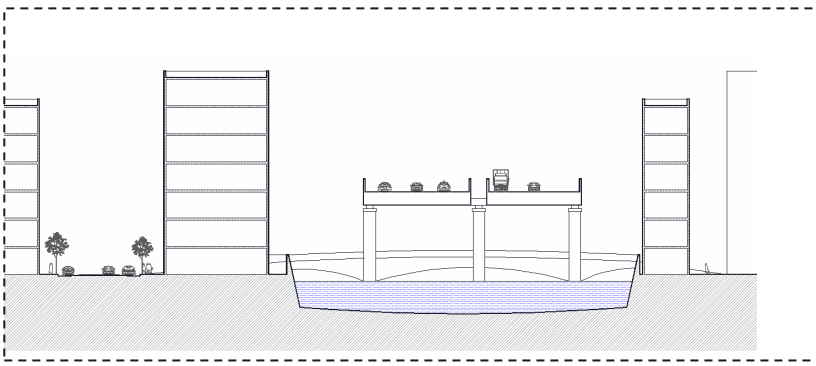


Fig353. Typical Section

Fig354. Nihombashi River

The river runs East of the Imperial Palace from North to South East encountering Kanda River to North and Sumida river to the South. Among its characteristics is the obvious darkness and isolation of the whole River, since the elevated expressway runs along the whole length and extents of the River. Allied to this, most of the buildings along the River are “turning their backs” to the water, meaning that their front facades are facing streets to the opposite side of the river. Concerning Public Spaces, they are practically inexistent, except the extreme North area near Kanda River where there are some new openings to the river with good pedestrian access, illumination and visual access to the water. Besides this, spaces along the river are rare, most of the times it is only possible to look into the water from bridges.

Although the elevated express highway can be a negative asset for one side, for other it can turn into a positive aspect. The areas around Nihombashi River are mainly high density business areas, which turns them into an area where liveliness only happens during the day, while people are working. In this kind of area, it is often needed a certain amount of night activities to balance day-night function flow in order to keep the city alive. The River area, with its gloomy personality, is not very apt to daily functions, but it is extremely favorable to night activities: bar, restaurant, clubs, and so on. Water spaces are said to be special by their changing character and by their ability to provoke certain moods in the people that experience them. In this case and because we are discussing a waterway with a special historical character, it is found that night functions along the water can turn this space once again into a prosperous area, looking into the future without forgetting the past.

Fig355. Existing Situation

Fig356 Possible Proposal

Among the typologies of design that could be mentioned, they are innumerous: decks, “pleasure boat design” , express highway under illumination, and so forth. It is believed that in this case, it would be important to turn buildings into the water, reversing the actual condition, allocate functions on the water without crowding the space too much, arrange resting and contemplation spaces where people can feel comfortable and safe, provide good illumination and search for typologies of design which incorporate Japanese design elements in order to keep up with some feeling of belonging.

Fig357. Existing Situation

Fig358. Possible Proposal

Nihombashi Bridge is an emblematic place and probably one of the most important historical monuments in Tokyo. For this reason and for the fact that it is a place that includes many historical layers it was thought important to be included in these six examples. The pictures above presented are once again to be seen as one example, of the many design possibilities in this area.

The project’s goal was to provide some images of how could the openness to the river be achieved, e.g. Topography manipulation and greenery allocation, how buildings could be related to the water (small height buildings along the highway and river bank or small structures on the water, how promenades could be designed to provide not only the enjoyment of walking along the river but to provide an actual “walk above water” feeling while watching the surroundings, and finally how some Japanese traditional elements could be incorporated to provide a sense of belonging, tradition and festivity: paper floating lights, pleasure boats, etc.

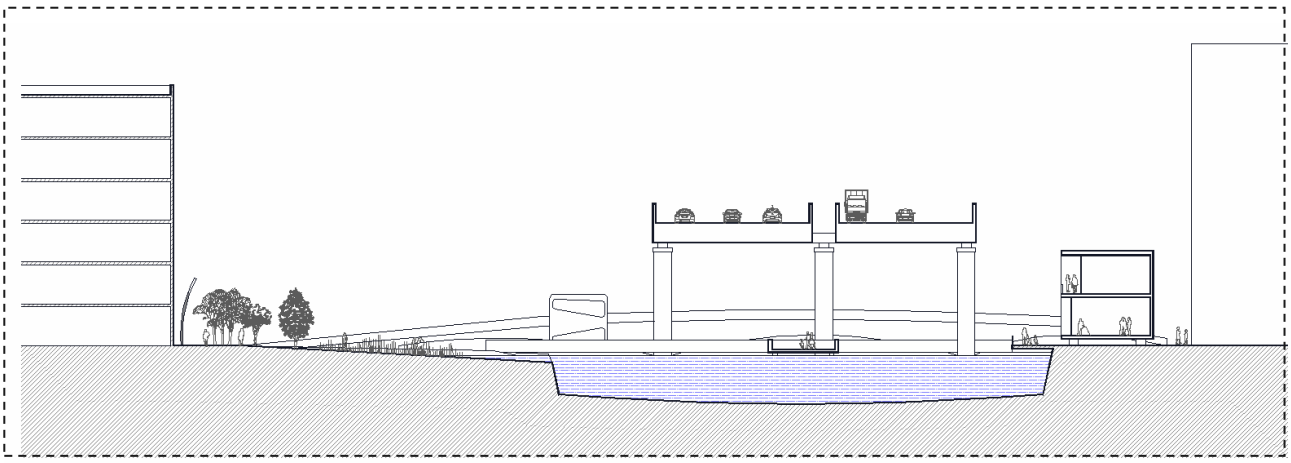


Fig359. Section Proposal

5.5.4. Outer Moat Kagurazaka – River Hills

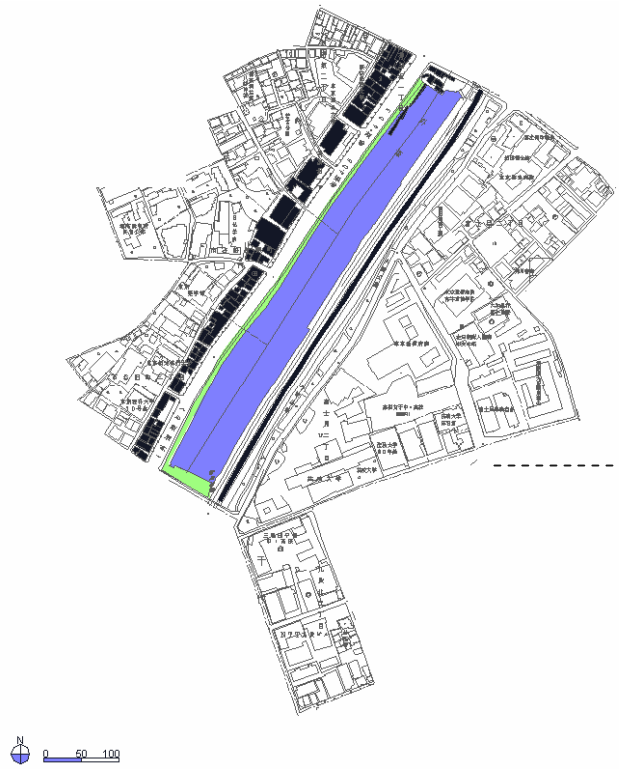


Fig360. Existing Situation

Fig361. Possible Proposal

The Outer Moat, as the name indicates, was the second protection moat of the Imperial Palace and nowadays only a part of it remains to the West of the Imperial Palace. As a moat it has a different character of a River in terms of water flow and changes over time. The area chosen has a special character since it is surrounded by important city areas, such as Kagurazaka with its old neighborhoods and hilly streets, Yasukuni Shrine, an important place in the city and urban centers such as Iidabashi to the North and Yotsuya to the South. It is a very pleasant area and among the rivers studied is one that doesn't have many problems to point out. Among its characteristics it even includes water related functions, promenades, coffee shops or fishing areas, being a very popular area in the summer and among young, trendy population.

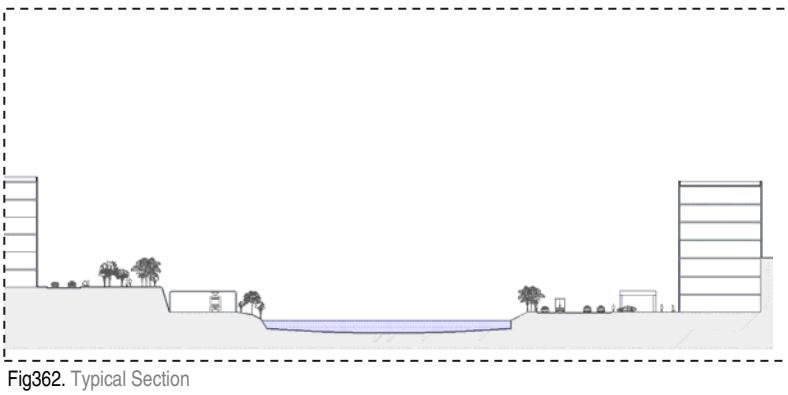


Fig362. Typical Section

Fig363. Outer Moat

With this positive character in mind, the reasons for the choice of this area concerns to the fact of its scale, of the fact that being a moat, the possibilities of having real water functions are extended and for the fact that this Outer Moat has only access in its western side, since to the East it has very strong physical barrier: hilly topography and the train tracks. This typology is not unique to this place, it happens in Kanda River as well and topography related physical barriers are also common in other spaces, e.g. Furukawa River, Kandagawa, etc.

The project of this space aimed to provide examples of how this barrier could be overcome, how the train tracks could be an asset, how they could be used to provide dynamic views from the water and how the difference in topography can provide excellent areas for high class housing with great views over the city and excellent public spaces.

Fig364. Existing Situation

Fig365. Possible Proposal

The train tracks can be covered to provide spaces above for housing and “waterscape promenades” and the train theme can be used to design a “train museum” along the canal.

Fig366. Existing Situation

Fig367. Possible Proposal

The museum can provide open and enclosed spaces and people can still enjoy watching the trains pass from the water level with a different framing. The museum walls could serve as murals to project images or to be used by people to express their own art.

Fig368. Existing Situation

Fig369. Possible Proposal

Fig370. Existing Situation

Fig371. Possible Proposal

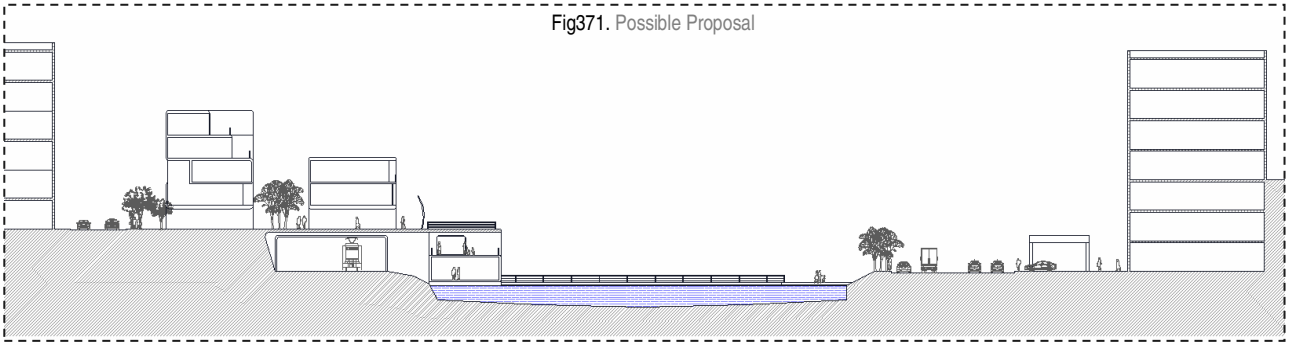


Fig372. Section Proposal

5.5.5. Shibuya – Water Shopping Street

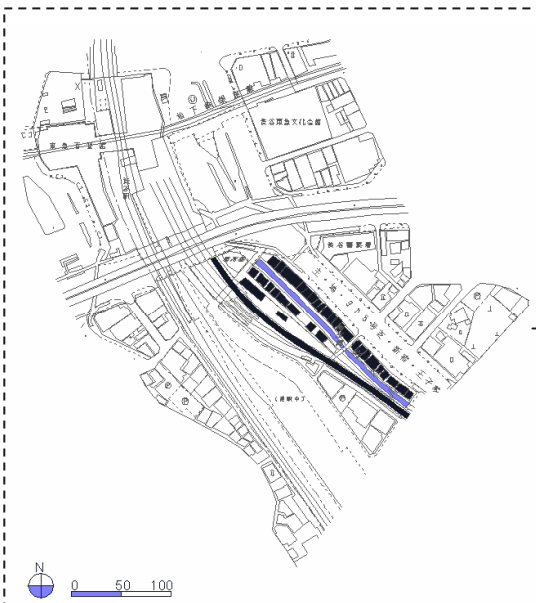


Fig373. Existing Situation

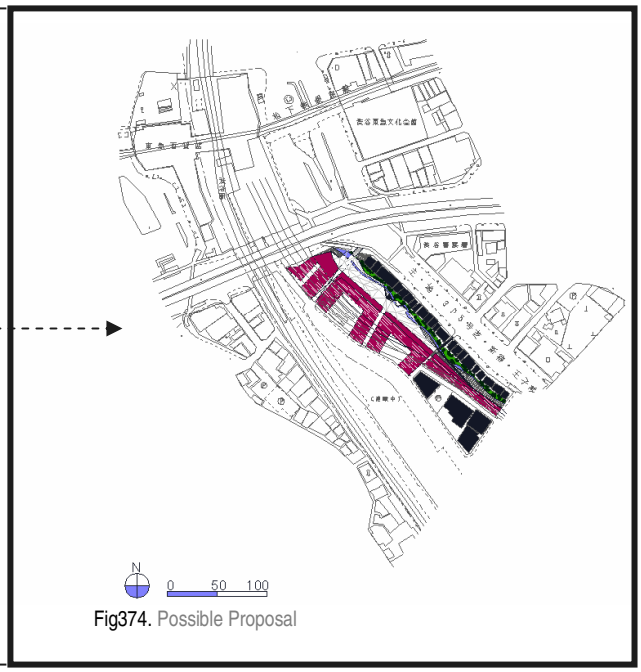


Fig374. Possible Proposal

Shibuya River is located in central Tokyo, starting from Shibuya Station until it crosses Furukawa River to the East. Although it is a river since long ago, looking to it nowadays makes us believe it is nothing more then a backyards sewage canal. The original river bank is completely buried under concrete walls and through its length buildings are completely trapping the canal from the surrounding city, impeding people to access it besides from its bridges. Besides this, for a part of the river there are also elevated train tracks which under space is not being used and give the place a sense of abandonment.

The area chosen is the Shibuya Station area for several reasons: first it was important to chose a river example close to a major station, second, one of the characteristics already mentioned is the presence of elevated train tracks along the canal which can be used in the design process (similar situation happens in Furukawa river, Edogawabashi area, and others), finally the fact that the river has become completely artificial with its concrete walls and it would be important to show how it could look like in another context.

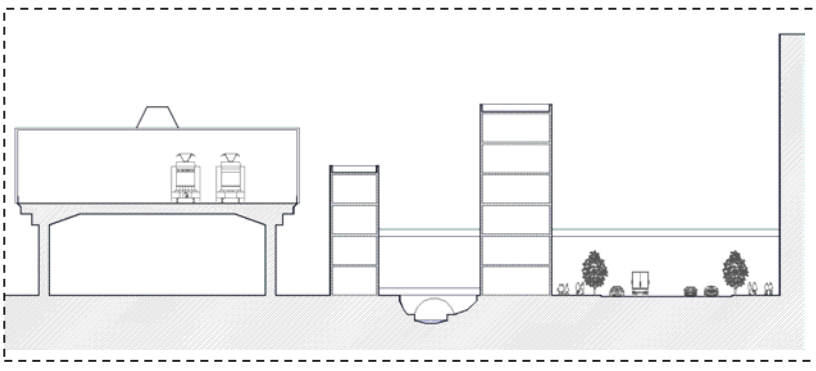


Fig375. Typical Section

Fig376. Shibuyau River

The project presented next had three major goals: the usage of the space under the train track structure (not only for a reason of lack of space but also because it is a common procedure in Japanese cities), the revival of the river bank through greening and landscape design and to provide functions suitable to the area in question.

Shibuya is a major urban center of Tokyo known for its abundance of pop culture, proliferation of young people and a high consumption district in which concerns fashion, food, entertainment, and so on.

The area in question is then in a crucial point where major investment can be made. The logical proposal would be the typical Japanese Train Station Shopping Mall, with its blind walls and labyrinth inner structure, but the idea here is to turn this concept into a more sophisticated design, where Japanese culture encounters “The shopping mall”. The idea was then to use the space under the train tracks to design a shopping area, but turning it to the exterior: the river. This would turn the river area into a shopping street, typical of Japanese cities, and especially near Train Stations. This shopping street would include shops, restaurants with outdoors esplanades in which people could enjoy the river and the greenery outside. Another thematic possible in this case would be to cover the street and make it semi- outdoors, also a very common typology, popular in Japanese cities. These examples aim to provide some image of how spaces under train tracks could look like and how a concrete river bank could bring a new face to the river and its surrounding city.

Fig377. Existing Situation

Fig378. Possible Proposal

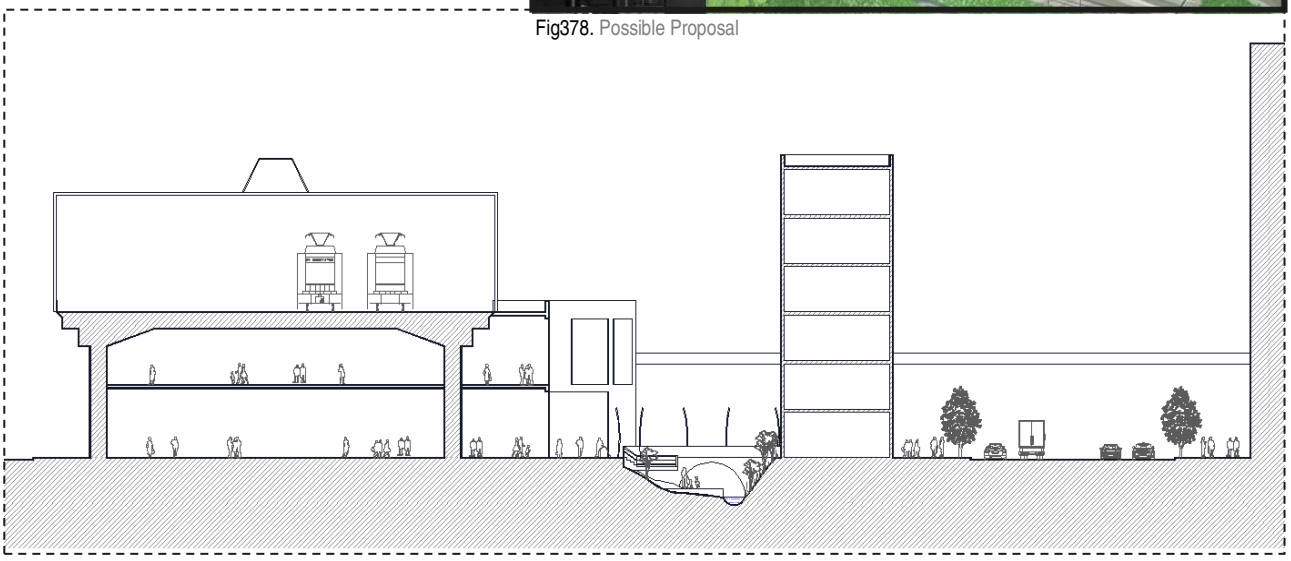


Fig379. Section Proposal

Fig380. Existing Situation

Fig381. Possible Proposal

5.5.6. Zenppukuji . Suburban Serenity

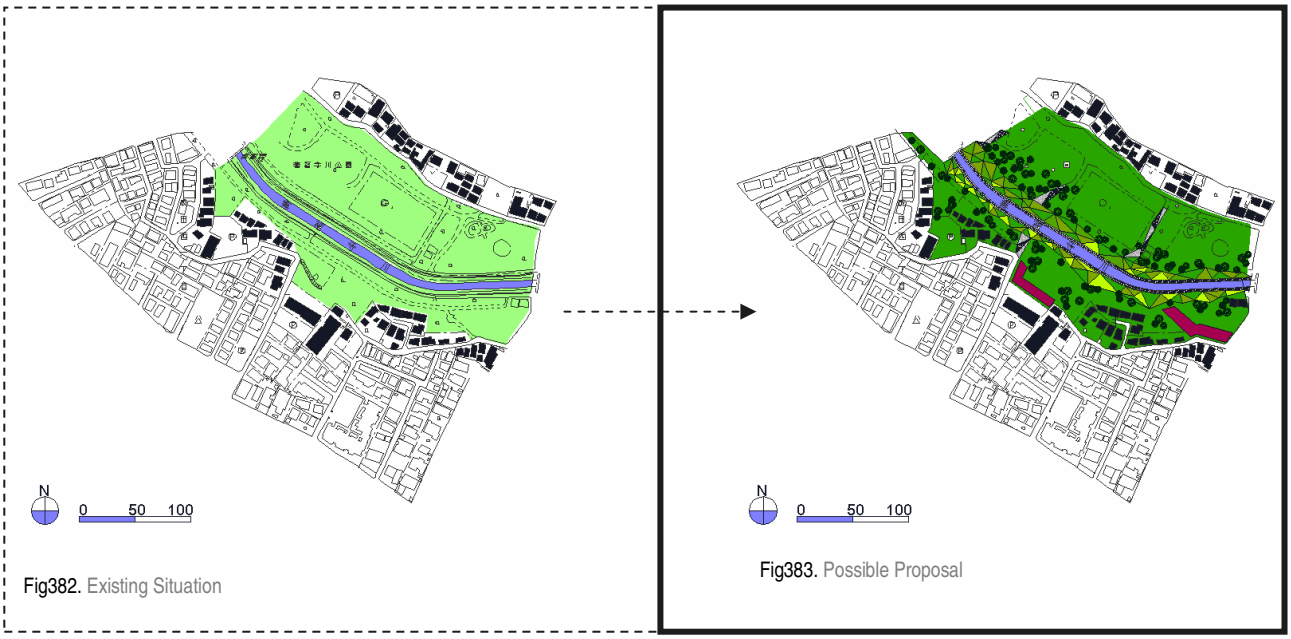


Fig382. Existing Situation

Fig383. Possible Proposal

Zenppukuji River, together with Kandagawa are some of the oldest rivers in Tokyo that actually have preserved their original configuration. Although of course they lost a great amount of wideness since their banks were continuously gained to provide for commercial land they still preserve their original shape for most of the time.

Zenppukuji River starts in the North west part of Tokyo in Zenppukuji Pond and it runs to South East direction until it encounters Kanda River around Nakano-Fujimichou Station in Suginami Ward. It is by its location a suburban typology similar to some areas of Kanda River or Shajujii River. For the most part of the studied lenght (since Ogikubo Station to Nakano-Fujimichou) the river appears well maintained and it contains a natural scenery not usual to Tokyo.

It is one of the few rivers including a linear park (Zenppukuji River Park) memorable for its size. Although at first sight it appears to be a flawless waterway, as a suburban space, it lacks functions, and it lacks density, which means for the most part of the time it lacks people, which in turn make most of the space feel isolated and even dangerous.

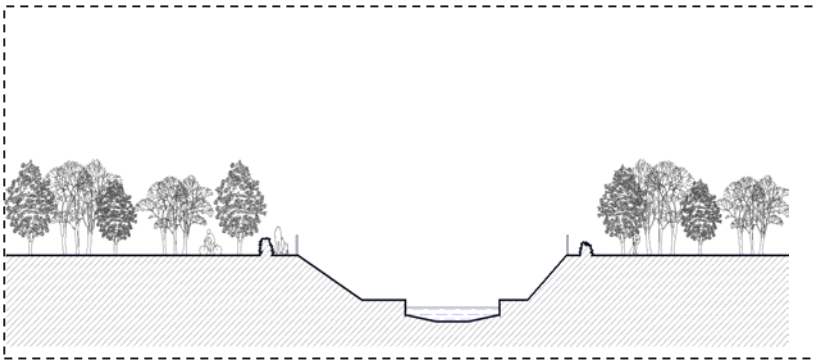


Fig384. Typical Section

Fig385. Zenppukuji River

This project is actually the least invasive project and it consists only in some “editing”. Since for the most part the area is quite pleasant there were only few “attachments” that made sense in an area like this.

For one side, it should be important to maintain the river banks green, (in some areas it is already visible), for the other it could be possible to open some promenades touching the water since the river is not so deep and it could provide for interesting spaces for residents and visitors, and finally it would be important to include functions along the river that keep the place alive, e.g. some kiosks, small coffee shops or restaurants, etc.

The promenades should be equipped with area for pedestrians and areas for bicycles since it is an area often chosen by citizens to exercise. Although it can be an area in which water can be touched, necessary measures for safety would always be provided like safety guards, however, the design of these could be very subtle in order not to destroy the river view and make it too dense.

Good illumination should also be thought of, not only post illumination but wall and pavement illumination. Spaces for children recreation could be also allocated near the river bank since there is more sunshine and mothers can watch their children while enjoying the morning sun and the river coolness.

This is a kind of project that can be applied in many cases along rivers in Tokyo, most of them would need only some process of small editing: lighting, greening, some urban furniture providence or some small functions that could attract people to the river. In these cases the rule “less is more” can still be contemporary enough while providing major improvements with small investments.

Fig386. Existing Situation

Fig387. Possible Proposal

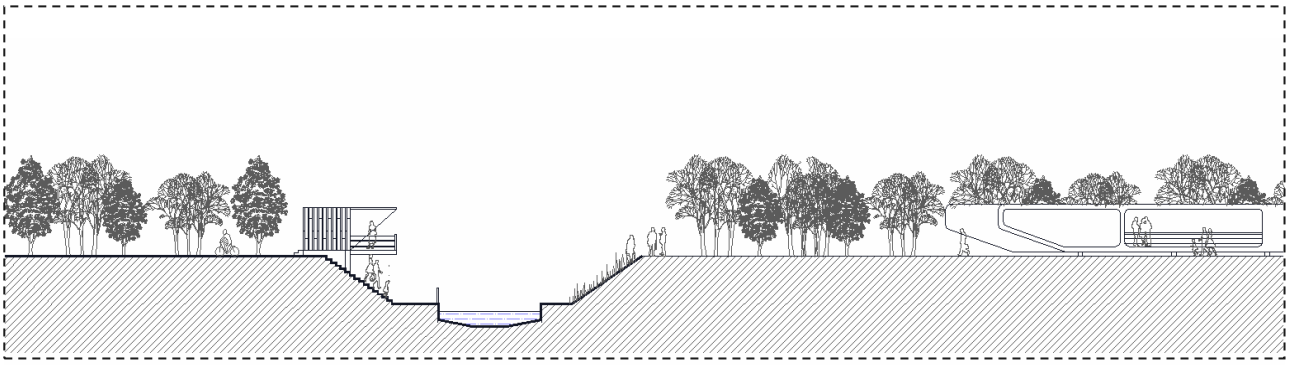


Fig388. Section Proposal

Fig389. Existing Situation

Fig390. Possible Proposal

Chapter 6: Conclusion

Successful urban regeneration is design-led. Promoting sustainable lifestyles and social inclusion in our towns and cities depends on the design of the physical environment.

in Towards an Urban Renaissance, Lord Rogers of Riverside

The present study had several purposes within its reach: first to provide a foundation background concerning waterfront regeneration realities and processes, second to recognize the reality of Tokyo in relation to the previous theme and set its framing layout according to local specificities, third to expand the knowledge concerning Tokyo's rivers and waterways focusing on its problems and potentialities for the urban realm, and finally, based on the previous results, to create an urban agenda in which an exemplification of how urban regeneration processes related to waterways should be approached and dealt with.

As was proved along this study, waterfront spaces are special within cities and the care and design of these can function as a mirror of how the city wants to look like to the world, how it approaches its economy and ecology and how it deals with its citizens level of happiness. In a world in which cities and urban populations expands enormously, life quality in the city is a current topic for discussion and the issue of sustainability has become the current trend in the urban design paradigm. "Sustainability" became a term used with an extremely broad meaning in which issues such as water, waste and resource management come hand in hand with culture and historical preservation movements. The term is so vast that it cannot encompass all the realities it includes in itself and at times it becomes an overrated word used to give meaning to meaningless projects or planning. Sustainability and sustainable development are then terms that have to be carefully pondered when used to defend the urban regeneration of cities. In the waterfront regeneration reality the term "sustainability" reaches both an ecological and cultural level. As was discussed, waterfronts are not only natural assets belonging to a city, but cultural assets as well, since they recorded cities birth and develop: they belong to the city's history. The natural scenery in which a city is settle upon is its biggest asset: the topography, the waterfront, rivers, valleys, trees and all the natural resources that constitute a city's background and foundation should be taken care of, since its total disappearance carries major risks for the continuation of life in the city.

In Ancient times cities could only consume the resources immediately in its surrounding areas since transportation means were rudimentary, and in some cases, if a city grew too much it would die for lack of food, water or fuel to keep life going on. With the Industrial Revolution and the exponential development of transports cities could expand and retrieve resources from places they even couldn't see: other cities, other countries or other continents. This reality developed into a consumerist society in which too much is consumed and too much is wasted and although cities and economies keep on growing and citizens don't feel the direct threat of its resource shortage, this reality is felt in other locations throughout the world and it is threatening our environment and our lives in cities as we know them. These facts are well know nowadays and cities are starting to worry about their insistence and emphasis on such consumerist lifestyles.

Cities in the developed world are educating themselves and their citizens to be more ecologically aware and there are many examples of cities doing great efforts to offer its citizens a quality of life in which the frenetic consumption of goods is not the main purpose, there are cities providing with urban activities that do not waste energy and there are cities that are recovering their natural assets in order to revive memories, historical frameworks or cultural reminiscences long lost throughout the 20th century. In this sense, the recovery, revival, restoration of waterfronts, rivers, valleys or topographical elements allied to a smart and careful urban regeneration are becoming trends in which to evolve cities and their urban future. It is believed that this study has provided with enough reasons to prove the importance of waterfronts, rivers or waterways as cultural, historical and natural properties of a city or metropolis.

The present research, focusing on Tokyo's waterways had some setbacks that in part limited the production and results presented here. The fact that most bibliography concerning the topic was written in Japanese language and was for most of the time incomprehensible was the major setback but also the major reason for the methodology chosen for this study. Since bibliography couldn't not serve as the main basis for the project, the focus was made on field work and its thorough analysis in order to produce a work worthy of being considered original.

As was described in earlier chapters, the focus shifted from Tokyo's waterfront bay area to inner waterways and rivers for several reasons: first because the Bay area constituted a typical example of a waterfront before its "cosmetic surgery" and waterways constituted a different typology of linear water spaces which only recently are being more explored by urban designers and architects, second because although the Bay area is still very hidden from the urban reality of Tokyo, waterways presented an even more critical condition concerning its integration in the city and finally for its historical and cultural importance for the growth of Tokyo.

The study comprehended the collection of data concerning 18 areas in Tokyo, each including one or more waterways and the results were conclusive in showing that these spaces are being neglected by citizens and authorities in many aspects. At the same time it can be affirmed that efforts in the improvement of safety conditions and water quality in many of these areas have been achieved but the potentials of these areas were not and are not being explored to its maximum.

Among the field work results it can be concluded that waterways in urban Tokyo present common problems concerning its inclusion in the city, its isolated character and dull cityscape allied to a overall bad image to which citizens are not attracted to. Among their potentialities it was shown that waterways can become one of the elements of transformation of Tokyo, a city still dedicated to the power of the machine and infrastructures that support them, into a more eco-friendly city in which infrastructures for machines are counterbalanced with infrastructures for people. As was referred, waterways, if properly managed and designed to be integrated in the city and among themselves could provide with a "slow-network" in which nature, people and city come together.

Considering the realities encountered and the analysis above mentioned the study had the final goal of creating a waterway agenda: a collection of strategies, drawings and proposals that would serve as a basis for consultation about the state of the waterways and for future proposals concerning the issue. This agenda aimed to provide with a comprehensive collection of strategies starting from a general scale and gradually approaching a small scale in which specific projects were proposed in order to create some visual stimuli showing the possibilities of designing rivers and waterways.

Tokyo's urban planning policies are in a great part based on private development and public interest in the urban issues is much left to basic regulatory purposes of zoning or strategic planning among a higher rank of planning. In Europe, urban planning is very important for the public government and most countries leave urban planning and urban design to a very small scale in the hands of the public sector. This reality can be very restrictive at times and the fact that governments fight for the preservation of their urban specificities make urban planning processes in Europe a very important, serious and sober issue. In Tokyo, the fact that private investment is so powerful provides the stage for a city in which profit-making is the main issue and public realities are left for second place. Recently there are many projects that provide a more comprehensive attitude in relation to the public sphere, but these are projects from multi-millionaire companies that have the financial power to invest like this. For most new projects, the design ends in the border of exterior walls and streets, squares, public illumination, green areas, and so on are just remaining plots that couldn't be made into profitable floor area ratios. This difference in planning processes is obvious in the way European cities keep their character, buildings and aesthetic principles through most of the time and Tokyo is a city that changes every month, every year, being sometimes not recognizable by its constant mutable character. This turns Tokyo into a truly exciting city in which life speeds up in accordance to the invention of new technologies and the latest trends are always on the streets but it is also the main problem concerning the city's waste of resources and unsustainable development.

In this sense it would be important for Tokyo, as a world city to concentrate on its important features and turning them into public assets. It would be important to focus on a more balanced type of urban planning, in which citizens enjoy the urban realities built with their taxes. It would be important to formulate urban agendas and then invest in public-private partnerships along waterways in order to have the financial power to design, include and maintain these spaces in the city.

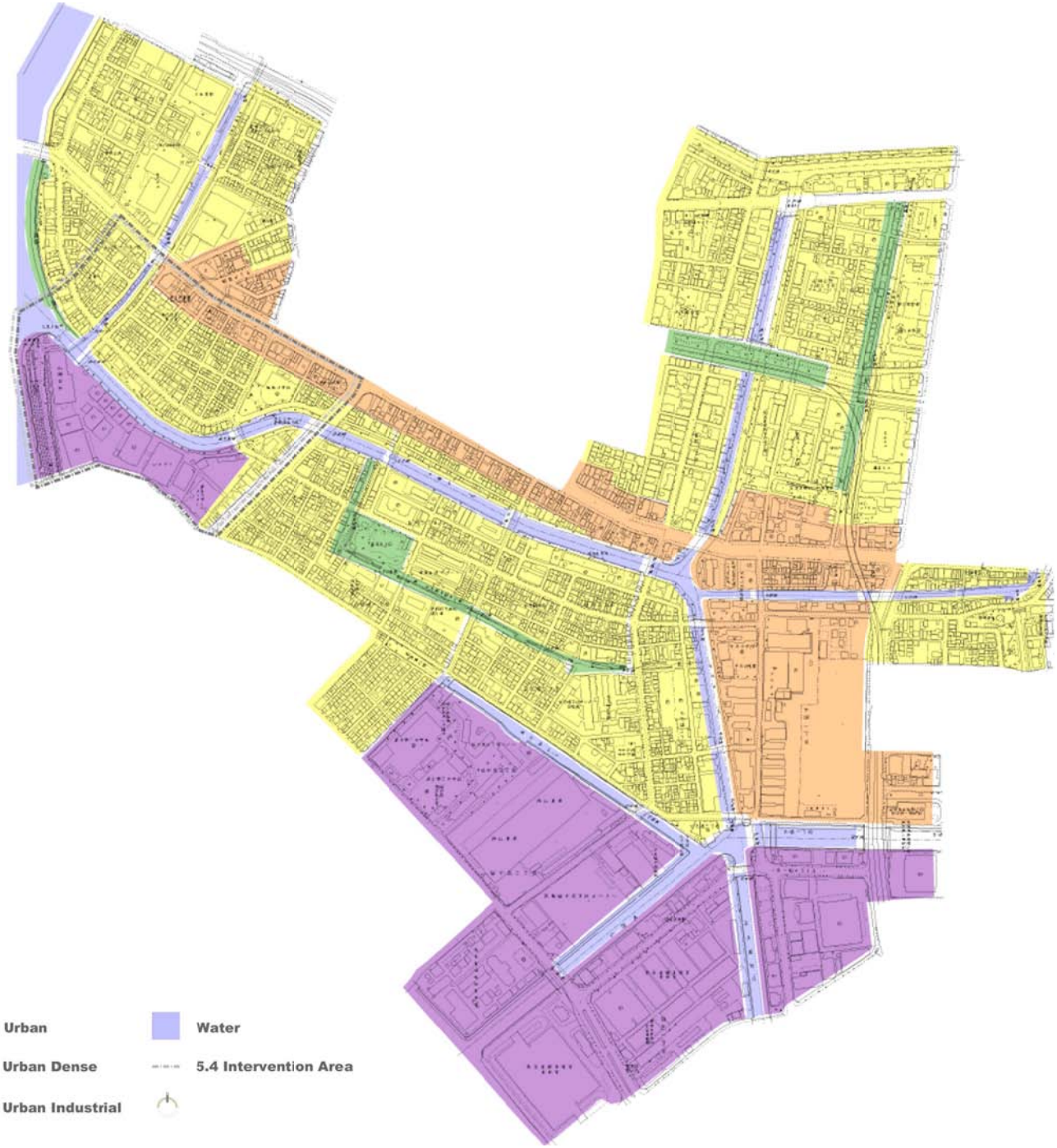
In this sense, chapter five of this study provides with a comprehensive set of strategies and proposals that could be taken in consideration by the public sector when truly planning the waterways in Tokyo. The importance of waterways for the city was thoroughly proven along this study and the exploration of its potentialities is applied in the Waterway Agenda. The chapter showed how the enhancement of a river network in Tokyo's central areas could bring a more green city in which water and green areas form a slow network for pedestrians, bicycles and non-motorized transportation vehicles. It showed that by the development of a river network, in the next fifty to one hundred years the city could create a connected public space area in which citizens and workers could enjoy the pleasures of an urban life with the proximity of a more natural space. This network could become a natural property in the city in which animal and vegetal habitats are enhanced and in which disaster prevention and control measures are applied: waterways could provide for water in case of fires in the city, fire break areas or shelter areas in case of major earthquakes.

In a second set of strategies, rivers and waterways could provide as neighboring urban character reinforcement elements. By the categorization of these in four scale typologies it would be possible to contribute for appropriate planning according to each scale and to reinforce the urban local character at the same time that we would reinforce the network system. These four scales would include first, "City Spinal "Waterbodies", second "Central City Connectors", third "Residential Oasis" and finally "Green Streams". These typologies would be planned and designed according to scale strategies and local characteristics and a wide range of sketches were provided to show the type of approach desired when designing these spaces.

Finally the agenda provided with six projects chosen according to their character and importance for the city: Kitajukken's, "Residential Amenities", Meguro's "Urban Oasis", Nihombashi's Historical Preservation, Outer Moat Kagurazaka's "River Hills", Shibuya's "Water Shopping Street" and Zenppukuji's "Suburban Serenity". These project's goal was to provide images of the waterways before and after their design. This study is individual and the design lacks originality in the sense that it belongs to only one individual, and for that it serves its only purpose as serving as an example. In reality, waterways should be designed in their smallest scale by a wide range of designers with different perspectives on the city and different ways of expressing themselves. Rivers and waterways are linear water spaces and for that able of being editable along their length, providing with wide water and urban landscapes to be explored by designers. But the design, although free and left to individual creativity should respond to the principles formulated along the waterway agenda. The four principles presented had the goal of setting a frame in which design should be supported. The principles responded to major problems and major potentialities of waterways and for that tackle with specificities unique to these spaces and should be considered always when starting a new project, in order to improve its final result.

Above were presented the main goals of this study, major problems and potentialities encountered and recommendations originally formulated for the particularities of this research. According to the background and setbacks encountered in its elaboration it is believed that this work can present an important outline for the study and approach to urban realities in Tokyo's waterways. As an academic study it includes much utopia and idealism and it is recognized that in a real project it would have had to deal with a much more broad dimension of realities and its result could have been quite different. But as was mentioned several times along this study, and in relation to waterfront specifically, the most important factor for the redevelopment of waterfronts is to have a vision. In the case of this study, and considering its framework, it is believed that this vision was amply shown in its most favorable context and one can only expect that future visions, ideals and utopianism serve as positive dreams for the realities of today.

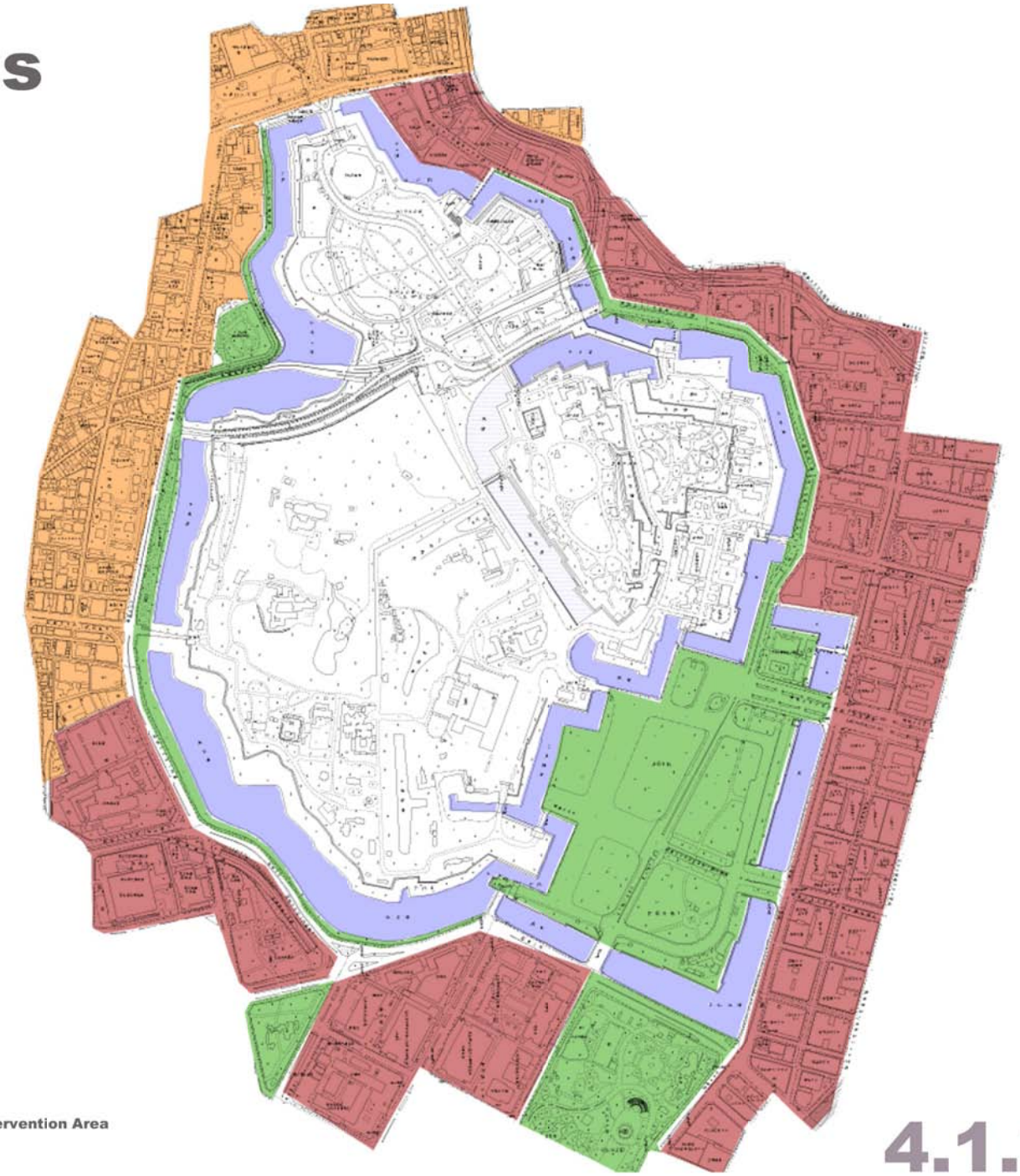
Kiba
plan & zoning



4.1.3.1

Imperial Moats

plan & zoning



Description

- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.2

Kanda

plan & zoning

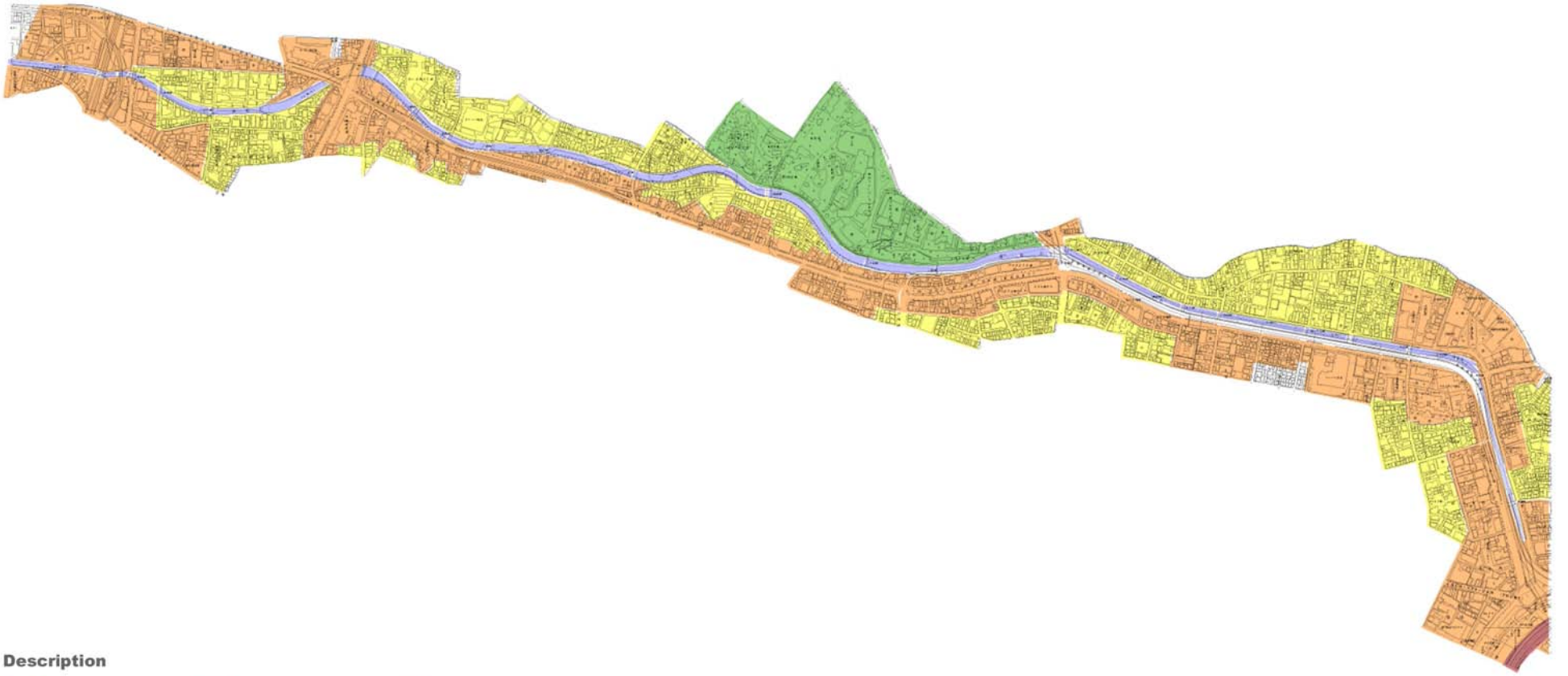
Description

- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.4

Kanda

plan & zoning



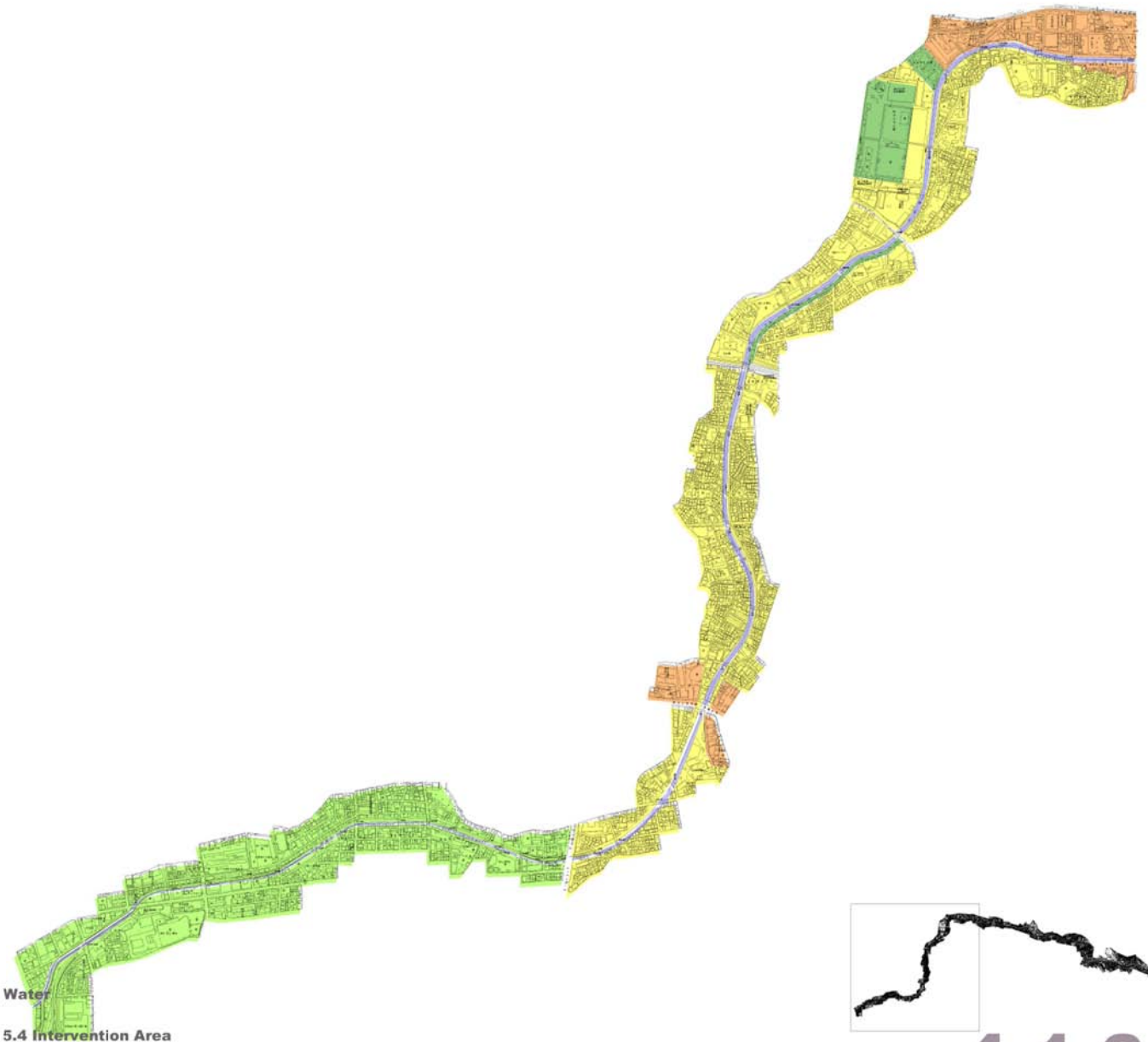
Description

- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.4

Kanda

plan & zoning



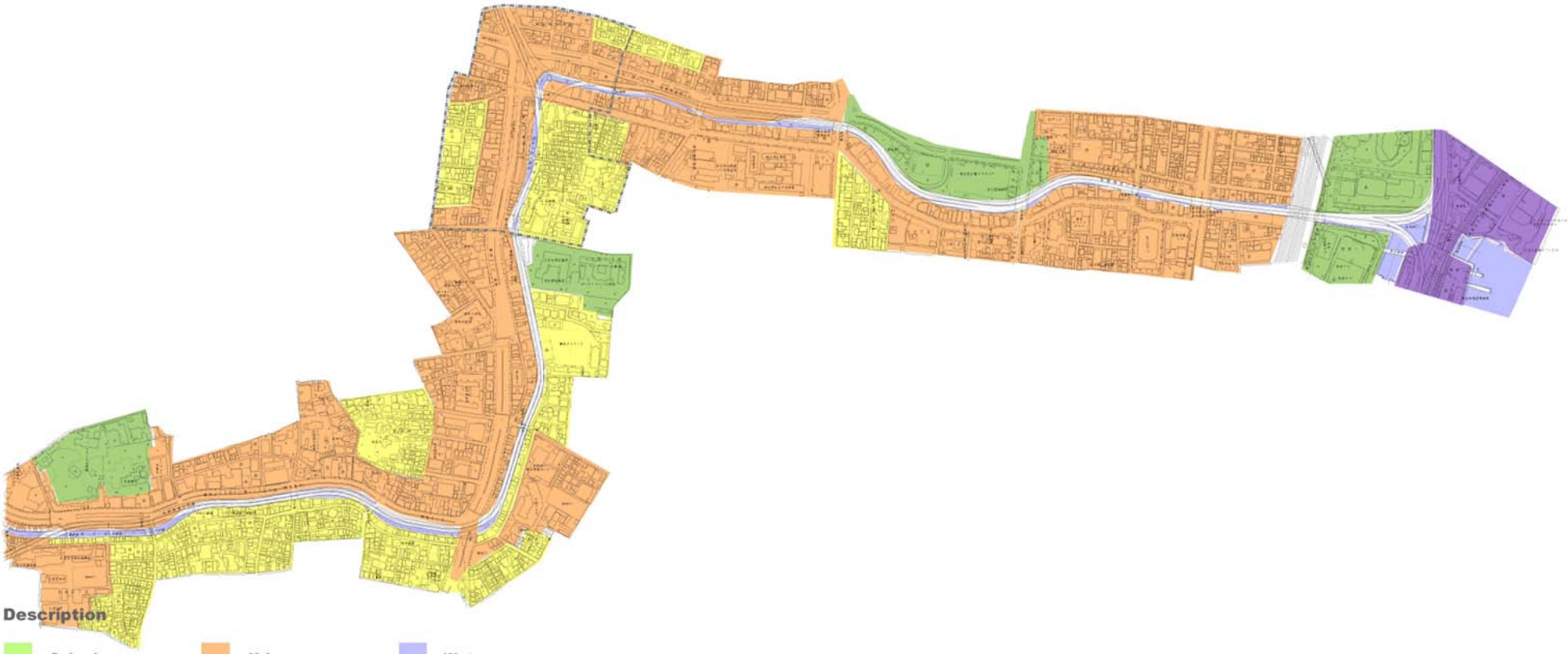
Description

- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.4

Furukawa & Shibuya

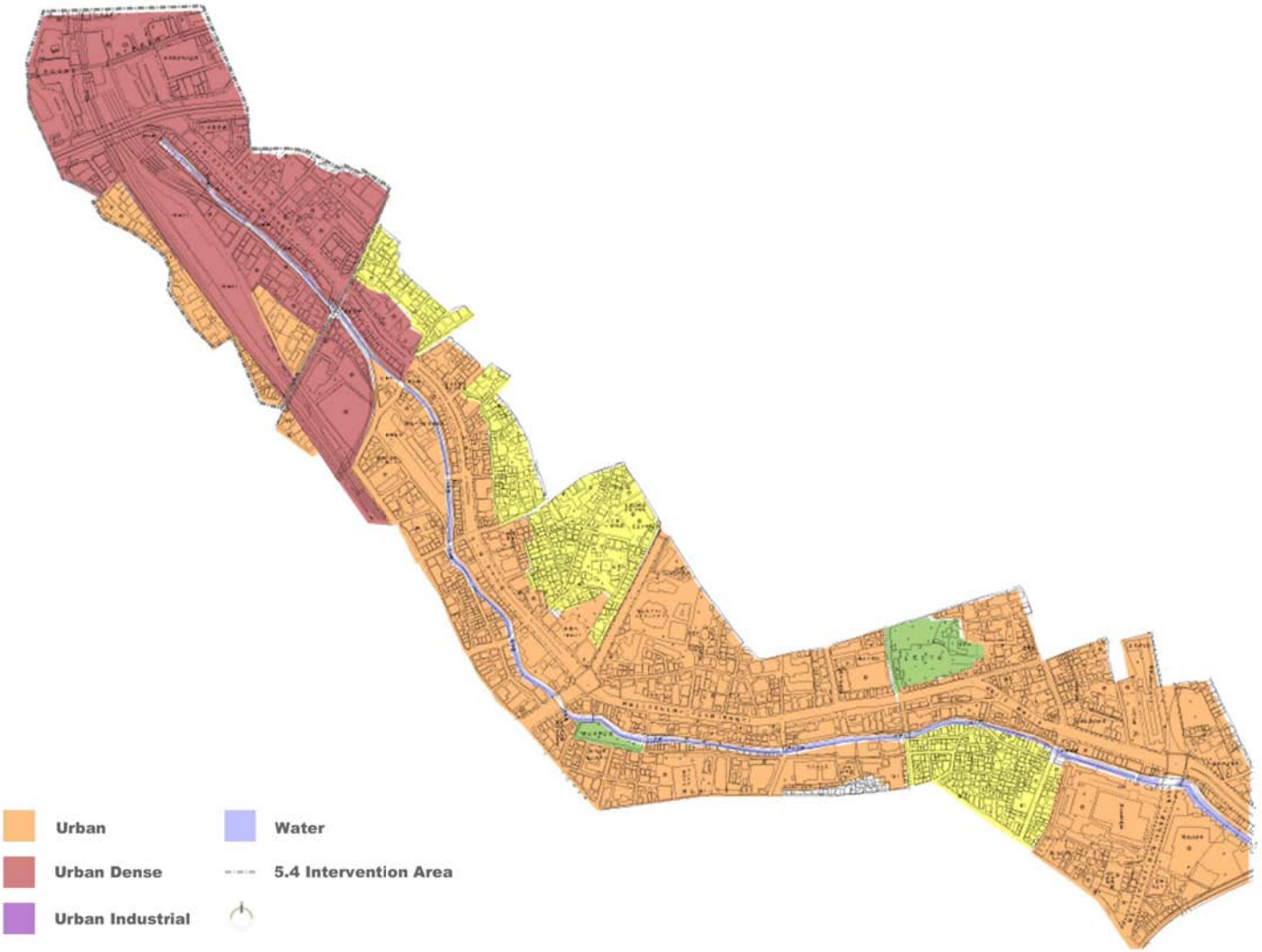
plan & zoning



4.1.3.2

Furukawa & Shibuya

plan & zoning



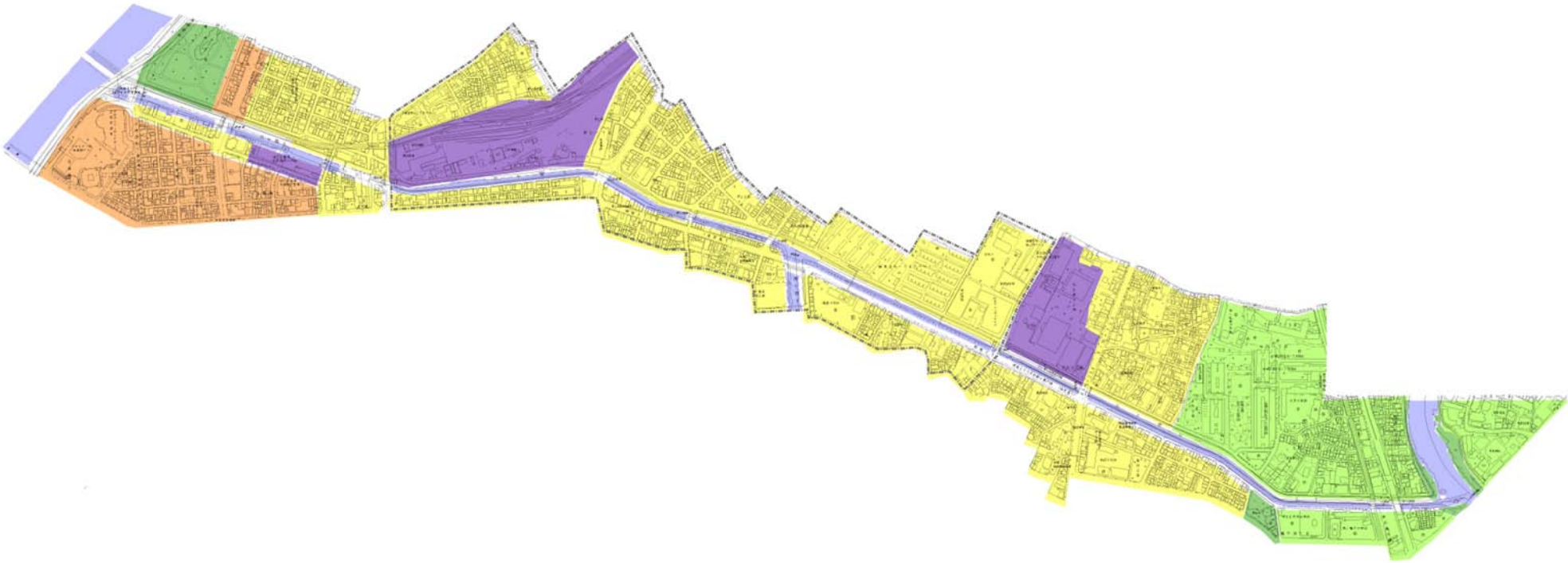
Description

- Suburban
- Urban Park
- Urban Residential
- Urban
- Urban Dense
- Urban Industrial
- Water
- 5.4 Intervention Area

4.1.3.2

Kitajukken

plan & zoning



Description

- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.5

Komatsu

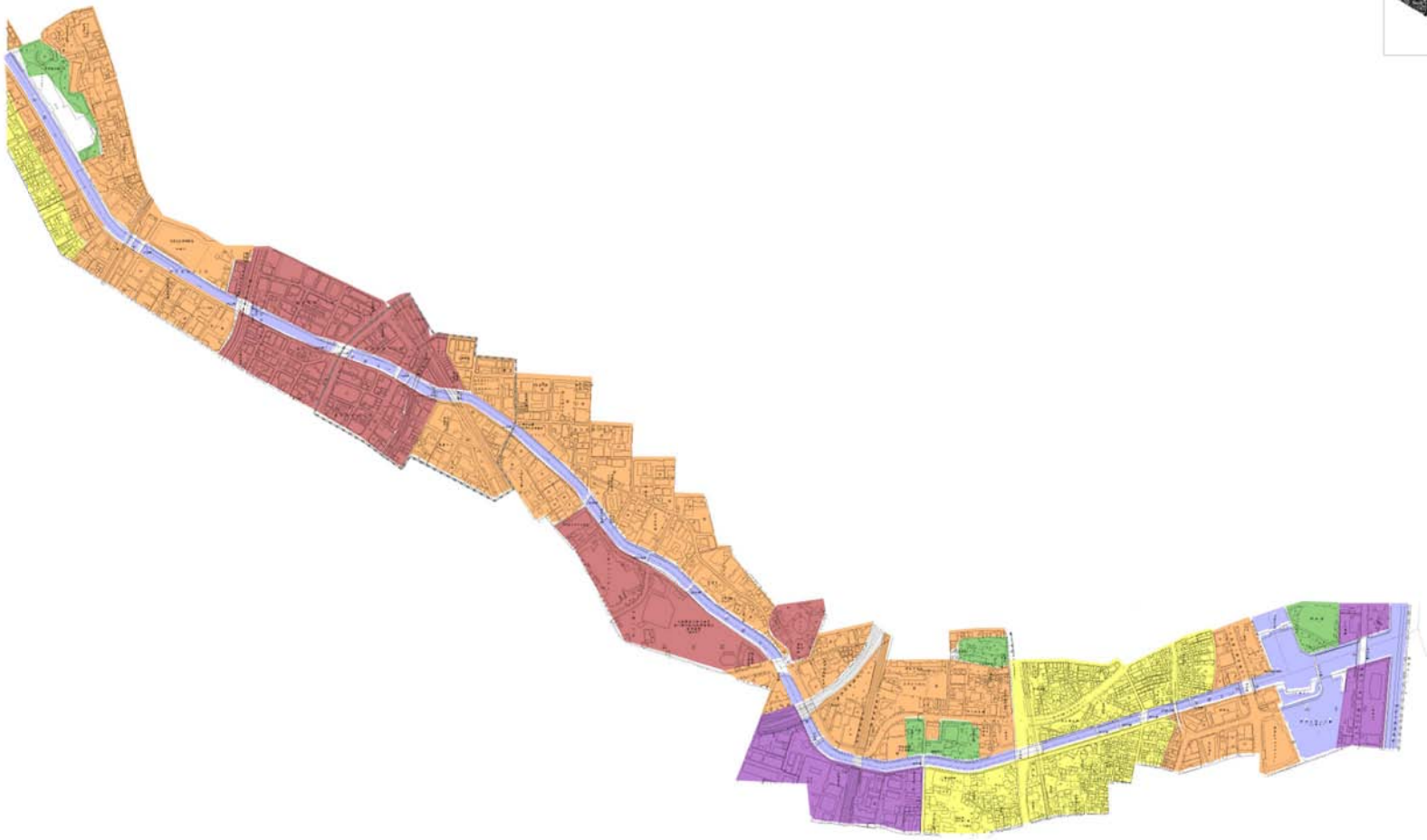
plan & zoning

Description

- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

Meguro

plan & zoning



Description

- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.7

Meguro

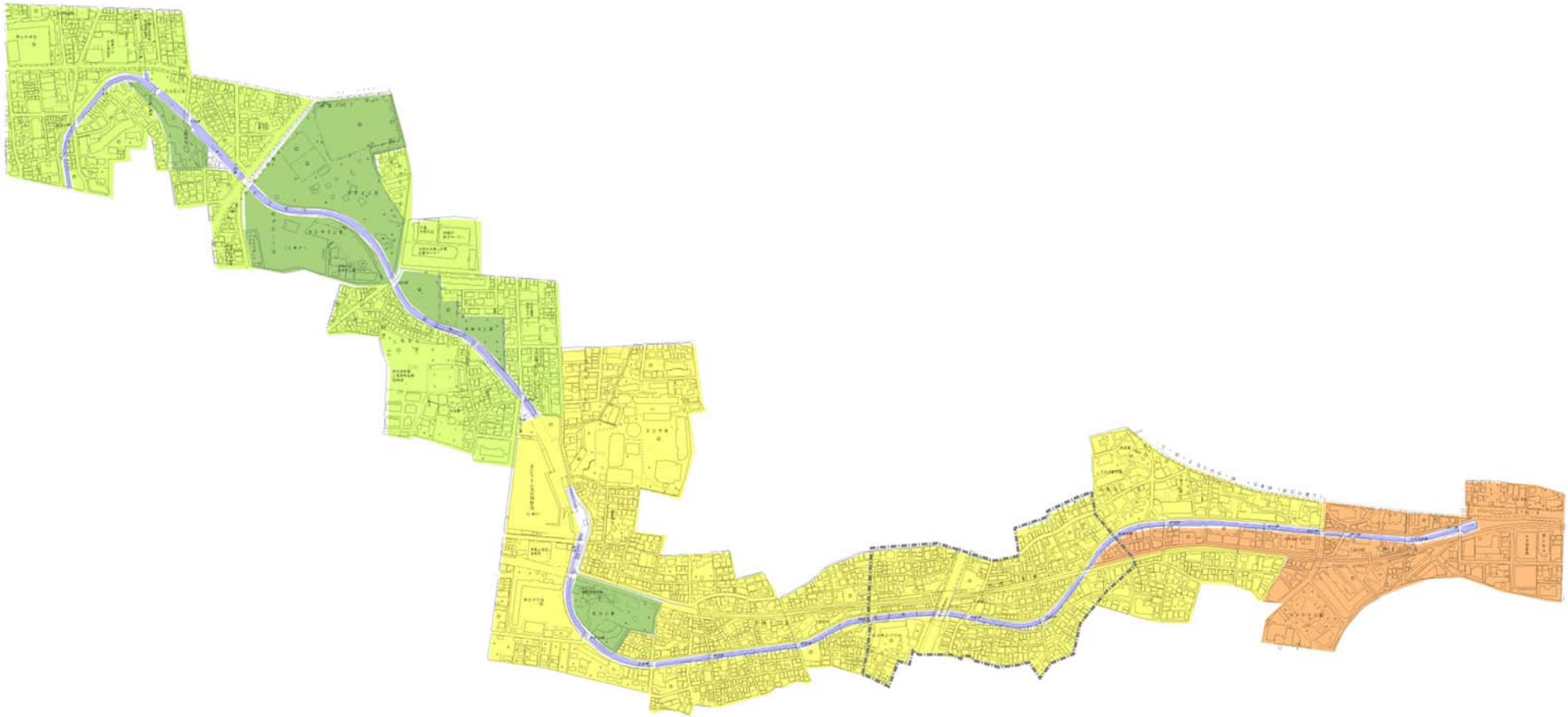
plan & zoning

Description

- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

Myoshoji

plan & zoning



Description

- Suburban
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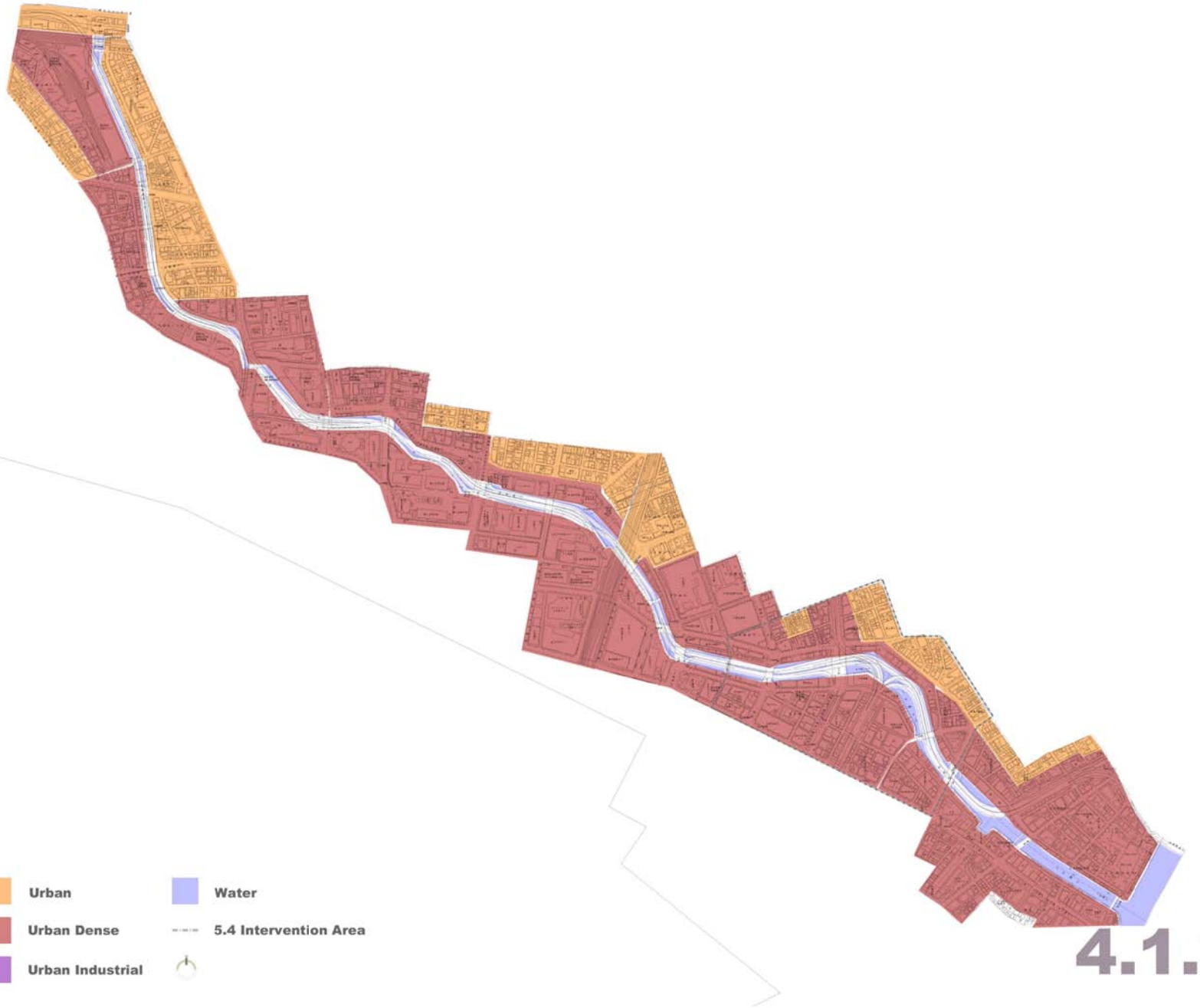
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.8

Nihombashi

plan & zoning

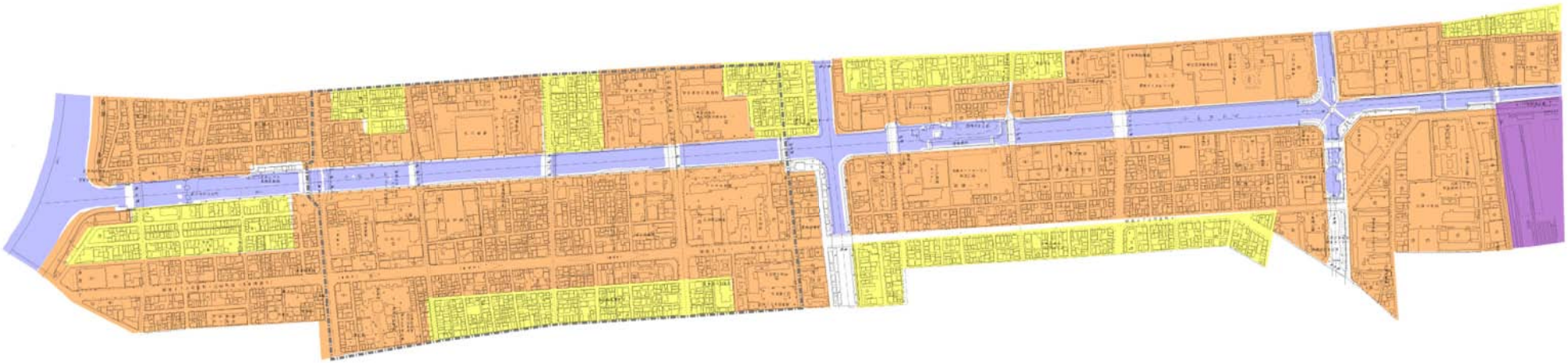


Description

- Suburban
- Urban Park
- Urban Residential
- Urban
- Urban Dense
- Urban Industrial
- Water
- 5.4 Intervention Area

Onagi

plan & zoning



Description

- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.10

Ooyoko

plan & zoning

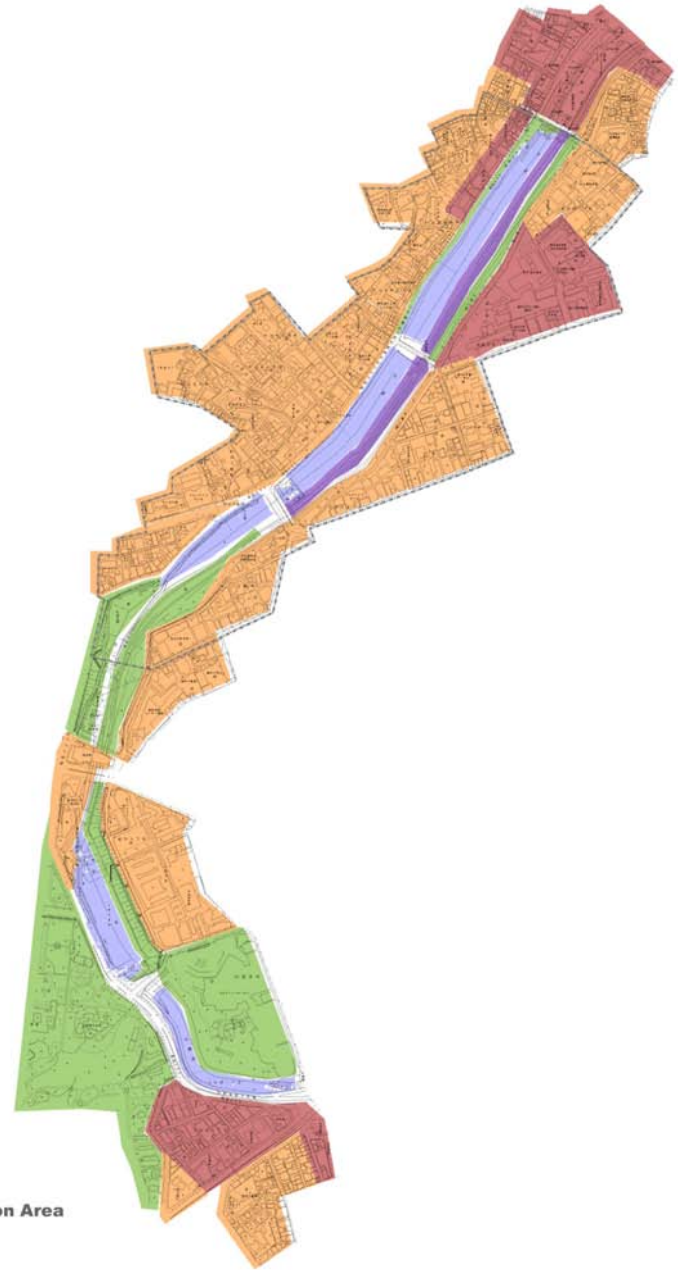
Description

- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.11

Outer Moats

plan & zoning



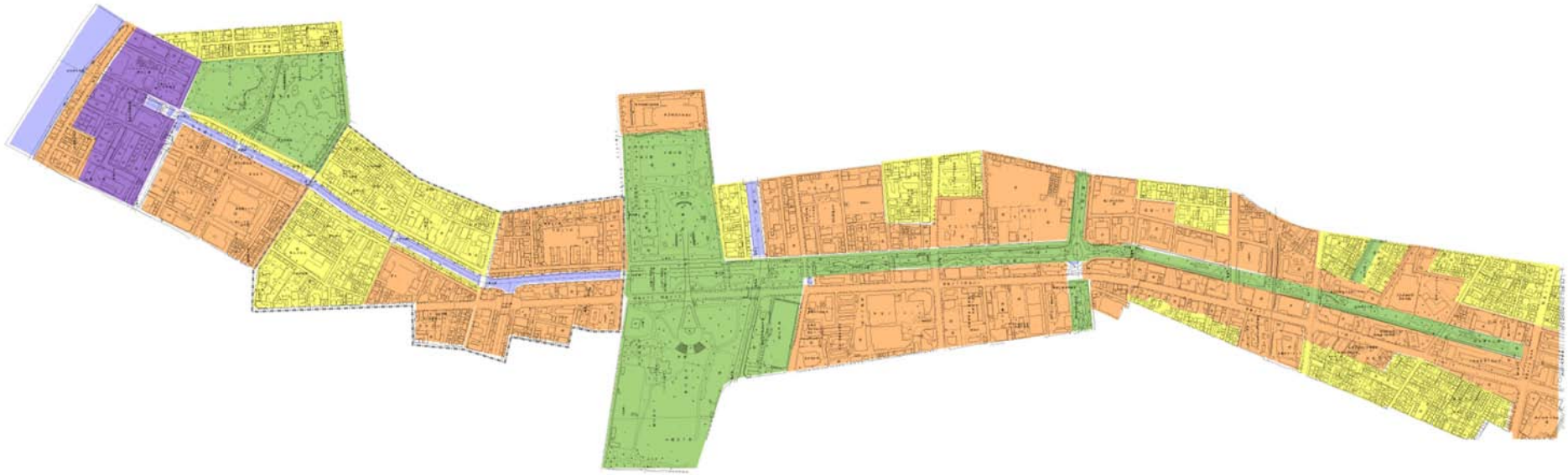
Description

- Suburban
- Urban Park
- Urban Residential
- Urban
- Urban Dense
- Urban Industrial
- Water
- 5.4 Intervention Area

4.1.3.12

Sendaihori

plan & zoning



Description

- Suburban
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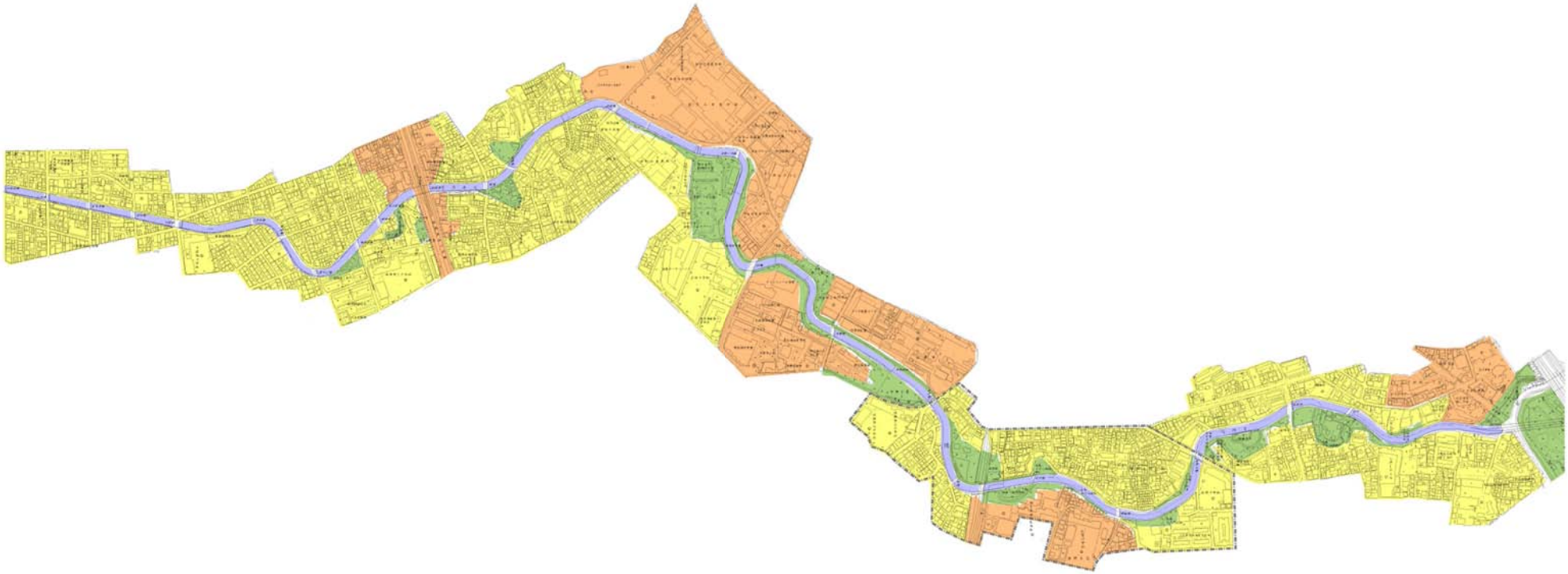
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.13

Shakujii

plan & zoning



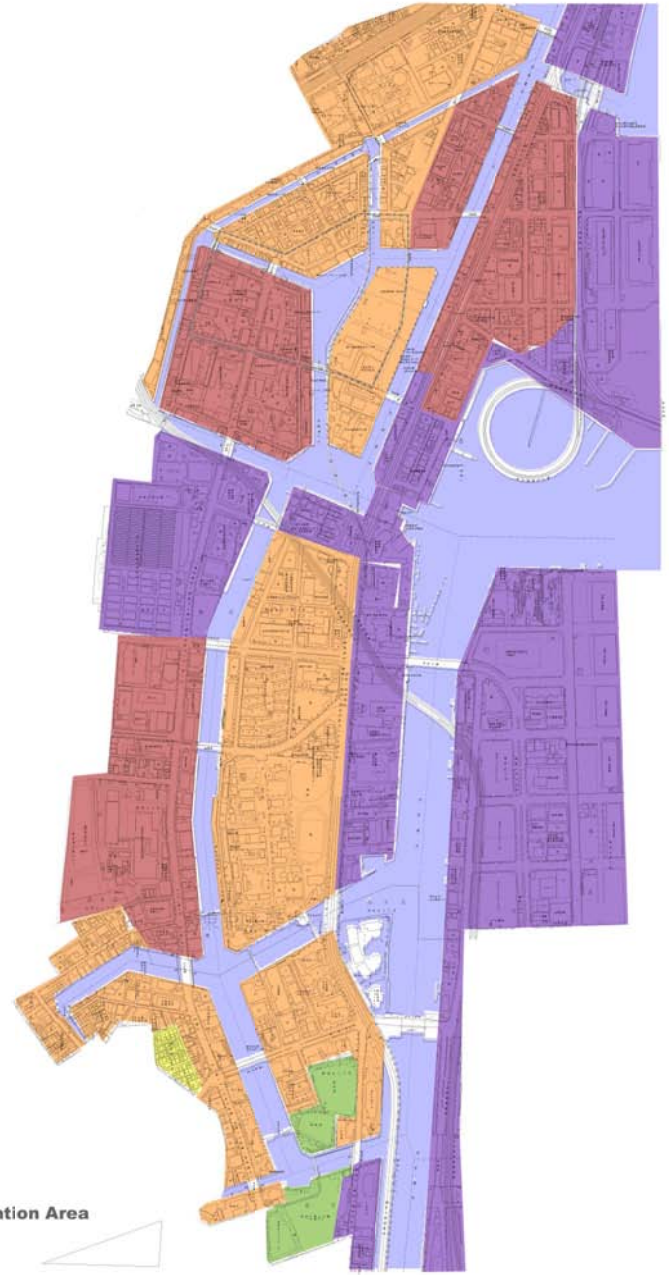
Description

- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.14

Shinagawa

plan & zoning



Description

- Suburban
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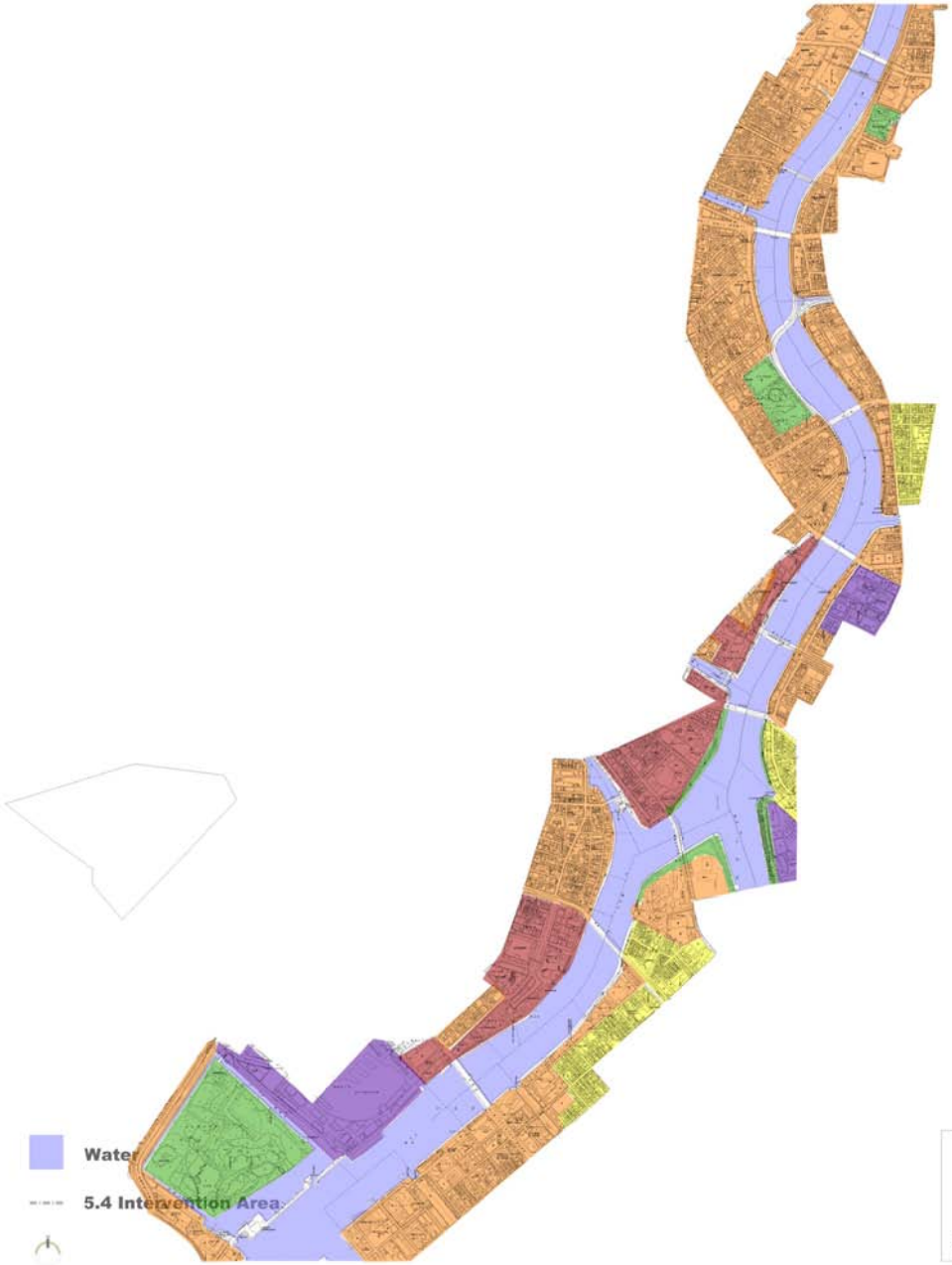
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.15

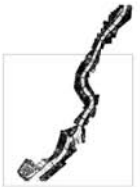
Sumida

plan & zoning



Description

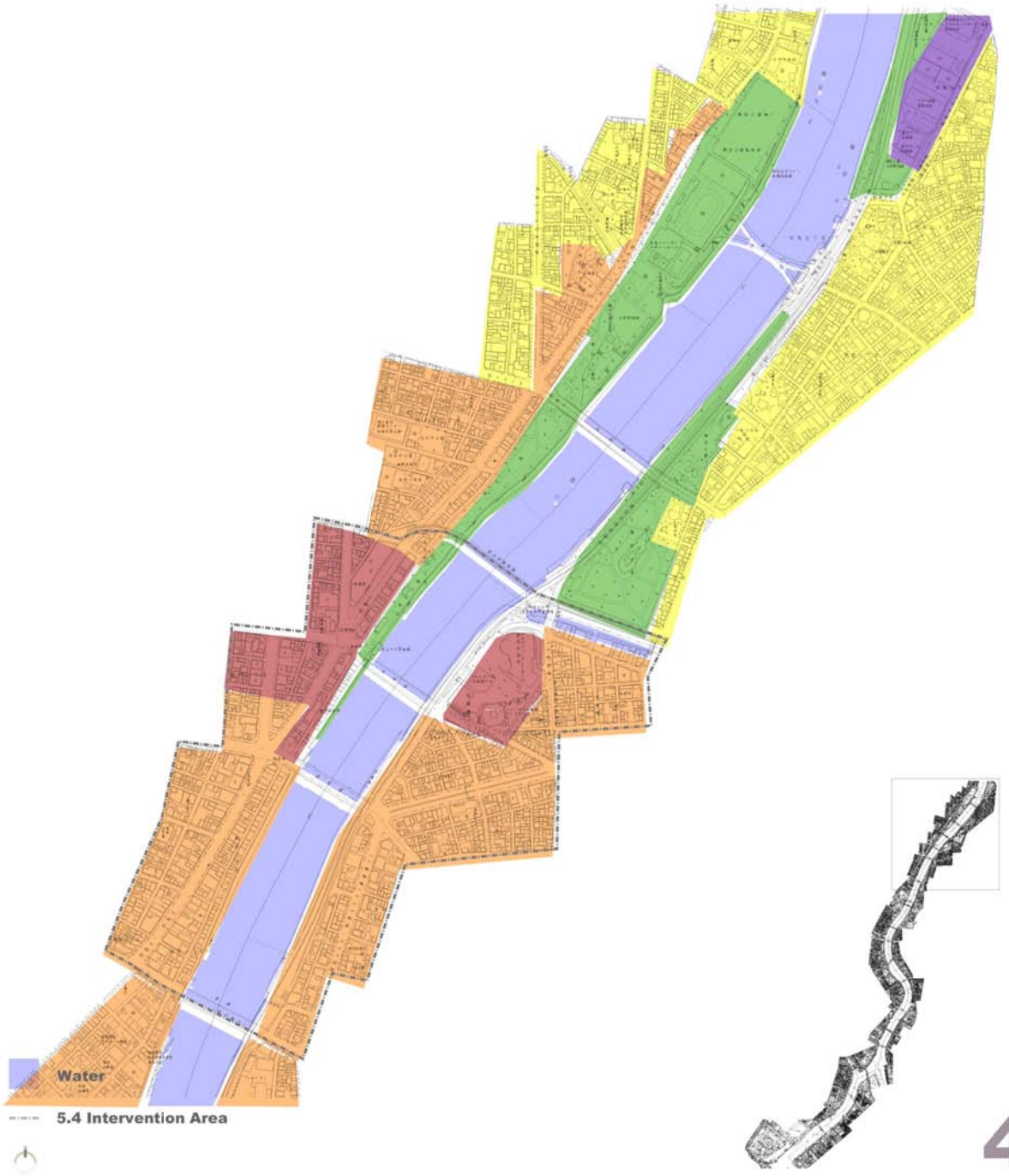
- Suburban
- Urban Park
- Urban Residential
- Urban
- Urban Dense
- Urban Industrial
- Water
- 5.4 Intervention Area



4.1.3.16

Sumida

plan & zoning



Description

- Suburban
- Urban Park
- Urban Residential
- Urban
- Urban Dense
- Urban Industrial

4.1.3.16

Yokojukken

plan & zoning

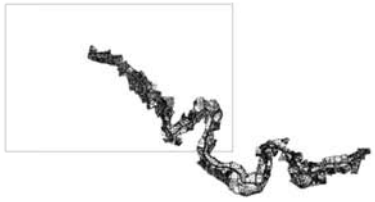
Description

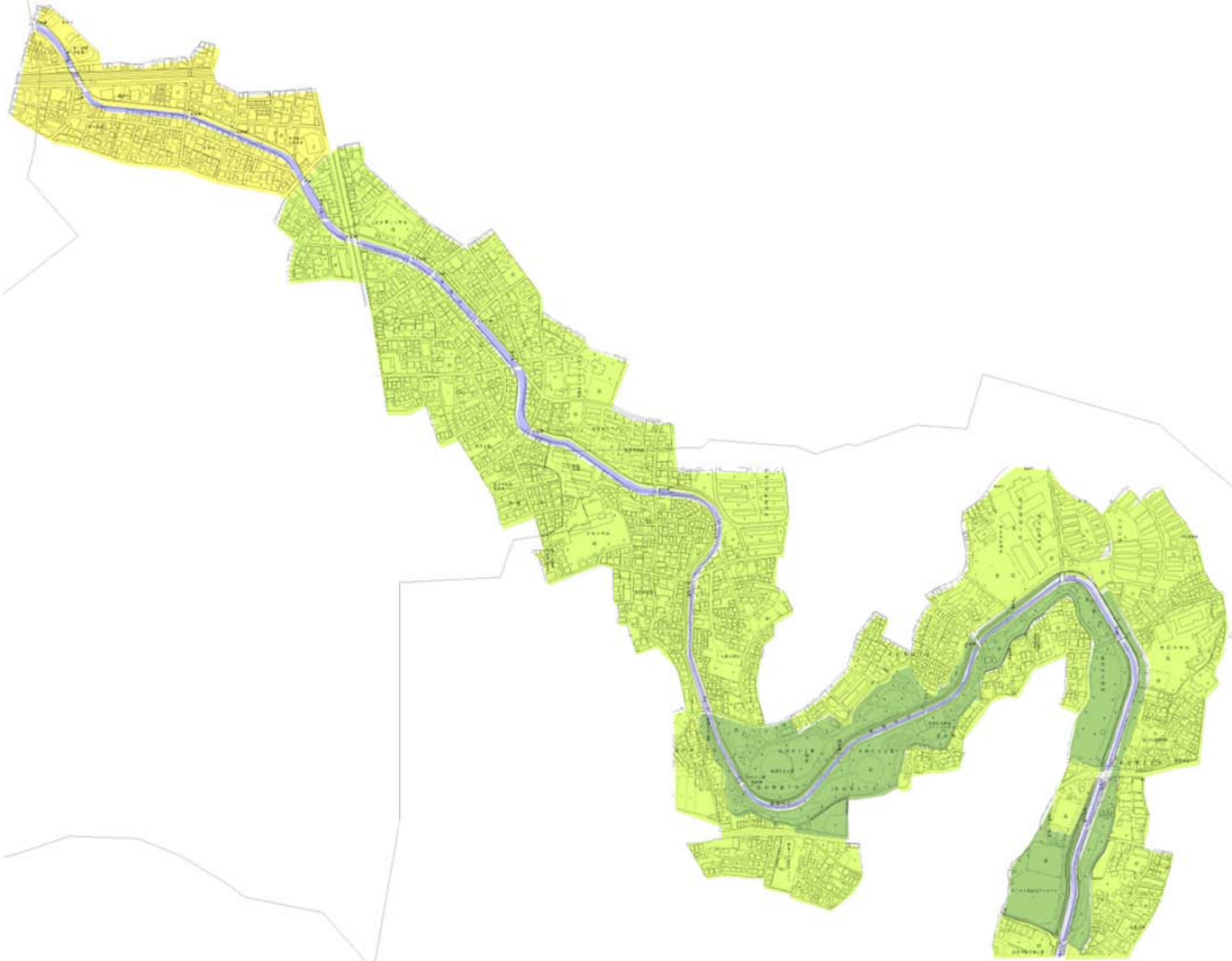
- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.17

Zenpukuji

plan & zoning





Description

- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.18

Zenpukuji

plan & zoning

Description

- Suburban
- Urban
- Water
- Urban Park
- Urban Dense
- 5.4 Intervention Area
- Urban Residential
- Urban Industrial

4.1.3.18

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Notes:

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3. DOVEY Kim, Fluid City;
4. INSTITUTE Urban Land, Remaking the Urban Waterfront;
5. Tabula Rasa refers to the epistemological thesis that human beings are born with no innate or built-in mental content, in a word, "blank", and that their entire resource of knowledge is built up gradually from their experience and sensory perceptions of the outside world *in* Wikipedia, http://en.wikipedia.org/wiki/Main_Page;
6. NAKHEEL Dubai Waterfront, Inc.;
7. Phoenix refers to a mythical bird with beautiful gold and red plumage. At the end of its life-cycle the phoenix builds itself a nest of cinnamon twigs that it then ignites; both nest and bird burn fiercely and are reduced to ashes, from which a new, young phoenix arises. The new phoenix is destined to live, usually, as long as the old one. In some stories, the new phoenix embalms the ashes of the old phoenix in an egg made of myrrh and deposits it in the Egyptian city of Heliopolis (*the city of the sun* in Greek). The bird was also said to regenerate when hurt or wounded by a foe, thus being almost immortal and invincible — a symbol of fire and divinity *in* Wikipedia, http://en.wikipedia.org/wiki/Main_Page;
8. Shitamachi can be translated from the Japanese as "Low/ Below City";
9. Yamanote can be traslated from the Japanese as "The Mountain's Hand";
10. The Jomon Period is the time in Japanese prehistory from about 14 000 BCE to 400 BCE, http://en.wikipedia.org/wiki/Jomon_period;
11. Yatai is a small, mobile food stall in Japan typically selling ramen or other food., http://en.wikipedia.org/wiki/Yatai;
12. TEIJI Itoh, The Gardens of Japan, p32;
13. Niwa is the Japanese word for garden or open spaces usually private.
14. TEIJI Itoh, The Gardens of Japan, p38;
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16.TEIJI Itoh, The Gardens of Japan, p91;
17. TEIJI Itoh, The Gardens of Japan, p93;
18. Roji refers to small streets or alleys usually very narrow and mainly destined to pedestrian access to residential areas;