

# Major Design: Define and Deliver

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10/06/2021

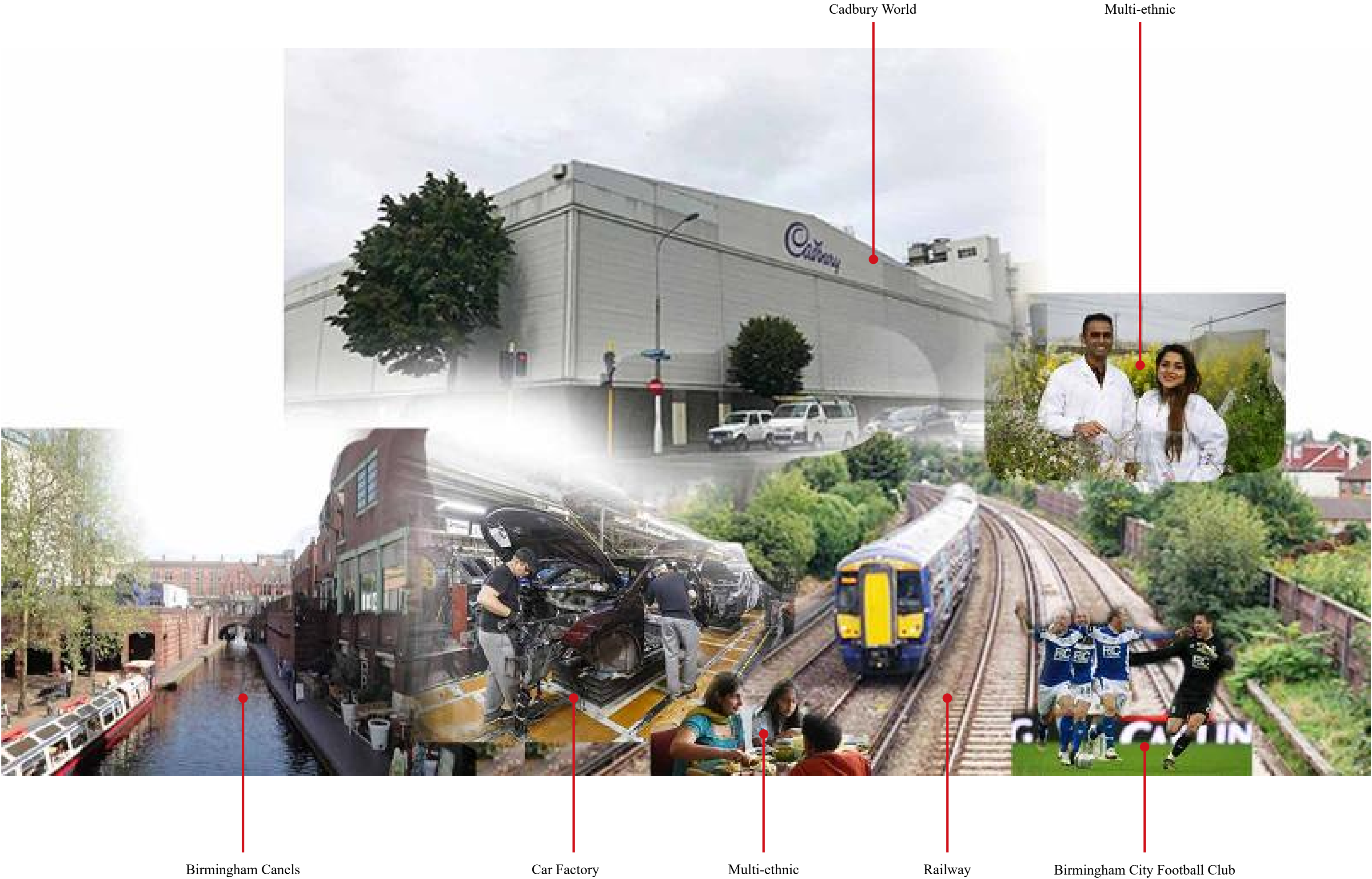


# A Pocket of Green among the Concrete



How does the urban park space be designed to enhance social interaction?

Birmingham Impression



Site Character

St. Martin's Church



Warehouse



Warehouse



Robbery



Street Crime

The Bullring



# Introduction And Current Condition

## Birmingham Introduction

Birmingham is the second largest international city in Britain after London. Its population and area are second only to London. It is located in the middle of England and is the intersection of the main railway, highway and canal networks in the country.

Birmingham is one of the major manufacturing centers in the UK, mainly heavy industry, the world's largest metal processing area, and the world's largest and most concentrated industrial zone. The automobile industry is large and its famous car brands are Rover and Jaguar.



United Kingdom

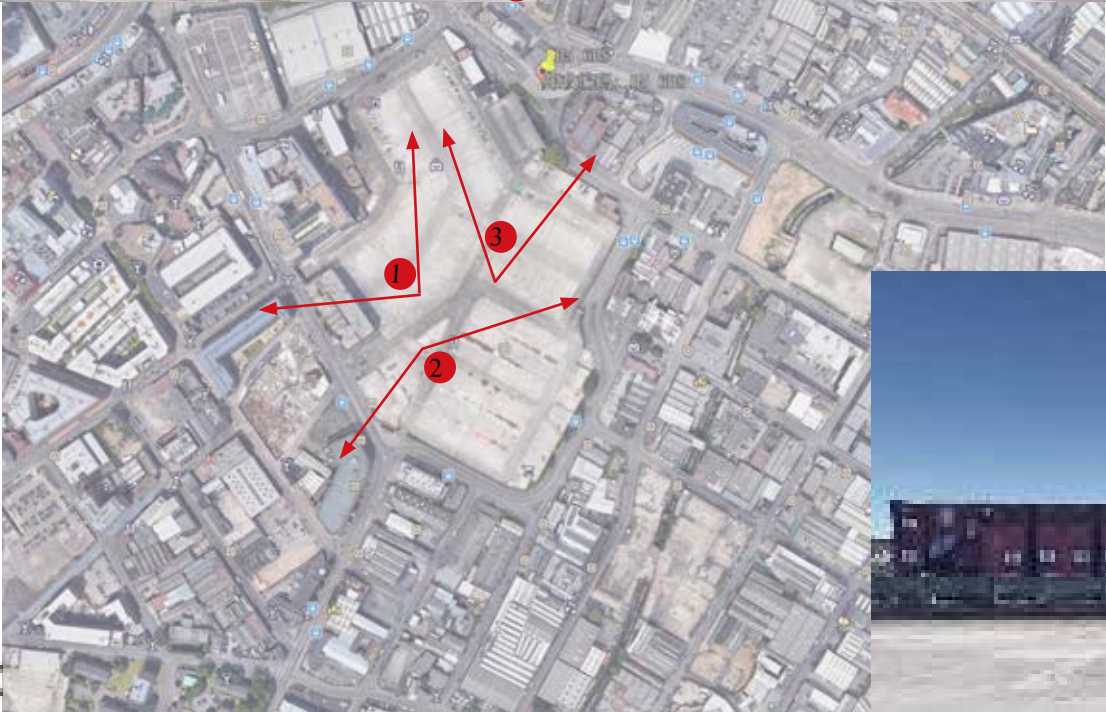


Birmingham



Site

## Site Current Condition



## Summary

- Site is located in Digbeth, Birmingham, West Midlands region of England.
- The site is relatively flat and is currently used as a parking lot.
- The majority of surrounding architecture are factories and warehouses, with several large shopping malls.

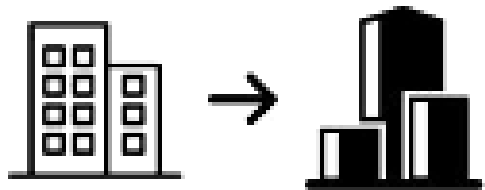


# Issues In The Future

1 Growth of the population



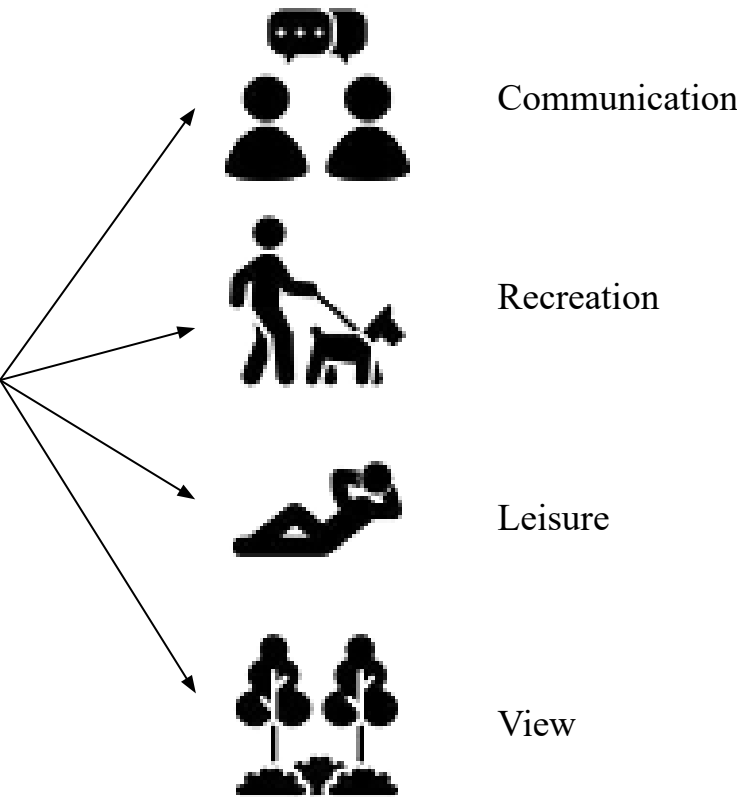
2 More and more high-rise buildings in dense down town



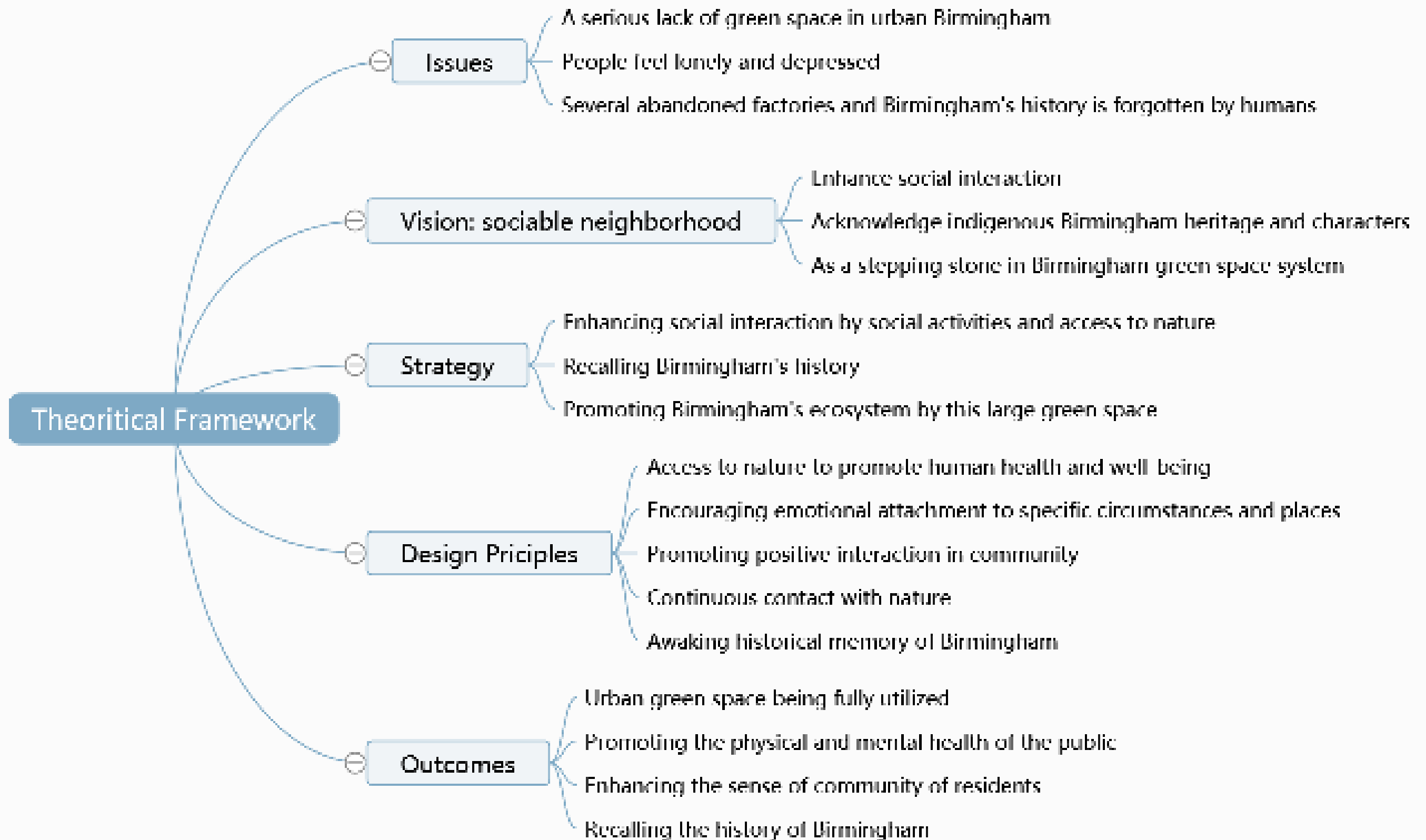
3 Limitation of green space



4 People's increasing demand in the future



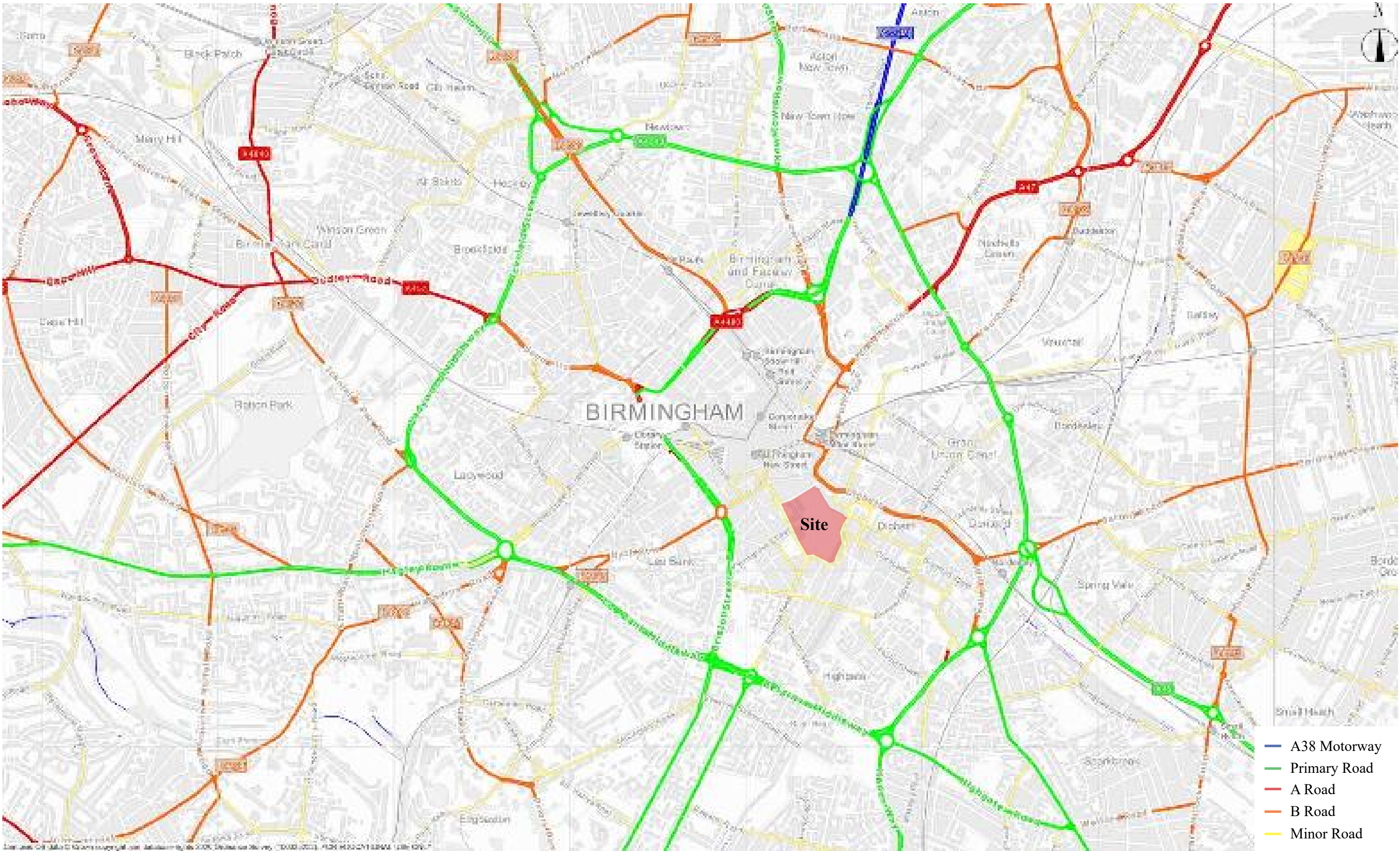
# Theoretical Framework





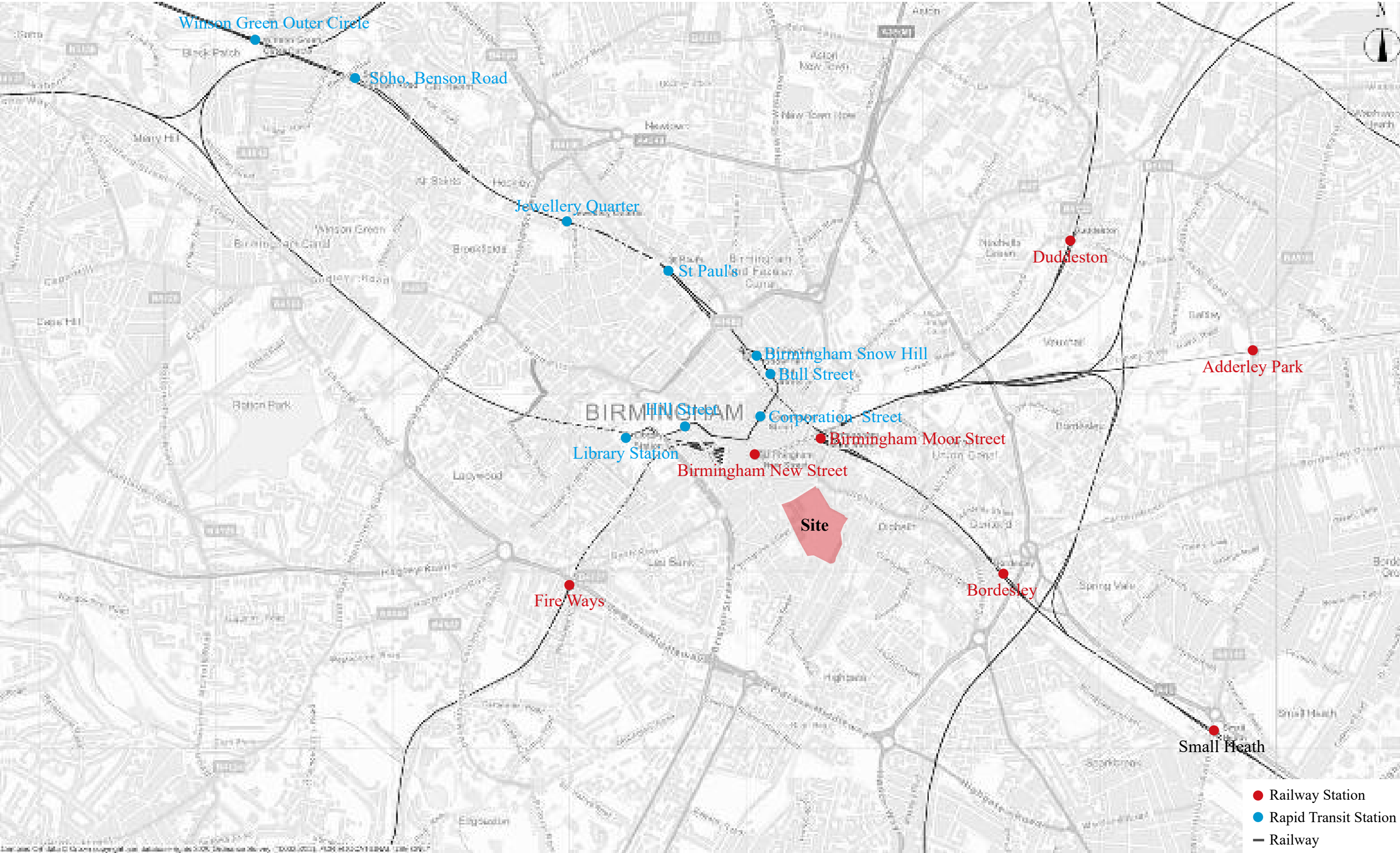
# City Analysis--Road

Conveniently located in the center of the city, the site has Birmingham New Street Station, the largest and oldest railway station in Birmingham, minor roads links are available on the east, south and west sides of the site.



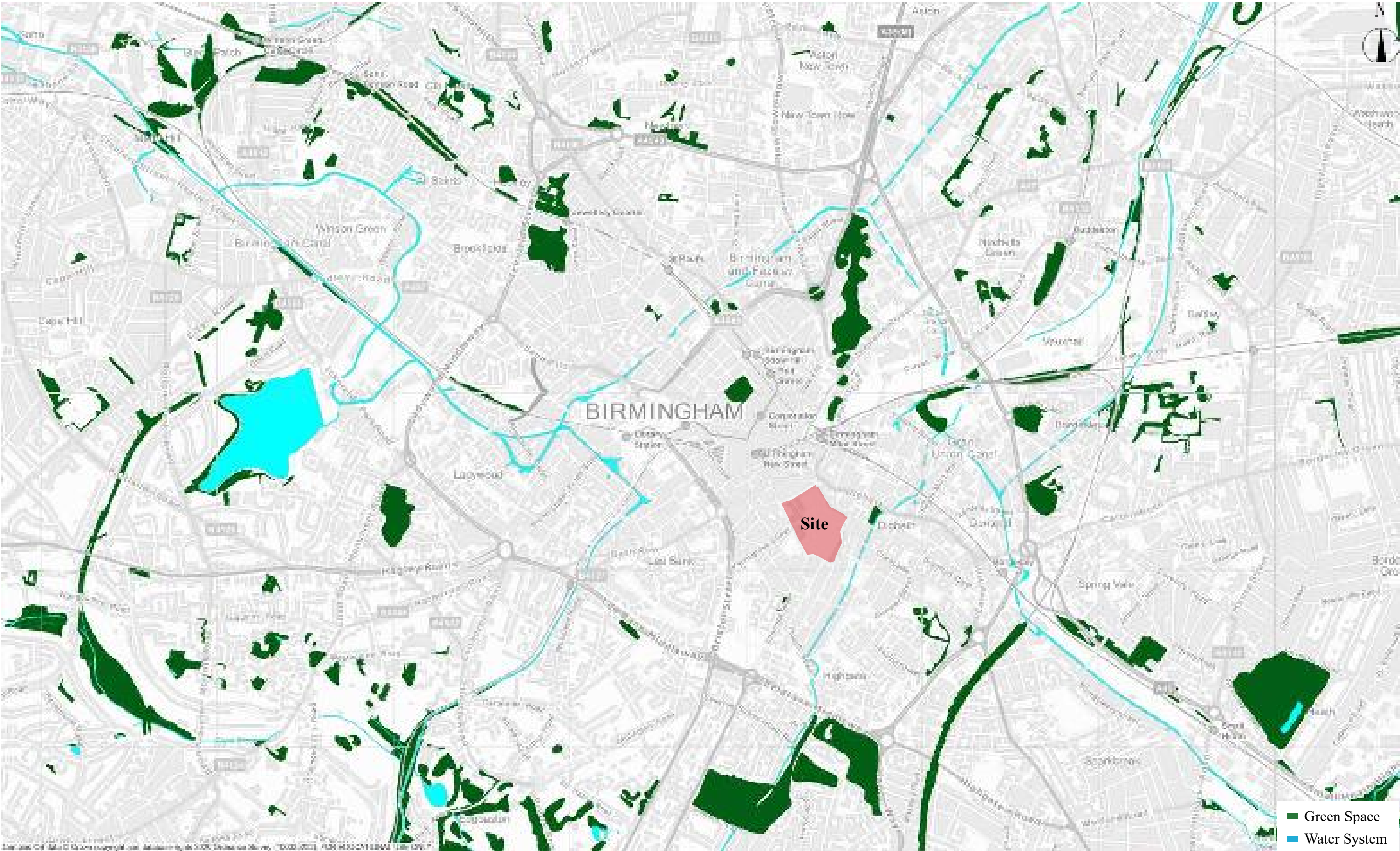
# City Analysis--Railway

Railways around the site is developed, with two railway stations and multiple rapid transit stations on the north side.



# City Analysis--Green Space & Water System

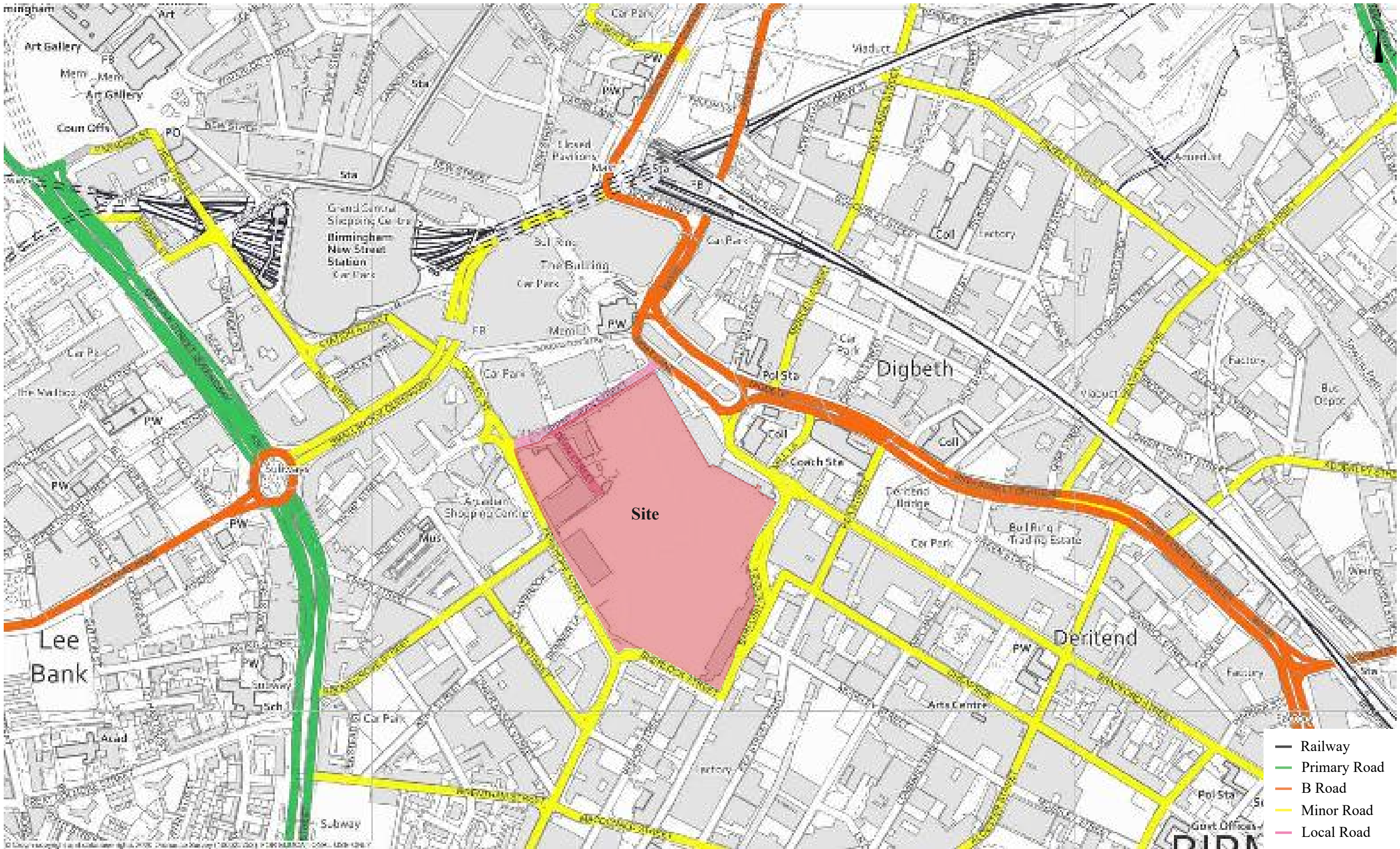
A canal on the east of the site while no lake nearby. And there is no green space around.





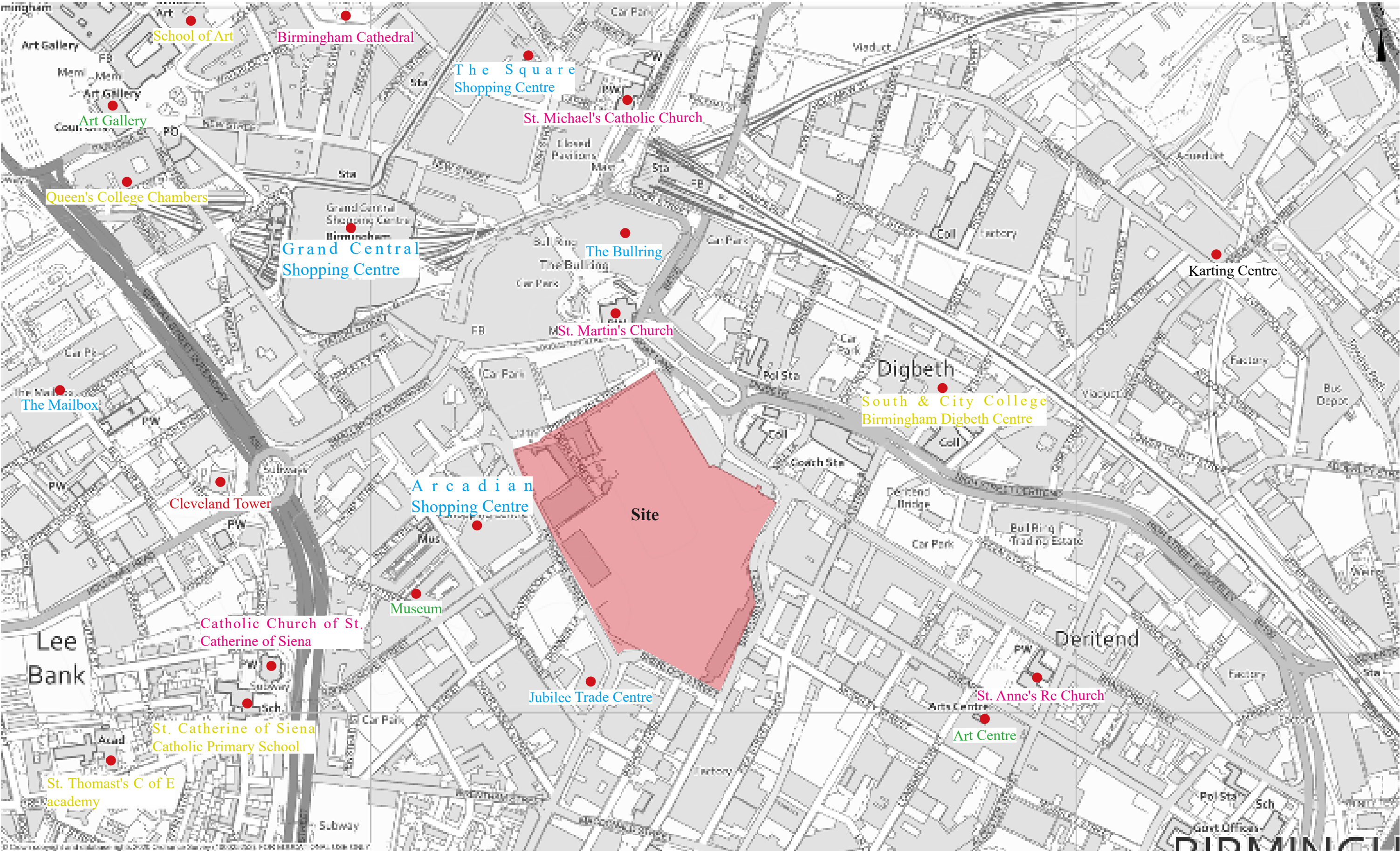
# Site Analysis--Road & Railway

Transportation of the site is convenient. Birmingham New Street Station, largest and oldest railway station in Birmingham, on the north side. The east, south and west side of the site have minor roads links while the north side has local roads links.



# Site Analysis--Landmarks

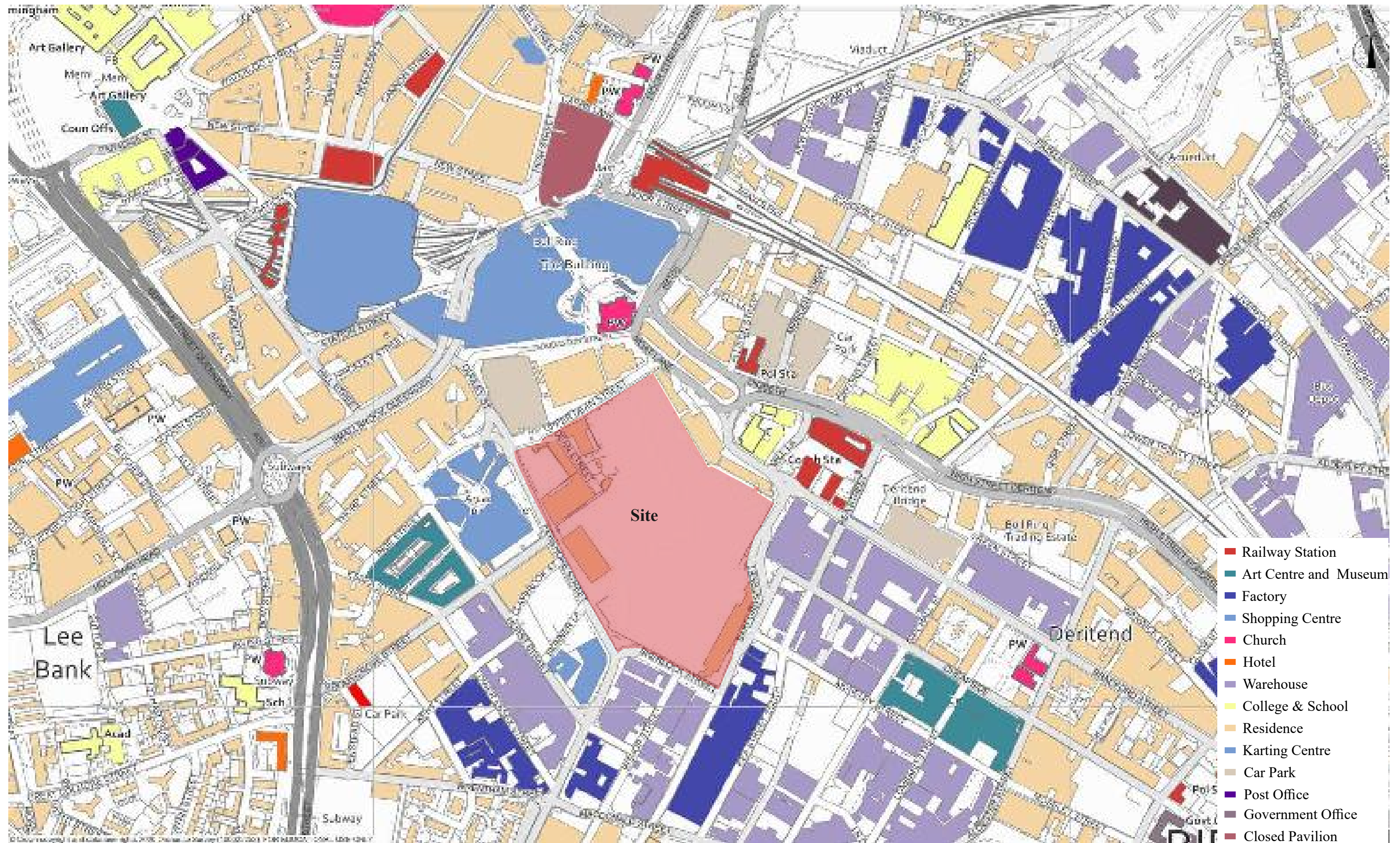
Located in the center of the city, there are many famous city attractions and shopping malls, such as St Martin Church, The Bullring,Grand Central Shopping Centre, Museum.





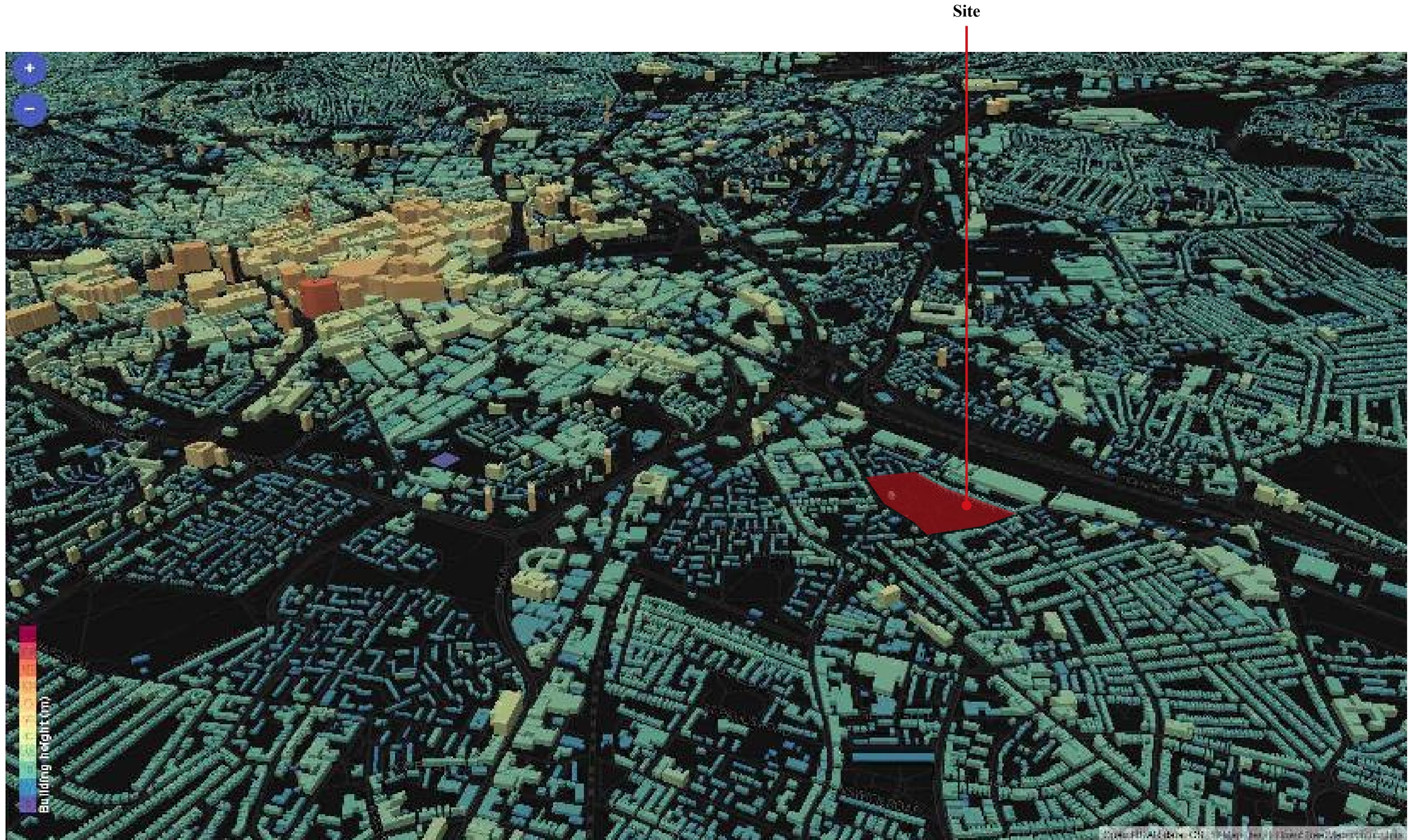
# Site Analysis--Architecture

The majority of surrounding architecture are factories and warehouses, with several large shopping malls.



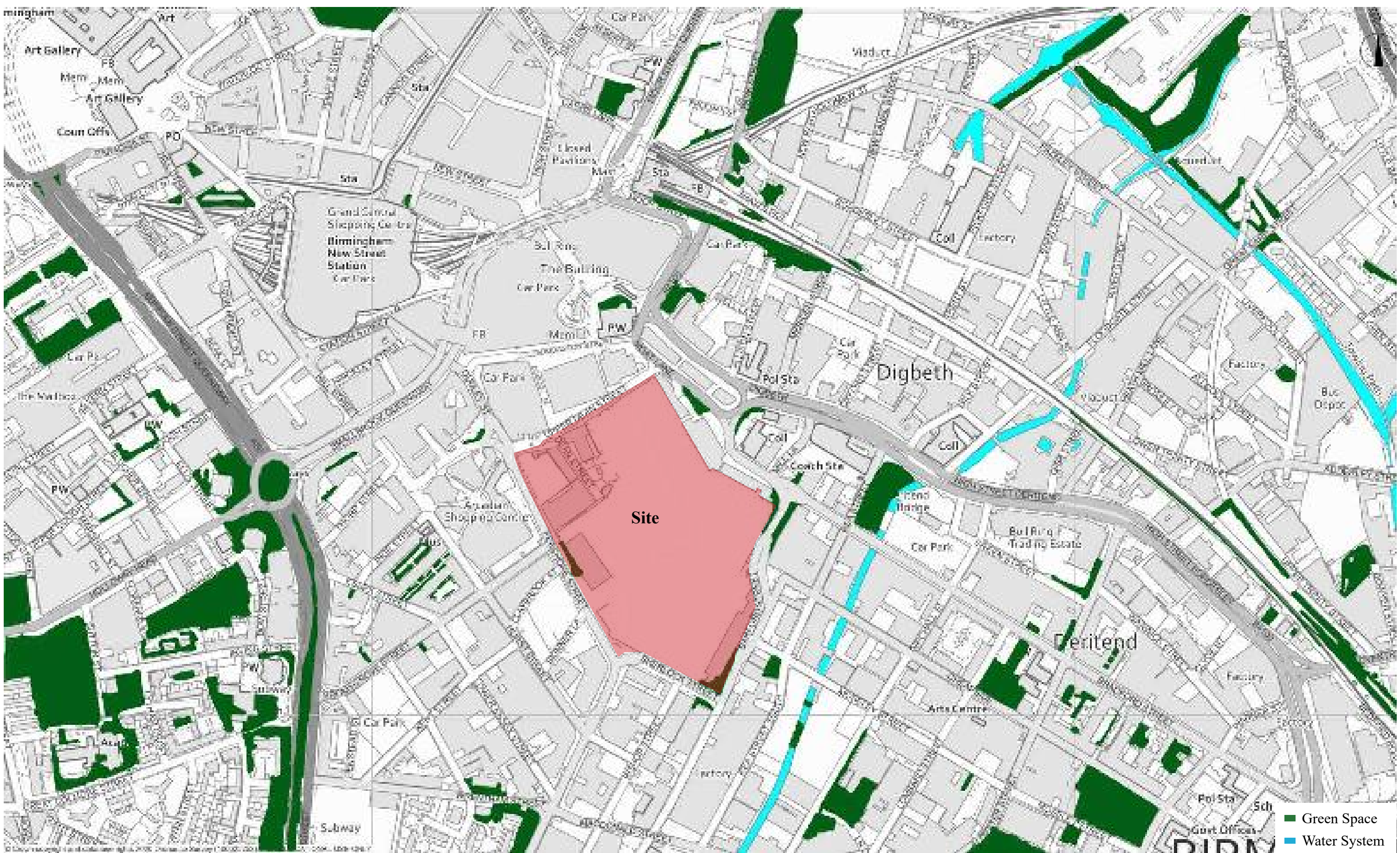
# Site Analysis--Building Heights

Low-rise buildings around the site, with basically 0-10m height.



# Site Analysis--Green Space & Water System

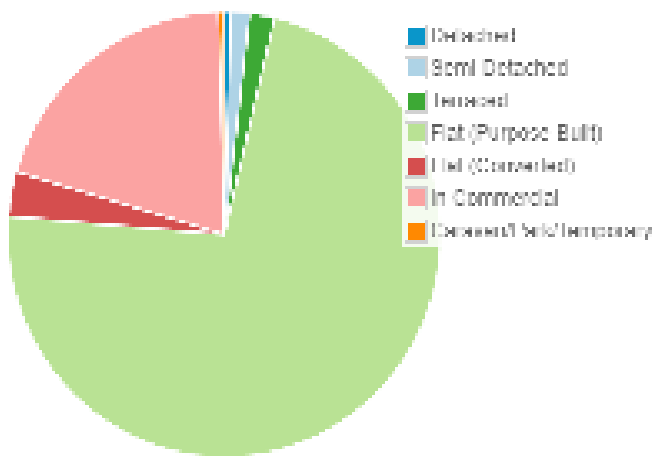
A canal on the east of the site while no lake nearby. And there is no large green space around and green space system planning.





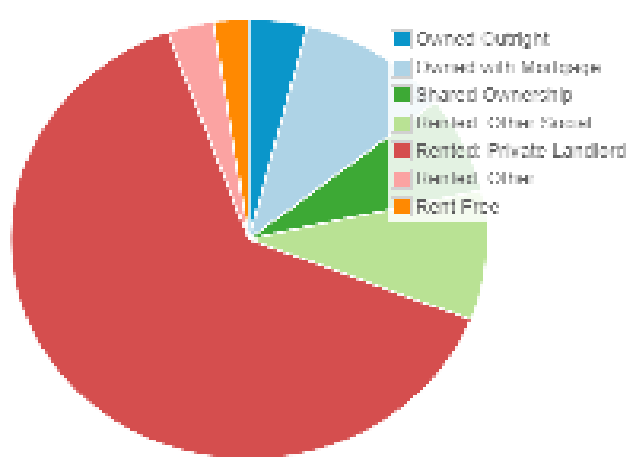
# Site Analysis--Society

## Housing



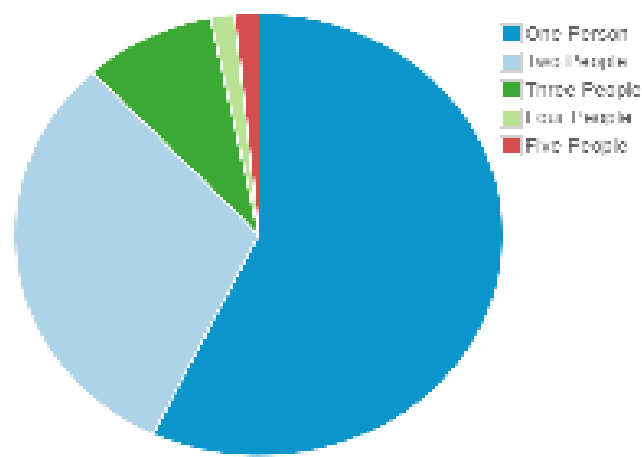
Housing types

Housing types: 156 flat (purpose-built)



Housing tenure

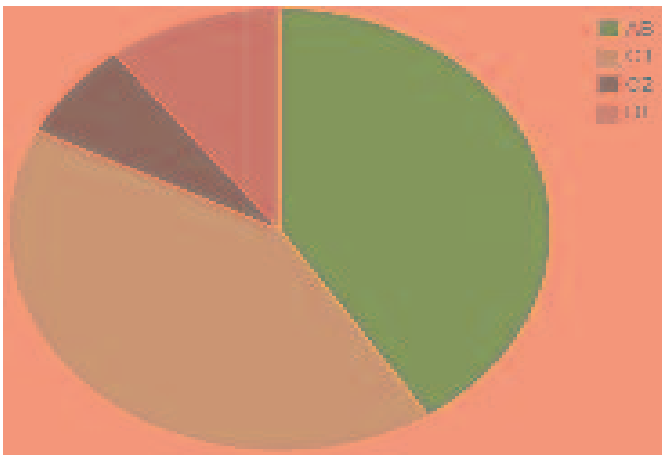
80% higher than average level (67%)



Housing occupancy

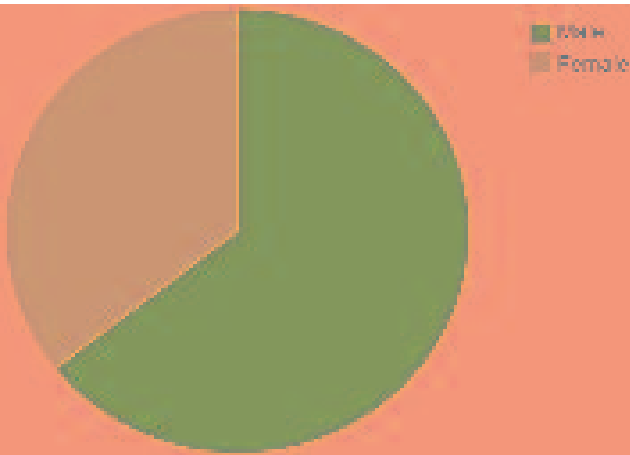
one person

## People



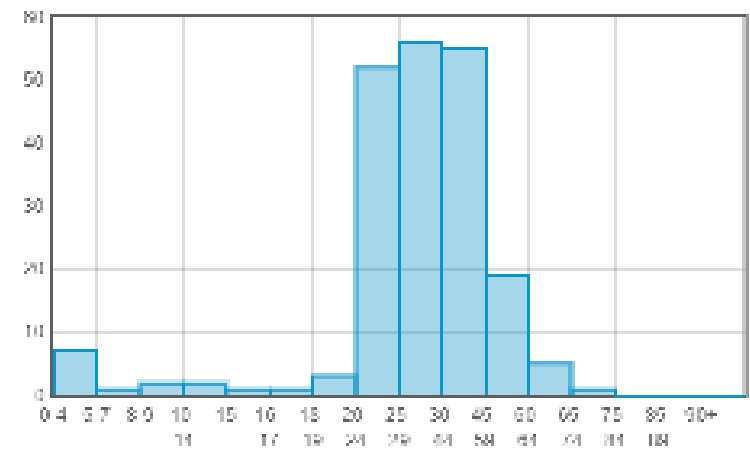
Social grade

A/B and intermediate managerial, administrative, or professional positions



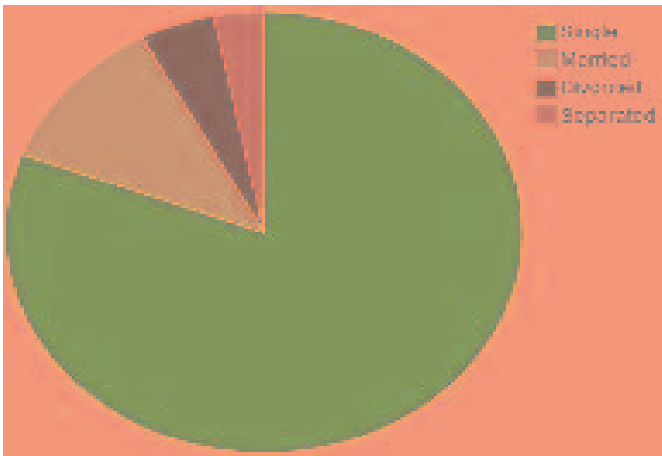
Gender

Male: 64% higher than UK average (49%); Female: 36% lower than UK average (51%)



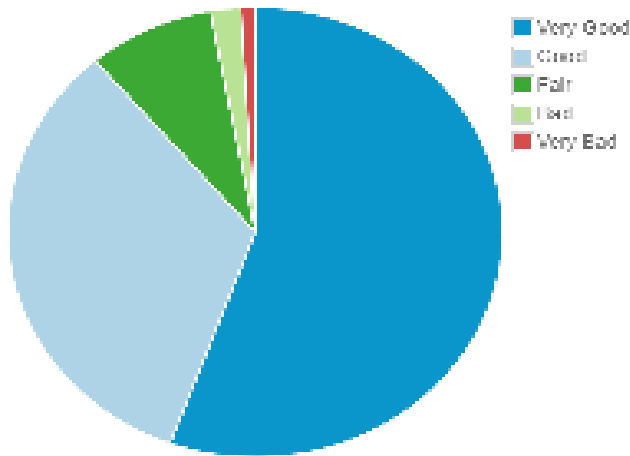
Age

majority is 18-30



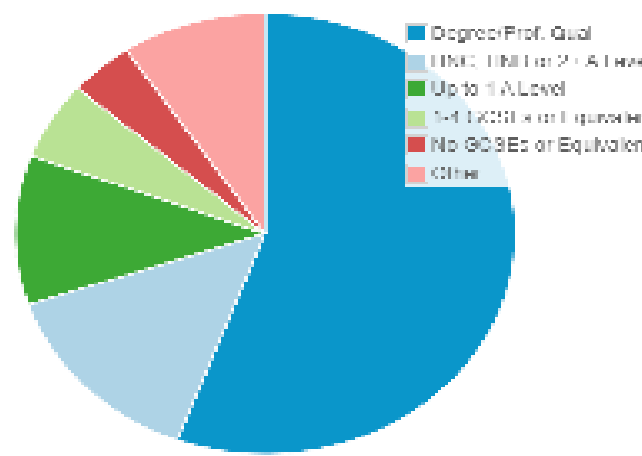
Relationship

76% single



Health

majority is very good & good

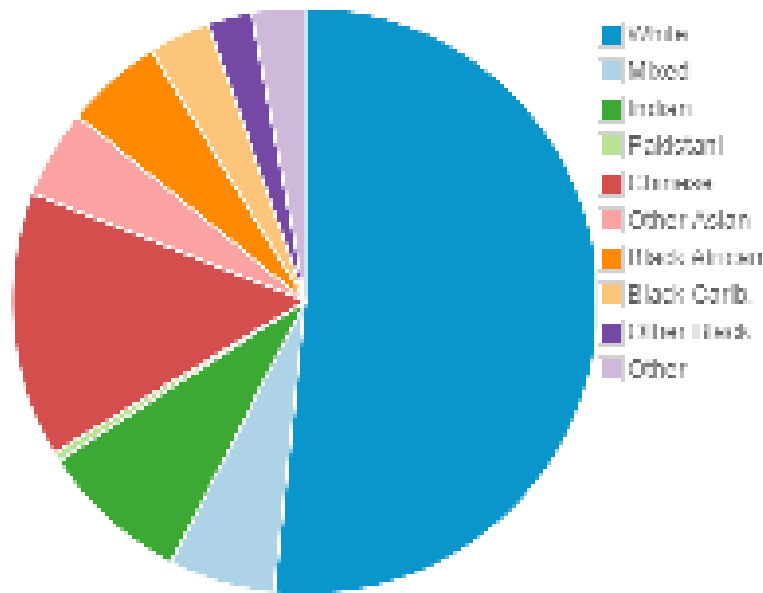


Education

56% degree educated or similar

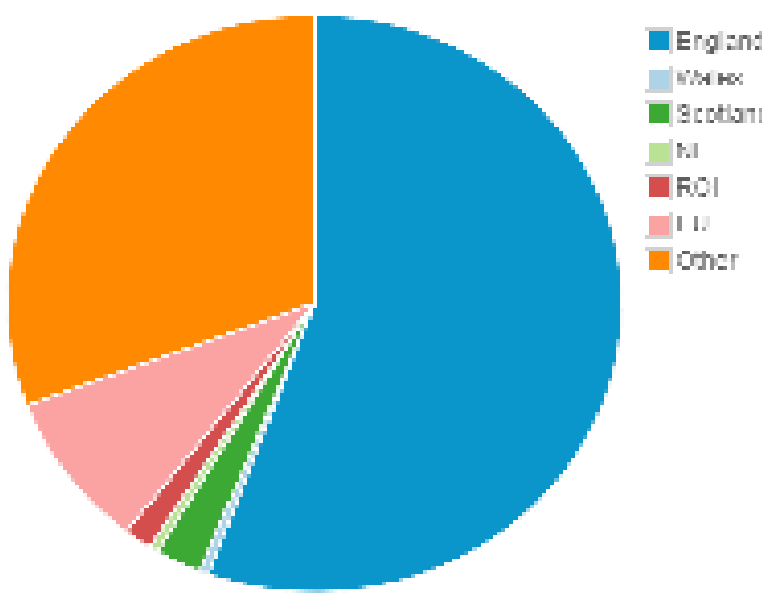
# Site Analysis--Society

## Culture



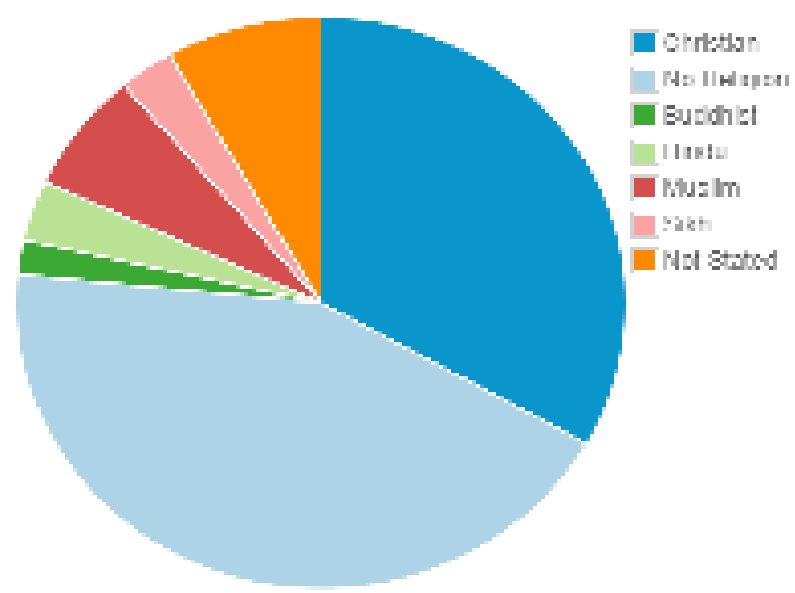
Ethnic group

More ethnically diverse than UK average (52% white)



Country of birth

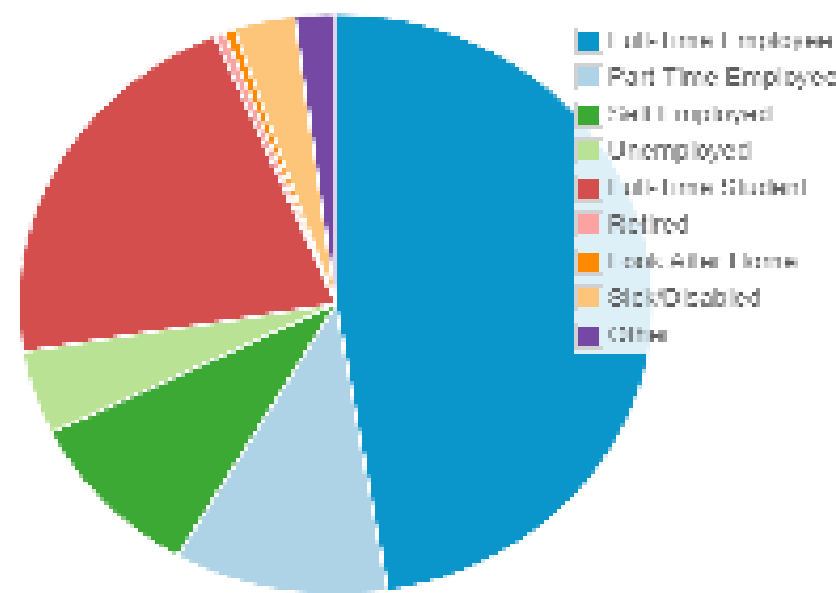
56% England lower than average (83.5% England) , top 2 is other ethnics



Religion

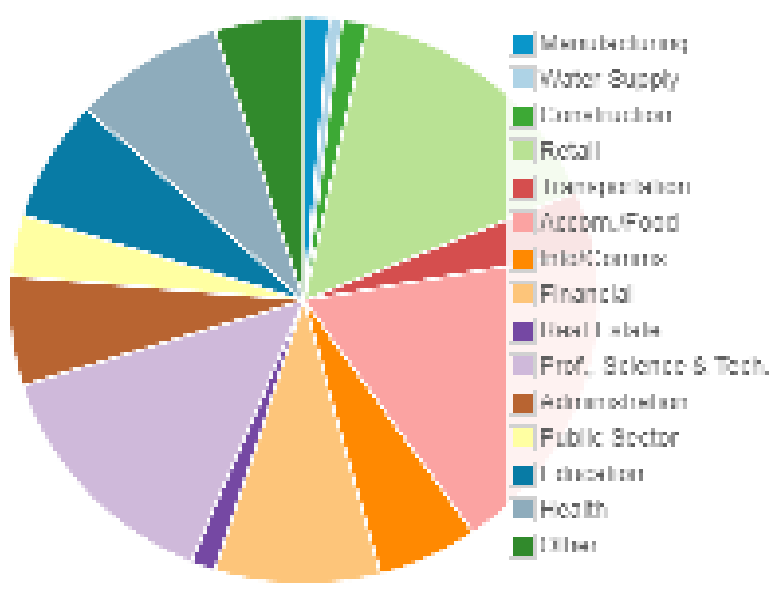
25% no religion, top 2 is Christian. Unlike England and Wales: Christian (59%)

## Employment



Employment

21% full-time student higher than average (9.2%); top 1 is full-time employee



Employment industry

top 1 is retail, accommodation and food, professional

## Conclusion

1. Most people rent a flat and living alone
2. Age: majority is 18-30 and single with degree educated, few children and the elders
3. Ethnically diverse and no religion, little England locals
4. Full-time students and employees most
5. The rate of crime is high

## Crime

Majority is Anti-social behavior and violence / sexual



## Site SWOT

### Strength

1. Accessibility: numerous roads and railway stations around the site.
2. One of the biggest open spaces in urban Birmingham.
3. A river (River Rea) is on the east side of the site.

### Weakness

1. The majority of surrounding architecture are abandoned factories and warehouses, with 2 large shopping malls and 3 markets in the northwest. Therefore, site is occupied by factories industrialization and part of the commercial.
2. A green space on the east side of the site and none on the rest. Therefore, a serious lack of green space and no green space system planning in Birmingham.

### Opportunity

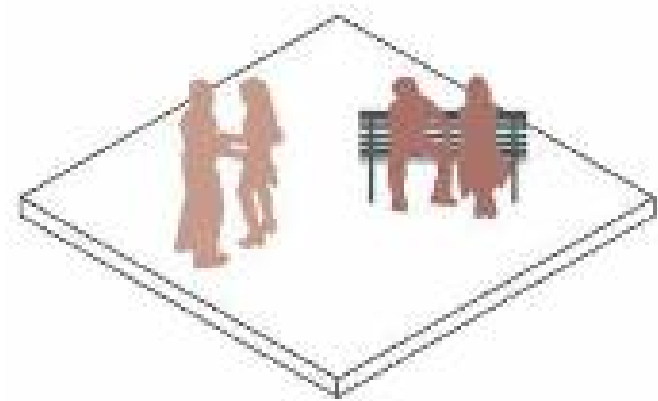
1. A large area of green space in urban industrial areas, therefore diverse functions should be considered.
2. Abandoned factories and warehouses can be regenerated.
3. Users: residents aged 18-30, with few children and the elderly.
4. A few British native and the other ethnics rent the house primarily.
5. Two large shopping malls and St. Martin's Church could overlook should be considered.

### Threat

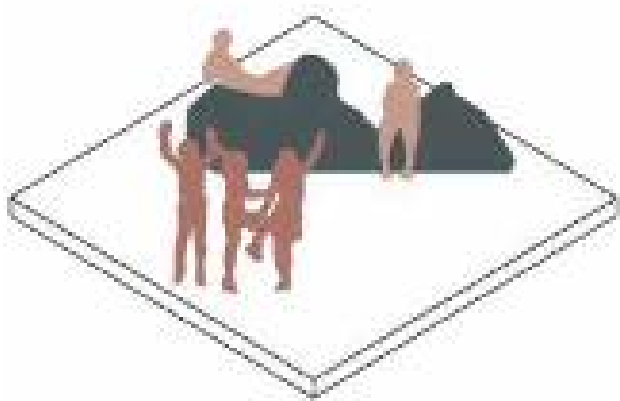
1. Factories with sewage gas bring adverse environmental effects.
2. Warehouses architectural style is so common.
3. A serious lack of green space in urban Birmingham.
4. The rate of crime is high among UK.

# Potential Activities & Spacial Demand of Users

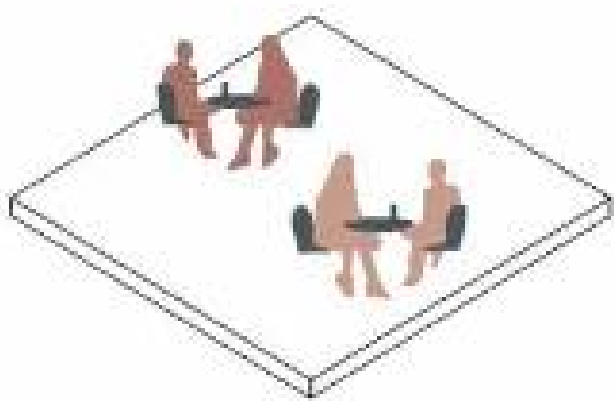
## Socializing



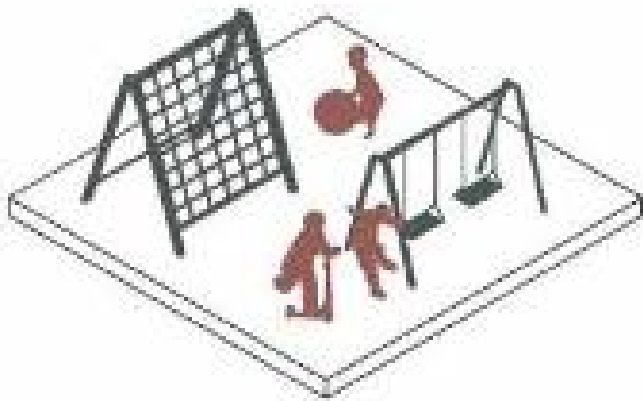
community communication



recreational facilities

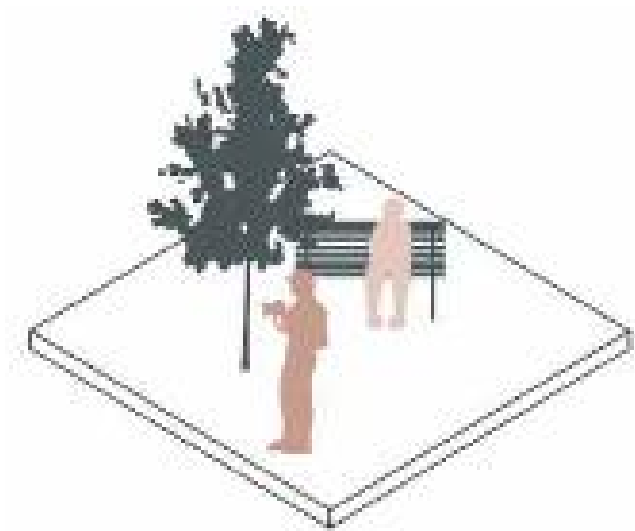


outdoor business & meeting

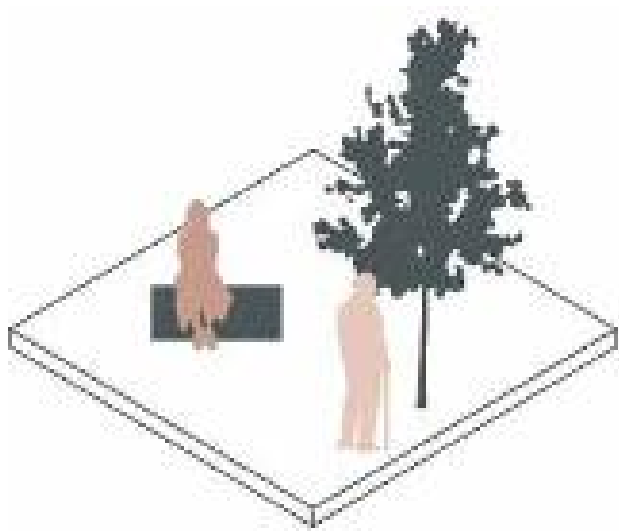


playground

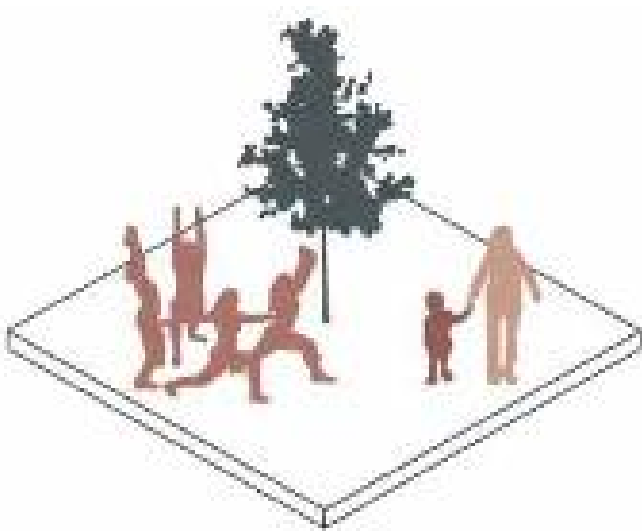
## Relaxing



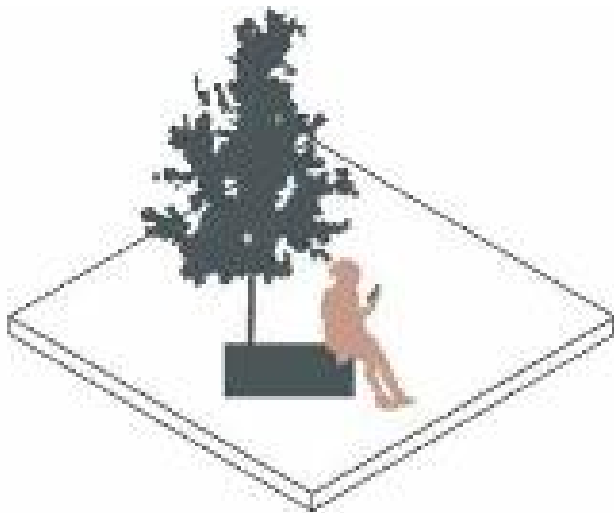
viewing & rest area



meditation

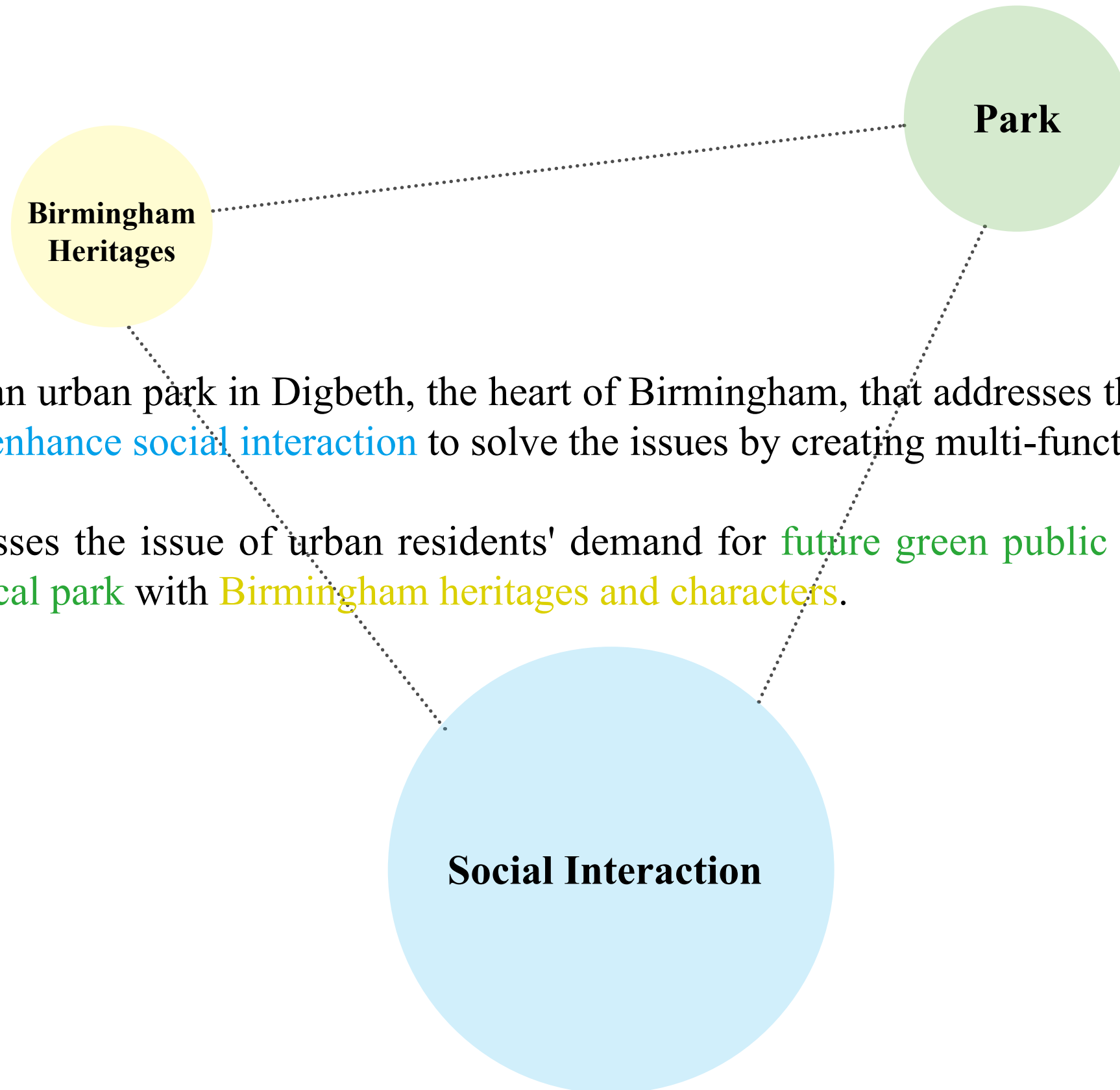


outdoor exercise circuit



outdoor reading & study

# Sociable Neighborhood



I am designing an urban park in Digbeth, the heart of Birmingham, that addresses the issue of **loneliness, depression** and **enhance social interaction** to solve the issues by creating multi-functional spaces.

This also addresses the issue of urban residents' demand for **future green public spaces**, by creating a **characteristic local park** with **Birmingham heritages and characters**.

# Principles

1

Enhance social interaction

2

Acknowledge indigenous Birmingham heritages and characters

3

As a stepping stone in Birmingham green space system

## Principles & Objectives

### Principle 1 Enhance social interaction

Spaces with different functions reduce stress and improve people's mood, helping to have a positive health impact. It also brings people together and promote social interaction and community development.

#### Objectives

- Different forms of seats adapt to different social distances.
- There are different ways to use the wall, you can sit, jump, as well as enjoy the frame view.
- The combination of high and low plants forms a natural barrier, which creates communication environments and spaces with different feelings.

#### Key Moves

- (1) Accessibility: increasing connectivity by entrances
- (2) Paths: new circulation
- (3) Multi-functional spaces



## Principles & Objectives

### Principle 2 Acknowledge indigenous Birmingham heritages and characters

The elements in the site awaken the historical memory of Birmingham, especially its industry development, and enhance the users' sense of local identity.

#### Objectives

- Red bricks are used for making walls and structures.
- Preservation of ethnic diversity and cultural communication

#### Key Moves

- (1) Post-industrial activities
- (2) Post-industrial art (eg. sculpture.....)
- (3) Ethnic diversity preservation and publicity

## Principles & Objectives

### Principle 3 As a stepping stone in Birmingham green space system

Located in a significant place in urban Birmingham, as a pocket of Green in Birmingham green space system, connects other small green spaces. It also uses visual and non-visual connection with nature.

#### Objectives

- Vision: Different colours of plants go together, mainly purple, white and pink, making people comfortable and healing.
- Smell+touch: The ornamental grass will be planted along the footpath. They are fragrant and easy to touch.
- Hearing+touch: A brook and several shallow ponds are setup where people can step in and listen to the waves of water.

#### Key Moves

- (1) Largest urban greenery
- (2) A brook and several shallow ponds in the site responses to River Rea
- (3) Local plants with different colours

## Artists Impression



# Case Study

## Playford Alive Town Park, Australia

Playford Alive Town Park is the centrepiece of one of Adelaide's largest urban and community renewal programs and includes some of the nation's most socio-economically disadvantaged and culturally diverse groups within its community. Designed by a team led by ASPECT Studios for Renewal SA, is a unique multifunctional space focussed on creating a diverse range of passive and active recreation opportunities that encourages healthy living and social inclusion.

The engagement and design was specifically crafted to involve and inspire the community so that the end result reflected community values, needs and aspirations and ultimately fosters community ownership.

The resulting park design is community inspired and on their request, centred on active play; playgrounds to suit various age groups; water play; a skate plaza; and a scooter and BMX triple bowl along with an amphitheatre for community performances and gathering spaces for families and larger groups.



# Case Study

## Gu'an Central Park, China

The park and gardens were created to attract the surrounding community's residents to an engaging and productive environment. The client wanted a modern park with fitness facilities, water feature, an educational and sustainability focus, and an aesthetic which contributed to the city's vibrance.

One of the design obstacles which the client outlined was a concealed underground carpark which limited construction and plantation above it. To resolve two issues at once, the designers placed the water feature here, resulting in a large reflecting pool which is a prominent feature at the west end of the park. The pool is now a popular destination for visitors in the warm summer months. It welcomes visitors for interactive play within the water as the edgeless shallow pool maintains a 3cm depth facilitating easy and safe play. Synchronized water columns as well as fog emitters add to the ambiance of the fountain plaza and create atmospherics in each season. The pool is designed so it can be quickly drained for the winter months or to open the plaza for large events. With a limited soil dept above the garage, the plaza and interactive reflecting pool was a conscientious design initiative that resulted in the most popular destination within the park.





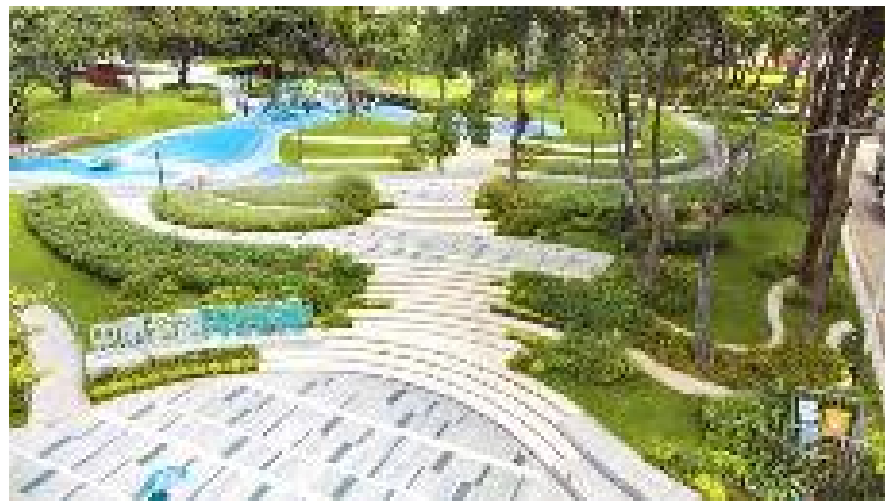
## Case Study

### Zhongkang Ideal Community Park, China

Meilin is the old district of Futian District in Shenzhen, The area around Zhongkang Park used to be zhongkang glass factory and Zhongkang living area, With the development of the city, the original glass factory has been upgraded to a prosperous commercial complex, but the surrounding area has still retained the simple residential areas.

Use plum blossom elements, planting and other design methods to show the unique plum culture of Merlin; Use glass blocks and other materials to continue the memory of Zhongkang glass factory. Rich activity space organization, strengthen community residents to participate in the park design interaction. Enhance the sense of belonging to the park.

The renewal and renovation of Zhongkang Park is a good illustration of how to find the most suitable regeneration mode for community parks under the background of urban renewal of major demolition and construction. Fundamentally solve the use function of community residents, reasonable use of the site positive factors, suitable for the integration of cultural deposits. In a real sense, the old park can be revitalized to create a link to the old community – the ideal park.



# Design Concept

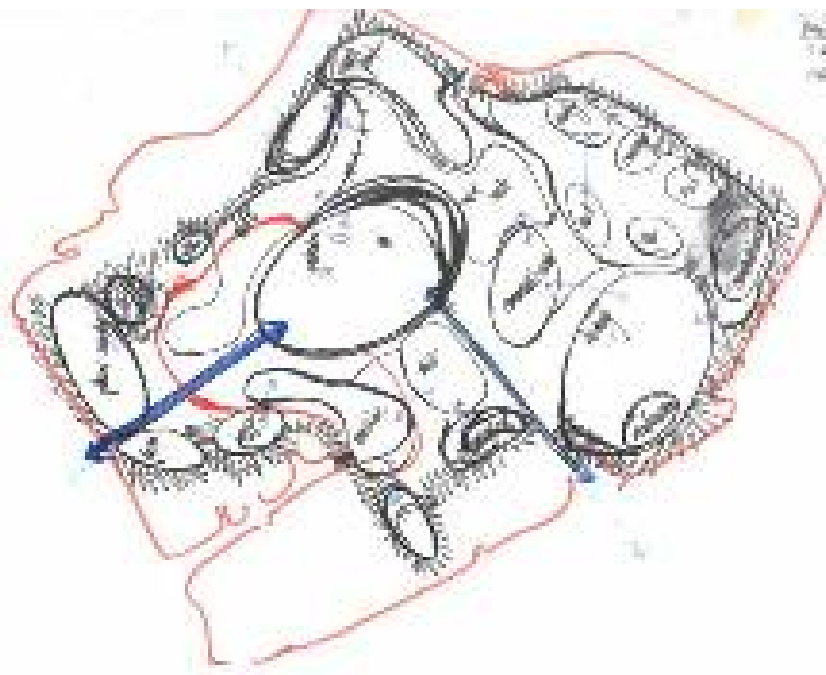
## Concept: Shape And Structure of aHive+Bees Activity

- Multi-ethnic people live and working in Birmingham, just like bees hard-working.  
Hives are living place for bees.
- The aim is to provide an attractive place for relaxation and social communicating activity for the local multi-ethnic population.
- Consider how each site can be closely linked by reference to the activity of bees.
- Consider intermingling and relaxing with people of multiple races.



# Design Process & Analysis

## Design Concept: Hive



Bubble Diagram



Draft Plan Version 1

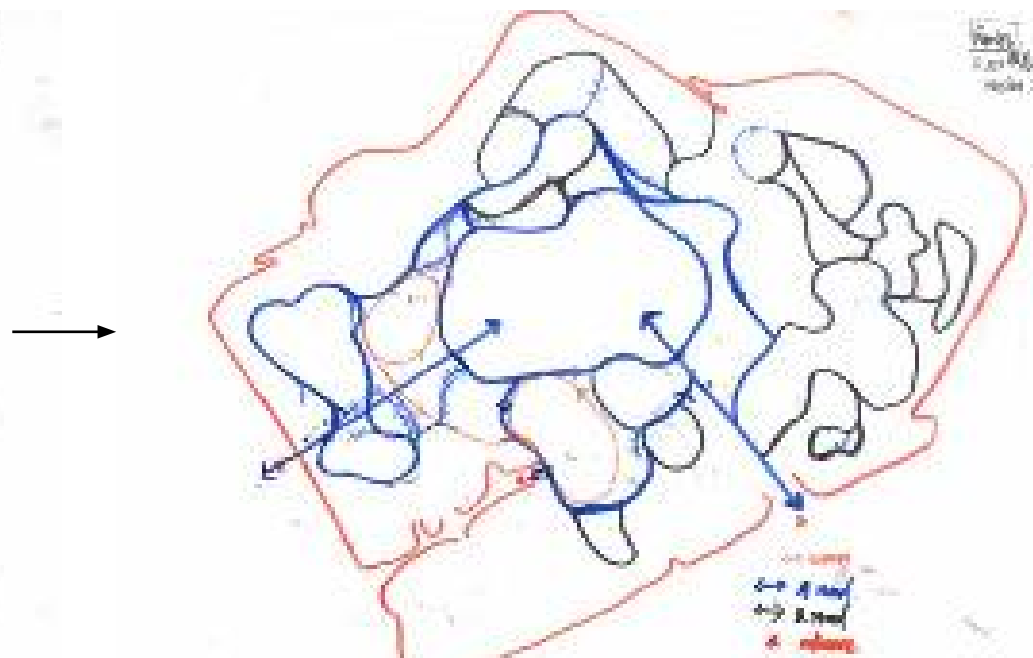


Draft Plan Version 2

## Design Analysis



Functional Zone



Traffic Analysis



View Analysis



Masterplan



1:1250 @A2



- |                             |                              |                            |
|-----------------------------|------------------------------|----------------------------|
| ▲ Main Entrance             | 12 Stage Steps               | 25 Morning Exercise Square |
| ▲ Secondary Entrance        | 13 Reading Square            | 26 Pavillion Square        |
| 1 A Road (3 m)              | 14 Outdoor Tables And Chairs | 27 Step Flower Pool        |
| 2 B Road (2 m)              | 15 Brook Square              | 28 Palm Square             |
| 3 Runway (1.5 m)            | 16 History Square            | 29 Skate Park              |
| 4 Pavillion                 | 17 Reflection Pool           | 30 Brook                   |
| 5 Main Entrance Square      | 18 Landscape History Wall    | 31 Seating                 |
| 6 Secondary Entrance Square | 19 Meditation Square         | 32 Planting Bed            |
| 7 Dry Fountain Square       | 20 Communication Square      | 33 Flowers                 |
| 8 Fountain Square           | 21 Children Playground       | 34 Groundcover             |
| 9 Pool                      | 22 Parking Lot               | 35 Meadows                 |
| 10 Performance Square       | 23 Farm Market               |                            |
| 11 Stage                    | 24 Planting Bed Square       |                            |



Functional Zone



- Main Entrance Square
- Secondary Entrance Square
- Central Gathering Square
- Farm Market
- Rest
- Exercise
- Parking Lot
- Children Playground
- Skate Park
- Communication
- Meditation
- Performance
- Brook Square



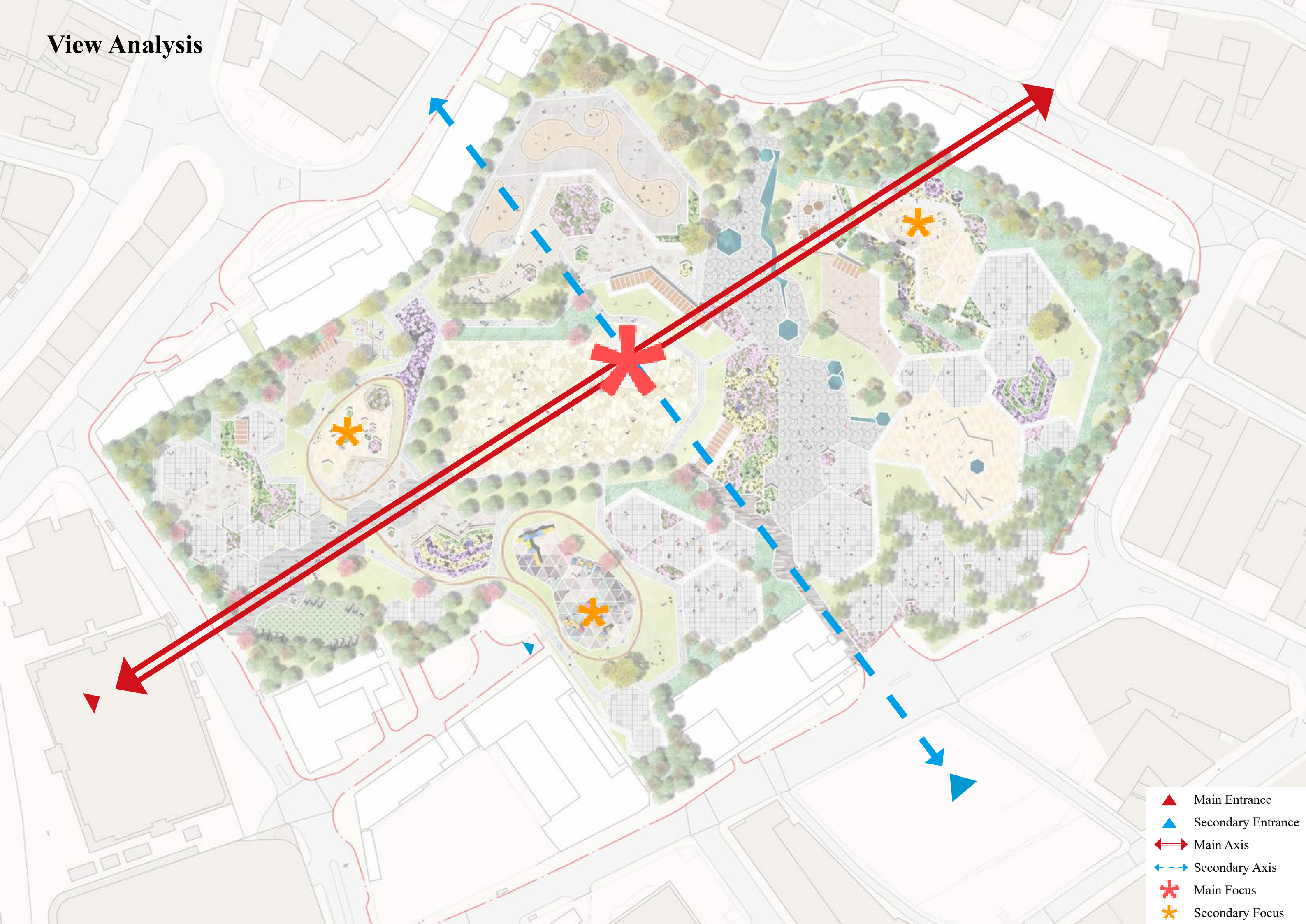
Traffic Analysis



- ▲ Main Entrance
- ▲ Secondary Entrance
- A Road (3 m)
- - - B Road (2 m)
- Runway (1.5 m)



View Analysis



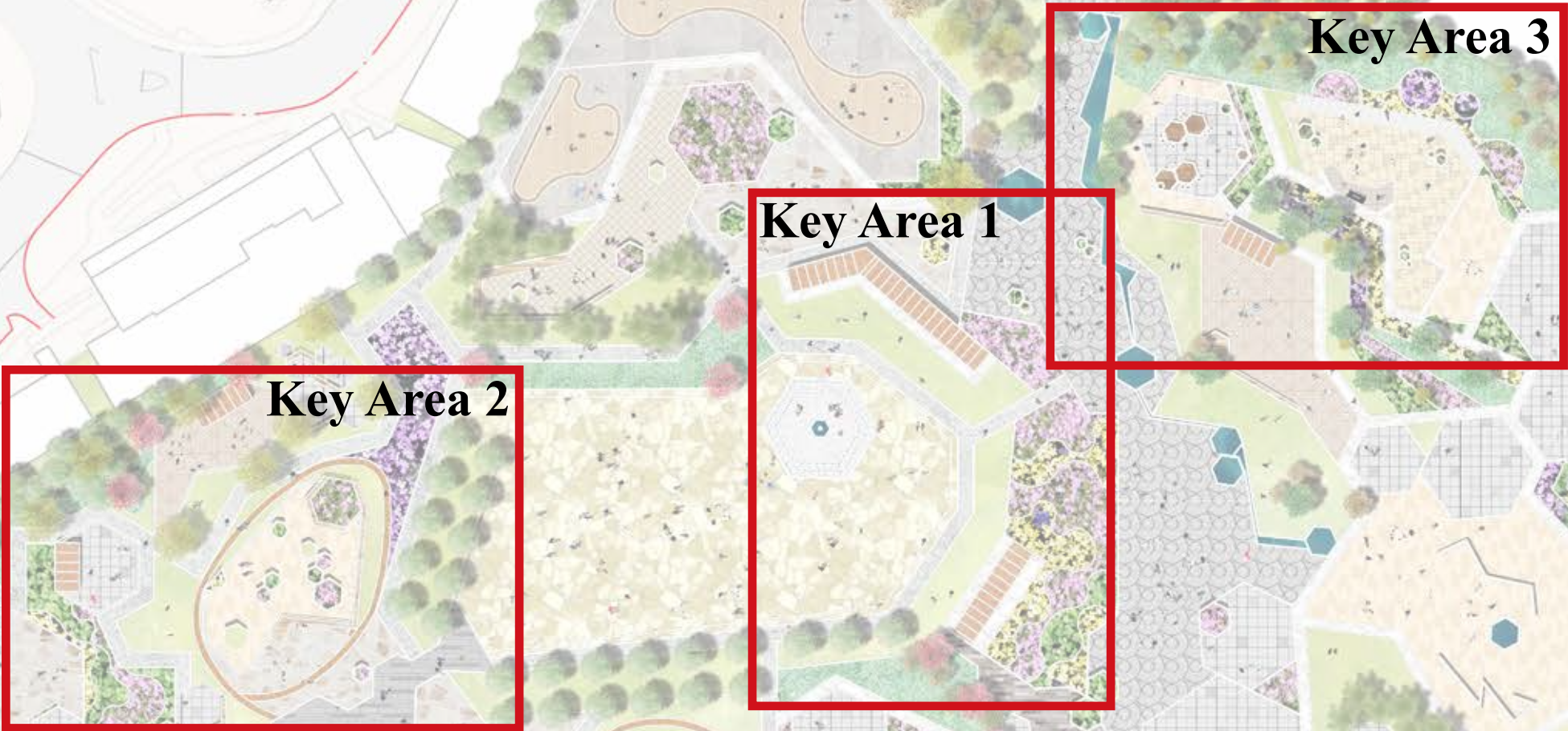
- ▲ Main Entrance
- ▲ Secondary Entrance
- ↔ Main Axis
- ↔ Secondary Axis
- ★ Main Focus
- ★ Secondary Focus



# From Masterplan To Key Areas



1:1250 @A2



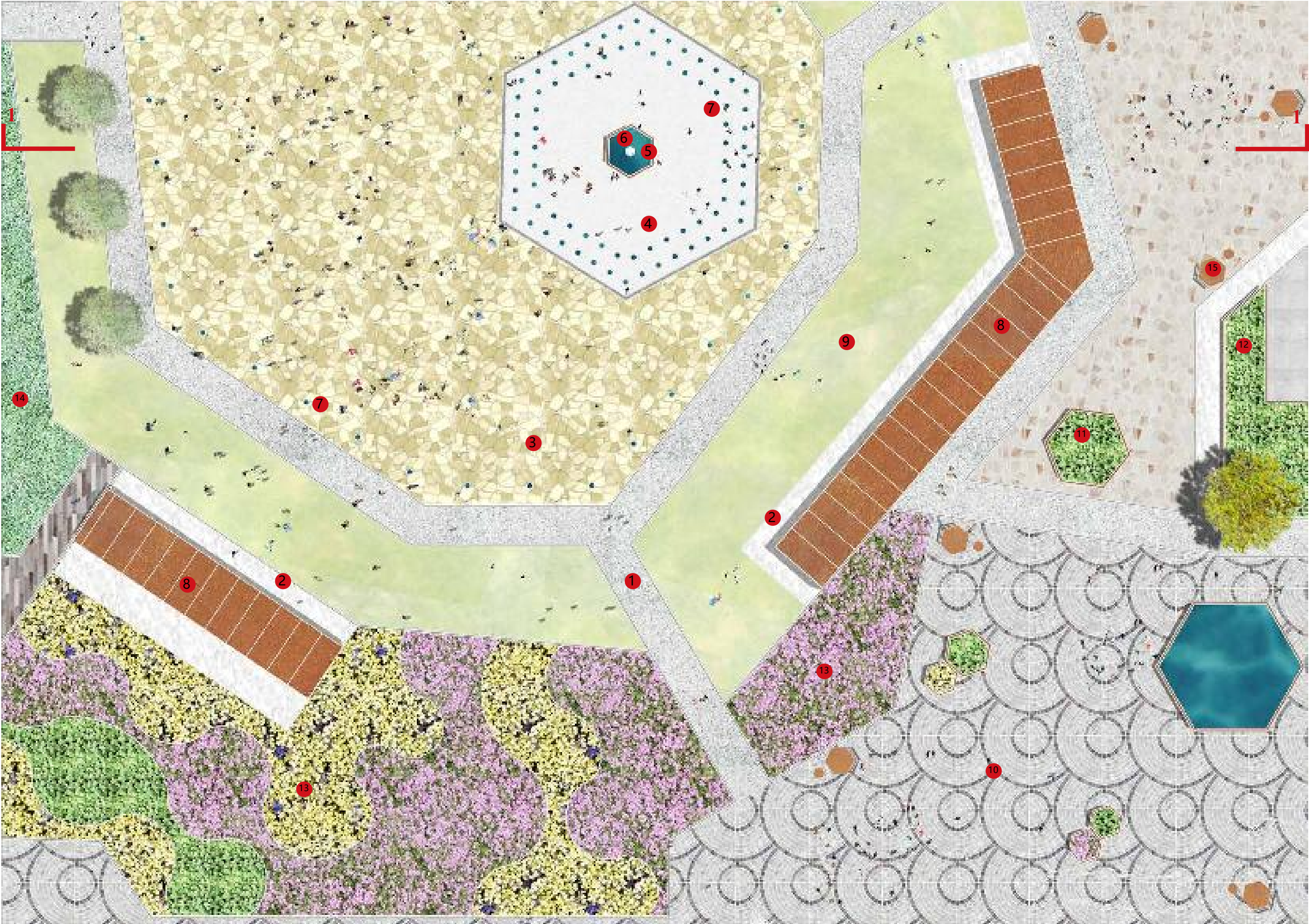


# Key Area 1--Dry Fountain Square Plan

This is the central location of the entire park, thus setting an boundless water feature, forming a large reflecting pool making it a prominent feature of the park. The pool is now a popular destination for visitors in the warm summer months.

It welcomes visitors for interactive play within the water as the edgeless shallow pool maintains a 3cm depth facilitating easy and safe play. Synchronized water columns as well as fog emitters add to the ambiance of the fountain plaza and create atmospherics in each season. The pool is designed so it can be quickly drained for the winter months or to open the plaza for large events, such as party parties, temporary shows. It can also be a venue for mobile shops.

Next to the square, viewing pavilions for rest and facing the center of the square, as well as stepped planting ponds with different height differences.



N  
1:250 @A3

- 1 A Road (3 m)
- 2 B Road (2 m)
- 3 Dry Fountain Square
- 4 Fountain Square
- 5 Pool
- 6 Theme Sculpture
- 7 Fountain
- 8 Pavillion
- 9 Meadows
- 10 Brook Square
- 11 Planting Bed
- 12 Hedges
- 13 Flowers
- 14 Groundcover
- 15 Desk & Chairs



# Key Area 1--Dry Fountain Square Section & Materials

Birmingham is an industrial city, so the selected materials all have an industrial atmosphere, especially the main material-brick red with porous rust steel plate not only for corridor brackets, but also for planting pools and seats, forming an integrated effect. The brick red and the simple and pure color pavement on the ground form a strong contrast in color, which highlights the site spirit of the project.

The edge of the pool is a silver stainless steel plate, echoing the highlights of the pool center and the whole site- -a large theme sculpture of stainless steel.



brick red rusty steel plate



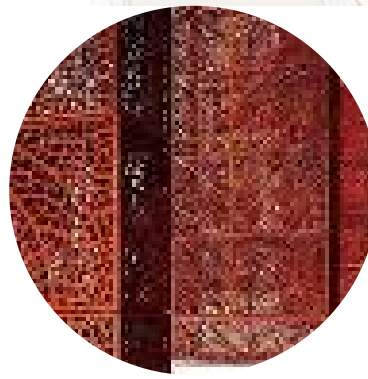
Ilex crenata



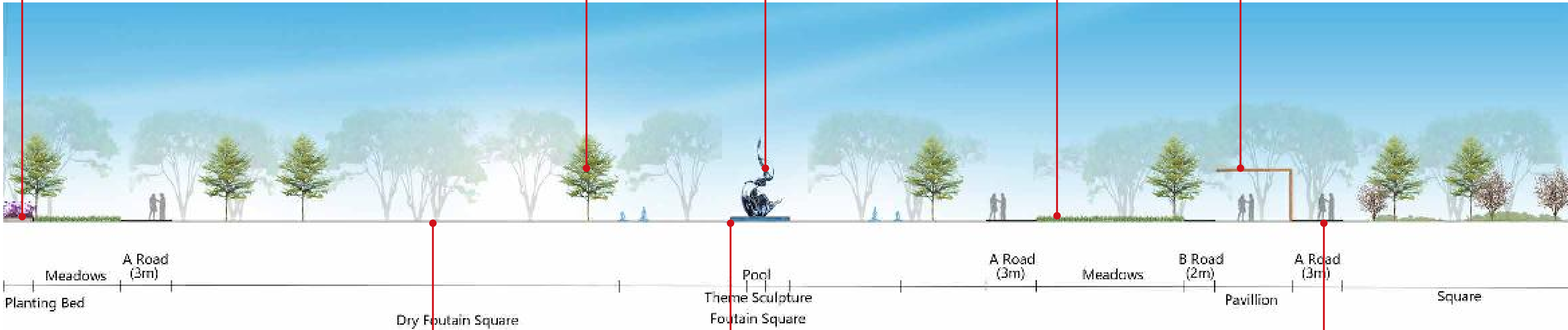
stainless steel sculpture



Zoysia matrella



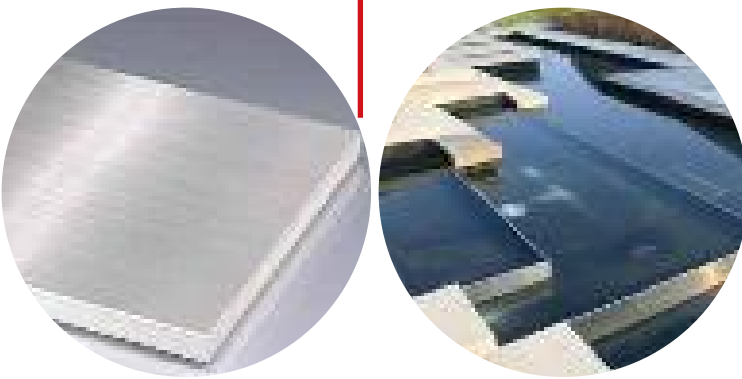
brick red rusty steel plate with holes



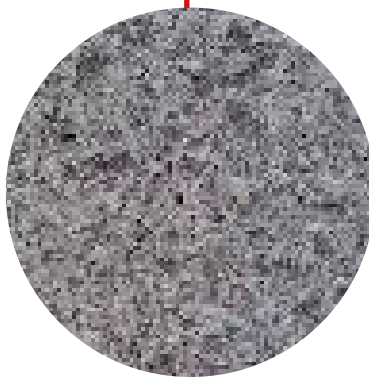
Dry Fountain Square Section 1:250@A3



colored concrete terrazzo mixture



silvery polished stainless steel plate



burnt sesame grey granite

## Key Area 1--Dry Fountain Square Perspective

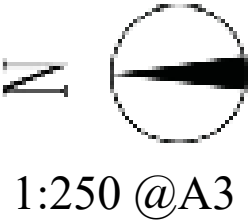




## Key Area 2--Runway Plan

Key area 2 is located on the left side of the entire design, with runways for easy exercise, fitness, squares of planting beds, pavilions for rest and small rest squares to view the plants of different seasons.

The planting bed square has various planting beds in the shape of the rich nest, and skillfully combined with the seats, the rich nest design concept has been concrete and rich reflected.



- 1 Secondary Entrance Square
- 2 A Road (3 m)
- 3 Runway (1.5 m)
- 4 Planting Bed Square
- 5 Morning Exercise Square
- 6 Pavillion Square
- 7 Step Flower Pool
- 8 Pavillion
- 9 Seating
- 10 Planting Bed
- 11 Flowers



# Key Area 2--Runway Section & Materials

Birmingham is an industrial city, so the selected materials all have an industrial atmosphere, especially the main material-brick red with porous rust steel plate not only for corridor brackets, but also for planting pools and seats, forming an integrated effect. The brick red and the simple and pure color pavement on the ground form a strong contrast in color, which highlights the site spirit of the project.

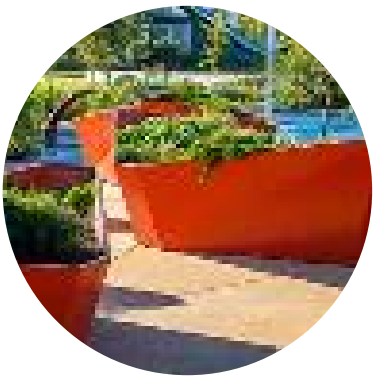
The runway uses colored plastic materials with red, echoing the theme color of brick red.



Ilex crenata



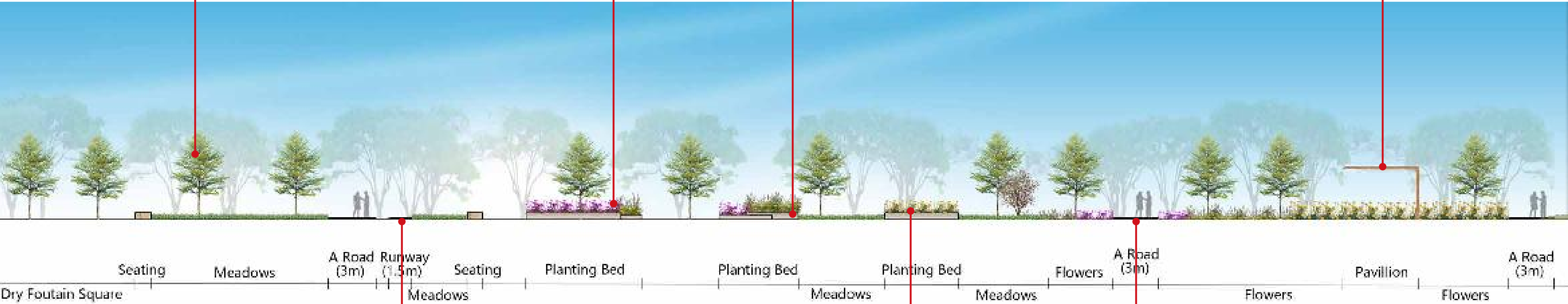
Liatris spicata



brick red rusty steel plate



brick red rusty steel plate with holes



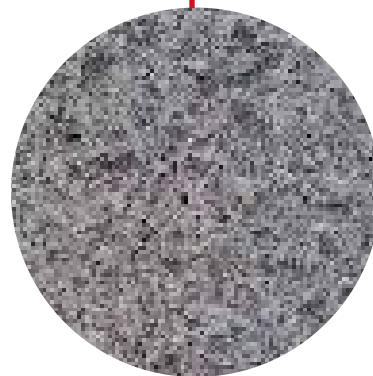
Runway Section 1:250 @A3



colored plastic



Tagetes erecta L



burnt sesame grey granite

## Key Area 2--Runway Perspective



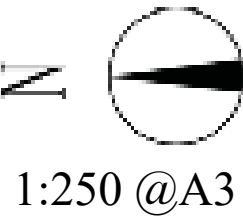
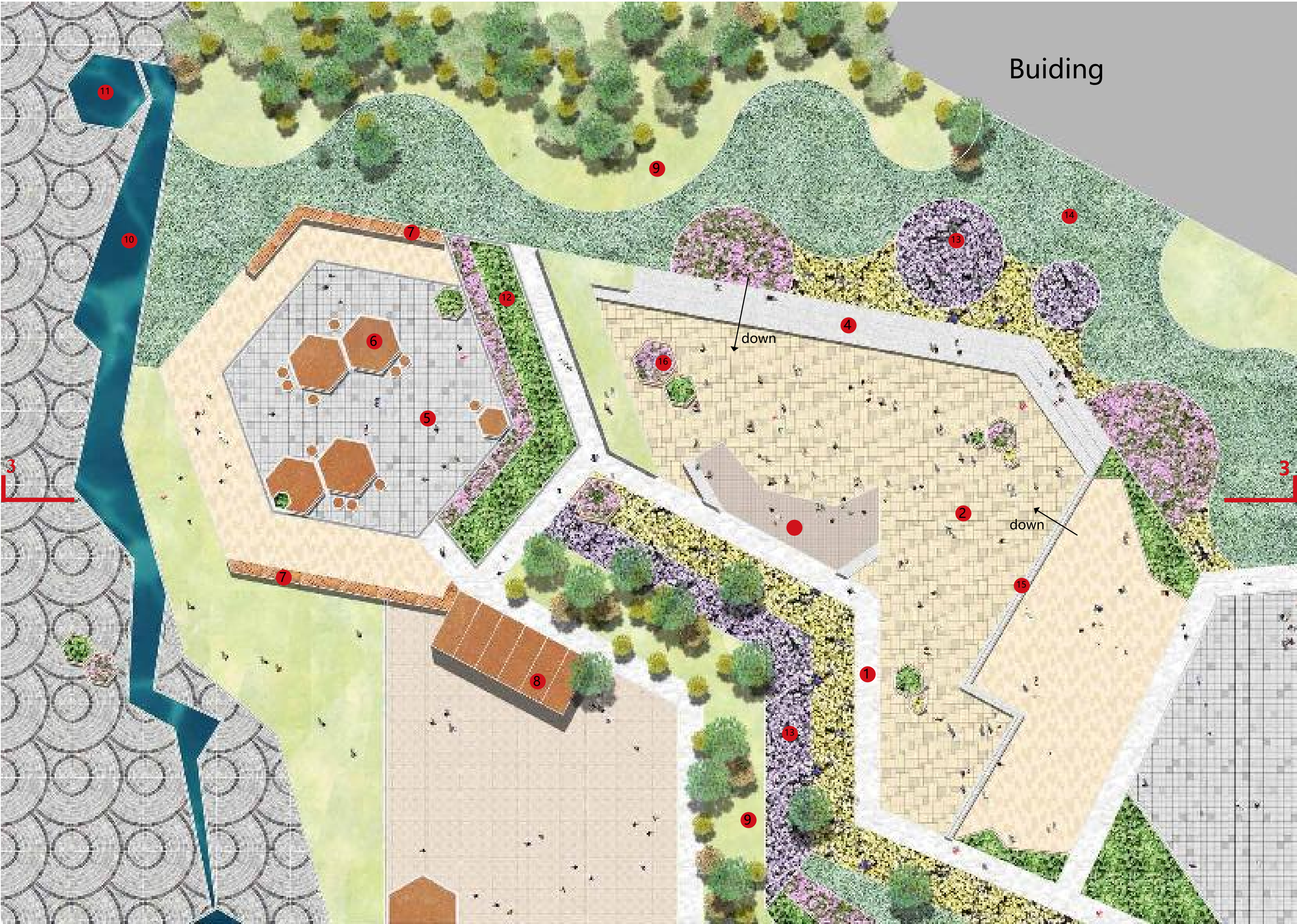


# Key Area 3--Brook & Performance Square Plan

Key Area 3 is located in the upper left corner of the entire design. The entire space is from Open → Closed → Half-open.

In the middle is a sunken performance square, with a stage and accessible centripetal stepped seats, and a number of small planting ponds. Connecting to the performance square is a small square with fine strip plant planting and two folded flower beds for it. On the south and north of the square are plants, which are encircled to form a closed space, and also to block the volume from the hexagonal reading square on the left.

Next to the square are viewing pavilions available for rest and facing characteristic streams. The characteristic stream simulates the old modern Birmingham Canal in the new landscape style, recalling historical memories of this city.



- 1 A Road (3 m)
- 2 Performance Square
- 3 Stage
- 4 Stage Steps
- 5 Reading Square
- 6 Outdoor Tables And Chairs
- 7 Seating
- 8 Pavillion
- 9 Meadows
- 10 Brook
- 11 Pool
- 12 Hedges
- 13 Flowers
- 14 Groundcover
- 15 Stairs
- 16 Planting Bed



# Key Area 3--Brook & Performance Square Section & Materials

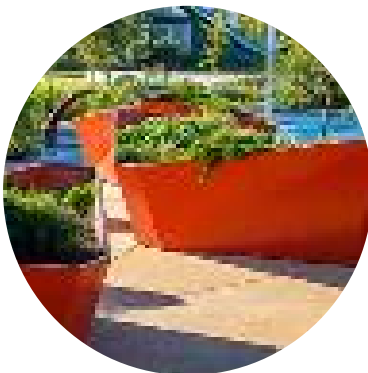
Birmingham is an industrial city, so the selected materials all have an industrial atmosphere, especially the main material-brick red with porous rust steel plate not only for corridor brackets, but also for planting pools and seats, forming an integrated effect. The brick red and the simple and pure color pavement on the ground form a strong contrast in color, which highlights the site spirit of the project.

The centripetal type stepped seat hopes to be pure, clean and flawless, in sharp contrast to the inlaid lawn, so the use of machine cut sesame white granite.

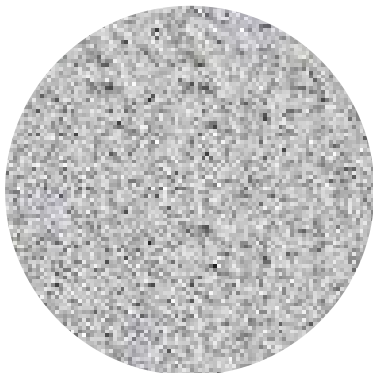
The edge of the characteristic stream uses white pebbles, forming a natural effect.



Ilex crenata



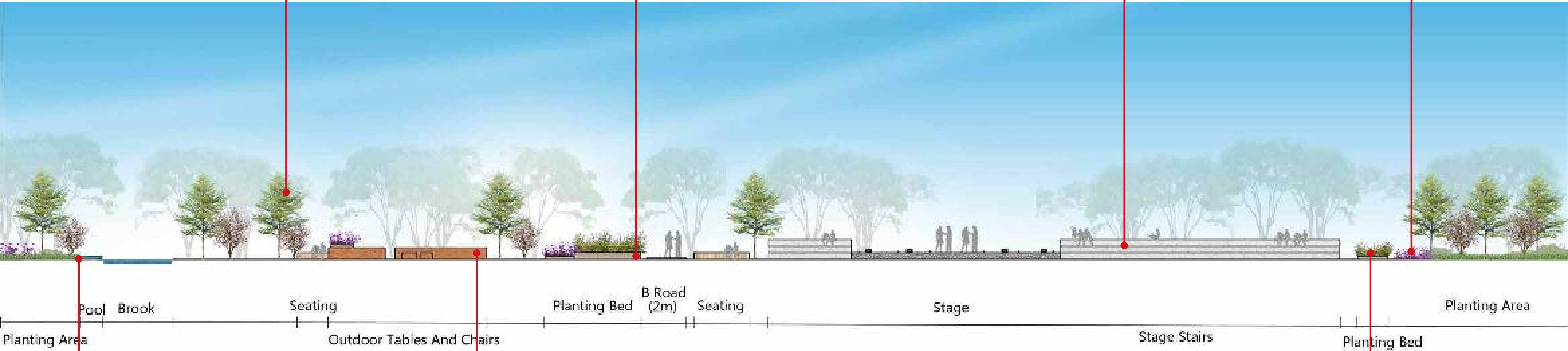
brick red rusty steel plate



cut by machine sesame white granite



Liatris spicata



Brook & Performance Square Section 1:250 @A3



white pebble stone φ50-80



brick red rusty steel plate with holes



Tagetes erecta L



## Key Area 3--Brook & Performance Square Perspective

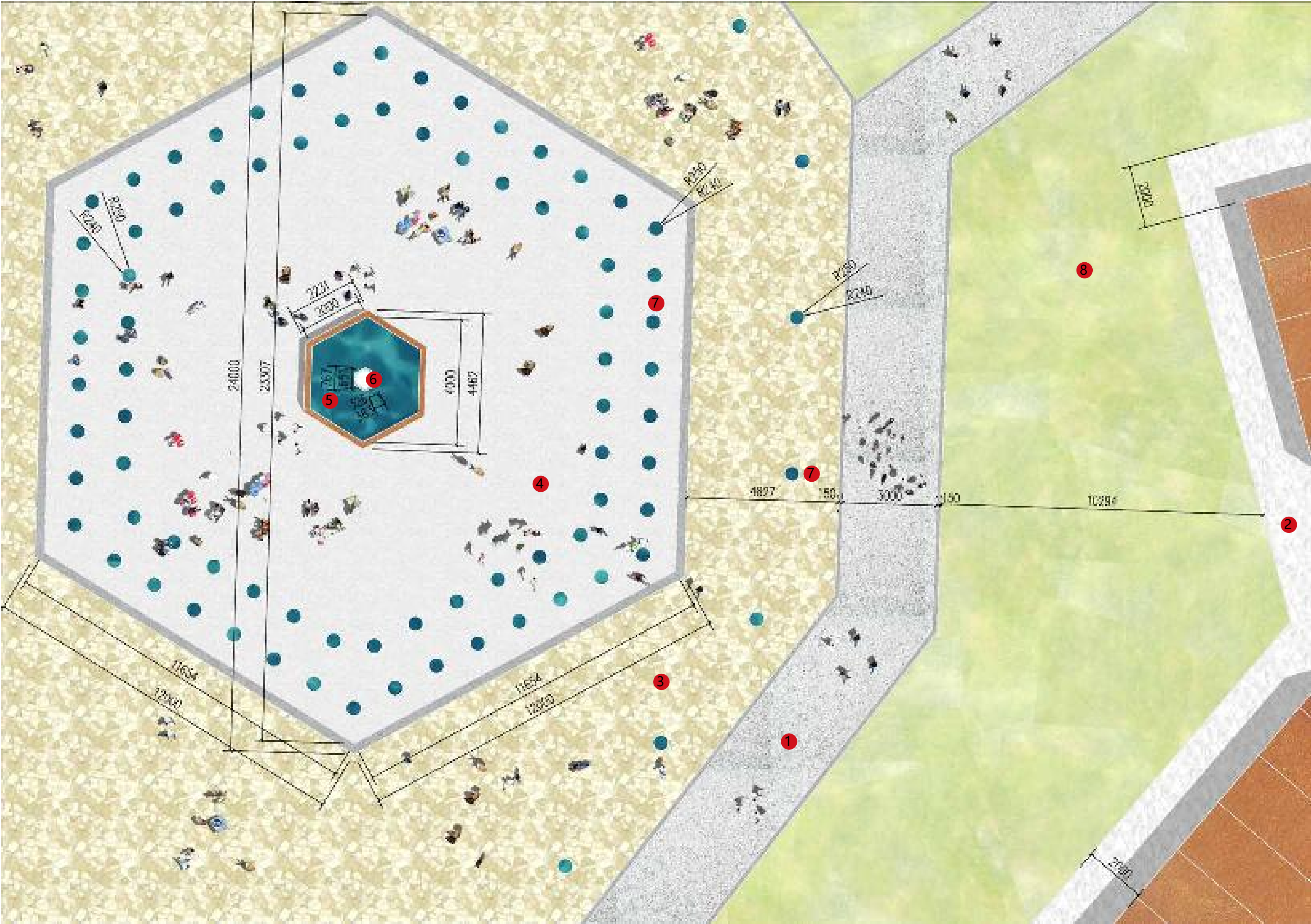
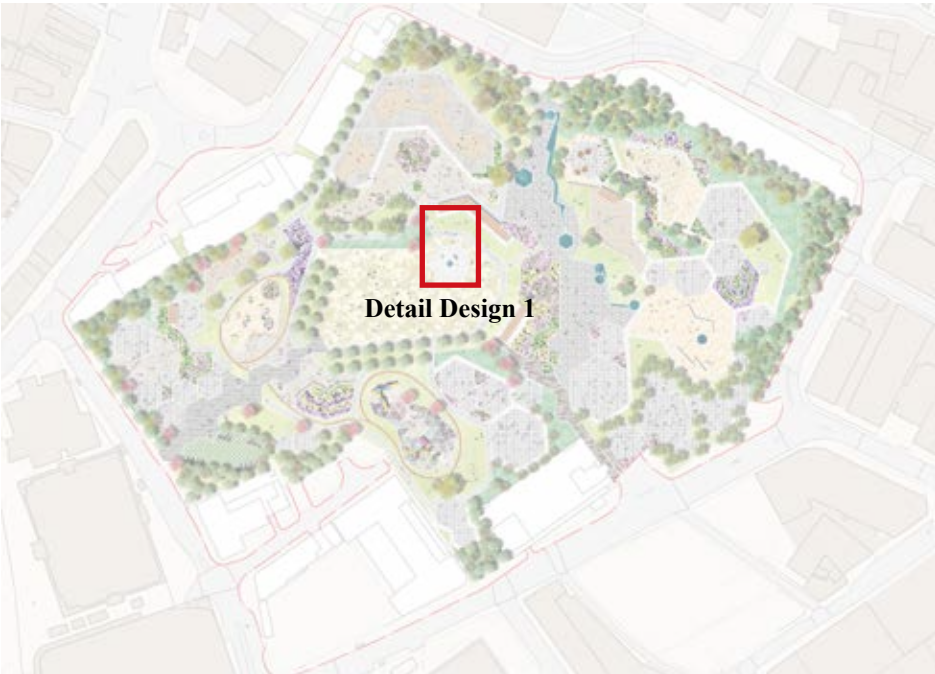
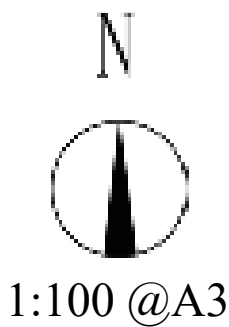


Detail Design 1--Fountain Square Detail Plan

This is the central location of the entire park, thus setting an boundless water feature, forming a large reflecting pool making it a prominent feature of the park. The pool is now a popular destination for visitors in the warm summer months. Because it is a dry spray, so the depth of the pool is not deep, only 3 centimeters deep, people can rest assured to play.

At the same time, the water column and water mist add to the atmosphere of the dry spray square, which can also create a different experience and feeling in each different season.

The edge stone adopts the inclined surface treatment, can run freely, do not worry will slip.



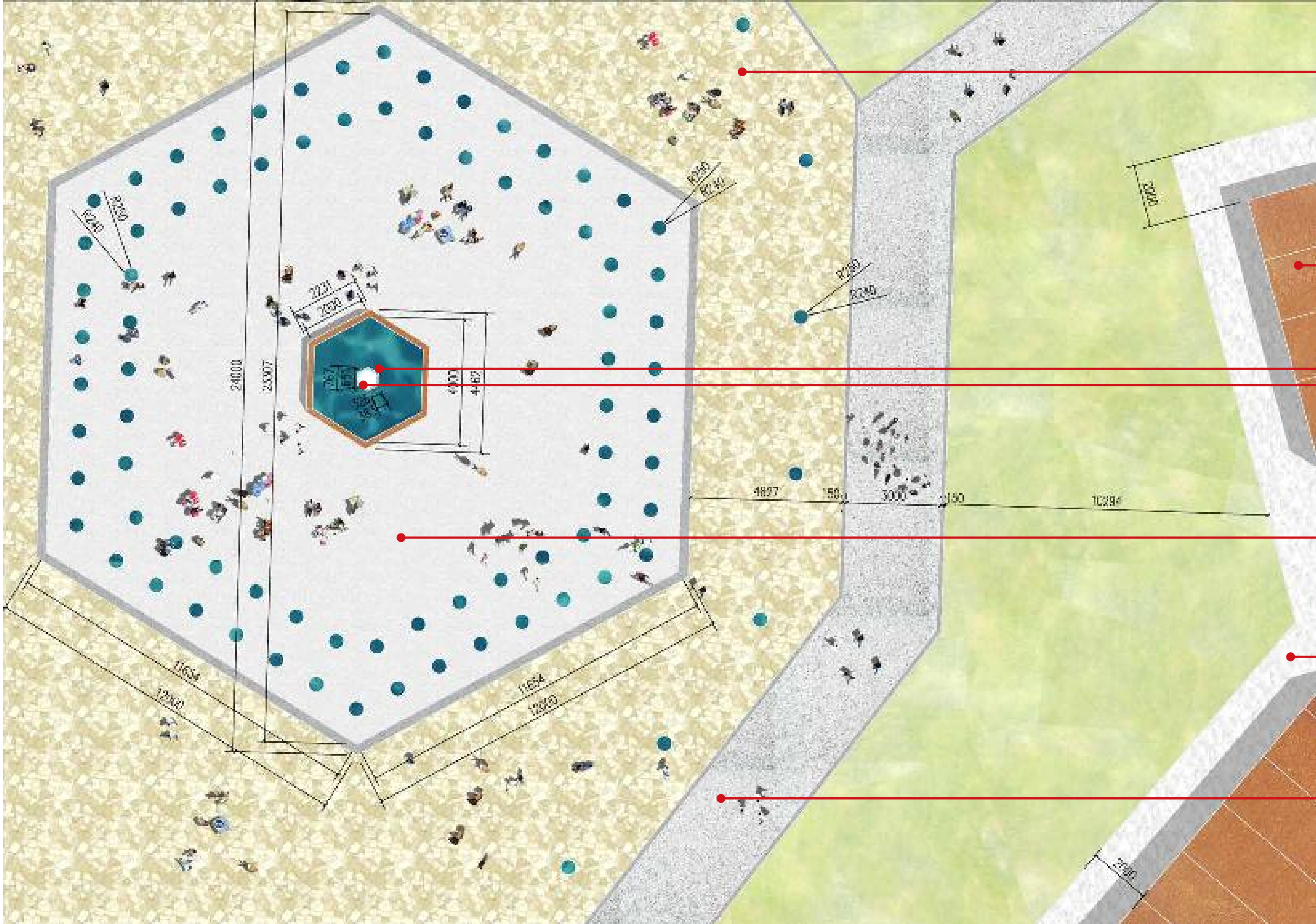
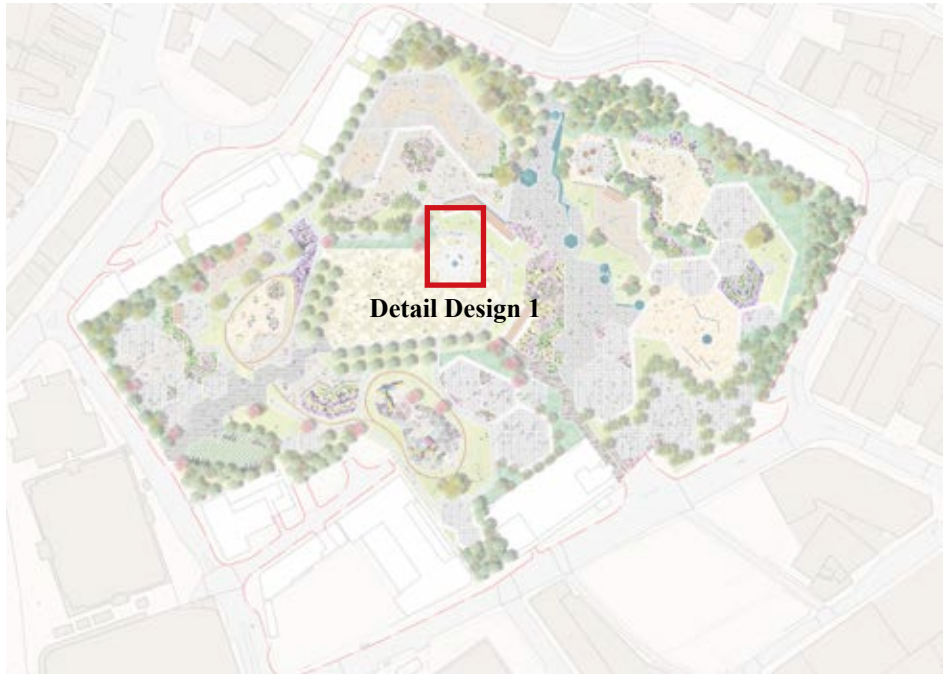
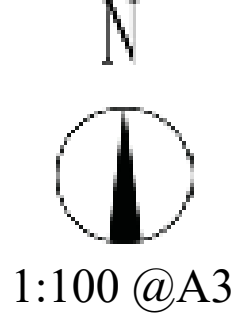
- 1 A Road (3 m)
- 2 B Road (2 m)
- 3 Dry Fountain Square
- 4 Fountain Square
- 5 Pool
- 6 Theme Sculpture
- 7 Fountain
- 8 Meadows



## Detail Design 1--Fountain Square Materials

Birmingham is an industrial city, so the selected materials all have an industrial atmosphere, especially the main material-brick red with porous rust steel plate not only for corridor brackets, but also for planting pools and seats, forming an integrated effect. The brick red and the simple and pure color pavement on the ground form a strong contrast in color, which highlights the site spirit of the project.

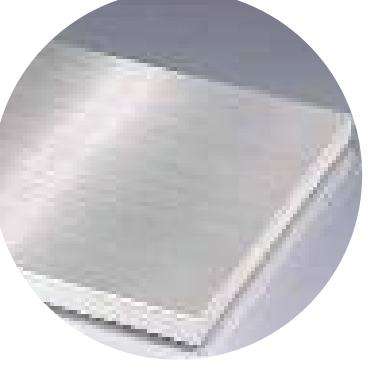
The edge of the pool is a silver stainless steel plate, echoing the highlights of the pool center and the whole site- -a large theme sculpture of stainless steel.



fragmentary granite



brick red rusty steel plate with holes



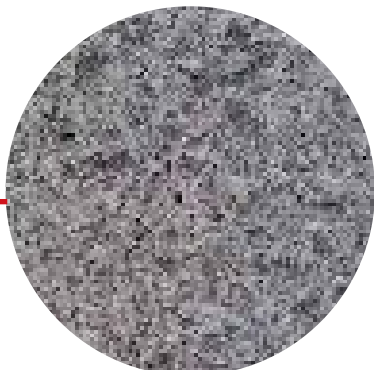
silvery polished  
stainless steel plate



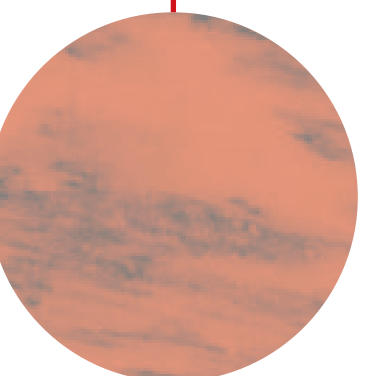
colored concrete terrazzo mixture



stainless steel sculpture



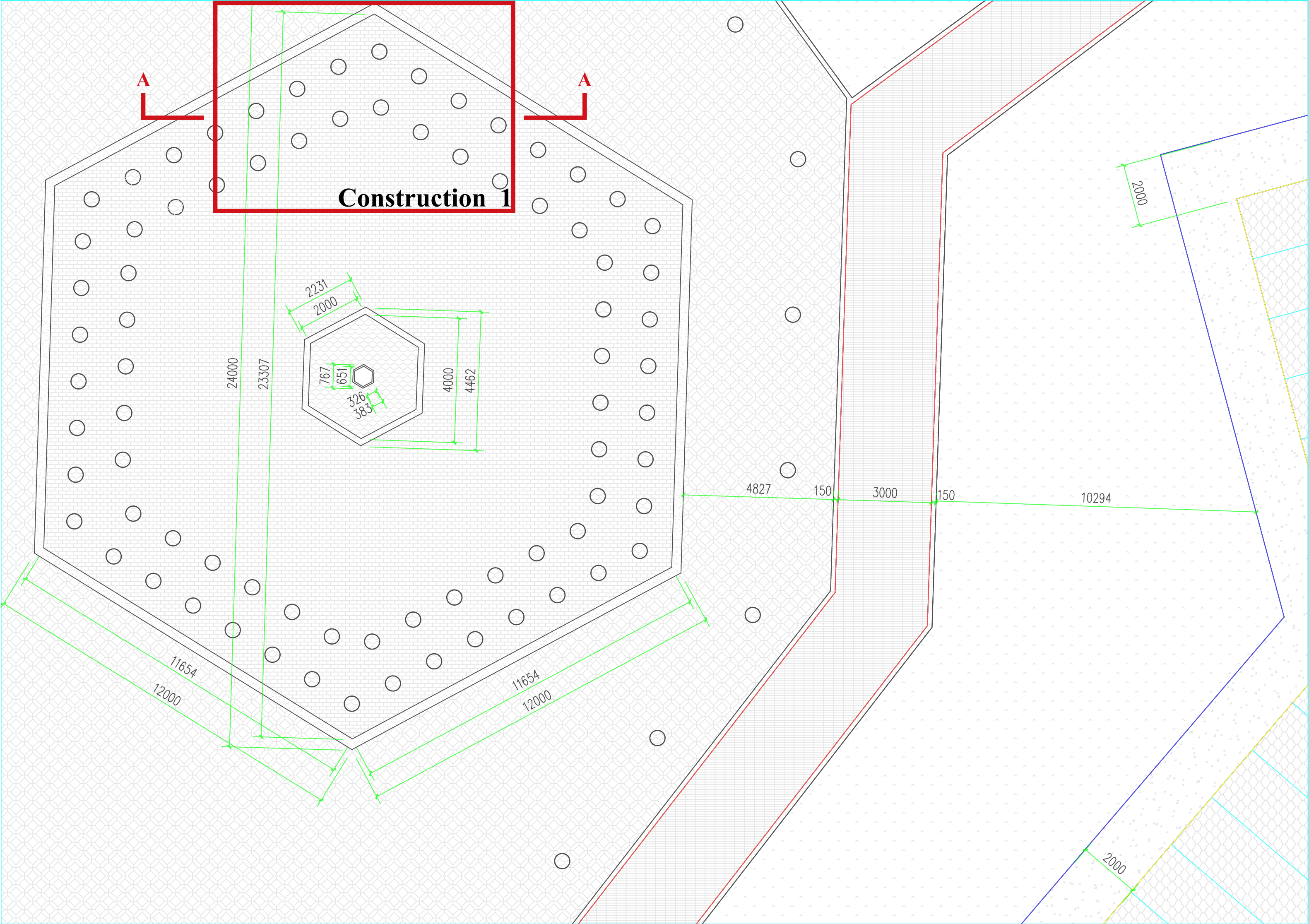
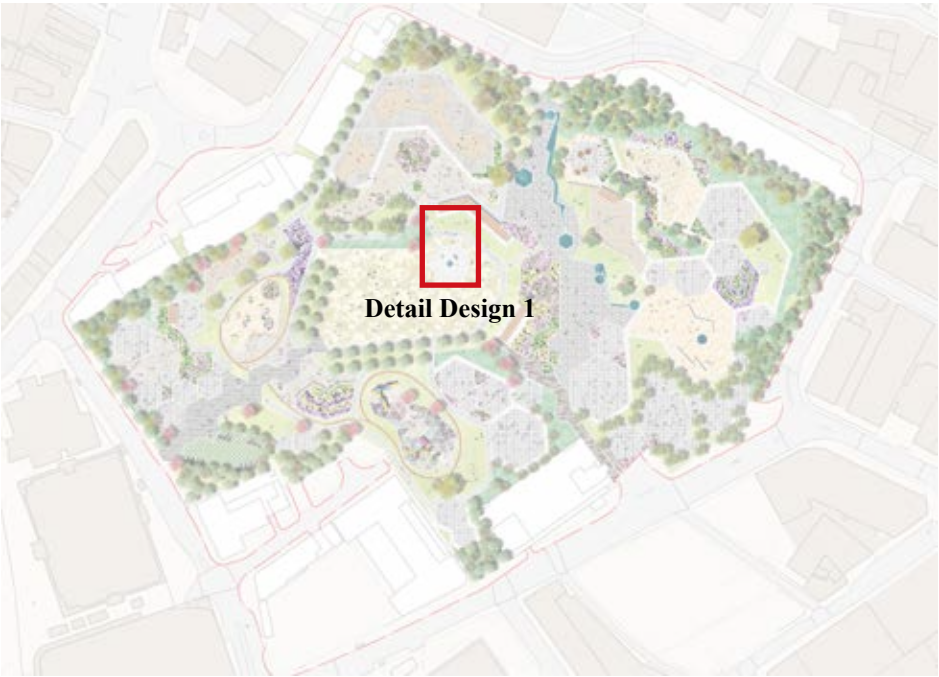
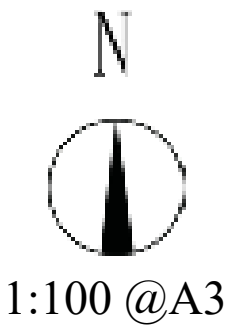
burnt sesame grey granite



matt blue and white granite



Detail Design 1--Fountain Square Setting Out

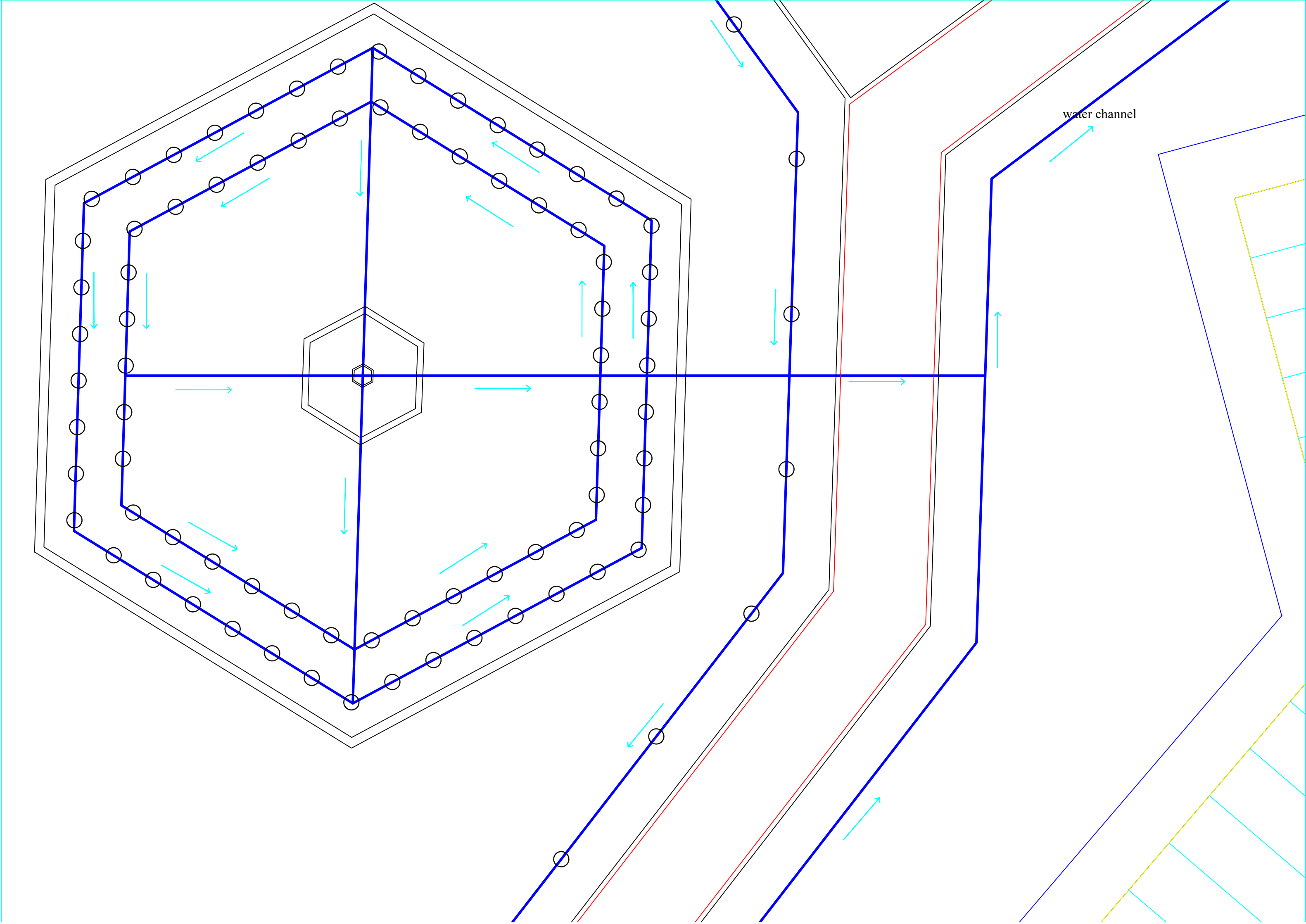
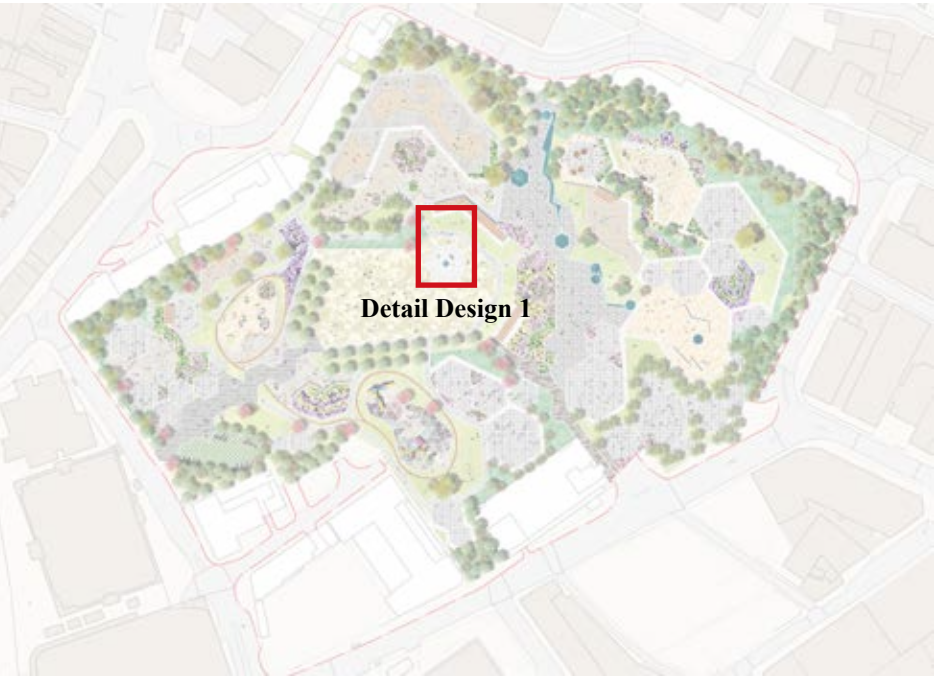
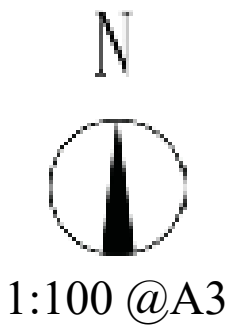


	water
	brick red rusty steel plate with holes
	burnt forest green granite
	fragmentary granite
	burnt sesame grey granite
	matt blue and white granite
	colored concrete terrazzo mixture
	Zoysia matrella



# Detail Design 1--Fountain Square Drainage System Diagram

The flow process of water, we can see that this is a cycle, can do not waste water,  
At the same time the water flowing to the outside can irrigate the plants.



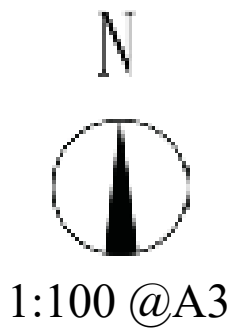
	Water Pipeline
	Waterflow direction



Detail Design 2--Runway Detail Plan

There are runway, several seating planting beds and groundcover flowers in different seasons. The diversity of elements is ensured.

Some planting beds are equipped with chairs for people to sit on, while others can only stand up for viewing ornamental plants.

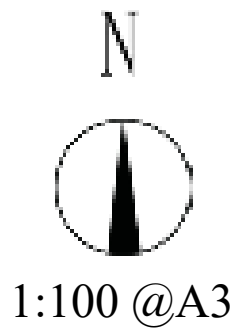




## Detail Design 2--Runway Materials

Birmingham is an industrial city, so the selected materials all have an industrial atmosphere, especially the main material-brick red with porous rust steel plate not only for corridor brackets, but also for planting pools and seats, forming an integrated effect. The planting square uses light yellow rust stone granite to foil brick red to highlight the spirit of the project.

The runway uses colored plastic materials with red, echoing the theme color of brick red.

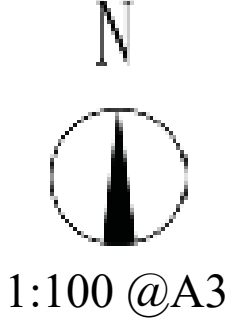




## Detail Design 2--Runway Materials

Native plant varieties are selected and considering the color change, the main landscape tree is a large deciduous tree with red leaves, while the matching tree is evergreen trees.

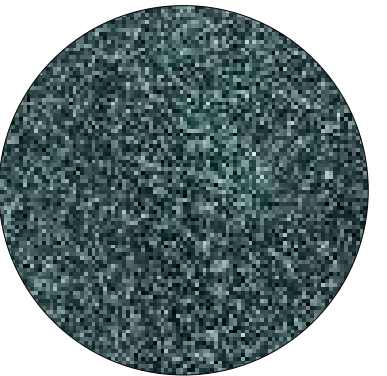
The groundcover in the planting beds are different, to ensure the flowering throughout the year round, to provide the best ornamental effect.



# Convallaria majalis



*Zoysia matrella*



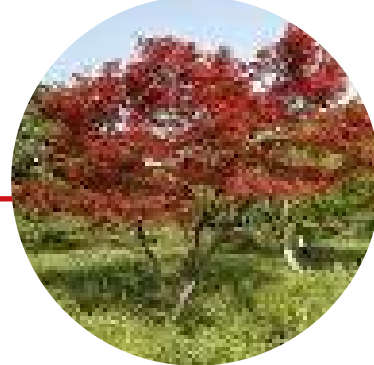
burnt forest green granite



Agrostemma githago L.



# Ilex crenata



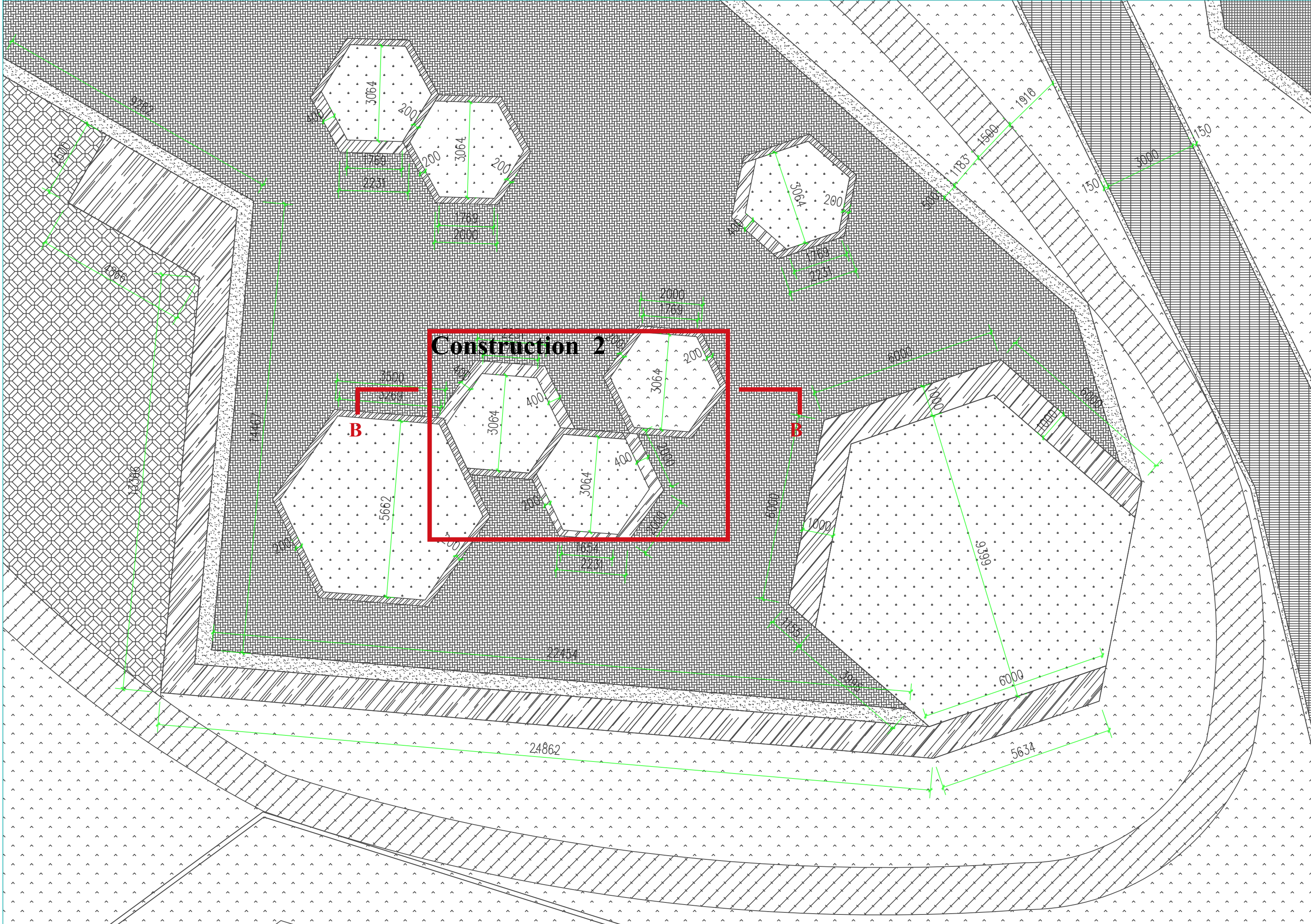
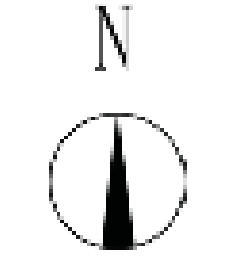
*Acer palmatum* 'Atropurpureum'



Campanula medium L.



## Detail Design 2--Runway Setting Out



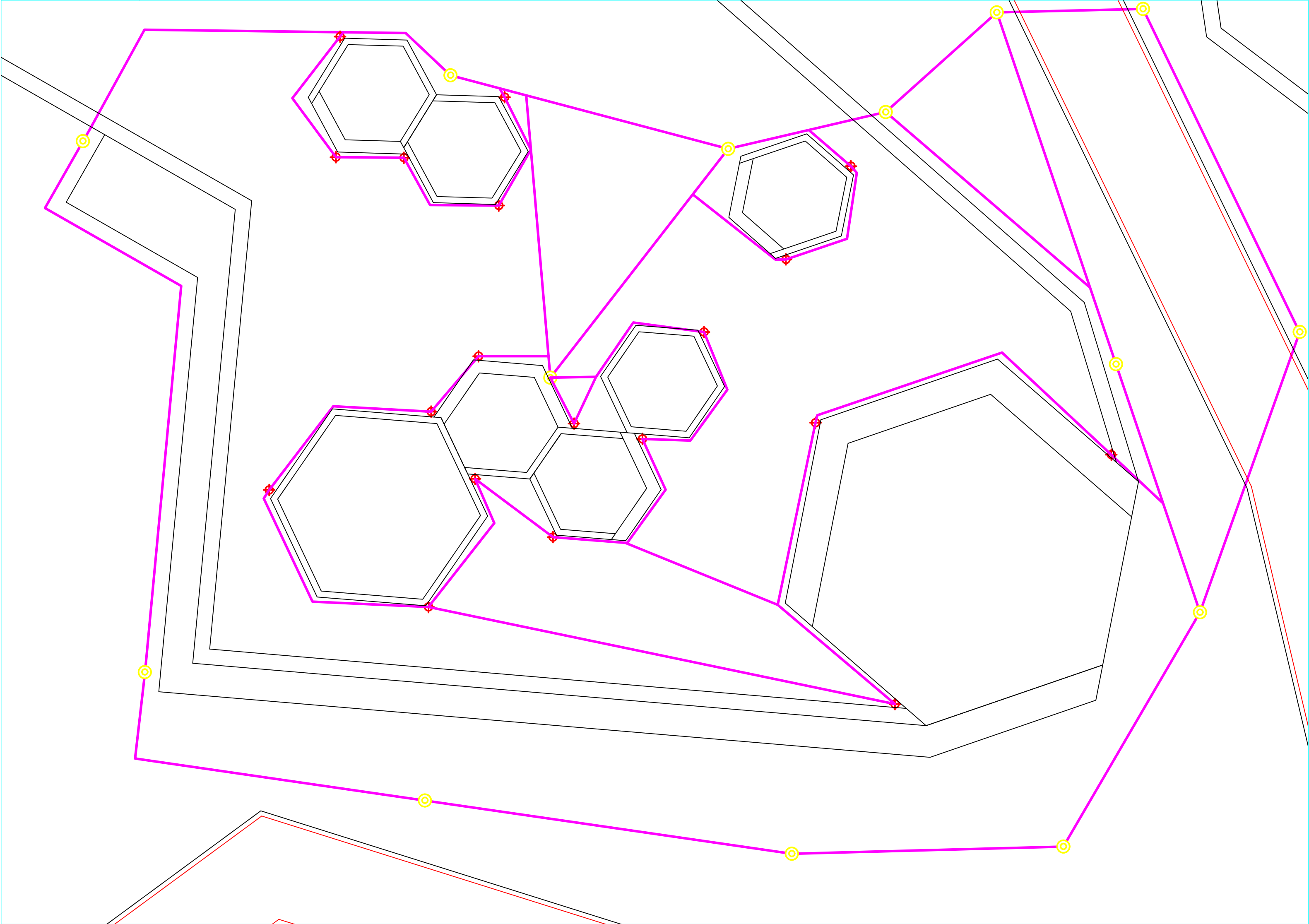
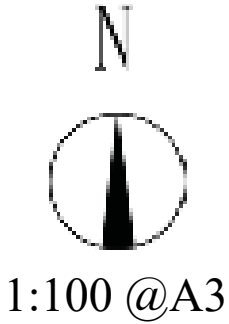
	brick red rusty steel plate with holes
	brick red rusty steel
	burnt forest green granite
	fragmentary granite
	burnt yellow rust stone granite
	burnt shrimp red granite
	burnt sesame grey granite
	colored plastic
	Flower
	Zoysia matrella



# Detail Design 2--Runway Lighting System Diagram

The lights use warm colors, giving people a warm feeling.

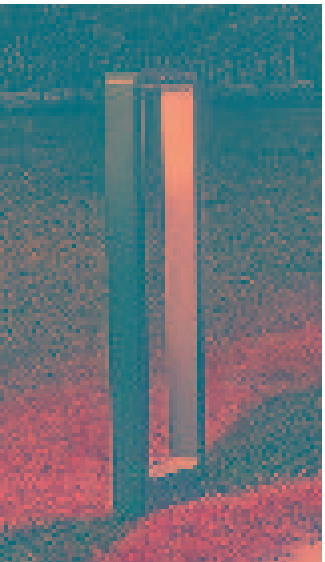
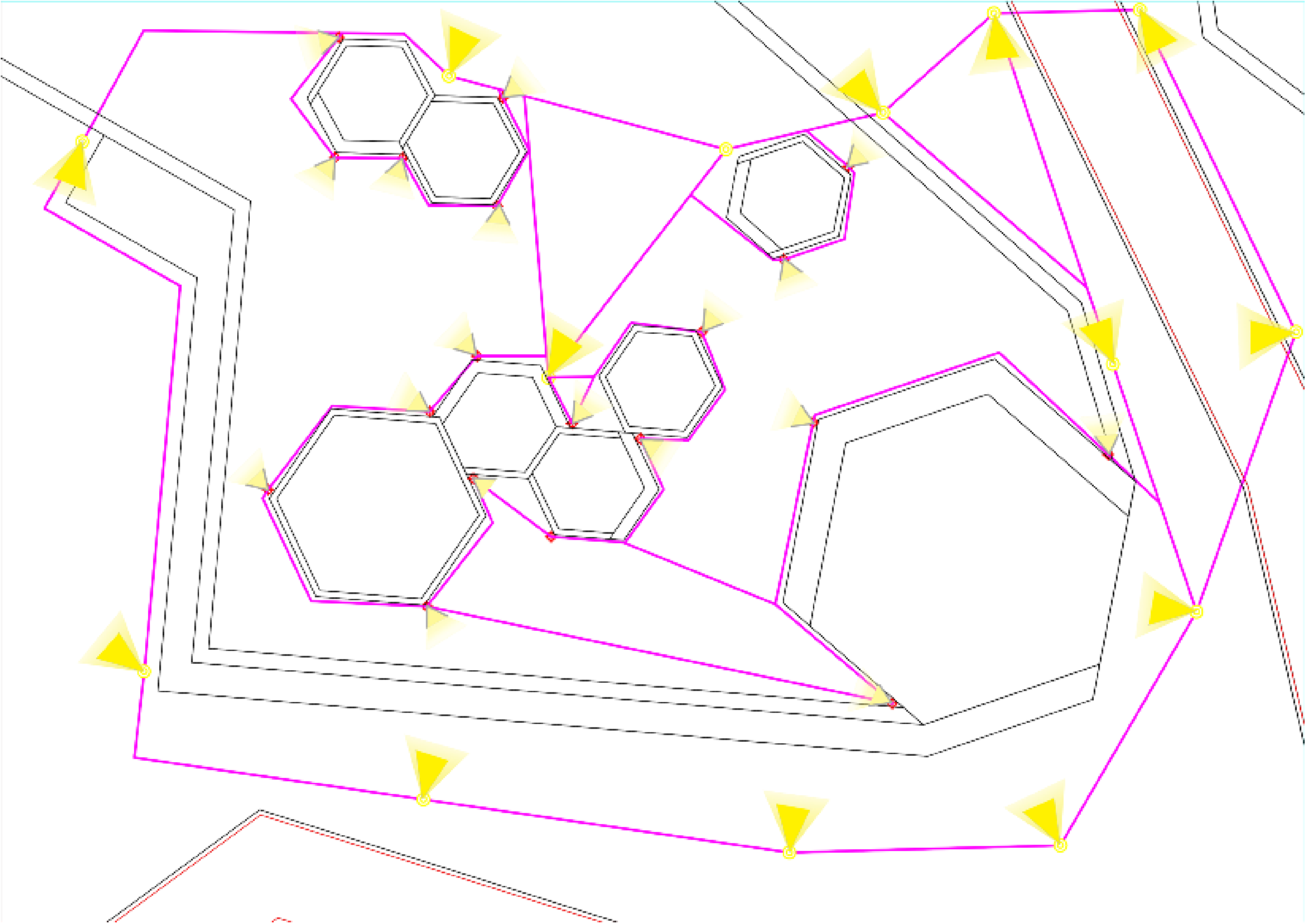
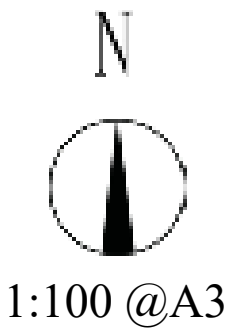
Courtyard lamps are arranged around the runway, while short column lamps are scattered around the planting pool, providing lights for people to view flowers and rest on the seats.



	Garden Lamp
	Lawn Lamp
	Lamp Line

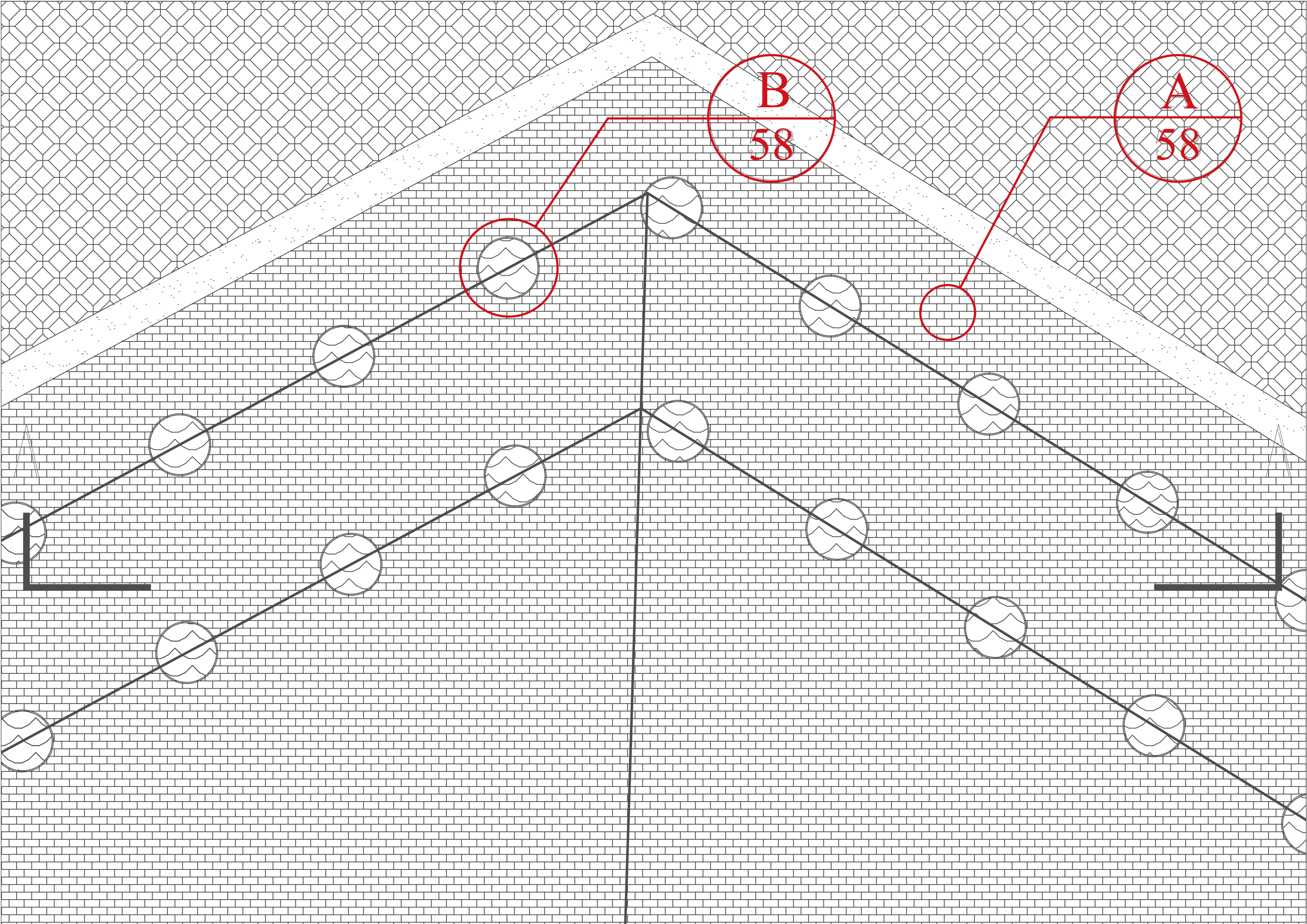
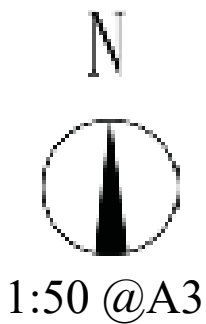






Detail Design 2--Runway Light Character



-  Garden Lamp
-  Lawn Lamp

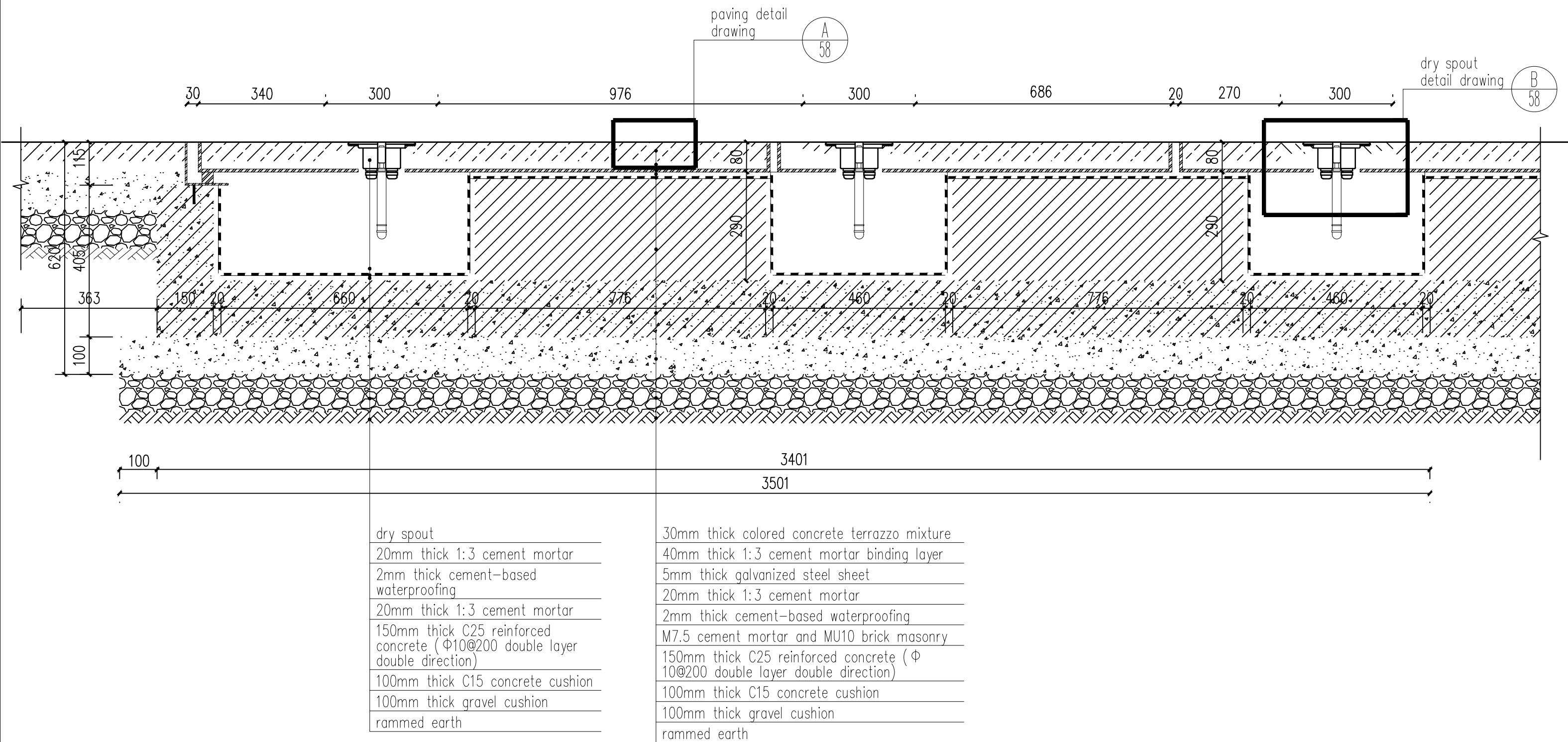
Construction 1--Fountain Square Plan



	water
	burnt forest green granite
	fragmentary granite
	colored concrete terrazzo mixture



Construction 1--Dry Fountain Construction

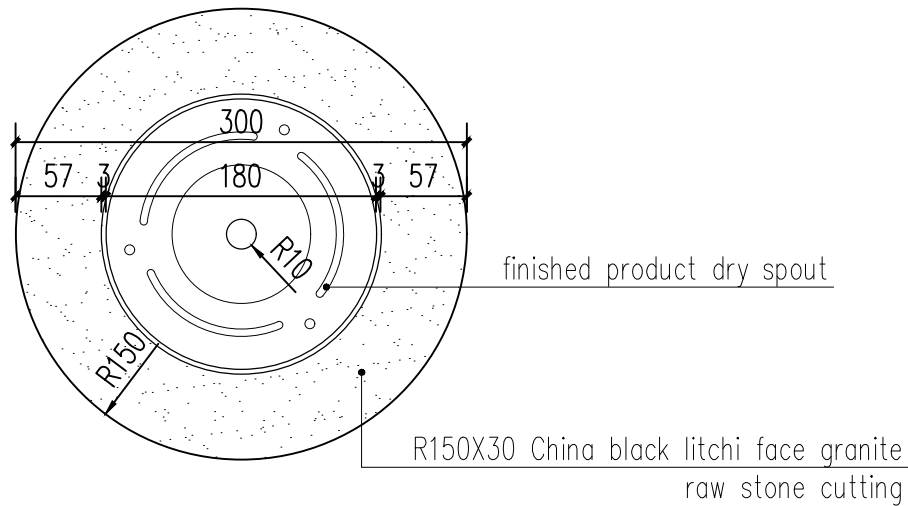


1 A-A Dry Spout Section 1:10

Construction 1--Fountain Square

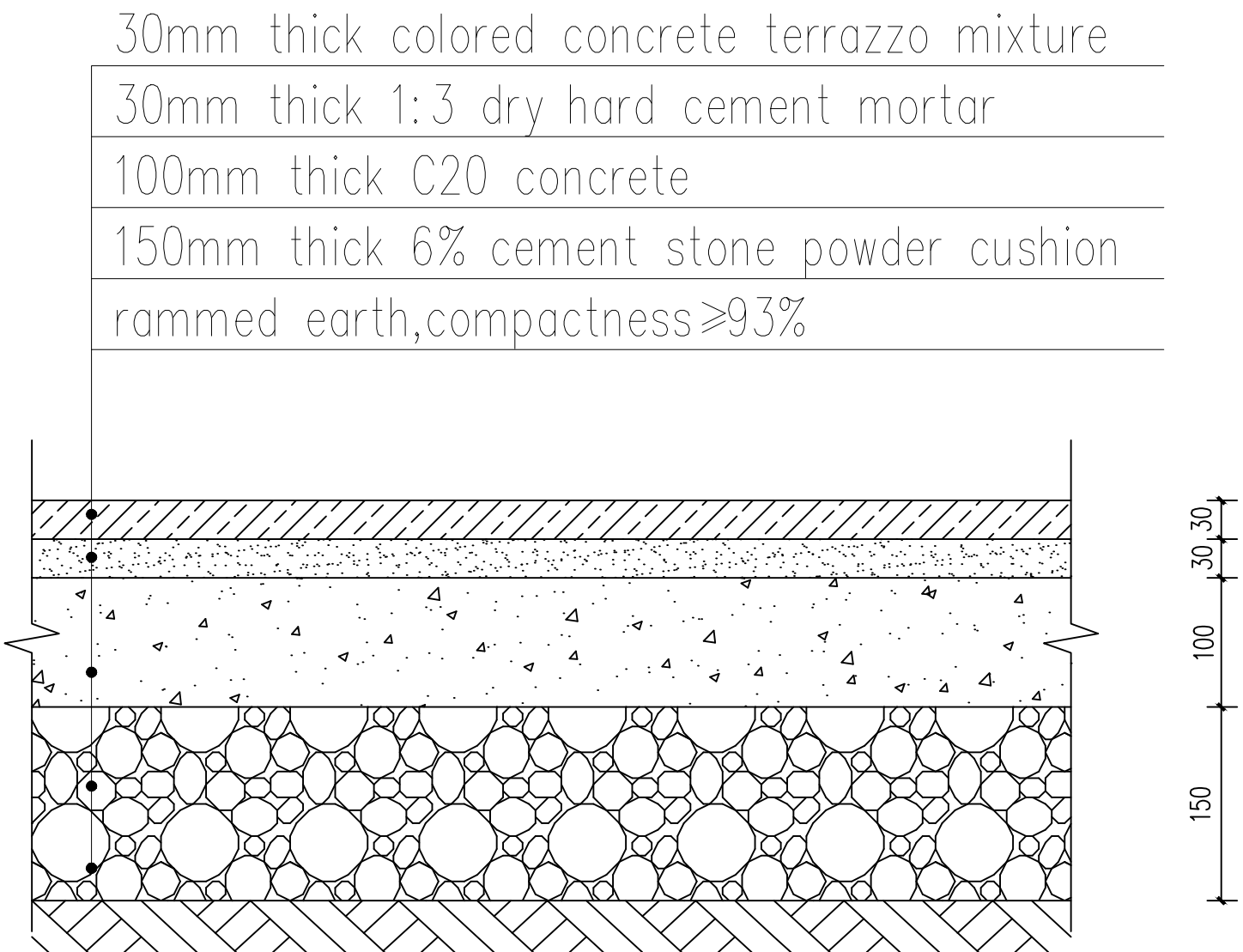


Dry Spout Detail Drawing



B Dry Spout Detail Drawing 1:5

Dry Fountain Square Paving Detail Drawing



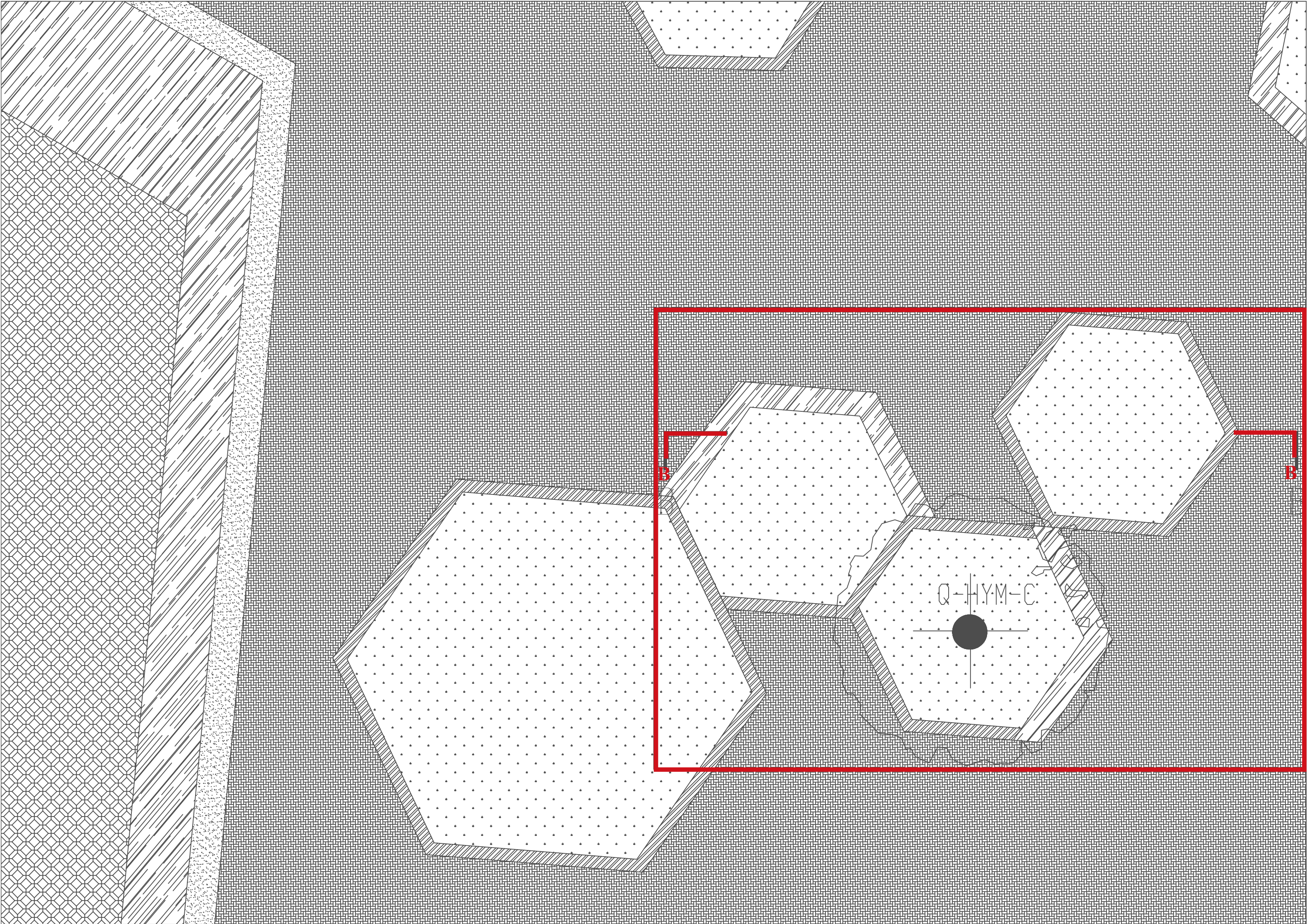
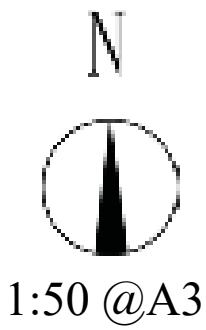
A Paving Detail Drawing 1:5



Construction 2--Planting Bed Square Detail Plan

The planting bed square has various planting beds in the shape of the rich nest, and skillfully combined with the seats, the rich nest design concept has been concrete and rich reflected.

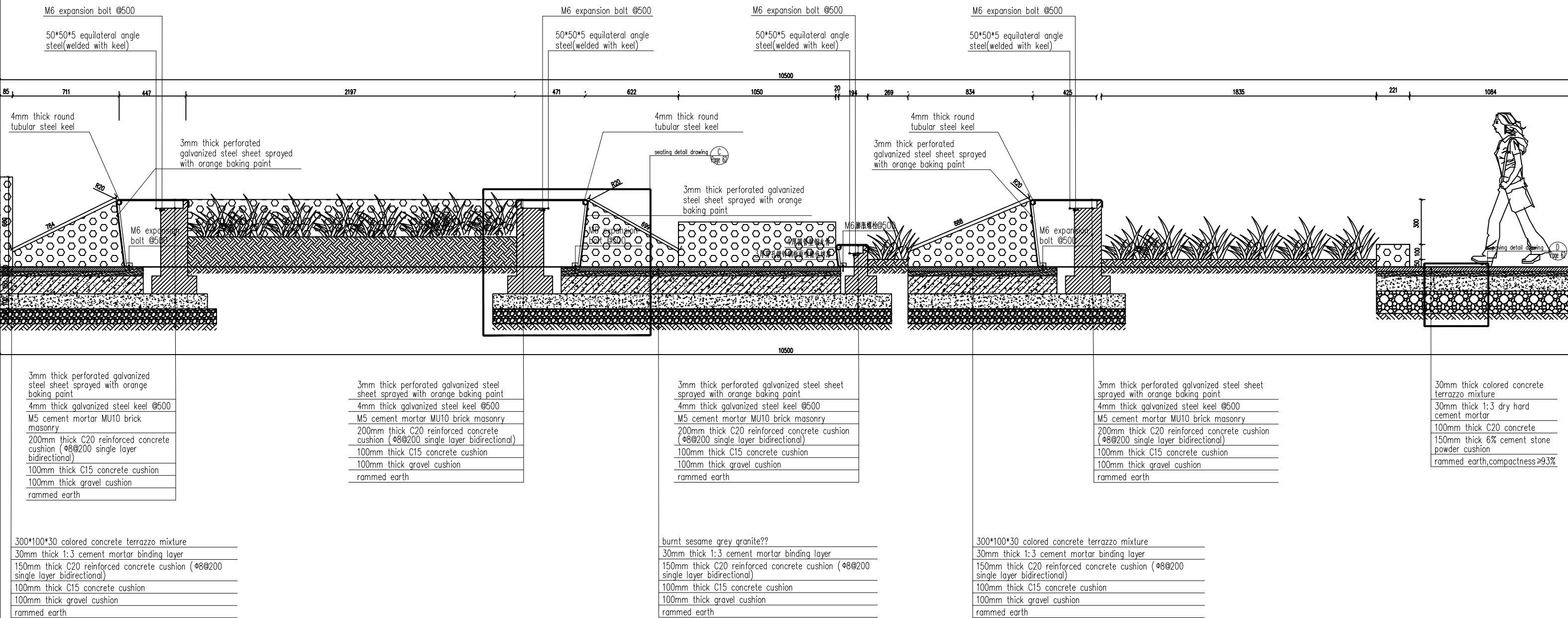
The planting bed square uses light yellow rust stone granite, while the planting pond and seats use brick red with porous rust steel plate.



	brick red rusty steel plate with holes
	brick red rusty steel
	burnt forest green granite
	fragmentary granite
	burnt yellow rust stone granite
	colored plastic
	Flower
	Zoysia matrella

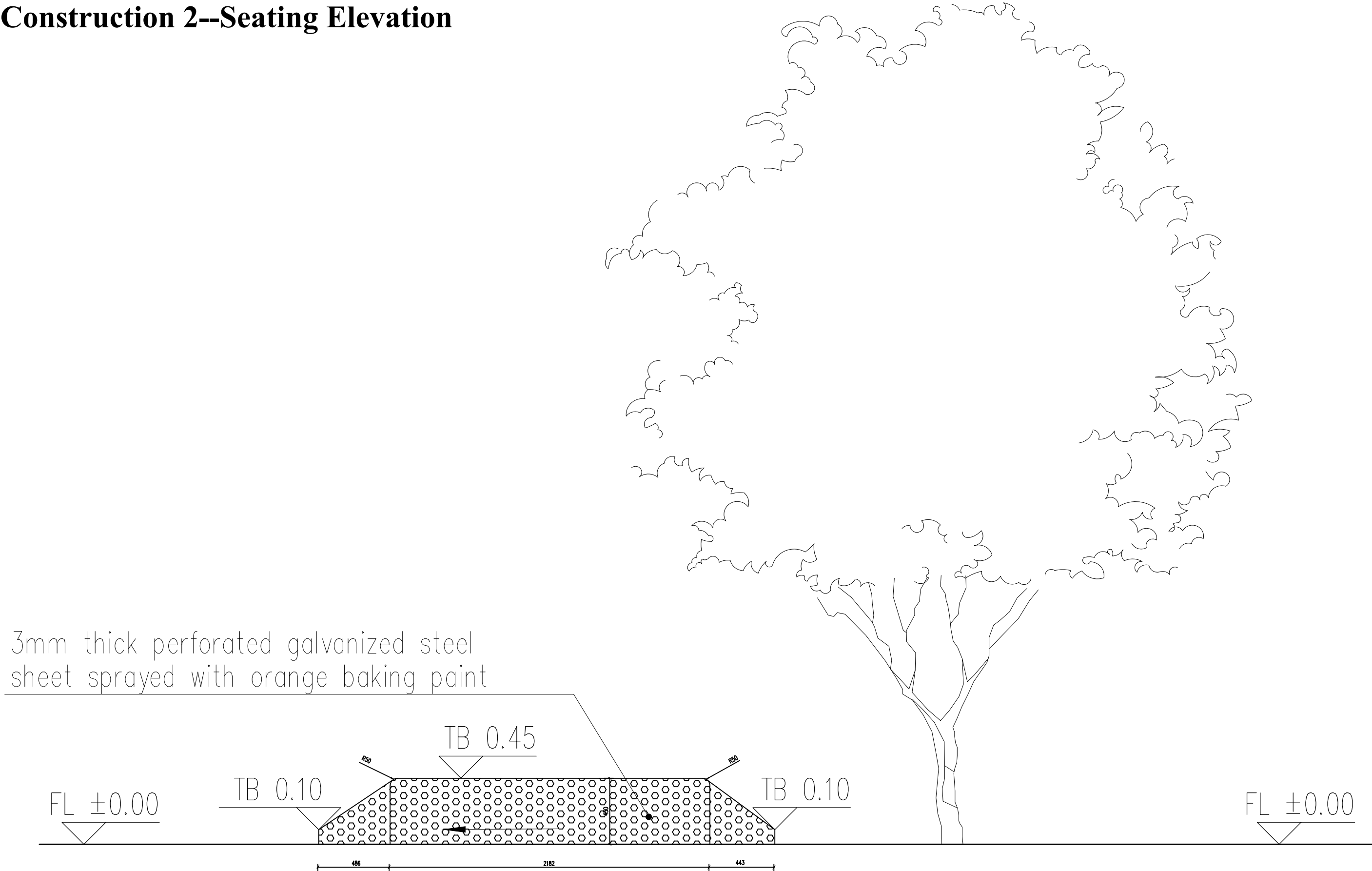


## Construction 2--Planting Bed Square Detail Section

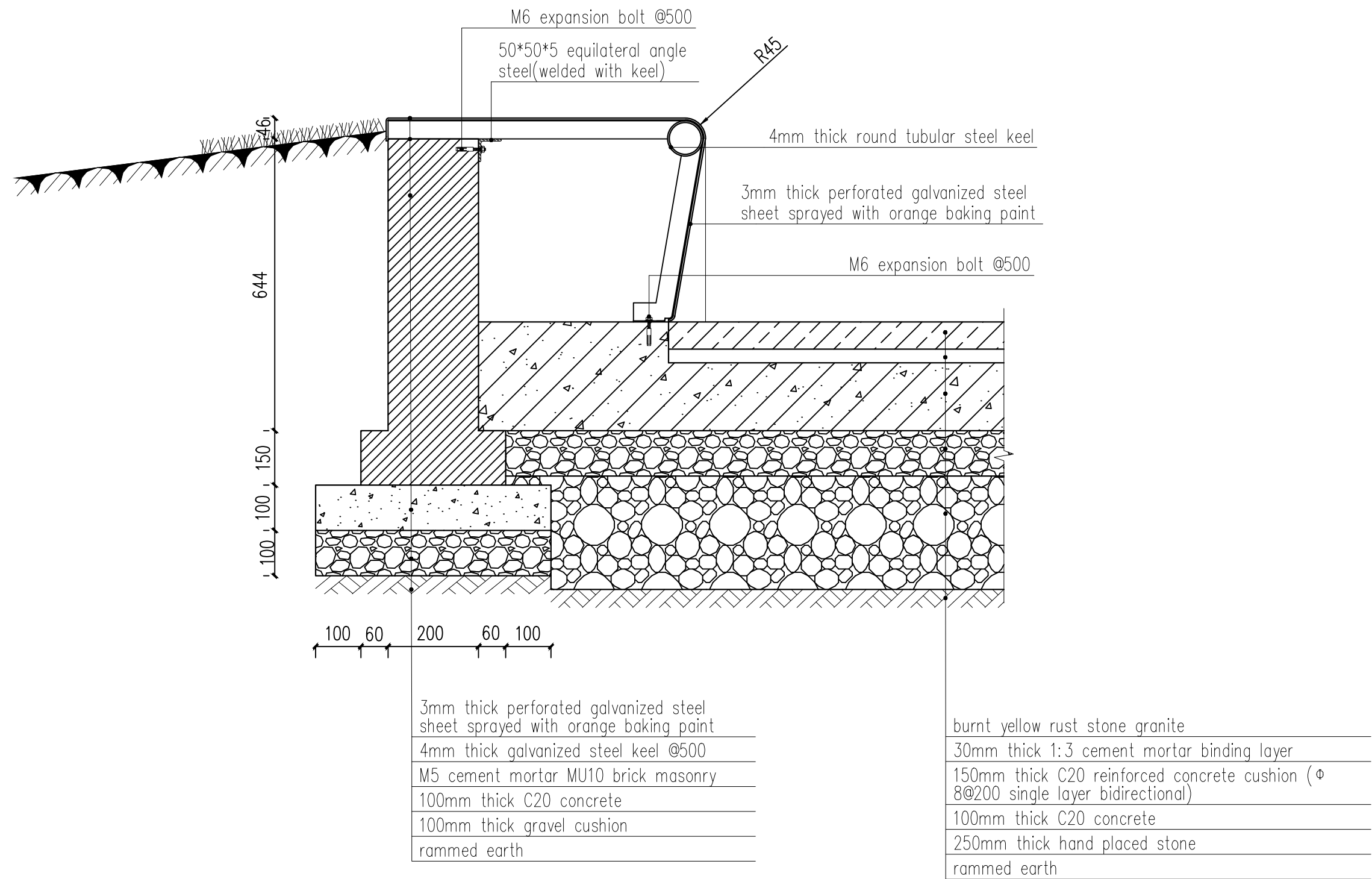




Construction 2--Seating Elevation



Construction 2--Seating Section



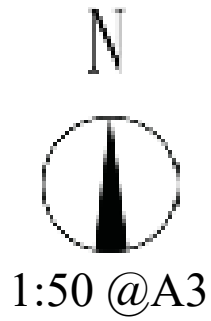
C Seating Detail Drawing 1:10



Planting Plan

Native plant species are selected, considering the colors change, using an eye-catching large deciduous tree--Acer palmatum 'Atropurpureum' as main landscape tree with its beautiful shaped and red leaves.

Using evergreen trees--Ilex crenata as matching trees with its beautiful tree-shaped and red fruits in autumn.



Ilex crenata



Acer palmatum 'Atropurpureum'

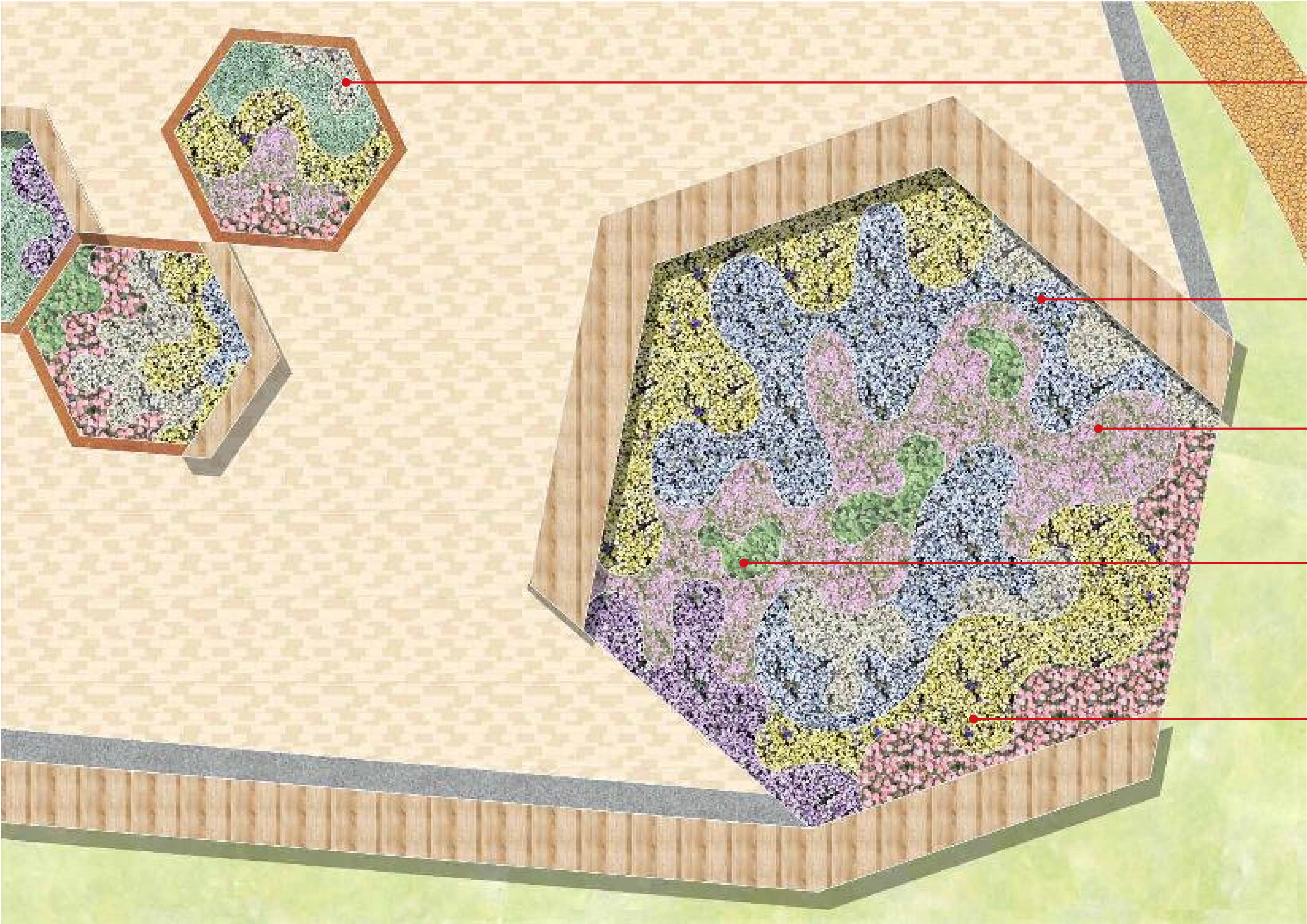
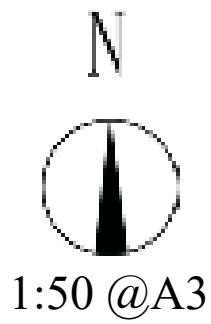
- Acer palmatum 'Atropurpureum'
- Ilex crenata
- Chrysanthemum leucanthemum
- Tagetes erecta L
- Agrostemma githago L.
- Liatris spicata
- Anchusa italica Retz.
- Campanula medium L.
- Convallaria majalis
- Alchemilla mollis
- Zoysia matrella



# Planting Plan-Groundcover

Native plant species are selected and their height between 10cm-100cm. These plants have different flowering periods and flowers, and are planted together in visual effects to ensure flowering all the year round. And the plants are attractive to the bees and echo the theme of the design.

In addition, these plants on the soil requirements are not high, as long as they ensure the clean soil and nutrition, with the characteristics of low cost and convenient later management.



Chrysanthemum leucanthemum



Anchusa italica Retz.



Agrostemma githago L.



Convallaria majalis



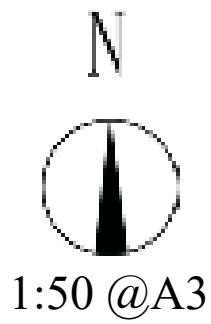
Tagetes erecta L



# Planting Plan-Groundcover

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In addition, these plants on the soil requirements are not high, as long as they ensure the clean soil and nutrition, with the characteristics of low cost and convenient later management.



Alchemilla mollis



Zoysia matrella



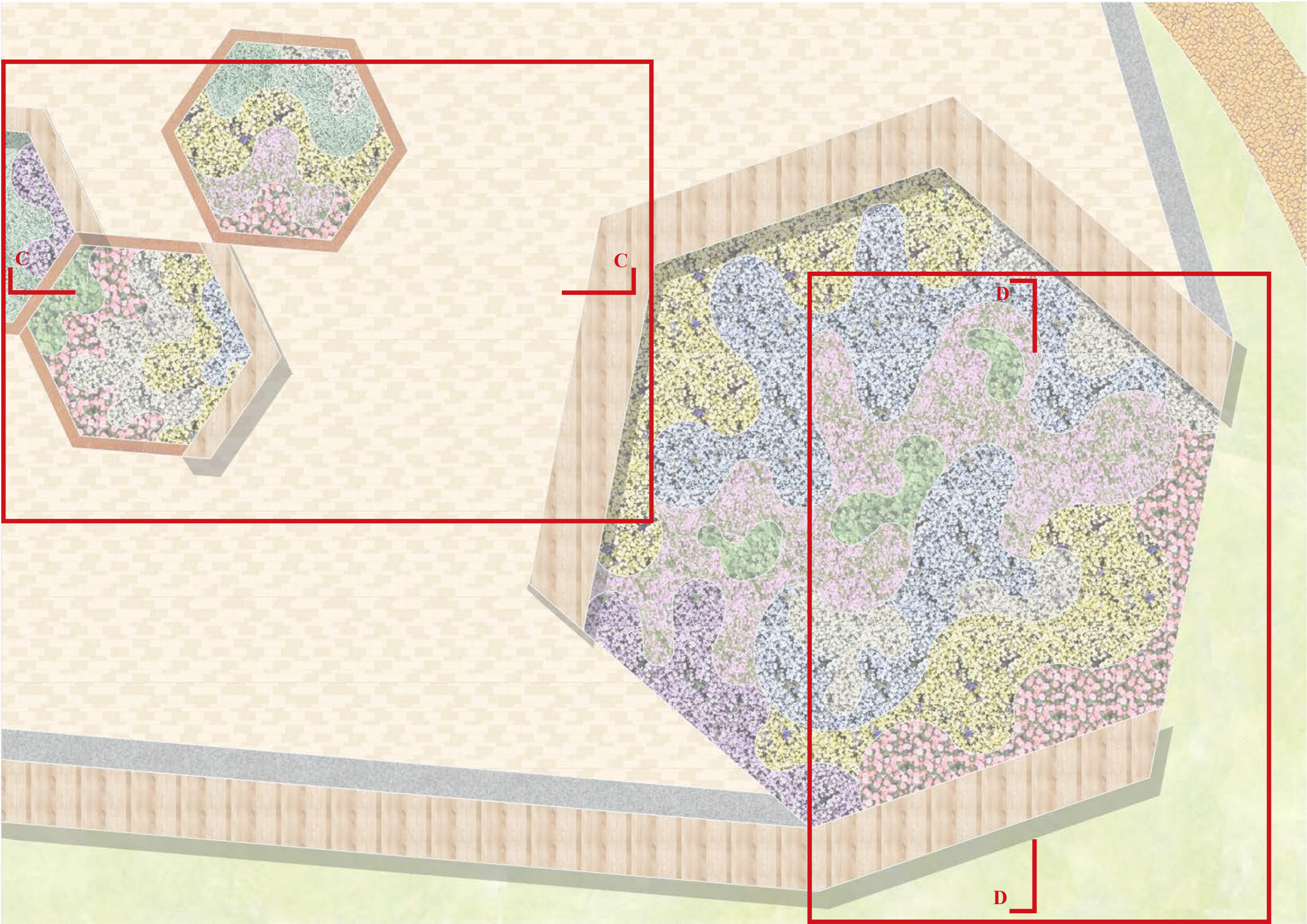
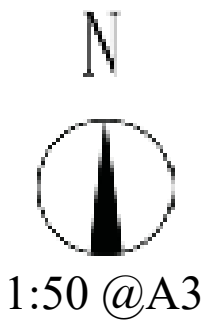
Liatris spicata



Campanula medium L.

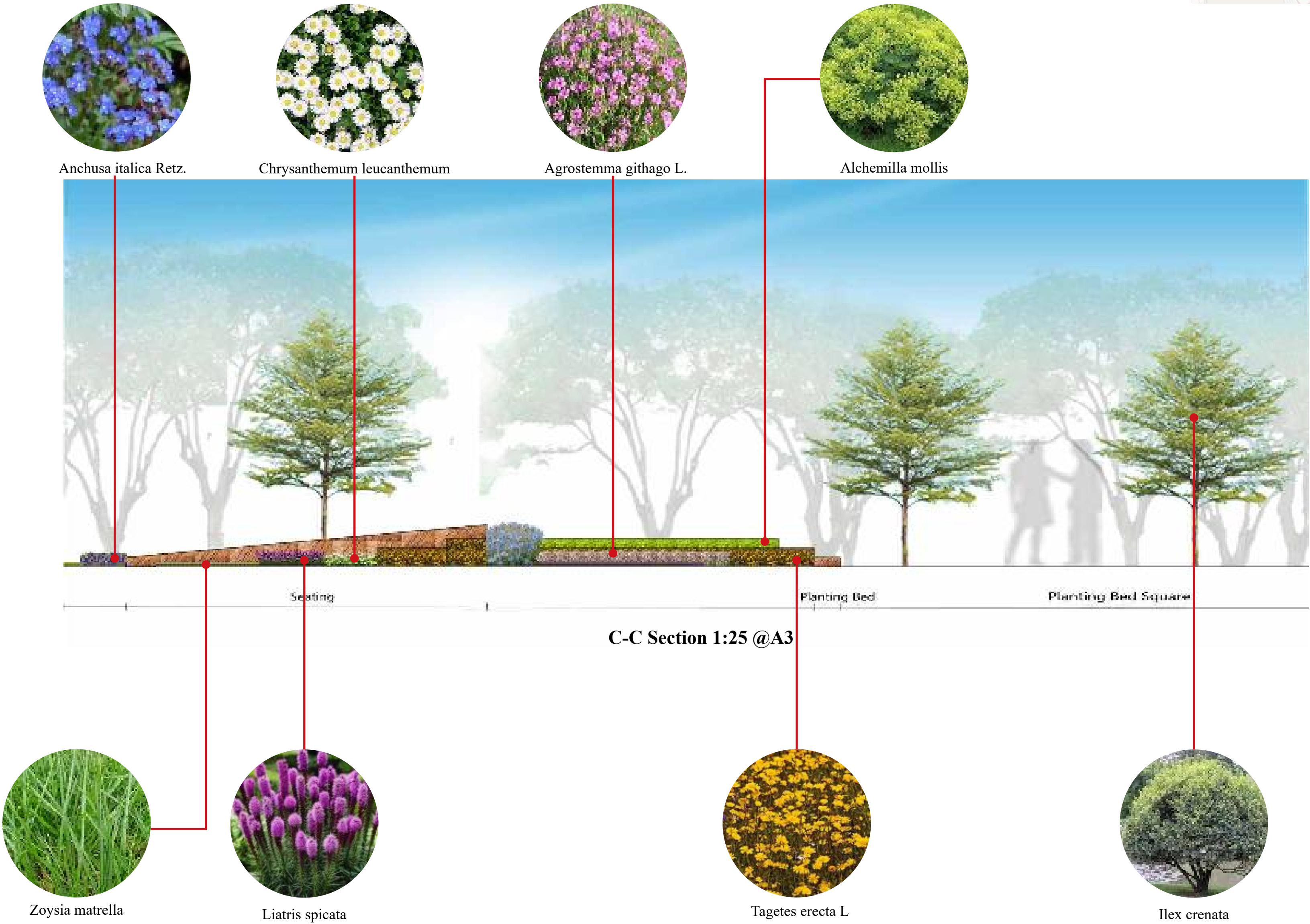


From Planting Plan To Planting Section





Planting Section & Materials (C-C)



Planting Section & Materials (D-D)



Liatris spicata



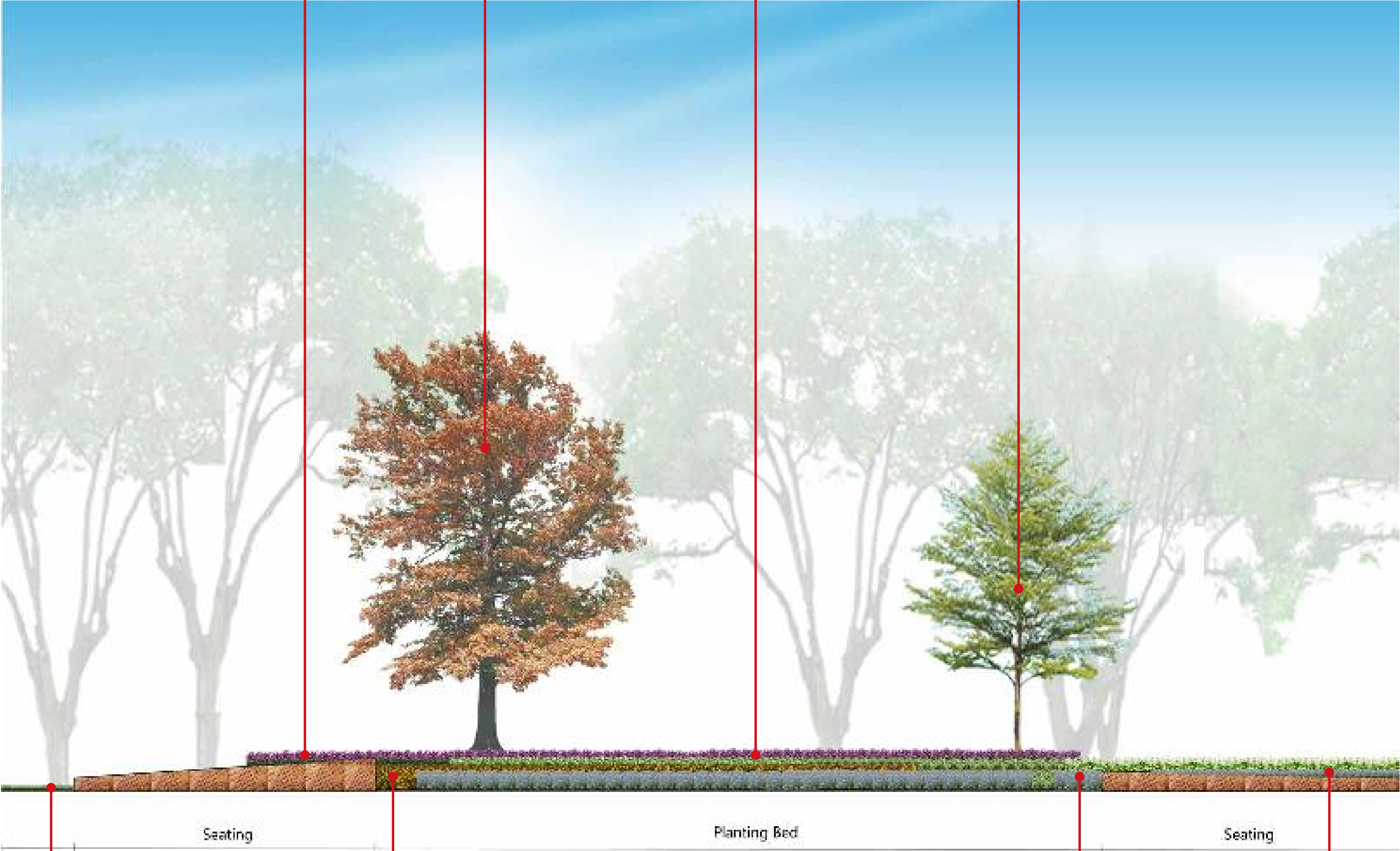
Acer palmatum 'Atropurpureum'



Convallaria majalis



Ilex crenata



D-D Section 1:25 @A3



Zoysia matrella



Tagetes erecta L



Anchusa italica Retz.



Chrysanthemum leucanthemum



# Planting Management

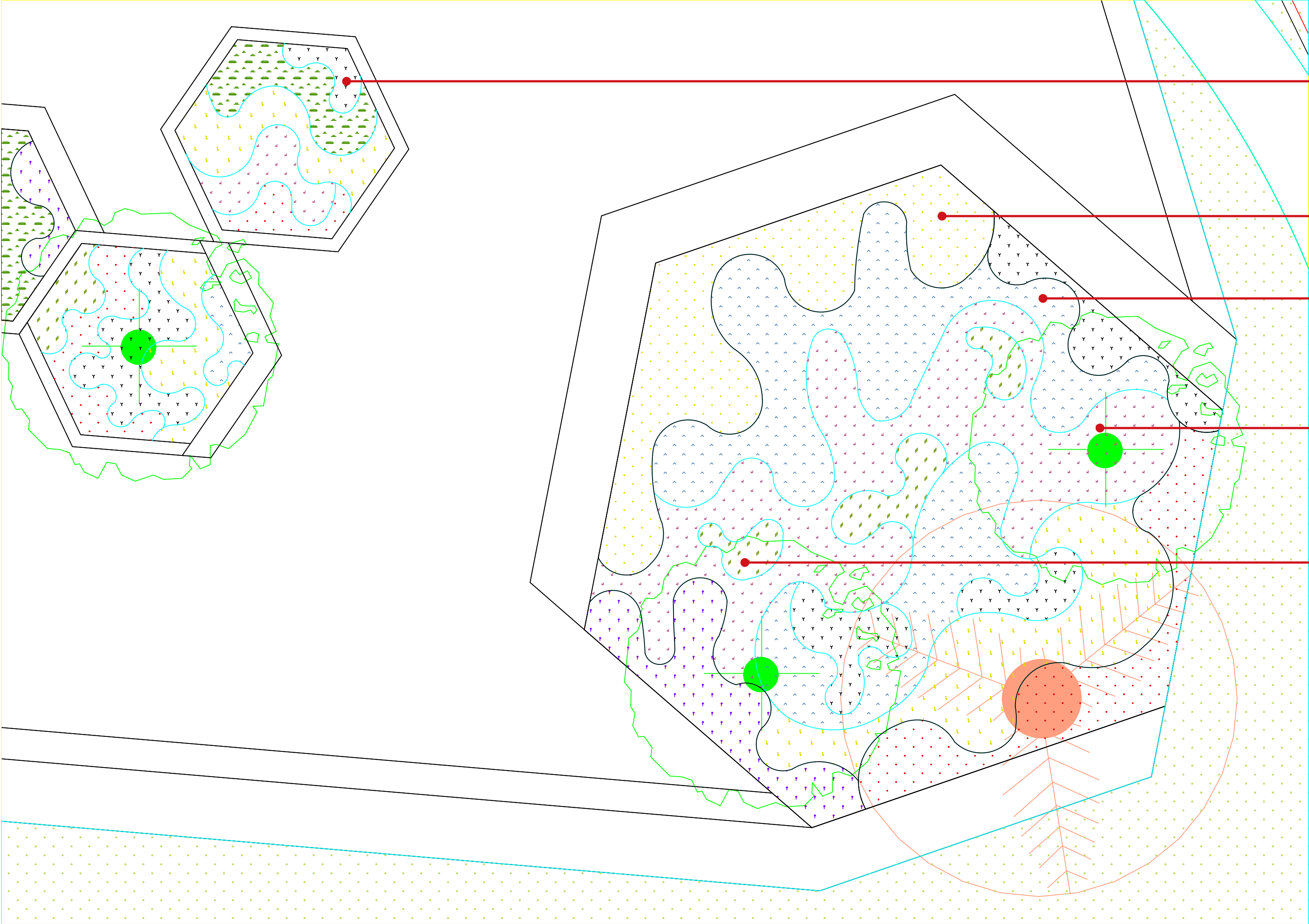
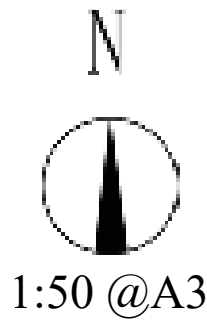
Plant management mainly adopts the form of pruning to keep the ground plants in the planting pool not messy, destroy the special design of random effect. The trees also keeps its tree-shaped as pruning.



# Planting Design

Native plant species are selected and their height between 10cm-100cm. These plants have different flowering periods and flowers, and are planted together in visual effects to ensure flowering all the year round. And the plants are attractive to the bees and echo the theme of the design.

In addition, these plants on the soil requirements are not high, as long as they ensure the clean soil and nutrition, with the characteristics of low cost and convenient later management.



Chrysanthemum leucanthemum  
ornamental planting



Tagetes erecta L  
ornamental planting



Anchusa italica Retz.  
ornamental planting



Agrostemma githago L.



Convallaria majalis  
ornamental planting

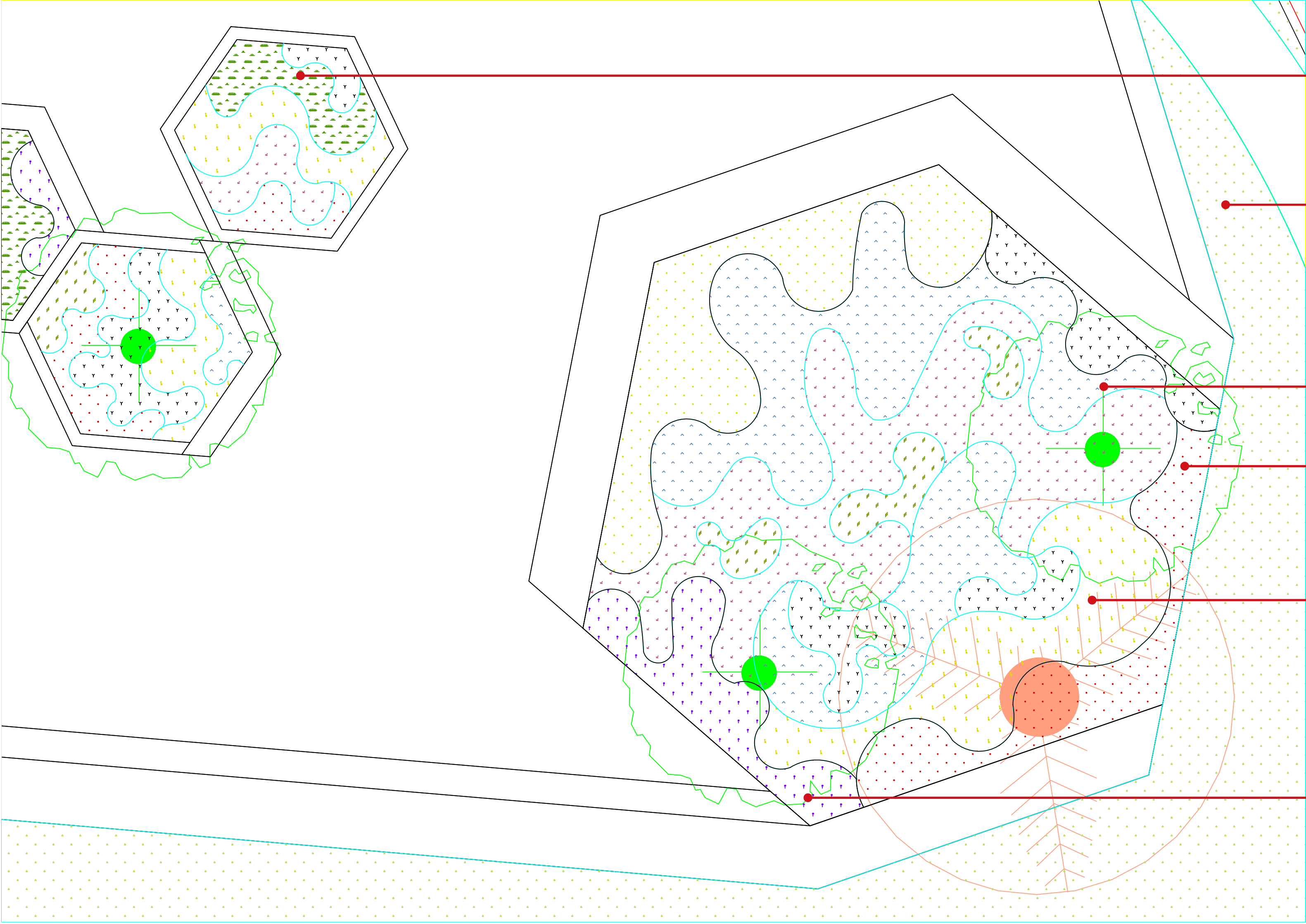
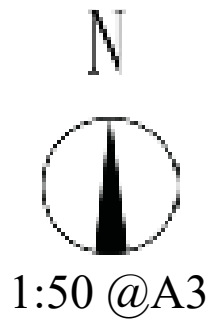
- Acer palmatum 'Atropurpureum'
- Ilex crenata
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- Agrostemma githago L.
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- Alchemilla mollis
- Zoysia matrella



Planting Design

Native plant species are selected, considering the colors change, using an eye-catching large deciduous tree--Acer palmatum 'Atropurpureum' as main landscape tree with its beautiful shaped and red leaves.

Using evergreen trees--Ilex crenata as matching trees with its beautiful tree-shaped and red fruits in autumn.



Alchemilla mollis  
ornamental planting



Zoysia matrella  
perennial border



Ilex crenata  
ornamental planting



Liatris spicata  
ornamental planting








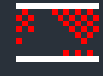

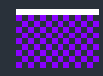
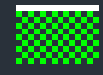
Acer palmatum 'Atropurpureum'  
ornamental planting



Campanula medium L.  
ornamental planting

	Campanula medium L.
	Liatris spicata
	Ilex crenata
	Zoysia matrella
	Alchemilla mollis
	Acer palmatum 'Atropurpureum'

Planting Specification

Planting Specifications								
No.	Legend	Location	Species Name	Quantity	Unit	Specifications (CM)		
						DBH	Crown	Height
Tropical								
1		Area 1 (North Side of Main Road)	Jackfruit Tree	1	Each	15-20	200-250	300-350
2		Area 2 (South Side)	Coconut Palm	1	Each	10-15	400-500	550-650
Groundcover								
3		Area 3 (Underneath Main Road)	Creeping Fig	500	Sq. M		10	1.5
4		Area 4 (Near Entrance)	Marigold	100	Sq. M		20	30
5		Area 5 (Along Pathway)	Flower Marigold	150	Sq. M		15	20
6		Area 6 (Open Space)	Lotus	50	Sq. M		30	40
7		Area 7 (Near Kitchen)	White Begonia	100	Sq. M		20	30
8		Area 8 (Near Office)	Blue Flower	120	Sq. M		25	35
9		Area 9 (Along Wall)	Creeping Fig	200	Sq. M		10	1.5



# Planting Specification Details

Foliage

Colour

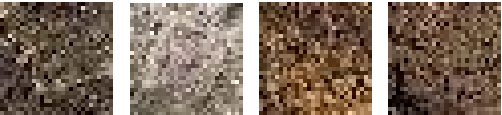
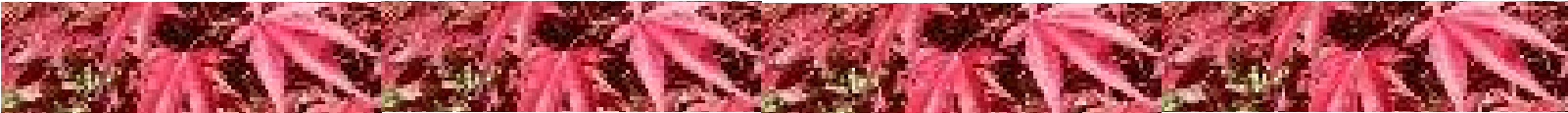
Soil

Sunlight

January	February	March	April	May	June	July	August	September	October	November	December	Chark	Clay	Loam	Sand	Full Sun	Partial Shade
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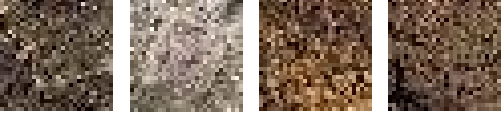
Deciduous



Acer palmatum  
'Atropurpureum'



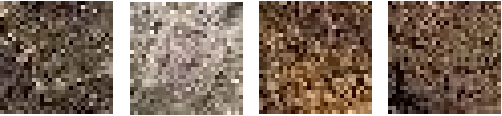
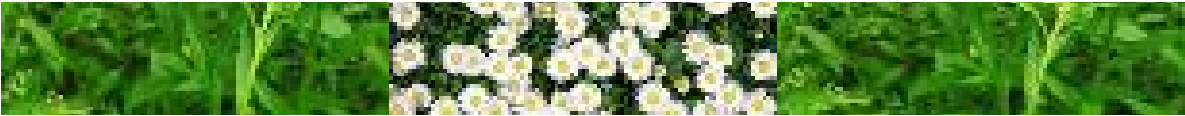
Evergreen



Ilex crenata



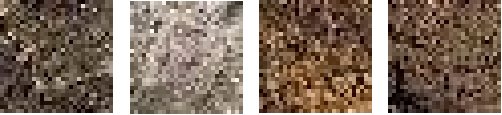
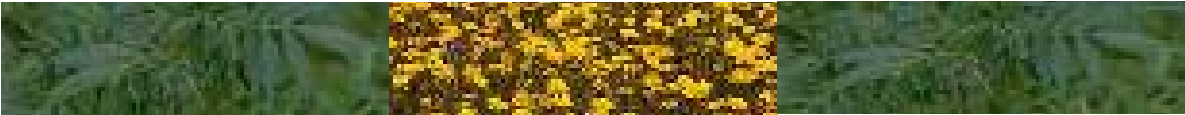
Annuals



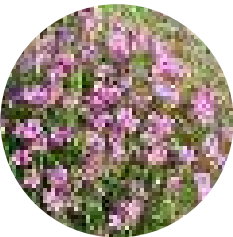
Chrysanthemum  
leucanthemum



Annuals



Tagetes erecta L



Annuals



Agrostemma githago L.

Planting Specification Details

Foliage

Colour

Soil

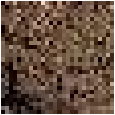
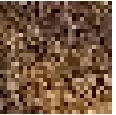
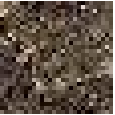
Sunlight

January	February	March	April	May	June	July	August	September	October	November	December	Chark	Clay	Loam	Sand	Full Sun	Partial Shade
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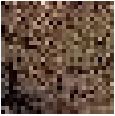
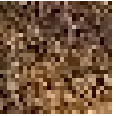
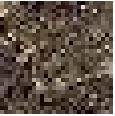
Liatris spicata

Perennial



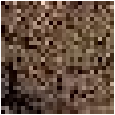
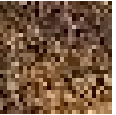
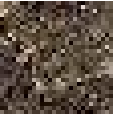
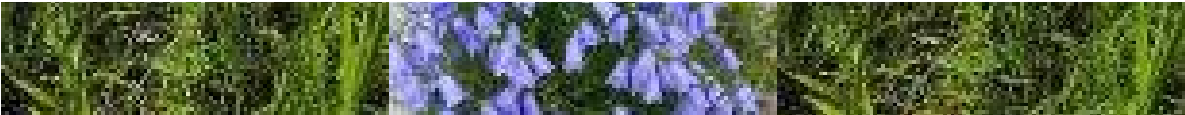
Anchusa italica Retz.

Perennial



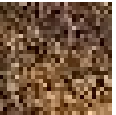
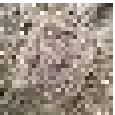
Campanula medium L.

Biennial



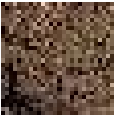
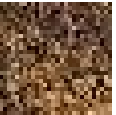
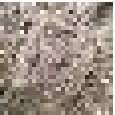
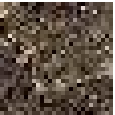
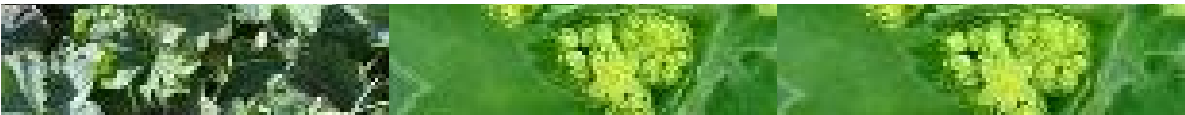
Convallaria majalis

Deciduous



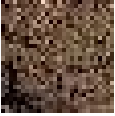
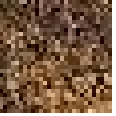
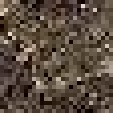
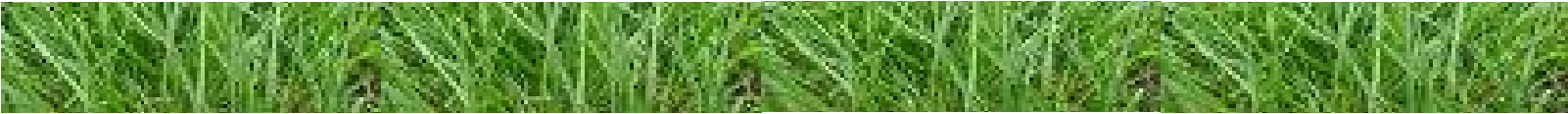
Alchemilla mollis

Deciduous



Zoysia matrella

Perennial





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