

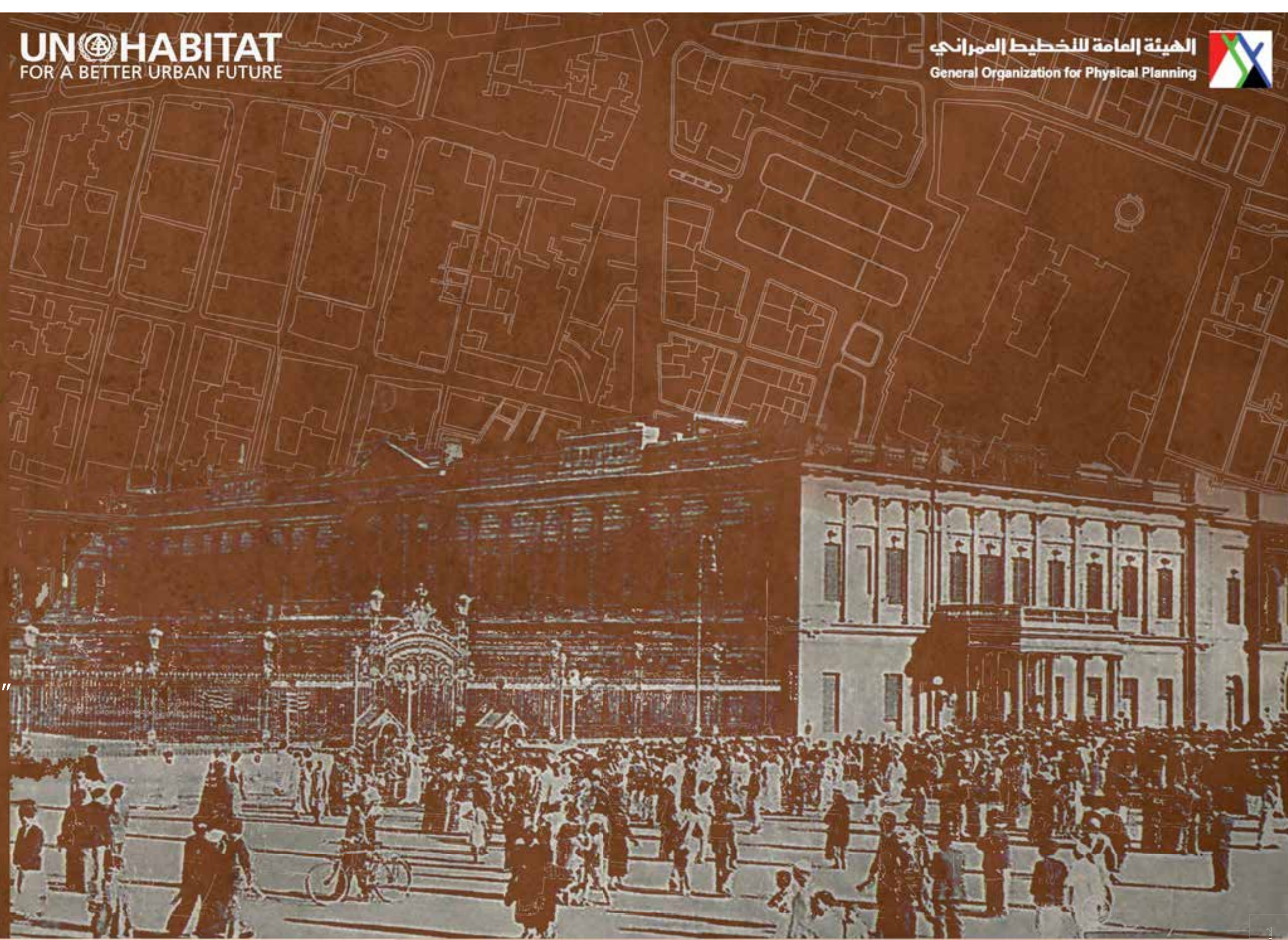


ABDEEN

Square Development

From yesterday
to today

First Chapter :
"THE ANALYSIS & DECISIONS"



This Project is considered as a one of the renovation projects recommended by the revitalization of the Central Zone of Khedive's Cairo project, one of Egypt's significant urban areas. This project has done by Gateway Consultants and under the supervision of the UN Habitat and the General Organization of Physical Planning

All rights reserved
United Nations Human Settlements Programme (UN-HABITAT),
P.O. Box 30030, GPO Nairobi 00100, Kenya.
Tel: +254 20 7623120
Fax: +254 20 7624266 / 7 (Central Office)
E-mail: infohabitat@unhabitat.org
Web: <http://www.unhabitat.org>

DISCLAIMER

- The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning delimitation of its frontiers or boundaries, or regarding its economic system or degree of development.
- The analysis, conclusions and recommendations of this publication do not necessarily reflect the views of the United Nations Human Settlements Programme, the Governing Council of the United Nations Human Settlements Programme, or its Member States.
- **References to names of firms and commercial products and processes does not imply their endorsement by the United Nations,** and a failure to mention a particular firm, commercial product or process is not a sign of disapproval.
- Excerpts from the text may be reproduced without authorisation, on condition that the source is indicated.

ACKNOWLEDGMENT

General Organization for Physical Planning
GOPP
Dr. Assem Al-Gazzar Chairman
Eng. Nahed Nagib Project Manager

United Nations Human Settlements Programme
UN-HABITAT

Rania Hedeya, Head of Egypt Office
Dr. Bassem Fahmy, Programme Manager, Egypt Office
Ahmed Adel, Assistant Programme Manager, Egypt Office
Yasmine Moustafa, Assistant Programme Manager, Egypt
Anas Aladdin, Assistant Programme Manager, Egypt Office

Consultant Office



CONTENTS

- INTRODUCTION & HISTORICAL SIGNIFICANCE	A
• the history of abdeen palace.....	4
-SPACE ANALYSIS & COMPONENTS	B
• Abdeen square in pervious plans.....	6
- SURROUNDING URBAN FEATURES.....	C
• Touristic attractions	12
• Major open spaces.....	12
• Main issues	13
- LOCATION & NEARBY USES.....	14
- OVERALL ANALYSIS	E
• current situation	16
• Space analysis.....	18
• activity sitting	19
- PRACTICAL APPROACH.....	F
• Vision	23
• Approaches to Space	24
• Design intent.....	25
- CASE STUDY	G
• Berlin Cathedral square.....	28
- SWOT ANALYSIS	29

INTRODUCTION & HISTORICAL SIGNIFICANCE

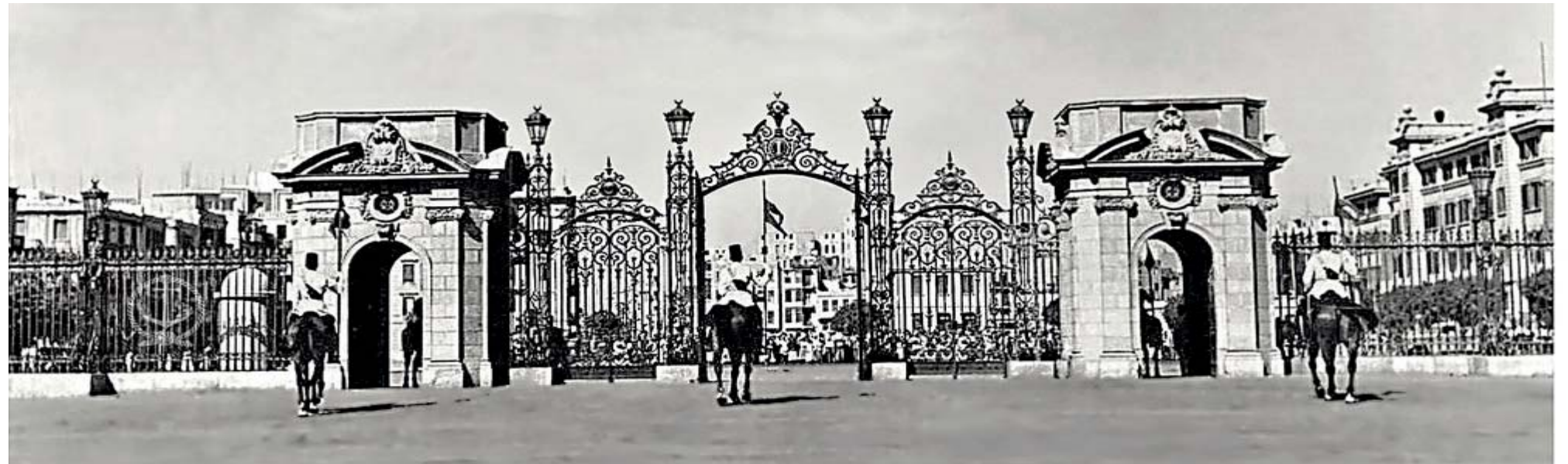


2. History

Abdeen Palace, one of the most famous Egyptian palaces and masterpiece that witnessed many events since the monarchy and even after the emergence of modern Cairo.

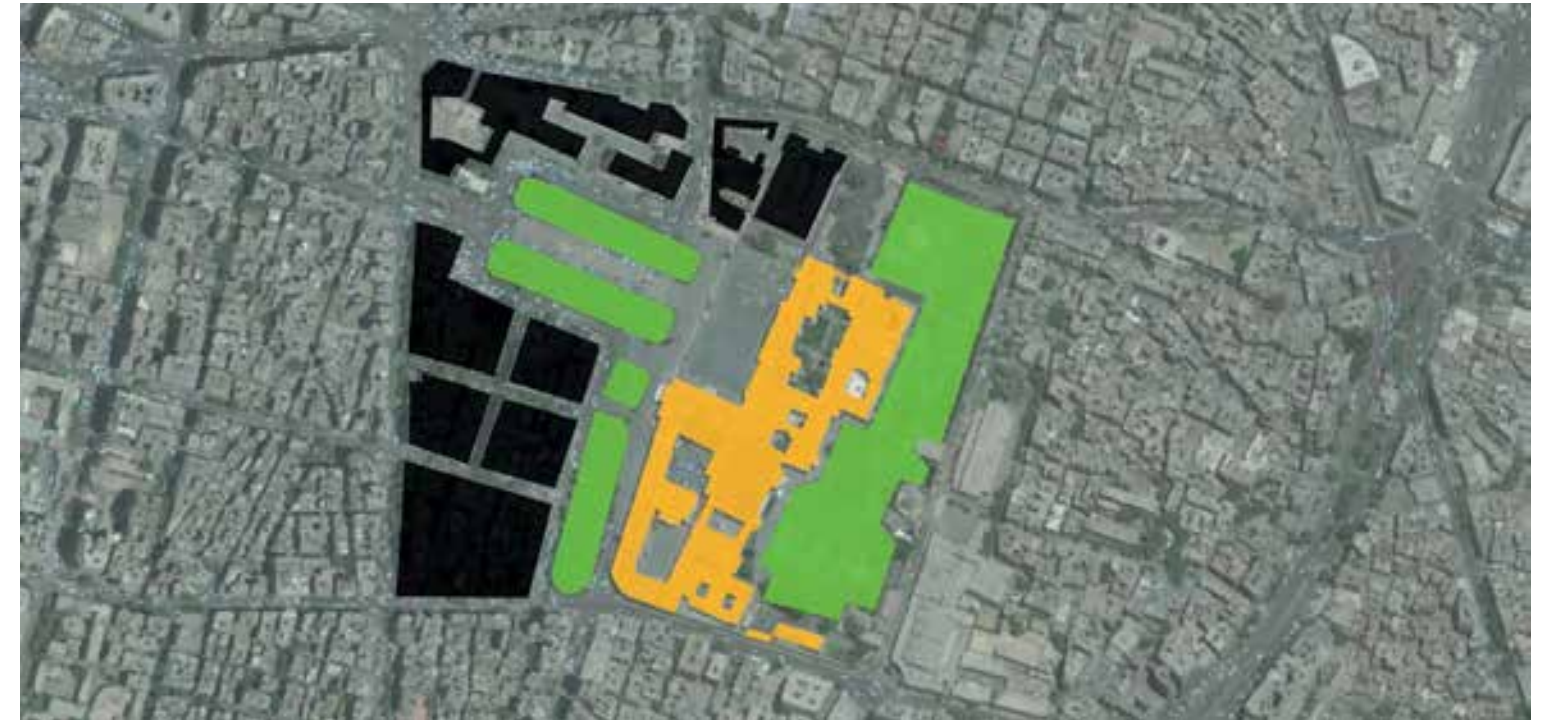
Built on the site of a small mansion owned by Abidin Bey, Abdeen Palace, which is named after him, is considered one of the most sumptuous palaces in the world in terms of its adornments, paintings, and large number of clocks scattered in the parlors and wings, most of which are decorated with pure gold. Built by Khedive Ismail, to become the official government headquarters instead of the Citadel of Cairo (which had been the centre of Egyptian government since the Middle Ages), this palace was used as well for official events and ceremonies.

Construction started in 1863 and continued for 10 years and the palace was officially inaugurated in 1874. Erected on an area of 24 feddans, However, the palace's garden was added in 1921 by Sultan Fuad I on an area of 20 feddans. spent on the palace's alteration, preservation and maintenance by consecutive rulers, The palace today is a museum.



1. Khedivial Cairo

Abdeen Palace was built in 1863 on a 25-feddan area, Khedive Ismail ordered the palace be erected in 1863, and the palace was named after Abdeen Bay, one of the army commander under Mohamed Ali Basha, In 1872, Khedive Ismail moved to Abdeen Palace, Abdeen Palace is a rare historical artifacts in terms of form and content, it reflects the luxurious and sophisticated taste was built by the palace, one of the most important palaces built by the family of Muhammad Ali Pasha of Egypt, and was the seat of government from 1872 until 1952. As it clear, Many changes took place from 1874 till 1888, apart of the palace converted into school in 1898, Then to residential buildings. All these changes affected the space, and have some impacts on it's size lawn area, uses and activities.



In 1874



In 1885



In 1888



In 1898



In 1914



In 1933

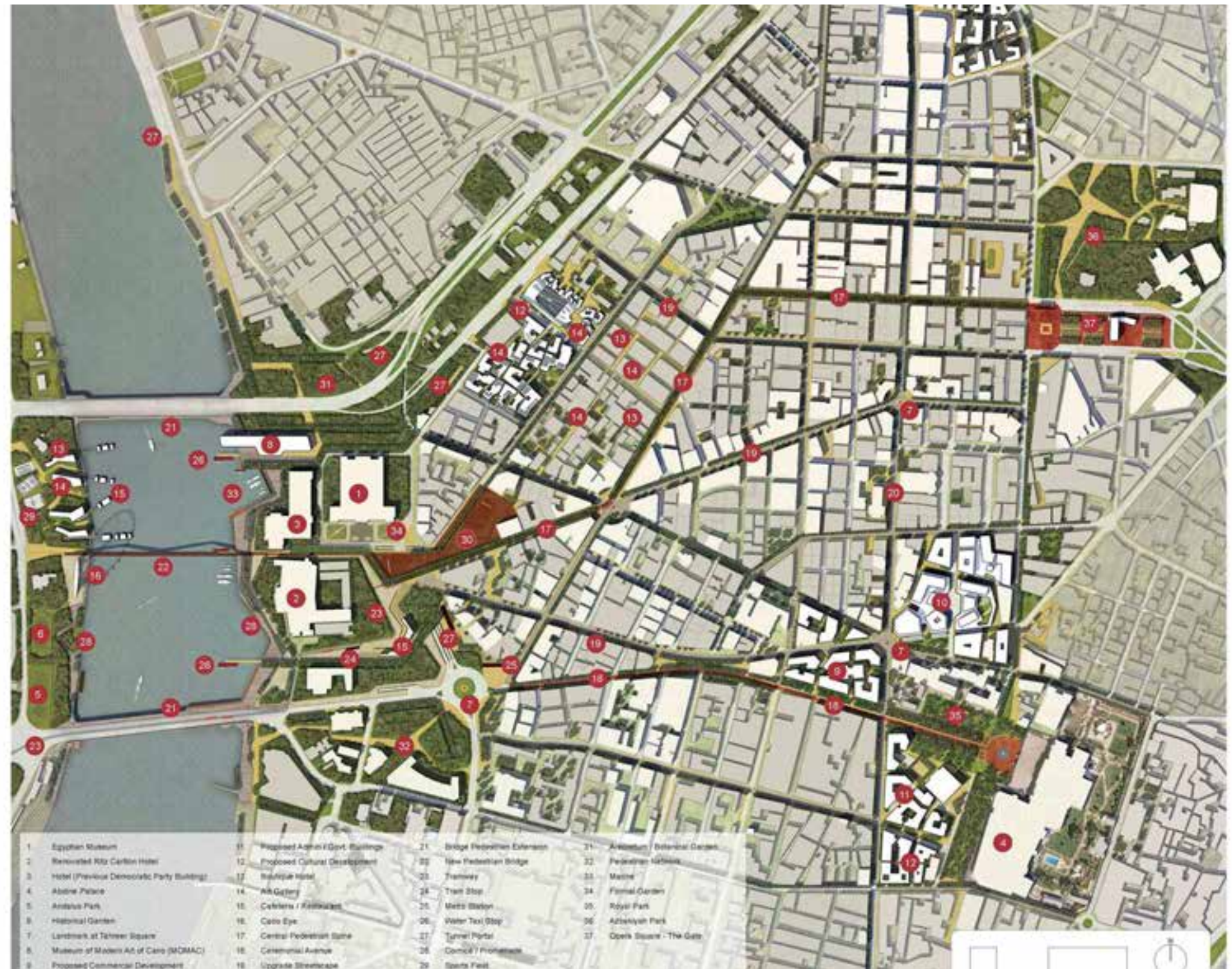
SPACE ANALYSIS AND COMPONENTS



ABDEEN SQUARE IN PREVIOUS PLANS

Abdeen square play an important role on the vision of khedivial cairo redevelopment plan which articulated a variant spaces and major squares linked together with green network system and efficient pedestrian friendly network and paths adding to a multi model public transit network strategy.

Abdeen square layout



ABDEEN SQUARE IN PREVIOUS PLANS

Cermonial entrance



Green Lines



Main Figure ground



Movement Network

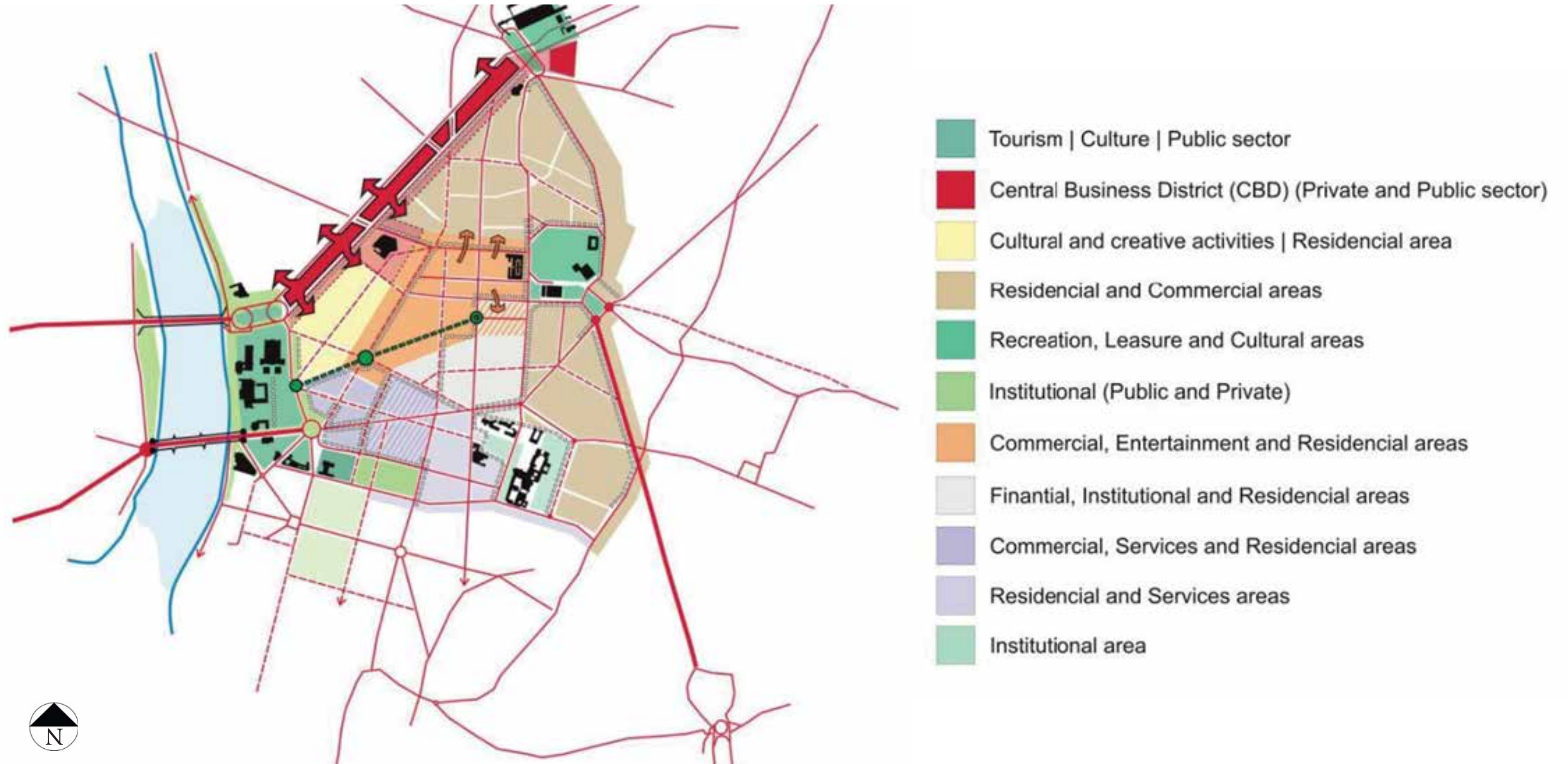


Abdeen Square Master plan Perspective



Space Creation of a space which frames the Abdeen Palace and the Cairo Governorate palace, This new design unifies this great rectangular space as a plaza and a park that is geometrically organised along two structuring axes: an axis relates to the great Abdeen Palace, and another that links it to the entrance to the Cairo Governorate, Two more closed and dense garden areas manage to consolidate the view of the Palaces, also providing room for experiencing coolness as well as relaxation and social gathering, New cultural function is proposed to Abdeen Palace, adding to the one in place Master Plan

ABDEEN SQUARE IN PREVIOUS PLANS



ABDEEN SQUARE IN PREVIOUS PLANS

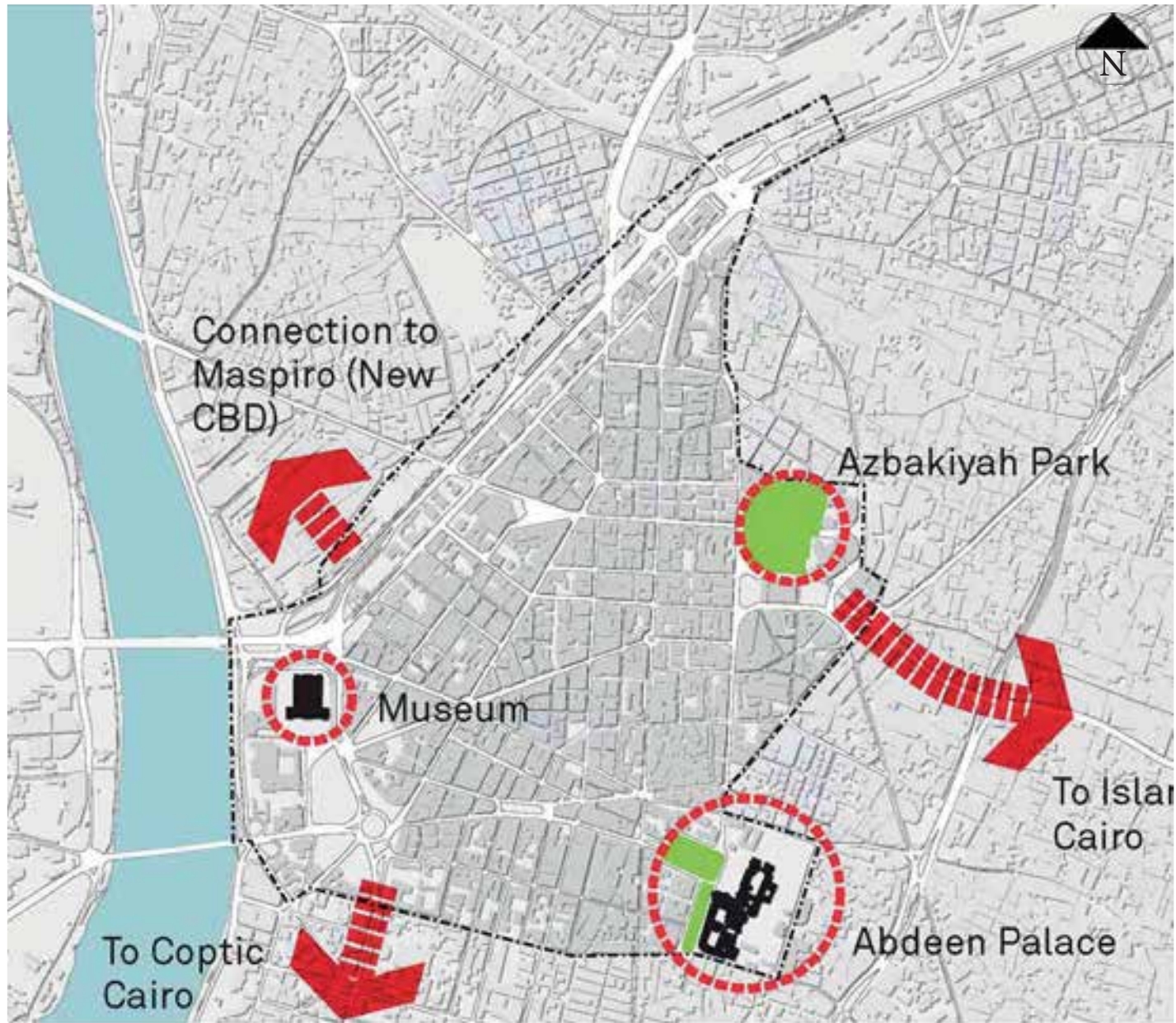


ABDEEN SQUARE IN PREVIOUS PLANS

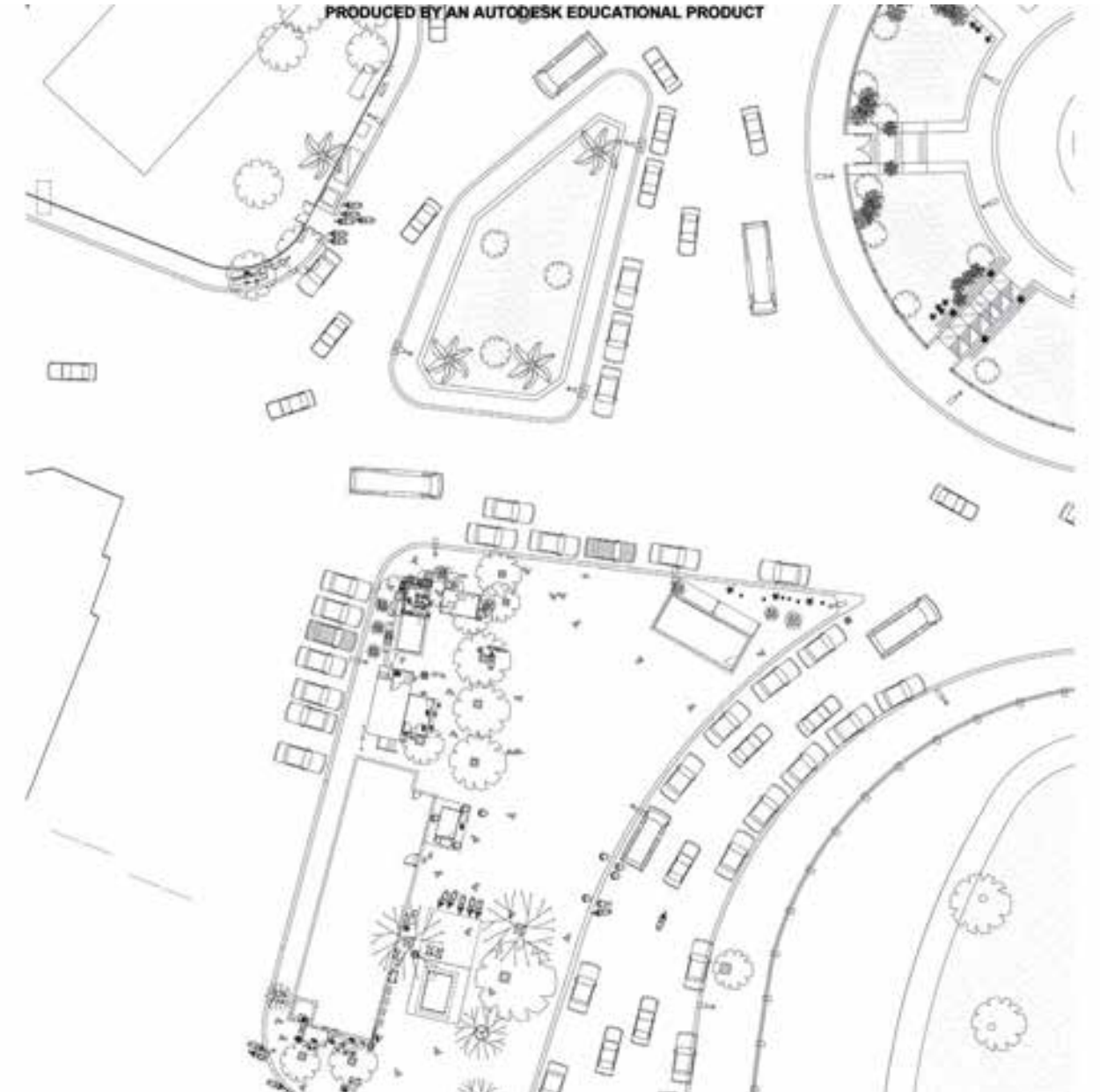


SURROUNDING URBAN FEATURE

1.1 Touristic Attractions



1.2 Major Open Spaces

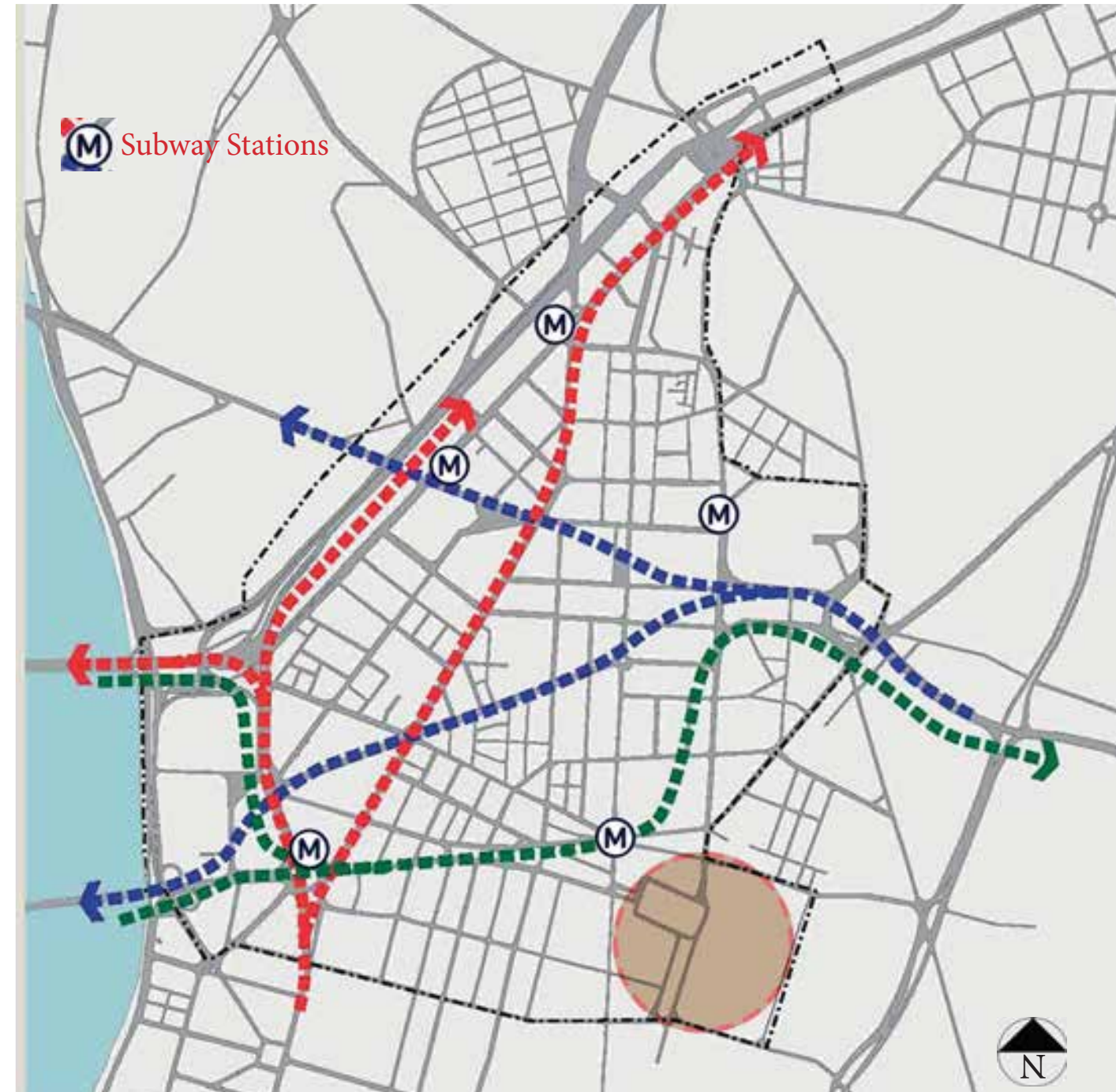


SURROUNDING URBAN FEATURES

2.1 Main Issues

Over time Cairo has expanded to the East and West of the site .

- The traffic intensity and congestion is persistent at all hours through the day . As a result, the city is suffering from the impacts of this sonstant traffic dominating the area.
- No clear street signage for way finding .
- From the survey, Square suffering from through traffic giving priorities for vehicles, especially for car parking over pedestrian .



SPACE ANALYSIS



LOCATION AND NEARBY USES

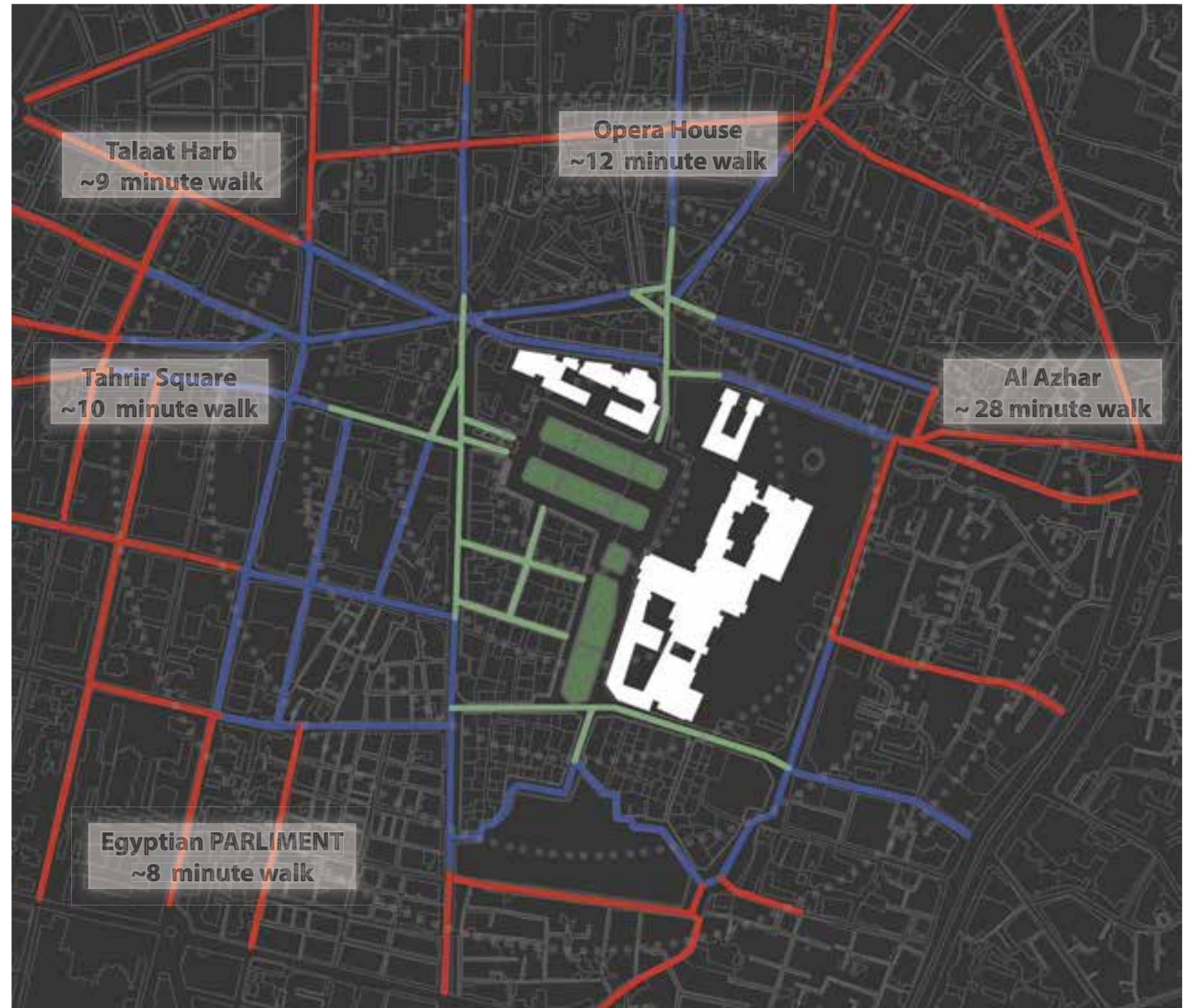
2.1 Walkability

Abdeen square lies in a median location to many main areas. Mostly with a walking distance less than 15 minutes for most of them.

Considering this and looking at the location of the palace (map to the right), Abdeen Square is one of the main destinations to various surrounding landuses.

However, further studies revealed that people does not prefer interacting with the square with surrounding neighbourhoods. Many space users merely passby the space, or live in the residential area along the space edge. The current situation is very dependant on the surrounding uses.

-  400m (5 minute walk)
-  800m (10 minute walk)
-  1200m (15 minute walk)



OVERALL ANALYSIS

1. Current Situation

Abdeen Square has very empathic urban walls such as Abdeen Palace and Governorate Building, a simple looking green structure and vehicular circulation.



OVERALL ANALYSIS

2. Space Analysis

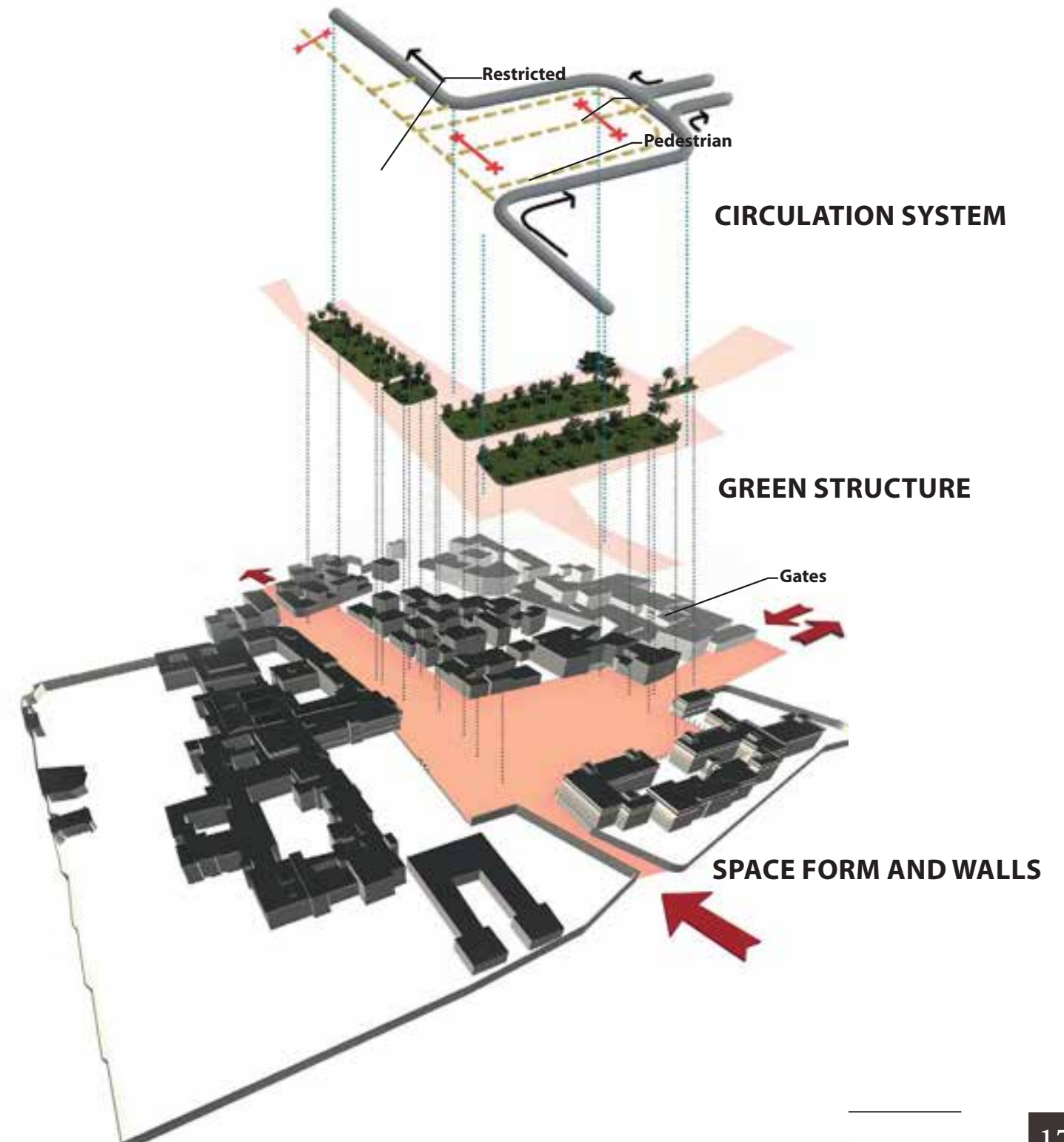
Abdeen Square has very empathic urban walls such as Abdeen Palace and Governorate Building, a simple looking green structure and vehicular circulation.



Abdeen Palace



Governorate Building



OVERALL ANALYSIS

2. Space Analysis

Abdeen space has a regular form that is considered an easy perceived space with formal walls.

- The space has a direct visual and roads axes from the entrances.
- There are many points of open view to the space.
- Two main focal points and a landmark on the governorate building.
- Green areas are distributed formally to the space but with low accessibility to the public.
- The space overall is considered relatively quite. However, there are zones that contain more dense activities.



ANALYSIS OF THE COMPOSITION AND CAPABILITIES OF THE URBAN SPACE

1-SPACE COMPOSITION

- Urban Walls
- Green Walls
- Empathic Urban Walls
- Empathic Buildings
- Road Axis
- Landmarks, Monuments

2-SPACE VISUALIZATION

- View Opening
- Visual Axis
- Focal Point

3-SENSATION OF SPACE

- Acceleration Zone
- Quiet Zone



ACTIVITY SITTINGS

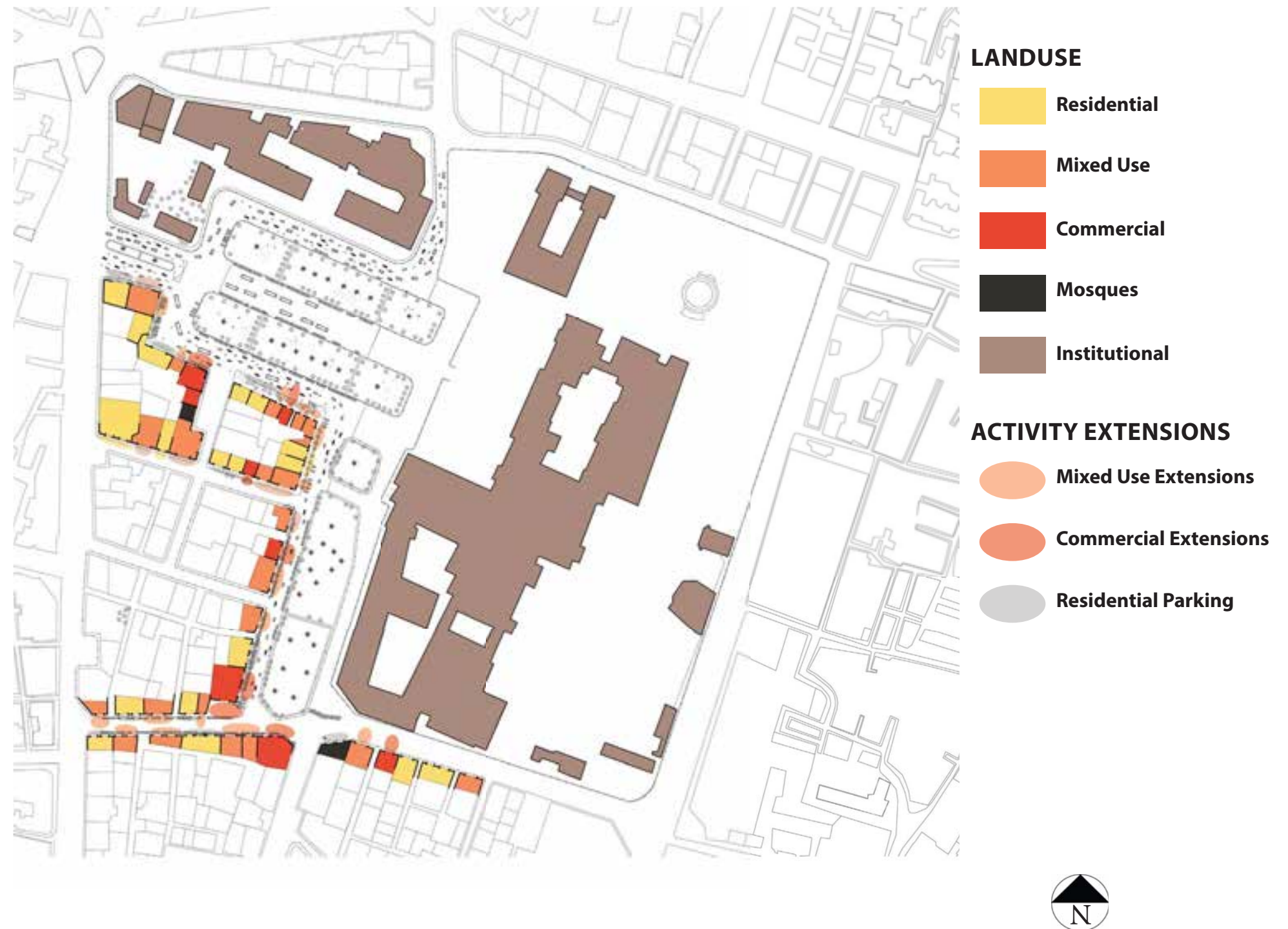
1. Activities and Extensions

The institutional use has 50% of the surrounding landuses that include the governorate building and Abdeen palace which is considered a heritage from khedivial Cairo.

25 % for groundfloor mixed use such as a traditional cafe and some shops.

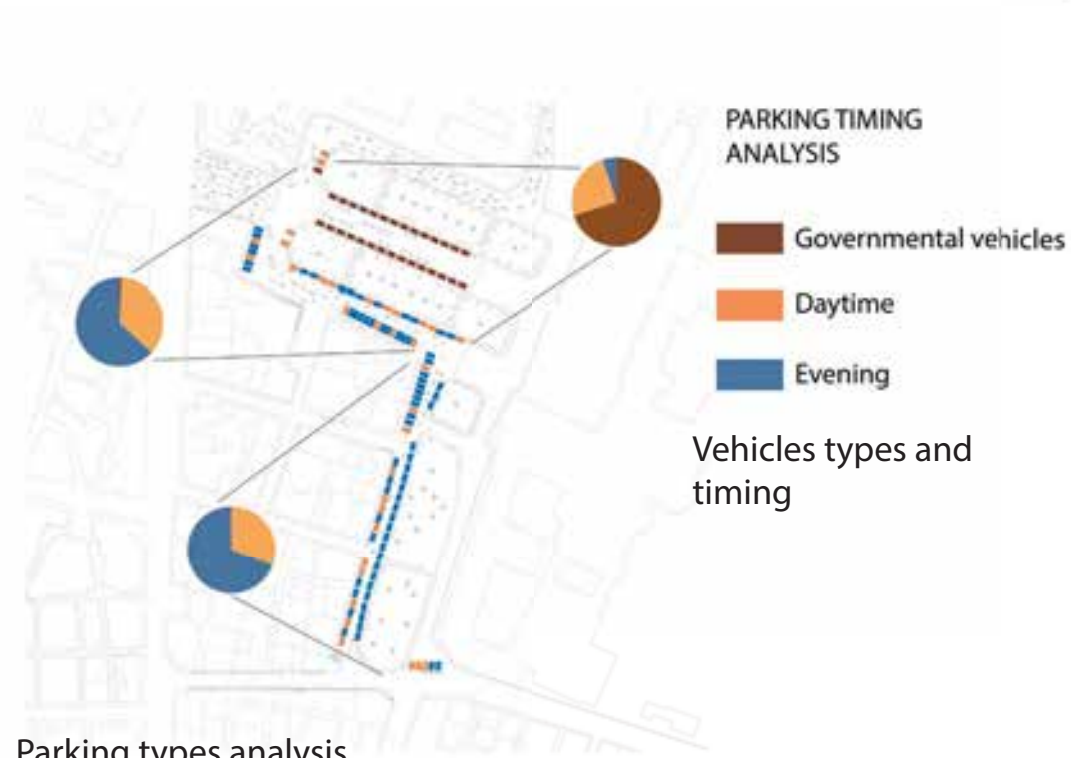
10% for the residential and commercial.

5% for mosques



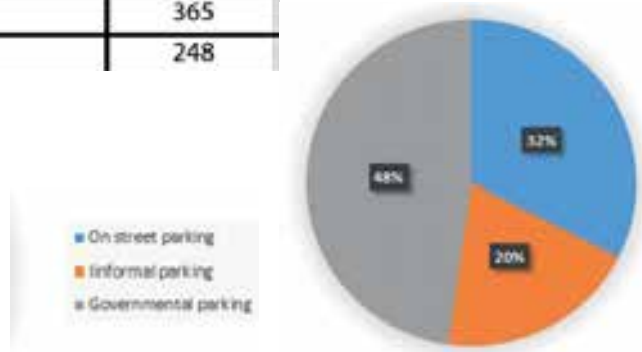
ACTIVITY SITTINGS

2. Parking Analysis



Parking types analysis

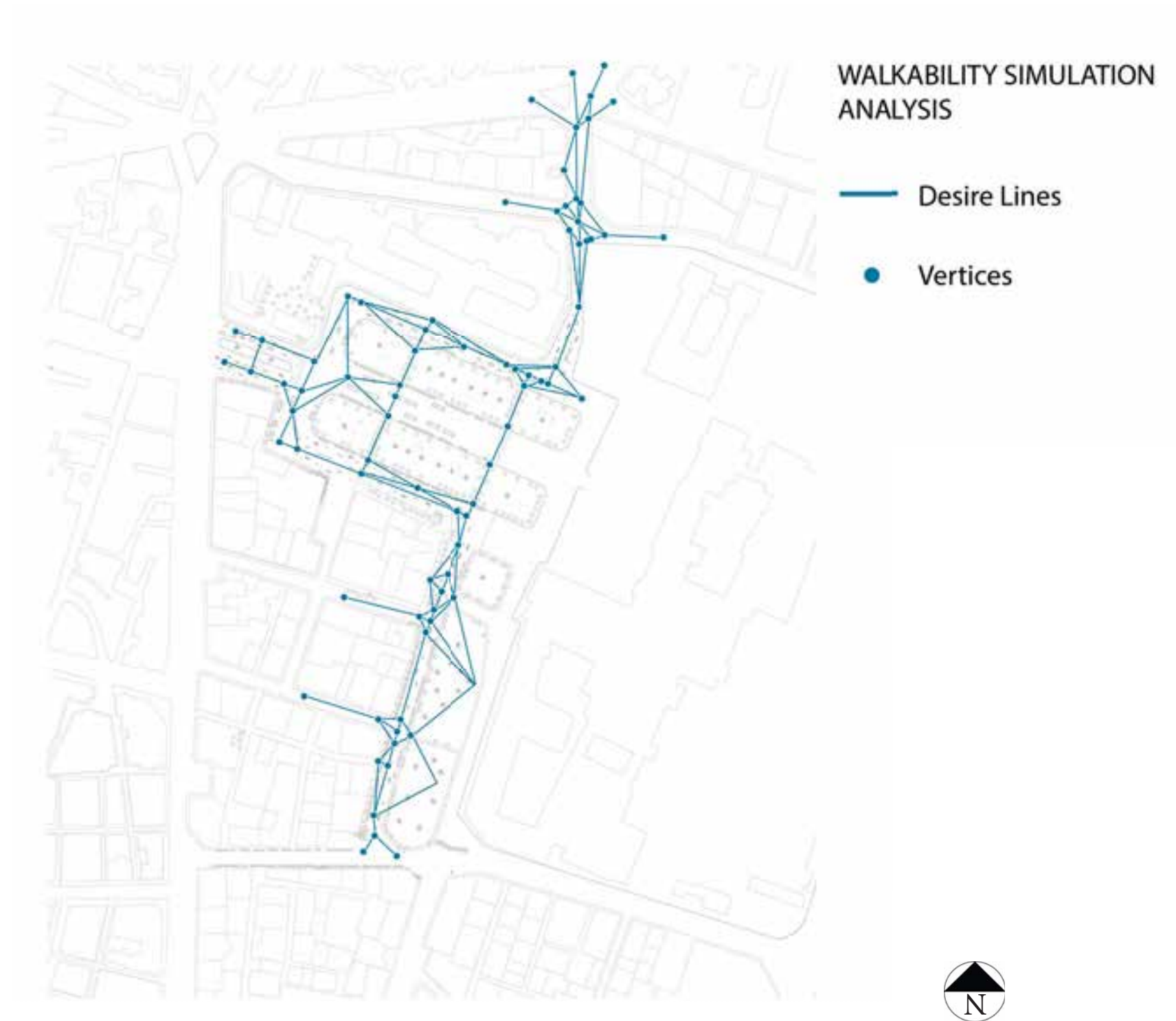
Parking Type	Parking Lots
Formal Parking	248
Informal Parking	151
Governmental Parking	365
On street Parking	248



ACTIVITY SITTINGS

3.Rates and Desire Lines

The desire lines of pedestrian movement within the space represent the shortest “desired” path of individuals. By analyzing movement patterns, there were heights (vertices) of movement.



PRACTICAL APPROACH & VISION

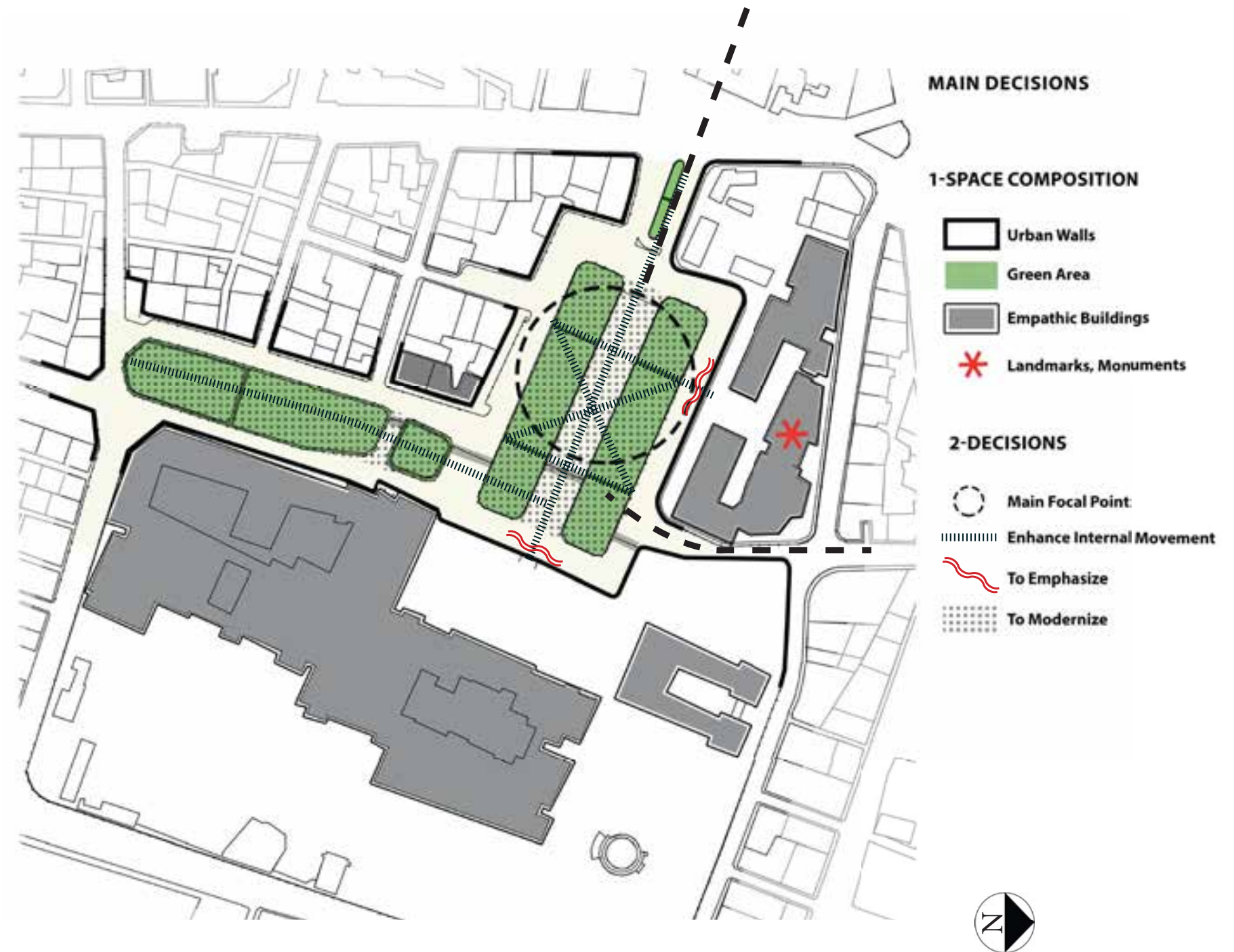


PRACTICAL APPROACH

1. Vision

From the studies of Abdeen square, some decisions took place, such as:

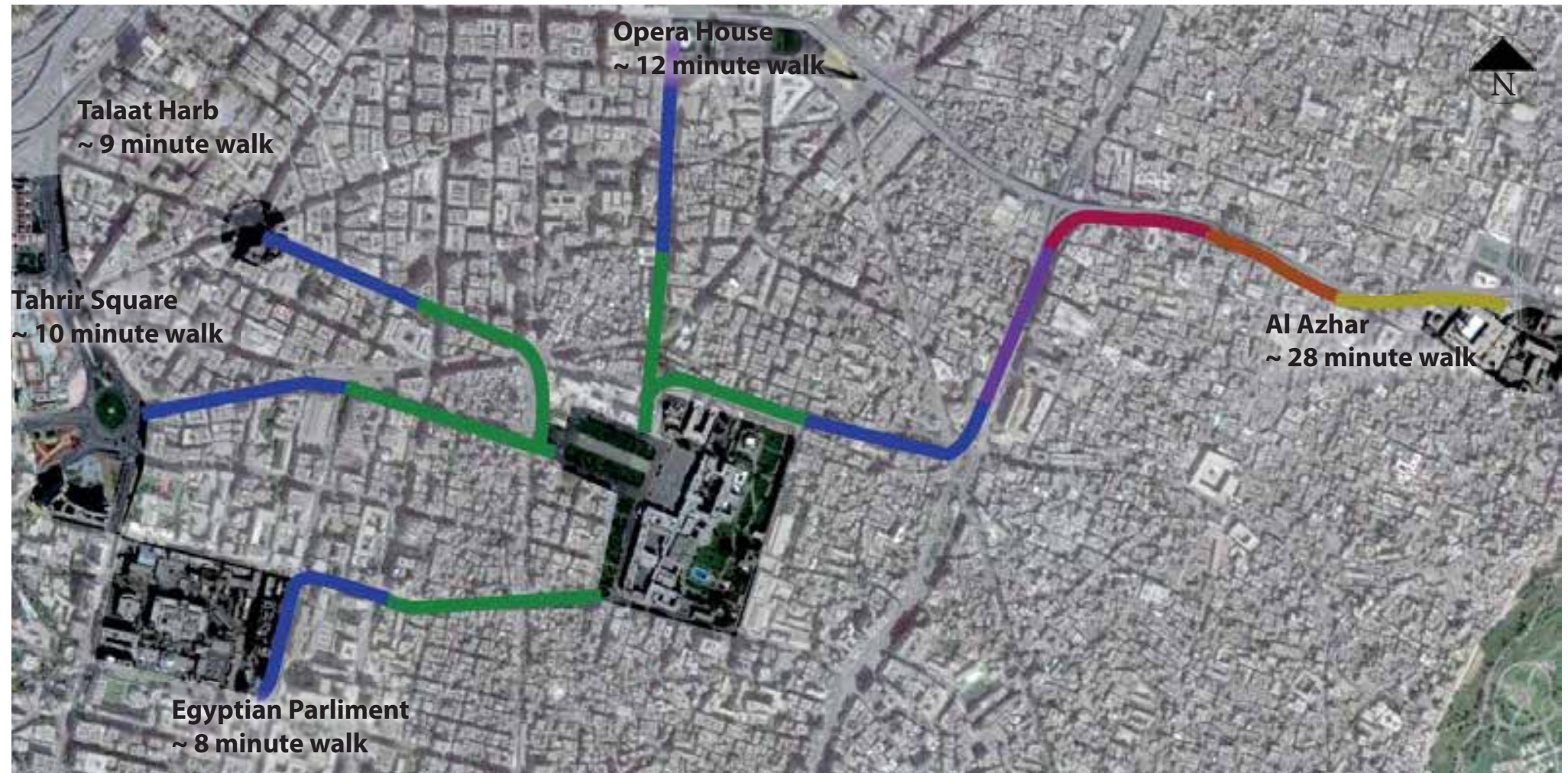
- Locating main focal point as a landmark for more extroversion exposure to emphasize space radiation in linking corridors.
- Linking the two parts of space with borders to be treated as a one place.



PRACTICAL APPROACH

2. Approaches To Space

The main theme is to enhance the links to space by on-street parking for a pedestrian movement in specific times at the day .



PRACTICAL APPROACH

3.Design Intent

To create a pedestrian friendly space in Mohamed Fareed street, that fulfills the activity amenities and parking spaces needed with respecting the identity of the built environment



PRACTICAL APPROACH

3. Design Intent

To create a pedestrian friendly in Algomhureya street by using the on-street parking space that fulfills the activity amenities and parking spaces needed with respecting the identity of the built environment .



CASE STUDY



CASE STUDY

Berlin Cathedral square has been taken as an example of historical space which converted to public space where people can arrange festivals and celebrations, The church is considered an significant node and worthy landmark, The church was replaced by a cathedral, built between 1745 and 1747 in a Baroque design from Johann Boumann. It was remodeled into a classicist building from 1816 to 1822.z



SWOT ANALYSIS



SWOT ANALYSIS

<ul style="list-style-type: none">• Clear space from through urban walls• Relation to landuses surrounding the space• Strong meaning of the palace and urban space• Strong connection with circulation around the space and easy accessibility . <p>S</p>	<ul style="list-style-type: none">• Some weak and ambiguous urban walls.• Informal and random space that affects pedestrian of space.• The lack of safety feeling because of the high traffic congestion .• Insufficient and weak urban furniture . <p>W</p>
<ul style="list-style-type: none">• The ability to connect with surrounding square and city green axes• Available main parking spaces to solve the parking problems• Nearby city cultural and entertainment centers that gives significance to the spaces . <p>O</p>	<p>T The lack of opportunities to create pedestrian-safe ambience, due to the strong vehicular connection with the main CBD street network .</p>





ABDEEN

Square Development

From yesterday
to today

Second Chapter :
"Alternatives"



ALTERNATIVES



CONTENTS

-FIRST ALTERNATIVE - FIRST OPTION	4
• Layout	4
-FIRST ALTERNATIVE - SECOND OPTION	5
• Layout.....	5
• Alternative Studies	6
-SECOND ALTERNATIVE	7
• Layout	7
• Alternative Studies	8
-THIRD ALTERNATIVE - FIRST OPTION.....	9
• Layout	9
• Alternative Studies	10
• 3D shoots.....	11
-THIRD ALTERNATIVE - SECOND OPTION.....	14
• Layout	14
• Alternative Studies	15
-THIRD ALTERNATIVE - THIRD OPTION	16
• Layout	16
• Alternative Studies	17
PREFERRED MASTER PLAN.....	18
• First Alternative - Second Option.....	19

1. First Alternative - First Option

1.1 Layout

The main concept of the alternative is to Minimize the intervention by:

- Keeping the existing road network and solving parking issues by supporting on street parking on space peripheries.
- Create a main path divides garden into two sides .
- Calling back classical formal gardens .
- Linking the two parks .



1.2 Layout

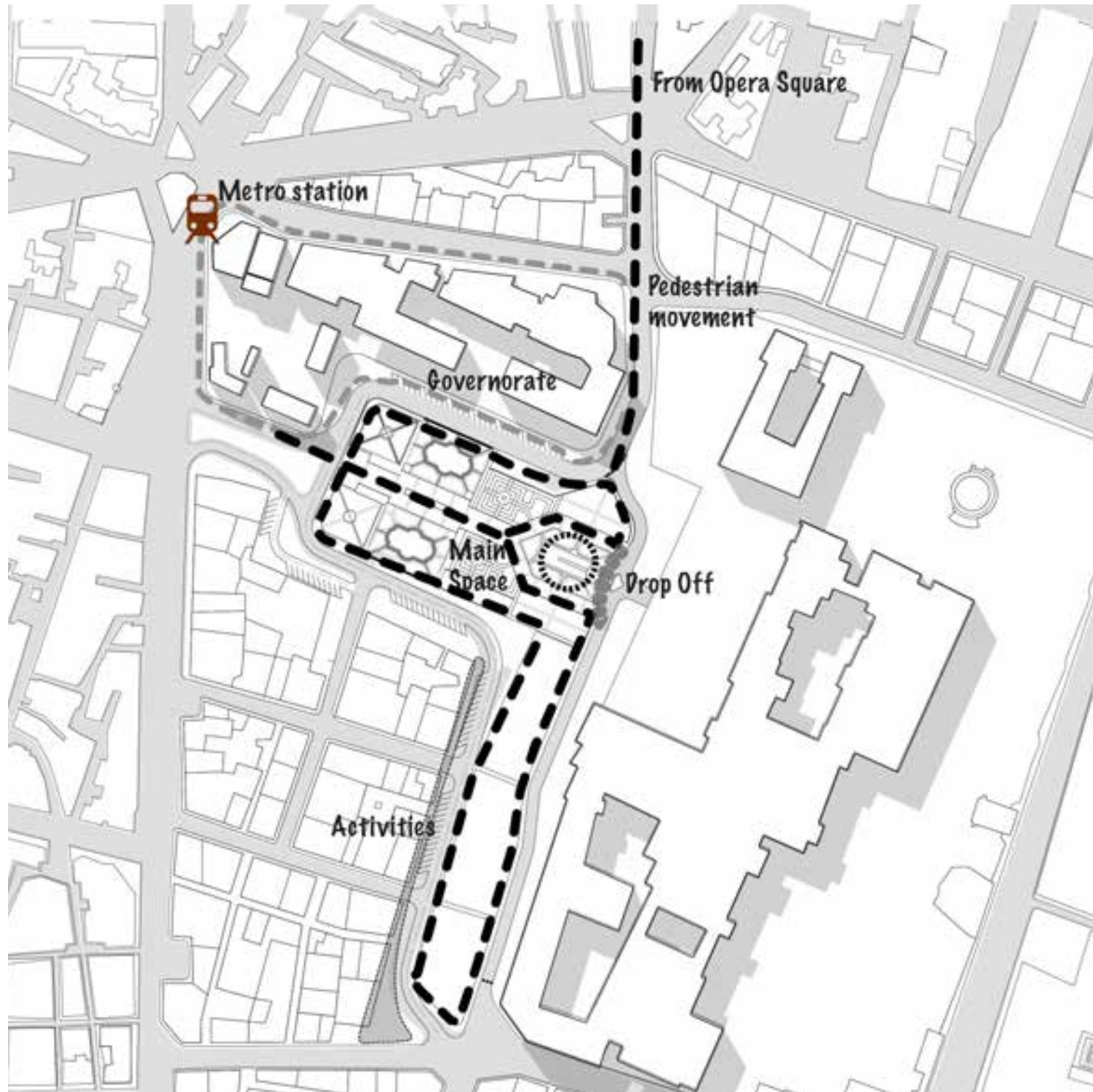
The main concept of the alternative is to Minimize the intervention by:

- Keeping the existing road network .
- Create a main gathering palza to support social activities.
- Enhancing the visual axis to Abdeen palace by palm trees
- Calling back classical form gardens .
- Linking the two parks .



1. First Alternative

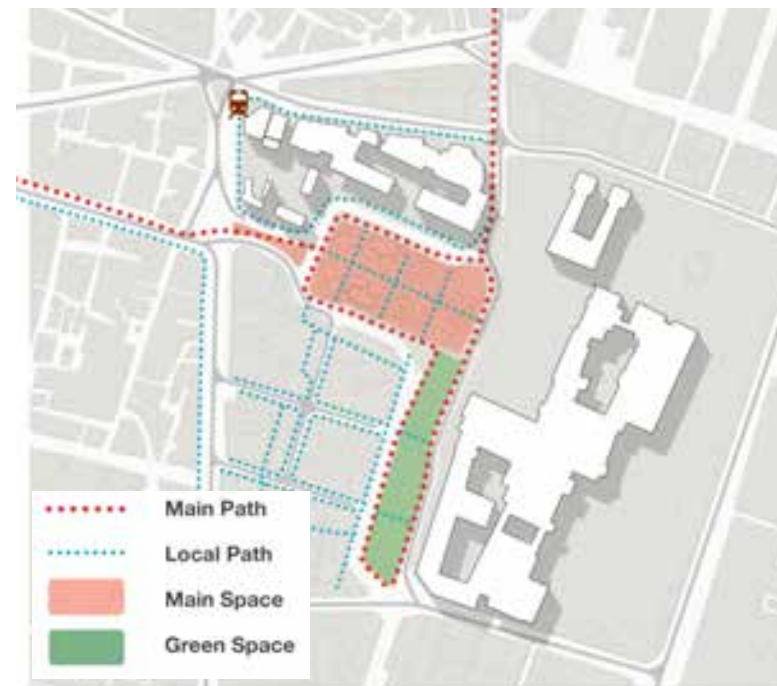
1.3 Main Concept



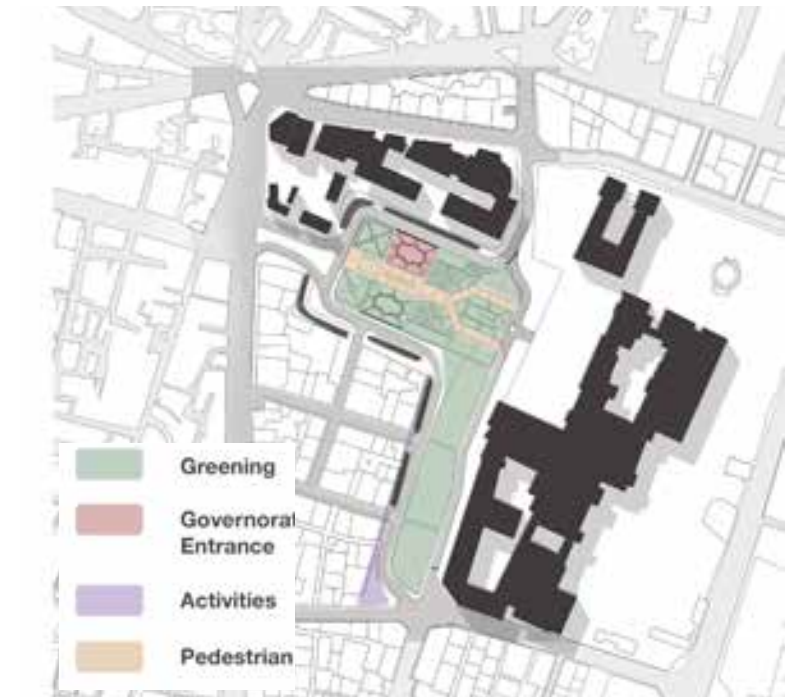
1.3 Network And Parking



1.4 Movement



1.5 Activities



Alternative Strengths
 Least intervention in built environment and infrastructure.
 Maximizing pedestrian circulation network.
 Providing privacy to Abdeen Palace.
 Good green space rate .

Alternative Weaknesses
 Traffic flow problem remains the same.
 Limited parking lots and access to parking.
 Vehicles dominance.
 Separation between the pedestrian movement and space activities .

2. Second Alternative

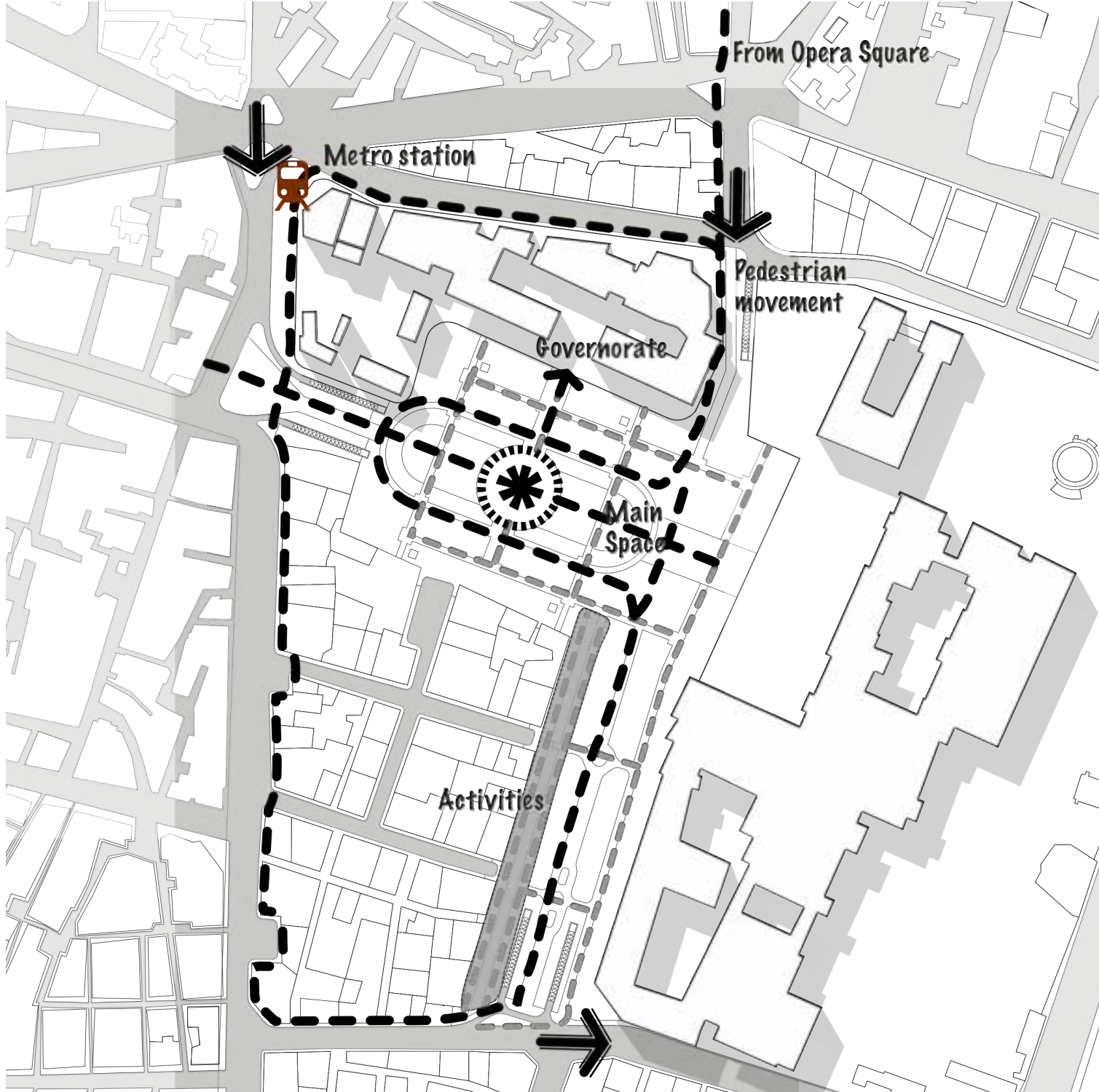
2.1 Layout

- The main concept of the alternative is to make a pedestrian space for pedestrian and social activities by:
- Preventing vehicles from entering the space.
- Create an intimate atmosphere by locating a wide area of green with classical forms, pedestrian paths and a main space contained fountain in the center.



2. Second Alternative

2.2 Main Concept



2.3 Network And Parking



2.4 Movement



2.5 Activities



Alternative Strengths

- pedestrian oriented space
- Very friendly environment for the pedestrian.
- Integrated with uses and activities.

Alternative Weaknesses

- traffic prohibited through the space
- Increased the flow around the square periphery ,thus affecting vehicular space accessibility.

3. Third Alternative - First Option

3.1 Layout

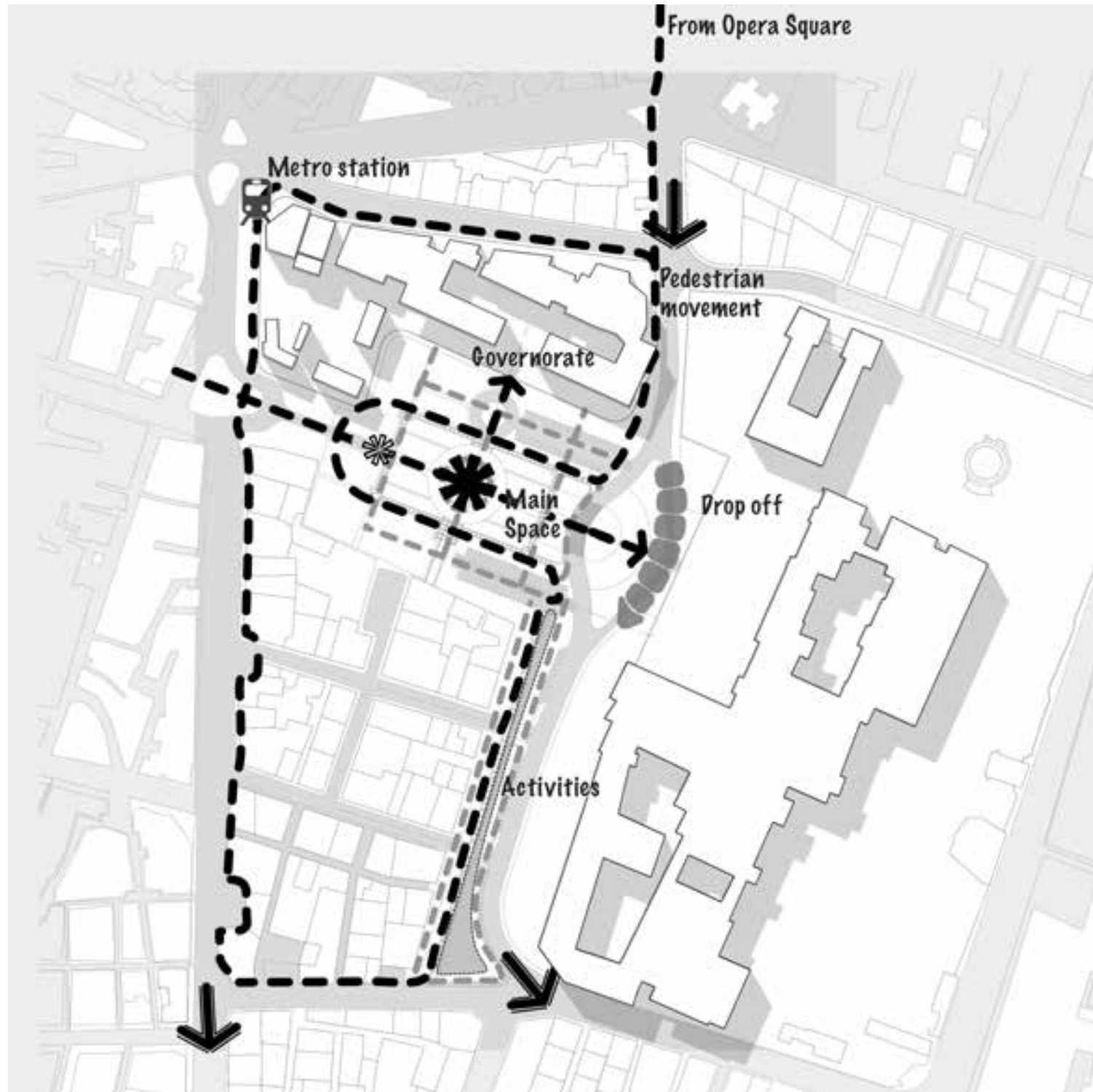
The main concept of the alternative is to Minimize the intervention by:

- Moderate Intervention.
- Developing avenue by making drop off in front of the palace and continue to the destination [Bab el Khalq] .
- Preventing All traffic through space.

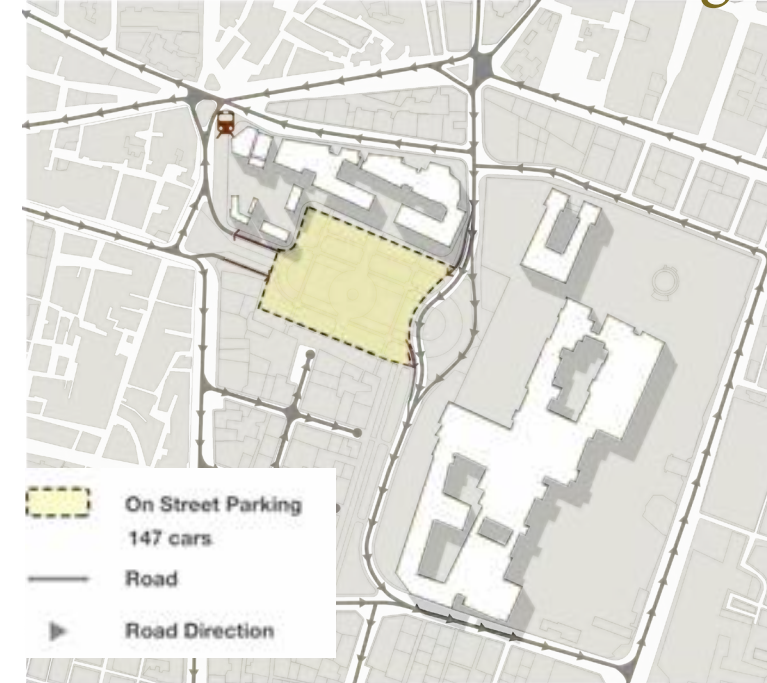


3. Third Alternative - First Option

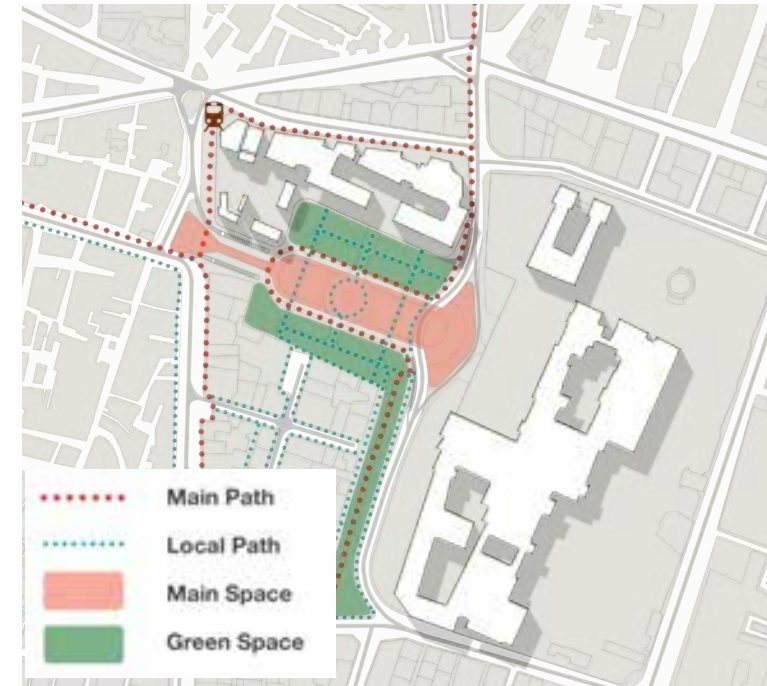
3.2 Main Concept



3.3 Network And Parking



3.4 Movement



3.5 Activities



Alternative Strengths

Maximizing parking space
 Strengthening visual axis to Abdeen Palace.
 Conserving the existing main axis along with additional axes .

Alternative Weaknesses

vehicular dominance inside the space.
 Isolated pedestrian paths which effects security and connectivity.
 Parking income is hard to manage.
 High cost (infrastructure interfrance) .

3.Third Alternative - First Option

3.3 3D shoots



3. Third Alternative - First Option

3.3 3D shots



3. Third Alternative - First Option

3.3 3D shots



3. Third Alternative - Second Option

3.4 Layout

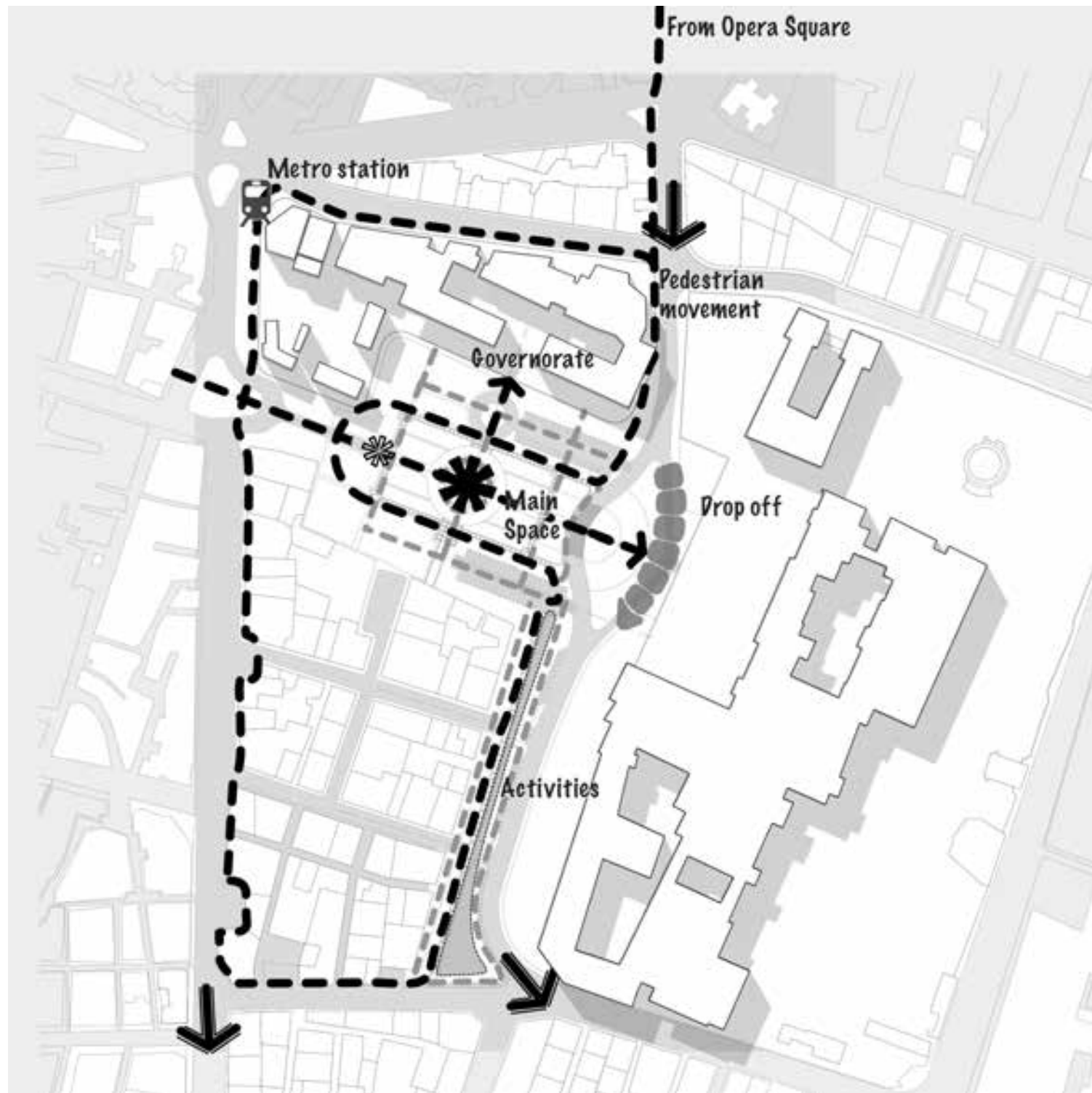
The main concept of the alternative is to Minimize the intervention by:

- Moderate Intervention
- Developing avenue by making drop off in front of the palace and continue to the destination [Bab el Khalq] .
- Preventing All traffic through space expect making an off-parking lots linked to the avenue instead of underground parking.



3. Third Alternative - Second Option

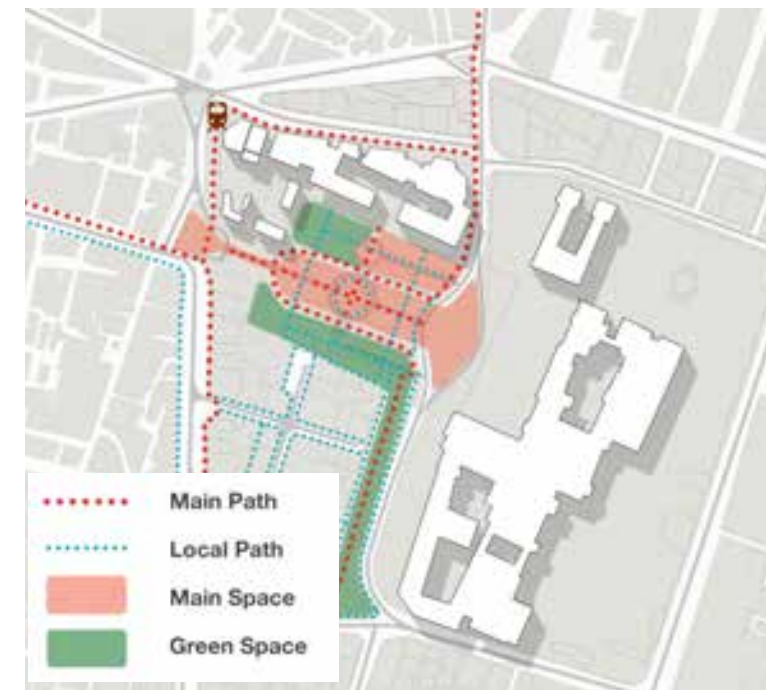
3.5 Main Concept



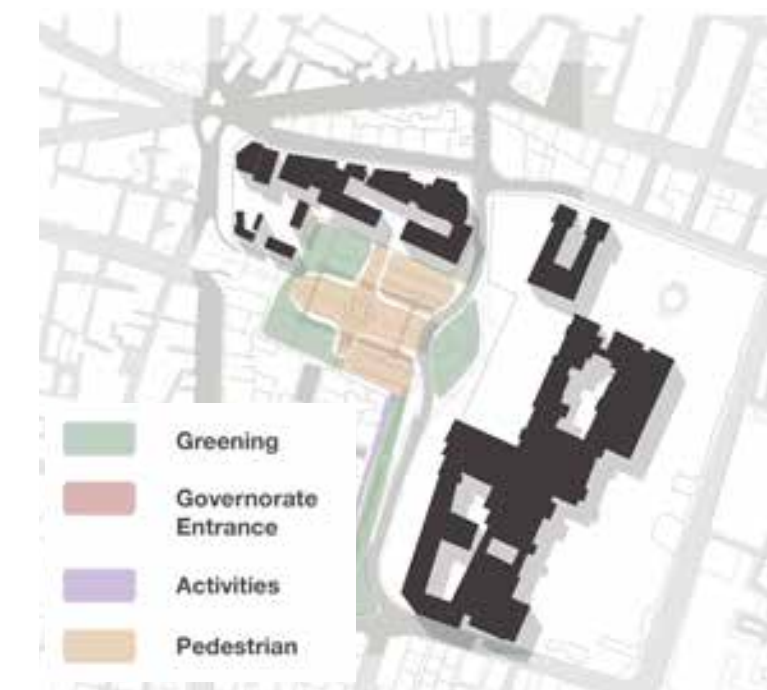
3.3 Network And Parking



3.4 Movement



3.5 Activities



Alternative Strengths

Maximizing parking spaces.
 Strengthening visual axis to Abdeen Palace.
 Conserving the existing main axis along with additional axes .

Alternative Weaknesses

Vehicular dominance inside the space.
 Isolated pedestrian paths which effects security and connectivity.
 Parking income is hard to manage.
 High cost (infrastructure interfrance) .

3. Third Alternative - Third Option

3.6 Layout

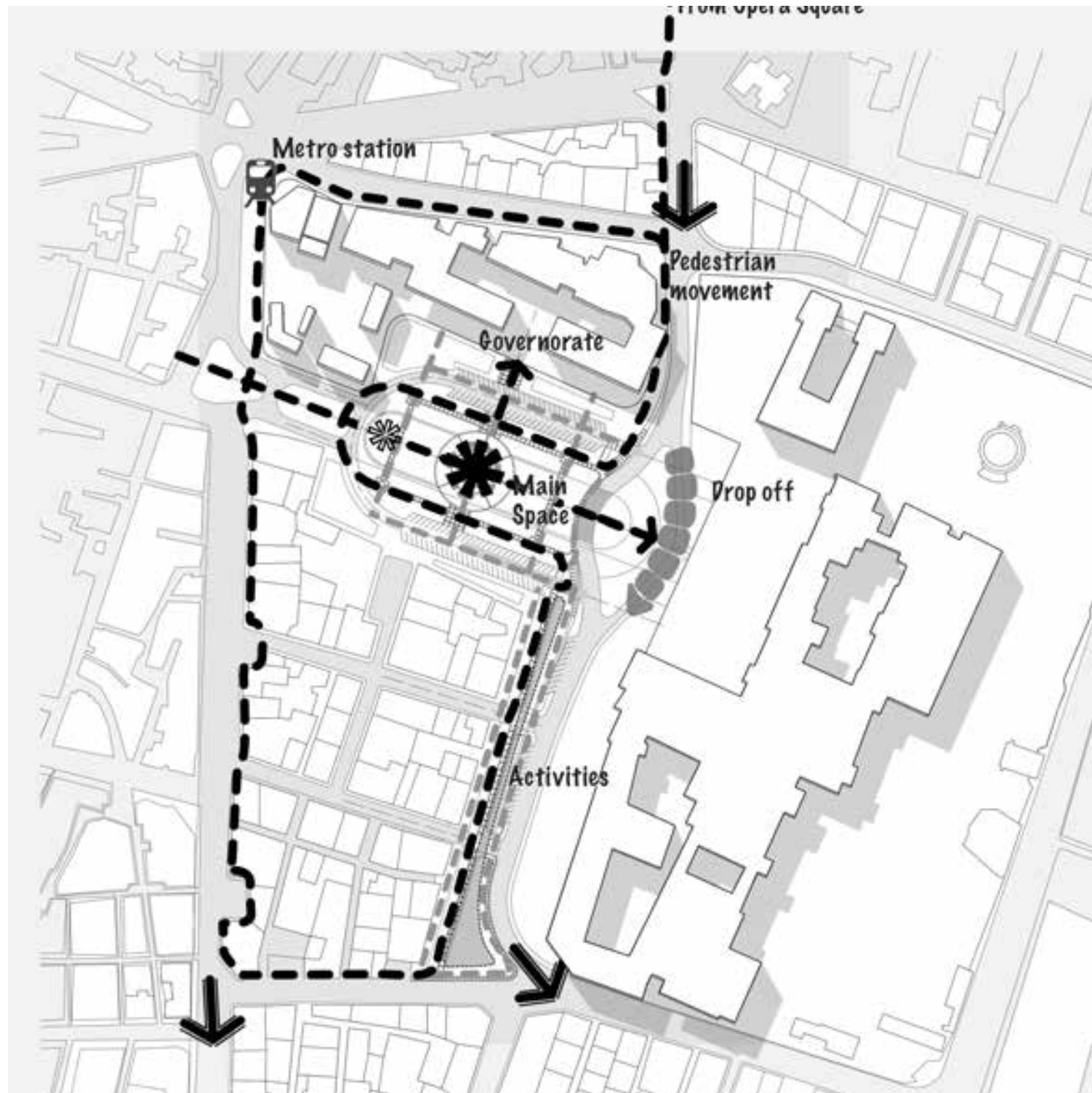
The main concept of the alternative is to Minimize the intervention by:

- Moderate Intervention.
- Developing avenue by making drop off in front of the palace and continue to the destination [Bab el Khalq] .
- Renovate the existing street network by development the entrance.
- Redesign the two street wings to space with on street parking.

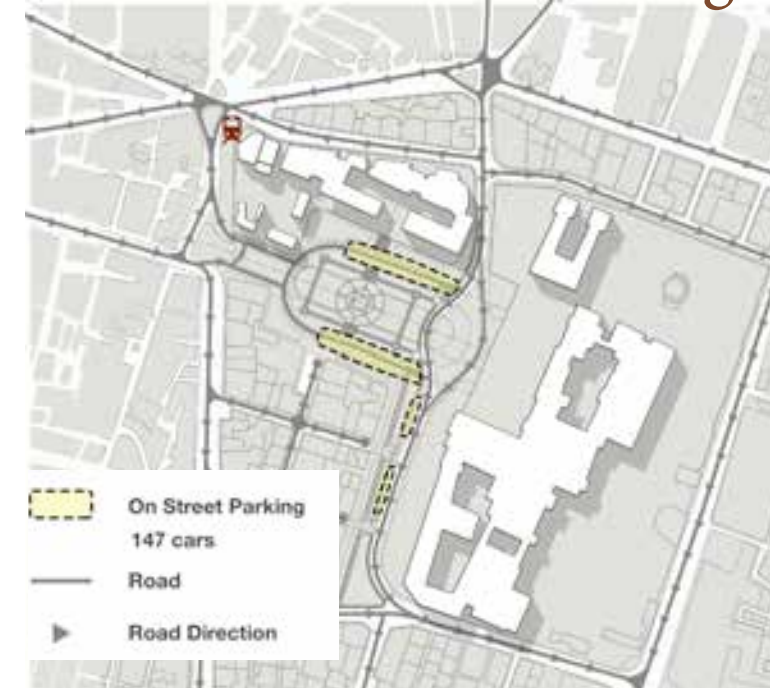


3. Third Alternative - Third Option

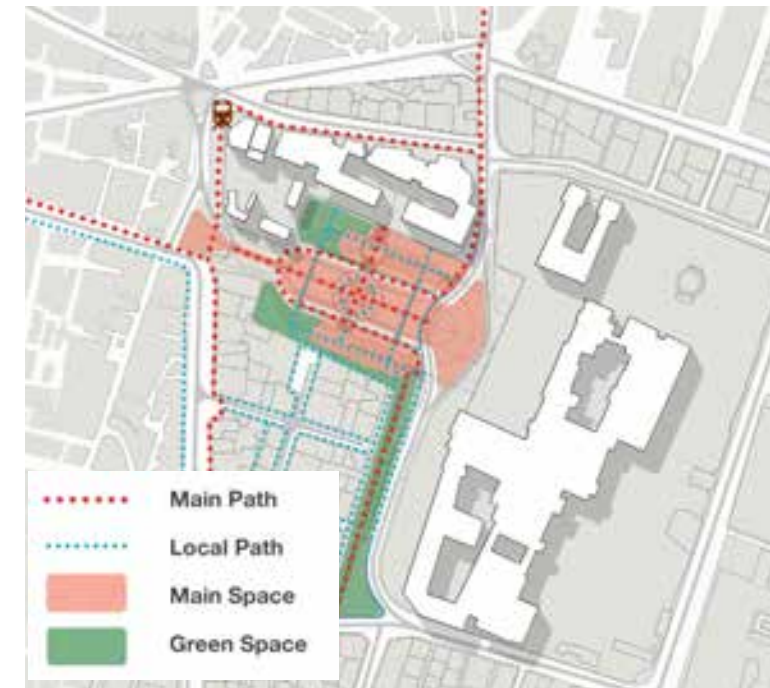
3.7 Main Concept



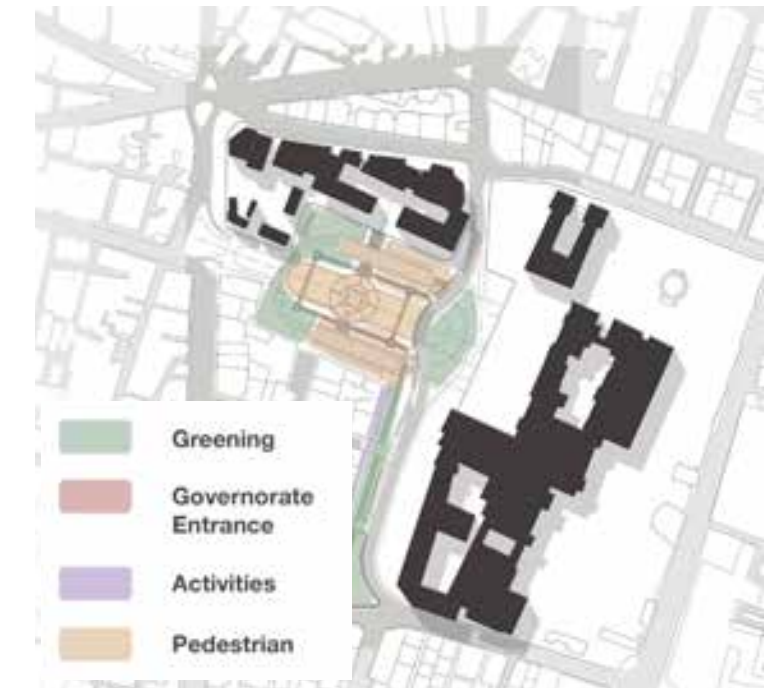
3.3 Network And Parking



3.4 Movement



3.5 Activities



Alternative Strengths

Maximizing parking spaces.
 Strengthening visual axis to Abdeen Palace.
 Conserving the existing main axis along with additional axes .

Alternative Weaknesses

Vehicular dominance inside the space.
 Isolated pedestrian paths which effects security and connectivity.
 Parking income is hard to manage.
 High cost (infrastructure interfrance) .

PREFERRED MASTER PLAN



First Alternative -Second Option

The main concept of the alternative is to Minimize the intervention by:

- Keeping the existing road network and redesign the on street parking.
- Create and renovate a main gathering plaza to support social activities.
- Enhancing the visual axis to abdeen palace by palm trees
- Calling back classical form gardens .
- Linking the two parks .



TEAMWORK

- DR. ABDELKHALEDQ QADI
- ABDUALLAH EL-ATTAR
- KHALED NOUR
- FATTIMA ALIRAQI

- ABDULALLAH BASHARY
- AHMED MAGDI
- AHMED ABDELMN'EEM SOKR
- BESHOI MEDHAT
- HEBA ABDEL-DAYM
- MAHMOUD HANI
- MOHAMAD KAMAL
- MOHAMAD SAA'ID
- MARY THARWAT
- RADWA KAMAL



ABDEEN

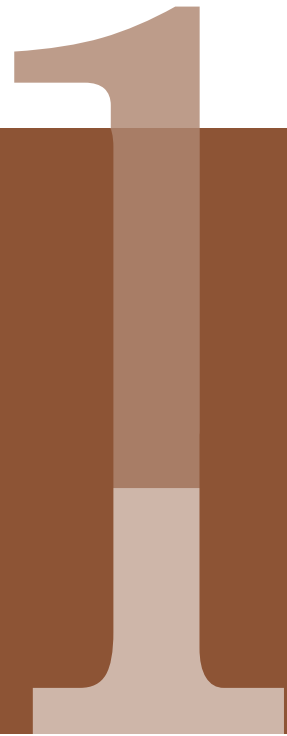
Square Development From yesterday to today

Final Chapter
"THE DESIGN & CONSTRUCTION"



CONTENTS

- 1- INTRODUCTION 3
 - 1-1 DESIGN PHILOSOPHY4
 - 1-2 DESIGN INTENT5
- 2- DESIGN ELEMENTS6
 - 2-1 AXIALITY7
 - 2-2 WATER FEATURES8
 - 2-3 SPACE BORDERS9
 - 2-4 ACCESS LINES10
- 3- ABDEEN MASTERPLAN11
 - 3-1 THE MASTERPLAN12
 - 3-2 3D SHOTS13
 - 3-3 SPACE TOPOLOGY14
- 4- LANDSCAPE CONSTRUCTION15
 - 4-1 HARDSCAPE16
 - 4-2 SOFTSCAPE20
 - 4-3 LIGHTING26
 - 4-4 DETAILS30
- 5- TEAMWORK33



INTRODUCTION

- Design Philosophy
- Design Intent

2-1.Design Philosophy

- The landscape of Abdeen Square confirms and maximizes the exposure of the icon buildings that surround the space by Confirming strong visual axiality and access lines with creating vibrant, socially engaging and healthy Landscape environment that will provide significant benefits to Users and visitors.



Design Philosophy



1-2.DESIGN INTENT

- Victorian minimalistic design with its straight lines and rectilinear shapes. The design lines are inspired by Khedivial architecture of historic Cairo and the formal gardens of the era. The spaces and green spaces are shaped with clean straight lines for better space definition and recognition It is a simple design yet very rich in details, the site furniture follows the minimalistic look of design with strong and clear functionality.
- A transition between the fluidity of the pedestrian desire lines moving towards the rigidity and boldness, yet neutral geometry and design of the existing buildings Enhances the function of space as main space of Cairo Khedivial plan.





DESIGN ELEMENTS

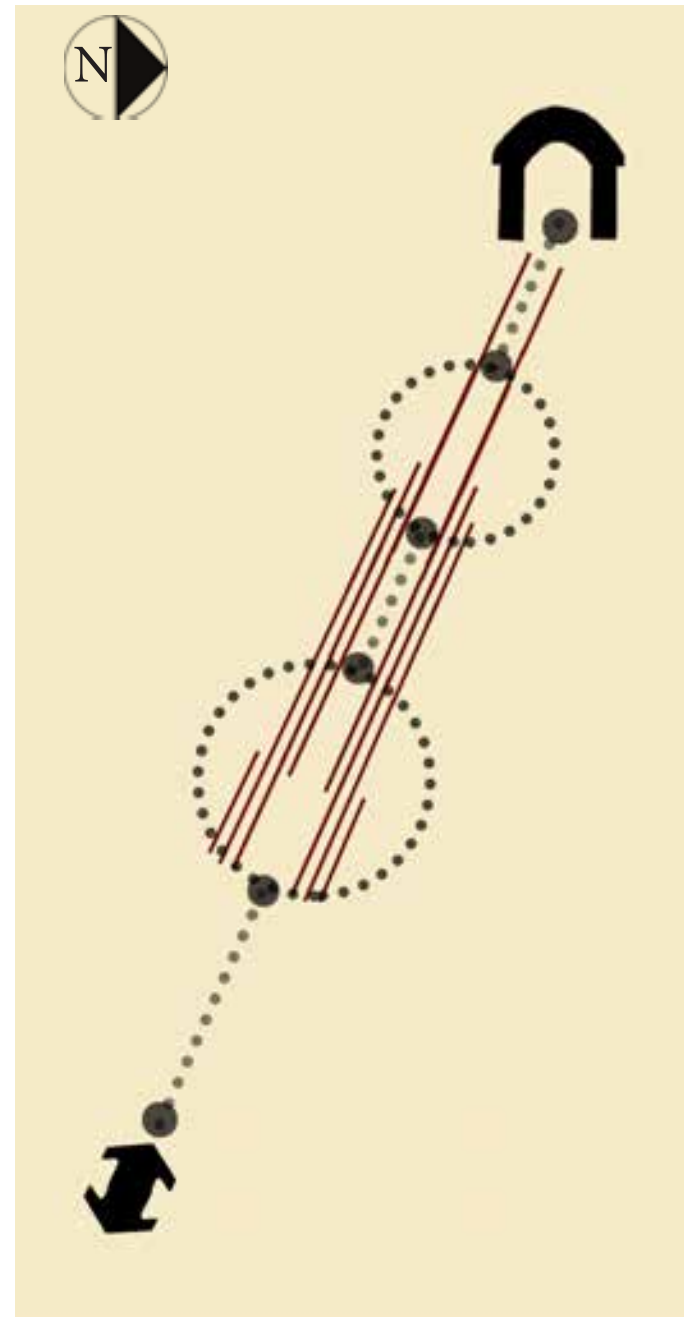
- Axialty
- Water features
- Borders
- Access lines

2-1.AXIALITY

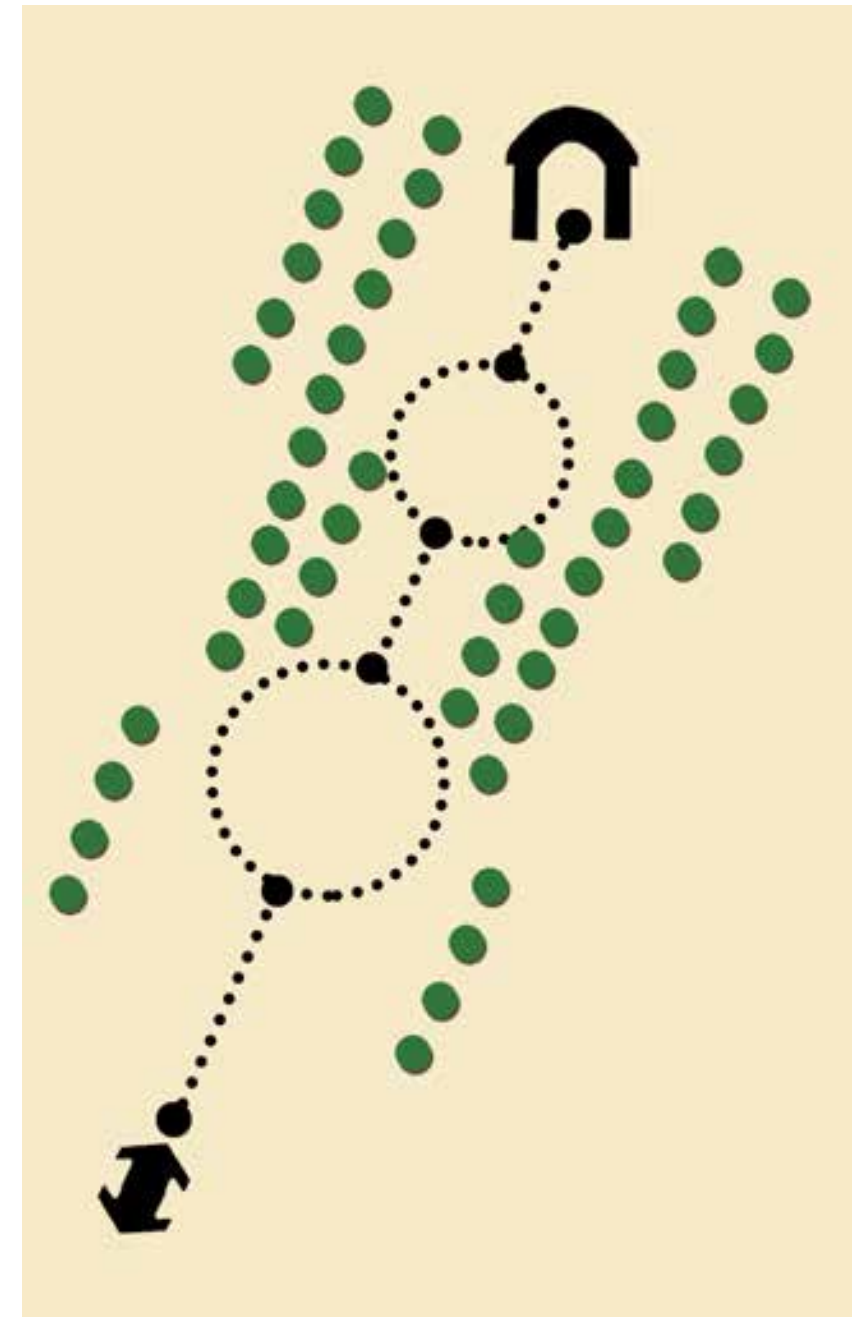
- Imphasising the axuality in Abdeen landscape design by creating main vertical visual axis to the Palace that enhance the exposure of palace architecture value, adding to the axis that connects the main approach to Government building.



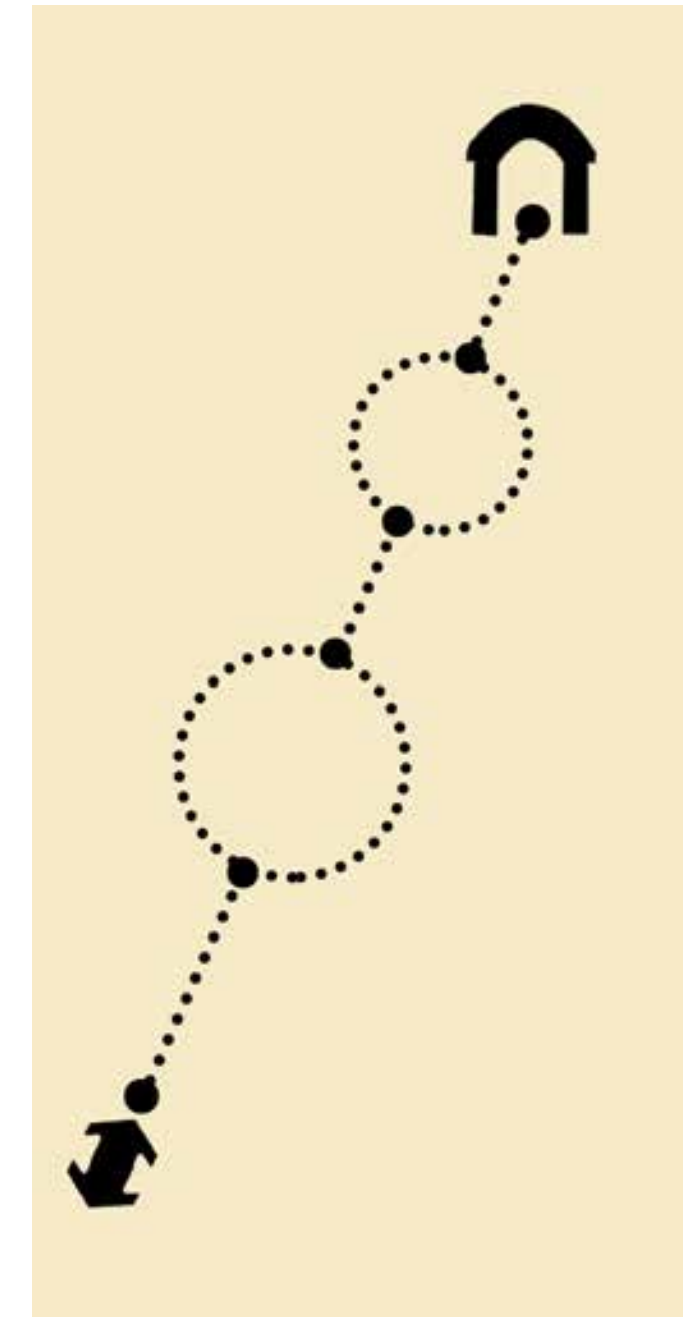
Axiality by
Hardscape design



Axiality by
Tree arrangement

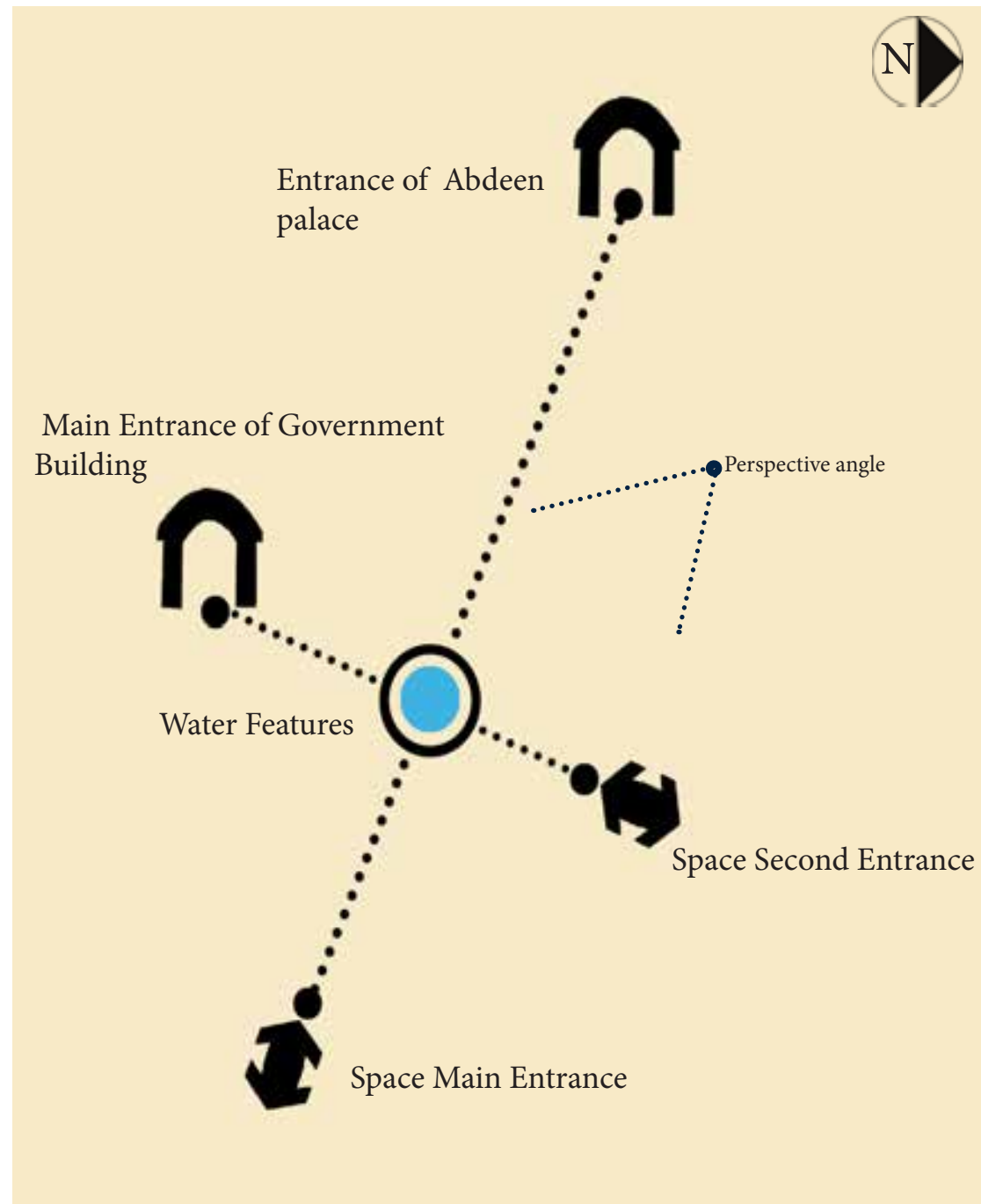


Axiality by
Visual Design



2-2. Water Features

- Enhancing visitors interactions with the space elements by creating a distinctive experience in the space , and achieving flexibility in use



- Direction:** to enhance the axially water features strip emphasized the main axis to place gate
- Location:** the intersection of main axis made a distinguish node to locate an iconic water feature of the space
- Liveliness and usage:** Uses an interactive water features allowing users to interact with water streams (in operation case) and fountain space (in non-operation case).

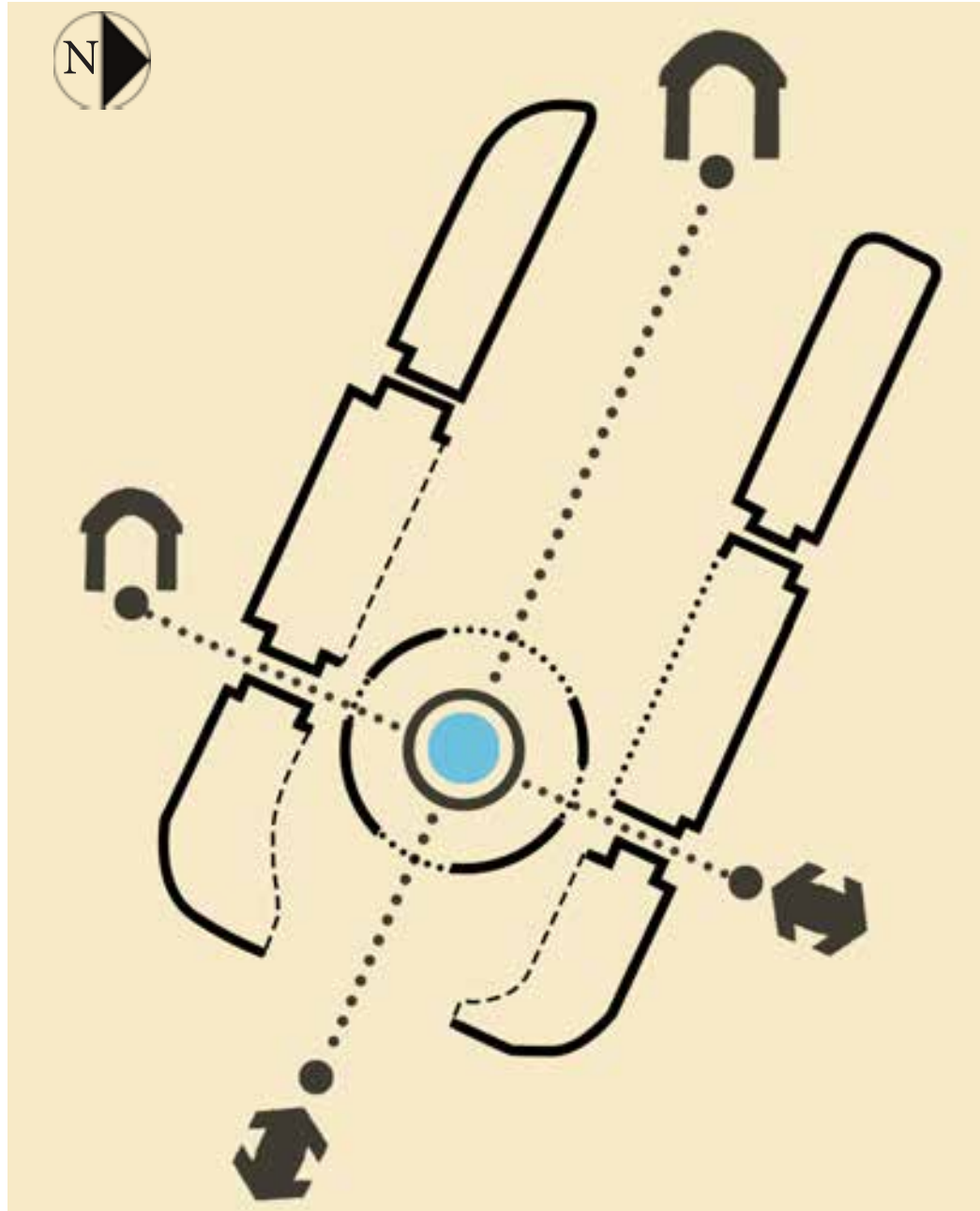


The Perspective shows :

- Main Entrance of Government Building
- Space Main Entrance
- Space Second Entrance
- Water Features
- Seats

2-3.Space Borders

- Facilitate visual perception and enhancing the uses of the space as entrance definition and regulate pedestrian circulations whether users and visitors.



- Enhancing the flexibility of borders uses



- Locating the pedestrian paths and substantiation the visual axiality



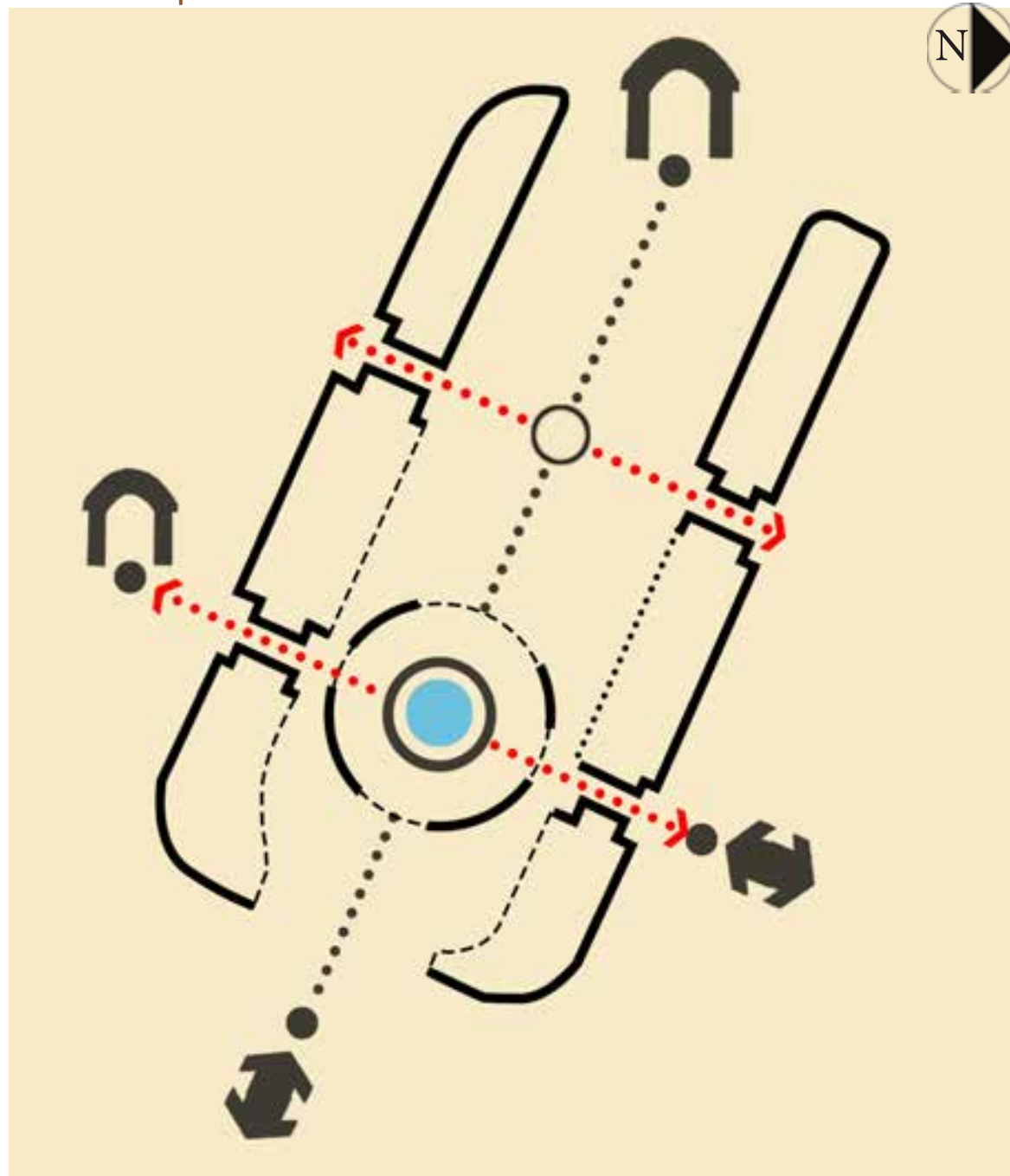
- Definition the directions at the night



- Enhancing the space formulation

2-4. Access Lines

- Confirming the pedestrian circulations to and from the buildings and the space by main horizontal access lines that inspired by the desire lines of the space .



- Making the pedestrian circulations to and from the buildings easy .



- Access lines are an vital bone of the ongoing circulation .



- Enhancing the access lines by landscape design .



- The main horizontal access lines is inspired by the desire lines of the space .

3

ABDEEN MASTERPLAN

- **Master plan**
- **3D shots**
- **Space typology**

3-1. THE MASTER PLAN

The main concept is to Minimize the intervention by:

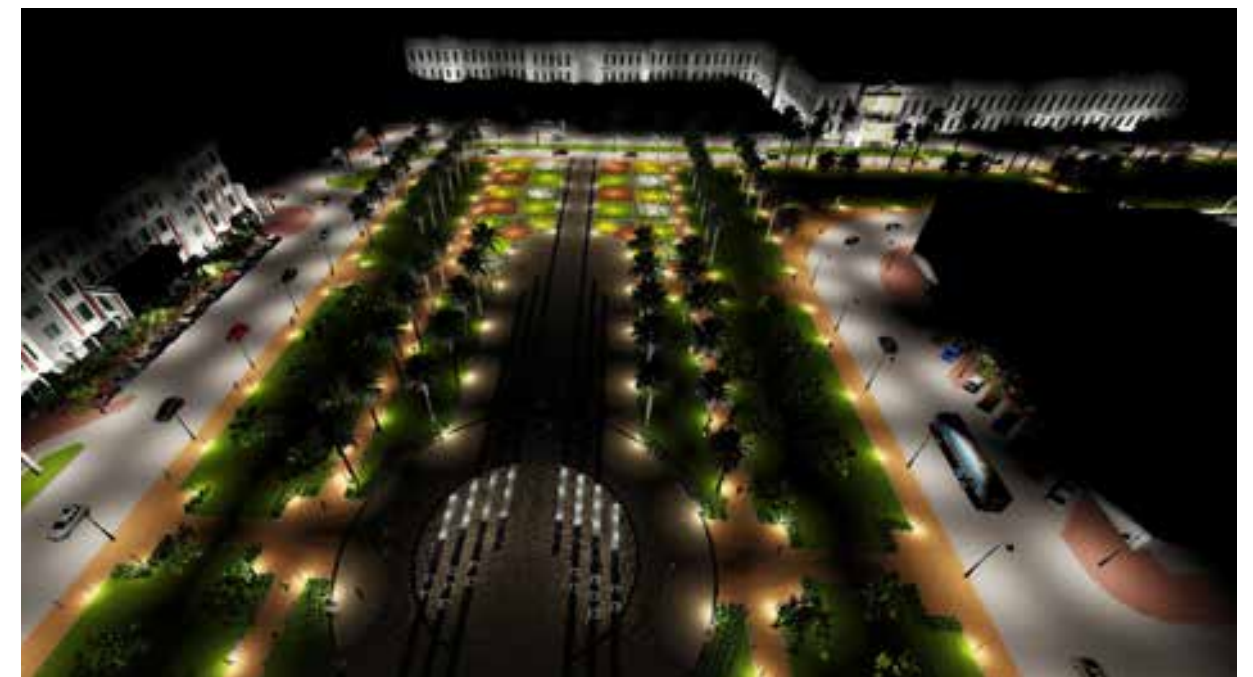
- Keeping the existing road network and redesign the onstreet parking.
- Create and renovate a main gathering plaza to support social activities.
- Enhancing the visual axis to abdeen palace by palm trees
- Calling back classical form gardens .
- Linking the two parks .



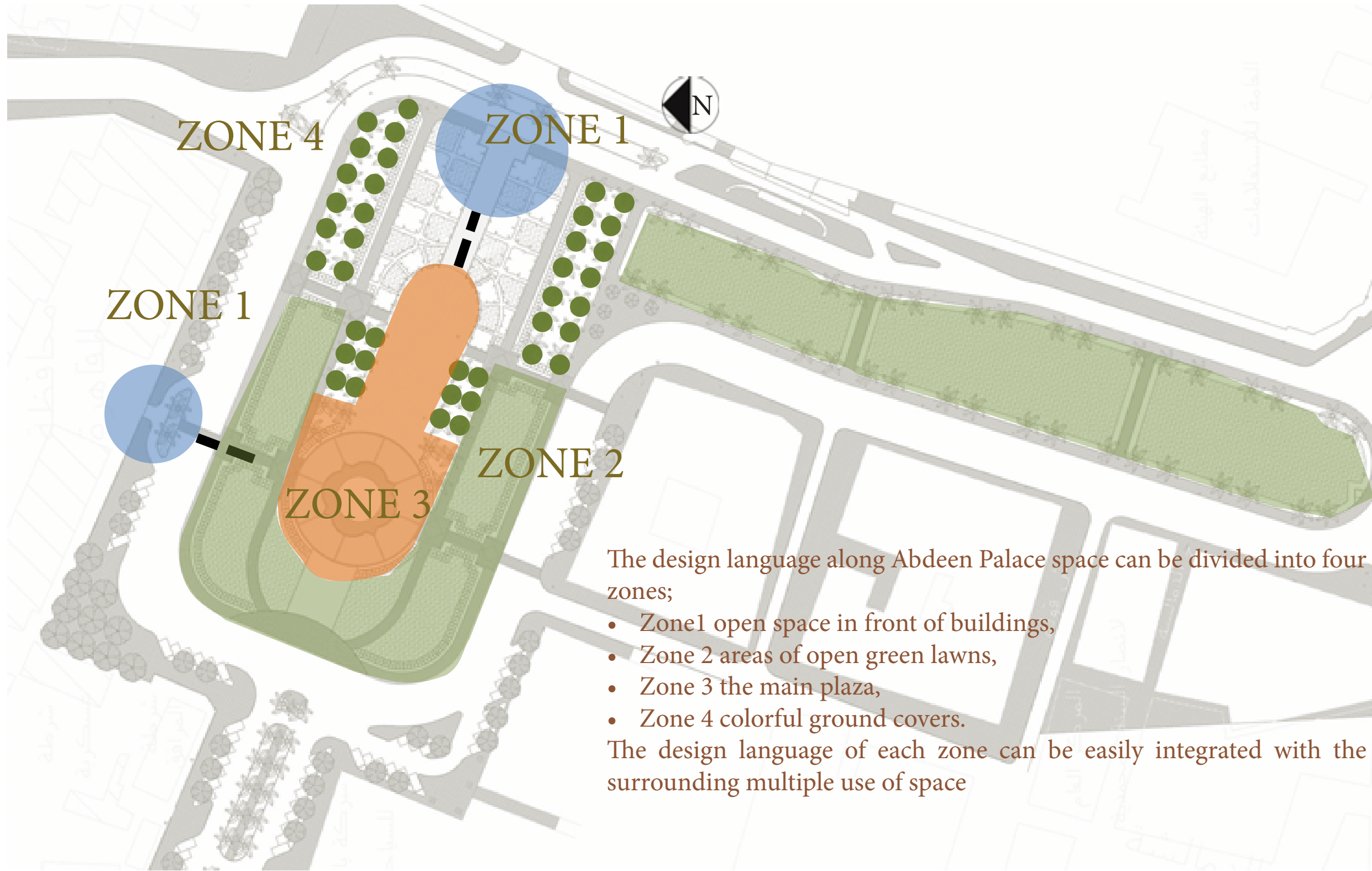
3-2.3D Shots

3D shots that describe :

- 1- Elements of the design
- 2- The movement of vehicles
- 3- Mechanisms movement and its relation with the new design and entrances
- 4- Design and buildings around it in the morning and evening



3-3.SPACE TYPOLOGY



The design language along Abdeen Palace space can be divided into four zones;

- Zone 1 open space in front of buildings,
- Zone 2 areas of open green lawns,
- Zone 3 the main plaza,
- Zone 4 colorful ground-covers.

The design language of each zone can be easily integrated with the surrounding multiple use of space



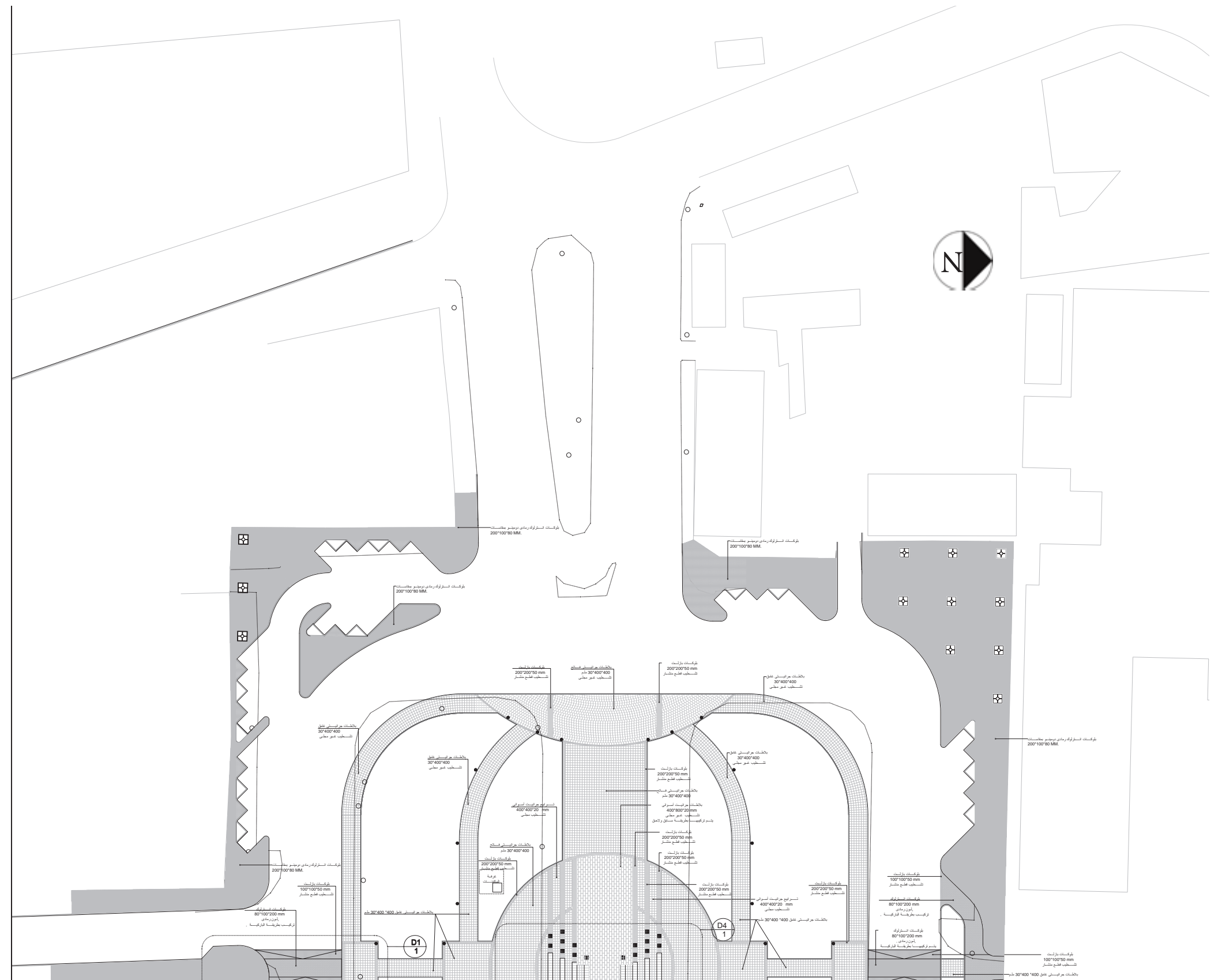
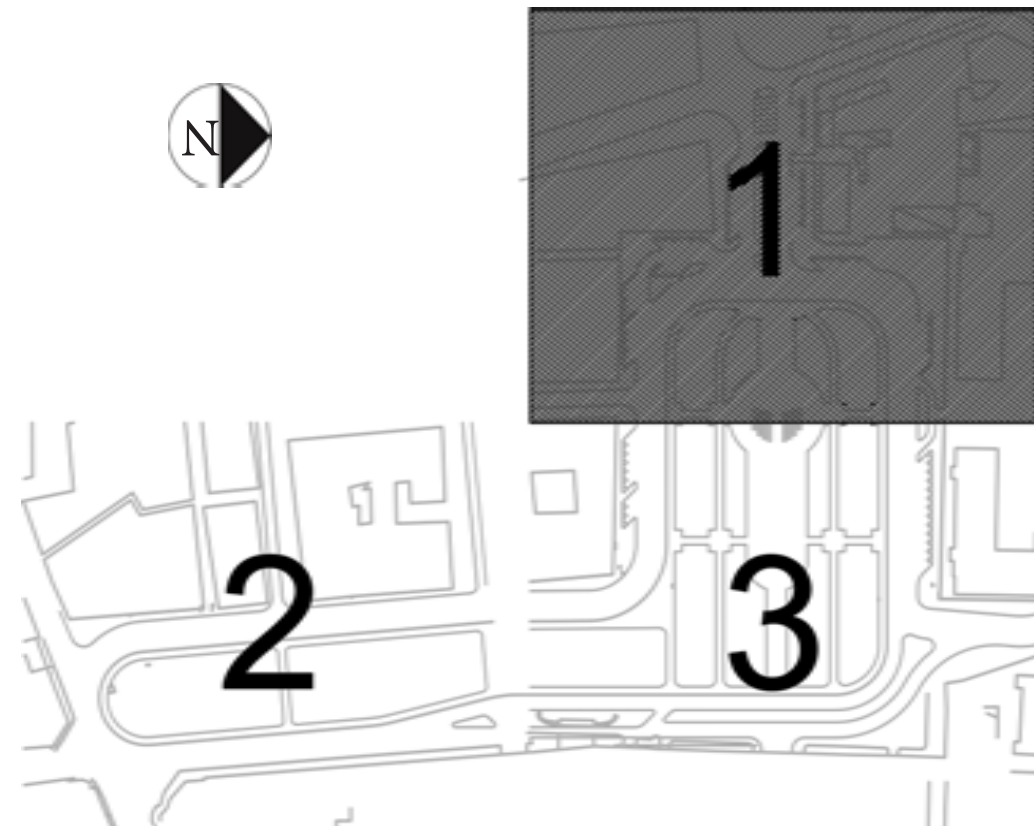
4

LANDSCAPE CONSTRUCTION

- Hardscape
- Softscape
- Lighting
- Details

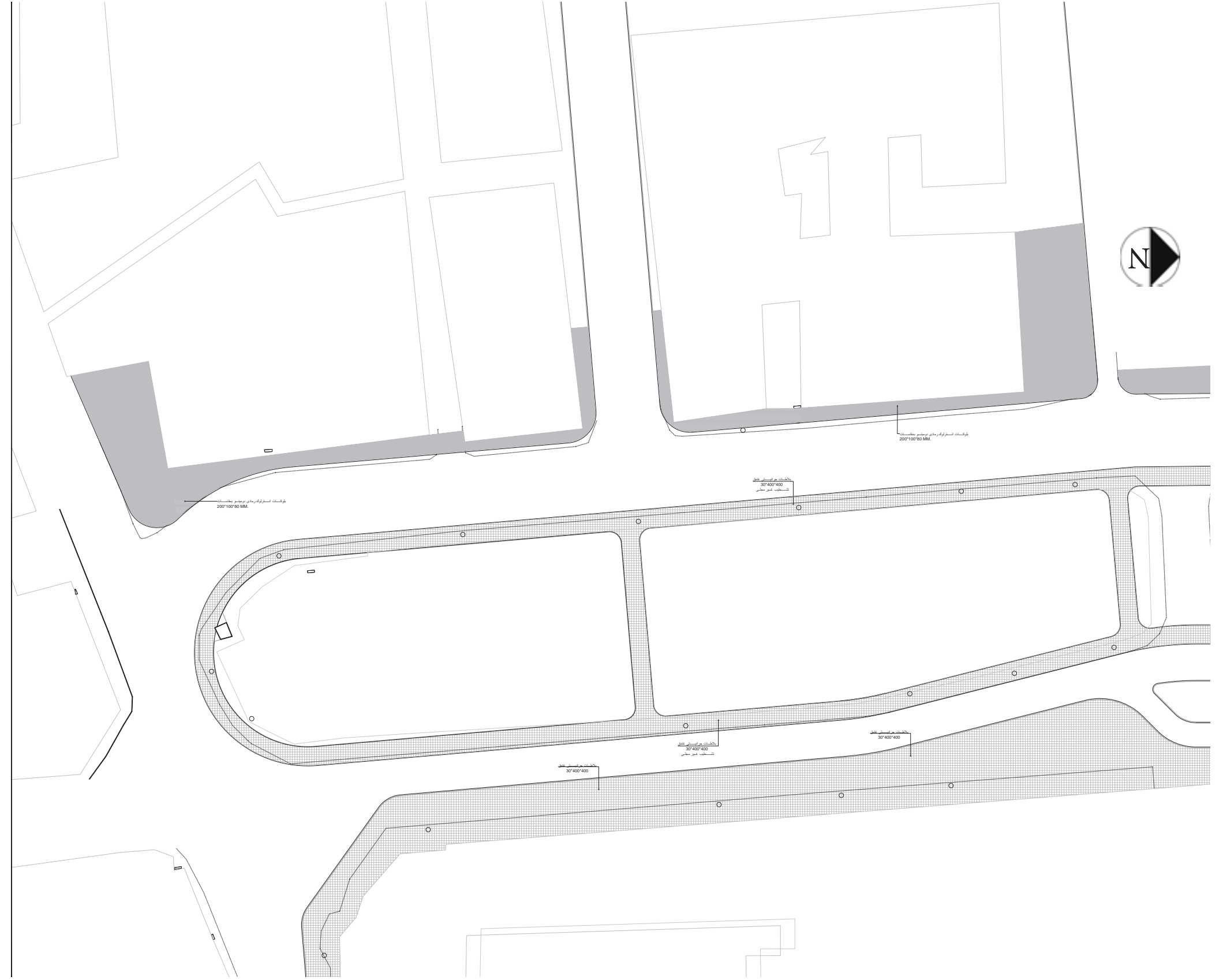
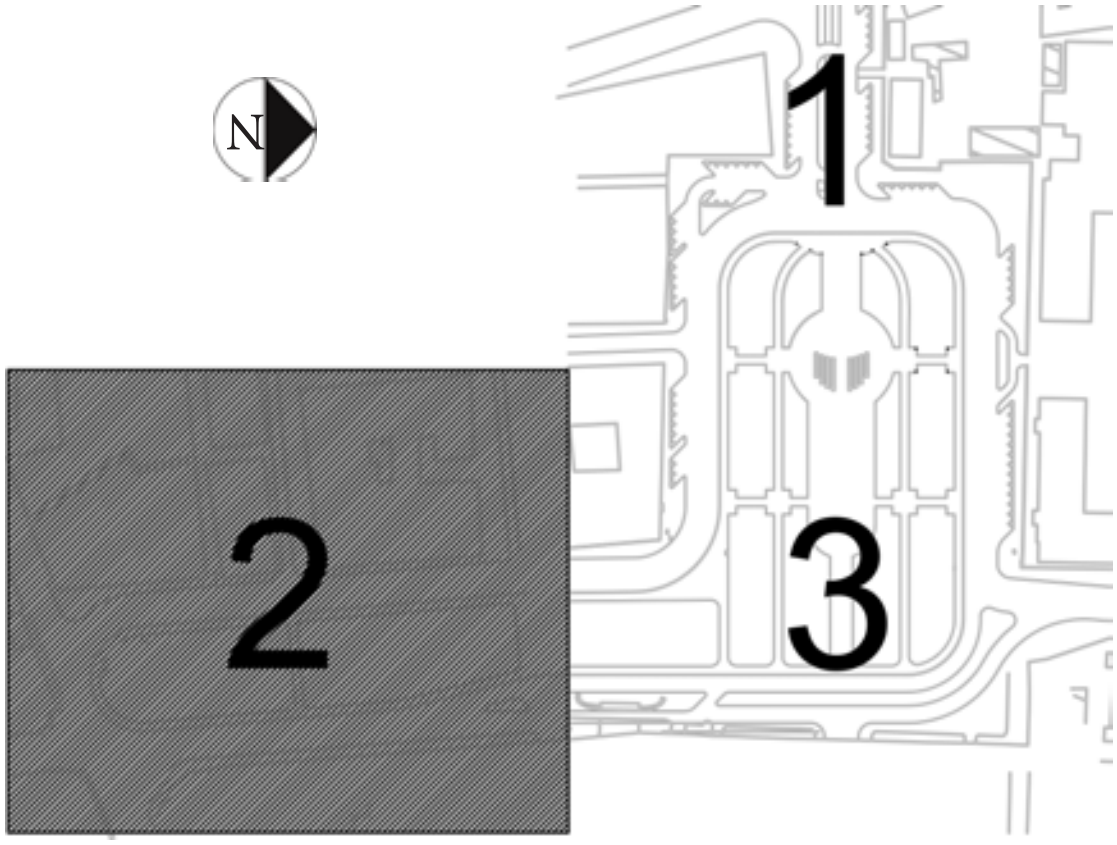
4-1.Hardscape

- FIRST SHEET



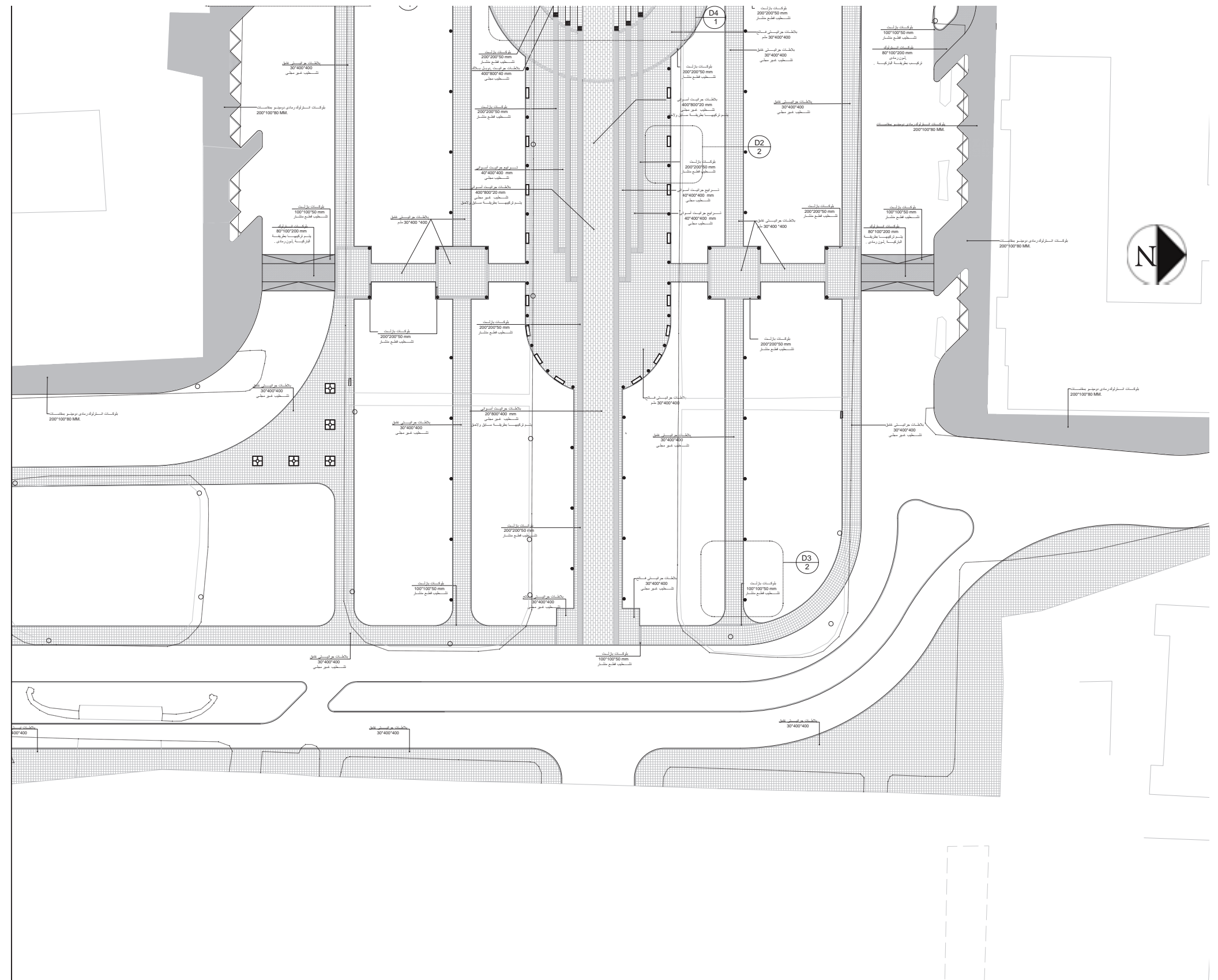
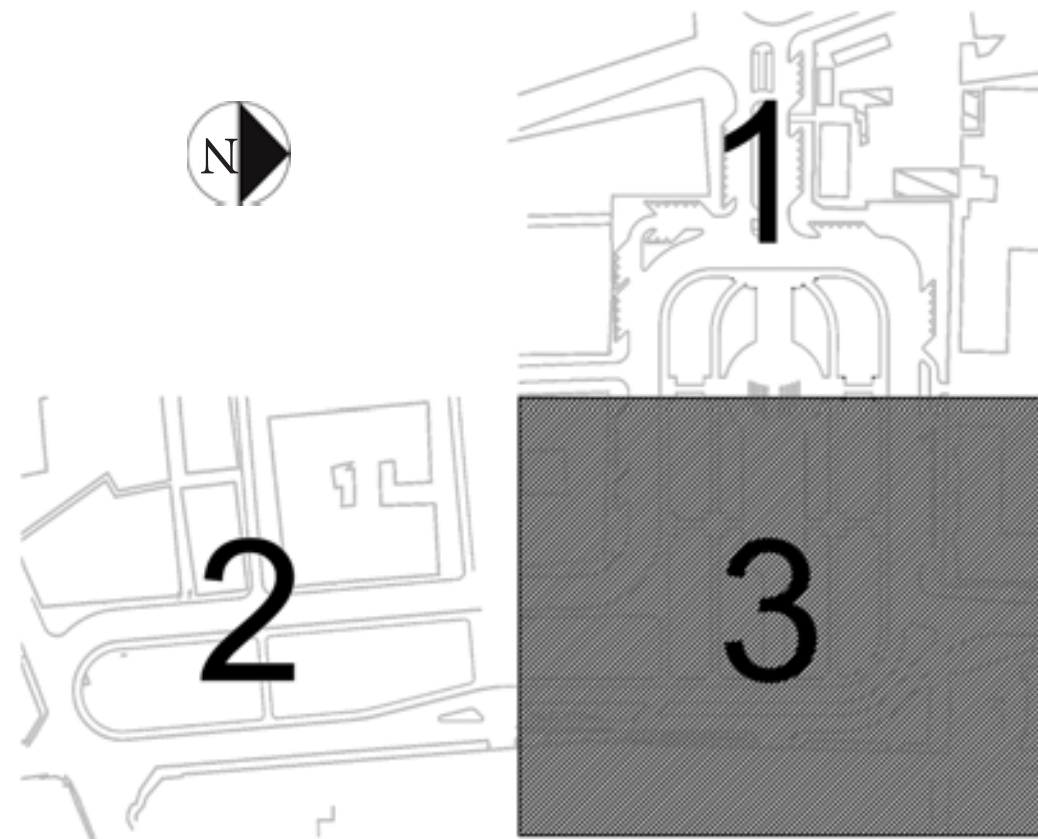
4-1.Hardscape

• SECOND SHEET



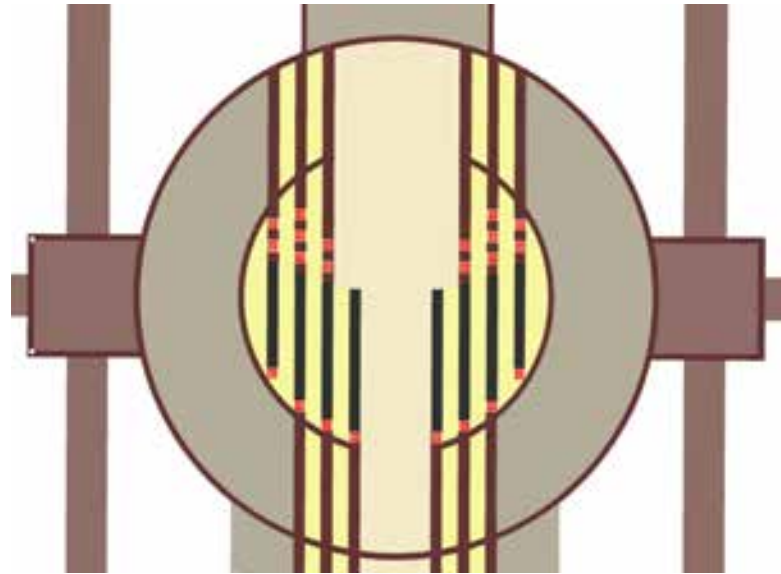
4-1.Hardscape









- THIRD SHEET

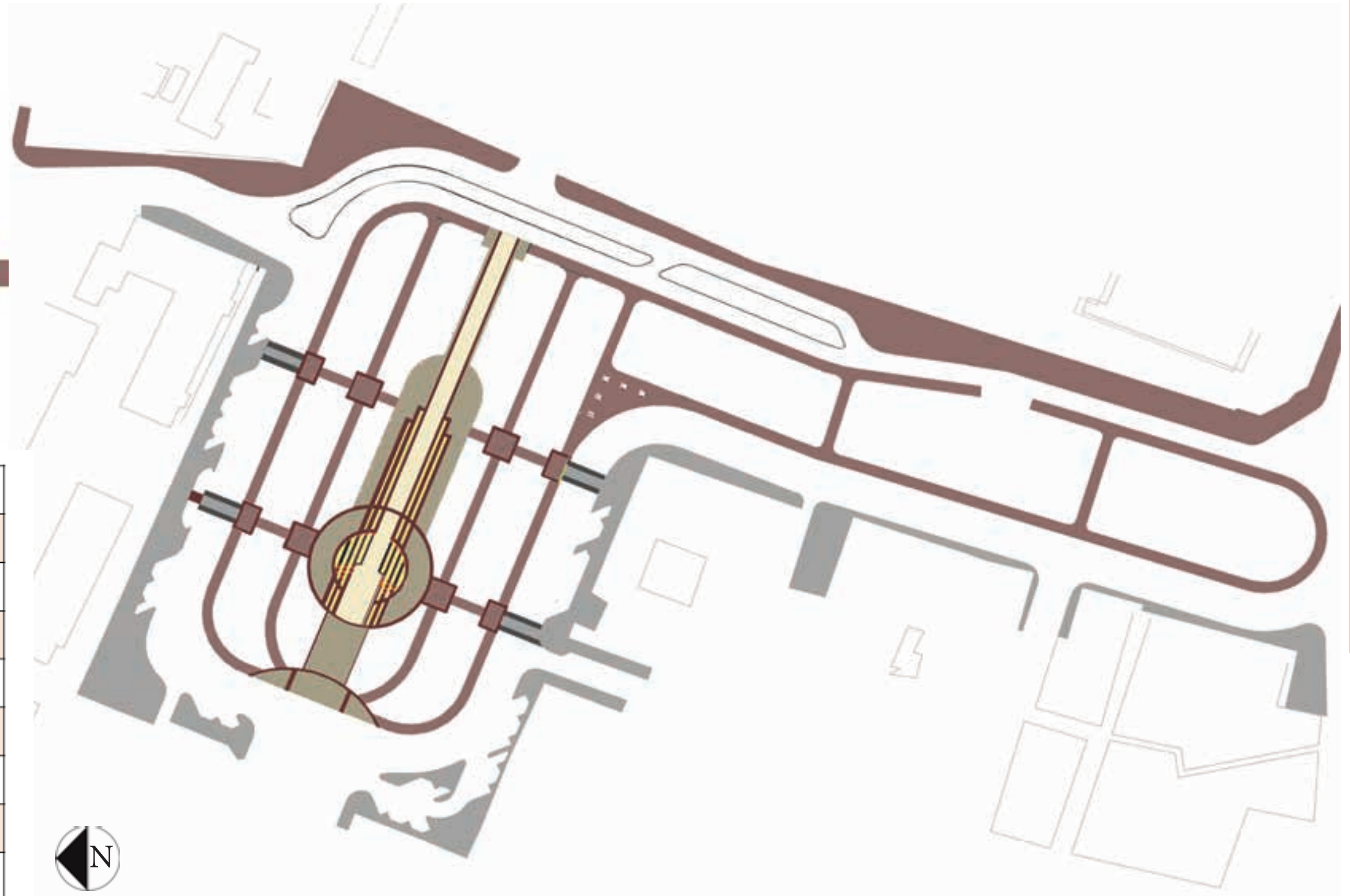


4-1.Hardscape

- This design technique with hardscape elements provides unity to the design and a sense of detail without compromising the simplicity of the design



Type	Area	Key
Dark Granite 30*400*400	4455	
Gray Aswan Granite 400*800*20	775	
Gray Aswan Granite 400*400*20	325	
Basalt	680	
Light Granite	1500	
Doble Dark Granite	155	
Interlock Blocks Domeno Shape 200*100*80	1000	
Basalt 100*100*50	5620	



4-2.Softscape

- TREES & PALMS



- Roystonea Regia



- Washingtonia Robusta



- Cassia Nodosa

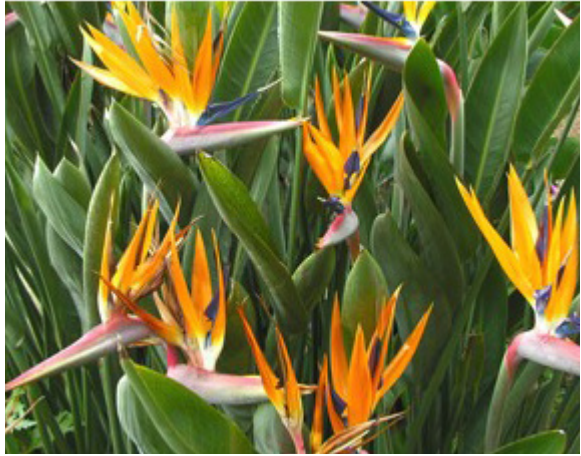


- Delonix regia

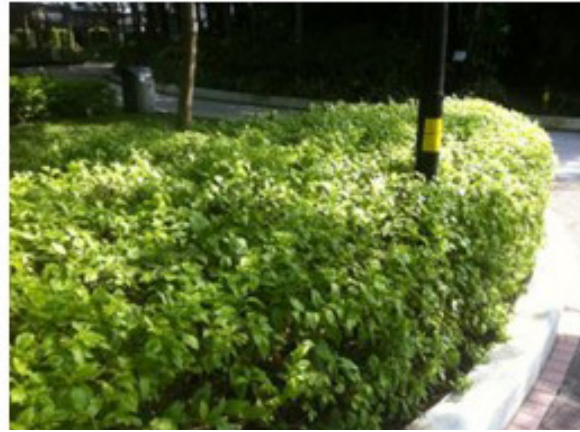


4-2.Softscape

• SHRUBS&GROUNDCOVERS



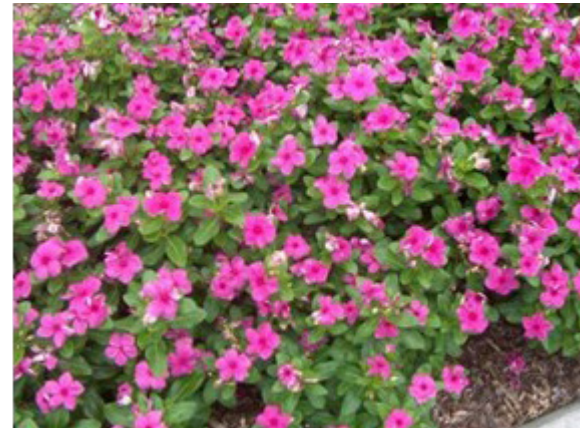
• *Strelitzia reginae*



• *Dodonaea viscosa*



• *Lantana montevidensis*



• *catharanthus roseus*



• *Alternanthera ficoidea*








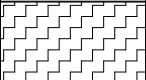
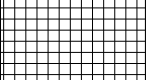
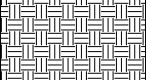




• *Euryops pectinatus*



4-2.Softscape

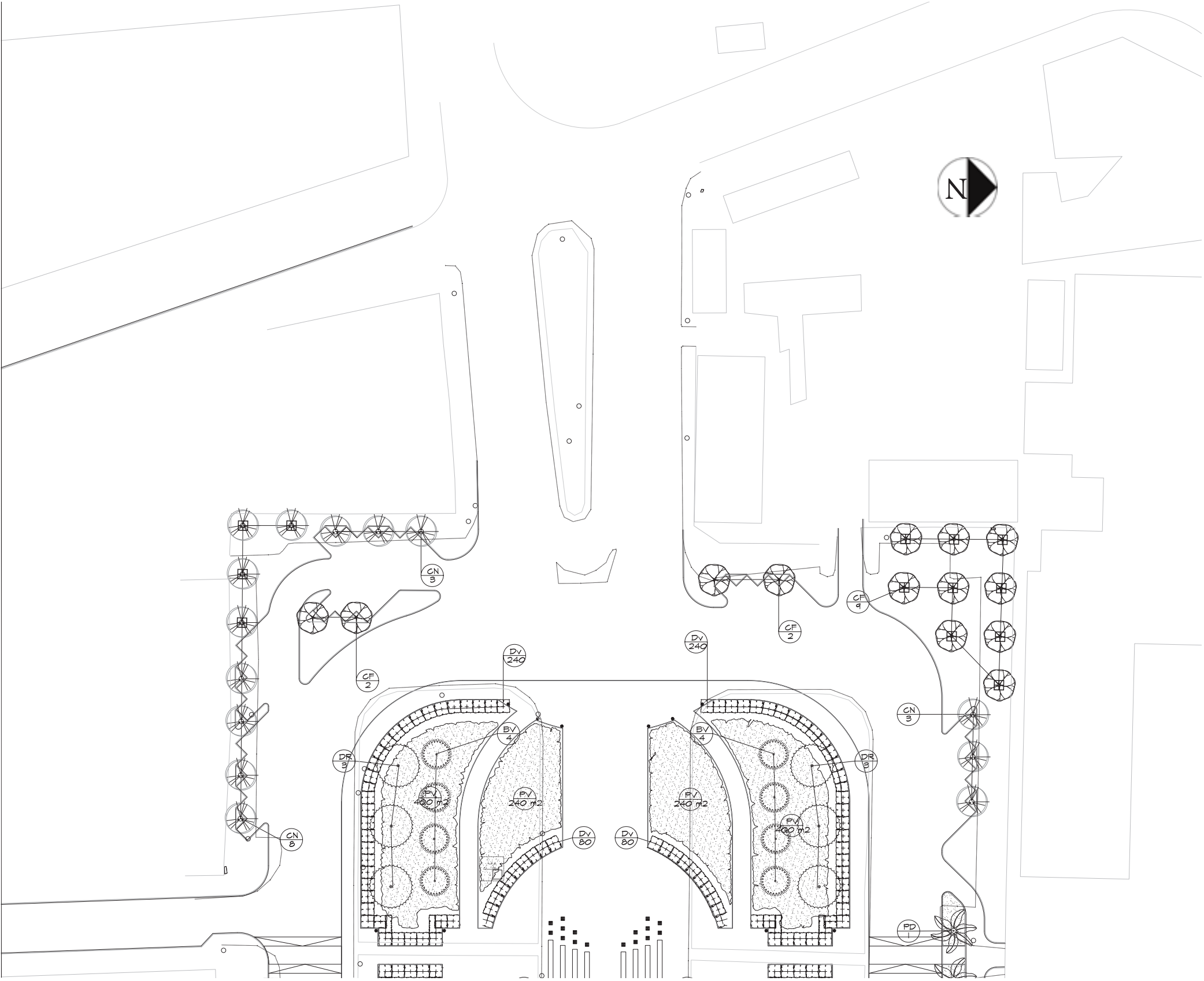
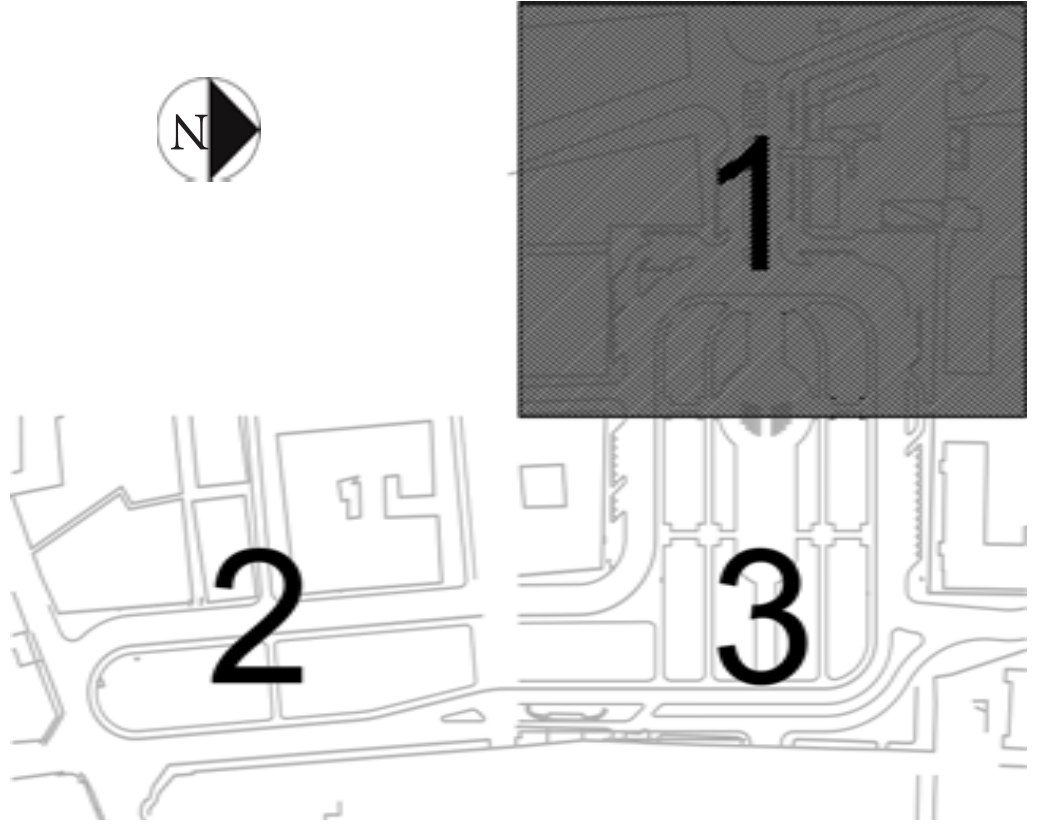
• PLANTING TABLE

جدول النباتات								
الكمية	مقياس التوريد	قطر الساق بوصة	اصيص التوريد	الاسم العربي الشائع	الاسم الشائع / الاسم العلمي للنبات	الرمز	الاشجار	
14	4m_Hx4m_S	6"	صندوق خشبي 70x70x70 سم	بوتسويانا	Delonix Regia / Royal Poinciana	DR		
15	3m_Hx3m_S	6"	صندوق خشبي 70x70x70 سم	خف الجمل	Bauhinia variegata/ Orchid Tree	BV		
15	3m_Hx3m_S	6"	صندوق خشبي 70x70x70 سم	خيار شمير	Cassia fistula / Golden Shower	CF		
45	3m_Hx3m_S	6"	صندوق خشبي 70x70x70 سم	كاسيا نودوزا	Cassia nodosa / Jointwood	CN		
5	3m_Hx1.5m_S	6"	صندوق خشبي 70x70x70 سم	سرر ليموني	Cupressus Sepsreverinsis	CS		
الكمية	مقياس التوريد	قطر الساق بوصة	اصيص التوريد	الاسم العربي الشائع	الاسم الشائع / الاسم العلمي للنبات	الرمز	اشجار النخيل	
94	الارتفاع الكامل 8 متر	20"ca	صندوق خشبي 70x70x70 سم	نخيل بلح	Phoenix dactylifera / Date Palm	PD		
الكمية	عرض النبات والتفرع	اصيص التوريد	الاسم العربي الشائع	الاسم الشائع / الاسم العلمي للنبات	الرمز	الشجيرات		
3100	لا يقل عن 40 سم مكتملة التفرع	اصيص 30 سم	دودونيا	Dodonaea viscosa	DV			
الكمية	مسافات التباعد	عدد الأفرع	قطر الساق	اصيص التوريد	الاسم العربي الشائع	الاسم الشائع / الاسم العلمي للنبات	الرمز	مغطيات التربة
4688		مكتملة التفرع	--	اصيص 20 سم	التشيريا	Alternanthera ficoidea / Red Threads	Ab	
4864		مكتملة التفرع	--	اصيص 20 سم	دورنتا ليموني	Duranta erecta / Duranta golden edge	De	
3576		مكتملة التفرع	--	اصيص 20 سم	ايروبيسيين	Euryops Pectinatus/golden Euryops	EP	
4560		مكتملة التفرع	--	اصيص 20 سم	وينكا	Catharanthus roseus / vinca rosa	Cr	
8822 m2		--	--	sod	نجيل بامبالم	Paspalum vaginatum / Seashore Paspalum	PV	



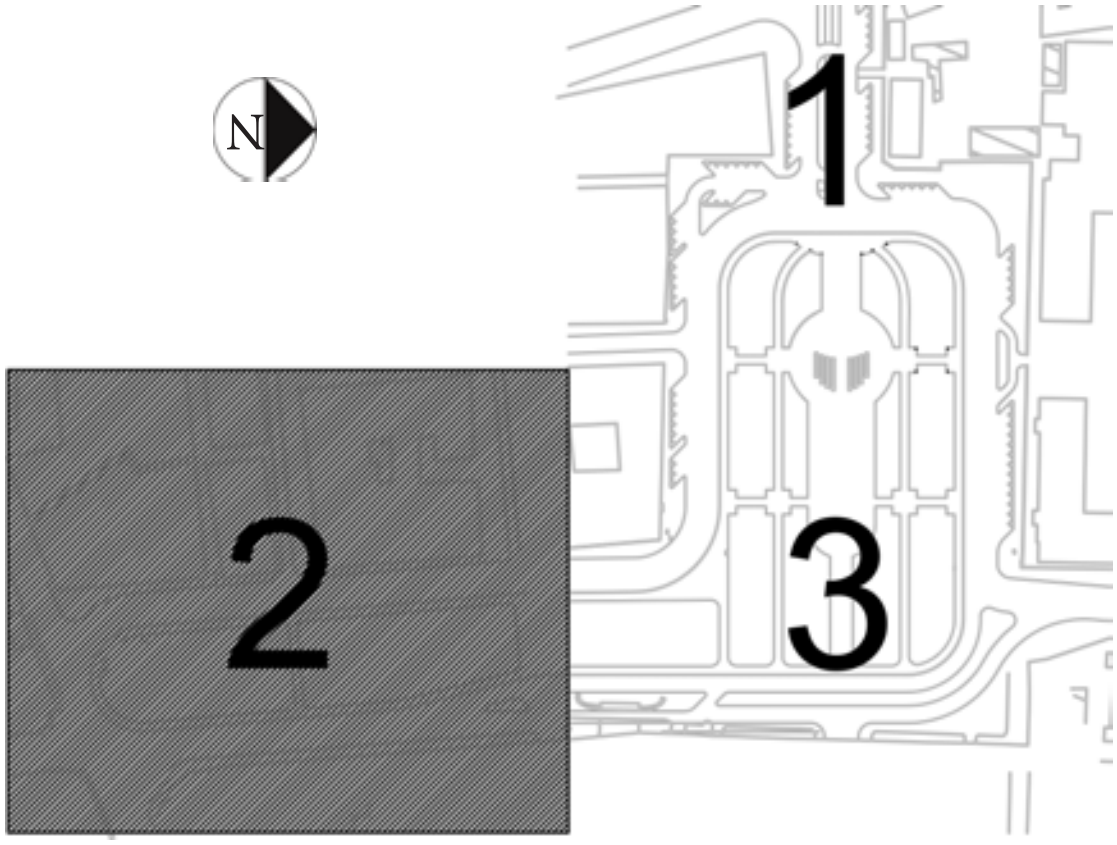
4-2.Softscape

• FIRST SHEET



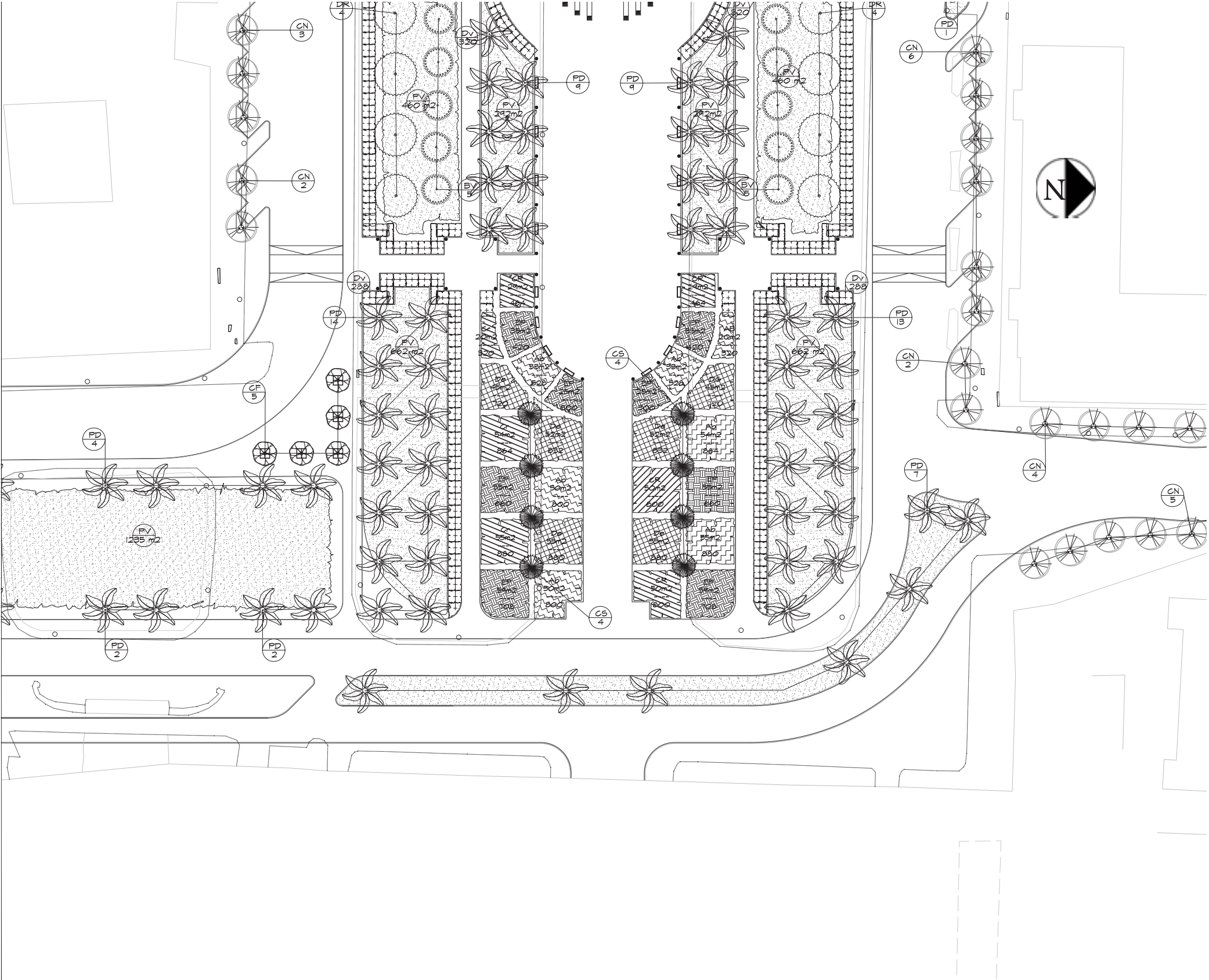
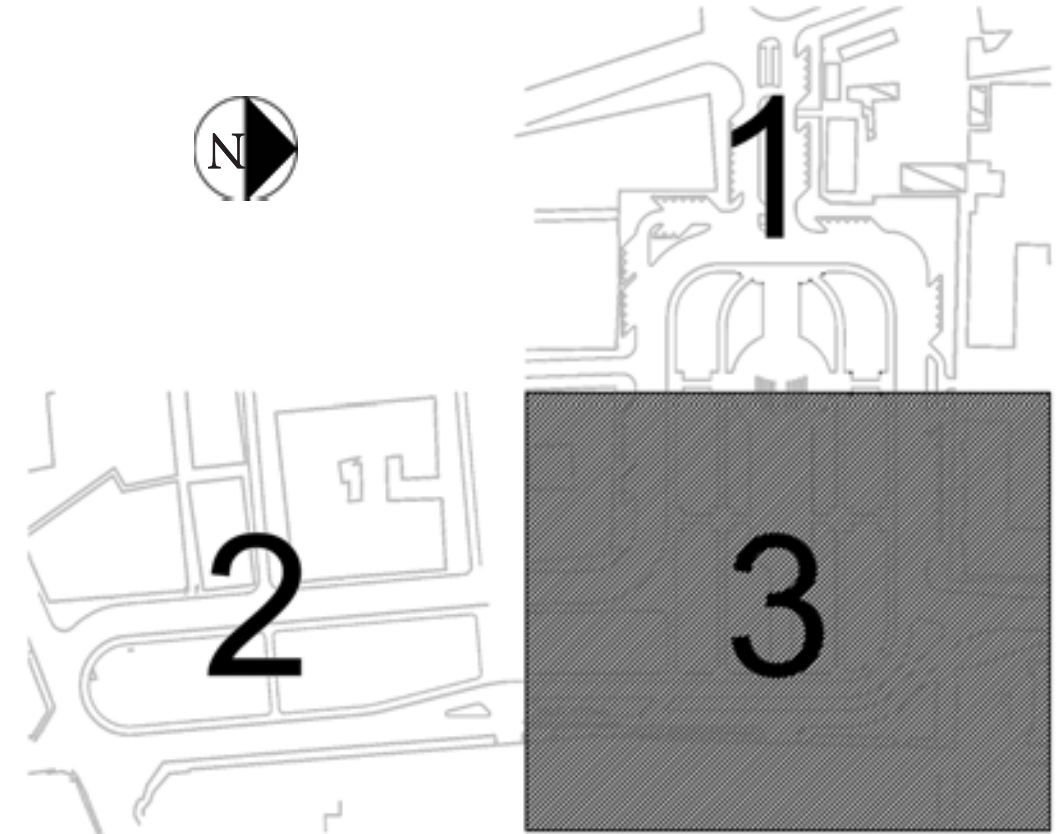
4-2.Softscape

• SECOND SHEET



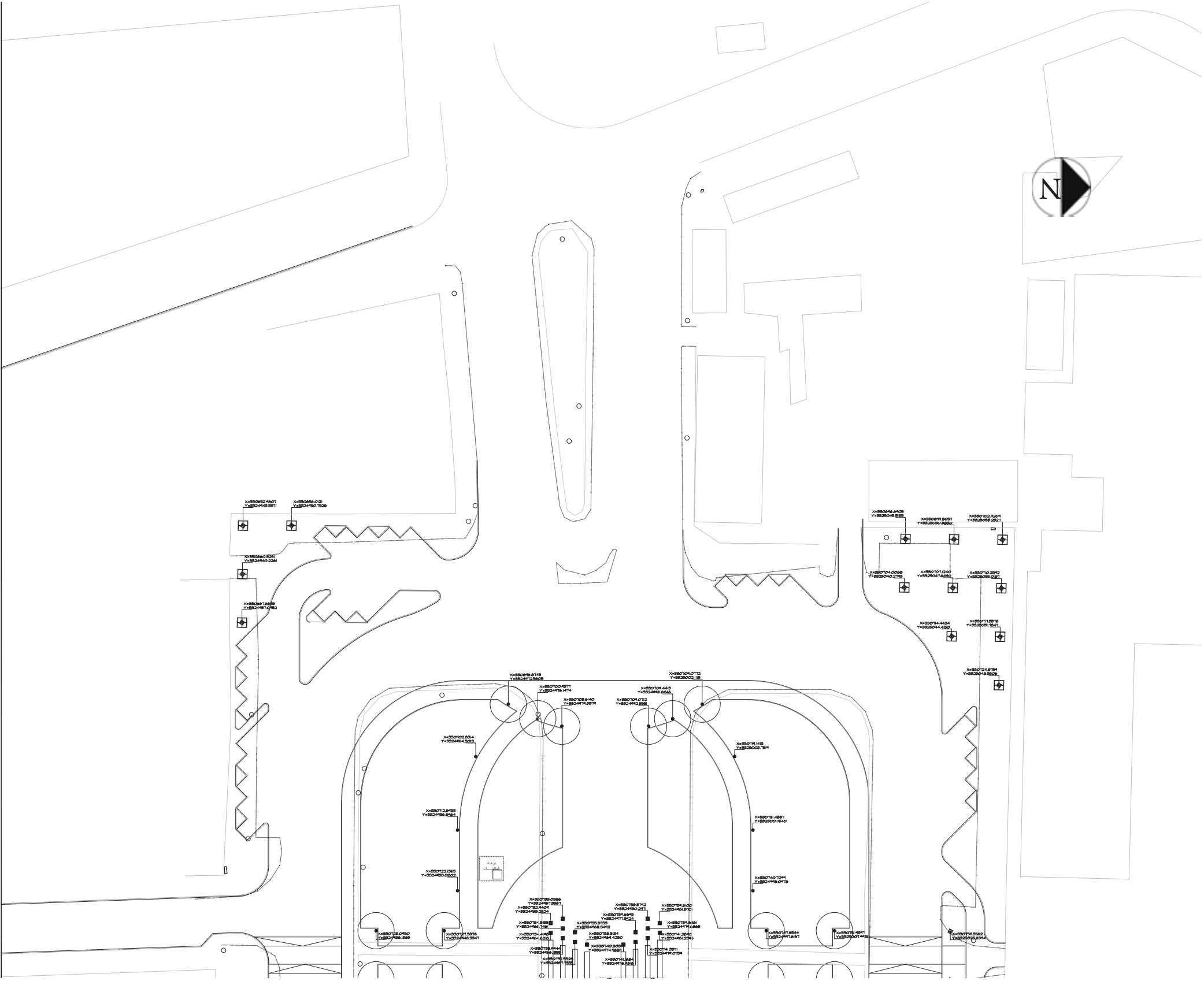
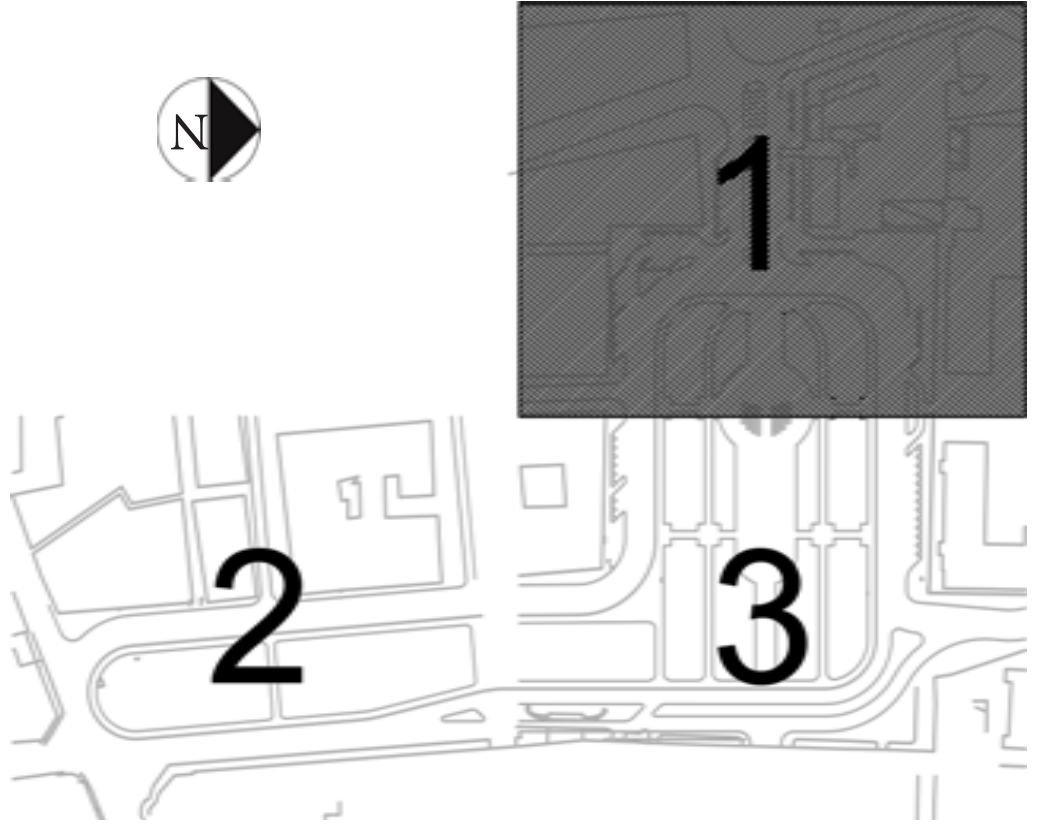
4-2.Softscape

• THIRD SHEET



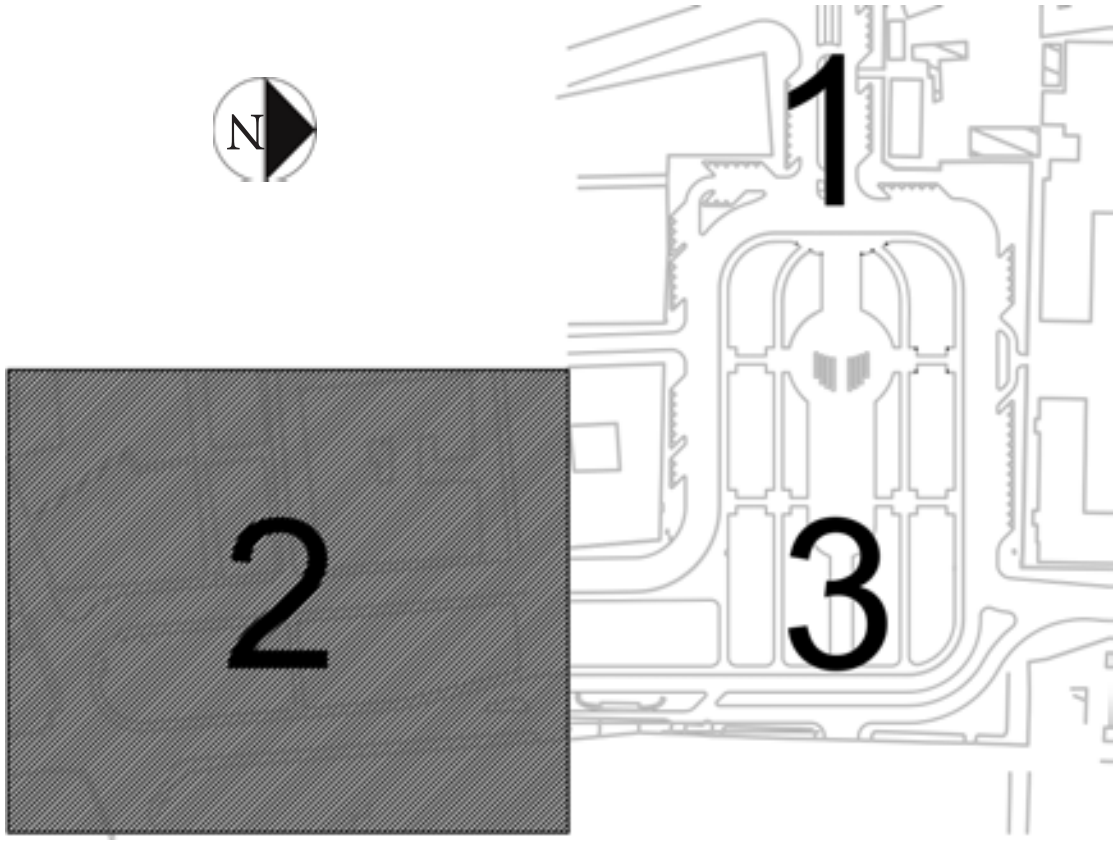
4-3.Lighting

• FIRST SHEET



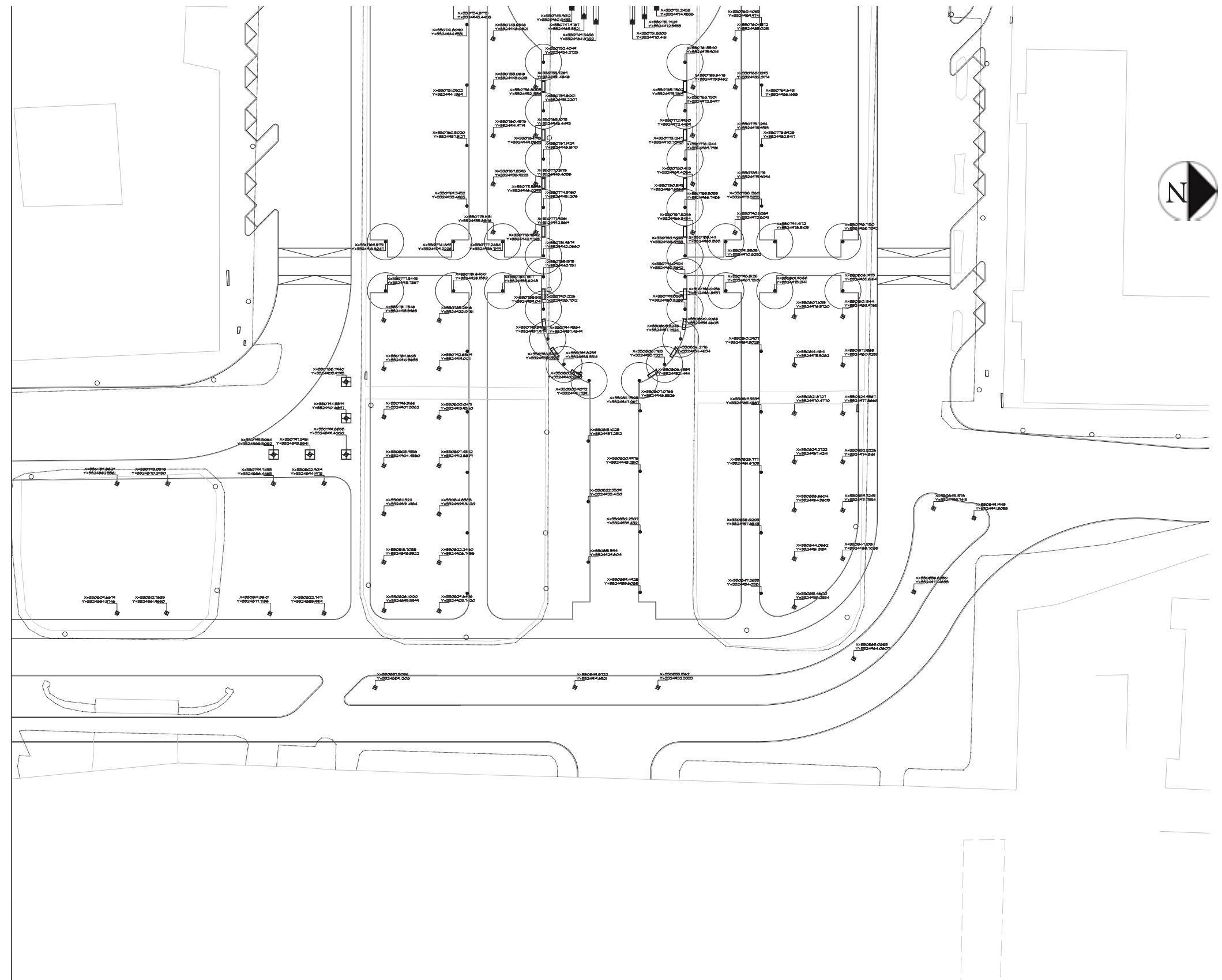
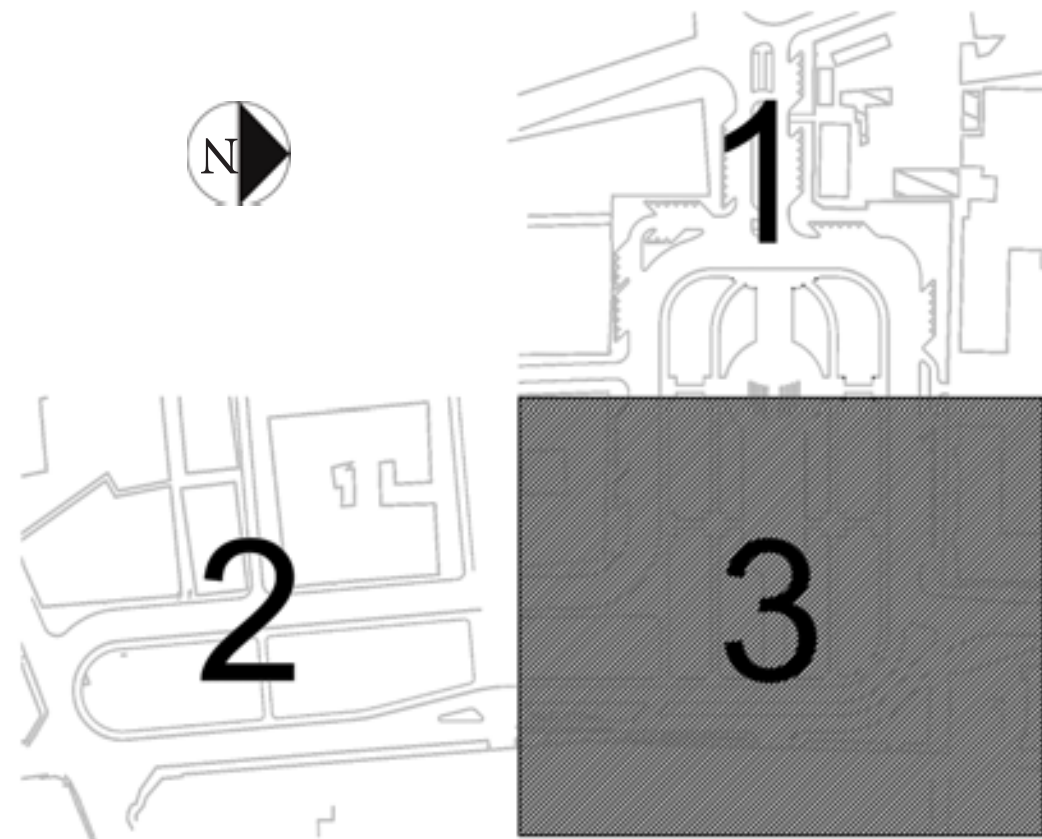
4-3.Lighting

• SECOND SHEET

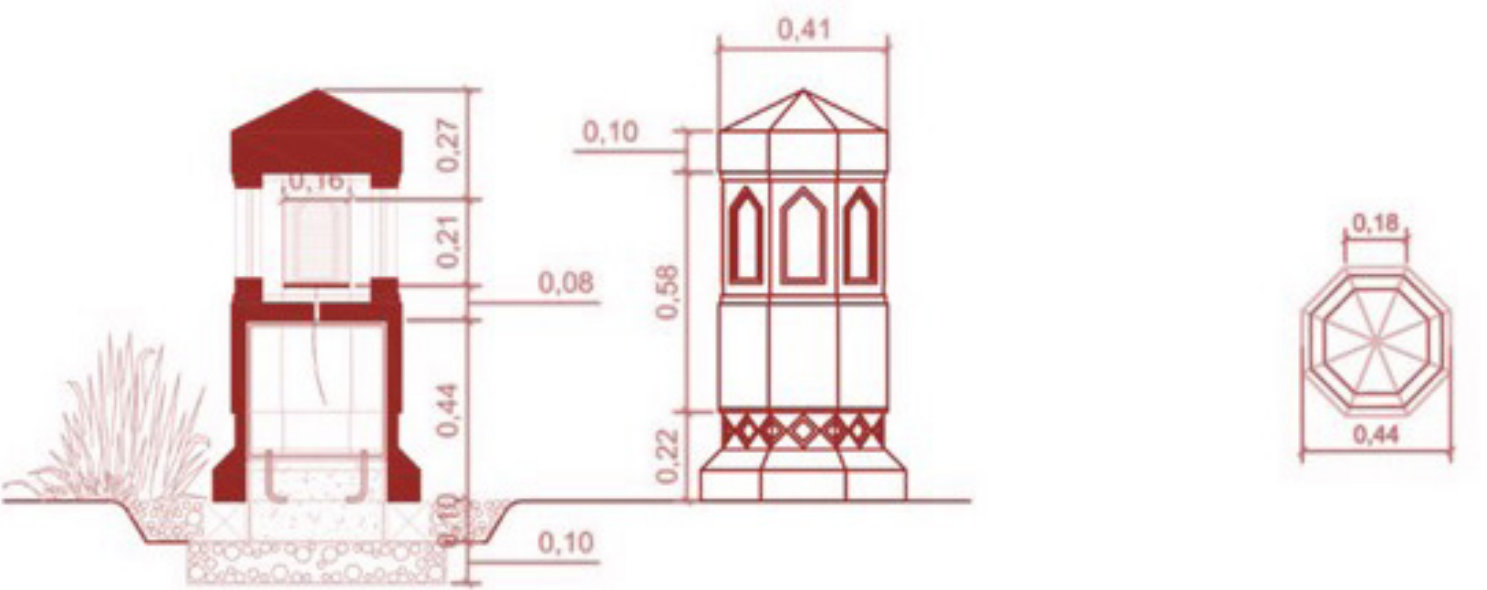
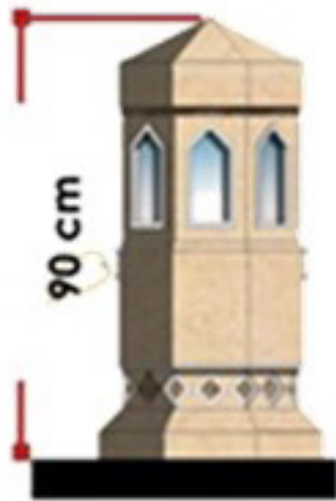
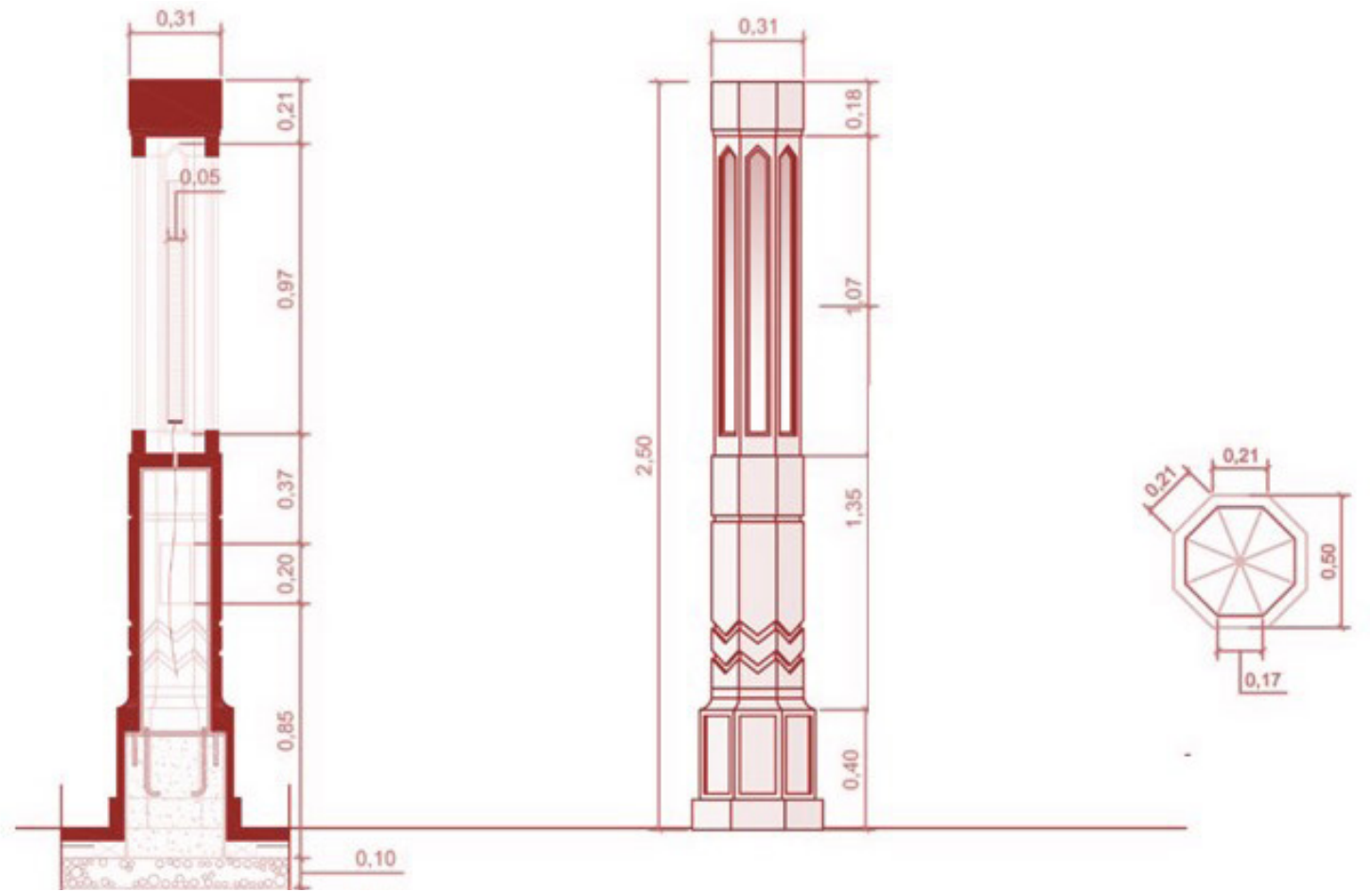
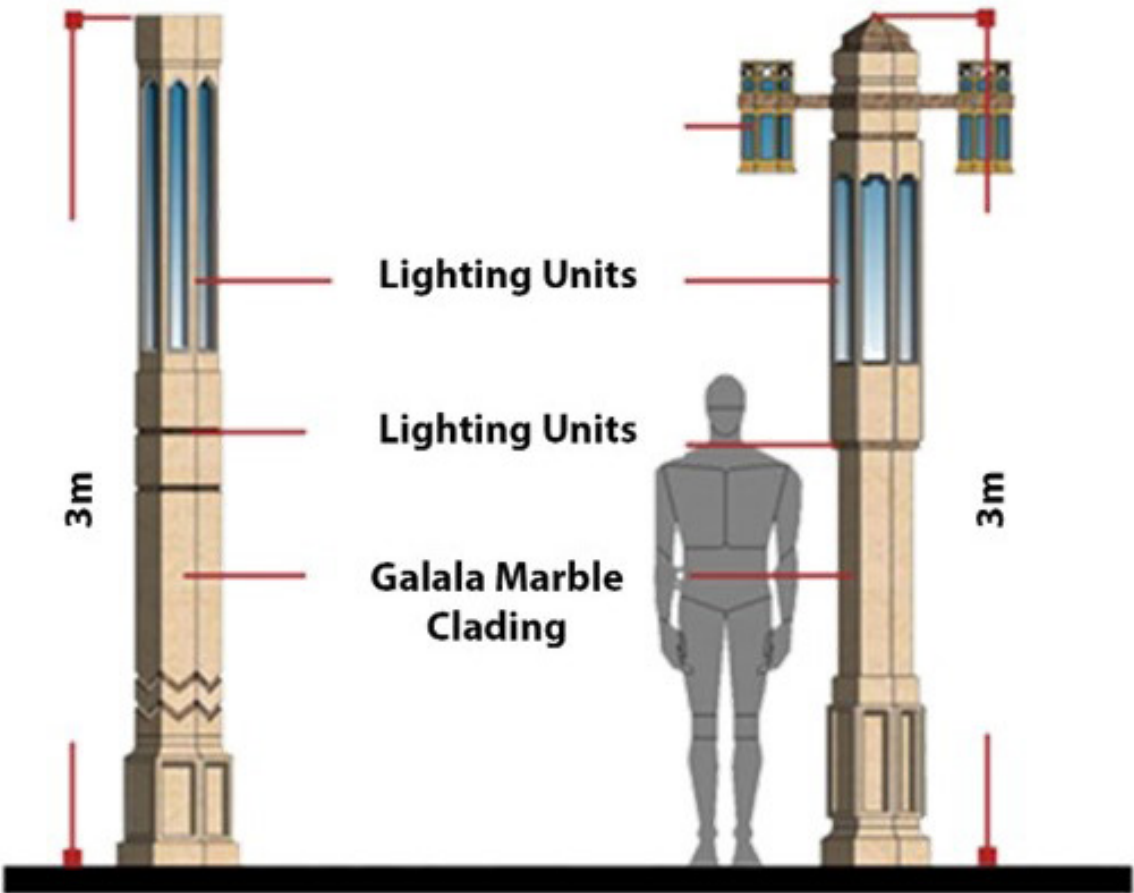


4-3.Lighting

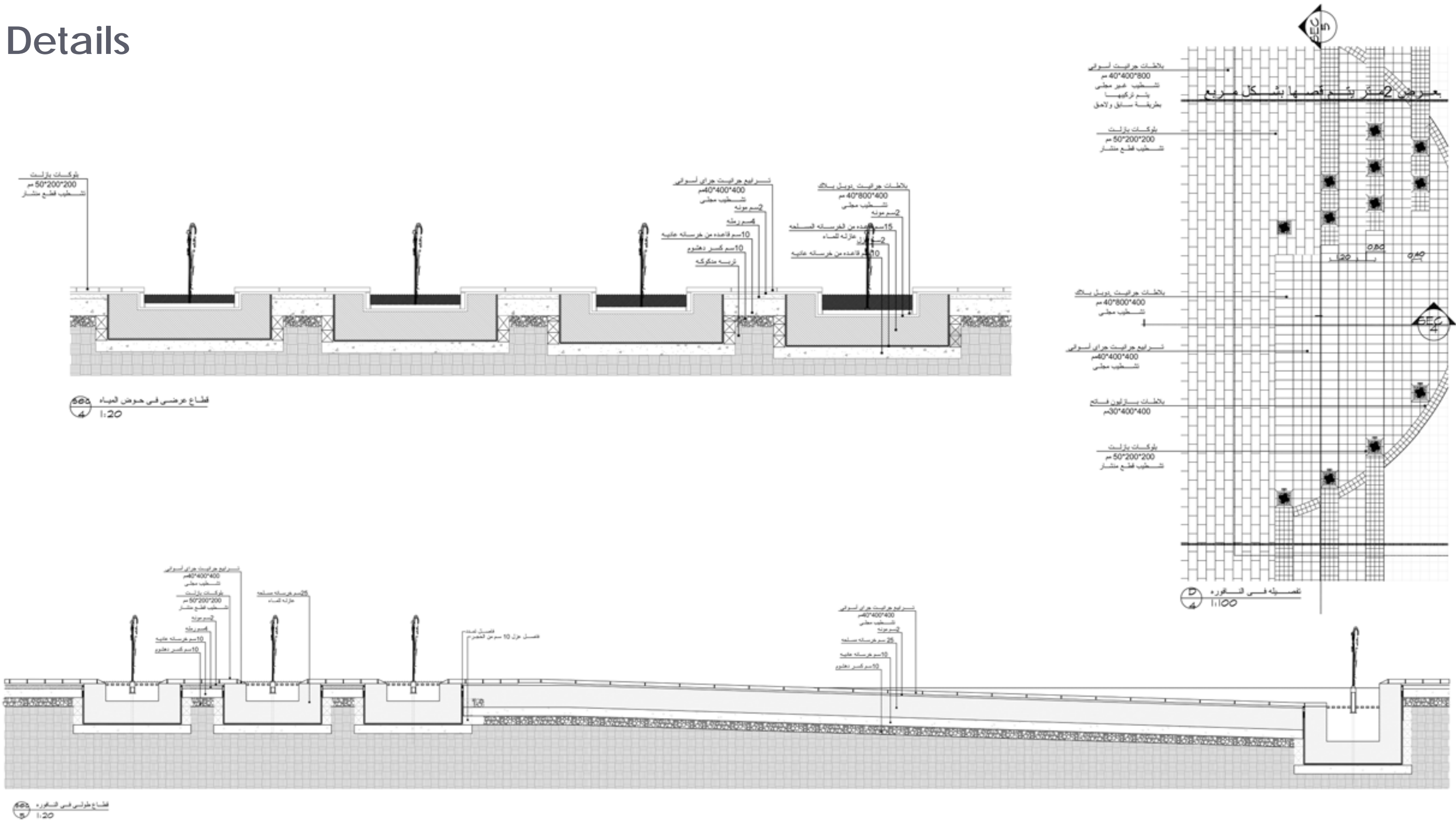
• THIRD SHEET



4-3.Lighting

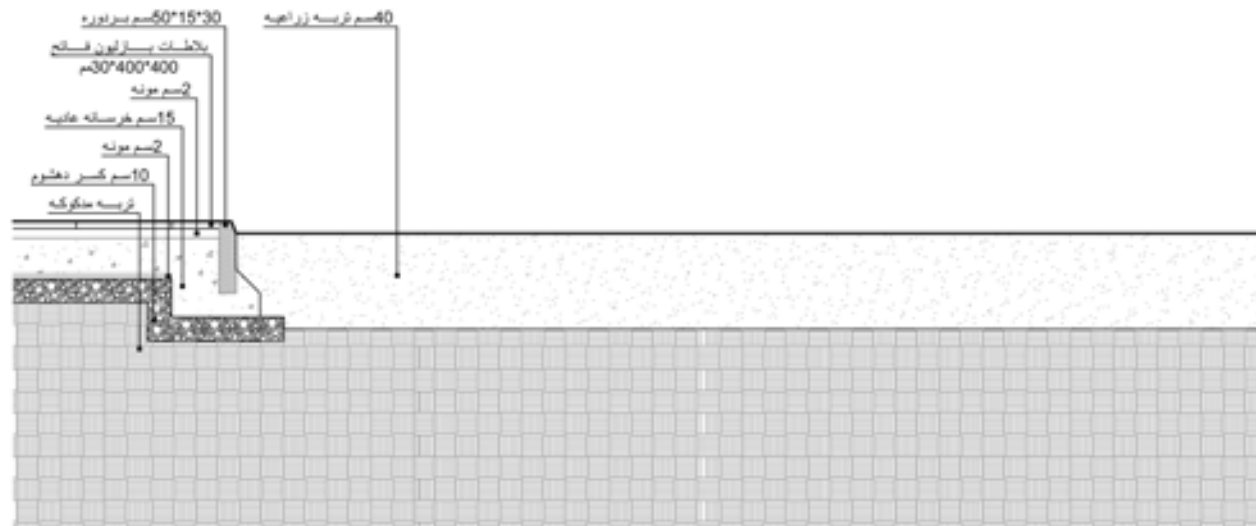


4-4. Details

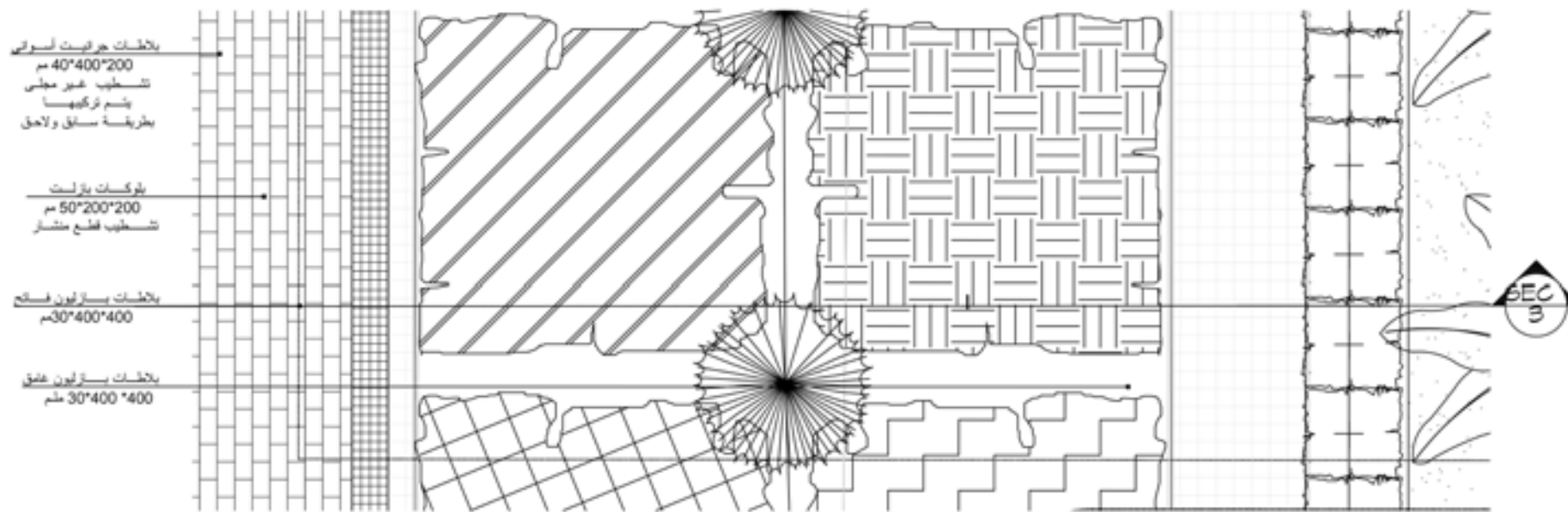


4-4. Details

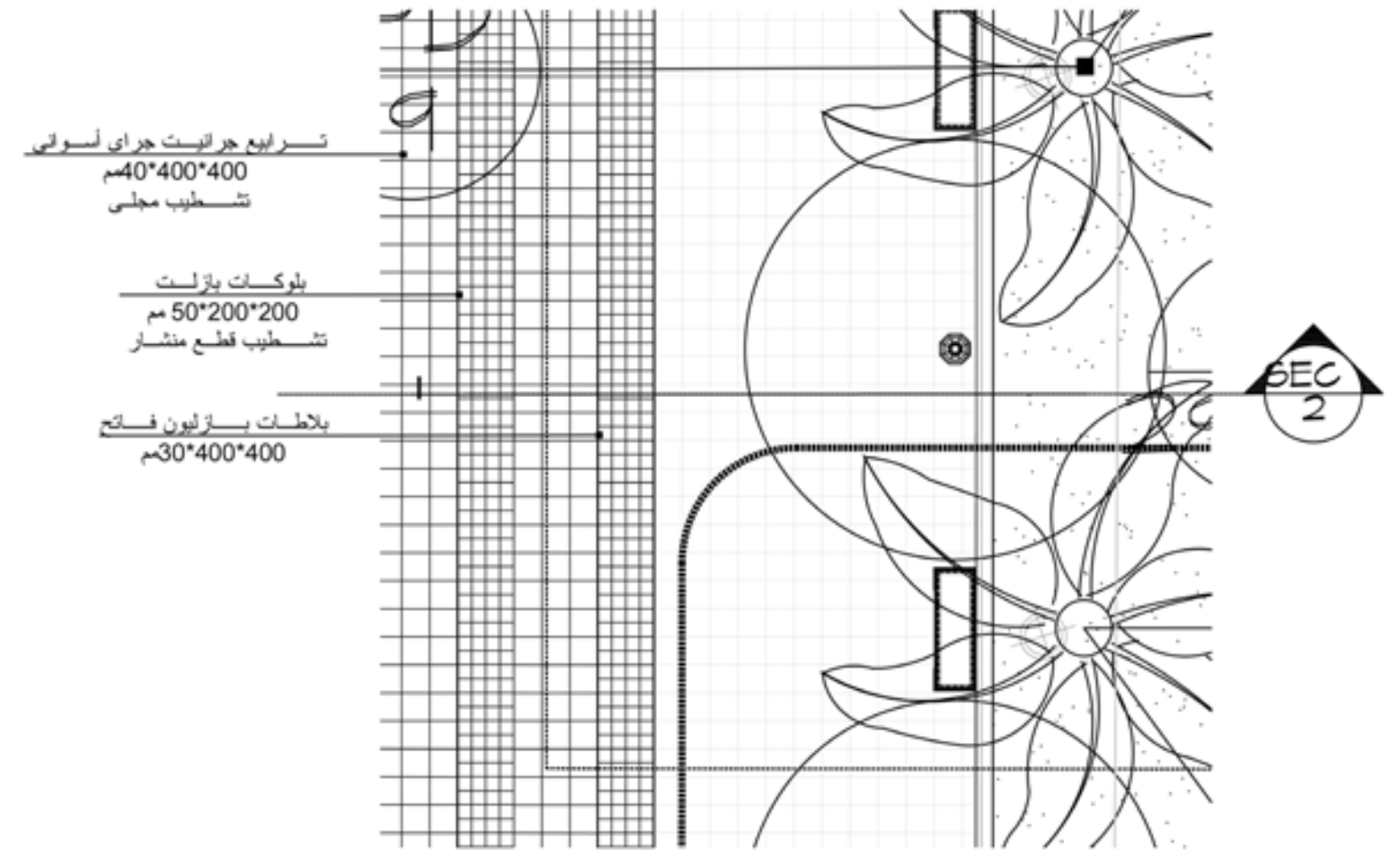
- Setting & planting space



قطاع في منطقة الجلوس
2 1:20



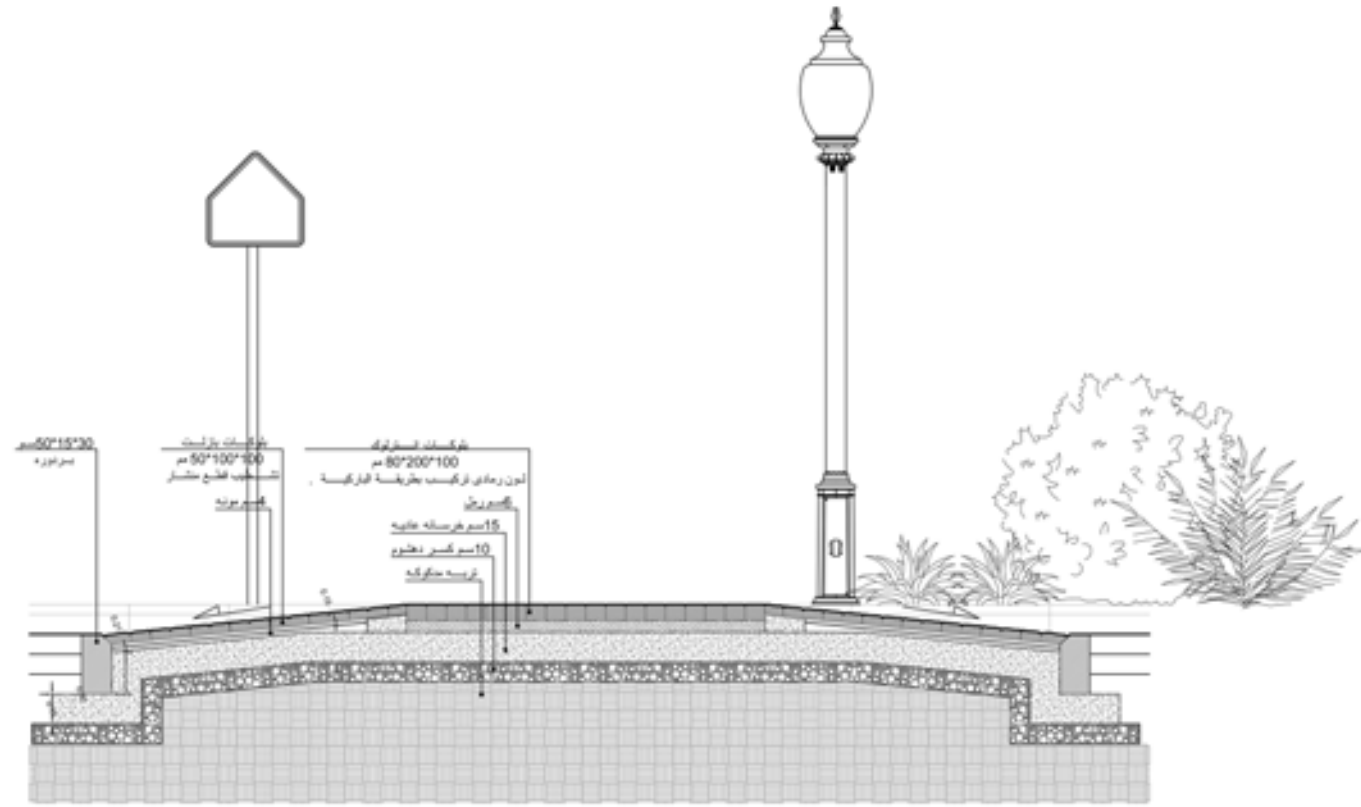
تفصيله في اجزاء النباتات عند مدخل الفراغ
3 1:100



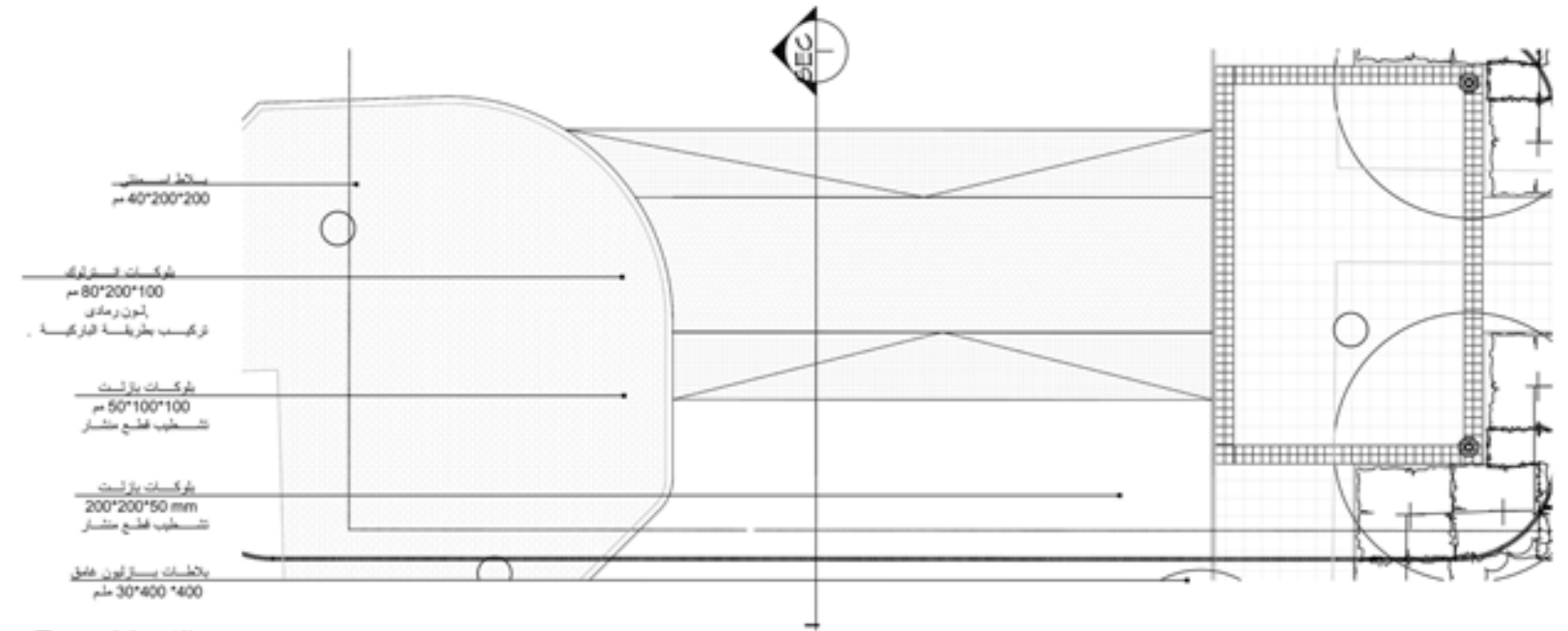
تفصيله في مكان الجلوس
2 1:100

4-4. Details

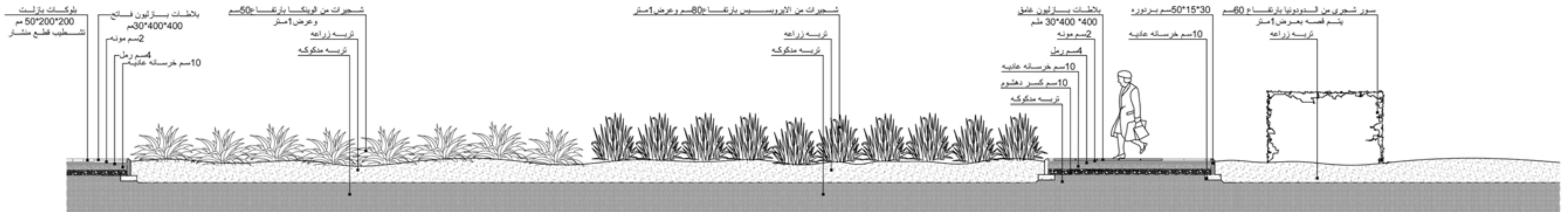
- Setting & planting space



قطاع في المصطب 1:20



تصميم في المصطب 1:100



قطاع في احوال النباتات 1:50

TEAMWORK

- DR. ABDELKHALEDQ QADI
- AHMED ABDELATY
- KHALED NOUR
- ABDUALLAH EL-ATTAR
- FATTIMA ALIRAQI

- ABDULALLAH BASHARY
- AHMED MAGDI
- AHMED ABDELMN'EEM SOKR
- BESHOUY MEDHAT
- HEBA ABDEL-DAYM
- MAHMOUD HANI
- MAHMAD KAMAL
- MAHMAD SAA'ID
- MARY THARWAT
- RADWA KAMAL