



LH Headquarters TK Competition

Mooyoung Architects & Engineers

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10.25.11



INTRODUCTION

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GOALS

PROGRAM

ANALYSIS

DESIGN EXPLORATIONS

ARCHITECTURE

SUMMARY

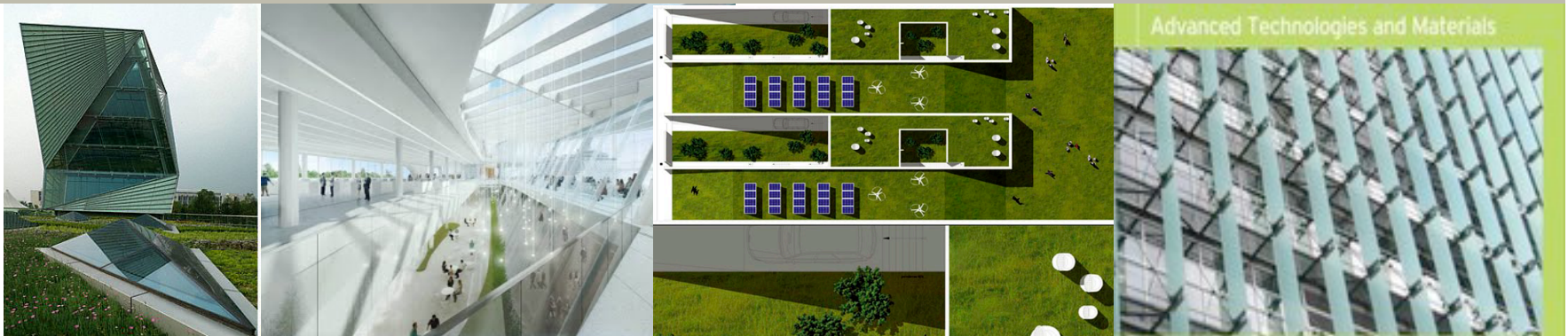
DIALOG

INTRODUCTION

This turnkey competition is for a new \$US 350 Mil regional headquarters for the Korea Land and Housing Authority located in the Innovation City region of Jinju, Korea. The new planned community west of the existing downtown core will include relocated government/ public agencies, housing, commercial, academic, cultural and sports, and opens space network in the spirit of a green city.

The TK Competition focus is the site development of 98,500 SM site for the new 132,700 SM regional headquarters which will include office, exhibition, cultural, sports and public open space.

Design + Energy + Budget





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VISION

The Korea Land and Housing Authority (LH) vision for the project is to create a “millennium building.” The new regional headquarters wants to be luxurious but have a sustainable qualities for longevity. As a sustainable new facility LH seeks smart building design and technologies including passive energy design solutions, maximized use of natural light and ventilation, limited curtain-wall facades, and strong campus environment for staff and guest circulation.

Mission and Vision

Mission

To stabilize a citizen's housing life and to efficiently use national land in an effort to improve the people's quality of life and to spearhead national economic development

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Vision

A first-class land and housing service corporation that lays the foundations for happy lives

To create a happy residential space for everyone.

To develop future-oriented, new growth, green cities

To go global in the arena of land development



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DESIGN GOALS

- *LH Excellence: Highly sustainable design solution with smart building systems*
- *Eco-Friendly Campus: Create a new eco-friendly campus with enjoyable vertical circulation that is integrated into the city urban networks*
- *Secure: Create a secured environment for offices within the public accessible campus*
- *Community: Create quality public spaces ~ min 10% public open space*
- *Symbolic: Local Korean Identity with celebration of the green environment*

Design + Energy + Budget





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LH Regional Headquarters

Net

Gross (1.35)

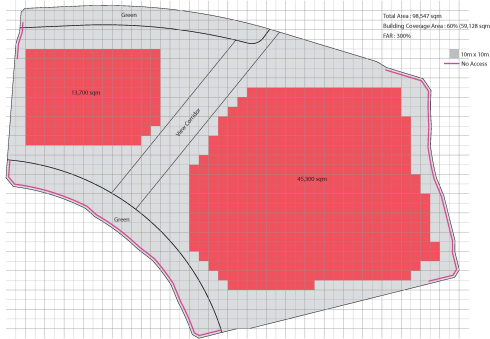
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<i>Office</i>		<i>19,518 SM</i>	<i>26,350 SM</i>
<i>Office Support</i>		<i>31,080 SM</i>	<i>41,950 SM</i>
<i>- Assembly, Conference, Education, Broadcast Lounge. Data Room, Management, Restaurant Social Room, Amenity Store, Trade Union Office</i>			
	<i>Subtotal</i>	<i>50,590 SM</i>	<i>68,300 SM</i>
<i>Welfare</i>			
<i>- Bank, Clinic, Cafeteria, Amenities</i>		<i>2,000 SM</i>	
<i>Culture and Sports</i>		<i>6,800</i>	
<i>Exhibition</i>		<i>10,500</i>	
<i>Child Care</i>		<i>1,750</i>	
	<i>Subtotal</i>	<i>21,050 SM</i>	<i>28,417 SM</i>
<i>Parking</i>		<i>31,500 SM</i>	
<i>- Indoor 900 – 920 Stalls</i>			
<i>- Outdoor 500 – 510 Stalls</i>			
<i>Outdoor Sports+ Exhibition Facilities</i>		<i>17,180 SM</i>	
<i>Total</i>			<i>96,700 SM</i>

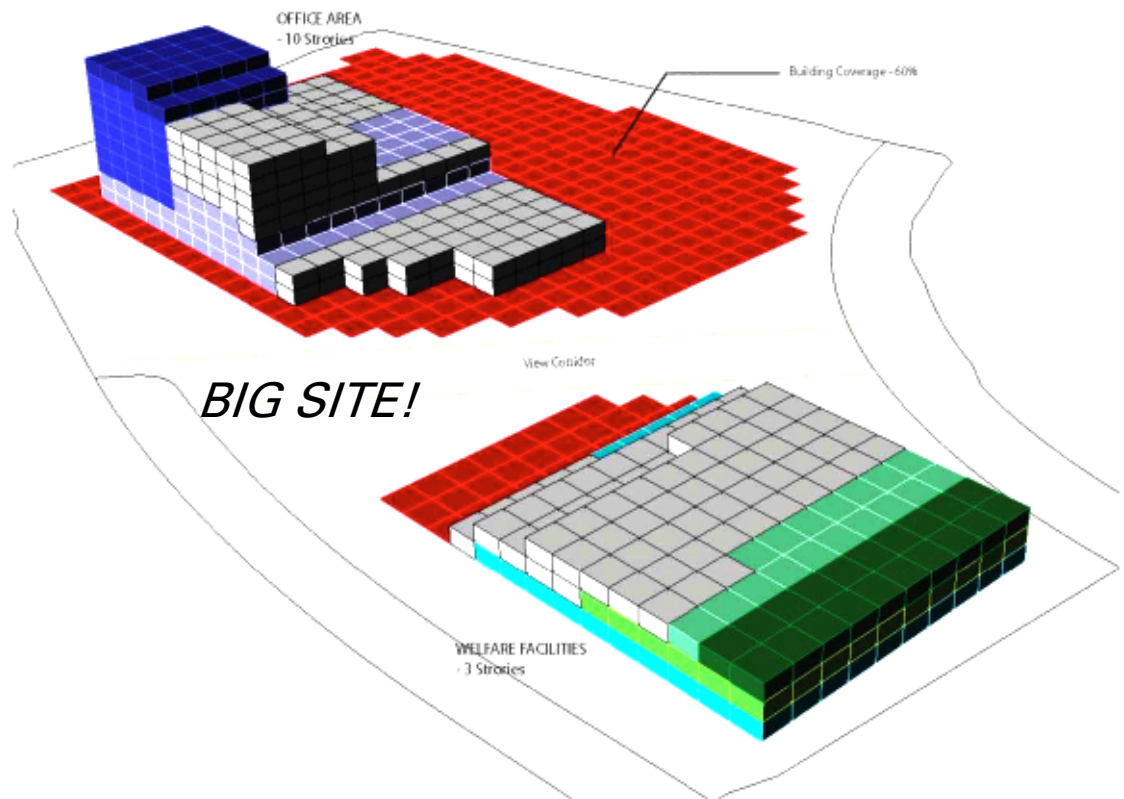
PROGRAM ANALYSIS

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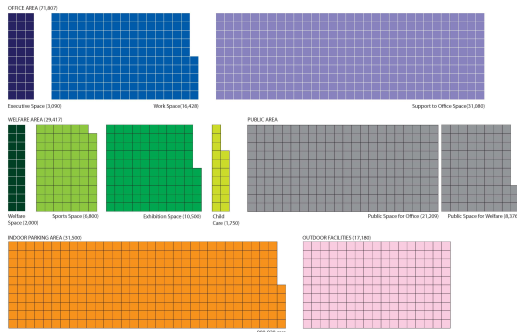
> Site 1:1500



> Program Stacking Diagram 1



> Program 1:1500



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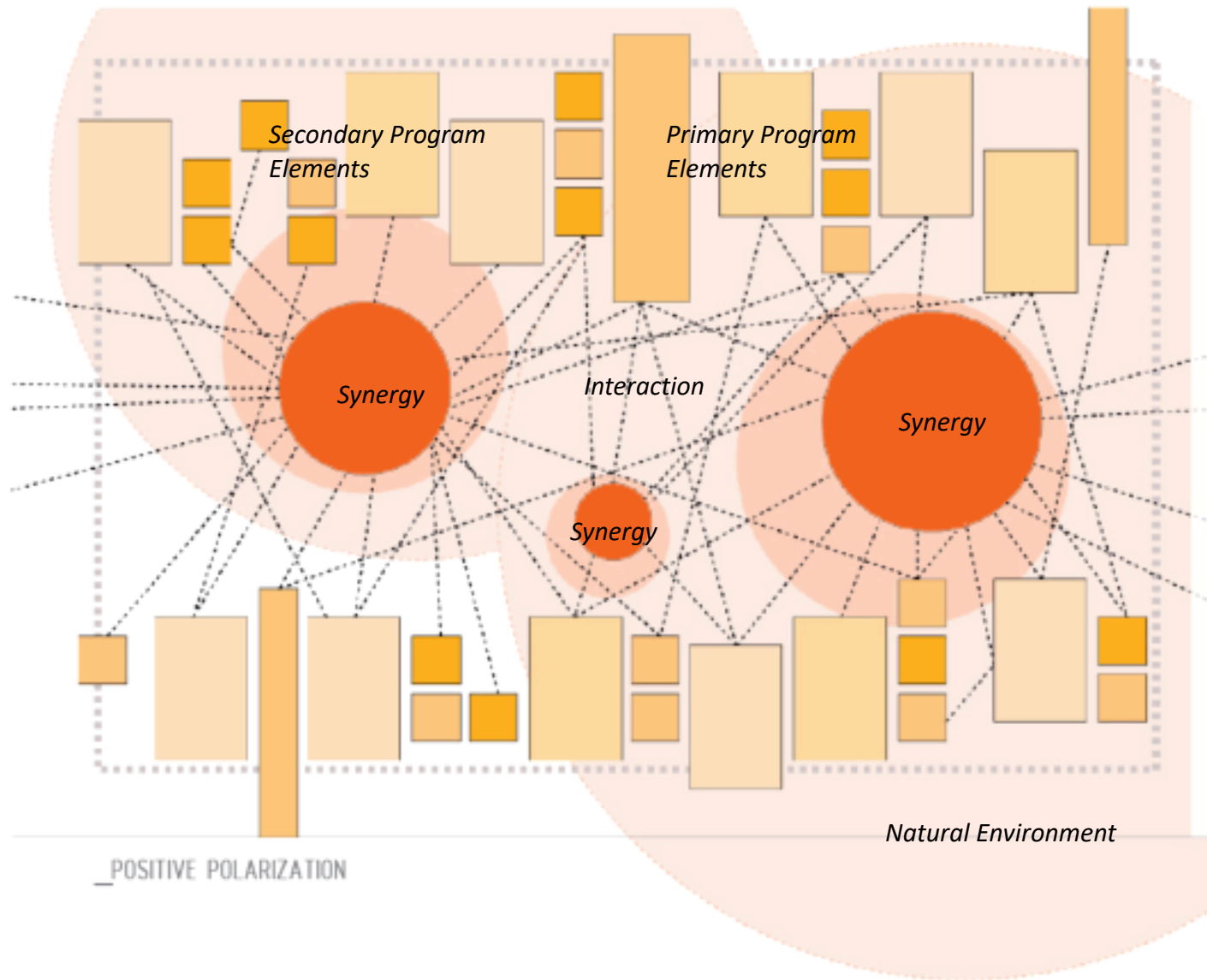
PROGRAM CONSIDERATIONS

- LH Values
- Campus Design Strategy
 - Vertical vs. Horizontal HQ Office Tower
 - Land Use Strategy
 - Open Space Strategy + Integration
 - Number of “stand-alone” Buildings
- * Workplace Culture

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PROGRAM CONSIDERATIONS

- Sustainable Green Building Strategies
 - *Land, Transportation, Energy, Material & Resources, Water Resources, Atmospheric Pollution, Maintenance, Ecological Environment, Indoor Environmental Quality*
- Connectivity with Urban City
 - Vehicular + Pedestrian Networks
 - Natural Environment
- Public Image & Amenities

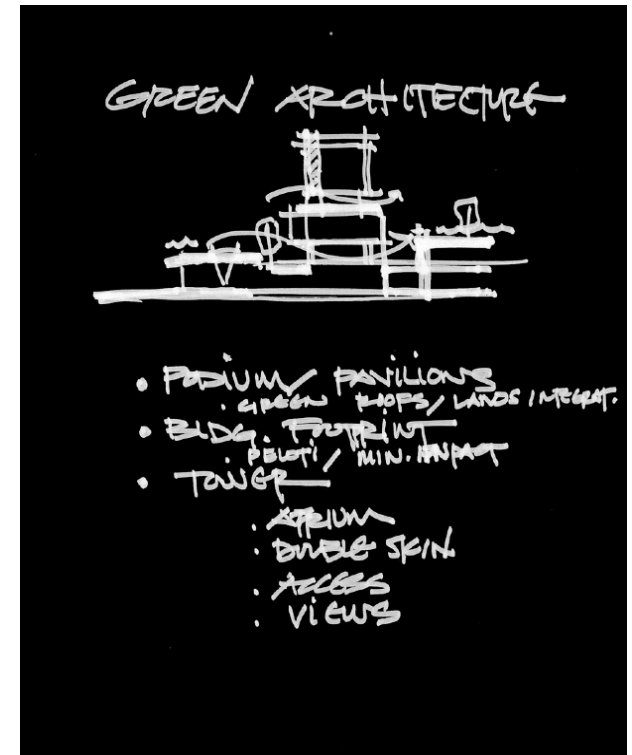
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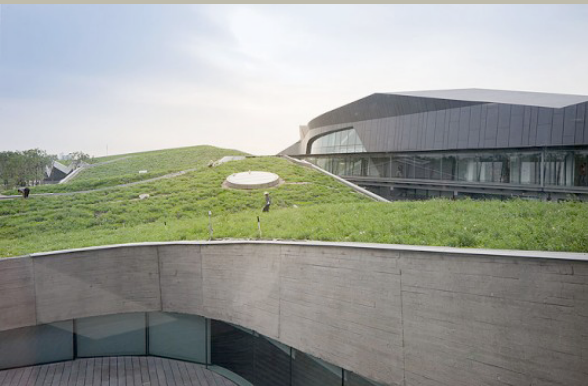
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SUSTAINABLE DESIGN CONSIDERATIONS

- *Natural Lighting for Public Spaces + Users*
- *Solar Control ~ West Façade*
- *Building Systems + Materials*
- *Energy Saving Strategies*
- *Maintenance*
- *Interior Environment Quality*



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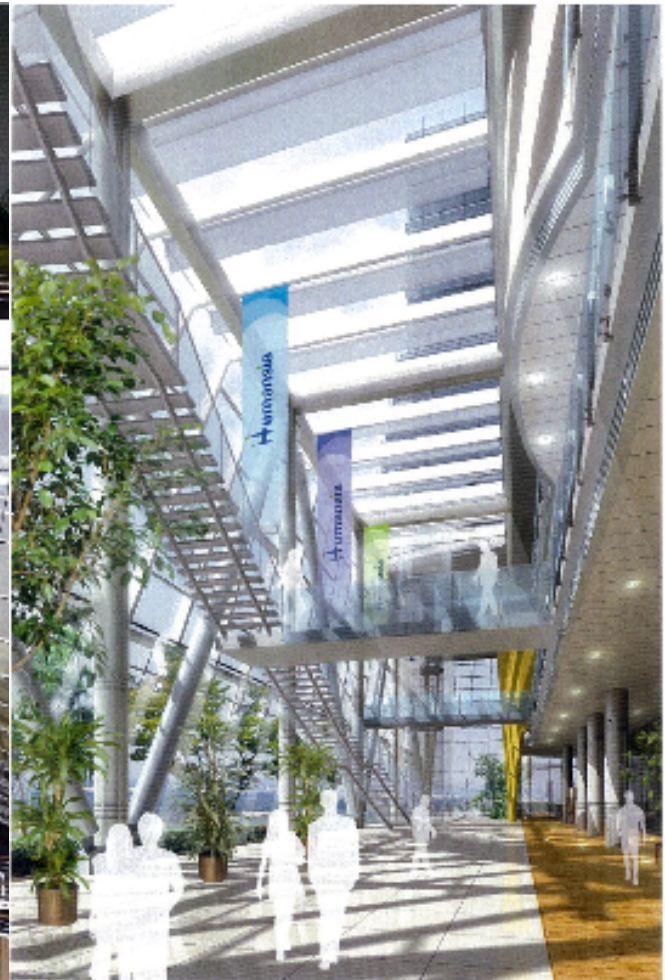
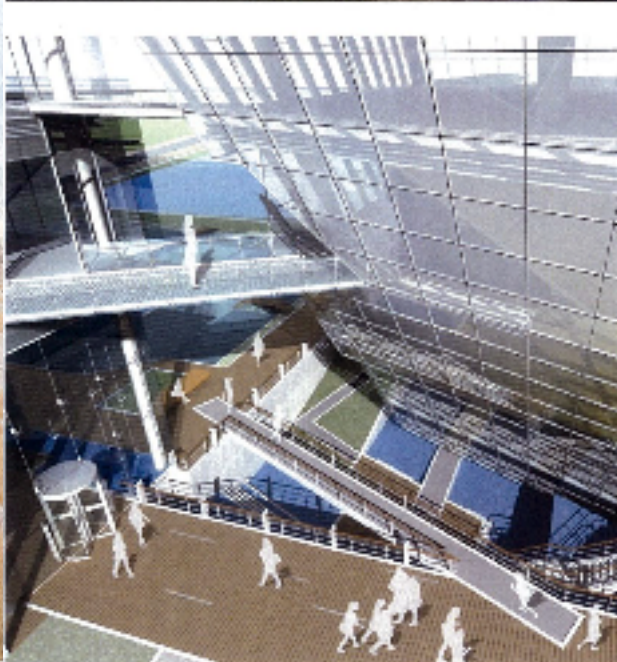
LH REGIONAL HQ EXAMPLE FACILITIES



01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



LH REGIONAL HQ EXAMPLE FACILITIES



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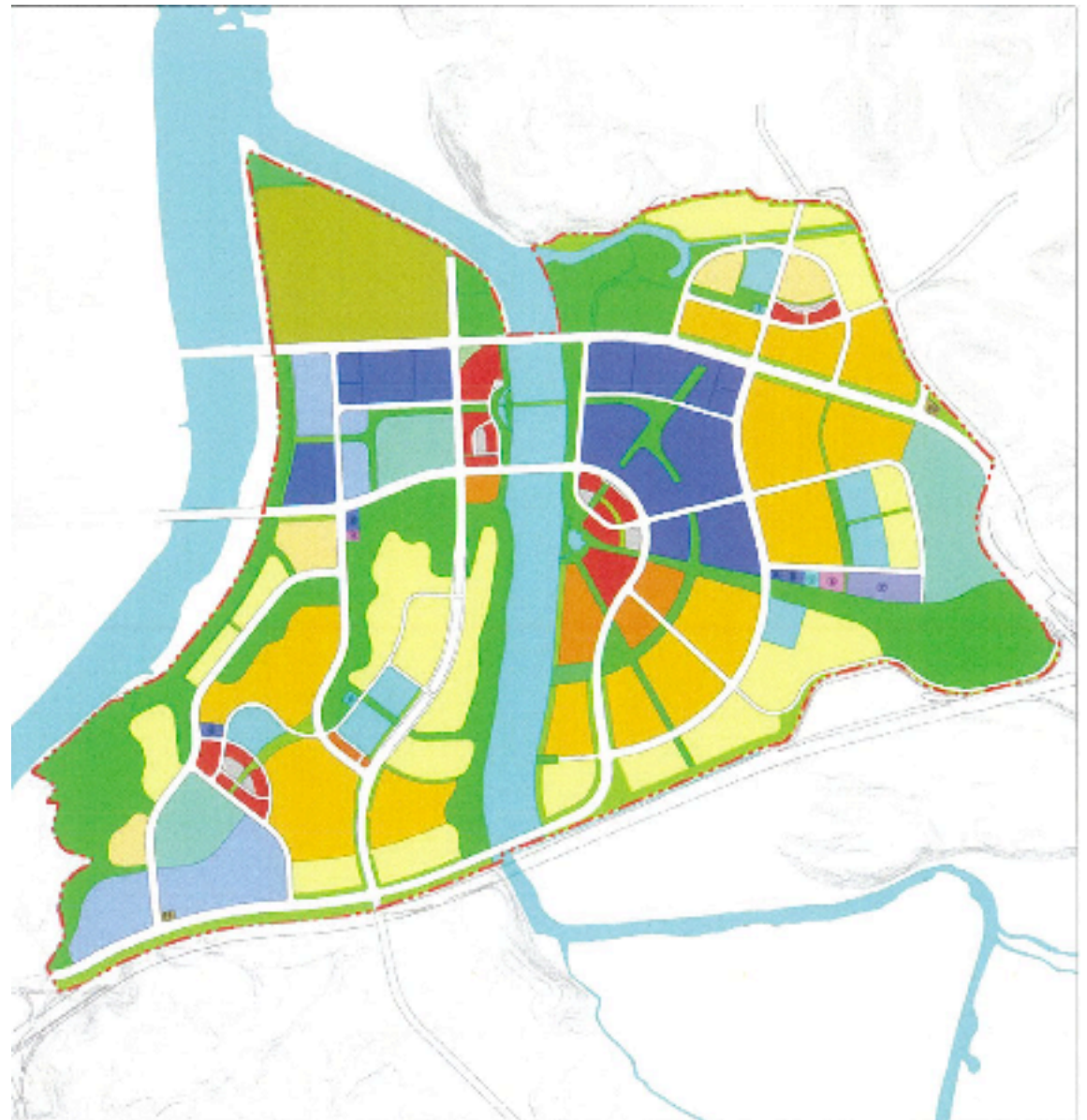
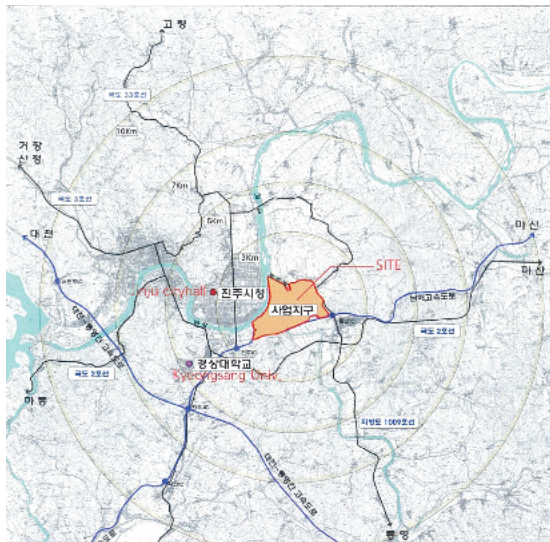


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SITE DESIGN CONSIDERATIONS

- *Context & Visibility*
 - *Urban Context + Visibility*
 - *Overall Building Massing, Building Height, Materiality*
- *Site Orientation and Views*
 - *HQ Office Tower Location & Solar Orientation + Views*
 - *30 m Mountain View Corridor*
- *Vehicular Flow & Circulation: Front Door Address?*
- *Pedestrian Flow & Circulation*
- *Connectivity*
 - *CBD Urban Networks*
 - *Public Open Space*

Design + Energy + Budget



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SITE ANALYSIS



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Design + Energy + Budget

Central Campus Spine ~ Mainstreet

Program Area

Office Area : 29,900 sqm **TOWER**

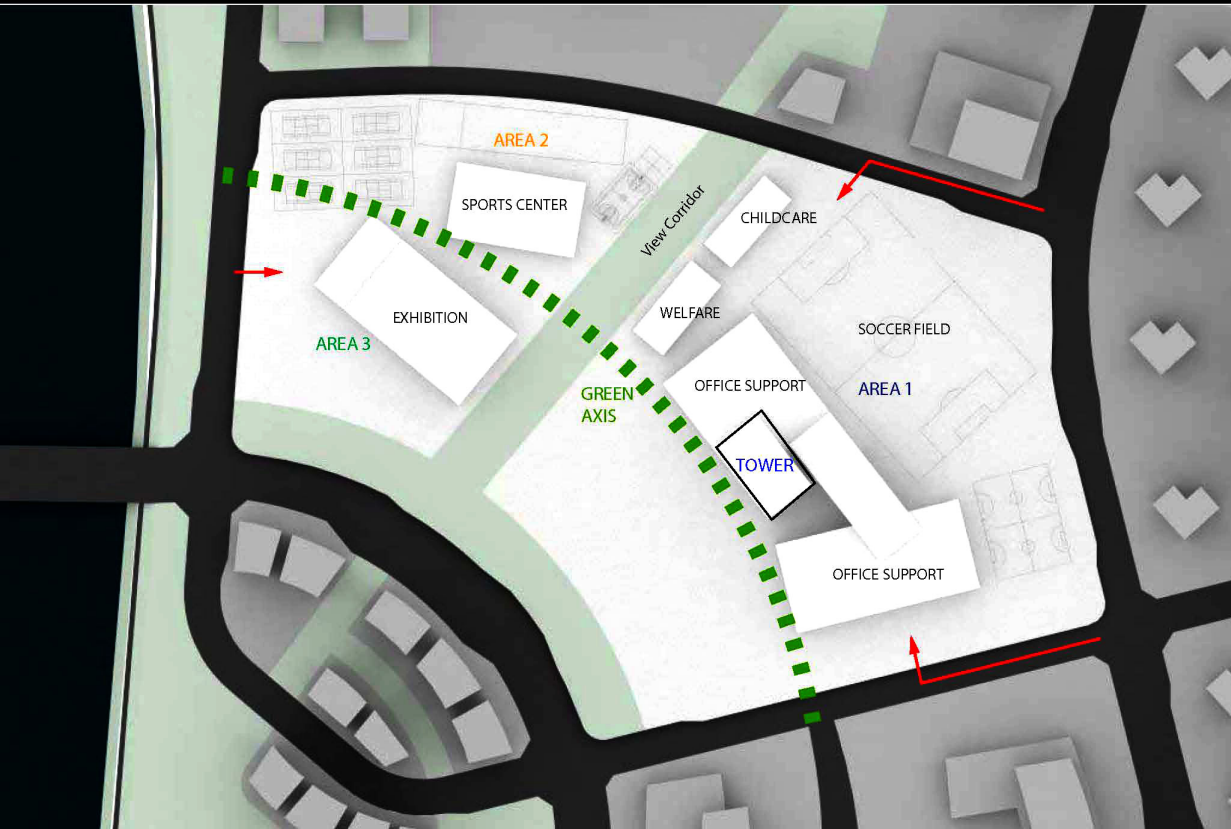
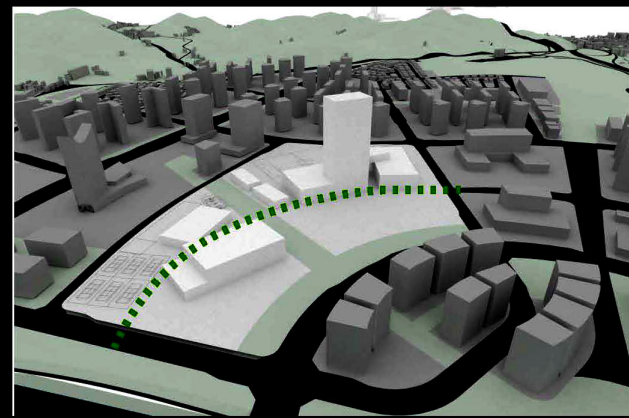
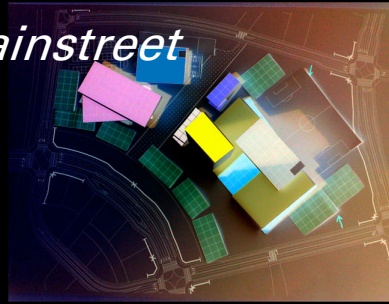
Office Support : 31,080 sqm **AREA 1**

Welfare : 2,000 sqm

Childcare : 1,750 sqm

Sports Center : 6,800 sqm **AREA 2**

Exhibition : 10,500 sqm **AREA 3**



Campus Cluster

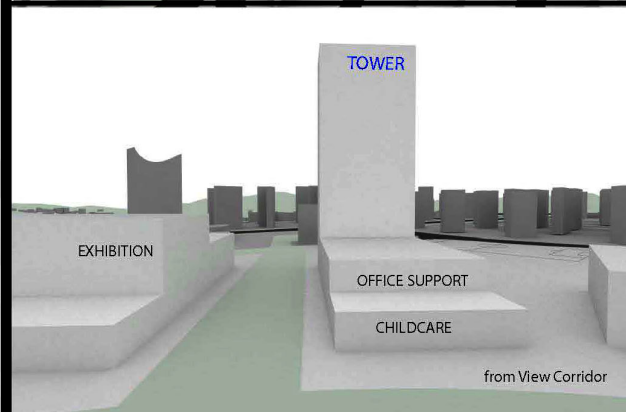
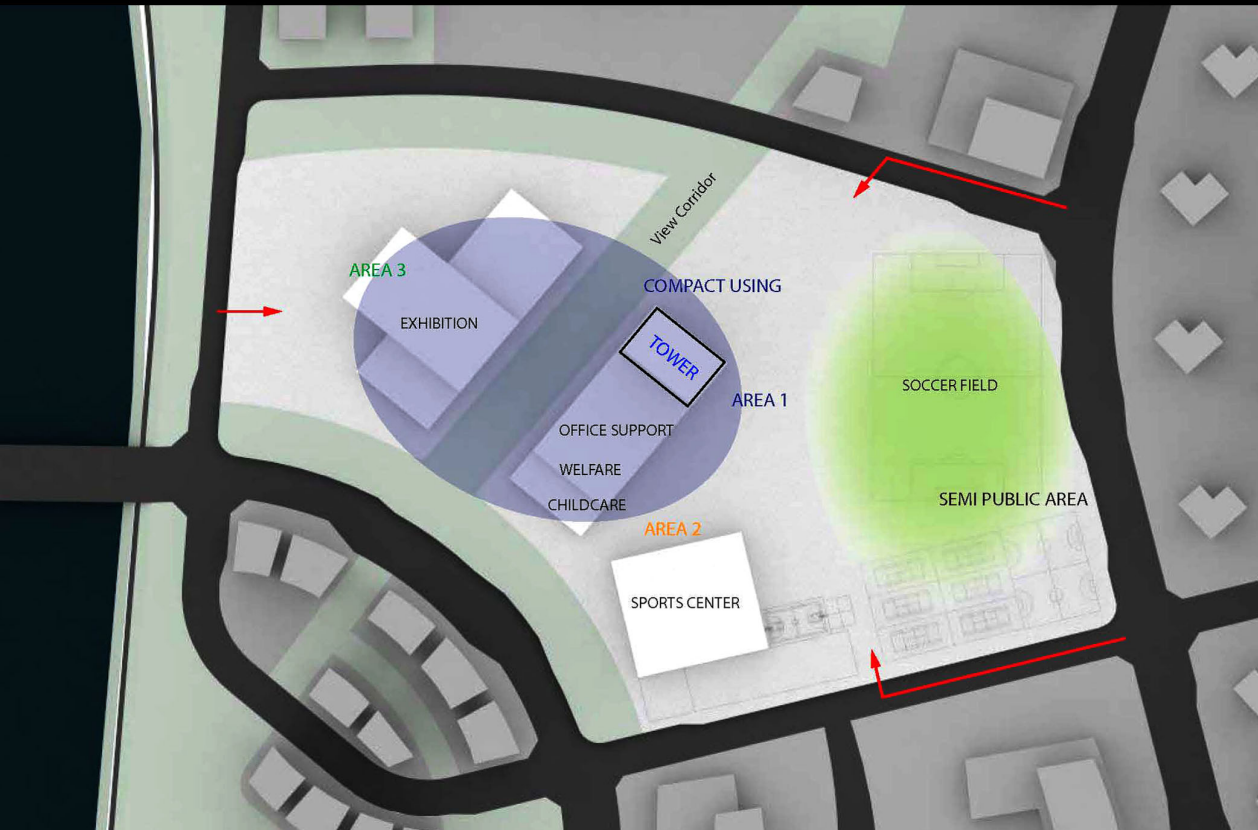
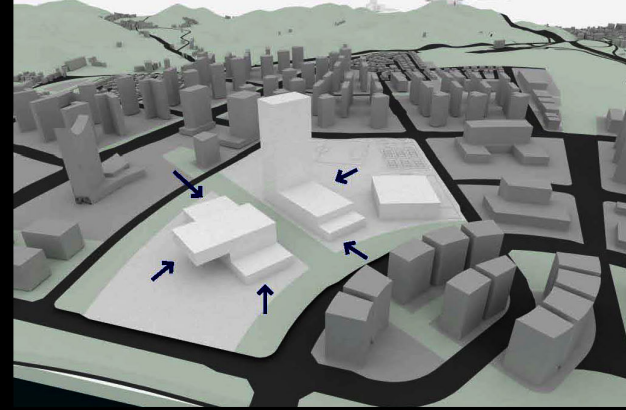
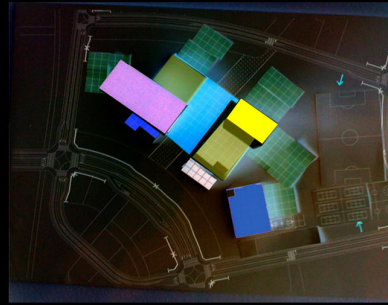
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Central Plaza

Program Area

Office Area : 29,900 sqm **TOWER**

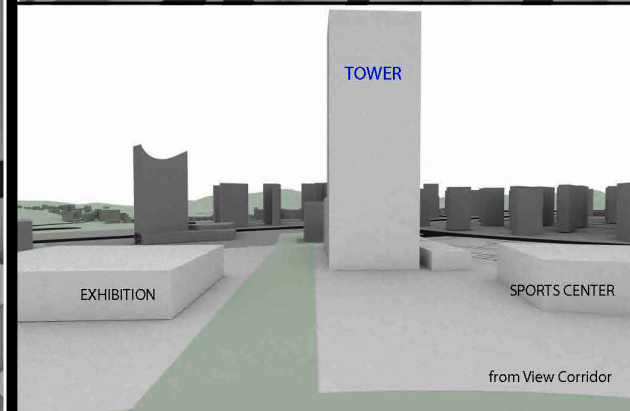
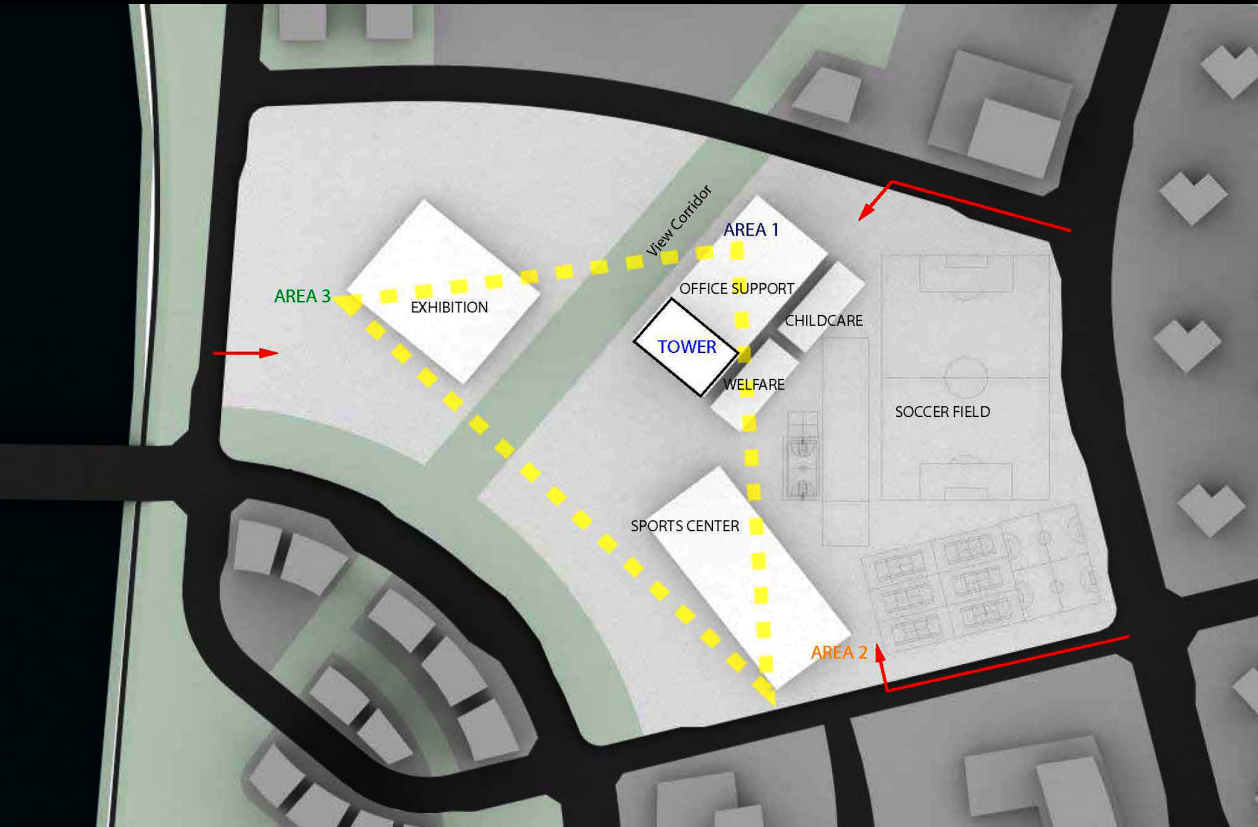
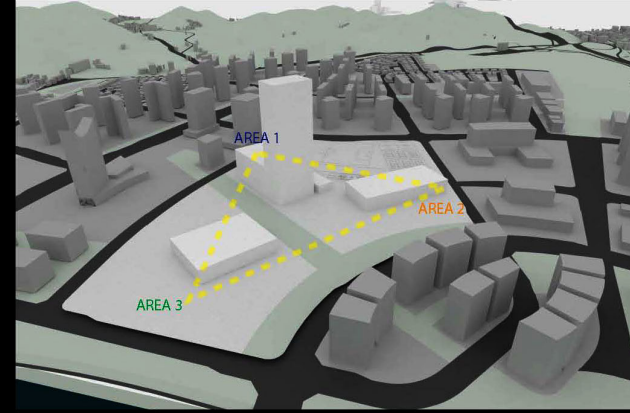
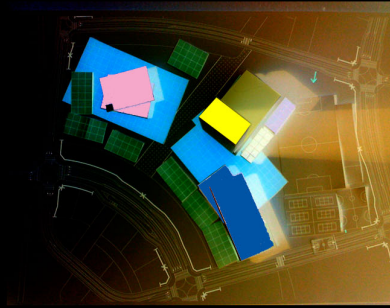
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Alternate Campus Spine ~ Tower Termination

Program Area

Office Area : 29,900 sqm **TOWER**

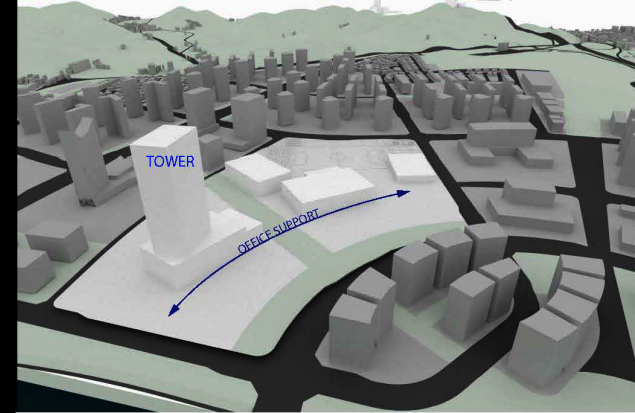
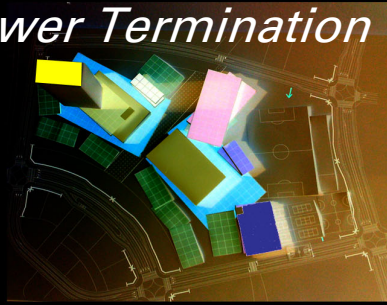
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Waterfront HQ Address

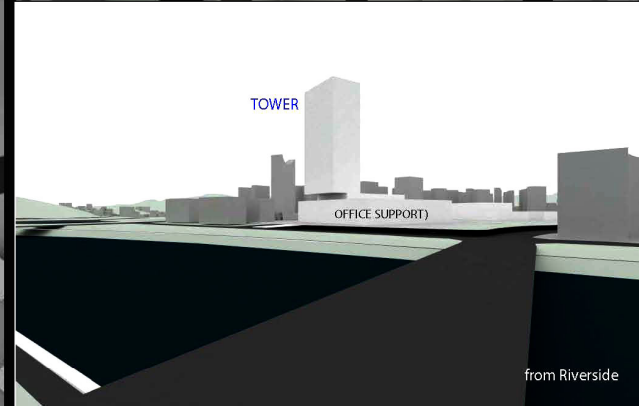
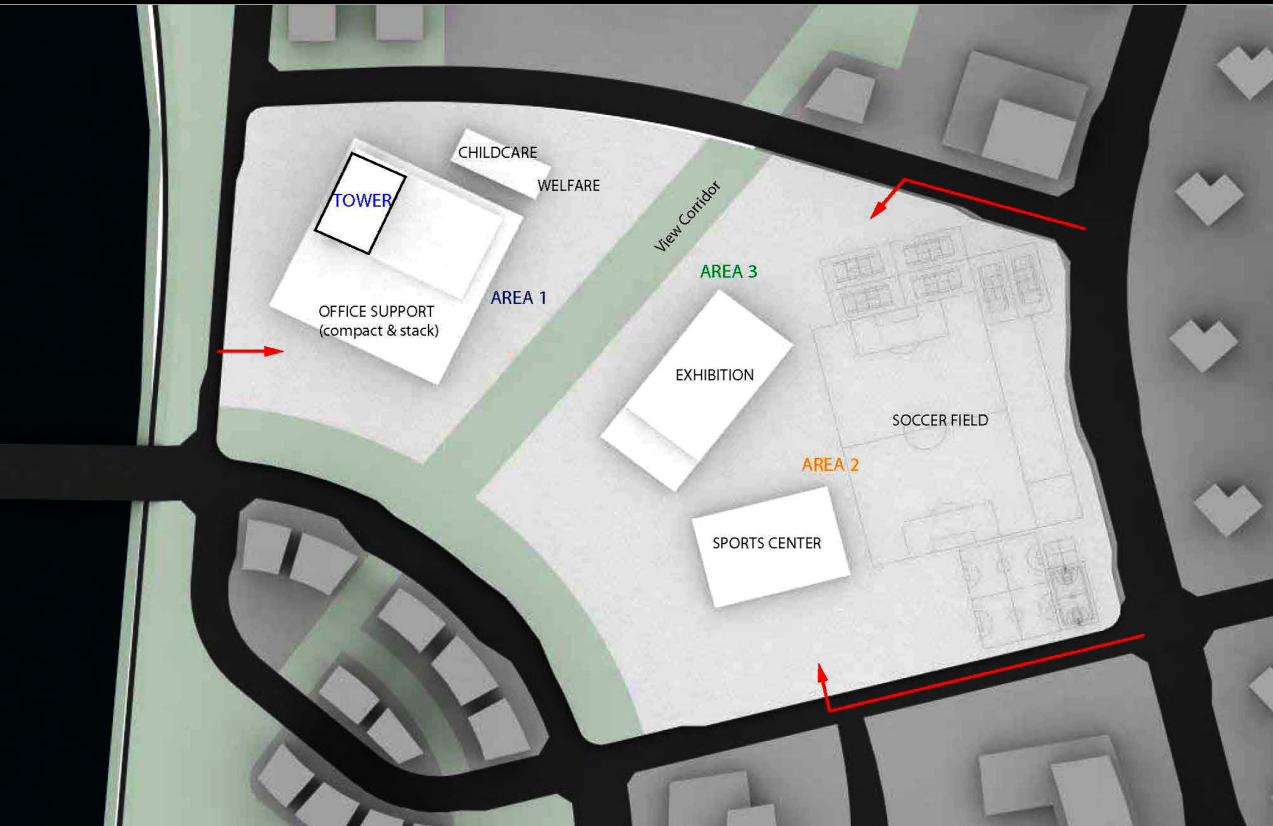
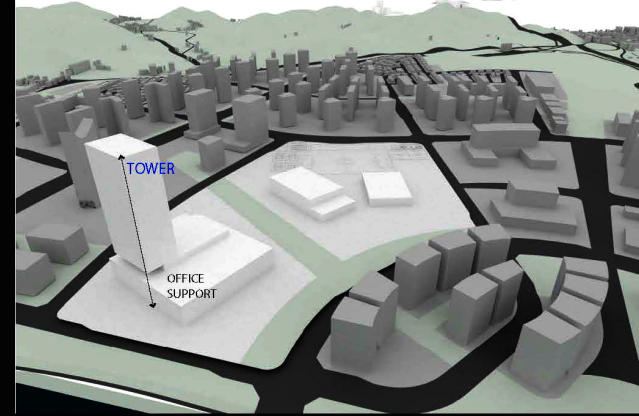
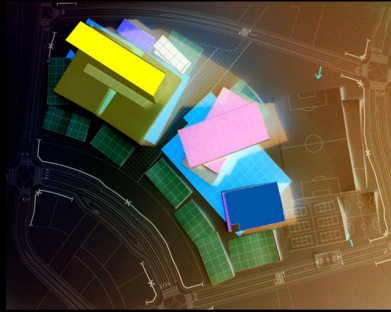
Program Area

Office Area : 29,900 sqm **TOWER**

Office Support : 31,080 sqm **AREA 1**
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Childcare : 1,750 sqm

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Axial Low-rise Atrium

Program Area

Office Area : 29,900 sqm **LOW RISE TOWER**

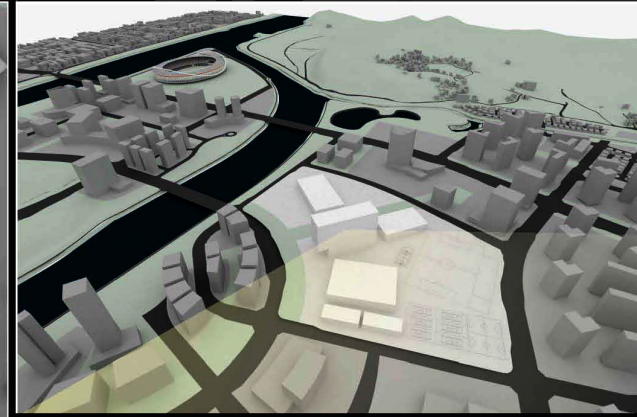
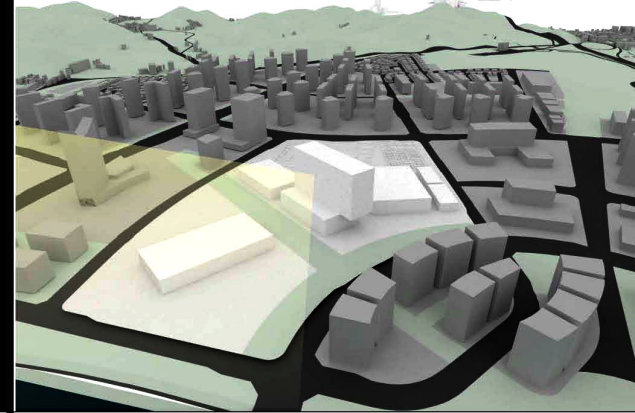
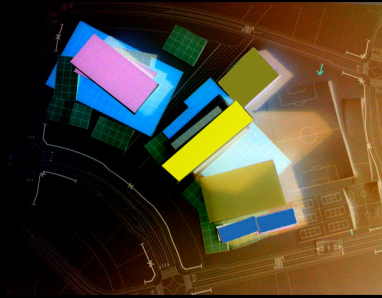
Office Support : 31,080 sqm **AREA 1**

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Childcare : 1,750 sqm

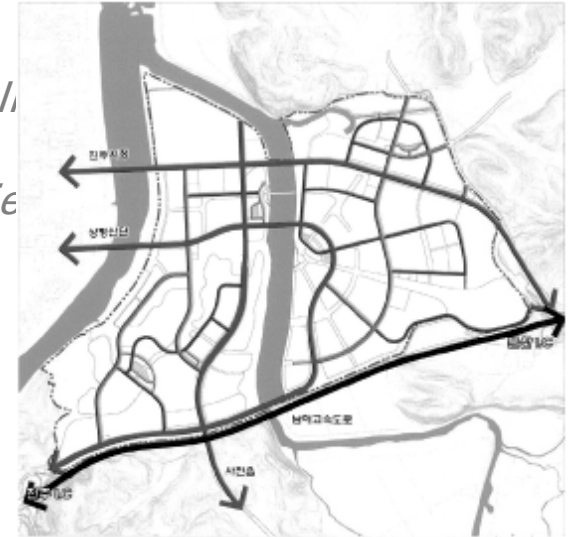
Sports Center : 6,800 sqm **AREA 2**

Exhibition : 10,500 sqm **AREA 3**



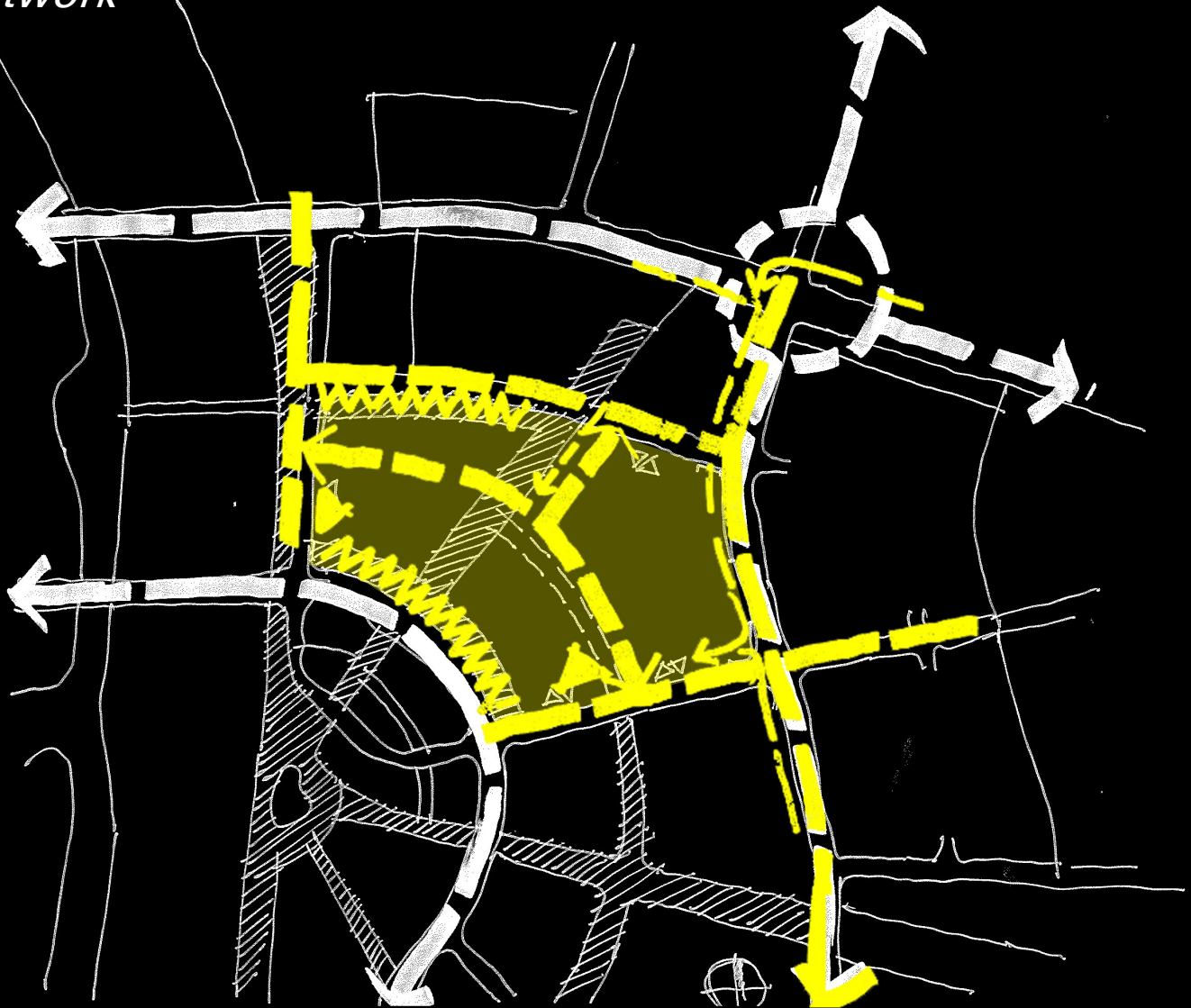
SITE DESIGN CONSIDERATIONS

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 - *Public Open Space*



Design + Energy + Budget

Vehicular Network



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Design + Energy + Budget

Pedestrian Network



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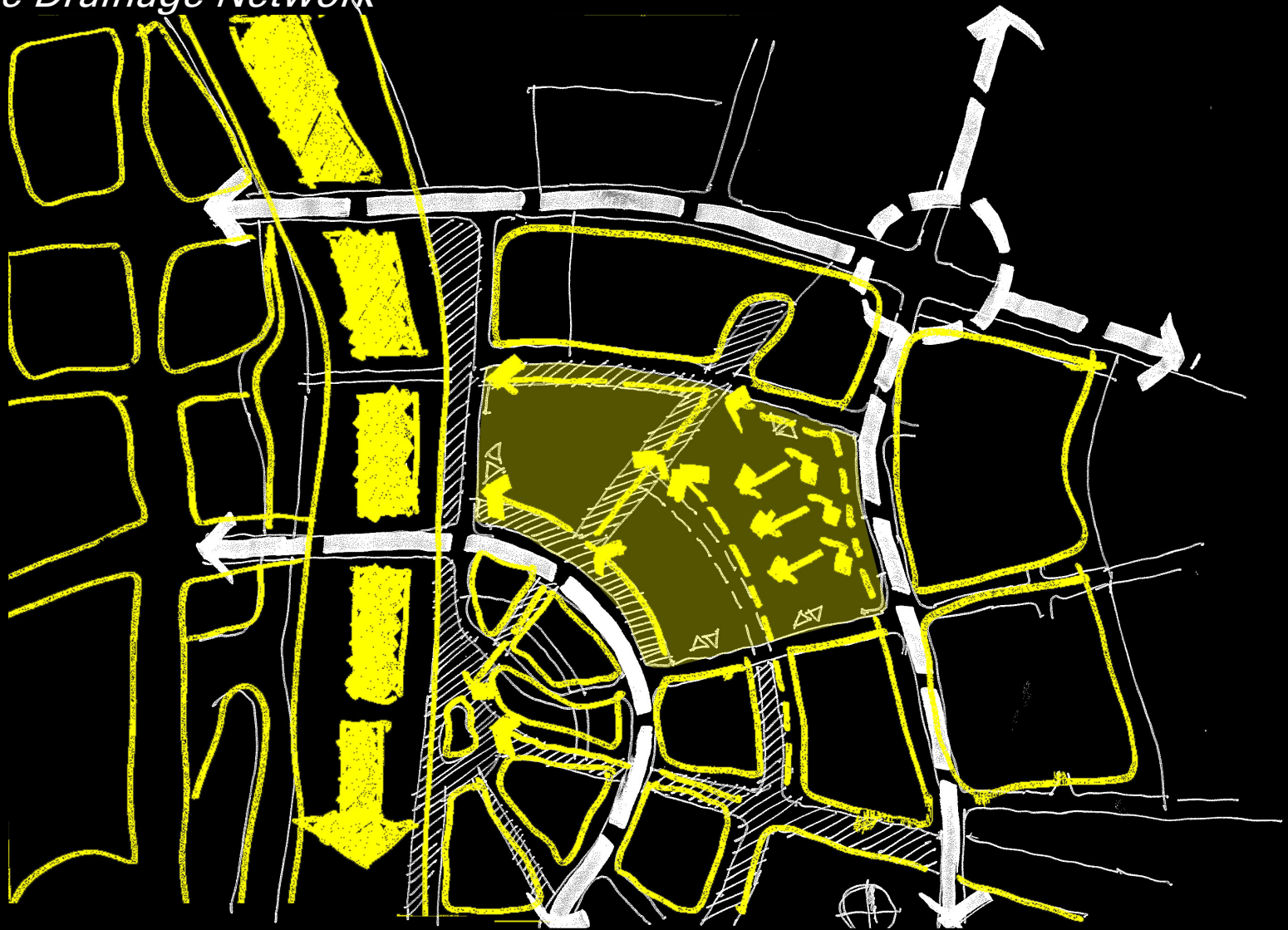
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Open Space GREEN Network



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Site Drainage Network



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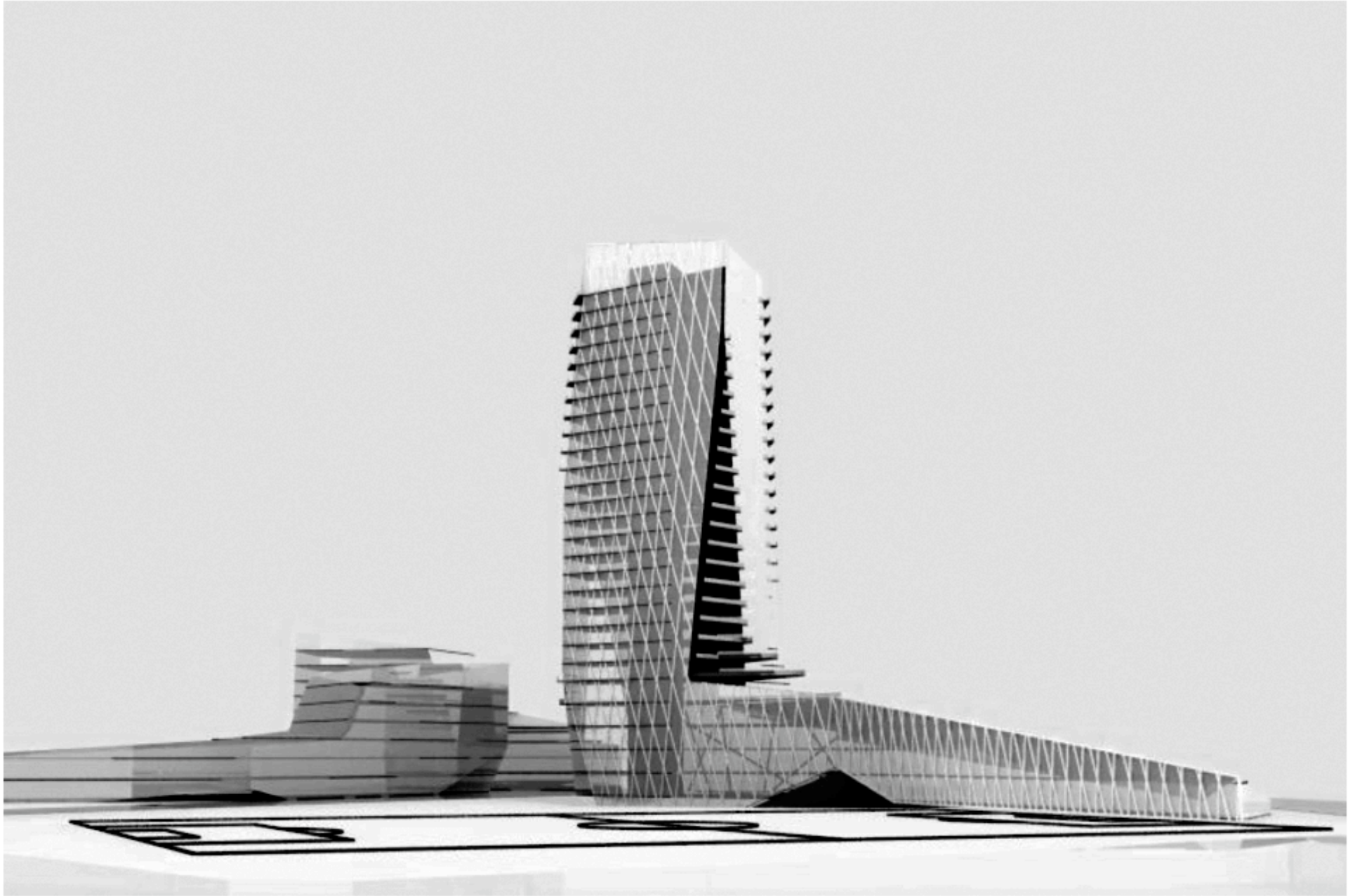
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DESIGN EXPLORATION

Crag

*a steep rugged projecting part of rock
formation*

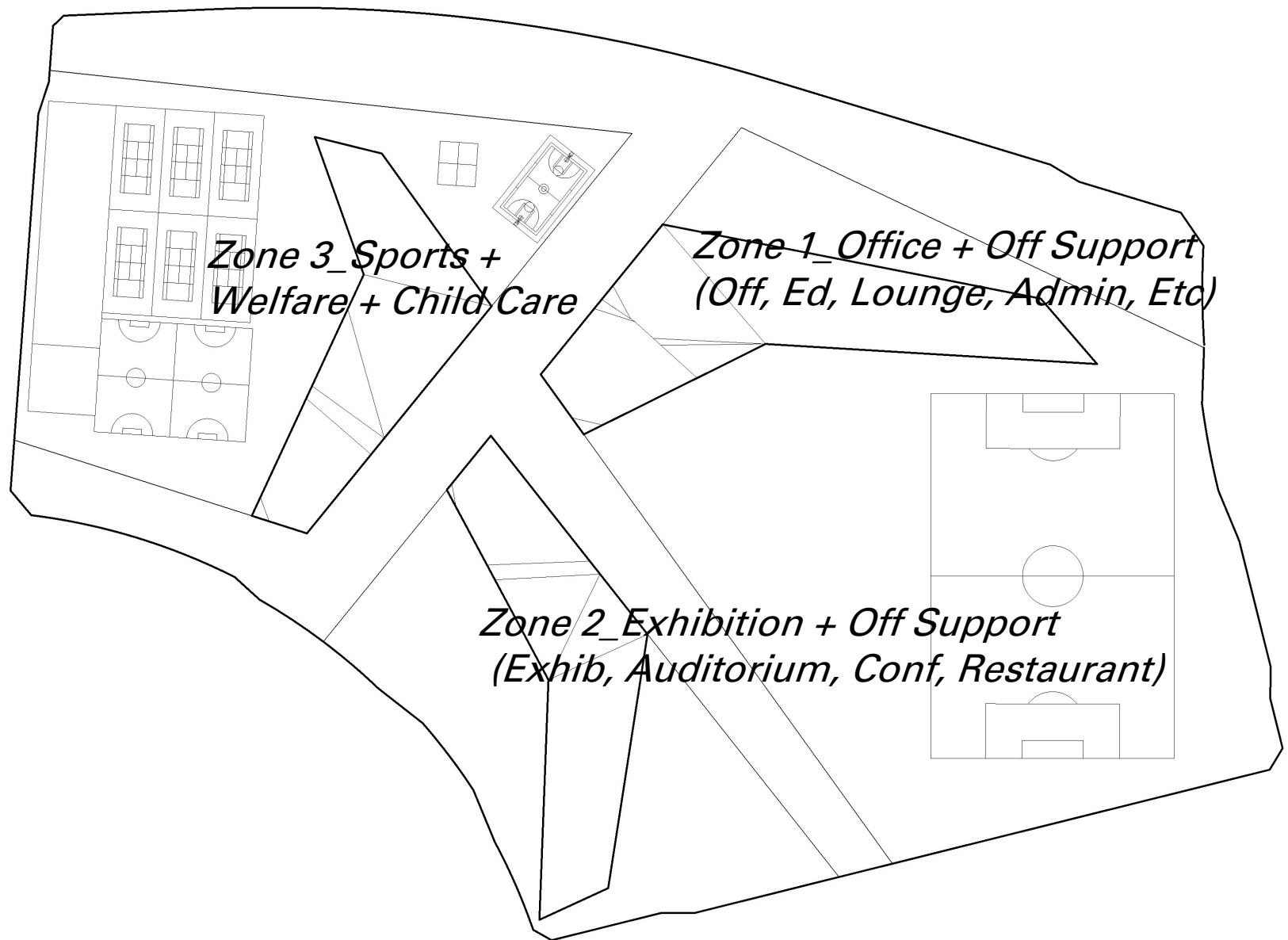
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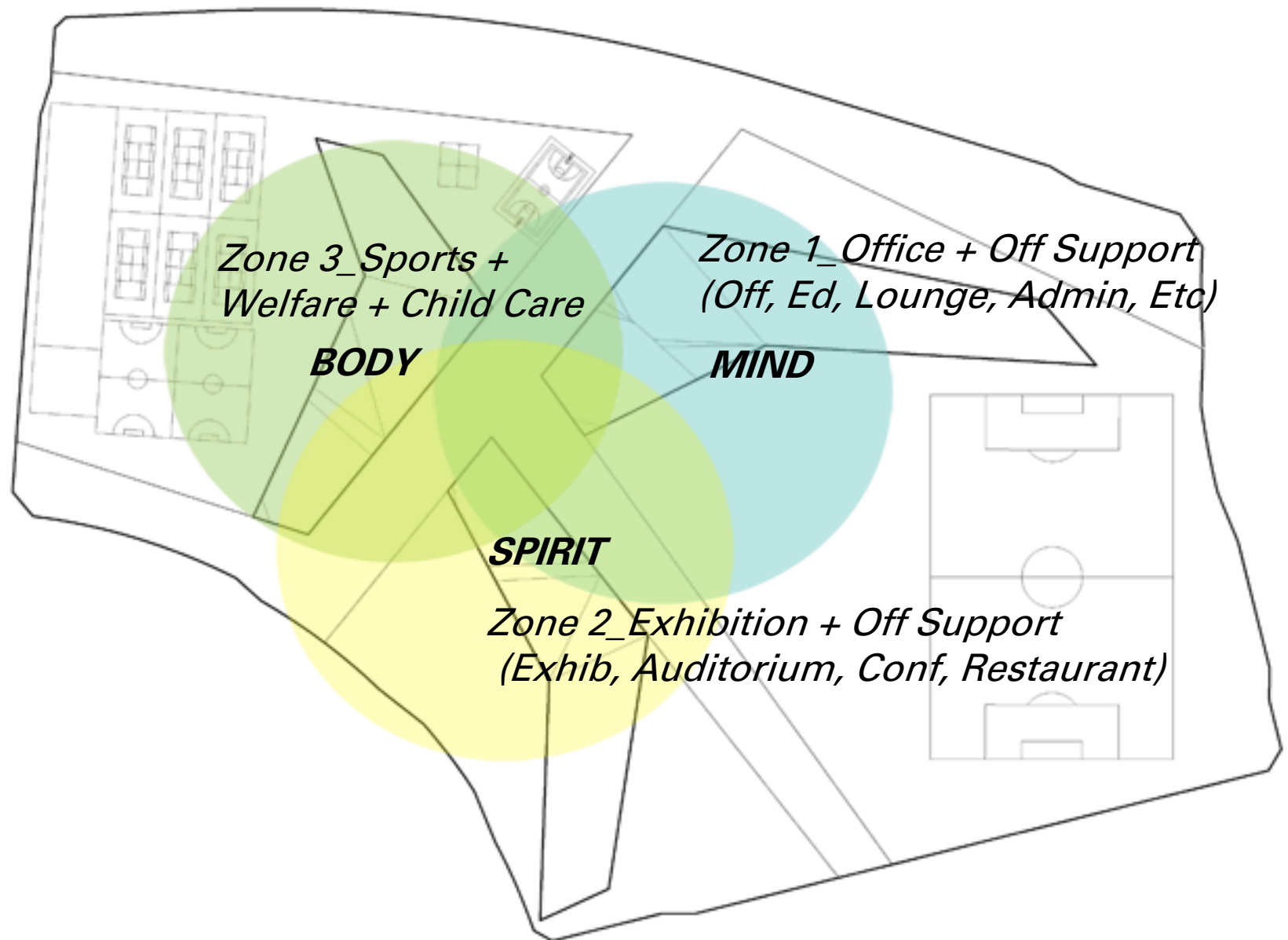
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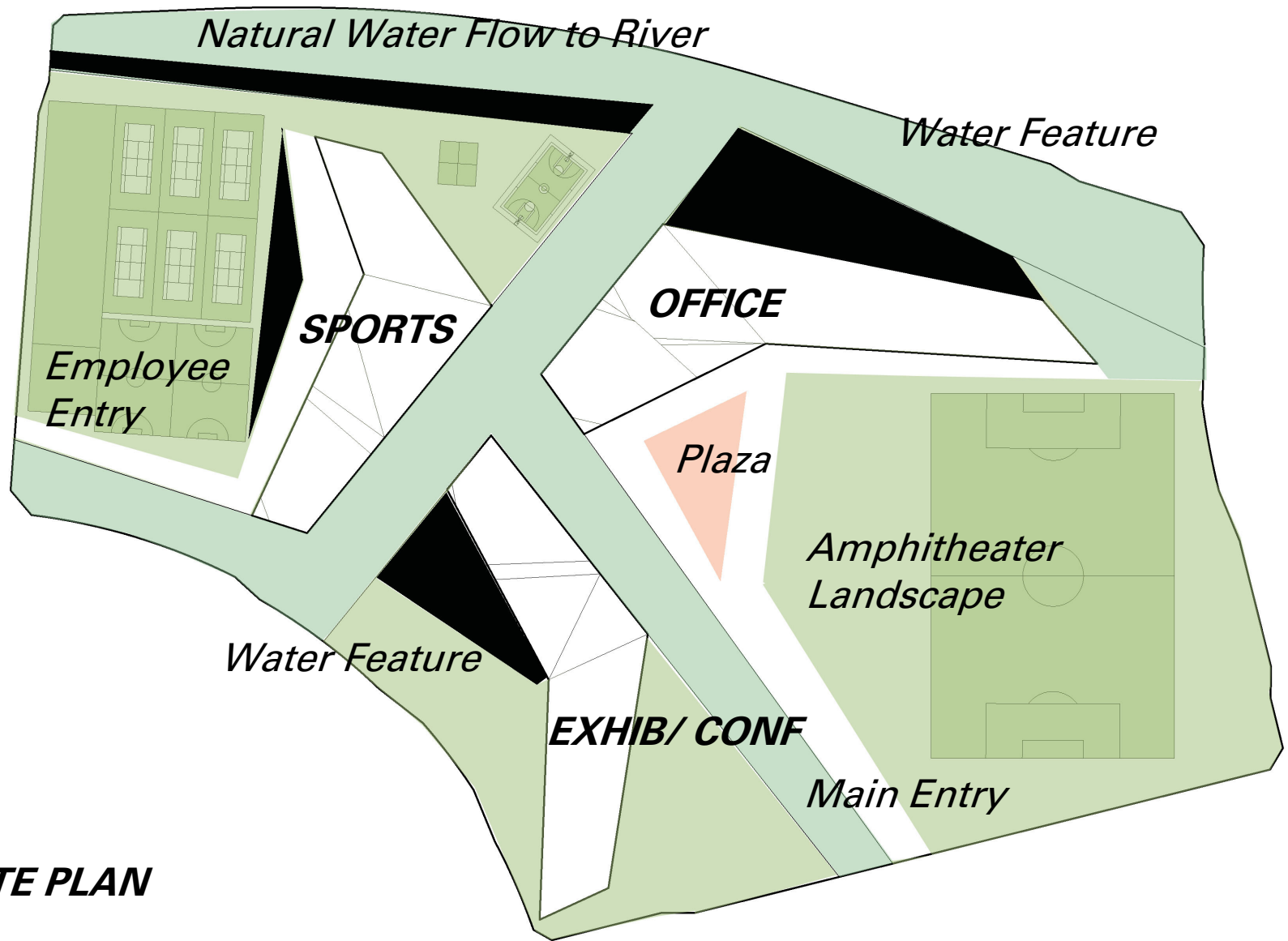
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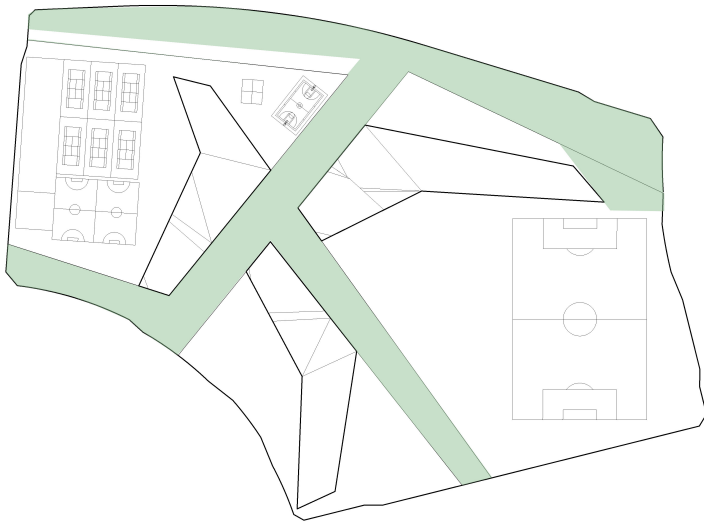
LH CORP CAMPUS ZONES



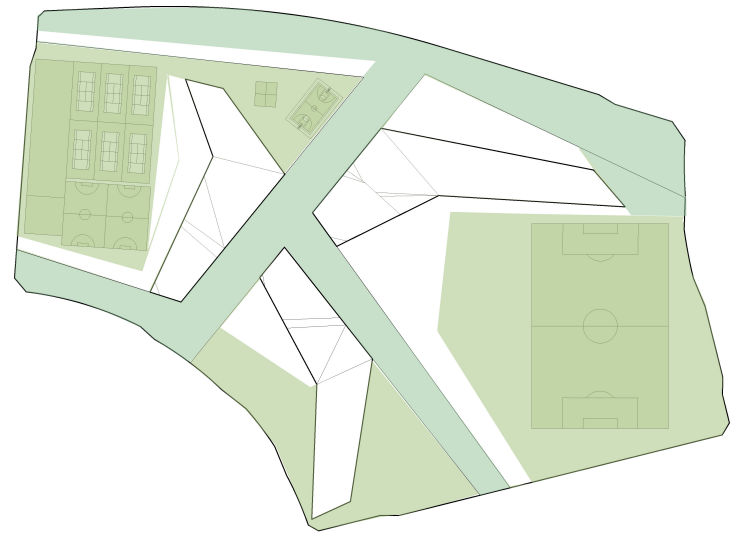
HARMONY DIAGRAM



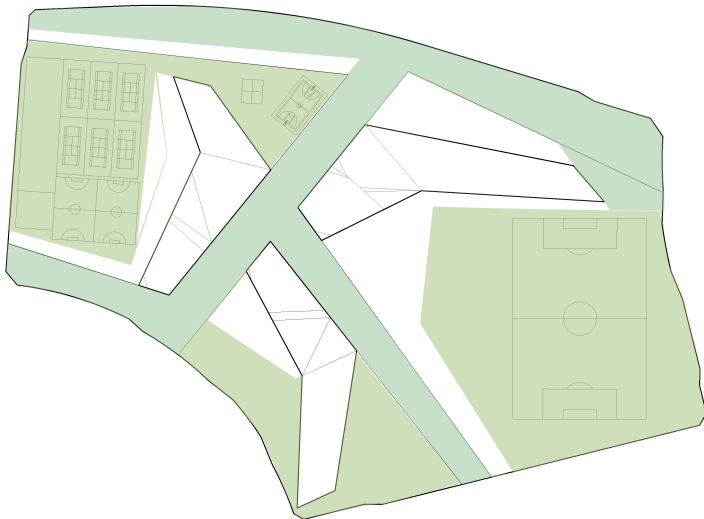
SITE PLAN



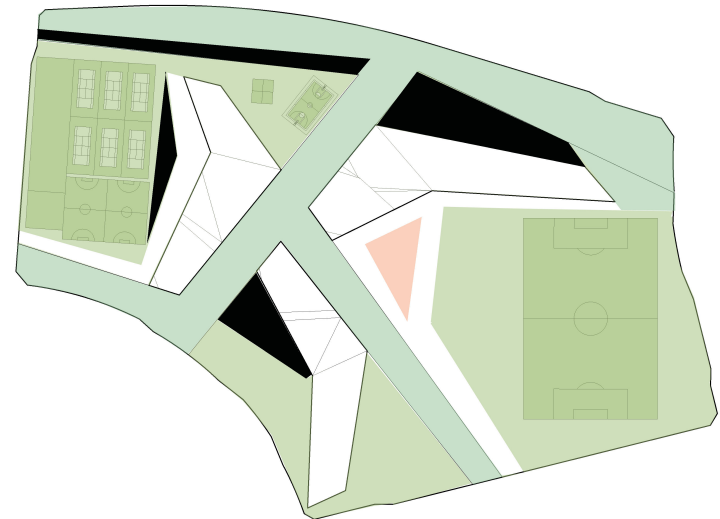
Natural Green Network



Campus Outdoor Amenities

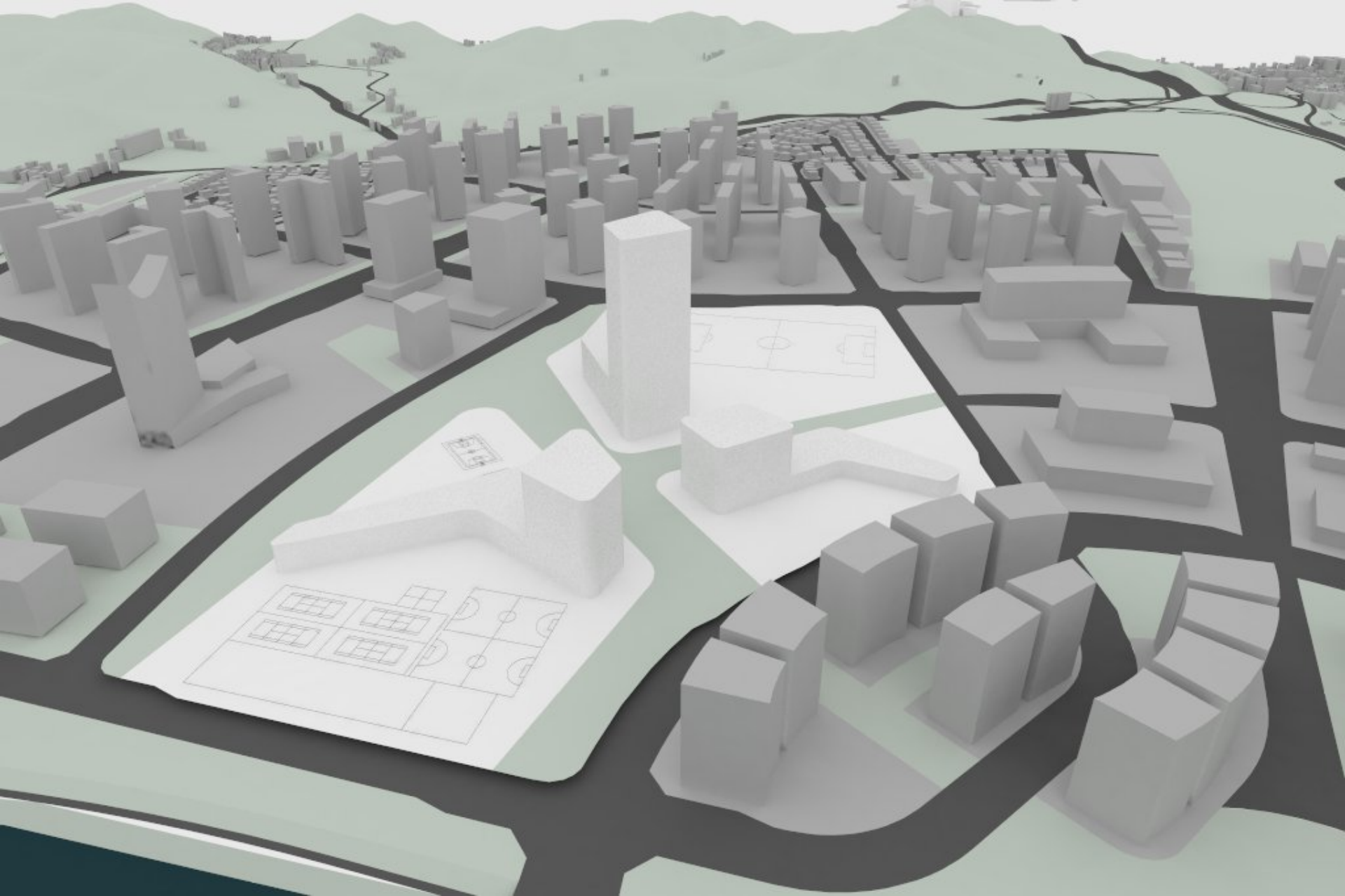


Public Open Space

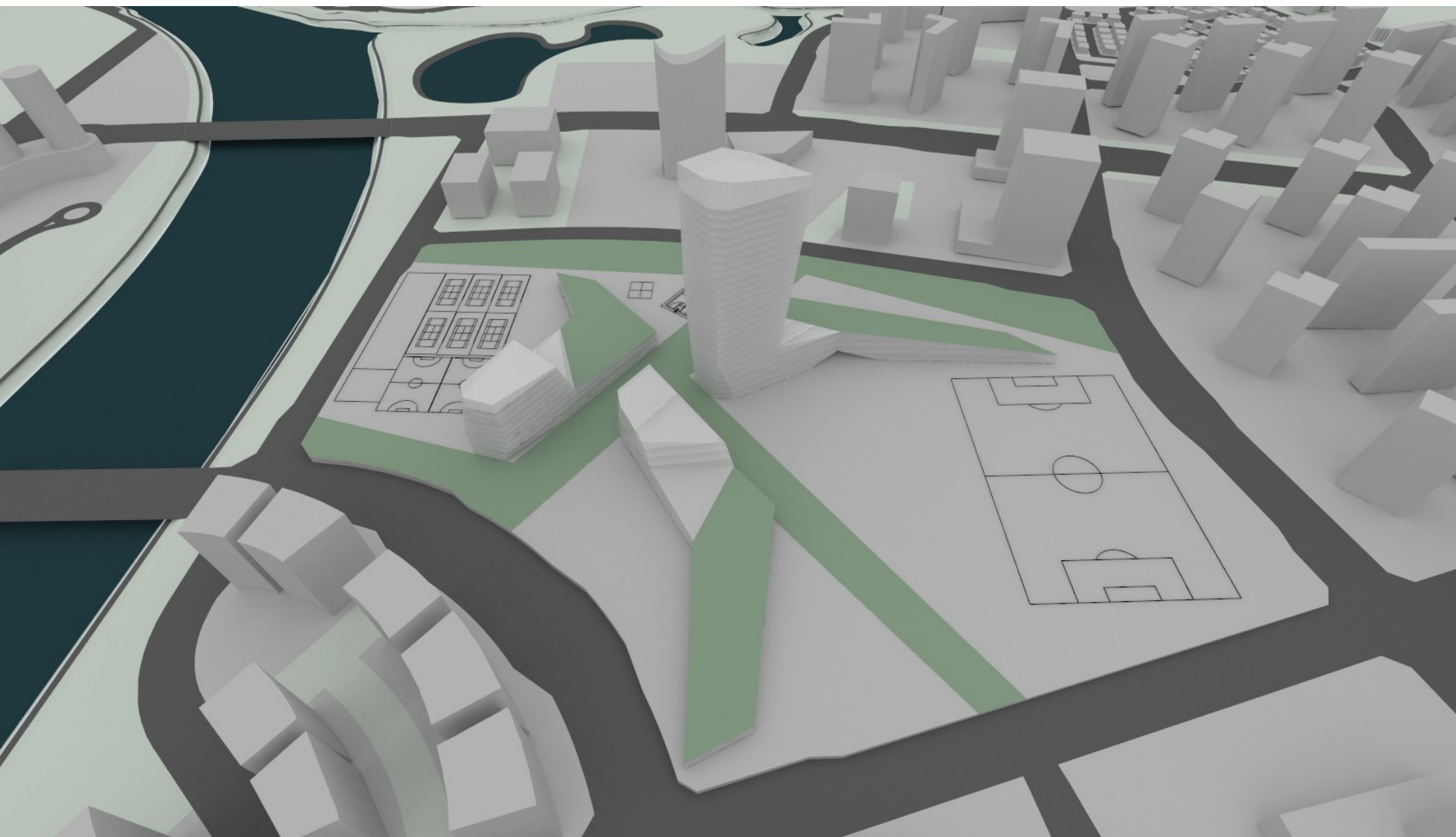


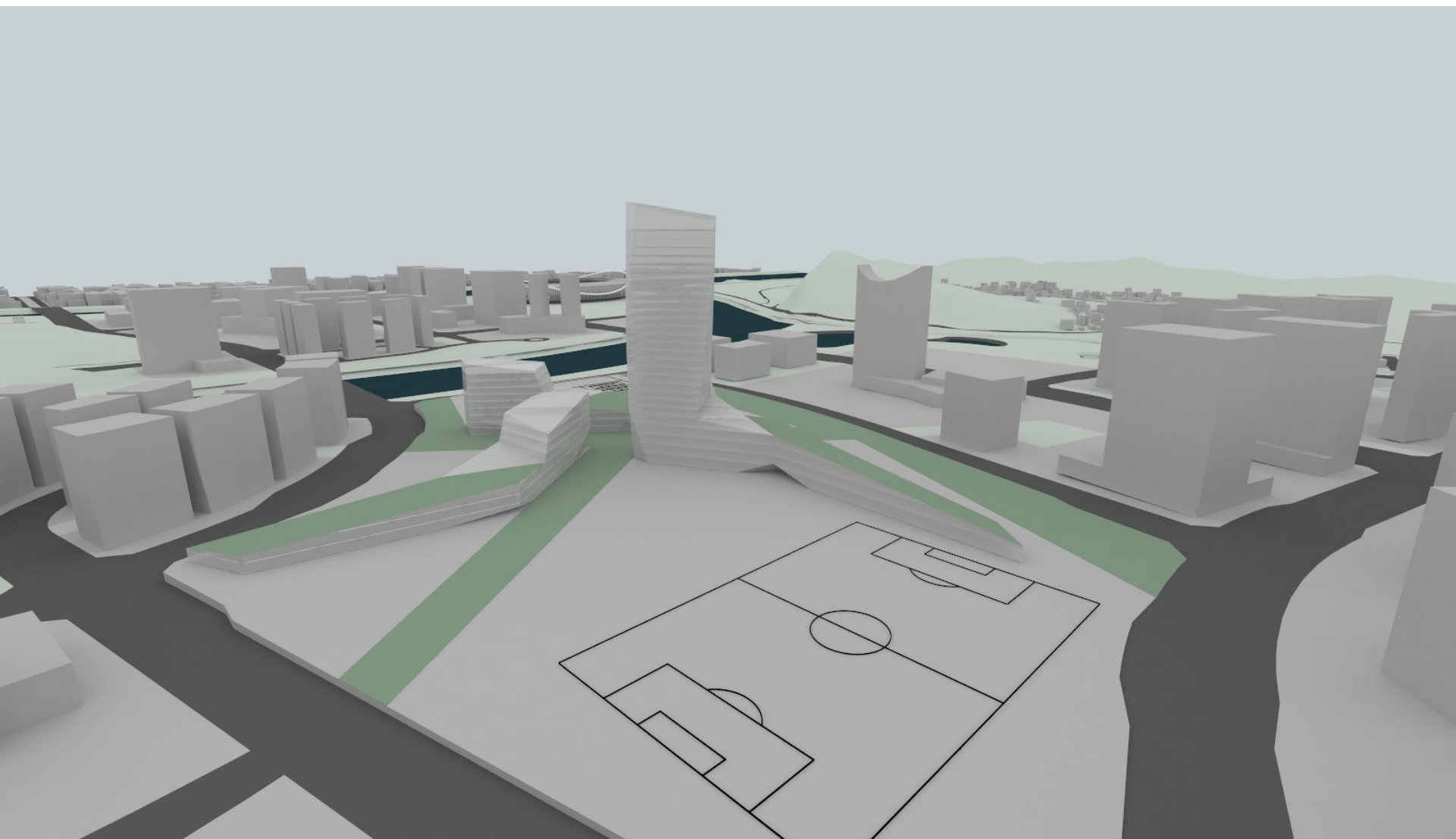
Water + Campus Integration

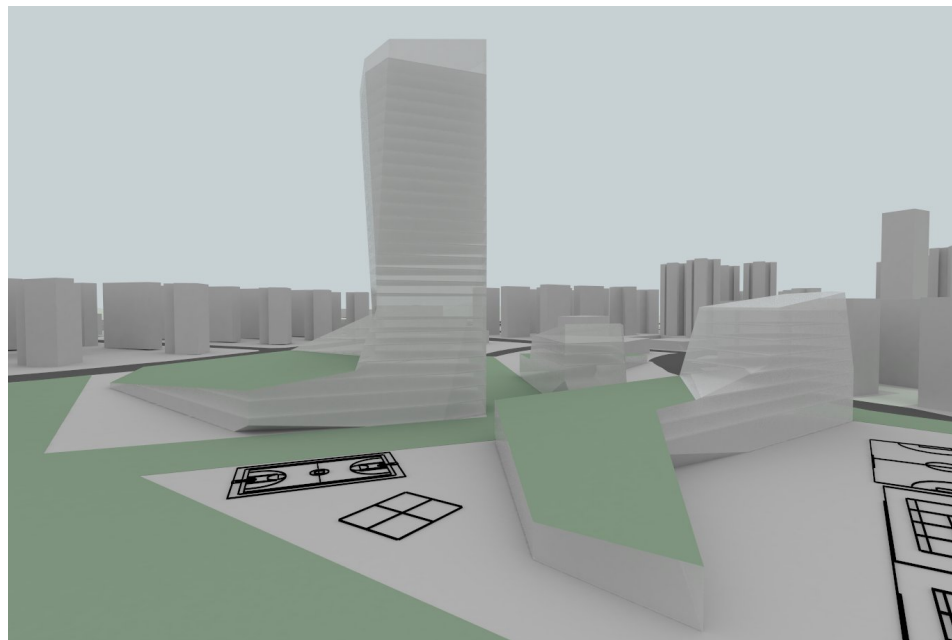
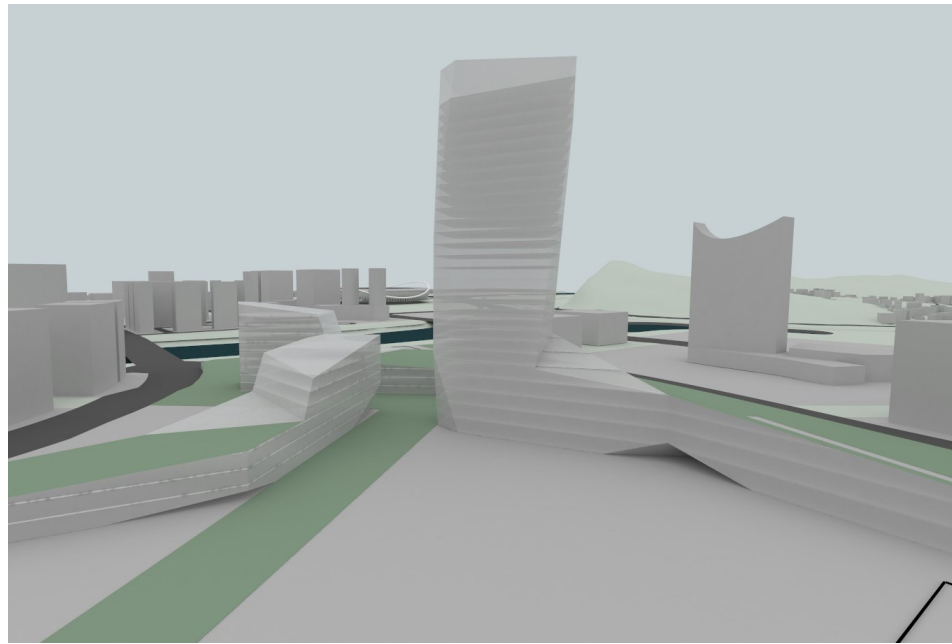
CAMPUS SYSTEMS



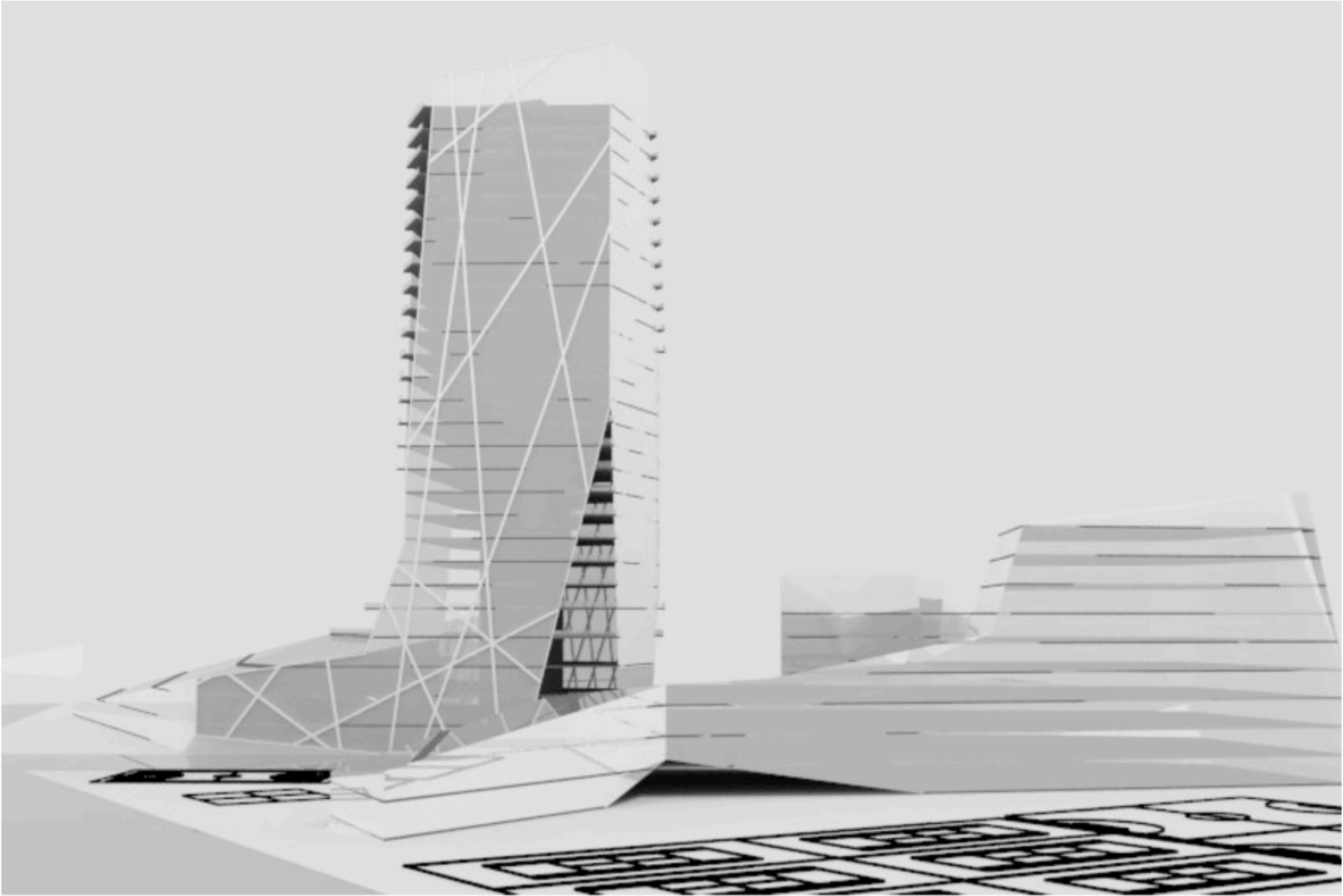
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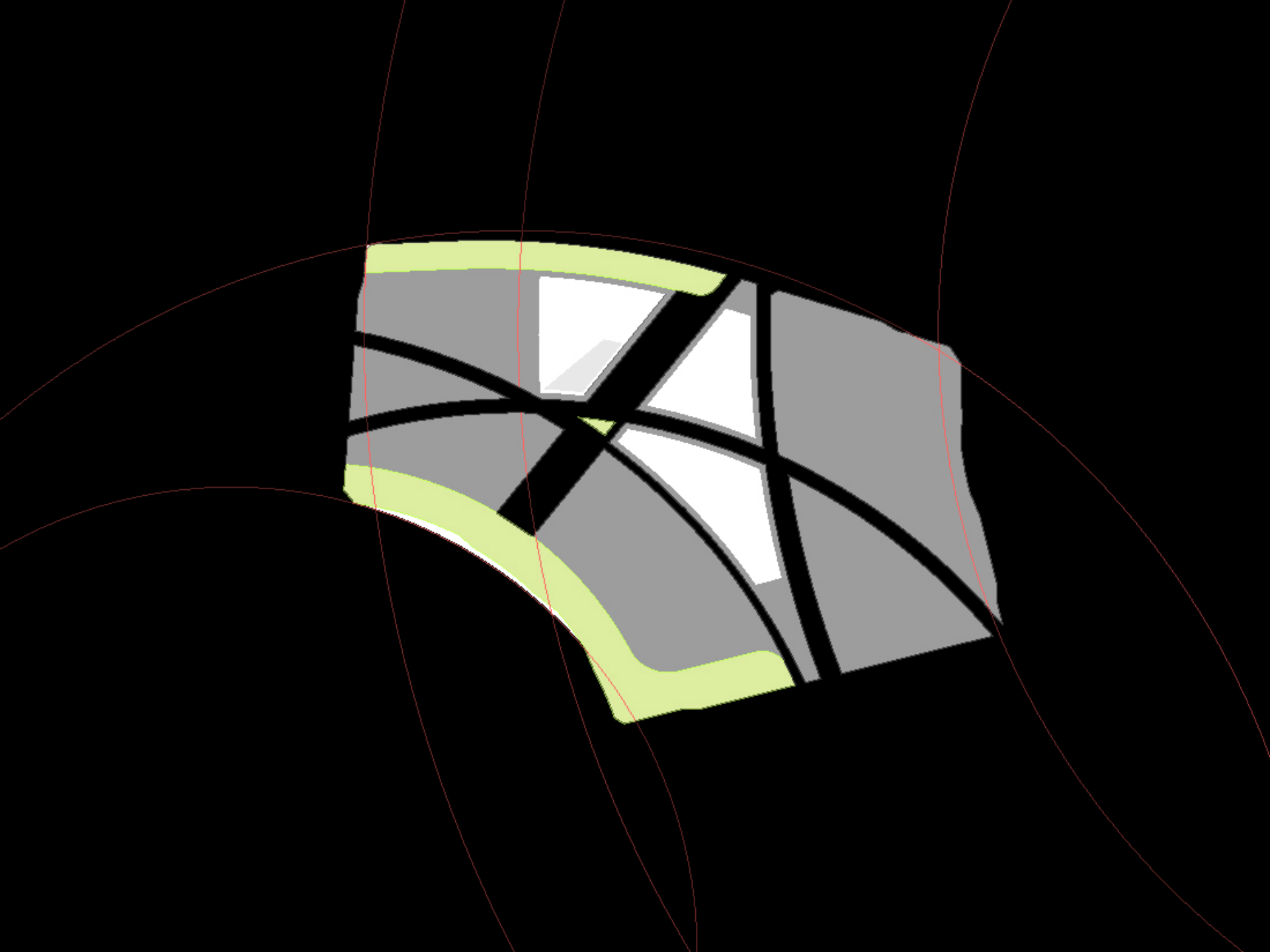
1 Crag



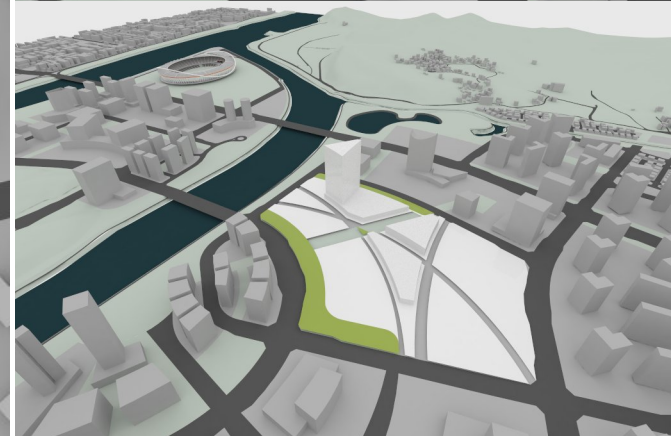
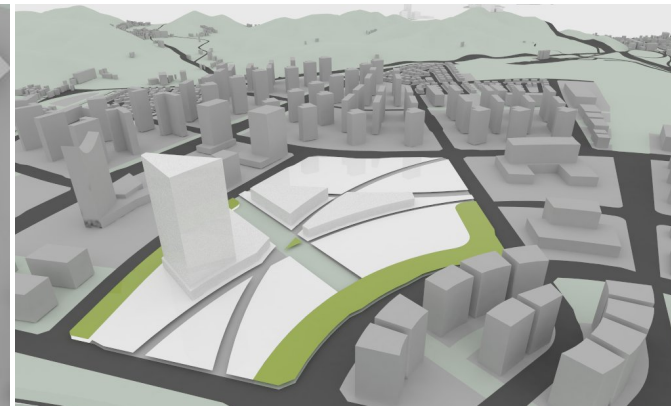
- **Approach**
 - Create a new building typology that promotes lateral cross communication between various departmental programs within a campus cluster of building organized around the GREEN NETWORK.
- **Design Attributes**
 - Thin floor-plate depth for natural lighting
 - Reflection pool for rainwater retention and natural cooling
 - Maximized roofscape for solar energy generation + green roofs
 - Low building typology for campus-like corporate headquarters with landmark office tower element.

DESIGN EXPLORATION 2

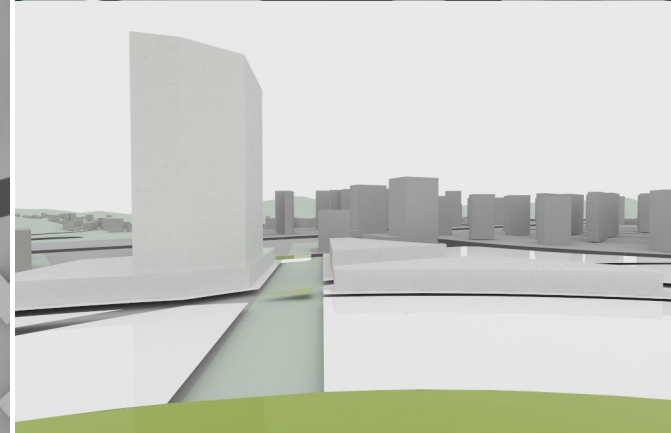
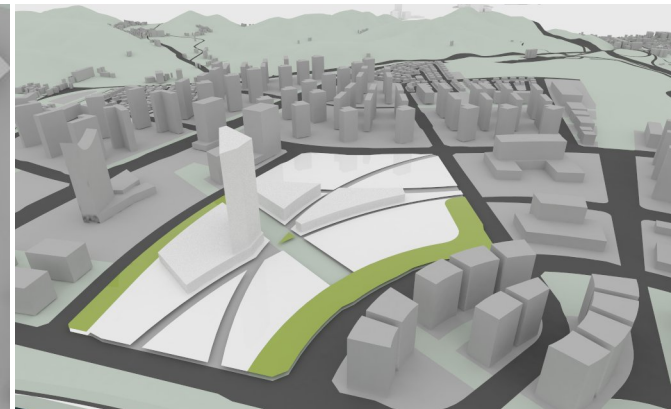
INTERSECT



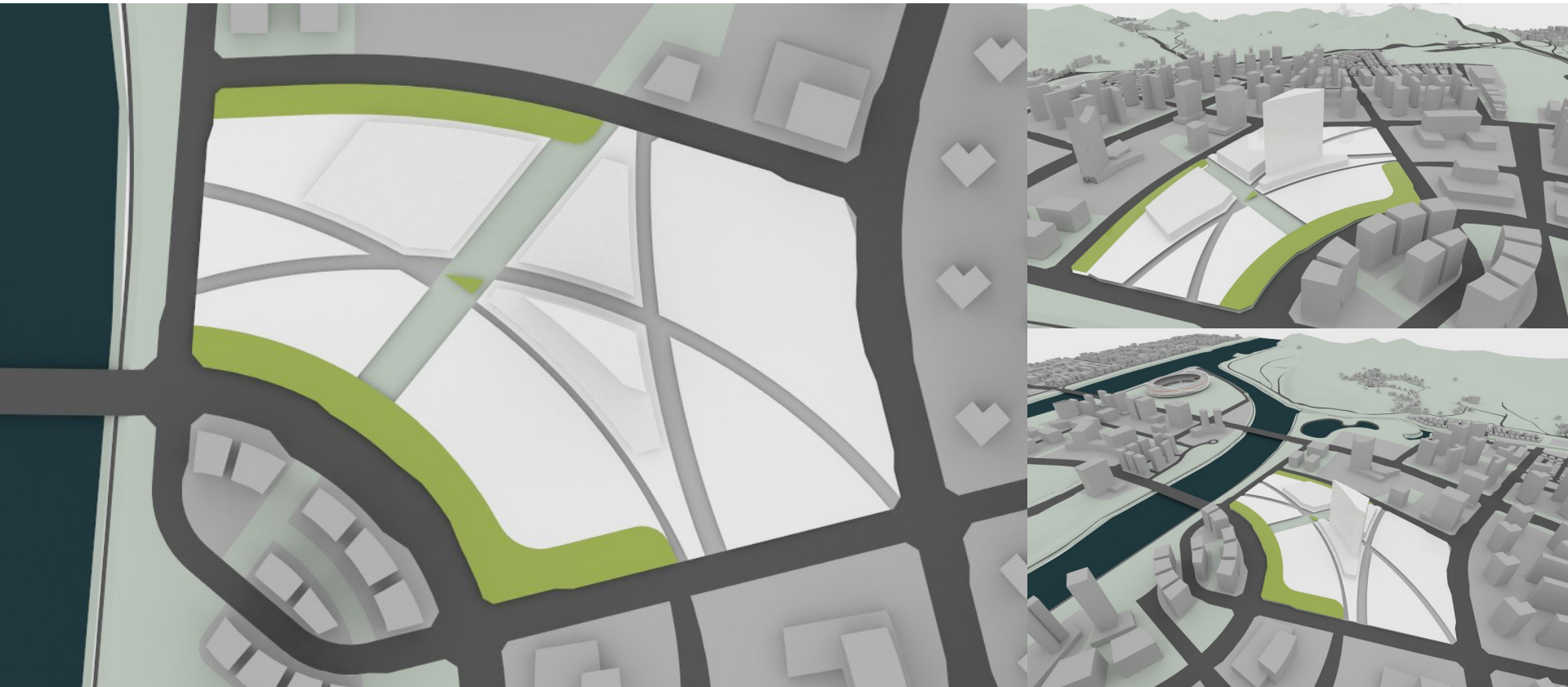
DESIGN EXPLORATION 2.1



DESIGN EXPLORATION 2.2



DESIGN EXPLORATION 2.3



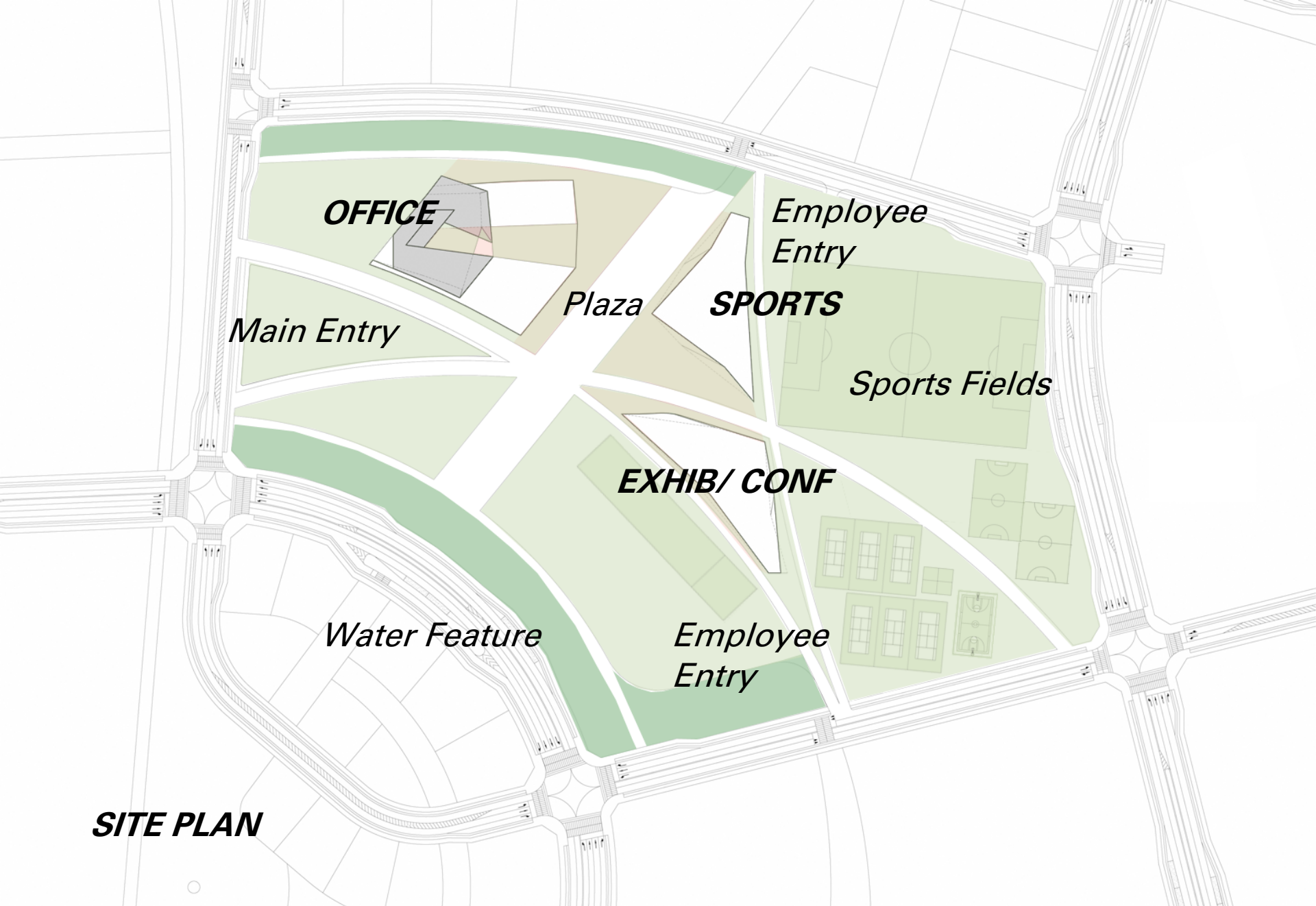


*Zone 1_Office + Off Support
(Off, Ed, Lounge, Admin, Etc)*

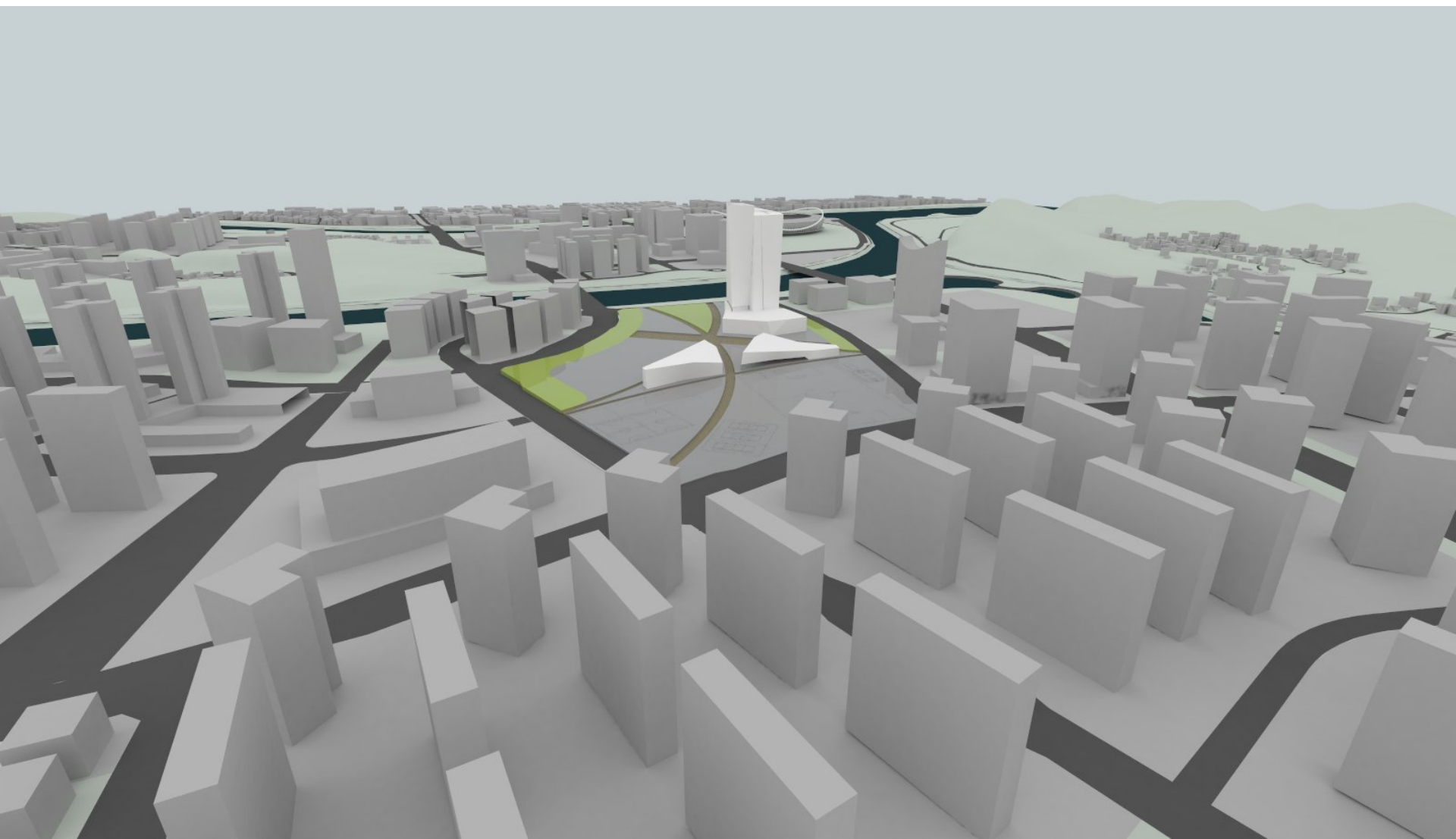
*Zone 3_Sports +
Welfare + Child Care*

*Zone 2_Exhibition + Off Support
(Exhib, Auditorium, Conf, Restaurant)*

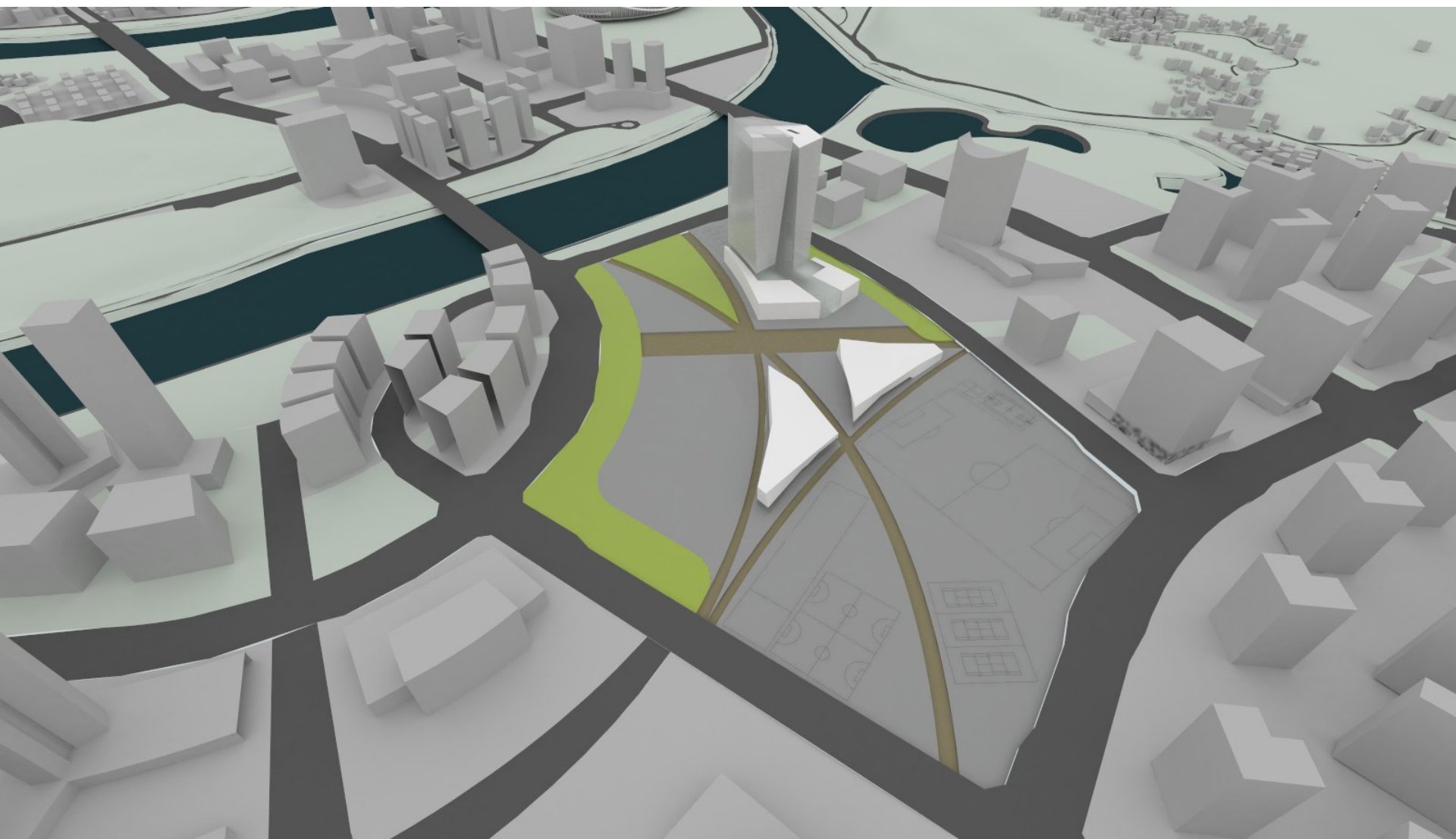
SITE PLAN



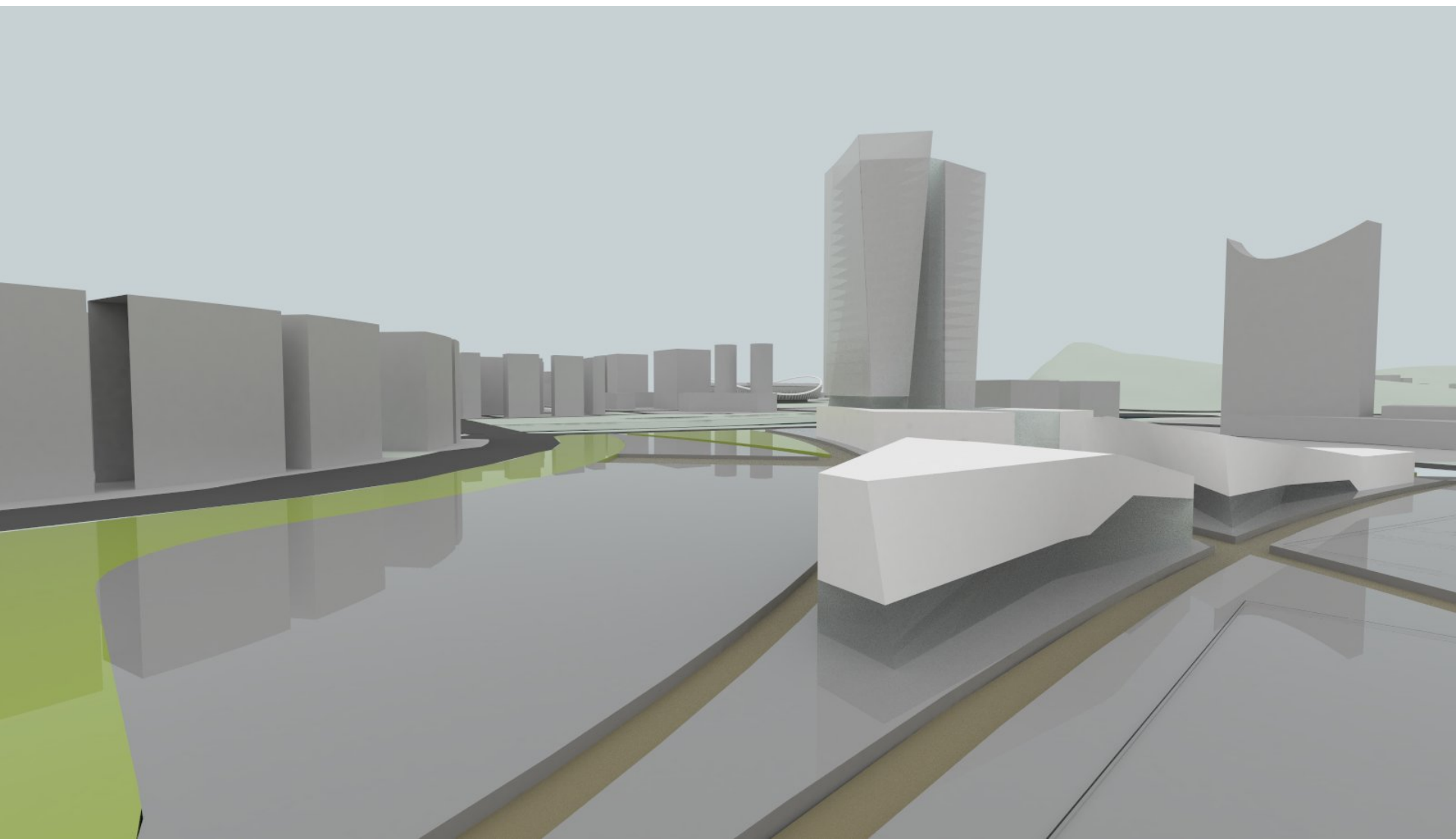
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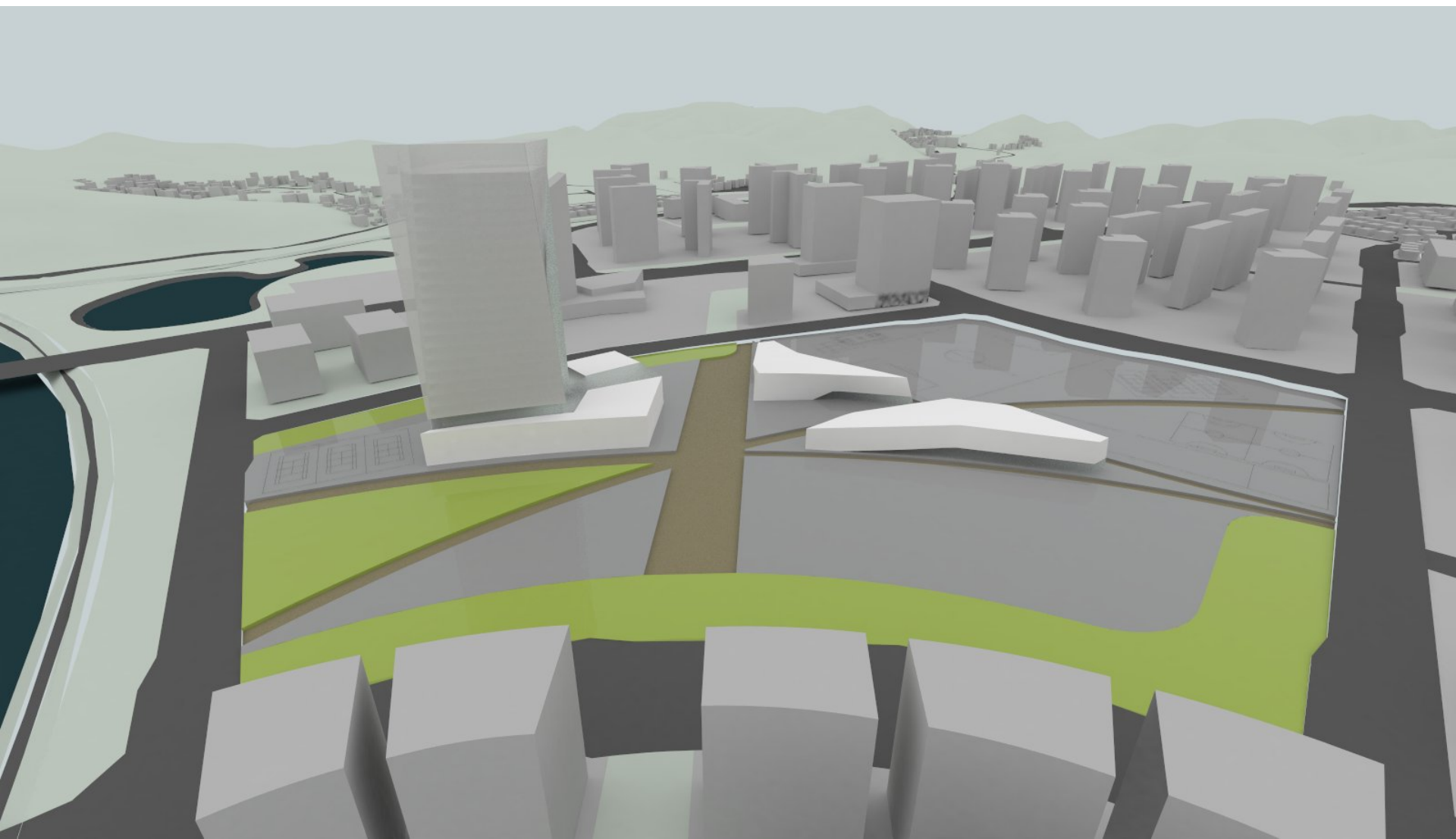


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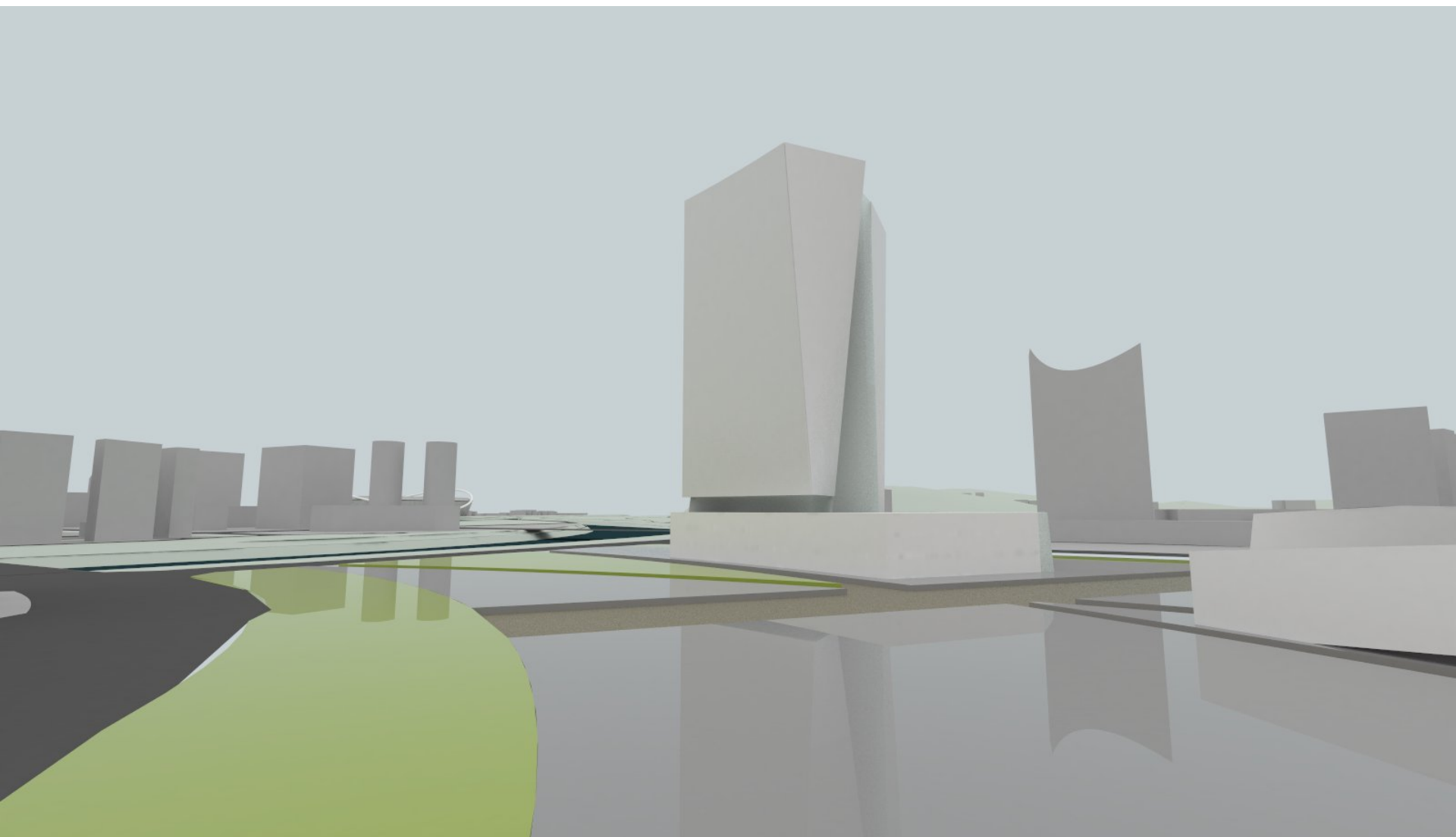


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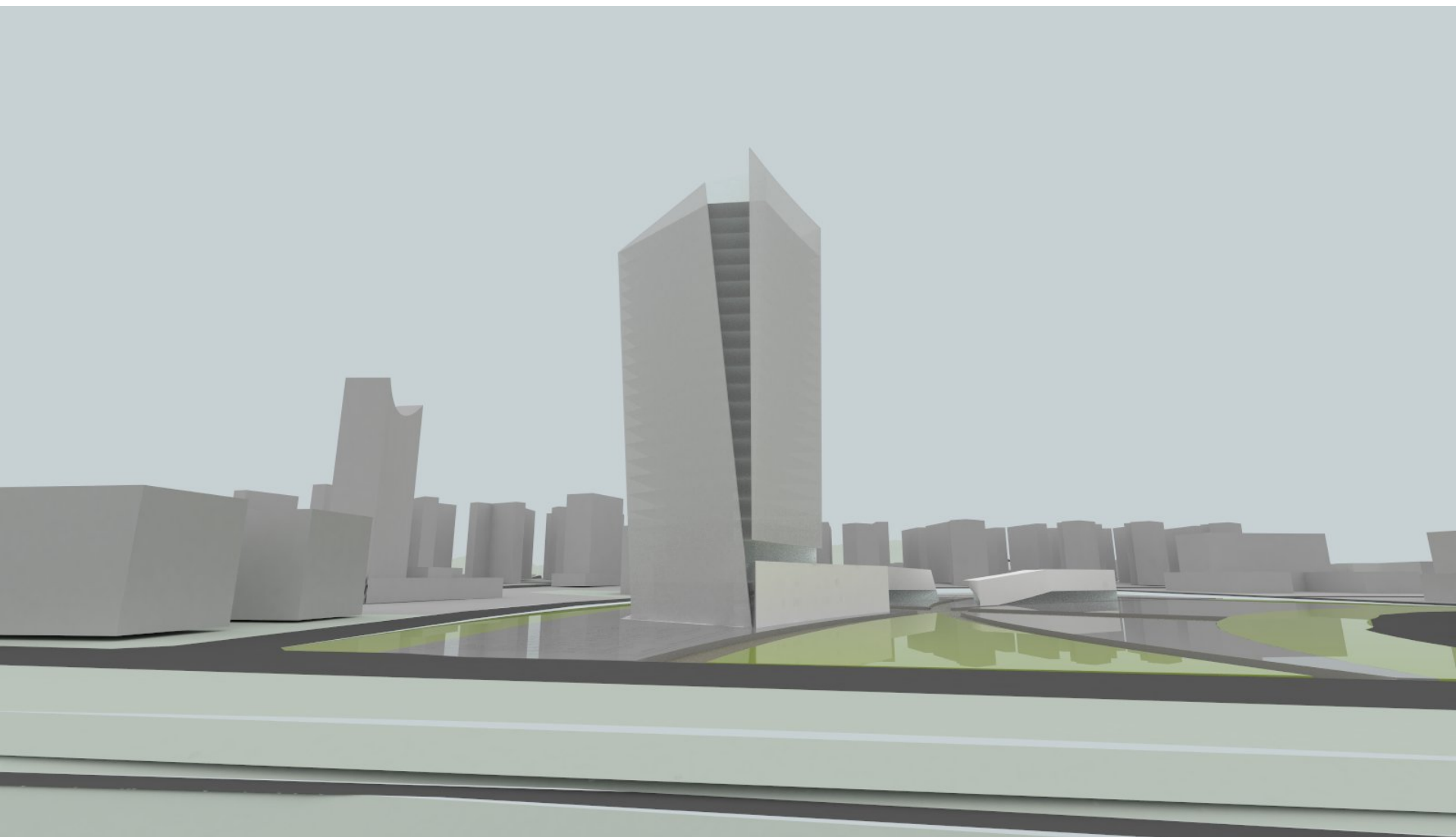




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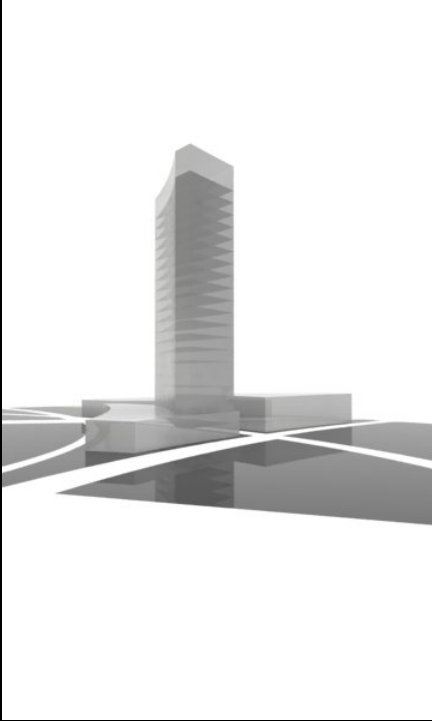


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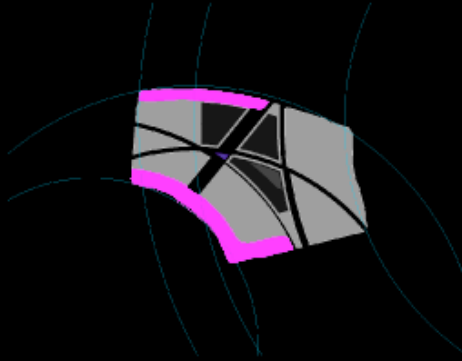


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2 *Intersect*

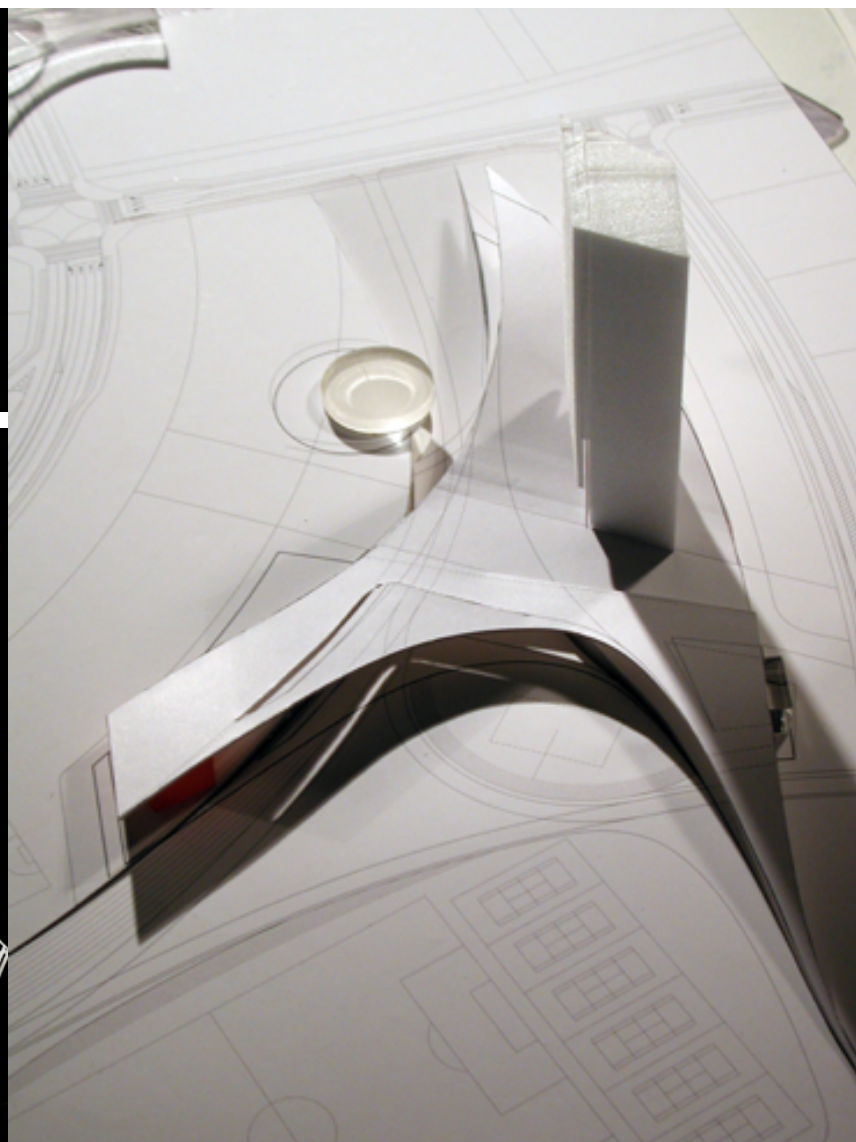
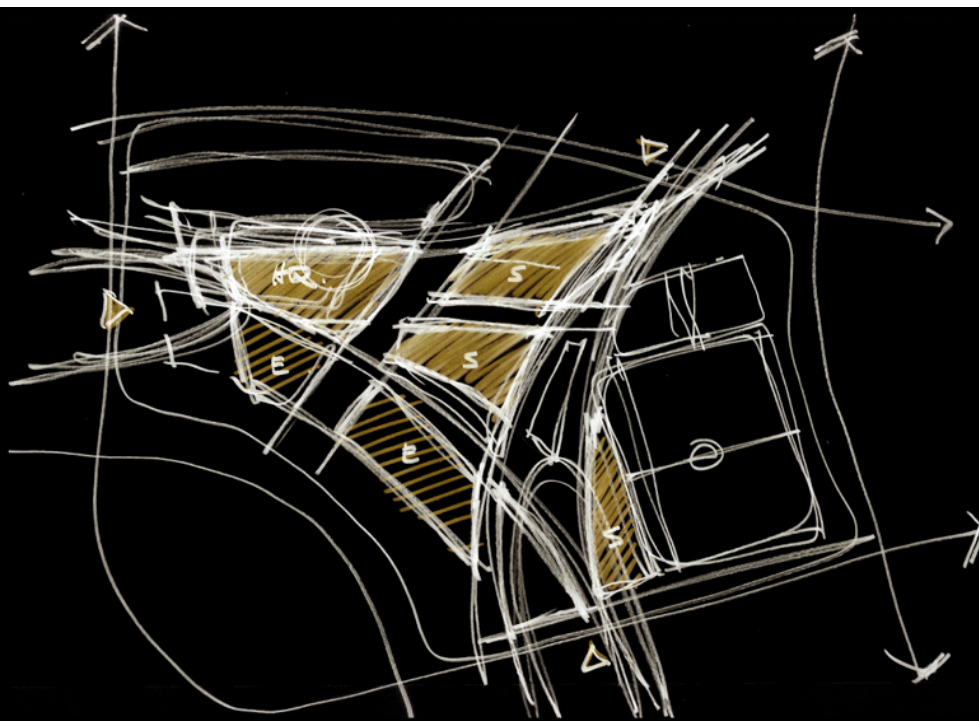
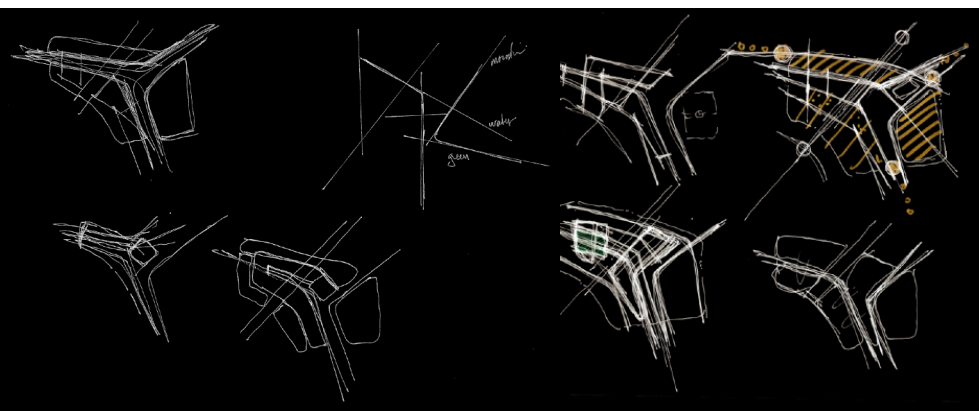


- **Approach**
 - Urban rings from the city grid intersect on campus to help inform a dynamic geometry which allows for campus cluster of building with strong pedestrian streets
- **Design Attributes**
 - Landmark Office Tower
 - Podium Elements informed by urban radial grid
 - Offer close communication and connectivity between program elements



DESIGN EXPLORATION PLINTH

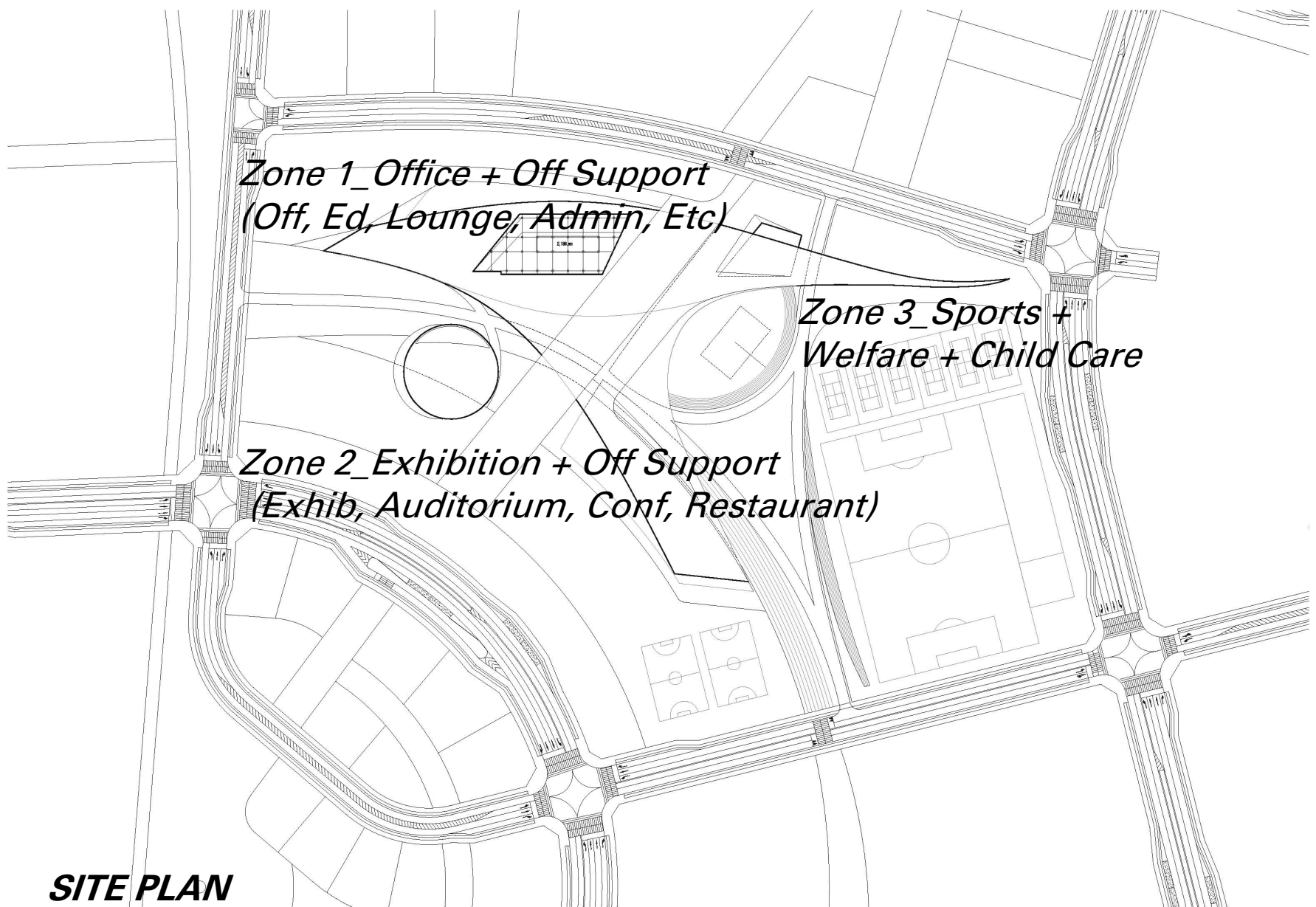
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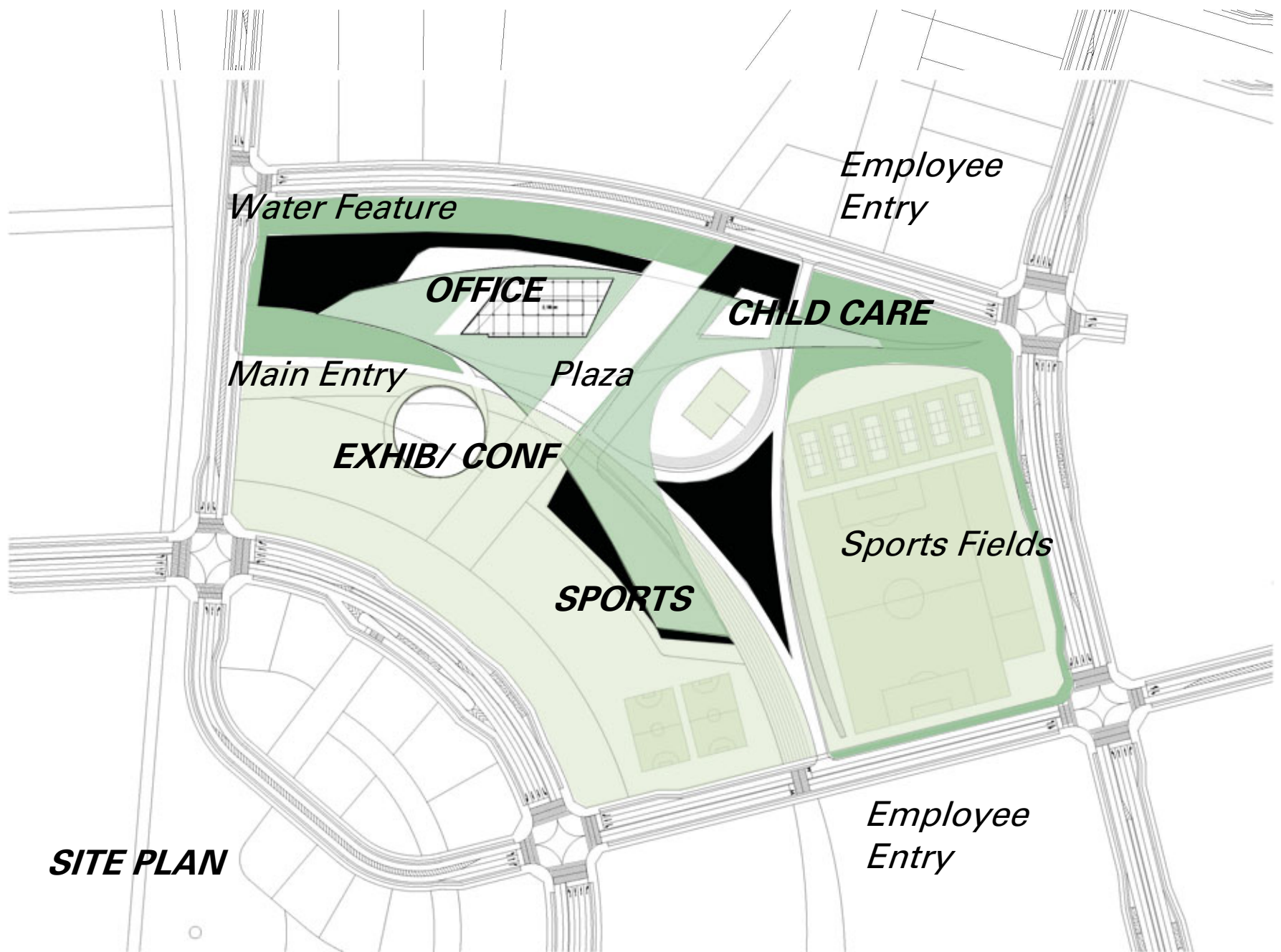


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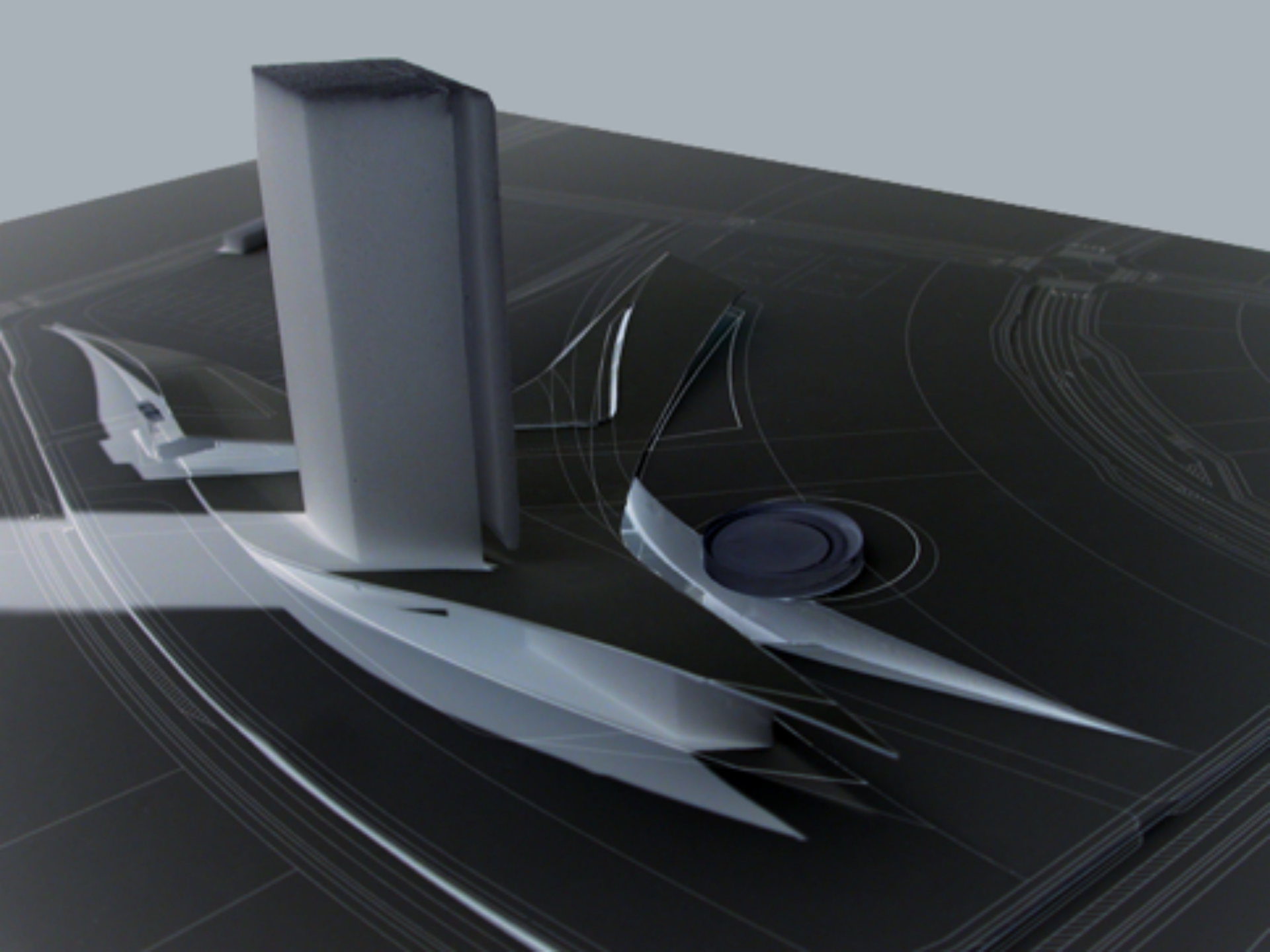
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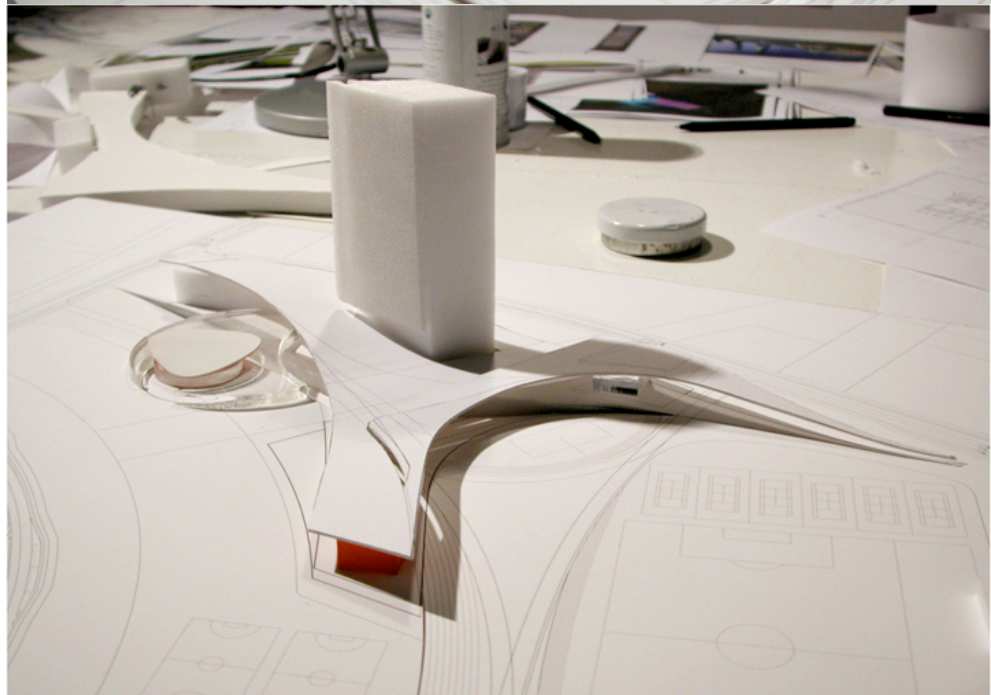
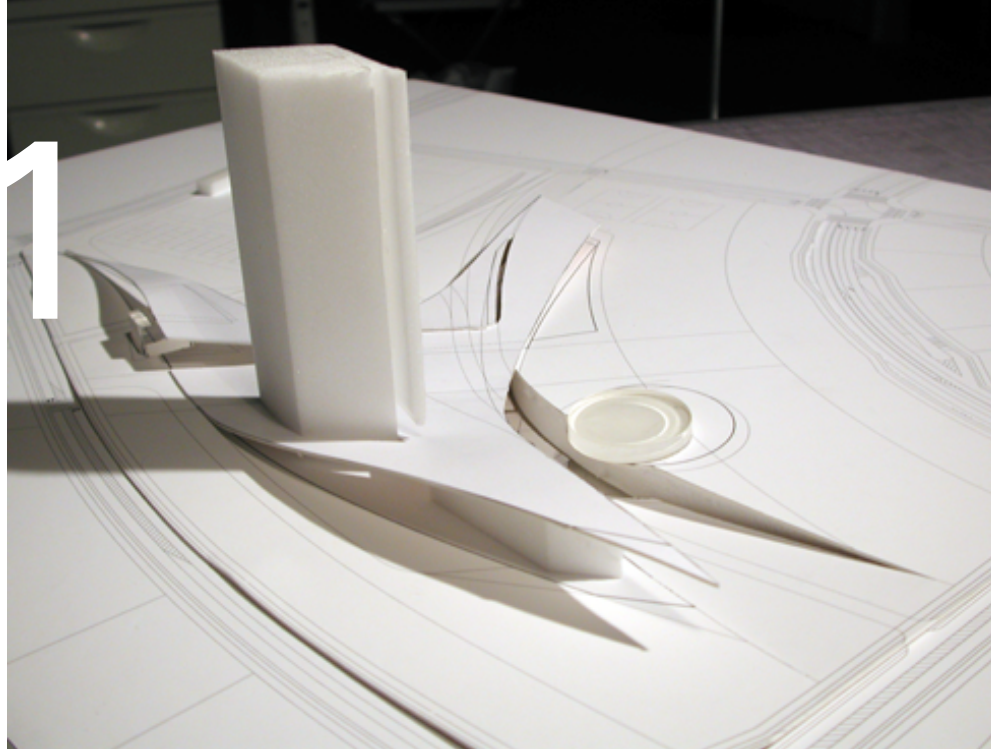
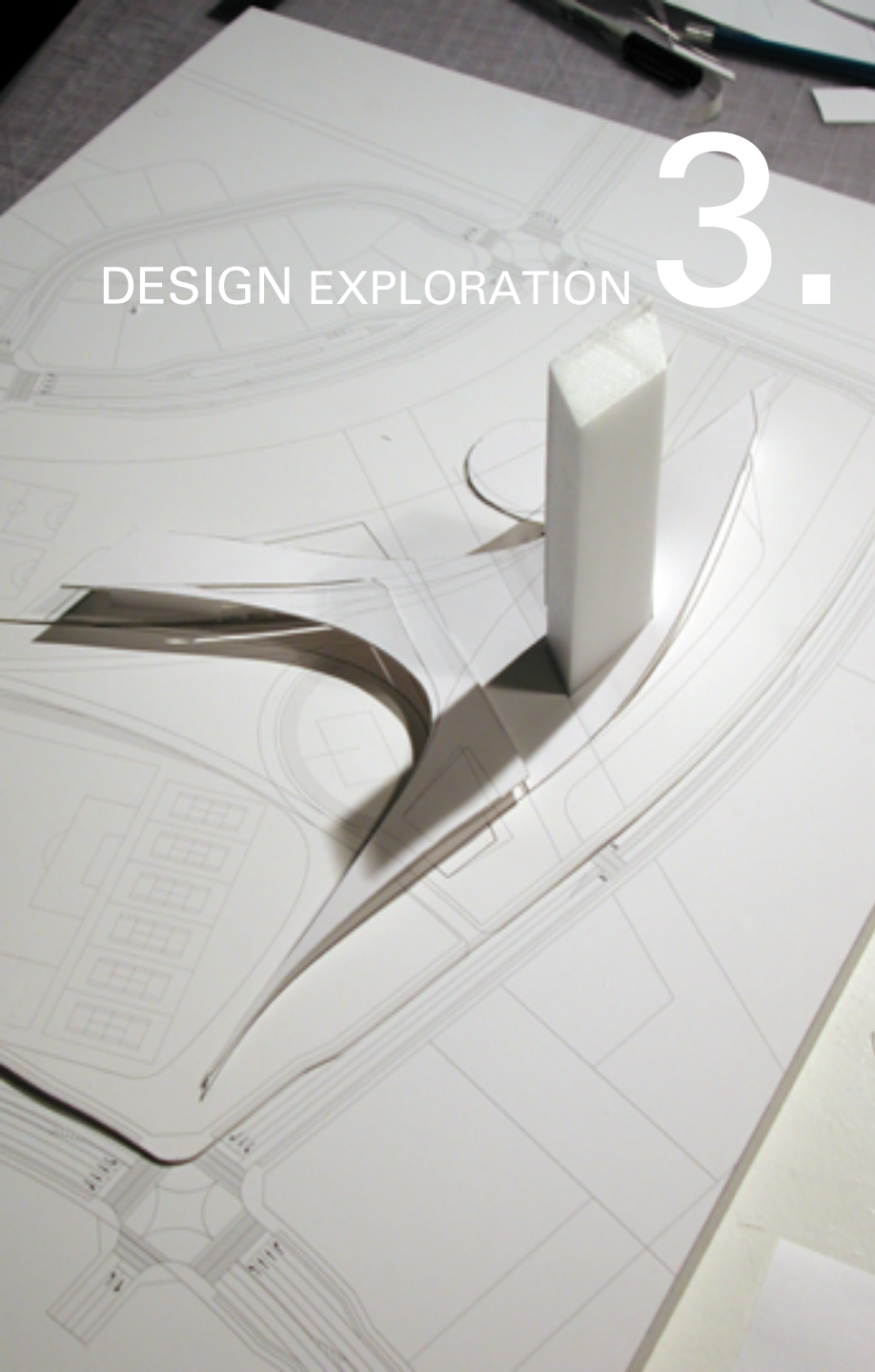


SITE PLAN

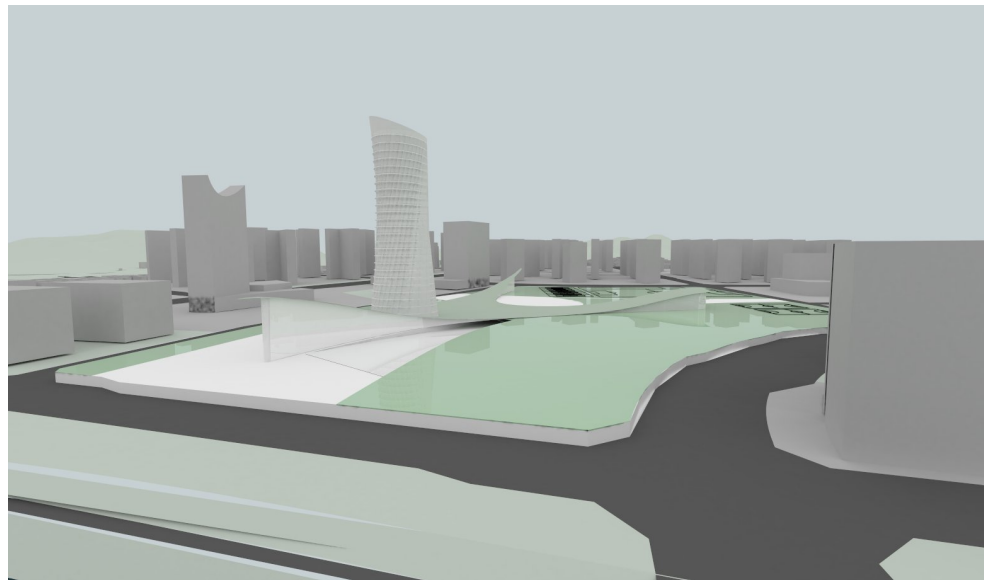
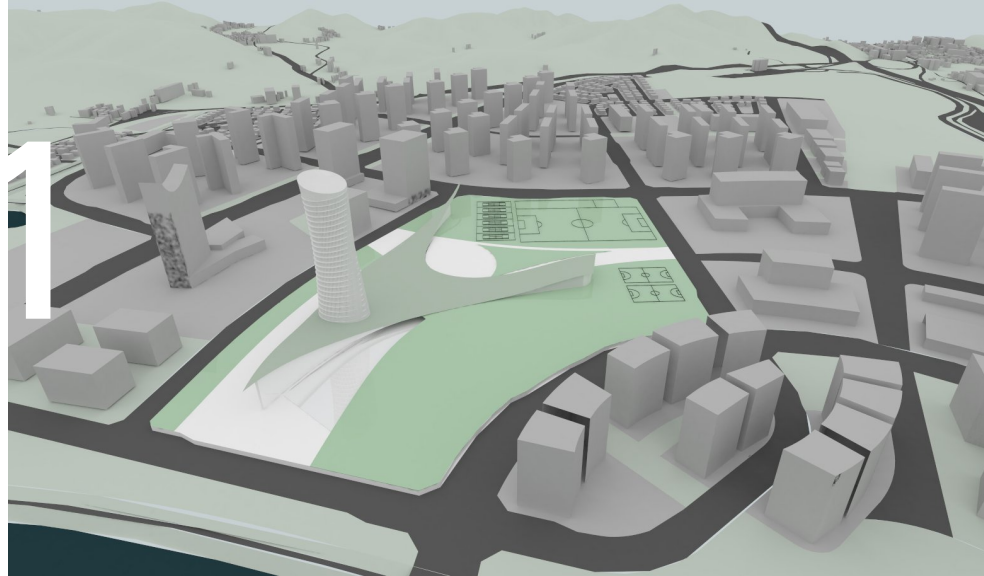
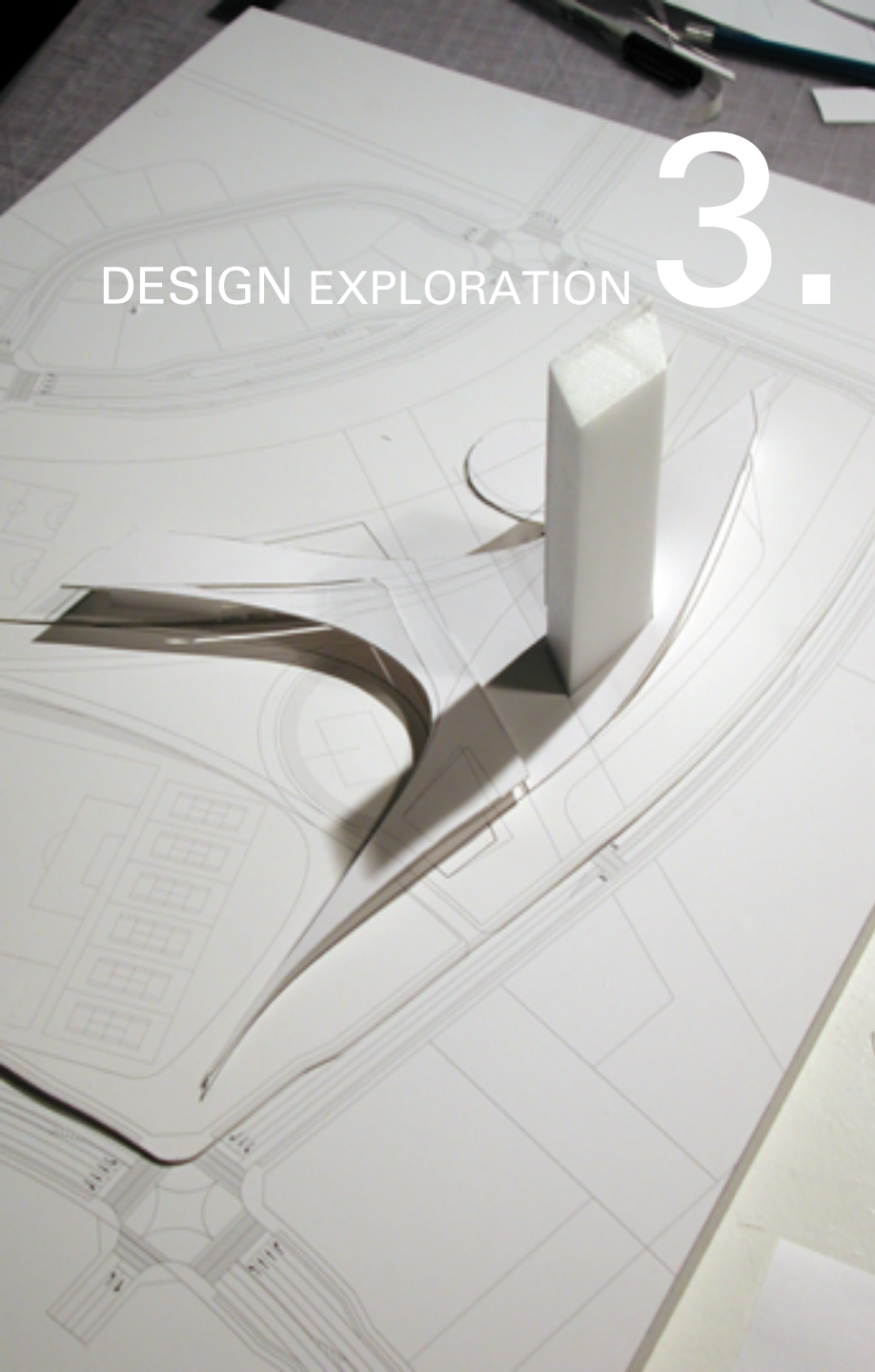
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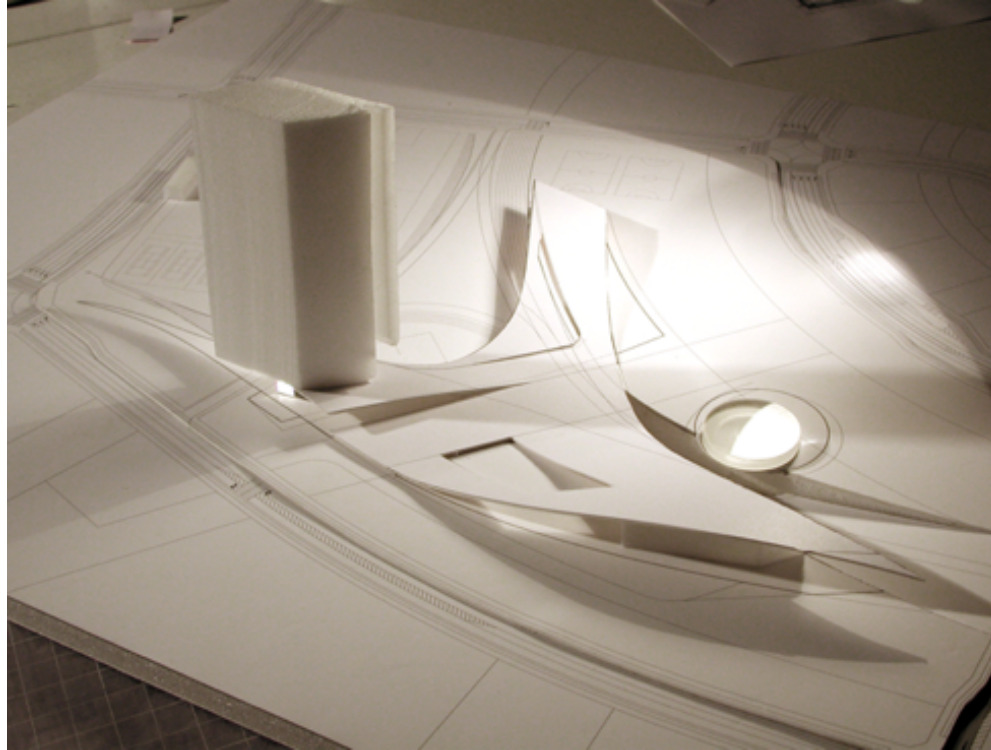
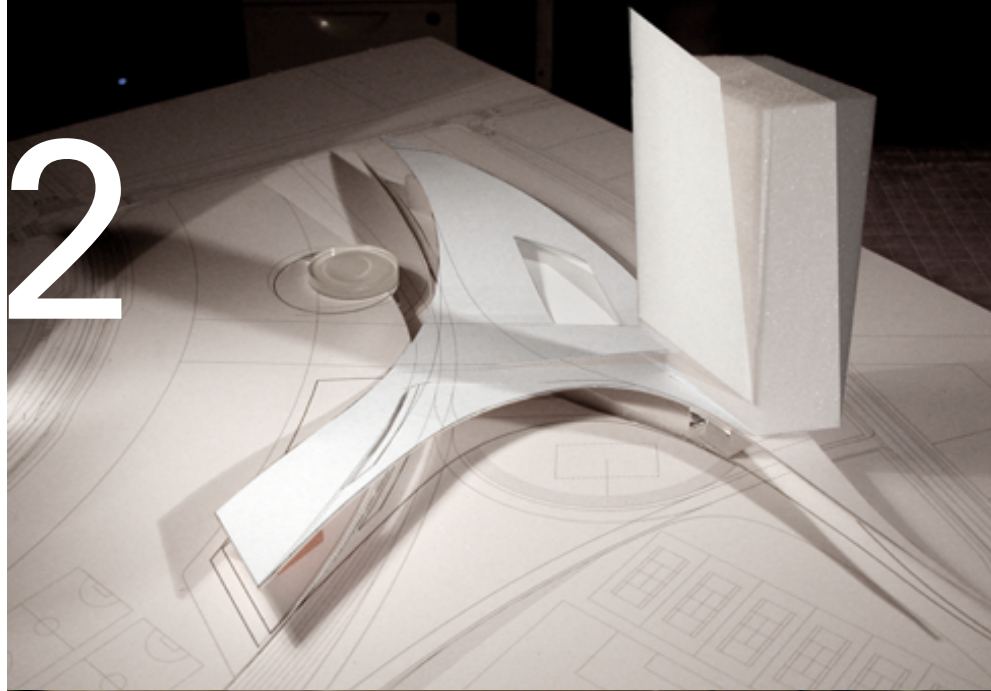
DESIGN EXPLORATION 3.1



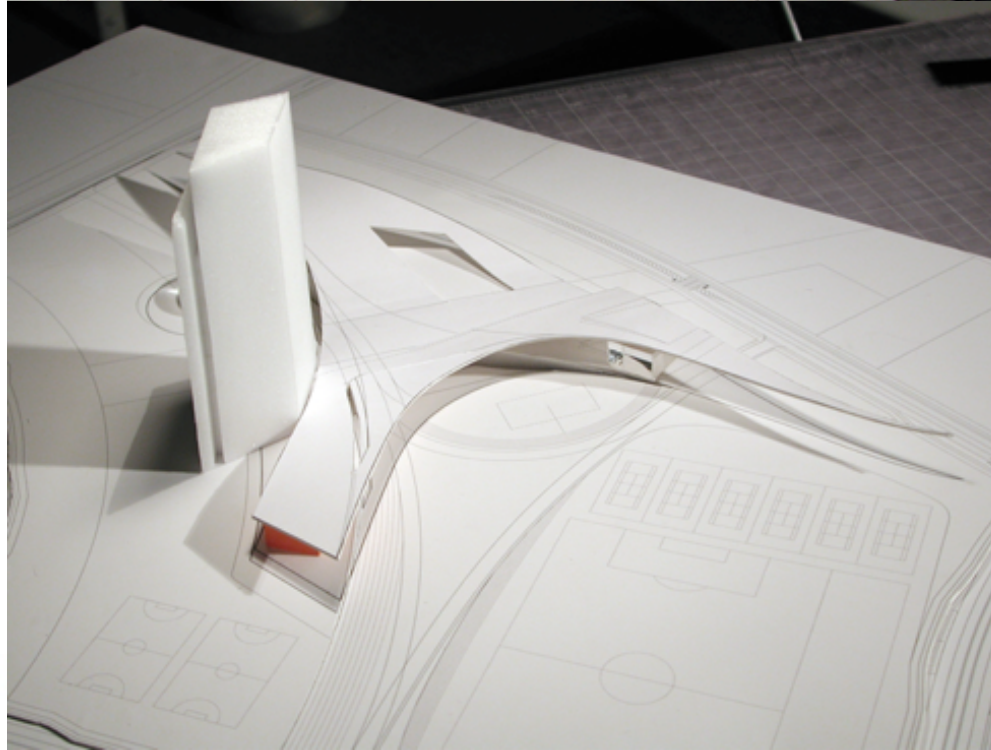
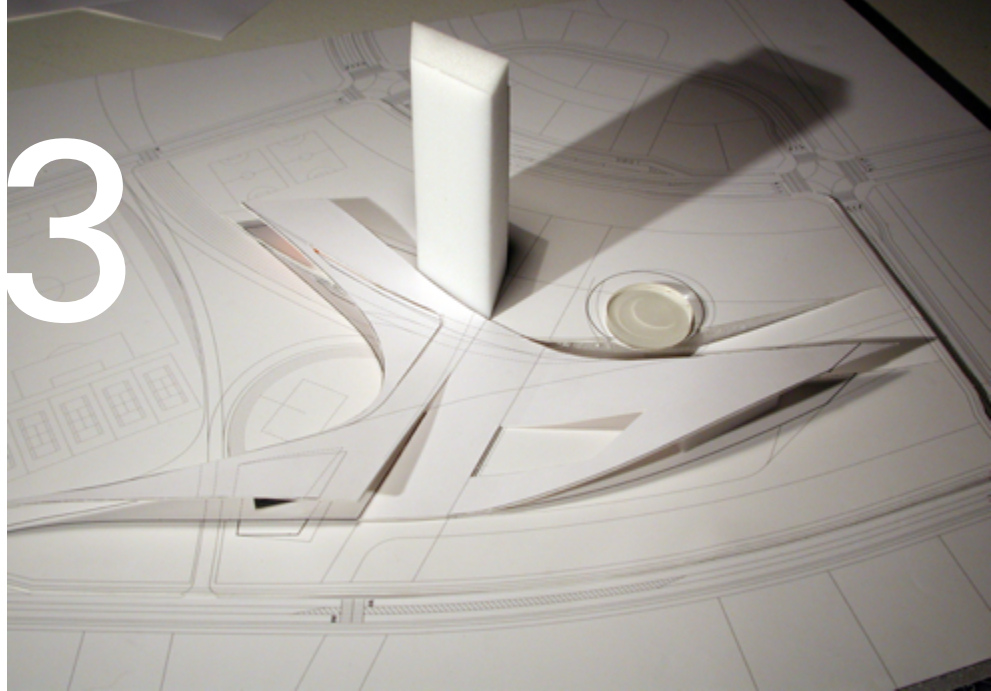
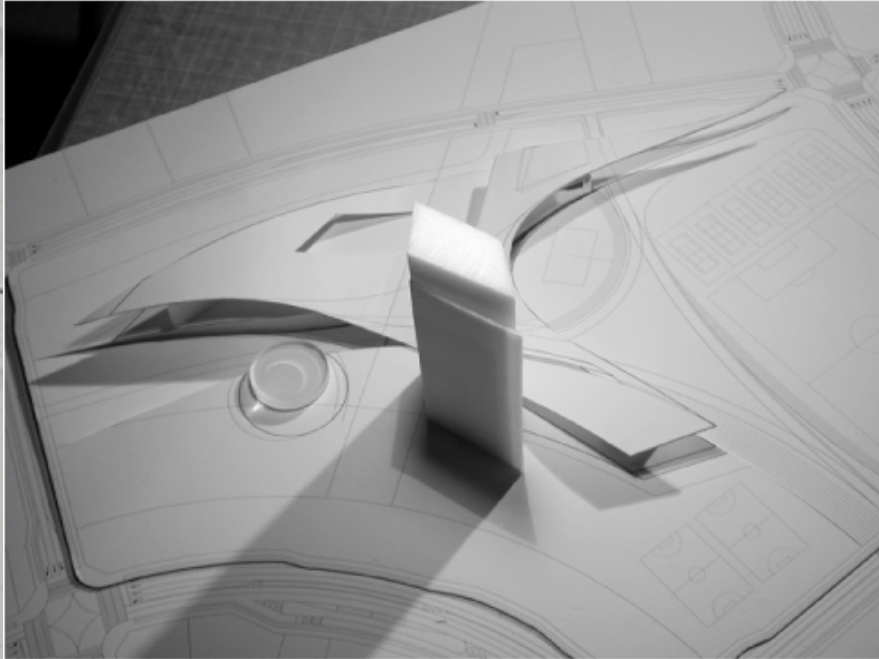
DESIGN EXPLORATION 3.1



DESIGN EXPLORATION 3.2

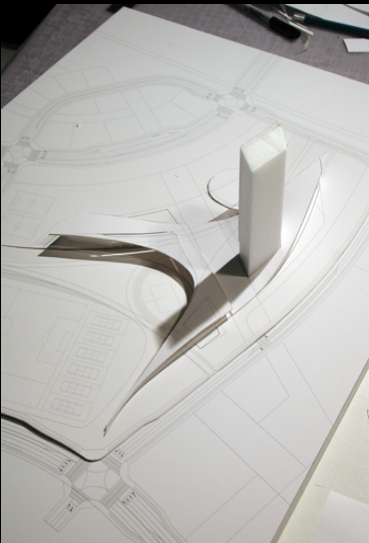
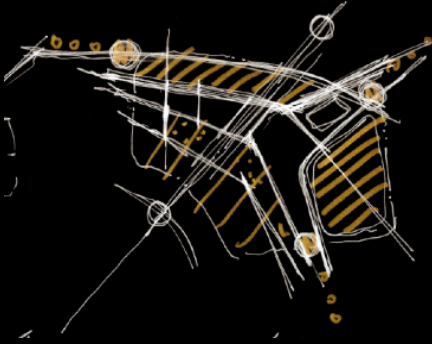


DESIGN EXPLORATION 3.3



3 *Plinth*

- **Approach**
 - Integrate the the site landscape and architecture in harmony utilizing sustainable concepts
- **Design Attributes**
 - Thin floorplate depth for natural lighting
 - Reflection Pool for rainwater retention and natural cooling
 - Maximized roofscape for solar energy generation
 - Fractal canopy protection from harsh southern sun
 - Low building typology for campus-like corporate headquarters





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DESIGN EVALUATION

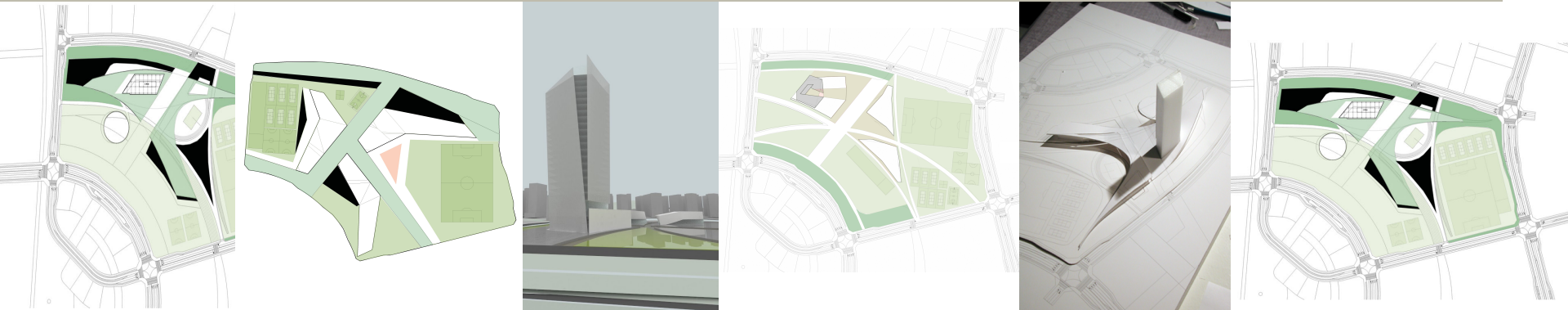
- _How does the new LH Regional Headquarters create a new millennium building?*
- _Which Design Explorations celebrates innovation + sustainable design technology as
a demonstration for public benefit?*
- _What solution best balances 1) LH Regional Headquarters operations
and 2) strong public open spaces for the local community to enjoy?*

Design + Energy + Budget

EVALUATION CRITERIA

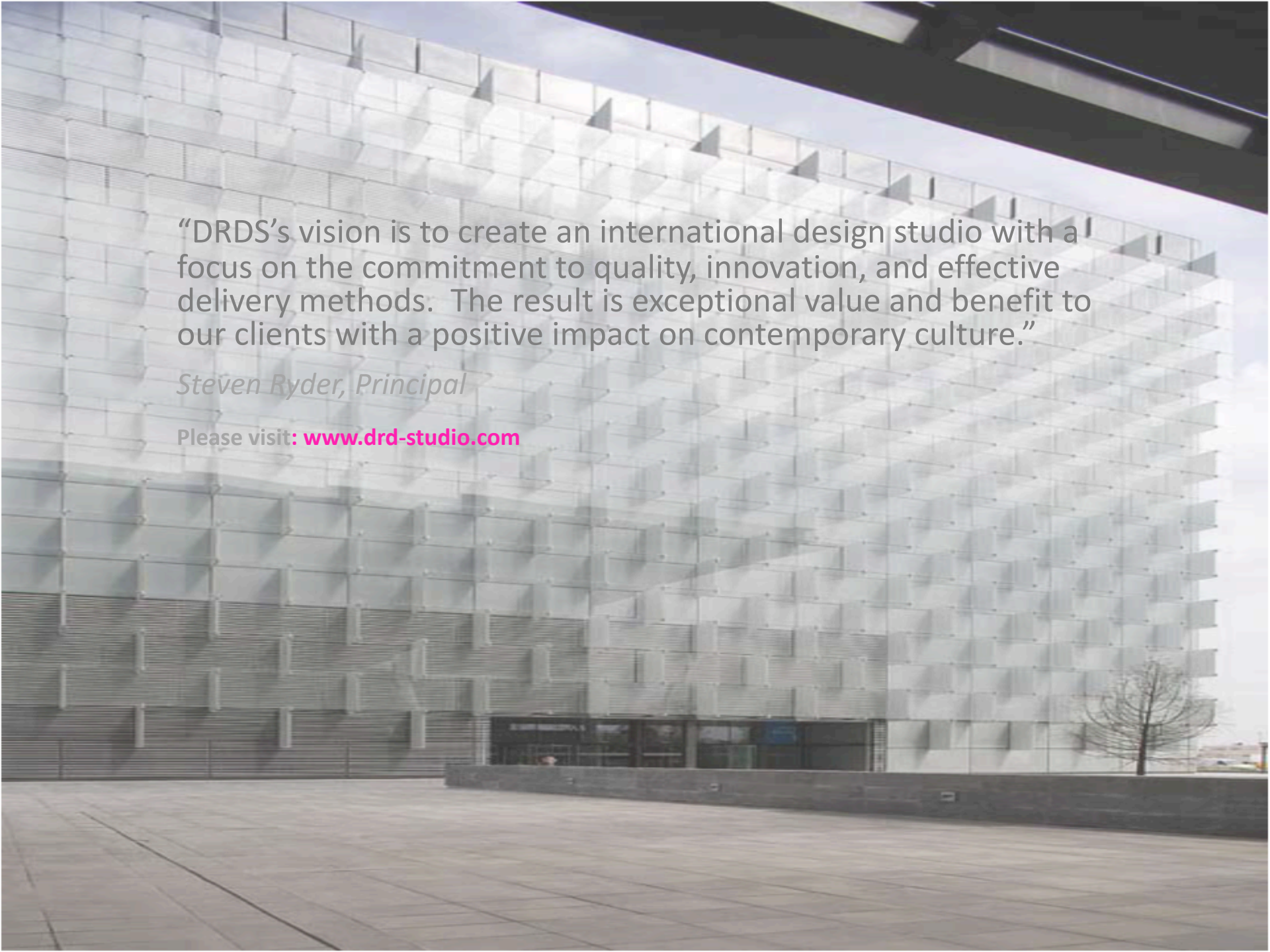
- *Quality of LH Civic Image for the City of Jinju*
- *Innovation + Eco-Friendly Technology*
- *Organization + Relationship of Program Elements*
- *Efficiency, Energy Savings, Construction Cost, + Maintenance*
- *Address + Compatibility with Urban Context*
- *Quality Public Open Space*

Design + Energy + Budget





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“DRDS’s vision is to create an international design studio with a focus on the commitment to quality, innovation, and effective delivery methods. The result is exceptional value and benefit to our clients with a positive impact on contemporary culture.”

Steven Ryder, Principal

Please visit: www.drd-studio.com