



HLOUBĚTIN SQUARE REVITALISATION

SUGANDHA CHAUDHARY

ACKNOWLEDGEMENT

FINISHING THIS PROJECT WAS A ROLLER COASTER RIDE, GIVEN THE CHALLENGING SITE AND COMPRESSED ALLOCATED TIME. I HAVE TRIED MY BEST TO DO JUSTICE TO THE AREA (OF THE PROJECT) AND THE HYPOTHETICAL (READE EVENTUAL) USERS. THIS EXERCISE WAS HOWEVER, NOT POSSIBLE WITHOUT THE KIND SUPPORT AND GUIDENCE OF PROF. HENRI HUBERTUS ACHTEN AND PROF. JIŘI PAVLIČEK. I WOULD LIKE TO SINCERELY THANK THEM FOR THEIR TIME, ANERGY AND CONSTANT PUSH TO HELP ME ACHIEVE A GOOD DESIGN. I ALSO WOULD LIKE TO EXPRESS MY GRATITUDE TO ČVUT (ESPECIALLY THE 3D PRINT DEPARTMENT, MOLAB AND MANAGEMENT) FOR PROVIDING A ROBUST INFRASTURE. BESIDES, MY DEAR FRIENDS IDIL AND SHOHEI HAVE BEEN A CONSTANT HELP ON A DAY TO DAY BASE.

LAST BUT NOT THE LEAST, I WOULD LIKE TO THANK YOU, DEAR READER, FOR YOUR PRECIOUS TIME.

MASTER'S THESIS PORTFOLIO

HLOUBĚTÍN SQUARE REVITALISATION, PRAGUE, CZECH REPUBLIC

AUTHOR : SUGANDHA CHAUDHARY

GUIDE : PROF. HENRI HUBERTUS ACHTEN, PROF. JIŘI PAVLIČEK

ATELIER MOLAB, FA, ČVUT

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CZECH TECHNICAL UNIVERSITY IN PRAGUE	
FACULTY OF ARCHITECTURE	
AUTOR, DIPLOMANT: AUTHOR OF THE DIPLOMA WORK / DIPLOMA PROJECT Academic Year 2018/2019, Spring Semester	
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LANGUAGE OF THE DIPLOMA WORK / DIPLOMA PROJECT: ENGLISH	
Diploma Work / Diploma Project Supervisor	Ústav: Department Dr. Henri Hubertus Achten, Prof Jiří Pavlíček
Diploma Work / Diploma Project Opponent	
Key Words (Czech)	Hloubetin, Square, Revitalization, Public Space, School, Library,
Annotation (Czech)	The thesis focuses on enhancing the connection of Hloubetin square with public transit, and further revitalization of the same, to engage more activity. It also strives to resuffice the existing functions.
Annotation (English)	

The Author's Declaration

I declare that I have elaborated the submitted diploma work / diploma project independently and that I have stated all the used information sources in coherence with the "Methodological Instruction for Ethical Preparation of University Final Works".

(The complete text of the methodological instruction is available for download on <http://www.fa.cvut.cz/En>)



In Prague onSignature of the Diploma Project Author

This document is an essential and obligatory part of the diploma project / portfolio / CD.

Czech Technical University in Prague, Faculty of Architecture

2/ ASSIGNMENT of the diploma project

Mgr. program navazující

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Date of Birth: 09.12.87

Academic Year / Semester: Summer Semester 2019-20

Department Number / Name:

Diploma Project Tutor: Henri Achten, Jiří Pavlíček

Diploma Project Theme:

See the Application Form for DP

Assignment of the Diploma Project:

1/description of the project assignment and the expected solution objective

Hloubetin Square and commercial centre is an area sitting amidst residential quarters. There is a lot of potential to this place, giving its location and direct link with public transport, but the current situation is rather inactive. The theme of project is the redemption of the entire square and complex and convert it to a more active and people's space, simultaneously relocating all the existing functions.

2/description of the final result, outputs and elaboration scales

SITE PLAN : 1:1000
SITE PLAN (LANDSCAPE) : 1:500 — 1:1000
PLANS : 1:200
SECTIONS, ELEVATIONS : 1:200
VISUALISATION :
MODEL : 1:200 to 1:500

3/list of further agreed-upon parts of the project (model)

1. description of the project assignment and the expected solution objective

Date and Signature of the Student



Date and Signature of the Diploma Project Tutor



Date and Signature of the Dean of FA CTU

6.3.2019



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ABSTRACT



PUBLIC SPACE IS HEART AND SOUL OF A CITY, THE ESSENCE OF A HABITAT. IF NOT DESIGNED WITH UTMOST SENSITIVITY, IT CAN KILL THE LIFE OF A NEIGHBORHOOD, SOMETHING WHAT IS HAPPENING WITH THE UNFORTUNATE HLOUBETIN SQUARE. THE SUBSEQUENT PROPOSAL IS A MODEST APPROACH TO INTERVENING AND DESIGNING THE SAME.

THE ABOVE ILLUSTRATION IS THE AUTHOR'S IMAGINATION OF AN ACTIVE PUBLIC SPACE.

THE PUBLIC SPACE

FIRST LIFE, THEN SPACES, THEN BUILDINGS. THE OTHER WAY ROUND NEVER WORKS. - JAN GEHL



HLOBETIN SQUARE IS LOCATED IN HLOBETIN, PRAGUE 9, RIGHT AT THE EXIT OF METRO STATION, OF THE SAME NAME ON LINE B. THERE ARE TWO MAIN DIVISIONS, THE NORTH AND THE SOUTH. WHILE NORTH SOMEHOW WORKS, HAS A DECENT LINKAGE WITH METRO AND PROMOTES A FEW ACTIVITIES, THE SOUTH IS NOWHERE CLOSE. IT IS PRIMARILY USED BY THE RESIDENTS, WHO CROSS THE UNDERPASS, SOLELY TO REACH THEIR HOUSES.



EXISTING SQUARE

BRIEF HISTORY

VETISKOVO SQUARE WAS FOUND IN 1972. IT WAS THE NODE THAT LINKED THE NORTH AND THE SOUTH. IN 1990, IT WAS DECLARED THAT THE PUBLIC SPACE NEITHER FUNCTIONS NOR DESIGNED AS A SQUARE AND HENCE THE NAME WAS REVOKED. SINCE THEN IT IS JUST UNOFFICIALLY CALLED AS HLOBETIN SQUARE.



METRO LINKAGE

CONNECTIVITY

THE SITE SITS NEXT TO PODEBRADSKA STREET AND IS WELL CONNECTED WITH REST OF THE CITY BY TRAMS 16, 25, 92 AND BUSES 94, 110, 141, 259. BESIDES, IT SITS RIGHT NEXT TO THE METRO LINE B.

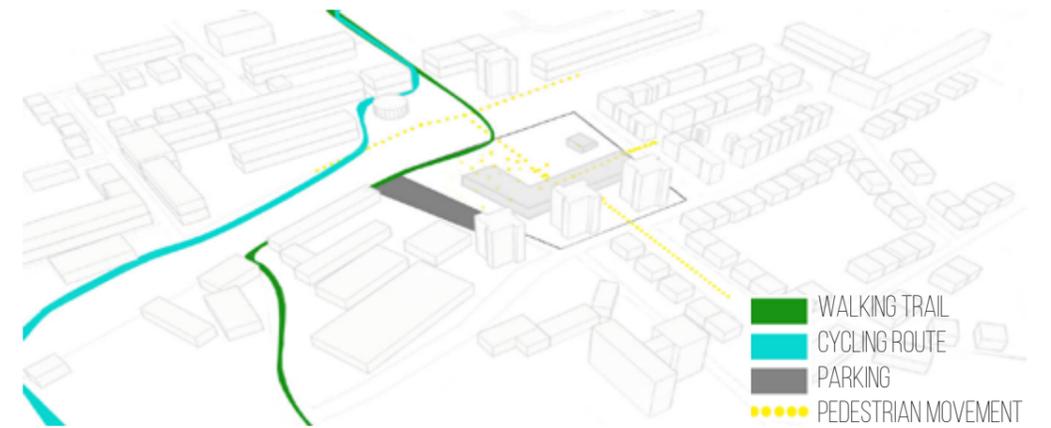


EXISTING BUILDING

CONTEXT

THE HISTORY OF HLOBETIN VILLAGE GOES BACK AS FAR AS THE 13TH CENTURY, IT WAS ANNEXED TO PRAGUE MAIN CITY ONLY IN 1922. AROUND 12,000 PEOPLE LIVE IN A ROUGH AREA OF 5.5 SQKM. THE AREA IS WELL CONNECTED BY TRAMS SINCE 1970S AND LINE B SINCE 1990. THE SURROUNDING MOSTLY CONSISTS OF 4-12 HOUSING ESTATES, FROM THE 1960S, VERY SIMPLISTIC AND FUNCTIONAL BLOCKS, BUILT PREDOMINANTLY FOR SMALL TO LARGE FAMILIES.

EXISTING SCENARIO



- WALKING TRAIL
- CYCLING ROUTE
- PARKING
- PEDESTRIAN MOVEMENT

PRIMARY ISSUES



PUBLIC SPACE



CONNECTIVITY



SPECIAL NEEDS



DIVERSITY

SECONDARY ISSUES



SAFETY



F&B



VARIETY



AMENITIES

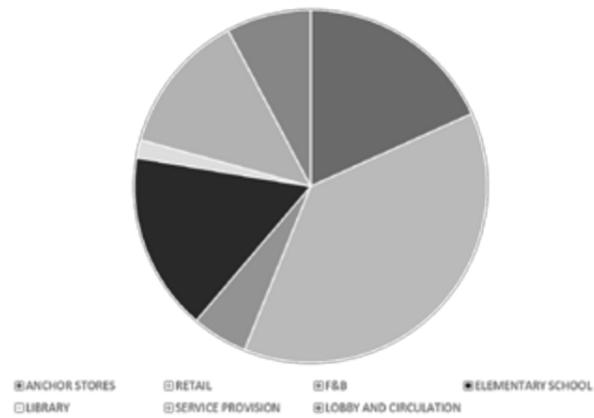
DEVELOPMENT CONTROL

SITE ANALYSIS	SITE AREA		16274
	AREA EXCLUDING HOUSING		4350
	AREA UNDER BUILD INTERVENTION		11924
	GROUND COVER (%)	60	7154
	Max NO OF FLOORS	12	
	FAR	1.18	14070

EXISTING FUNCTIONS

EXISTING PROGRAM	Elementray Schhol	1345
	Library	135
	Retail	3117.5
	Service Provision	1069.5
	F&B	420
	Lobby and Circulation	637.5
	Total	6724.5

AREA ANALYSIS



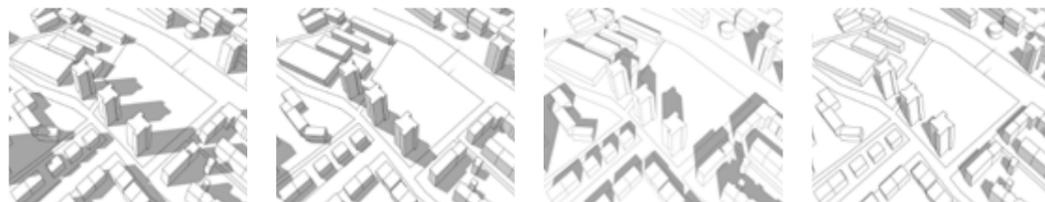
DETAILS OF FUNCTIONS

	Left Wing	Area
Ground Floor	Penny Market	732
	Lobby and Circulation	150
	Ceska Posta	168.75
	KB Bank ATM	33.75
	Second Hand Store	67.5
	Teta	67.5
	Laundry	67.5
	Ceska Sportelna	135
	Textile Store	67.5
	Mini Store	67.5
	Bakery	67.5
	Pharmacy	67.5
	Lobby and Circulation	135
	Mini Store	253
	All In One Store	253
First Floor	Pepco	732
	Lobby and Circulation	150
	Kitchen Shop	67.5
	Food Shop	67.5
	Stationary	67.5
	Uniqa	67.5
	Pet Shop	67.5
	Cosmetic Shop	67.5
	Ceska Pojistovna	67.5
	Optics	135
	Clocks, Jewellery	67.5
	Studio Anika	67.5
	Bulgarian Shop	67.5
	Nail Studio	67.5
	Library	135
Laundromat	135	
Lobby and Circulation	67.5	
Second Floor	Dental Centre	366
	Real Estate	366
	Lobby and Circulation	150
	Elementary School	1345
	Lobby and Circulation	67.5



PROPOSAL

SHADOW ANALYSIS



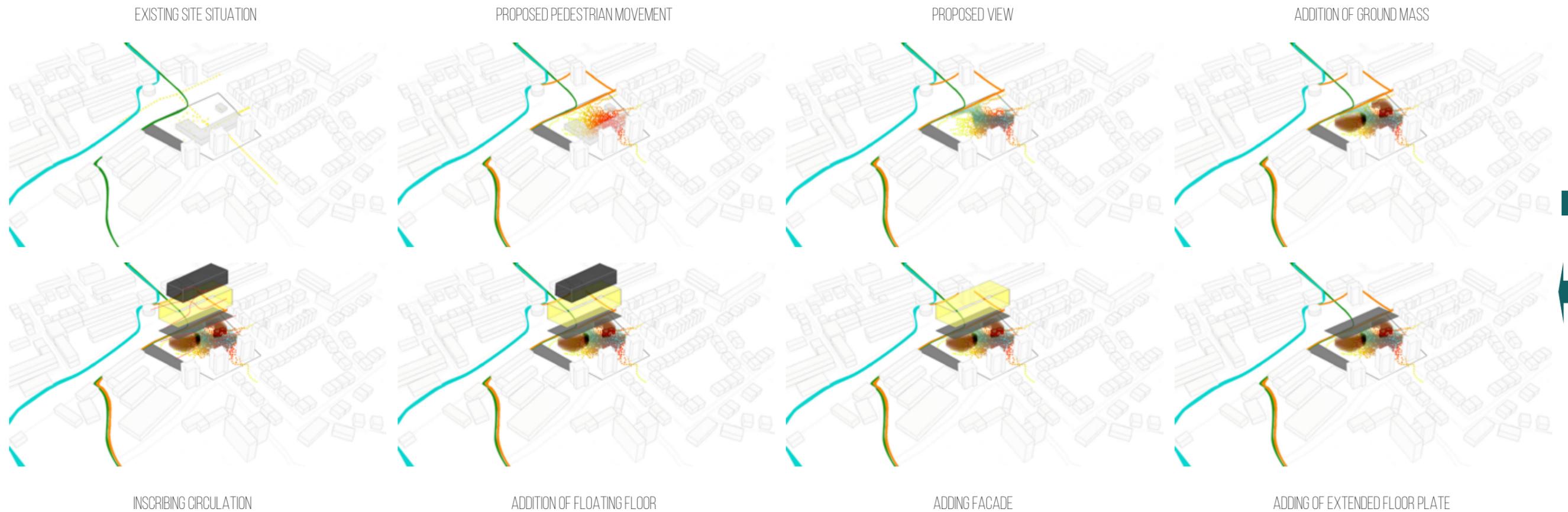
HLOUBETIN AND THE FUTURE



THE AIM OF THE PROJECT IS TO INTERVENE THE TRAFFIC ISLAND OF HLOUBETIN SQUARE, TREAT IT AS THE MAIN NODE OF THE RESIDENTS, WHO NOW DEPEND ON CERNY MOST FOR MOST OF THEIR NEEDS. A NEW SQUARE COMPLEX IS PROPOSED TO ENHANCE ACTIVITY, VISIBILITY, CONNECTIVITY AND LIVEABILITY FOR THE RESIDENTS OF SÍDLIŠTĚ HLOUBĚTÍN BY.

THE DESIGN PROCESS IS CARRIED OUT BY IDENTIFYING ISSUES OF THE SITE ITSELF AND THE SURROUNDING, PROPOSE AN INTERACTIVE GROUND LEVEL PUBLIC SPACE AND FURTHER DEVELOPING THE UPPER FLOORS TO SUFFICE EXISTING AS WELL AS SUPPORTIVE FUNCTIONS FOR THE SUBSEQUENT GROUND LEVEL.

PLANNING PROCESS



-  EXISTING WALKING TRAIL (AS/IPRAHA)
-  EXISTING CYCLE ROUTE (AS/IPRAHA)
-  EXISTING PARKING
-  EXISTING PEDESTRIAN MOVEMENT
-  INTENDED PEDESTRIAN MOVEMENT
-  PROPOSED EXTENDED CYCLE ROUTE
-  EXISTING VIEW LINE
-  PROPOSED VIEW

AREA AND CIRCULATION

ACHIEVE FAR AND COVERAGE

PROPOSED DEVELOPMENT CONTROL	SITE AREA		16274
	AREA OF HOUSING		4350
	AREA UNDER BUILD INTERVENTION		11924
	GROUND COVER (%)		53%
	Max NO OF FLOORS	4.5	
	FAR ACHIEVED	1.18	0.84

ACHIEVED AREA (FLOOR WISE)

	LOWER GROUND FLOOR		550
	GROUND FLOOR		2050
	FIRST FLOOR		2500
	SECOND FLOOR		2430
	LOBBY AND CIRCULATION		2500
	TOTAL WITHOUT PARKING		10030
	BASEMENT (lower ground)		1600
	BASEMENT		1600
	TOTAL		13230

ACHIEVED AREA (FUNCTION WISE)

PROPOSED PROGRAM	Elementray Schhol	2030
	Library	1200
	Retail + Service	4000
	F&B	900
	Parking	3200
	Lobby and Circulation	2700
	Total witout parking	10030

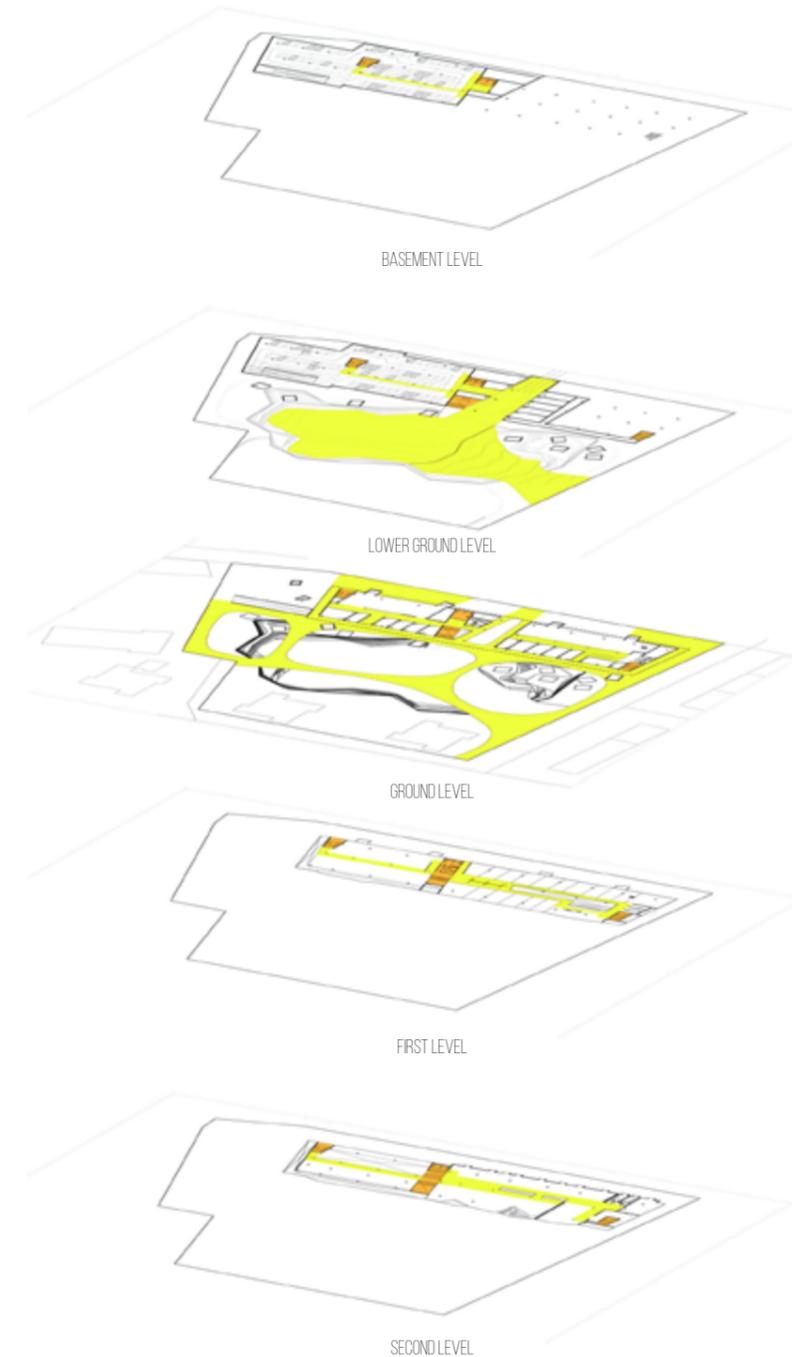
27%
0.84

PARKING PROPOSAL

REQUIRED PARKING		Parking / area
Library	1/120 SQM	10
School	1/300 SQM	7
Commercial	1/40SQM	123
TOTAL		139
PROPOSED PARKING		149

Visitor	Non Visitor
2	8
2	5
12	110
16	123
15	134

PRIMARY CIRCULATION STRATEGY : SIMPLE MOVEMENT



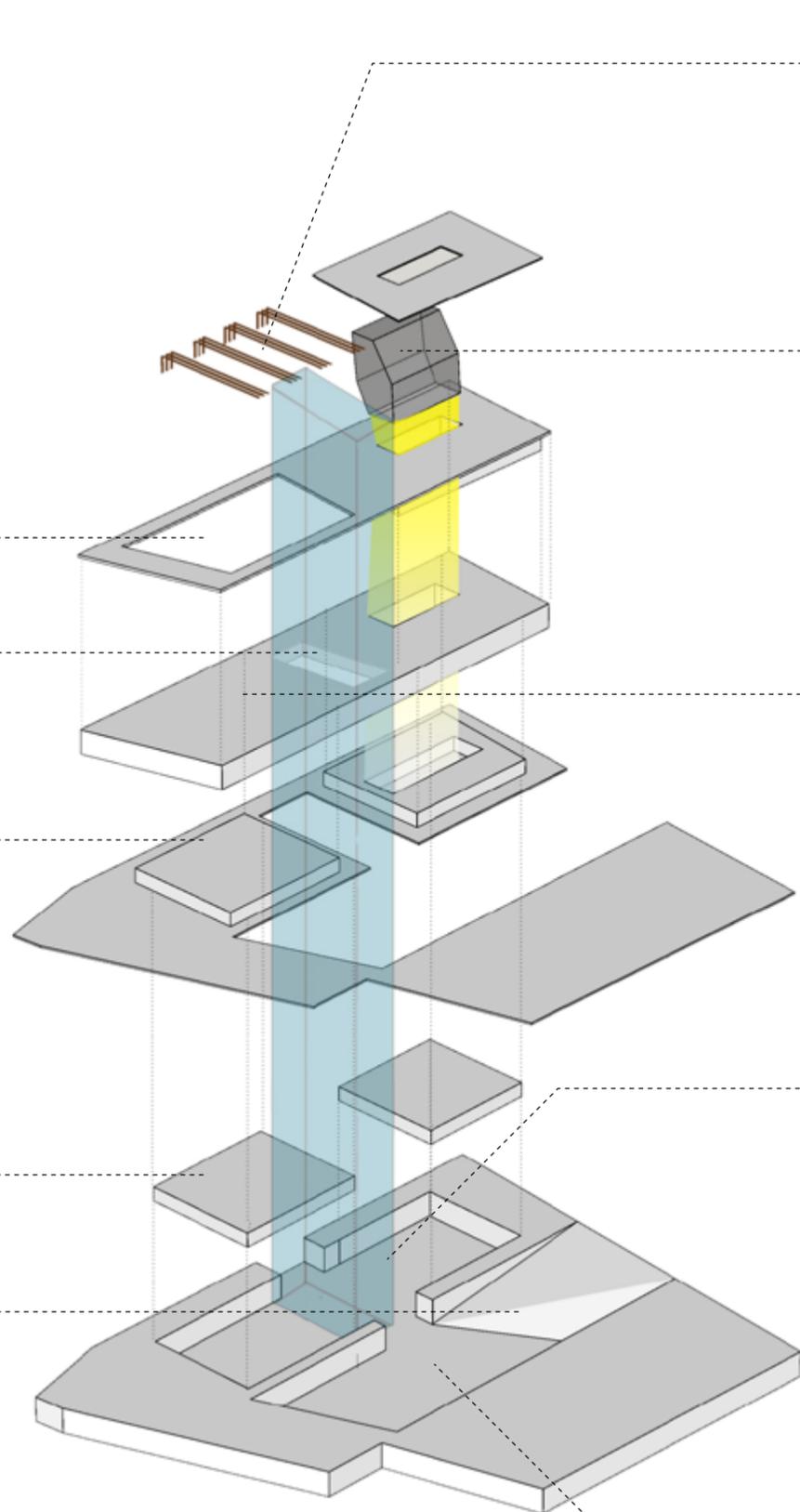
ALL ROUND THE YEAR PLAYGROUND FOR SCHOOL

PRIMARY VERTICAL TRANSPORTATION - 6M STAIRCASE

SHOPS

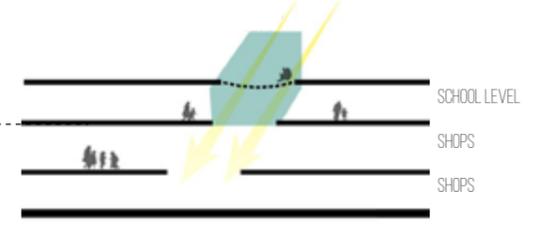
SHOPS

RAMP TO ACCESS RESIDENCES FROM SUBWAY STATION

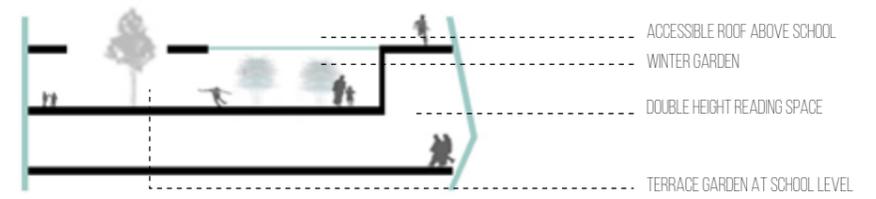


THE TERRACE LEVEL HAS CONTROLLED ENTRY DURING SCHOOL OPERATIONAL HOURS. THERE IS ALSO PROVISION OF SLIDE FOLD PARTITION SO THE TERRACE CAN BE HEATED DURING WINTERS

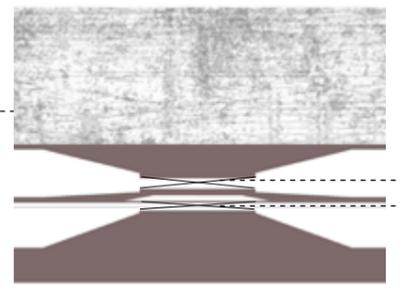
LIGHTWELL-JUMP BOX-SOUND BUFFER



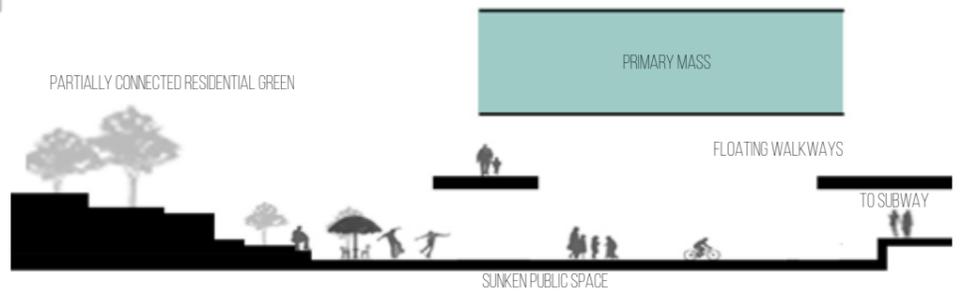
SCHEMATIC SECTION OF SCHOOL-RETAIL



SCHEMATIC SECTION OF TERRACE GARDEN



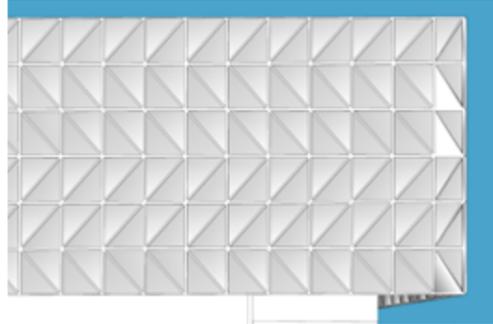
SCHEMATIC SECTION OF ENTRY PASSAGE



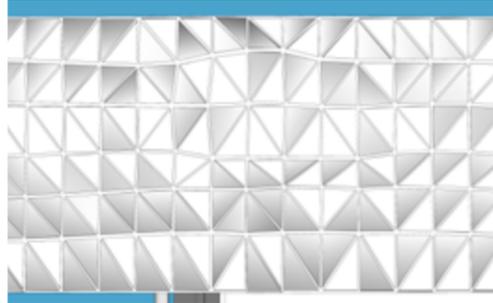
SCHEMATIC SECTION OF SQUARE

FACADE STRATEGY

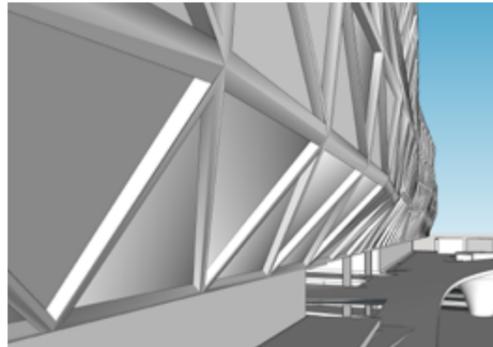
NON PARAMETRIC INTERVENTION



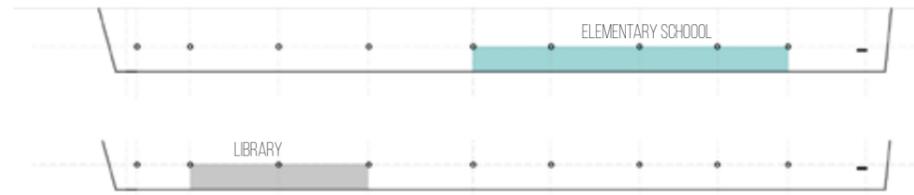
PARAMETRIC INTERVENTION



TRIANGULATED PANELS



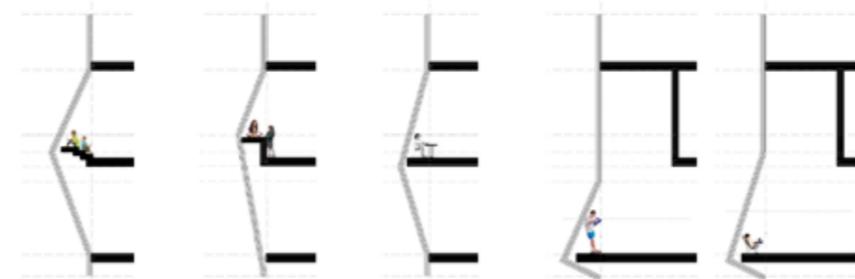
GRID STRUCTURE



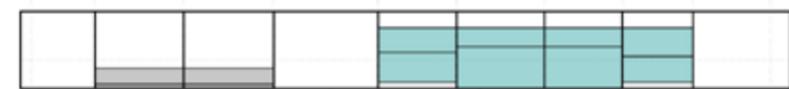
TRANSLATION ON FACADE



DEVELOPMENT OF SECTION AS / FUNCTIONS AND HUMAN NEEDS



TRANSLATION OF SECTIONS ONTO FACADE GRID



GENERATING CURVE FOR PARAMETER FROM ENHANCED SECTIONS



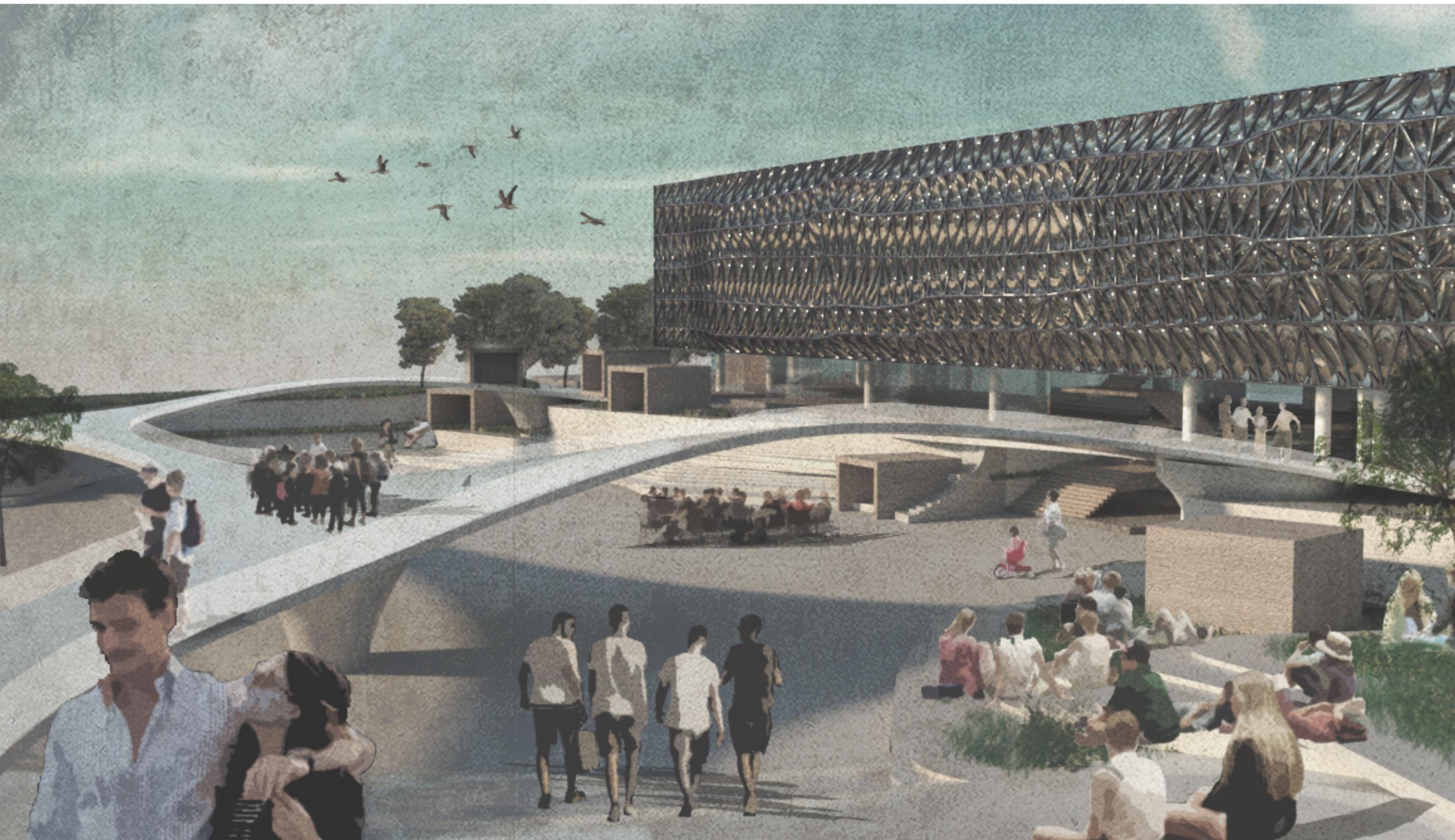
3

VISUALISATIONS

VIEW OF THE TERRACE - WINTER GARDEN



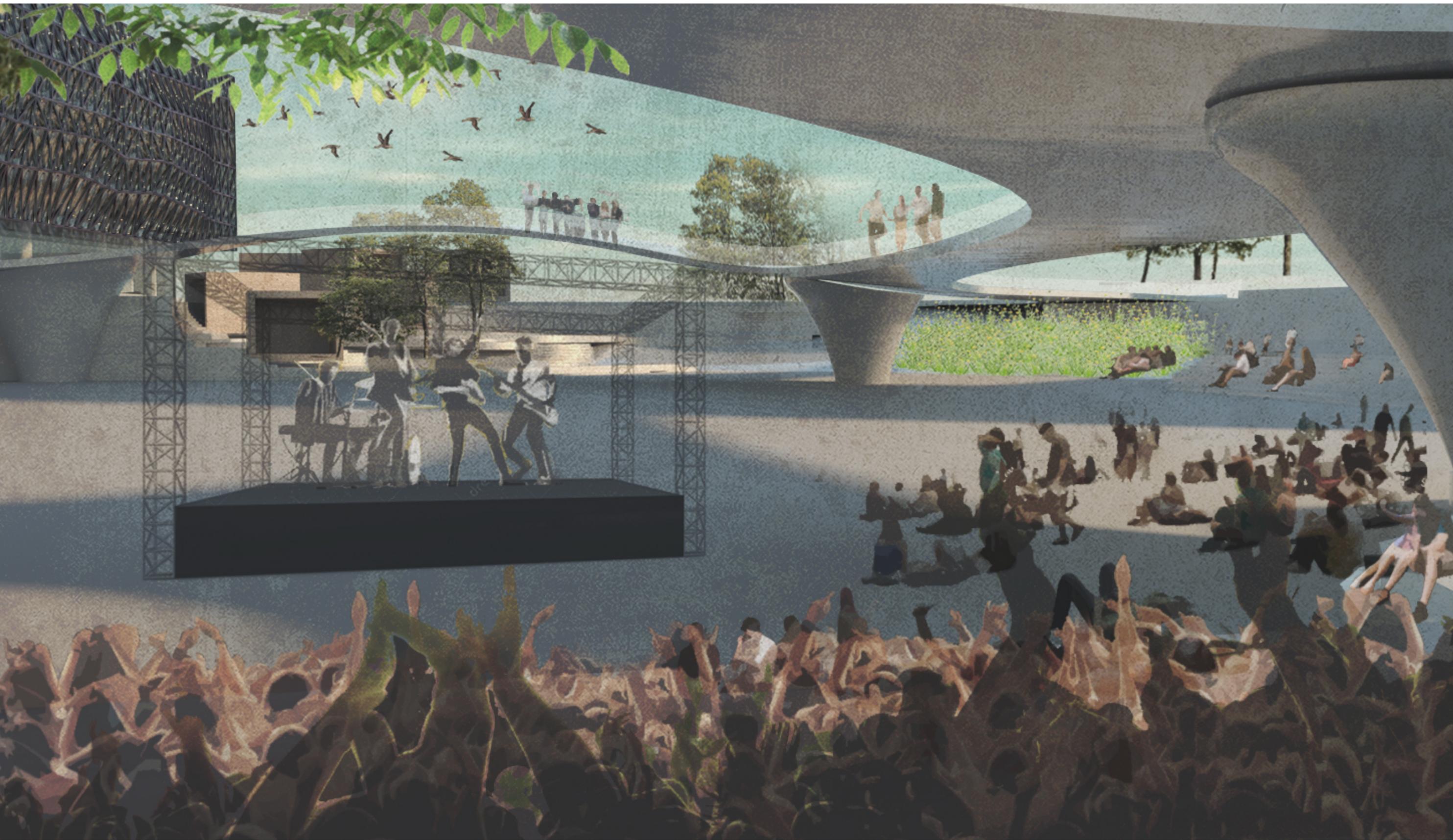
THE FACT THAT THE ELEMENTARY SCHOOL IS NEEDED AT THE SITE CALLS FOR MANY ACTION. THERE IS NO CONTROLLED OPEN SPACE FOR CHILDREN TO MOVE AROUND, AND THEY MOSTLY STAY WITHIN FOUR WALLS. THE BUILDING TERRACE IS DESIGNED FOR MULTIPLE USE. IT ACTS AS A PARTIALLY OPEN PLAYGROUND FOR THE KIDS OF THE ADJACENT ELEMENTARY SCHOOL. IT CAN ALTERNATIVELY CONVERT TO A WINTER GARDEN, SO THAT THE CHILDREN CAN IMAGINE WITHOUT CONSTRAINTS. DURING THE NON-OPERATIONAL HOURS, IT IS OPEN UP FOR REGULAR PUBLIC, ACCESSIBLE FROM THE MAIN STAIRCASE.



THE MOST IMPORTANT ASPECT OF THE DESIGN IS TO ESTABLISH A CONNECTION BETWEEN THE SUBWAY TUNNEL AND THE RESIDENTIAL NEIGHBORHOOD. IT HAS BEEN SOLVED BY PROVIDING A SEAMLESS PATH CONNECTION THE UNDERGROUND WITH A DRAMATIC RAMP INTEGRATED IN A PUBLIC SPACE. IT LETS PEOPLE OF ALL AGE GROUPS, GENDERS AND SPECIAL NEEDS TO MOVE FREELY IN THIS SPINE. THE ABOVE ILLUSTRATION IS A VIEW FROM THE ENTRANCE RAMP THAT CONNECTS THE SQUARE WITH THE SURROUNDING NEIGHBORHOOD.



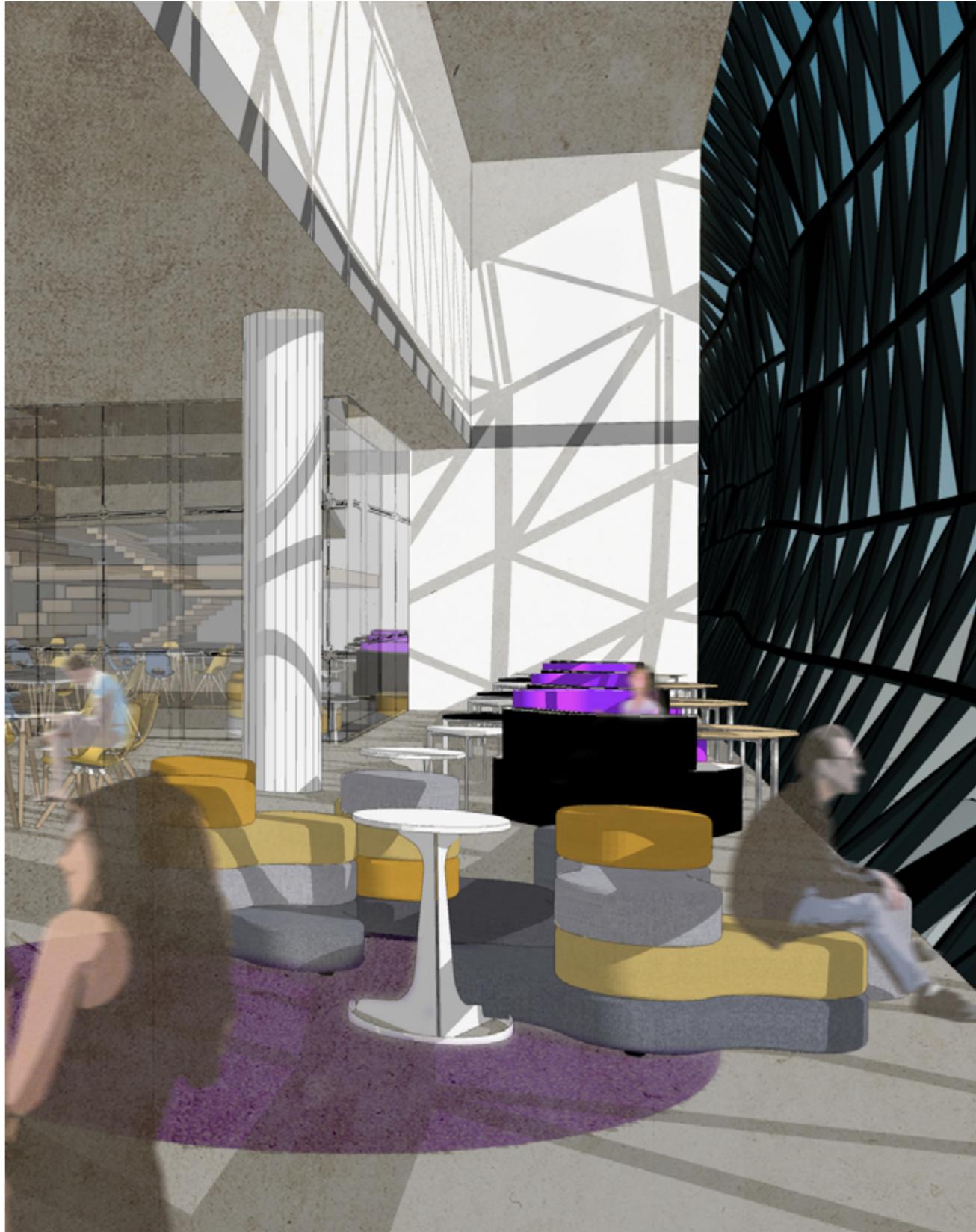
CHLOUBETIN URBANISED IN LATE 60S, WITH SIMPLE MORDERNISTIC RESIDENTIAL TOWERS RISING FROM THE GROUND. THE STREET ELEVATION HAD TO BE TREATED WITH UTMOST SENSITIVITY AND RESPECT TO THE CONTEXT. THE FORM OF THE BUILDING FOLLOWS THE URBAN BLOCK. ALTHOUGH THE SQUARE SIDE FACADE JUGGLES WITH THE FUNCTIONS HOUSED INSIDE, THE ROAD SIDE ELEVATION IS SIMPLE, AND FOLLOWS ADJACENT MODERN ERA BUILDINGS. THIS ALSO SUPPORTS SIGNAGE AND ADVERTISEMENTS FOR THE RETAIL INSIDE, A PRIVILEGE THAT THEY ALREADY ENJOY.



THE CENTRAL SQUARE IS A HUB OF ACTIVITIES. IT IS ASSISTED BY SEVERAL SEATING SPACES, F&B OUTLETS, DAILY, GREEN PATCHES AND OBSTRUCTION FREE AREA. THE SUBSEQUENT VIEW IS A SUMMER AFTERNOON WITH A CONCERT GOING ON. FOR SUCH OCCASIONS THE SQUARE CAN ACCOMODATE AS MANY AS 2500-3000 PEOPLE. OTHER SUMMER ACTIVITIES LIKE OPEN AIR CINEMA, SMALL SPORTS EVENTS, BOARD GAME NIGHTS AND BIRTHDAY PARTIES ARE ENCOURAGED AND SUFFICED FOR.



SUMMER ARE NOT THE ONLY TIMES, THAT ENCOURAGES HUMAN ENGAGEMENTS. FOCUS HAS BEEN MADE TO CARRY OUT SMALL EVENTS LIKE FARMER'S MARKET, CHRISTMAS MARKET, SPORTS ACTIVITIES ETC. THE ABOVE IMAGE ILLUSTRATES AN ACTIVE SPACE AT THE PEAK OF WINTER, ENGAGING DIVERSE AGE GROUPS AND GENDERS. THE PUBLIC SPACE STRIVES TO HAVE SOMETHING FOR EVERYBODY, AND FACILITATES FOR SPECIAL NEEDS AS WELL.



THE EXISTING SITE HAS A LIBRARY OF APPROX. 140 SQM. IT SITS IN A CORNER, INVISIBLE AND DARK. THE PROPOSED LIBRARY IS DESIGNED FOR ROUGHLY QUADRUPLE THE AREA. ITS PLANNED SO AS TO HAVE PLENTY OF DAYLIGHT AND VARIETY OF SPACE. THERE IS NO PHYSICAL DIVISIONS, HOWEVER, ASSURANCE HAVE BEEN MADE FOR DIVERSITY SUCH AS SILENT ZONE, WORKSTATIONS, PRIVATE NOOK, DOUBLE HEIGHT READING LOUNGES AND STORAGE, ARCHIVES ETC.



ARCHITECTURE

DRAWINGS

ACCESS ROAD

PEDESTRIAN AND CYCLING SPINE

VISITOR PARKING

RAMP DOWN

GREEN TERRACE
8.15

WINTER GARDEN

GREEN TERRACE
12.15

LOWER GROUND LEVEL
-36

WALKWAY
00

RAMP DOWN TO LOWER GROUND AND SUBWAY

RESIDENTIAL GREEN
00

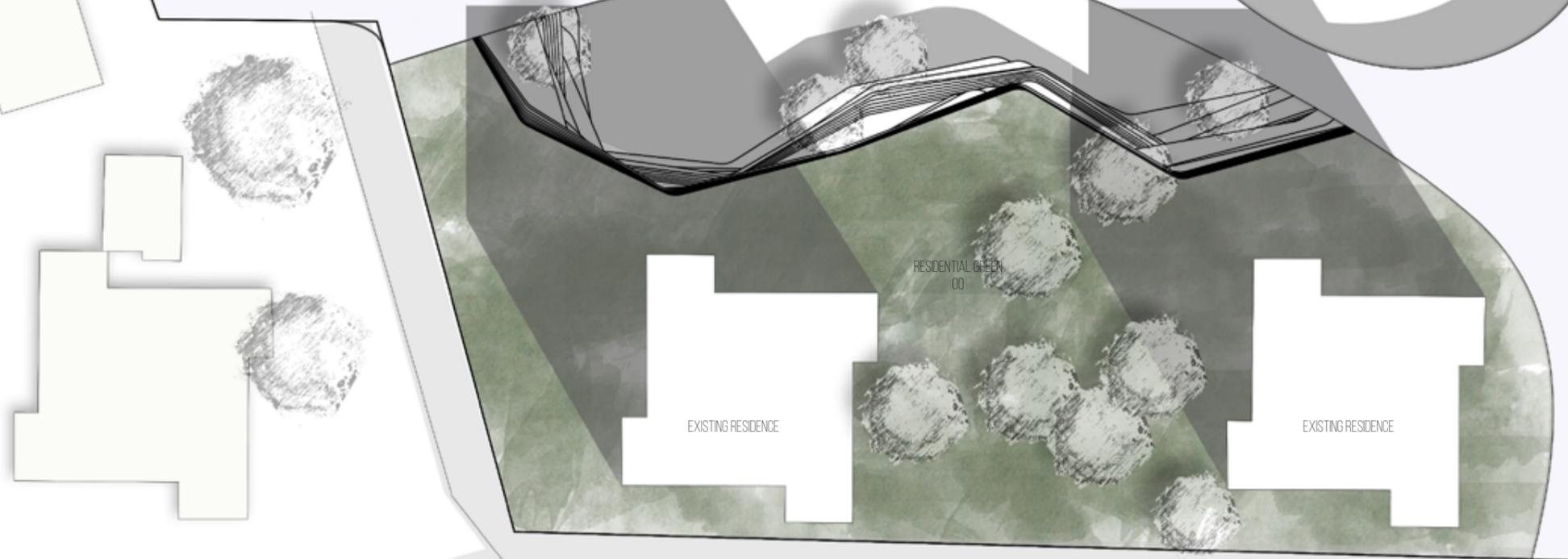
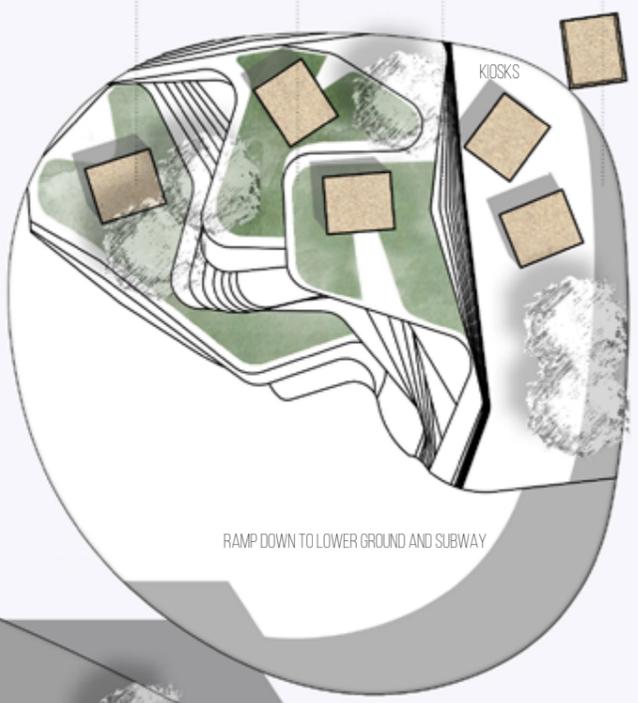
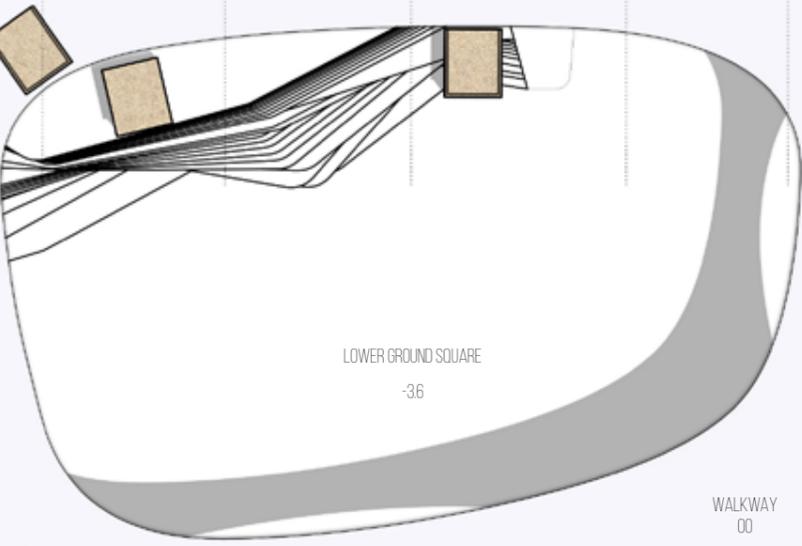
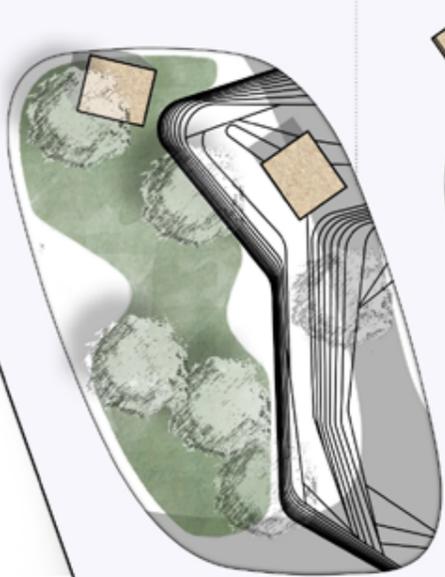
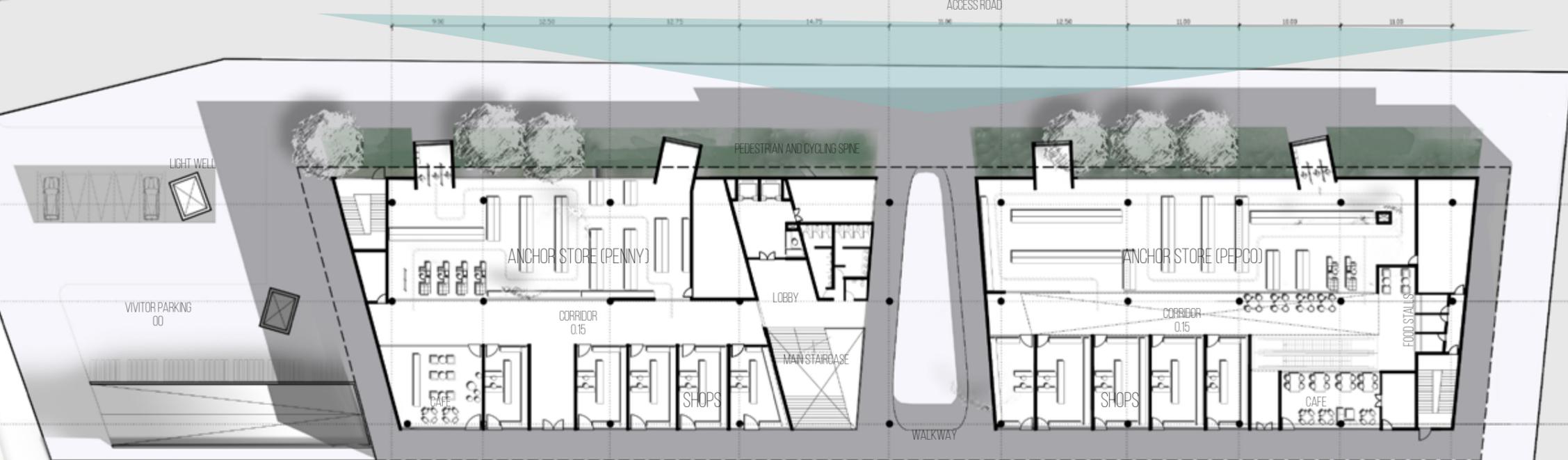
EXISTING RESIDENCE

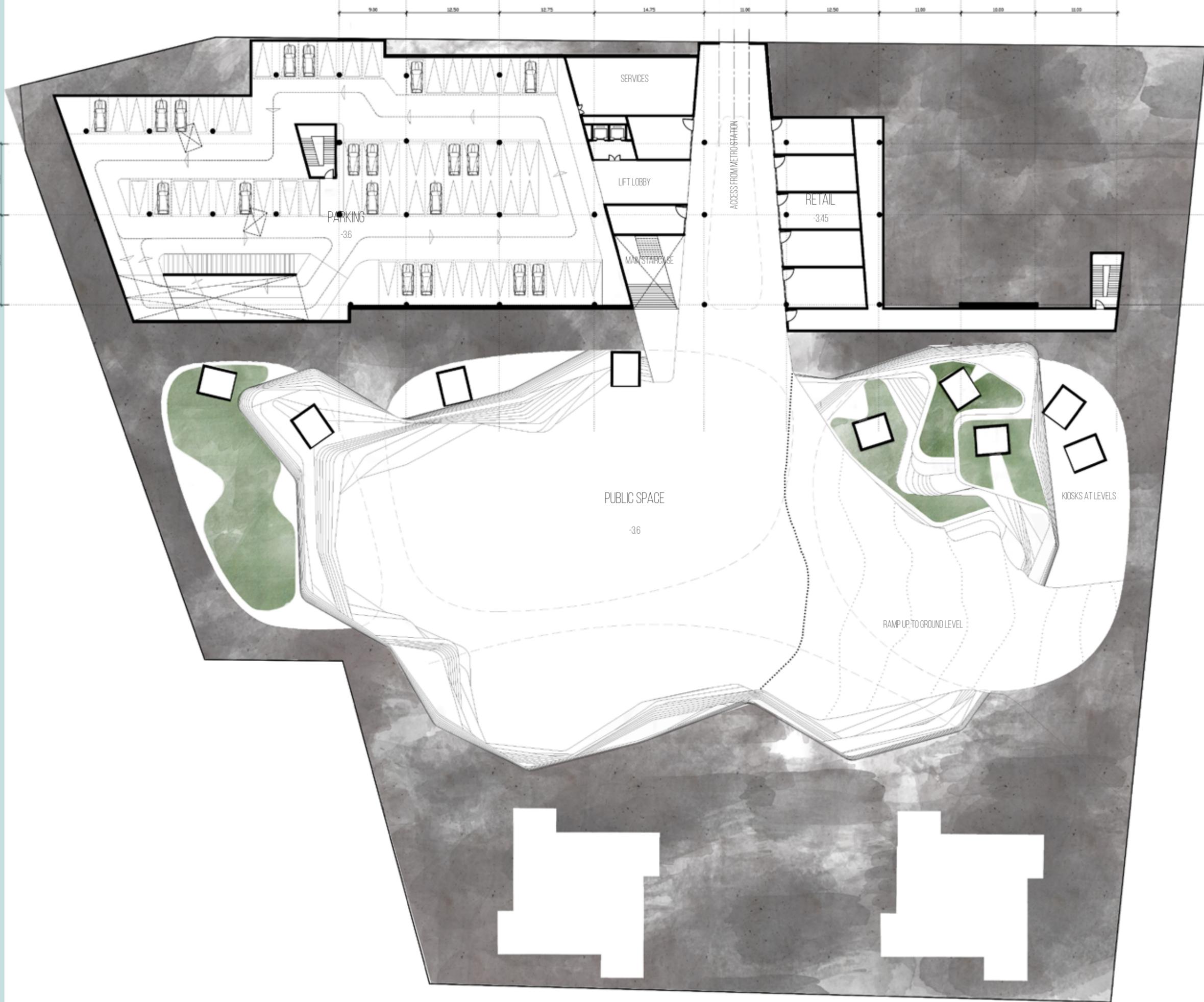
EXISTING RESIDENCE

PLANS

GROUND FLOOR PLAN

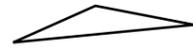
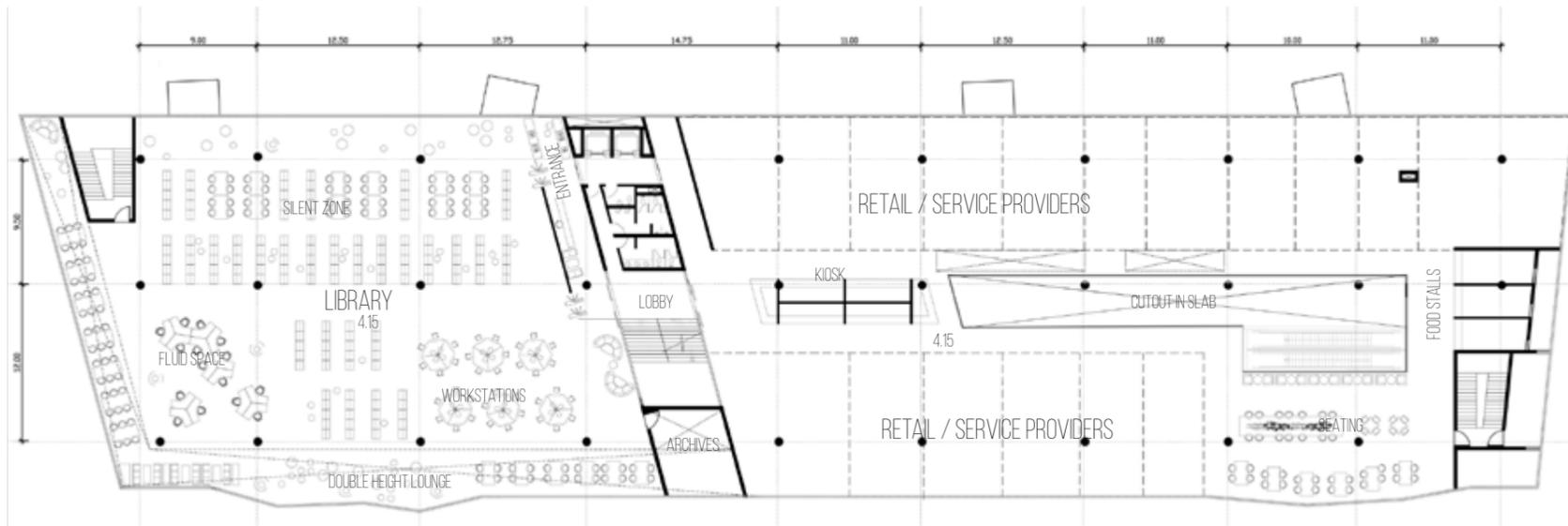
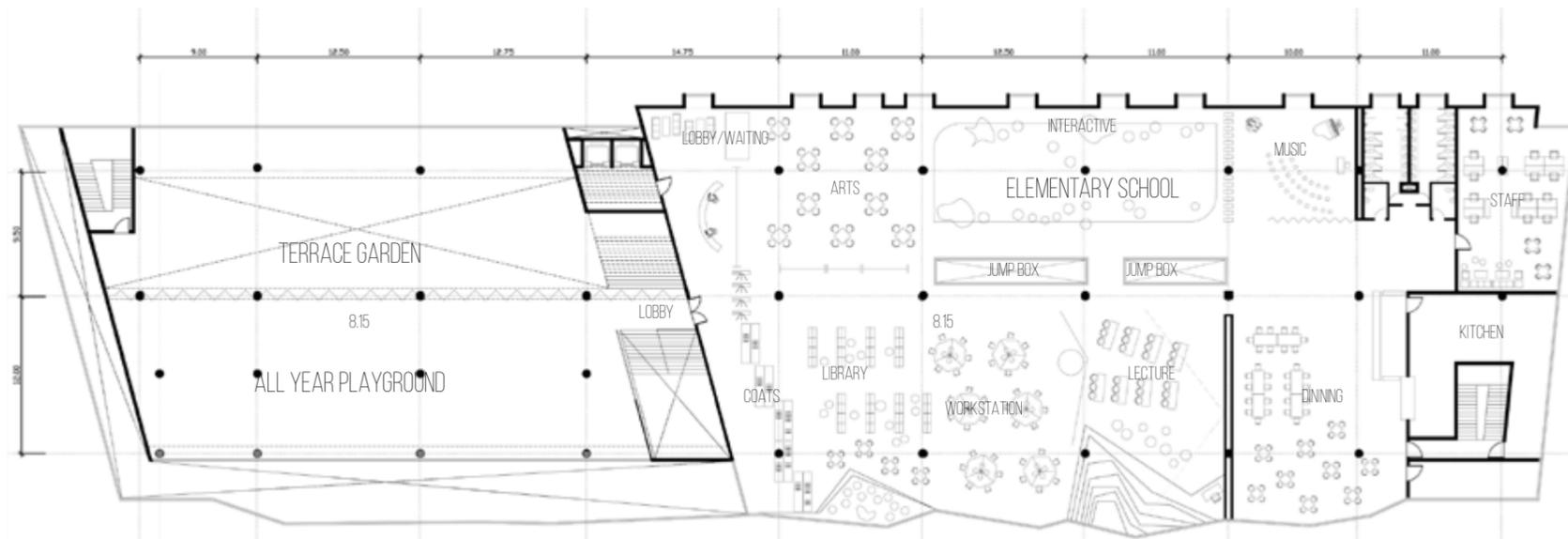
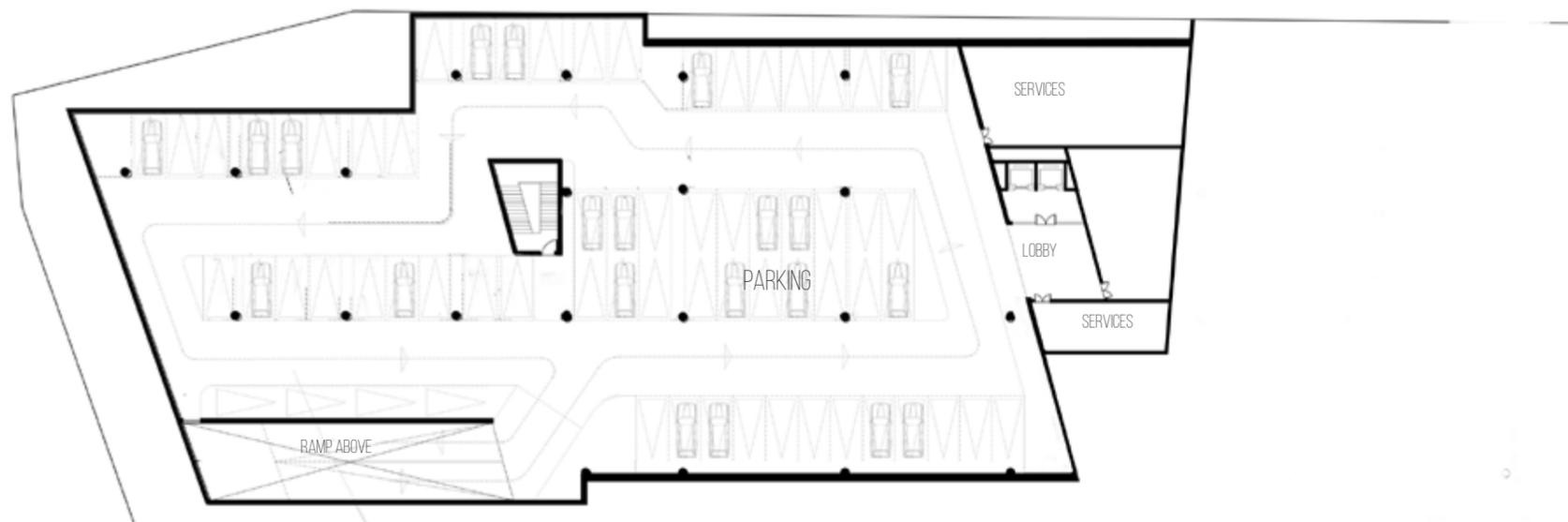
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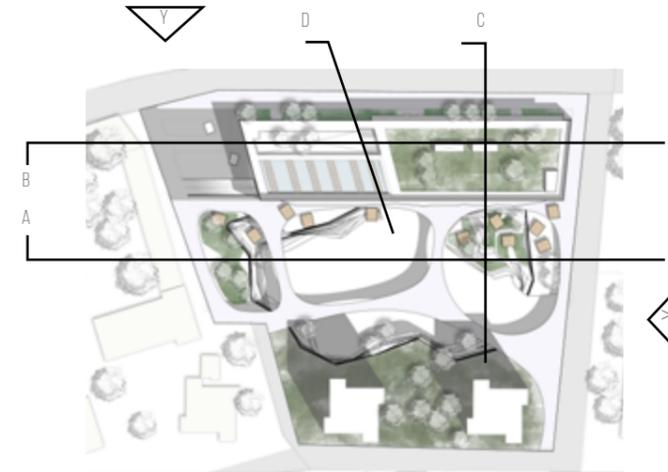
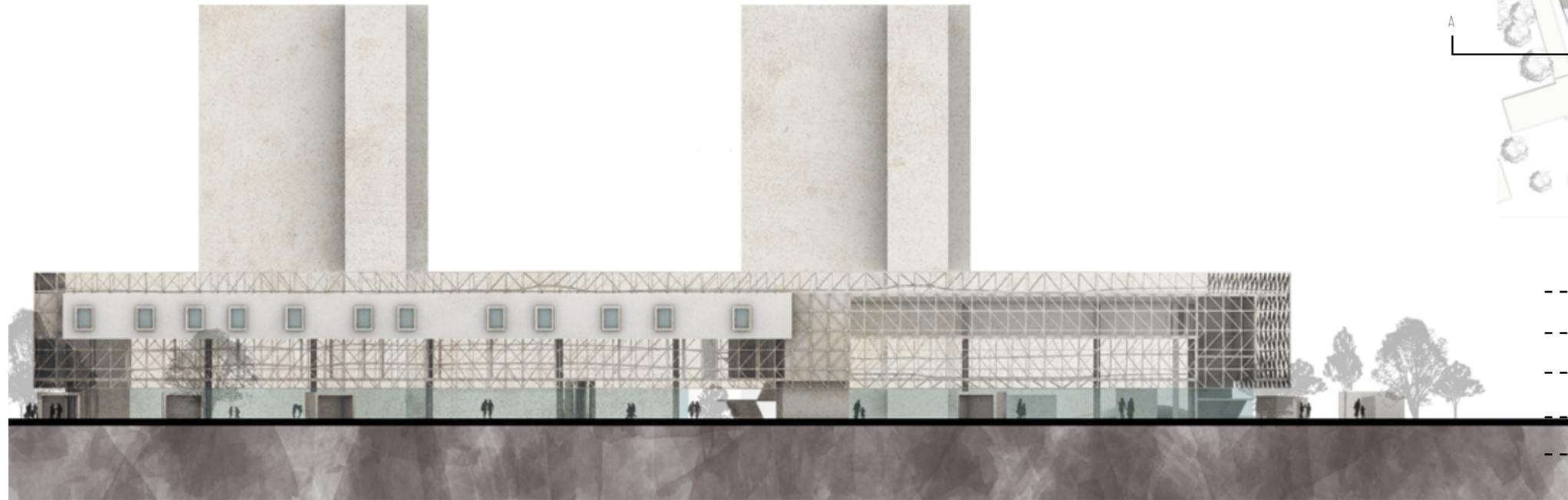




PLANS FIRST, SECOND, BASEMENT PLAN

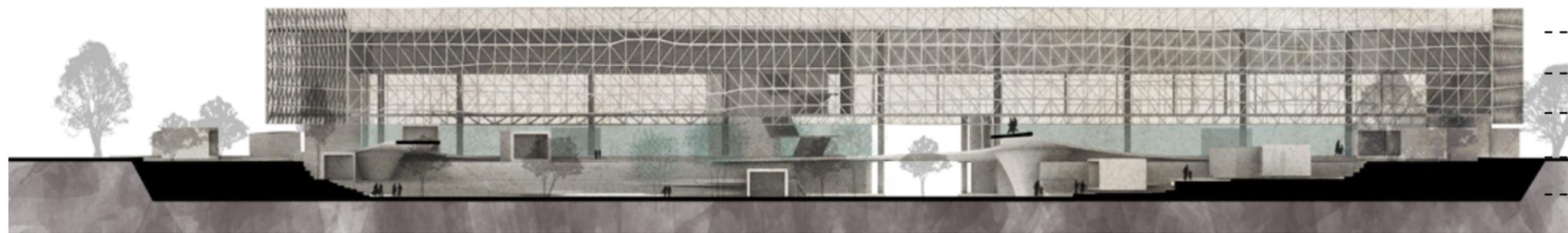
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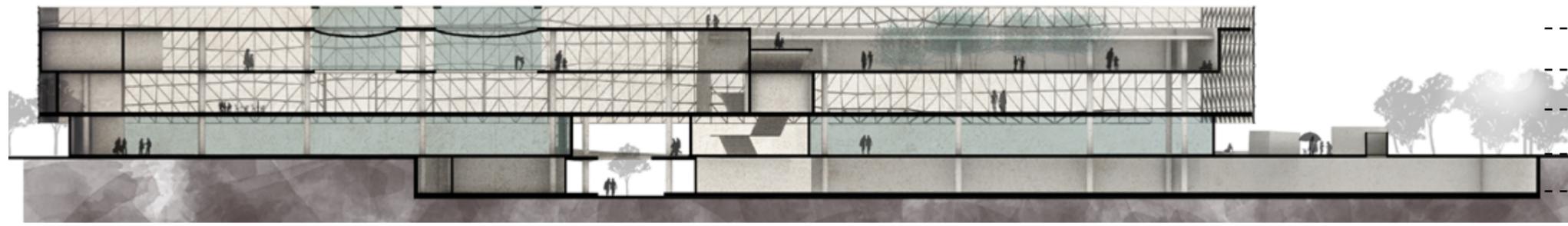
- - - - - +12.15
- - - - - +8.15
- - - - - +4.15
- - - - - +0.15
- - - - - -3.45

ELEVATION Y - ROAD SIDE ELEVATION



- - - - - +12.15
- - - - - +8.15
- - - - - +4.15
- - - - - +0.15
- - - - - -3.45

SECTION AA' - SQUARE SIDE ELEVATION

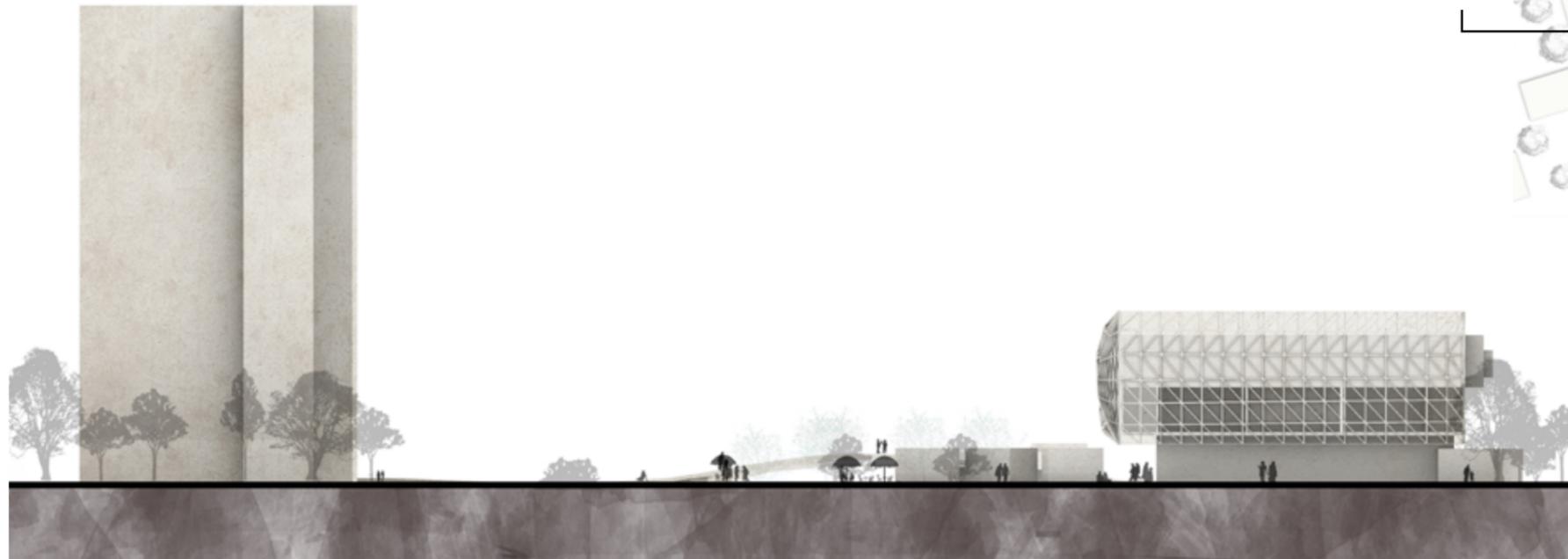


- - - - - +12.15
- - - - - +8.15
- - - - - +4.15
- - - - - +0.15
- - - - - -3.45

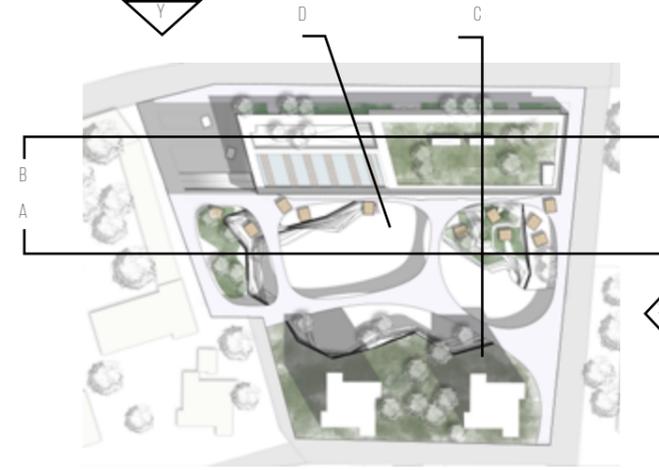
SECTION BB' - LONGITUDINAL SECTION

ELEVATIONS/SECTIONS

1:500



EAST ELEVATION

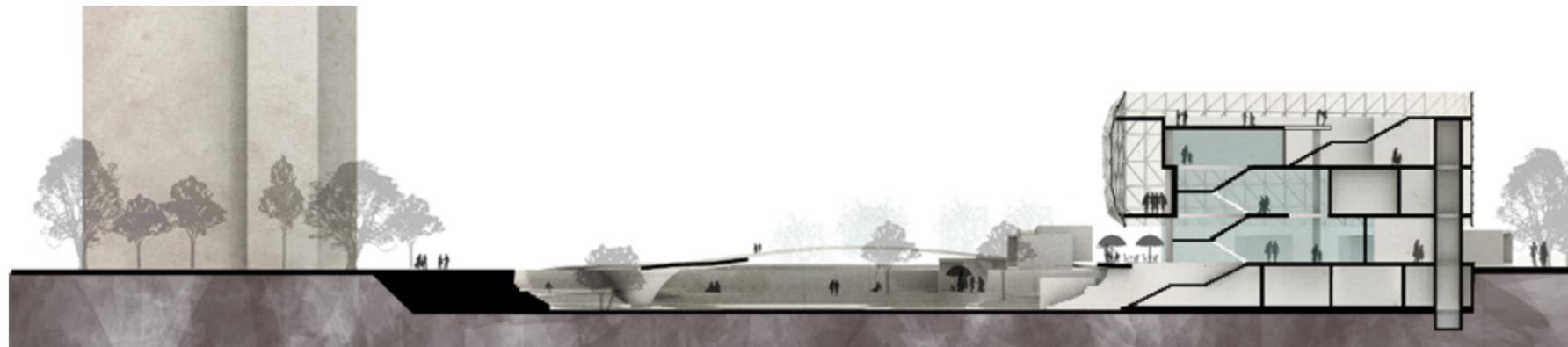


- +12.15
- +8.15
- +4.15
- +0.15
- -3.45



SECTION CC' - THROUGH SCHOOL

- +12.15
- +8.15
- +4.15
- +0.15
- -3.45



SECTION DD' - THROUGH MAIN STAIRCASE

- +12.15
- +8.15
- +4.15
- +0.15
- -3.45

SPECIAL MENTIONS

CAMP, PRAHA

IPR PRAHA

PROF JAN JEHLIK, CVUT [LECTURES]

PROF KAREL MEIR, CVUT [LECTURES]

MAPY.CZ

FOTOHISTORI.CZ

ARCHDAILY

LIFE BETWEEN BUILDINGS, JAN GEHL

RETAIL [R]EVOLUTION, DAVID KEPNOR

CITZ RIFFS, RICHARD PLUNZ

PRAGUE 20TH CENTURY ARCHITECTURE



THANK YOU

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