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Core Connections: Stitching Together the Heart of Atlanta through the Redevelopment of Underground Atlanta.

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CORE CONNECTIONS

STITCHING TOGETHER THE HEART OF ATLANTA THROUGH
THE REDEVELOPMENT OF UNDERGROUND ATLANTA.

THESIS PROJECT BY AMARI PARRISH

CORE CONNECTIONS

STITCHING TOGETHER THE HEART OF ATLANTA THROUGH THE REDEVELOPMENT OF UNDERGROUND ATLANTA.

APPROVAL OF THESIS RESEARCH
PROJECT BOOK IS PRESENTED TO:

ERMAL SHPUZA

AND TO THE
FACULTY OF THE DEPARTMENT OF ARCHITECTURE
COLLEGE OF ARCHITECTURE AND CONSTRUCTION MANAGEMENT

BY

AMARI MONAYE PARRISH

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

BACHELOR OF ARCHITECTURE

KENNESAW STATE UNIVERSITY
MARIETTA, GEORGIA

MAY 9, 2023



ACKNOWLEDGMENTS

TO MY FRIENDS, FAMILY AND THOSE I HOLD DEAR

MY DEEPEST THANKS GOES OUT TO YOU FOR ALL YOUR SUPPORT, ENCOURAGEMENT, AND LOVE. THIS JOURNEY THAT I HAVE TAKEN WOULD NOT HAVE BEEN POSSIBLE WITHOUT YOU ALL BY MY SIDE. I HAVE MET SO MANY WONDERFUL PEOPLE IN THE FIVE YEARS THAT I HAVE ATTENDED KENNESAW STATE UNIVERSITY AND I CAN NOT WAIT TO SEE WHAT THE FUTURE HOLDS FOR ALL OF US.

YOU ALL HAVE MY ETERNAL LOVE.

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Figure 1.1 The Fairlie-Poplar area in Downtown Atlanta, January 13, 1983

01 | DESIGN THEOREM

THE HEART OF ATLANTA'S CRY FOR CHANGE



Figure 1.2 Georgia History Pre-1900, Old Atlanta Union Station, May 1, 1957

1.1

DESIGN HYPOTHESIS

ATLANTA, GEORGIA, ONE OF THE FASTEST-GROWING COMMERCIAL CENTERS IN THE UNITED STATES, FOCUSED ON CREATING A TRANSIT-ORIENTED DEVELOPMENT CENTERED AROUND THE AUTOMOBILE. HOWEVER, TODAY, ATLANTA'S CITY INFRASTRUCTURE IS FRAGMENTED, WITH MANY SEGMENTS LYING ABANDONED THROUGH SEPARATION ON THE OUTSKIRTS. ACCORDING TO THE ARTICLE «STRENGTHENING ATLANTA'S COMMERCIAL CORRIDORS» BY DR. ELOISA KLEMENTICH AND LEIGH HOPKINS, ATLANTA CONTAINS SMALL AND NARROW STRIPS OF COMMERCIAL AREAS SEPARATED BY LONG DISTANCES OF LONG PARKING LOTS AND UNDERUTILIZED PROPERTIES. THIS RESULTS IN A LACK OF AMENITIES AND LOW AMBITION TO CONNECT THE CITY TO DISJOINTED AREAS.

ONE OF THE DISJOINTED AREAS LIES IN THE HEART OF THE CITY. UNDERGROUND ATLANTA WAS ONCE A BUSTLING OPEN MARKET FOR VISITORS TO HAVE A BALANCE OF RETAIL, FOOD VENDORS, AND LOCAL TRANSIT. HOWEVER, UNDERGROUND ATLANTA HAS BECOME A DISTANT MEMORY FOR LOCALS AS THE AREA HAS BECOME RUN DOWN AND MOSTLY ABANDONED, LEAVING A VOID IN THE CITY'S CENTER. HOW DID UNDERGROUND ATLANTA TRANSFORM SO DRASTICALLY TO BECOME VOID IN THE CITY'S CENTER THAT DETERS VISITORS, AND WHAT FACTORS CONTRIBUTED TO THAT CHANGE?

UNDERGROUND ATLANTA HAS A LONG HISTORY AND HAS UNDERGONE MANY CHANGES ALONG WITH THE SURROUNDING CITY. HOWEVER, THE CHANGES HAVE YET TO STAND THE TEST OF TIME AND HAVE FALLEN SHORT. WITH THE RIGHT ARCHITECTURAL MORPHOLOGIES, UNDERGROUND ATLANTA WILL UNIFY THE FRAGMENTATION OF THE AREA AND REESTABLISH A PEDESTRIAN-ORIENTED DEMAND AS ATLANTA'S PRIMARY FOCUS, CONNECTING THE PUBLIC ABOVE WITH THE HISTORY OF THE PAST LOCATED DIRECTLY BELOW THE CITY.

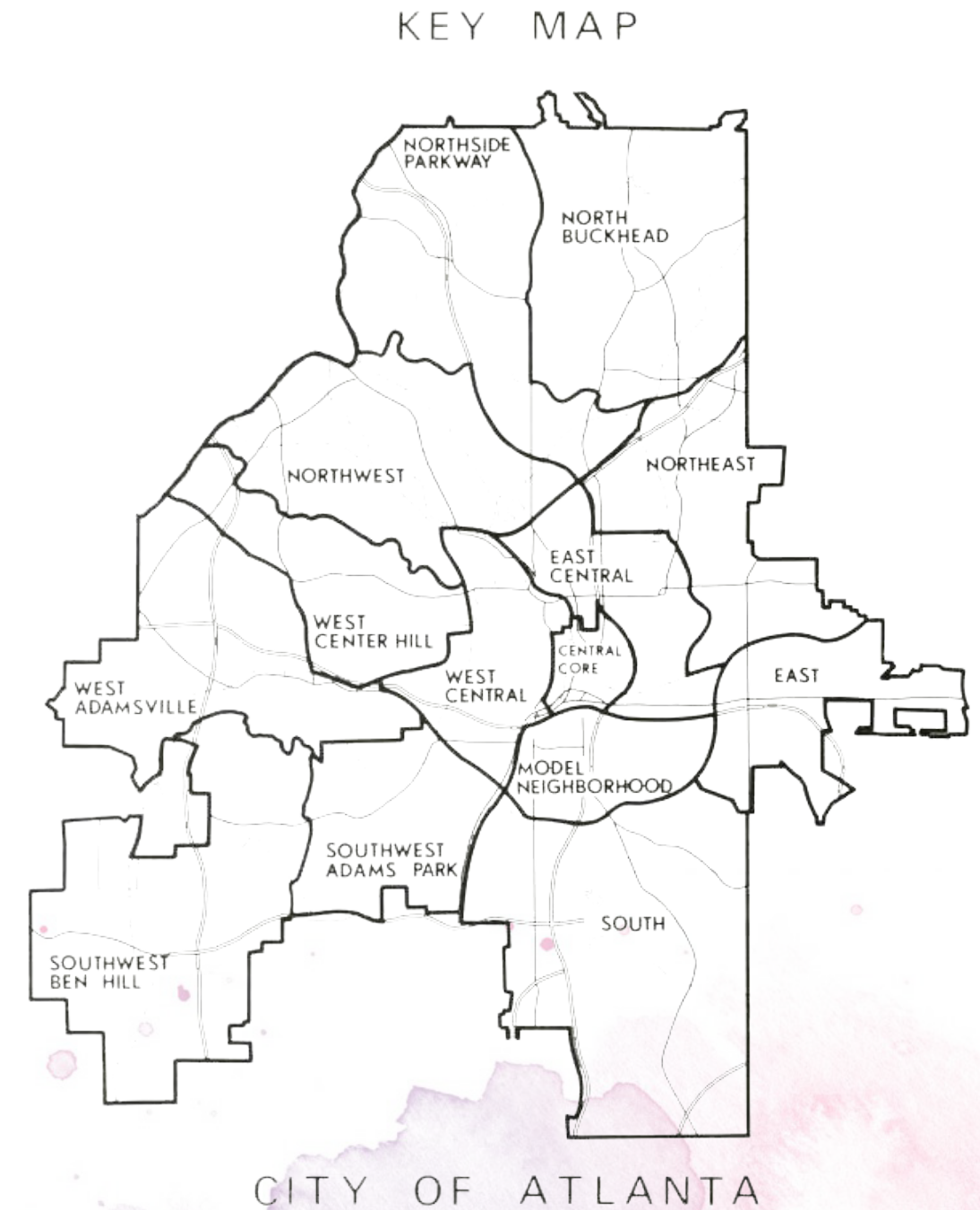


Figure 1.3 Key Map: City of Atlanta

1.1.2

HISTORY OF UNDERGROUND ATLANTA

IN 1836, GEORGIA CREATED A RAILROAD TO CONNECT THE FARMING STATES OF THE SOUTH TO EASTERN MARKETS. TO ACHIEVE THIS, A RAILROAD WAS BUILT BETWEEN ATLANTA AND CHATTANOOGA; THE ZERO MILEPOST MARKED THE CENTER OF THIS RAIL LINE. AT THE ZERO MILEPOST, THE CITY OF ATLANTA BEGAN TO EMERGE AND TAKE ROOT. AS THE CIVIL WAR APPROACHED, ATLANTA BECAME THE SOUTH'S TRADE CENTER. ALABAMA STREET WAS THE CENTER OF THE CITY, WHICH WOULD BECOME UNDERGROUND ATLANTA.

DURING THE CIVIL WAR, GEORGIA AND MANY OTHER SOUTHERN STATES SECEDED FROM THE UNION. A MONTH AFTER THE SIEGE OF WILLIAM T. SHERMAN, ATLANTA SURRENDERED TO FEDERAL TROOPS TO END THE BLOODSHED AND DAMAGE TO THE ONCE VIBRANT CITY. A UNION CAMP WAS SET UP NEAR UNDERGROUND ATLANTA, AIDING THE WOUNDED SOLDIERS AND ADDING TENSION TO THE SOUTH. IN 1866, THE PEOPLE OF ATLANTA SIFTED FROM THE DESTRUCTION AND REBUILT THEIR CITY AROUND MILESTONE ZERO. DURING THIS TIME OF RECONSTRUCTION, THE CITY'S POPULATION DOUBLED. IN THE 1870s, THE AREA INCLUDED THE TRAIN STATION, MANY BANKS, HOTELS, AND PACKINGHOUSE ROW ON ALABAMA STREET.

IN 1889, ATLANTA BROUGHT THE FIRST ELECTRIC STREETCAR TO THE SOUTH, AND BY EARLY 1900, UNION STATION DEPOT SERVED 100 TRAINS A DAY. TEN YEARS LATER, SEVERAL BRIDGES WERE CONSTRUCTED TO CROSS THE RAIL TRACKS AT UNION STREET. A MALL AT THE BRIDGE LEVEL CONNECTED THE VIADUCTS AND CREATED A SERIES OF PUBLIC PLAZAS. THE «VIADUCTS» ELEVATED THE STREET SYSTEM TO PERMIT A BETTER FLUID-LIKE TRAFFIC FLOW. TO ADAPT TO THE CHANGE, VENDORS MOVED THEIR OPERATIONS TO THE SECOND FLOOR, LEAVING THE OLD FRONTS AND GIVING BIRTH TO UNDERGROUND ATLANTA.



Figure 1.4 • Zero Milepost #1, February 10, 1984



Figure 1.5 • Railroad Tracks and Broad



Figure 1.6 Eternal Lamp Of The Confederacy

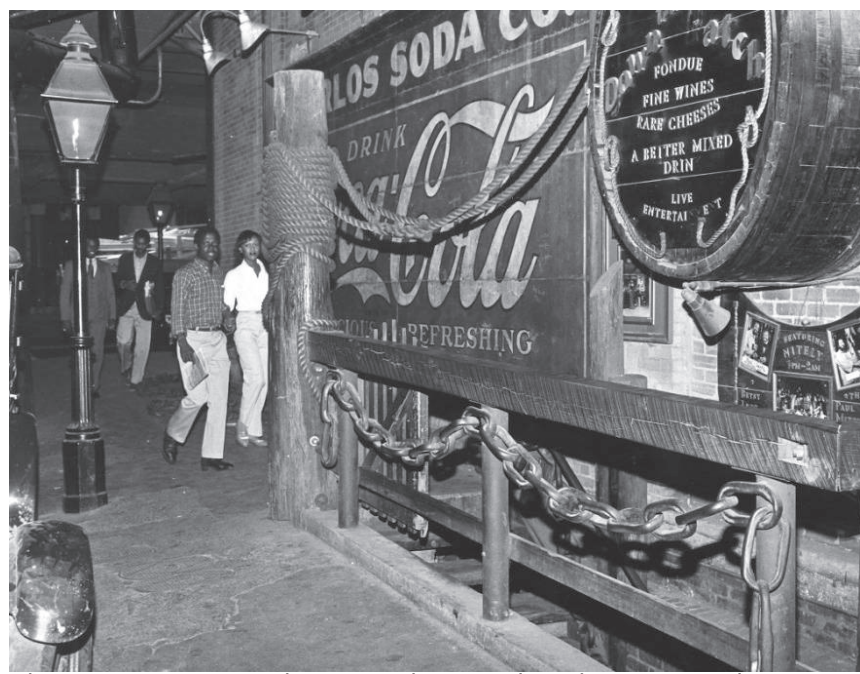


Figure 1.7 Dante's Down the Hatch, Atlanta, Georgia, 1980s

ATLANTA CONTINUES TO GROW AS A TRANSPORTATION HUB. IN 1943, PLAZA PARK WAS BUILT OVER THE RAILROAD GULCH. THE PARK WAS EVENTUALLY REPLACED BY PEACHTREE FOUNTAINS PLAZA, WHICH BECAME AN ESSENTIAL ENTRANCE TO UNDERGROUND ATLANTA. IN THE 1960s, ATLANTA WAS THE EPICENTER OF THE CIVIL RIGHTS MOVEMENT, LED BY DR. MARTIN LUTHER KING, JR. IN 1968, THE ENTIRE AREA WAS DECLARED A MONUMENT. MANY ARCHITECTURAL FEATURES FROM THE OLD ATLANTA SURVIVED, INCLUDING ORNAMENTAL MARBLE, DECORATIVE BRICKWORK, AND HAND-PICKED POSTS AND PANELS. SOON AFTER, UNDERGROUND ATLANTA OPENED AS A RETAIL AND ENTERTAINMENT CENTER FOR ATLANTA RESIDENTS AND MANY VISITORS FROM OTHER STATES. HOWEVER, IN 1980, ATLANTA RESIDENTS AND THE INTRODUCTION OF MARTA AND OTHER FACTORS THAT COMPROMISED THE EXPERIENCE OF THE AREA LED TO THE CLOSING OF UNDERGROUND ATLANTA.

BUSINESS LEADERS SUCCEEDED IN PLACING UNDERGROUND ATLANTA ON THE NATIONAL REGISTER OF HISTORIC PLACES TO SAVE THE AREA. UNDERGROUND ATLANTA REOPENED IN 1989 AND WAS REDESIGNED TO PRESERVE AND REVITALIZE THE CENTER OF ATLANTA AND COMMUNITY LIFE. OVER THE YEARS, UNDERGROUND HAS OFFERED FAMILY EXPERIENCES, MULTIPLE RETAIL OUTLETS, GREAT FOOD FROM OLD ALABAMA RESTAURANTS, AND UNIQUE FEATURES AND ENTERTAINMENT. SADLY, THESE BUSTLING YEARS ENDED IN 2016 AS UNDERGROUND ATLANTA SAW A RAPID DECLINE, AND BY 2018, THE HISTORIC SITE CLOSED ITS DOORS WITH ONLY A FEW POP-UP SHOPS REMAINING. IN 2022, THE FUTURE OF UNDERGROUND ATLANTA WAS LOOKING UP AS NEW PLANS TO REINVENT THE HEART OF ATLANTA WERE RISING.

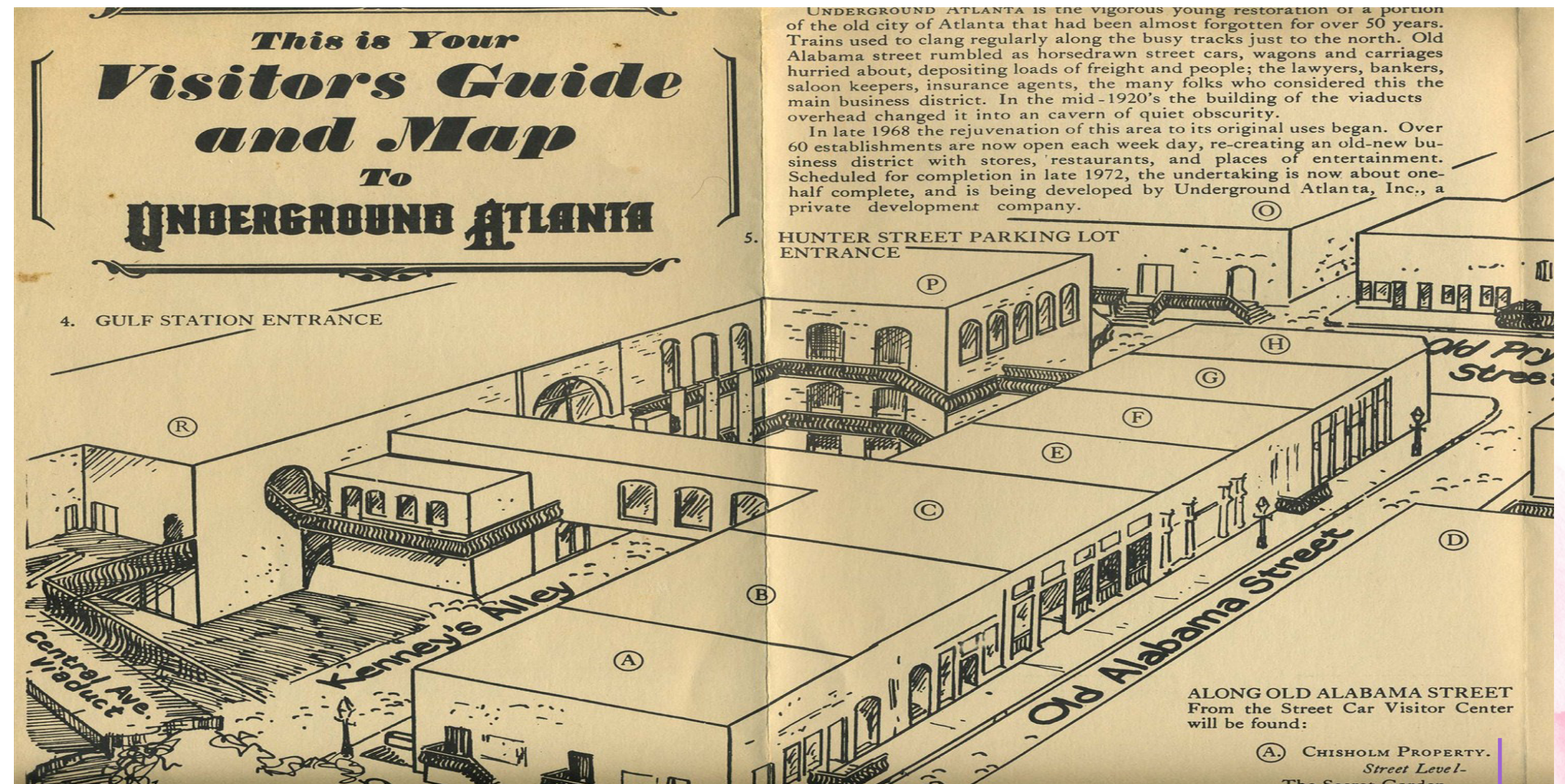


Figure 1.8 The Visitors Guide and Map to Underground Atlanta

HISTORY OF UNDERGROUND ATLANTA

RECAP



Figure 1.8a The History of Underground Atlanta Recap

1.1.3

RESEARCH PROBLEMS AND QUESTIONS

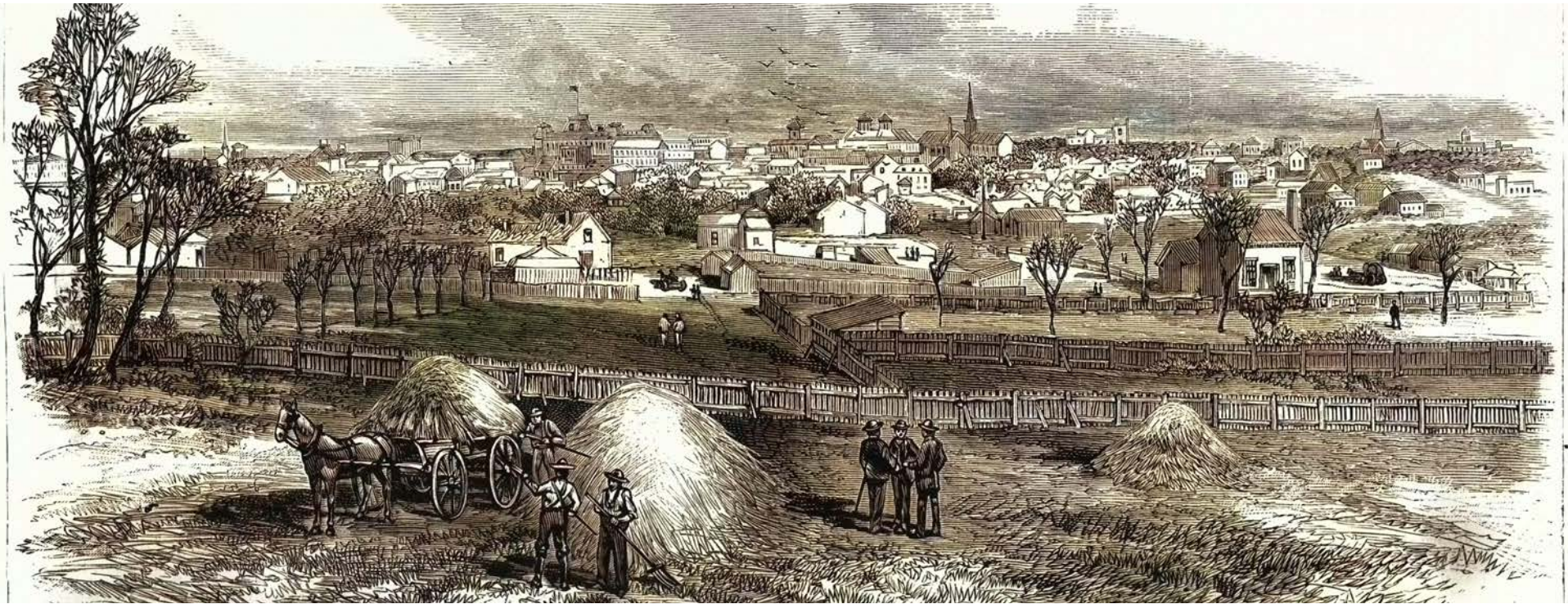


Figure 1.9 Atlanta the Phoenix City of the South

FOR ATLANTA, SUCCESS IS MEASURED BY ITS VALUE TO EVERYONE WHO LIVES, WORKS, AND VISITS DOWNTOWN. A LIVABLE AND ECONOMICALLY ROBUST DOWNTOWN MUST REFLECT SOCIAL VALUES AND COMMUNITY. HOWEVER, DOWNTOWN ATLANTA FACES MANY PROBLEMS THAT HAVE THE POTENTIAL TO HALT ANY ECONOMIC PROGRESS TO REVITALIZE AND RECONNECT UNDERGROUND ATLANTA TO ITS SURROUNDING CONTEXT.

ATLANTA FACES MASSIVE URBAN SPRAWL, INCLUDING THREE CORES, NEVER-ENDING TRAFFIC, DISJOINTED AND UNCONNECTED TRANSIT, AND FADING HISTORY. AS ITS SYMBOL, THE PHOENIX, ATLANTA RISES FROM THE ASHES OF TURMOIL AND HARDSHIP, AND UNDERGROUND ATLANTA HAS THE POTENTIAL TO DO THE SAME, PROMPTING FIVE ESSENTIAL QUESTIONS TO CONSIDER WHEN DISCUSSING HOW THE AREA CAN BE REBORN ANEW.

1. WHAT EXISTING CONDITIONS OR HISTORICAL CHANGES CAUSED UNDERGROUND ATLANTA TO DECLINE AND DETER VISITORS?

2. WHAT DESIGN ELEMENTS CAN BE APPLIED TO RECONNECT THE FRAGMENTATION OF UNDERGROUND ATLANTA AND EFFECTIVELY DEVELOP A MIXED-USE ENVIRONMENT BASED ON PEDESTRIAN INTERACTION IN A RAPIDLY CHANGING AREA CENTERED AROUND THE AUTOMOBILE?

3. HOW CAN IMPROVEMENTS TO UNDERGROUND ATLANTA DISTINGUISH BETWEEN THE DECIDING FACTOR OF HOW AND WHEN PEDESTRIANS INTERACT WITH A DESIGNED SPACE?

4. WHAT EXISTING CONDITIONS AROUND UNDERGROUND ATLANTA MAKE THE HEART OF DOWNTOWN UNDESIRABLE, SEPARATING THE VISITORS FROM THE RICH HISTORY BELOW STREET LEVEL.?

5. CONCERNING UNDERGROUND ATLANTA'S INFRASTRUCTURE, COULD REVITALIZING THE UNDERUTILIZED SPACES AT THE LOCATION IMPROVE THE ECONOMIC VITALITY OF THE SURROUNDING AREAS?

6. HOW COULD LOCAL ATLANTA CONDITIONS BE IMPACTED NEGATIVELY AND POSITIVELY BY THE REDESIGN AND RECONNECTION OF UNDERGROUND ATLANTA?

THESIS STATEMENT

MY THESIS FOCUSES ON CREATING A MIXED-USE DEVELOPMENT THAT RECONNECTS THE AREAS OF UNDERGROUND ATLANTA WITH THE SURROUNDING CITY CONTEXT AND REESTABLISHES A PEDESTRIAN-ORIENTED DEMAND AS ATLANTA'S PRIMARY FOCUS TO RECONNECT ATLANTIAN'S WITH THE OLD CITY BELOW THE SURFACE.

THESIS ABSTRACT

THE HEART OF ATLANTA, A PROSPEROUS TOURIST DESTINATION BRIMMING WITH LIFE, HAS FOUND ITSELF CONTAINING AREAS THAT HAVE BEEN COMMERCIALY CUT OFF FROM INNER-CITY CONNECTIONS IN CONTRADICTION TO BEING IN A HEAVY TRANSIT AREA. ATLANTA'S LONGSTANDING HISTORY OF INHABITING SMALLER SUB-CITIES INSIDE A LARGER CONTEXT THAT HOUSES A CONSTANTLY GROWING POPULATION HAS BECOME OVERSHADOWED BY TRAFFIC, UNDERUTILIZED SPACES THAT CREATE MASSIVE VOIDS, AND FRAGMENTATION WHICH PREVENTS THE CITY'S UNIFICATION. CORE CONNECTIONS FOCUSES ON CREATING A MIXED-USE DEVELOPMENT COMPRISED OF PARKING, RETAIL, AND OFFICE THAT RECONNECTS THE SURROUNDING CONTENTS OF DOWNTOWN ATLANTA AND REPAIRS THE AREA AS THE CITY'S CORE. CORE CONNECTIONS WILL HIGHLIGHT THE PRODUCT OF A STRATEGIC BALANCE IN PRIORITIZING PEDESTRIAN FLOW BY CREATING AN ENVIRONMENTALLY RICH LAYOUT THAT ALLOWS PEDESTRIANS TO ESCAPE THE HUSTLE AND BUSTLE OF DOWNTOWN ATLANTA AND DRAWS VISITORS INTO THE AREA. CREATING A MIXED-USE DEVELOPMENT WITH PEDESTRIAN ACCESS AND FLOW AS ITS PRIMARY FOCUS ELEVATES THE SURROUNDING CONTEXTS OF THE CHOSEN SITE TO MEET THE EXISTING URBAN EXPECTATIONS OF DOWNTOWN ATLANTA ON AN EQUAL LEVEL. THE INTERSECTIONALITY BETWEEN THE MIXED-USE DEVELOPMENT AND ATLANTA'S EXISTING INFRASTRUCTURE WILL FILL THE HOLE THAT HAS GONE UNCHECKED IN THE CITY'S CENTER FOR YEARS. THE OBJECTIVES FOR THE PROPOSAL SHALL OCCUR AT UNDERGROUND ATLANTA, DIRECTLY ACROSS FROM THE FIVE POINTS MARTA STATION. REDESIGNING THE AREA WILL EXTEND THE EXISTING COMMERCIAL RETAIL MARKET TO MEET THE STREET, DEVELOP AN OPEN-AIR PLAZA FOR LEISURE ACTIVITY, AND RECONSTRUCT THE INFRASTRUCTURE FOR PEDESTRIAN WALKABILITY. THESE CHANGES WILL EFFECTIVELY REDEFINE UNDERGROUND ATLANTA'S FLOW, GIVING THE AREA A MUCH-NEEDED UPLIFT TO ATLANTA'S RICH CULTURE AND HISTORY. CORE CONNECTIONS BRINGS TOGETHER SOCIAL PRACTICES TO ACHIEVE EQUITY, EQUALITY, DIVERSITY, AND INCLUSIVENESS AT THE HIGHEST LEVELS OF URBANIZATION. THIS PROPOSAL WILL ULTIMATELY ANSWER THE QUESTIONS CONCERNING DOWNTOWN ATLANTA'S LAND CONFIGURATION, THE FADING OF DOWNTOWN ATLANTA'S RICH HISTORY DUE TO EXTERIOR CONDITIONS, THE DISTINGUISHING FACTORS WHICH LED TO UNDERGROUND ATLANTA'S DECLINE, AND THE EXISTING CONDITIONS THAT DETERMINE IF UNDERGROUND ATLANTA WILL REMAIN AN INFLUENTIAL LOCATION TO VISIT AND SOCIALIZE.

1.1.5

OBJECTIVES



Figure 1.10 Plaza of Underground Atlanta

1. TO GUIDE PEDESTRIANS TO UNDERGROUND ATLANTA TO REESTABLISH COMMUNITY LIFE VIA A RICH RETAIL SETTING.
2. REVITALIZE UNDERGROUND ATLANTA TO RECONNECT TO THE SURROUNDING CITY CONTEXT.
3. IMPROVE ACCESS TO GREEN SPACES, PUBLIC SPACE SEATING, AND ENVIRONMENTS THAT PROMOTE SOCIAL INTERACTION.
4. INCREASE THE COMMUNITY IMPACT OF UNDERGROUND ATLANTA TO PROVIDE AN INTERACTIVE AND VIBRANT ENVIRONMENT.
5. CREATE A MIXED-USE DEVELOPMENT THAT UNIFIES THE SURROUNDING AREA AND CREATES A BALANCE BETWEEN THE NEW ATLANTA WITH THE OLD ATLANTA.



Figure 1.11 Entry Sign Underground Atlanta

THE DESIGN OF SPACES FROM CITY: REDISCOVERING THE CENTER (1988)

WILLIAM WHYTE

WILLIAM WHYTE WAS AN AMERICAN URBANIST, SOCIOLOGIST, AND PEOPLE-WATCHER. HE IDENTIFIED THE ELEMENTS THAT CREATED VIBRANT PUBLIC SPACES WITHIN THE CITY IN NEW YORK CITY DURING THE 1970S. WHYTE CREATED THE STREET LIFE PROJECT AND RESEARCHED HOW PEOPLE USE URBAN SPACE.

WHYTE CONCLUDED THAT SOCIAL LIFE IN PUBLIC SPACES DIRECTLY CONTRIBUTES TO HOW PEOPLE LIVE AND SOCIETY. HE ADVOCATED THAT DESIGNING PUBLIC SPACES SHOULD START WITH A DEEP UNDERSTANDING OF HOW TO USE SPACES. WHYTE CAREFULLY MENTIONED THAT, IN MOST CASES, PEOPLE USE PLAZAS THAT ARE RELATIVELY CLOSE TO THEIR CURRENT LOCATION. PLAZAS A FEW BLOCKS TOO FAR COULD BE MILES AWAY.

TO COMBAT THE CONCEPT OF THE DEAD PLAZA OR DEAD PUBLIC SPACE, WHYTE DETERMINED THAT THREE MAIN FACTORS INFLUENCE HOW PEOPLE USE PUBLIC SPACE. THE RELATIVE SHAPE OF THE SPACE, THE SPACES' RELATIONSHIP TO THE STREET, AND HOW MUCH ACCESSIBLE SITTABLE SPACE IS AVAILABLE.

WHYTE TOOK THE TIME TO MENTION THAT SITTABLE SPACE IS THE MOST CRUCIAL ASPECT OF PUBLIC SPACE. LARGER PUBLIC SPACES WOULD BE VIRTUALLY EMPTY, WITH FEW TO NO PLACES TO SIT, WHILE SMALLER SPACES WITH PLENTY OF SEATING ARE ENTIRELY OCCUPIED AND CRAMPED.

TO ROUND OUT WHYTE'S RESEARCH, HE NOTICED THAT PUBLIC SPACES WITH MORE WOMEN ARE BETTER DESIGNED BECAUSE WOMEN CAREFULLY CONSIDER THE SPACES THEY OCCUPY. MORE WOMEN MEANT MORE MEN AND FAMILIES WOULD FREQUENT THE SAME SPACES, ULTIMATELY PRODUCING A LIVELY, FRIENDLY AREA.

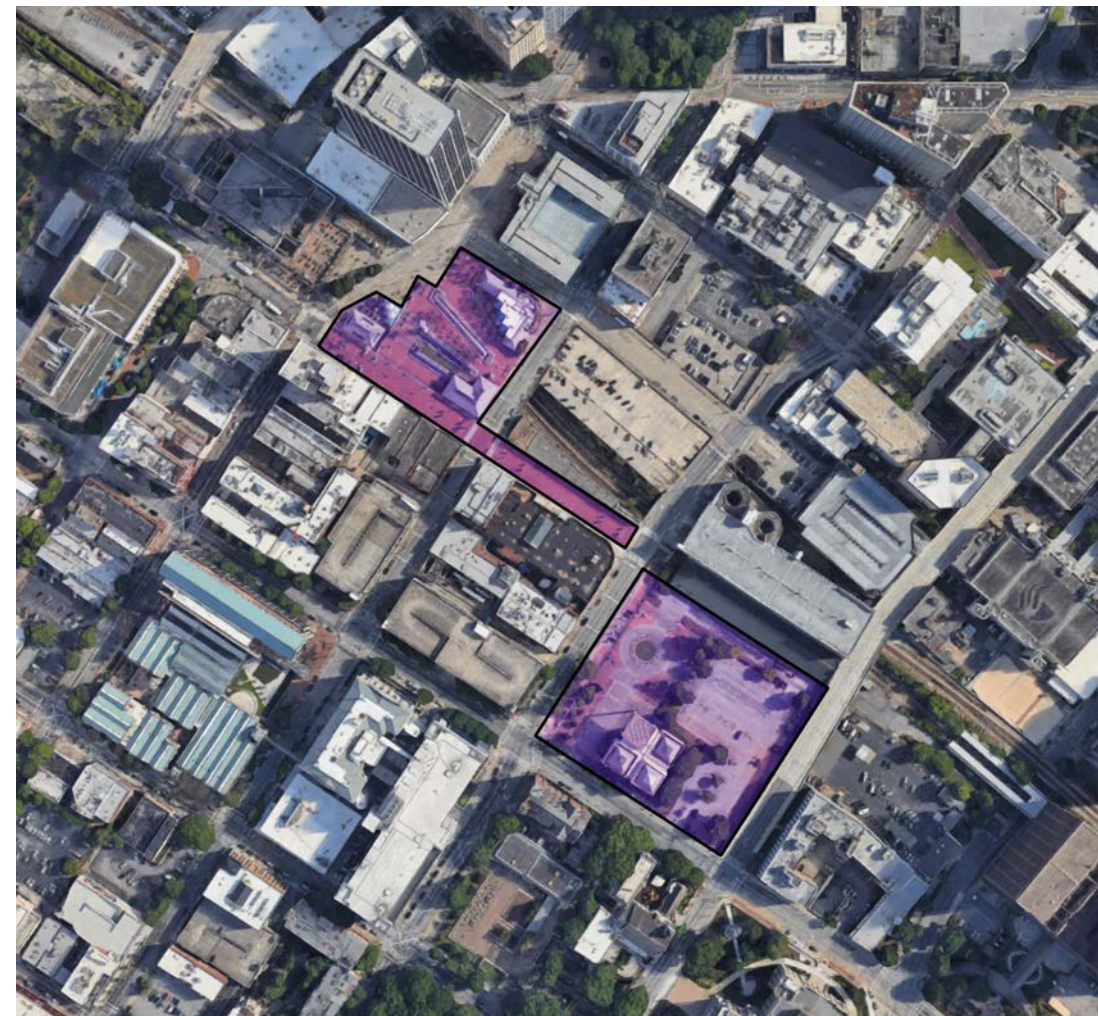


Figure 1.12 Public Space On and Near Site

«IT IS DIFFICULT TO DESIGN A SPACE THAT WILL NOT ATTRACT PEOPLE.
WHAT IS REMARKABLE IS HOW OFTEN THIS HAS BEEN ACCOMPLISHED.»

- WILLIAM WHYTE

1.2

LITERATURE REVIEW

THE CITY IMAGE AND ITS ELEMENTS FROM THE IMAGE OF THE CITY (1960)

KEVIN LYNCH

KEVIN LYNCH WAS AN AMERICAN URBAN PLANNER AND AUTHOR. HE MADE SIGNIFICANT CONTRIBUTIONS TO THE DYNAMIC OF CITY PLANNING BY RESEARCHING HOW PEOPLE VIEW AND NAVIGATE THE URBAN LANDSCAPE. HIS RESEARCH EXPLORES THE URBAN ENVIRONMENT AND HOW PEOPLE PERCEIVE THE PHYSICAL FORM OF CITIES AND REGIONS AS THE BASIS FOR GOOD URBAN DESIGN.

LYNCH ARGUES THAT PEOPLE STRUCTURE THEIR MENTAL MAPS OF CITIES INTO ELEMENTS SUCH AS PATHS, EDGES, DISTRICTS, NODES, AND LANDMARKS. ACCORDING TO LYNCH, **MORE SATISFYING AND CREATIVE CITIES CAN BE ACHIEVED IF DESIGNERS UNDERSTAND HOW PEOPLE VIEW THEIR SURROUNDINGS IN RESPONSE TO THESE ELEMENTS AND DESIGN THEM APPROPRIATELY.**

LYNCH HAS PROVIDED THE FOLLOWING DEFINITIONS FOR THE FIVE ELEMENTS THAT MAKE UP A CITY.

- 1: PATHS - PATHS ARE HOW PEOPLE MOVE THROUGH THE CITY AND OBSERVE THEIR ENVIRONMENT.
- 2: EDGES - EDGES ARE THE BOUNDARIES THAT CLOSE OFF ONE REGION FROM ANOTHER.
- 3: DISTRICTS - DISTRICTS ARE SECTIONS OF THE CITY THAT PEOPLE ENTER INTO AND HAVE SOME IDENTIFIABLE CHARACTERISTICS.
- 4: NODES - NODES ARE SPECIFIC SPOTS IN THE CITY THAT SERVE AS THE FOCAL POINT OR CORE.
- 5: LANDMARKS - LANDMARKS ARE OBJECTS WITHIN THE CITY THAT ARE EASILY RECOGNIZABLE AND CAN SERVE AS A POINT OF ORIENTATION.



Figure 1.13 PATHS

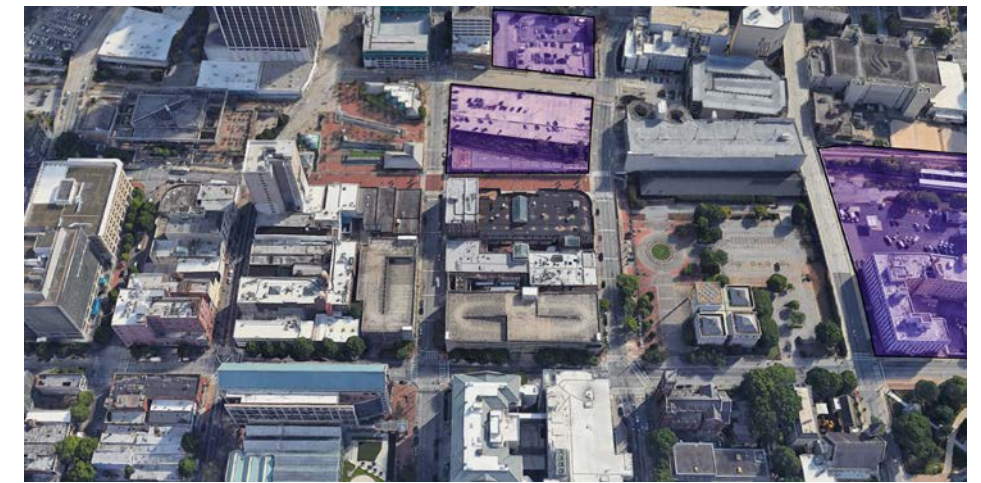


Figure 1.14 EDGES

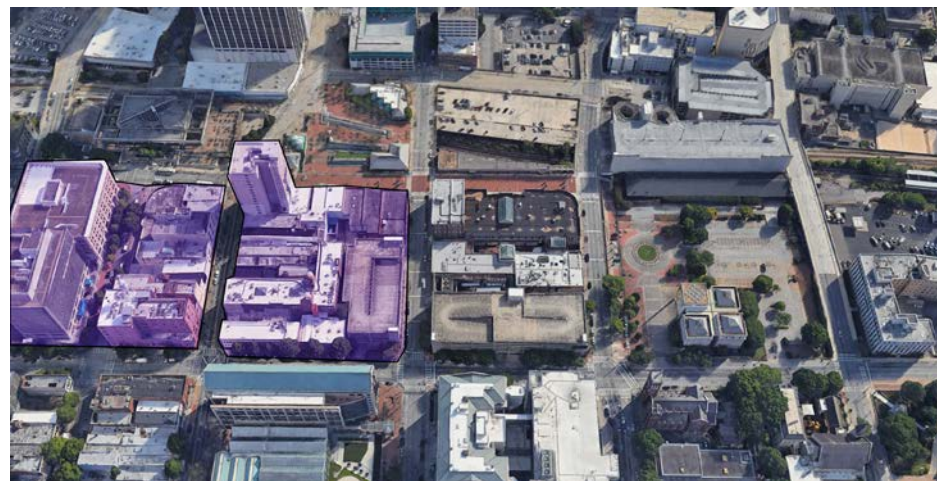


Figure 1.15 DISTRICTS

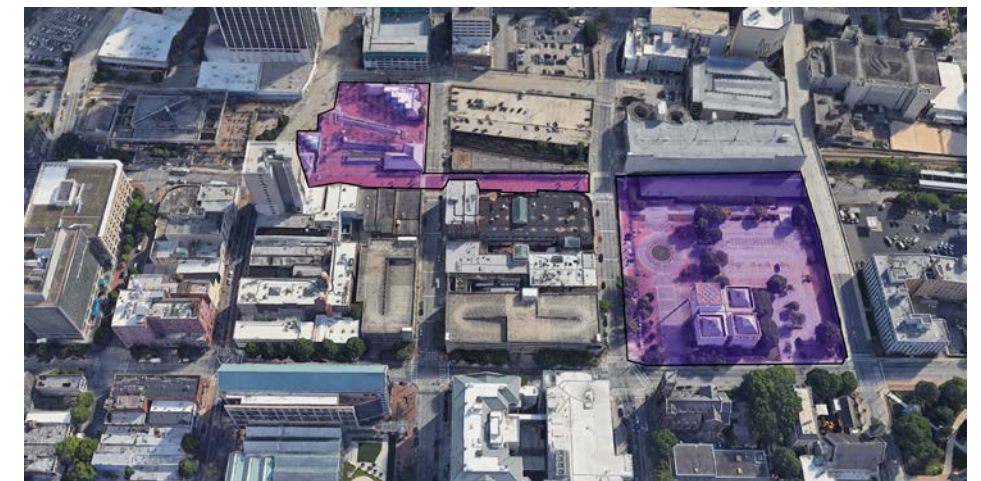


Figure 1.16 NODES

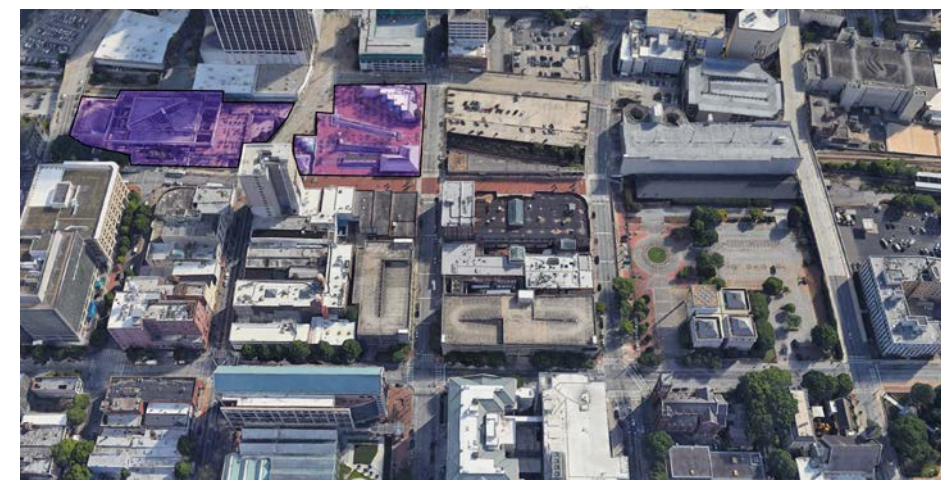
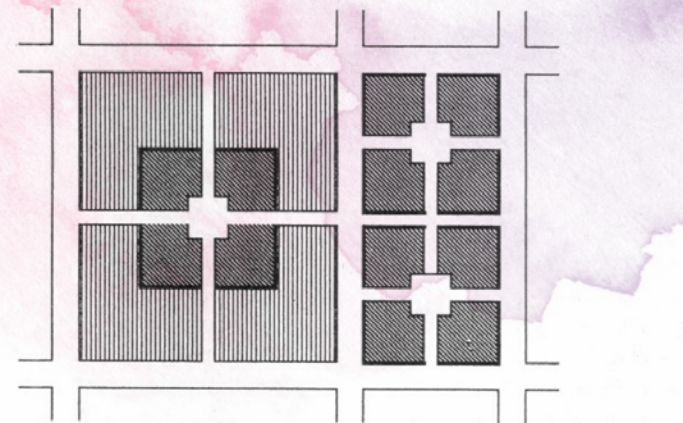


Figure 1.17 LANDMARKS

THE EFFECTS OF BLOCK SIZES AND FORM IN NORTH AMERICA AND AUSTRALIAN CITY CENTERS

ARNIS SIKSNA



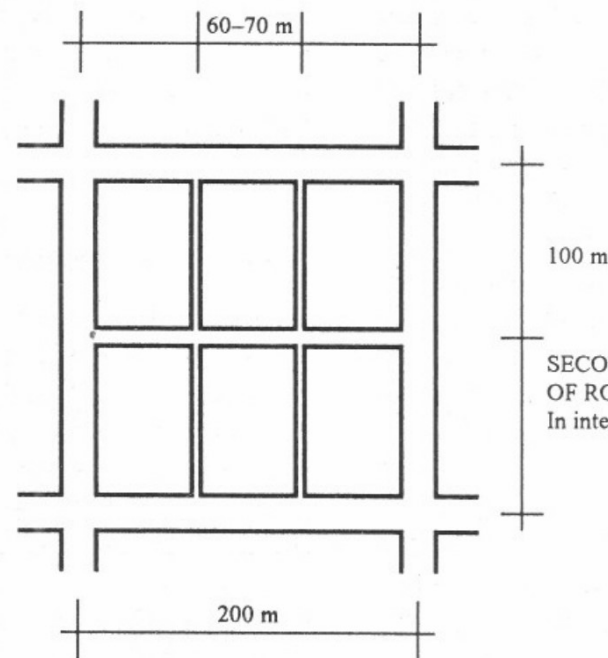
Large blocks—About 200 m square
Have sufficient depth to allow outward facing street frontage as well as inward frontage to internal malls

Small blocks—About 100 m square
May have sufficient depth only for inward frontage to internal malls, thus creating blank exterior walls.

DESIRABLE SIZE OF BLOCKS WITH INTERNAL MALLS
Based on Maitland (1986, 58)

Figure 1.19 Desirable Pedestrian Circulation

TERTIARY NETWORK OF ROUTES
In very intensive pedestrian areas and in historic city centres



PRIMARY NETWORK OF ROUTES & NODES
Maximum desirable distance between major pedestrian nodes

DESIRABLE PEDESTRIAN CIRCULATION MESH
Based on: Maitland (1984, 155), Panerai *et al.* (1980, 156), Tonuma (1981, 317-19)

Figure 1.18 Network of Routes and Nodes

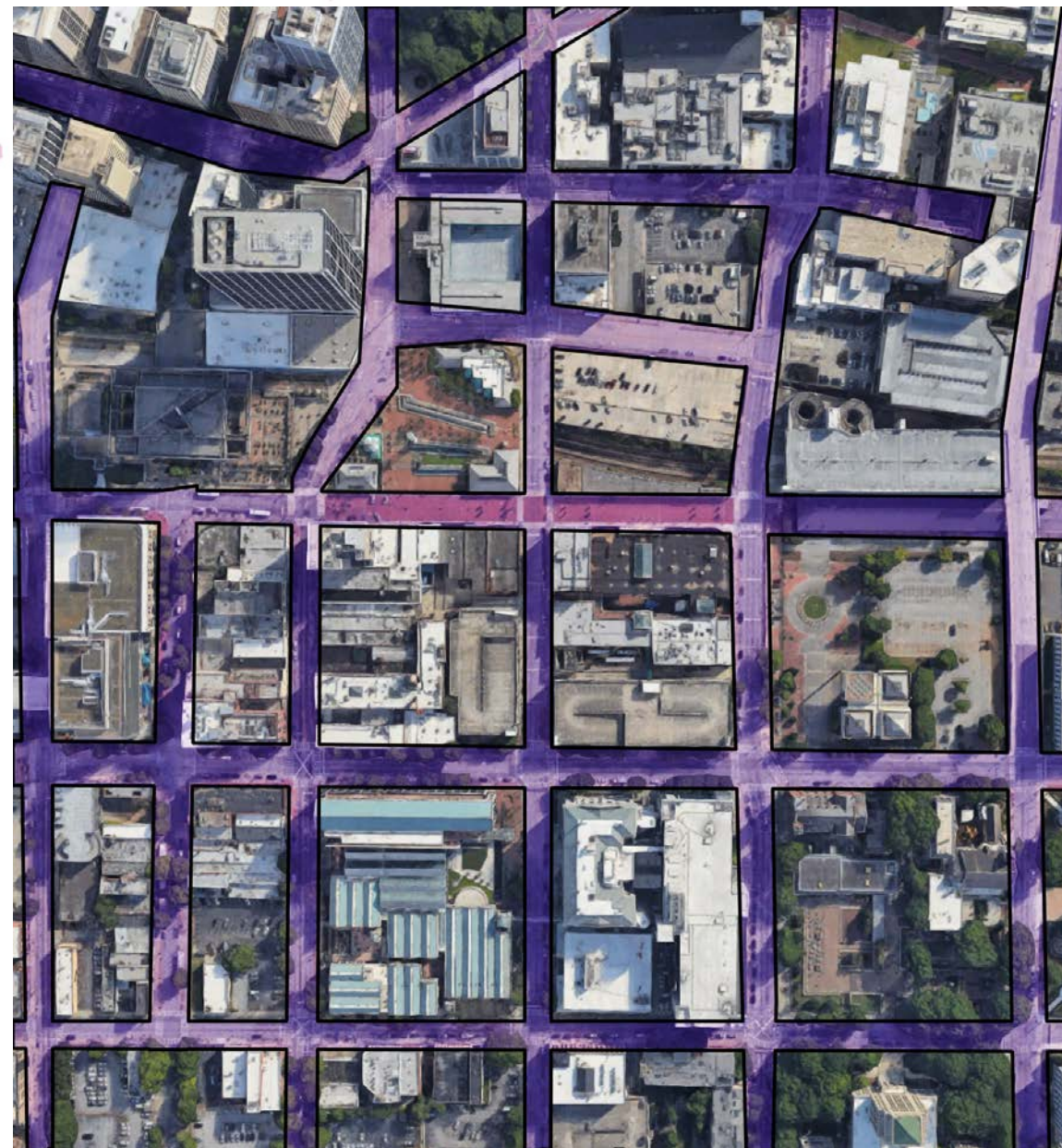


Figure 1.20 Underground Atlanta Block Network

ARNIS SIKSNA IS A RESEARCHER ON URBAN MORPHOLOGY AND SPECIFICALLY STUDIED AND ANALYZED THE EFFECT OF DIFFERENT BLOCK SIZES AND THEIR ORGANIZATIONAL PATTERNS ON CITY CENTERS. HIS RESEARCH FOCUSED ON LAND PARCELING, BUILDING FORMS, CIRCULATION PATTERNS, AND LAND USE.

HE DETERMINED THAT THE CITY BLOCK IS AN ESSENTIAL ELEMENT OF PHYSICAL STRUCTURE IN URBAN AREAS AND THAT TOWNS AND CITIES ARE LAID OUT IN SIMPLE PATTERNS IN MANY SETTLEMENTS. SIKSNA WAS ABLE TO DOCUMENT HOW, EVEN THOUGH CITIES HAVE ADAPTED TO DIFFERENT ENVIRONMENTAL REQUIREMENTS, HAVING CERTAIN BLOCK FORMS AND SIZES MAY PERFORM BETTER THAN OTHERS.

THROUGH HIS ANALYSIS, SIKSNA EXAMINES THREE CRITICAL ASPECTS OF THE BLOCK; THE PATTERN OF PLOTS GOVERNING THE NEIGHBORHOOD, THE ADAPTABILITY AND INTERACTION OF BUILDINGS, AND THE DIMENSIONS OF STREETS AND NODES. HE ALSO DISCOVERED THAT SMALLER BLOCKS WORK BETTER THAN LARGER BLOCKS BECAUSE THEY CAN PRODUCE BETTER CIRCULATION AND URBAN FABRICS.

SIKSNA'S RESEARCH IDENTIFIED FACTORS THAT ALLOWED LOT LAYOUTS, STREETS, AND BLOCKS TO BE MODIFIED EFFECTIVELY OVER TIME. LARGER BLOCKS ARE BEST UTILIZED WHEN BROKEN DOWN BY STREETS AND ALLEYS. SMALLER PLOTS RESULT IN A MORE PREDICTABLE BUILT FORM THAT IS FINE-TUNED TO ITS SURROUNDINGS. THESE FINDINGS RESULT IN MORE ADAPTABLE BLOCKS THAT PERFORM BETTER FOR PAST AND PRESENT DEVELOPMENTS.

1.3

DESIGN STRATEGIES



Figure 1.21 Underground Atlanta Steet Plaza

1. **ACTIVATE THE SITE BY BRINGING RETAIL AND INTERACTIVE EXPERIENCES UP TO THE STREET LEVEL TO ENGAGE PEDESTRIANS AND BRING THEM DOWN TO UNDERGROUND ATLANTA.**
2. **PROVIDE PLENTY OF SEATING ON AND AROUND THE UNDERGROUND ATLANTA TO CREATE AN ACTIVE PLAZA ENVIRONMENT TO ENTICE PEDESTRIANS FROM THE STREET.**
3. **CONNECT THE EXISTING BLOCKS OF UNDERGROUND ATLANTA BY CREATING A SEAMLESS ENTRANCE WITH EASY ACCESS TO THE SURROUNDING CONTEXT.**

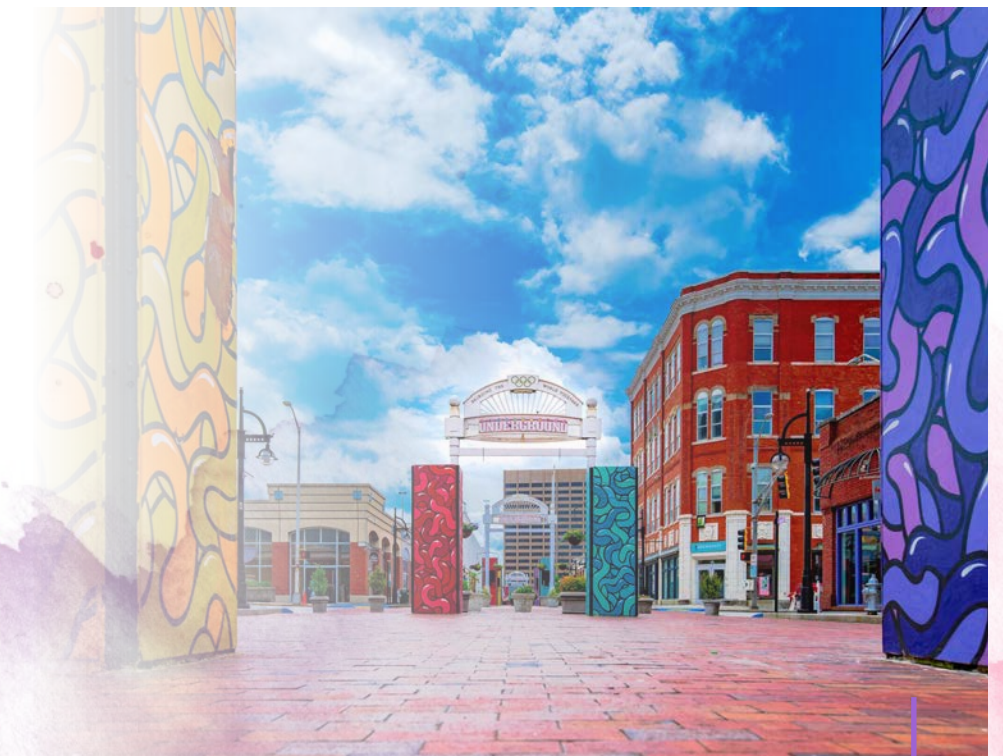


Figure 1.22 New Alabama Street

02 | DESIGN ANALYSIS

IDEAS FOR CHANGE IN THE PROCESS



PRECEDENT CASE STUDY: PARC CENTRAL

ARCHITECTS: BENOY LOCATIONS: GUANGZHOU, CHINA YEAR: 2016

2.1

PRECEDENT STUDIES



Figure 2.0 Parc Central



Figure 2.1 Parc Central Aerial View

PARC CENTRAL IS A MIXED-USE DEVELOPMENT COMPRISED OF GREEN SPACE, OFFICES, AND RETAIL SHOPS. PARC CENTRAL CREATED A NEW TYPOLOGY CALLED 'STADIUM FOR RETAIL'. THIS TYPOLOGY SEAMLESSLY CONNECTS THE LOW-RISE BUILDINGS ABOVE AND BELOW-GROUND RETAIL. THE STRUCTURE RETAIL, TRANSIT-ORIENTED, AND PUBLIC REALM DESIGN STRATEGIES TO SOCIALLY, ECONOMICALLY, AND SPATIALLY CONNECTED TO THE CITY.

THE IDEA FOR PARC CENTRAL IS TO CREATE A CENTRAL NODE FOR THE DESIGN AND A NEW CENTRAL PARK. THE RETAIL DEVELOPMENT IS 110,000M² TOTAL, AND MUCH OF THE DEVELOPMENT IS UNDERGROUND TO PRESERVE THE GROUND-LEVEL ENVIRONMENT.

VIBRANT GREEN SPACES CREATE AN INTERACTIVE AND EXCITING ENVIRONMENT THAT INTEGRATES WITH THE DEVELOPMENT AND SURROUNDING STREETScape. THE DESIGN OFFERS A RELAXING AND UNIFIED ENVIRONMENT THAT LOCAL CITIZENS CAN ENJOY.

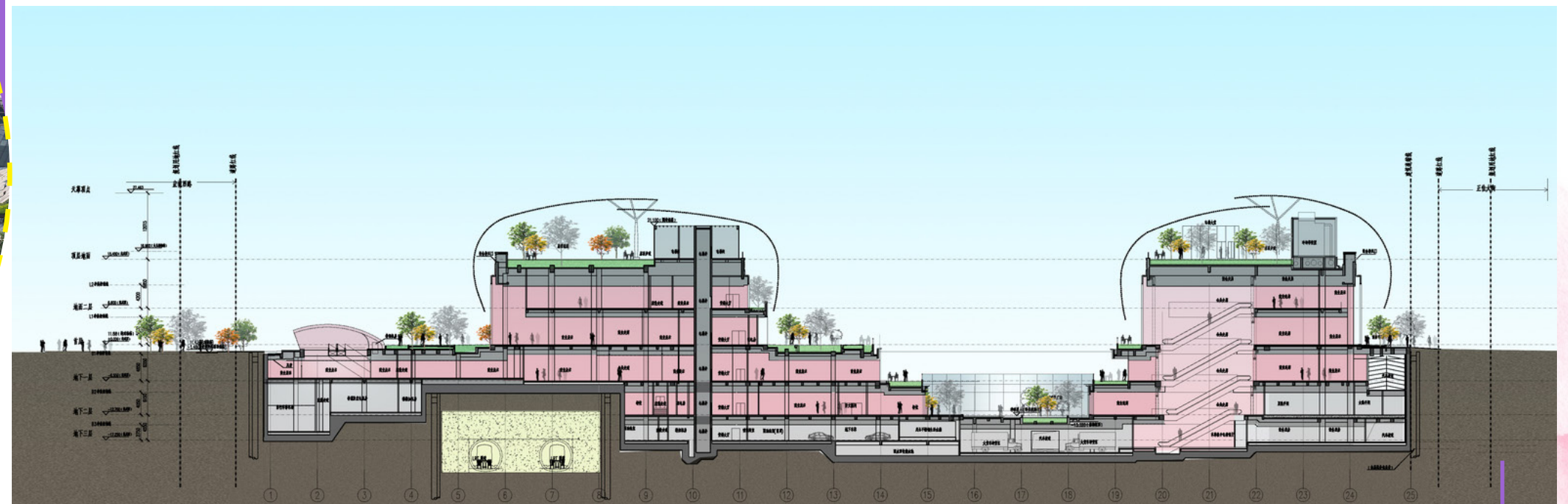


Figure 2.2 Parc Central Section

STANDING AT 24M HIGH, PARC CENTRAL IS A LOW-RISE BUILDING WITH TWO LEVELS ABOVE THE GROUND AND THREE LEVELS UNDERGROUND. THE DESIGN ENGAGES WITH THE STREET AND PEDESTRIANS VERSUS THE SURROUNDING BUILDINGS OVER THE SITE LOCATION.

BENOY'S INTERIOR DESIGN TEAM INTRODUCED GEOMETRY TO THE BUILDING WITH A FLUID CEILING FORM AND CONTINUOUS JOINERY ALONG THE EDGES. LARGE ATRIUMS ENHANCE THE RETAIL JOURNEY AND PULL LIGHT INTO THE OPEN CORRIDORS, ILLUMINATING THE INTERIOR SPACES AND LIMITING THE NEED FOR ARTIFICIAL LIGHT IN THE CENTRAL CIRCULATION SPACES DURING THE DAY.

CONNECTED ABOVE AND BELOW GROUND, PARC CENTRAL IS ACCESSIBLE INSIDE AND OUTSIDE THE STRUCTURE THROUGH CHINA'S METRO SYSTEM, LINKED BY OVERHEAD BRIDGES TO THE DISTRICT'S NEIGHBORING DEVELOPMENTS AND BUILDINGS. THE DESIGN ALLOWS THE DEVELOPMENT TO FUNCTION AS AN EPICENTER FOR GATHERING SPACE WITH ACCESSIBILITY ABOVE AND BELOW GROUND LEVEL.



Figure 2.3 Parc Central Level 1 Plan



Figure 2.4 Parc Central Internal View

PRECEDENT CASE STUDY: ROCKEFELLAR PLAZA

ARCHITECTS: ASSOCIATED ARCHITECTS LOCATIONS: 30 ROCKEFELLER PLAZA YEAR: 1931-1933



Figure 2.5 One of the Rockefeller Towers

IN THE 1930s, JOHN D. ROCKEFELLER DEVELOPED THE ROCKEFELLER CENTER, A GROUP OF TALL MULTI-STORY BUILDINGS AND THEATERS IN NEW YORK CITY. IT REPRESENTS HOW SKYSCRAPERS CAN BE INTEGRATED INTO THE CITY BELOW WITHOUT PERTURBING THE EVERYDAY LIVES OF THE PEOPLE OF NEW YORK. ROCKEFELLER CENTER WAS SUPPOSED TO BE A MIXED-USE COMPLEX HOUSING VARIOUS RETAIL ESTABLISHMENTS.

THE PROFILE OF THE BUILDING SHIFTS ACCORDING TO THE PERSPECTIVE AND LOCATION OF THE VIEWER. THE MAIN ENTRANCE IS ON THE EAST SIDE OF THE BUILDING VIA THE LONG AND NARROW CHANNEL GARDENS, ALLOWING FOR UNOBSTRUCTED VIEWS.

THE BUILDING WAS AS CLEAN AND ELEGANT. ROOF GARDENS OCCUPIED THE ROOFTOP, ADDING A TOUCH OF LUXURY TO THE OFFICES. ROCKEFELLER CENTER INTEGRATES THE VERTICAL CITY AND THE HORIZONTAL ONE. THE TENANTS GENERATE LAYERED CIRCULATION PATHS. SMALL PRIVATE STREETS CUT INTO THE LARGER GRID BLOCKS TO DICTATE CIRCULATION AROUND THE PLAZA THAT HAS BECOME A FOCAL POINT FOR SOCIAL ACTIVITY.



Figure 2.6 Rockefeller Plaza

When it was built, Midtown had yet to develop into the commercial real estate juggernaut it has become. Most of the properties on the site were occupied by low-rise rooming houses and brownstones.

A crucial point in the planning was to keep people moving; the Center's underground concourse links every building in the complex to a subterranean shopping center and, ultimately, the subway. Rockefeller Center's planners envisioned a "city within a city." The shops in the concourse meant that office workers could get what they needed without venturing far.

The Center's transportation committee worked with the city so that its new Sixth Avenue subway line could serve the vast numbers of workers commuting to the complex. The plaza has a famous sunken garden home to a café in the summer and an ice skating rink in the winter. In winter, the plaza's immense Christmas tree is illuminated in an elaborate ceremony broadcast live across the country.



Figure 2.8 Rockefeller Plaza Aerial View

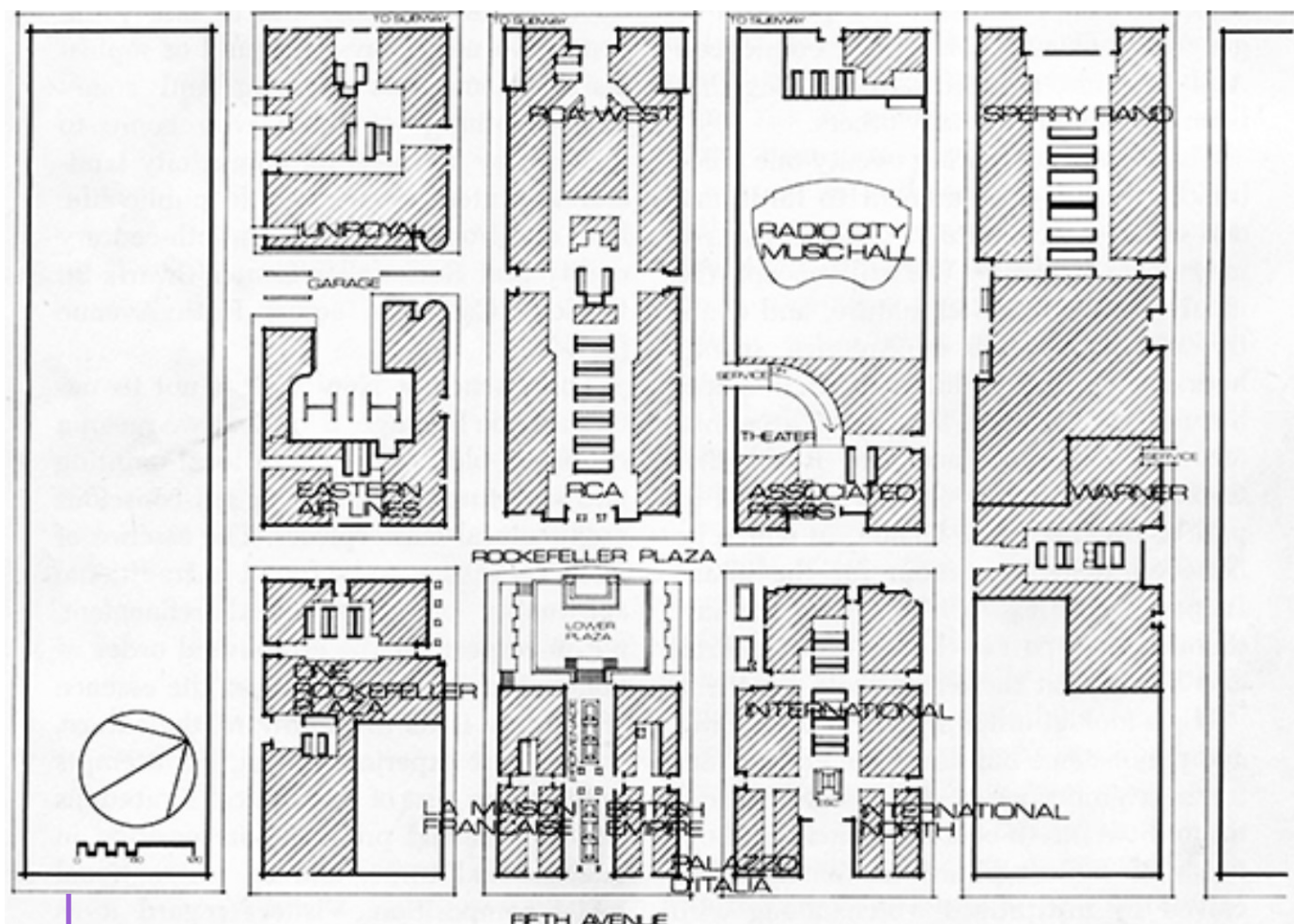


Figure 2.7 Original Rockefeller Masterplan Layout



Figure 2.9 Rockefeller Plaza Street View

PRECEDENT CASE STUDY: NEW YORK LOWLINE

ARCHITECTS: RAAD STUDIOS

LOCATIONS: 140 ESSEX ST, NEW YORK, NY 10002

YEAR: 2011-PRESENT

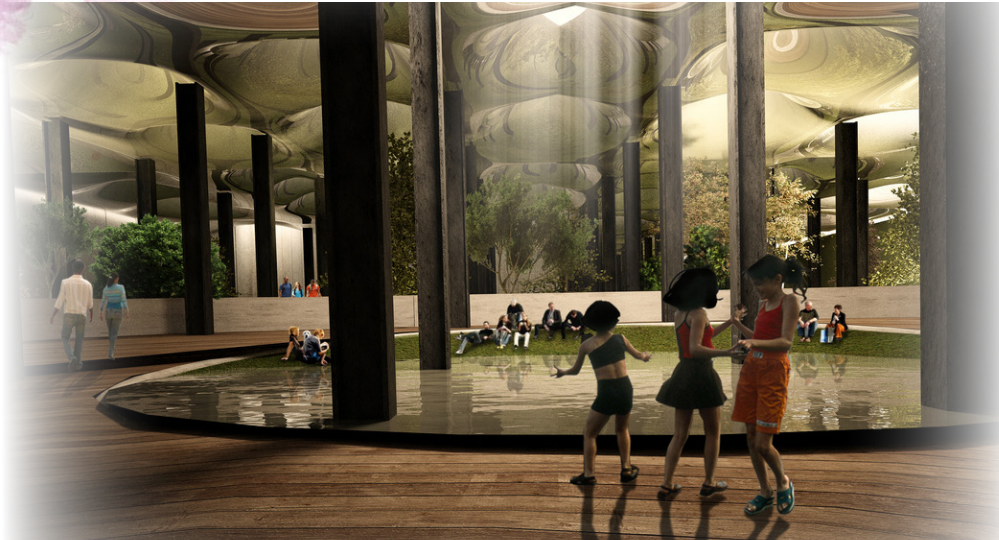


Figure 2.11 Lowline Conceptual Rendering - Water Feature



Figure 2.12 Lowline Underground Vegetation



Figure 2.10 Lowline Conceptual Rendering

THE FORMER WILLIAMSBURG BRIDGE TROLLEY TERMINAL, A ONE-ACRE SITE BELOW DELANCEY STREET IN THE LOWER EAST SIDE OF MANHATTAN, IS BEING PROPOSED AS A LOCATION FOR A PARK. THE SITE HAS BEEN UNUSED SINCE THE TROLLEY SERVICE WAS DISCONTINUED IN 1948 BUT STILL HAS EXCITING FEATURES SUCH AS COBBLESTONES, RAIL TRACKS, AND VAULTED CEILINGS. THE SITE IS NEXT TO THE JMZ SUBWAY TRACK AND PRESENTS A UNIQUE OPPORTUNITY TO RECLAIM UNUSED SPACE FOR THE PUBLIC GOOD IN ONE OF THE LEAST GREEN AREAS OF NEW YORK CITY.

THE LOWLINE PROJECT AIMS TO USE TECHNOLOGY TO CREATE MORE GREEN SPACE FOR CITY RESIDENTS BY REPURPOSING A FORMER TROLLEY TERMINAL. THE PROJECT PLANS TO USE SOLAR TECHNOLOGY AND DESIGN TO ALLOW PLANTS AND TREES TO GROW UNDERGROUND WHILE ALSO HIGHLIGHTING THE SITE'S HISTORICAL ELEMENTS. A PLANNING STUDY COMMISSIONED WITH ARUP AND HR&A ADVISORS CONCLUDED THAT THE LOWLINE WAS TECHNICALLY FEASIBLE AND WOULD IMPROVE THE LOCAL ECONOMY AND TRANSIT HUB. THE LOWLINE WOULD OFFER COMMUNITY PROGRAMMING AND YOUTH ACTIVITIES AND SERVE AS AN INNOVATIVE DISPLAY OF HOW TECHNOLOGY CAN TRANSFORM CITIES IN THE 21ST CENTURY. THE COMMUNITY WOULD BE INVOLVED IN THE DESIGN PROCESS TO BUILD A NEW PUBLIC SPACE IN THE LOWER EAST SIDE.

THE PROPOSED SOLAR TECHNOLOGY FOR THE LOWLINE PROJECT INVOLVES USING A «REMOTE SKYLIGHT» TO COLLECT SUNLIGHT AND DIRECT IT UNDERGROUND TO SUPPORT PHOTOSYNTHESIS AND ENABLE PLANTS AND TREES TO GROW. THE TECHNOLOGY WORKS BY CAPTURING SUNLIGHT USING A PARABOLIC COLLECTOR PLACED ON A ROOFTOP, WHICH REFLECTS AND CONCENTRATES THE SUNLIGHT ONTO A GLASS SHIELD. THE CONCENTRATED LIGHT IS THEN DIRECTED THROUGH A TUBE TO A REFLECTIVE DISH PLACED UNDERGROUND, WHICH DISPERSES THE SUNLIGHT THROUGHOUT THE SPACE.

THE REFLECTIVE SURFACE ON THE DISTRIBUTOR DISH UNDERGROUND TRANSMITS THE NECESSARY WAVELENGTHS OF LIGHT REQUIRED FOR PHOTOSYNTHESIS TO TAKE PLACE, ENABLING PLANTS AND TREES TO GROW. THE REMOTE SKYLIGHT TECHNOLOGY CAN TRANSMIT SUNLIGHT UP TO 20 FEET UNDERGROUND AND IS DESIGNED TO PROVIDE NATURAL LIGHT TO THE UNDERGROUND SPACE WITHOUT THE NEED FOR ELECTRICITY DURING PERIODS OF SUNLIGHT.

THE TECHNOLOGY HAS BEEN TESTED IN A FULL-SCALE PROTOTYPE AND HAS BEEN FOUND TO BE BOTH TECHNICALLY FEASIBLE AND ECONOMICALLY VIABLE. THE TECHNOLOGY WOULD NOT REQUIRE ELECTRICITY DURING PERIODS OF SUNLIGHT, THE FULL-SCALE PROTOTYPE WAS BUILT AS PROOF OF THIS CONCEPT. TO ENSURE THAT ENOUGH SUNLIGHT IS CAPTURED TO SUPPORT PLANT GROWTH, THE LOWLINE PROJECT PLANS TO USE EFFICIENT MIRRORS TO REFLECT SUNLIGHT FROM SURROUNDING ROOFTOPS TO THE UNDERGROUND SPACE THROUGH A NETWORK OF TUBES. THIS WILL PROVIDE A CONSTANT SOURCE OF NATURAL LIGHT TO SUPPORT A WIDE VARIETY OF PLANT SPECIES LIVING IN THE UNDERGROUND PARK.



Figure 2.13 Lowline Underground Flora

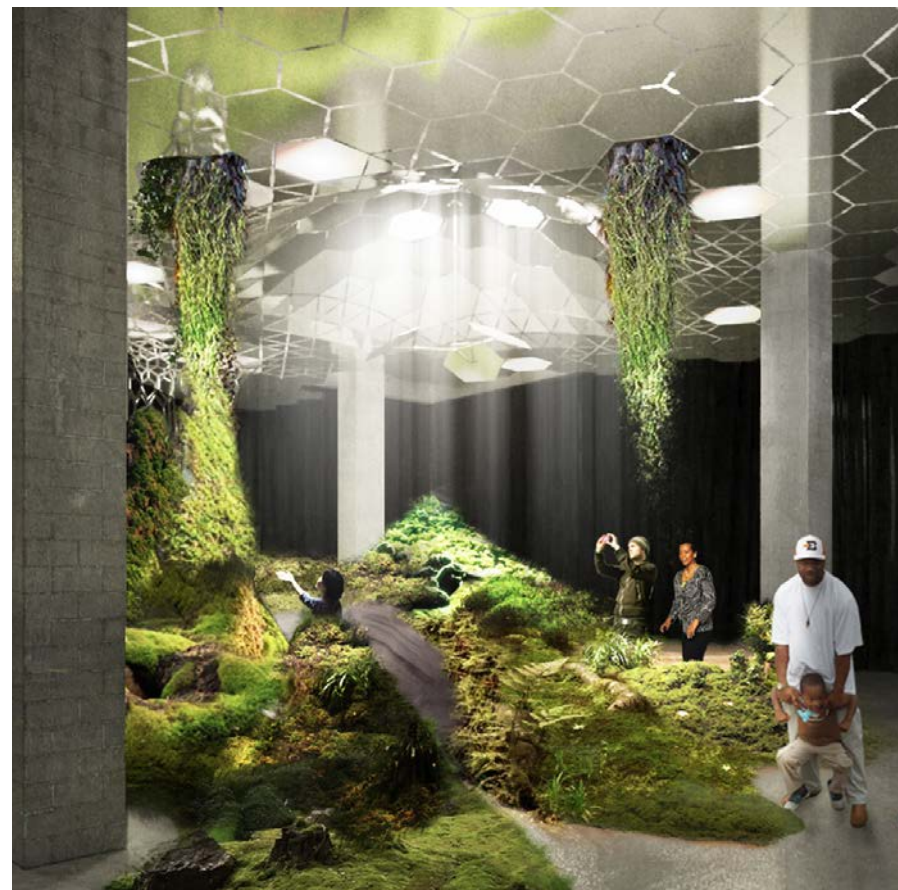


Figure 2.14 Lowline Conceptual Rendering - Family Interaction

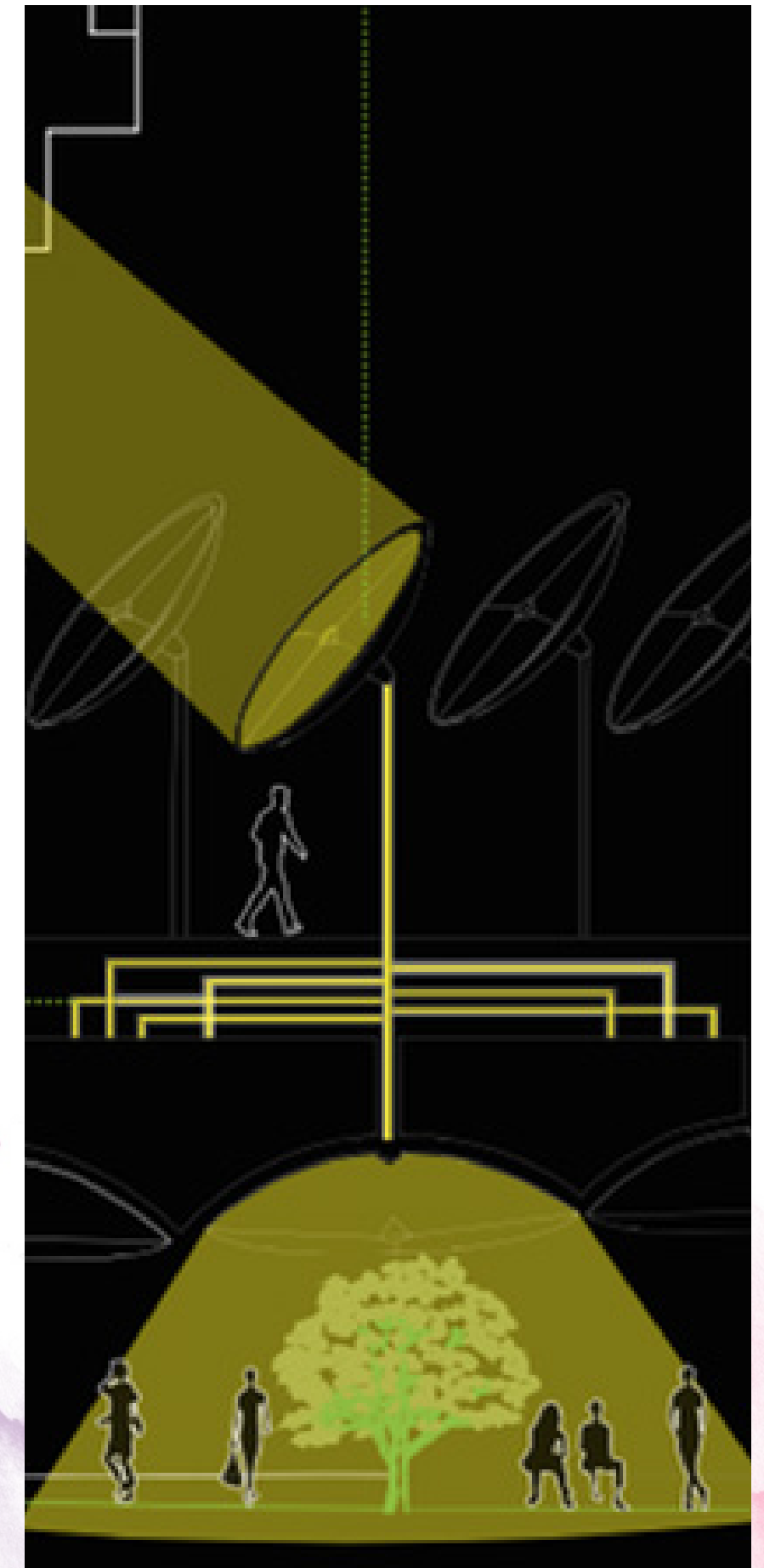


Figure 2.15 Lowline Remote Skylight Technology

2.2
SITE SELECTION, CONTEXT AND
CONDITIONS

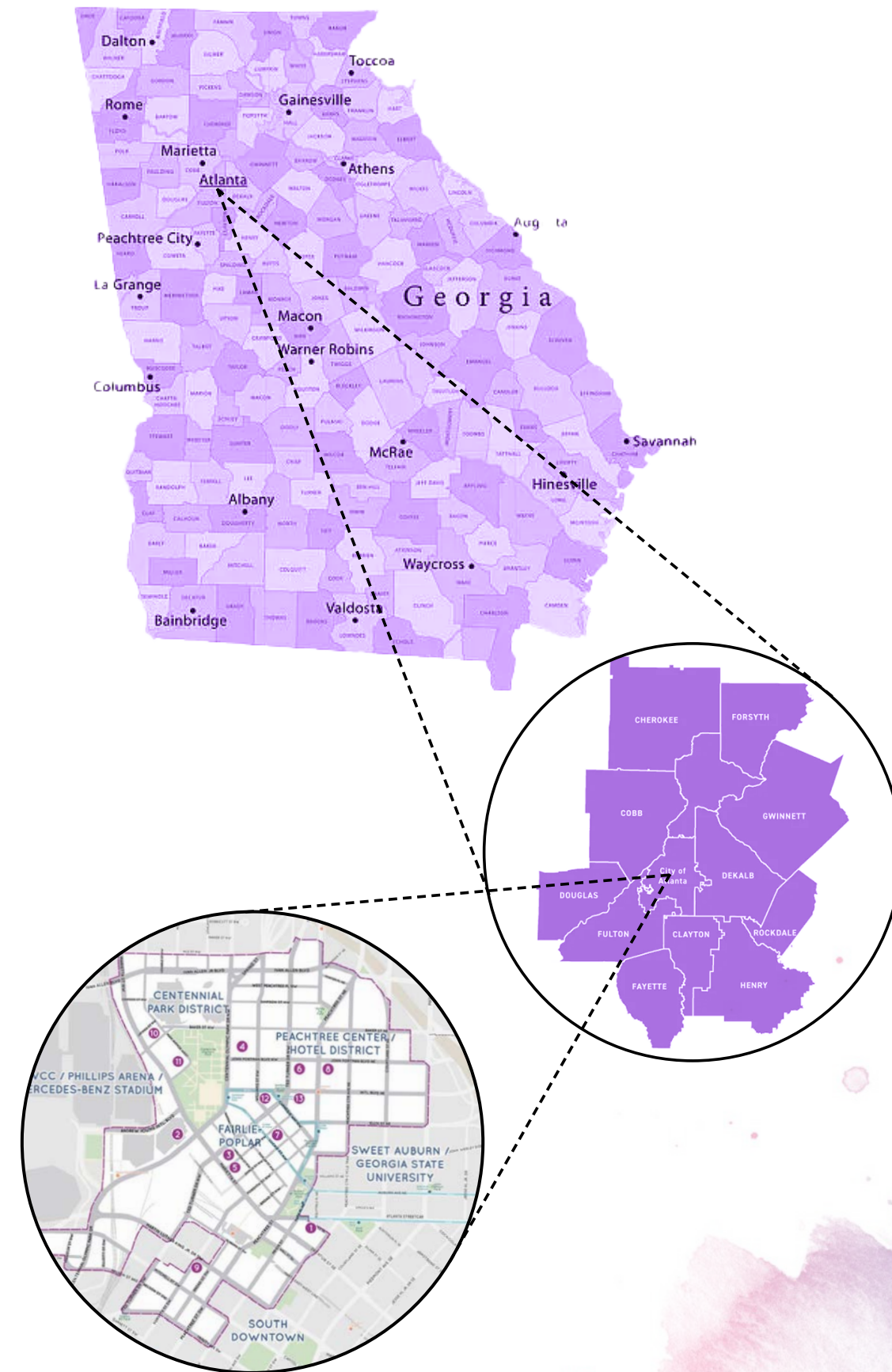


Figure 2.16 Site Location Macro to Micro

SITE SELECTION: UNDERGROUND ATLANTA
 ADDRESS: 50 UPPER ALABAMA ST, ATLANTA, GA 30303

THE PROPOSED PROJECT IS LOCATED AND UNDERGROUND ATLANTA LOCATED IN THE HEART OF DOWNTOWN ATLANTA DIRECTLY ADJACENT TO THE FIVE POINTS MARTA STATION.

THIS SITE IS DRASTICALLY UNDERUTILIZED AND IS CURRENTLY IGNORED BY PASSING PEDESTRIANS, SLOWLY CONTRIBUTING TO THE SITES FADING HISTORY. THESE CIRCUMSTANCES MAKE THE SITE SIGNIFICANT TO THIS THIS THESIS PROJECT.

THE CONTRAINTS AND BOUNDARIES FOR THIS SITE ARE THAT THERE ARE ABANDONED BUILDINGS, LITTLE REAIL EXPERIENCES, AND TRAIN TRACKS THAT CREATE A HARD EDGE CONDITION.

THE POTENTIALS AND OPPORTUNITIES FOR THIS SITE ARE THAT IT IS ADJACENT TO A MARTA STATION, THERE IS HIGH POTENTIAL FOR HISTORIC PRESERVATION, AND THAT THERE IS PLENTY OF SPACE TO DEVELOP A COMMERCIAL DEVELOPMENT STRIP.

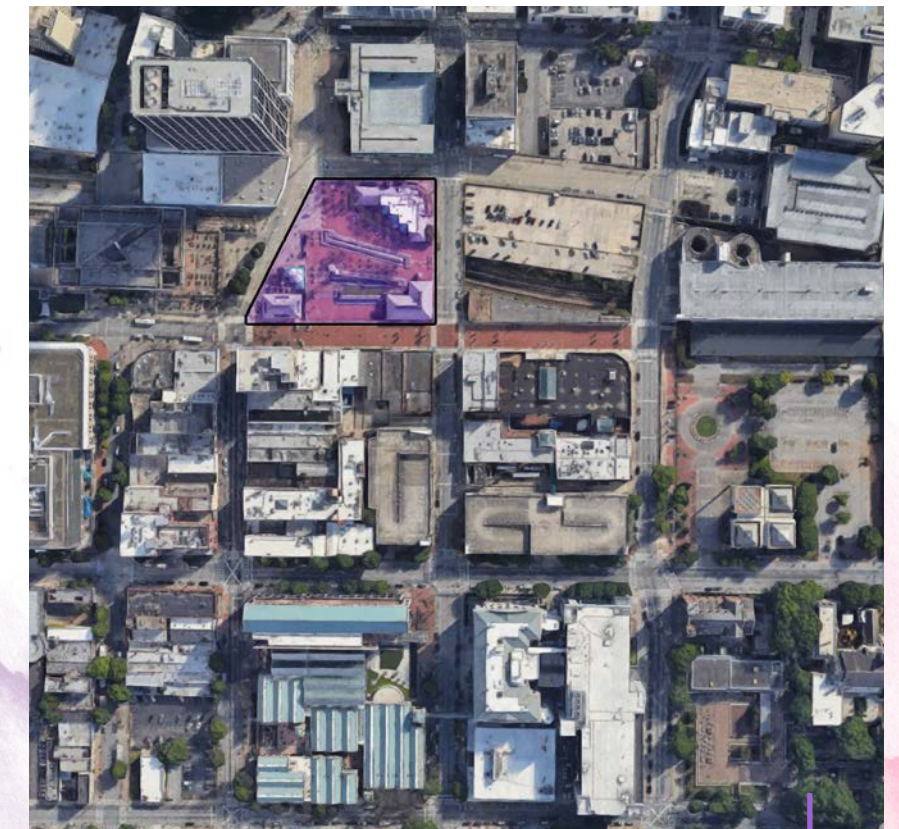


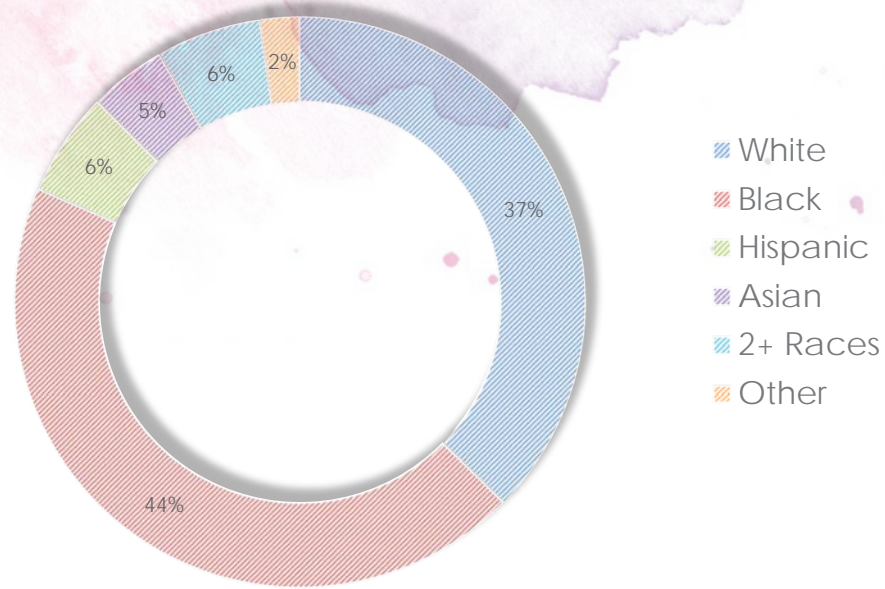
Figure 2.16a Site Location

NEIGHBORHOOD DATA



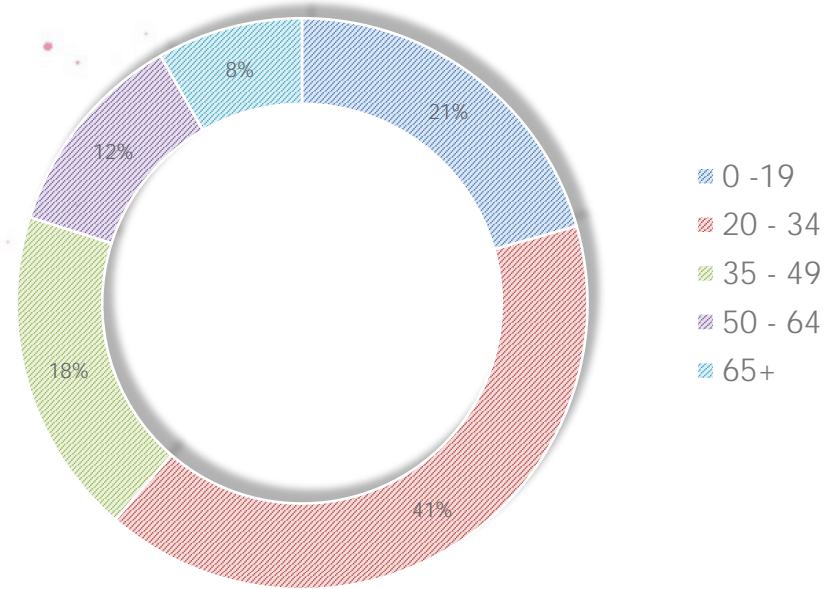
POPULATION DENSITY
10.3K PERSONS/SQ MILE

RACE/ETHNICITY



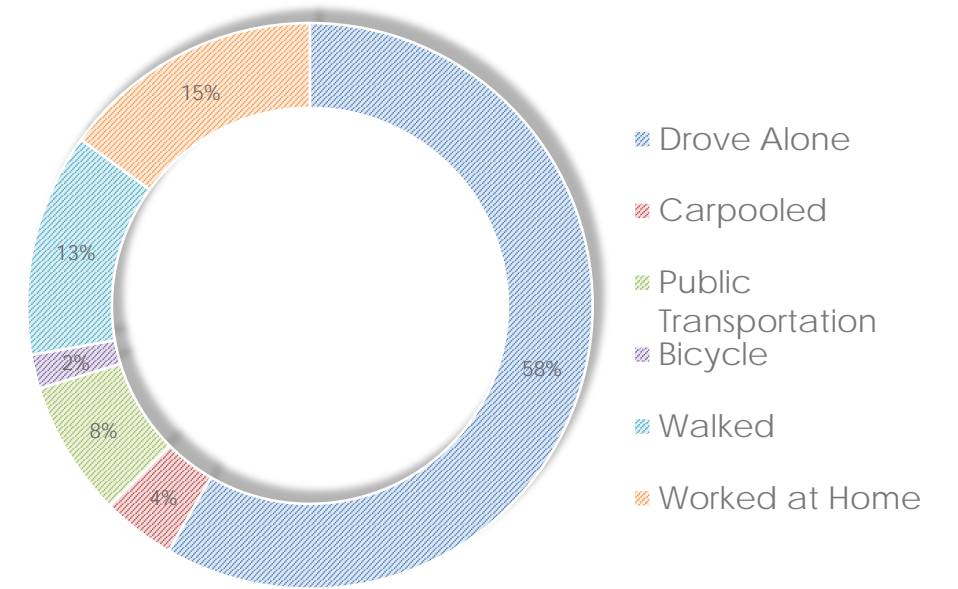
- White
- Black
- Hispanic
- Asian
- 2+ Races
- Other

POPULATION BY AGE



- 0 - 19
- 20 - 34
- 35 - 49
- 50 - 64
- 65+

TRANSPORTATION TO WORK, AGES 16+

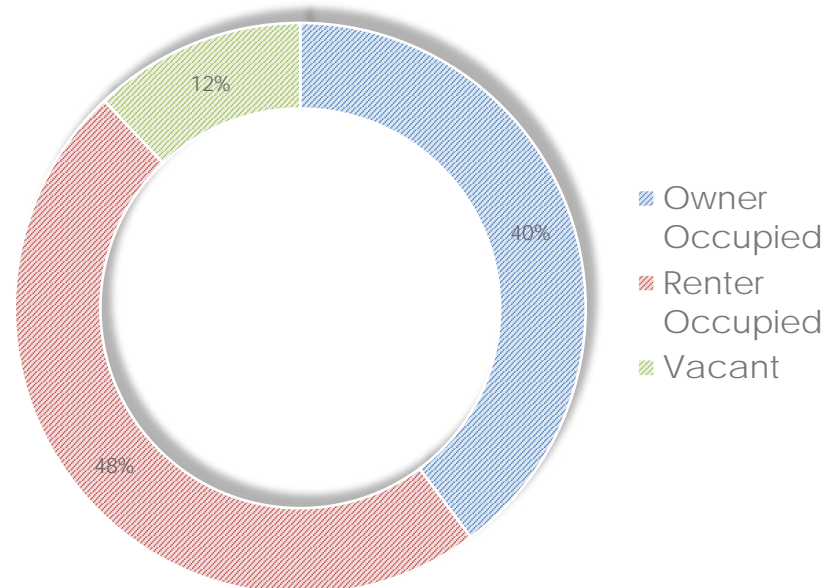


- Drove Alone
- Carpooled
- Public Transportation
- Bicycle
- Walked
- Worked at Home



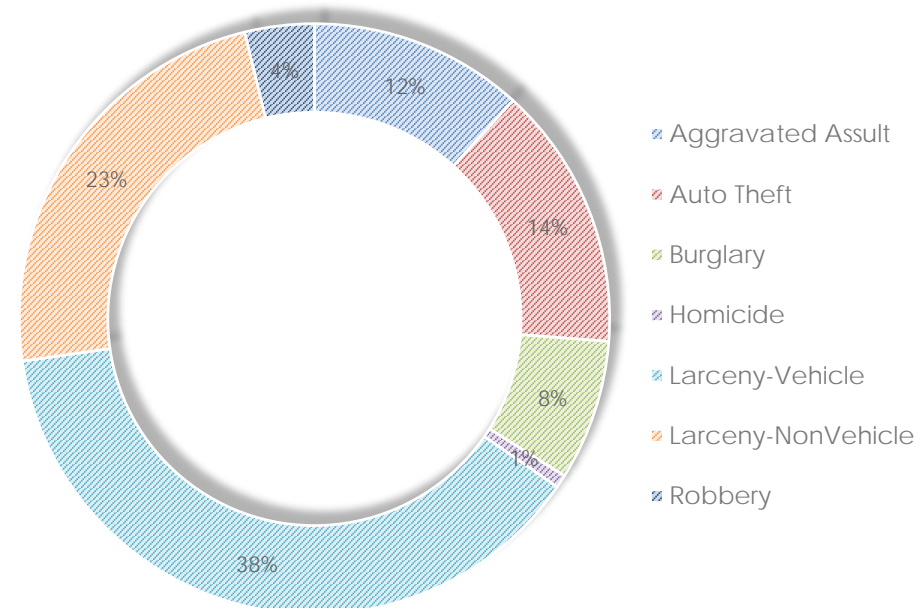
HOUSING AFFORDABILITY INDEX
89

HOUSING OCCUPANCY



- Owner Occupied
- Renter Occupied
- Vacant

CRIME



- Aggravated Assault
- Auto Theft
- Burglary
- Homicide
- Larceny-Vehicle
- Larceny-NonVehicle
- Robbery

EXISTING SITE CONDITIONS

THESE IMAGES WERE TAKEN OF AROUND UNDERGROUND ATLANTA DURING MY SITE VISIT TO THE LOCATION TO GAIN A BETTER UNDERSTANDING OF THE SITE, ITS EXISTING CONDITIONS, AND HOW MANY PEOPLE ACTIVELY VISITED THE AREA DURING THE DAY.

THESE PHOTOS DEMONSTRATE THAT UNDERGROUND ATLANTA IS MOSTLY VACANT DESPITE HAVING HISTORICAL CONTEXT, AND BEING LOCATED IN THE HEART OF DOWNTOWN. THERE IS A HIGH LEVEL OF BRICK WORK TO MARK THE PATH FOR PEDESTRIANS, AND MANY OF THE ORIGINAL BUILDINGS ON UPPER ALABAMA STREET STILL REMAIN WITH A FEW SHOPS OCCUPYING RETAIL SPACE.

THE TOP AND LOWER PLAZA OF UNDERGROUND ATLANTA HAVE NO SEATING OR INTERACTIVE ACTIVITIES TO ENGAGE PEDESTRIANS WITH THE SITE, RENDERING THE LOCATION VIRTUALLY ABANDONED RESULTING IN A MASSIVE VOID. THE ENTRANCE TO UNDERGROUND ATLANTA IS HIDDEN BY A THICK OPAQUE GLASS BARRIER THAT SIGNALS TO VISITORS TO STAY AWAY. EVEN IF THE GLASS WAS TRANSPARENT, THE LONG DESCENT DOWN TO THE ENTRY DOORS IS ENOUGH TO MAKE PEDESTRIANS UNINTERESTED.

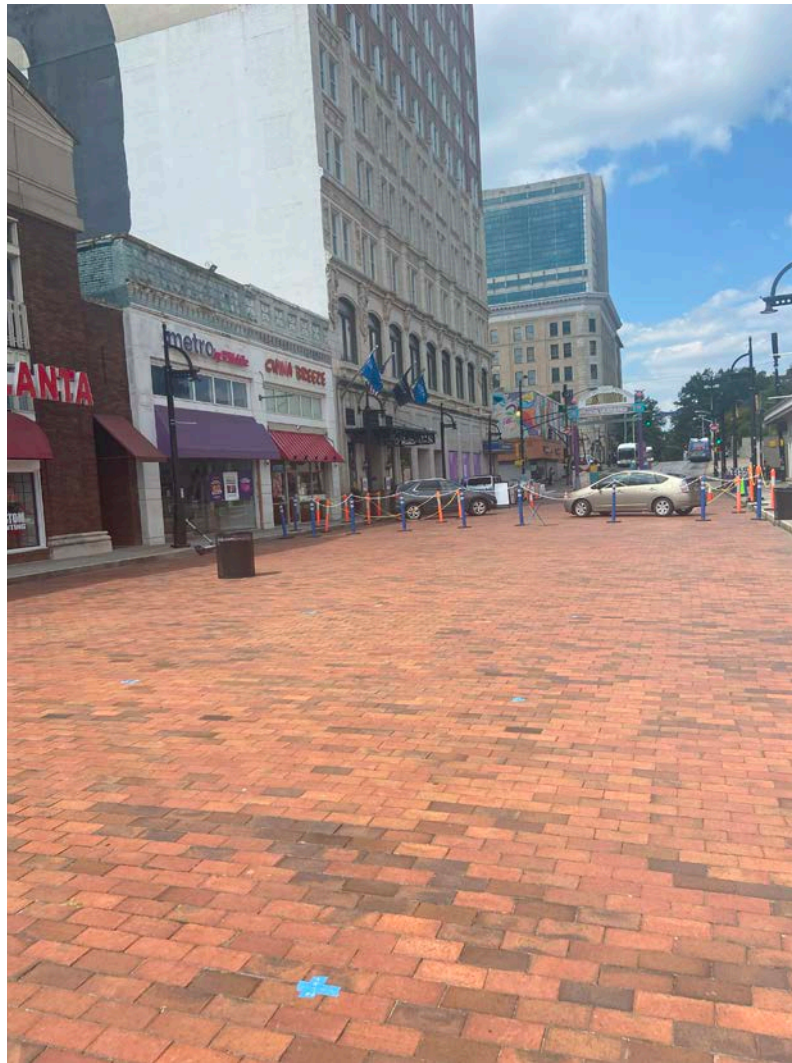


Figure 2.17 Upper Alabama Street

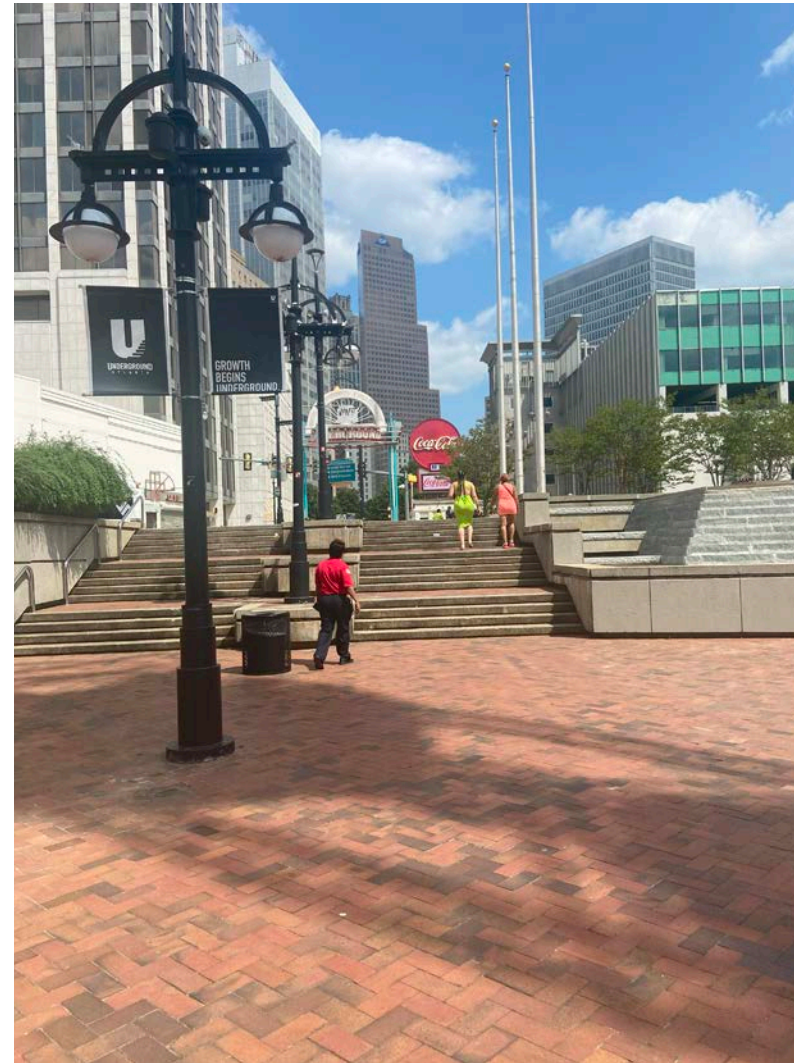


Figure 2.18 Top Plaza of Underground Atlanta



Figure 2.19 View from Underground Atlanta Top Plaza

THESE IMAGES WERE TAKEN OF INSIDE OF UNDERGROUND ATLANTA DURING MY SITE VISIT TO THE LOCATION TO GAIN A BETTER UNDERSTANDING SPACIAL LAYOUT, PRESERVED HISTORICAL CONTEXT, AND LIGHTING CONDITIONS,

SIMILAR TO THE SITE CONDITIONS AT STREET LEVEL, THE GROUND LEVEL CONDITIONS OF UNDERGROUND ATLANTA WERE NOT APPEALING. THE HISTORICAL KENNY'S ALLEY WAS DIFFICULT TO FIND AS THE ENTRANCE IS HIDDEN UNDERNEATH THE VIADUCT THAT ELEVATES TRAFFIC TO STREET LEVEL. THERE WERE NO VENDORS, AND MUCH OF THE STOREFRONTS HAD BEEN VANDILIZED.

THE MAIN CORRIDOR OF UNDERGROUND ATLANTA HELD A FEW RETAIL SHOPS, HOWEVER; NONE OF THE SHOPS APPEARED TO BE OPEN. THE NATURAL LIGHT WAS ACCAPTABLE BUT IT DID NOT EXTEND FURTHER THAN THE CORRIDOR. ARTIFICIAL LIGHTING WAS NEEDED AS MOST OF THE AREA IS DARK. MOST OF THE HISTORICAL CONTEXT WAS PRESERVED DUE TO LACK IN PEDESTRIAN ACTIVITY. THERE WERE NOT MANY SPACES TO EXPERIENCE AS MANY OF THE PREVIOUS PATHWAYS HAVE BEEN BLOCKED OFF DUE TO SAFETY CONCERNS.



Figure 2.20 Kenny's Alley

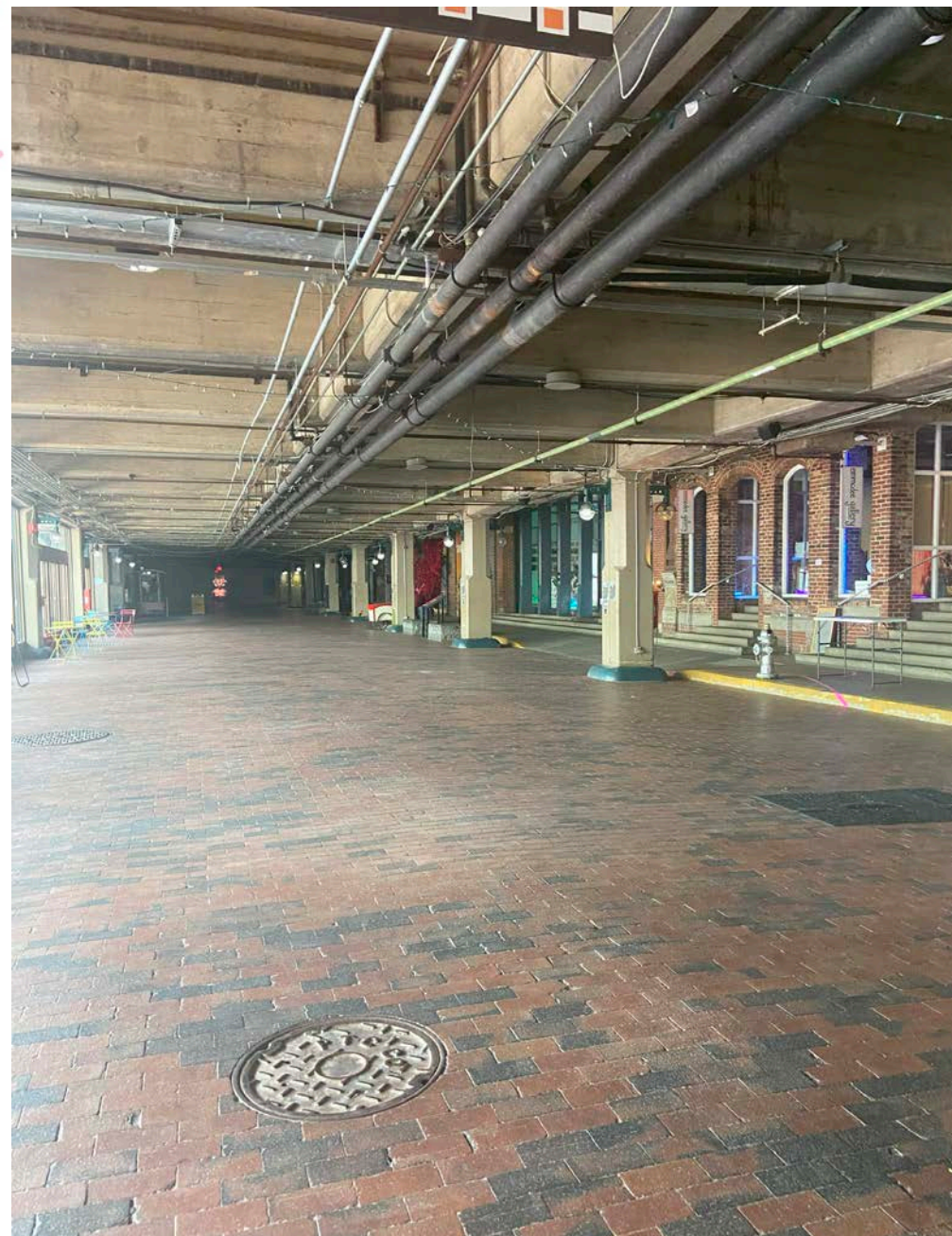


Figure 2.21 Underground Atlanta's Main Corridor

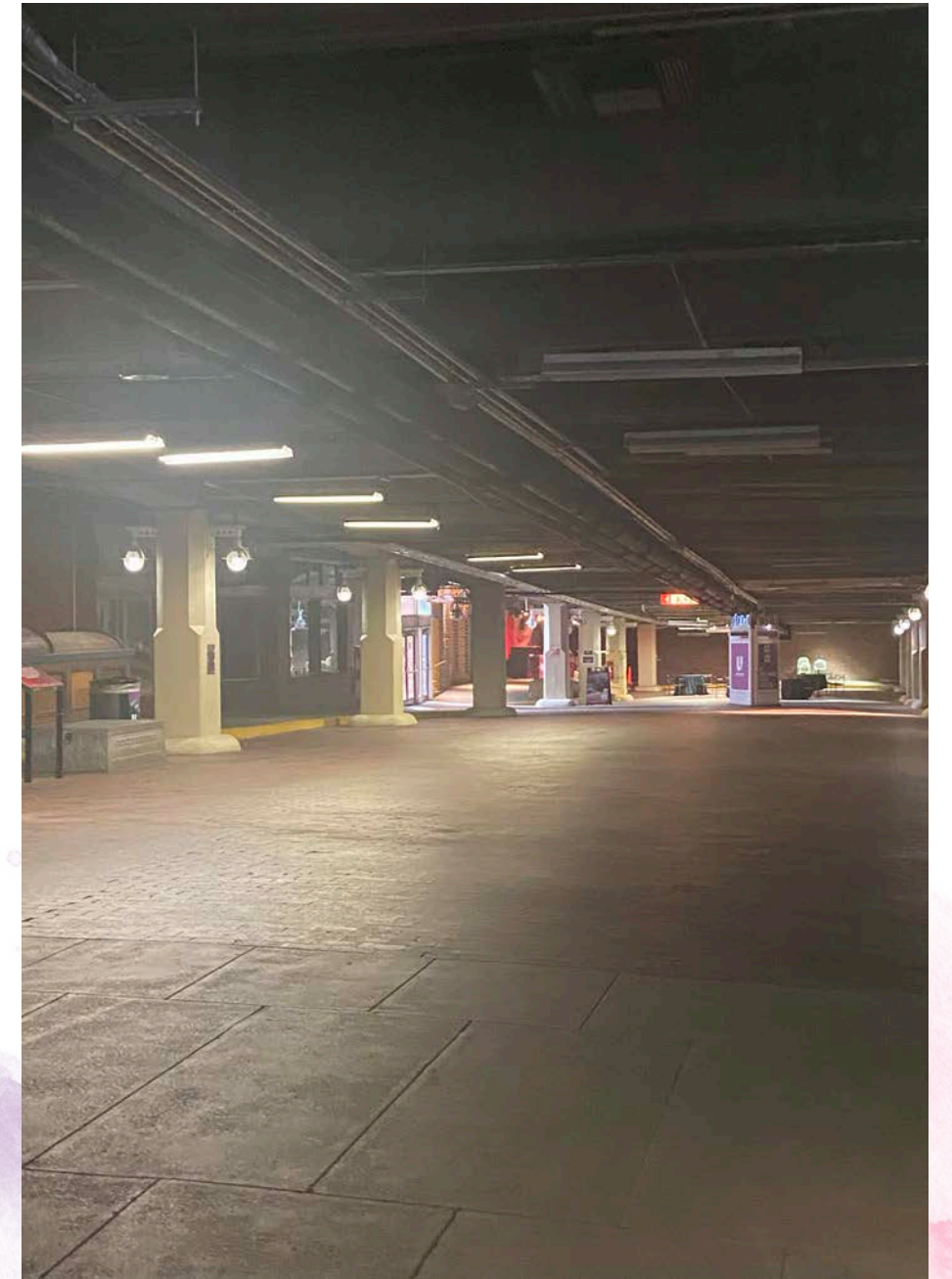


Figure 2.22 Underground Atlanta's Second Corridor

TOPOGRAPHY AND LAND USE

2.3 SITE ANALYSIS

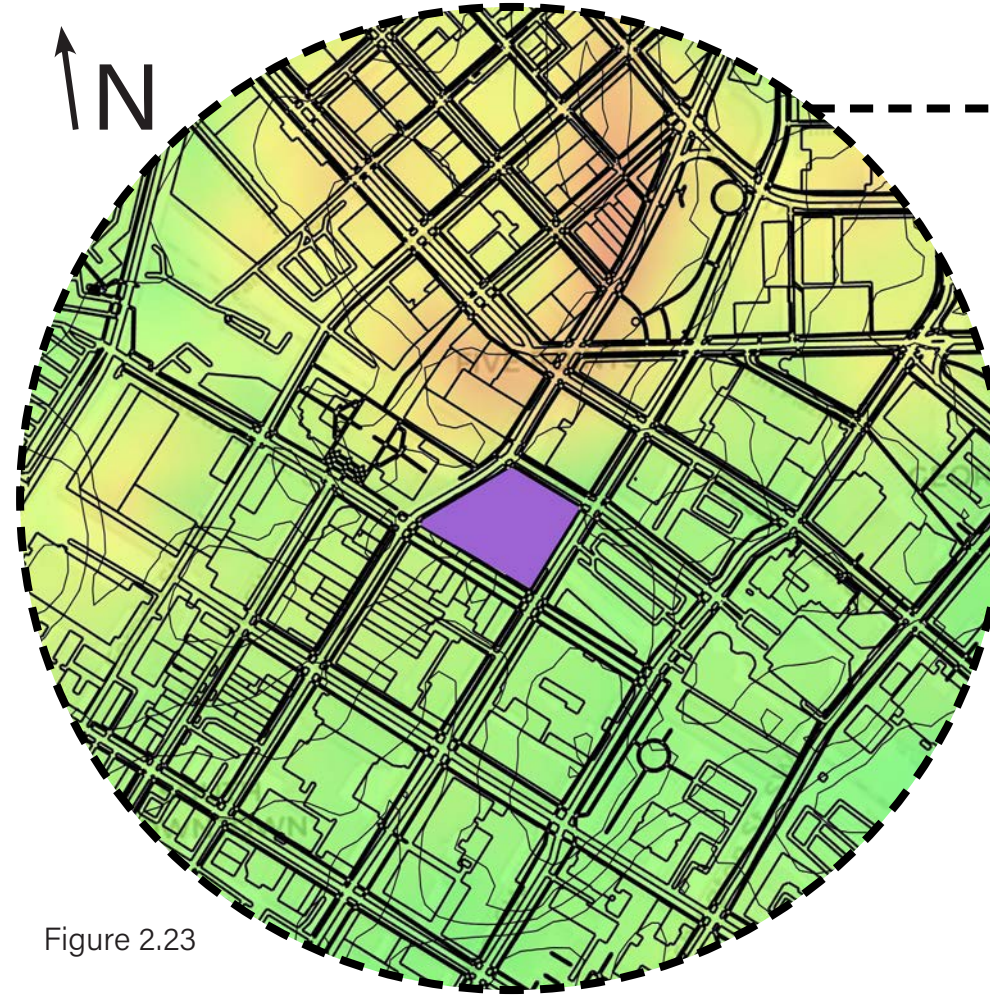


Figure 2.23

LEGEND

- | | | |
|----------------------|---------------|----------|
| NO STREET ACCESS | MARTA | ACADEMIC |
| VACANT RETAIL SPACES | HOUSING | |
| OFFICE | RELIGION | |
| RETAIL | PARKING DECKS | |

THE LAND USE DIAGRAM INDICATES AND IDENTIFIES THE FUNCTION OF BUILDING FACES IN RELATIONSHIP TO THE STREET AND PEDESTRIAN ACCESS. THIS WILL ULTIMATELY DETERMINE WHICH TYPE OF BUSINESS DOMINATES THE AREA AROUND THE SITE AND HOW PEDESTRIAN ACTIVITY AND CIRCULATION WILL RESPOND.

DOWNTOWN ATLANTA HAS RECURRING HILLS AND ELEVATED STREETS. THE TOPOGRAPHY DIAGRAM IS AN INDICATOR OF WHERE THE TOPOGRAPHY CHANGES DRASTICALLY IN RELATIVITY TO EXISTING SITE CONDITIONS AND BUILDING PLACEMENT.

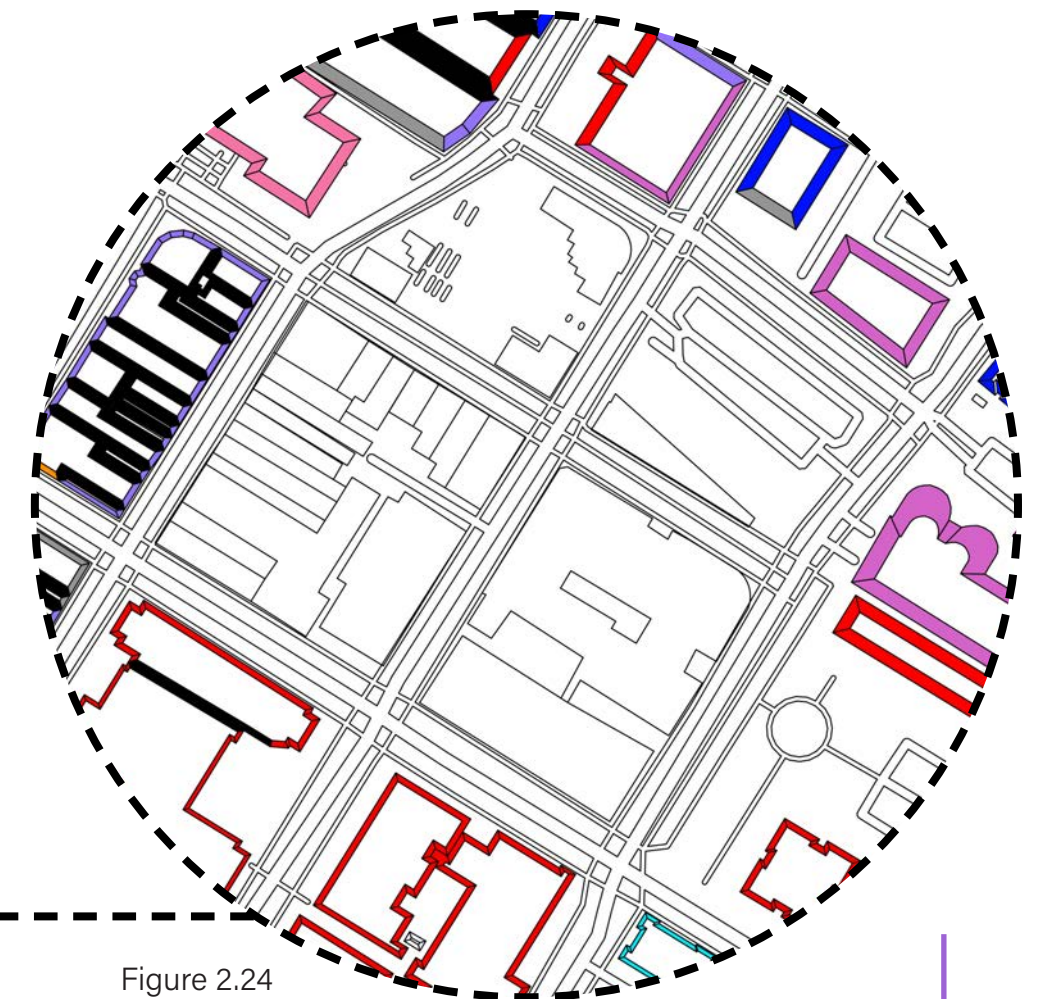


Figure 2.24

FIGURE GROUND

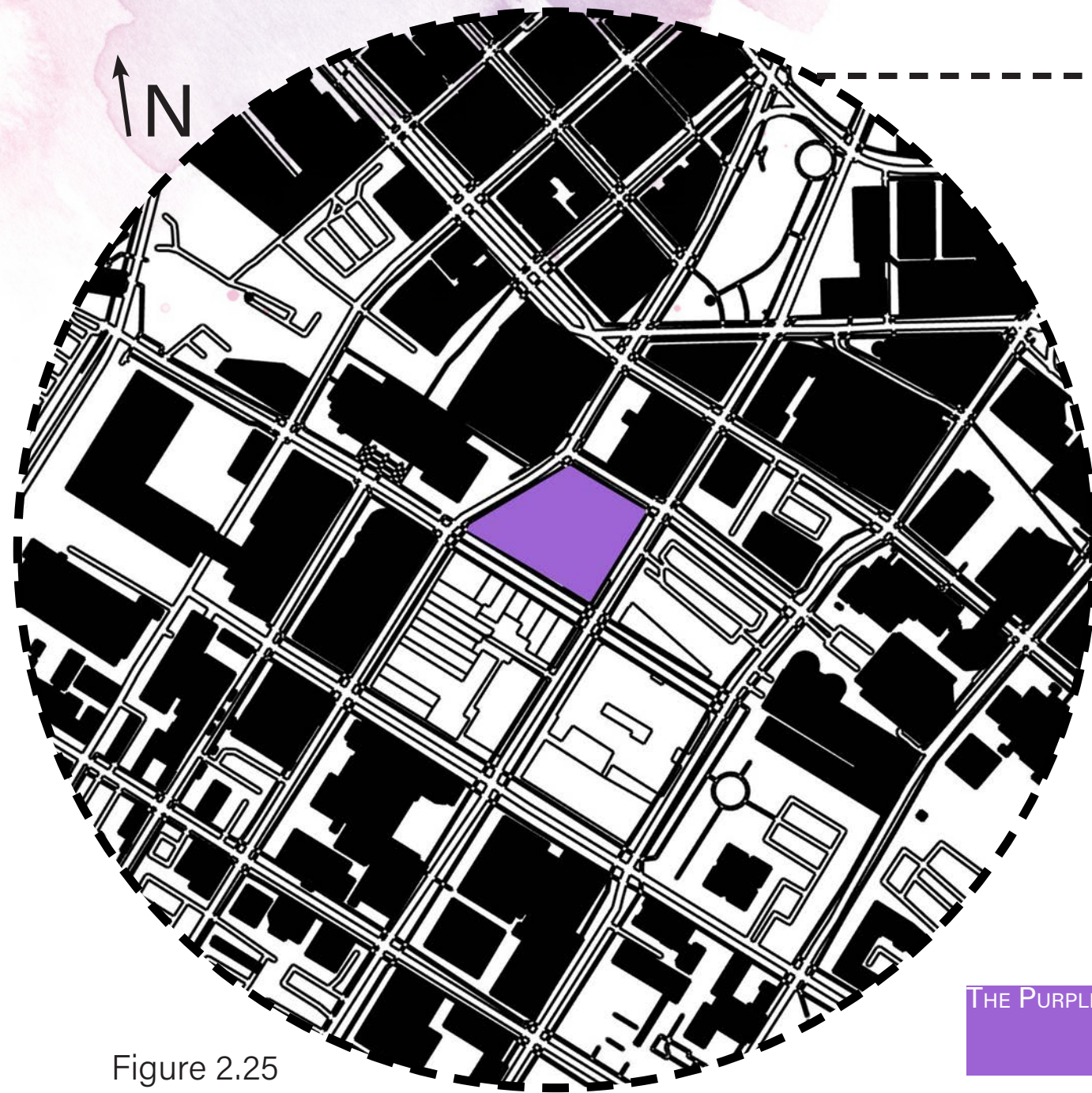


Figure 2.25

THE FIGURE GROUND DIAGRAM SHOWS HOW THE SOLID COMPONENTS OF EXISTING BUILDINGS RELATES TO THE SPACES CONTAINED BY THE BUILT FORM. THE SOLIDS REPRESENT THE POSITIVE SPACES THAT HAVE A PHYSICAL PRESENCE IN SPACE, WHILE THE NEGATIVE SPACE REPRESENTS THE AREAS THAT ARE NOT OCCUPIED BY A BUILT FORM.

THE PURPOSE OF THIS STUDY IS TO DEMONSTRATE HOW THE STREET GRID SYSTEM AND THE AVAILABILITY OF OPEN SPACE AROUND THE SITE RELATES TO THE PHYSICAL SPACE THAT IS OCCUPIED BY BUILT FORMS AND HOW THEY MAY FORM EDGE CONDITIONS WITHIN THE EXISTING URBAN FABRIC.

THE PURPLE AREA INDICATES THE SITE LOCATION THAT THIS THESIS WILL INVESTIGATE FOR THE PROPOSED PROJECT

PEDESTRIAN AND BICYCLE CIRCULATION



Figure 2.26

LEGEND

- HIGH PEDESTRIAN DENSITY
- LOW PEDESTRIAN DENSITY

IN CONJUNCTION WITH THE LAND USE STUDY, THE PEDESTRIAN CIRCULATION DIAGRAM DIRECTLY RESPONDS TO HOW BUSINESS ARE LAID OUT AROUND THE SITE. PEDESTRIANS FOCUS IS MAINLY LOCATED TOWARDS THE NORTHERN AND WESTERN PARTS OF THE SITE SINCE MANY RETAIL LOCATIONS ARE SITUATED THERE.

THE BICYCLE DIAGRAM SHOWS THE ACTIVE ROADS AND PATHS FOR SAFE BICYCLE TRAVEL AROUND THE SITE OF UNDERGROUND ATLANTA.

LEGEND

- DEDICATED BIKE LANES
- BIKE TRAILS
- BIKE FRIENDLY ROADS



Figure 2.27

ISOVIST VIEWS

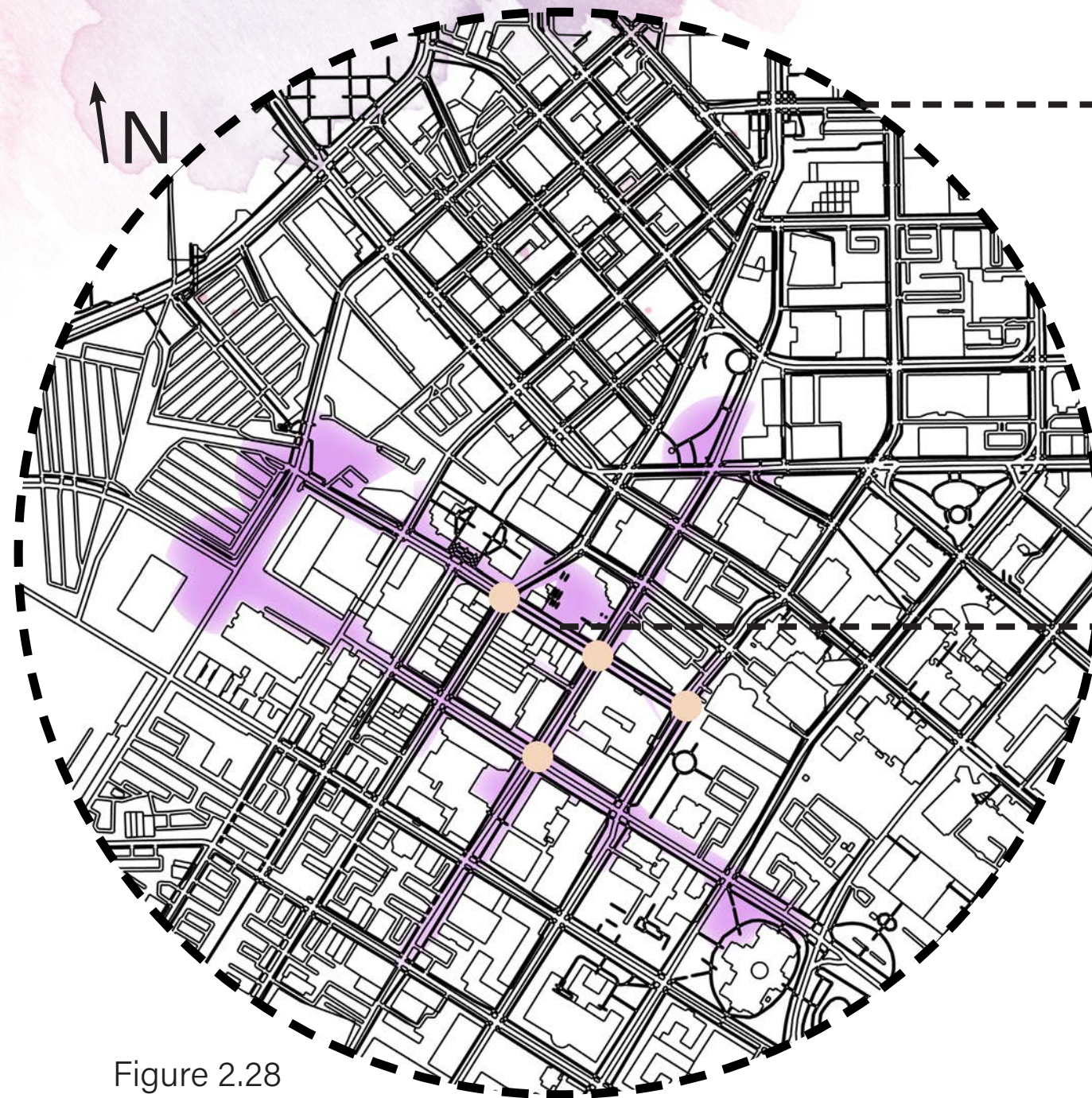


Figure 2.28

LEGEND

- LINE OF SIGHT
- STARTING POINT

THE PURPOSE OF AN ISOVIST STUDY IS TO DEMONSTRATE THE VOLUME OF SPACE THAT IS VISIBLE FROM A GIVEN POINT IN A SPECIFIED LINE OF DIRECTION. THE DIAGRAM SHOWS THAT THERE IS A GREATER LINE OF SIGHT FROM STREET LEVEL IN THE NORTHERN AND WESTERN DIRECTIONS SIMILAR TO THE PEDESTRIAN DIAGRAM.

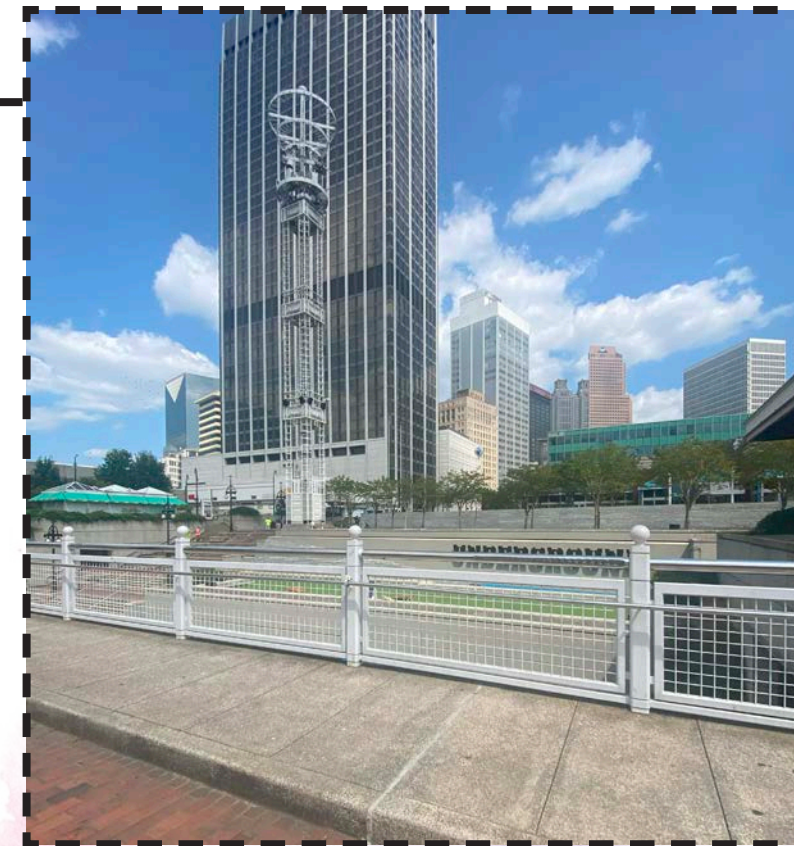
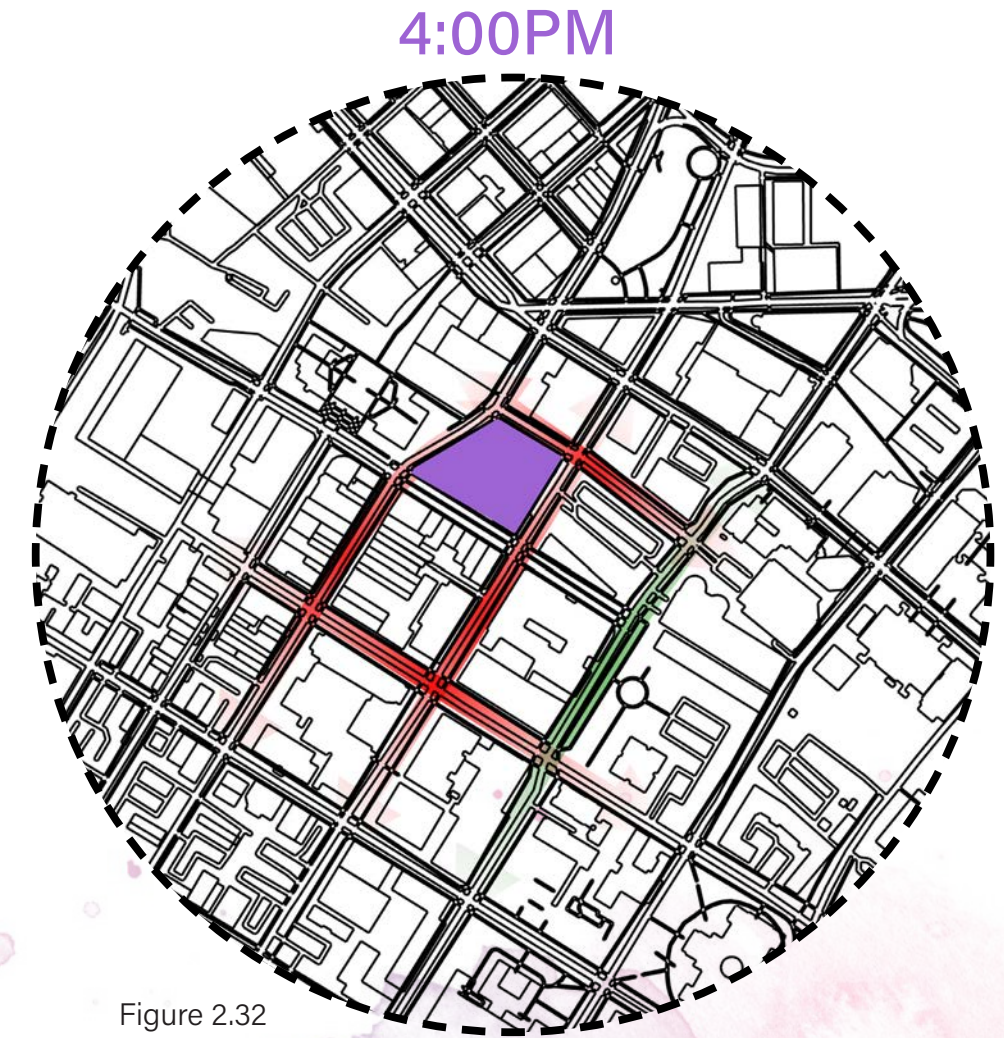
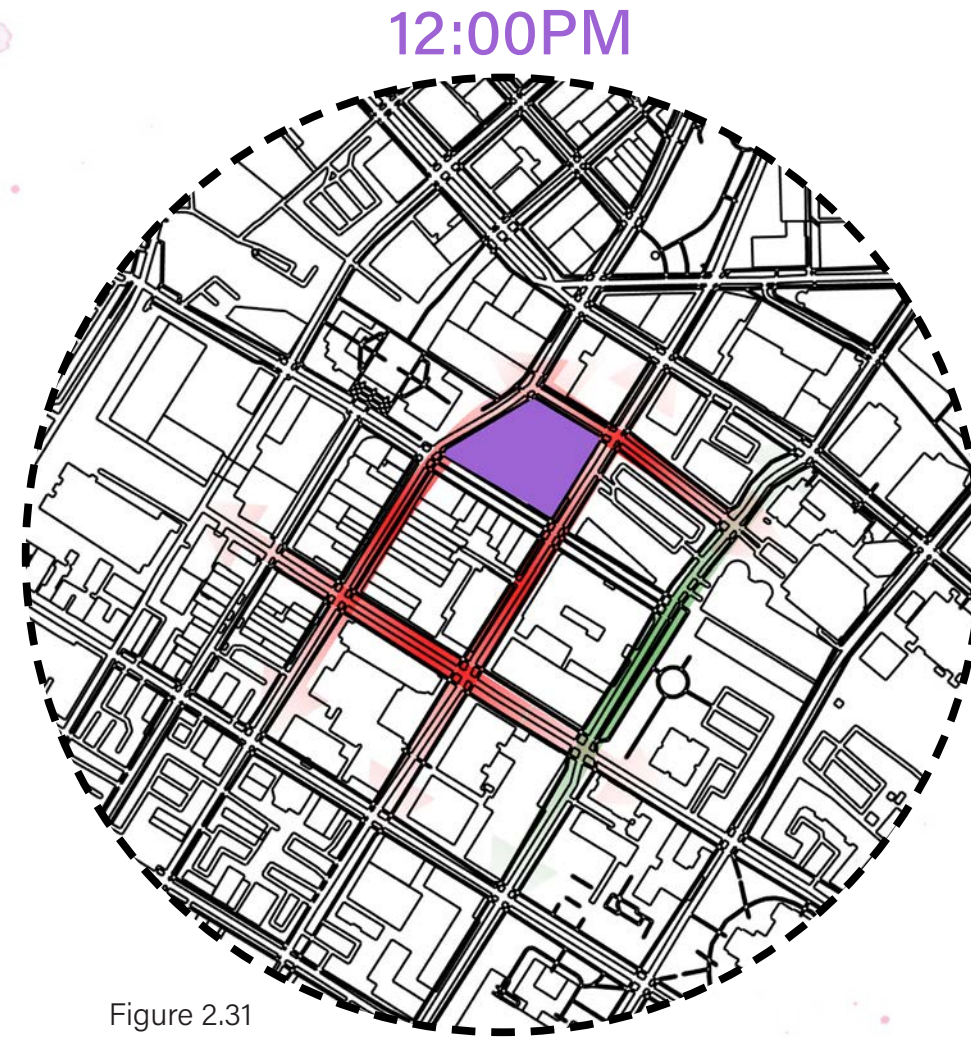


Figure 2.29 View of Peach Drop Structure from Upper Alabama Street

TRAFFIC LEVELS

THE TRAFFIC DIAGRAMS SHOWCASE HOW THE LEVEL OF TRAFFIC CHANGES THROUGHOUT THE DAY DURING A TYPICAL WORK WEEK ON AVERAGE FOR THE UNDERGROUND ATLANTA AREA.



LEGEND

- HEAVY TRAFFIC
- LIGHT TRAFFIC

THE PURPLE AREA INDICATES THE SITE LOCATION THAT THIS THESIS WILL INVESTIGATE FOR THE PROPOSED PROJECT

SUMMER SOLSTICE

THE PURPLE AREA INDICATES THE SITE LOCATION THAT THIS THESIS WILL INVESTIGATE FOR THE PROPOSED PROJECT

9:00AM

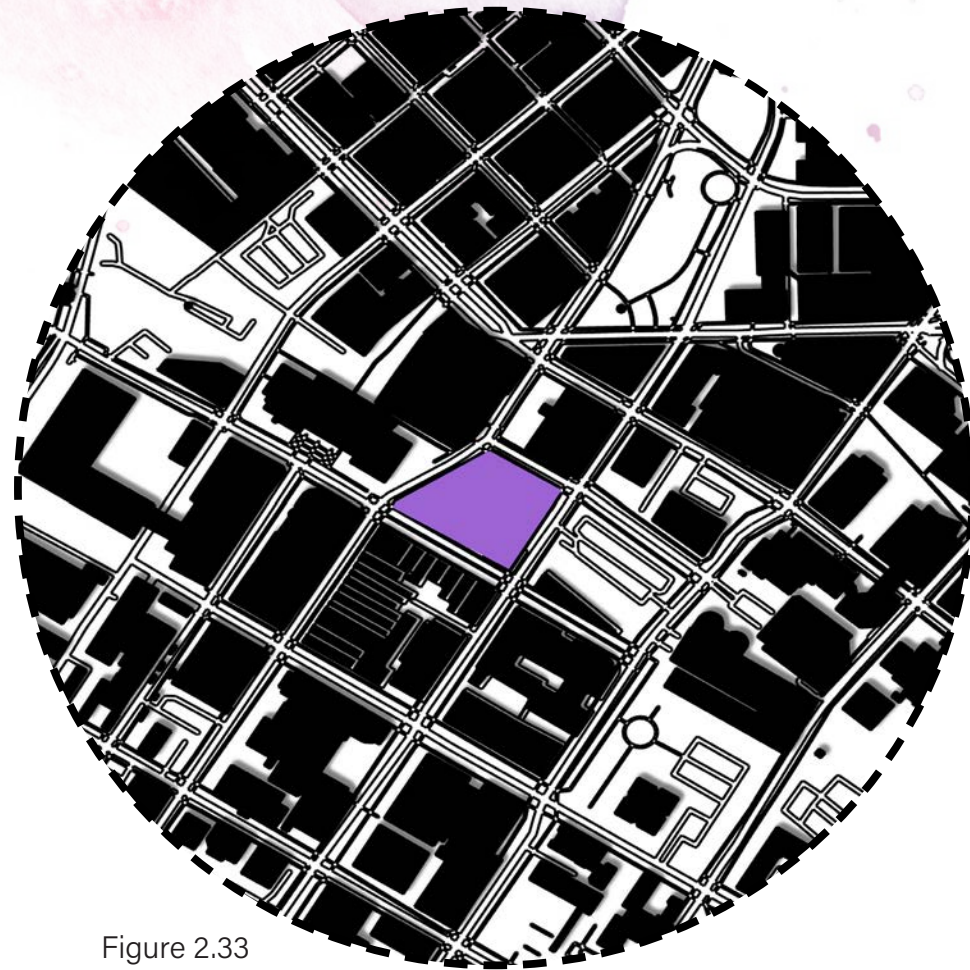


Figure 2.33

12:00PM



Figure 2.34

3:00PM

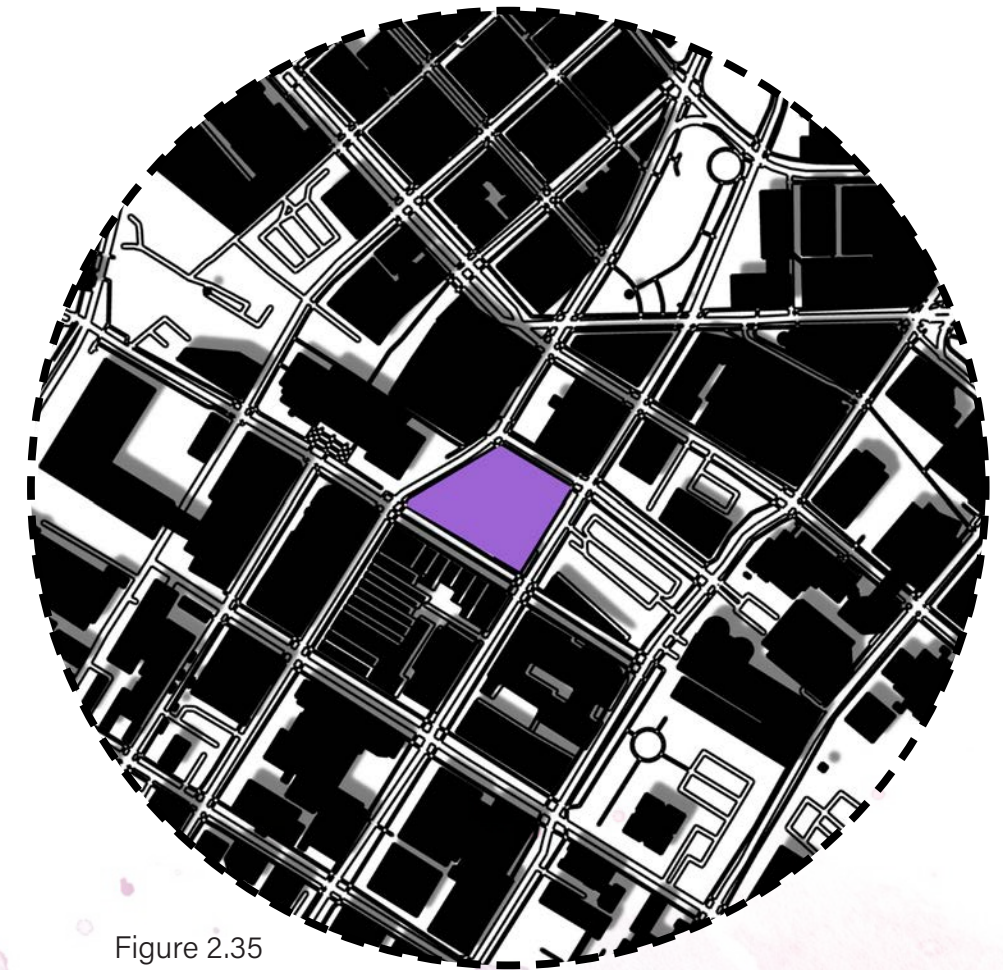


Figure 2.35

WINTER SOLSTICE

THE PURPLE AREA INDICATES THE SITE LOCATION THAT THIS THESIS WILL INVESTIGATE FOR THE PROPOSED PROJECT

9:00AM

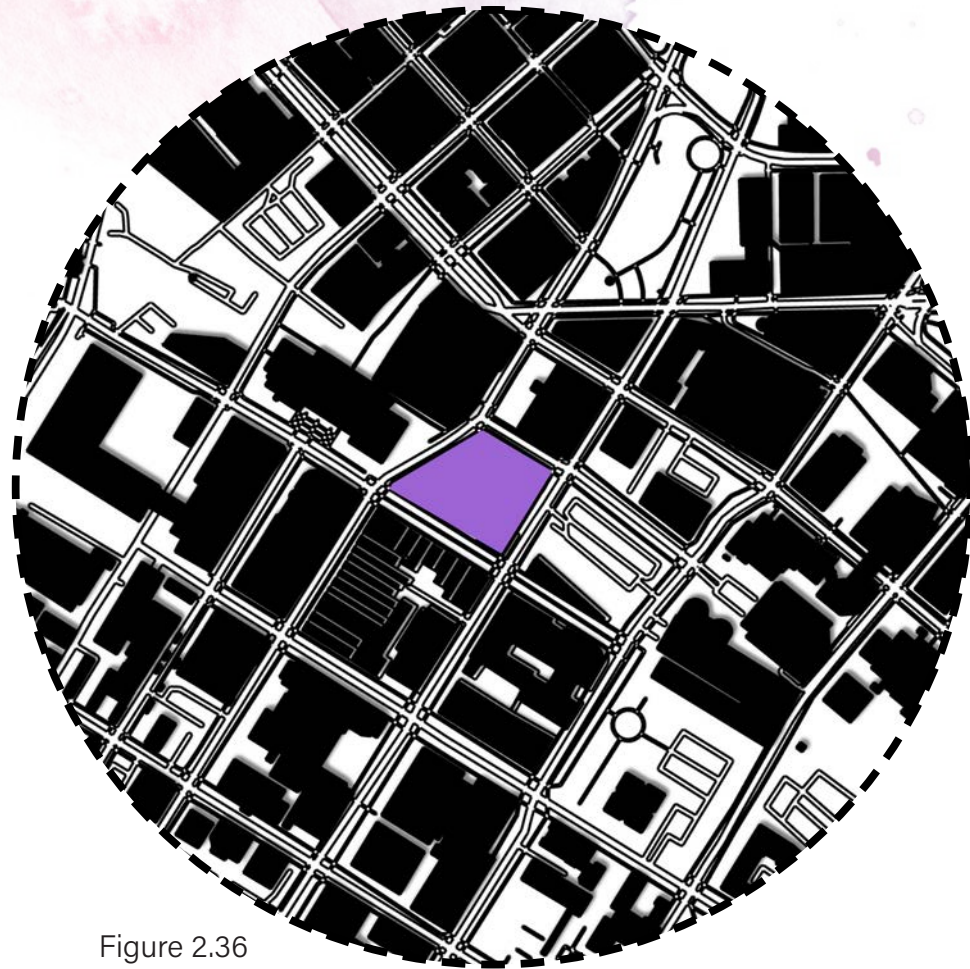


Figure 2.36

12:00PM

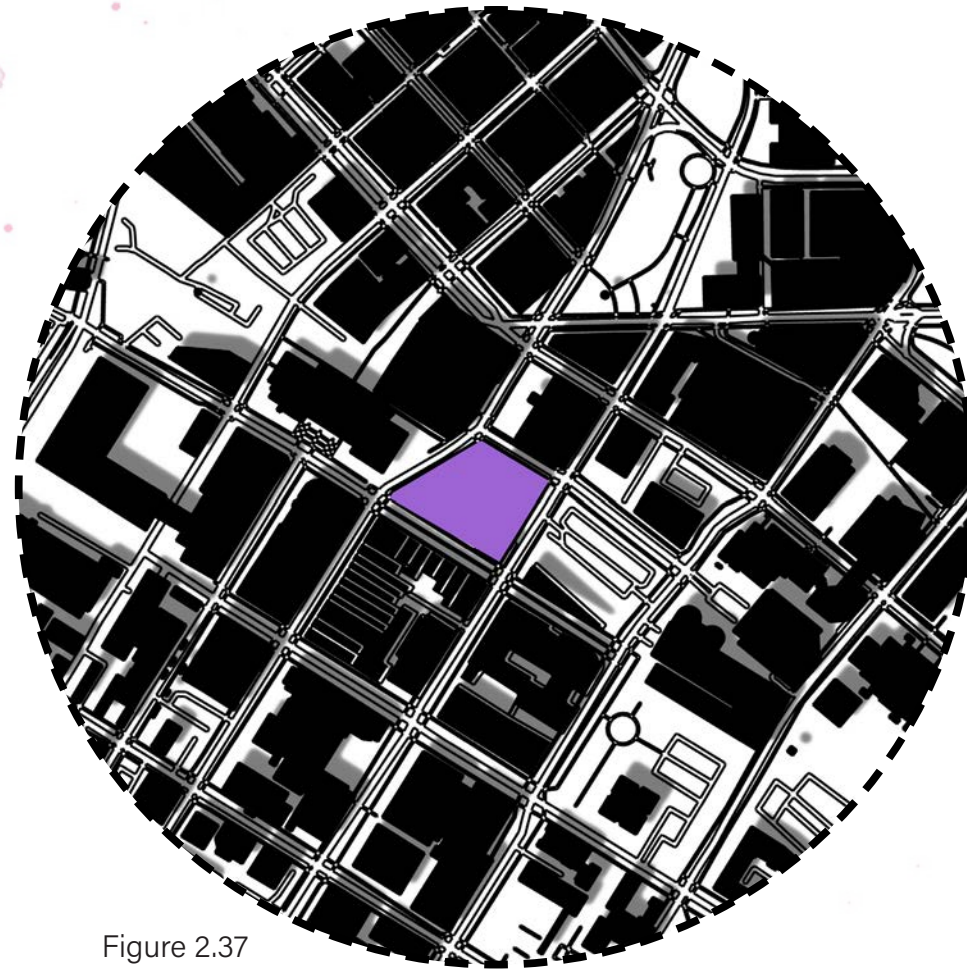


Figure 2.37

3:00PM

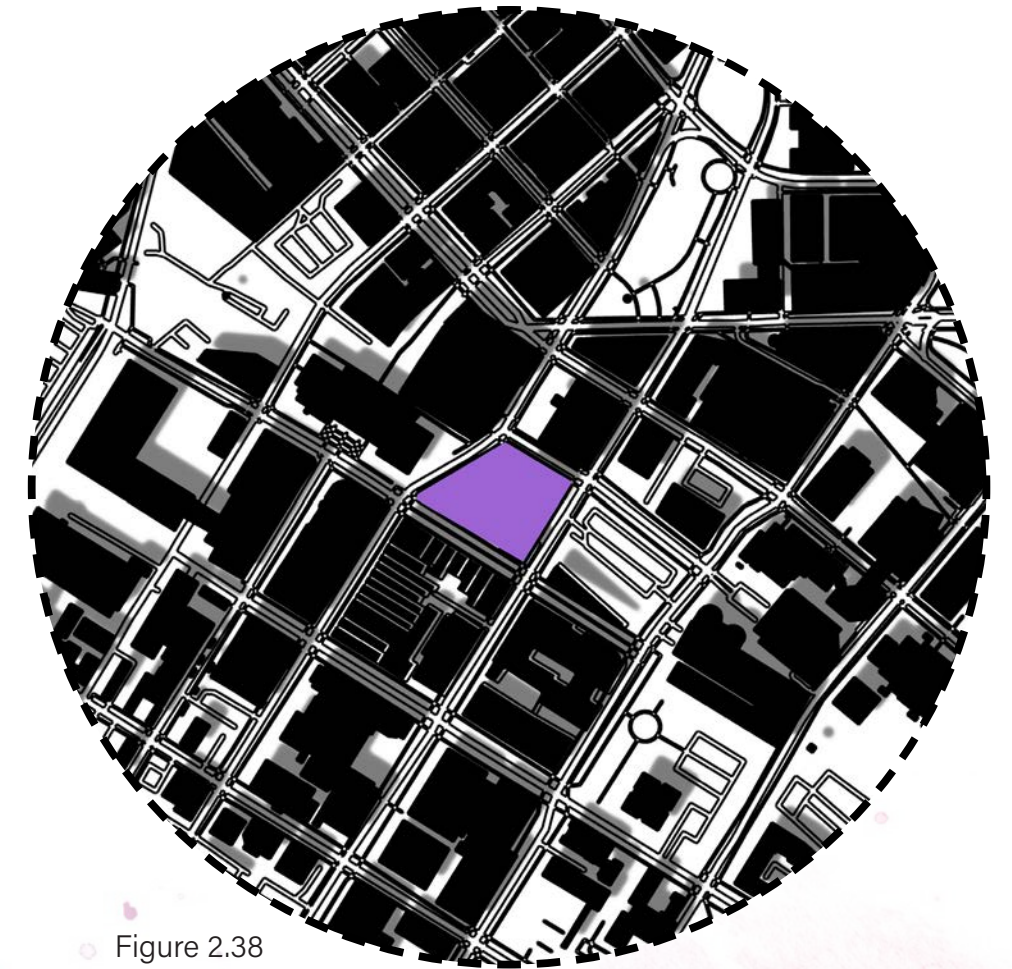


Figure 2.38

03 | DESIGN PROCESS

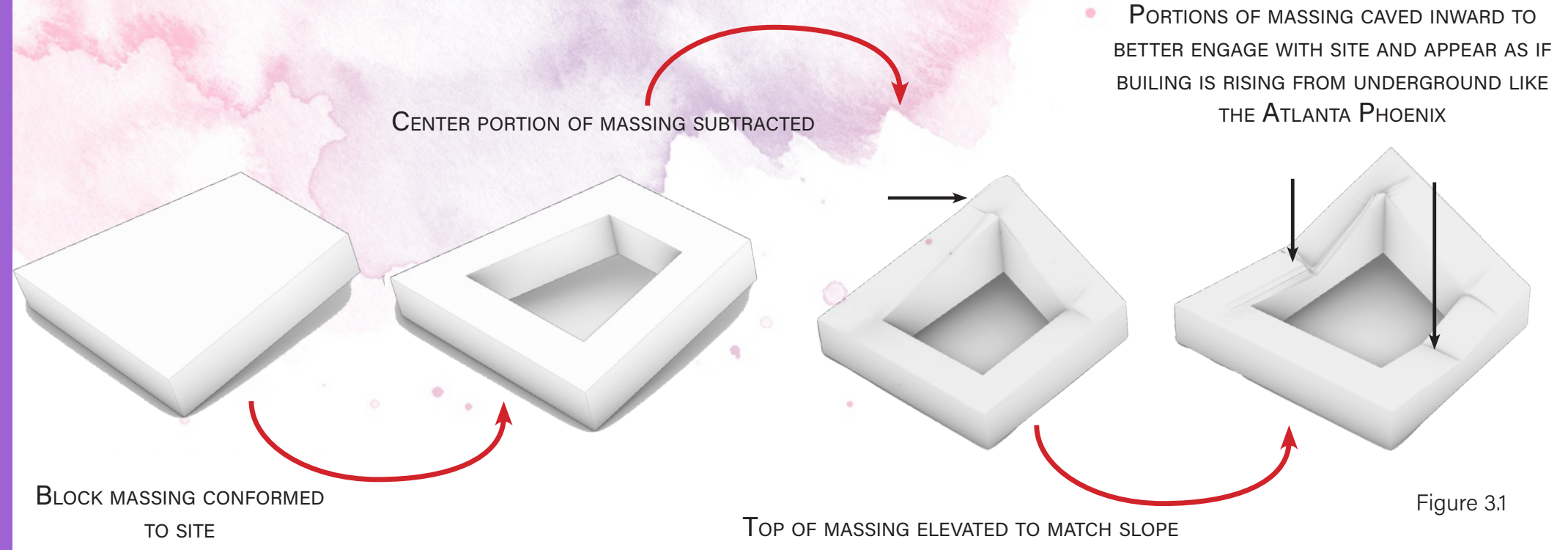
A NEW IDEA, A NEW FUTURE



3.1

DESIGN PROCESS

DESIGN CONCEPT



BUILDING CHARACTERISTICS

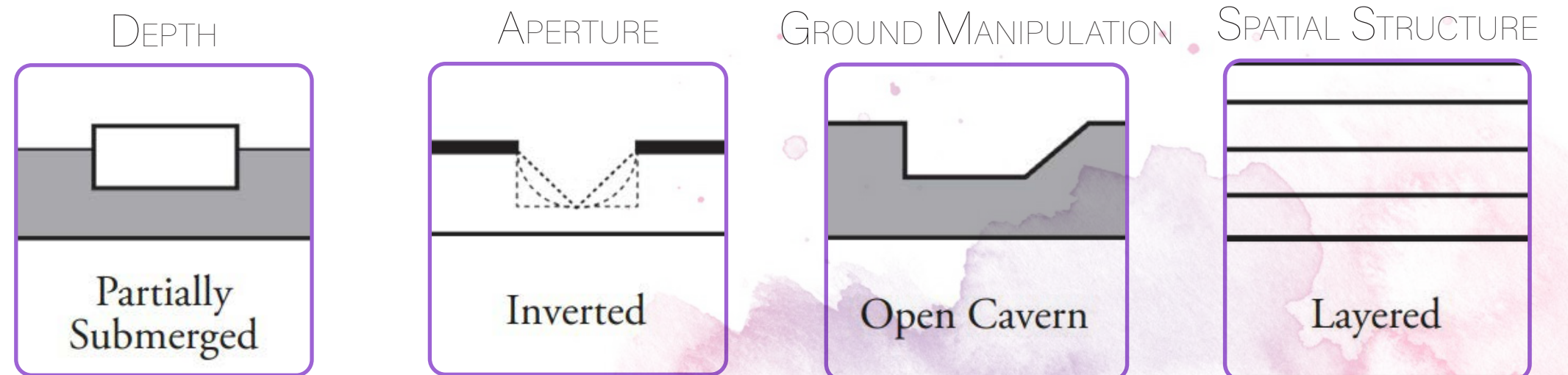


Figure 3.2

SITE PLAN

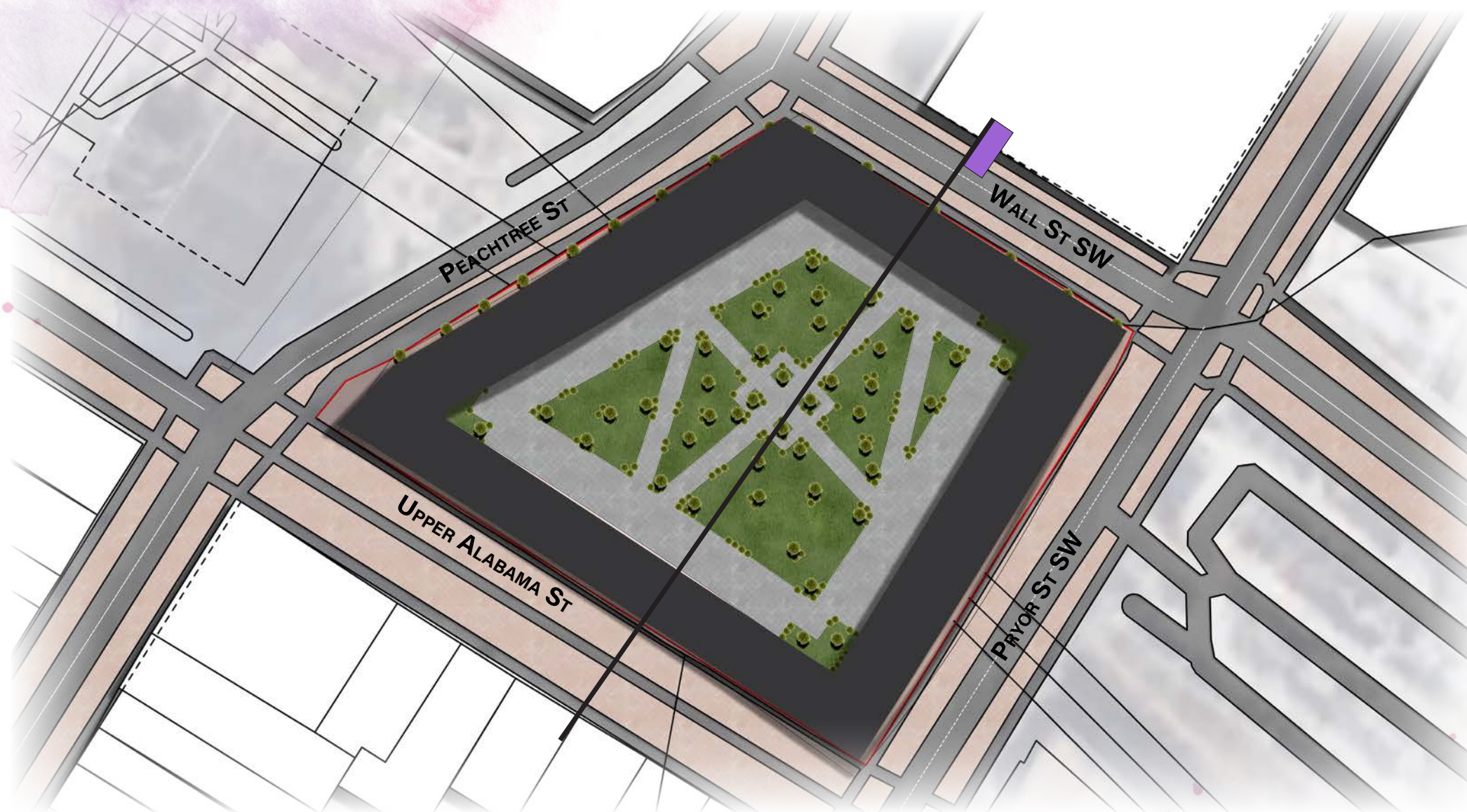
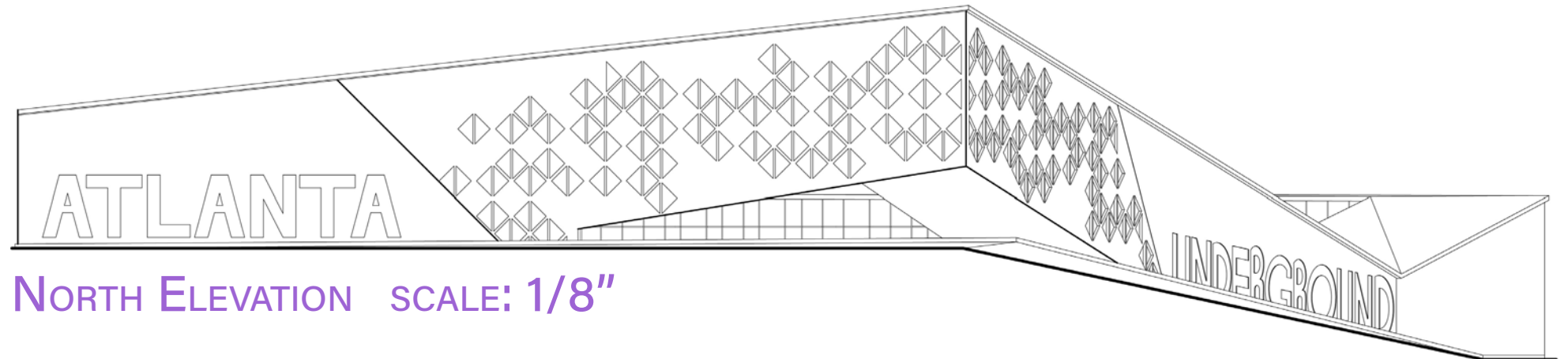


Figure 3.3

VISITORS TO UNDERGROUND ATLANTA WILL ENTER ALONG EITHER PEACHTREE ST OR WALL ST SW. THE BUILDING IS FORMED TO THE SHAPE OF THE SITE AND LEAVES AN OPEN CAVITY IN THE CENTER TO CREATE AN OPEN PLAZA FOR EVENTS, GATHERINGS, AND LOUNGING.

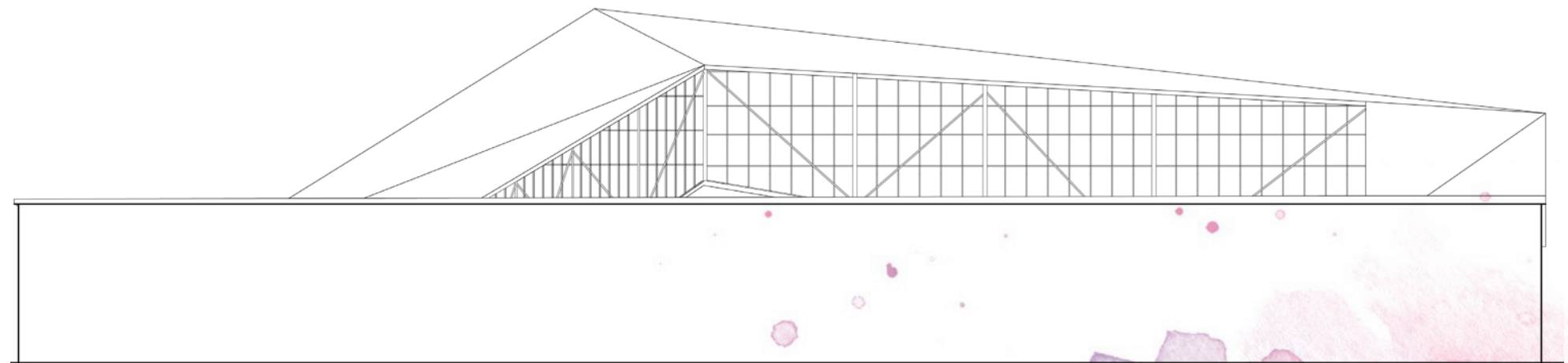
3.2
ELEVATIONS

FROM STREET LEVEL THE ENTRANCE OF THE PROPOSED DESIGN FOR UNDERGROUND ATLANTA IS ELEVATED. IT ALLOWS VISITORS THE OPTION OF DECEDING DOWN INTO THE UNDERGROUND SPACES OR ENTER INTO A CENTRAL OPEN PLAZA.



NORTH ELEVATION SCALE: 1/8"

Figure 3.4

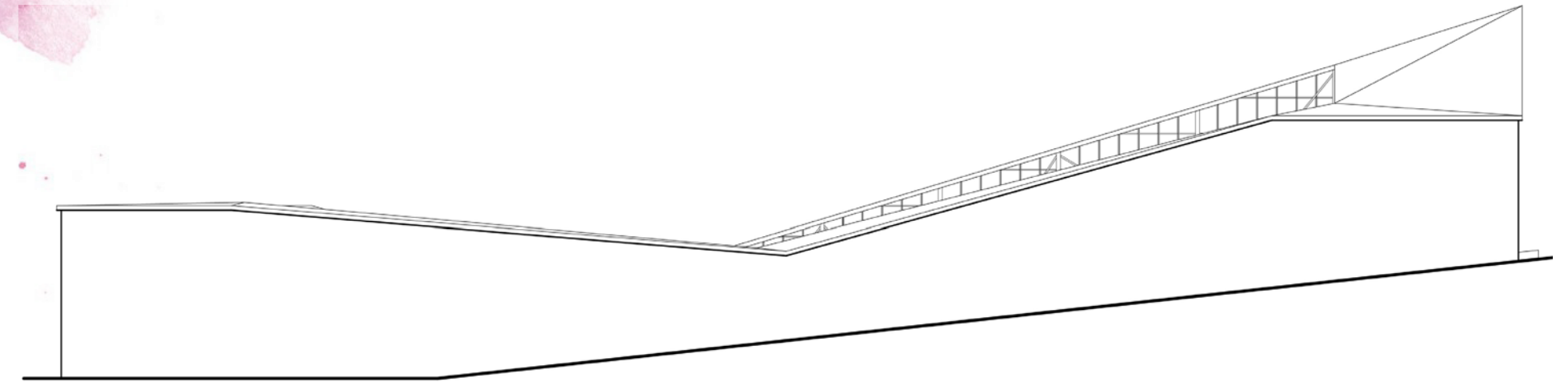


SOUTH ELEVATION SCALE: 1/8"

Figure 3.5

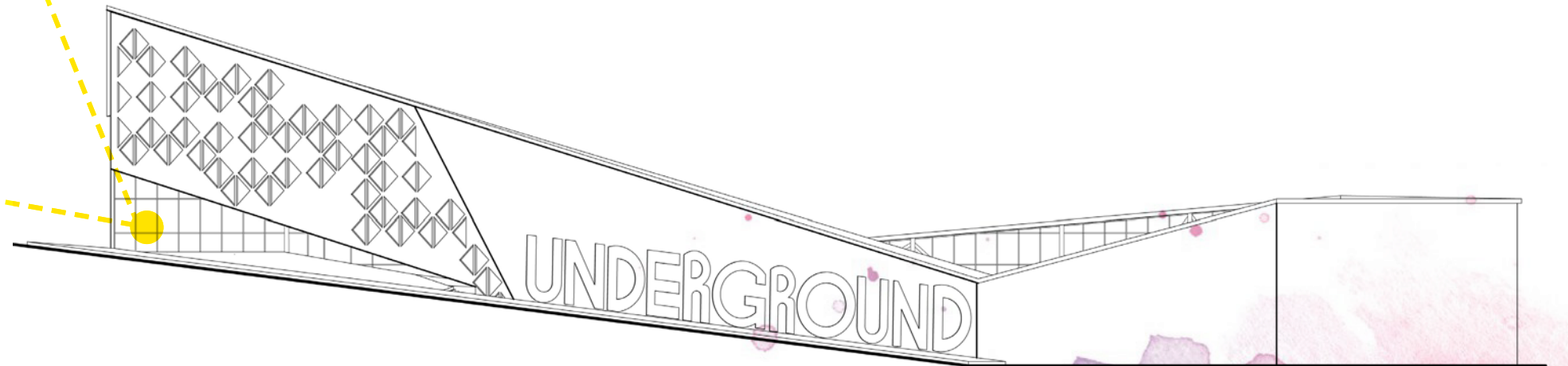


Figure 3.6



EAST ELEVATION SCALE: 1/8"

Figure 3.7



WEST ELEVATION SCALE: 1/8"

Figure 3.8

FROM STREET LEVEL THE BUILDING COMPLIMENTS THE EXISTING TOPOGRAPHY BY RISING HIGHER ON THE NORTHERN FACE THAN THE SOUTHERN FACE. THIS GIVES THE BUILDING AN ASCENSION TYPE LANGUAGE REFERENCING THE ATLANTA PHOENIX RISING FROM THE ASHES.

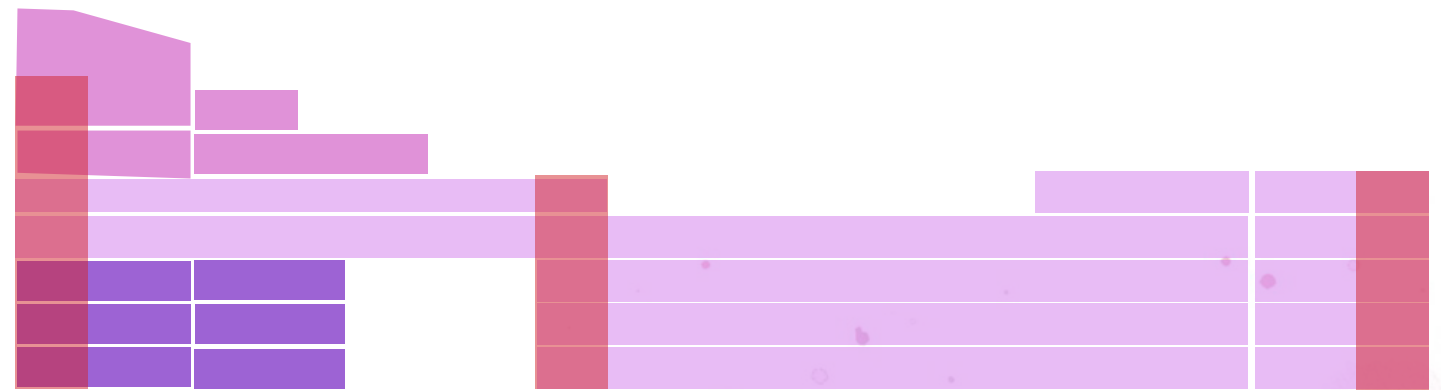


Figure 3.9

3.3

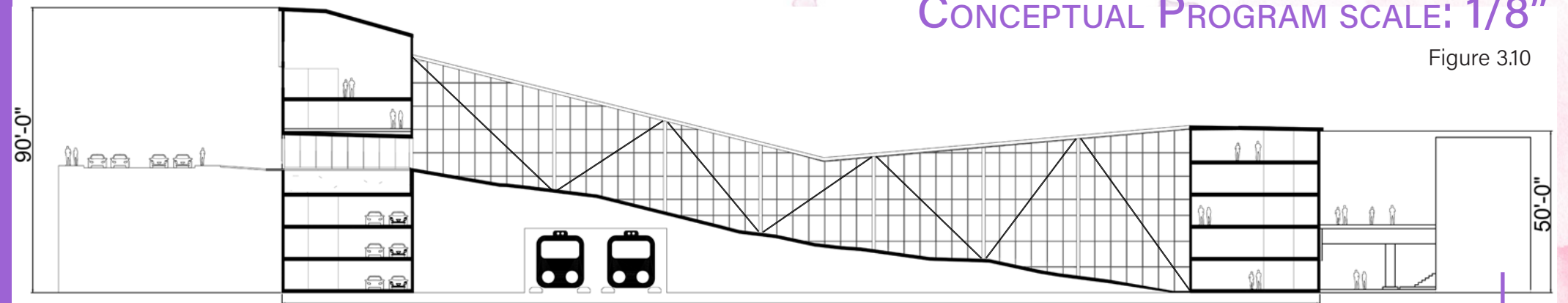
SECTIONS AND RENDERINGS

- OFFICE
- CORE
- RETAIL
- PARKING



CONCEPTUAL PROGRAM SCALE: 1/8"

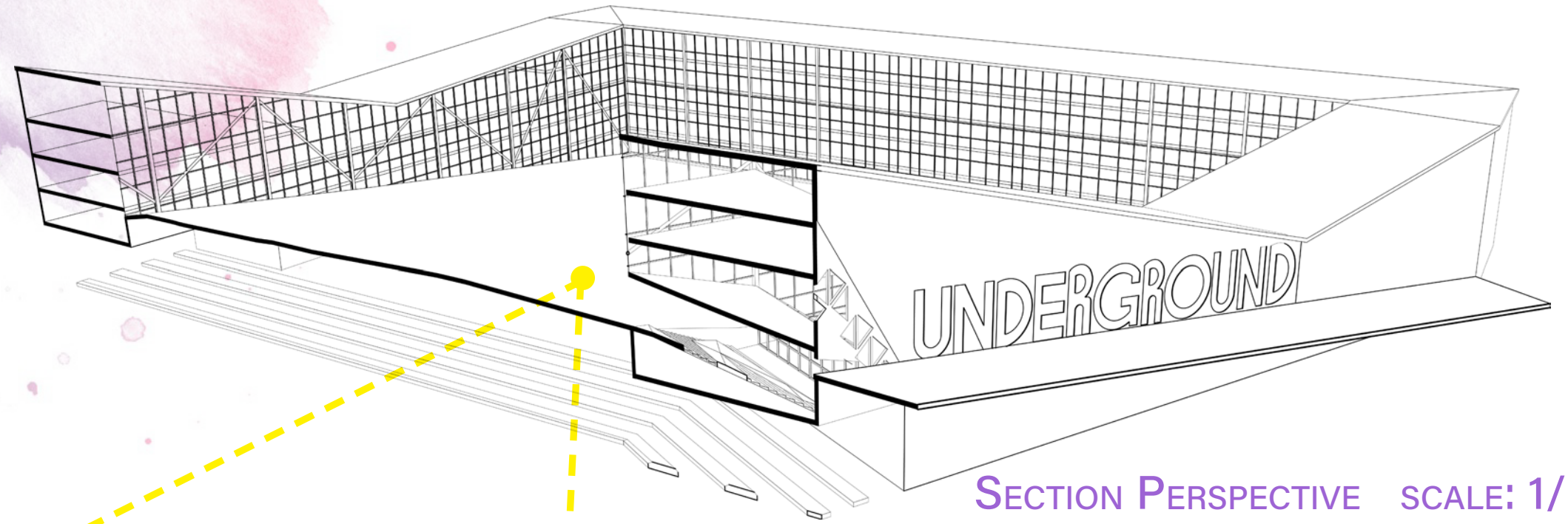
Figure 3.10



LONGITUDINAL SECTION SCALE: 1/8"

Figure 3.11

DUE TO THE ATLANTA MARTA RAIL LINE RUNNING DIRECTLY BENEATH THE SITE WITH A MINIMUM CLEARANCE HEIGHT OF 22' - 0», THE BUILDING DOES NOT INTRUDE INTO THE PLAZA SPACE. INSTEAD THE BUILDING IS FORMED AROUND THE SITE AND THE RAIL LINES ALLOWING THE TRAIN TO PASS UNDERNEATH THE SITE WITHOUT DISTURBING THE PEOPLE ABOVE.



SECTION PERSPECTIVE SCALE: 1/8"

Figure 3.12



Figure 3.13



Figure 3.14

BIBLIOGRAPHY

Alan G Brake |19 October 2015 4 comments. "Lowline Lab Demonstrates an Underground Park in New York." Dezeen, February 4, 2022. <https://www.dezeen.com/2015/10/19/lowline-lab-underground-park-essex-street-lower-east-side-new-york-city/>.

Barnes, Sara. "NYC's Lowline to Turn Forgotten Trolley Tunnel into World's First Underground Park." My Modern Met, September 13, 2020. <https://mymodernmet.com/nyc-lowline-underground-park/>.

Cardenas, Daniela. "Parc Central / Benoy." ArchDaily. ArchDaily, July 21, 2016. <https://www.archdaily.com/791640/parc-central-benoy>.

"Flashback Photos: Underground Atlanta's History." Ajc. The Atlanta Journal - Constitution. Accessed May 5, 2023. <https://www.ajc.com/news/local-govt--politics/flashback-photos-underground-atlanta-history/6PSAlohZxjtw2pupd4ezAK/>.

Hickman, Matt. "Manhattan's Subterranean Lowline Park Flatlines." The Architect's Newspaper, February 24, 2020. <https://www.archpaper.com/2020/02/the-lowline-flatlines/>.

"History of Underground Atlanta - Atlanta Families." Atlanta Families Guide. Accessed May 5, 2023. <https://www.atlantafamilies.org/underground-atlanta-history/>.

Kahn, Michael. "Atlanta Votes to Abandon 2 of Downtown's Oldest Streets." Curbed Atlanta. Curbed Atlanta, December 6, 2016. <https://atlanta.curbed.com/2016/12/6/13850806/atlanta-alabama-pryor-streets-underground-atlanta>.

Kahn, Michael. "Exclusive: Underground Atlanta Plans Unveiled, but Future Still Unclear." Curbed Atlanta. Curbed Atlanta, March 9, 2017. <https://atlanta.curbed.com/2017/3/9/14865536/underground-atlanta-plans-redevelopment-wrs>.

"Kevin Lynch." Places Journal. Accessed May 5, 2023. <https://placesjournal.org/author/kevin-lynch/?cn-reloaded=1>.

Lynch, Kevin. 1960. "The City Image and its Elements." In *The Image of the City*, 98-102. Massachusetts: MIT Press.

Morrison, Jeffrey. *Atlanta Underground: History from Below*. Guilford, CT: Globe Pequot, 2019.

Peters, Andy. "Underground Atlanta Sales Price Suggests Its Value Only Took Small Hit." Ajc. The Atlanta Journal-Constitution, April 15, 2021. <https://www.ajc.com/news/underground-atlanta-sales-price-suggests-its-value-only-took-small-hit/KYF73VVAHFD67H32LHWOSGZNTA/>.

"Photos: Underground Atlanta through the Years." The Atlanta Journal - Constitution . Accessed May 5, 2023. <https://www.ajc.com/news/photos/photos-underground-atlanta-through-the-years/ccEpnUOO4FeohMkjdaQ4XP/>.

"Project." The Lowline. Accessed May 5, 2023. <http://thelowline.org/about/project/>.

"SCROLL THROUGH UNDERGROUND'S HISTORY." UNDERGROUND ATLANTA, AUGUST 8, 2018. [HTTPS://UNDERGROUNDATL.COM/OUR-STORY/](https://undergroundatl.com/our-story/).

SIKSNA, ARNIS. 1997. "THE EFFECTS OF BLOCK SIZE AND FORM IN NORTH AMERICAN AND AUSTRALIAN CITY CENTERS." IN URBAN MORPHOLOGY 1, 19-33. NO.1 ED. [HTTP://WWW.URBANMORPHOLOGY.ORG/ONLINE-UNLIMITED/UM199701-19-33.PDF](http://www.urbanmorphology.org/online-unlimited/um199701-19-33.pdf).

SIMON, DR. MALKA. "ROCKEFELLER CENTER." SMARTHISTORY. ACCESSED MAY 5, 2023. [HTTPS://SMARTHISTORY.ORG/ROCKEFELLER-CENTER/](https://smarthistory.org/rockefeller-center/).

"SOCIAL IMPACT." SOCIAL IMPACT | AREAS OF FOCUS | ATLANTA DID | DOWNTOWN ATLANTA, GA. ACCESSED MAY 5, 2023. [HTTPS://WWW.ATLANTADOWNTOWN.COM/ADID/AREAS-OF-FOCUS/SOCIAL-IMPACT](https://www.atlantadowntown.com/adid/areas-of-focus/social-impact).

"THE ROCKEFELLER CENTER." NEW YORK ARCHITECTURE IMAGES- ROCKEFELLER CENTER- ASSOCIATED PRESS BUILDING&NBSP; (THE GE BUILDING). ACCESSED MAY 5, 2023. [HTTPS://WWW.NYC-ARCHITECTURE.COM/MID/MID055.HTM](https://www.nyc-architecture.com/MID/MID055.htm).

"WILLIAM H. WHYTE." RSS. ACCESSED MAY 5, 2023. [HTTPS://WWW.PPS.ORG/ARTICLE/WWHYTE](https://www.pps.org/article/wwhyte).

WHYTE, WILLIAM H. 2020. "THE DESIGN OF SPACES." IN CITY: REDISCOVERING THE CENTER, 430-436. NEW YORK: ROUTLEDGE.

IMAGE SOURCES

ARTOKOLORO. ATLANTA, THE PHOENIX CITY OF THE SOUTH. JANUARY 8, 2013. PHOTOGRAPH. ALAMY STOCK PHOTO. [HTTPS://WWW.ALAMY.COM/GEORGIA-VIEWS-IN-ATLANTA-THE-PHOENIX-CITY-OF-THE-SOUTH-GENERAL-VIEW-OF-THE-CITY-US-ENGRAVING-1880-1881-IMAGE240544787.HTML](https://www.alamy.com/georgia-views-in-atlanta-the-phoenix-city-of-the-south-general-view-of-the-city-us-engraving-1880-1881-image240544787.html).

ATLANTA (GA.). DEPARTMENT OF BUDGET AND PLANNING. KEY MAP: CITY OF ATLANTA. PHOTOGRAPH. FULTON COUNTY (GA.), 1970. GEORGIA STATE UNIVERSITY LIBRARY. [HTTPS://DIGITALCOLLECTIONS.LIBRARY.GSU.EDU/IIIF/2/PLANATL:1356/FULL/FULL/0/DEFAULT.JPG](https://digitalcollections.library.gsu.edu/iiif/2/PLANATL:1356/FULL/FULL/0/DEFAULT.JPG). THE MAPS DEPICT THE FOURTEEN COMPONENT AREAS THAT FORM THE CITY OF ATLANTA TOGETHER. THESE 14 PLANNING AREAS WILL BE THE SUBJECT OF THIS PLANNING ATLANTA PUBLICATION.

ATLANTA DOWNTOWN. UNDERGROUND ATLANTA STREET PLAZA. PHOTOGRAPH. FAIRFIELD INN & SUITES ATLANTA DOWNTOWN. ATLANTA DOWNTOWN. ACCESSED NOVEMBER 18, 2022. [HTTPS://WWW.ATLANTADOWNTOWN.COM/GO/FAIRFIELD-SUITES-ATLANTA-DOWNTOWN](https://www.atlantadowntown.com/go/fairfield-suites-atlanta-downtown).

ATLANTA JOURNAL-CONSTITUTION. GEORGIA HISTORY PRE-1900, OLD ATLANTA UNION STATION, MAY 1, 1957. PHOTOGRAPH. DOWNTOWN ATLANTA, MAY 1, 1957. GEORGIA STATE UNIVERSITY LIBRARY. [HTTPS://DIGITALCOLLECTIONS.LIBRARY.GSU.EDU/DIGITAL/COLLECTION/PLANATL/ID/5665/REC/127](https://digitalcollections.library.gsu.edu/digital/collection/PLANATL/id/5665/rec/127). «PHOTO DATED 1890 SHOWS OLD UNION STATION (RIGHT), KIMBALL HOUSE (LEFT). IN THE DAYS BEFORE VIADUCTS RAISED «FLOOR» OF DOWNTOWN SECTION OF ATLANTA.»

BUGLEWICZ, JOE. ROCKEFELLAR PLAZA STREET VIEW. PHOTOGRAPH. ZO AND THE ART OF TISHMAN SPEYER AMENITIES. NEW YORK CITY: NYC & Co., FEBRUARY 9, 2017. [HTTPS://WWW.COMMERCIALSEARCH.COM/NEWS/ZO-AND-THE-ART-OF-TISHMAN-SPEYER-AMENITIES/](https://www.commercialsearch.com/news/zo-and-the-art-of-tishman-speyer-amenities/).

CONNELL, ROBERT. ZERO MILEPOST #1, FEBRUARY 10, 1984. PHOTOGRAPH. DOWNTOWN ATLANTA, FEBRUARY 10, 1984. GEORGIA STATE UNIVERSITY. [HTTPS://DIGITALCOLLECTIONS.LIBRARY.GSU.EDU/DIGITAL/COLLECTION/PLANATL/ID/6160/REC/1](https://digitalcollections.library.gsu.edu/digital/collection/PLANATL/id/6160/rec/1). ZERO MILEPOST: PROVISION DICTATED LOCATION WEST OF DECATUR

DISTRICTS. DECEMBER 6, 2022. PHOTOGRAPH.

EDGES. DECEMBER 6, 2022. PHOTOGRAPH.

ENTRY SIGN UNDERGROUND ATLANTA. PHOTOGRAPH. DOWNTOWN ATLANTA. WIKIPEDIA . ACCESSED NOVEMBER 2, 2022. [HTTPS://EN.WIKIPEDIA.ORG/WIKI/UNDERGROUND_ATLANTA](https://en.wikipedia.org/wiki/Underground_Atlanta).

GEORGIA VIRTUAL VAULT. ETERNAL LAMP OF THE CONFEDERACY. PHOTOGRAPH. ATLANTA. GEORGIA VIRTUAL VAULT. ACCESSED OCTOBER 2, 2022. [HTTP://WWW.ATLANTATIMEMACHINE.COM/DOWNTOWN/FLAME.HTM](http://www.atlantatimemachine.com/downtown/flame.htm).

HENRY, T'SHAUNA. THE VISITORS GUIDE AND MAP TO UNDERGROUND ATLANTA. PHOTOGRAPH. DOWNTOWN ATLANTA. GEORGIA STATE UNIVERSITY . ACCESSED OCTOBER 2, 2022. [HTTP://SITES.GSU.EDU/THEHENRY25/FINALARGUMENT/FALLOCATION/](http://sites.gsu.edu/thenry25/finalargument/fallocation/).

THE HISTORY OF UNDERGROUND ATLANTA RECAP. APRIL 2, 2023. PHOTOGRAPH.

KENAN RESEARCH CENTER. RAILROAD TRACKS AND BROAD STREET BRIDGE. PHOTOGRAPH. ATLANTA HISTORY CENTER, 1875. KENAN RESEARCH CENTER. [HTTPS://ALBUM.ATLANTAHISTORYCENTER.COM/DIGITAL/COLLECTION/ATHPC/ID/388](https://album.atlantahistorycenter.com/digital/collection/ATHPC/id/388). VIEW OF THE RAILROAD TRACKS IN DOWNTOWN ATLANTA, GEORGIA, LOOKING WEST FROM PRYOR STREET TOWARD THE BROAD STREET BRIDGE, ERECTED IN 1873 BY THE CANTON WROUGHT IRON COMPANY.

KENNY'S ALLEY. SEPTEMBER 17, 2022. PHOTOGRAPH.

LANDMARKS. DECEMBER 6, 2022. PHOTOGRAPH.

LOWLINE CONCEPTUAL RENDERING - FAMILY INTERACTION. PHOTOGRAPH. NEW YORK GIVES THUMBS UP TO SUBTERREANEAN LOWLINE PARK. MANHATTAN : THE LOWLINE, OCTOBER 6, 2016. [HTTPS://BLOG.ACADEMYART.EDU/NEW-YORK-GIVES-THUMBS-UP-TO-SUBTERREANEAN-LOWLINE-PARK/](https://blog.academyart.edu/new-york-gives-thumbs-up-to-subterreanean-lowlime-park/).

LOWLINE CONCEPTUAL RENDERING - TROLLEY STATIONS. PHOTOGRAPH. MANHATTAN'S SUBTERRANEAN LOWLINE PARK FLATLINES. MANHATTAN: THE LOWLINE, FEBRUARY 20, 2020. [HTTPS://WWW.ARCHPAPER.COM/2020/02/THE-LOWLINE-FLATLINES/](https://www.archpaper.com/2020/02/the-lowlime-flatlines/).

LOWLINE CONCEPTUAL RENDERING - WATER FEATURE. PHOTOGRAPH. ABOUT / PROJECT. MANHATTAN: THE LOWLINE. ACCESSED OCTOBER 27, 2022. [HTTP://THELOWLINE.ORG/ABOUT/PROJECT/](http://thelowlime.org/about/project/).

LOWLINE REMOTE SKYLIGHT TECHNOLOGY . PHOTOGRAPH. NYC'S LOWLINE TO TURN FORGOTTEN TROLLEY TUNNEL INTO WORLD'S FIRST UNDERGROUND PARK. MANHATTAN: THE LOWLINE, JULY 2, 2015. [HTTPS://MYMODERNMET.COM/NYC-LOWLINE-UNDERGROUND-PARK/](https://mymodernmet.com/nyc-lowlime-underground-park/).

LOWLINE UNDERGROUND FLORA. PHOTOGRAPH. THE LANDSCAPE ARCHITECTURE BEHIND THE LOWLINE. MANHATTAN: THE LOWLINE, DECEMBER 17, 2015. [HTTPS://WWW.ARCHDAILY.COM/778856/THE-LANDSCAPE-ARCHITECTURE-BEHIND-THE-LOWLINE](https://www.archdaily.com/778856/the-landscape-architecture-behind-the-lowlime).

LOWLINE UNDERGROUND VEGETATION. PHOTOGRAPH. CITY WILL START ACCEPTING PROPOSALS FOR UNDERGROUND LOWLINE SPACE. MANHATTAN: THE LOWLINE, NOVEMBER 20, 2015. [HTTPS://WWW.6SQFT.COM/CITY-WILL-START-ACCEPTING-PROPOSALS-FOR-UNDERGROUND-LOWLINE-SPACE/](https://www.6sqft.com/city-will-start-accepting-proposals-for-underground-lowlime-space/).

NEIGHBORHOOD DATA. APRIL 14, 2023. PHOTOGRAPH.

NEW ALABAMA STREET. PHOTOGRAPH. ATLANTA'S DOWNTOWN FESTIVAL RETURNS THIS WEEKEND. ATLANTA DOWNTOWN, NOVEMBER 7, 2022. [HTTPS://WWW.ATLANTADOWNTOWN.COM/BLOG/ATLANTA-S-DOWNTOWN-FESTIVAL-RETURNS-THIS-WEEKEND](https://www.atlantadowntown.com/blog/atlanta-s-downtown-festival-returns-this-weekend).

NODES. DECEMBER 6, 2022. PHOTOGRAPH.

ONE OF THE ROCKEFELLAR TOWERS. PHOTOGRAPH. NEW YORK CITY: 123RF, AUGUST 23, 2015. [HTTPS://WWW.123RF.COM/PHOTO_52788328_%C3%A2%E2%82%AC%E2%80%B9%C3%A2%E2%82%AC%E2%80%B9NEW-YORK-AUGUST-23-EXTERIOR-VIEWS-OF-TO-THE-ROCKEFELLER-CENTER-IN-MIDTOWN-MANHATTAN-AT-THE-5TH.HTML](https://www.123rf.com/photo_52788328_%C3%A2%E2%82%AC%E2%80%B9%C3%A2%E2%82%AC%E2%80%B9NEW-YORK-AUGUST-23-EXTERIOR-VIEWS-OF-TO-THE-ROCKEFELLER-CENTER-IN-MIDTOWN-MANHATTAN-AT-THE-5TH.HTML).

PATHS. DECEMBER 6, 2022. PHOTOGRAPH.

PLAZA OF UNDERGROUND ATLANTA. PHOTOGRAPH. UNDERGROUND ATLANTA, OCTOBER 24, 2022. GEORGIA GLOBE DESIGN NEWS. [HTTPS://WDANIELANDERSON.FILES.WORDPRESS.COM/2014/02/DSCN6699.JPG](https://wdanielanderson.files.wordpress.com/2014/02/dscn6699.jpg).

PUBLIC SPACE ON AND NEAR SITE. DECEMBER 6, 2022. PHOTOGRAPH.

PUGH, CHARLES R. THE FAIRLIE-POPLAR AREA IN DOWNTOWN ATLANTA, JANUARY 13, 1983. PHOTOGRAPH. DOWNTOWN ATLANTA, JANUARY 13, 1983. GEORGIA STATE UNIVERSITY LIBRARY. [HTTPS://DIGITALCOLLECTIONS.LIBRARY.GSU.EDU/DIGITAL/COLLECTION/PLANATL/ID/7598/REC/107](https://digitalcollections.library.gsu.edu/digital/collection/PLANATL/id/7598/rec/107). «THE FAIRLIE-POPLAR PROJECT: THE IDEA IS TO RESTORE THE 'HUMAN SCALE' AMID DOWNTOWN'S MEGASTRUCTURES.»

ROCKEFELLAR PLAZA. PHOTOGRAPH. ROLLER RINK TO OPEN AT ROCKEFELLER CENTER THIS SPRING FOR THE FIRST TIME IN DECADES. NEW YORK CITY: AMNY, MARCH 15, 2022. [HTTPS://WWW.AMNY.COM/ENTERTAINMENT/THINGS-TO-DO/ROLLER-RINK-TO-OPEN-AT-ROCKEFELLER-CENTER-THIS-SPRING-FOR-THE-FIRST-TIME-IN-DECADES/](https://www.amny.com/entertainment/things-to-do/roller-rink-to-open-at-rockefeller-center-this-spring-for-the-first-time-in-decades/).

SIKSNA, ARNIS. DESIRABLE PEDESTRIAN CIRCULATION. PHOTOGRAPH. THE EFFECTS OF BLOCK SIZE AND FORM IN NORTH AMERICA AND AUSTRALIAN CITY CENTERS. UNIVERSITY OF QUEENSLAND, 1986.

SIKSNA, ARNIS. NETWORK OF ROUTES AND NODES. PHOTOGRAPH. THE EFFECTS OF BLOCK SIZE AND FORM IN NORTH AMERICA AND AUSTRALIAN CITY CENTERS. UNIVERSITY OF QUEENSLAND, 1980.

SIMON, MALKA. ORIGINAL ROCKEFELLAR MASTERPLAN LAYOUT. PHOTOGRAPH. ROCKEFELLER CENTER. NEW YORK CITY: SMARTHISTORY, AUGUST 9, 2015. [HTTPS://SMARTHISTORY.ORG/ROCKEFELLER-CENTER/](https://smarthistory.org/rockefeller-center/).

SITE LOCATION MACRO TO MICRO. SEPTEMBER 25, 2022. PHOTOGRAPH.

SITE LOCATION. SEPTEMBER 25, 2022. PHOTOGRAPH.

SPEYER, TISHMAN. ROCKEFELLAR PLAZA AERIAL VIEW. PHOTOGRAPH. TISHMAN SPEYER AND GABELLINI SHEPPARD ASSOCIATES REVISIT PROPOSALS TO UPDATE ROCKEFELLER PLAZA. NEW YORK CITY: NEW YORK YIMBY, APRIL 28, 2022. GABELLINI SHEPPARD ASSOCIATES. [HTTPS://NEWYORKYIMBY.COM/2020/04/TISHMAN-SPEYER-AND-GABELLINI-SHEPPARD-ASSOCIATES-REVISIT-PROPOSALS-TO-UPDATE-ROCKEFELLER-PLAZA.HTML](https://newyorkyimby.com/2020/04/tishman-speyer-and-gabellini-sheppard-associates-revisit-proposals-to-update-rockefeller-plaza.html).

TOP PLAZA OF UNDERGROUND ATLANTA. SEPTEMBER 17, 2022. PHOTOGRAPH.

UNDERGROUND ATLANTA BLOCK NETWORK. DECEMBER 6, 2022. PHOTOGRAPH.

UNDERGROUND ATLANTA'S MAIN CORRIDOR. SEPTEMBER 17, 2022. PHOTOGRAPH.

UNDERGROUND ATLANTA'S SECOND CORRIDOR. SEPTEMBER 17, 2022. PHOTOGRAPH.

UPPER ALABAMA STREET. SEPTEMBER 17, 2022. PHOTOGRAPH.

VIEW FROM UNDERGROUND ATLANTA TOP PLAZA. SEPTEMBER 17, 2022. PHOTOGRAPH.

VIEW OF PEACH DROP STRUCTURE FROM UPPER ALABAMA STREET. SEPTEMBER 17, 2022. PHOTOGRAPH.

WEST, RAY. DANTE'S DOWN THE HATCH, RESTAURANT AND BAR IN UNDERGROUND ATLANTA, ATLANTA, GEORGIA, 1980s. PHOTOGRAPH. ATLANTA, 1980. GEORGIA STATE UNIVERSITY. [HTTPS://DIGITALCOLLECTIONS.LIBRARY.GSU.EDU/DIGITAL/COLLECTION/AJC/ID/4762/](https://digitalcollections.library.gsu.edu/digital/collection/AJC/id/4762/).

ZHANG, TERRENCE. PARC CENTRAL AERIAL VIEW. PHOTOGRAPH. PARC CENTRAL / BENOY. GUANGZHOU, CHINA: ARCHDAILY, JULY 21, 2016. [HTTPS://WWW.ARCHDAILY.COM/791640/PARC-CENTRAL-BENOY](https://www.archdaily.com/791640/parc-central-benoy).

ZHANG, TERRENCE. PARC CENTRAL INTERNAL VIEW. PHOTOGRAPH. PARC CENTRAL / BENOY. GUANGZHOU, CHINA: ARCHDAILY, JULY 21, 2016. [HTTPS://WWW.ARCHDAILY.COM/791640/PARC-CENTRAL-BENOY](https://www.archdaily.com/791640/parc-central-benoy).

ZHANG, TERRENCE. PARC CENTRAL LEVEL 1 PLAN. PHOTOGRAPH. PARC CENTRAL / BENOY. GUANGZHOU, CHINA: ARCHDAILY, JULY 21, 2016. [HTTPS://WWW.ARCHDAILY.COM/791640/PARC-CENTRAL-BENOY](https://www.archdaily.com/791640/parc-central-benoy).

ZHANG, TERRENCE. PARC CENTRAL SECTION. PHOTOGRAPH. PARC CENTRAL / BENOY. GUANGZHOU, CHINA: ARCHDAILY, JULY 21, 2016. [HTTPS://WWW.ARCHDAILY.COM/791640/PARC-CENTRAL-BENOY](https://www.archdaily.com/791640/parc-central-benoy).

ZHANG, TERRENCE. PARC CENTRAL. PHOTOGRAPH. PARC CENTRAL / BENOY. GUANGZHOU, CHINA: ARCHDAILY, JULY 21, 2016. [HTTPS://WWW.ARCHDAILY.COM/791640/PARC-CENTRAL-BENOY](https://www.archdaily.com/791640/parc-central-benoy).