



RITUAL: ENHANCING THE MODERN ATHLETE

RYAN SORBY
DESIGN THESIS
2010-2011

SIGNATURE PAGE

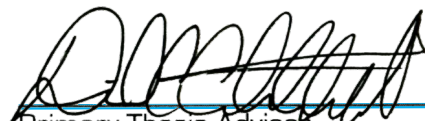
Ritual: Enhancing the Modern Athlete

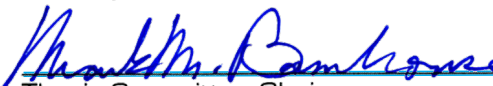
A Design Thesis Submitted to the Department of Architecture and Landscape Architecture of North Dakota State University

By

Ryan Sorby

In Partial Fulfillment of the Requirements for the Degree of Master of Architecture


Primary Thesis Advisor 05/12/11
Date


Thesis Committee Chair 05/12/11
Date

September 2010
Fargo, North Dakota

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ABSTRACT

TITLE Exploration of Architecture Through Ritual

TYOLOGY Olympic men's soccer training center: integrating housing and training facilities.

LOCATION Atlanta, Georgia

THEORETICAL PREMISE/ UNIFYING IDEA Architecture is directly influenced by ritual and it is instrumental that architecture contributes to the ritual of construction, function, and experience.

ABSTRACT This project illustrates how ritual influences the construction, function, and experience of architecture. Ritual is essential in our everyday life and it is vital to that architecture contributes to ritual.

This project incorporates ideas of ritual constructed from research and incorporates them into an Olympic men's soccer training center. The training center is comprised of housing and training facilities utilized by future Olympic athletes.

KEY WORDS Ritual, Experience, Training Center, Olympics, Athletes, Soccer, Team.

PROBLEM STATEMENT

PROBLEM STATEMENT What is ritual's influence on architecture?

STATEMENT OF INTENT



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STATEMENT OF INTENT

TYOLOGY Olympic men's soccer training center: integrating housing and training facilities.

CLAIM Architecture has the capacity of creating synergies between people and buildings through ritual.

PREMISES Architecture sculpts our lives and can influence our actions.

Synergies are created by people and the building acting in harmony.

The people who dwell and interact with the building are an integral focus when designing architecture.

Ritual is essential for every culture and plays a significant role to it's members.

THEORETICAL PREMISE/ Architecture is directly influenced by ritual and it is instrumental that
UNIFYING IDEA architecture contributes to the ritual of construction, function, and experience.

PROJECT JUSTIFICATION Ritual embodies our everyday life. Through analyzing and understanding past and current rituals, it is possible to enhance people's experiences and natural and built environments. The harmony between architecture and ritual is essential and together they contribute to a more inspired design.

A black and white photograph of a field of grass, viewed from a low angle. The grass blades are sharp and detailed in the foreground, while the background is blurred. The word "PROPOSAL" is overlaid in a bright blue, sans-serif font in the center-right of the image.

PROPOSAL

NARRATIVE

Ritual is an intrinsic part of our culture and everyday life. Ritual symbolically correlates with specific architectural programs and helps enhance the influence it has on people when they are engaged with the building. Sporting events are encompassed by ritual from the way athletes train to the events they participate in. Since the 8th Century BC athletes have participated in the Olympic Games, and every two years the world unites to participate in these ancient rituals. Ritual is essential to architecture because it enhances the experiences and the spaces and helps create culturally conscious buildings.

The Olympic athletes who participate in these rituals are required to participate in extensive training prior to the games. The facilities these athletes train in are an integral part of their preparation for the Olympics and influence the ritual of how they train. When designing architecture, it is important to understand the ritual of the users along with the ritual of the construction, function, and experience the architecture has throughout its life cycle. Ritual is vital to athletes because it creates synergies among the users and building. Through ritual the training facility promotes physical, personal, and social growth.

USER/CLIENT DESCRIPTION

THE CLIENT/OWNER The United States Olympic Committee

UNITED STATES SOCCER TEAM ATHLETES

Amount Approximately 20-60 Olympic athletes will train and live in the facility depending on the roster and time of year.

Peak Usage Athletes will occupy the facility year round, with more intense usage before the Olympic Games.

Parking Public transportation is located near the training facility, so only limited parking is necessary. While in residence, athletes may utilize zip cars for local travel needs. Team busses will be provided to accommodate the needs of the athletes and coaches.

Medical or Mental Health Issues The Olympic athletes are in exceptional physical condition. A training room is to be provided to ensure the health and wellbeing of each athlete. The United States Olympic Committee Sport Psychology Services will aid athletes in the mental training skills essential in becoming an elite athlete.

UNITED STATES SOCCER TEAM COACHES/STAFF

Amount Approximately 6 - 10 coaches will reside and coach at the training facility.

Peak Usage Coaches will occupy the facility year round, with more intense usage before the Olympic Games.

Parking No public transportation is located on the training facility, so parking is necessary. Zip cars will be utilized to minimize the environmental footprint and reduce impervious surfaces.

Medical or Mental Health Issues The United States Olympic Committee Sport Psychology Services will aid coaches in the mental training skills essential to train elite athletes.

MAJOR PROJECT ELEMENTS

RESIDENT HOUSING

Bedrooms The bedrooms provide space for the athletes and coaches to sleep and live.

Gathering Area A communal gathering space is essential for team building and provides a place for athletes and coaches to unite as a team. A large gathering area will include furniture such as couches, computers, and televisions.

Kitchen A commercial kitchen is used to maintain the dietary needs of the athletes. A buffet style serving line is utilized for athletes and coaches to receive their food.

Dining Room The dining hall provides a place for coaches and athletes to eat after they get their food.

Laundry Room A laundry room will be provided for the athletes and coaches to wash their personal laundry.

TRAINING FACILITY

Training Room A training room is provided for any medical work necessary to maintain the athletes. Sports physiology is required for the athletes to attain their potential and recover from energies.

Strength and Conditioning Strength conditioning is necessary for increased performance, decreased injury potential, increased skill acquisition, balance, coordination, quickness, physical fitness, confidence, self-esteem, quicker recovery times, and mental toughness [Team USA]. Special space is needed for athletes to improve their strength and conditioning to a world-class level.

Locker Rooms Locker rooms are vital for athletes privacy. Coaches will use a separate locker area from the athletes.

Baths Bathing facilities are necessary for the athletes to use after practices and symbolizes the cleansing for the athletes.

Office Offices are essential for retaining records and maintaining certain aspects of training.

Auditorium An auditorium will be provided for team meetings and gatherings.

Equipment Storage Storage for soccer equipment

Laundry A commercial laundry room is used to wash towels, uniforms, and training equipment.

OUTDOOR SPACES

Entrance A symbolic entrance is used to greet athletes, coaches, and guests when they arrive to the training facility.

Seating Seating is utilized by guests to watch soccer practices and scrimmages.

Outdoor Gathering Space Outdoor spaces are essential for a connection to the environment and to provide a space for gatherings.

OTHER

Field An official FIFA soccer field will be provided for games and practices.

Maintenance Room A maintenance room will be provided to store and maintain the equipment used to sustain the fields.

Mechanical

Circulation

SITE INFORMATION

MACRO - REGION

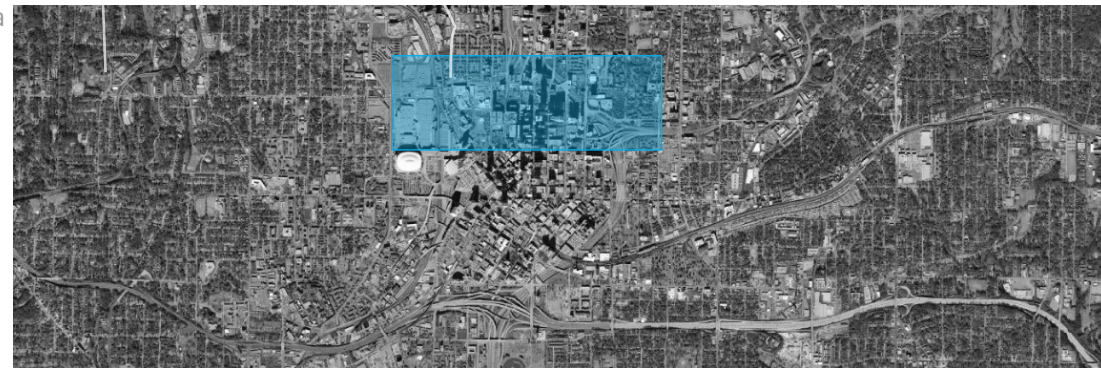
Southeast



Located in the Southeast region of the United States, Georgia borders Alabama, Tennessee, North Carolina, South Carolina, and Florida. Georgia shares a coastline with the Atlantic Ocean which makes it vulnerable to hurricanes. The region consists primarily of a humid subtropical climate with hot and humid summers and moderate to heavy precipitation. The site is situated in the heart of Georgia in the capital city Atlanta on the foothills of the Appalachians. Atlanta is also surrounded by rolling hills and its northwestern border is defined by the Chattahoochee River.

MACRO - CITY

Atlanta, Georgia



Atlanta is the largest city in Georgia and the 9th most populated metropolitan in the United States with 4,917,700 people [U.S. Census Bureau, 2006]. In the last six years the metropolitan population in Atlanta has grown by over 142,000 people every year, making it the fastest growing metro in the United States [Atlanta, 2010]. Atlanta's metropolitan spans 8,400 square miles mainly within the boundaries of Fulton County and extending east into DeKalb County [Atlanta, 2010]. Atlanta has a rich culture in sports and athletics with four professional teams in baseball [Atlanta Braves], hockey, [Atlanta Thrashers], basketball [Atlanta Hawks], and football [Atlanta Falcons]. Atlanta was also the host for the 1996 Summer Olympics which was pivotal in transforming Atlanta into an international city [Atlanta Historic Center, 2010]. The city is also home to Hartsfield-Jackson International Airport, the world's busiest airport every year since it opened in 1998 [Hartsfield-Jackson Atlanta International Airport, 2010].

MICRO - SITE

Downtown Atlanta



The proposed training facility is located north of Baker Street and south of Peachtree Place, between Olympic Park Drive and Spring Street. The site lies at 84° 23' west longitude and 33° 45' in the heart of downtown Atlanta. Some notable landmarks that surround the site are the World of Coca-Cola and the Georgia Aquarium to the west and the AmericasMart to the south. This urban site is ideal because of its opportunity to connect downtown Atlanta and help reduce the amount of pay lots which add to the heat island effect.

PROJECT EMPHASIS

The emphasis of this thesis is to examine and understand how architecture directly influences and enhances ritual throughout construction, function, and experience. Ritual will be examined and integrated throughout the building's entire life cycle, creating synergies between the users and building. When designing, special attention will be paid to the preparation, separation, and return experience within ritual.

PLAN FOR PROCEEDING

RESEARCH DIRECTION Research will be conducted in a quantitative/qualitative method. Emphasis will be concentrated in project typology, historical context, site analysis, programmatic requirements, and sustainability.

DESIGN METHODOLOGY The design process will comprise of utilizing the mixed method, quantitative qualitative approach to develop the theoretical premise and unifying idea. Analysis will be conducted through modeling, graphics, and digital drawings.

DOCUMENTATION OF DESIGN Analyzing, interpreting, and documenting of the results will occur throughout the design process and compiled on a biweekly basis. A bound book and digital copy of the final project will be created and made available at the North Dakota State University Architecture Library to be referred to by future scholars.

PREVIOUS STUDIO EXPERIENCE

SECOND YEAR STUDIO

First Semester [Professor Mike Christenson \[Fall 2007\]](#)

Tea House - Fargo, ND
Boathouse - Minneapolis, MN
Mixed Use - Fargo, ND

Second Semester [Professor Malini Srivastava \[Spring 2008\]](#)

Baz Honein House Case Study - Deir el Qamar, Lebanon
Downtown Residential - Fargo, ND

THIRD YEAR STUDIO

First Semester [Professor Cindy Urness \[Fall 2008\]](#)

Library - Moorhead, MN
Center for Excellence - Fargo, ND

Second Semester [Professor Steve Martens \[Spring 2009\]](#)

Northern Legacy Museum - Fargo, ND
Structural Study

FOURTH YEAR STUDIO

First Semester [Professor Bakr Aly Ahmed \[Fall 2009\]](#)

Mixed-Use Highrise - San Francisco, CA


Second Semester [Professor Frank Kratky \[Spring 2010\]](#)

Slum Redevelopment Urban Design - Santo Domingo, Dominican Republic
Elementary School - Kigoma, Tanzania
Community Center - Santo Domingo, Dominican Republic

FIFTH YEAR STUDIO

First Semester [Professor Cindy Urness \[Fall 2010\]](#)

[ONE] Elementary - Brandon, MN



PROGRAM
DOCUMENT

THEORETICAL PREMISE RESEARCH

NARRATIVE Architecture and ritual have been intrinsic elements of every culture throughout history and are communicated through distinct symbols that express a culture's belief system. These symbols are used to communicate messages express in what can be inexpressible religious and mythological themes [Barrie, 1996]. Cultures utilize symbolic terms to represent the limitless thoughts and ideas beyond the capabilities of human understanding. These concepts we cannot fathom create symbolic languages or imagery that correlates to their core ideas. These unexplainable mysteries have manifested themselves throughout history in cave paintings, Egyptian tombs, and even folktales.

Architecture creates synergies between form and meaning and often portrays a culture's beliefs. Architecture forms a narrative of symbolic images, forms, and spaces that signify how space is constructed and experienced. Alan Colquhnon, practicing architect and professor at Princeton University stated:

“Architectural elements can symbolize the ritual as well as allow the ritual to take place. Although architecture cannot force ritual upon someone, it may encourage someone to re-examine an otherwise thoughtless action. This may take place through the modification of that element which facilitates the ritual.”

- Alan Colquhnon

Colquhnon's valuable insight of the relationship between ritual and architecture is essential to recognize because it is not the architecture that is indented to shape the ritual, but comparatively the ritual is meant to shapes the architecture.

Throughout the research, the references regarding religion are to be viewed as the unique cultural systems they are. Each religion has it's own distinct cultural dimension and social implications that shape their symbols and mythology.

SYMBOLS Religion and ritual in cultures depend on shared symbols for their effect and meaning [Barrie, 1996]. Symbols such as dark and dense rain clouds that predict rain, and explicit symbols like a red light means stop universally exist. Symbols are “tangible formulations of notions, abstractions, from experience fixed in perceptible forms, concrete embodiments of ideas, attitudes, judgments, longings, or beliefs” [Geertz, 1993, p. 91].

Symbols exist because of their underlying meanings and their shared belief in small groups or even throughout the world. Symbols are capable of originating from an individual, but they must be accepted and applied by a group. The symbols' meanings and significance are directly influenced by the number of people sharing them in a social group. For example, the cross is a very prominent symbol within the Catholic Church. This symbol is much more significant compared to one shared between two friends.

SYMBOLISM THROUGH ARCHITECTURE Symbols transcend their perceived conceptions and are utilized throughout culture including in architecture. Through architecture, people can experience symbolism, because of the symbol's ability to be experienced spatially and phenomenologically. The architectural experience, creates a sense of synthesis through various media used to communicate the symbolic themes [Barrie, 1996]. The symbols transcend in architecture throughout the plans, geometry, surface, form, and space [Barrie, 1996].

“[Architecture] it is not a static experience, such as the viewing of art, nor a passive one such as listening to the retelling of a folktale, but a dynamic experience in which the participant, moving through architecture, apprehends its message both spatially and temporally. It is the inexpressible expressed three-dimensionally and experienced totally.”

-Thomas Barrie, 1996, p. 16

Architecture functions as both built symbols and myth that symbolizes cultural beliefs and facilitates the enactment of shared rituals. Water is a very important symbolic feature found in ritual. The use of water is universal in all of the world's religions. Often found at the entrance of sacred spaces, it serves to provide purification and cleansing to the rituals participants.

LEGIBILITY OF SPACE When discussing and observing ritual through architecture, it is vital to understand the geometry and elements that comprise each design.

Kevin Lynch addressed, analyzed, and deconstructed the components of an urban environment. He referred to space as five different elements: paths, edges, districts, nodes, and landmarks [Lynch, 2008]. Lynch emphasized the importance of clarity and legibility throughout space so one can progress through and experience space. These five elements are able to describe the structure of architecture and serve to construct a vocabulary to help interpret space.

Even though all of the elements are meant to correlate with urban design, they also explain the relationships within architecture. The vocabulary formed by Kevin Lynch will facilitate in describing the spatial experiences and symbols found architecture that are formed through ritual.

Paths Paths are channels along which the observer customarily, occasionally, or potentially moves [Lynch, 2008]. Architecture consists of a series of paths through structured spaces that are harmonized through a goal or experience. Paths are characterized by a sequential progression through space that is determined by

an individual. The paths are symbolic because of the conscious choice to follow them and to eventually leave one path to pursue another. These paths need to have distinct identities and are often comprised of enfilades. These enfilades, or linear arrangements of landmarks or nodes, define space and experience throughout the building.

Edges Edges function as separation or cohesion of different parts of a building or environment. Often in architecture these are found in walls or other surfaces.

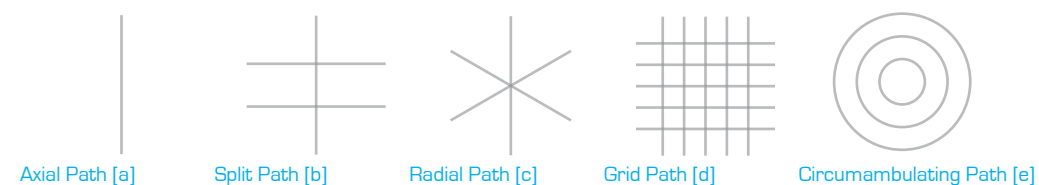
Districts Districts are areas with perceived underlying characteristics. These are expressed in parts of buildings as well as individual spaces.

Nodes Nodes are elements that centers for attraction you can enter and are defined as "strategic" foci. They can be defined as converging paths, or moments of shift between elements.

Landmarks Landmarks consist of points of interests that are not able to be entered. They can be any distinct or prominent physical or visual feature that helps identify an area.

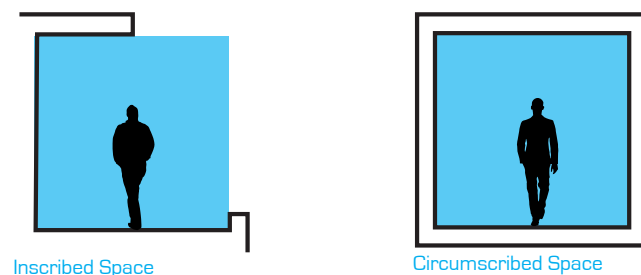
CHARACTERISTICS OF SPACE The essence of ritual in architecture is communicated between path and place and is characterized by specific elements and patterns. The dynamic relationship between path and place is essential when describing ritual in architecture, even though they can act independently. Through path and place, one experiences architecture far beyond the physical boundaries of the building. Path and place within architecture also has the capability of captivating us psychologically and spiritually. The ritual acts as a symbol that enhances the architecture of a building.

There are two major typologies of paths exist, linear paths and segmented paths. Linear paths consist of axial paths [a], split paths [b], radial paths [c], grid paths [d], and circumambulating paths [e].



In western culture, we place emphasis on the spaces the building creates rather than the building itself. This view of architecture creates a notion of perception and experience through volumes and spatial sequences [Barrie, 1996]. The spaces sculpted within a building cannot be represented or described in text or imagery, rather they must be experience to fully understand their meanings. Architect Bruno Zevi expressed that “the history of architecture is primarily the history of spatial conceptions. Judgment of architecture is fundamentally judgment of internal space of buildings.” Through understanding the spatial configurations and symbols utilized throughout the history of architecture, inspiration and symbolism can be attained and incorporated into modern architecture successfully.

Space is experienced in terms of inscribed or circumscribed. Inscribed space is not fully enclosed but is implied by the edges or one or more sides, including but not limited to walls, columns, rails, change in level, or landscaping. Circumscribed space is completely or almost entirely enclosed and is considerably more defined.



EXPERIENCE The function of architecture is not to be viewed, but rather experienced. Through architecture, one can the building’s path and place along with characteristics that might not be so apparent. Characteristics such as acoustics, lighting, smells, and various social environments enhance the building and provide phenomenological experiences [Barrie, 1996]. The synergies between these experiences are necessary to understand the entirety of the architecture.

“Every sacred space implies a hierarchy, and irruption of the sacred that results in detaching a territory from the surrounding cosmic milieu and making it qualitatively different.”

- Mircea Eliade, 1959

The rhythm experienced throughout architecture manipulates the fourth dimension of space, time, and is vital to the experience within a building. Dimensions, distance, and textures directly affect the time experienced by the person experiencing the build. The perception of time is perceived as faster when traveling through a narrow space compared to a similar wide corridor. Time is also important because of its relativity. Individual experience within a building depends on many factors such as physical ability and age. A space may seem longer for someone who is younger and smaller compared to a full-sized adult.

MEANING When designing architecture it is vital to sculpt a unique environment that creates a sense of belonging and connection between the users and building. The idea of architecture creating and defining space for the community is vital. Through community, users feel connected with others and the building itself. These communities can share values, which can indicate symbolic connections. It is important to understand why occupants value and interact in space. The ritual of attending mass at a church has a very specific environment and meaning that is shared throughout all it’s users. People attending mass dress up because they

share same values about the meaning and symbolism of attending the service.

Often, the architecture that has been created was inspired by these concepts, preexisting culture and symbols. The symbolic elements used throughout the building help define the space help identify the users to the space [Barrie, 1996]. The underlying beliefs of the space held by the users are often expressed in how it was produced and experienced.

“Successful and meaningful paths and places make use of cadence of space-forming elements such as planes or columns; their rhythm is manipulated in a manner not dissimilar to musical composition.”

- Thomas Barrie

Sacred place is created when synergies are created between “place and meaning” [Barrie, 1996]. Even though sacred place can be derived from various origins, uses and forms, their connotative ideas and themes are often similar. The sacred place creates an oasis from the outside world where users share symbolic meaning and share rituals.

RITUAL MANIFESTED IN ARCHITECTURE The path to the sacred place is experienced in three different stages; preparation, separation, and return [Barrie, 1996]. There is always a defined entry, that symbolizes the decision whether to start the journey or not. This gateway symbolizes the first point of separation between the sacred and the profane. The entrance is often the locus for a ritualistic shedding of the outside world, such as a cleansing. In Catholic liturgical design this is manifested through holy water near the entrance that symbolizes cleansing and the baptism one once experienced.

After preparing to enter the sacred spaces, one follows an enfilade

of symbolic spaces that strengthen a sense of motivation until they reach the sacred place. This sacred place is isolated from the profane world. Spaces within the sacred place contain a symbolic hierarchy in these spaces that correlate to specific rituals.

Through ritual, one attempts to communicate with the divine. These religious rituals have remained almost unchanged and are inherited through previous generations. Part of the reason why the rituals have remained unchanged is because of their specific structure that makes them symbolic and timeless.

THEORETICAL PREMISE SUMMARY

Even though architecture does not directly shape ritual, it does facilitate in synergies between the user and building. The culture of the buildings users shape their perceived symbols and assist in communicating throughout paths and space. Careful consideration of symbolic connotations and interactions help form the spatial relationships that directly enhance architecture.

Different cultures utilize different space and path configurations that are results of their culture and rituals. Each culture and religion contain different features specific to their rituals, but their intrinsic ideologies are almost identical.

Symbols found in cultures exist because of their underlying meanings and are accepted by the group. These symbols are exhibited through religious and cultural myths and traditions. For example, water symbolizing cleansing is apparent in many ritualistic experiences. Throughout the design process for the Olympic soccer team, it is important to pay attention to their past and current rituals.

The presence of ritual is ubiquitous when referring to sporting events and athletes. The Olympic Games were originally held as a religious ceremony paying homage to Zeus and the other Greek gods. Sporting along with music, dance, poetry drama and contests were done as ceremonies and offered to the gods. This distinct and poetic culture and history of the Olympics is an pronounced source of inspiration for designing for these athletes.

A major element of ritual is the journey that is experienced in preparation, separation, and return. These three steps are experienced throughout every religious ritual and add invaluable meaning to the architecture and it's users. Symbolically this directly correlates to athletes training for the Olympic games. The

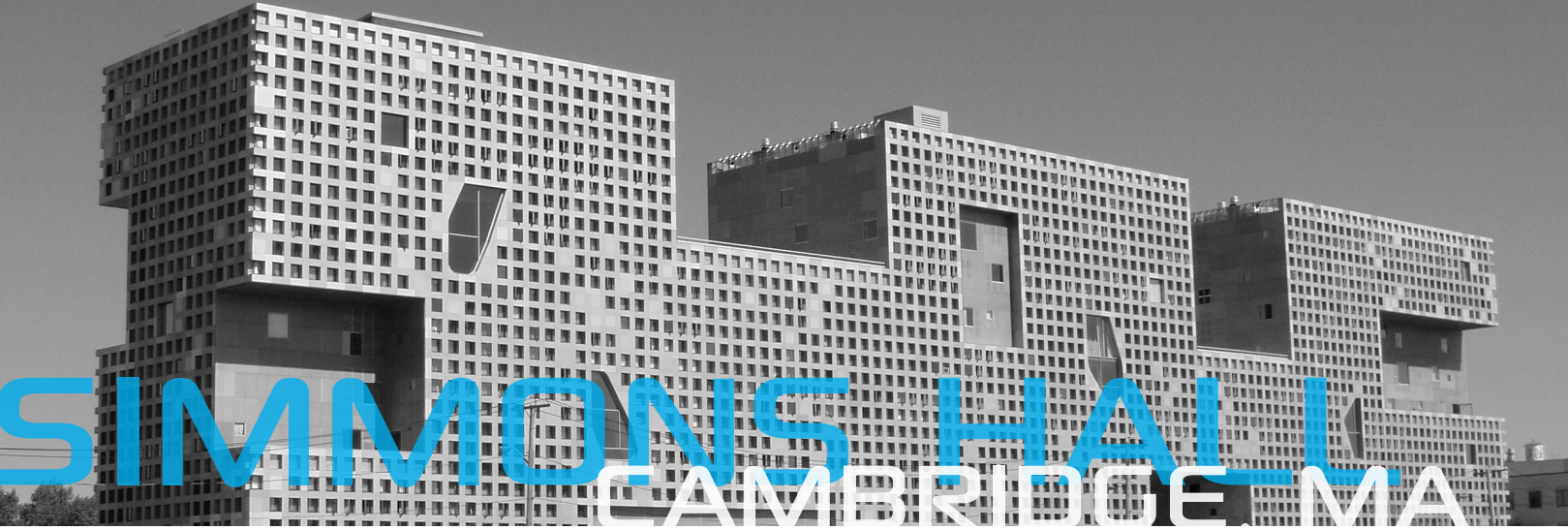
preparation is experienced when the athletes are training physically and psychologically. Through preparation they train as individuals and as a team to achieve a common goal. Separation is experienced when the athletes are traveling from the entrance to the field or the living areas. These are experienced through a series of paths, edges, districts, nodes, and landmarks. The series of spaces creates a heightened awareness of the task at hand and unite the team. The return is experienced once they leave the temporary training facility to return to their personal residences.

Without the use of ritual there is a natural tendency to dehumanize the standards of architecture. Architecture reduces down to a series of meaningless spaces and materials that function merely as structure. The advancement of technology has taken emphasis off of symbolism and replaced it with building technology.

Experience and phenomenology are critical elements when considering different path and space configurations. The architecture is also amplified through symbolic hierarchy found within the culture.



CASE STUDIES



ARCHITECT Steven Holl

TPOLOGY Undergraduate Dormitory

SQUARE FOOTAGE 200,000 square feet

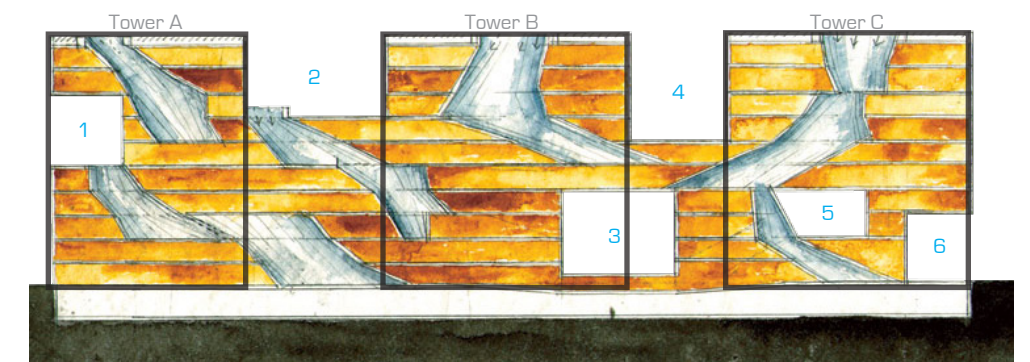
INTRODUCTION In 1999, Massachusetts Institute of Technology [MIT] appointed Steve Holl to design an iconic undergraduate dorm to house 350 students and incorporate a dining hall, cafe, and a 125 person theatre. Each dorm room of the buildings ten floors contains nine operable windows for more than 5,500 windows throughout the entire building. The windows are recessed 18” into the concrete facade which provides shade in the summer and maximizes heat gain in the winter.

CONCEPT Simmons Hall was inspired by a sponge that creates pores that allow in light and promote natural ventilation throughout the building. Along with the organic sponge-like forms that Steven Holl referred to as “lungs” in the building, the hall also contains six voids. The main voids within the building’s form are utilized as space for entrances, circulation spaces, and outdoor space. The building is organized into three towers, characterized by the large voids. The unique spaces created by these voids help contribute to student interaction and add a new dimension of space.

STRUCTURE The dorm’s structure is created using prefabricated reinforced concrete panels with openings for the windows. These concrete panels once connected, serve as bearing walls and provide structure to the building. The 10’ x 10’ or 10’ x 20’ panels are connected to vertical beams to create it’s unique rigid frame structure. One of Simmons Hall’s most unique features is the bright painted windows. These colors represent the size of the reinforced steel within the concrete. The five colors used throughout the building are blue [5], green [6], yellow [7], orange [8], and red [9/10].

NATURAL LIGHTING With over 5,500 windows, the building receives an abundance of natural light. The sponge-like voids that assist in increasing light and ventilation were originally planned to be much larger, but due to fire codes their size had to be reduced.

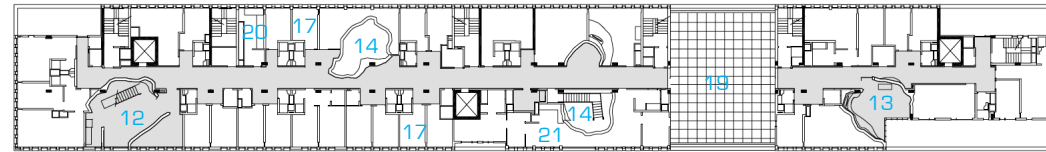
MASSING Simmons Hall’s form consists of a large rectangular block with 5 voids penetrating though the building. Multiple organically shaped “lunge” also exist within the building to help define and create unique spaces. Tower ‘A’ is slightly smaller than towers ‘B’ and ‘C’. The six voids are located throughout the building helping sculpt a variety of unique spaces. Void 6 serves as the entrance to the building, where 1, 2, 3, and 4 function as outdoor terraces, and 5 is an open space over a unique glazed passage. The sponge features interact with every floor on each tower and are interact with the voids to promote ventilation and daylight.



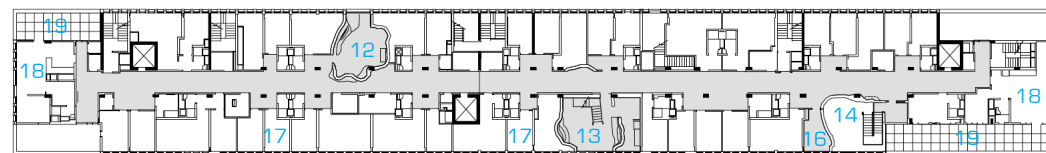
CONCLUSIONS Simmons Hall creates a unique city environment within a building for it’s 350 residents. It’s successful integration of dorms, a dining center, cafe, and theatre create synergies within the building. Steven Holl utilizes the bottom two floors for the building’s public programmatic elements and utilizes voids to create larger first story spaces that enhance the prominence of these spaces. The individual rooms that exist on floors three through ten are formed around voids, terraces, and community spaces, which break up the repetition within their configuration. The mixture of spaces creates communal areas for students to interact and function.



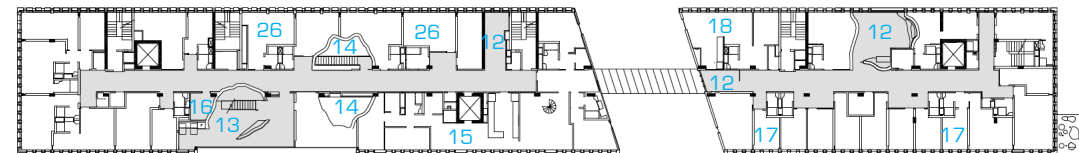
Eighth Floor



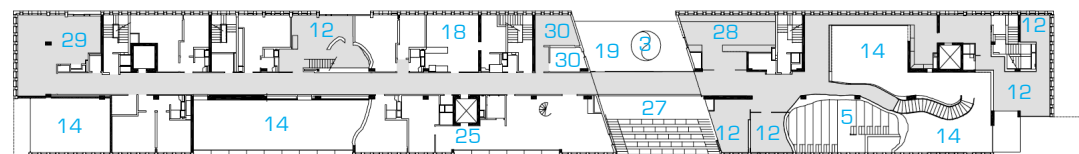
Seventh Floor



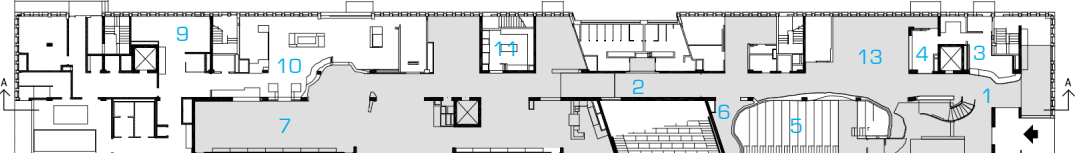
Sixth Floor



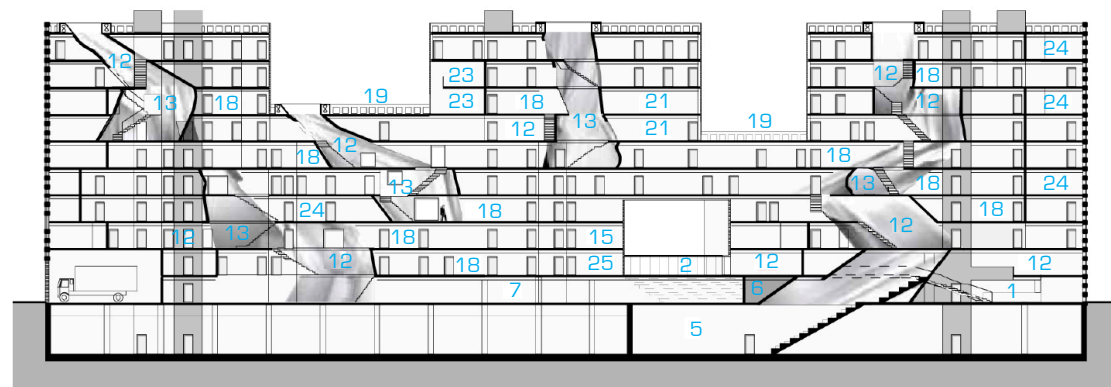
Third Floor



Second Floor



Ground Floor



Section 1

- 1 Lobby
- 2 Glazed Passage
- 3 D. Graham Sculpture
- 4 Mail Room
- 5 Multiuse/Auditorium
- 6 Meditation
- 7 Dining Hall
- 8 Outdoor Dining
- 9 Prep Kitchen
- 10 Serving Area
- 11 Student Kitchen
- 12 Study
- 13 Group Lounge
- 14 Open
- 15 Housemaster
- 16 Laundry
- 17 Typical Single Room
- 18 Graduate Resident
- 19 Terrace
- 20 Photo Lab
- 21 Associate Housemaster
- 22 Skylight
- 23 Exercise
- 24 Visiting Scholar
- 25 Housemaster Reception
- 26 Typical Double Room
- 27 Bleachers
- 28 Computer Lab
- 29 Game Room
- 30 Music Room



[1] The dorm room lights of Simmons Hall animate the Cambridge night sky.



[2] The organic forms going through the dorm crates create unique spaces for circulation.

[3] The 'lungs' penetrating the building allow light into a study lounge.



[4] The splash of color on the outside of the windows correlates to the size of reinforced steel.

[5] The bottom two levels serve as community spaces including a dining hall.

THE CENTRE DE FORMATION DE FOOTBALL

AMIENS, FRANCE

ARCHITECT Chartier-Corbasson

TPOLOGY Soccer Training Facility

SQUARE FOOTAGE 20,000 square feet

INTRODUCTION Designed in 2008 by French Firm Chartier-Corbasson, the soccer training facility provides space for 45 players, including locker rooms, training rooms, a fitness center, and a restaurant. The training facility is located in rural Amiens, France on the banks of the River Selle.

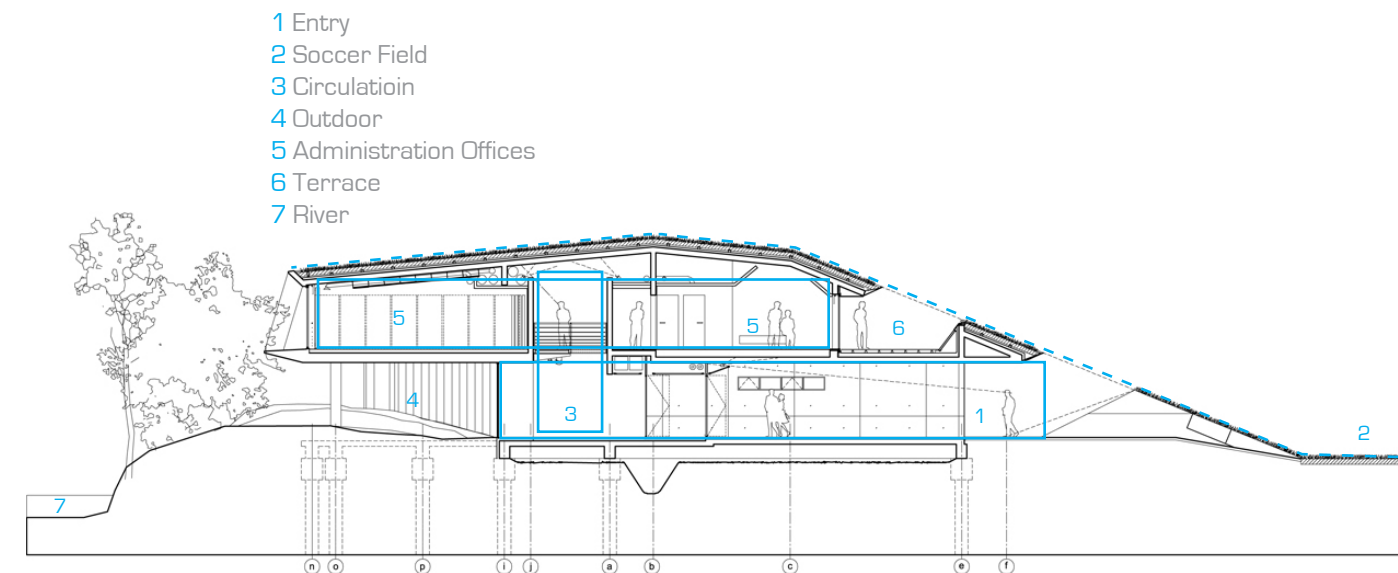
CONCEPT

Two separate levels divide the programmatic elements of the building. The first floor contains dressing rooms, a medical unit, and large activity rooms. The second floor contains space for the athletes and administrative spaces. A mound is created near the entrance to direct athletes and guests into the building along with serving as seating for those watching the practices on the field. Overhanging roofs provide shade from the sun and provide shelter from the elements.

STRUCTURE The buildings structure is comprised of concrete bearing walls that run parallel to the building. Steel beams cantilever into the open circulation corridor to support.

NATURAL LIGHTING The building utilizes curtain walls to obtain indirect northern light. The south of the training facility also features glass sliding doors that allow in light and promote ventilation. The concrete walls and landscape prevent the summer sun from entering in the first level where private functions like the locker and medical rooms are situated.

MASSING The training center's form is created by two offset rectangles that create two voids. The void on the first floor serves as an outdoor space and fitness center, the second floor void serves as a terrace that overlooks the soccer field. Circulation on both floors overlap each other and they are connected by a set of stairs.

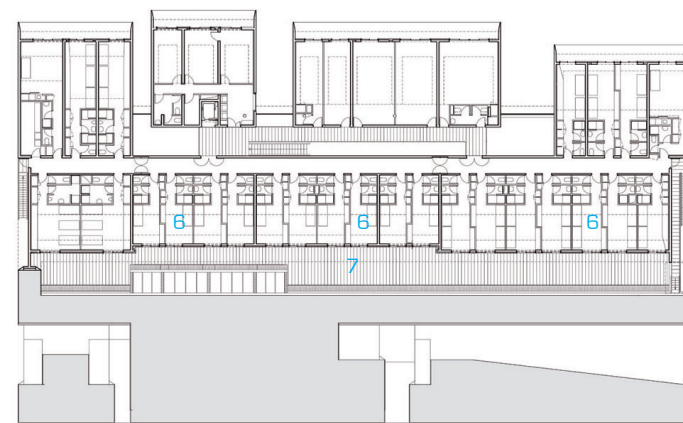


CONCLUSIONS The training center successfully combines administration, training, and a restaurant all into one cohesive program. The building's utilization of curtainwalls provides countless views to the surrounding site. The earth provides the entrance to the building and assists in guiding athletes and guests into the building. This experience serves as a reminder and allows the athletes to further experience the field's playing surface. It's simple, but elegant form is accentuated by the large greenroof that physically and visually integrates the training facility to the earth. The training facility also interacts with the river to the north of the building where the structure rises into the air.



First Floor

- 1 Entry
- 2 Soccer Field
- 3 Dressing Rooms
- 4 Training Room
- 5 Activity Room
- 6 Administration Offices
- 7 Terrace



Second Floor



[1] The exercise room provides athletes with a scenic view.



[2] The building utilizes large amounts of glazing to help connect visitors with nature.



[3] The training facility's large activity room functions as a place to eat.



[4] The building is visual connected to the site through a greenroof.



ARCHITECT Richard Meier

TYOLOGY Church and Community Center

SQUARE FOOTAGE 9,000 square feet

INTRODUCTION Jubilee Church [formerly known as Dio Padre Misericordioso] was designed in 1996 by Pritzker Prize recipient Richard Meier to function as a the parish of eight thousand parishioners of the church and community center. The material palate utilized throughout the building consists of concrete, stucco, travertine, and glass.

CONCEPT The church's most iconic feature is it's three pre-cast concrete shells that range from 56 to 88 feet tall. The three shells represent the Holy Trinity and emphasize the visual connection with the sky and draw attention to heaven. Glazed skylights between the shells help illuminate the interior of the church. Jubilee Church's white walls and forms allow light and shadow to play off of the church's surface, creating numerous unique textures and experiences.

The church has three entrances [one functions as a ceremonial entrance] that greet parishioners into the building. When approaching the church a cantilever reaches out and greets it's guests. After passing underneath the shelter at the entry one enters the building through a pair of double doors made out of wood that are only used for sacred and special occasions such as weddings, festival processions, holy days, and funerals.

Upon entering you pass the baptismal font before reaching the church's nave. The nave is sculpted from the largest concave shell to the south and the vertical wall to the north. A series of voids on the shell that separates the chapel from the nave create visual countenance between the altar and the chapel.

Jubilee Church also integrates a community center into the church on the second floor and two outdoor courts that provide areas for

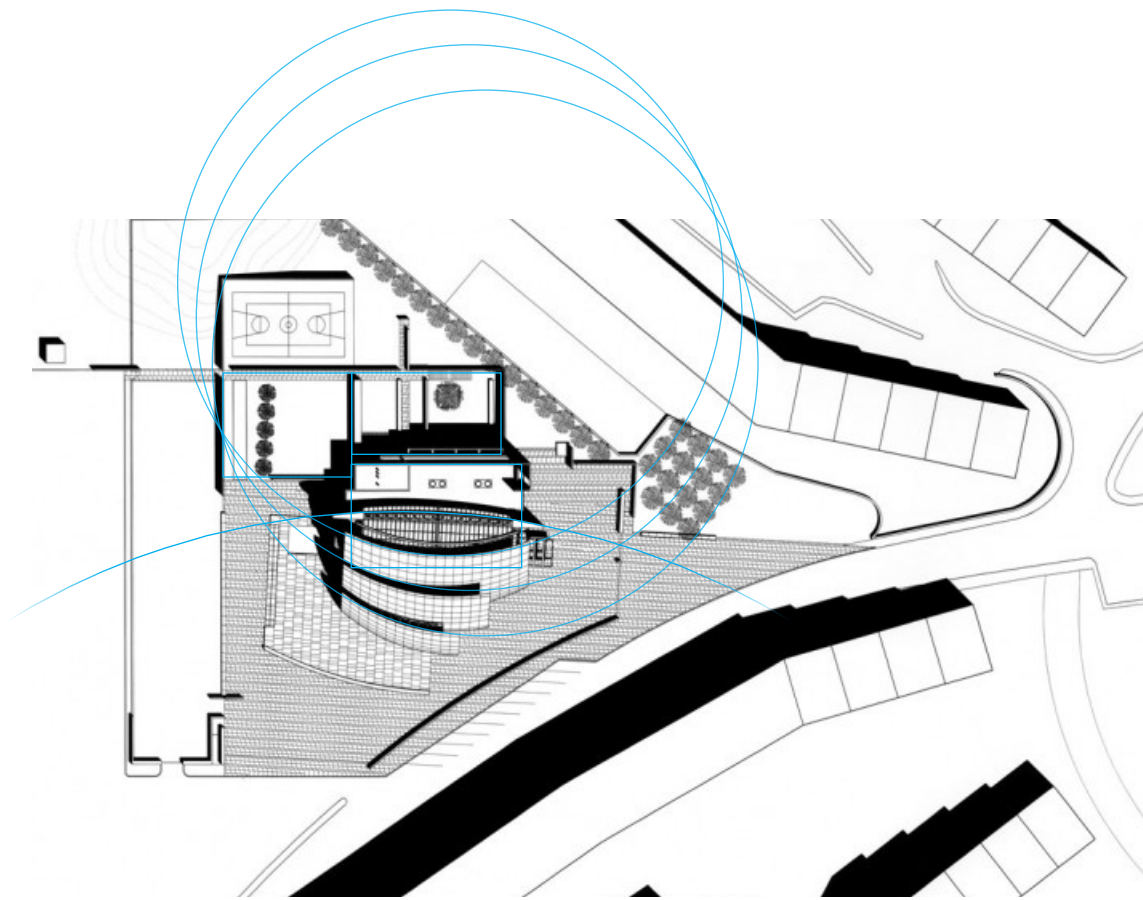
church assemblies and other liturgical rituals. The court in the east is embedded into the earth, which provides light and access to the lower floor of the community center. The court to the west features a reflecting pool that symbolizes the role played by water in the ritual of baptism. These courts help express the formal and informal celebration of God and human life.

STRUCTURE The church's structure is formed using the pre-cast concrete shells as bearing walls, along with one vertical bearing wall at the center of the building. The community center is supported by a series of significantly smaller bearing walls and columns that correlate with the edges of rooms and cooridors.

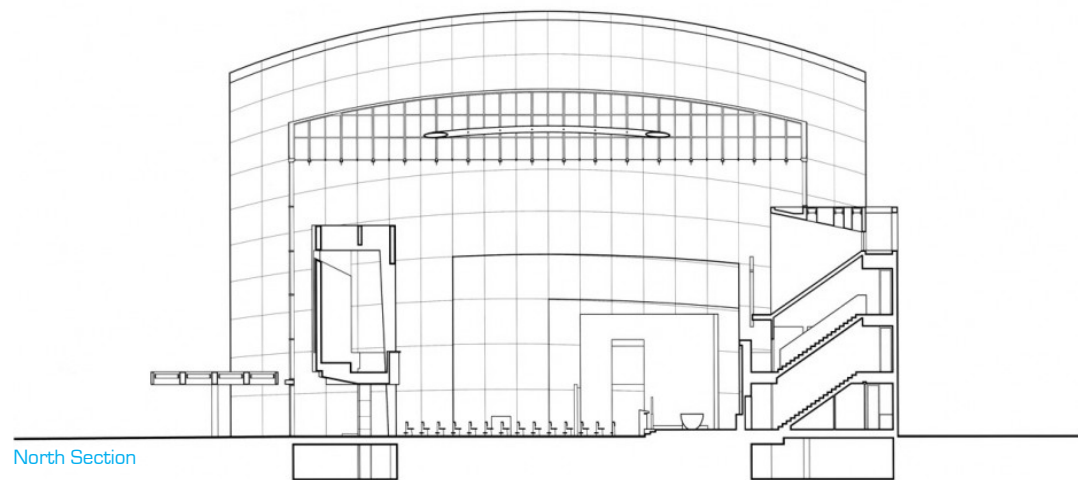
NATURAL LIGHTING Jubilee's interior spaces are illuminated by a plethora of curtainwalls that exist between the shells. Intense southern direct light is reduced with the shell's presence on the south. The building's mostly white textures assist in reflecting light and illuminating the spaces, creating a radiant environment.

MASSING The from of Jubilee Church is comprised of four circles and three squares. Three circles of equal diameter shape the building's three iconic concrete shells. The final circle shapes the curved vertical wall in the center of the church. The four squares create the nave and community center and are divided only through the centralized bearing wall.

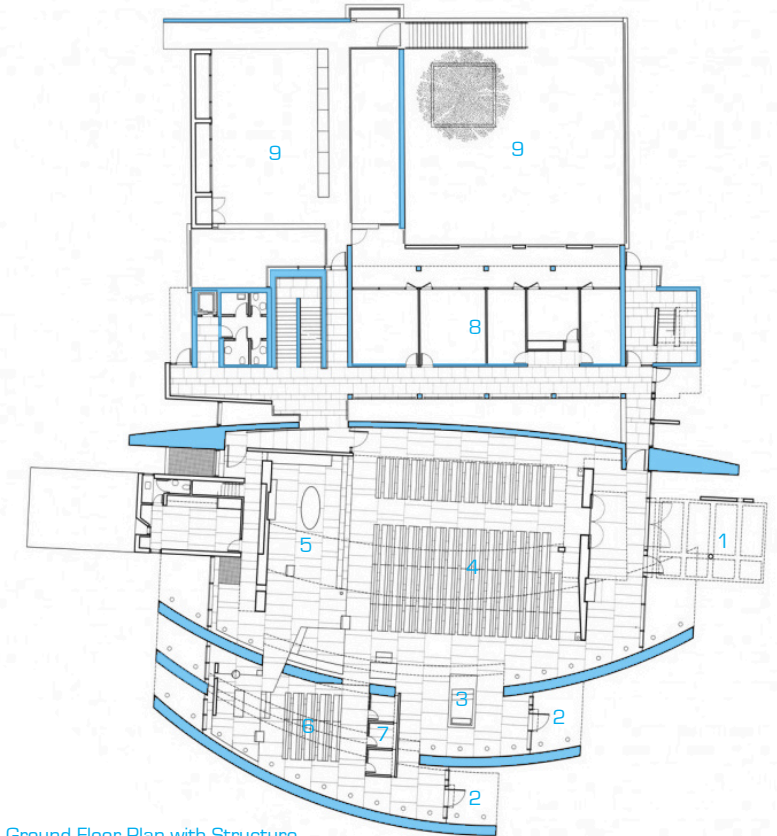
CONCLUSIONS Jubilee Church embraces form, space, and ritual. Even the church's unique approach was considered, and designed slightly curved to allow for automobiles to experience the ceremonial approach. The three shell's forms contribute to acoustic, structure, thermal mass, and shading, all while sculpting a unique enfilade of spaces to enhance the mass experience. The church's thermal mass allows the church to be naturally ventilated that helps create an open and natural environment.



Roof Plan

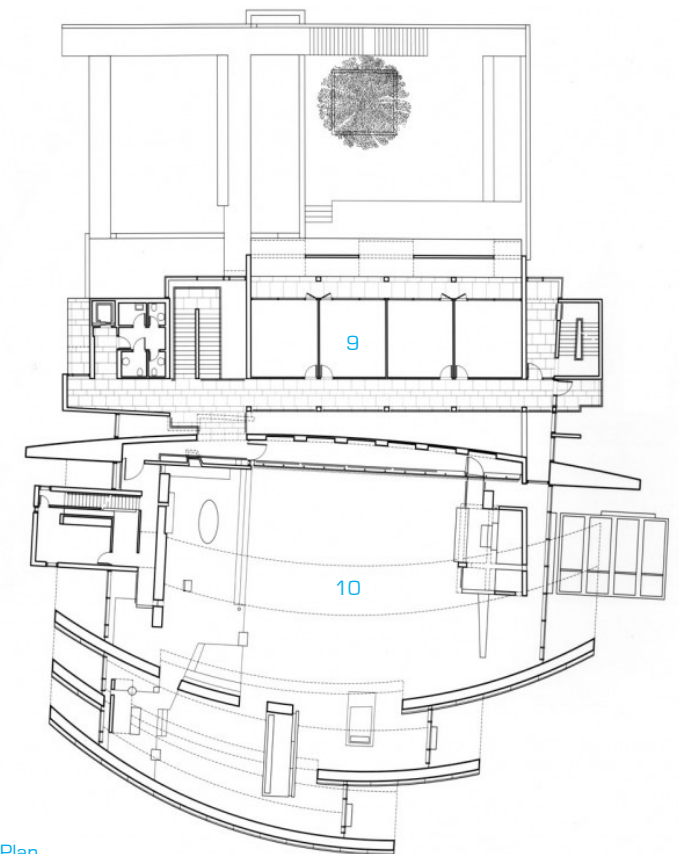


North Section

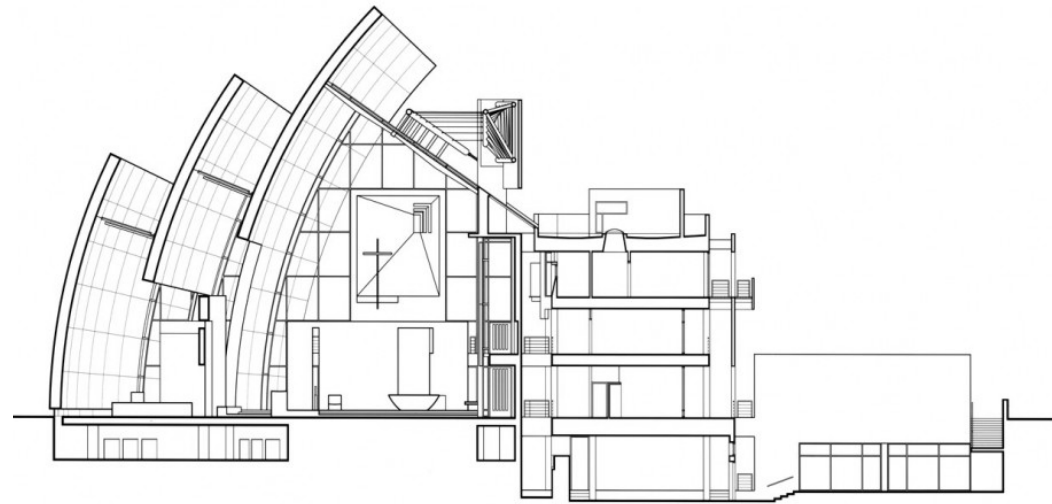


Ground Floor Plan with Structure

- 1 Ceremonial Entrance
- 2 Alternate Entrances
- 3 Baptismal Fount
- 4 Nave
- 5 Altar
- 6 Chapel
- 7 Reconciliation Rooms
- 8 Priest's Office and Meeting Rooms
- 9 Catechism Classroom
- 10 Open



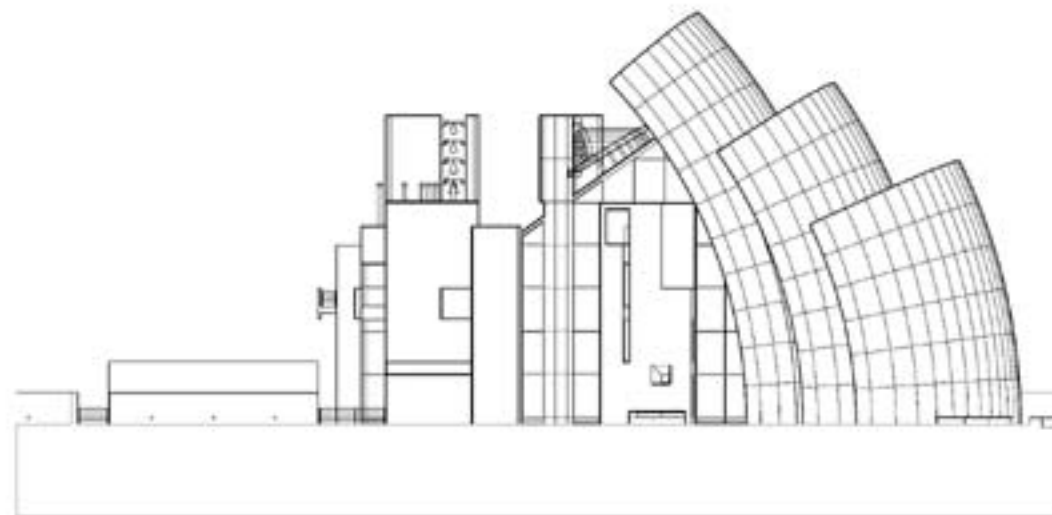
First Floor Plan



East Section



East Elevation



West Elevation



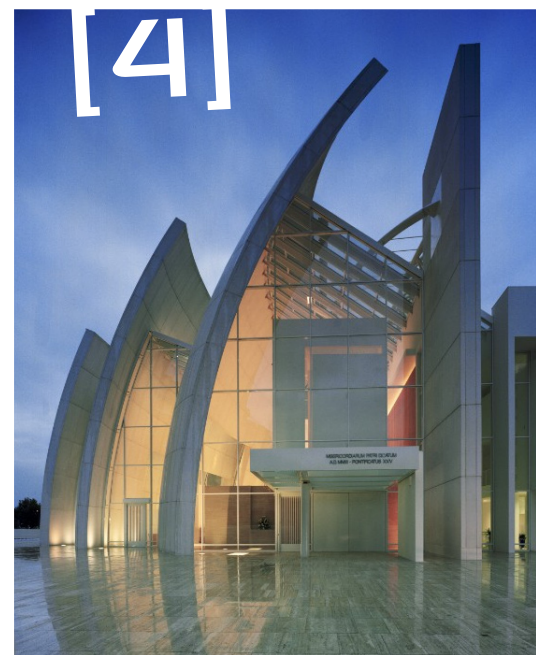
[1] The chapel is connected to the nave and altar through a series of voids.



[2] Richard Meier's use of the color white defines and enhances highlights and shadows created by the sun.



[3] The nave of the church is defined by the main shell to the south and vertical wall to the north.



[4] Jubilee Church's ceremonial entrance greets worshipers and is only utilized on weddings, ceremonial processions, holy days, and funerals.

TYPOGRAPHICAL SUMMARY

NARRATIVE Even though these case studies include buildings with different typologies, they contain many similar characteristics. Simmons Hall, the Centre de Formation de Football, and Jubilee Church all have very specific programs that are meant to enhance the user's experience with the program [academics, soccer, mass]. Through understanding these typologies and their specific programs, one is able to obtain a greater understanding on how the proposed training facility could utilize synergies between these buildings concepts.

This thesis project will not conform to the current constraints of a training facility, but rather integrate ideas and aspects from different typologies to create synergies within the building. By achieving this, the training center and it's users will be more successful. For example, a dorm is more than a series of repetitious rooms arranged down a corridor. Rather it is the other programmatic elements that create and enhance the building.

The building is separated into three different elements; dormitories, training facilities, and outdoor space. Each of these programmatic elements is equally vital for the success of the training facility. By closely studying elements from dorms [life], training facilities [sport], and churches [ritual], these ideas will influence the design and enhance the architecture and the users' experience.

LIFE There is a significant importance to these athletes living together. Just like college students matriculate from all around the country for school, Olympic athletes have other homes usually not in the cities they train. By utilizing living areas, these athletes are able to focus on preparing for the Olympic games instead of commuting to the training facilities. Similar to dorms, special attention needs to be placed on the community spaces that allow for interaction. In each of the case studies, the buildings utilized community spaces along corridors on their main axis. The location of these spaces is vital and is influenced by the buildings form, users, and program.

SPORT The training facility also requires spaces for athletes that have special needs and require spaces for medical and training. Case studies featuring current training facilities, wellness centers, and stadiums provide insight on various training facility forms and configurations.

RITUAL Ritual is an intrinsic part of our everyday life. Churches, temples, and other liturgical designs contain valuable insight to ritual and the enfilade experienced by users. A thorough understanding of these liturgical building will directly enhance and inspire the spaces where the athletes live and train.



HISTORICAL
CONTEXT

ATLANTA, GEORGIA

POPULATION 4,917,717

RACES Black alone - 249,442 (55.1%)
White alone - 165,101 (36.4%)
Hispanic - 24,327 (5.4%)
Asian alone - 7,787 (1.7%)
Two or more races - 4,229 (0.9%)
Other race alone - 1,543 (0.5%)

HISTORY Atlanta is built on the previous land of Creek and Cherokee Native American territory. The ancient land of the Native Americans was taken over by settlers and traded for land out west. In 1836, the Georgia General Assembly decided to construct the Western and Atlantic Railroads to provide a trade route to the Midwest. The railroad marked the beginning as Atlanta's economic and cultural presence in the south.

The city had a major influence on the southern slave trade, and during the Civil War it served as an important railroad and military supply. Several distinct Civil War battles took place in Atlanta including Battle of Peachtree Creek, Battle of Atlanta, and Battle of Ezra Church. At one time the city was evacuated for four months due to an attack by the Union Army. The attack and later defeat of Atlanta crippled the south and was a major turning point in the war. Eventually the fall of Atlanta led to the re-election of Abraham Lincoln and the end to the Civil War. After the war there was a shift of freed slaves from plantations to major southern cities. At this time Atlanta's population doubled to 35,000 in 1770.

Later, during the Great Depression, Atlanta was going bankrupt. The Coca-Cola Company paid the city's debt. To this day the Coca-Cola's presence in the city is everywhere.

Atlanta served as the epicenter for the Civil Rights Movement fronted by

Martin Luther King Jr. In 1964 the Civil Rights act was passed, making it illegal to discriminate based on race, religion, or national origin. The charismatic leader was assassinated April 4th, 1968. The King Center in Atlanta celebrates the life of Martin Luther King Jr. and tells the story of the Civil Rights movement.

In 1990, the International Olympic Committee selected Atlanta as the host for the 1996 Centennial Olympic Games. The Summer Olympic Games revitalized the city and Atlanta Became the third American City to host the Olympics [previously, St. Louis and Los Angeles]. One notable event during the time of the Olympics was the Centennial Olympic Park bombing that took one life and injured several more.

The Olympics Games have transformed Atlanta from a regional city, to a fast growing international city. The city currently has the world's busiest airport and is the southeast capital for business.

OLYMPICS

The Olympic Games were sacred festivals celebrating religion and athletics in Ancient Greece. The Olympic Games played in Olympia were included with the Pythian [located in Delphi], Isthmian [Corinth], and Nemean [Nemea] to make up the Panhellenic Games. The essence of the the games was religion. The Olympics Games honored Zeus, the other Greek city-states practicing in the Panhellenic Games honored a other gods [figure a].

Festival	Place	God Honored	Symbol	Time Interval	Founded [B.C.]
Olympic	Olympia	Zeus	Olive	4 years	776
Pythian	Delphi	Apollo	Bay	4 years	582
Isthmain	Corinth	Poseidon	Pine	2 years	582
Nemwan	Nemea	Apollo	Parsley	2 years	573

Figure [a]

Throughout the duration of the games, all wars between city-states would temporarily interrupted so the warriors could focus on the religious and athletic events of their own Panhellenic Games.

The ritualistic games were held to convince the gods to return from the dead. These times were also sacred and occurred at the time of the second full moon after the summer solstice. Before the games started the athletes would prepare for the games for thirty days, after which would be concluded with a religious ceremony symbolizing the start of the games. The sports competed in consisted of foot races, chariot races, boxing, wrestling, throwing [which would evolve into the modern events of discus and javelin], and an ancient type of wrestling called pankration. These short religious ceremonies lasted five days. On the final day a celebration feast was created and sacred olive branches were awarded to the winners.

The athletics featured in the Olympic Games' ritual and religious celebrations would eventually become our concept of sporting events and athletics [Guttmann, 1978]. Eventually sports became a part of everyday

life along with being a means for worship.

“... athletic game[s], originally laden with religious significance, concentrated itself upon its own essential elements - play, exercise, and competition.”

- Hans Kamphausen

The Olympic Games were direct by-products from religion and shaped Greek culture and athletics. The victors of the athletic events were honored, almost in the same way the Catholic Church honors Saints. They were praised in statues, poetry and legends.

The Ancient Olympic Games ended in 393 AD, from the speculated exile of all things that resembled to be pagan influences by Christian emperor Theodosius I, but the exact reason is unknown.

The games were revived in 1896 by Frenchmen Pierre de Coubertin, because of his notion that sports and athletics creates a more complete and more vigorous person. The Modern Olympics followed the Olympian ritual of bringing nations together every 4 years for each the Summer and Winter Olympics.

OLYMPIC SYMBOLS

Rings The five Olympic rings symbolize the five continents that participate in the games. They rings are interlaced to show unity. The six colors of the rings [blue, yellow, black, green, red, and white] represent all nations united in the Olympics.

MOTTO "Citius - Altius - Fortius"

The motto translates to "Faster - Higher - Stronger" from Latin. This along with the Olympic creed "The most important thing in life is not the triumph, but the fight; the essential thing is not to have won, but to have fought well", encourage athletes to do their best and strive for personal excellence

FLAME The flame symbolizes three elements in the Olympics: the lighting, the torch, and the relay route.

Lighting The lighting is done in memory of the Olympic Games' origins. This flame is lit in Olympia, Greece before the opening of the Olympics and is started by the sun's rays.

Torch A unique torch is created for each Olympic Games. Runners relay the Olympic flame and pass it on from torch to torch.

Relay Route The relay route from Olympia to the host city is symbolic to the Olympics international presence.

METALS Gold, silver, and bronze metals are given to the first, second, and third place athletes. They symbolize the wealth that was given to ancient Olympians that performed well at the games.

OLIVE BRANCH Also known as kotinos, they were given to each victor of the competitions.

DOVES Doves are a symbol of peace and represent the Greek nation's neutral armistice during the ancient Panhellenic Games.

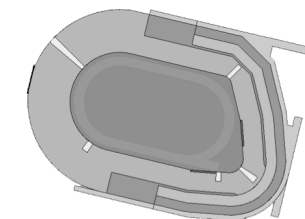
ATLANTA SUMMER OLYMPICS

NARRATIVE For the seventeen days between July 19th and August 4th, 1996, Atlanta became the capital of the world as it hosted the Centennial Olympic Games. These games marked the 100-year anniversary of the Olympics' revival and became the most significant even in Atlanta's history. Over 10,000 athletes gathered from 197 nations to compete in the game's 26 sporting events. The Summer Games cost \$1.6 billion in public and private money that helped create and revitalize the cities parks, venues, and infrastructure.

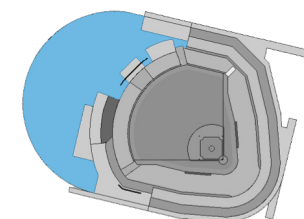
DOWNTOWN The Olympics served as a rebirth for Downtown Atlanta. Downtown housing projects were replaced with apartments that housed the athletes. The culture of the Downtown area morphed from notorious gang territory to the tourist attraction it is today. Downtown attracts over 2 million visitors to the World of Coca-Cola, Centennial Olympic Park, and the Georgia Aquarium annually alone.

ECONOMIC EFFECTS One of the goals of hosting the Olympics was to become an international city. The tourism industry in Atlanta has experienced significant increases since the Olympic Games with significant increases to international travelers. The international presence has also increased and the city has seen notable change in the number of conventions.

FACILITIES One of Atlanta's major additions was the 85,000 seat Centennial Olympic Stadium [a] that was converted into the 49,000 seat Turner Field [b] that serves as the home for the Atlanta Braves. The ballpark reconfiguration cost only \$209 and it serves as a legacy to Atlanta. The **main gate** exists where the west part of the Olympic Stadium was created. This outdoor area serves as a meeting place for fans before and after Braves games.



Centennial Olympic Stadium [a]



Turner Field [a]

PROJECT GOALS

ACADEMIC GOALS

An Insightful Theoretical Premise Clearly define and explore the theoretical premise that becomes a catalyst for every phase of the thesis project. The project should provide academic insight on the theoretical premise and serve as a valuable resource to future scholars.

A Comprehensive Thesis Proposal A thorough thesis proposal is necessary to produce and complete the thesis project.

High Quality Thesis Book Throughout the thesis process it is imperative that the thesis is constantly maintained and developed to the highest quality. It is necessary that both the research and graphics enhance the project and work in harmony.

Professional Thesis Presentation A comprehensive presentation will be utilized to share the research and design completed throughout the semester. The presentation will feature drawings, models, renderings, and any other appropriate mediums to convey the ideas in the thesis.

Achieving Academic Goals These academic goals will be achieved through creating a well organized and cohesive theoretical premise, proposal, and final presentation. It is essential that all deadlines are met and the project is thoroughly developed to exceed all expectations.

PROFESSIONAL GOALS

Improved Computer Modeling Computer skills will be focused on Revit, 3ds Max, SketchUp, and any programs applicable to the given task. A dedication to using multiple programs will eliminate certain constraints individual programs have, so the computer won't restrain the project's design. The computer modeling should produce professional quality drawings and renderings.

Notable Design Skills The thesis should help build and refine design skills necessary to be a prominent designer. Designing notable and inspiring thesis project will serve as a focal point of my portfolio and lead to future design work.

PERSONAL GOALS

Produce a Distinguished Project Through the thesis, I aspire to produce a notable project that I am thoroughly proud of. I look to explore the boundaries of architecture and embrace and strengthen my design philosophy.

Future Career The thesis serves to act as a benchmark for my future as an architect. I look to put to use the skills and knowledge I have obtained to pursue a career in sports architecture.



SITE ANALYSIS

NARRATIVE

As I travel through Atlanta, the Olympic's influence on the city is ubiquitous. The 1996 Summer Olympics hosted by Atlanta served as a renaissance to the downtown area and revitalized the city. Atlanta is comprised of three districts, consisting of Downtown, Midtown, and Buckhead. Atlanta's center of the entertainment and art scene is located in between Downtown and Midtown. The site located in the heart of Midtown is a prime example of the spirit and exuberance of the renewed city.



To the west is the Georgia Aquarium and the World of Coca-Cola that combined attract over two million visitors each year. The liveliness of these buildings span across the Midtown Area and enhance the urban environment. Visitors of the Georgia Aquarium and World of Coca-Cola travel around the Midtown streets and enjoy the ambience of Centennial Olympic Park [1]. These three venues were built in the location of previously abandoned and run-down warehouses that were havens for drugs, alcohol, and prostitution. As I watch people walking and interacting in these vibrant spaces, it is hard to imagine the site's dark past.

Along with the entertainment, Midtown also serves as one of the business and financial headquarters of the south. To the south of the site lays the American Cancer Society and AmericasMart, that along with outer office buildings in Midtown, provide jobs for over 70,000 people. Walking around the site during the day, it is apparent that the workday keeps most business people indoors.

The east of the site is bordered by a run-down parking lot and garage. The environment between the site and the bordering parking lot and garage feels like another world compared to the areas surrounding the World of Coca-Cola. I was greeted to the world in ruins by a homeless man asking for spare change. As I looked around noticed the area was darkly decorated with graffiti and garbage.



Condominiums built to the north provide one to three bedroom units within walking distance to restaurants and retail. The abundance of new residential highrises add to the dynamic character of the Midtown area.



Overall, the surrounding sites have an abundance of outdoor spaces that enhance Midtown and serve as a connection between buildings. As I walk around the site, there is a sense of excitement and life, whether it is a group of figure skaters skating, or dogs playing frisbee with their owners in Centennial Olympic Park. To the north there are children pulling their parent's hands with excitement to the Georgia Aquarium [2] where they can see over 100,000 different animals, along with couples walking together enjoying the landscape created in the void between the World of Coca-Cola and the Georgia Aquarium.

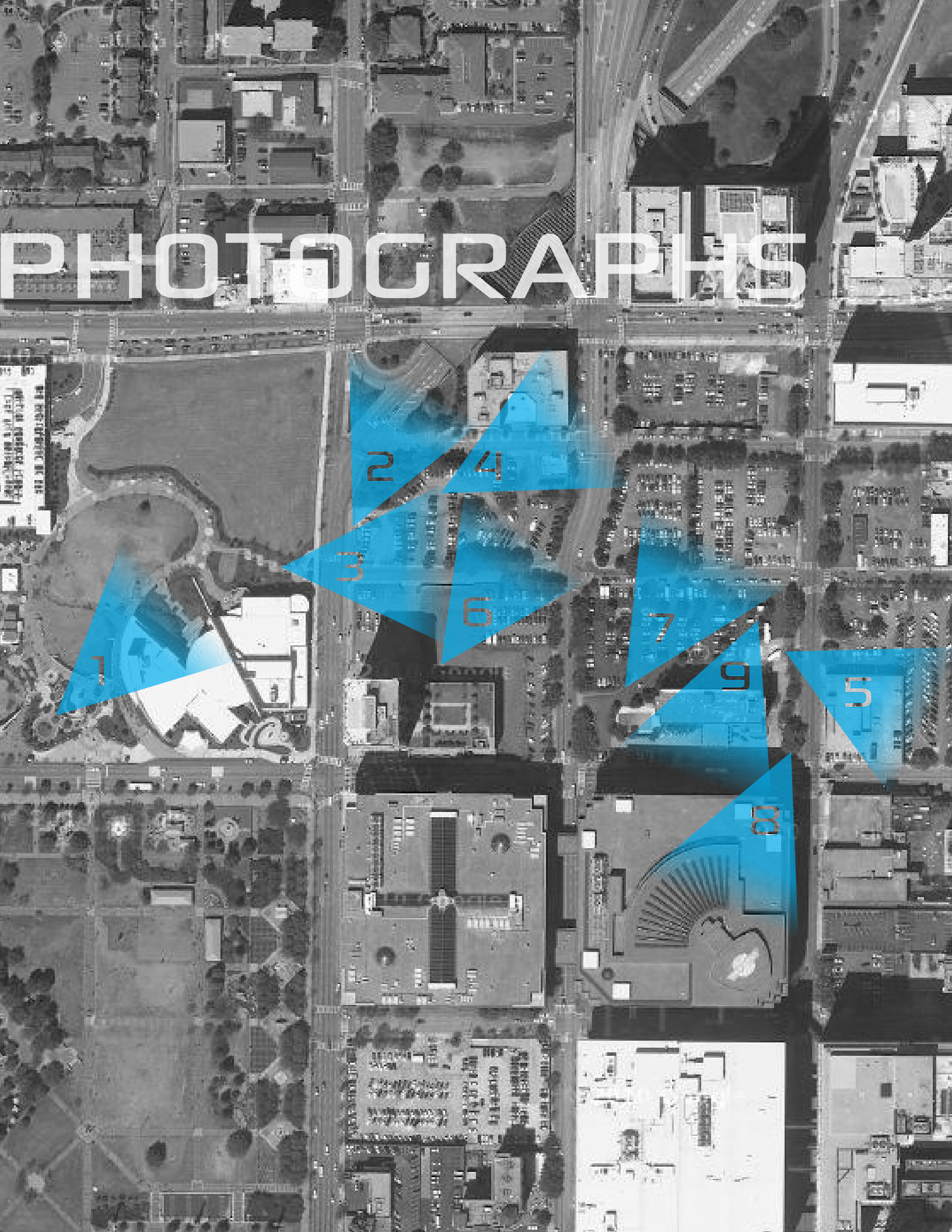
Nestled within Midtown's animated built environment is the proposed site that is covered by a plethora of parking consisting of cracks and overgrowth. With qualities more extreme than the parking to the east, the site is neglected and in ruins. The only evidence of any inhabitants on the site is a sleeping bag comprised of old packing blankets and a nearby stash of clothes neatly folded in a clearing of bushes [3]. The homeless dwelling is located in the heart of the proposed site and is a sign of its need for renaissance.

Located on the site stands an aging Days Inn [3], that stands as evidence of the city's past. Both the hotel and its premises are in despair, which have contributed in making the hotel mostly vacant except for a few shady personalities lingering near the entrance.

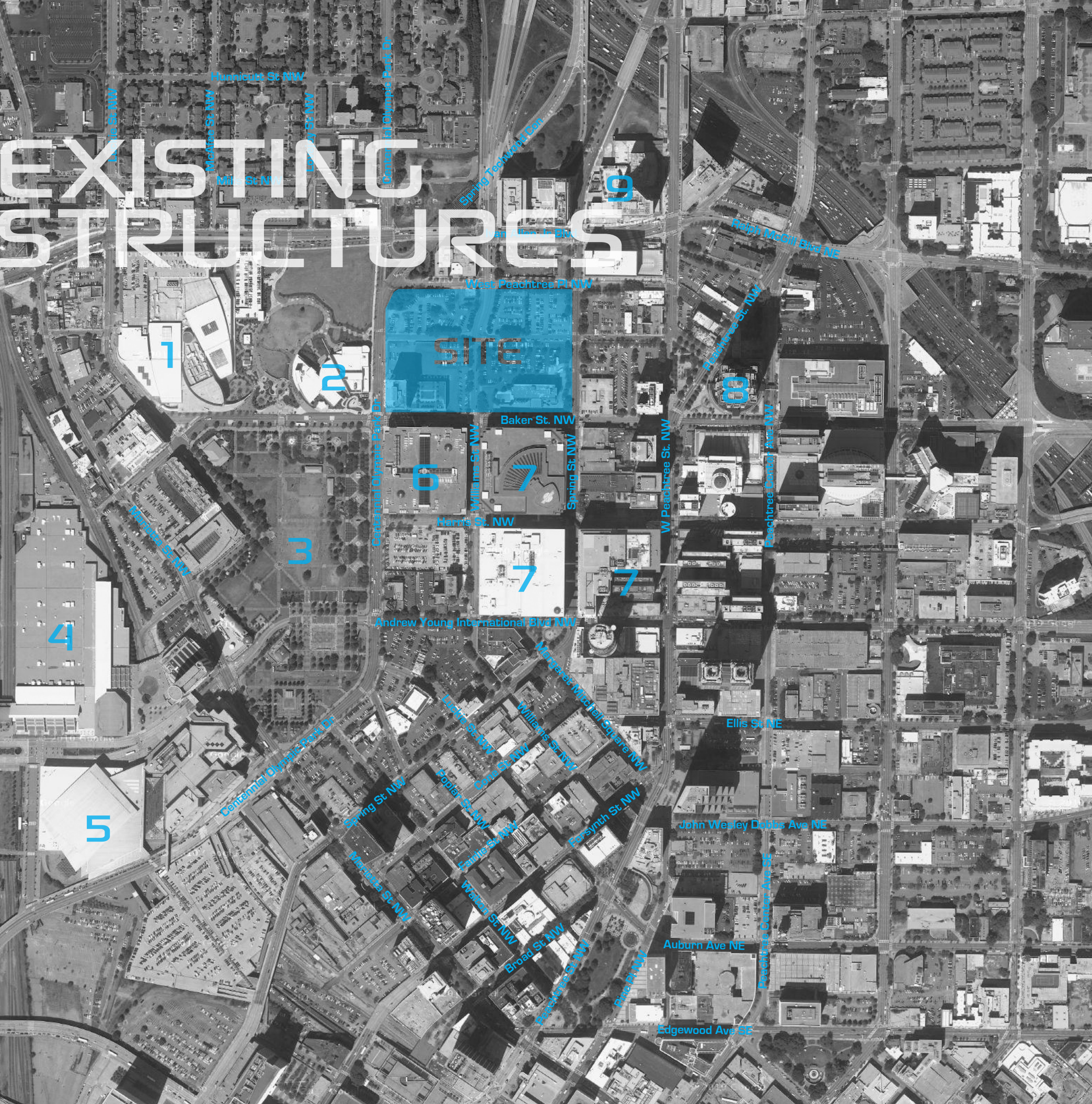
Even though the office suites and attractions generate liveliness and a sense of security, the end of the five o'clock workday transforms this part of Midtown into a different place. Once the visitor's and employee's cars leave the pay lots, the lots morph and shady groups of people congregate in the corner of these lots.

The site creates a unique opportunity to be revitalized and enhance the surrounding areas. As I walk away from the site, I think about the site's unique character and its opportunity to enhance the city of Atlanta.

PHOTOGRAPHS



EXISTING STRUCTURES



1 Georgia Aquarium

The Georgia Aquarium is the world's largest aquarium with more than 8.5 million gallons of marine and freshwater. The aquarium features more than 100,000 animals of 500 different species.

2 World of Coca-Cola

The World of Coca-Cola exhibits the history of the Coca-Cola Company. Completed in 2007, the World of Coca-Cola attracts over 1 million guests each year. The World of Coca-Cola features a 3d movie theatre, over 1,000 Coca-Cola artifacts, and a fully functioning bottling line.

3 Centennial Olympic Park

Centennial Olympic Park was designed as part of the 1996 Summer Olympics on the sites of previously vacant and run-down industrial buildings. The 21-acre park continues to host community festivals, fundraisers, and private events [Centennial Olympic Park]. The park's key attraction is the Fountain of Rings, featuring the Olympic Rings and 251 computer-controlled jets that shoot water into the air.

4 Georgia World Congress Center

Georgia World Congress Center is the main convention center in Atlanta. The convention center attracts over a million visitors each year and features 3.9 million square feet of exhibit halls, galleries, and meeting space.

5 Phillips Arena

Phillips Arena is home to the Atlanta Hawks [NBA], Atlanta Thrashers [NHL], and Atlanta Dream [WNBA]. The 18,500 seat venue has hosted many events including the 2003 NBA All-Star Game, 2004 US Figure Skating Championships, and numerous concerts. Phillips Arena was ranked as the 2nd top entertainment venue in the United States according to Pollstar magazine in 2010.

6 American Cancer Society Center

The American Cancer Society Center is a convention center and office building containing 1.5 million square feet. The building provides office space for the AT&T, InComm, Internap, National Home Office, Turner Broadcasting System, US South Communications, and the South Atlantic Division of the American Cancer Society.

7 AmericasMart

AmericasMart is the largest and tradeshow market of its kind in the world. It provides 800,000 square feet of private convention, meeting, and tradeshow space. Each year, more than 500,000 people are drawn to AmericasMart's three buildings.

8 Sun Trust Plaza

Sun Trust Plaza is Atlanta's second tallest highrise comprising of 60 stories of office space. The skyscraper was designed by internationally renowned architect, John Portman, Jr. and completed 1992.

9 TWELVE Centennial Park

TWELVE Centennial Park is a 39 story residential highrise containing 1,024 condominium and 20,000 square feet of retail.

SITE CHARACTERISTICS

NOISE The noise experienced in the heart of Midtown is that typical to any urban area. The majority of the sound is caused by passing automobiles that create the background noise of the city.

SOILS Atlanta's soils consist mainly of dense clay. The site's land is comprised of urban lands that have already been cut, filled, and shaped by previous construction. The depth to the water table is greater than 80 inches. The site's topsoil contains 14% clay, 66.8% sand, and 19.2% silt. The typical profile of the site's soils is:

- 0 to 5 inches: Sandy loam
- 5 to 26 inches: Clay
- 26 to 36 inches: Sandy clay loam
- 36 to 66 inches: Sandy loam

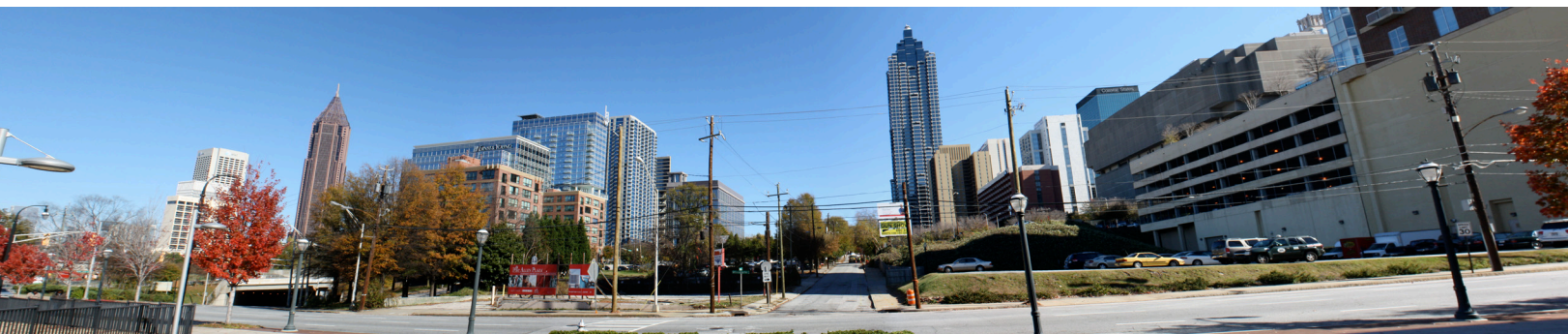
VEGETATION The only vegetation on the site is uncontrolled grass and weeds and a boulevard of maintained grass on Centennial Olympic Park Drive

UTILITIES Due to its urban location, all utilities exist on the site and would be suitable for construction.

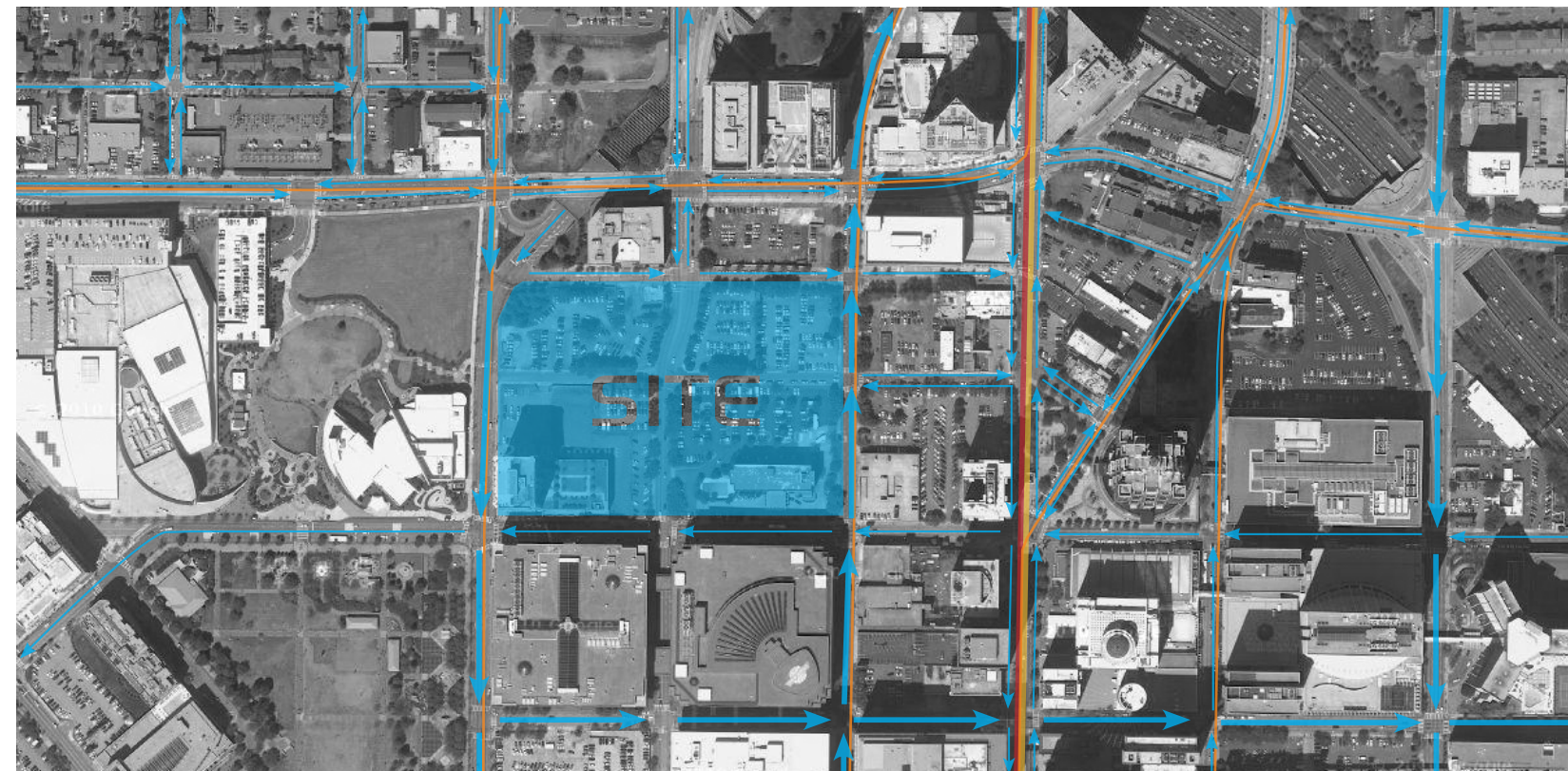
TOPOGRAPHY The site's topography is mostly flat, which makes it ideal for a training facility. Due to its relative flatness, consideration will be need to be addressed for drainage.

DISTRESS The site lays in ruins and is covered in parking lots and an abandon garage. Long grass emerges from the cracks of the concrete providing testament of its neglect and decay.

LIGHT QUALITY The light quality on the site is plentiful besides in areas where the shadows cast by AmericasMart and the American Cancer Society buildings to the south.



TRANSPORTATION



VEHICULAR TRAFFIC Downtown Atlanta experiences heavy vehicular traffic with numerous one-ways.

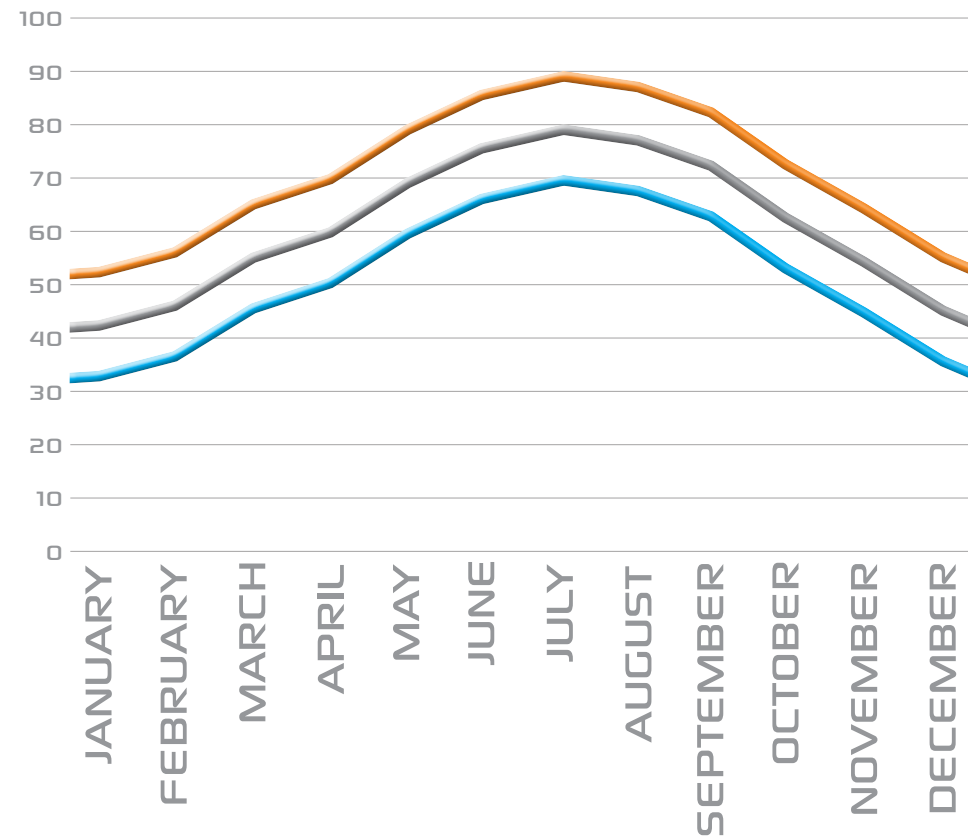
MARTA The Metropolitan Atlanta Rapid Transit Authority [MARTA] serves as Atlanta's transportation system. MARTA utilizes both bus and rail services throughout DeKalb and Fulton counties.

Rail Atlanta's rail system comprises of 47.6 miles of track and 38 stations. The rail's four lines [Red, Gold, Blue, and Green] are located elevated, ground level, and underground. The Red and Gold lines run on Peachtree St SW, one block East of the site.

Bus The MARTA has over 500 busses that services the Atlanta Metropolitan. Multiple bus lines run surrounding the site.

PEDESTRIAN TRAFFIC Extensive pedestrian traffic occurs around the site from the Georgia Aquarium, World of Coca-Cola, and the surrounding downtown buildings.

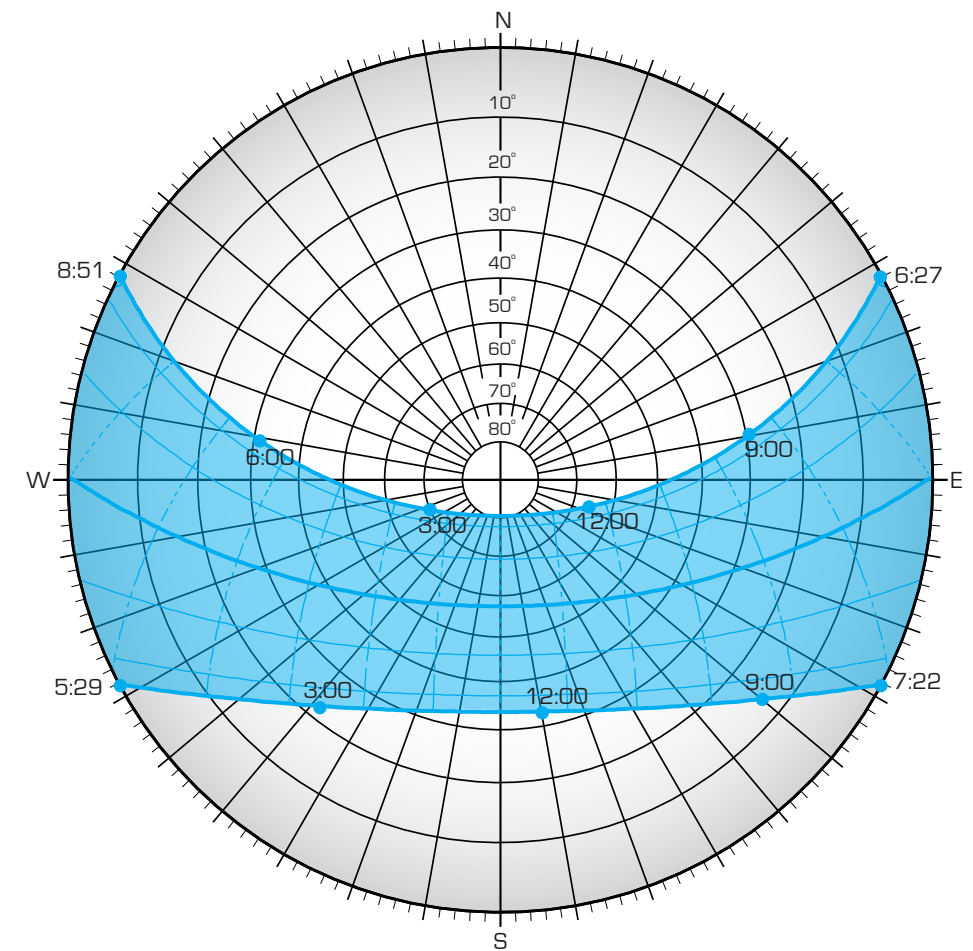
TEMPERATURE



Atlanta has a humid subtropical climate, that is characterized as mild and experiencing all four seasons. It's relation to the Atlantic Ocean and Gulf of Mexico control the summer heat. The Appalachians located to the North divert south moving winds that create mild winters [Atlanta: Geography and Climate]. Atlanta's summers are hot and humid while experiencing mild winters.

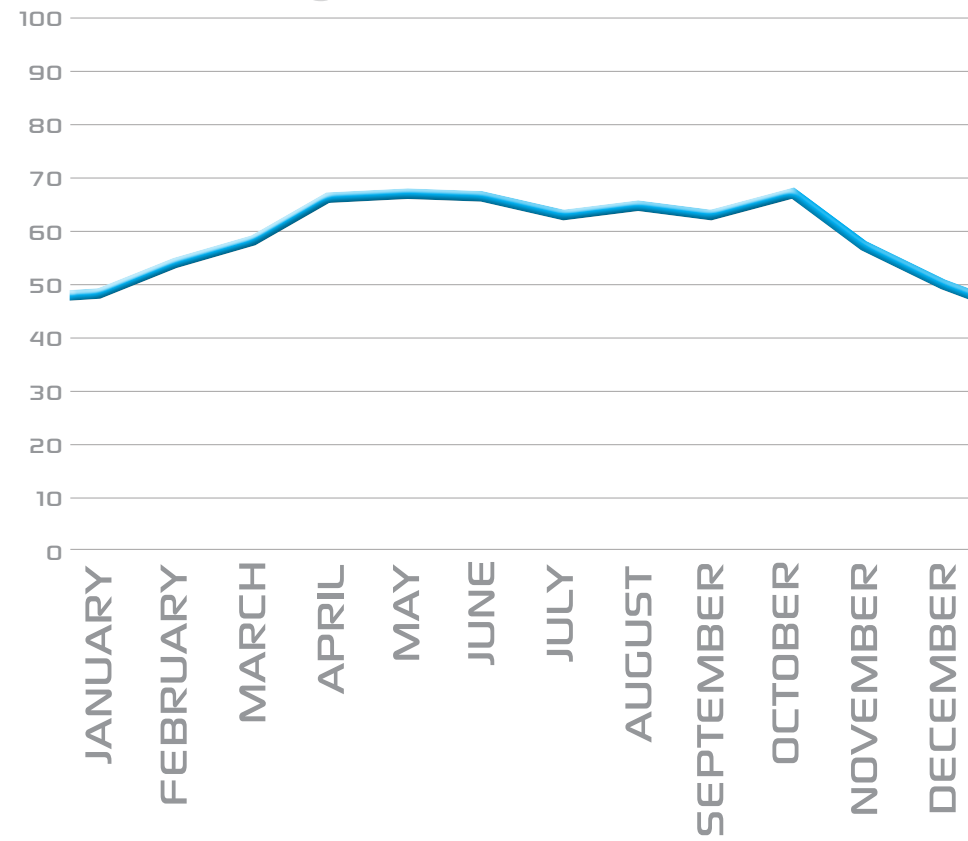
The average temperatures in Atlanta range from 42 to 80 degrees. High and low temperatures in range from 32 to 90 degrees

SUNPATH DIAGRAM



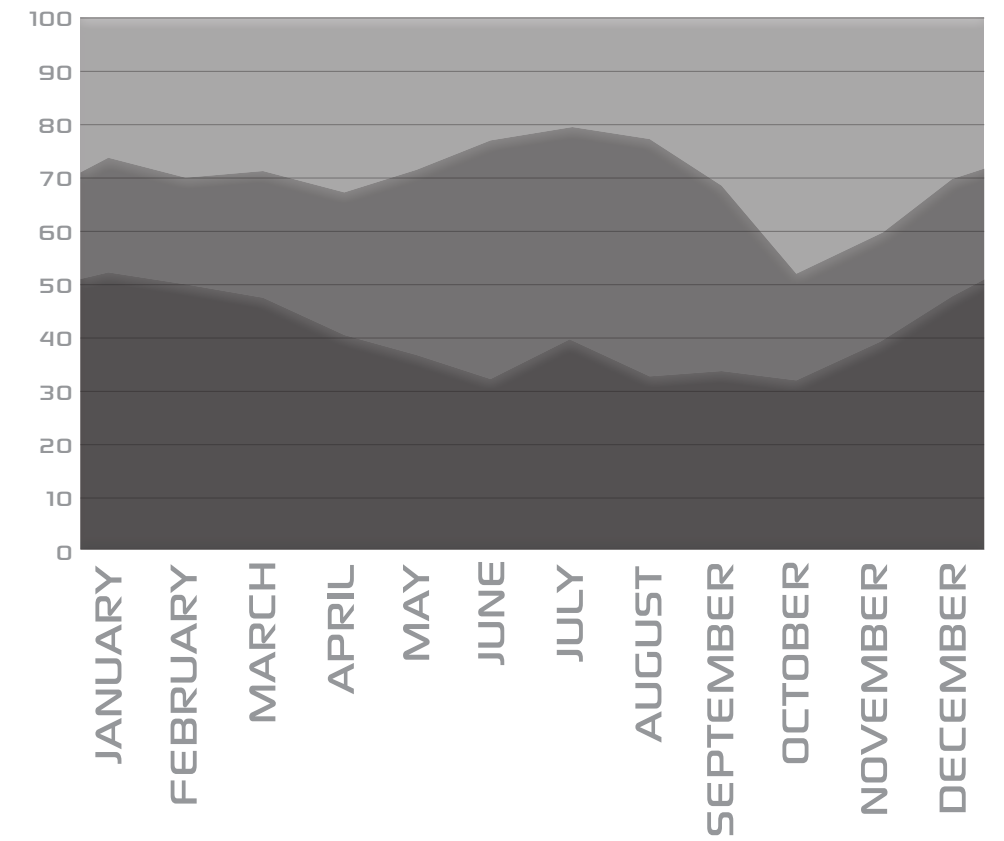
The top line represents the sun's path on the summer solstice [June 21st]. The middle line denotes the vernal [March 21st] and autumnal [September 22nd] equinoxes. The bottom line is the winter solstice [December 21st], where the earth's axis is tilted the furthest from the sun.

SUNSHINE



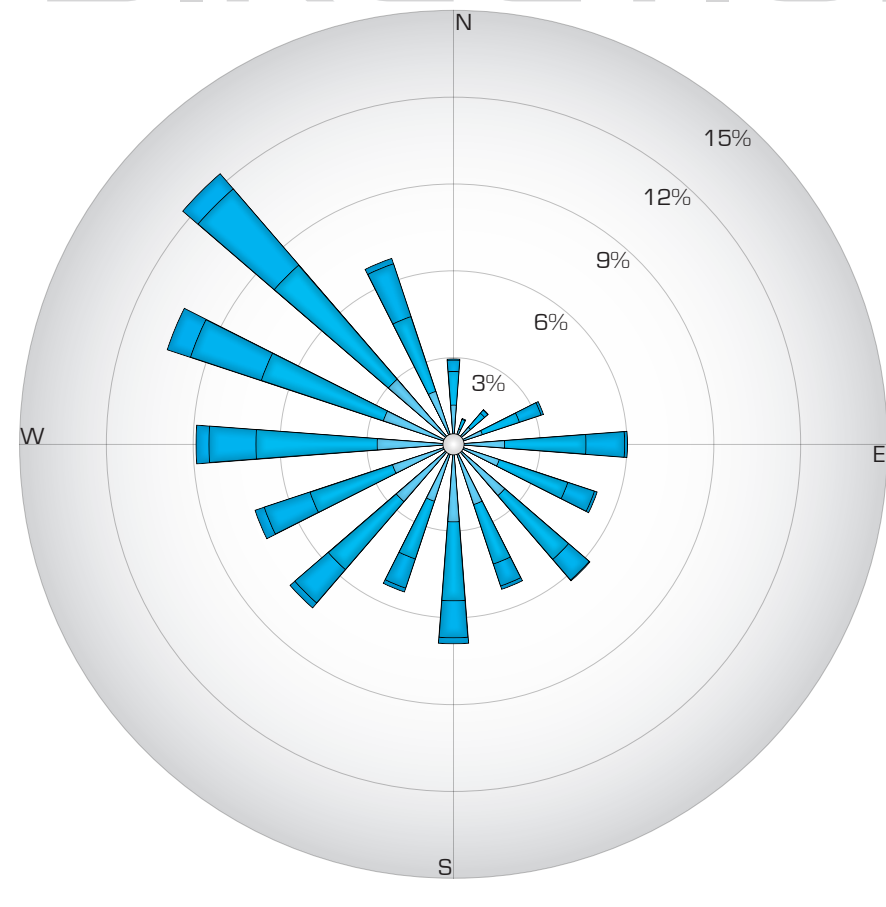
Atlanta experiences a good amount of [sunshine](#) throughout the year.

CLOUDY DAYS



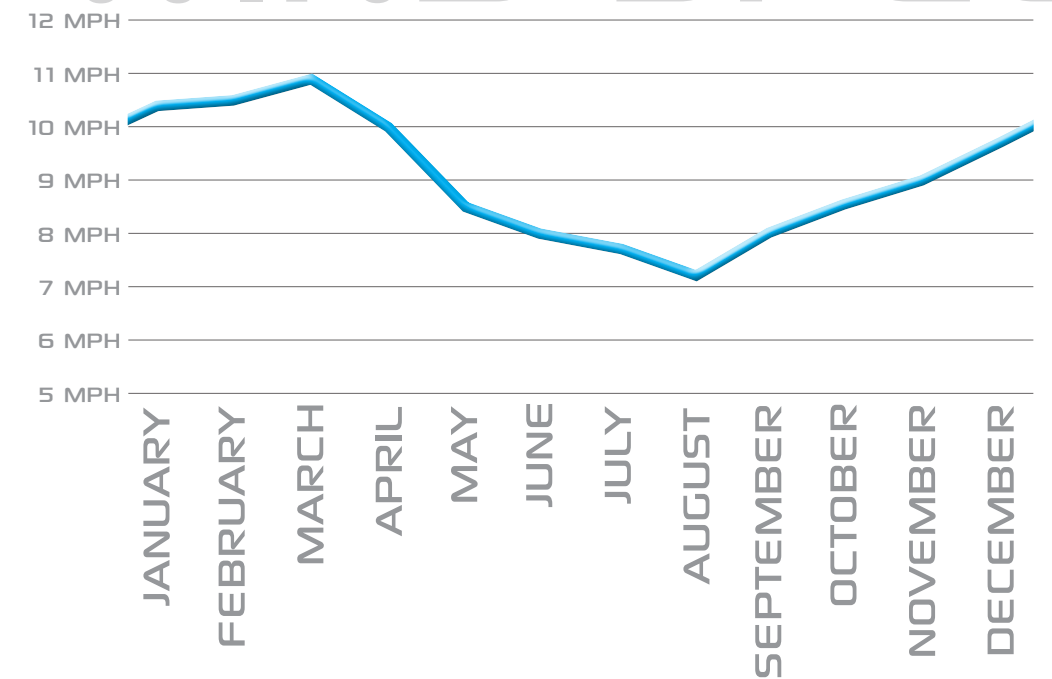
Days clear of clouds
Partly cloudy days
Cloudy days

WIND DIRECTION



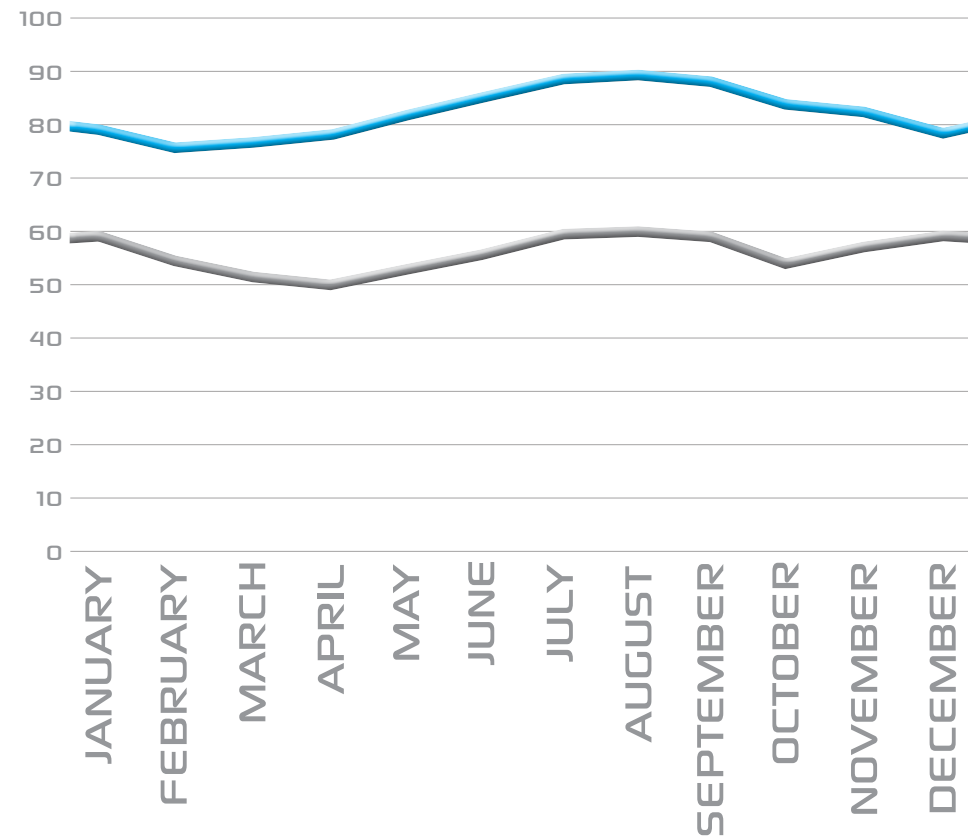
The wind in Atlanta predominantly blows from the west and northwest. The wind that occurs mainly in the winter and spring often bring clouds, fog, and sometimes a mist.

WIND SPEED



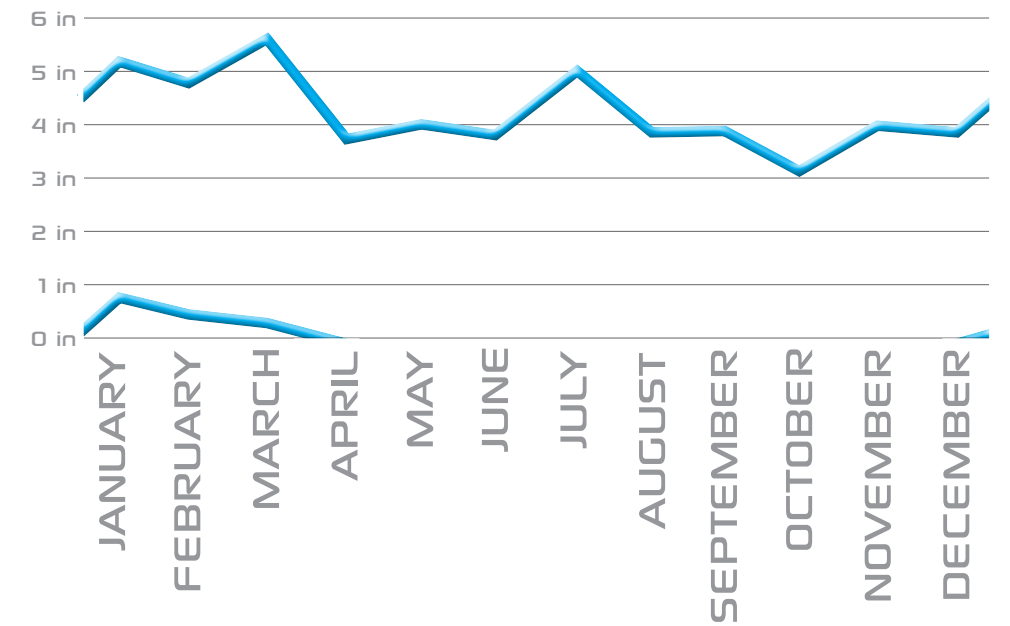
The [average wind speed](#) in Atlanta varies from 7 to 11 mph with the most wind in the winter and spring.

HUMIDITY



The Atlanta metropolitan area is very humid with it's [humidity](#) being approximately 20% higher than the [national average](#).

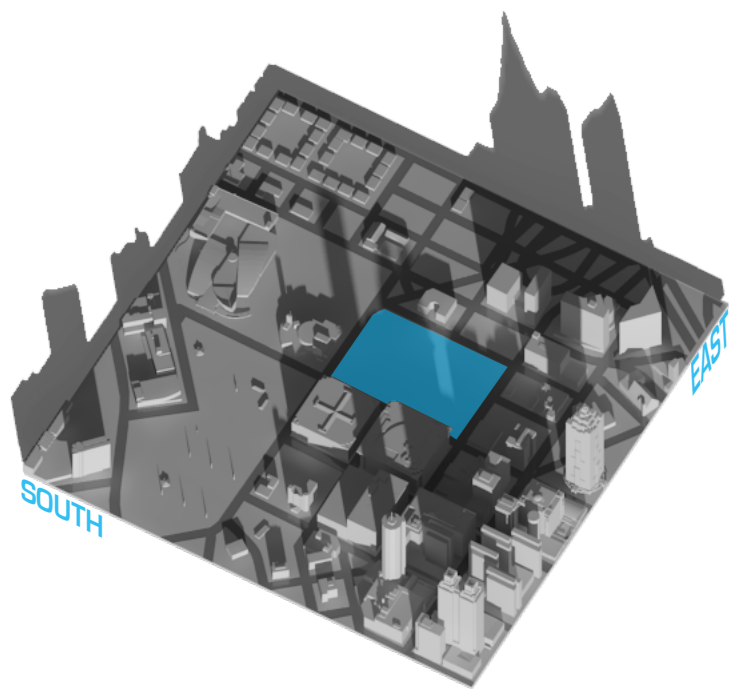
PRECIPITATION



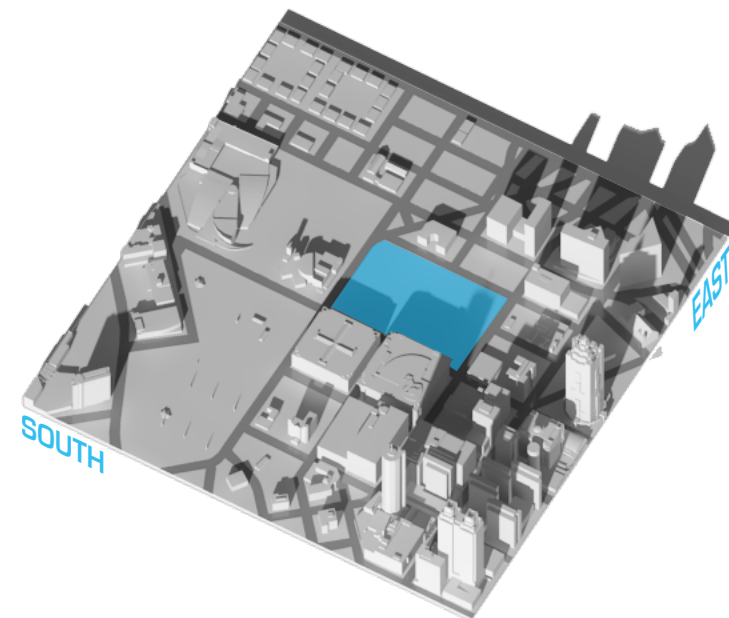
Atlanta [averages](#) around 3 and 5.5 inches of precipitation each month with traces of [snow](#) in the winter. Atlanta experiences few rainy days, but due to occasional heavy summer thunderstorms, the city has a high annual precipitation [50.2 inches].

SOLAR STUDY: WINTER SOLSTICE

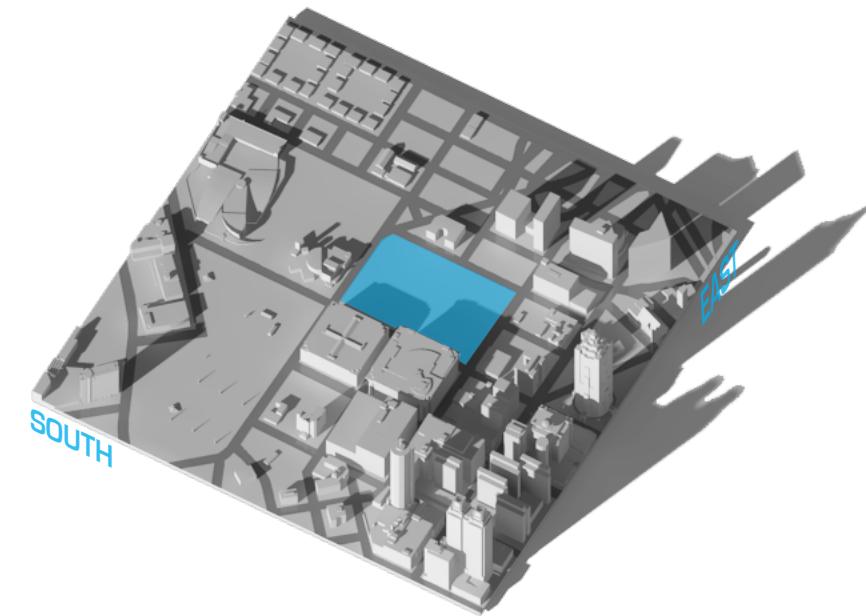
DECEMBER 21
9am



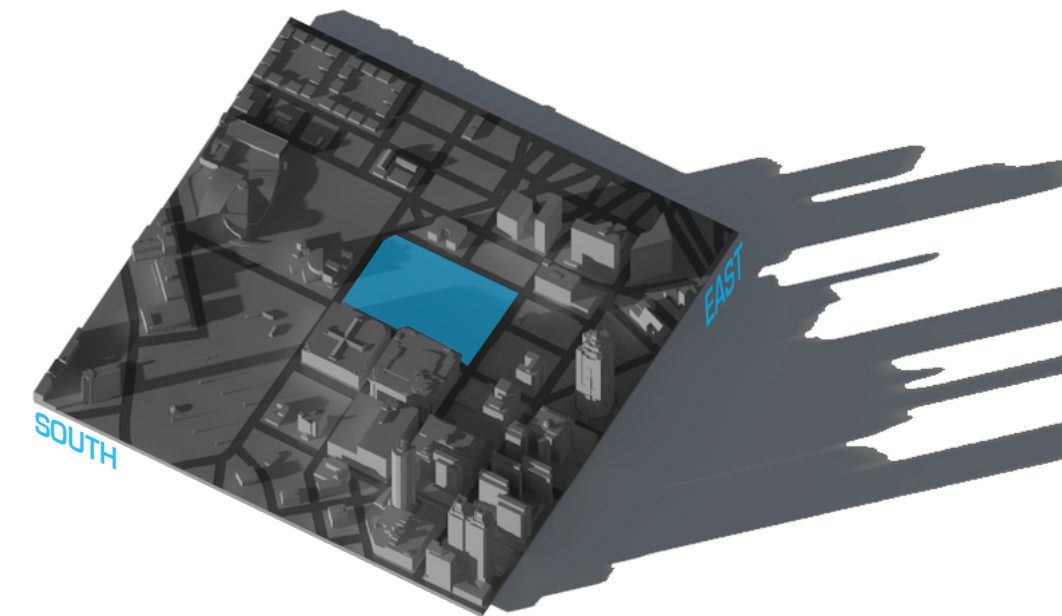
DECEMBER 21
11am



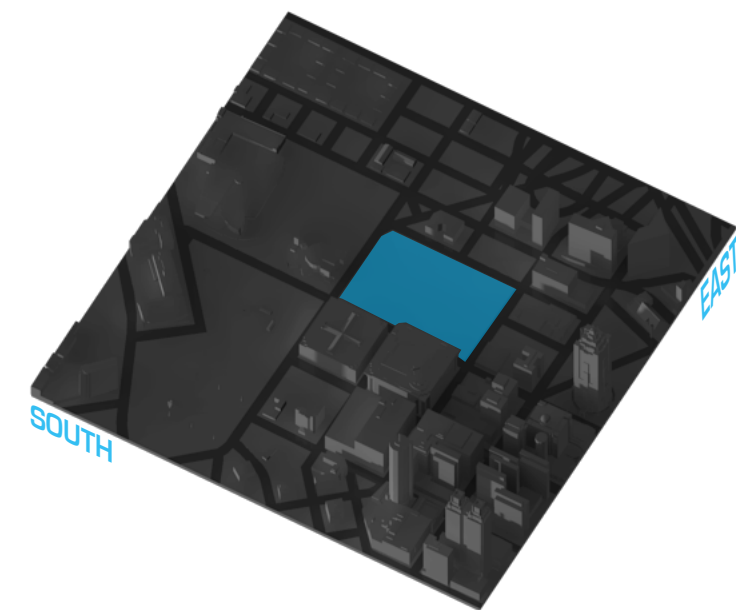
DECEMBER 21
1pm



DECEMBER 21
3pm

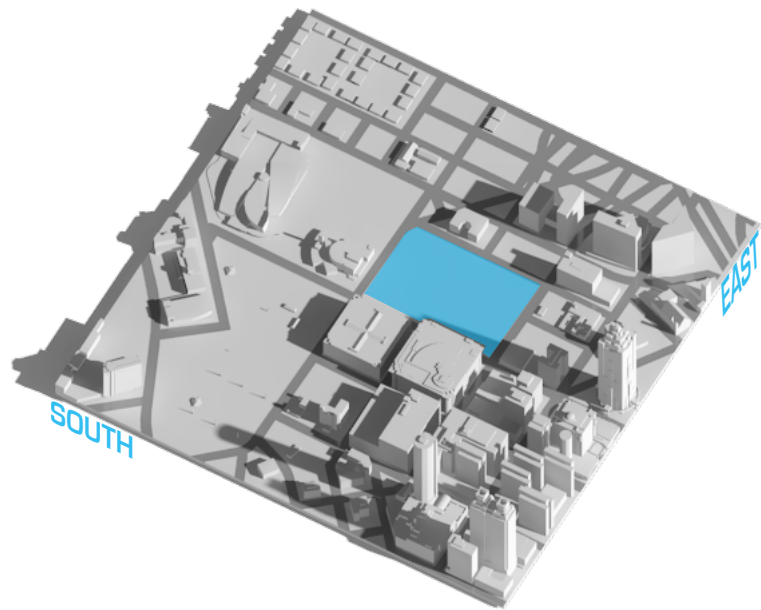


DECEMBER 21
5pm

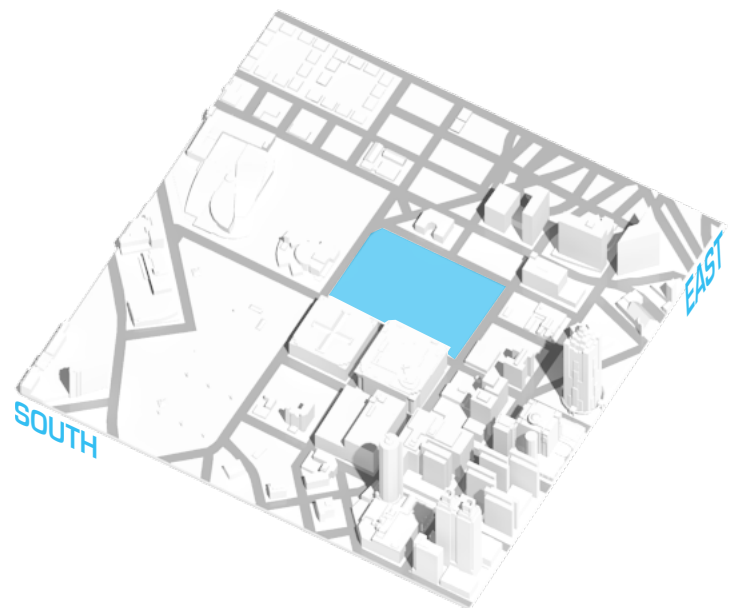


SOLAR STUDY: SUMMER SOLSTICE

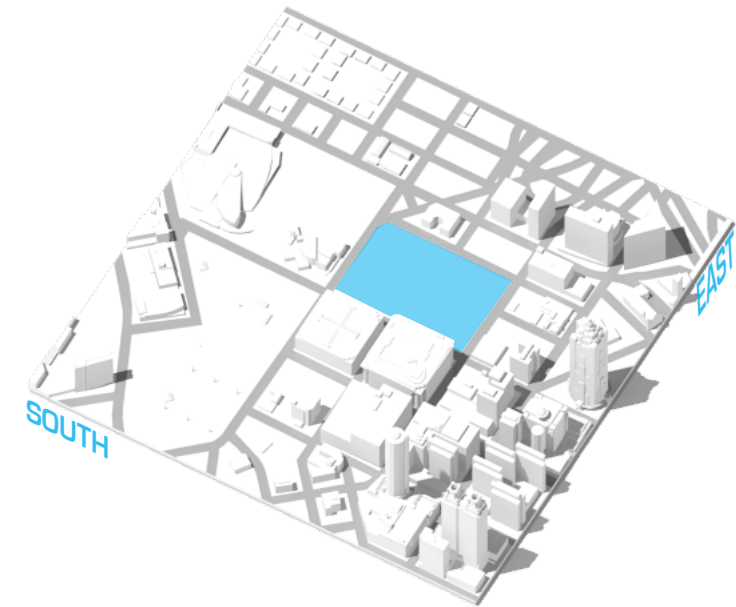
JUNE 21
7am



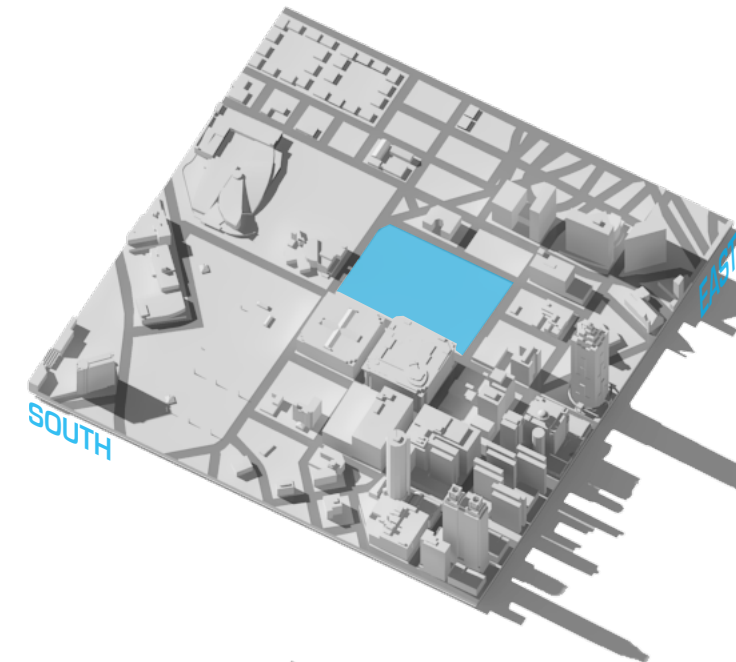
JUNE 21
10am



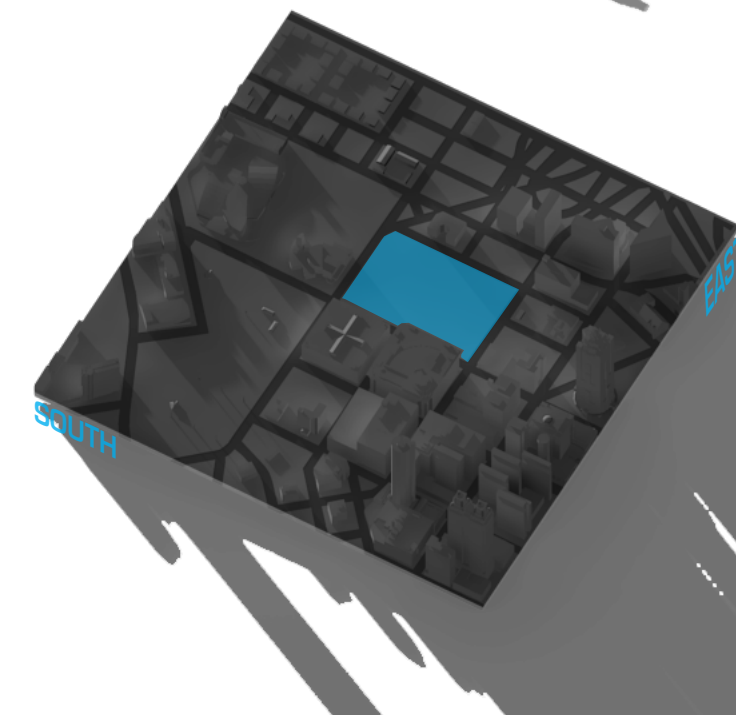
JUNE 21
1pm



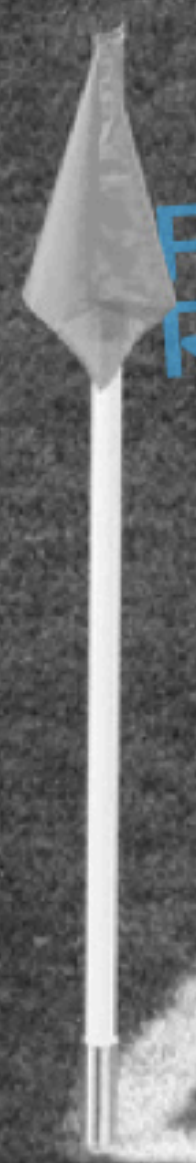
JUNE 21
4pm



JUNE 21
7pm



of the



PROGRAMMATIC
REQUIREMENTS



PROGRAMMATIC REQUIREMENTS

ENTRY 2,400 square feet
Entry 2,400 square feet

RESIDENT HOUSING 33,900 square feet

Living Suite [x35]* 10,000 square feet [200-225 square feet per room with 30 athlete rooms and 16 coaches rooms.

Gathering Area* 12,000 square feet

Resident's Outlook* 2,000 square feet

Dining Hall* 4,000 square feet

Commercial Kitchen 2,750 square feet

Bathrooms and Shower 2,000 square feet

Laundry Room 400 square feet

Storage 750 square feet

TRAINING FACILITY 29,650 square feet

Locker Rooms* 4,000 square feet

Boot Room* 250 square feet

Training 10,000 square feet

Outdoor Training 1,200 square feet

Baths* 1,400 square feet

Medical Training Room* 6,000 square feet

Auditorium* 1,750 square feet

Coaches Suite* 1,800 square feet [5x200 square foot offices, 800 square foot conference room]

Restrooms 400 square feet

Equipment Storage 600 square feet

Laundry 250 square feet

Storage 2,000 square feet

FIELD 93,500 square feet [+ seating]

Field* 90,000 square feet

Seating* [7,940 seats]

Mechanical 500 square feet

Storage 3,000 square feet

AWAY TEAM 6,900 square feet

Locker Room 3,000 square feet

Showers 600 square feet

Bathrooms 900 square feet

Coaches Offices 400 square feet [2x200 square foot offices]

Training Room 2,000 square feet

OFFICIALS FACILITIES 400 square feet

Locker Room 200 square feet

Toilets 100 square feet

Showers 100 square feet

OTHER 2,000 square feet [+ circulation]

Maintenance Room 1,000 square feet

Mechanical 1,000 square feet

Circulation 10% [16,600]

TOTAL 195,000 square feet

*Denotes sacred spaces



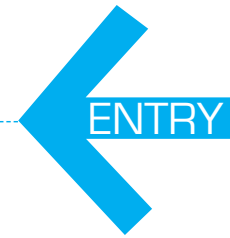
PROCESS

hero[athlete]

PREPARATION
PREPARATION

hero[resident]

ENTRY



JOURNEY OF THE HERO

“ **PREPARATION**
FIRST POINT OF SHEDDING FROM THE
OUTSIDE WORLD AND START OF THE
HERO'S JOURNEY. ”

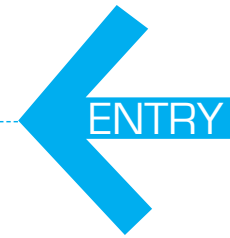
hero[athlete]



SEPARATION
SEPARATION



hero[resident]



JOURNEY OF THE HERO

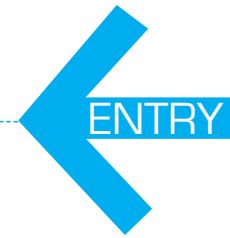
“ **SEPARATION**
SEPARATION FROM THE EXTERNAL
ENVIRONMENT WITH FOCUS ON
DISTINCT ROLES. ”

hero[athlete]



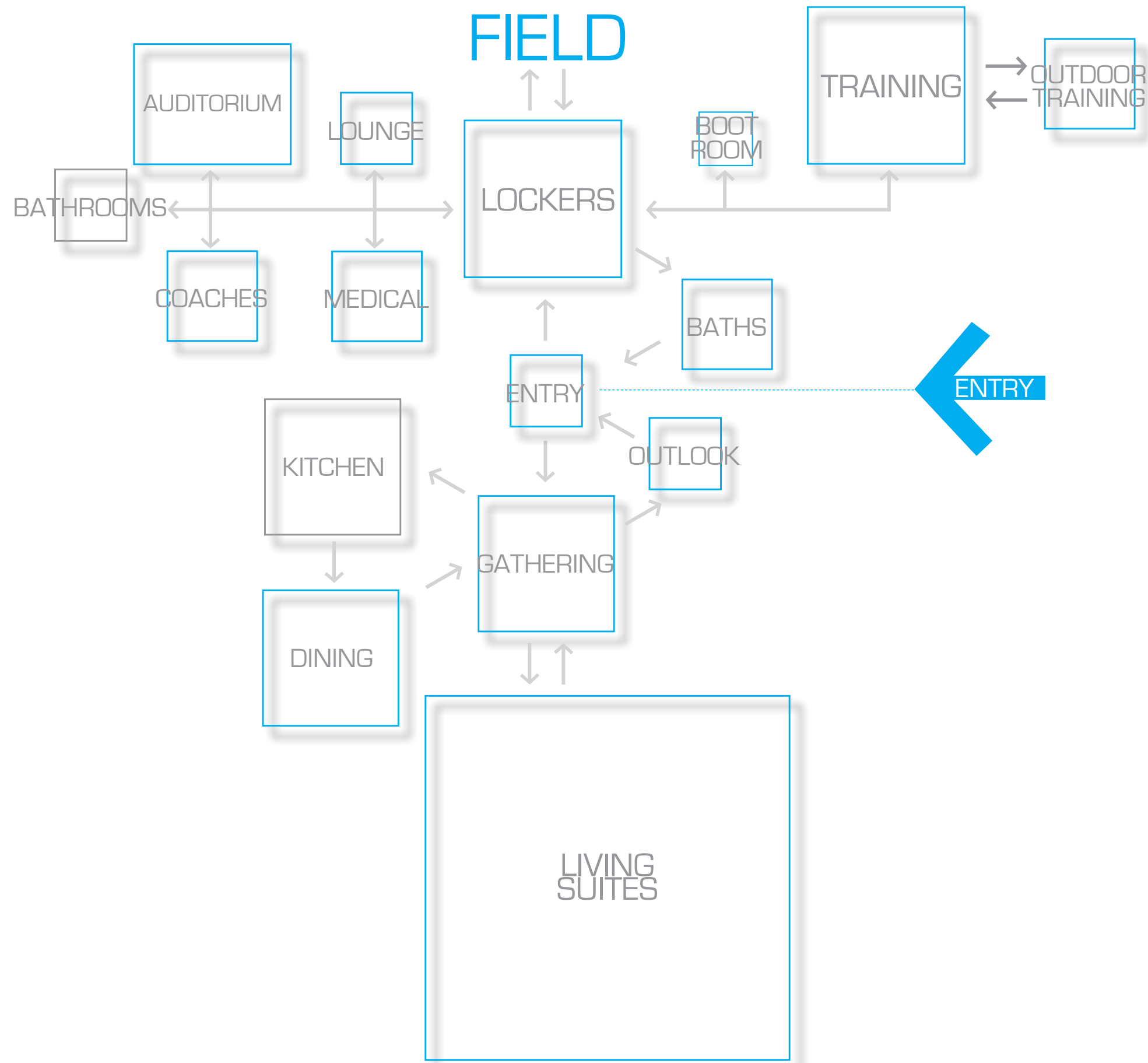
RETURN
RETURN

hero[resident]



JOURNEY OF THE HERO

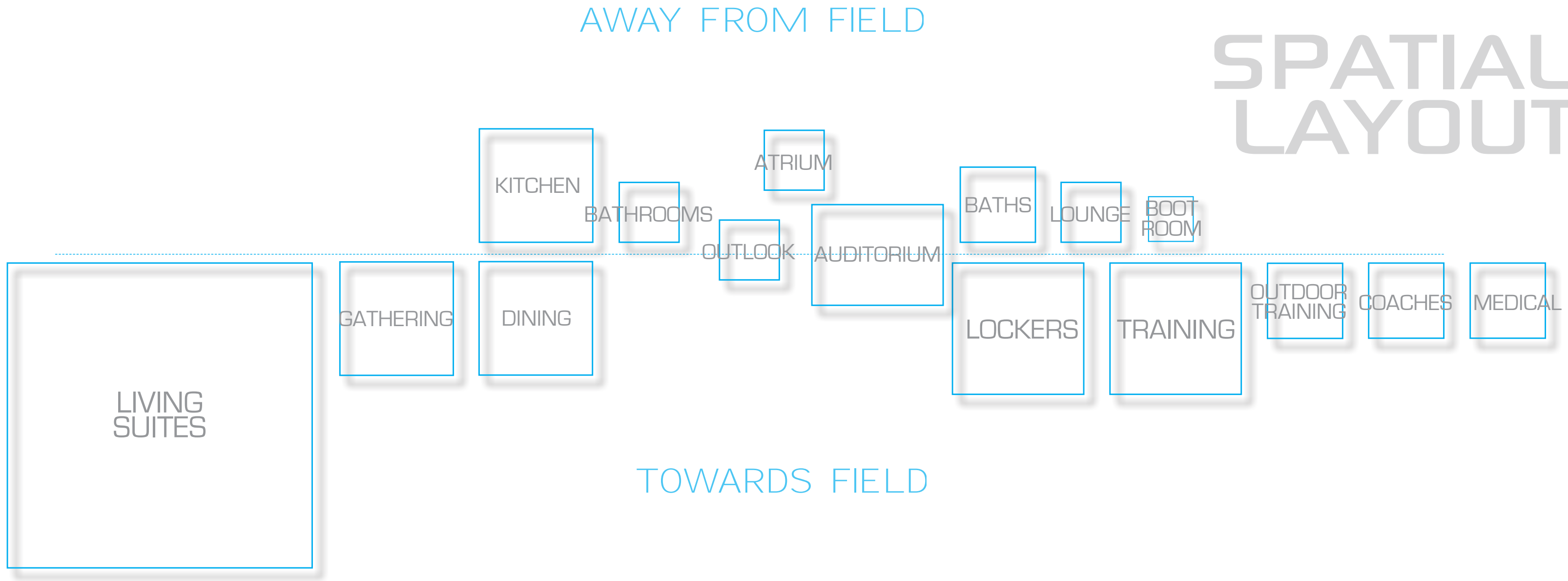
“ **RETURN**
SYMBOLIZES THE COMPLETION OF THEIR JOURNEYS AND THE DEPARTURE FROM THEIR DISTINCT ROLES. ”



SPATIAL LAYOUT

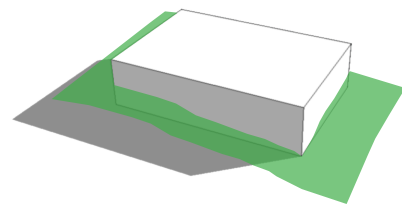
50 FEET = 

SPATIAL LAYOUT

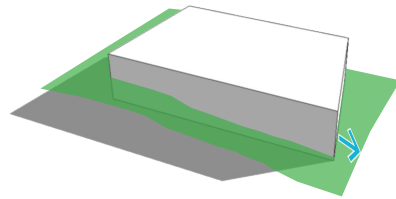


50 FEET = 

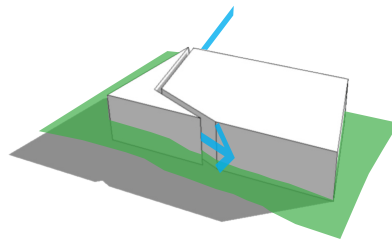
CONCEPTUAL PROCESS



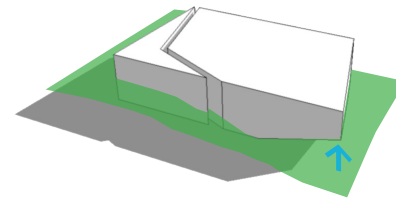
The Olympic Soccer Training Facility is positioned within the site running East to West. The form originates from a basic block.



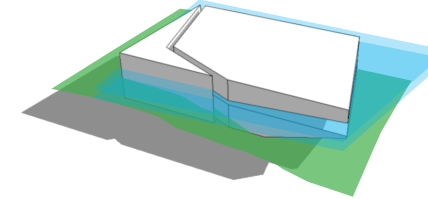
A corner is skewed towards the World of Coca-Cola's plaza that possesses Midtown Atlanta's spirit and aligns with the corridor created with the Georgia Aquarium.



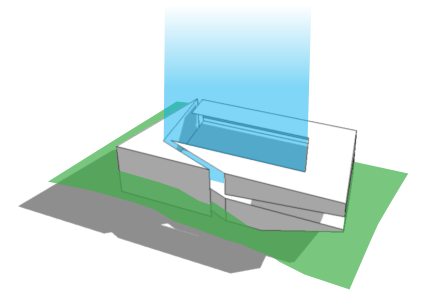
A void is created within the form. This defines the two separate entities; training and stadium.



The corner facing the pedestrian corridor and Centennial Olympic Park Drive is raised; revealing the fan entrance to the stadium.



Two planes intersect the stadium, creating a reveal for fans and the surrounding to interact.

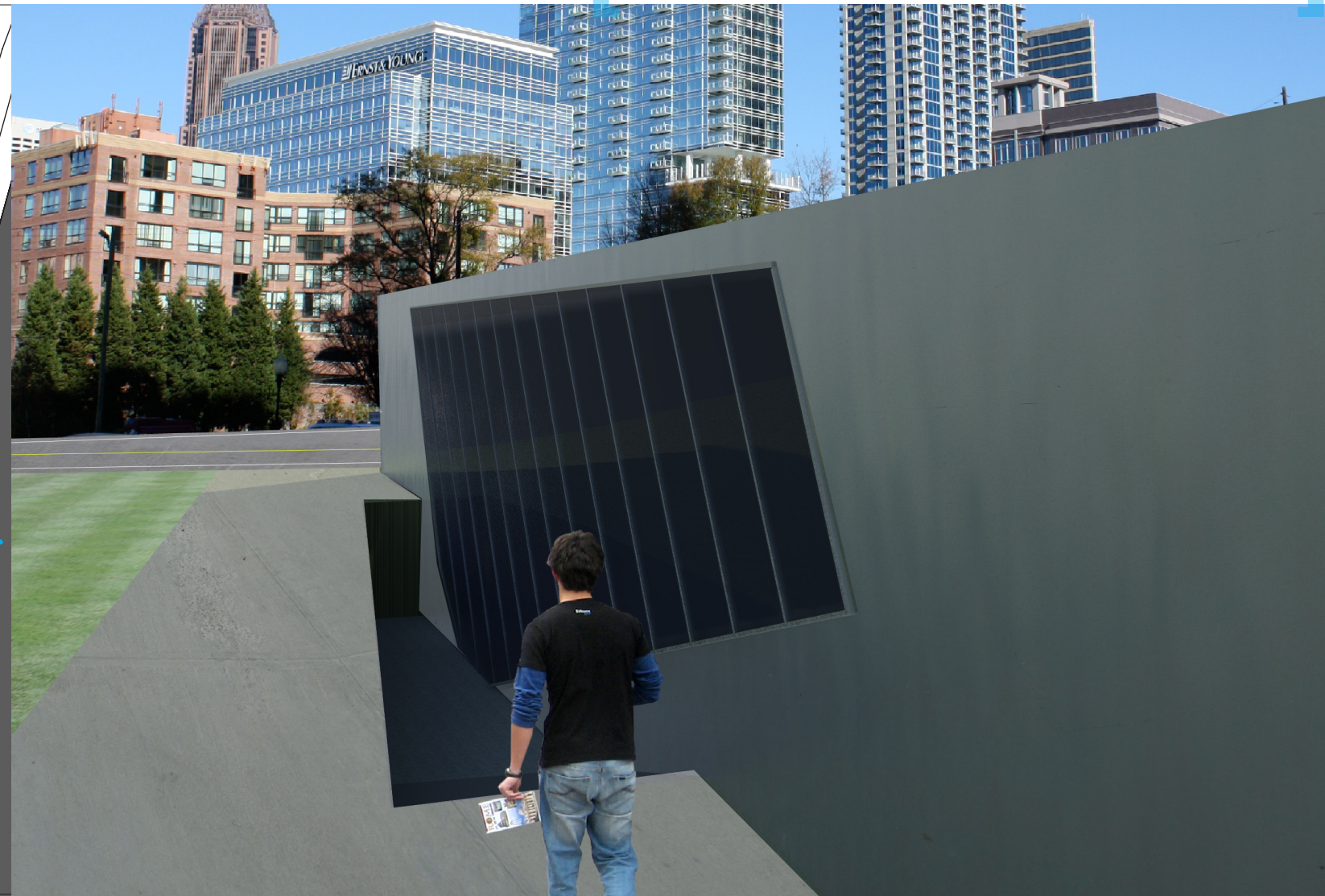
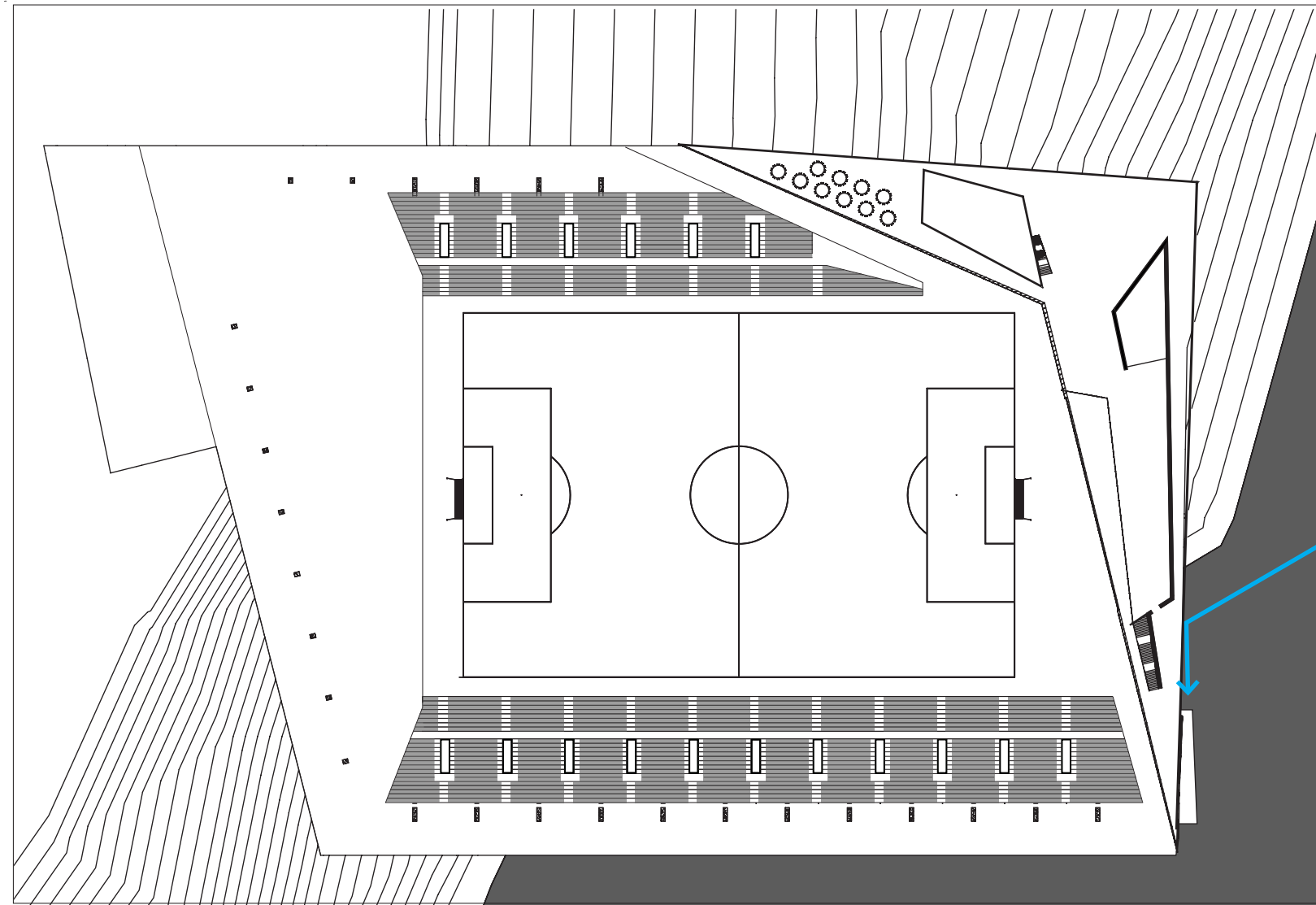


A void punctures the stadium opening the playing surface up to the skies.



JOURNEY OF THE
HERO [ATHLETE]

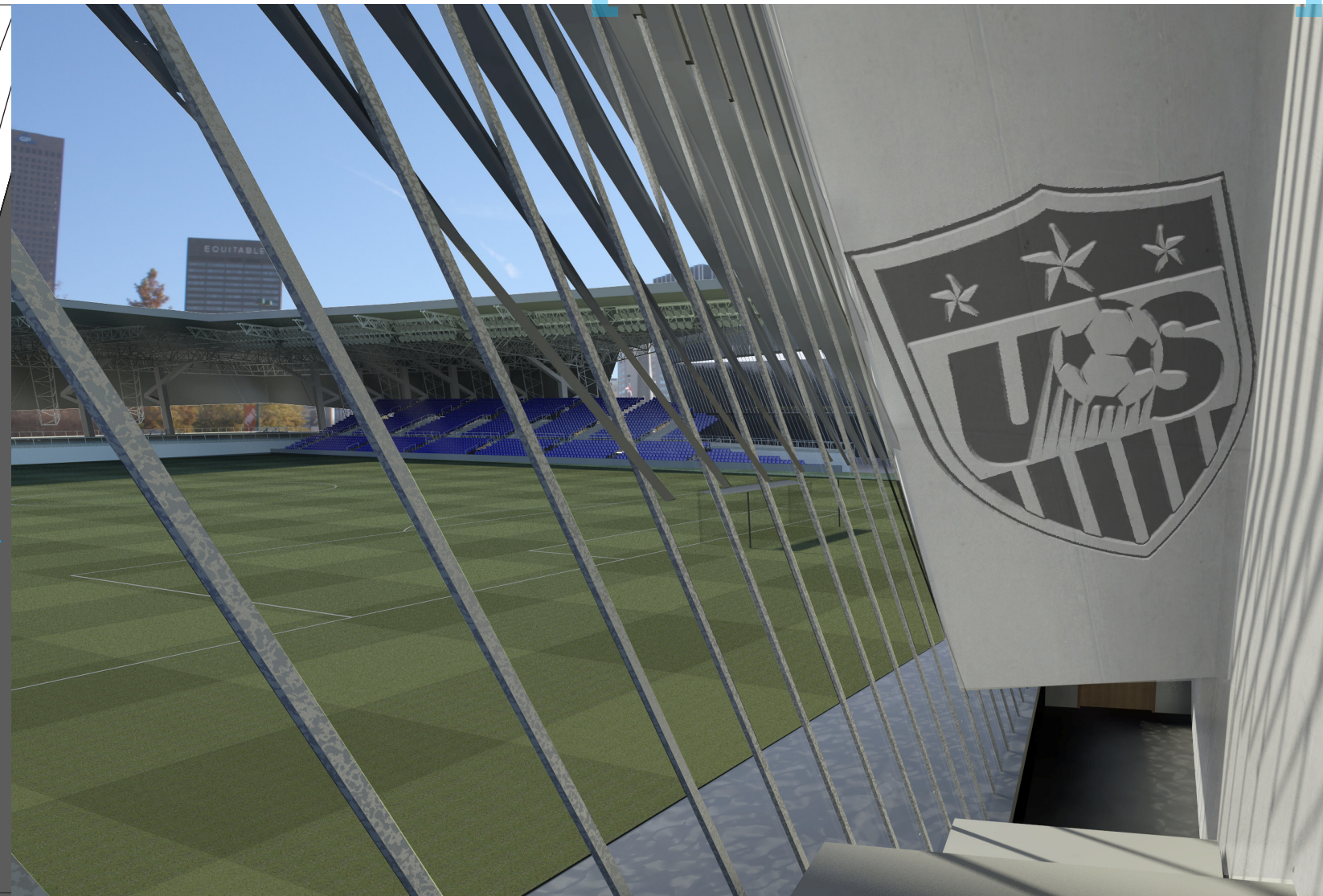
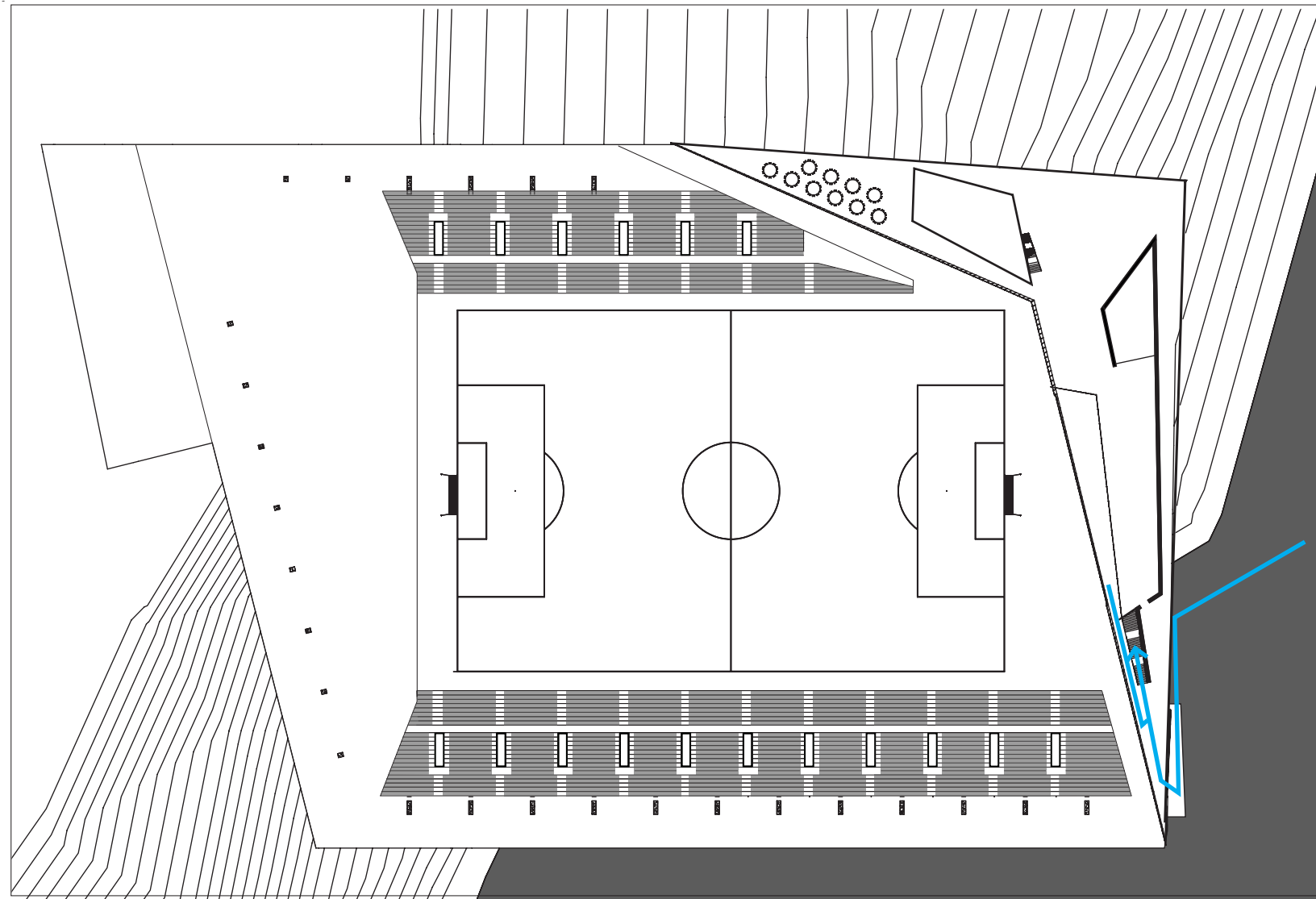
JOURNEY OF THE HERO | ATHLETE



ATHLETE LIVING
COACHES LIVING
GATHERING
COACHES OFFICES AND AUDITORIUM
FIELD
LOCKER ROOM

Athlete Ritual [Entrance] The athletes descend into the ground when entering the facility and are separated from the surrounding built environment.

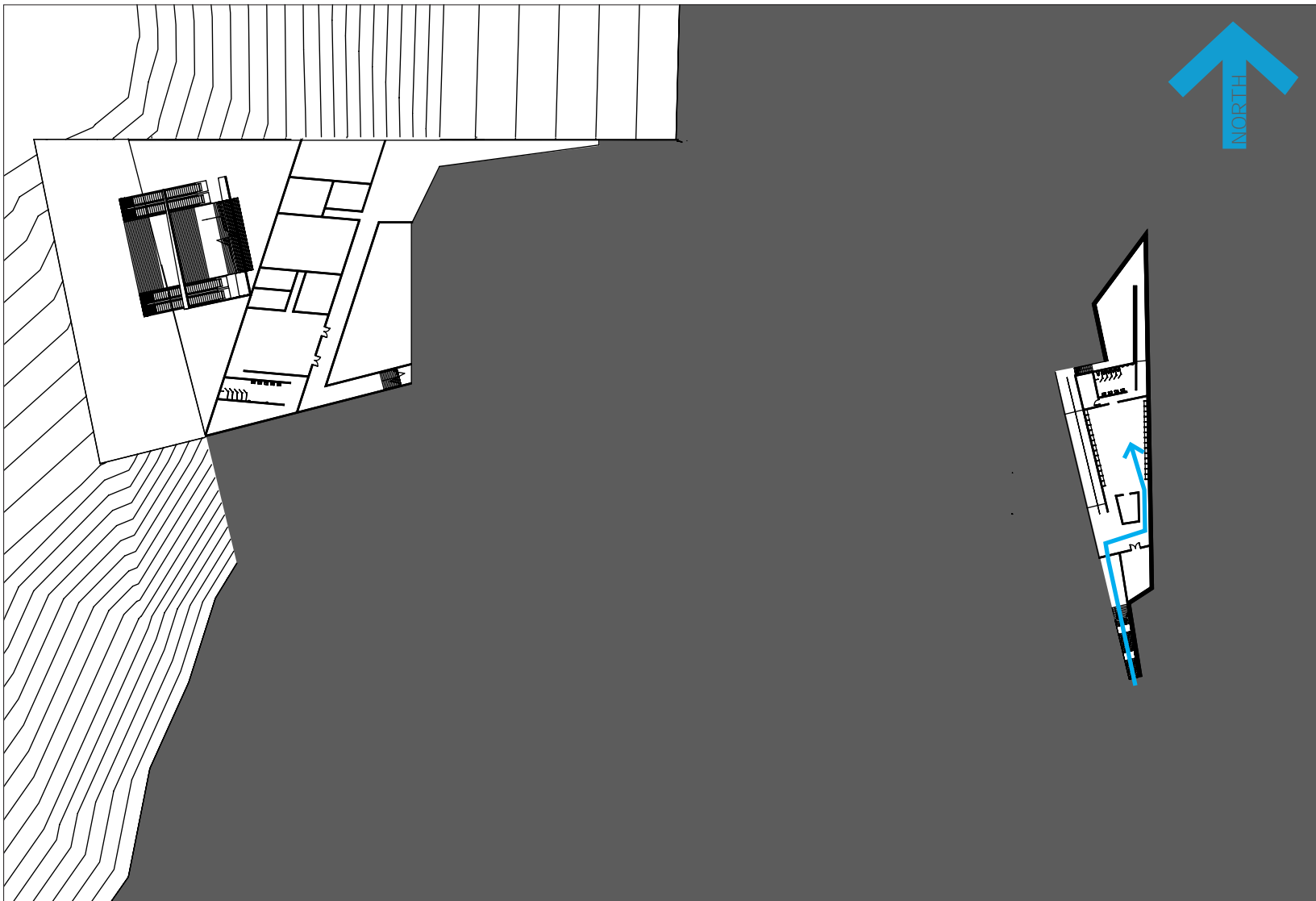
JOURNEY OF THE HERO [ATHLETE]



ATHLETE LIVING
COACHES LIVING
GATHERING
COACHES OFFICES AND AUDITORIUM
FIELD
LOCKER ROOM

Athlete Ritual [Preparation] The athletes pass the field as they travel down from the entry to the locker room.

JOURNEY OF THE HERO [ATHLETE]

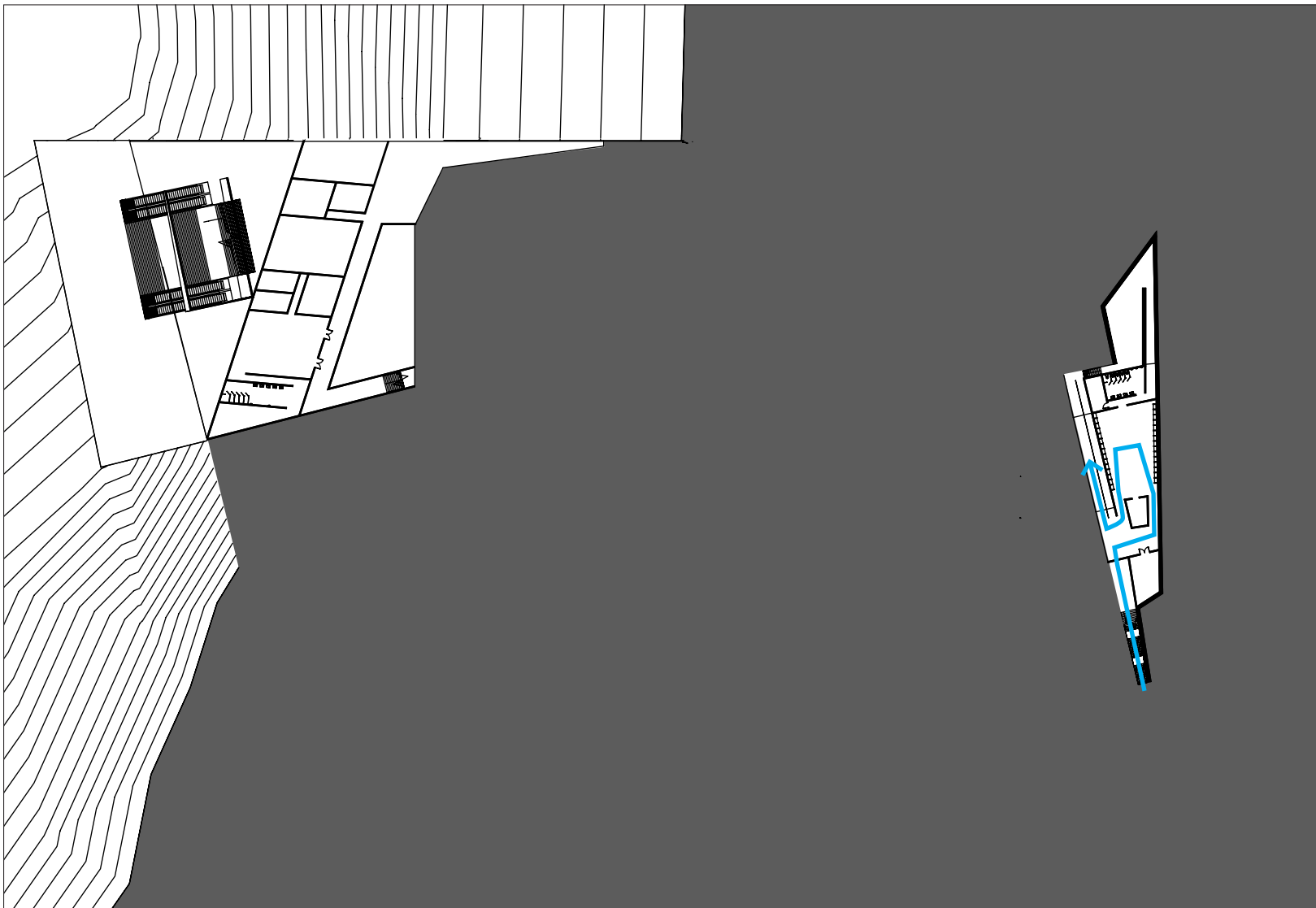


ATHLETE LIVING
COACHES LIVING
GATHERING
COACHES OFFICES AND AUDITORIUM
FIELD
LOCKER ROOM

LOCKER ROOMS

Athlete Ritual [Return] The locker rooms become a place for the team to come together before the game.

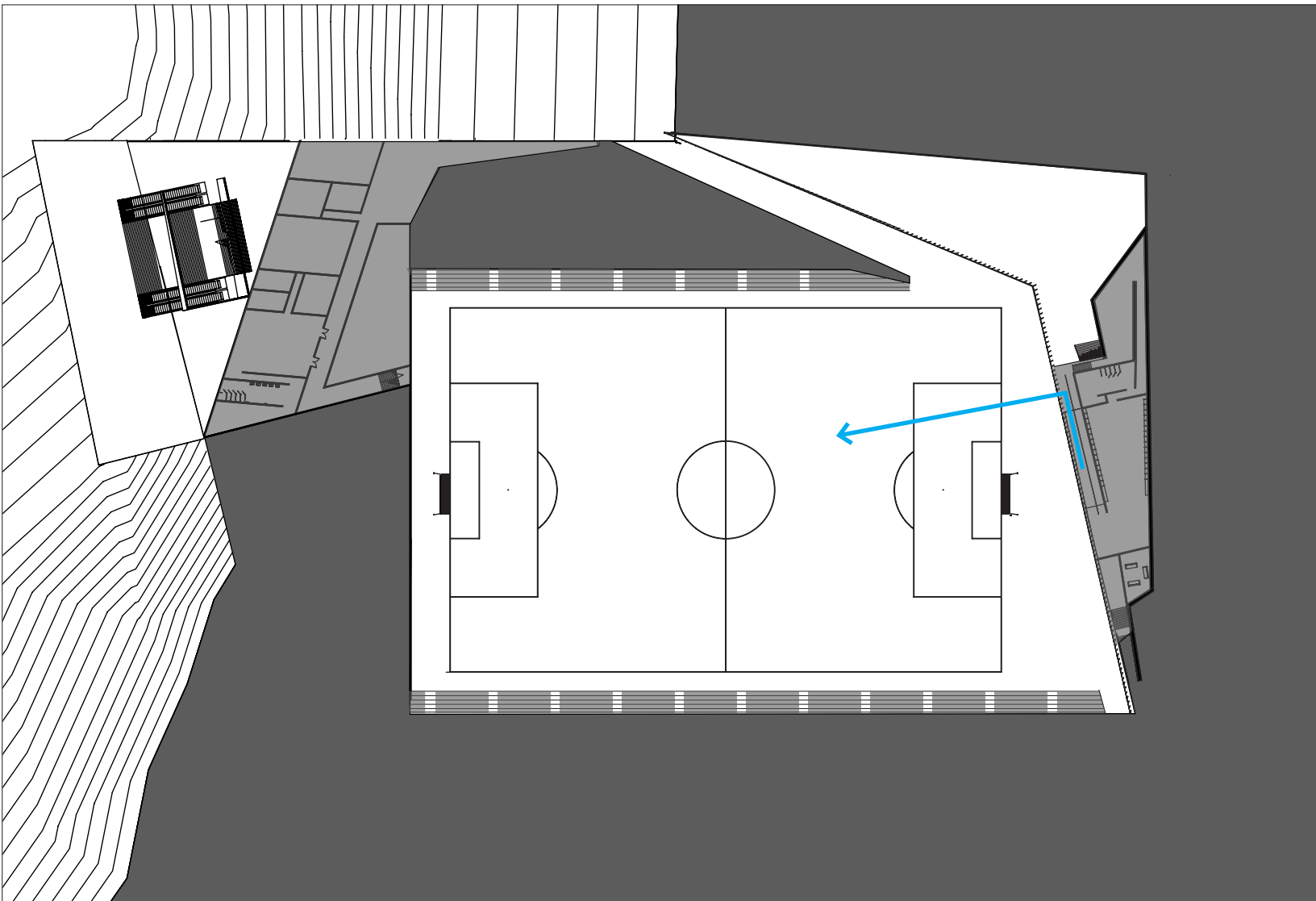
JOURNEY OF THE HERO [ATHLETE]



ATHLETE LIVING
COACHES LIVING
GATHERING
COACHES OFFICES AND AUDITORIUM
FIELD
LOCKER ROOM

Athlete Ritual [Ascent] The ascent from the locker rooms to the field reveals the playing surface to the athletes and creates a moment of meditation.

JOURNEY OF THE HERO [ATHLETE]

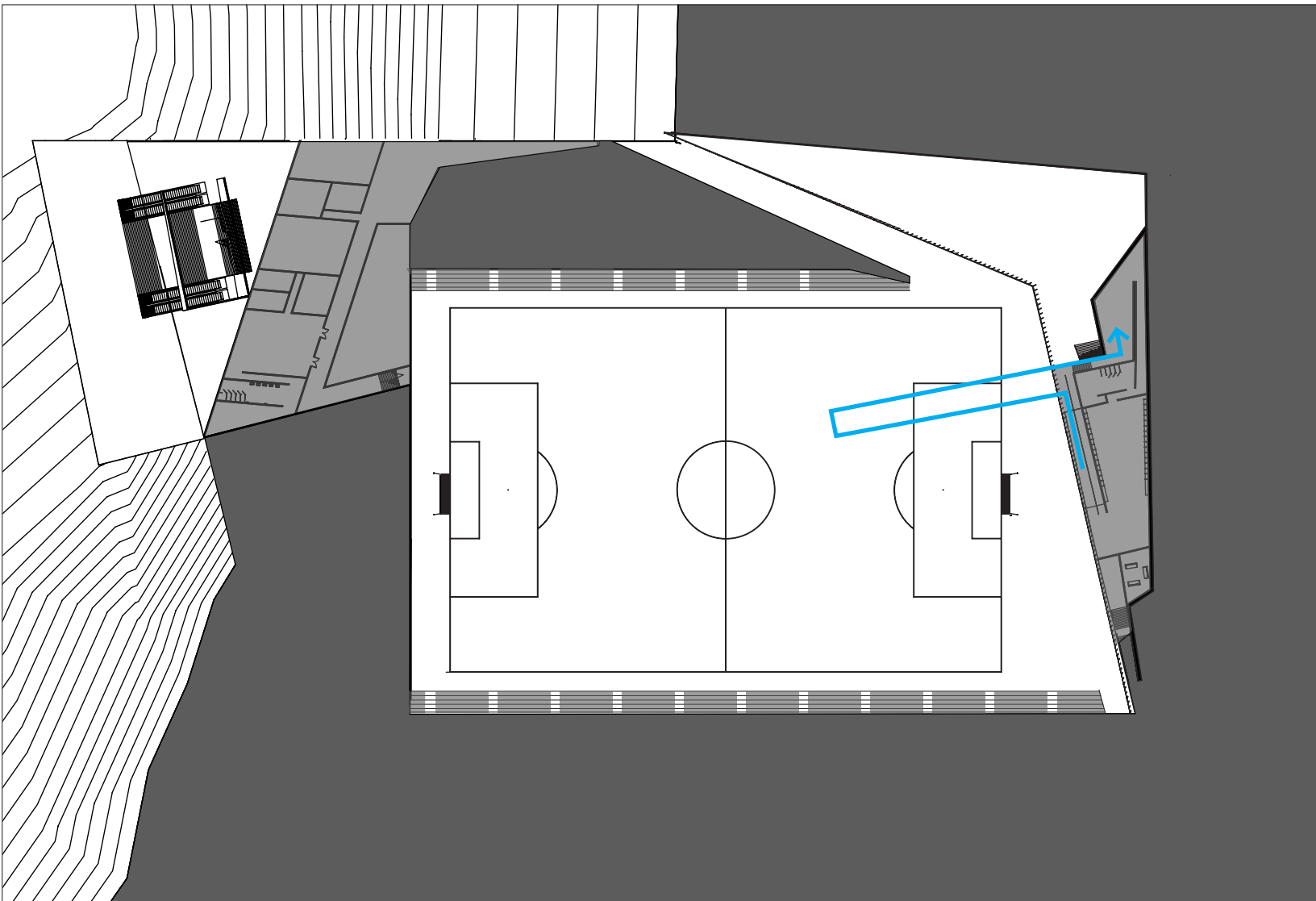


- ATHLETE LIVING
- COACHES LIVING
- GATHERING
- COACHES OFFICES AND AUDITORIUM
- FIELD**
- LOCKER ROOM

FIELD

Athlete Ritual [Field] The athletes utilize the field for physical and mental enhancement.

JOURNEY OF THE HERO [ATHLETE]

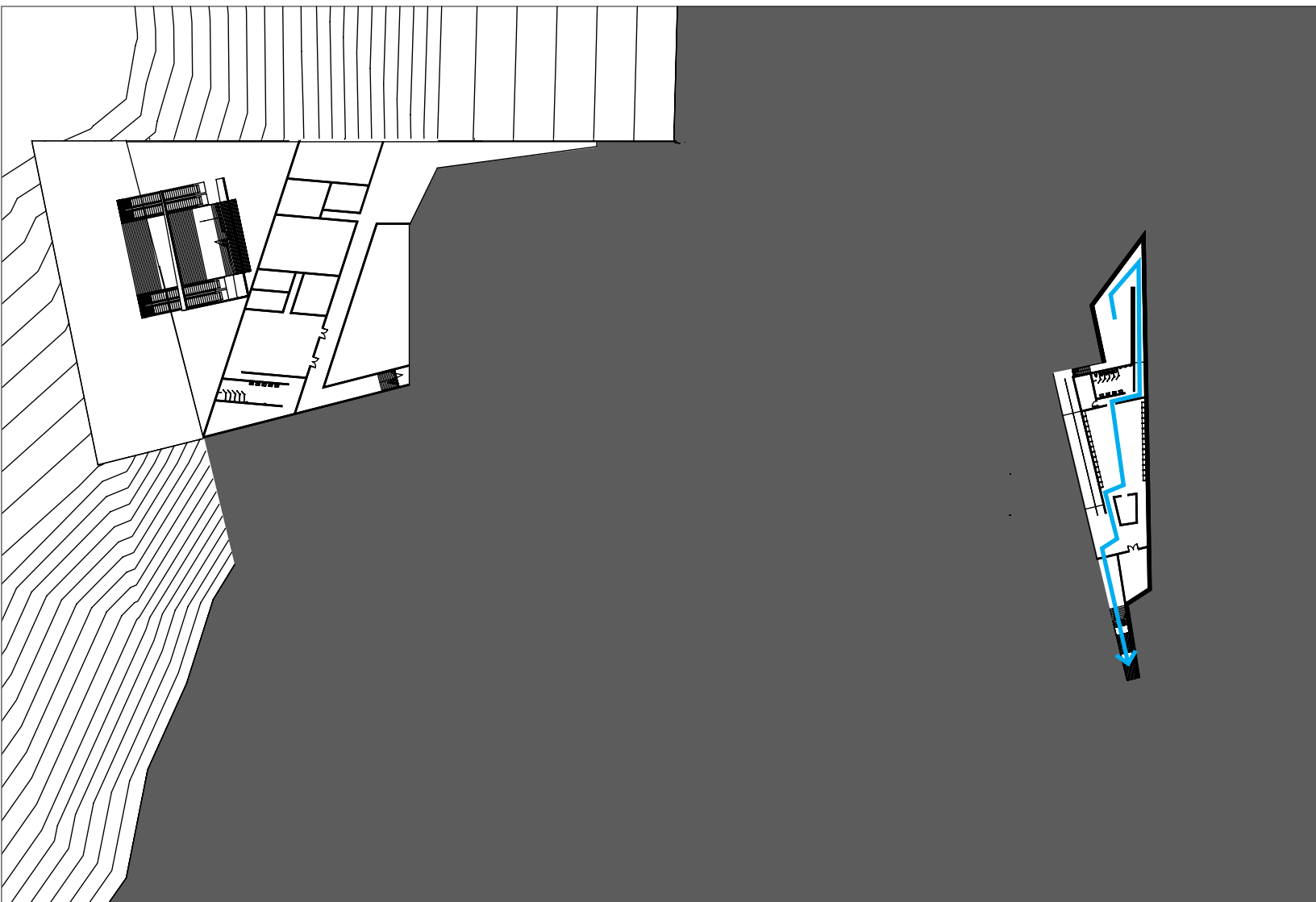


ATHLETE LIVING
COACHES LIVING
GATHERING
COACHES OFFICES AND AUDITORIUM
FIELD
LOCKER ROOM

BATHS

Athlete Ritual [Baths] The baths become a place for cleansing for the athletes upon the completion of their journey.

JOURNEY OF THE HERO [ATHLETE]



ATHLETE LIVING
COACHES LIVING
GATHERING
COACHES OFFICES AND AUDITORIUM
FIELD
LOCKER ROOM

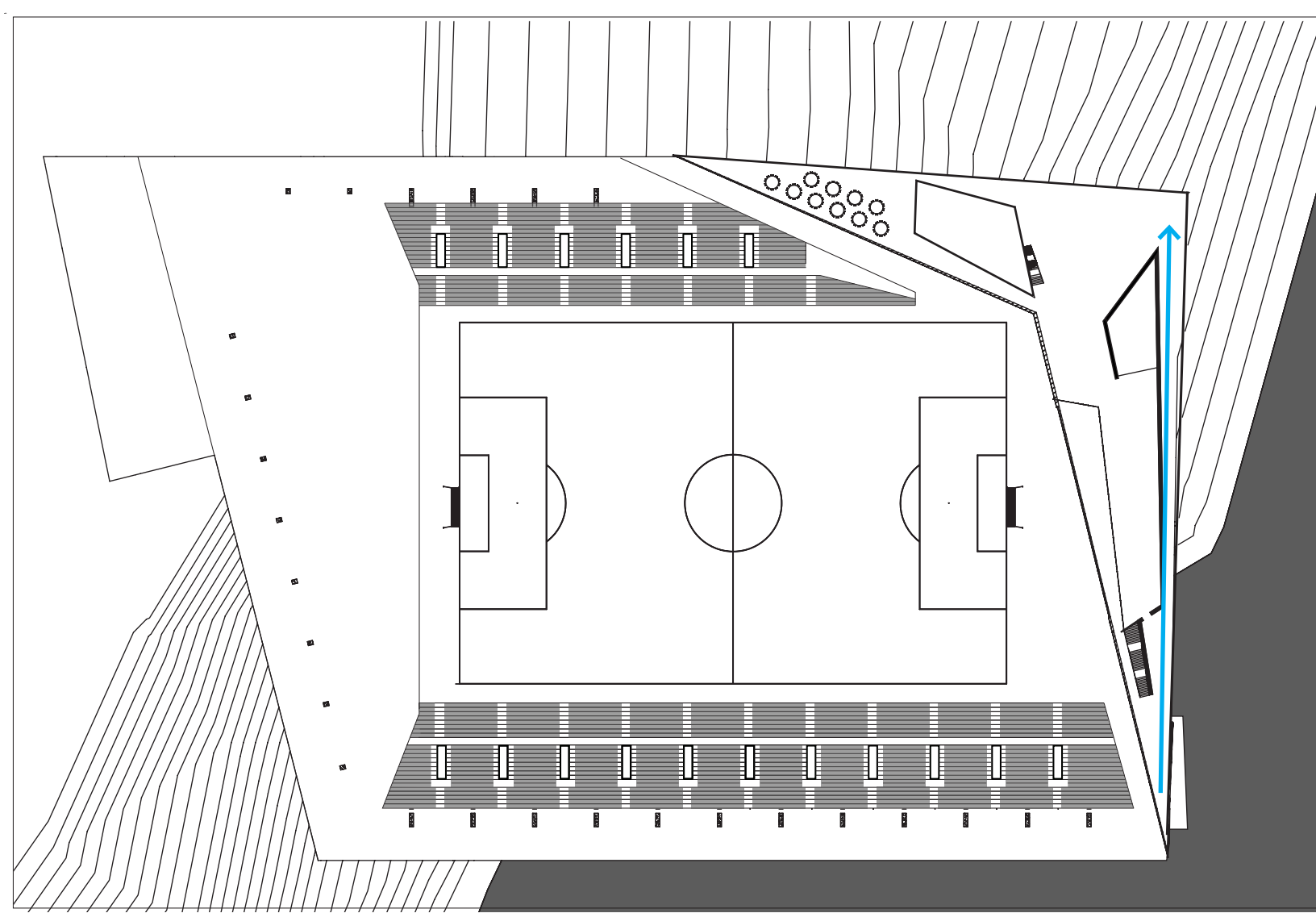
RETURN

Athlete Ritual [Return] The athletes return to the entry where the journey is complete.



JOURNEY OF THE
HERO [RESIDENT]

JOURNEY OF THE HERO [RESIDENT]

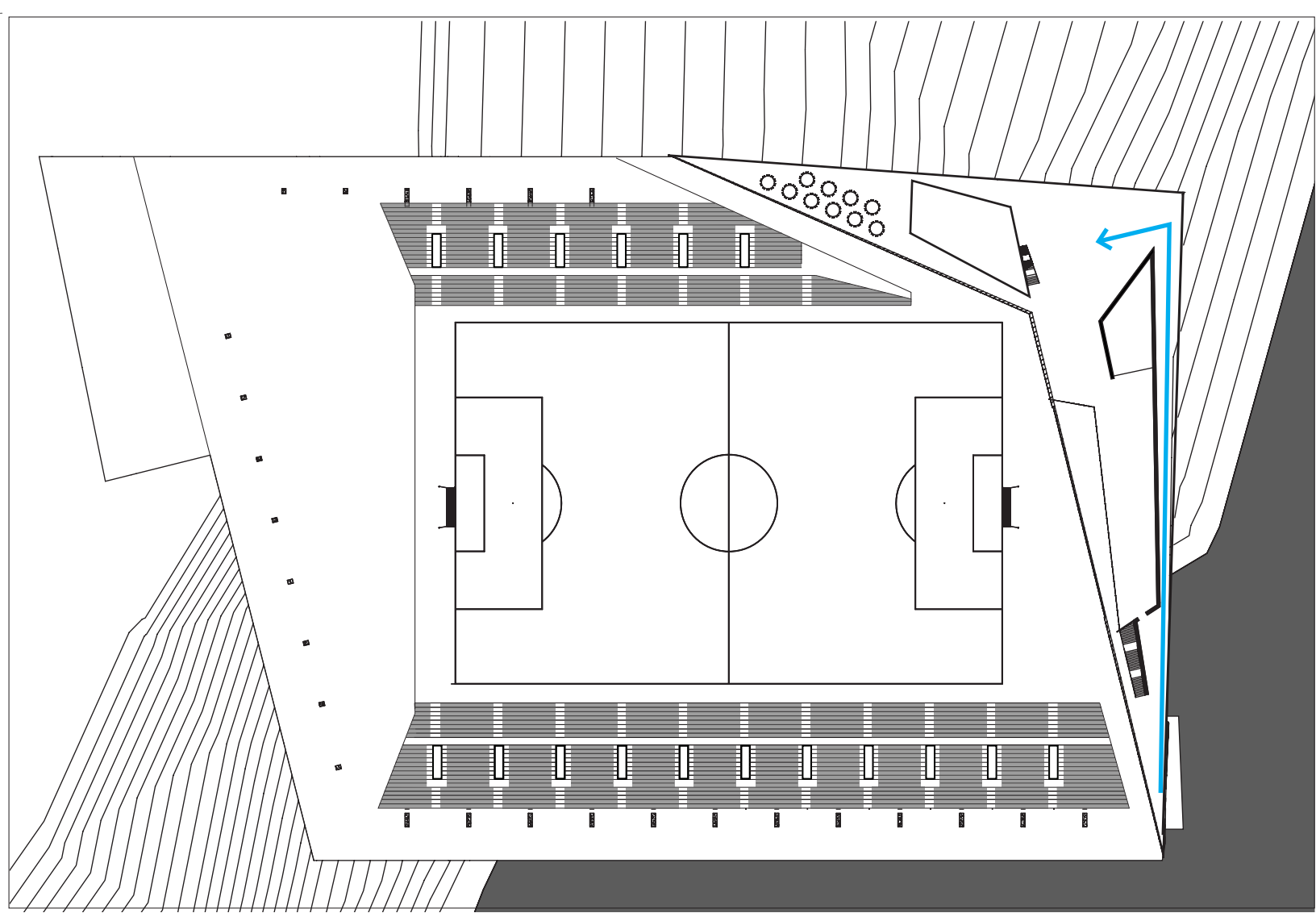


- ATHLETE LIVING
- COACHES LIVING
- GATHERING**
- COACHES OFFICES AND AUDITORIUM
- FIELD
- LOCKER ROOM

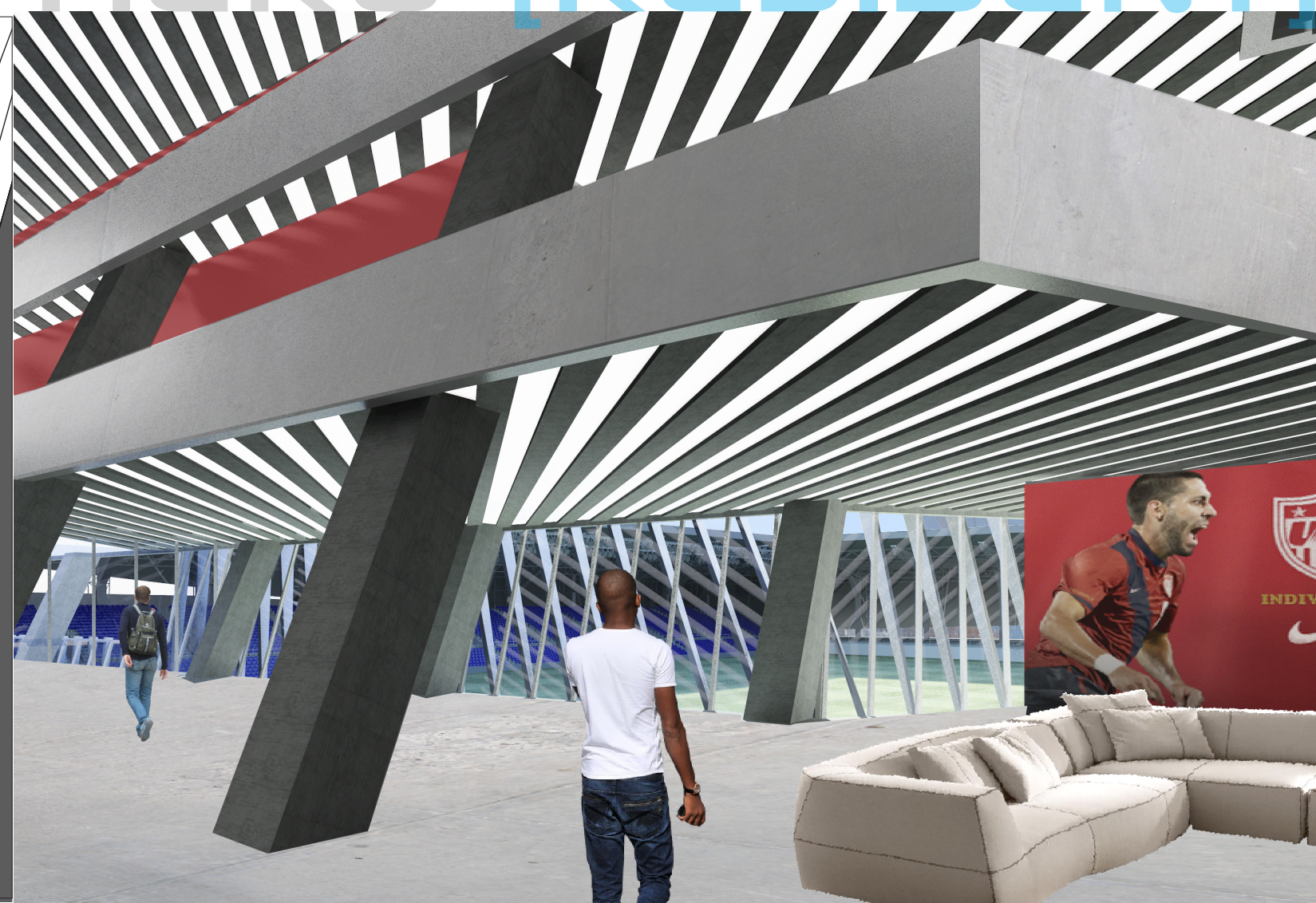
PREPARATION

Resident Ritual [Preparation] The athletes pass down the back of the training facility as they progress to the gathering area.

JOURNEY OF THE HERO [RESIDENT]

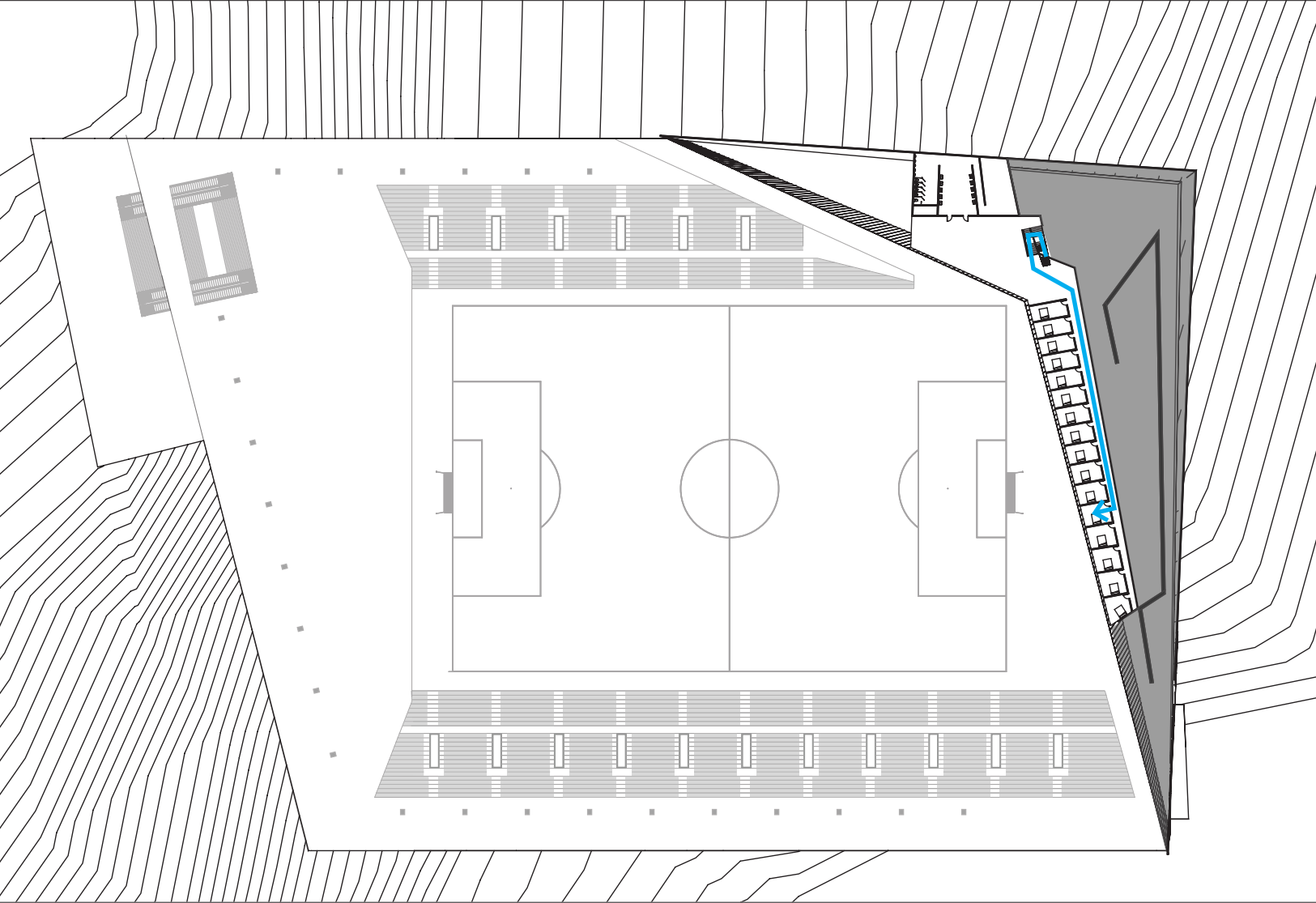


- ATHLETE LIVING
- COACHES LIVING
- GATHERING**
- COACHES OFFICES AND AUDITORIUM
- FIELD
- LOCKER ROOM



Resident Ritual [Gathering] The gathering area frames the field to create a sense of focus and provides a place for team bonding.

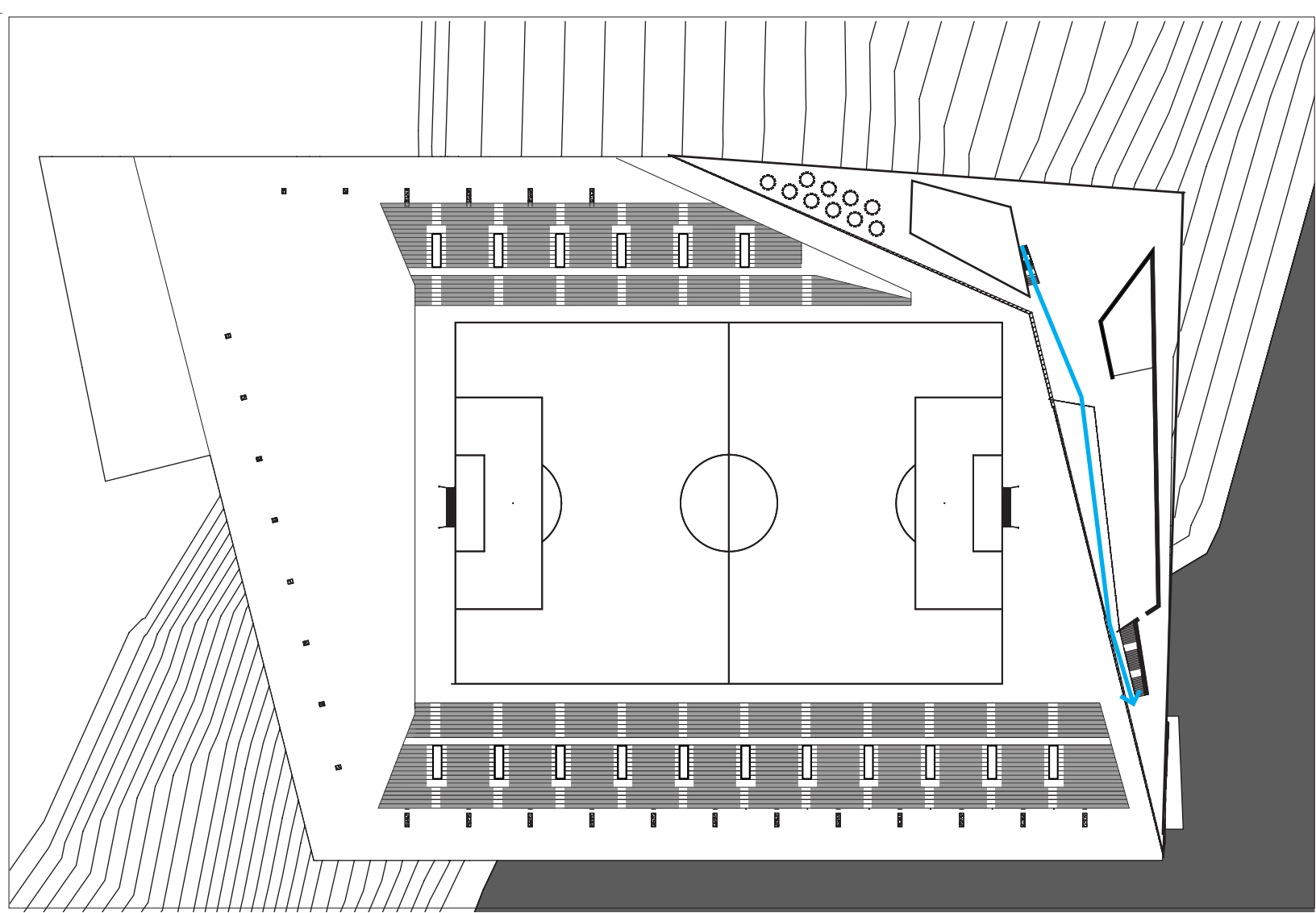
JOURNEY OF THE HERO [RESIDENT]



- ATHLETE LIVING
- COACHES LIVING
- GATHERING
- COACHES OFFICES AND AUDITORIUM
- FIELD
- LOCKER ROOM

Resident Ritual [Meditation] The resident's bedrooms become a location for meditation and rest.

JOURNEY OF THE HERO [RESIDENT]



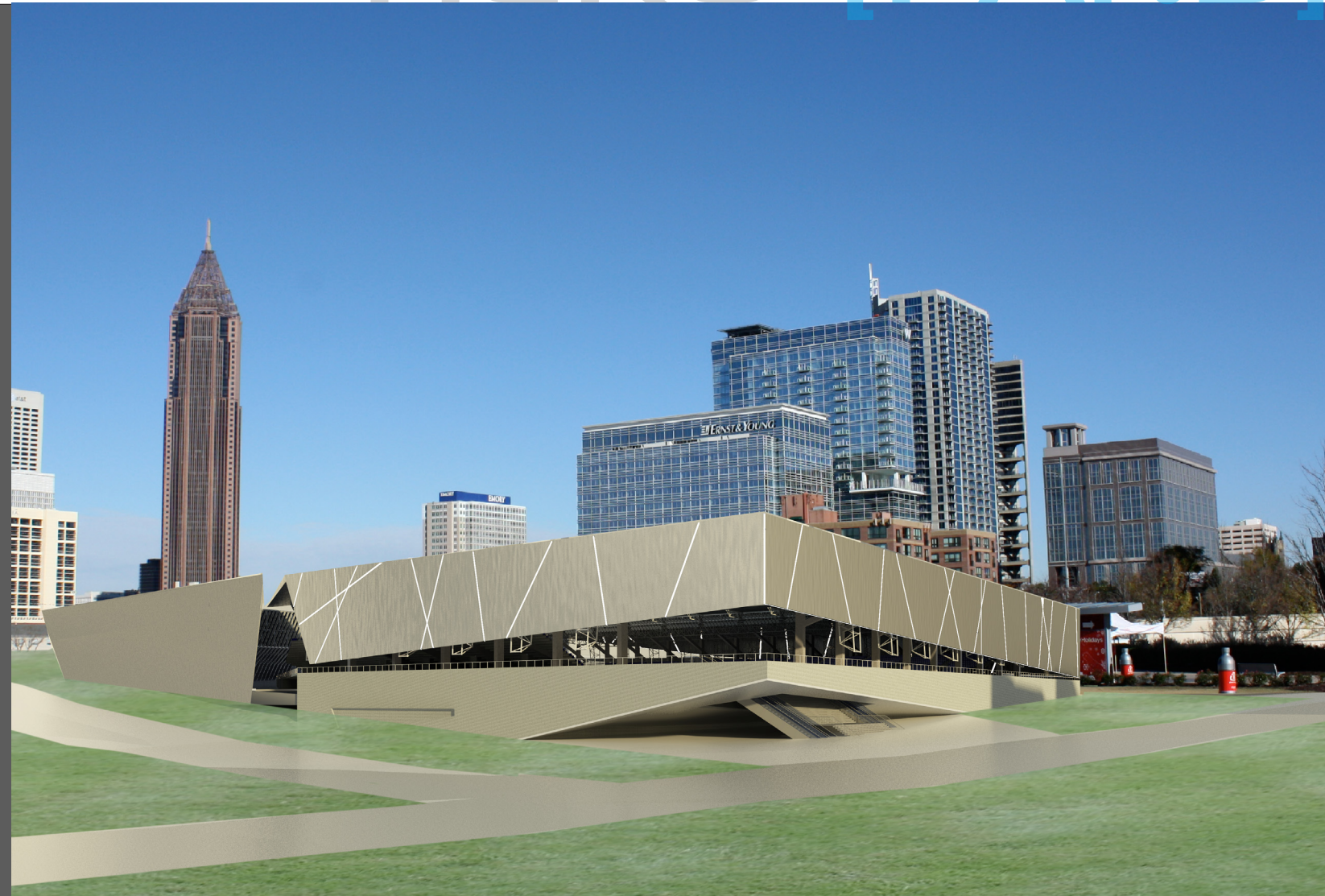
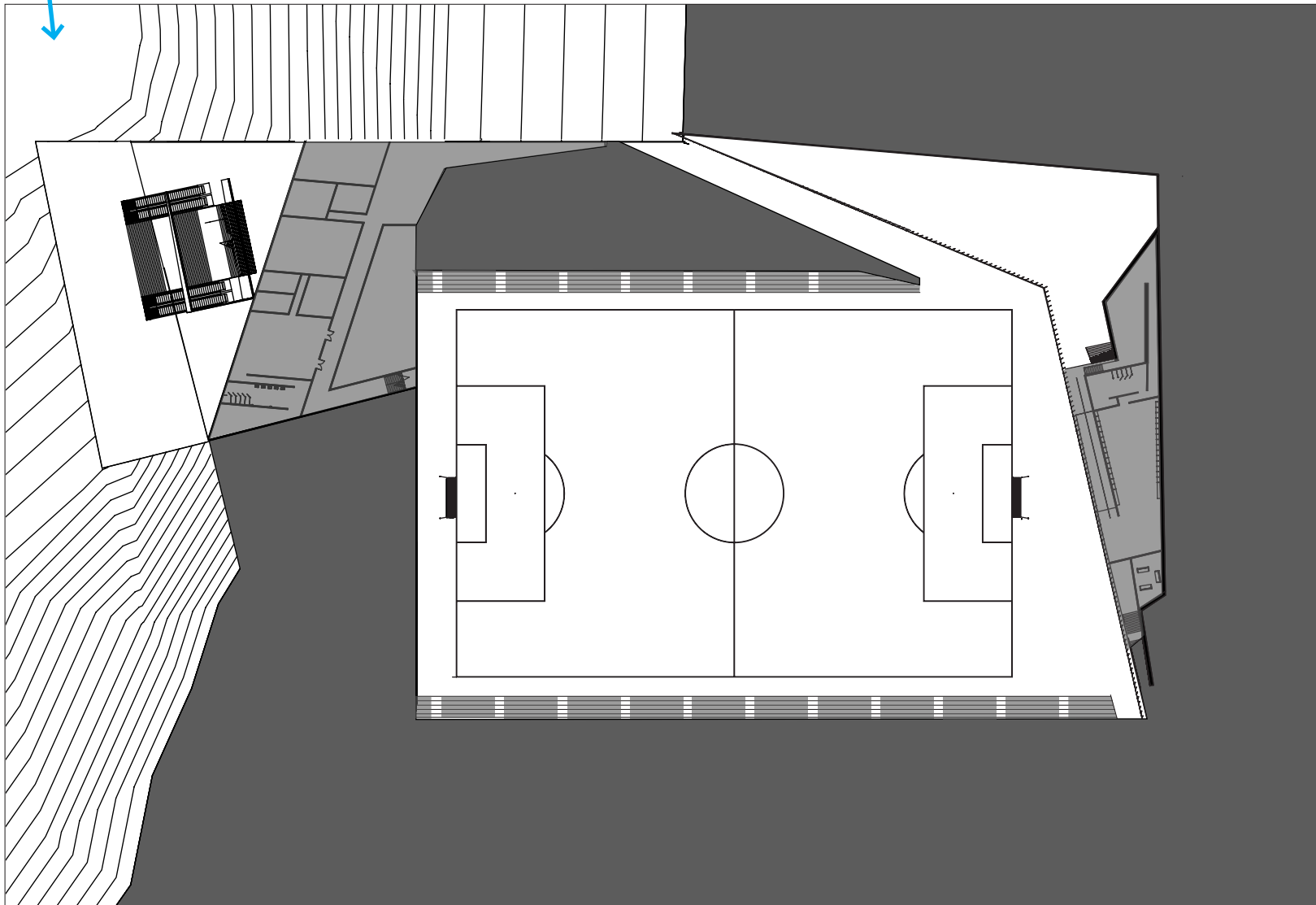
- ATHLETE LIVING
- COACHES LIVING
- GATHERING**
- COACHES OFFICES AND AUDITORIUM
- FIELD
- LOCKER ROOM

Resident Ritual [Return] The athletes pass through an external overlook that is experienced when leaving the facility.



JOURNEY OF THE HERO [FANS]

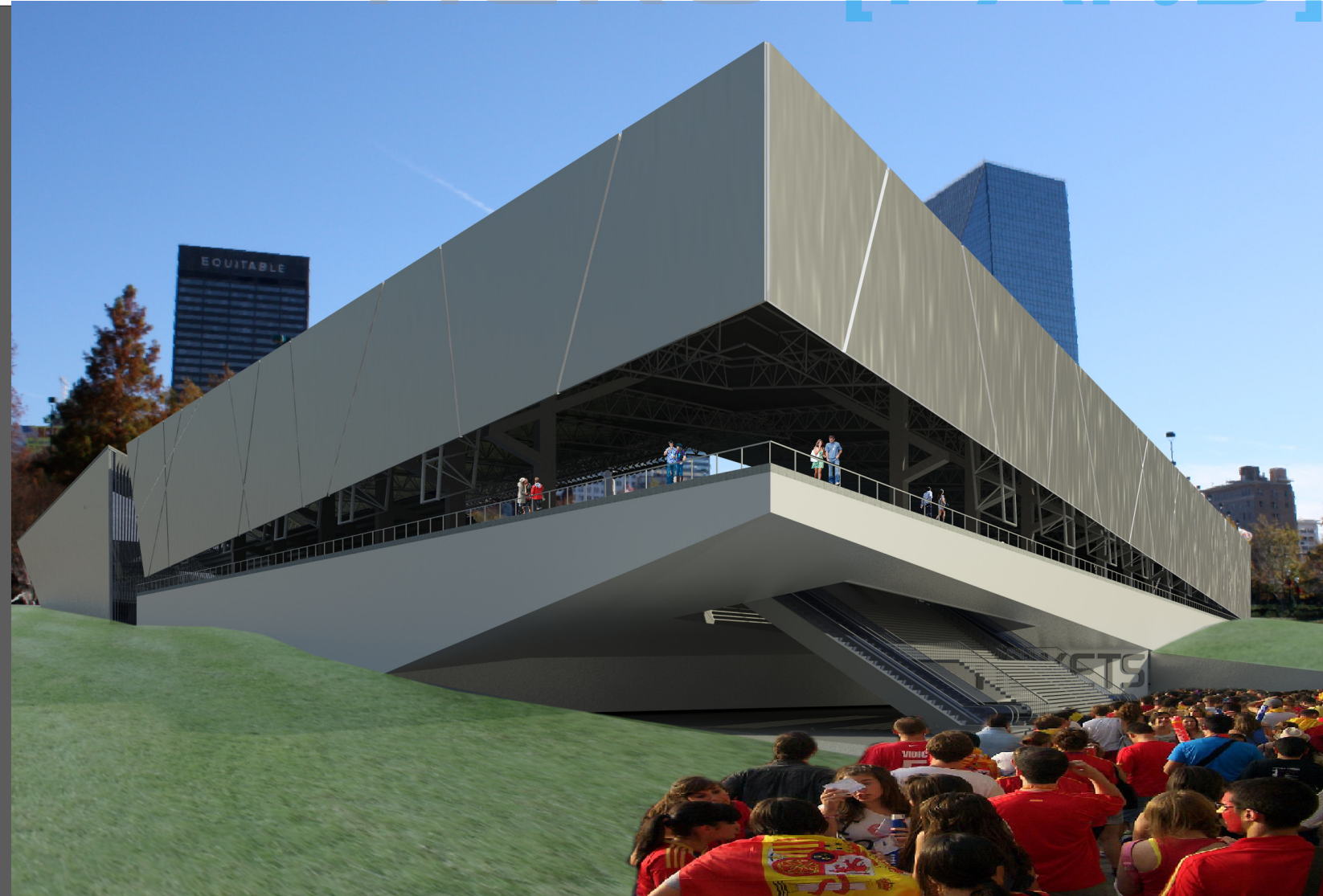
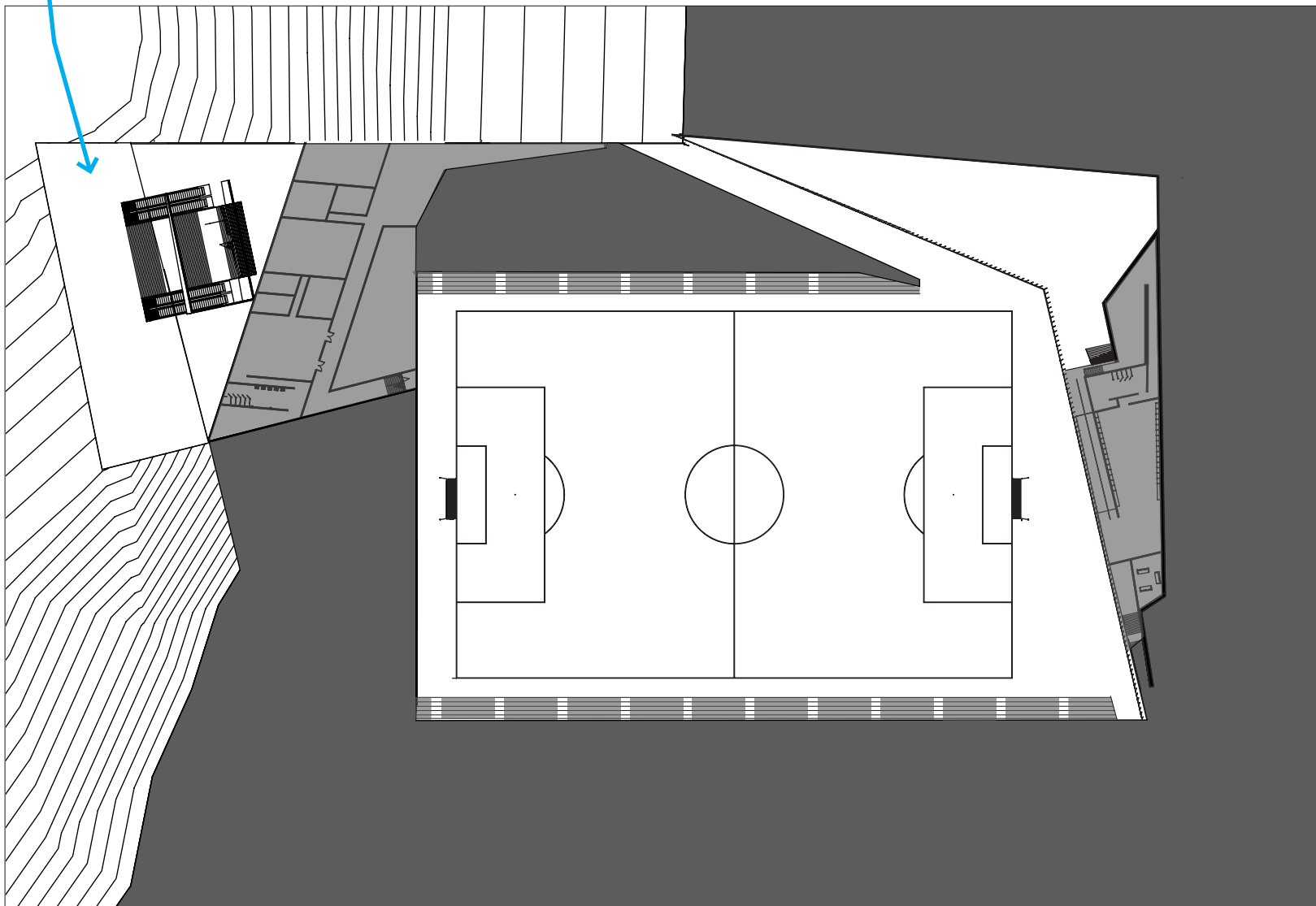
JOURNEY OF THE HERO [FANS]



ATHLETE LIVING
COACHES LIVING
GATHERING
STADIUM CONCOURSE
FIELD
LOWER ENTRY

Fans Ritual [Approach] Fans approach the stadium on Centennial Olympic Park Drive located in the heart of Midtown Atlanta.

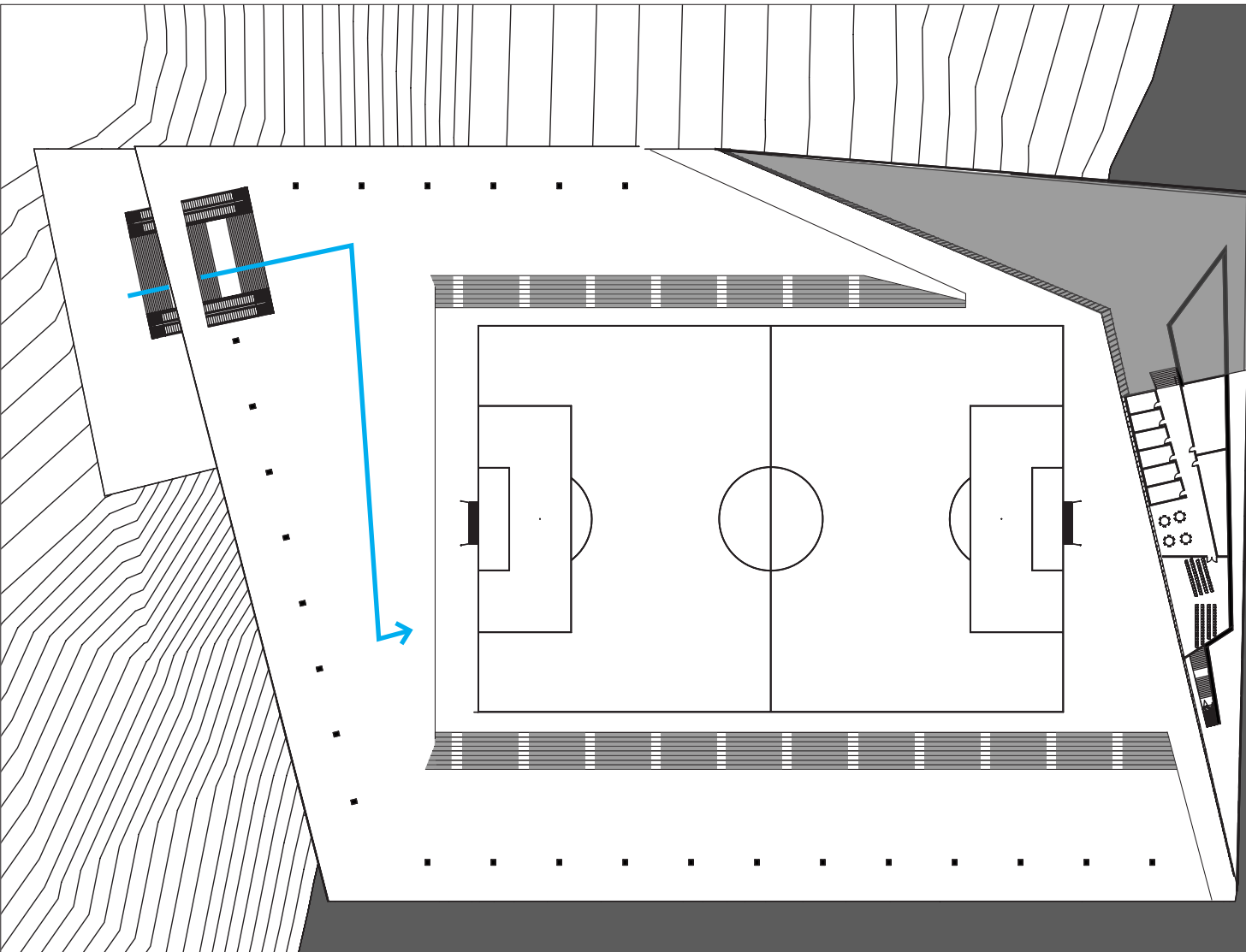
JOURNEY OF THE HERO [FANS]



ATHLETE LIVING
COACHES LIVING
GATHERING
STADIUM CONCOURSE
FIELD
LOWER ENTRY

Fans Ritual [Entrance] The fan entrance symbolizes the Krypte Esodos at Olympia and the gate between the profane and sacred.

JOURNEY OF THE HERO [FANS]

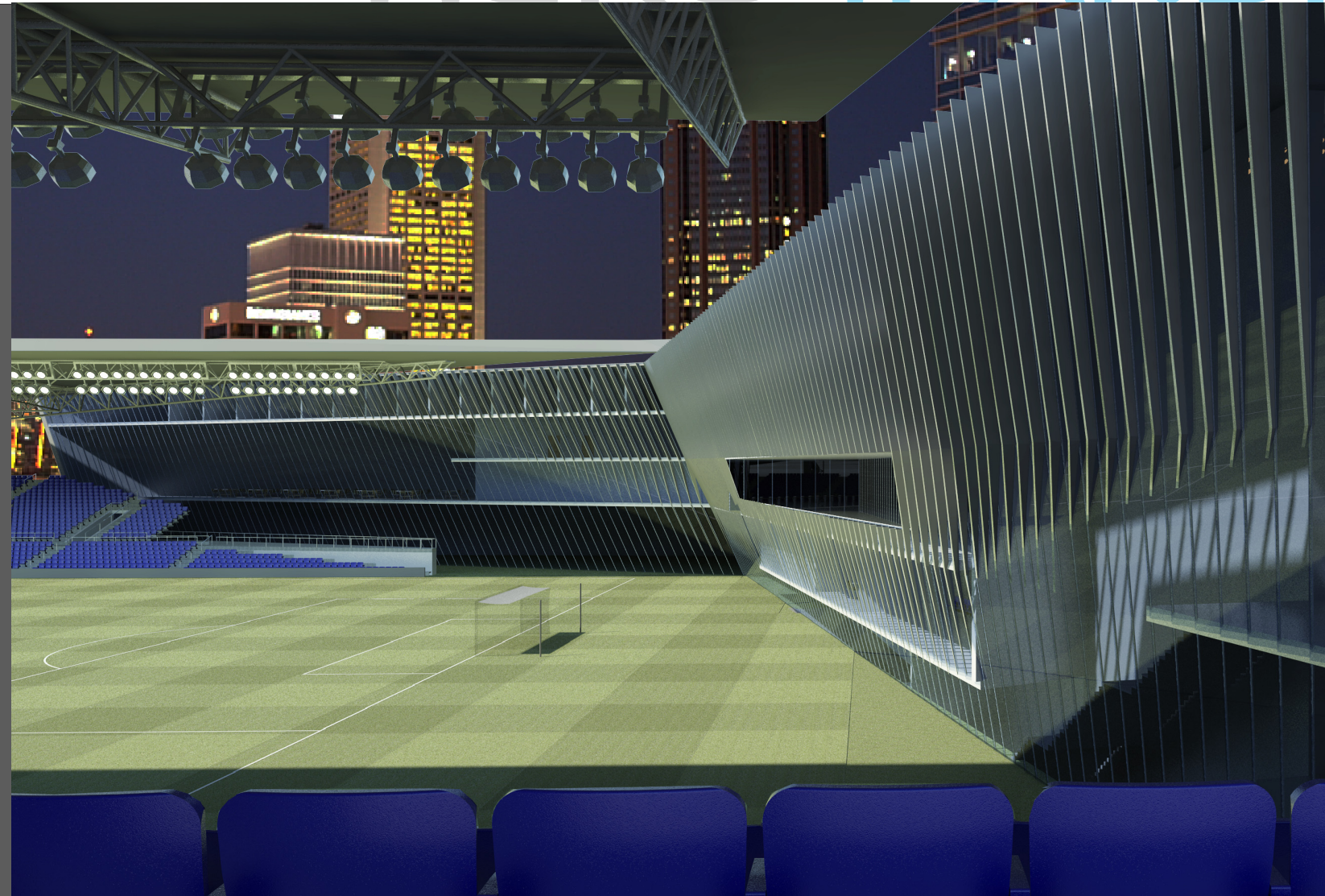
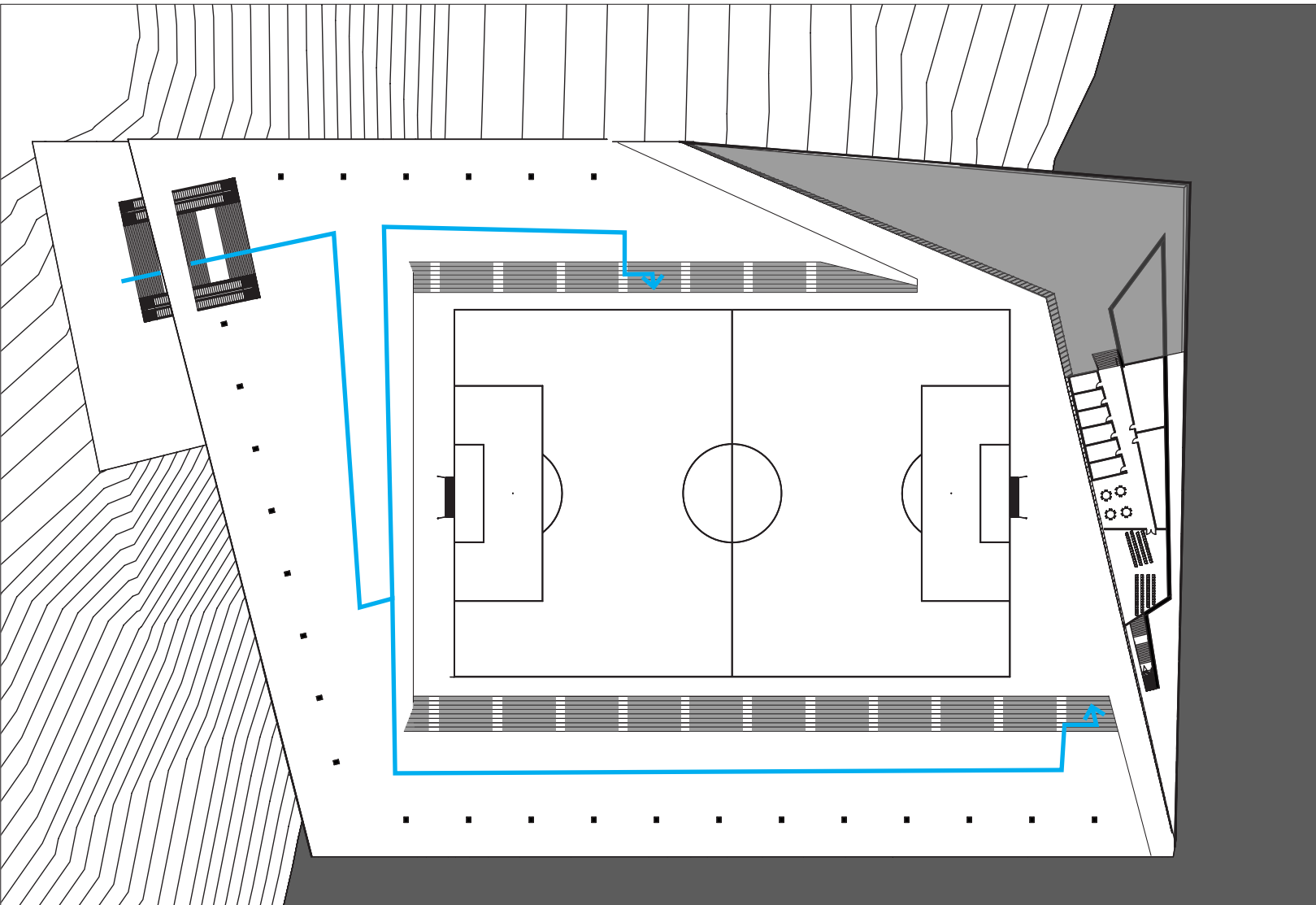


ATHLETE LIVING
COACHES LIVING
GATHERING
STADIUM CONCOURSE
FIELD
LOWER ENTRY



Fans Ritual [Overlook] The overlook provides standing area to watch the soccer match and focuses the fan's attention to the field.

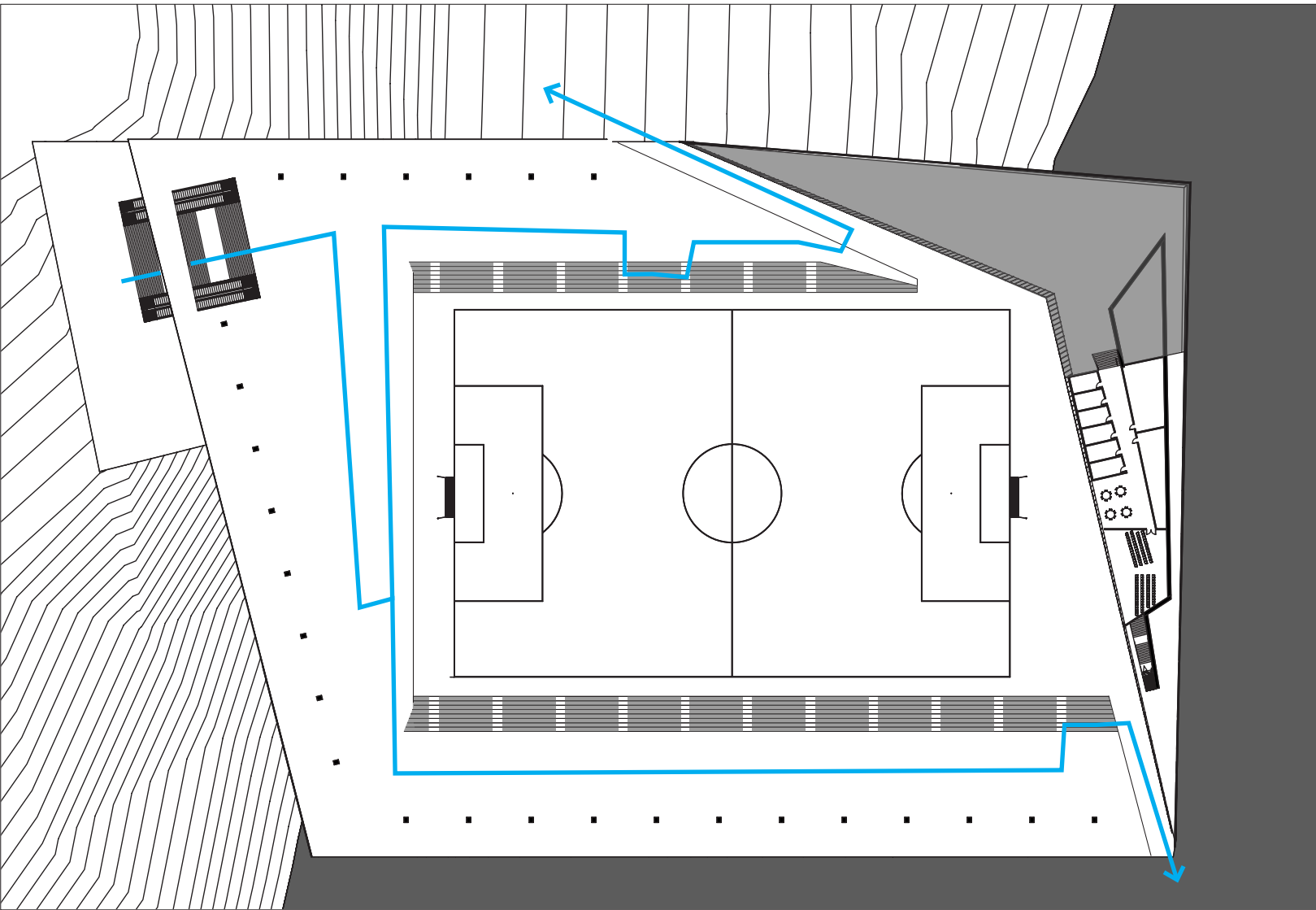
JOURNEY OF THE HERO [FANS]



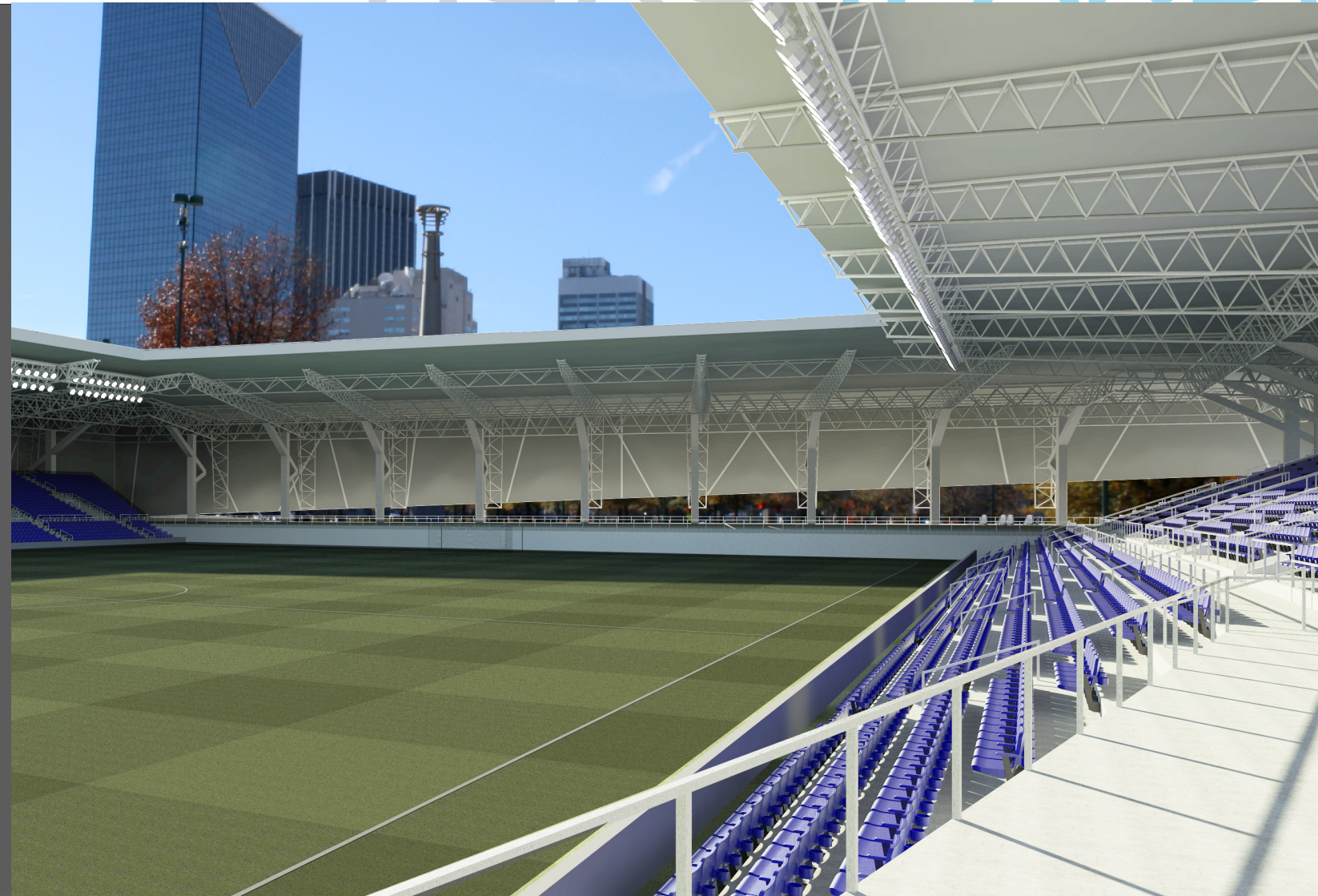
ATHLETE LIVING
COACHES LIVING
GATHERING
STADIUM CONCOURSE
FIELD
LOWER ENTRY

Fans Ritual [Seating] The 8,000 seats in the stadium are defined by the overlook and training facility
The skin on the training facility shades the residents from the sun and focuses their attention to the field.

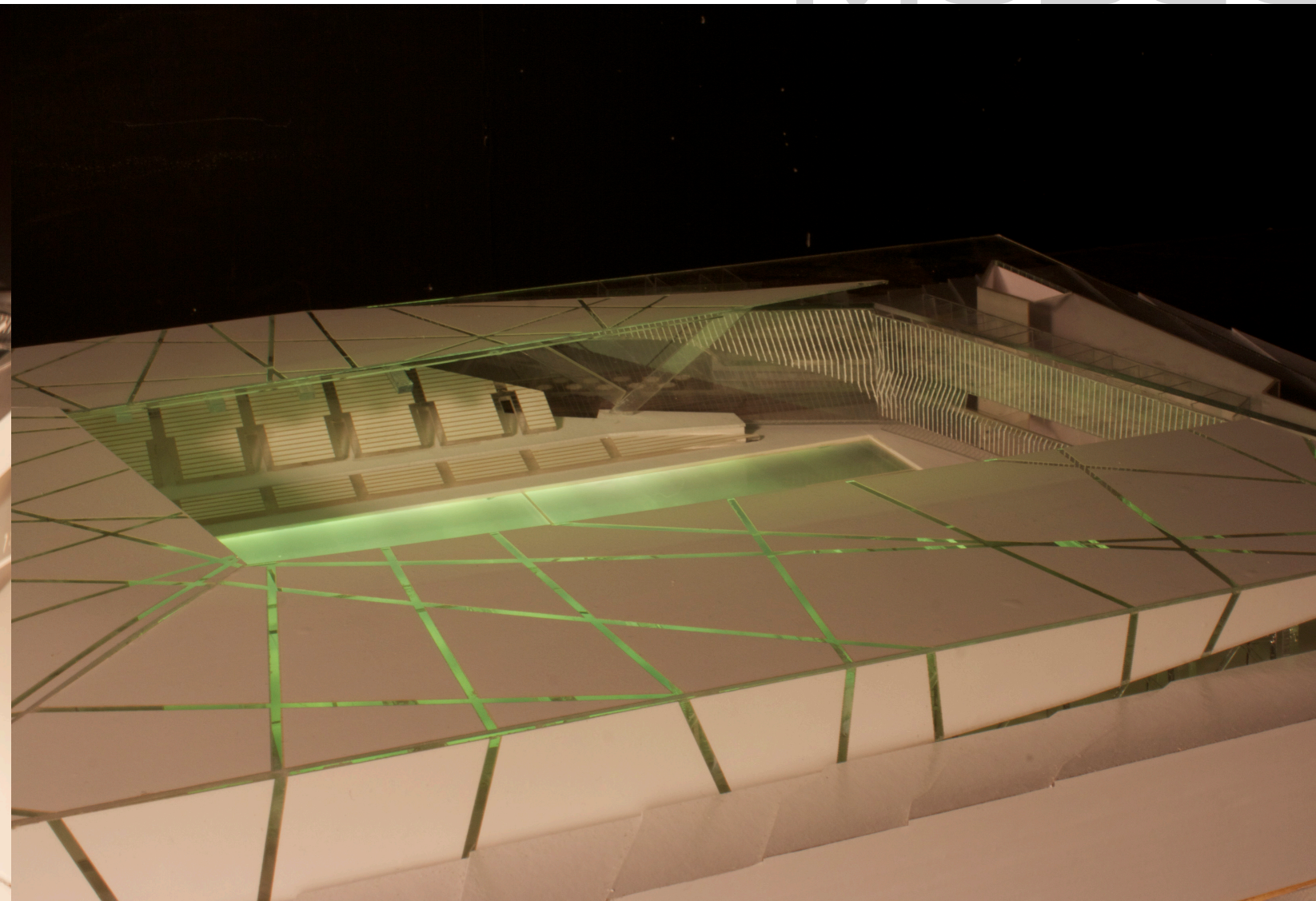
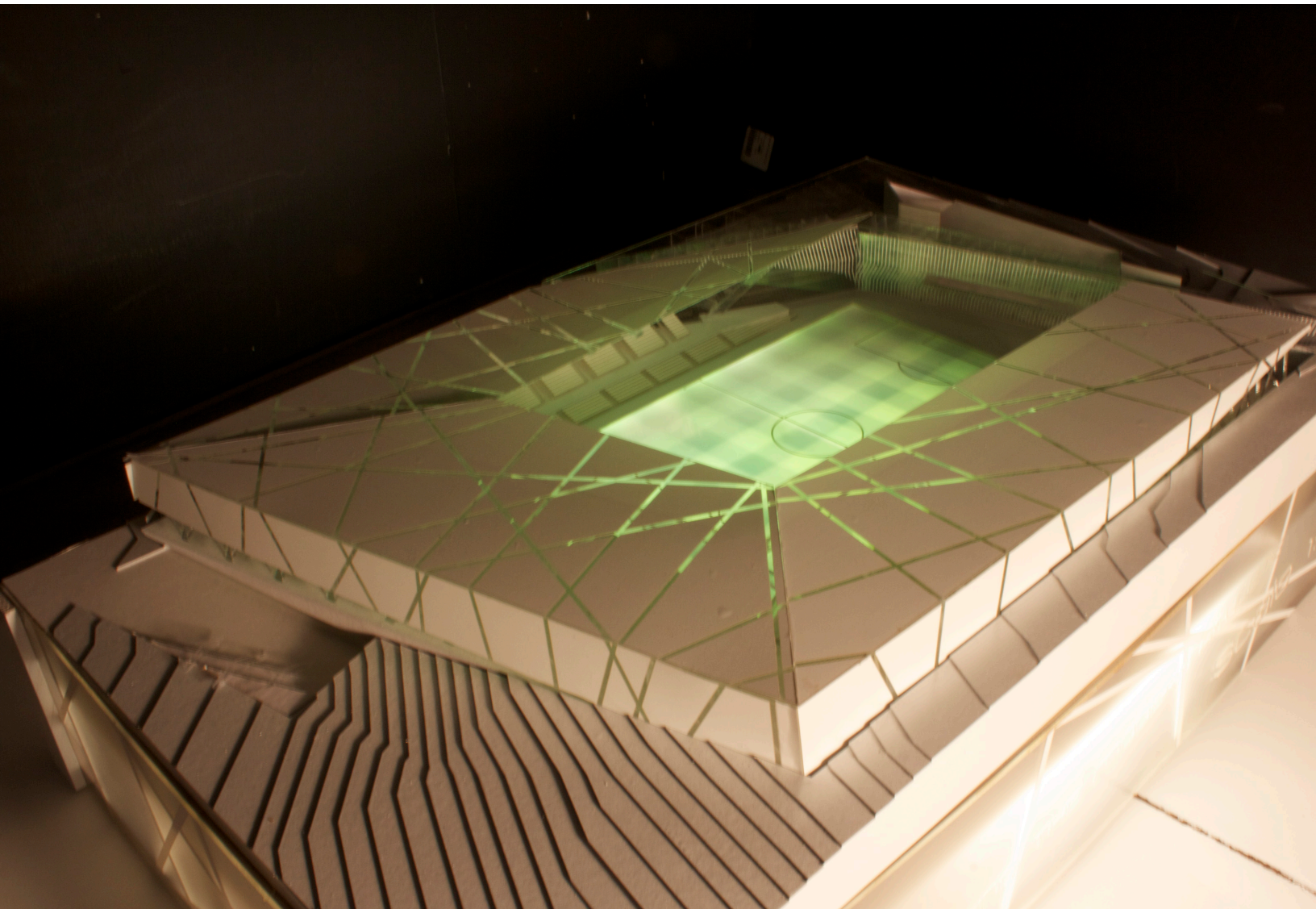
JOURNEY OF THE HERO FANS



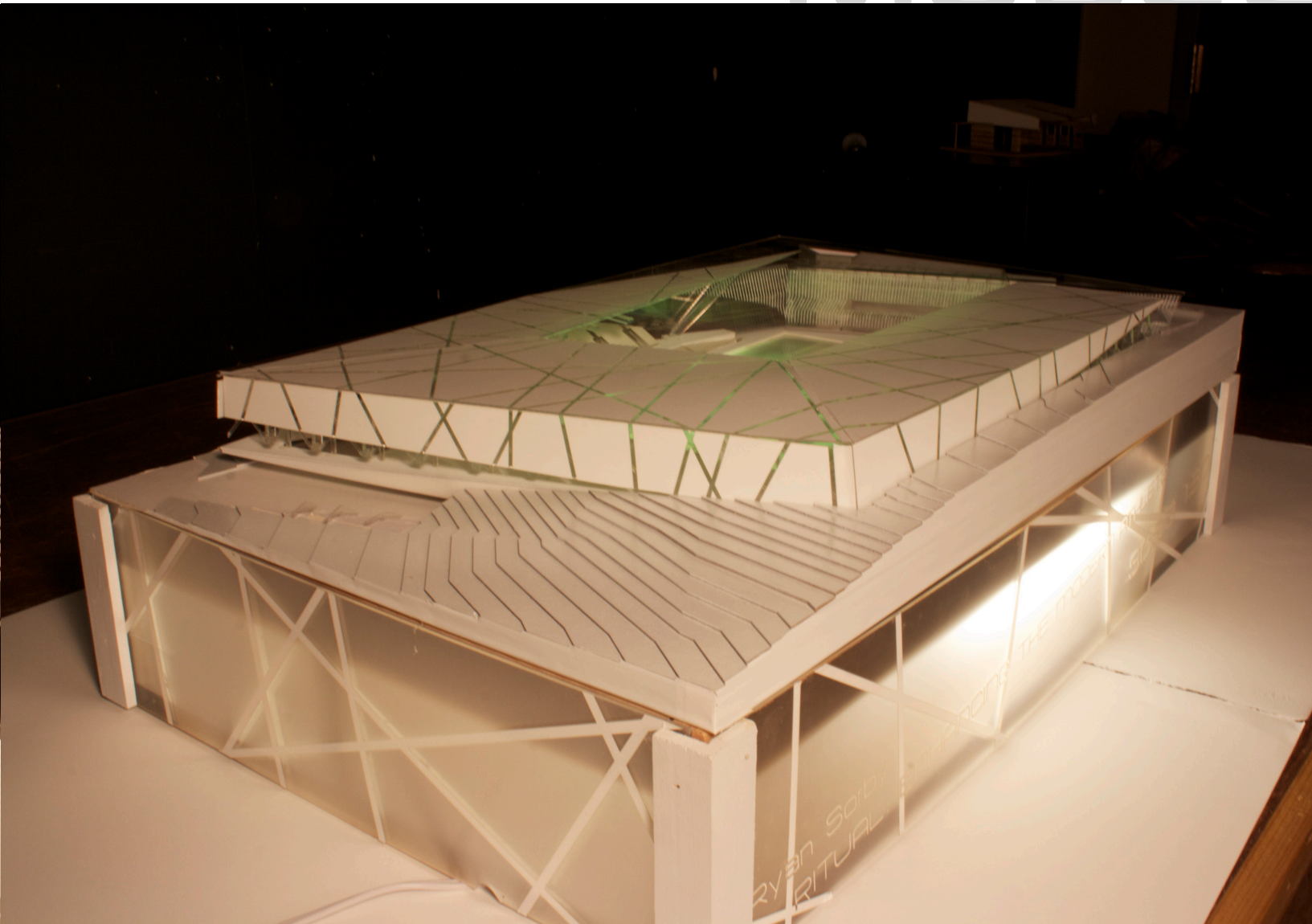
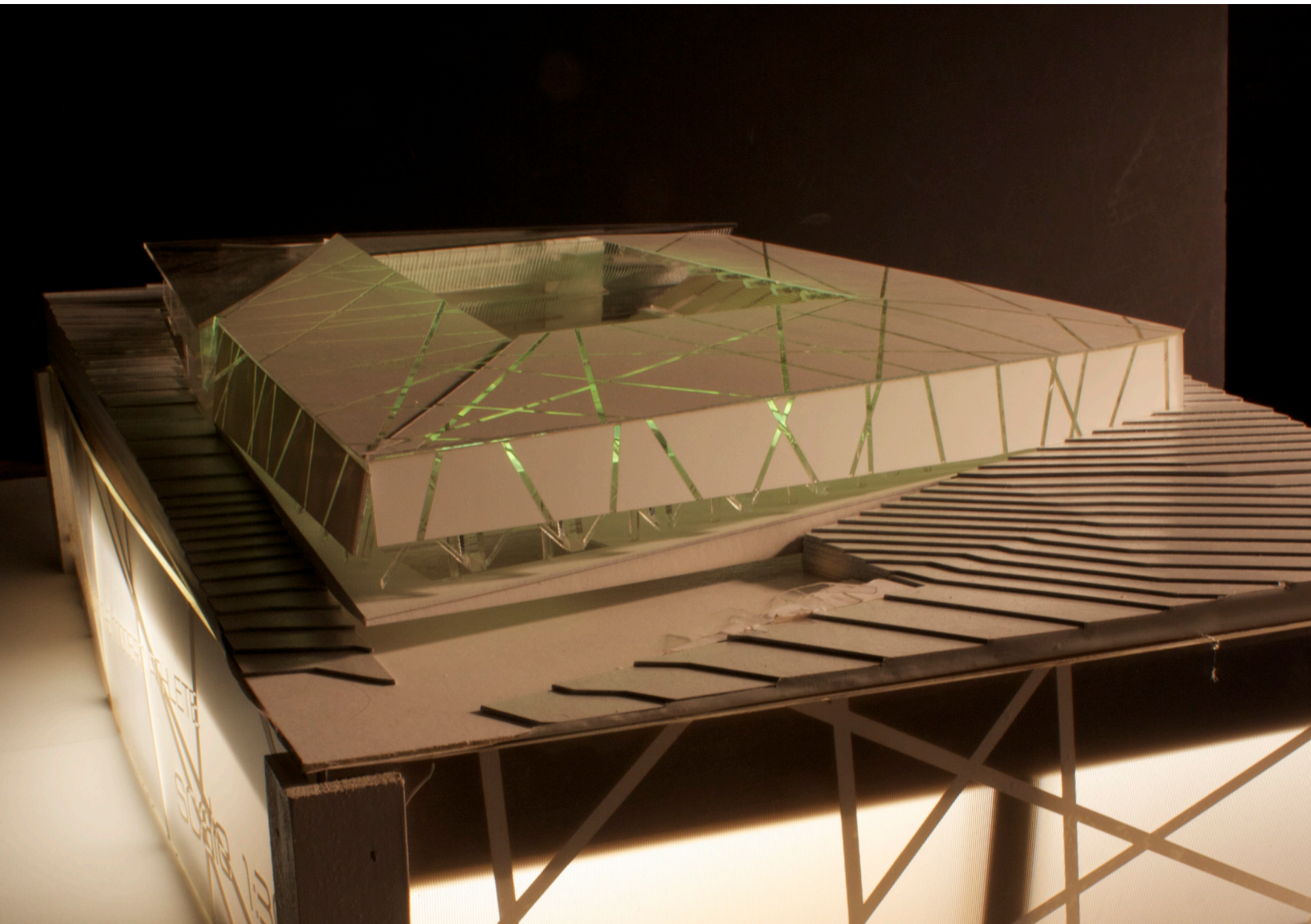
ATHLETE LIVING
COACHES LIVING
GATHERING
STADIUM CONCOURSE
FIELD
LOWER ENTRY



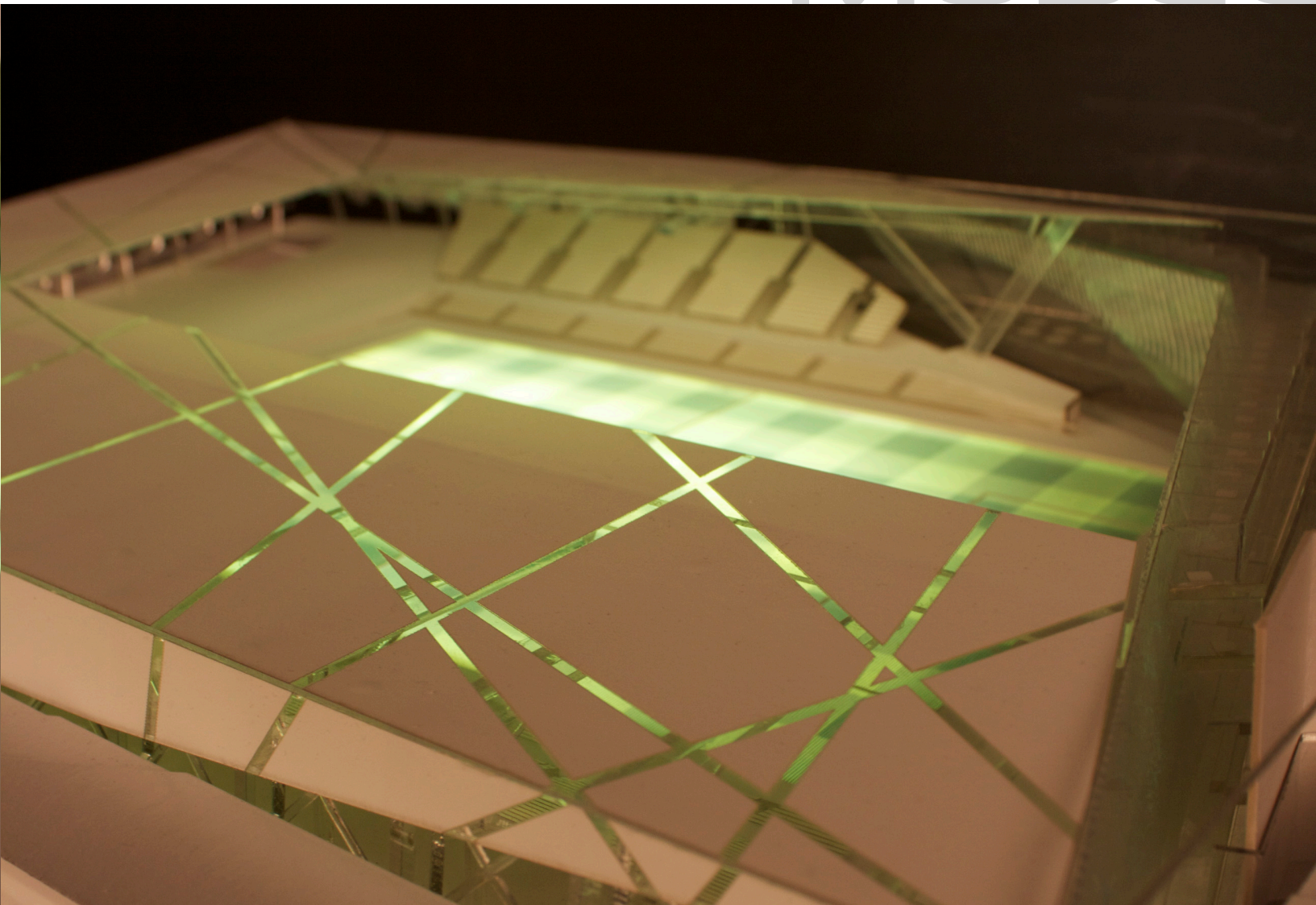
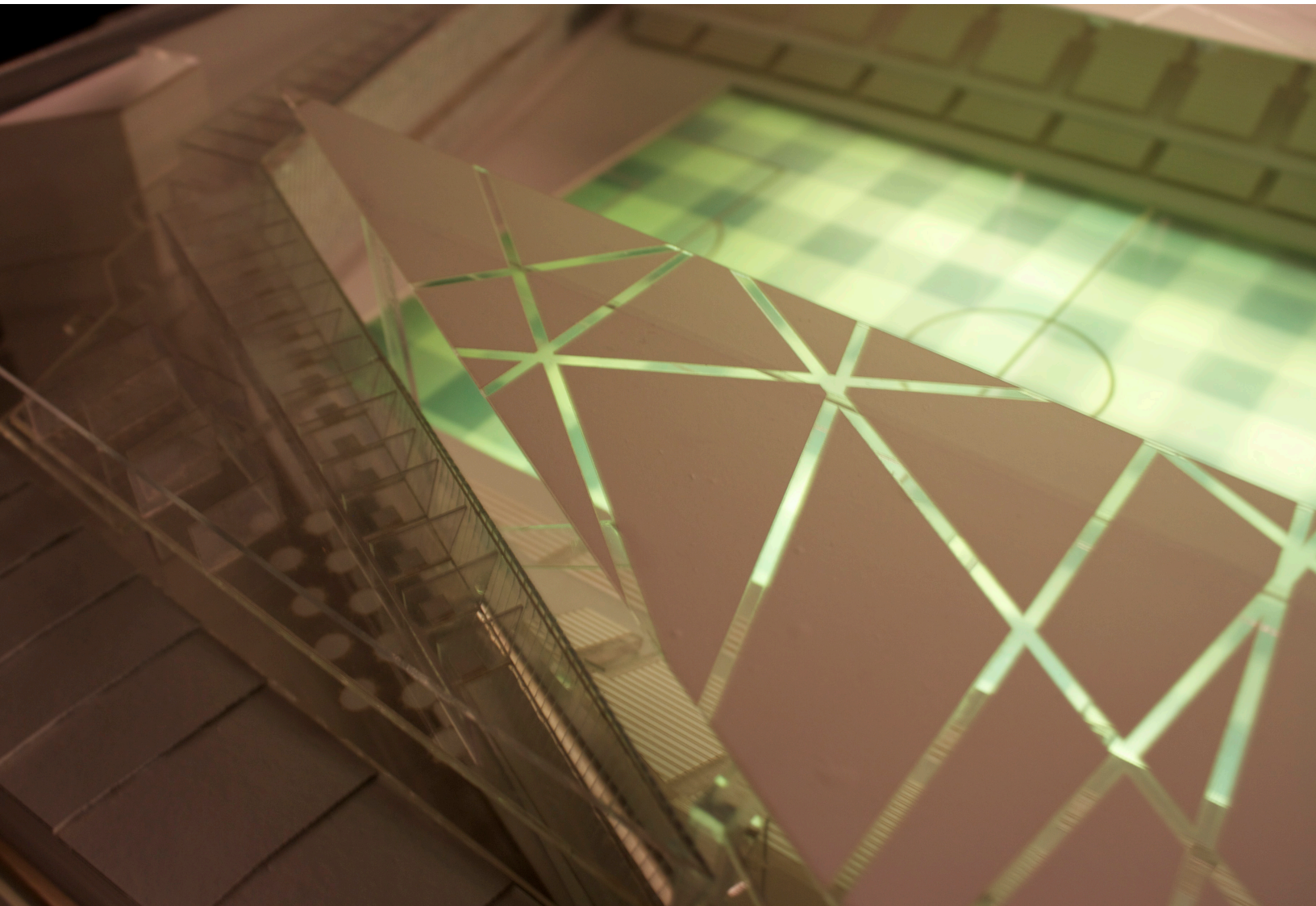
Fans Ritual [Return] The return becomes the final area to view the field before exiting the stadium.



MODEL



MODEL



REFERENCE LIST

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QUOTE "You may say that I'm a dreamer, but I'm not the only one." - John Lennon

