

# **Doppelpass**

**Connecting Winnipeg's Stadium with the Fort Garry Campus**

A practicum submitted to the Faculty of Graduate Studies of the University of Manitoba

In Partial fulfillment of the requirements of the degree of

Master of Landscape Architecture

Department of Landscape Architecture  
Faculty of Architecture  
University of Manitoba

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A practicum by Jin Hyeok Choi



# Abstract

This practicum intends to improve the landscape surrounding the Investors Group Field stadium at the University of Manitoba in Winnipeg, Manitoba. It addresses the site's current challenges, the proposed changes to the neighboring infrastructure, and how these improvements are better-suited to the daily lives of fans, residents, and University of Manitoba students. The design proposal further aims at creating a more welcoming and enjoyable experience for visitors first arriving at the stadium. Moreover, it shows how fans, residents, and University of Manitoba students would benefit from the interrelationship between Investors Group Field, University of Manitoba, and a changing new neighboring infrastructure — a “win-win” situation entitled Doppelpass (“one-two pass”).



All photographs and figures were prepared by the author or noted if it came from other sources.  
See figure credits on page 158

# Acknowledgments

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Thank you all.

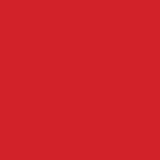


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Figure 1.1 - Allianz Arena

Looking back at my childhood, I remember always carrying a soccer ball with me everywhere I went. I do not remember when my passion for the sport began, but the soccer ball was always with me. As with most elementary school children, I always looked forward to weekends, but for an altogether different reason than merely wishing to avoid the classroom. Most every weekend, my parents would take me to the soccer stadium for the team which our family supported: the club called FC Bucheon. The FC Bucheon is one of many teams in the Korean professional soccer league, and is the regional home team for the city where I grew up. It was not important whether the club was good or not; they were the hometown club and it was soccer. That was all, that was well enough for our family's enthusiasm with the team, especially for my dad and I. At the stadium, I always felt a little nervous, curious about the huge building we were going inside, but mostly excited to watch soccer with my own eyes inside the stadium. When I was young, that was how I felt about stadiums until the club had to be shut down. —But recently, my feelings how I looked at stadiums have changed through my experiences and educated by Faculty of Landscape Architecture.

Through the experience of seeing a club had to be shut down, I have few questions come up. What if the stadium had not been located in the middle of nowhere; if the surrounding context had been well-established and congruent with the daily lives of citizens? What if the surrounding area had been well-managed and accessible, would the stadium not have been shut down?



Figure 1.2 - Entrance of Allianz Arena





Figure 1.3 - Allianz Arena - Bayern Munich

I felt the same childhood excitement 18 years later, on December 2014 Europe Trip, in Munich, Germany. There, I witnessed a lot of people sharing the same enthusiasm for soccer; all wearing the same colors but gathered together from different places for one goal: to support their team, Bayern Munich. What is it that gets these people so fired up? Perhaps, the soccer match itself is a good enough justification for all that excitement. However, part of the reason behind what has made this club so successful to establish get love from fans and residents? Moreover, how is the stadium's external infrastructure communicated to the fans and residents on a daily basis?

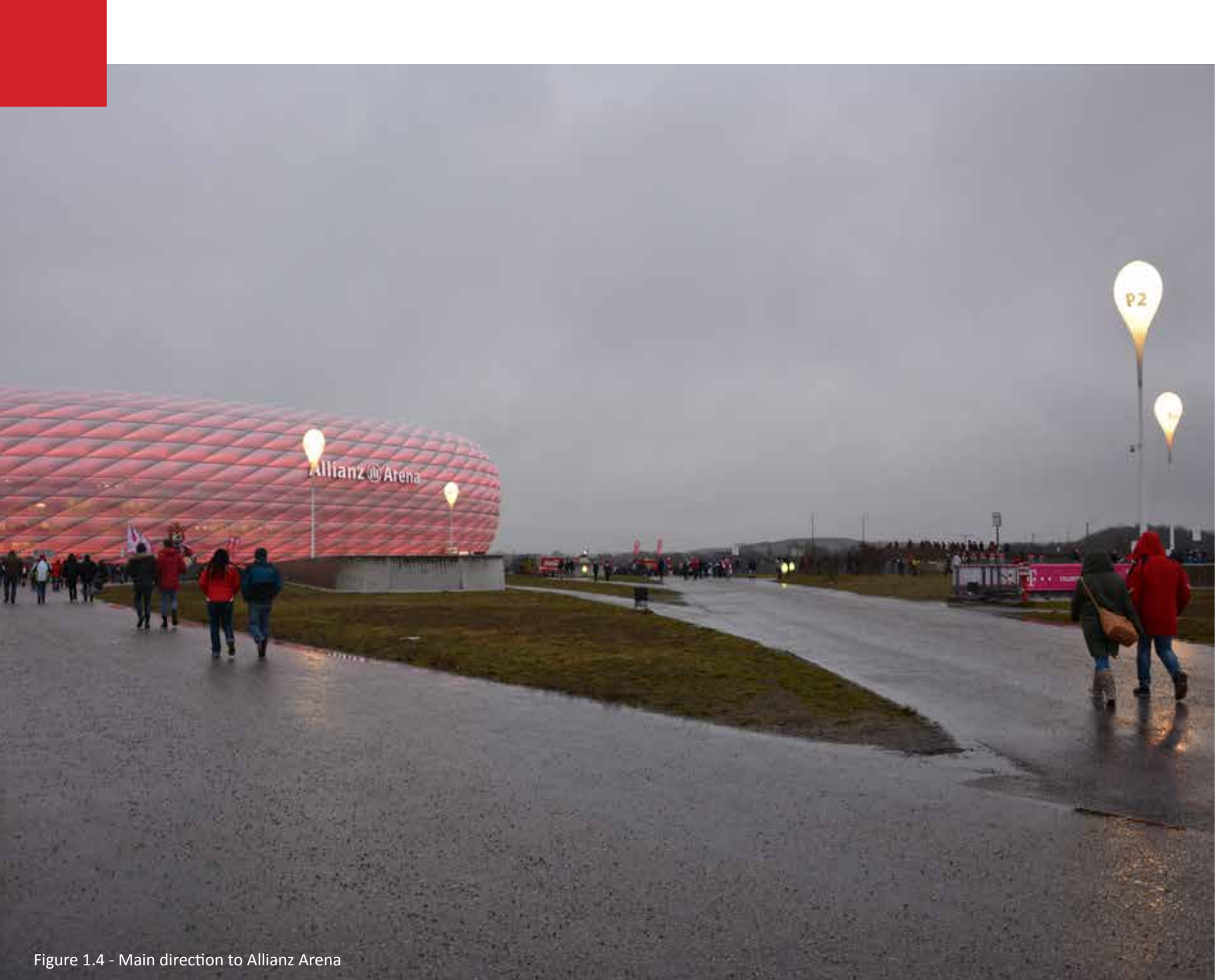


Figure 1.4 - Main direction to Allianz Arena

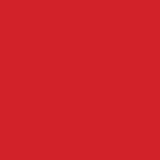


Figure 1.5 - Other direction to Allianz Arena



Figure 1.6 - Landscape of Allianz Arena

The next week, I travelled to Barcelona, Spain, and visited Camp Nou; home stadium for the FC Barcelona. After spectating a match, I realized that a well-considered infrastructure for daily life is the key to make people engage the space, even outside of match days. Once more people are active in a place, that place grows to become loved. Such has been the case with Allianz Arena's landscape design, with a pathway that turns into a running or walking course for non-match days. Geraint, Rod & Ben (2013) reinforce that people want to do more activities before or after a match, and desire less stress on the way in and out venues, in accordance with a good quality of life (Geraint, Rod, & Ben, 2013, p. 37-39).





After the Europe trip, I targeted the Investors Group Field, constructed in 2013 on the University of Manitoba campus. I realized that little importance had been placed on the stadium's landscape, when compared to that of the Allianz Area and Olympiapark in Munich. Limited programs are available for people to enjoy before or after a match, spaces are isolated, and there is a lack of infrastructure for public transportation and parking — the space is defined by its mono-function as a stadium and nothing else.

The following chapters will describe the standard guide requirements for stadium landscapes for students, fans, and residents. Additionally, they will present the criteria that should be considered for future stadium landscapes.



## 02 STADIUM PAST, CURRENT, AND FUTURE

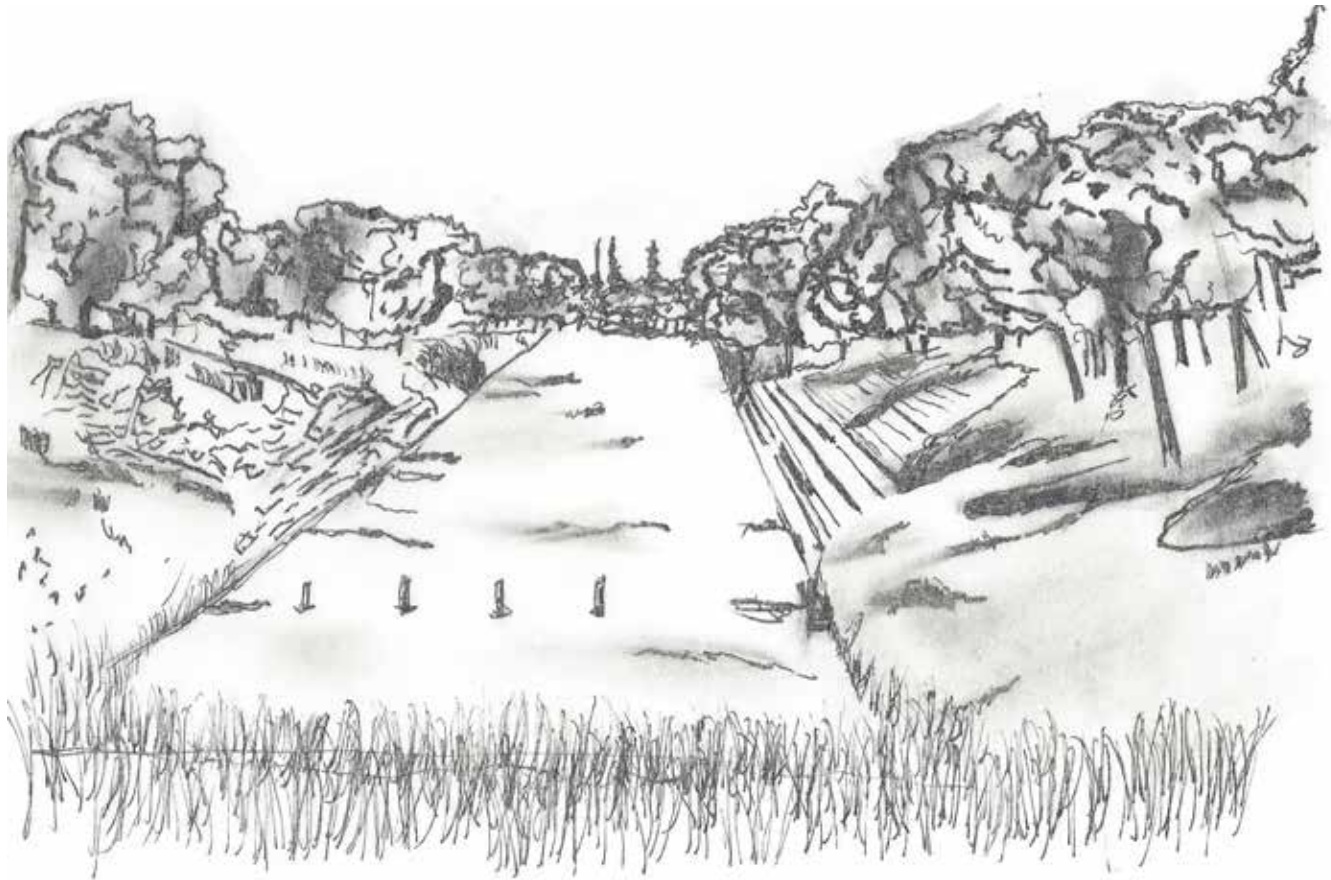


Figure 2.1 - Ancient Greek Stadium

The word “stadium” originates from the town of Olympia in ancient Greece. In the 8th century, Olympians used the stadium to hold 192-meter races. For the most part, the architects of Ancient Greece were concerned with designing a stadium as a theatre tailored to meet a large amount of spectators at once. The amphitheater design was used to inspire the type of structure for the stadium and many such examples can be found to this day (UEFA, p.7).

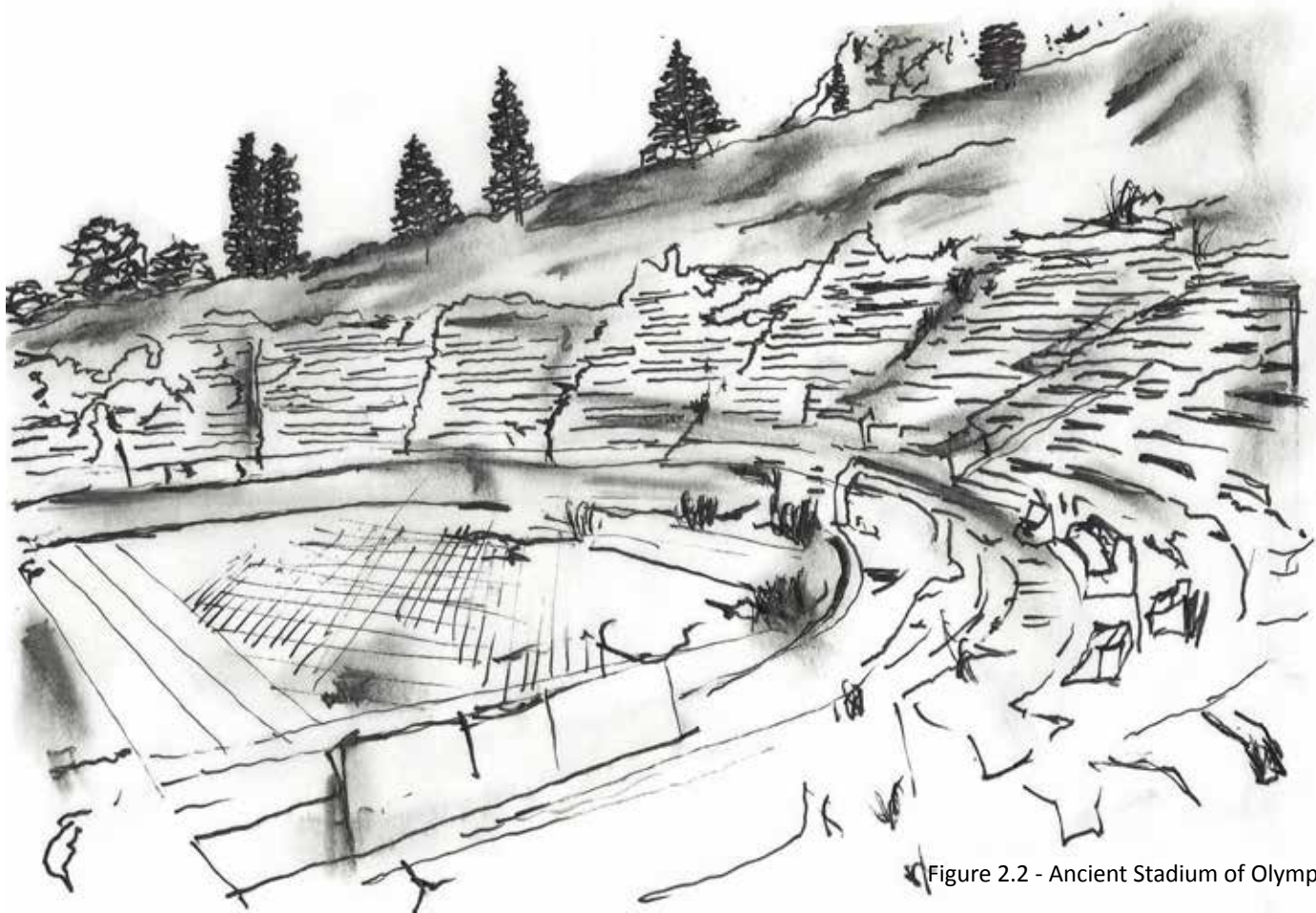


Figure 2.2 - Ancient Stadium of Olympia

A stadium requires more than spectacular views for the fans. A good location is the most important requirement, as shown by the ancient stadiums and gymnasiums in Greece. These are usually built in valleys, with rows of stone seats, hence the location was critical due to seats being built upon a hill's natural slope. The gymnasium was located in the center of town because the Greeks thought of strength and health in boys to be just as important as good schooling and work (Unstead, 1986, p.10).



Figure 2.3 - Metro to Allianz Arena



Figure 2.4 - Pathway of Allianz Arena



Figure 2.5 - On the way to Allianz Arena

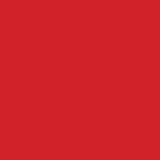
Also, how the stadium communicates to its neighbors is one of the important issues in the design process. Spectators want convenient transportation, road, and information systems, as well as provisions for parking and pedestrian routes (Geraint, Rod, & Ben, 2013, p.40-42). Additionally, the open spaces, such as the landscape around the stadium, needs to be carefully considered for attractiveness, welcoming feeling, and functional external areas to accommodate the large crowds that will approach and navigate the stadium (Fenwick, Bornø, Favre and Tusell, p.22).





Figure 2.6 - Street Market

In the past, from the late 1800's to the late 1900's, soccer stadiums were only used on match days. They were owned by clubs and were used once every one or two weeks, with national stadium usage being far more infrequent. These large spaces should see far more activity, as encouraged by the UEFA (Union of European Football Associations): "Modern stadiums need to identify other means of generating revenue on a daily basis". While the primary purpose of any modern stadium needs to be the provision of an environment for the best quality of entertainment, "commercial realities dictate that they also need to maximize the time and money that spectators and visitors spend during their visit" (Fenwick, Bornø, Favre and Tusell, p.26).





What is the best environment for entertainment? In order to answer this question, we should be considering what makes for better living in a society where people spend leisure time outside with friends and family. In the case of a sports stadium, the infrastructure needs to be designed for people's lives on a daily basis. Additionally, the venue should encourage activities both prior to and following a match. If a stadium is drawn on a canvas, the enormous stadium does not stand by itself, the stadium exists because the infrastructure and the landscape around the stadium exists; the main character on the canvas is not the stadium itself, but the infrastructure and the landscape around the stadium that supports the zone's activity on a daily basis.



## 03 SITE ANALYSIS AND UEFA GUIDE LINE



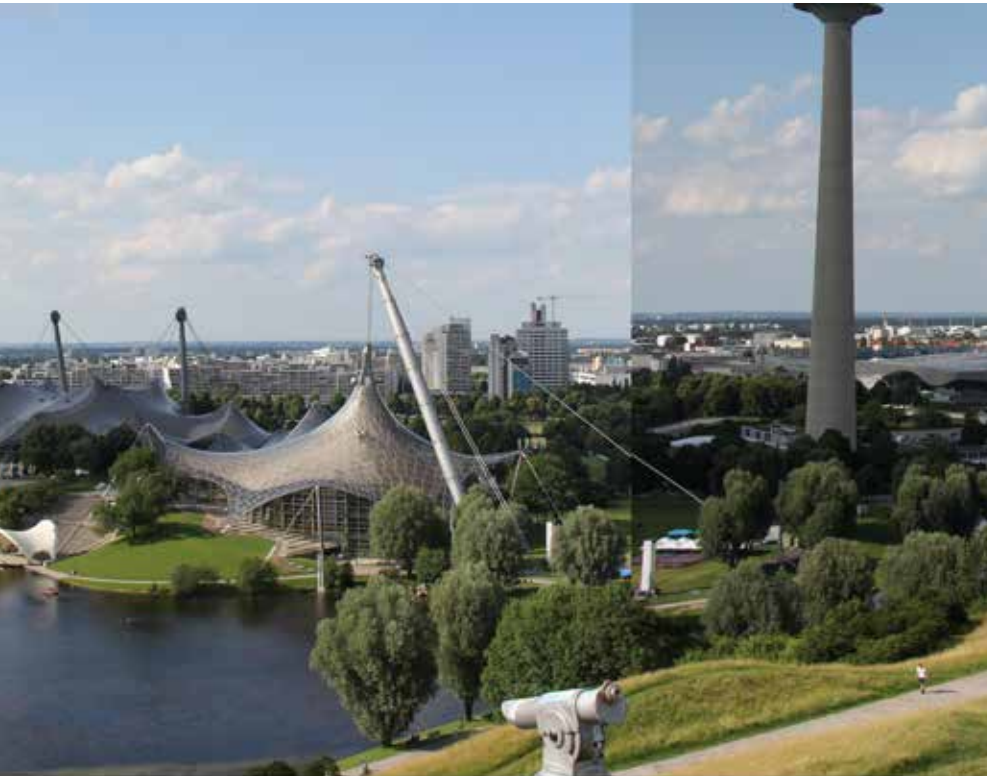


Figure 3.1 - Area view of Olympiapark in Munich

According to Fenwick, Bornø, Favre and Tusell (2011), the UEFA stadium guide states certain criteria that landscape architects should consider, with the most important being site location. Depending on the site's location, the range selection for other essential criteria would be altered; this includes site accessibility, security and safety, and potential usage and adaptability (Fenwick, Bornø, Favre and Tusell, p37-38).

When applying the essential criteria cited by Fenwick, Bornø, Favre and Tusell in the UEFA stadium guide such as site location, green goals, site accessibility, security and safety, and potential usage and adaptability to the Investors group field, it is apparent that the stadium's considerations are lacking in several of the aforementioned categories, particularly site location, site accessibility, and potential usage and adaptability.

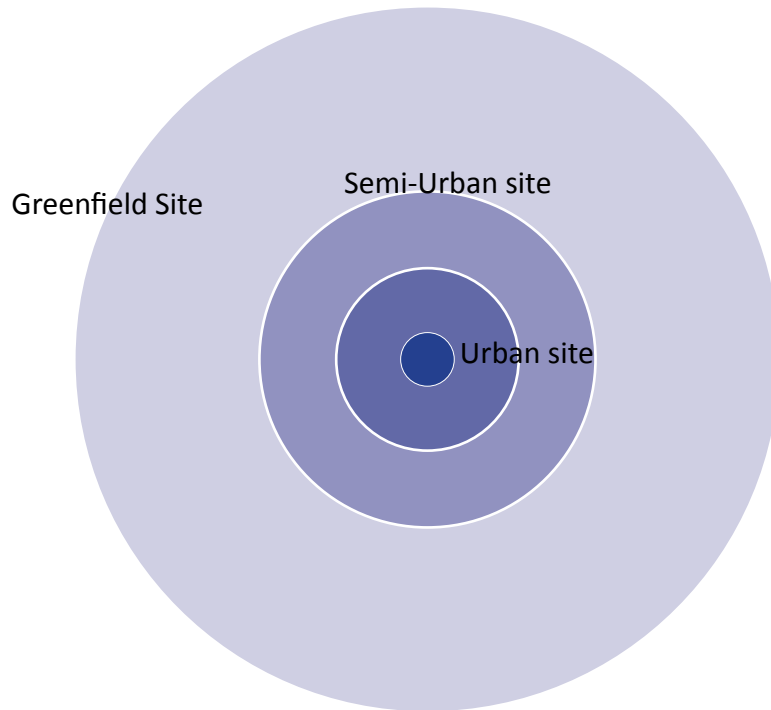


Figure 3.2 - Categories of location

Fenwick, Bornø, Favre and Tusel (2011) state, the location of a stadium is very important. Depends on the where a stadium is located, the location is considered into different categories; urban sites, semi-urban sites or out of town/ greenfield site. Those categories of the site consideration are really important because it makes various of transportation network system which gives multiple options for fans or civilians to choose to come to the stadium (Fenwick, Bornø, Favre and Tusell, p35).



**20 CARS**



**4 MINI VANS**



**2 BUSES**

Figure 3.3-Transportation

The public transportation would carry a lot of people at a time compare to other source of transportation (Fenwick, Bornø, Favre and Tusell, p. 41).



Figure 3.4 -Context around the Investors Group Field

The Investors Group Field is located within the University of Manitoba Fort Garry campus in Winnipeg, Manitoba. Pembina Highway is the main throughfare to the University of Manitoba, connection the Fort Garry campus to Winnipeg's downtown area. The location for the Investors Group Field is considered an urban site, with the advantage of easy access to the public transportation network. However, the limited available space and/ or high real estate costs make for limited passenger vehicle parking areas.



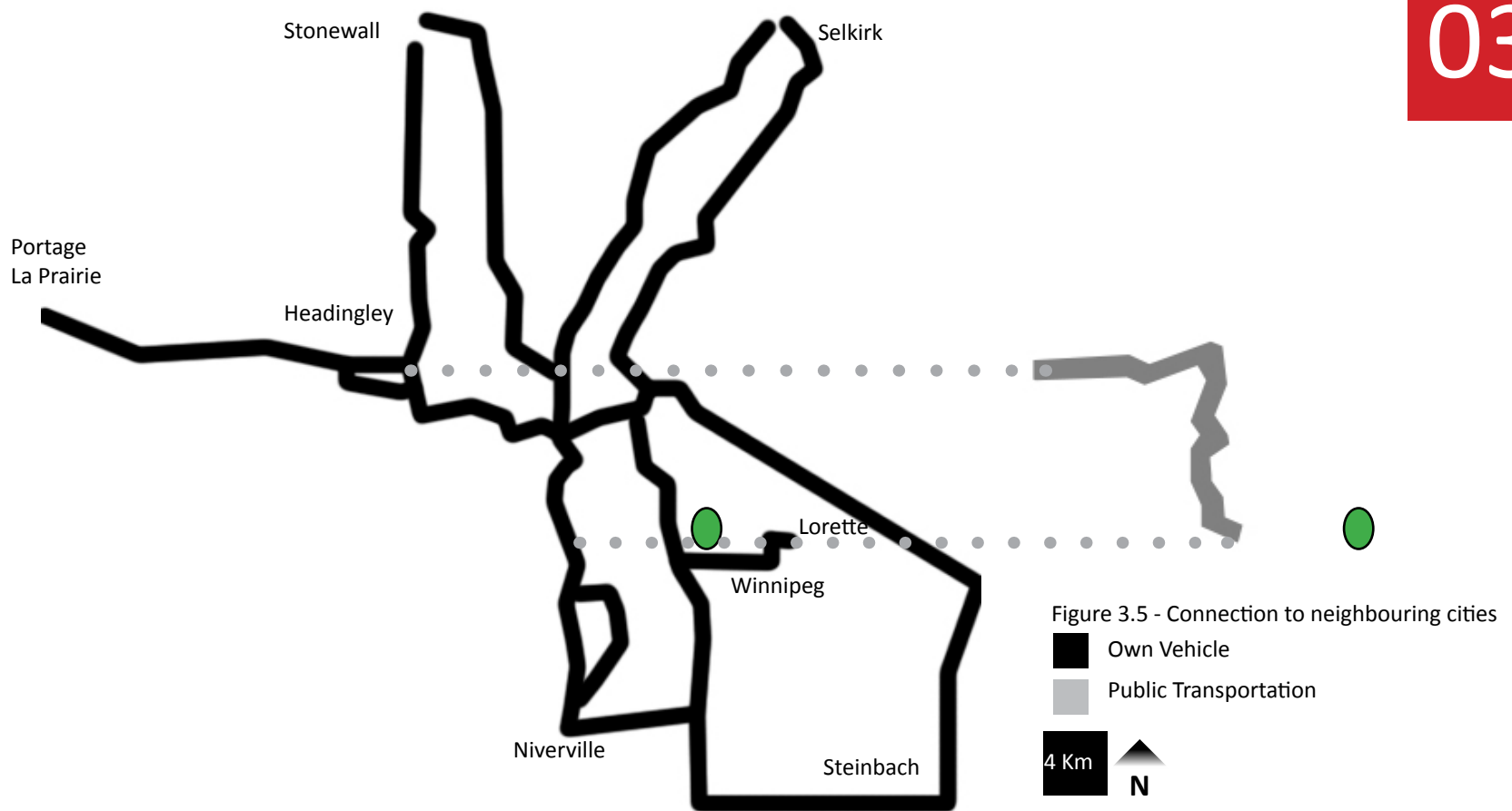


Figure 3.6 - Available transit at Investors Group Field

The Investors Group Field did not select an optimal location, as is evident by the lack of transportation systems connecting neighboring cities to the stadium. And while local public transportation system to the stadium is well managed, no proper landing or bus station exists at this time. This oversight may lead to security and safety issues due to the enormous numbers of people attempting to secure transportation at the same time in a disorganized manner. Moreover, the lack of a proper terminal has already been the cause of chaos and confusion during match days. According to CBCNEWS (2013), a match started at 7 PM made huge traffic on the Pembina Highway, and the traffic made many of fans were streaming into the stadium late 8 pm. The Winnipeg transit bus also delayed from the traffic issue (CBCNEWS, 2013).



Figure 3.7 - Tree Population

The most important area near the Investors Group Field would be Chancellor Matheson Road. Chancellor Matheson Road is a symbolic monument dedicated to the students who sacrificed their lives during the First World War. The number of American Elms that stretch from the administration building to Pembina highway represent the number of those students. Sadly, due to Dutch Elm disease many of the American Elms were replaced by Green Ash trees. Even though, the species of trees are not the same as it was originally designed, the road still represents an important part of the university's history.(University of Manitoba)



Figure 3.8 - Green Spaces

According to the Campus planning office, the Southwood golf course started in 1894, then known as the Winnipeg Golf Club. After the First World War, seven holes were built in 1918 and the club purchased extra land from the University of Manitoba in 1919. Since 1956, the golf course had been owned and operated privately until its closure in 2011 (Campus Planning Office). The green spaces have high potential to contribute to future students, and the overall development around the campus.

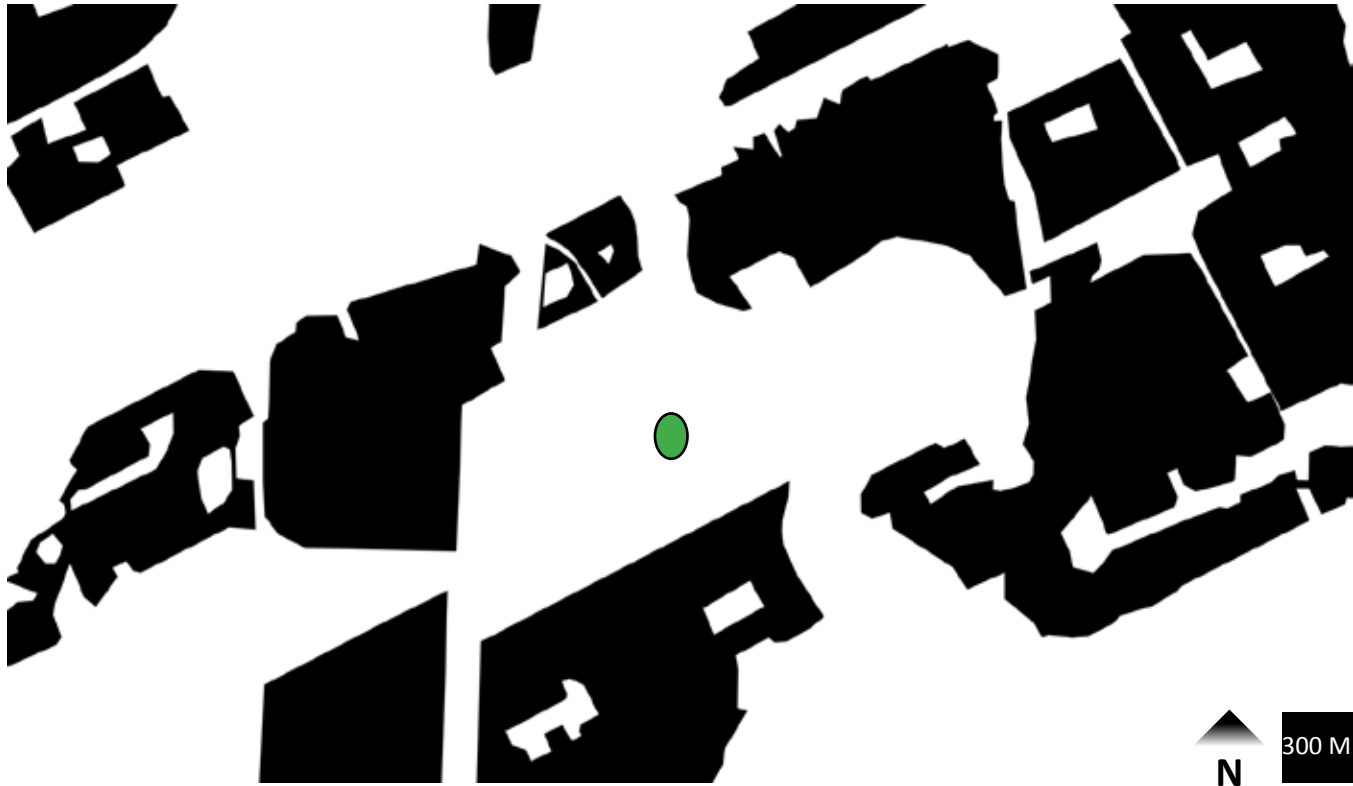


Figure 3.9 - Residential Spaces

The surrounding spaces around the stadium are mostly residential. Some people say there are advantages from living nearby the stadium. However, other people have also said that there are disadvantages by being located so near it. According to CTV News Winnipeg, many people are worried that this would bring down their property value and that after every event, fans might leave litter by their areas. However, the noise issue was the biggest complaint (CTV News Winnipeg). The residents that are disturbed during event days deserve to have a better environment. For a healthier environment, people deserve to have recreational spaces, which could be adapted into people's daily lives.



Figure 3.10 - Parking Spaces

During an event day, the prepared numbers of parking spaces are always a problem due to the high number of cars. In this case, we need to think about what would be an alternate way to bring more people down to the stadium safely. One of options would be by convincing people to use the public transportation systems more often. Therefore, we need proper bus terminals and parking spaces around the stadium



Figure 3.11 - University Crescent



Figure 3.12 - Crossing to Investors Group Field





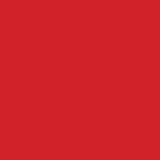
Figure 3.13 - Side walk

Another thing the Investors Group Field has failed to address is adaptability. Even though the stadium is not run by the University of Manitoba, it is still a physical part of the university. However, the neighboring infrastructure has only marginally considered a direct connection to the campus, seeing the stadium and the university as two isolated spaces. Connectivity between the center of campus and the stadium is essential, and will elevate the quality of life for students, fans, and residents who are willing to come to either location.





## 04 DESIGN PURPOSE



I have chosen the new sports stadium (Investors Group Field) as the site for this practicum. Designed by Raymond S.C Wan Architect Inc and located at University of Manitoba in Winnipeg, Manitoba. The Investors Group is the main sponsor to construct the new home of the Winnipeg Bombers. The construction for the stadium started on May, 2010, and opened on May, 2013 (Winnipeg Blue Bombers). Currently, the stadium is mainly used for Winnipeg Blue Bombers Football Club events, and, to a lesser extent, concerts. Through research, grounded on the present course's topics, I have found several issues with the stadium's design. These include limited parking space, unreliable public transit schedules, heavy vehicle traffic, very limited utilization (the venue is only used 16 times a year, not counting concerts), and a total lack of activities connected to the U. of M., despite being located within its campus. Having analyzed the issues, I reviewed the campus competition design. The University of Manitoba officially opened the international level competition, the Visionary (re)Generation open International Design Competition, on December 6, 2012. The main criteria for the competition were a re-imagining of the University of Manitoba's Fort Garry campus with a focus on innovation and sustainable design. All participating teams were asked to develop an overall vision and urban design strategy that would incorporate the guiding development of the former Southwood Golf Course and design objectives. Forty-five teams, from 17 different countries, participated in this competition (VISIONARY).



Figure 4.1 - March 2015, the latest campus design

Janet Rosenberg & Studio Inc was the chosen winner of the University of Manitoba competition design. However, the competition design has been widely changed. Figure 5 displays the latest campus design by March 2015, planned for the next 25-30 years, from Janet Rosenberg & Studio Inc. In the figure 5, more dwelling units would be found on the North side of the stadium, as well as a re-developing of Sydney Smith Street as a core campus hub. Moreover, several mixed retail units would be developed in many different areas of the campus.

The additional dwelling units and the developing of a new core campus hub is advantageous both for students and a constantly increasing population of immigrants (Policy option, 2012).

However, more focus is required upon the current relationship between the stadium and university campus. Additionally, the future campus plan could be the first step towards facing current campus issues such as lack of connectivity between the stadium and core of the campus.

Currently, the Investors Group Field is located within the campus. However, in my personal opinion, it is hard to tell if the area of the stadium communicates any “connectivity” with core of the campus. The reason simply being that few students visits the stadium’s area due to a lack of connectivity or attractive destinations.

The proper improvement of connectivity would not only unite campus and stadium, but could turn this into a highly active zone in the daily lives of students, fans, and residents. Therefore, connectivity improvements should be pursued in the first phase of the 25-30 year campus plan design.

The following chapters will cover the components that could develop around the stadium focusing on daily life utility.



## 05 DESIGN SCENARIO

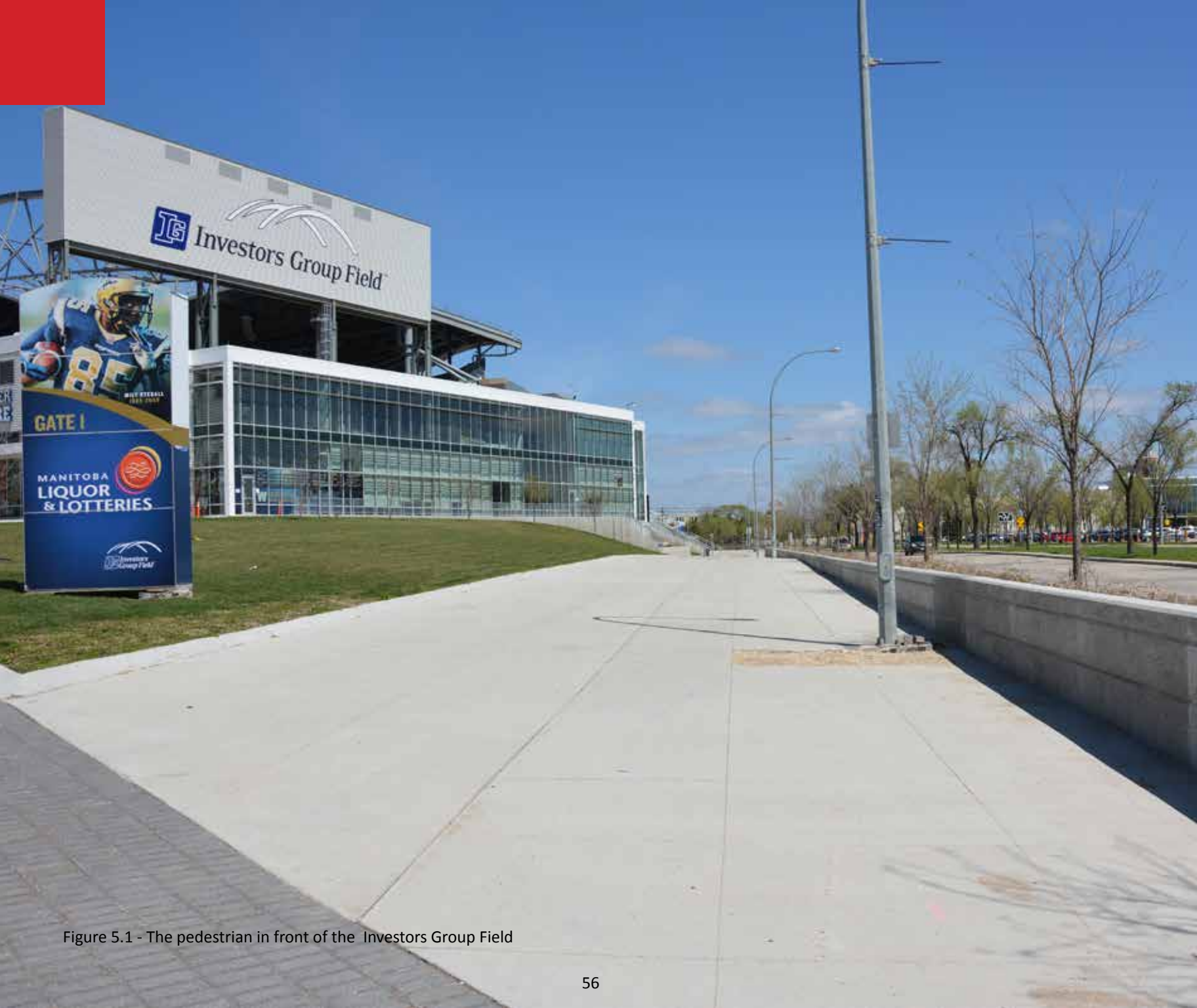


Figure 5.1 - The pedestrian in front of the Investors Group Field



My design research is based on the assumption that a professional soccer club will emerge in Manitoba in the future. While Manitoba does not currently have a professional soccer club, it does have many players of great ability. As happens every year, when these players wish to join a professional soccer club, they often leave for other provinces or even other countries (primarily the United States). The good news about the future of Manitoban soccer is that recently, a semi-professional soccer team has been created as a preliminary trial, which means that if the team does well there is a good possibility that Manitoba will have its very own professional soccer club. If this comes to pass, the new stadium in the University of Manitoba would be the first choice to house this team.

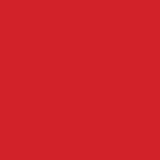
If the Investors Group Field houses the first professional soccer club in Winnipeg, more people could be solitary as similar as fan of Winnipeg Jets and Blue Bombers. Also, City of Winnipeg could be supported by the tax from the relative goods. Additionally, people could enjoy soccer while also supporting their local professional club every year. Moreover, if the team does well, the province would garner more attention from those outside of Manitoba and even the City of Winnipeg.

The success of a professional Winnipeg soccer club necessitates the developing of connectivity to the campus core, bus stations, and additional entertainment programs. Connectivity to the core of campus would be most critical before and after a match, doing away with the impression that the stadium is an isolated unit in the campus. If connectivity were wider, safer, and more open, more options would become available to the public, making it one of the best places for fans to partake of other activities before and after matches.

Bus stations provide the means for public transportation to deliver large numbers of people at a time to the stadium. Also, additional entertainment programs give more options for visitors utilizing their time at the campus.



## 06 DESIGN INSPIRATION



## Inspiration

This chapter describes a handful of places and events, witnessed first-hand through personal experience that have inspired different aspects of my design project. These places and events draw from different cultures, and have aided in understanding distinct environments based on the particular infrastructures of their respective culture. Moreover, this perspective opened the project with a fresh mindset, and brought forth ideas that would bear direct impact on the practicum design.



Figure 6.1 - Night View at La Rambla

## La Rambla

1.2 Km of Promenade

Location :Spain, Barcelona

La Rambla is a street in central Barcelona with gorgeous tree plantings, popular with tourists and locals. Rambla Street runs 12 km, from Catalunya Palace to Rambla del Mar (Alexander and Tang). The promenade serves as a popular meeting spot, and a number of activities take place in the shade of its tree canopy, including dining , shopping, strolling, and jogging. The material of this pedestrian thoroughfare depicts a unique and representative wave symbol texture, iconic to Rambla del Mar.

My experience of Rambla Street evidenced limited vehicle access along the pedestrian avenue; restricted by narrower roads and reduced speed limits. The lower speed limits makes for a safer outdoor restaurant environment, but causes serious traffic congestion due to the large number of pedestrians and slow-moving vehicles. This zone is always highly activate, hosting numerous festivals, and is easy to access via local buses and metro system. During different season of the year, La Rambla's unique tree line and neighboring infrastructure is transformed in the evenings by a variety of light panels, creating spatial unity through the use of unique lights-capes.









La Rambla provides an excellent example of how connectivity can be improved around the stadium's infrastructure. In this case, connectivity would be established as a promenade offering multiple options for enjoyment in everyday life. If aspects of Rambla Street can be set around the Investors Group Field, the site would attract more fans, students, and residents, and it would become a campus landmark frequented for its variety of activities. The space between the stadium and campus core would thus no longer consist of two isolated spaces.

Figure 6.4 - Street at La Rambla



## SUGAR BEACH

Three distinct component at  
Waterfront Toronto.

Designer : Claude Cormier + Associates

August, 2010

Location :Toronto, Canada

Canada's Sugar Beach, designed by Claude Cormier + Associates, integrates with and establishes a direct relationship to the industrial heritage of the neighboring Redpath Sugar factory. Sugar Beach has three distinct components: an urban beach; a plaza space; and a tree-lined promenade running through a park. The intent of this space was to remind people that Toronto's waterfront is a playful area. Visitors partake of distinct activities such as reading, playing in the sand, people-watching, and enjoying the boats on the lake. Moreover, the plaza space offers a venue for public events. A boardwalk runs along Sugar Beach for enhanced accessibility to the beach. This is lined by pink umbrellas and muskoka chairs, a unique and iconic trademark of the Toronto waterfront (WATERFRONToronto).

Sugar Beach is a good example of how the existing condition on the North of the stadium and the nearby pond could be reclaimed as a playful area. Waterfront Toronto and the golf course's pond are similar in that neither feature is meant for swimming. The focus of this re-imagined water feature would be on drawing people to the area by providing additional options for activities around the water.





Figure 6.5 - Sugar Beach





Figure 6.6 - Olympiapark

# OLYMPIAPARK

Designers:

Architecture : Behnisch and Partners with engineer Frei Otto

Landscape Architecture : Günther Grzimek

1968-1972

Location :Munich, Germany

With an easily recognizable name, the Olympic Park was constructed for the 1972 Summer Olympics at the outer edge of central Munich. Despite the park's remote location, access is facilitated by various public transportation options, such as the metro and buses. According Geraint, Rod and Ben (2014), "if the journeys involved in getting to a sporting event seem excessively difficult or time consuming, the potential spectator may well decide not to bother – particularly if alternative attractions are available"(p. 39). Additionally, Geraint, Rod and Ben (2014) listed the concerns of spectators prior to their journey:

- Will they be traveling with a friend, family or by themselves?
- Will they be traveling by car, bus, or train?
- Where will the transport leave from, and when?
- How do they get to and from the transport?
- What are the things which can go wrong with the above arrangements, and what alternatives do they have?

In my personal opinion, Munich's Olympiapark has considered all these questions by properly selecting a location with well-developed transportation options. For public transportation, the Olympic Line, such as U3, provides a direct route from Marienplatz (Center of Munich), connecting Olympiapark to the midtown area via Schwabing. The S-Bahn S1 line provides an alternative transportation option to the Centre of Munich for people' convince. Also, the park's location at the city's outer edge makes for milder traffic than what is seen closer to the city center.





Figure 6.7 - Road for Cars



Figure 6.8 - Pedestrian



Figure 6.9 - Parking Lots



Figure 6.10 - Bike Parking






Additional sensible design considerations include the network of pathways serving both as connectivity to the stadium and market as well as a circular walking course. As the name implies, it is understood that Olympiapark sees large numbers of people accessing the park on foot after their arrival. The park has been developed using slopes and topography, desirable by those who expect a variety of gradients when exercising by walking or jogging. For those who may hesitate at the thought of deep sloping pathways, level pathway options exist on the park's lower area. The variety of slopes and pathways offered by Olympiapark encourages visitors to utilize the space for their exercise regimens accompanied by friends and family on any day of the week. Another effective design technique that merits attention can be seen in the site's parking lots. In my personal opinion, these rendered the most interesting observations from the park, having spent most of my time simply trying to find the parking lots in the first place; a difficult task at best, as they are not easily identifiable unless vehicles are seen parked there.

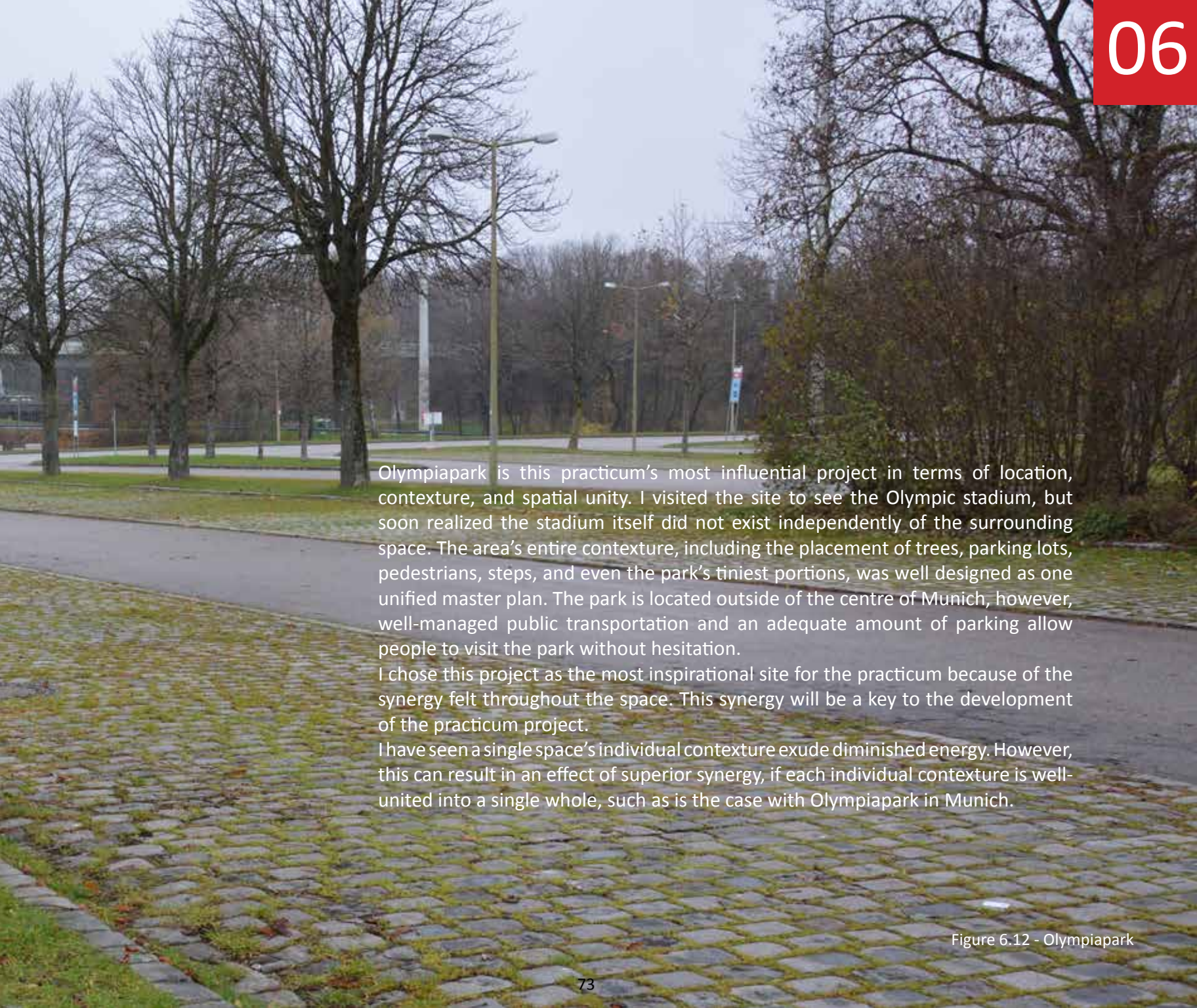
Figure 6.11 - Olympiapark



A photograph of a park path lined with trees, with a red square in the top left corner. The path is paved with cobblestones and runs alongside a grassy area. Several large, mature trees with bare branches are visible along the path. In the background, a stadium is visible through the trees. The sky is overcast.

Several parking lots are located around Olympiapark's edge, with primary lots extending Southwards along the West side towards the main event area in the Southwest corner. Seen from above, the parking lot's curvilinear shape communicates well with overall organic pattern of pathways throughout the park, and brings to mind the image of a person kneeling down while bending their back — this peaked my interest and led to the conclusion that the parking lots are primarily intended for people, not cars. This is supported by the fact that when matches or events are not underway, the parking lot is turned into a market. At those times, the largest space dedicated to vehicles is modified to accommodate the most basic of people's daily routines: provisioning foodstuffs from a market. Overall, Olympiapark is well-accomplished in terms of accessibility and presenting viable options for fulfilling the needs of normal day life. This is a great example of how the surrounding landscape can be used year-round beyond the scope of architecture (stadium).



A photograph of Olympiapark in Munich. The foreground shows a paved path with a cobblestone border. The middle ground features a grassy area with several trees, some of which are bare, suggesting a cooler season. In the background, the Olympic stadium is visible, surrounded by more trees and a clear sky.

Olympiapark is this practicum's most influential project in terms of location, contexture, and spatial unity. I visited the site to see the Olympic stadium, but soon realized the stadium itself did not exist independently of the surrounding space. The area's entire contexture, including the placement of trees, parking lots, pedestrians, steps, and even the park's tiniest portions, was well designed as one unified master plan. The park is located outside of the centre of Munich, however, well-managed public transportation and an adequate amount of parking allow people to visit the park without hesitation.

I chose this project as the most inspirational site for the practicum because of the synergy felt throughout the space. This synergy will be a key to the development of the practicum project.

I have seen a single space's individual contexture exude diminished energy. However, this can result in an effect of superior synergy, if each individual contexture is well-united into a single whole, such as is the case with Olympiapark in Munich.

Figure 6.12 - Olympiapark



# Cherry Blossom

The cherry blossom symbolizes the most beautiful moment. Korean author, Kim, H, J (2010) stated in the book “Petit Flower” that the process from blossoming to falling flower is similar to that of a person’s life. The peak of one’s youth would be the turning point after which old age begins to set in. The blossoming is the most beautiful moment of the cherry tree, but after the flowers fall, it is lonely and still until the following year’s blossoming. As a symbol for the course of human life, cherry blossom trees are found in many public parks in South Korea (NAVER). Moon, S, Y (2014) who is head of cultural department in JUNGANG Sunday (Korean news paper) stated, although the blossoming is very short, many people in East Asian countries love cherry blossoms, and each country has its own cultural observance of this event. The blossoming period begins in mid-April and lasts a mere two days. The flower and its symbolic lifespan are so revered that the origin of the cherry blossom has always been a point of contention for every East Asian (China, Japan, Korea, and Mongolia) country (JUNGANG Sunday).



Figure 6.13 - Cherry Blossom Events in Korea

Every East Asian country has its own cherry blossom event. Even though they last for only a short period of time every year, many people relish and enjoy partaking of these events.

However, those cherry trees would not survive well in Winnipeg due to the weather, but we can expect similar seasoning aspect on different type of trees such as Amur Maple tree. The Amur Maple trees do not have blossoming, but they do have beautiful autumn color.

If we introduce Amur Maple trees for the similar seasoning aspect of the viewing event to the campus, many people would be drawn to the area at the certain period of year when the autumn color starts. Moreover, it would bring fresh energy to both stadium and campus events throughout the autumn color period.



Figure 6.14 - Cherry Blossom Events in Korea



## Food Truck

In Austin, Texas, South and Southwest areas are taken over by colorful vehicles locally known as food trucks. The music emanating from the food truck, reminiscent of a music festival, draws customers in, who, once near, would never pass the row of vehicles without some sort of treat in their hands.

In this area, more than a hundred trucks welcome locals and tourists alike. These places have become an integral staple of local daily life, with a variety of menus and reasonable prices. I believe that a composition of competitive food trucks would broaden the opportunities for adding an assortment of fresh quality foods to people's lives; something that Winnipeggers definitely deserve.

The practicum design envisions the placing of a number of contracted food trucks on the new plaza where is located on the north side of the stadium. These would serve students, fans, and residents with many different types of fresh foods at reasonable prices. The food trucks would be one of the options for people to enjoy on the plaza. Moreover, much like the fresh foods they provide, these food trucks would further serve to revitalize otherwise dead spaces with renewed activity by attracting many visitors.





Figure 6.15 - Food Trucks in Austin Texas





Figure 6.16 - A Food Truck in Austin Texas



Figure 6.17 - A Food Truck in Austin Texas





## 07 RBT NETWORK/ LATEST CAMPUS DESIGN

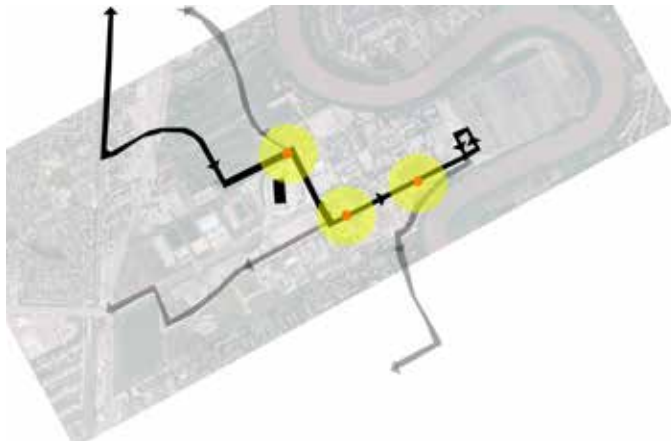


Figure 7.1 - BRT Network - Phase 1

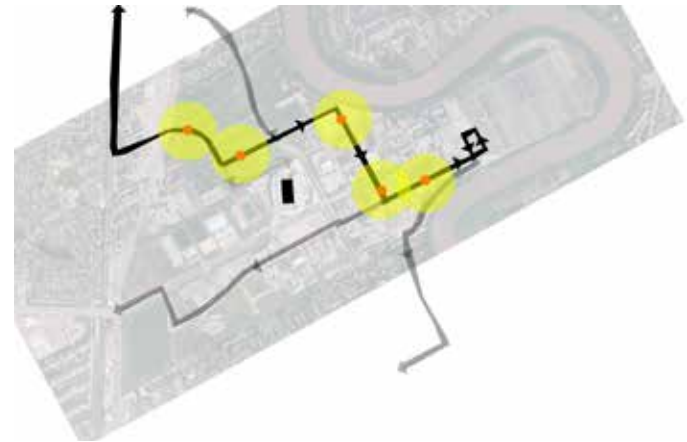


Figure 7.2 - BRT Network - Phase 2

According to Janet Rosenberg's earlier design by 2014, the Bus Rapid Transit (BRT) network has been described as a 4-phase plan spanning the next 100 years. The city of Winnipeg has further planned for a more immediate solution such as bus loop for 150 buses alternative with platform for approximate of 30,000 people, until the BRT network is fully functional, in the form of a new rapid transit bus route.

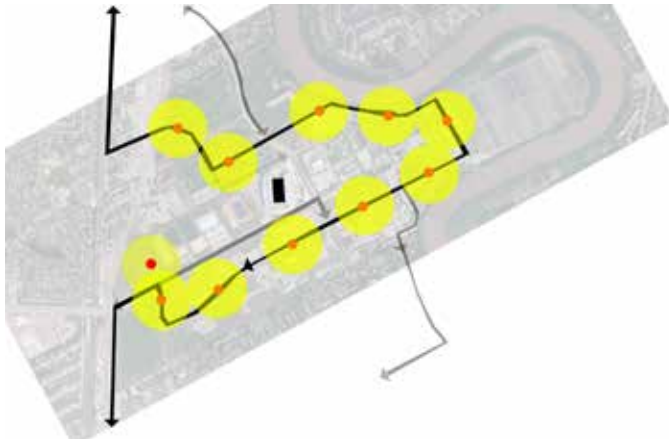


Figure 7.3 - BRT Network - Phase 3



Figure 7.4 - BRT Network - Phase 4



According to Rejeanne Dupuis (2016), the alternative would be the key strategy that will reduce the number of parking lots in the future. There are three reasons. First, the Upass and the proposed BRT system would increase the public transportation demands by students in future. Second, more dwelling units would be developed in Southwood for the residencies. Third, bike share lanes and car pool programs would be used more often in the future. However, the number of the parking lots would not be decreased at once. The reduction of parking demand will be understood better through commuter surveys to know the preference of the majority. Based on the survey and future recommendation, the number of the parking lots will decrease (Campus planning office).



Figure 7.5 - March 2015, the latest campus design



Figure 7.6 - The proposal of bus loop location



Although the City of Winnipeg has made plans for the route 150 bus loop, this would be just as mono-functional as the stadium because it would only be used by people going to and from the stadium on match days. According to Janet Rosenberg's latest updated proposal, the North side of the stadium would be filled with dense dwelling units (VISIONARY).

The additional dwelling units are fitting, given the statistics for the future increase in human population. Omidvar and Lopes (2012) state that "in 2020, Canada will face a number of challenges" (Policy option, 2012). Twenty percent of Canada's population is foreign-born. The country's population is increasing by 250,000 new permanent residents, 190,000 temporary foreign workers, and 100,000 new international students each year. This means that new or recent immigrants are about to face a baby boom; these children will require a better environment for their education and living (Policy option, 2012). At this point, we need to think about the healthy environment for this better education and living, as it is not only a matter of locating dwelling units closer to the university. People need something else to do in terms of by physical activity. According to the Ski and Snowboard Association (2006), the resources and demands placed by sports activities make people mentally and physically stronger, as well as aiding as a coping mechanism (Ski and Snowboard Association - 2006). In this site's case, the inner spaces of the bus loop could be the ideal location for a variety of sports fields open to students, residents, and fans visiting the campus.







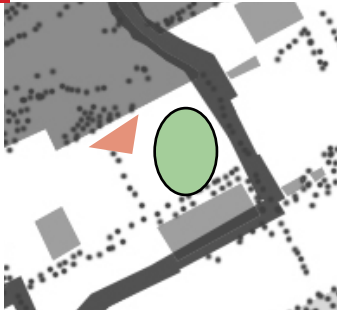


Figure 8.1 - Photo location map



Photograph: North side of stadium, towards golf course. Currently, the course is not frequented by many people and the landscape's condition is getting wilder. In my personal opinion, wild is not always a negative occurrence. This time, the wild condition gives a positive inspiration for the practicum design. This area could be developed into seasonal sports fields and a platform used by large numbers of people.







Figure 8.2 - Current Condition on North Side of Golf Course



Figure 8.3 - Photo location map



Photograph: North side of stadium, end of ramp.  
Currently, it is unclear what purpose this area serves.  
However, I have observed several Blue Bombers players  
using this space as a parking area. The surface starts at  
ground level and goes down to about 4 meters.





Figure 8.4 - Current Condition on Future VIP Parking





Figure 8.5 - Photo location map



Photograph: East side of stadium, ramp.

In this photo, University Crescent and limited connectivity isolate the stadium from the core of the campus. If the connectivity is improved, it would bring more students to the stadium's vicinity, and both stadium and campus core would communicate better as a unified whole.





Figure 8.6 - Current Condition on University Crescent







# Aspect 1 : Border of extent spatial units

This proposal reclaims University Crescent to establish a proper connection to the stadium and to develop the contexture of its surroundings. The border of extended spatial units composed with numerous individual units such as the promenade, the seasonal sports fields, plaza, the bus parking lots, and the swimming pool or hot spring. Moreover, in the master plan that the campus plan office provided, there was a new corridor system placed as a pedestrian route along Dafoe Road, Sydney Smith Road, and Shifton Road. The new corridors will contain contexture specifically for entertainment. Also, individual units will make a strong inter-relationship bond through synergy benefits. The synergy benefits are a very important concept in this practicum proposal. If the individual units are not resonating with each other, plus with no new corridors, the stadium's current condition will remain the same; having the stadium isolated from core of the campus. Therefore, the borders of extended spatial units are the most important consideration of this practicum.



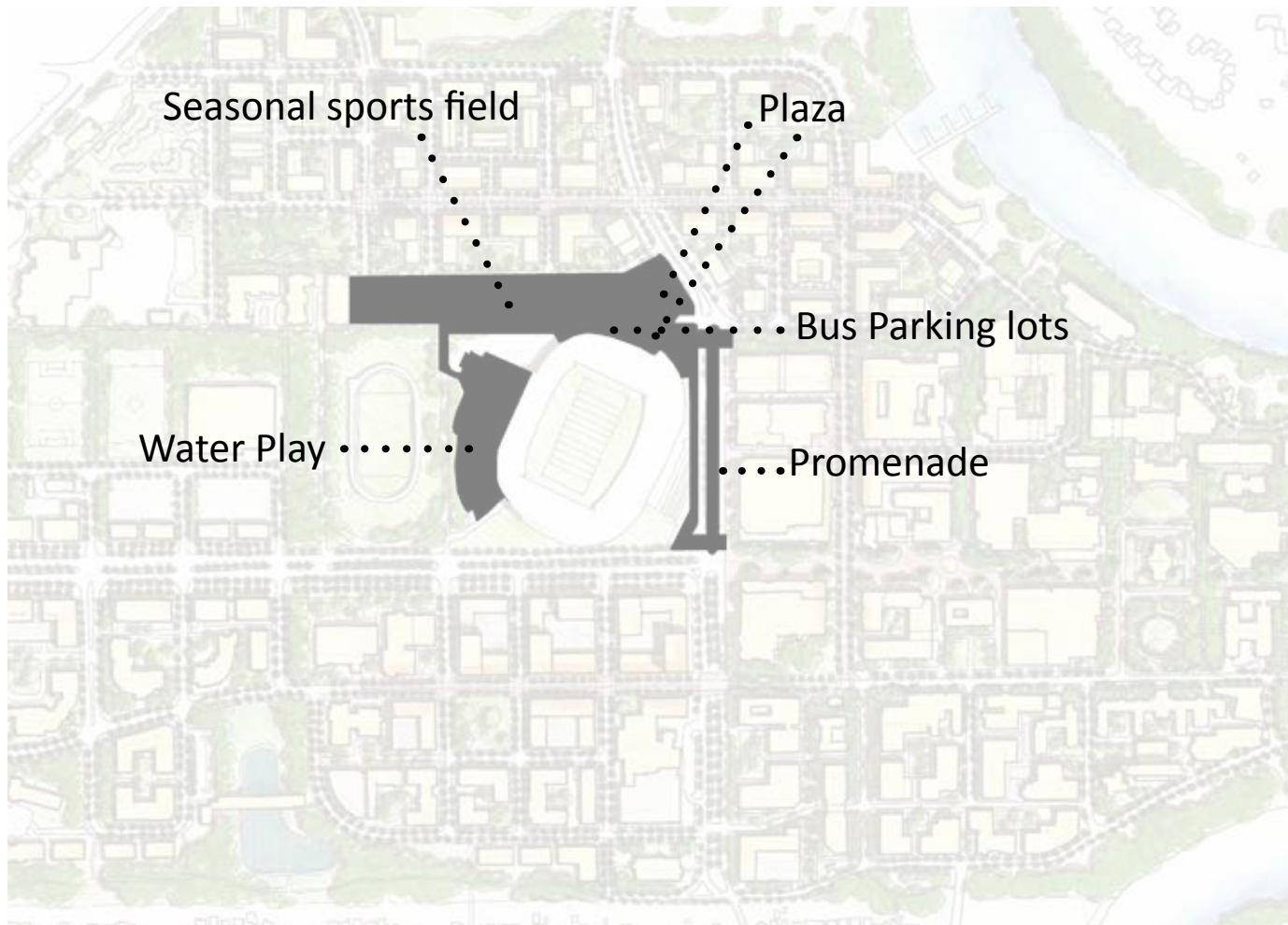
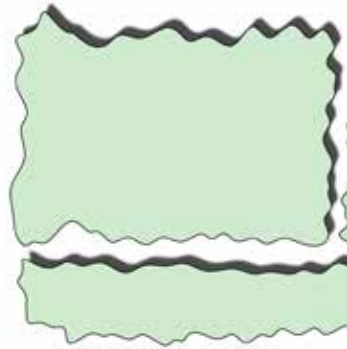


Figure 9.1 - Aspect 1 : Border of extent spatial units





## Aspect 2 : Unifying Umbrella Tree Patterns



Tree patterns were chosen to enhance the design's unity. The concept of tree patterns would unify the entirety of the selected site with Green Ash, Amur Maple, and Aspen Trees. However, the patterns themselves would not be exactly replicated throughout the space. The evolution of these patterns would follow breaking the regular tree planting pattern by spacing between the trees. The initial set up of the breaking the patterns would create some spaces between trees and may function as seating or gathering spaces.

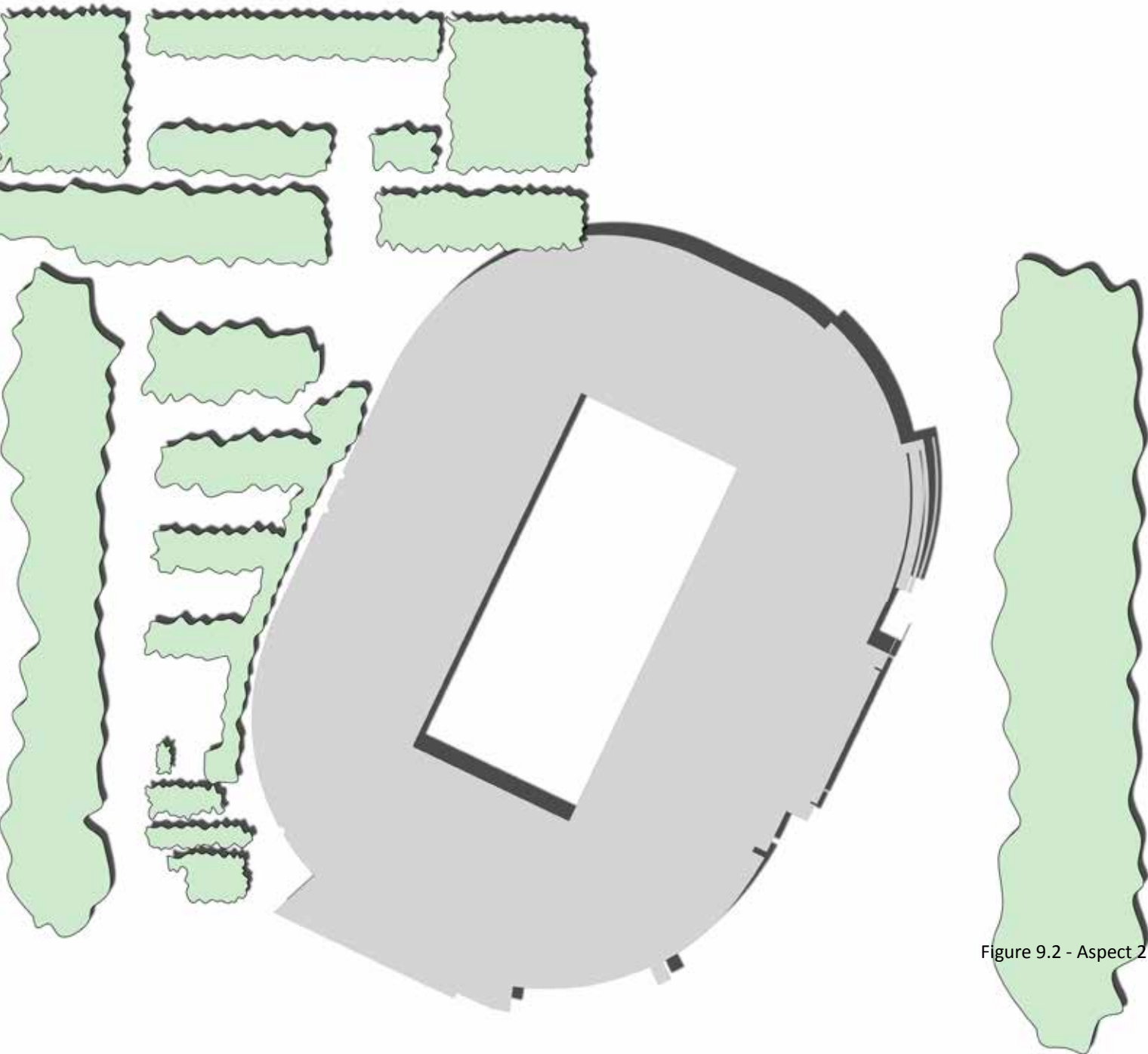


Figure 9.2 - Aspect 2 : Unifying patterns





## Aspect 3 : Seasonal function

The seasonal functionality is the key concept for breaking the current mono-functional condition of the stadium and its surrounding area. If the site housed seasonal functions such as autumn colour events during fall at the North side stadium, ice skating rink at the sports field, and hot spring places many people would partake in the available seasonal activities in certain patterns, as per varying inclinations towards each seasonal function. This concept drawing shows a potential pattern of movement through the space with unique function at each unit.

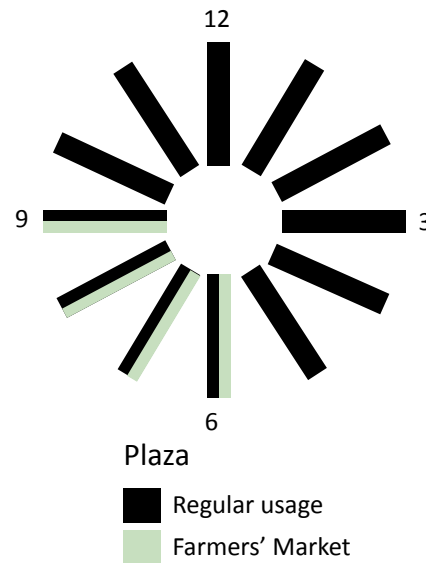
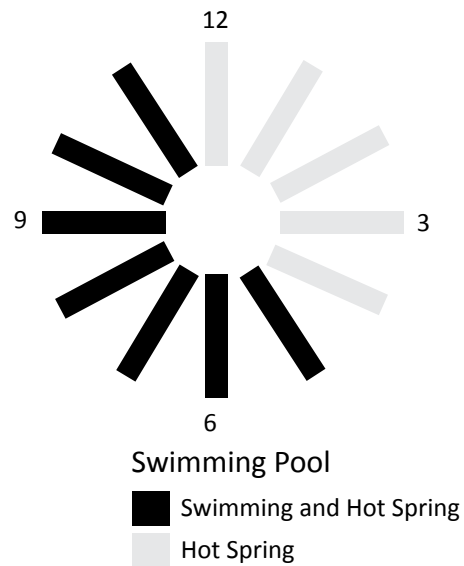
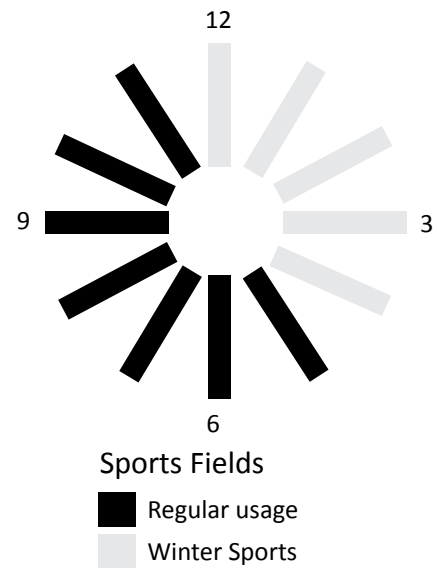
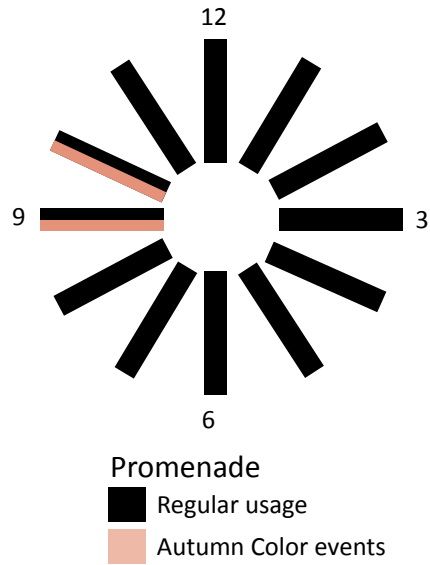


Figure 9.3 - Aspect 3 : Seasonal function







# Material

All the different materials are applied to the selected areas for different meaning of usage by people.

Please reference on the detail drawing for the material texture.

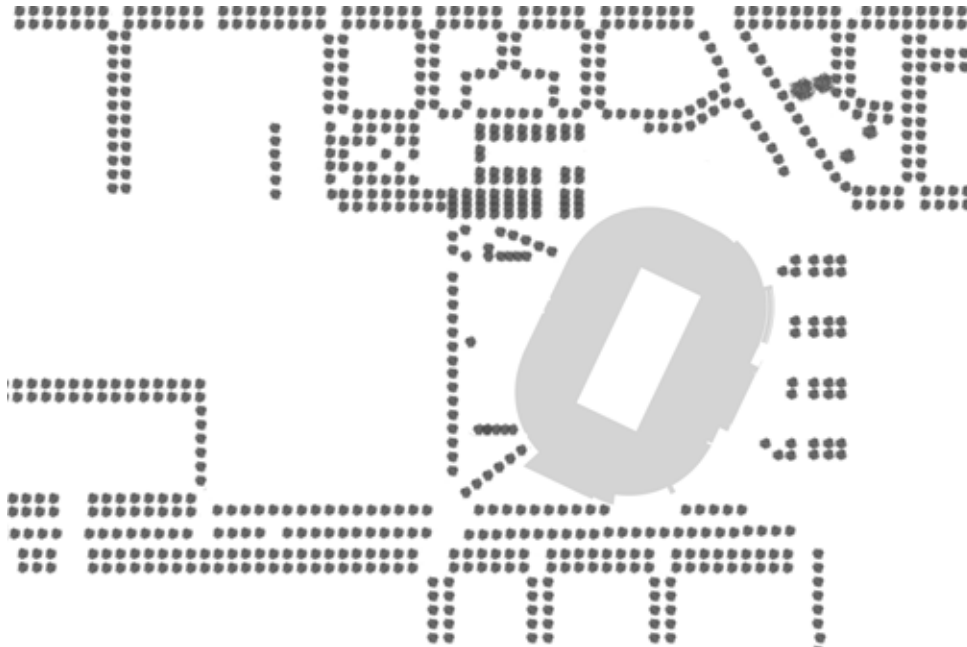


Figure 10.1 - Green Ash

## Green Ash

The Green Ash trees will be most dominant species tree I used for the design. The reason is, the tree is commonly used on the campus for street trees / replacing trees.

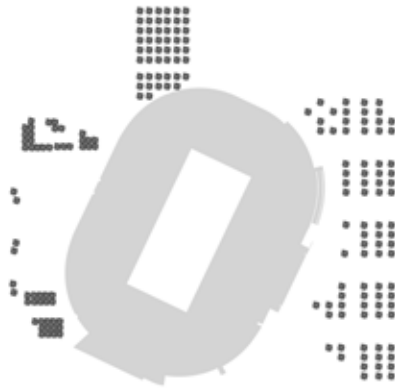


Figure 10.2 - Amur Maple

### Amur Maple

The Amur Maple trees will give you different aspect on the area where it is planted in fall season by autumn color. The Amur Maple trees are planted areas starts at the promenade to the North side of the Plaza. This stretched Amur Maple trees would intend people to follow the line of the trees and lead them to the North side of the stadium to do varies activities.

The single stemmed Amur Maple trees are chosen for this design because unlike the multi-stemmed Amur Maples, these would be more spatially open.



Figure 10.3 - Aspen Tree

### Aspen Tree

The Aspen trees will makes a selected area turn in to wild condition quickly by character of the trees (rhizome, and fast growing tree). This richness of the Aspen tress will give different inspiration compares to cultivated trees.





### **Cast-in-place concrete paved on the cross walk / gathering area**

The main purpose of the material is intended to people gather/ highly use for people on the area where the material paved. This little individual paving would not be uncomfortable to walk on it but, it would be uncomfortable for cars. This uncomfortable bumpy material will let drivers know the area should be more careful for the people who cross on the road.

Figure 10.4 - Concrete Paving 1



### **Cast-in-place concrete paved path**

The main purpose of the material is intended to show the direction where the design of the site towards. The longer edge will be towards the intended direction on the design.

Figure 10.5 - Concrete Paving 2



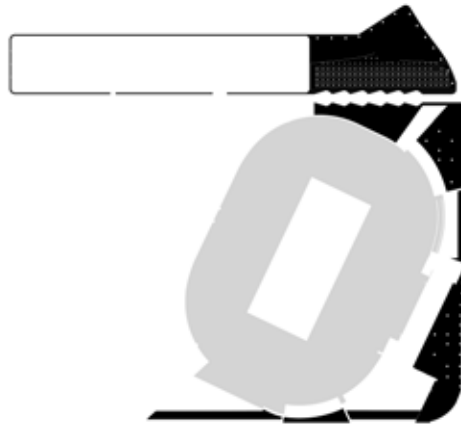


Figure 10.6 - Concrete Paving 3

#### **Cast-in-place concrete paved on the plaza/ jogging courses**

The material is used for the more opened spaces where people would access. The paved area on the design will be North and South plaza and walking / jogging courses. This material will be the exactly as same as current concrete material in front of the stadium.



Figure 10.7 - Concrete Paving 4

#### **Cast-in-place concrete paved on the Green Ash forest**

The permeable material is used on part of the Green Ash forest. The material will be the one of the solution to reduce the runoff from the storm water on the dominant concrete surface. Moreover, the permeable materials could give the rooting spaces to Green Ash which they need to grow full size.





### **Rubber**

The material is used for the soccer field, this rubber material could use both summer and winter season. People would play soccer in summer season. In winter season, water will be freezing on the rubber materials for people to play either skate or play hokey.

Figure 10.8 - Rubber



### **Wood**

The wood material is used for the Hot-spring and swimming pool area where people walk with their barefoot. Wood product is from trees and it is friendly source from the nature which personally thinks the wood is the most friend materials to human.

Figure 10.9 - Wood





# 10 DESIGN - MASTER PLAN

The design is focused on criteria to improve current site conditions in the pursuit of a better environment. These criteria entail: first, the selected site should host public activity; second, the selected site should attain a seasonal activity aspect; third, the site should take into consideration the daily lives of residents, fans, and students.

Based on these criteria and framework by Campus Planning Office such as more dwelling and commercial units, redeveloping on Chancellor Matheson Road and new corridors (as per the latest version of updated competition plans), the chosen area has been selected for developing a better environment around Investors Group Field in the practicum design. The design focuses on reclaiming key locations around the site: North side of golf course, Stadium parking lots, and University Crescent.





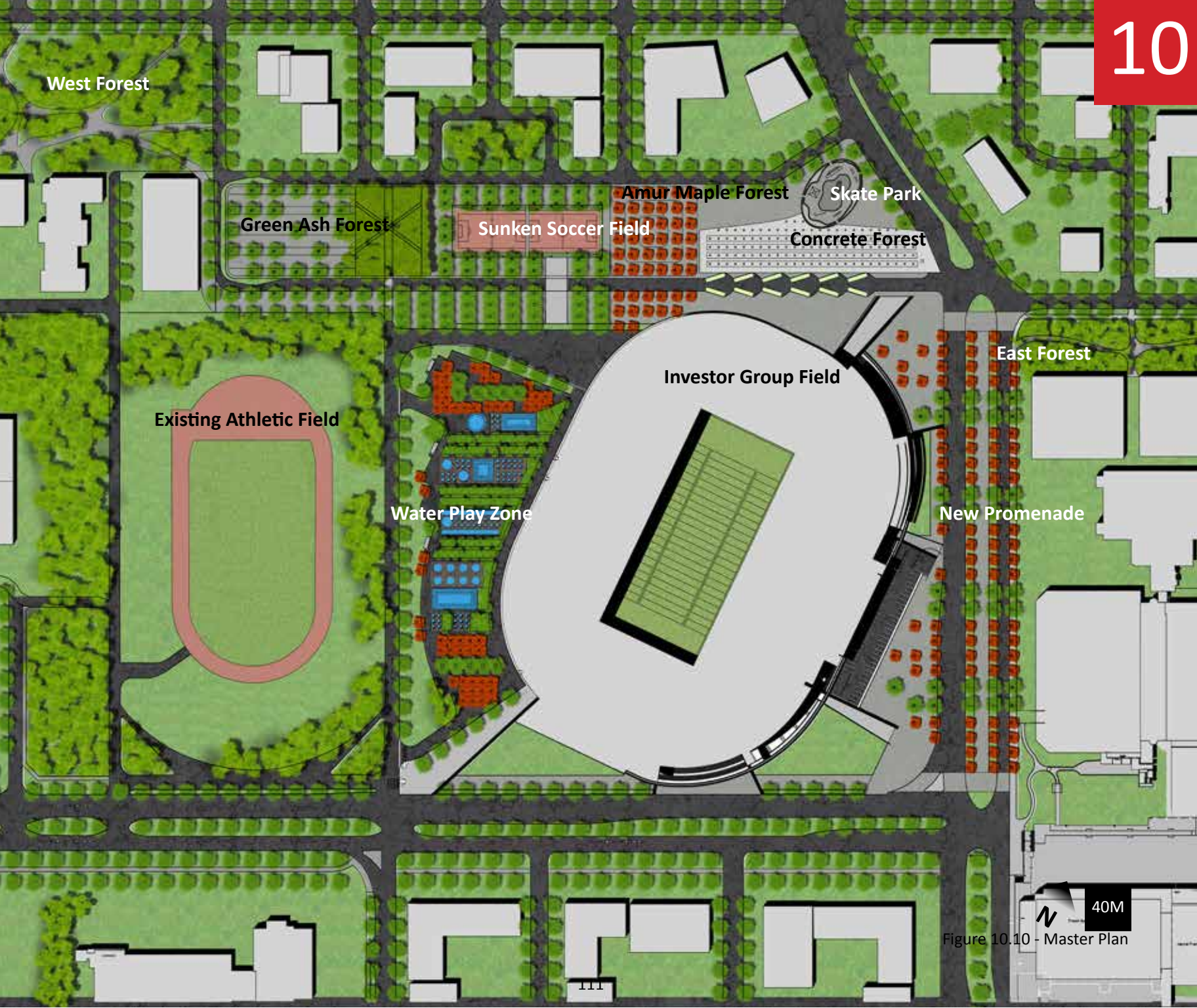
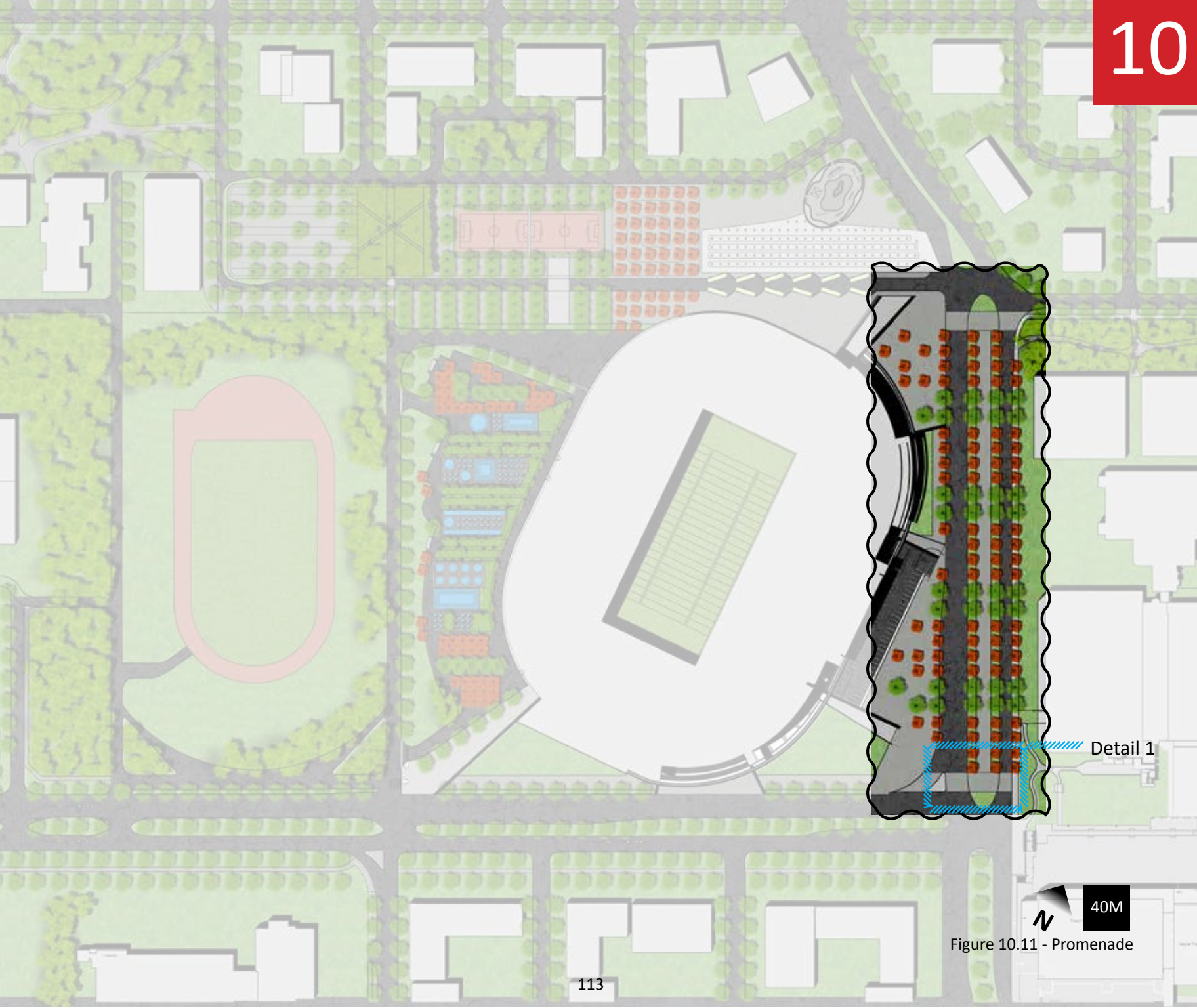


Figure 10.10 - Master Plan



On the latest updated version of master plan from the campus planning office, they added a new bike lane on the both sides of University Crescent and an expanded sidewalk with a median condition of trees. However, in my personal opinion, University Crescent is the most important location which can reduce the current crossing and connectivity issues between the stadium and the University of Manitoba Campus. Moreover, the boulevard would represent the spine between the stadium and the campus core. Its purpose is to reclaim the currently dead spaces and transform them into a highly active thoroughfare akin to La Rambla. Also, it would offer direct connectivity between the stadium and campus for match days and regular daily activities.



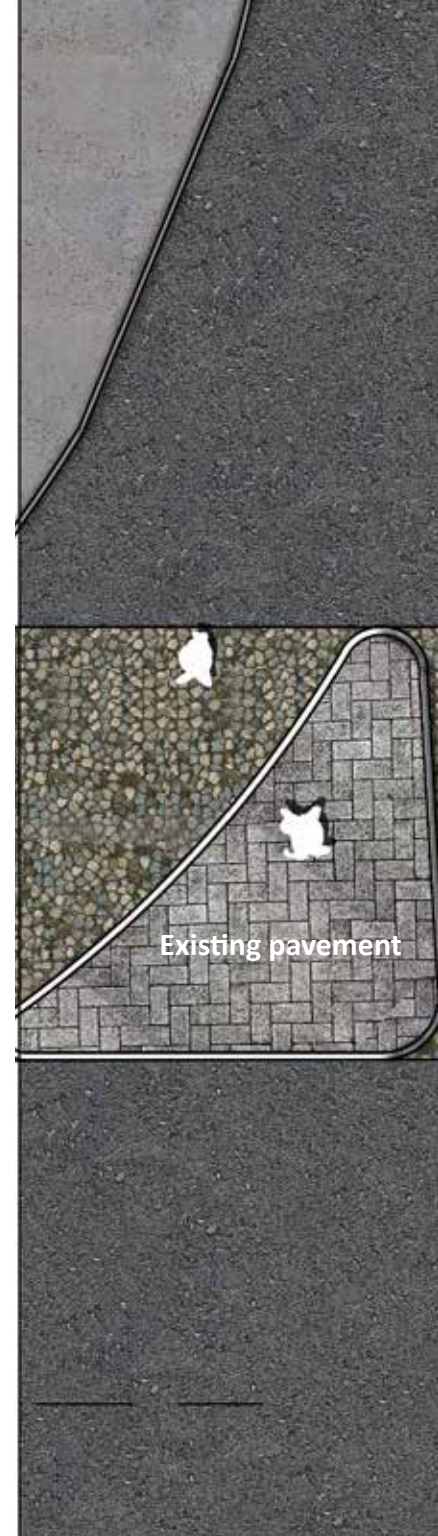


Detail 1



Figure 10.11 - Promenade

The promenade is projected to be lined with Green Ash, Amur Maple and a median condition of vegetation. The autumn color events will be beginning from the promenade to the North side of the stadium through the Amur Maple during fall season. Two East-West crosswalks will be reclaimed on to University Crescent. Each crosswalk will be located on the two different intersection points. The first intersection point will be between Chancellor Matheson Road and University Crescent, and the second intersection point will be between University Crescent and Dysart Road. The average width of the promenade would be 33.9 meters but varies along different parts of the existing road.





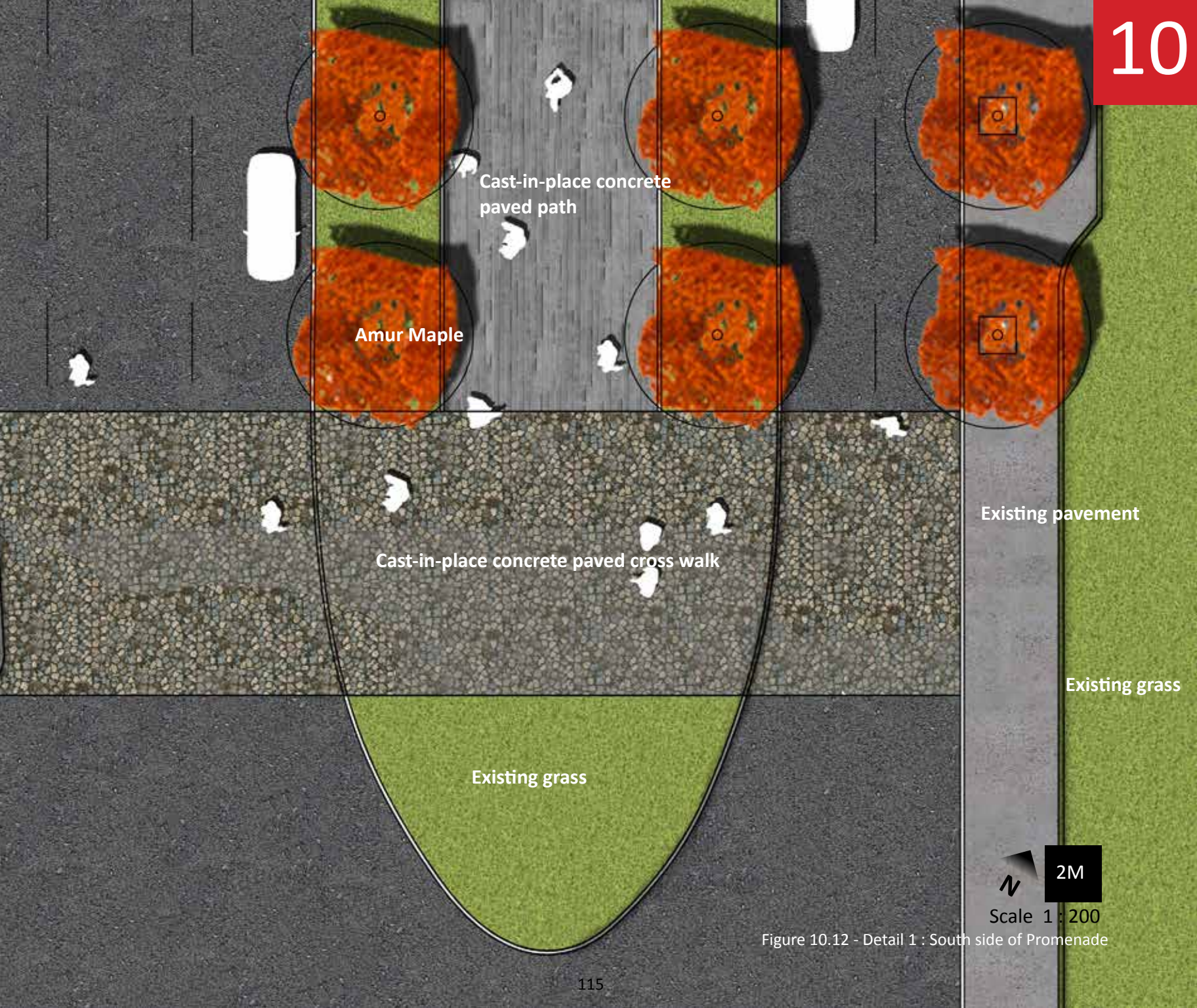


Figure 10.12 - Detail 1 : South side of Promenade

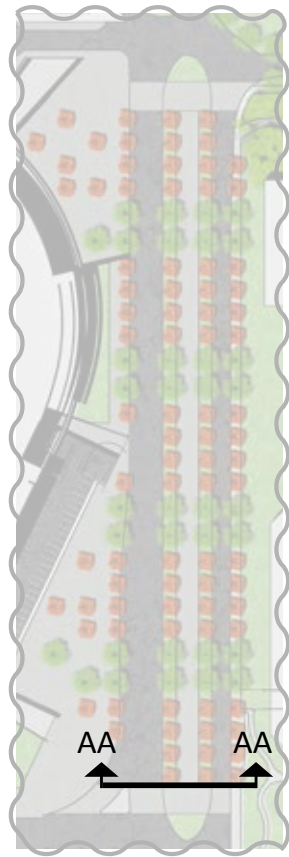
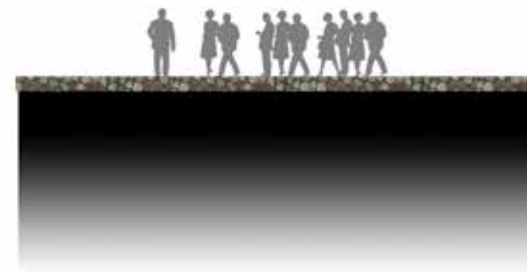


Figure 10.13 - Section cut through the promenade





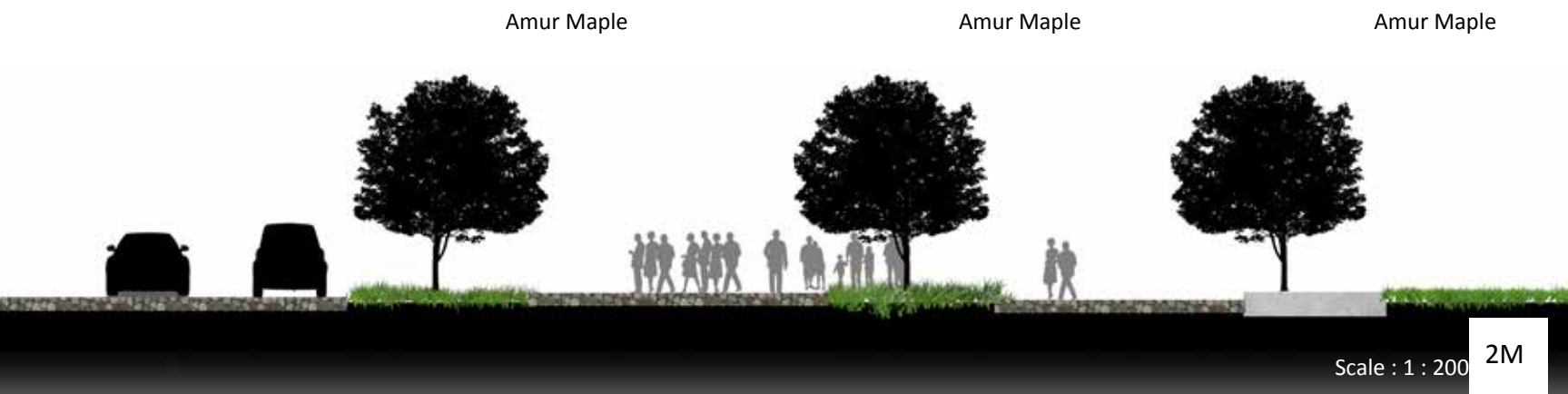


Figure 10.14 - Section AA : Cut through promenade







Figure 10.15 - Perspective 1 : On the promenade, looking towards North

## 10 DESIGN - PART 2 NORTH SIDE

As a proposal for the practicum design, the North side of the stadium (former golf course) would be broken down into multiple distinct components: bus parking, sunken soccer fields, skate board park, plaza, walking/jogging courses and different characteristics of forest zones (existing, cultivated, and concrete). Moreover, the sunken soccer fields would be converted into skating rinks during the winter.





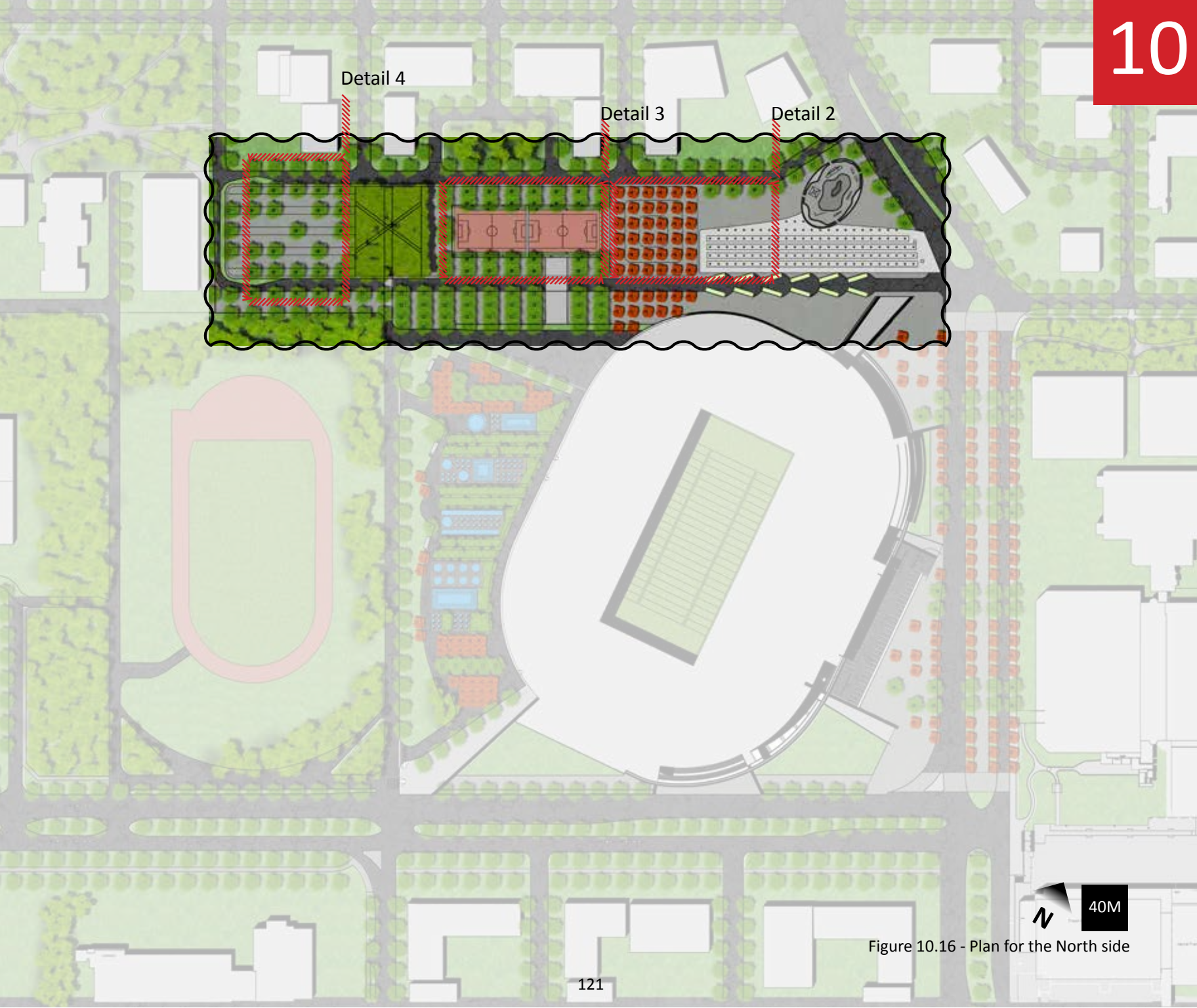


Figure 10.16 - Plan for the North side



# Amur Maple Forest

Bus parking would consist of two locations facing each other, each connecting the two plazas; North and South, for improved disembarking and waiting options. On the last updated version of the master plan from the Campus Plan office, two green spaces will be located West and East side on the stadium. The South plaza would be rolled as a crossing from the West Park to East Park through one of the bus parking locations. This plaza will be helpful to deliver the people enter from the West area safely.

In the proposal, twelve buses can load people at once, and all other waiting buses would perform a scheduled stop along the road.

Moreover, the concrete forest will be located on the North side of the bus parking area. The main purpose of this concrete forest would be a waiting zone for the buses. The shape of the individual concrete trees would be represented as a simple shape such as a tree trunk to harmonize with other trees on the North side area. This concrete forest will provide a welcoming and pleasant different feeling to visitors on a match day and to other users during regular days.

Another program we need to look at is the plaza skateboard park.

The skateboard park will be one of the attractive programs for the teenagers who would live near the stadium. This skateboard park will be made of various topography which starts from the plaza. This topography will be gently rising up from the plaza and drop down to the lower levels. The gentle rise structure could also be used for seating spaces by the skaters and other visitors.

Figure 10.17 - Detail 2 :  
Concrete Forest/ Amur Maple Forest





An aerial photograph of a landscape. On the left, there is a vertical strip of orange, textured circular patches, each with a small black square in the center. To the right of this strip is a large, grey, rectangular concrete structure with a slanted top edge. This structure contains four horizontal rectangular sections, each with six small circular holes. The background is a dark grey surface with several small white holes.

Amur Maple

Concrete Forest





9 % Ramp

Sunken Soccer Field









Green Ash Forest

Green Ash

Cast-in-place concrete pavement  
for tree replacement

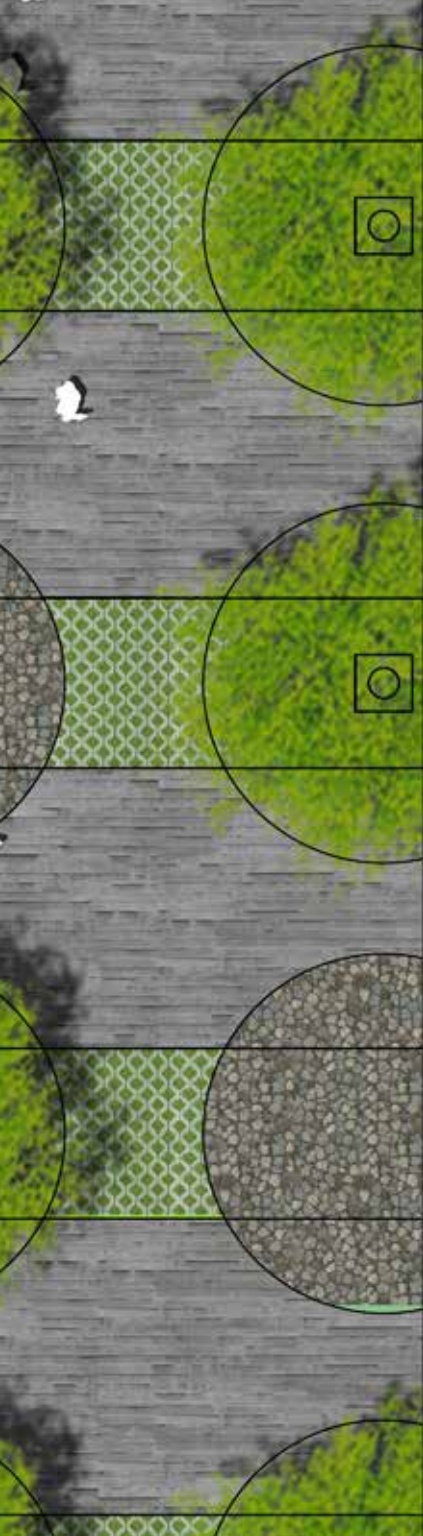
Permeable pavement

Cast-in-place concrete paved path

Figure 10.19 - Detail 4 : Green Ash Forest

 2M  
Scale 1 : 200





With regards to the rest of area, the design proposes two soccer fields, two different types of forest; cultivation, wilderness, and a flexible multi-function leisure area with accommodations for jogging or walking. Amur Maple trees and Green Ash trees will be used in the cultivated forest zone. The pattern on the Green Ash forest will be a less regular pattern than the Amur Maple tree forest by leaving spaces between trees with different types of paving materials.

Currently, the condition of the existing forest is very wild and I would like to expand this forest as square shape to eliminate some portions of forest in the area for future bus parking and the South plaza. This wilderness will become a reminder of the past (former golf course) and will give a spatial feeling set apart from the cultivated forest.

The two soccer fields will be located in a sunken area and a crosswalk will be placed between the soccer fields. The rubber material will be the main ground material for the soccer fields, and it will provide easier maintenance than either artificial grass or real grass. Moreover, the rubber material will reduce the requirement for people to wear cleats in order to visit this area. Additionally, the sunken soccer fields could be turned into skating/ hockey rinks during the winter season by freezing water over the rubber materials.

This area was chosen to remind people that the nearby stadium is a playful area, and also to reclaim and revitalize an area which could reasonably be called a dead zone (former golf course).



Figure 10.20 - Section cut through the sunken soccer fields



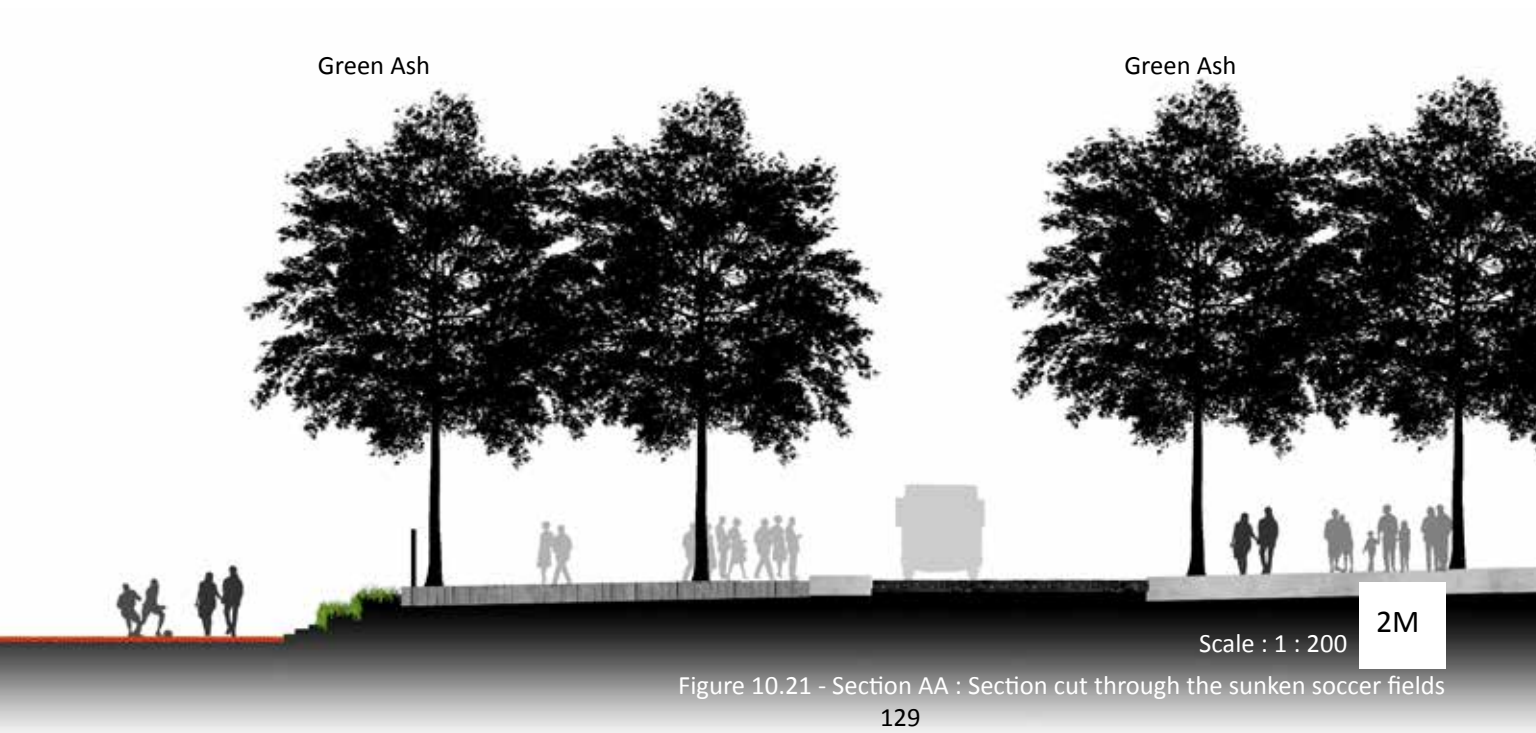










Figure 10.22 - Perspective 2 : On the sunken soccer field

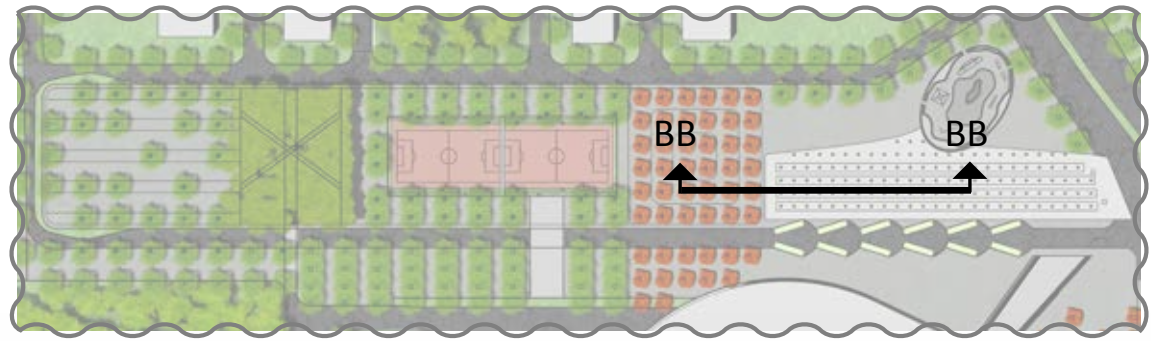


Figure 10.23 - Section cut through the concrete forest / Amur maple forest

Amur Maple

Amur Maple

Amur Maple



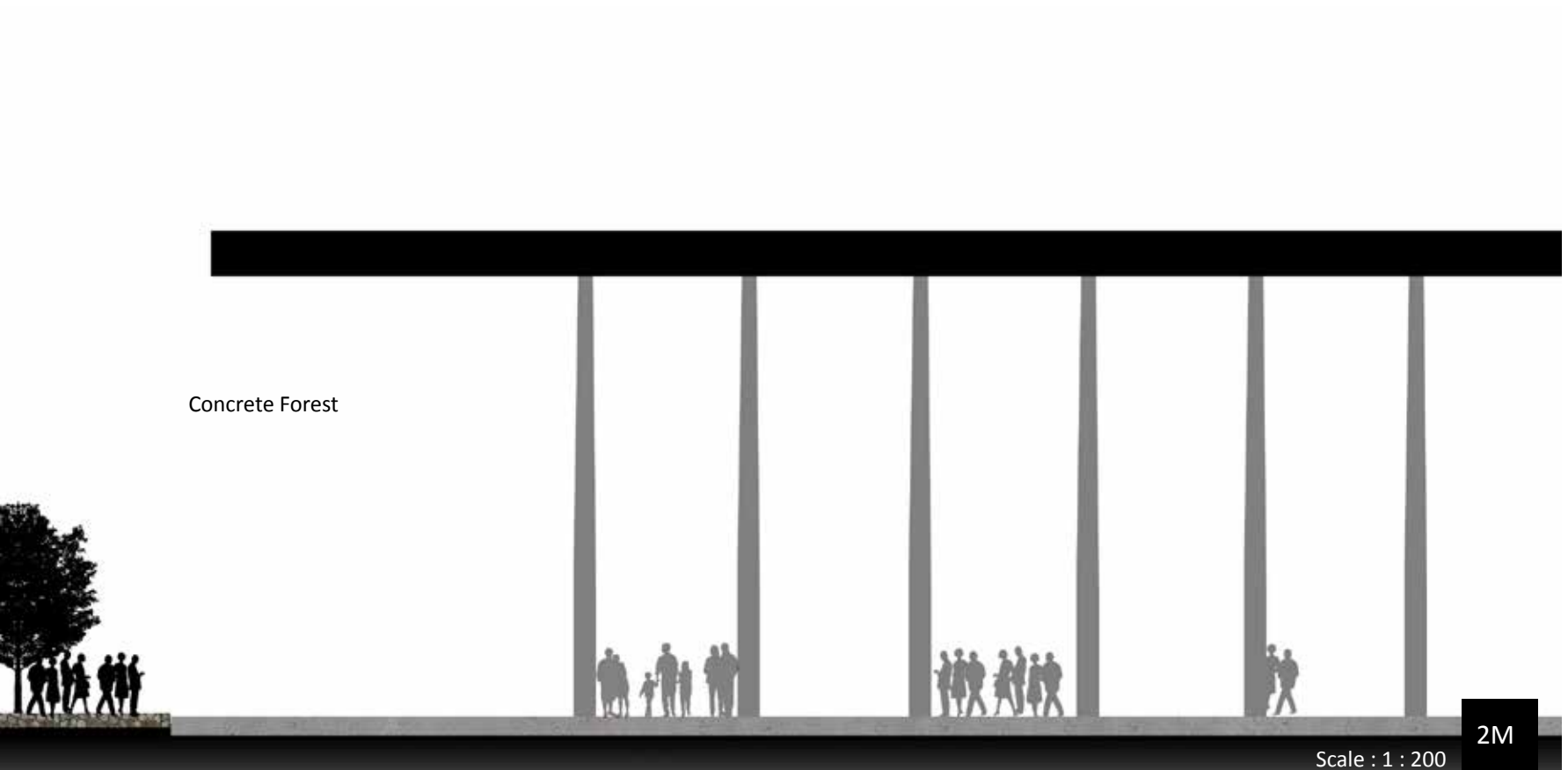


Figure 10.24 - Section BB : Section cut through the concrete forest / Amur maple forest





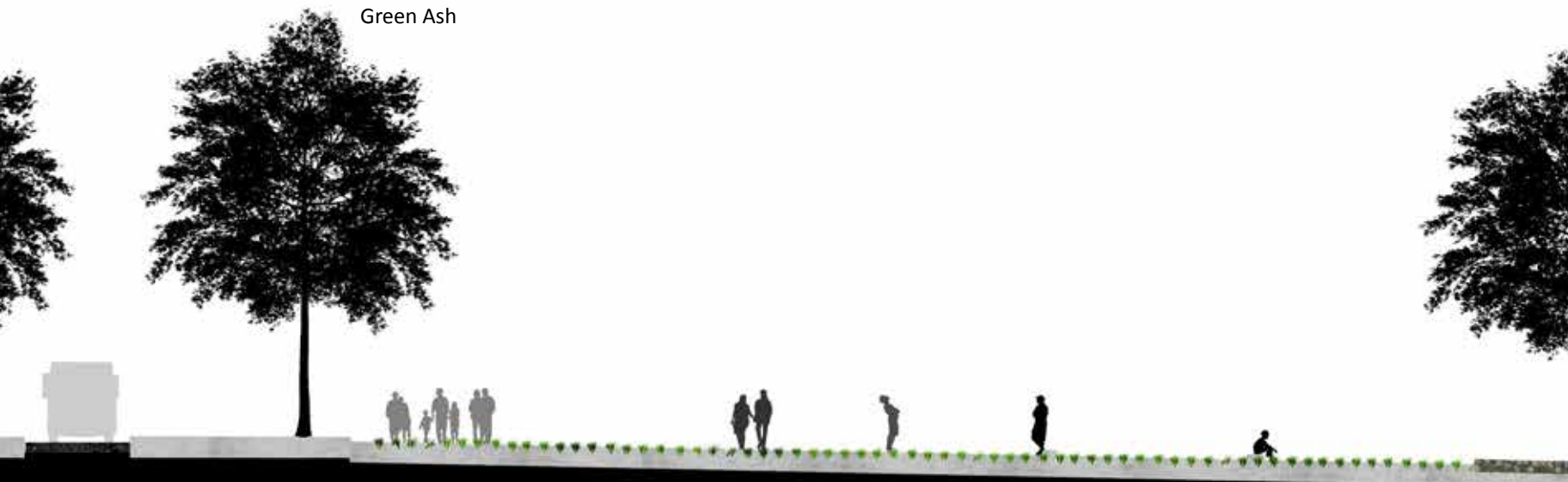




Figure 10.25 - Perspective 3 : On the plaza, looking towards the stadium



Figure 10.26 - Section cut through the green ash forest





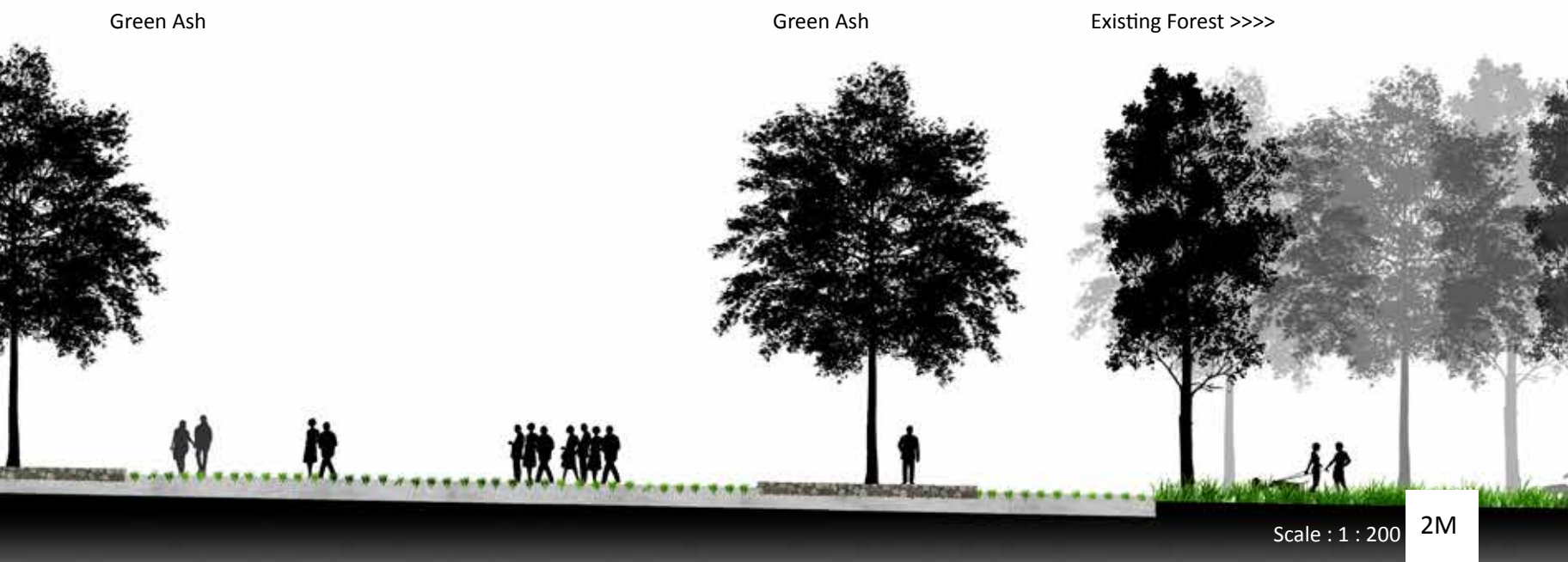


Figure 10.27 - Section CC : Section cut through the green ash forest







Figure 10.28 - Perspective 4: On the green ash forest

Water would be the most welcome resource on a hot summer day. Many people search out to a beach or swimming pool to escape the heat in the summer. Also, the water could be used in the cold winter season for different purposes such as a hot spring or Jacuzzis. Winnipeg endures both hot summers and cold winters.

In the practicum proposal, the water play zone is designed for both summer and winter seasons, and it has two distinct areas: the swimming pool and the hot springs. The hot springs would be further subdivided according to three temperature variants (from mild to very hot). The hot spring tubs would also range in size: single; family; and public. This zone caters to those people who may prefer other activities beyond that of the stadium events. In my experience, when going to a baseball game with my family, the first half hour was the most exciting. This was largely due to the food that my mother had prepared, so when those were gone, I would always beg my parents to take me home, even long before the middle of the match.

For such families, I suggest the swimming pool and hot springs for a little extra excitement during family days. The primary consideration for this zone is children having fun in the water while their parents watch the game at the stadium, enjoy the swimming pool, or partake of the hot springs. Although fences are settled around this entire zone, both the single hot tub and swimming pools would be restricted for those under 18 years of age without an adult as a safety precaution.

The combination of the hot tubs and swimming pools are located into the four district areas. All the swimming pools are designed with multiple layers. Each layer on the swimming pool will drop 10 cm in depth from the 130 cm as a safety precaution except the district third area which is only to allow adults with highly leveled swimming skills. Also, all the hot tubs are designed with additional layers to prepare oneself to prevent slipping from sudden changes in depth or effects of certain heart conditions caused by the extreme change in temperatures.

Additionally, grouping trees will be planted on the spaces between the pedestrians and the borders of water play zones to separate people between using the water play zone and those entering the stadium. This separation zone will be helpful to people who are not used hot springs in public spaces. However, the openness level of the hot spring to the public spaces will be variable depends on the location of the tubs in the four distinct areas.

The hot springs are designed for every day usage, a valuable opportunity for Winnipeggers seeking different experiences during the winter season.





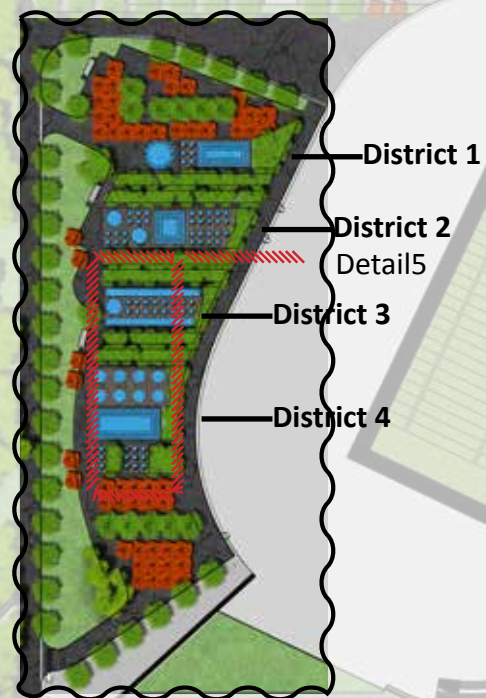
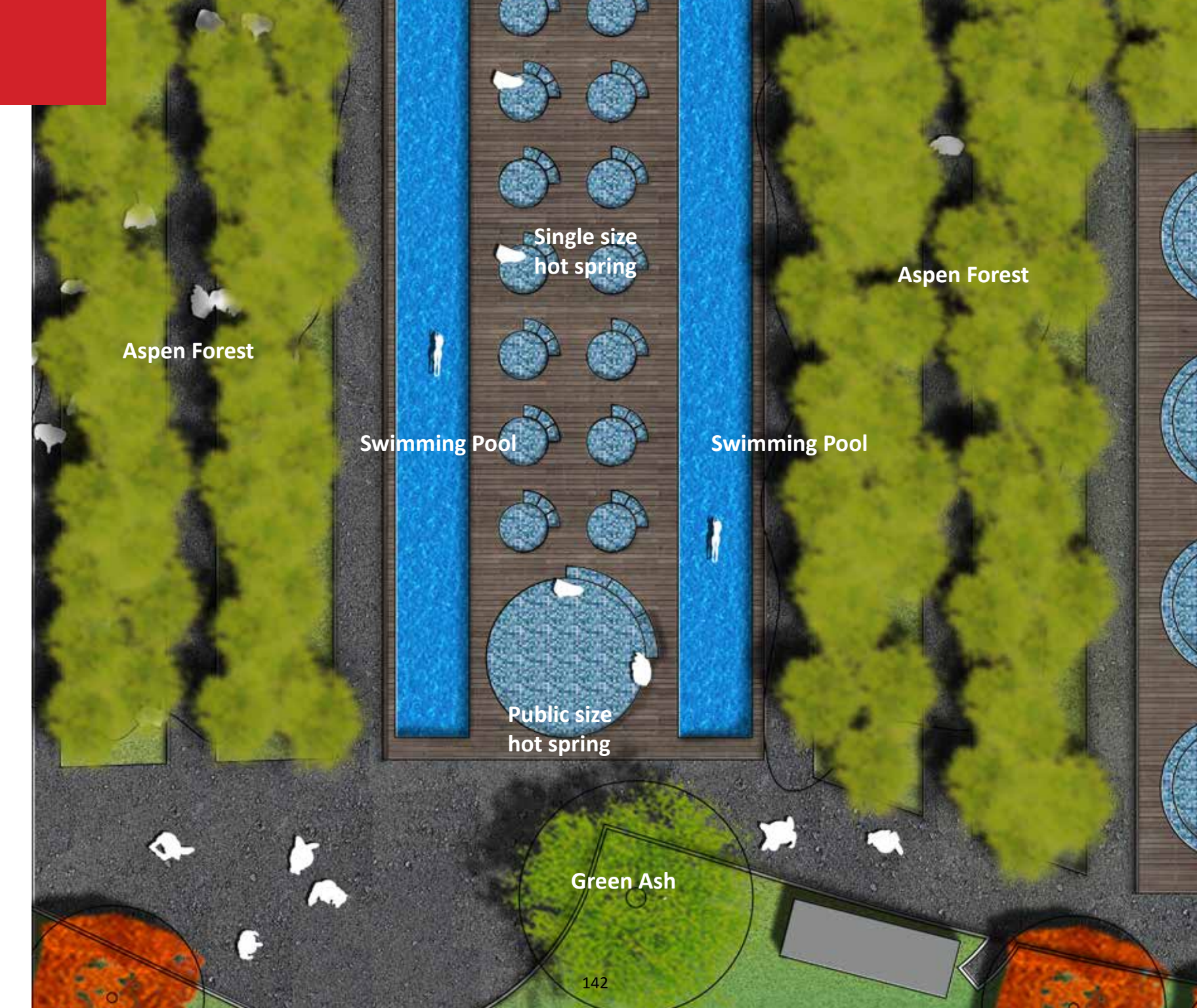


Figure 10.29 - Water Play





Aspen Forest

Single size  
hot spring

Aspen Forest

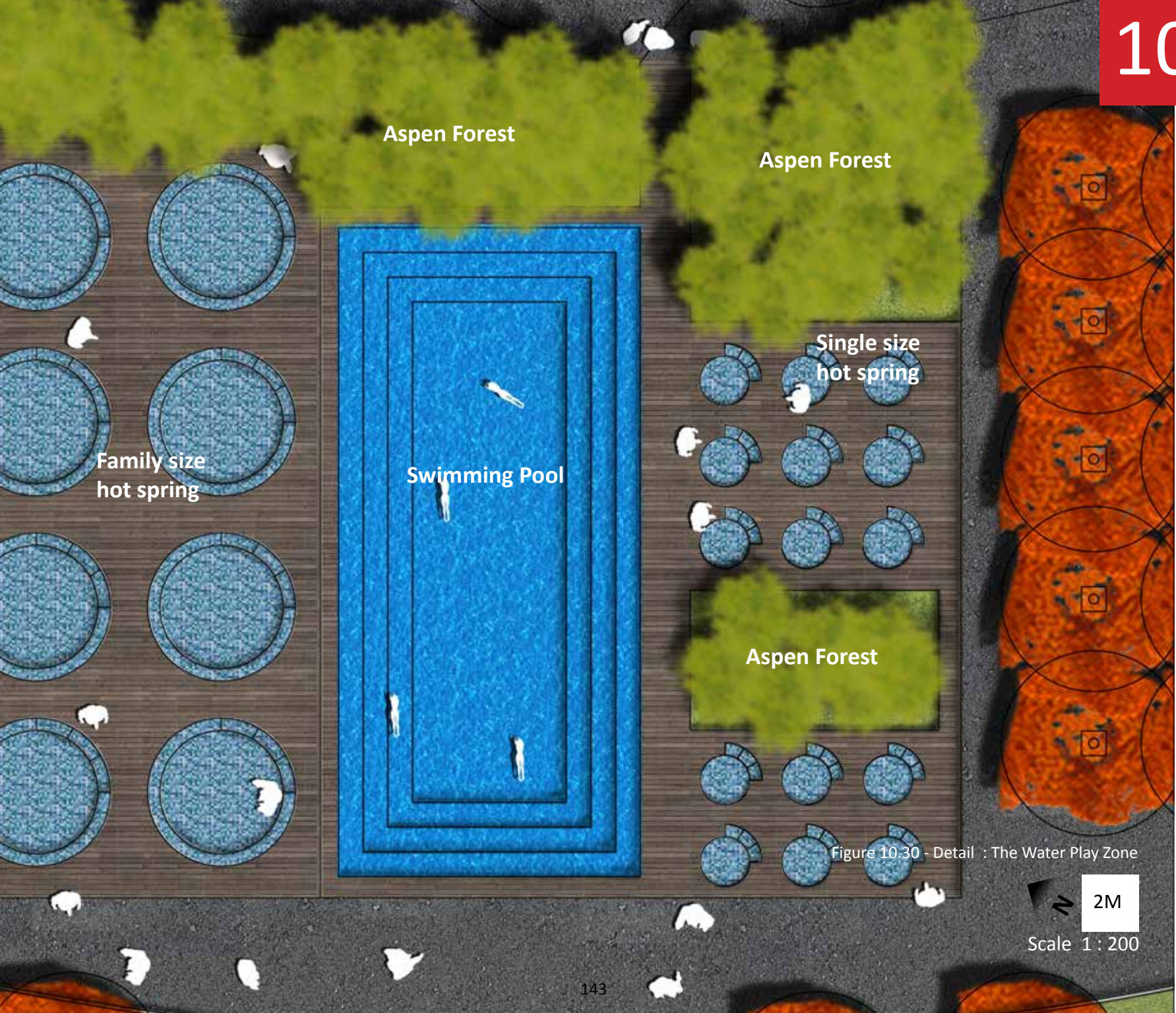
Swimming Pool

Swimming Pool

Public size  
hot spring

Green Ash





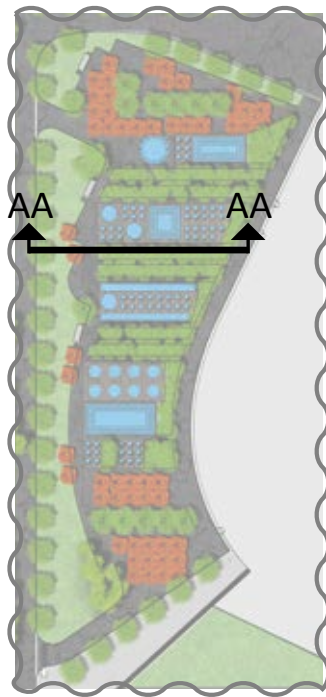


Figure 10.31 - Section cut through the Aspen Forest







Figure 10.32 - Section AA : Cut through Aspen Forest

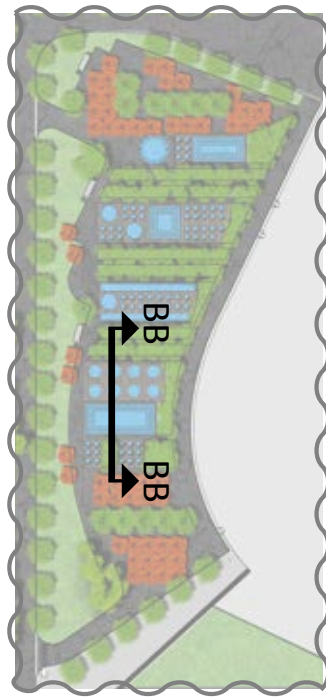
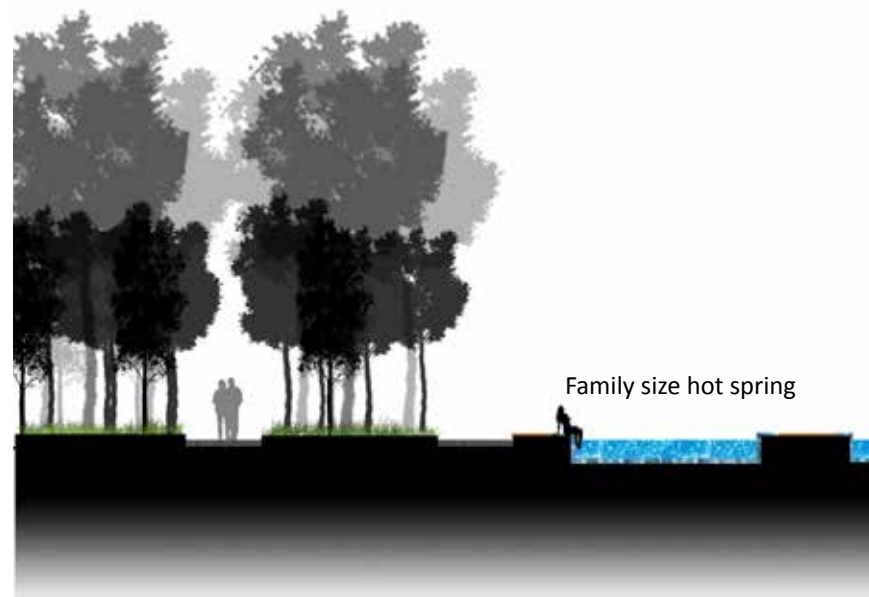


Figure 10.33 - Section cut through the Aspen Forest





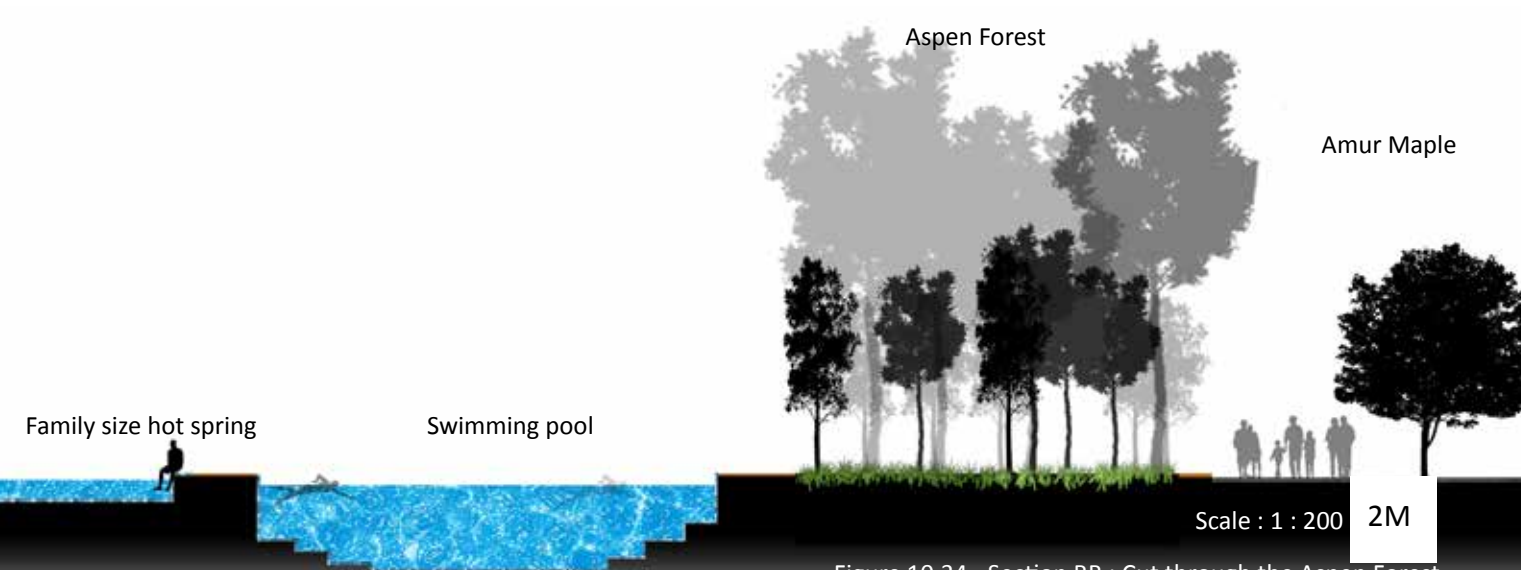


Figure 10.34 - Section BB : Cut through the Aspen Forest  
147





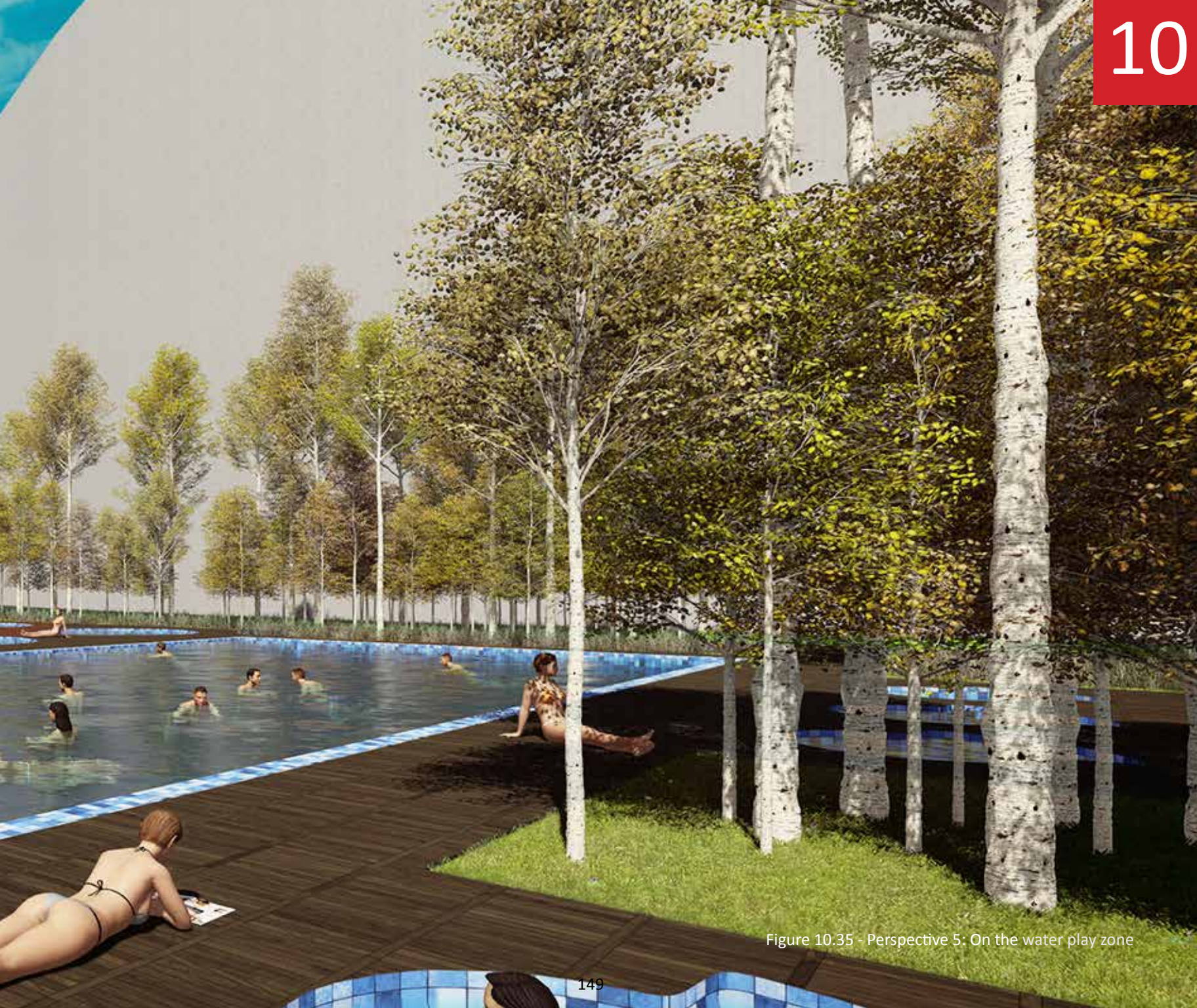
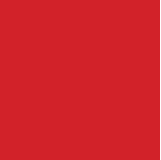


Figure 10.35 - Perspective 5: On the water play zone









The infrastructure around Investors Group Field offers great opportunities for improving communication with fans, students, or even visitors to either the stadium or the University of Manitoba. The most serious of concerns with the site were the area's mono-functional nature and the lack of connectivity between the campus and the stadium. Moreover, the stadium requires its own bus network system to transport people at the stadium safer and faster.

The main purpose of this practicum is to design a more friendly experience for friends, family, or even lone visitors while visiting either the campus or the stadium. The proposed design explored other methods and mechanisms that enable students, fans, and visitors alike to spend their time in outdoor spaces with multiple functions applicable to daily life at the reclaimed site.

The new programs considered how people come to the campus and how they end their day. These programs were the bus parking areas, sports fields, promenade, and outdoor water feature during summer and winter seasons. Additionally, food trucks, farmer's market, and the autumn colour event would be more welcoming to those on the North side of the stadium in certain days of the year. The above programs would adequately establish seasonal character year-round through the stadium's new infrastructure.

All the programs and new infrastructures would not be reclaimed at once. The crosswalk on the University Crescent would be the first priority for change, in order to address the connectivity issue. If connectivity were well developed in the form of a promenade it would bring numerous different advantages to the area. The entire North side of the stadium would be the next phase to re-develop the site. Although the City of Winnipeg has announced the BRT system would be settled in the coming future, we have to consider the alternative; that the BRT would not reach the University of Manitoba campus. In this case, bus stations would serve an important role of connecting the city of Winnipeg to the stadium. Also, the North side of the stadium has to be working together because of safety and mono-functional issues before and after an event for students, residents, and visitors. If only bus parking is settled at these phases, it would not show any difference compared to the current infrastructure around Investors Group Field.

The promenade connects the North side of stadium to provide many different options for students and visitors in daily life activities. The last phase of this project would develop the water feature next to the stadium. The new water feature would bring revitalized energy to the stadium's surroundings through its supporting infrastructures.

Furthermore, I strongly encouraged people to utilize public transportation in my practicum proposal. According to Rejeanne Dupuis (2016) due to commuter surveys the University of Manitoba has further plans for reducing the number of the parking lots in the future. The first reason is with the implementation of the U-Pass, more students would be using public transportation and the proposed BRT system. Secondly, with the future development of Southwood Lands, more students would be in residence on campus. Another reason is that students would be often use bike share lanes and car pool programs in the future. To better understand the preference of the majority the commuter survey would be carried out carefully (Campus planning office).

To successfully accomplish the bus parking, additional cooperation from City of Winnipeg is essentially. One way to promote the use of the bus system would be a contract between the City of Winnipeg and the stadium; people who use buses would pay less on using the stadium's facilities including the water features. The benefits would encourage the use of public transportation during visits to the stadium.

The University of Manitoba and the Investor's Group Field should be the main investors for the North side of the stadium and the promenade as well as the ones to maintain them. The stadium management would maintain the North side of the stadium along with the promenade because majority of the visits would occur during stadium events. Portion of the contact fee from various users such as the food trucks would be used towards the maintenance of these areas.

These days, one infrastructure would be hard to succeed without the interaction of other infrastructures because of being mono-functional and the exclusion of neighboring infrastructure would lose other opportunities to develop and lead people's interests. In this practicum, all the programs are made to interact with each other and to be supported by each program. All the supporting programs would make synergy benefit for the stadium, the students, the University of Manitoba, the City of Winnipeg and the visitors. In addition I like to show how the interacting relationships among the stadium, University Campus, fans, students, and visitors having synergy benefits through the re-claiming of the infrastructure around the stadium.

Through this project, I have learned that the seasonal function and the daily landscape is really important and the University of Manitoba campus has a great opportunity to develop it for people who spend their time at the campus with synergy benefits and I really wish to see the improvements in the near future.







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## Reference - Figure Credit

\*All photographs and figures were prepared by the author or noted if it came from other sources.

Figure 2.1 : Ancient Greek Stadium

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Figure 2.2 : Ancient Stadium of Olympia

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Figure 3.1 : Area view of Olympiapark in Munich

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Figure 3.2 : Categories of location

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Figure 4.1, & 7.5 : March 2015, the latest campus design

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Figure 6.5 : Sugar Beach

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Figure 6.15, 6.16, & 6.17: Food Trucks in Austin Texas

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