NDSU Hockey Arena

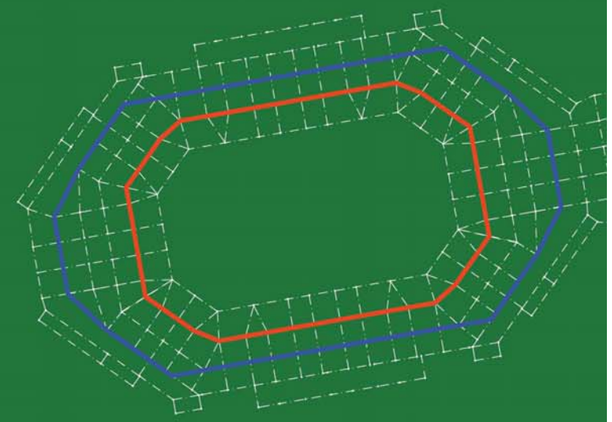
RIVERFRONT

... A Gateway to Community and Athletics

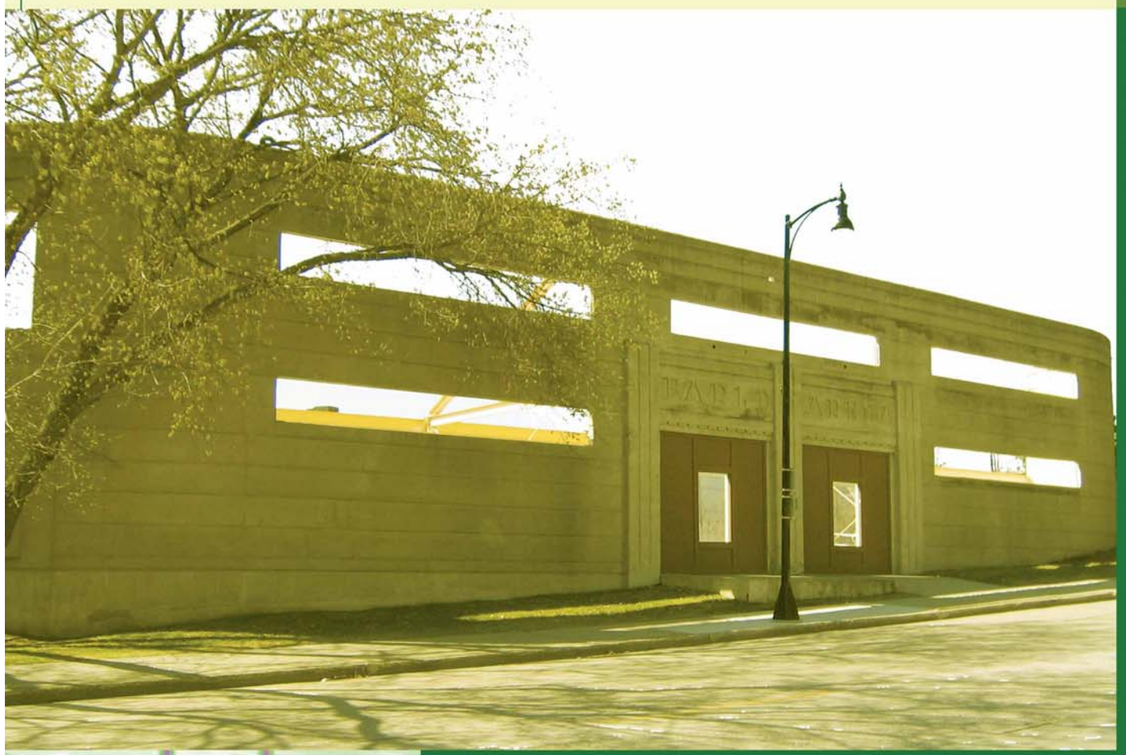
PROJECT INTRODUCTION

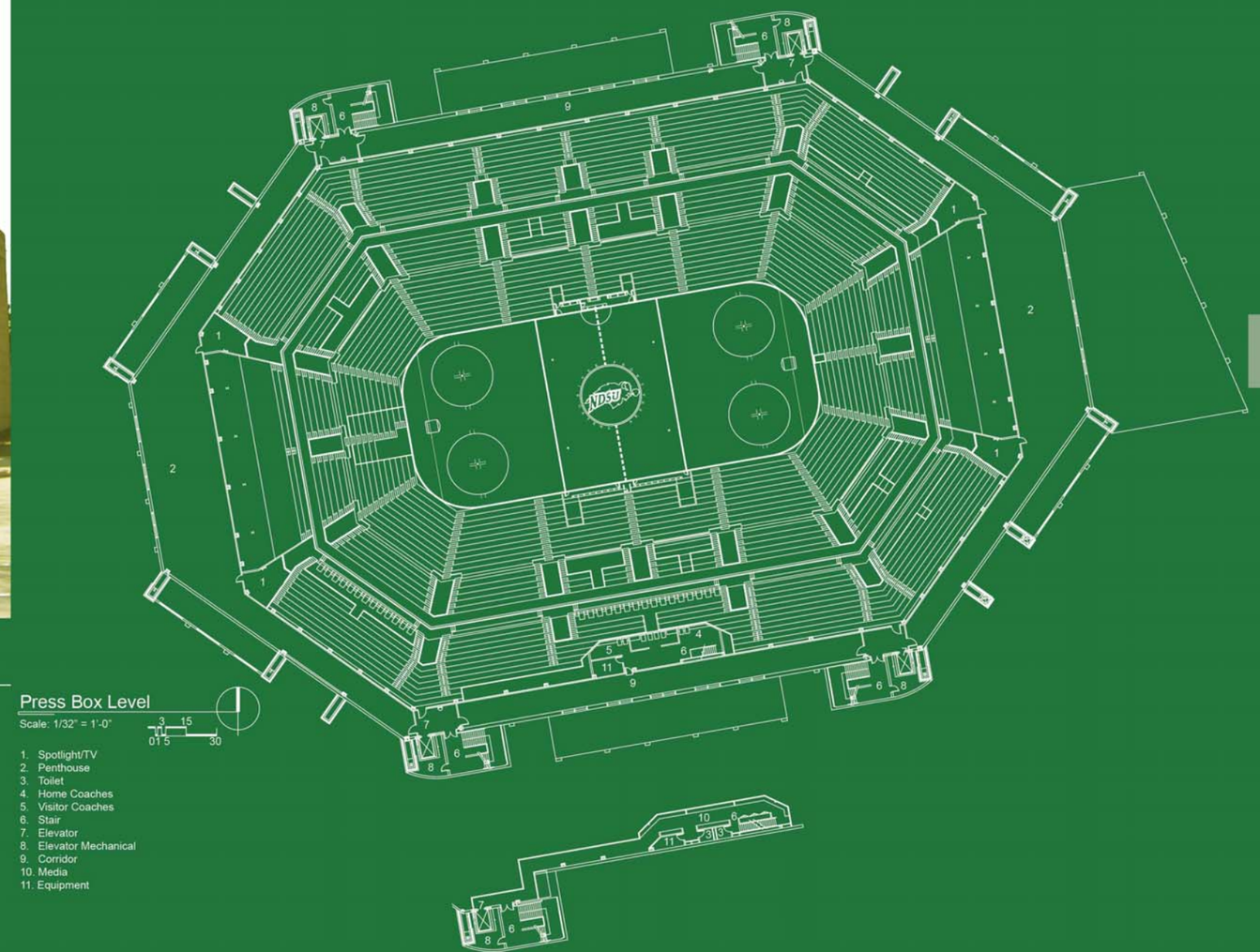
Riverfront NDSU Gateway Arena is a project conceived to develop a precedent changing the way people in the Fargo-Moorhead Community view athletics. This arena is designed to unite people and the community for the enjoyment of hockey. Riverfront NDSU Gateway Arena will have the ability to facilitate up to 8,500 hockey spectators in a state-of-the-art environment. Retractable seating will allow the facility to expand the ice sheet from the standard sheet size (85'x200') to Olympic size (100'x200') and reducing the capacity to 6,000. Two seating bowl levels and a suite level will give fans every opportunity to get the best possible view of the game. Two levels of Club Lounges are located at the ends of the arena that include seating and bars. Circulation into the seating is from the concourse forcing people to walk through the concourse and past the many concession stands. Exterior circulation to the site is from the downtown via first, second and third avenues north and fourth and second streets and from Moorhead via the three downtown bridges. A parking structure is available across first avenue with skyways connecting to the open concrete patio on the Hockey Arena site. A large LCD screen visible from fourth street will allow pedestrians to view the events taking place inside the Hockey Arena. A plaza on the site is a public amenity designed to act as a link between the Hockey Arena and the proposed expansion for the Civic Center. This project proves a community's unity can be informed by Architecture.

Partial West Elevation
Material Study



Structure/HVAC Plan
Scale: 1/64" = 1'-0"



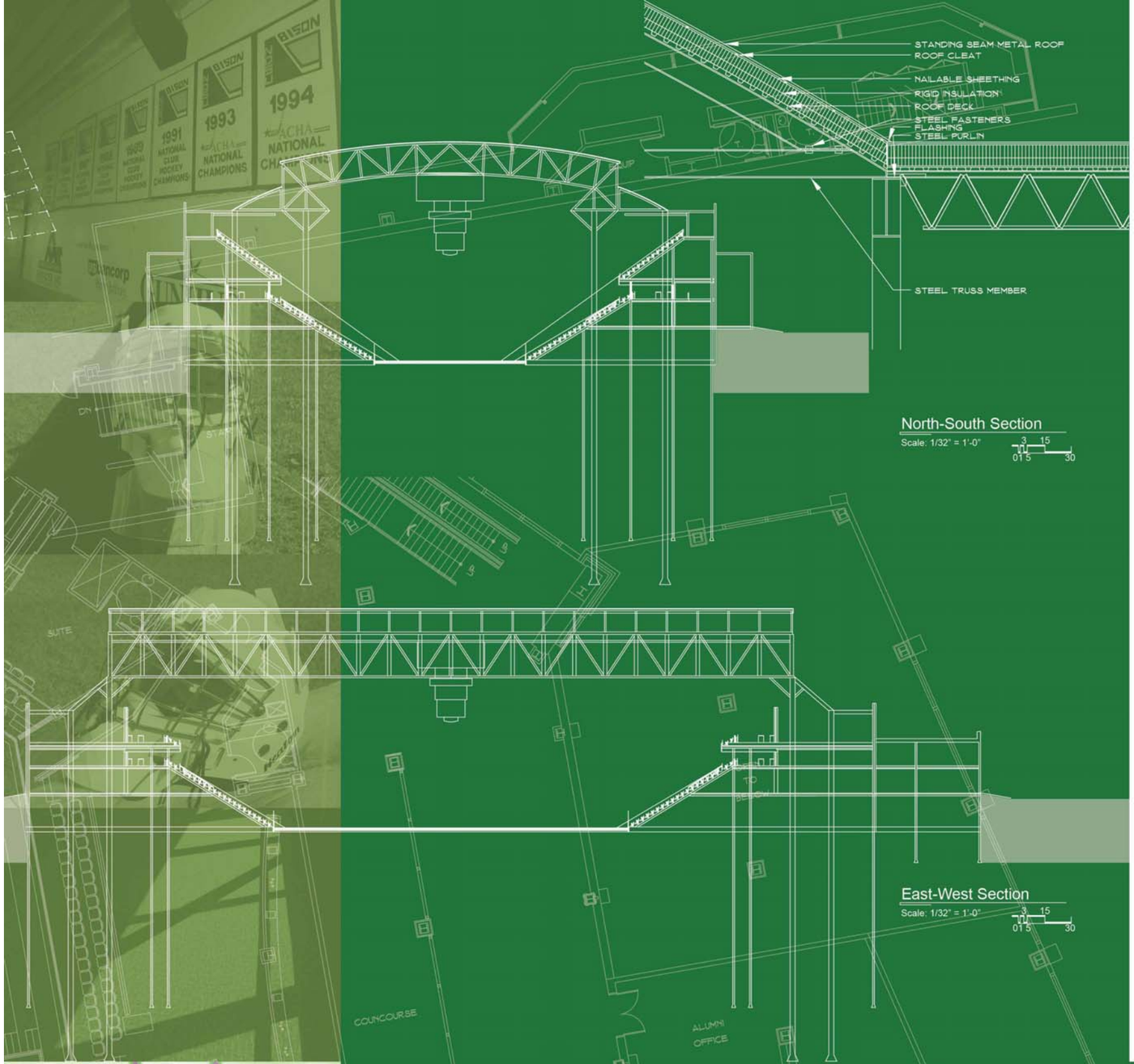


Press Box Level
Scale: 1/32" = 1'-0"

1. Spotlight/TV
2. Penthouse
3. Toilet
4. Home Coaches
5. Visitor Coaches
6. Stair
7. Elevator
8. Elevator Mechanical
9. Corridor
10. Media
11. Equipment

PROJECT BACKGROUND

Indoor Hockey started in Fargo in the 1930's with the addition of the Fargo Arena in Island Park. The building was renovated in the 1950's and surrendered its hockey duties to the John E. Carlson Coliseum in the 1960's and later became Fargo's downtown swimming pool. The NDSU Hockey Club was established in 1983. The team brought national notoriety to the school by winning seven national championships in their first eight seasons. NDSU Club Hockey was re-established in 2003 after a four year absence and is making great strides to continue its championship tradition. This facility will help the club recruit the finest players to North Dakota State University as well as being the cornerstone in getting Men's and Women's Division I Ice Hockey teams to NDSU.

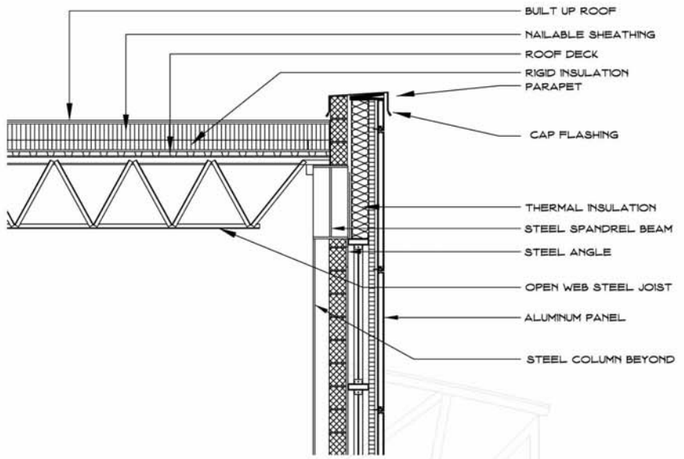


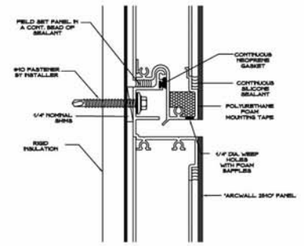
North-South Section

Scale: 1/32" = 1'-0"

East-West Section

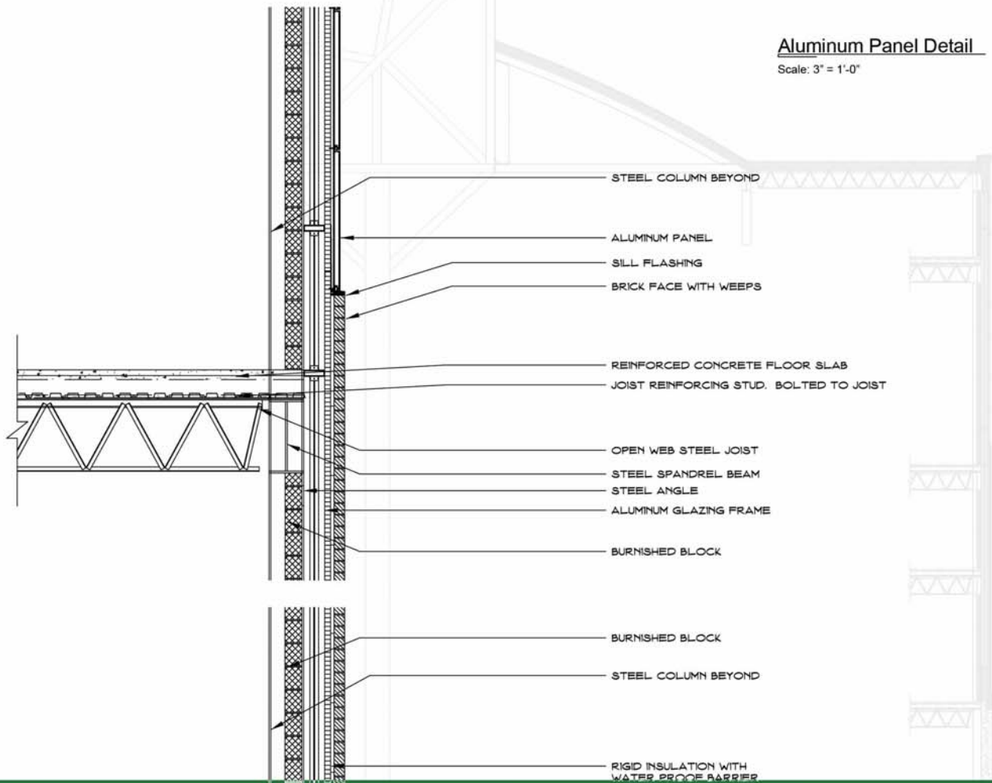
Scale: 1/32" = 1'-0"





Aluminum Panel Detail

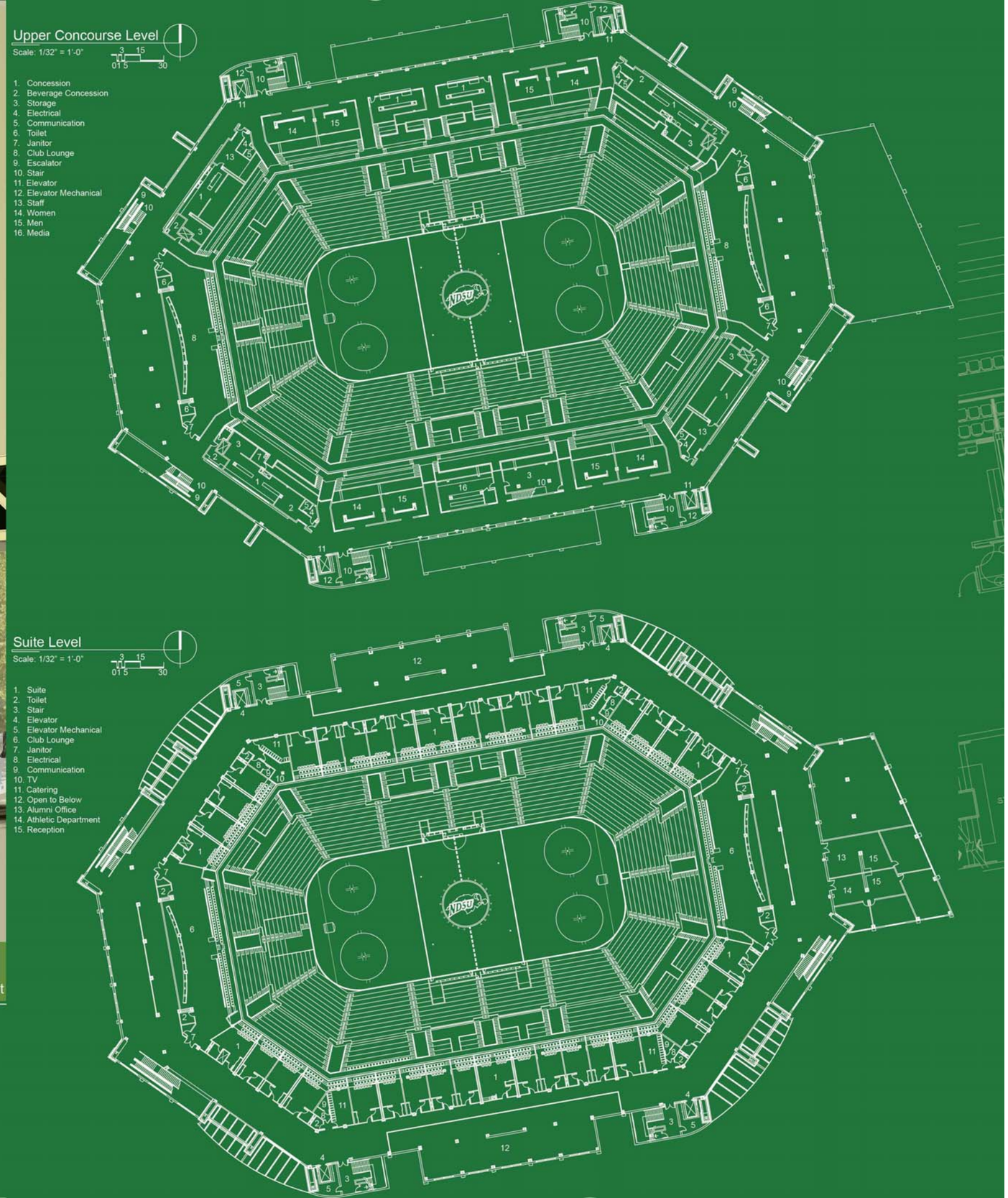
Scale: 3" = 1'-0"

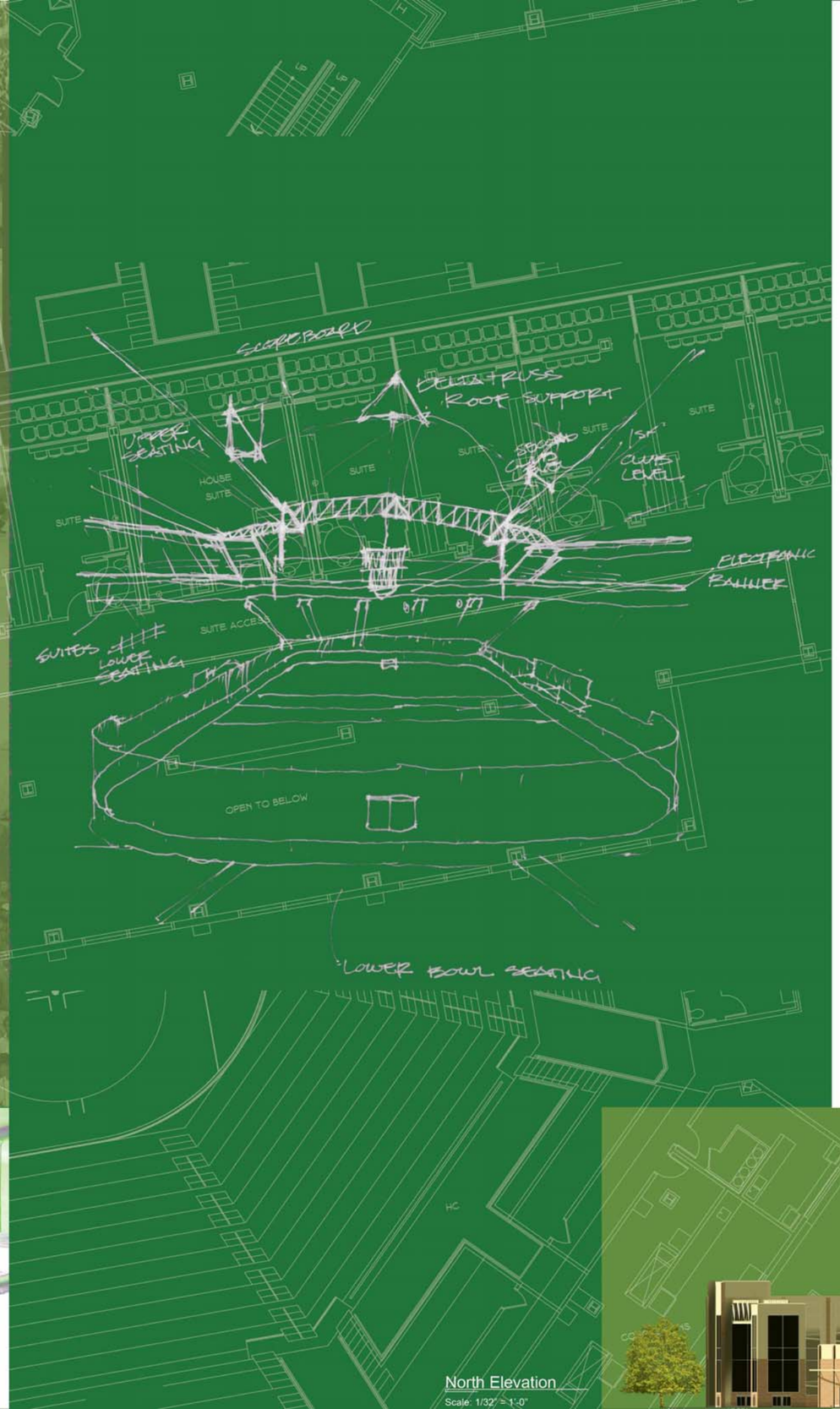


Building Perspective
View of Digital Video
Screen Looking Southeast

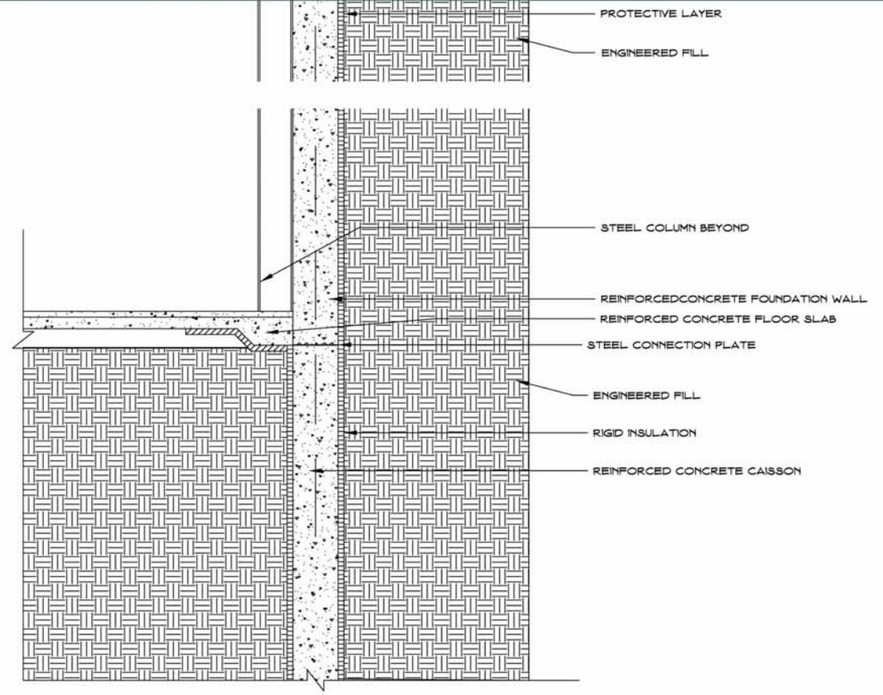
PROJECT DEVELOPMENT

The Riverfront NDSU Gateway Hockey Arena is a long-span steel structure that has come to life by understanding the building components using four main methods. Conceptually, the process has been brought to the level of developed design through concept sketches and models. Two dimensional drawings were used to develop the spaces and define public ways of circulation as well as develop the building materials in building and wall sections. The process of developing the mass of the building and solving structural components began with a conceptual floor plate model and evolved into a presentation model showing building mass and structural connection. Three dimensional modeling was used to depict the exterior of the building and its relationship to the site.





North Elevation
Scale: 1/32" = 1'-0"



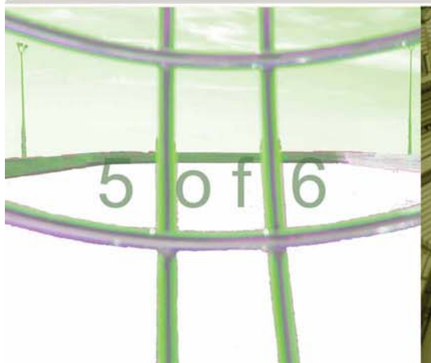
Wall Section Detail
Scale: 1/2" = 1'-0"

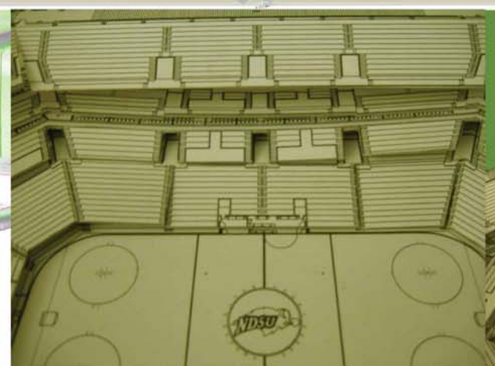
SIGNIFICANT PROJECT ELEMENTS

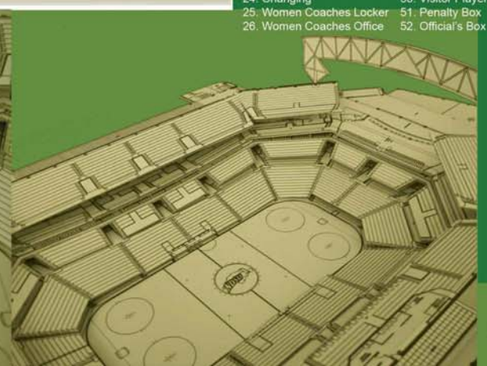
This long-spanned, light weight steel structure has many material components that comprise of the building's structure, connectivity, exterior and interior aesthetic. Steel structure and curtain wall systems hold up and envelope most of the building assembly. Concrete flooring and masonry interior material are also used. Burnished block is used as a structural material to anchor the curtain wall as well as an interior finish material. The interior materials are conducive to activity such as hard Terrazo floors with flowing patterns and soft colored burnish block walls directing the flow of circulation. Material accents at nodes of transportation act as marketing tools aligning people with concessions and souvenirs. The steel roof structure creates an illusion of a space within a space because of its size and span.

Building Perspective
View from Red River
Looking Southwest

Building Perspective
View from First Avenue
Bridge







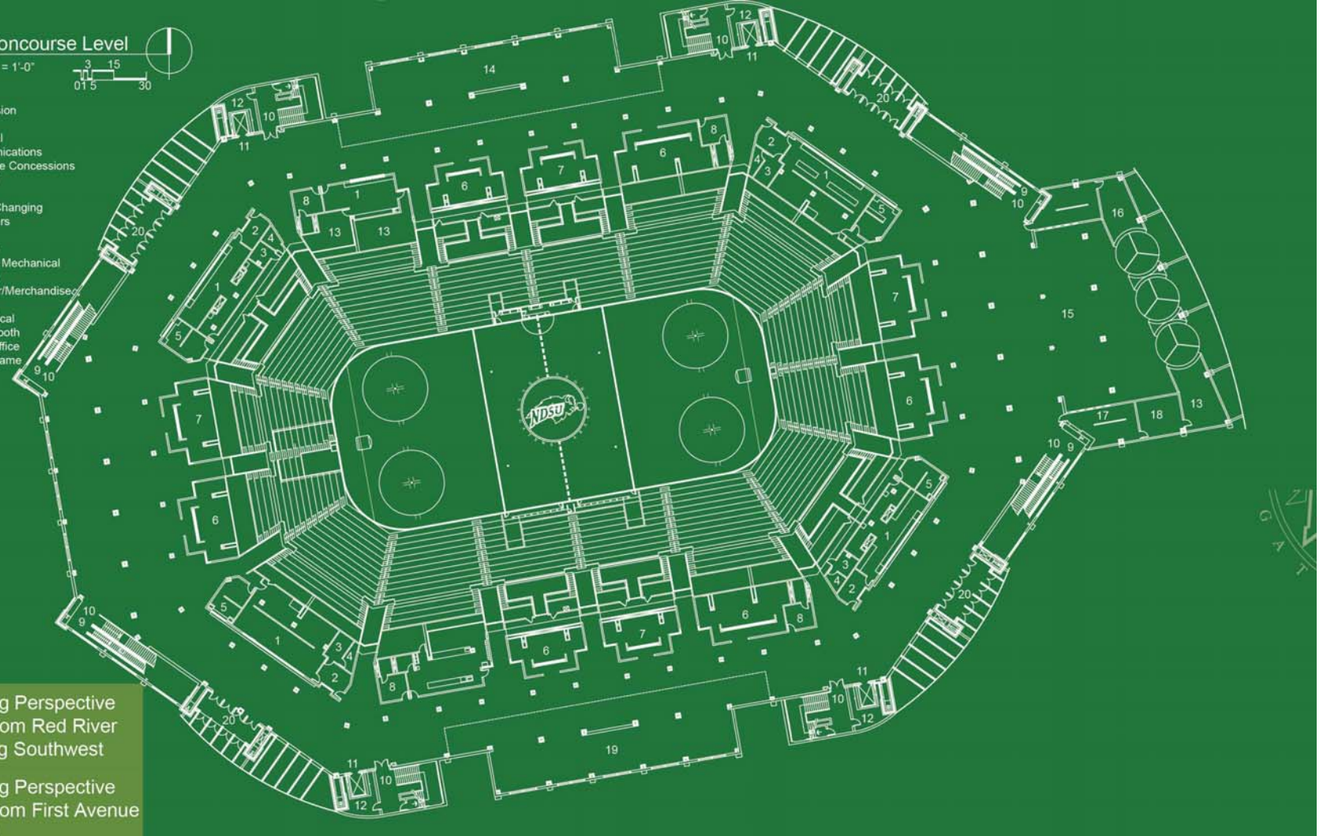
Interior Study Models

Main Concourse Level

Scale: 1/32" = 1'-0"

0 1 5 3 15 30

1. Concession
2. Staff
3. Electrical
4. Communications
5. Beverage Concessions
6. Women
7. Men
8. Family/Changing
9. Escalators
10. Stair
11. Elevator
12. Elevator Mechanical
13. Storage
14. Souvenir/Merchandise
15. Lobby
16. Mechanical
17. Ticket Booth
18. Ticket Office
19. Hall of Fame
20. Entry

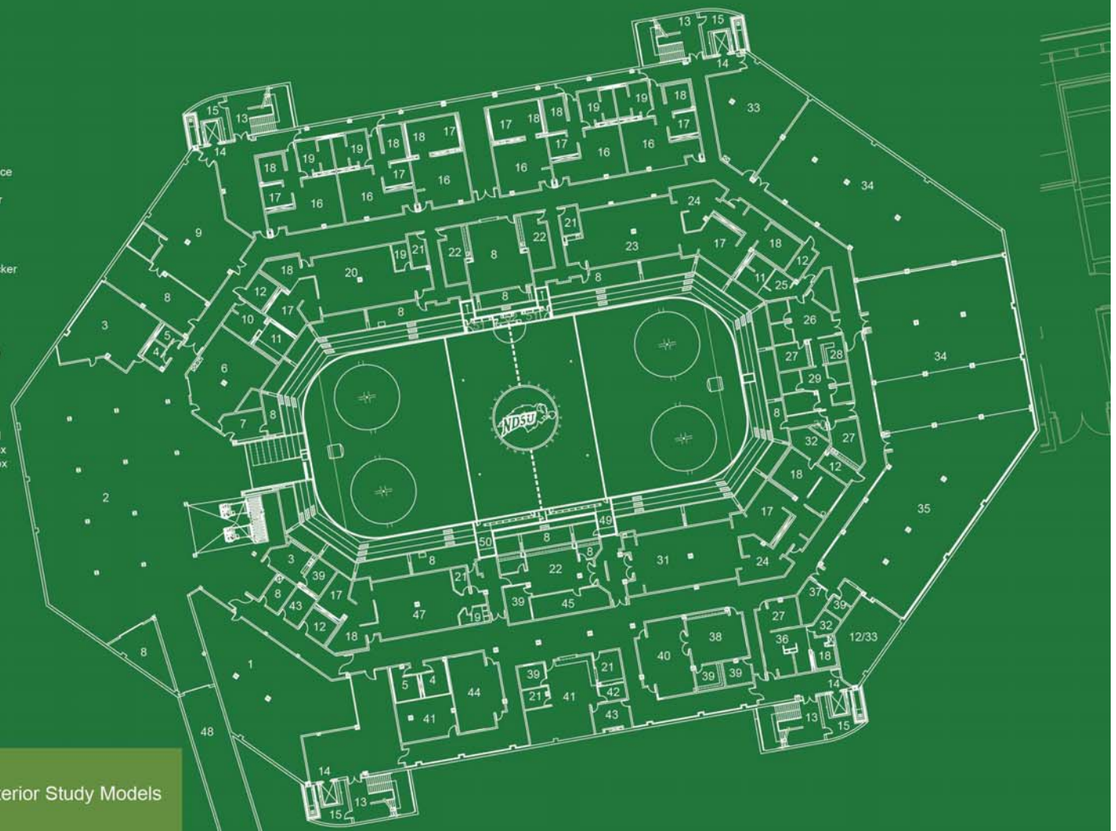


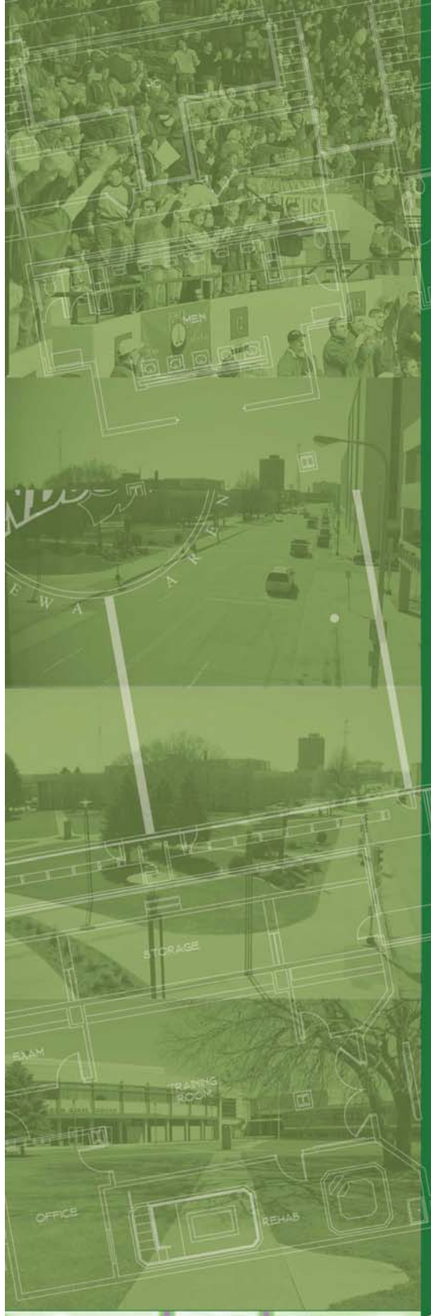
Ice Level

Scale: 1/32" = 1'-0"

0 1 5 3 15 30

1. Holding/Drop Off
2. Zamboni/Mechanical
3. Staff
4. Women
5. Men
6. Maintenance Shop
7. Tool Shop
8. Storage
9. Kitchen
10. Officials Locker Room
11. Shower/Toilet
12. Electrical
13. Stair
14. Elevator
15. Elevator Mechanical
16. Locker Room (Small)
17. Toilet
18. Shower
19. Coaches Room
20. Visitor Women
21. Stick Prep
22. Trainer's Room
23. Women Home
24. Changing
25. Women Coaches Locker
26. Women Coaches Office
27. Conference
28. Reception
29. Men Coaches Office
30. Communication
31. Men Home Locker
32. Sauna
33. Mechanical
34. Cardio Exercise
35. Weight Room
36. Men Coaches Locker
37. Weight Office
38. Classroom
39. Office
40. Player's Lounge
41. Equipment
42. Skate Sharpening
43. Laundry
44. Press
45. Rehab
46. Exam
47. Visitor Men
48. Ramp to Ice Level
49. Home Player's Box
50. Visitor Player's Box
51. Penalty Box
52. Official's Box





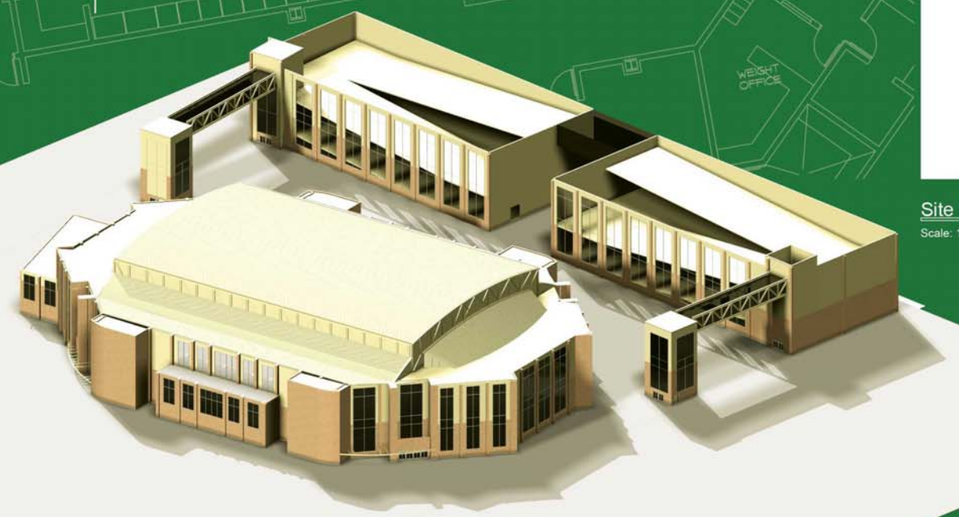
Seating Bowl Layout

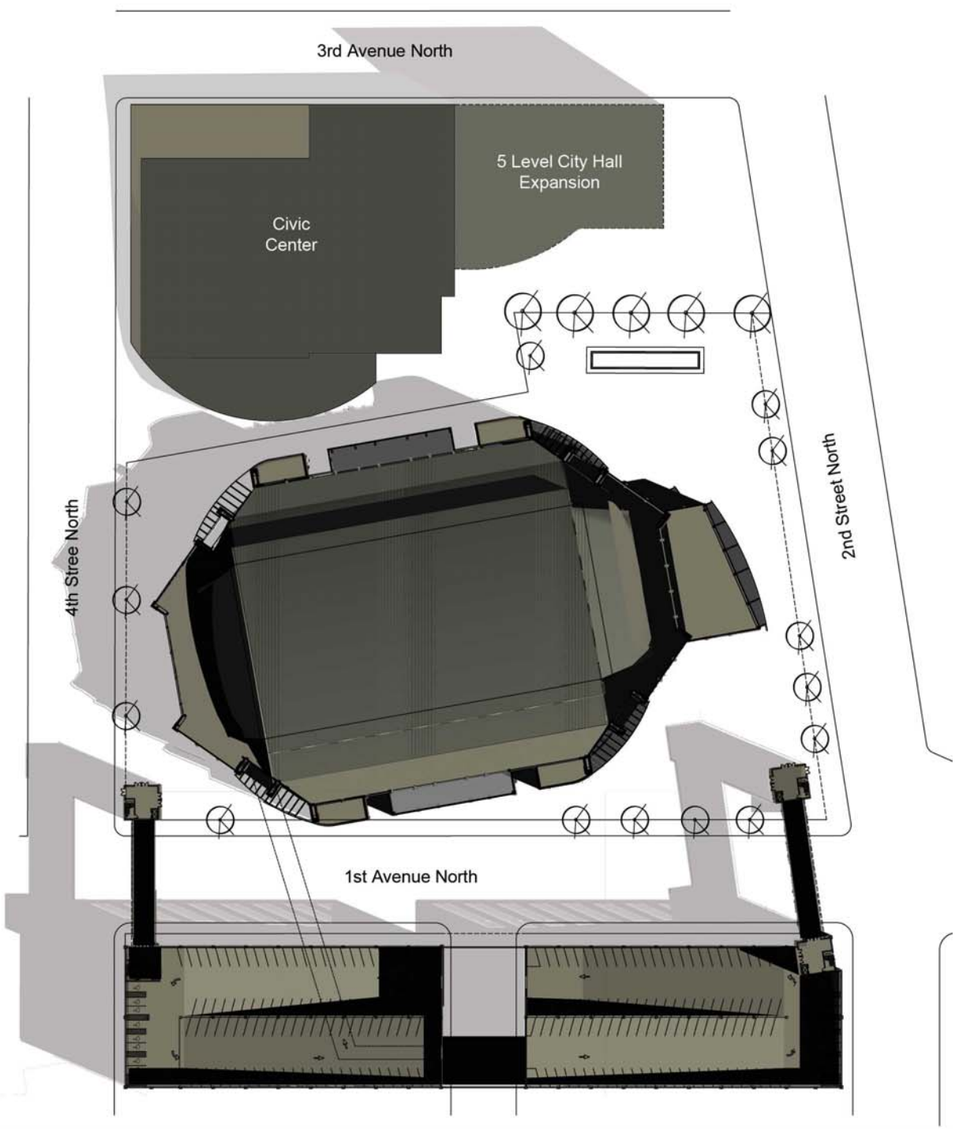
SITE INFORMATION

Downtown Fargo is growing at a faster rate than ever before. As the community has grown, downtown has become more and more important. North Dakota State University is also experiencing many changes. Athletics has recently made the move to Division I and Club Hockey has been resurrected. Fargo has developed a plan for this site that will provide a corridor from downtown Fargo to Moorhead. My design adds to that plan creating more of a Gathering space or meeting node in the downtown fabric with many amenities including the Riverfront NDSU Gateway Arena, a parking structure with skyways and a plaza.

The site of the Riverfront NDSU Gateway Arena lies between second and fourth streets, both sides of first avenue and up to the current Fargo Civic Center. Cooperating with the City of Fargo's Downtown Master Plan, I have removed two buildings. The Fargo Public Library which is being planned for another location and the Fargo City Hall. I have proposed space for a City Hall expansion connecting to the Civic Center on the east side of the site. I took out third street as it wasn't a downtown through street and seemed to only service City Hall and the Parking lot that has been replaced with my parking structure. City Hall can now be serviced by third avenue north and second street. The Plaza is a public amenity consisting of trees, seating and a large planting structure.

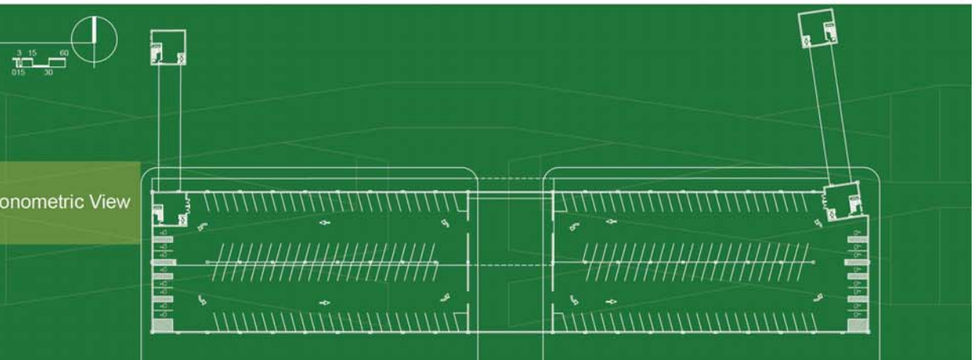
The contextual surroundings of downtown are quite diverse. Masonry construction dominates this part of downtown along with some contemporary and modern materials such as metal panel and concrete construction. The surrounding context consists of commercial, residential and mixed-use spaces.





Site Plan

Scale: 1/64" = 1'-0"



Site Axonometric View