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Hermantown Outdoor Recreational Facility

By:

Nikolas Gabriel Thomalla

May 2006

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Hermantown recreational
facility

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Thesis
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Thomalla

HERMANTOWN RECREATIONAL FACILITY

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


By

Nikolas Gabriel Thomalla

In Partial Fulfillment of the Requirements
for the Degree of
Bachelor of Landscape Architecture



Joshua Walter, Primary Critic
Associate Professor of Landscape Architecture



Don Faulkner, Thesis Committee Chair
Associate Professor

May 2006



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Statement of Intent:

Project Typology:

A city wide plan for an outdoor recreation facility for Hermantown, MN.

Theoretical Premise:

The thesis will examine the necessity that humans have for recreation. An historical comparison with the past will be done to establish familiar threads with life today. Design metaphors, analogies and or tectonics will be developed from the examination.

Project Justification:

Hermantown's recreation facilities are starting to wear down from constant use from the community and are being overwhelmed by the growth of the city. This ideal design project will participate in the discourse about how Hermantown will adapt to the future of the city.

Narrative:

Hermantown is a small suburb outside of Duluth, MN that is rapidly increasing in size and is in need of a new recreation complex. The complex is scattered and not very functional, as terms of walking around the site and holding a large capacity of people. The complex got started by adding a few elements at a time when necessity arose, instead of an initial master plan for the site. The football field that exists on the site now had its bleachers condemned in 1999 and they moved the football field behind the high school. (This complex is located 2 miles south of the high school.) The football field now is a run down lawn area that is occasionally used for youth soccer games, but usually is not maintained. The complex as it stands now consists of 2 softball fields and one baseball field and the football field on the north side of the site.



This project's main goal is to rehabilitate existing features and to better the functionality of the existing site. The project will also incorporate the expansion and beautification of the site. This project will consist of the renovation of the existing baseball field with the addition of plantings around the site. The addition of a larger concession area with large plazas to accommodate more people will make it an area ideal for hosting tournaments. The renovation of the old football field will be turned into a large open turf area so it can be utilized by youth soccer and youth football games as well as a wide range of outdoor activities. There will also be the addition of a new skate park, to replace the drab old one, to accommodate the increasing popularity of the sport among kids. Furthermore, the master planning will also consist of better parking and pathways to make it easier for pedestrians to move around the complex.



I believe this is a necessity for the city of Hermantown, MN. It is a city that its population is rapidly growing with young families and the current complex is not adequate for the future growth of the city. Something needs to be done to accommodate the growth to make it convenient for the residents and for the money this could generate for the community.

User/Client Description:

This project is designed for the people of Hermantown, MN as well as the surrounding communities in the Duluth area. This project will be owned by the City of Hermantown, MN. The Hermantown Park Board has full control over all city property designated for park purposes. In addition is responsible for the maintenance, beautification and care for all municipal park property, and reports all activities to the City Council. City of Hermantown will maintain the park facilities while volunteer organizations and school district manage the recreation activities. The user groups consist of:

Park Board:

Gene Shaw, Chair, Mike Kopyy, Anne Larson and Seth Taran.





City Councilors:

Wayne Boucher



City Hall 729-3680

councilorboucher@hermantownmn.com

Darlene Koski



City Hall 729-3683

councilorkoski@hermantownmn.com

Andy Thielen



City Hall 729-3681

councilorthielen@hermantownmn.com

Brad Tafs



City Hall 729-3682

councilortafs@hermantownmn.com



School District Organizations:

Hermantown High School Principal

Lois Backsheider - (218) 729-8874 ext. 1003

Hermantown Middle School Principal

Dave Radovich- (218) 729-6695 ext. 1310

Student Activities Director/ Administrative Assistant

Gary Bowen- (218) 729-8874 ext. 1112





Youth Organizations:

Hermantown Little League

Rick Stanich - [REDACTED]

Hermantown Girl's Softball


Steve LaFontaine - [REDACTED]

Hermantown Youth Soccer

President Todd Steen - [REDACTED]


Upper Division - Sharon Danielson - [REDACTED]

Lower Division - Chris Morris - [REDACTED]



The peak usage of this recreation facility is fall, spring and summer. All activities that occur on this site are during these seasons. Parking requirements, physical restrictions, medical issues and special, social, cultural, ethnic or economic issues are unknown at this time.


Major Project Elements:



This project is for a city wide plan for an outdoor recreation facility for Hermantown, MN. The major elements that will be addressed in this project are increasing the functionality of the site as well as the beautification involved in making the site appealing to the users. The current athletic fields are to be renovated and there will be the addition of more athletic fields to make this complex justifiable in hosting larger scale tournaments to increase revenue and tourism to the city. Other than the athletic fields on the site other elements will include a skate park, playground, pedestrian circulation (bicycle and walking) and parking. There is a creek that runs through the site and that needs to be more pronounced, because it will add another beautiful element to this site making this recreation complex stand out from the rest.

Site Information:

This site is located in Hermantown, MN which is a small town just west of Duluth, MN. It is located in St. Louis County which is the largest county in the state, square footage wise. The site I chose is located on two major roads in Hermantown. It is located on the corner of Maple Grove Rd. and Ugstad Rd. All of the Hermantown schools are located within two miles of this facility as well as the police department and City Hall. This site is of particular interest because it is where I grew up and went to high school and I was not fortunate to have a high quality



recreational facility like the one that I am proposing. The site provides what others do not in the fact that this cities population is climbing at dramatic rate and property values have all gone up as well. The population of Hermantown has increased 10.2 % over the last year which shows that this is a necessity for this growing community. Site Inventory includes: Part1: Historical/socio/political/ economic (Economic base, demographics and History). Part 2: Geographic (site location, streets and boundaries, transportation links, site area major landmarks site topography and views. And Part 3: Physical (Ecological/Environmental Issues, solar orientation, prevailing winds, annual precipitation, acoustical characteristics, vegetation, geology, soils and Hydrology.

Project Emphasis:

The thesis will examine the necessity that humans have for recreation. A historical comparison with the past will be done to establish familiar threads with life today. The beautification of the site is the main emphasis of the project. In doing this connections throughout the site will create opportunities to beautify the site to make it more appealing to the user. Another emphasis will be the addition of larger concession areas and plazas and the renovation of the athletic fields on the site to generate greater notoriety to the site; hosting tournaments of larger scale games will be easier and will produce revenue and tourism for the city of Hermantown.

A Plan for Proceeding:

Critical stages included:


1. Site inventory and Analysis
 - a. Soils
 - b. Vegetation
 - c. Existing elements
 - d. Opportunities and constraints
2. Research
 - a. Site history
 - b. Case studies
3. Development
 - a. Concept generation
 - b. Site design
 - c. Perspective drawings

Project Introduction:


This thesis project proposes the necessary requirement for expansion and renovation of the existing recreational facilities in Hermantown, MN. The addition of new fields, a new skate park and plantings will solve the requirement mentioned above. The existing facilities are being run down from constant use from the community and the facilities are starting to get overwhelmed by the growth of the city. A problem is starting to arise because of all the new development the city is doing makes the existing recreational facilities seem sub par and outdated. The proposed facility will create more opportunities for the city of Hermantown. It will provide more activities for kids and the renovation of the baseball and softball fields with the addition of a better concession area and new community garden will attract more attention. Opportunities to host tournaments will generate a lot of tourism to the area; which tourism brings in revenue for the city. The main issue will be the increasing the functionality and beautification of the site by creating better pathways and incorporating native plant and grass species. The master planning will also address a more functional parking area for the complex.




Town History:



In 1872 August Kohlts was granted the first homestead in the Town of Herman. St. Louis County received its first taxes from the Town of Herman in 1872. By the turn of the century, the Town of Herman had a population of 625. With the result of rumors that the government would be building a new seaway connecting Duluth with the East Coast, the town had its first land boom. The land sold for \$250 an acre in 1897, compared to \$12.50 an acre forty years later. The township had grown by 300 people over the next ten years; the town then built three new two-room schools, and had a town hall in an old one room school. In 1918 the growth of the township was set back by the great forest fire of 1918. There was hardly a building left standing; among the buildings that were left were the three two-room schools, and a church. The Red Cross quickly helped rebuild the town, but in 1920 the population was down by 842 people.



The Town of Herman would soon get another population boost from a new wave of homesteaders. In hard times of the Depression the government built about one hundred "subsistence homestead" projects. The idea was to move people trapped in poverty in the cities to new homes in rural or suburban locations. There were only two such projects assigned to Minnesota and one of them was in the Town of Herman. These homes were called the Jackson Project and were completed in 1937. The 84 homesteads had a brick veneer farmhouse and half had an addition of a garage-barn combination. Families would be able to raise its own food and use the profits from selling any surplus to work off debt to the government. These houses sold for an average price of about \$2,687.40 plus interest.

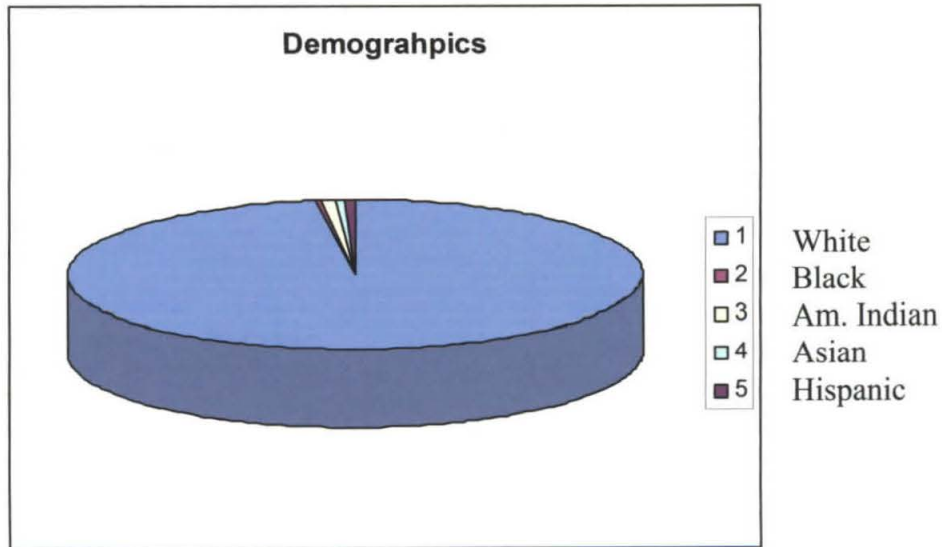


Twenty years later another wave of population growth came to the Town of Herman. They were suburbanites of the 1950's who came from Duluth for its low taxes, country living space and good school district. The Air Force also had a big influence on the growth of the town. The construction of a 105 family housing units on base brought 120 new students to Hermantown school district.

The Town of Herman was then influenced by a more local form of government in 1974. The neighboring city of Duluth announced its intention to annex two-thirds of the township in order to keep its population over the 100,000 mark and retain its first class city status. The town was outraged, because it was all ready to be designated a city. And on February 11, 1975 the Municipal Commission declared that on December 31st of that year the Town of Herman could become the City of Hermantown. As it stands today the population at the last census was at 7,448, and there is no population decrease in sight.

Site Description:

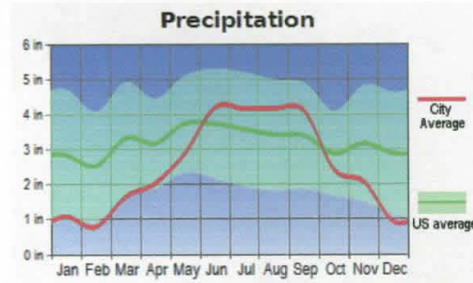
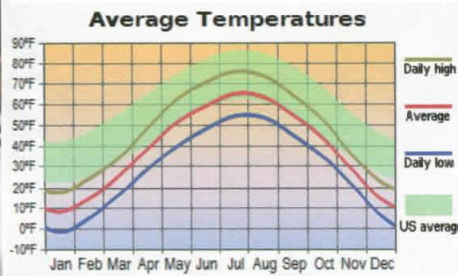
The complex as it stands today is 360,000 sq. ft. The importance of this site is the location within the city limits of Hermantown that is rapidly growing. The population of the town is at 7,440 and the population of its neighboring city Duluth is 86,918. The whole metropolitan population of this area is about 244,000 people. Demographically the city of Hermantown is 97.3% White, .4% Black, .8% American Indian and Alaska Native, .5 % Asian, and .6% Hispanic.



In 1999 the existing football field on the North end of the site saw its final days as the city was proposing to create a new football field behind the high school. As this field stands today it is just an open turf area that occasionally gets used for youth soccer games and pick-up touch football. Fichtner Field is the primary attraction to this complex; it is the full sized baseball field located at the Southwest corner of the site. This field has seen better days and is in need of some renovation.

Climate:

The climate of Hermantown, MN is considered humid continental. The average monthly temperature varies from a minimum in January of 1 degree F to a maximum July temperature of 75 degrees F. The average annual precipitation for the year is about 28 inches with the majority of precipitation falling from May until August.



Site Orientation:

Hermantown is located just west of Duluth in the Northern part of Minnesota. The existing complex named Fichtner Field complex is located by two major roads within the Hermantown city limits. It is located on the corner of Ugstad and Maple Grove Roads. These are major arteries located within Hermantown; Maple Grove Road connects Highway 2 to the major business district of Duluth, MN, and Hermantown High School and Middle School are located on Ugstad Road; just a couple of miles down from the existing complex.

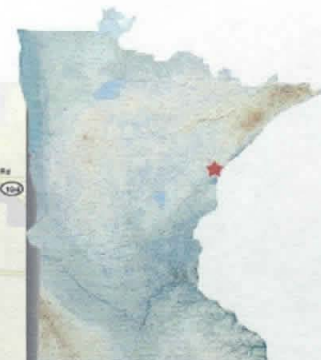
Site Map



City Map of Hermantown



Minnesota



Goals and Objectives:

- To provide a recreational facility that will comply for the comfort level and safety of the users as well as maintaining the standards of the community's new development trend.
- The athletic fields will be adequate to hold larger scale games to generate revenue and tourism to the community of Hermantown.
- The complex will provide a safe environment through proper circulation techniques to limit the number of possible injuries between pedestrians and vehicles.
- The use of native grasses and plants to beautify the site to make it more enjoyable for the everyday user.
- To provide more diverse recreational activities for the citizens of Hermantown.






Project Justification:


Hermantown's recreation facilities are starting to wear down from constant use from the community and are being overwhelmed by the growth of the city. This ideal design project will participate in the discourse about how Hermantown will adapt to the future of the city.

+ Hermantown's Recreational Opportunity:



Hermantown has a great opportunity to have a state of the art recreational facility. The constant use from the community is proof that this community needs a better recreational facility. The town is constantly growing and is just outside of Duluth; many residents are starting to move out of the city and into the surrounding towns. With this being the only recreational facility, the growth of the city is starting to overwhelm the area. The opportunity arises with the creation of better facilities for the kids in the area to help create more activities. By renovating this facility it will create more opportunities to host more events and activities at this site, by hosting more events and activities this will help generate revenue for the community and bring the community closer together.

+ Landscape Design Trend



The opportunity of this recreational facility will provide more activities for the residents of Hermantown as well people visiting from other areas. The addition of a new skate park, larger and newer nature trails and community garden arouses interest along a broad spectrum of human interests. The existing ball fields are adequate enough to be played on however with the growth of the community it will benefit the town by being renovated to keep the facility state of the art. By keeping this area well maintained it will draw more attention and be considered to host larger events such as tournaments that will generate tourism and revenue to the community.



+ My Own Justification

My personal background of this site is my main justification for this project. I grew up playing baseball on this facility and I had a lot of opportunities to visit many other facilities. By seeing other recreational facilities only made me realize how desperate the town is in need of a newly renovated park. I have always been intrigued by sports and have always wanted to design a baseball/recreational complex. This project will be beneficial for me in future job opportunities in designing parks and recreational facilities.



Project Emphasis:

The thesis will examine the necessity that humans have for recreation. A historical comparison with the past will be done to establish familiar threads with life today. The beautification of the site is the main emphasis of the project. In doing this connections throughout the site will create opportunities to beautify the site to make it more appealing to the user. Another emphasis will be the addition of larger concession areas and plazas and the renovation of the athletic fields on the site to generate greater notoriety to the site; hosting tournaments of larger scale games will be easier and will produce revenue and tourism for the city of Hermantown.



Design Emphasis:

In many designs of recreational complex's it seems that they just place the playing fields wherever there is room and the consideration of pedestrian traffic flow is not accounted for. Also the consideration of diverse activities for residents is not looked at. Today the pedestrian movement is a key design element in designing a functional recreational complex as well as providing a wide range of activities to accommodate most people's interests. One complex that I will focus on is Rio Vista Community Park located in Peoria, Arizona. This parks main focus is the addition of sporting and recreational facilities and the addition of passive pedestrian walkways and picnic areas. The following description of Rio Vista Community Park will explain the background and process of this project.



Background-

Situated in a prominent area in central Peoria between the Agua Fria Freeway and the New River Channel, this will be the city's first community park. This 52-acre site will be home to a wide array of parks and recreation facilities, including a 5-plex softball area, a soccer/multi-use field complex, a recreational center with a gymnasium and special events plazas, an urban lake, a skate park, multi-use trails, large and small group armadas, passive picnicking areas, and parking. The park will serve as a primary city activity center and as an example for future Peoria parks that incorporate highly diverse facilities.



GROUP RAMADA AREA

Rio Vista Community Park
<www.oaconsulting.com>

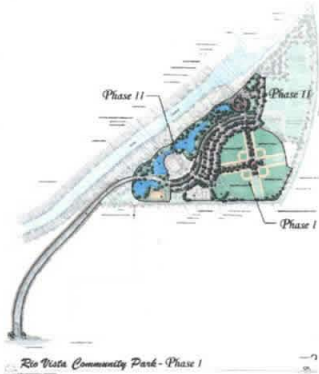
Process-

Key design challenges include: balancing active and passive facilities, meeting intensive sports field needs, providing appropriate buffering between the park and the Loop 101 and between the park and adjacent residential areas, development of a new park entry and main access road adjacent to New River while addressing traffic issues, coordination of improvements with the Flood Control District, and providing sports field lighting that does not impact nearby residents. (Reference: www.oaconsulting.com)

Case Studies:

Case Study #1

Rio Vista Community Park
Peoria, Arizona



Description:

Rio Vista Community Park is a large scale recreational complex with many activities ranging from baseball/softball to skateboarding and plenty of trails for the hiking and biking enthusiasts.

Case Study #2

Colonel Francis J. Beatty Park
Mecklenburg County, NC



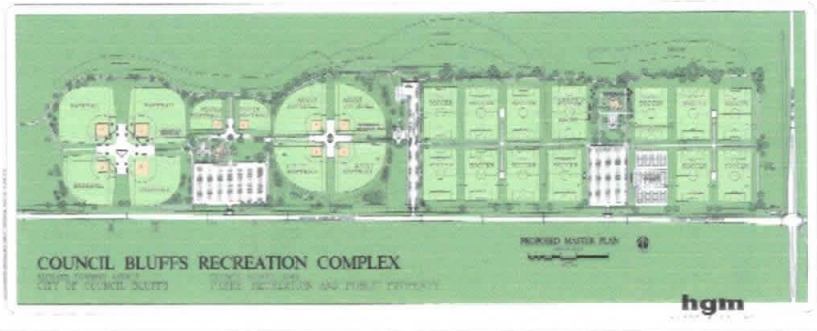
Description:

Colonel Francis J. Beatty Park is a 270 acre park with a man made lake, soccer and softball fields, tennis and volleyball courts, mountain biking trails, hiking and interpretive nature trails, playgrounds, and a park maintenance facility.



Case Study #3

Council Bluffs Recreational Complex
Council Bluffs, Iowa



Description:

This is an 83 acre complex which includes 8 full size soccer fields, 4 adult softball fields, 2 youth/fast pitch softball fields, 4 baseball fields, 2 concession restroom buildings, 1 playground area, 2 meeting rooms and a maintenance facility.

Case Study #4

Fargo Skate Park
Fargo, North Dakota



Description:

This facility is made of formed concrete and contains challenges for the beginner, intermediate, and advanced athletes.



Existing Vegetation:

There are numerous types of trees and grasses that are existing on the site now. There is a collaboration of Silver Maples, Lindens, Ashes, Oaks, Birches, Spruces and Pine trees located in the masses of existing trees on the site. The native grasses that are prominent on the site are an assortment of Indian grass, Switchgrass and Canada Wild Rye. These are a tall dry grass that usually grow near creeks and streams.

- 20'-80' in height.
- Greenish-blue color
- Zone: 3-9



Silver Maple (*Acer sacchari*)



Scots Pine (*Pinus sylvestris*)

- 20'-40' in height
- Blue Green in Color
- Zone: 3-8



Bur Oak (*Quercus macrocarpa*)

- 20'- 40' in height
- Dark Green
- Zone: 2-8



- 15'- 45' in height
- Green leaves and white bark
- Zone: 2-9

Paper Birch (*Betula papyrifera*)



- 15'-60' in height
- Green in color
- Zone: 4-9

Green Ash (*Fraxinus pennsylvanica*)



- 20'- 50' in height
- Yellow to Green in color
- Zone: 3-8

American Linden (*Tilia americana*)





Colorado Spruce (*Picea pungens*)

- 15' -50' in height
- Blue- Green in Color
- Zone: 3-8



Switchgrass (*Panicum virgatum*)

- 6'-8' in height
- Red/Brown in color
- Zone: 2-8



Canada Wild Rye (*Elymus Canadensis*)

- 24"-36" in height
- Green to Brown in color
- Zone: 3-8



Indian grass (*Sorghastrum nutans*)

- 4'-6' in height
- Cream/Tan in color
- Zone: 4-9

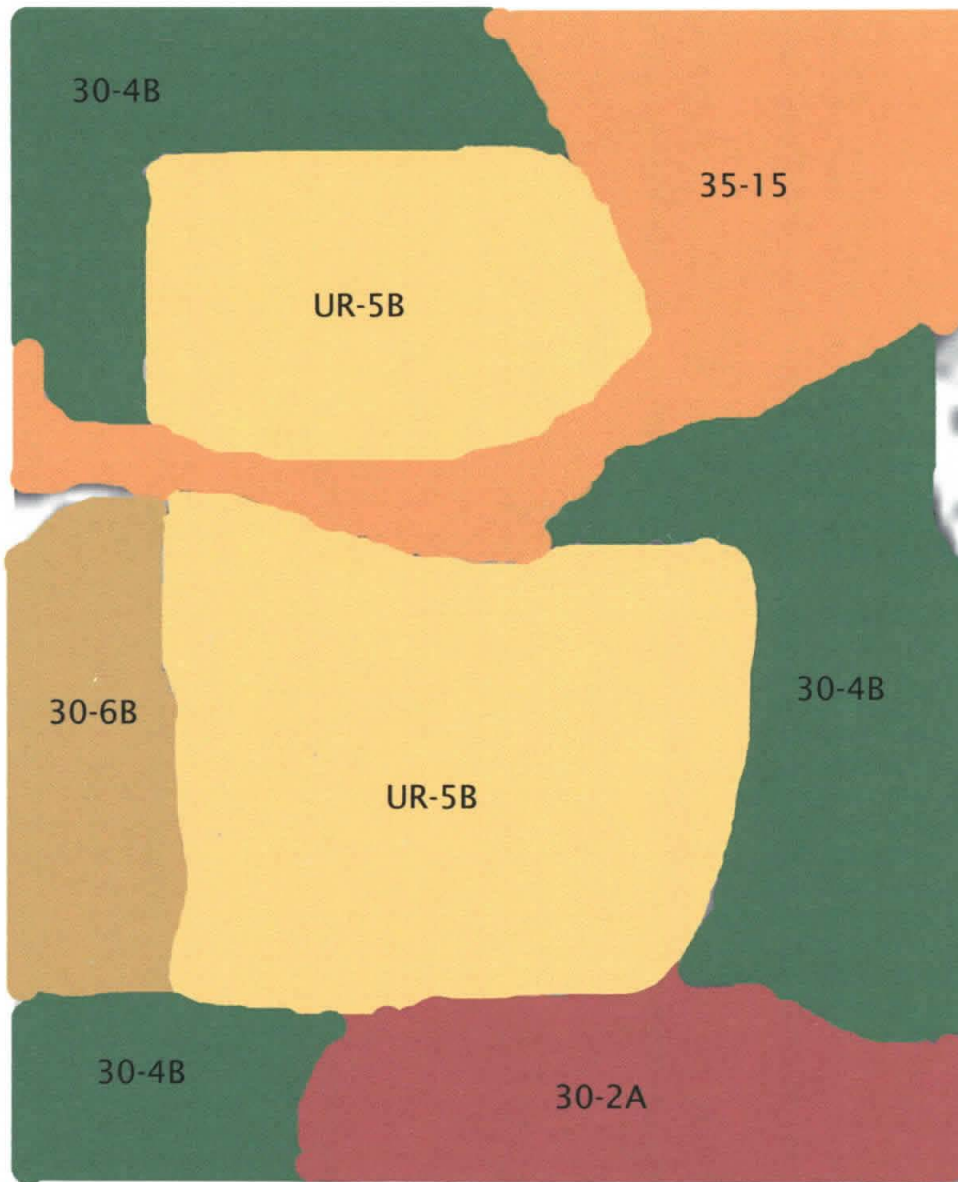


Design Intent:

My design intent for this project was to restore and revitalize a recreational complex that is in desperate need of restoration. This project's main goal was to rehabilitate existing features and to better the functionality of the existing site. The project incorporates the expansion and beautification of the site. This project consists of the renovation of the existing baseball field with the addition of plantings around the site. The addition of a larger concession area with large plazas to accommodate more people will make it an area ideal for hosting tournaments. The renovation of the old football field will be turned into a large open turf area so it can be utilized by youth soccer and youth football games as well as a wide range of outdoor activities. There will be an addition of a new skate park to replace the drab old one to accommodate the increasing popularity of the sport among kids. On this site I also incorporated a large community garden to give the site an added feature to attract people with other interests rather than physical activities. The last item that I designed for this complex is a large discovery playground to entertain younger kids that are brought to this site. Furthermore, the master planning consists of better parking and pathways to make it easier for pedestrians to move around the complex. There will be 250 parking spots to accommodate numerous users for the different activities on the site. The parking lot consists of medians that will give the lot an attractive look but also uses numerous Green Ash trees to shade the parked cars on hot summer days.



Soils:



UR-5B- URBAN LAND-NORMANNA-CANOSIA COMPLEX, 0 TO 8 PERCENT SLOPES

30-4B- NORMANNA-CANOSIA COMPLEX, 0 TO 8 PERCENT SLOPES

30-2A- HERMANTOWN-CANOSIA-GIESE, DEPRESSIONAL COMPLEX, 0 TO 3 PERCENT SLOPES

30-6B- NORMANNA-ALDENLAKE-CANOSIA COMPLEX, 0 TO 8 PERCENT SLOPES

35-15- BOWSTRING AND FLUVAQUENTS LOAMY, 0 TO 2 PERCENT SLOPES FREQUENTLY FLOODED

*Note- All of these soils have been disturbed from the existing ball fields and are not prone to flooding. The only soil that is prone to flooding is 35-15 which is located around the creek.

Site Analysis:

Site Analysis & Inventory



There is an existing pond on the site which is fairly small and could be expanded to make it a more prominent feature on the site. It could be utilized for fishing in the summer and could be turned into a skating rink in the winter.



This is the existing concession area and skate park. The concession area needs a new building as well as a large plaza to accommodate more people that visit the site. The existing skate park is just too small and there are not enough challenges for the beginner skateboarder as well as the advanced. A new skate park will be designed to handle the growth of the popularity of the sport.

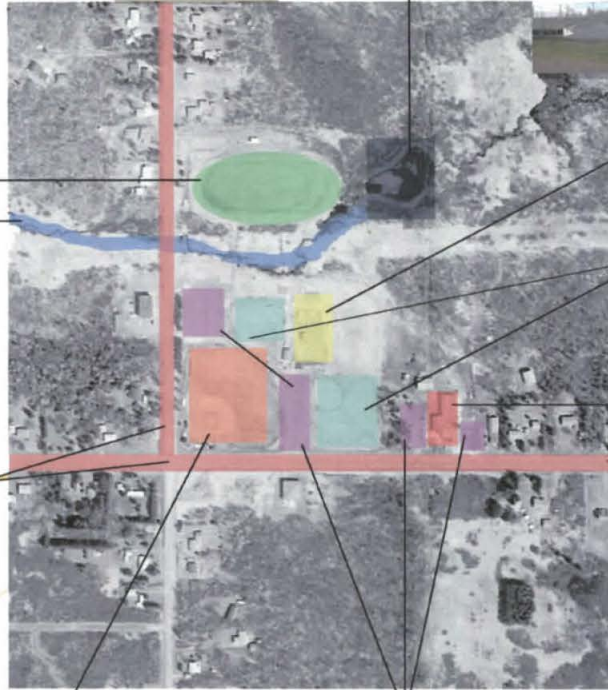


This area is the existing old football field that has an opportunity to turn into open field turf area. With proper maintenance this could be a nice turf area for a variety of outdoor activities.

This is the existing creek that runs through the north part of the site. This creek adds a nice tranquil element to this complex, however could pose a problem for flooding and wet soils.



The road running North and South is Ugstad Road and road running East and West is Maple Grove Road. These are two major roads that run through Hermantown. Maple Grove Road has an approximate average daily traffic of 10,000 to 12,000 cars a day and Ugstad Road sees approximately 7,000 to 8,000 cars a day. (Reference: www.dot.mn.us).



These two fields are the existing softball/little league fields located within the complex. Some renovation needs to be done to host more games and the addition of more bleachers to accommodate more people.

This building is the existing Hermantown City Hall and Public Works building. The city hall and public works building is moving a mile down the street along Maple Grove Rd. to a new building which will be a good opportunity to turn this building into an information building for the complex.

Fichtner Field is the existing baseball field located in the Southwest corner of the recreational complex site. For the most part this field is in good shape; however, there are some things that need improvement such as the fences, dugouts and some other aesthetic components to the field.



The existing parking lots need to be renovated; right now they are large slabs of asphalt with no character. The addition of medians and trees will give these parking lots a good look as well as shading cars in hot summer months.





Opportunities:

Site Accessibility- This site lies on the intersection of two major roads in Hermantown. This makes this site easy to find and is very noticeable from these streets that see around 24,000 cars a day between the two.

Large Site- At approximately 360,000 sq. ft. this site has plenty of room for the addition of gardens, plazas and areas for activities to make this site more state of the art.

Soils- The soils throughout this site are impacted and drain very well which will help it from flooding in massive amounts rain. This site also dries up fast during the spring so people can utilize this site sooner than later.

Habitat- There is a good number of animals that inhabit this area which adds an extra element to the tranquility of the site.

Constraints:

Expense- This project could be costly with the addition of numerous paved trails and plazas, as well the placement of all ready developed trees and shrubs.



Perspectives and Details:



This is a perspective looking south at the existing Fichtner Field. The addition of a path will make it easier to move around the site. And the addition of more trees around the outside of the field will help frame the baseball field. Keeping the grass area near the field open is important; giving people the opportunity to see the playing field while entering the site.

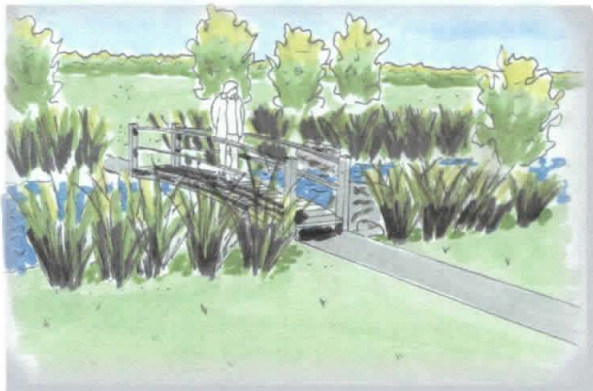
This is a perspective looking North East through the parking connection between the big league field and the little league field. This area was once open for through traffic but the decision to close it off was made to limit the interaction between pedestrians and vehicles.



This is a perspective looking South through the concession plaza. This view shows the character added to the plaza with different paving patterns and the addition of planters giving the plaza new life.



This is an aerial view of the concession plaza. This view shows more character of the plaza as well as the connections to the small baseball field and the transformation from one plaza to another. This plaza has a friendly and inviting appearance and will hopefully encourage people to visit this site over and over again. With the water feature, canopies and tree planters that give the plaza and recreational complex a state of the art look, this will hopefully attract users from all over bringing more tourism to the city of Hermantown.



This is a perspective looking at the bridge crossing over miller creek that runs through the site. This is a nice feature to the site and this perspective shows the nice vegetation and the soothing look that the creek creates.

This is a perspective looking North East through the community garden plaza. This plaza adds a nice feature and pronounced entrance into the community garden. The community garden is a series of paths that runs through planted trees and shrubs to give this complex another feature to attract people to this site.

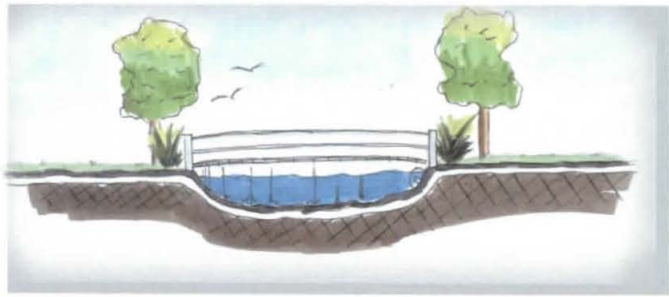




This perspective looking through the discovery garden shows the idea behind giving children a large play area to keep them busy. Children can use their imagination and expand their mental growth by playing with natural materials such as trees and rocks as well as playing on your standard jungle gym to improve their physical growth. This playground will keep kids busy while their big brother or sister is playing sports on the larger fields.



This is an aerial view of the expanded skate park for the complex. This is a formed concrete park and has components that will challenge the beginner as well as the advanced skateboarder.



This section shows the constructed wood bridge that crosses over the creek on the North part of the site.



Final Board #1:

Hermantown Recreational Facility

Hermantown City History

In 1872 August Bohms was granted the first homestead in the Town of Herman. St. Louis County received its first town with the result of 1873. The town was to be built on a new survey connecting Duluth with the East Coast. The town had its first land boom. The land sold for \$250 an acre in 1897, compared to \$1,250 an acre forty years later. The town had a school, a church, and a town hall in an old one room school. In 1918 the growth of the township was set back by the great forest fire of 1918. There was hardly a building left standing, among the buildings that were left were the three two-story houses of Mrs. A. J. Church. The fire broke quickly behind the town, but in 1920 the population was down by 842 people.

The Town of Herman would get another population boost from a new wave of homesteaders. In 1882 the town of Herman was established. The town was then influenced by a more local form of government in 1974. The neighboring city of Duluth announced its intention to annex two-thirds of the township in order to keep its population over the 100,000 mark and attain first class city status. The town was outraged, because it was all ready to be designated a city, and would become the City of Hermantown. As it stands today the population at the last census was at 7,448, and there is no population decrease in sight.

Twenty years later another wave of population growth came to the Town of Herman. They were suburbs of the 1960's and 1970's. The town was then influenced by a more local form of government in 1974. The neighboring city of Duluth announced its intention to annex two-thirds of the township in order to keep its population over the 100,000 mark and attain first class city status. The town was outraged, because it was all ready to be designated a city, and would become the City of Hermantown. As it stands today the population at the last census was at 7,448, and there is no population decrease in sight.

The town of Herman was then influenced by a more local form of government in 1974. The neighboring city of Duluth announced its intention to annex two-thirds of the township in order to keep its population over the 100,000 mark and attain first class city status. The town was outraged, because it was all ready to be designated a city, and would become the City of Hermantown. As it stands today the population at the last census was at 7,448, and there is no population decrease in sight.

Site Description

The complex is a 100-acre site located in the north end of the town of Herman. The site is located within the city limits of Duluth is 86.918. The whole metropolitan population of this area is about 244,000 people. Demographically the city of Duluth is 1.1, 37.3% White, 21.4% Black, 31.8% American Indian and Alaska Native, 4.1, 5.5% Asian, and 51.0% Hispanic.



Existing Football Field



Existing Football Field



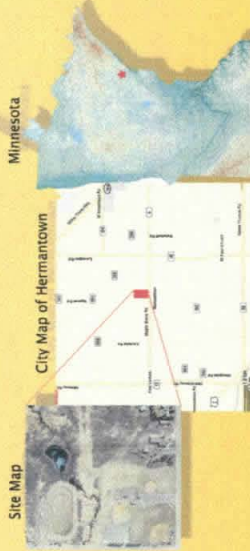
Existing Baseball Field

Goals & Objectives

- To provide a recreational facility that will comply for the comfort level and safety of the users as well as maintaining the standards of the community's new development trend.
- The athletic fields will be adequate to hold larger scale games to generate revenue and tourism to the community of Hermantown.
- The complex will provide a safe environment through proper circulation techniques to limit the number of possible injuries between pedestrians and vehicles.
- The use of native grasses and plants to beautify the site to make it more enjoyable for the everyday user.
- To provide more diverse recreational activities for the citizens of Hermantown.

Site Orientation

Hermantown is located just west of Duluth in the Northern part of Minnesota. The existing complex named Fichtner Field complex, is located by two major roads within the Hermantown city limits. It is located on the corner of Uptown and Maple Grove Roads. These are major arteries located within Hermantown. The Uptown High School and Middle School are located on Uptown Road, just a couple of miles down from the existing complex.



Minnesota

City Map of Hermantown

Site Map

Wildlife

The wild life on the site primarily consists of Canadian Geese that inhabit the wetland located in the North East corner of the site, White Tail Deer and Sharp-Tailed Grouse as well as other small birds and animals.



Canadian Geese



White Tail Deer



Sharp-Tailed Grouse

Historical & Cultural

Project Justification

Hermantown's recreational facilities are starting to show signs of wear from constant use from the community and are being maintained by the citizens of the city. This ideal design project will participate in the discourse about how Hermantown will adapt to the future of the city.

Hermantown's Recreational Opportunity

Hermantown has a great opportunity to have a state of the art recreational facility. The facility is currently located in the north end of the town, just outside of Duluth, many residents are starting to move out of the city and into the surrounding towns. With this being the only facility in the area, it is a great opportunity for the town to create a state of the art facility. By renovating this facility it will create more opportunities to host more events and activities. By renovating this facility it will create more opportunities to host more events and activities. By renovating this facility it will create more opportunities to host more events and activities.

Landscape Design Trend

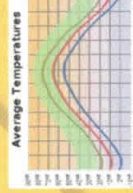
The opportunity of this recreational facility will provide more activities for the residents of Hermantown as well as people visiting from other areas. The addition of a new state park, larger and more nature trails and community garden grows interest along a broad spectrum of recreation. The town of Herman will benefit from the growth of the community by being renovated to keep the facility state of the art. By keeping this area well maintained it will draw more attention and be considered a top larger events such as tournaments that will generate tourism and revenue to the community.

My Own Justification

My personal background of this site is my main justification for this project. I grew up playing baseball on this facility and I had a lot of opportunities to visit many other facilities. By seeing other recreational facilities only made me realize how desperate the town is in need of a state of the art facility. This project will be beneficial for me in future job opportunities in designing parks and recreational facilities.

Climate

The climate of Hermantown, MN is considered humid continental. The average monthly temperature is 49.8 degrees Fahrenheit. The average annual precipitation for the year is about 28 inches with the majority of precipitation falling from May until August.



Average Temperatures for the City of Hermantown



Hermantown Recreational Facility

Concept & Emphasis

RESTORATION AND REVITALIZATION

This thesis project proposes the necessary requirement for expansion and renovation of the existing recreational facilities in Hermantown, MN. The addition of new fields, a new skate park and plantings will solve the requirement mentioned above. The existing facilities are being run down from constant use from the community and the facilities are starting to get overwhelmed by the growth of the city. A problem is starting to arise because of all the new development the city is doing makes the existing recreational facilities seem sub par and outdated. The proposed facility will create more opportunities for the city of Hermantown. It will provide more activities for kids and the renovation of the baseball and softball fields with the addition of a better concession area and new community garden will attract more attention. Opportunities to host tournaments will generate a lot of tourism to the area; which tourism brings in revenue for the city. The main issue will be the increasing the functionality and beautification of the site by creating better pathways and incorporating native plant and grass species. The master planning will also address a more functional parking area for the complex.

Project Emphasis:

The thesis will examine the necessity that humans have for recreation. A historical comparison with the past will be done to establish familiar threads with life today. The beautification of the site is the main emphasis of the project. In doing this connections throughout the site will create opportunities to beautify the site to make it more appealing to the user. Another emphasis will be the addition of larger concession areas and plazas and the renovation of the athletic fields on the site to generate greater notoriety to the site; hosting tournaments of larger scale games will be easier and will produce revenue and tourism for the city of Hermantown.

Design Emphasis:

In many designs of recreational complex's it seems that they just place the playing fields wherever there is room and the consideration of pedestrian traffic flow is not accounted for. Also the consideration of diverse activities for residents is not looked at. Today the pedestrian movement is a key design element in designing a functional recreational complex as well as providing a wide range of activities to accommodate most people's interests. One complex that I will focus on is Rio Vista Community Park located in Peoria, Arizona. This park's main focus is the addition of sporting and recreational facilities and the addition of passive pedestrian walkways and picnic areas. The following description of Rio Vista Community Park will explain the background and process of this project.

Background:

Situated in a prominent area in central Peoria between the Agua Fria Freeway and the New River Channel, this will be the city's first community park. This 52-acre site will be home to a wide array of parks and recreation facilities, including a 5-plex softball area, a soccer/multi-use field complex, a recreational center with a gymnasium and special events plazas, an urban lake, a skate park, multi-use trails, large and small group armadas, passive picnicking areas, and parking. The park will serve as a primary city activity center and as an example for future Peoria parks that incorporate highly diverse facilities.

Process:

Key design challenges include: balancing active and passive facilities, meeting intensive sports field needs, providing appropriate buffering between the park and the Loop 101 and between the park and adjacent residential areas, development of a new park entry and main access road adjacent to New River while addressing traffic issues, coordination of improvements with the Flood Control District, and providing sports field lighting that does not impact nearby residents. (Reference: www.oacconsulting.com)

Case Studies:

Case Study #1

Rio Vista Community Park
Peoria, Arizona



Description:
Rio Vista Community Park is a large scale recreational complex with many activities ranging from baseball/softball to skateboarding and plenty of trails for the hiking and biking enthusiasts.

Case Study #2

Colonel Francis J. Beatty Park
Mecklenburg County, NC



Description:
Colonel Francis J. Beatty Park is a 270 acre park with a man made lake, soccer and softball fields, tennis and volleyball courts, mountain biking trails, hiking and interpretive nature trails, playgrounds, and a park maintenance facility.

Case Study #3

Council Bluffs Recreational Complex
Council Bluffs, Iowa



Description:
This is an 83 acre complex which includes 8 full size soccer fields, 4 adult softball fields, 2 youth/fastpitch softball fields, 4 baseball fields, 2 concession restroom buildings, 1 playground area, 2 meeting rooms and a maintenance facility.

Case Study #4

Fargo Skate Park
Fargo, North Dakota



Description:
This facility is made of formed concrete and contains challenges for the beginner, intermediate, and advanced athletes.

Existing Vegetation:

There are numerous types of trees and grasses that are existing on the site now. There is a collaboration of Silver Maples, Lindens, Ashes, Oaks, Birches, Spruces and Pine trees located in the masses of existing trees on the site. The native grasses that are prominent on the site is an assortment of Indiangrass, Switchgrass and Canada Wild Rye. These are a tall dry grass that usually grow near creeks and streams.



Silver Maple



Scots Pine



Bur Oak



Paper Birch



Green Ash



American Linden



Colorado Spruce



Switchgrass



Indiangrass



Canada Wild Rye

Added Vegetation:

The additional vegetation that I will be adding to the site is an assortment of trees that are all ready existing on the site with the addition of the Spring Snow Crabapples that will be placed throughout the plazas. The addition of numerous wildflowers, roses, and tulips will also be added into the planting beds located throughout the community garden.



Tulips



Roses



Assorted Wildflowers



Spring Snow Crabapple

Board 2 of 6
Nik Thomalla - 5th year LA

Final Board #2:

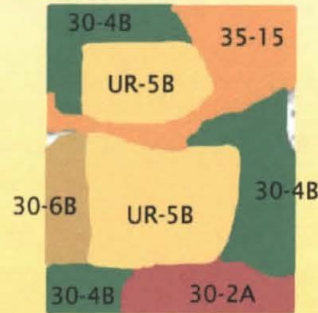


Hermantown Recreational Facility

RESTORATION AND REVITAL

Site Analysis & Inventory

Soils:



- UR-5B- URBAN LAND-NORMANNA-CANOSIA COMPLEX, 0 TO 8 PERCENT SLOPES
- 30-4B- NORMANNA-CANOSIA COMPLEX, 0 TO 8 PERCENT SLOPES
- 30-2A- HERMANTOWN-CANOSIA-GIESE, DEPRESSIONAL COMPLEX, 0 TO 3 PERCENT SLOPES
- 30-6B- NORMANNA-ALDENLAKE-CANOSIA COMPLEX, 0 TO 8 PERCENT SLOPES
- 35-15- BOWSTRING AND FLUVAQUENTS LOAMY, 0 TO 2 PERCENT SLOPES FREQUENTLY FLOODED

*Note- All of these soils have been disturbed from the existing ball fields and are not prone to flooding. The only soil that is prone to flooding is 35-15 which is located around the creek.

Opportunities:

Site Accessibility- This site lies on the intersection of two major roads in Hermantown. This makes this site easy to find and is very noticeable from these streets that see around 24,000 cars a day between the two.

Large Site- At approximately 360,000 sq. ft. this site has plenty of room for the addition of gardens, plazas and areas for activities to make this site more state of the art.

Soils- The soils throughout this site are impacted and drain very well which will help it from flooding in massive amounts rain. This site also dries up fast during the spring so people can utilize this site sooner than later.

Habitat- There is a good number of animals that inhabit this area which adds an extra element to the tranquility of the site.

Constraints:

Expense- This project could be costly with the addition of numerous paved trails and plazas, as well as the placement of all ready developed trees and shrubs.



This area is the existing old football field that has an opportunity to turn into open field turf area. With proper maintenance this could be a nice turf area for a variety of outdoor activities.

This is the existing creek that runs through the north part of the site. This creek adds a nice tranquil element to this complex, however could pose a problem for flooding and wet soils.



The road running North and South is Ugstad Road and road running East and West is Maple Grove Road. These are two major roads that run through Hermantown. Maple Grove Road has an approximate average daily traffic of 10,000 to 12,000 cars a day and Ugstad Road sees approximately 7,000 to 8,000 cars a day. (Reference: www.dot.mn.us)



There is an existing pond on the site which is fairly small and could be expanded to make it a more prominent feature on the site. It could be utilized for fishing in the summer and could be turned into a skating rink in the winter.



This is the existing concession area and skate park. The concession area needs a new building as well as a large plaza to accommodate more people that visit the site. The existing skate park is just too small and there are not enough challenges for the beginner skate boarder as well as the advanced. A new skate park will be designed to handle the growth of the popularity of the sport

These two fields are the existing softball/little league fields located within the complex. Some renovation needs to be done to host more games and the addition of more bleachers to accommodate more people.

This building is the existing Hermantown City Hall and Public Works building. The city hall and public works building is moving a mile down the street along Maple Grove Rd. to a new building which will be a good opportunity to turn this building into an information building for the complex.

Fichtner Field is the existing baseball field located in the Southwest corner of the recreational complex site. For the most part this field is in good shape, however, there are some things that need improvement such as the fences, dugouts and some other aesthetic components to the field.



The existing parking lots need to be renovated, right now they are large slabs of asphalt with no character. The addition of medians and trees will give these parking lots a good look as well as shading cars in hot summer months.





Hermantown Recreational Facility

Master Plan

RESTO

Design Intent

My design intent for this project was to restore and revitalize a recreational complex that is in desperate need of restoration. This project's main goal was to rehabilitate existing features and to better the functionality of the existing site. The project incorporates the expansion and beautification of the site. This project consists of the renovation of the existing baseball field with the addition of plantings around the site. The addition of a larger concession area with large plazas to accommodate more people will make it an area ideal for hosting tournaments. The renovation of the old football field will be turned into a large open turf area so it can be utilized by youth soccer and youth football games as well as a wide range of outdoor activities. The addition of a new skate park, to replace the drab old one to accommodate the increasing popularity of the sport among kids. On this site I also incorporated a large community garden to give the site an added feature to attract people with other interests rather than physical activities. The last item that I designed for this complex is a large discovery playground to entertain younger kids that are brought to this site. Furthermore, the master planning consists of better parking and pathways to make it easier for pedestrians to move around the complex. There will be 250 parking spots to accommodate numerous users for the different activities on the site. The parking lot consists of medians that will give the lot an attractive look but also uses numerous Green Ash trees to shade the parked cars on hot summer days.



Board 4 of 6

Nik Thomalla - 5th year LA

Final Board #4:



Hermantown Recreational Facility

Restoration and Revitalization

Perspectives & Details



1. Perspective looking at Big League Field.

This is a perspective looking south at the existing Fichtner Field. The addition of a path will make it easier to move around the site. And the addition of more trees around the outside of the field will help frame the baseball field. Keeping the grass area near the field open is important; giving people the opportunity to see the playing field while entering the site.



2. Perspective of parking lot connection.

This is a perspective looking North East through the parking connection between the big league field and the little league field. This area was once open for through traffic but the decision to close it off was made to limit the interaction between pedestrians and vehicles.



5. Perspective of bridge expanding over creek.

This is a perspective looking at the bridge crossing over miller creek that runs through the site. This is a nice feature to the site and this perspective shows the nice vegetation and the soothing look that the creek creates.



3. Perspective of concession plaza
This is a perspective looking South through the concession plaza. This view shows the character added to the plaza with different paving patterns and the addition of planters giving the plaza new life.



4. Aerial view of concession plaza.

This is an aerial view of the concession plaza. This view shows more character of the plaza as well as the connections to the small baseball field and the transformation from one plaza to another. This plaza has a friendly and inviting appearance and will hopefully encourage people to visit this site over and over again. With the water feature, canopies and tree planters that give the plaza and recreational complex a state of the art look, this will hopefully attract users from all over bringing more tourism to the city of Hermantown.



8. Aerial of Skate Park.
This is an aerial view of the expanded skate park for the complex. This is a formed concrete park and has components that will challenge the beginner as well as the advanced skateboarder.



7. Perspective looking through the discovery garden.

This perspective looking through the discovery garden shows the idea behind giving children a large play area to keep them busy. Children can use their imagination and expand their mental growth by playing with natural materials such as trees and rocks as well as playing on your standard single gym to improve their physical growth. This playground will keep kids busy while their big brother or sister is playing sports on the larger fields.



6. Perspective of community garden plaza
This is a perspective looking North East through the community garden plaza. This plaza adds a nice feature and pronounced entrance into the community garden. The community garden is a series of paths that runs through planted trees and shrubs to give this complex another feature to attract people to this site



9. Section looking west of bridge and creek. Scale: 1/8" = 1'
This section shows the constructed wood bridge that crosses over the creek on the North part of the site.

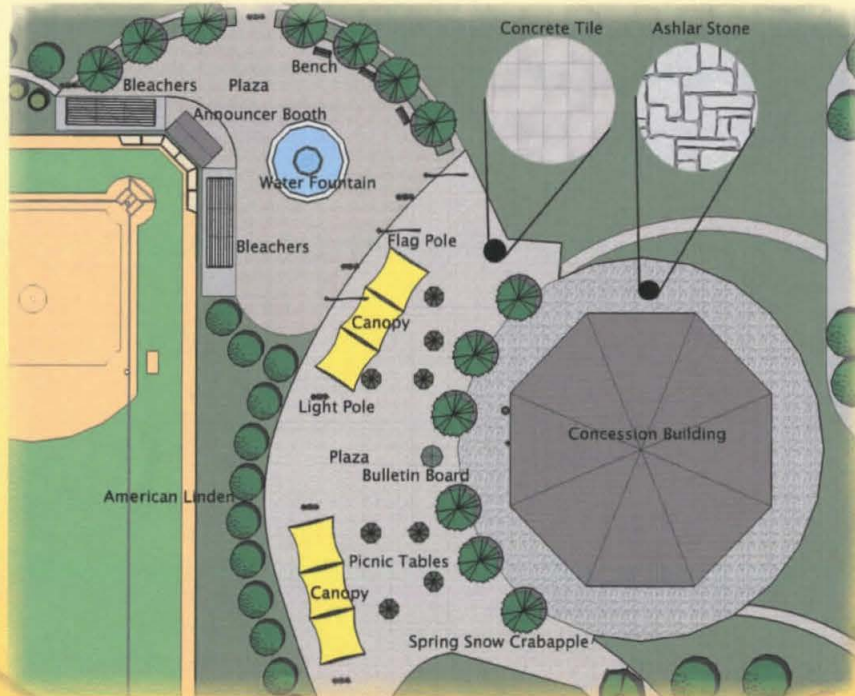
Board 5 of 6

Nik Thomalla - 5th year LA



Hermantown Recreational Facility

Concession Detail



Concession Stand and Announcer Booth
-Salmon and Slate Split Face Concrete Blocks



Concrete Water Fountain



Cedar Wood Bench



Cast Aluminum Street Light
-High Pressure Sodium Metal Halide Bulb



Concrete Picnic Tables
-Concrete Base with Commercial Grade "A" 8oz Poly 600 Thread Count 3M Scotchgard Umbrella



Aluminum Bleachers



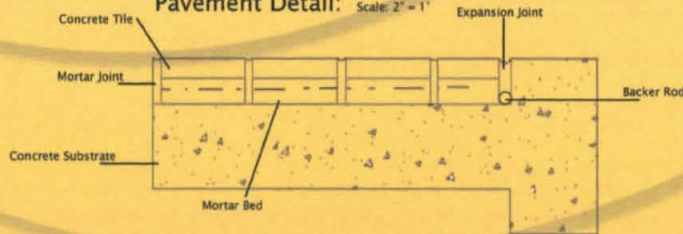
Seasonal Canopy
-Aluminum Frame and Commercial Grade "A" 8oz Poly 600 Thread Count 3M Scotchgard Canopy



Scale: 1" = 32' 1/4" 1/2" 1"

Pavement Detail:

Scale: 2" = 1'



Board 6 of 6

Nik Thomalla -5th year LA

Final Board #6:

Project Details:

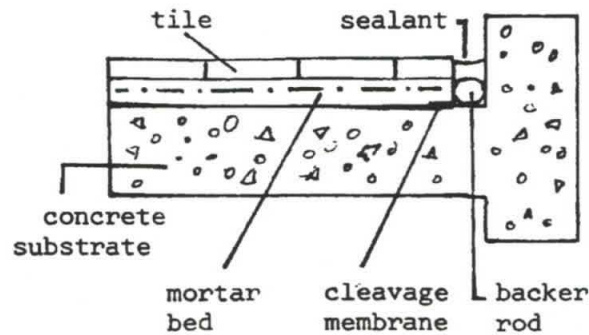
There are many project details within the plaza that are associated with the development of this recreational complex. These details are a large part of the design and need to be incorporated to make this design successful. The following is a list of the required details for the complex:

- Paving
- Lights
- Water Fountain
- Parking
- Concession Stand
- Bleachers
- Picnic Tables
- Benches
- Skate Park

The site is approximately 360,000 square feet. Most of the fields are existing and there is adequate room for the addition of many elements such as the ones I listed above. There will be 250 parking spots to accommodate the users for this site.

Paving:

The paving around most of the site is a standard 1' x 1' concrete tile. This paving pattern is located on all of the paths surrounding the site and within the large concession stand plaza. The other type of paving pattern that will be place on the site is a gray ashlar stone that surrounds the concession stand.



Paving Detail

<http://www.ctioa.org/reports/fr42.html>



Gray Ashlar Stone



1' x 1' concrete tile



Lights:

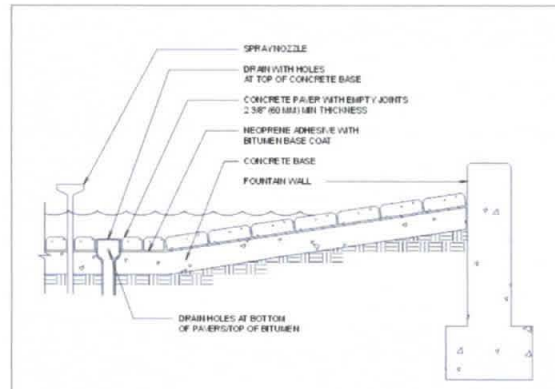
The lights throughout the site are an old fashioned cast aluminum street light. These lights are to be placed throughout the entire recreational complex and primarily throughout the concession stand plaza. They are made of a black cast aluminum with a standard high pressure sodium halide bulb, which are primarily used in street lights.



Cast aluminum street light

Water Fountain:

The water fountain located in the concession stand plaza is a standard concrete water fountain. It is supported by concrete footer and wall with a standard spray nozzle located in the center of the fountain. Water is continually recycled through the drain back to the spray nozzle pump.



Water Fountain

<http://www.bendindustries.com/images/detail/CMLPG-22.gif>



Parking:

The site will include four parking lots; two located near the baseball and softball fields and two located near the information center. There will be 250 parking spots and include handicap spaces for people with disabilities. The parking lots will include medians with trees to give the parking lot a nice aesthetic feel.

Concession Stand:

There will be a new larger concession stand built on the site in will be octagonal in shape to allow many different areas to purchase refreshments. The buildings façade will be made of salmon and slate concrete blocks to give the building a nice look on the outside.

Bleachers:

The bleachers placed throughout the site are a standard silver stationary aluminum bleacher.



Aluminum Bleachers

<http://www.onlinesports.com/pages/I,CP-NB0415.html>

Picnic Tables:

The picnic tables that will be placed around the site are a formed concrete base and the umbrella has an aluminum frame and commercial grade "A" 8 oz poly 600 thread count 3M scotchguard canopy.



Concrete picnic table with umbrella.

Canopy:

The two canopies that are located within in the concession stand are also made of aluminum with a commercial grade "A" 8 oz poly 600 thread count 3M scotchguard canopy. These canopies will only be seasonal and taken down before winter and put up in the spring.



Aluminum canopy.


Benches:

The benches throughout the site will be made of cedar with a cast iron frame. The cedar is a good wood for outdoor benches because it is weather resistant.



Cedar wood bench.

Annotated Bibliography:




DPR Associates. Colonel Francis J. Beatty Park. Apr. 1999.
< <http://www.dprassociates.net/ParksRecreation.htm>>. This website is the homepage for the Colonel Francis J. Beatty Park located in Mecklenburg County, North Carolina. Colonel Francis J. Beatty Park is a 270 acre park with a man made lake, soccer and softball fields, tennis and volleyball courts, mountain biking trails, hiking and interpretive nature trails, playgrounds, and a park maintenance facility.



Fargo Parks and Recreation. Fargo Skate Park. Apr. 2000.
< http://www.fargoparks.com/facilities_skatepark.html>. This is the website of the Fargo Skate Park located in Fargo, North Dakota. This facility is made of formed concrete and contains challenges for the beginner, intermediate, and advanced athletes.

Fichtner, Art. A History of Hermantown. Chalkboard. Vol. 7, No. 53, 4-8. This is a journal that explains the history of Hermantown, Minnesota dating back to 1867.



Hermantown, Minnesota. Jan. 2005 < <http://www.city-data.com/city/Hermantown-Minnesota.html>>. This website is a collection of information on the city of Hermantown, Minnesota. It has information ranging from population, culture, climate and orientation, as well as other information about the city.

HGM Associates. Council Bluffs Recreational Complex. Jun. 2005.
< <http://parksandrec.councilbluffs-ia.gov/complex.asp>>. This is the website of the Council Bluffs Recreational Complex located in Council Bluffs, Iowa. This is an 83 acre complex which includes 8 full size soccer fields, 4 adult softball fields, 2 youth/fastpitch softball fields, 4 baseball fields, 2 concession restroom buildings, 1 playground area, 2 meeting rooms and a maintenance facility.

Klaers, John M. City Planner and Zoning Director. Personal Interview. Feb. 2006. This is an interview I had over the phone with John Klaers the City Planner and Zoning Director of Hermantown, Minnesota. He gave me information about the site for the recreational complex and gave me information on what the city was planning for future development.



Olsson Associates. Rio Vista Community Park. Jun. 2003. http://www.oaconsulting.com/project_indi.asp?ID=80. This website is the home page for Rio Vista Community Park located in Peoria, Arizona. Rio Vista Community Park is a large scale recreational complex with many activities ranging from baseball/softball to skateboarding and plenty of trails for the hiking and biking enthusiasts

Venolia, Carol. Healing Environments. California: Celestial Arts 1988. This book is concentrated on the design of environments that will that brings greater harmony into your life. The primary use of this book was to concentrate on the design well being of children which was the basis of a discovery playground.





Previous Studio Experience:

2nd Year

Fall: International Peace Gardens/ Matt Chambers.

Spring: NDSU Fountain and Main Avenue Bridge/ Dennis Colliton.

3rd Year

Fall: Oriska Arboretum and Chicago Riverfront/ Matt Chambers.

Spring: Rocking Horse Farm Development and Expression of Masonry in the Landscape/ Tim Kennedy.

4th Year

Fall: Urban Design Lowertown Recreational Complex/ Frank Kratky.

Spring: Trucker's Inn Bioremediation and Livelihood of the Land/ Catherine Wiley.



“You know a lot of people go to school for seven years.”
“Yeah, they’re called Doctors.”

I would like to dedicate this project to my family and friends for giving me the support that I needed to make it through these seven years. Thank You.