Integration of a Greenway Corridor in the Village of Jonesville, Michigan
INTEGRATION OF A GREENWAY: A CORRIDOR for the VILLAGE of JONESVILLE, MICHIGAN

A Comprehensive Project
LA 404

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The analysis of a small site within the Village of Jonesville in hopes of revitalization reveals the opportunity to create two extensive corridor systems: A Rails-to-Trails and St. Joseph River greenway. The intersection of the two corridors within the community offers the ideal site for the beginning of a comprehensive regional design. Three areas are identified to become individual parks within the defined greenway boundary for Jonesville: Industrial Park, Recreation Park, and Jonesville Park. The site initially identified for the project, Jonesville Park, now becomes part of a whole as the site specific design is developed.
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To...

...my daughter, Kelsey, who gave me the inspiration and courage...

... my parents, Max and Elaine, who gave me the opportunity and never ending support ...

...my adopted family, the landscape architecture studio of 1997, who gave the will and motivation...

...to give everything within me to succeed.
Background

Along the beginning banks of the St. Joseph river is the quaint village of Jonesville. With a population of just over 2000 residents, this town marks the half way point between Chicago and Detroit along the Sauk Trail, an old Indian road connecting the two cities, now known as US 12. It was because of these two landmarks, the river and the trail, that made area ideal to be established as a trading center. This opportunity was realized in 1828 when Beniah Jones built the first log cabin beside the river to mark the area as an official settlement.

As the migration of settlers continued into the North West territory, Jonesville quickly became a thriving town, complete with four saw mills, a school house, several merchants, and even a hotel for the increasing number of travelers arriving in southern Michigan. It wasn’t long before buildings lined both sides of the main street with businesses immediately filling the vacant spaces. Growth of the town appeared unstoppable when in 1848 two railroad companies, Lake Shore & Michigan and New York Southern, were established. At the current rate of development, it appeared as if the small village would soon become a booming city with the number of opportunities for growth seeming endless.

As with most railroad companies, however, the prosperity and success was able to last for a short time only. The trails were never extended far enough from Jonesville to allow for a large trading area, thus, limiting the market. Plus, the region traversed by the railroad was small enough that it could just as easily be accessed with the automobile, making the railroad obsolete before its time.

Figure 1: View of the St. Joseph River from the intersection of U.S. 12 and the river.

Figure 2: The old railroad station still remains in tact even though the trail is no longer there. There is currently no use within the building or upon the site.
During their short time in operation, the railroads did help to bring more wealth and opportunity into the region. Several influential families settled in this area, all of whom believed Jonesville to be a very distinguished community. They reflected this attitude in the homes they built. Elegant designs and quality construction created some very unique and beautiful places, several of which remain today as a reminder of the pride felt for the community in both the past and the present. This pride was also reflected in the businesses established by these families. Their attention to building a reputation through quality service became a tradition in Jonesville, and that tradition has continued for generations.

Today, several family businesses are still in operation that were established four and even five generations earlier with promise to continue for several more to come.

The closing of the railroad, however, stabilized the growth of Jonesville until only a small rural village remained. Today exists what has been there for the past fifty years: a main street enclosed by tall, narrow buildings and tree lined sidewalks where residents can window shop at the local stores and greet one another with a smile and hello. This character of Jonesville consists of a charm and tranquility that would not be present had the small village grown into the once dreamed of city.

However, a lack of growth has taken its toll on the community. Today’s consumer demands a large selection which has forced businesses to move to larger locations or face the consequences of no business with the limited number of customers. The abandonment of certain spaces along main street. These spaces, not limited to buildings only, have become unsightly areas within the community. These areas of Jonesville need to be addressed and upgraded if the pride exhibited by the founding patrons of Jonesville is to remain strong within the community.
Problem Statement

In order to maintain Jonesville as an inviting rural village, it is necessary to revitalize buildings and open space within the community that has been abandoned. These areas have been allowed to degrade for several years, but this negligence does not make it acceptable. The type of revitalization proposed for the sites needs to be responsive to the existing character, useful and inviting to the residents, and sensitive to the surrounding natural environment.

One highly visible site within Jonesville needing to be revitalized is the old lumber yard site. This site is vital to the success of the community because of its high visibility from U.S. 12 as well as the amount of use it still receives, despite its dilapidated condition. It is used as a staging area for the local parades and as a central activity area for the Frontier Canoe Races, a festival sponsored by the community which has become an annual tradition.

This site is popular not only because of its close proximity to downtown, but also because several unique features to the community converge at this site. These include the railroad and the St. Joseph River. However, these two systems do not start and begin on this site. They are part of two regional corridors which need to be identified and analyzed before they can be designed at a site specific scale. These corridors can be used for more than just context however. Much of the area surrounding these systems has been left undeveloped. The opportunity exists to identify a boundary and integrate a greenway corridor into Jonesville.
Regional Context—
Jonesville

Jonesville is located in Southern Central Michigan. Although it is too far east and west of Lake Michigan and Lake Erie respectively to take advantage of these resources, it is close to both the Indiana and Ohio State lines. This advantage offers a large region of tourists.

The River

The headwaters of the St. Joseph River begin within South Central Michigan in Hillsdale County. From this single water source, the river flow south to Fort Wayne where it converges with the St. Mary and Maumee Rivers and west to Benton Harbor where it empties into Lake Michigan. The portion traveling to the west meanders through Jonesville, which is only five miles from the source. These headwaters create a greenway through the town which to this point has not been extensively developed except for a dam built across the river several years ago to create a power source for mills. The undulating river created after the ponded area is small and very sensitive to disturbance. The large number of sharp bends in the river causes a lot of erosion in unvegetated areas, and there is a high potential for oxbow lakes. The immediate surrounding are saturated for several months of the year and flood during the spring.

The Railroad

The Lake Shore and Michigan Railroad was taken out of service early in the 20th century. Much
of the trail to the south leading out of Jonesville has been overtaken by agriculture, roads and other development. However, a 40 mile stretch of the trail is still distinguishable and, in many places, intact traveling to the north from Jonesville, culminating in Jackson. The rails and ties have been removed at several locations and are overgrown with weeds at others. However, bridges are still over river crossings.

The potential for extensive greenways and corridors is very possible, but a beginning is needed that can initiate these opportunities. Because these features, the river and railroad, intersect in downtown Jonesville, this is the ideal location to initiate the endeavor. The amount of open space offers the opportunity to create a large park like setting that will not only serve as the beginning of the greenway corridor, but also serve the local residence as a great resource for their use. Two overall goals have been established for this project:

1.0. Increase opportunities for residents to become involved and gain pride in their community.

1.1. Provide a public gathering space for community activities and events.

1.2. Increase the knowledge of residents of the historical, cultural, and environmental aspects of their community.

2.0. Increase identity for and within the community of Jonesville.

2.1. Designate and distinguish the spaces of Jonesville that contains unique aspects of the community as a part of regional greenway system.

2.11. St. Joseph River corridor

2.12. Potential Rails-to-Trails corridor

2.2. Designate specific nodes within Jonesville portion of the greenway that will accommodated for the local residents and their needs.
1.0. Increase pedestrian connections through the community.

1.1. Provide convenient access trails through the community that connect different areas of the community.

1.1.1 Residential 1.1.4 Industrial
1.1.2 Commercial 1.1.5 Greenspace
1.1.3 Community

1.2. Provide physical and visual connection between residents and the natural environment.

1.3. Encourage a regional connection by incorporating facilities and initiating standards for a future Rails-to-Trails system.

2.0. Increase the protection of the natural habitat located within the designated greenway.

2.1. Identify, document, and protect the different types of ecology located within and around the site boundaries.

2.1.1 Preservation
2.1.2 Restoration
2.1.3 Conservation

2.2. Identify and take care of sources of pollution on a local and regional level.

3.0. Increase the awareness and knowledge of the residence of the importance, sensitivity, and value of greenspace.

3.1. Designate areas within the greenway corridor specifically for educational purposes
3.2. Provide within designated areas educational resources, facilities, information, and interpretation centers.

4.0. Increase the recreational opportunities within Jonesville.

4.1. Create greater access to the river through boat launches and fishing piers.
4.2. Provide a trail system that is accessible to all residents from several different areas within the community that encourages both active and passive recreation.
4.3. Incorporate the proposed greenway into a regional Rails-to-Trails system.
Boundary Definitions~

In order to give definition to this project, a boundary was defined. The boundaries established for the greenway are based upon three basic existing features. First, roads are used in order to avoid conflict between the pedestrian and vehicle. Because they are very dominant features on today's landscape, they are difficult to ignore and are easily describable. The second feature is the natural systems of the landscape. Changes in the vegetation, topography, and soil type are all indications of a change in the natural environment. Because one main goal is to protect sensitive environments, it is important to include as much of these ecologies within the boundary of the greenway as possible. The final feature used to determine the boundaries includes already established legal boundary lines. The creation of this greenway will give a wonderful resource to the community of Jonesville, but the residents will initially be asked to give a lot in return. Instead of demanding the use of privately owned land, compromising with the residents will initially prove to be more effective in gaining cooperation. By allowing as many residents as possible to voluntarily connect themselves to the site, instead of forcing them through land allocations, the pride and interest will remain.

Assumptions~

The proposed site encompasses several square miles of unused space within Jonesville. However, previous plans may already exist for certain plots within the site. Also included within the boundary are plots of land already being used. Regardless of these future plans or current uses, the assumption will be made that land encompassed within the proposed boundaries for this project will be available to be purchased or used by the community for the development of the park.
Chapter 4—The Greenway

The railroad running through this site is no longer in use. Because of the movement across the country to transform abandoned railroads into trail systems, it will be assumed that a regional Rails-to-Trails project will be extensively developed for this line. Since the railroad has been abandoned, several parcels of land have been reverted to agriculture. All obstacles of designing a continuous trail will be solvable and implemented to create a regional trail system. Because the development of the Rails-to-Trails is a future (and possibly hypothetical) plan, the greenway is designed for the accommodation of the trail, but it is not a major factor in the final design of the site.

Community support is a very important component to the success of a greenway system. It will be assumed that the residents of Jonesville will accept the different aspects associated with this project, including financial support, design acceptance, and maintenance operations. Also, areas identified as necessary connections will be accessible through smaller trails connected to the greenway system. The space for these trails may need to border private property and, at times, pass through large areas of privately owned property. Therefore, it will also be assumed that this encroachment upon private property, to an extent, will be acceptable to the land owners with reimbursement.

Several different businesses and uses have been incorporated on various areas of the site. It will be assumed the complete inclusion of the industrial park and other businesses within the boundary will be readily acceptable to the owners and managers of the individual compa—
nies. These businesses will cooperate among themselves and with the community in helping to create a usable greenway. Some of the uses within the industries may have polluted the immediate and surrounding area leaving the habitat unsafe. It will be assumed that any identified sources will be removed from the site by the community, owners, and the state.

Limitations

The railroad line running through Jonesville has been abandoned for several decades. Although this trail line ran for several miles in either direction, much of the land has been converted into agriculture or has been built on by businesses. Some of the railroad bed is undetectable today. Re-acquiring this land and returning it to a railroad bed/trail will be virtually impossible. A continuous greenway within Jonesville is possible, but a trail linking several cities together will be segmented in several areas if only rail beds can be used. Alternate routes will need to be found.

The environment paralleling the railroad bed within the community is wetlands. During the spring, the greenway may become flooded or water logged. Because this is a needed event in nature, it should not be disturbed, but use of these areas during the flooding period may need to be limited or stopped all together. The facilities and materials used utilized within the greenway in the wet areas will be limited as well in order to avoid contamination of the habitat and unneeded cost for replacement of excessive materials.

Client and User Groups

The client for the project includes the Community Improvement Board and Township Council. These people have a direct and acknowledged interest in the well being of the community and its amenities.
Chapter 4—The Greenway

The residents of Jonesville will be the largest user of the greenway system. Because of the size of the proposed site, there will be several opportunities for different levels of use. Amenities for recreation, both active and passive, will be provided. A portion of the site is currently used for local festivals and as a parade staging ground. With improved conditions and facilities, both of these uses will be much safer and enjoyable to the community. Another specific type of recreation that can be added to the area is for education of users. Because of the unique habitat within the site, several aspects of these habitats can be highlighted along the trail through signs and small outlooks located throughout the greenway.

A second user group would include visitors to Jonesville. There are several different levels of interaction between visitors and the community. The first level are those passing through along the main street, or US 12. Although there is limited contact, there is still a visual impression upon these users. Other visitors to the community may choose to stop within Jonesville. These users would have the opportunity to use this greenway system and possibly learn a little about the community. Future users would be those from the Rails to Trails system. The greenway and shops within Jonesville would become a major destination point that could provide for the needs of this user group.

A final user of this site are the plants and animals that currently inhabit the area. These users must be considered in order to maintain the character that currently exists on much of the site. This user group can be enhanced to provide a better opportunity for continued success of the greenway and the habitat.
Chapter 4 - The Greenway

Review of the Literature

The success of the greenway depends on several factors, one of the most obvious being access. These trails not only have to be available, but also user friendly, user being both pedestrians and the environment. Ashbaugh (P. 11-12, 1965) lists ten general rules to follow when designing new trails. However, additional data has been collected since 1965, generating more specific and updated theories (Flink and Sears p. 189-220, 1993). Guidelines to determine the best general layout of additional trail systems include width, material, slope, and layout for the trail. Levels can range from a pedestrian-oriented trail to a motorized route. Once a level of trail use has been determined, design elements should reflect that user group in order to ensure the success of the trail.

Safety features need to be included within a greenway system (Balshorn p. 33, 1975). This begins by removing “anxieties” from the area such as disorientation because location and destinations have not been adequately marked. Balshorn also points out that planting vegetation along the borders of spaces will create a natural atmosphere while diminishing other problems (p. 56-77). Not only will proper plantings encourage a microclimate, but they will also help delineate spaces by separating conflicting uses. Plants can not eliminate all conflicts between different uses. Dealing with intersections and encounters between vehicles and pedestrians is also a safety issue that has been addressed (Untermann p. 65-66, 1984). Creating a “predictable” situation, or making it obvious to the vehicle where the pedestrian is going, will eliminate a lot of confusion. If the drivers can depend upon the pedestrians to be predictable in their actions, the chances that the pedestrian can depend upon the vehicle to be more cautious increases. This has been accomplished by indicating with signs and boundaries to both the pedestrian and vehicle where each use is allowed and when they are present.

The ecology surrounding the trail and the park is very diverse and sensitive. General data has been collected for this initial phase of the design process. Because these environments are included within the greenway system, techniques on protecting, restoring, and re-establishing lost or endangered habitats was needed (Adams p.71-80, 1994). Trail design around these sensitive areas is also an issue that was addressed. How to avoid selected areas are major questions that were answered through case studies and techniques. When these sensitive areas could not be avoided, construction procedures for specialized trails were assimilated into the data. These special trails help to access the river for fishing and recreating. Special amenities or modifications that were made for these access trails, or walkways was also included. (Flink and Sears p.263-264, 1993)
Getting the community interested, supportive, and involved in the greenway project is very important to the success of the greenway. The type of community involvement will depend upon the various societies and professions that are established within the village. Different techniques are outlined to build public support. (Flink and Sears, p. 18-21, 1993) Establishing committees comprised of local residents to help make decisions concerning the greenway will give the potential users a voice in the design of their area. Conducting public workshops and reviews of the project will not only involve the public, but could also get a great amount of work completed in a short period of time.

This public support also must come in the form of financing the project. Funding is needed from federal, state and local levels. (Rails to Trails Conservancy, p. 32-35, 1990) Several departments within the federal and state levels exist to grant monies toward the allocation of land, trail facilities, and environmental enhancement programs. Local funding can be accomplished in several different ways from private grants to fund raisers. Also, on the local level, volunteering time and knowledge will help reduce costs.

The liability associated with the trail is also a major consideration. Items to consider are users, both invited and trespassing; accessibility; personal injury due to a lack of maintenance; boundary rights; and multi-user conflicts, just to name a few. (Flink and Sears, p. 279-284, 1993) Creating a successful greenway system is accomplished through two main steps: creating a sense of place through the design and maintaining the completed greenway in a condition that is inviting to users. Creating a sense of place is accomplished by accenting the feature or features that are a well-defined part of the site. These features can be a rolling topography, a diversity of environment, or historic landmark. (Rails to Trails Conservancy, p. iii, 1990) Maintaining a quality greenway system is also important to its success. Keeping trails and open spaces clear of branches and litter must be executed while maintaining a natural appearance. A manicured landscape will nullify the use of the greenway as a naturalized pedestrian area, but clear access is needed for the comfort of the users.

Several different themes can be incorporated in the design of the greenway: history, education, recreation, etc. Because this site is a distinct part within Jonesville, there is a local historical significance, and stories concerned with the community will be retold through icons and relics once found or produced in Jonesville. (Hutchinson and James, 1978) Different educational resources located along the trail such as environment delineations and plant identification will be synthesized into one general overview area of what specific features will be found throughout the greenway and within the wetlands area.
Inventory

The context of the greenway is very diverse. There are several residential neighborhoods including the historical neighborhood of Jonesville, two commercial districts, an industrial park, several large highways, recreational facilities, and sources of pollution. Because of the diversity of surrounding environments, a large variety and number of users will be exposed to and have the opportunity to utilize the greenway. This will help to ensure its success.

The site itself is approximately one mile long and a quarter of a mile wide. The northern and southern boundaries are determined by two existing roads, US 12 and Moore Road. These are used mainly as a logical stopping point for this portion of the project, but the possibility of expansion to the north and south is very feasible. A similar revitalization project has been proposed beginning at Moore Road (south boundary) and continuing to the south.

The eastern boundary is being determined by using legal lot lines and natural features of the site in order to include the major portion of the flood plain within the boundary line. The western boundary of the proposed site is being determined using a combination of the railroad property line, other legal line limits, and roads. Its establishment is to include as much of the remaining open space as possible. Because of the scattered arrangement of several of the homes and buildings located along the western portion of the site, many of these privately owned plots of land are being integrated into the greenway, including the majority of Jonesville's industrial park. At least seven different industries are completely encompassed or in direct connection to the proposed greenway. This is being done for several reasons. First, these industries segment a large section of open space that has been degraded and abandoned by the railroad. If the properties occupied by these businesses are not included within the boundary, several narrow corridors will
be formed creating several linear trails instead of a park like setting. Including the companies helps to create a cohesive space, offers direct contact and involvement between the greenway and the workers, and cooperation between the owners and the community in helping to identify pollution sources that can be eliminated.

Several types of habitats currently exist within the boundary. These are a result of both natural processes and the disturbance of the land. They include open grassland, forests, wetlands, and a river. The sensitivity and conditions of these habitats are very diverse. Other water features found on the site besides the St. Joseph River include small streams formed from the manipulation of the landscape. Several ditches were dug to power mills when Jonesville was first being established. Although the mills are no longer used today, the ditches now support small streams. The river was also dammed several years ago to be used by the mills. This created a large pond and wetland area. For the development of the Walmart plaza, retention ponds dredged a stabilized grassland area.

Analysis

The largest habitat found in the greenway is the land surrounding and including the river. Much of this area contains wetland vegetation and floods on an annual basis. This environment is susceptible to disturbance because of the sensitivity of shallow rooted vegetation, the habitat it provides to hundreds of wildlife species, and the erodibility of soils because of the high water content. Some of the area has been identified as a wetland preserve, therefore most types of development are not acceptable by law. Development in non-
designated wetland areas has been limited to minimal use as well for this project. It is important to retain the natural characteristics and quality already found in the area. Carefully sited access trails and boardwalks could be added in order to provide access through the site.

The grassland environments includes areas that were previously damaged or disturbed, but have stabilized since being abandoned. The vegetation is of little value other than as a stabilizer. Returning these areas to a more natural state with a larger diversity of plant and animal species will produce a healthier habitat. Much of the soil, listed as Houghton Muck (see Appendix A) for the entire greenway, has become highly compacted through years of disturbance and are naturally of poor quality for most uses. Before a diversified habitat can be reestablished, treatment to the soils will need to be done through plantings, possible drainage, or mechanical and chemical manipulation of the soil. Some of these areas can not support any plant or animal species because of the high level of disturbance that in many cases is still occurring. These areas would be prime spaces for high use areas as long as the design incorporates amenities to stabilize the soils and other features of the specific sites.

The final environment found within the proposed greenway includes areas that are stable in terms of erosion control and vegetation establishment, and they contain a large variety of plant and animal species. These sites can be designed to include several different uses and development without causing extreme stress upon the surrounding ecology. At closer analysis, it may become apparent that improvements can be made to enhance the habitat, or a particular endangered species is found here, but these areas are ecologically healthy and can withstand a limited amount of development.
The quality of the water and the immediate habitat of these water features is poor (Seiwart) (see Appendix B). Located close to the natural ponds is an old gravel pit/junk yard from the 1950’s. Buried within the hole are batteries, paint cans and other hazardous toxins to the environment. The amount of pollution from this source is unknown, but further study needs to be done. The dredged ponds are also poor in quality. The water from the parking lot at the Wal-Mart plaza flows directly into the ponds taking with it pollution and inorganic substances into the pond. Although this is the intended purpose for these retention areas, the lack of vegetation between the parking area and the ponds prevents the water from slowing down to drop out toxins or possibly be infiltrated.

Recreational facilities exist upon the site, as well. Three baseball and softball diamonds were build along the river and dammed pond almost a decade ago. Since that time, the fields have not been maintained, but they are still usable. Much of the land surrounding the diamonds remains as open space because of the spring flooding. Because the diamonds are in close proximity to the industrial park, there is an excellent opportunity to utilize these open areas for additional recreational fields and programs. On the other side of the river is the golf course. Although it is not included within the boundary for monetary and ownership reasons, it is an important element along the proposed greenway. Fertilizers and chemicals used on the lawns runoff and seep into the river. Miscalculation of the amount or type of lawn treatments can be
very detrimental to the wildlife found within and along the river and pond. One advantage of the
golf course is the location. It parallels a very sensitive and undulating portion of the river. This
privately owned buffer will help to discourage unplanned use within this area of the floodplain.

The site, as a whole, traverses the town of Jonesville. From this space, there is immediate
access to several different types of land uses including residential neighborhoods, businesses,
schools, other green spaces, and industrial plants. The proximity between these land uses and
thegreenway system will be beneficial for the residents by providing an alternative to driving.
The space can also be utilized for recreation of individual and group activities. The unique
proximity of the river is also an amenity that is advantageous to the site. By carefully utilizing
the river and the surrounding environment, educational resources, beautiful views, and stable
habitats will become a major amenity to the greenway corridor. Additional connections will be
possible in the future with the establishment of a Rails-to-Trails. The elements for this regional
connection are already in place, and the restoration of the rail line into a trail will reconnect
communities throughout southern Michigan.

Concepts

*Industrial Park*

The only existing features surrounding the various industrial factories are open grassland,
retention ponds, and compacted soils. These are all separate items in a patchwork of buildings
alternated by open space. There is no cohesiveness tying the separate areas together. By imple-
menting a comprehensive plan and revegetation program, the open space can become a progress-
ion of different environments.

There are two main spaces within the area that are encompassed by different industries.
These areas and the ponds would become the focal points and major activity areas of the site with
transition between the spaces. The use of large shade trees, understory, and ground cover at differ-
ent levels of density would create a transition from open space to lightly shaded to heavily shaded
areas. These different environments will allow for several uses upon this site. Screening of the
adjacent road and buildings will visually enclose the area while pedestrian paths will physically
make the connections.
Concept 1—Industrial Park

Figure 22. The Industrial Park concept includes connection through the site to Walmart's south west corner, two large picnic areas to be used by the shop workers and re-vegetation of the site. Re-vegetation will help eliminate erosion around the retention ponds and provide a more diverse habitat.
Located across the road from the Industrial Park Site, the Recreational Park contains many more existing features, including softball and baseball diamonds, river/pond access, parking and restroom facilities, and electricity. The existing features only encompass a third of the available space of the site. The remaining area was left for future development. For this proposal, that additional development will include locker rooms, a playground, roller hockey courts, and a naturalized jogging trail. Currently the park is in private ownership, but when incorporated into the greenway, it would be opened to the public with special consideration given to workers within the industrial park. Because of the close proximity, various leagues and programs could be sponsored by the different companies and incentives given to employees and their families who participate.

Figure 24. Recreation Park would be connected to the other side of the river across the dam as well as the industrial park and Railto-Trails. Several amenities and facilities are located in this central area to accommodate these different users.
Jonesville Park

Located directly in the center of the downtown, Jonesville Park is a highly visible area to both residents and visitors to Jonesville. The site has both environmental and historical significance. With the St. Joseph river as the third boundary to the triangular shaped park, the outer perimeter is surrounded with a designated wetland, with physical and visual access available to the river. Historically, this is the site where the first log cabin was erected by Beniah Jones in 1828. Although nothing remains of the cabin and the site is not designated as historically significant, it is a very important event in history to the residents of Jonesville.

The site is currently used various times of the year for community events and parades. Although it is a very wet and inconvenient space for the staging of a parade, it still remains the most popular area to convene. This is because of the convenience of location and the amount of available open space. What is needed is the enhancement of this site to accommodate not only these existing annual events, but also other events that can take place here with the addition of more facilities. An open air shelter will become a stage for outdoor concerts or community gatherings. Revegetation of the site with overhead canopy and screening material will create small pocket parks for picnicking and other passive recreation. And the improved access to the river and greenway will be available as the space becomes developed into a park instead of an abandoned parking lot. This concept will be expanded upon later in this book.

Master Plan

The overall plan will include not only the above designed spaces but also educational nodes and pedestrian circulation. Educational nodes will be in areas of high interest and habitat. These areas will be interactive while still maintaining the safety of the surroundings. Board-
walks, signs, and interpretive studies will all be combined to educate the users of the park about their surroundings. Trails through wetlands, forests and open areas will not only provide circulation between places, but also provide an educational opportunity to habitats many people are never able to see up close.

Circulation is a very important aspect to the success of the greenway. Convenient connections with trails between the different area of the community are necessary in order to allow residents to use the corridor on a daily basis. Trail heads are located in each neighborhood within the community, all of which are the beginnings of trails leading to commercial districts, industrial factories, focal spaces within the greenway, and community spaces. While allowing pedestrian circulation for the residents of Jonesville to their community, the trails will also be reconnecting the users to nature.

Figure 26. Master Plan of Jonesville Corridor Greenway showing the different recreational parks, educational nodes, and circulation patterns.

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The Integration of a Greenway Corridor for the Village of Jonesville, Michigan  pg. 21.
Jonesville Park

Goals and Objectives:

1.0. Decrease the amount of substandard areas within the community by restoring and utilizing the abandoned parking lot located in the center of downtown Jonesville.

1.1. Recognize the different events that currently take place on this site and accommodate for their needs.

1.1.1. Electrical outlets
1.1.2. River access: pedestrian and canoe
1.1.3. Large staging area of public presentation, display, and pedestrian circulation.

1.1.4. Provide for a safe crossing of U.S. 12.

1.2. Increase the potential for use upon this site in addition to the current events.

1.2.1. Provide visual connection to the greenway from U.S. 12.
1.2.2. Design space designated for certain events in order to accommodate several uses.
1.2.3. Provide an entrance and transition into the entire greenway.

1.3. Increase the knowledge of the community of the importance of the site in terms of the historical significance.

1.3.1. Indian influence
1.3.2. First log cabin built upon this site
1.3.3. Railroad
Assumptions

The site is currently used for several community events. These traditions within Jonesville are important to the community and should be considered in the design of the site. It will be assumed that these events will continue to take place upon this site and the addition of amenities will enhance not only these events, but the use of the park throughout the year.

The building that is currently on the site is the location of two businesses. Because of the degradation of the building caused by flooding of the site, it is necessary to remove the structure. It will be assumed that these businesses will be able to relocate to locations within the downtown.

Limitations

The wetland found upon the site is protected by law, so removal or excessive disturbance of the portion of the site is not an option. What is there must stay there and be protected from excessive pollution or invasive plant species.

The topography of the site allow for a large portion to be flooded for several weeks during the spring. Because this is part of a natural system, the site needs to be designed and used to accommodate the flooding. This includes limiting the amount of unnatural materials placed within the potential flood area, using waterproof electrical wiring and outlets, and not using certain portions of the site during flooding.

Inventory

The boundaries for Jonesville Park are a collaboration of the three criteria listed for the greenway. The triangular shaped space is enclosed to the north by US 12, the west with the railroad bed, and along the south east border is the St. Joseph River. These three boundaries are very distinct upon the landscape and are important amenities to this space. However, beyond the boundaries, there is not much available upon the site. The remains of the lumberyard include the old office, a dark brown wooden building occupying

Figure 27. The railroad bed intersects with the river just south of Jonesville Park, marking one corner of the site. The topographical change is approximately four feet, but flooding does still occur during extremely wet seasons.
approximately 2500 square feet. It currently is the location of a horse and tack shop and an insurance company. The east side of the structure within the flood plain of the St. Joseph River and annually has water up to and around the foundation. The only other remnant of the lumberyard is a cement slab covering 6000 square feet of the site. The slab is cracked in several places and being eroded away along the edge. However it is one of the stabilizers of the soil on this portion of the site.

The context of the site is quite dynamic. Along the northern boundary is the new lumberyard, the fire station, and the remnants of the old trail depot. A long parcel of land extends from US.12 to the north about 500 feet. This area is ideal for a parking area for the park but will need to be addressed with a future stage of this design project. Along the west boundary is the backside of the grocery store and its parking lot, as well as an apartment building. On the opposite side of the river is a large floodplain that is forested. No residences are visible from the site, but a portion of the downtown can be seen. Adjacent to the highway and across the river is a new video rental store, the parking lot for which drains directly into the river.

The remainder of the site is comprised of compacted soils, gravel drives, grasslands, and wetlands. The boundary along the river and railroad bed is designated wetland varying from 12 to 40 feet in width. The wetland contains several understory species such as red stem dogwood, ferns, reeds, and cattails. There are very few deciduous trees remaining on the site. There are a few swamp white oaks located along the river, but not large stands begin until the southern most point of the site where the river intersects the railroad. Open grassland begins when the wetlands stop. This habitat encom-
passes approximately 85 percent of the site with different species of grasses, queen anne's lace and other weedy species. The remainder of the site is covered with compacted soil and gravel. No vegetation is able to grow within this area because of the constant disturbance by vehicles and erosion.

As a whole there is little topography upon the site. There is an approximately 3 foot rise in an 8 to 10 foot span from the site up to the road. There is another 3 to 4 foot berm that makes up the railroad bed which keeps it from flooding when the wetlands contain large amounts of water. Water drains toward the river across the site. As mentioned earlier, flooding usually occurs along the for two weeks of the year. This space is in conflict with the high use areas of the site which are located along the road and the river. The uses include driving and parking vehicles for the two businesses located in the store. This conflict is detrimental to both the natural system and the usability of the site.

![Figure 30. A view of the site shows the building and concrete slab. The vegetation on the portion of the site is scarce because of the compacted gravel and amount of continuous driving upon the area.](image)

**Analysis**

The condition of the vegetation found upon this site is not at its potential. The historical vegetation for this area (in the floodplain of the river) includes several species of deciduous trees, dogwoods, sedges, and other understory plants (Hillsdale County Soil Survey, 1939). Because of the disturbance that has taken place to the soil and vegetation, several species are unable to revegetate with the existing conditions. Establishing new species of vegetation is crucial to making it a park setting suitable to the context of the village and revitalizing the soil.

The site will become a gateway for several different events. On a larger scale, it is the
gateway when entering the Village of Jonesville. It is the transition between the gas stations and residences into the village stores lining the street. It is the first and last impression you receive of Jonesville as a community. The site is also a gateway for the greenway corridor and possible Rails-to-Trails. These users will be continuing through the site, but it creates another transition from the built environment to the natural. The final gateway is to the park itself. This happens at both ends of the park along US 12. The current pedestrian flow is along the sidewalk parallel to the highway with little separating the pedestrian from the vehicle.

Views to and from the site are very important. Because this is such a large open area, all parts of the site are visible. For the most part, looking onto the site is a very uninteresting experience. Because of the location of the building, it is not possible to see from the highway the only attractive amenity, the river. The rest of the site usually has for sale cars and trucks parked there, in addition to the overgrown weeds, cement slab, and gravel drive. Looking out of the site is a different experience. It is only possible to look at or across the river at certain spots. These selected views make the view more interesting. Across the river remains a well established wetland forest with a lot of color and beauty during the entire year. Along the western boundary is the view of the grocery store delivery access and old apartment buildings. These views are visible only from the railroad bed because the wetland vegetation screens it from the rest of the site, especially when the vegetation is in bloom. Looking north, one sees the lumberyard and firebarn, two square pole barn style buildings. There are select views to and from the site that are beautiful at certain times of the year, but for the most part, there a very few views worth preserving or addressing.

Figure 31. This section of the railroad marks the boundary of the site, as well as the transition from the gas stations and grocery stores to the left and leads into historic Jonesville.

Figure 32. The best views from the site are those facing across the river. The wetland vegetation provides a beautiful scene for the entire year with spring flowers, fall color, and snow covered branches.
Chapter 5—Jonesville Park

Concepts

Focal Point

The focal point concept addresses the need for a central gathering space for community events. In addition there are a variety of other spaces including a high use area along the river and a secluded area screened visually by vegetation. The path systems connects the street to both the river and the railroad through the park, intersecting at the focal point. The revegetation of the site uses native species which would help keep pedestrians out of the wetlands area.

Natural Space

The natural concept makes the majority of the site secluded from the road and the rest of the site. Two separate spaces are created with vegetation, one along the river and the second bordering the wetlands. Circulation is simple with a pedestrian path diagonally intersecting the site and a vehicular access path leading to the river. There is no focus to the site and the transition between the built and natural environments is very abrupt.

Formal

The formal concept involves quadrilateral symmetry created by the circulation. A focal, high use space is found in the center of the site with secondary space surrounding it. The revegetation of the site creates a secluded space along the river, however views from the road of the river are screened.
Comprehensive Site Plan

The final design is a collaboration of all three concepts. The overall scheme is a transition from the urban to the natural. Along the road is a large open grassy area to allow for views into the site, short term parking for parades, and vendors during community festivals. The entrances and upper walk are able to accommodate vehicular traffic, but will primarily serve pedestrian circulation. A secondary trail system is provided in the lower, or natural, portion of the site. These are for pedestrian circulation only and connect the river to the railroad.

Three types of spaces are incorporated. The focal area is comprised of a gazebo and flagstone plaza for large meetings or gatherings. A high use space is located along the river. Mainly for recreation and river access, this space will remain clear of a lot of vegetation. Two secluded spaces have been created through revegetation of the site. They are screened from the road and the high use space. But offer framed views of the focal point and the river.

Two river overlooks have been provided. One at the eastern entry into the site. This overlook is elevated above the river level and is not near the water. A second overlook located towards the back of the site. It is a boardwalk extended over the river to allow for fishing or relaxing.

Figure 34. The overall masterplan for Jonesville Park.
All of the wetland vegetation has been protected with the addition of native species. (See Appendix C). To keep users away from these sensitive areas, shrubs and evergreens have been used along the wetland boundary to dissuade users from entering. Larger overstory trees and ornamental trees have been used between the spaces and the road in order to allow visual contact and safety.

The entrance into the west potion of the park marks the intersection of the park and Railroad trail. This area will contain a sign designating the area as Jonesville and a kiosk with directional information and announcements for users.
Conclusion

The final outcome of this project is the establishment of the boundaries of the Jonesville Greenway Corridor. By locating boundaries and master planning of this section of the floodplain and surrounding open space of the St. Joseph River corridor, we will retain a resource that is vital to the long term success of all communities: usable green space. The plan shows the considerations that have been incorporated into the greenway. First, the establishment of the Rails-to-Trails has been accommodated, but does not dominate the plan. Second, passive and active recreational facilities have been provided and improved. Third, educational facilities concerning the environment, ecological history, and cultural history of the greenway. Most importantly, pedestrian connections have been provided within the community, adding a new layer of circulation through the village.

Several areas within the greenway have been diagramed as important spaces. All of these areas will eventually need to be more carefully analyzed and designed to a level of detail. For this initial stage in the process, it is important to gain community involvement and interest. The development of the most visible and used site to the community, the old lumber yard, will accomplish several client goals. First, there will be an increase in the awareness of the community of the importance of the greenway. Second, the improvements to this small site will be well used by the community. And last, the beginning stage for the development of an invaluable resource for Jonesville will be underway.
# Appendix A

## Detailed Water Quality Report

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<td>Rain</td>
</tr>
<tr>
<td>Observed Cloud Cover:</td>
<td>Overcast</td>
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</table>
Appendix B
Soil Characteristics: Houghton Series

Description: Very poorly drained soils formed in herbaceous organic deposits in bogs and other depressional areas within outwash plains, lake plains, till plains and moraines. The surface layer is black muck 9 inches thick, the underlying layers are black and dark reddish brown muck. Slopes are 0-2 percent. Most of these soils are drained and used for cropland.

Texture: Muck, Peat
Permeability: 0.2-0.6 inches /hour
pH: 4.5-7.8
Organic Matter: 70 percent
High Water Table: September-June
Corrosivity
Concrete: Moderate
Steel: High
Ponding: Severe
Frost Action: High
Erosion Hazard: Slight
Equipment Hazard: Severe
Seedling Mortality: Severe
Plant Competition: Severe
# Appendix C

## Native Plant Species

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<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
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<td><strong>Deciduous Trees</strong></td>
<td></td>
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<tr>
<td><em>Acer saccharinum</em></td>
<td>silver maple</td>
</tr>
<tr>
<td><em>Acer Rubrum</em></td>
<td>red maple</td>
</tr>
<tr>
<td><em>Quercus palustris</em></td>
<td>pin oak</td>
</tr>
<tr>
<td><em>Quercus bicolor</em></td>
<td>swamp white oak</td>
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<tr>
<td><em>Platanus occidentalis</em></td>
<td>sycamore</td>
</tr>
<tr>
<td><em>Fraxinus americana</em></td>
<td>white ash</td>
</tr>
<tr>
<td><em>Populus</em></td>
<td>poplar</td>
</tr>
<tr>
<td><strong>Evergreen Trees</strong></td>
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<tr>
<td><em>Picea abies</em></td>
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<tr>
<td><em>Pinus strobus</em></td>
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<td><em>Tsuga canadensis</em></td>
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<td><strong>Ornamental Trees</strong></td>
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<td>willow</td>
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Legend

Habitat Type
- Wetlands/Preservation
- Restoration
- Conservation
- Possible Connections
- Opportunities
- Constraints

Integration of a Greenway Corridor for the Village of Jonesville

Corridor Analysis

North
Scale: 1" = 200' 0"
Concept #1: Jonesville Park

Jonesville Park is an intersection between the village and the corridor. The design of the park and function within the site are two main goals of the design.

Legend
- Connections
- Site Concept Boundaries
- Park Sites
- Educational Node Sites

Integration of a Greenway Corridor for the Village of Jonesville

Corridor Concepts
Integration of a Greenway Corridor for the Village of Jonesville

Water Quality
Sampling Date: 12/11/90
Alkalinity: 7.30 ppm
Chloride: 37 ppm
COD: 1.1 ppm
Hardness: 474 ppm
Manganese: 1.6 ppm
pH: 7.3

Soil: Houghton Muck
Water: 0.9%
Humus: Very Poor
Organic Matter: 7.0%
pH: 4.5-7.0
Feasibility: 1-2 of 5 on a scale of 1-5
Potential Risk: High

Legend
Connections
Opportunities
Constraints

Existing Features
The common site and soil utility area belonging to the landowner are highly quality placed and in need of repair. The process of floating the water treatment is in place and the characteristics of the soil hierarchy includes both of these elements. The objective is currently occupied by two other buildings, but the specific site is not to be considered as a site.

Scale: 1" = 40' 0"
Concept #1: Focal Point

The "focal point" concept addresses the need for a central gathering space for community events. In addition, there are a variety of other spaces. A main activity space is located along the river to take advantage of the meandering shape and the water. A more secluded recreational space is centered with the re-vegetation of the site. This area is screened from the road to make it only physically and conceptually accessible.

Integration of a Greenway Corridor for the Village of Jonesville

Legend
- Circulation
- Vegetation
- Spaces
- Secluded area
- High Use Area
- Focal Point

Scale: 1" = 40' 0"

North
The Inspiration

The inventory and analysis of the views and amenities of the area set the basis for the location and uses of Jonesville Park. The amenities are of the space, however, are unique to the community and are connected to the Village of Jonesville. The depth of the downtown bound park buildings remain as the focal point.

Integrating the landscape, the park and the community. The design elements found within the park are simple and are designed to continue the theme of simplicity and to set a continuous storyline through the park, setting the stage for the urban space.

Integration of a Greenway Corridor for the Village of Jonesville

Comprehensive Site Plan
Bibliography

Texts


Other Sources
http://imc2.lisd.k12.m.us/tango/t...action=detail&WaterQuality_uid=118