

DEVISING DESIGN SOLUTIONS FOR NORTH COLLINS, NY PUBLIC PARKS

By

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A thesis submitted to the
University Honors College
Of the State University of New York At Buffalo in partial
fulfillment
Of the requirements of the degree of

Bachelor of Arts

Department of Environmental Design

Abstract

Many public parks across the United States are in need of improvement due to numerous factors such as neglect. Two such parks in the small town of North Collins, NY, Marion J. Fricano Park and New Oregon Park, are in need of improvement. North Collins is located roughly an hours' drive south of Buffalo, NY. These parks will need to be improved in such a way all North Collins residents can benefit from the improvements, regardless of their age, socioeconomic background, interests and abilities. Two-person teams studied how to best improve the parks. After first analyzing the strengths and weaknesses of Shoshone Park in Buffalo, NY as a precedent, the North Collins parks were then analyzed through field visits, data gathering and mapping to gain an understanding of the spatial organization of the parks, the quality of currently existing facilities, the use of land surrounding the parks and each park's environmental profile. The facilities in both parks were found to mostly be worn out and not wheelchair-friendly. Both parks were found to contain substantial wooded areas, hills, creeks, children's' playgrounds, baseball fields and other similar facilities. The residents then made suggestions about how both parks should be improved during a town hall meeting. These suggestions and the data gathered about the parks were then taken into account to devise alternative design solutions for each park. The proposals for both parks included renovated baseball fields, new athletic facilities, new nature trails, new playgrounds, new community pavilions and new dog runs. Three dimensional models of these proposals were then created and presented to a panel of North Collins residents who emphatically supported the proposals. At the conclusion of the study, a report booklet of options was presented to North Collins.

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Section 1 - Introduction

When improving any park, several important considerations must be taken into account. Parks must be able to provide amenities which suit the needs of as many groups as possible, as no one deserves to feel excluded from a park and all of the activities which occur inside it. Also, before any improvements to a park become implemented, the parks, their surrounding areas and the community who uses the parks must be thoroughly analyzed, so all improvements made will suit its users. Only after doing all of this can proposals be made to improve such parks.

The rural town of North, Collins NY asked the University at Buffalo School of Architecture and Planning to propose improvements for two of their public parks: the large Fricano Park and the small New Oregon Park. Two-person teams made up of junior environmental design students in the fall of 2016 each analyzed the current conditions of the two parks and proposed solutions for them. At the conclusion of this study, a report booklet of all the teams' options was presented to North Collins. This thesis is based off that study.

Section 2 – Literature Review

It is commonly known how many public parks across the United States are in need of improvements. The amenities are some of parks' most important features, as they are what visitors primarily interact with in their parks. As a result, planners often find themselves considering how to modify amenities during the redesign process. When figuring out how to best improve parks, planners should aim to increase the amount of people who use the green spaces. The visitors can come to partake in both active and passive activities. In order to accomplish this, planners have to learn which amenities tend to be the most popular, so they can learn which amenities would have the most impact on the green space overall if emplaced.

Some scholars believe sports-related activities are the most popular at parks, such as baseball fields, basketball courts and other related amenities (Babey et al. 2015, Cohen et al. 2015, Cranney et al. 2016, McCormack et al. 2014, Patton-Lopez et al. 2015, Veitch et al. 2012). Many also argue how recreational paths for a variety of activities like walking, running and biking are some of the most popular uses in green spaces overall (Cohen et al. 2015, Cranney et al. 2016, Greer, Castrogiovanni, and Marcello 2017, McCormack et al. 2014, Patton-Lopez et al. 2015, Veitch et al. 2012). Some argue how outdoor fitness equipment for both kids and adults tend to be the most popular park activities (Chow 2013, Cranney et al. 2016, King et al. 2015, Patton-Lopez et al. 2015). Some argue how most visitors to green spaces like to do relaxation-related activities such as reading, eating, drinking and sunbathing (Chow 2013, McCormack et al. 2014, Nordh and Østby 2013). Some argue public events like concerts and pre-scheduled group activities are the most popular activities (Cohen et al. 2013, Han et al. 2015).

The vast majority of scholars agree the most popular amenities depend from park to park because since each green space has a different surrounding neighborhood, each park is unique (Chow 2013, Cohen et al. 2015, Cohen et al. 2013, Cranney et al. 2016, Greer, Castrogiovanni, and Marcello 2017, Han et al. 2015, King et al. 2015, McCormack et al. 2014, Nordh and Østby 2013, Patton-Lopez et al. 2015). As a result, the vast majority of scholars thoroughly discuss the importance of directly engaging the community when figuring out how to best improve parks (Chow 2013, Cohen et al. 2015, Cohen et al. 2013, Cranney et al. 2016, Greer, Castrogiovanni, and Marcello 2017, Han et al. 2015, King et al. 2015, McCormack et al. 2014, Nordh and Østby 2013, Patton-Lopez et al. 2015). Also, many scholars pointed out how the popularity of some amenities in green spaces often directly lead to the popularity of other amenities in those same parks (Chow 2013, Cohen et al. 2015, Cranney et al. 2016, McCormack et al. 2014, Patton-Lopez et al. 2015, Veitch et al. 2012).

Firstly, some experts believe sports-related amenities are often the most widely used amenities. These include baseball fields, basketball courts, tennis courts, swimming pools and other related amenities. All of these scholars found these sports were the most commonly played at green spaces by kids and adults alike after surveying users about which activities they use the most, and through direct observation during certain time periods (Babey et al. 2015, Cohen et al. 2015, Cranney et al. 2016, McCormack et al. 2014, Patton-Lopez et al. 2015, Veitch et al. 2012). All of these experts use these findings to argue planners must especially take into consideration any parks' sports related activities when considering how to best redesign those green spaces (Babey et al. 2015, Cohen et al. 2015, Cranney et al. 2016, McCormack et al. 2014, Patton-Lopez et al. 2015, Veitch et al. 2012).

This shows how many scholars have recognized sports-related amenities are some of the most widely used of any type of facility. This is understandable, since it is commonly known how sports-related activities predominate many community parks. Because of this, it is clear planners must take this into account when figuring out how to best redesign green spaces. One way to do this would be to spend time learning which sports residents like to play the most. Planners can then use this information to not only learn which existing sports-related facilities should be modified, but to see if any new facilities should be added.

Secondly, many scholars argue recreational paths are often more widely-used than other facilities. Visitors use recreational paths for a variety of activities like walking, running biking, rollerblading, dog-walking and other similar activities. All of these experts found these activities were the most commonly practiced on recreational paths by both kids and adults after surveying users and directly observing the parks during specific periods of time (Cohen et al. 2015, Cranney et al. 2016, Greer, Castrogiovanni, and Marcello 2017, McCormack et al. 2014, Patton-Lopez et al. 2015, Veitch et al. 2012).

It is clear recreational paths are key elements of green spaces which should not be overlooked by planners when they consider how to best improve green spaces. They are key features not only because of their popularity, but by how these features allow for the practicing of numerous different activities, all of which allow users to both have fun and exercise. Planners must clearly remember the importance of recreational paths. Not only will improving recreational paths help residents by letting them further use the facilities they like the most, it will also encourage them to exercise more, thereby improving their health.

Thirdly, a minority of experts believe outdoor fitness equipment tend to be more widely compared to other amenities. This includes outdoor gyms with equipment geared

towards adults and playgrounds for children. After surveying users and directly observing the parks, these scholars found kids most often used playgrounds, and adults most often used outdoor fitness equipment especially designed for them. The scholars noticed how senior citizens most commonly used the special outdoor fitness equipment, rather than young adults (Chow 2013, Cranney et al. 2016, King et al. 2015, Patton-Lopez et al. 2015). Some of these experts also conducted health studies of individual senior citizens who used outdoor fitness equipment, which led them to find using the equipment not only improved their cardiovascular health, but their mental health as well. They found using the equipment decreased their chances of getting serious health problems like Alzheimer's disease (Chow 2013, Cranney et al. 2016).

These findings further prove planners must remember the importance of encouraging residents of all ages to exercise when considering how green spaces can be redesigned. As a result, it will be important for planners to keep in mind the usefulness of playgrounds for children and outdoor fitness equipment for adults, especially senior citizens. These offerings can improve the mental and physical health of both young and old visitors.

Fourthly, a few scholars argue the most popular activities at parks primarily involve relaxation, such as reading, eating, drinking, picnicking, sunbathing and other related activities. After talking with residents about which facilities they liked to use and the most and observing the green spaces, these experts found people most often like to eat and drink by themselves and with family and/or friends, people-watch, listen to music, sunbathe, feed birds and read and draw or paint by themselves the most out of all relaxing activities (Chow 2013, McCormack et al. 2014, Nordh and Østby 2013). The scholars also found people do

these activities most often in benches, lawns and pavilion structures (Chow 2013, McCormack et al. 2014, Nordh and Østby 2013).

It is commonly known how in addition to exercising, many people like to come to parks simply relax. Visitors can not only come to green spaces with the sole aim of sitting back and collecting their thoughts, but they can also relax after exercising in order to take breaks. Therefore, it is clear relaxation-related amenities are key elements of any park. Therefore, planners must take this into account when figuring how to best improve their green spaces.

Fifthly, some experts believe sizable public events like concerts and coordinated group activities tend to be the most popular activities. After observing the parks and communicating with users, these scholars found people most often went to green spaces to hear bands play in band shells, or they often went to a variety of big events in parks. These events include food fairs, group kids activities, classes for adults, meditation groups, tai-chi groups and other similar types of pre-arranged group meetups (Cohen et al. 2013, Han et al. 2015). These scholars also noted how such activities are especially common in city green spaces (Cohen et al. 2013, Han et al. 2015).

One cause for this discrepancy in experts' views is the scholars who believe other more well-known exercise and relaxation activities are the most popular activities in parks (Babey et al. 2015, Chow 2013, Cohen et al. 2015, Cranney et al. 2016, Greer, Castrogiovanni, and Marcello 2017, King et al. 2015, McCormack et al. 2014, Nordh and Østby 2013, Patton-Lopez et al. 2015, Veitch et al. 2012) were taking into account both urban and rural green spaces. The scholars who believe concerts and other similar coordinated group events are the most popular (Cohen et al. 2013, Han et al. 2015) clearly focused on urban parks, which are

often surrounded by more densely populated environments compared to rural parks. This affects those scholars' findings because the more densely populated an urban environment is, the more parks it will need. This can make events in those parks appear more crowded compared to events in rural parks, where there are less people. It is important for planners to carefully consider the types of environments their green spaces are surrounded by when considering how to best redesign their parks. Doing this helps planners better anticipate how their proposals can impact the parks they are redesigning.

Even though many scholars argue parks tend to have the same most popular activities, they all found since each green space often has a different surrounding neighborhood with residents of different backgrounds, each park is thereby unique and will have different amenities which appeal to those residents (Chow 2013, Cohen et al. 2015, Cohen et al. 2013, Cranney et al. 2016, Greer, Castrogiovanni, and Marcello 2017, Han et al. 2015, King et al. 2015, McCormack et al. 2014, Nordh and Østby 2013, Patton-Lopez et al. 2015). For example, green spaces located in neighborhoods with high amounts of families were found to have popular playgrounds and other similar kid-friendly amenities (King et al. 2015, Patton-Lopez et al. 2015). Parks located in neighborhoods predominated by senior citizens were found to have popular relaxation-related facilities and outdoor fitness equipment (Chow 2013, Cranney et al. 2016, McCormack et al. 2014, Nordh and Østby 2013). Since urban parks were often found to have concerts and other similar group activities be most popular in them, they often had a lot space dedicated to such events (Cohen et al. 2013, Han et al. 2015).

Each green space has its own surrounding neighborhood, and each neighborhood has residents of different ethnicities, ages, and so forth. As a result of this, each park may have

slightly different offerings of amenities because each of those groups will desire and use slightly different amenities. Therefore, planners must remember to analyze the demographics of any green space's users, as this can possibly reveal certain types of amenities they will want to use.

As a result of this, the vast majority of scholars thoroughly discuss the importance of directly communicating with residents who live near the green spaces during the planning process. These experts employed the planning method of holding community meetings, where they directly asked residents what they wanted to see done with their parks (Chow 2013, Cohen et al. 2015, Cohen et al. 2013, Cranney et al. 2016, Greer, Castrogiovanni, and Marcello 2017, Han et al. 2015, King et al. 2015, McCormack et al. 2014, Nordh and Østby 2013, Patton-Lopez et al. 2015).

It is not surprising many scholars believe this and employed community engagement planning methods, because this is widely known among planners to be a common planning tool. It only makes sense for planners to talk with residents to get ideas of what they want done to their green spaces. If planners do not do this, they risk making mistakes like creating new attractions which residents will not want to use. However, it is also important for planners to consider their own ideas. Planners are able to bring innovative ideas to the table which residents may not have thought of before. Therefore, while planners must remember to directly communicate with park users about what they want to see, planners should also be able to suggest their own ideas. This way, planners and park users can work together so that users can benefit as much as possible from all improvements made to their green spaces.

Also, many scholars pointed out how the popularity of some amenities in parks directly lead to other amenities in those same green spaces being popular. (Chow 2013,

Cohen et al. 2015, Cranney et al. 2016, McCormack et al. 2014, Patton-Lopez et al. 2015, Veitch et al. 2012). For example, some of these scholars found if people in a park often played sports, they would sometimes get bored with playing those sports, but still want more physical activity. As a result, they would then move on to using other amenities like outdoor fitness equipment, or running along the recreation paths (Cranney et al. 2016, Patton-Lopez et al. 2015). Many scholars also noted how after people would exercise, they would all then use benches and lawns to relax on, stimulating the popularity of those relaxation-related amenities (Chow 2013, McCormack et al. 2014, Nordh and Østby 2013).

This goes to show even though parks can have certain amenities which are more used by visitors than others, all amenities are heavily interconnected because visitors will be influenced to use certain amenities right before or after using other ones. For example, it does not make sense to have a soccer field without including benches in the green space, because the soccer players will want to have somewhere to take breaks while playing or to relax right after. Therefore, despite how some amenities can sometimes be more popular than others, all amenities must be taken into account when redesigning parks because the uses of all amenities are heavily interconnected.

In conclusion, there are many lessons planners can learn from these scholars' discussions. First of all, it is clear the most popular reasons why people want to use and visit green spaces is to exercise, relax and have fun. As a result, the most widely used amenities of parks tend to be related to this. Sports fields, recreational paths and fitness equipment are popular since they allow users to exercise. Benches, lawns and pavilions are widely used since they allow for relaxation. Band shells, lawns and other related gathering spaces are popular since they allow for users to attend concerts or participate in group activities.

Planners should therefore pay attention to these features the most when redesigning green spaces, because these are the most commonly used features of them. They should learn how much residents use and care about these facilities, and they should determine if any new similar facilities should be added. Improving all of these features is important because not only do they make parks more attractive to their users, but they improve the mental and physical health of their users.

Second of all, the vast majority of experts also agree every green space is unique because each park lies in a unique environment and has users of distinct backgrounds. As a result, when redesigning any green space, planners must remember to focus on analyzing their parks individually. However, they should also remember to learn about other similar green spaces, what those similar parks do right and wrong, and apply those lessons to the spaces they are redesigning. The vast majority of scholars also point out how every facility is heavily interrelated because visitors will naturally feel the need to use certain amenities after using others. Therefore, planners must also remember this when figuring out how to best redesign green spaces.

Bibliography for Section 2

- Babey, S. H., D. Tan, J. Wolstein, and A. L. Diamant. 2015. "Neighborhood, family and individual characteristics related to adolescent park-based physical activity." *PREVENTIVE MEDICINE* 76:31-36. doi: 10.1016/j.ypmed.2015.04.001.
- Chow, H. W. 2013. "Outdoor fitness equipment in parks: a qualitative study from older adults' perceptions." *BMC PUBLIC HEALTH* 13 (1):1216-1216. doi: 10.1186/1471-2458-13-1216.
- Cohen, D. A., B. Han, J. Isacoff, B. Shulaker, S. Williamson, T. Marsh, T. L. McKenzie, M. Weir, and R. Bhatia. 2015. "Impact of Park Renovations on Park Use and Park-Based Physical Activity." *JOURNAL OF PHYSICAL ACTIVITY & HEALTH* 12 (2):289-295. doi: 10.1123/jpah.2013-0165.
- Cohen, D. A., S. Lapham, K. R. Evenson, S. Williamson, D. Golinelli, P. Ward, A. Hillier, and T. L. McKenzie. 2013. "Use of neighbourhood parks: Does socio-economic status matter? A four-city study." *Public Health* 127 (4):325-332. doi: 10.1016/j.puhe.2013.01.003.
- Cranney, L., P. Phongsavan, M. Kariuki, V. Stride, A. Scott, M. Hua, and A. Bauman. 2016. "Impact of an outdoor gym on park users' physical activity: A natural experiment." *HEALTH & PLACE* 37:26-34. doi: 10.1016/j.healthplace.2015.11.002.
- Greer, A. E., B. Castrogiovanni, and R. Marcello. 2017. "Park Use and Physical Activity Among Mostly Low-to-Middle Income, Minority Parents and Their Children." *JOURNAL OF PHYSICAL ACTIVITY & HEALTH* 14 (2):83-87. doi: 10.1123/jpah.2016-0310.

- Han, Bing, Deborah A. Cohen, Kathryn P. Derose, Terry Marsh, Stephanie Williamson, and Steven Loy. 2015. "Effectiveness of a free exercise program in a neighborhood park." *Preventive Medicine Reports* 2:255-258. doi: 10.1016/j.pmedr.2015.03.010.
- King, D. K., J. Litt, J. Hale, K. M. Burniece, and C. Ross. 2015. "'The park a tree built': Evaluating how a park development project impacted where people play." *URBAN FORESTRY & URBAN GREENING* 14 (2):293-299. doi: 10.1016/j.ufug.2015.02.011.
- McCormack, G. R., M. Rock, K. Swanson, L. Burton, and A. Massolo. 2014. "Physical activity patterns in urban neighbourhood parks: insights from a multiple case study." *BMC PUBLIC HEALTH* 14 (1):962. doi: 10.1186/1471-2458-14-962.
- Nordh, Helena, and Kjersti Østby. 2013. "Pocket parks for people - A study of park design and use." *Urban Forestry and Urban Greening* 12 (1):12-17. doi: 10.1016/j.ufug.2012.11.003.
- Patton-Lopez, M. M., R. Munoz, K. Polanco, B. Olson, G. Brown, and S. DeGhetto. 2015. "Redesigning a Neighborhood Park to Increase Physical Activity: A Community-Based Participatory Approach." *JOURNAL OF PUBLIC HEALTH MANAGEMENT AND PRACTICE* 21:S101-S105. doi: 10.1097/PHH.0000000000000206.
- Veitch, Jenny, Kylie Ball, David Crawford, Gavin R. Abbott, and Jo Salmon. 2012. "Park improvements and park activity: A natural experiment." *American Journal of Preventive Medicine* 42 (6):616-619. doi: 10.1016/j.amepre.2012.02.015.

Section 3 – Precedent Study: Shoshone Park

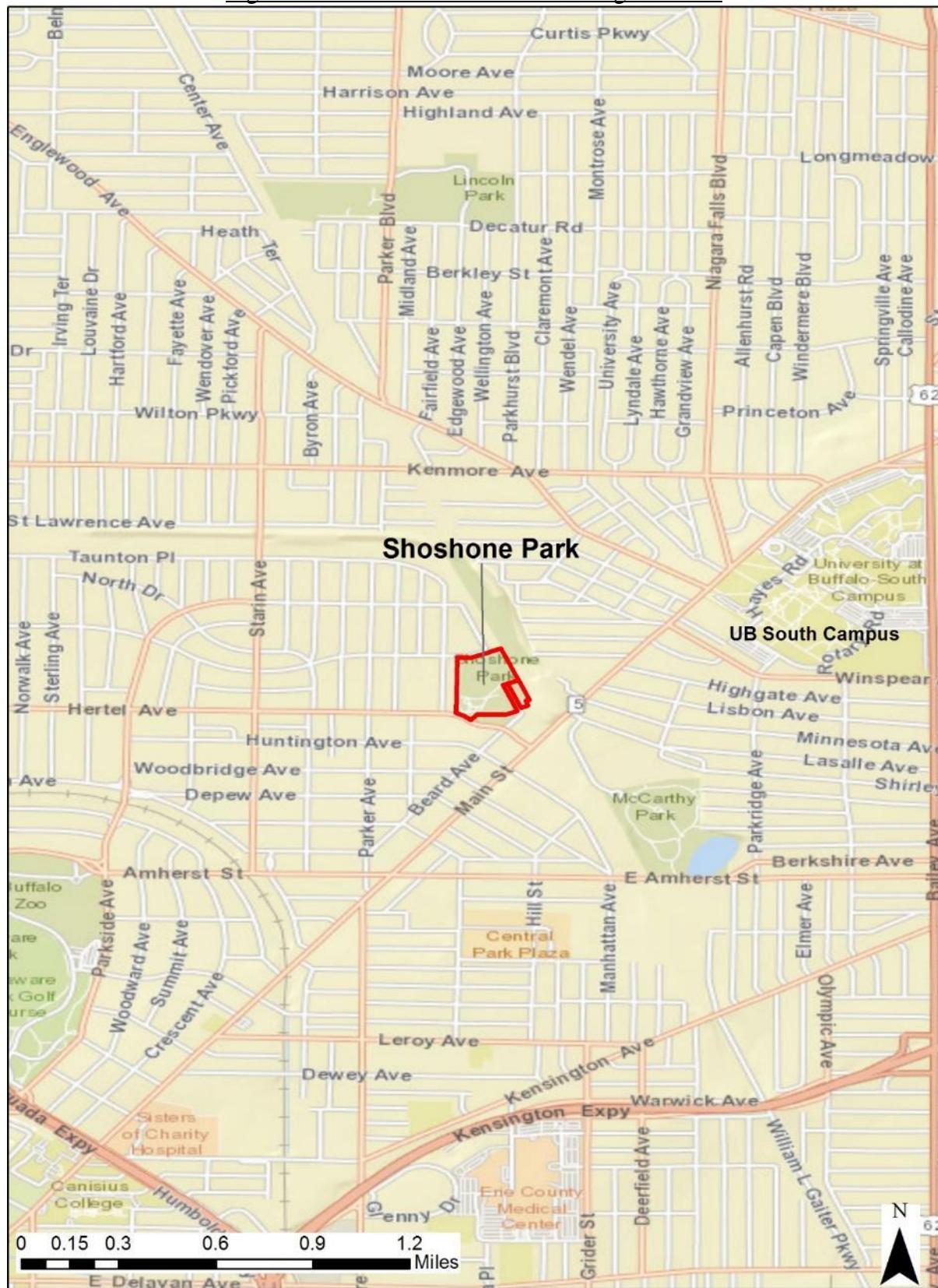
Before the North Collins parks could be analyzed and have upgrades proposed, the first step was to study a similar park in a different location to analyze the park's strengths and flaws, and how these lessons can be applied to improving the North Collins parks. Shoshone Park is a roughly sixteen-acre park situated in northern Buffalo, NY, a mostly residential area. Shoshone Park is located about a fifteen to twenty-minutes' walk southwest of the University at Buffalo's South Campus, and about an hours' drive from North Collins, NY. Shoshone Park was studied as a precedent primarily because of its similarities to New Oregon Park. New Oregon Park is roughly eight acres, compared to Shoshone Park's sixteen acres (Erie County, NY. Office of Geographic Information Services). Shoshone Park is also similar to Fricano Park since the dominant amenity for both parks are currently baseball.

Figure 3.1 Location of Shoshone Park within Buffalo



Data source: (Erie County, NY. Office of Geographic Information Services)

Figure 3.2 Location of Park within Neighborhood



Data source: (Erie County, NY. Office of Geographic Information Services)

Shoshone Park can be easily accessed by cars and public transit. The park is located near two of the most important thoroughfares in northern Buffalo: Hertel Avenue and Main Street. The park has an entrance for cars on the north side of Hertel Avenue which leads to the small parking lot inside the park itself. The park can also be accessed by car from Main Street through the large parking lot just east of the park. The park is also easily accessible by public transit, as it is located near Hertel Avenue bus line stops, Main Street bus line stops and the LaSalle subway station, which the large parking lot east of the park is meant to serve.

One of the most important benefits for motorists who visit the park is the ample parking space available for them between the small lot inside the park and the large lot just east of it. However, there is too much parking space available compared to the amount of cars which use it. During field visits to Shoshone Park on September 11, 2016, it was observed how both lots were mostly empty, even though the park itself was busy. In order to improve the park, it is possible either part or all of the small parking lot can be eliminated and be replaced with new amenities.

Figure 3.3 Underused Large Parking Lot



Taken by Ian Schwarzenberg and Shimon Bhuyan on 9/11/16

Figure 3.4 Shoshone Park Vehicular Access Map



Parcel Data source: (Erie County, NY. Office of Geographic Information Services)

The park is also easily accessible to pedestrians and bikers. There are four different official entrance points for pedestrians and bikers which are evenly distributed throughout the park: one on the southwest corner of the park on Hertel Avenue, one at the southeast corner through the small parking lot, one on the east side of the park by the large parking lot, and one on the northwest corner of the park by the houses on Parkside Crescent. There is also an unofficial ramp entrance at the extreme northeastern corner of the park, just north of the east side large parking lot entrance.

The official eastern pedestrian entrance by the large parking lot is notable for two reasons. Firstly, it provides a direct connection to Buffalo's Minnesota Linear Bike Trail, serving both pedestrians and bikers alike who are coming off the trail. Despite the official entrance's usefulness, it has a drawback. The official entrance only consists of stairs, and the unofficial ramp entrance just north of it can be easily missed. It was observed during field visits that this led many biker visitors to carry their bikes down those stairs, which not all visitors will be physically able to do. These entrances can be improved by better paving the unofficial ramp entrance and installing a sign pointing visitors to it. Additional handrails can also be installed on the ramp.

Figure 3.5 Unofficial Ramp Entrance at Shoshone Park



Taken by Ian Schwarzenberg and Shimon Bhuyan on 9/11/16

Figure 3.6 Shoshone Park Pedestrian Access Map



Parcel Data source: (Erie County, NY. Office of Geographic Information Services)

Shoshone Park has a diverse array of amenities, such as a pool, a loop recreational trail, baseball fields, basketball courts, tennis courts and a playground. It was observed during field visits that Softball and Baseball are the two most important attractions to the park. For example, the fields are home to the North Buffalo Baseball League, who regularly play weekend games at the park. These games attract the family of the players as well as other neighborhood residents who watch.

One of the park's major strengths is how its varied amenities can attract people of all different backgrounds and ages to the park. Even though baseball and softball are the most common amenities, there is also room for people who like basketball, tennis, swimming, biking, and other related activities. This makes the park less reliant on the North Buffalo Baseball League for activity generation.

One flaw with the park's amenity offerings is during field visits, it was noticed that there were too many baseball fields in the park, despite all the demand for them. This leads to sizable portions of the park being empty during any time of the year. This can be remedied by getting rid of at least one baseball field and converting that new space for the use of a new activity. Another flaw the park has is how most of the amenities are best for use during warm weather. There are not many attractions in the park which people can use in cold weather. This can certainly make the park empty during the winter. In order to improve this, at least one of the baseball fields can be removed and a wintertime amenity can be built in its place, such as a small ice rink for example.

Figure 3.7 Shoshone Park Amenities Map



Parcel Data source: (Erie County, NY. Office of Geographic Information Services)

Figure 3.8 Little League Baseball Game in Shoshone Park



Taken by Ian Schwarzenberg on 9/11/16

It was observed during field visits that even though the park's facilities were not on the verge of breaking down, many of the park's facilities exhibited signs of wear and tear. The loop paths contained many cracks and worn out pavement, the wooden baseball field bleachers contained cracks, some trash was strewn around, some plants overgrew through fences and the field grass often needed fertilizing.

Despite these issues with maintenance, it was clear improvements were being made to the park. During field visits, neighborhood volunteers were observed traversing the park and picking up trash and helping maintain park facilities. It was also observed that some buildings within the park were freshly renovated and decorated, such as the storage facility for the North Buffalo Baseball League. Even though some of the park's facilities needed to be better maintained, it is clear North Buffalo residents care about the quality of their park's facilities and are willing to volunteer to help upkeep the park.

Figure 3.9 Shoshone Park Quality of Maintenance Diagram



Photos taken by Ian Schwarzenberg and Shimon Bhuyan on 9/11/16. Parcel data source: (Erie County, NY. Office of Geographic Information Services)

Much can be learned from Shoshone Park's strengths and weakness when considering what improvement to make for the North Collins parks. One major strength of the park is the diversity of its amenity offerings. Many scholars agree on how the more diverse a park's offerings, the more people will use it^{2, 4, 5, 6, 7, 8, 9, 12, 15, 18, 19, 21, 22}.

Another major strength about Shoshone Park was how it was well cared for by local volunteers. Many experts agree on how in order for any park to survive, it must have users who care about the park's well-being^{3, 4, 10, 11, 12, 13, 14, 15, 18, 21}. North Collins residents can go further by not only helping maintain their parks, but also potentially helping decorate their parks.

Another important strength with the park is how well connected it is with the surrounding streets and bike paths. This lesson can be applied to the North Collins parks, which can be improved so they become more connected with the surrounding town, which will make them more accessible to residents.

One important flaw with Shoshone Park is how many of the park's activities are suitable for summertime use only. New activities which become implemented in the North Collins parks should be suitable for year-round use so residents can benefit from the parks year-round.

Bibliography for Section 3

Erie County, NY. Office of Geographic Information Services. "Erie County On-Map

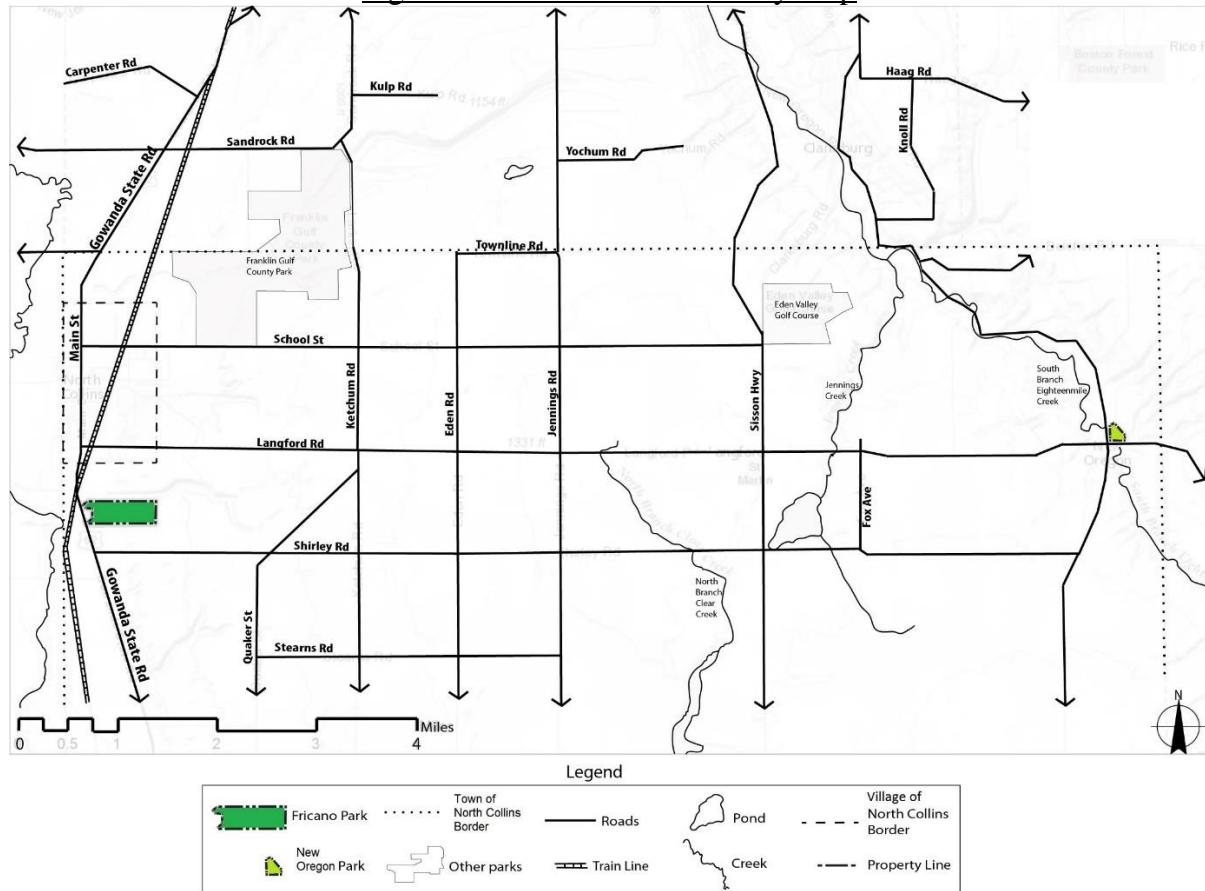
Application." Retrieved 6 Sept. 2016, from

<http://gis2.erie.gov/HTML5/ErieCountyNY/PublicLaunchPage.aspx>.

Section 4 – Site Analyses

The North Collins park facilities, the parks' surrounding areas and the park's environmental features must be analyzed before solutions can be proposed. Fricano Park is located inside the Town of North Collins, but only a mile south from the center of the Village of North Collins. On the other hand, New Oregon Park is located towards the eastern side of the town and much farther away from the Village of North Collins compared to Fricano Park.

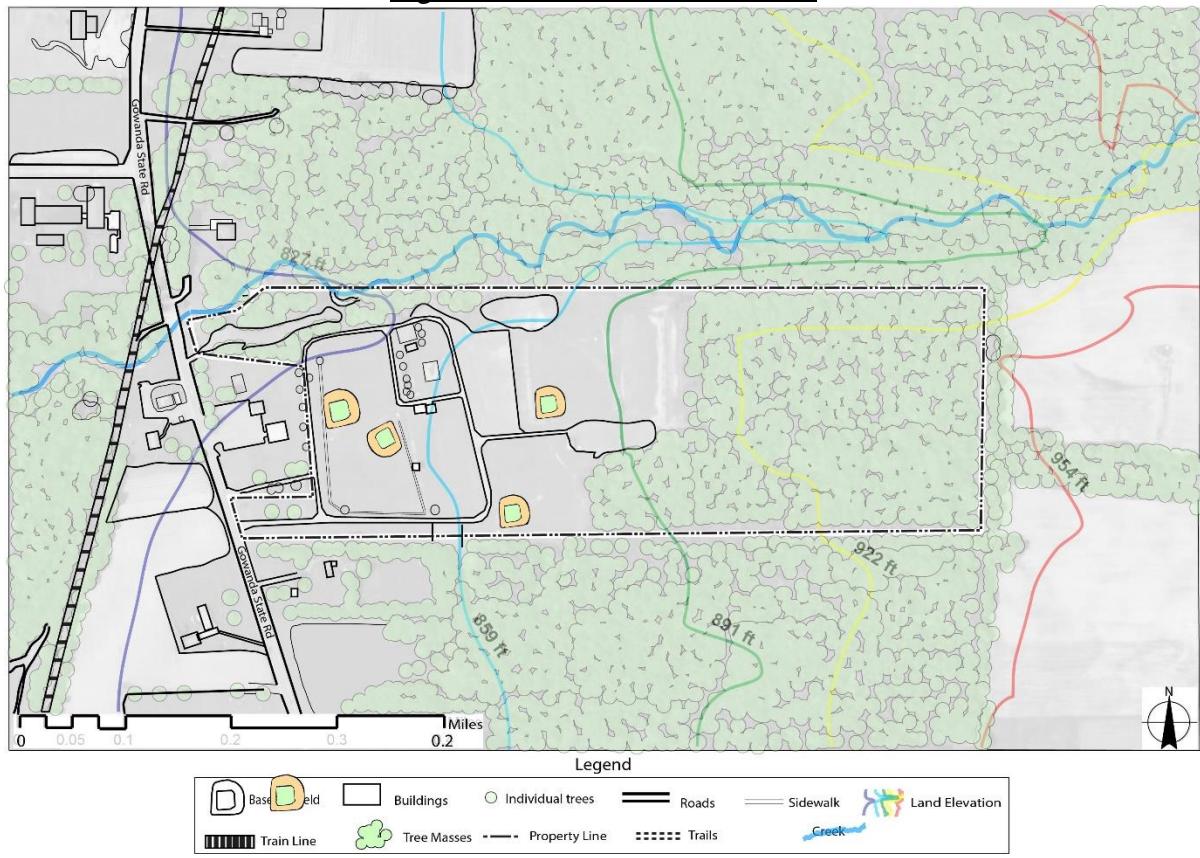
Figure 4.1 North Collins Vicinity Map



Fricano Park is fifty-four acres total, with 26 acres being wooded and the other 28 acres not wooded (Erie County, NY. Office of Geographic Information Services). The park is located on the east side of the major Gowanda State Road. It is also located just east of the Buffalo Southern Railroad tracks (Buffalo Southern Railroad). The park consists of a wooded

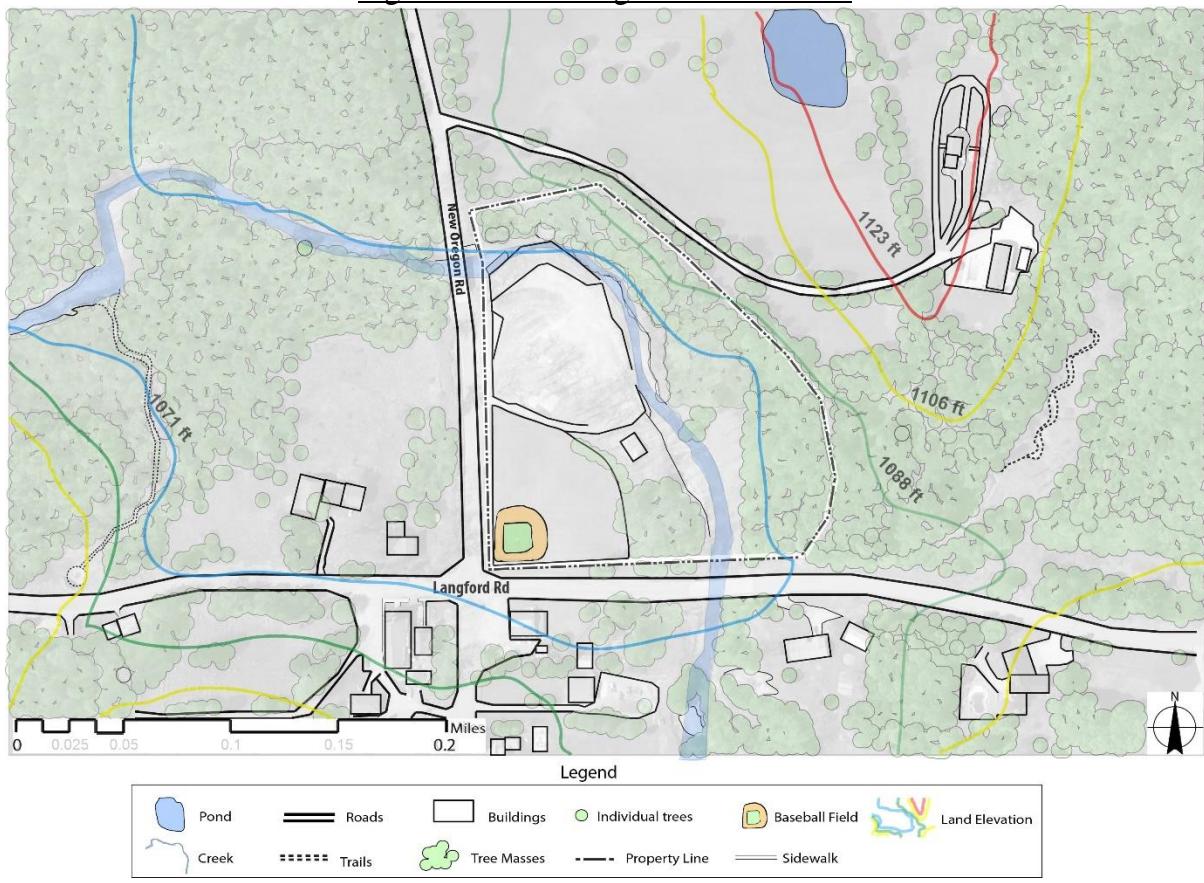
eastern portion, four parking lots, a loop of roads, four large baseball fields, a football/soccer field, a storage facility, a basketball court, a creek and a senior citizens center. The park is situated on a hill, with the land sloping up towards the east (Hofstetter 2013).

Figure 4.2 Fricano Park Site Plan



New Oregon Park is much smaller than Fricano Park at about eight acres (Erie County, NY. Office of Geographic Information Services), and it is located at the northeast corner of Langford and New Oregon Roads. The park consists of a baseball field, a small basketball court, a creek, swings and woods. Similar to Fricano Park, New Oregon Park slopes up towards the east, with the wooded portion east of the creek containing a higher elevation than the portion of the park west of the creek.

Figure 4.3 New Oregon Park Site Plan



Parcel data source: (Erie County, NY. Office of Geographic Information Services)

Topography data source: (Hofstetter 2013)

It was observed during field visits that Fricano Park's facilities were in decent shape overall. However, the facilities noticeably needed to be renovated so the disabled can access them. For example, there was no real path to the creek in the northern part of the park, and the way to get there was dangerous. It was also noticed during field visits how the hill the park is situated on puts many of the park's features on top of steep but short inclines. This would normally require park visitors to use stairs or a ramp to access the fields, but neither were observed.

Figure 4.4 Fricano Park Quality of Maintenance Map



Parcel data source: (Erie County, NY. Office of Geographic Information Services)
Photos taken by Ian Schwarzenberg and Shimon Bhuyan on 9/15/16.

Just like Fricano Park, New Oregon Park was observed to be in decent condition.

However, it was observed how many of the park's simple features such as its lampposts and its benches have been treated with some neglect and are in need of simple renovations. It was also noticed how the space visitors use to park was unpaved and in rough shape. This can be problematic because rough weather can make the parking lot muddy, which can discourage potential visitors from going to the park. Simple issues such as neglect of facilities and an unpaved parking space can lead to such a valuable resource being underutilized.

Figure 4.5 New Oregon Park Quality of Maintenance Map



Parcel data source: (Erie County, NY. Office of Geographic Information Services)

Photos taken by Ian Schwarzenberg and Shimon Bhuyan on 9/15/16.

The only way visitors can access Fricano Park is by car or bicycle through Gowanda State Road. During field visits made on September 15, 2016, there were unfortunately no sidewalks found which link Fricano Park to the rest of North Collins. There are four different parking lots visitors can park in, one located at the front of Gowanda State Road and the other three being located in the eastern portion of the park. The land surrounding Fricano Park is mostly residential, however there is one auto-repair shop just northwest of the park and some other commercial structures located further north along Gowanda State Road towards the Village of North Collins (Erie County, NY. Office of Geographic Information Services).

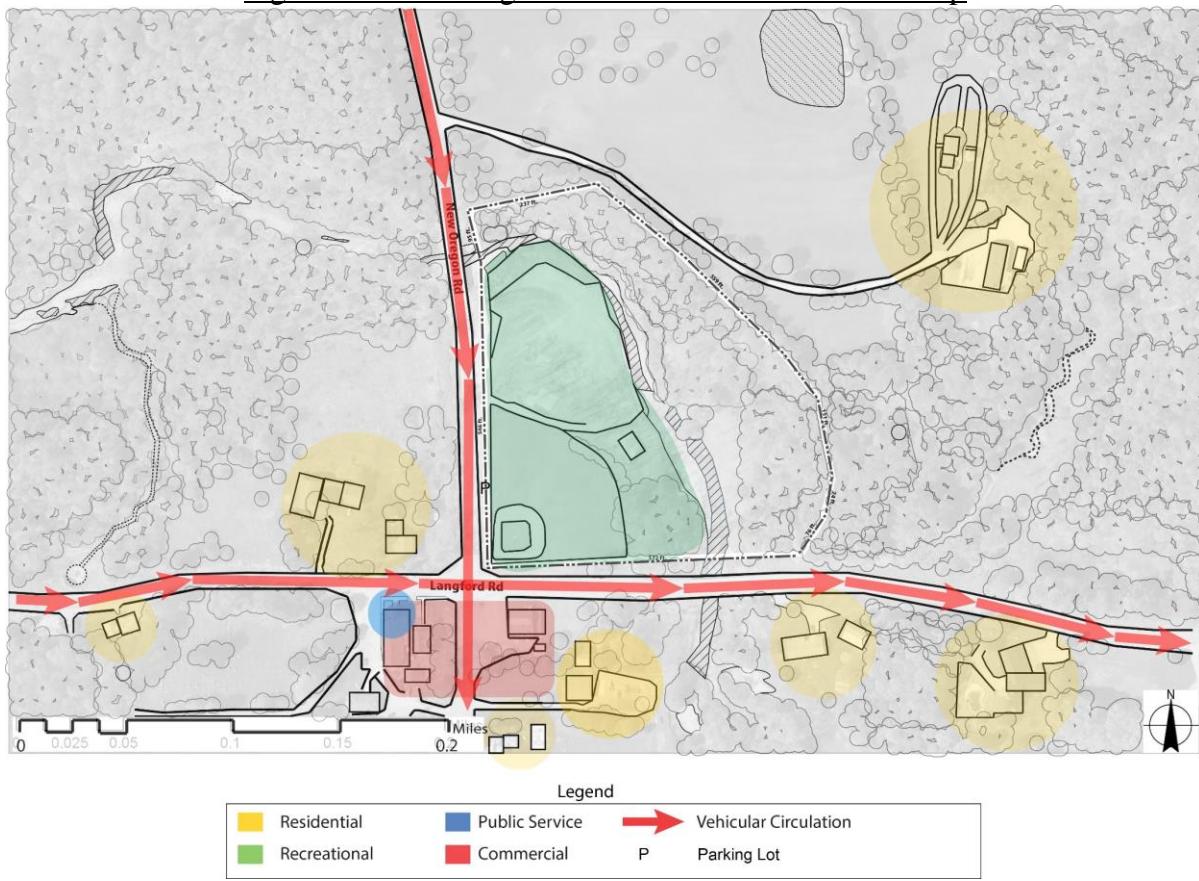
Figure 4.6 Fricano Park Access and Land Use Map



Parcel data source: (Erie County, NY. Office of Geographic Information Services)

The only way visitors can access New Oregon Park is by car or bicycle through Langford and New Oregon Roads. Similar to Fricano Park, there were unfortunately no observed substantial sidewalks which connect New Oregon Park with its surroundings. Unlike Fricano Park, however, New Oregon Park contains no real parking lots, with the exception of one narrow but long makeshift lot on the west side of the park along New Oregon Road. There is a small collection of commercial properties at the intersection of Langford and New Oregon Roads, as that corner forms the center of the New Oregon hamlet. Besides those properties, however, all other properties immediately surrounding the park are residential (Erie County, NY. Office of Geographic Information Services).

Figure 4.7 New Oregon Park Access and Land Use Map



Parcel data source: (Erie County, NY. Office of Geographic Information Services)

The parcels surrounding both Fricano and New Oregon Parks tend to be both large and cheap. For example, many big parcels which surround Fricano Park cost under \$99,999 (Erie County, NY. Office of Geographic Information Services), which shows a low cost of land per acre in that area. Most parcels which surround New Oregon Park cost between \$100,000 and \$149,999. Similar to Fricano Park, most parcels are large and cost under \$100,000. All of this shows many of the North Collins residents are lower to middle class.

Figure 4.8 Fricano Park Real Estate Values Map

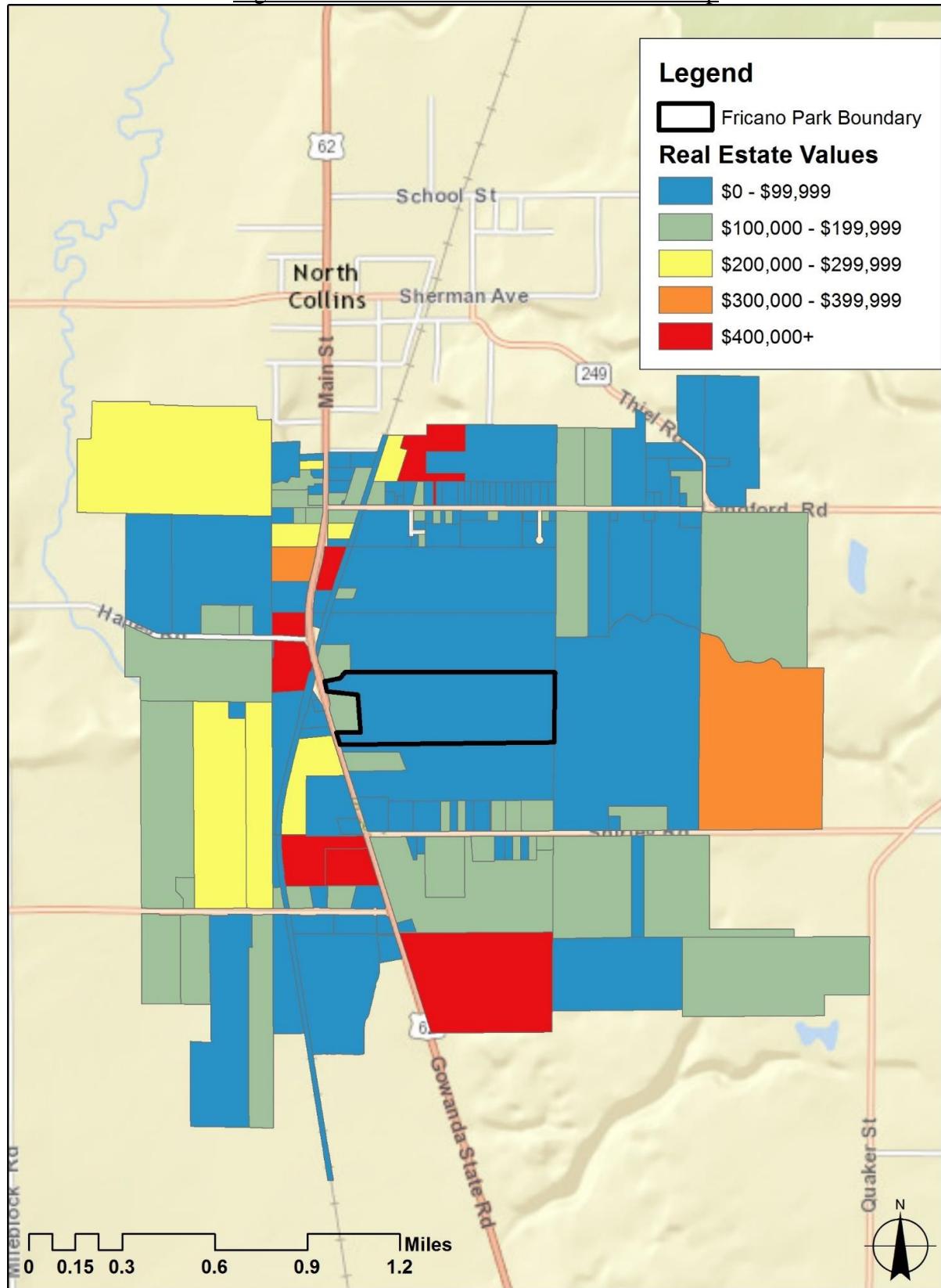
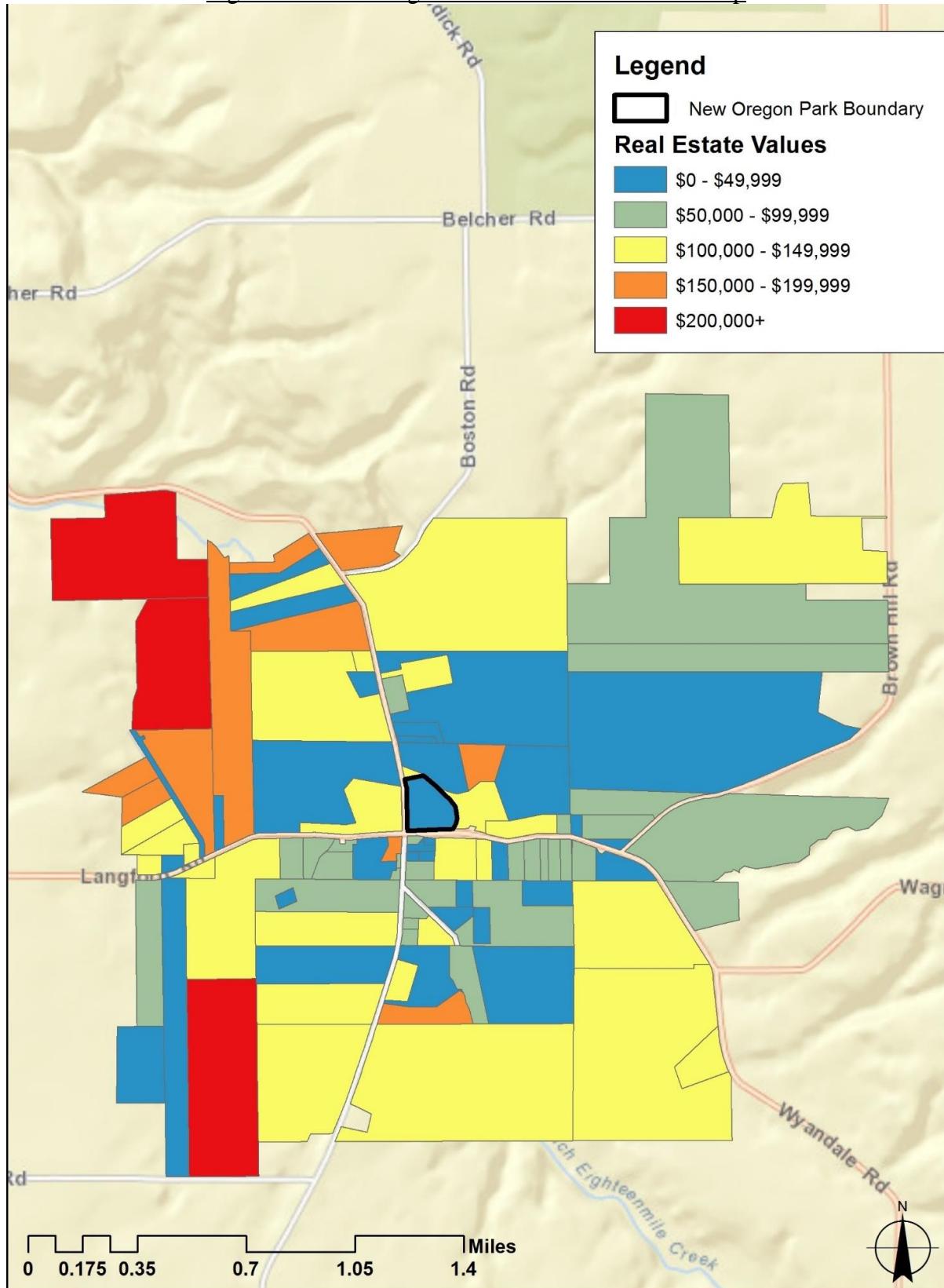


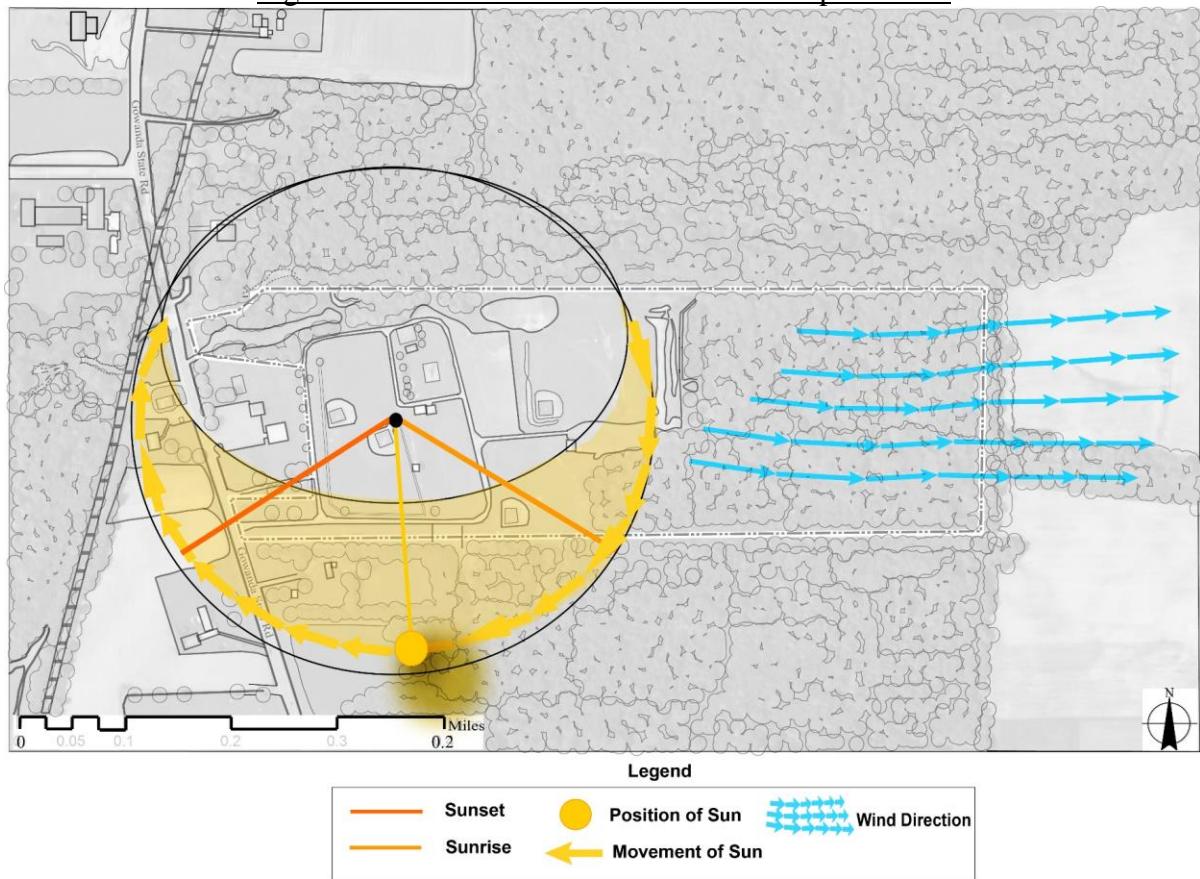
Figure 4.9 New Oregon Park Real Estate Values Map



Parcel data source: (Erie County, NY. Office of Geographic Information Services)

During the afternoon hours of days throughout all seasons, the sun's rays usually shine down northward on both parks during afternoons. During the fall and spring solstices, the sun's rays shine straight west during sunrise and the straight east during sunset. However, during the winter solstice, the sun's rays shine northwest during sunrise and northeast during sunset. During the summer solstice, the sun's rays shine southwest during sunrise and southeast during sunset. The wind usually flows northeast through both parks during all seasons except for the winter, when the cold winter wind blows straight east from Lake Erie (Hoffmann 2015).

Figure 4.10 Fricano Park Sun and Wind Map - Winter

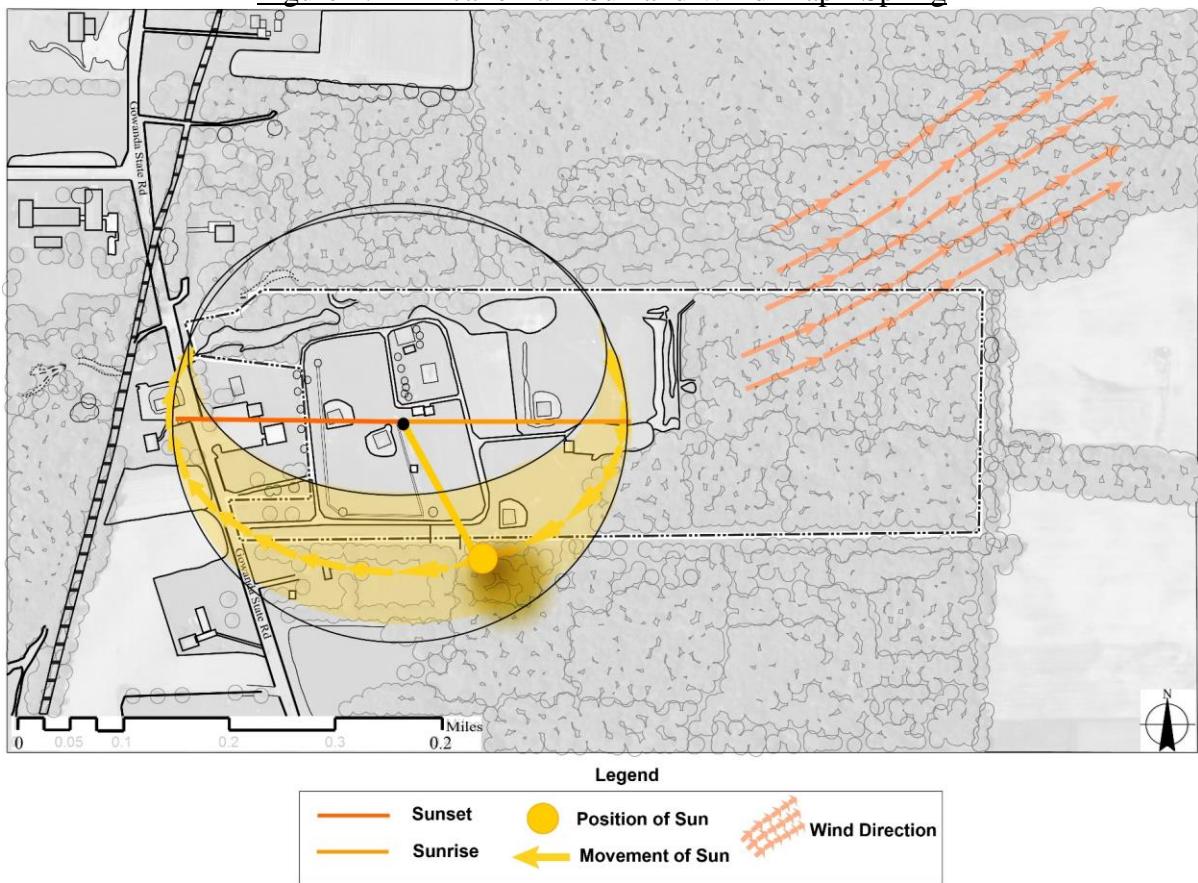


Parcel data source: (Erie County, NY. Office of Geographic Information Services)

Sun data source: (Hoffmann 2015)

Wind data source: (CustomWeather Inc.)

Figure 4.11 Fricano Park Sun and Wind Map - Spring

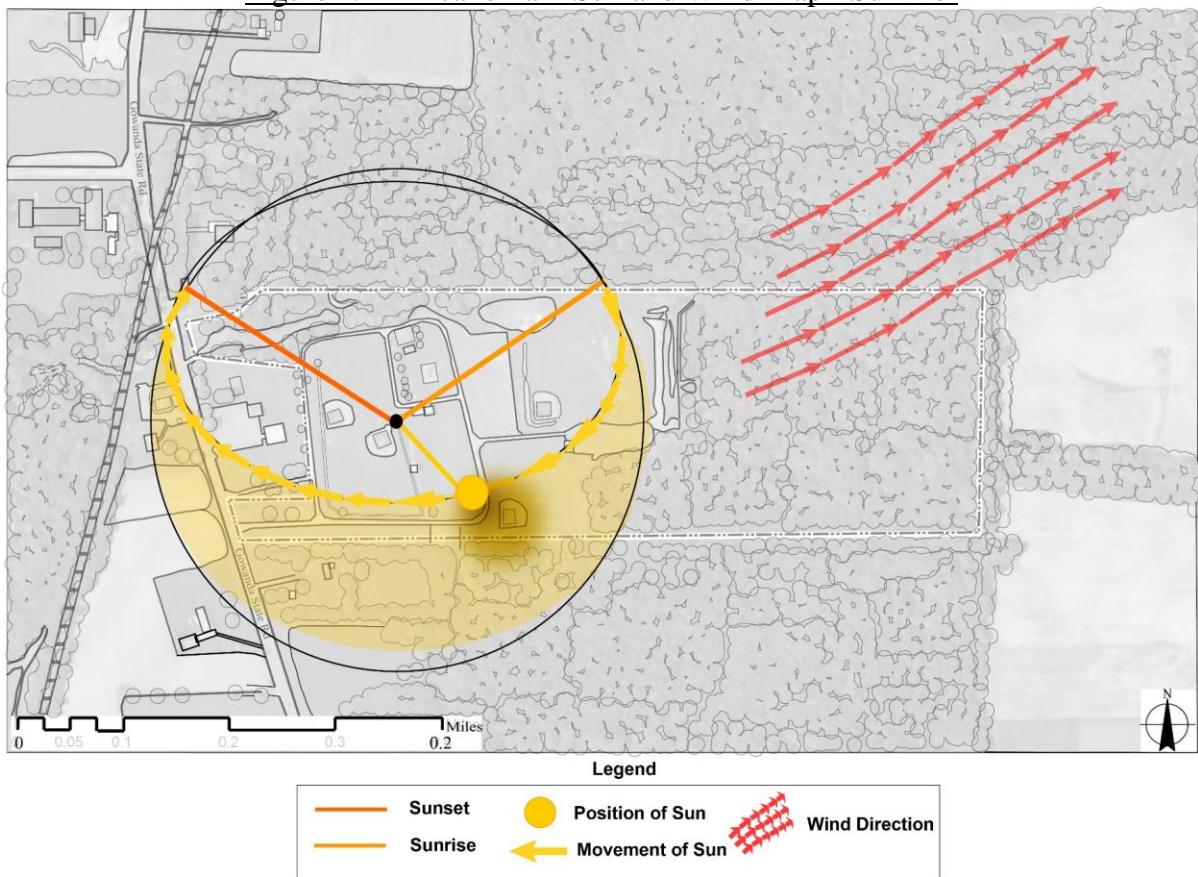


Parcel data source: (Erie County, NY. Office of Geographic Information Services)

Sun data source: (Hoffmann 2015)

Wind data source: (CustomWeather Inc.)

Figure 4.12 Fricano Park Sun and Wind Map - Summer

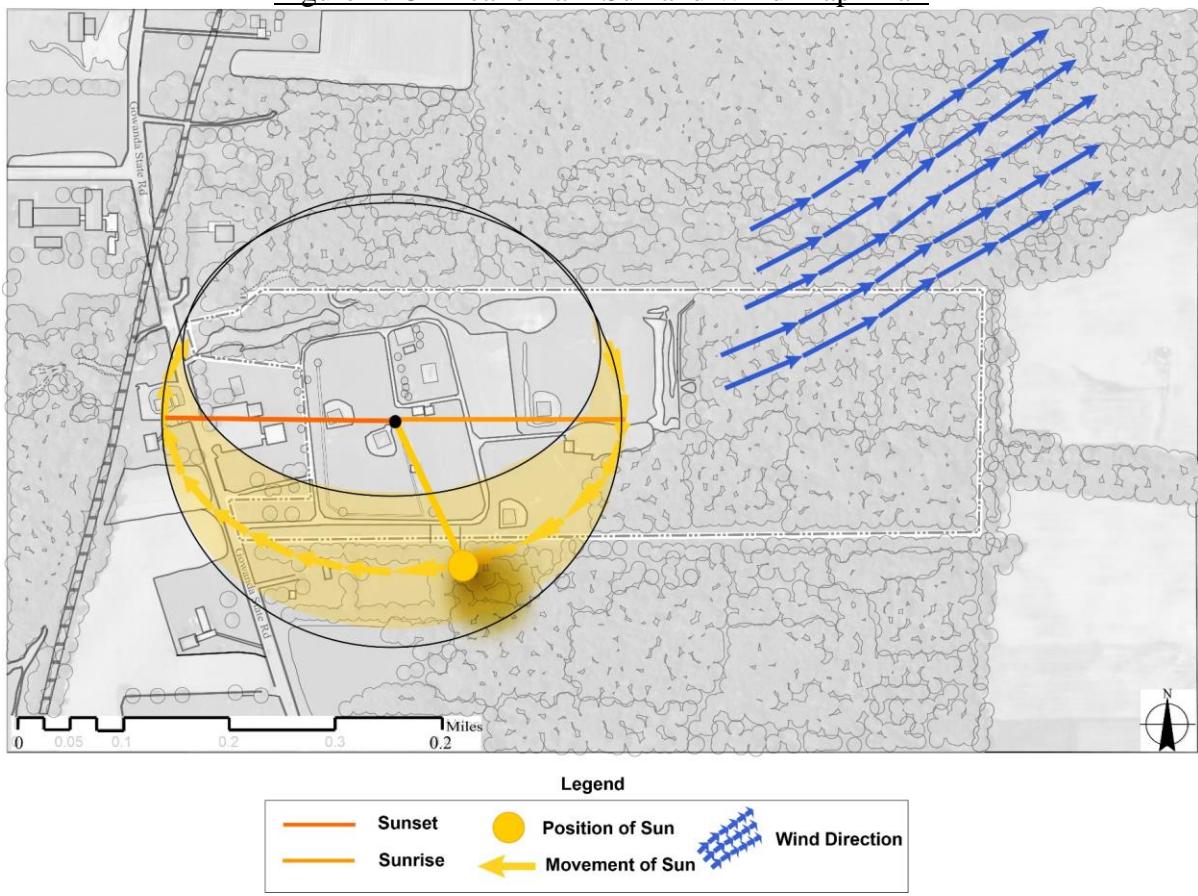


Parcel data source: (Erie County, NY. Office of Geographic Information Services)

Sun data source: (Hoffmann 2015)

Wind data source: (CustomWeather Inc.)

Figure 4.13 Fricano Park Sun and Wind Map - Fall

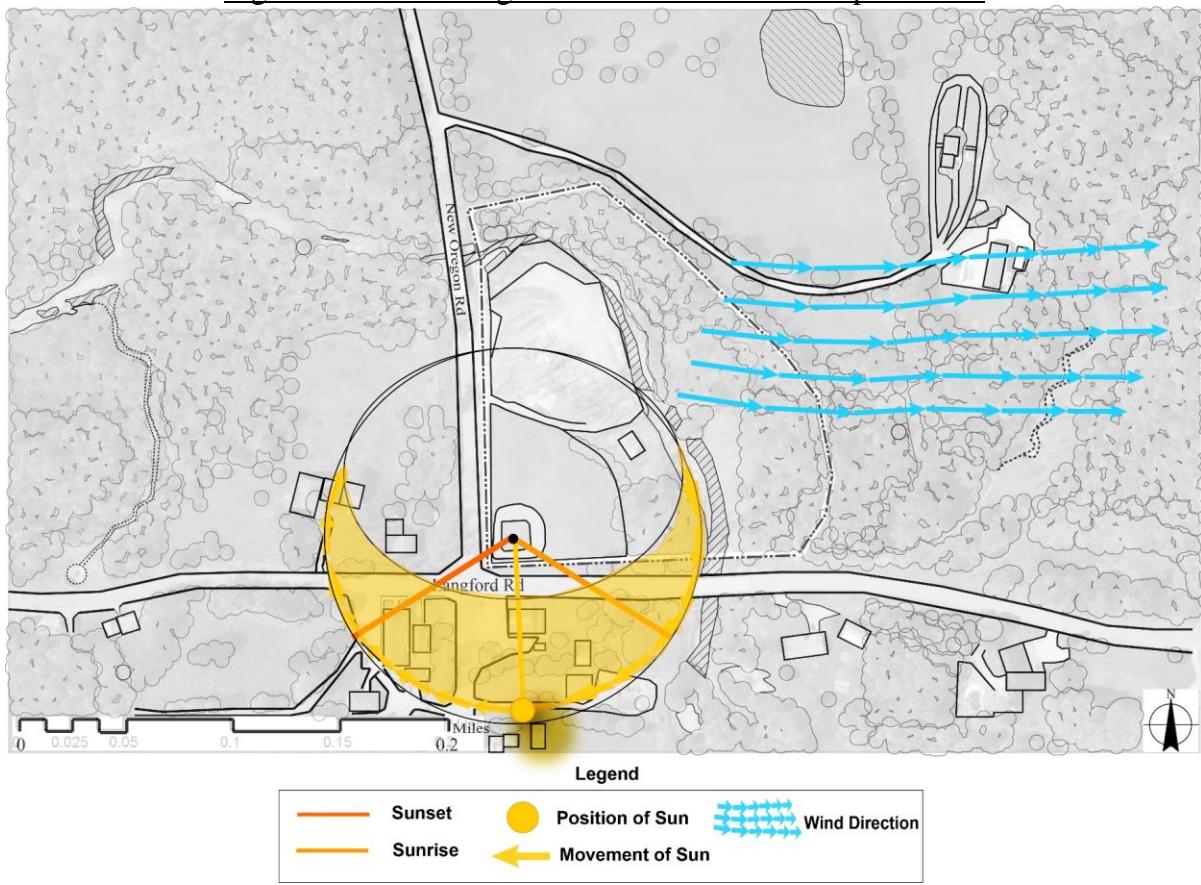


Parcel data source: (Erie County, NY. Office of Geographic Information Services)

Sun data source: (Hoffmann 2015)

Wind data source: (CustomWeather Inc.)

Figure 4.14 New Oregon Park Sun and Wind Map - Winter



Parcel data source: (Erie County, NY. Office of Geographic Information Services)

Sun data source: (Hoffmann 2015)

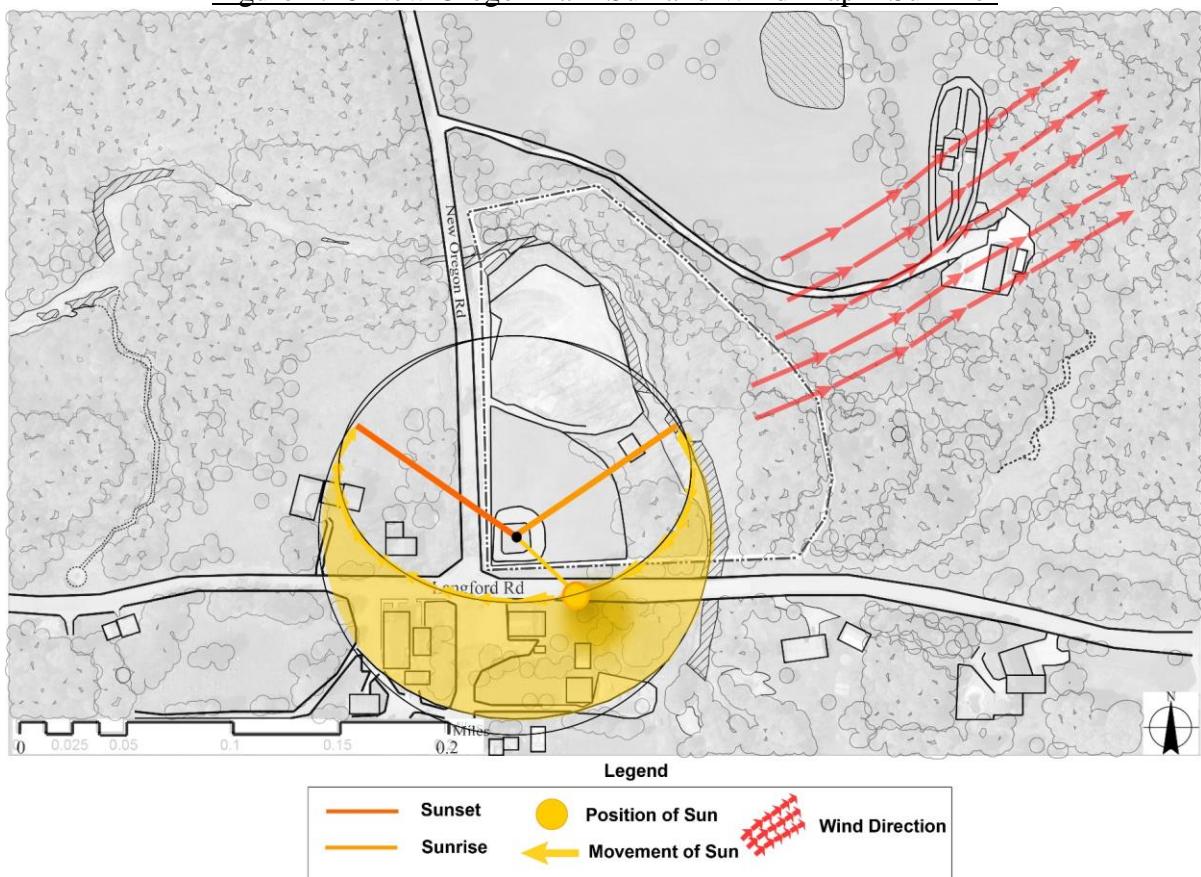
Wind data source: (CustomWeather Inc.)

Figure 4.15 New Oregon Park Sun and Wind Map - Spring



Parcel data source: (Erie County, NY. Office of Geographic Information Services), sun data source: (Hoffmann 2015), wind data source: (CustomWeather Inc.)

Figure 4.16 New Oregon Park Sun and Wind Map – Summer

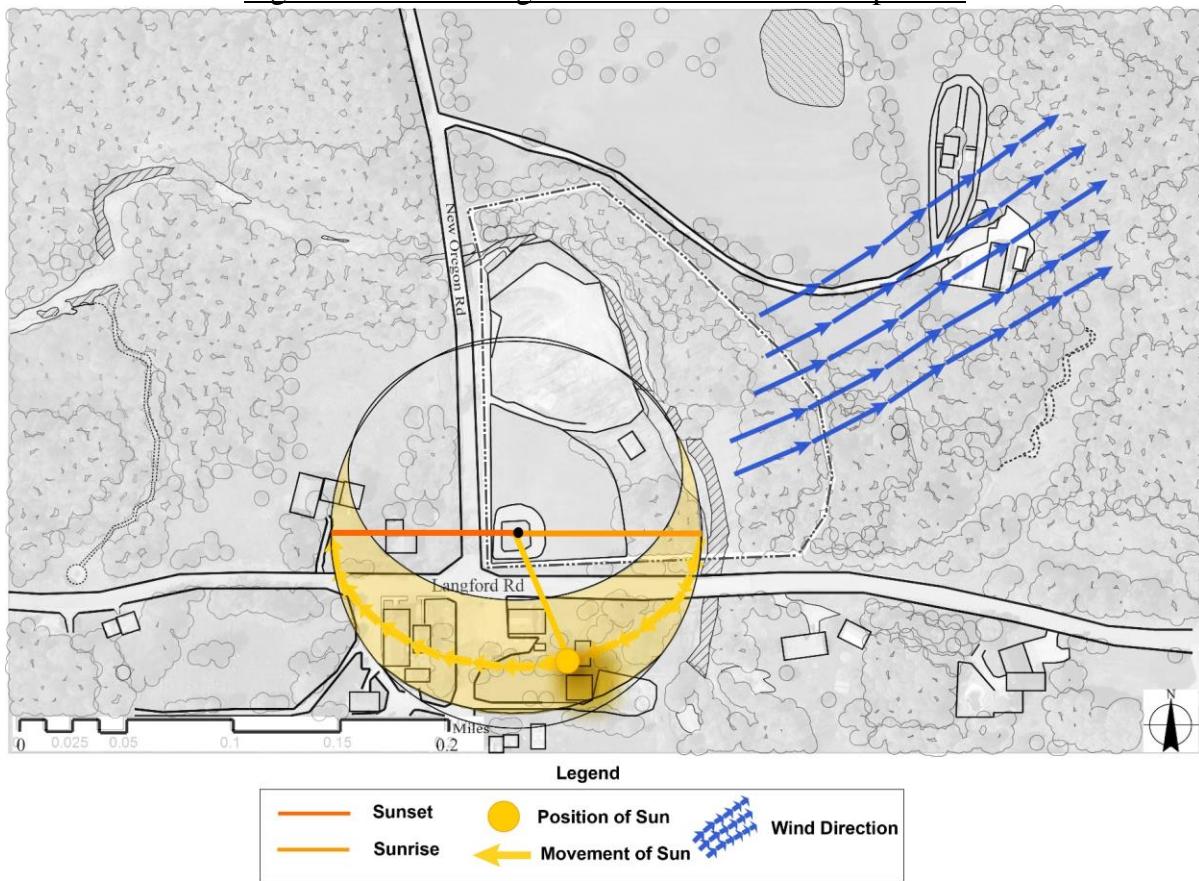


Parcel data source: (Erie County, NY. Office of Geographic Information Services)

Sun data source: (Hoffmann 2015)

Wind data source: (CustomWeather Inc.)

Figure 4.17 New Oregon Park Sun and Wind Map - Fall



Parcel data source: (Erie County, NY. Office of Geographic Information Services)

Sun data source: (Hoffmann 2015)

Wind data source: (CustomWeather Inc.)

Much can be taken into account from these studies when devising solutions for the parks. Similar to Shoshone Park, there are too many baseball fields in Fricano Park compared to their demand, and there are other amenities which are currently underutilized. At least one of Fricano Park's baseball fields can be eliminated and replaced by other activities. This relates to some scholars' observations on how there are often other amenities which are more popular than baseball fields in American parks.^{1, 2, 3, 4, 5, 6, 7, 12, 12, 16, 17, 19, 20, 21} Also, both Fricano Park and New Oregon Park contain creeks and significant wooded areas which are currently being underutilized. New amenities can be implemented in those parks which can help residents relax and take in nature.

As more people own cars, many scholars agree parks will need to have adequate parking space^{4, 5, 6, 7, 8, 11, 20, 22}. The two parks differ in terms of amount of parking spaces. Fricano Park has too much parking space compared to its demand, so at least one of those parking lots can be eliminated and be replaced with a new amenity. This is unlike New Oregon Park, which currently has too little parking, especially if new amenities get constructed. With the construction of new amenities will come more demand for the park, which will result in an increased need for new parking space. Therefore, at least one new parking lot should be constructed in New Oregon Park.

It was observed during field visits how many of the facilities in both parks have facilities which are already in decent condition and have room for additions. Therefore, a major focus of improvements in both parks should be adding on to existing facilities. This strategy can be good from a financial standpoint, since it can be less expensive to improve existing facilities compared to building entirely new ones. However, the benefits of constructing completely new facilities should not be ignored. Creating new attractions in each park will help attract new visitors who may have felt left out before by not having any amenities suited for them now. This will increase the popularity of each park, which can enhance the bonds between the North Collins residents and their parks, benefitting both the residents and the parks.

It was found how both parks contain hilly areas. When proposing improvements for both parks, this must be taken into account because new amenities can be built which take advantage of the views those hills can provide of the surrounding areas. It was observed during field visits how the hill provided great views of Lake Erie. A new amenity can be proposed which enhances this viewing and leisure opportunity. Since it was found the

sunrays point straight east at Fricano Park's hill during fall and spring sunsets, a new amenity at that spot can help give residents great views of those sunsets.

Bibliography for Section 4

Buffalo Southern Railroad. "Buffalo Southern Railroad Route Map". Retrieved 13 Mar. 2017, from <http://www.buffalosouthernrr.com/routemap>.

Erie County, NY. Office of Geographic Information Services. "Erie County On-Map Application." Retrieved 6 Sept. 2016, from
<http://gis2.erie.gov/HTML5/ErieCountyNY/PublicLaunchPage.aspx>.

CustomWeather Inc. "Almanac: Historical Information". Retrieved 20 Oct. 2016, from
http://www.myforecast.com/bin/climate.m?city=24399&zip_code=14111&metric=true.

Hoffmann, Torsten (2015). "SunCalc". Retrieved 3 Nov. 2016, from
<http://www.suncalc.org/#/42.5953,-78.9411,15/2016.10.20/01:51/1>.

Hofstetter, Christoph (2013). "Contour Map Creator". Retrieved 3 Nov. 2016, from
<https://contourmapcreator.urgr8.ch/>.

Section 5 – The Clients’ Opinions

Even though much was learned about Fricano and New Oregon Parks during field visits conducted on September 15, 2016, it was imperative to find out what the North Collins residents want to see improved with their parks. On October 18, 2016, a town hall meeting was held at the North Collins Town Hall where attendees discussed the current state of the parks and what they wanted to see improved and added.

Various issues were observed in Fricano Park during field visits. Many of the park’s amenities were not easily accessible to people of all abilities. For example, there is no clear-cut path which connects the creek to the rest of the park. The only way visitors can access the creek is by walking down a flight of uneven wooden stairs which lead to a makeshift trail surrounded by poison ivy down to the creek. Once at the creek, visitors can only walk on dangerous rocks alongside of the creek. Many other park facilities such as the baseball fields also contained similar problems. Some of the fields are situated on short, steep slopes, with no ramps or stairs connecting them with the park’s paths. The park itself is situated on a short and steep slope above Gowanda State Road, with no sidewalks connecting the park to the surrounding areas at the bottom of the slope. This is especially problematic because that slope acts as a barrier to pedestrians who wish to access the park through walking and biking. The park’s connectivity with the surrounding areas must be improved.

Many of the park’s facilities also need renovations involving lighting, materials and other simple fixes. The pavilion, volleyball courts and basketball courts are in need of lighting. The children’s playground’s hard surfacing can hurt the children who use it. The parking lots’ lack of pavement can hurt visitors’ cars during inclement weather. Many structures showed signs of underuse and neglect, such as the park’s press box and the storage

building. All of the park's facilities seemed fit for summer use, and there were no winter-oriented amenities observed in the park.

Figure 5.1 Unsatisfactory Access to Creek



Taken by Ian Schwarzenberg and Shimon Bhuyan on 9/15/16

Figure 5.2 Parking Lots in Need of Better Pavement



Taken by Ian Schwarzenberg and Shimon Bhuyan on 9/15/16

Figure 5.3 Gowanda State Road Slope with No Sidewalks



Taken by Ian Schwarzenberg and Shimon Bhuyan on 9/15/16

Figure 5.4 Basketball Court in Need of Renovation



Taken by Ian Schwarzenberg and Shimon Bhuyan on 9/15/16

Since Fricano Park is big, it naturally has room for many improvements. During the town meeting, North Collins residents discussed their desire to eliminate the park's neglected

bathroom building and press box. They stated how they want a new facility to be constructed in their places which consists of public toilets, storage for sports accessories and a concessions space. The residents also wanted to prioritize constructing a sidewalk connecting the nearby town center to the park. On top of that, the residents want more walking and running trails to be created throughout the park. They also generally want to see a new dog park and adult exercise equipment be constructed. They desired to see new lighting be implemented at the parks' baseball fields and basketball court, and general renovations of the volleyball courts. They also want to see the construction of winter-oriented facilities in order to make the park more suitable for year-round use.

Various flaws were also observed with New Oregon Park during field visits, some of which Fricano Park contained as well. Access to New Oregon's creek is limited. New Oregon Park's basketball court is in poor condition and needs renovation, such as better hoops and better floor markings. There is little lighting in the park, such as by the baseball fields and in the interior of the small pavilion. The playground has a narrow offering of equipment, and the equipment is also worn out. For example, the swings are rusty and unsafe to use. The wooden bench located in the northern part of the park is also decaying, and needs to be upgraded as a result. In addition to these structures, some trees are also decaying or even already dead. The park's berm is in bad condition due to neglect. There were also no visible sidewalks anywhere in the park.

Despite all these similarities to Fricano Park, New Oregon Park also has its own unique challenges. For example, New Oregon Park does not have many parking spaces, with the only real space available being a narrow unpaved strip on the west side of the park. This

is especially problematic because an inadequate amount of parking spaces drives down the amount of potential visitors to the park, which clearly contributes to the park's underuse.

Figure 5.5 Narrow Playground Offerings



Taken by Ian Schwarzenberg and Shimon Bhuyan on 9/15/16

Figure 5.6 The Lone Small Parking Space



Taken by Ian Schwarzenberg and Shimon Bhuyan on 9/15/16

North Collins residents discussed during the town meeting how they want Wi-Fi to be installed throughout the park. They also want improved access across the creek, and renovations to the basketball court. The residents expressed a desire to see the construction of a horseshoe pit, the renovation of the existing berm and the upgrading of the park's lighting systems.

When seeing all the signs of underuse without knowing what the North Collins residents think of their parks, it can be easy to incorrectly assume the North Collins residents do not care about their parks. In reality, the exact opposite is true. North Collins residents care greatly about their parks, and they have substantial hopes of what their parks can become as a result.

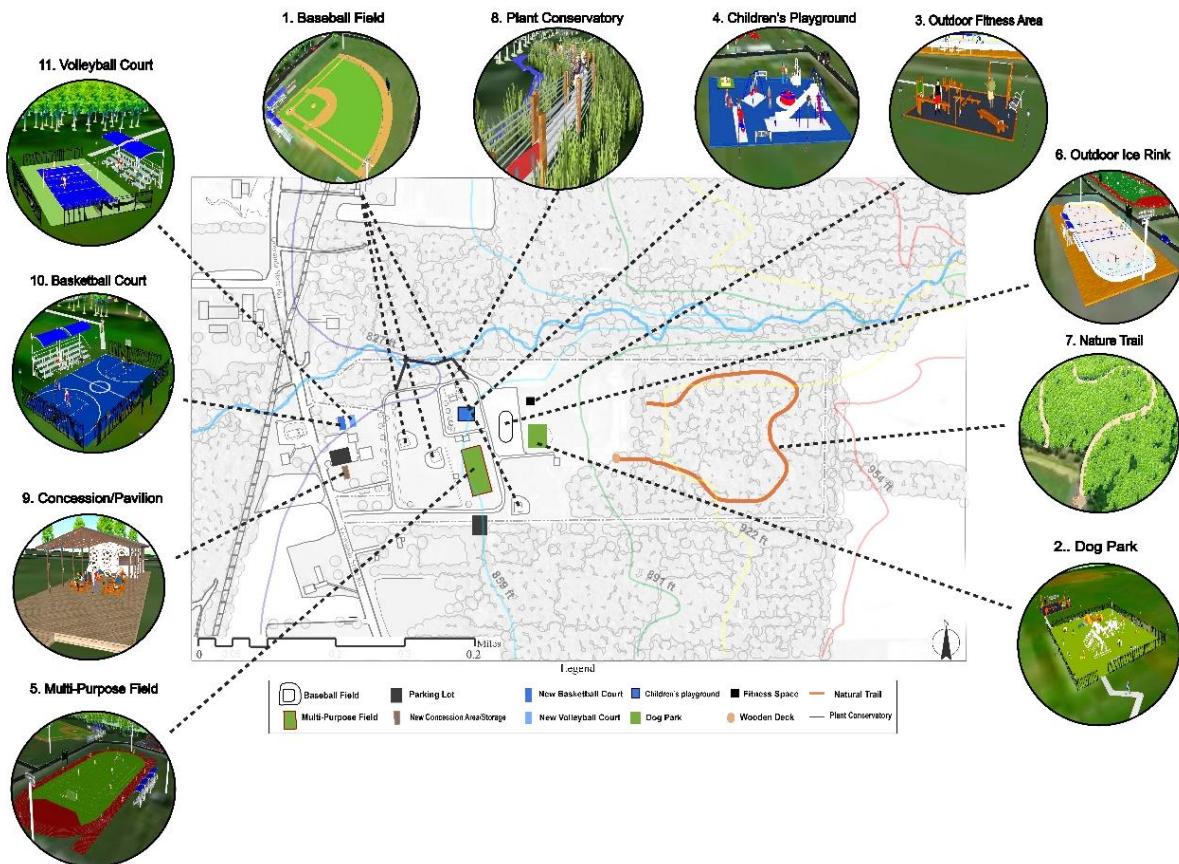
When designing solutions for the parks, many scholars agree it is paramount to first learn what the residents and town officials want to see implemented in their parks, and that every proposal for the parks must take into account the opinions of the residents and their leaders^{4, 5, 6, 8, 14, 18, 19, 20, 22}. If this step is skipped, any proposal which gets constructed will be a waste, since no resident will want to use them. The most successful ideas will be ones North Collins residents already want. Therefore, it is imperative that all proposals for both parks take into account the residents' and town officials' discussions during the town hall meeting. This shows the importance of having community meetings when proposing solutions for any public space, because these meeting act as the sources of proposal ideas.

Even though Fricano and New Oregon Parks have numerous flaws, it is clear both parks have much room for dramatic improvement. Both parks have enough space for the renovations of existing facilities and the construction of new ones. As a result, both parks can become so much more than what they are now after such improvements are made to them.

Section 6 – Design Proposals

The field observations made on September 15, 2016 and the suggestions made by North Collins residents and leaders during the October 18, 2016 town hall meeting were all taken into account to devise solutions for both parks. The solutions proposed for both parks aim to resolve key issues with the parks' current designs by renovating existing facilities and constructing new ones. Three dimensional models of the proposals were created using SketchUp and then presented on posters to a panel of North Collins residents.

Figure 6.1 Map of Changes to Fricano Park



1. Baseball Fields: Many of the existing baseball fields will have new wheelchair-accessible bleachers, lights and scoreboards installed. The current bleachers were observed to not be wheelchair-friendly during field visits, which can prevent disabled residents from attending baseball games. This motivated the decision to add wheelchair-friendly bleachers. Adding lights and scoreboards to the fields can make the fields livelier, attracting more people to use them as a result. The lights were added for two reasons: residents stated they want them at the town meeting, and they can attract people to the park at all hours of the day because they allow for the nighttime use of the fields.
2. Multi-Purpose Field: The existing multi-purpose field will have many improvements. Firstly, new wheelchair-accessible bleachers, lights and scoreboards will be installed, just like the baseball field. Secondly, the field will also get a new running track, new field goal posts and improved field markings. The new running track and revamped football field can provide space for North Collins schools to hold track meets and football games. During field visits, the field was observed to not have many features which can really draw visitors to it. These improvements are meant to imbue a sense of life into the field and make it a destination where people can go and play various types of sports. The running track was added for two reasons: there was no space observed during field visits which was dedicated to runners, and residents stated how they wanted such space during the town meeting.

Figure 6.2 Renovated Multi-Purpose Field with New Running Track



Model created by Shimon Bhuyan and Ian Schwarzenberg using SketchUp.

3. Basketball Court: The existing basketball court will have new wheelchair-accessible bleachers and scoreboards installed. The court will also receive new flooring and refurbished hoops. During field visits, it was seen how even though the basketball courts were in decent condition, the hoops and flooring could use upgrading. The new flooring and refurbished hoops will serve to clean up the court and make it more appealing to visitors, encouraging its use. The small wheelchair-friendly bleachers and small scoreboard can make the court suitable for competitive and regular basketball games alike. This was also designed to be a less expensive approach to satisfying the residents' wishes of a sports sized building for basketball, which was discussed at the town meeting.
4. Volleyball Court: The existing multi-purpose field will feature new wheelchair-accessible bleachers, scoreboards, new flooring, upgraded nets and small benches. The location of the court will also be moved to the western side of the park next to the basketball court. Similar to the basketball court, these improvements can make the court suitable for

competitive volleyball games. Putting the basketball and volleyball courts side by side also makes that spot a singular destination for those sports. This choice was also in response to the residents' wishes during the town hall meeting.

5. Children's Playground: The children's playground will get renovated flooring so it is safer for children, and it will also get refurbished equipment. During field visits, it was noted how the playground had flooring which can hurt children who fall on it, and the equipment was a bit rusty. Making the playground components safer for children can attract more parents to bring their children to the playground, as they will feel better about letting them play in it.

In addition, some entirely new features will be constructed in the park:

1. Ice Rink: The large existing parking lot located in the middle section of the park will be replaced by a new multi-purpose rink. The rink will contain lights, a scoreboard and wheelchair-friendly bleachers as well. This rink will serve as a great space for winter activities such as skating and hockey, attracting people to use the park year-round. Similar to the multi-purpose field, this rink can also provide space for local schools to hold hockey matches. This was proposed for two reasons. Firstly, residents stated during the town meeting how they want an ice rink in the park. Secondly, the parking lot was observed to be too big compared to the amount of residents who use it. Replacing this lot with a new amenity helps better use the space available in the park.
2. Dog Park: The park's easternmost baseball field will be eliminated in order for a dog park to be constructed in the field's place. The dog park's obstacle course will allow dog owners to exercise their pets. This will also serve as a space for North Collins residents to

socialize with each other. This was proposed primarily because residents expressed a wish to have a dog park during the town meeting.

3. Outdoor Fitness Center: In addition to the dog park, a new outdoor adult fitness center will be constructed in place of the easternmost baseball field. The fitness center is meant to complement the children's playground by offering an exercise space designed specifically for adults. Just like the dog park, this will also serve as a space for North Collins residents to socialize with each other. This was proposed mainly because residents expressed a wish to have a fitness area for adults in the town meeting.
4. Pavilion: A new pavilion building will be constructed in the westernmost portion of the park adjacent to the senior citizens' center. Similar to the senior citizens' center, residents can gather and interact at the new pavilion while also enjoying concessions from a built-in cafe. The pavilion will also contain bathrooms and storage space for athletic materials. In order to further connect the space with the community, the walls of the pavilion will also be branded with the North Collins town logo. This pavilion was proposed for numerous reasons. Firstly, residents stated how they wanted a new building to be constructed which consists of toilets, storage and a concessions space. The pavilion will contain all of these elements. Secondly, the park should serve as a space which promotes socializing between North Collins residents, which can unify the community. To further build off of this, the park should also make residents proud of it, which encourages pride of North Collins as well. This is exemplified by the North Collins logo on the wall.

Figure 6.3 New Pavilion



Model created by Shimon Bhuyan and Ian Schwarzenberg using SketchUp.

5. Nature Trail: The park should also serve to educate visitors. A narrow, curved nature trail which traverses through the woods in the eastern half of the park will be constructed. By navigating this trail, visitors can learn about the various trees and even wildlife located inside the woods. This nature trail can be useful for North Collins schools who can take their students to it to teach them about environmental science. The southern end of the trail will also lead onto a small deck on the hill which makes up the eastern half of the park. The deck will allow visitors to be able to view Lake Erie in the warmer months. This nature trail was proposed for two reasons. Firstly, it was noted during field visits how the woods in the eastern portion of the park were underdeveloped, and how they have much potential to be taken advantage of as a result. Secondly, residents stated in the town meeting that they want more walking trails to be constructed in the park.

Figure 6.4 Nature Trail – Surface Level View



Model created by Shimon Bhuyan and Ian Schwarzenberg using SketchUp.

Figure 6.5 Hilltop Deck



Model created by Shimon Bhuyan and Ian Schwarzenberg using SketchUp.

6. Outdoor Plant Conservatory Path: We will also create a new plant conservatory path area by the creek. The path will contain small information signs educating passersby about the various plants situated by the creek, such as poison ivy. Like the nature trail, this

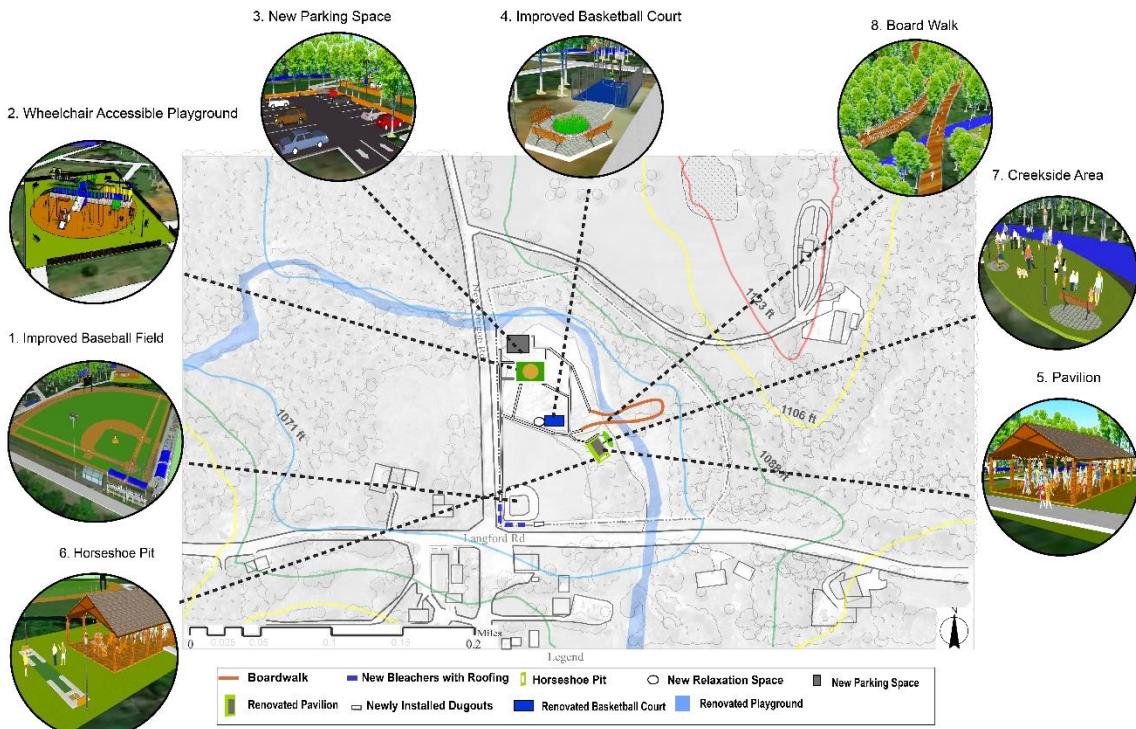
conservatory area can also be useful for North Collins schools to take their students here to teach them about environmental science. The presence of poison ivy in the northern part of the park is one of the factors which pushes potential visitors away from the creek, since they risk being injured by the poison ivy when walking to the creek. The path blazes a safe and satisfactory trail through the poison ivy to the creek, with the fences along the path putting visitors a safe distance away from the poison ivy. While being a safe distance from the poison ivy, the visitors can also learn about it by reading information signs. This proposal also satisfies residents' wishes of wanting to be able to better access the creek.

Figure 6.6 Plant Conservatory Path – Surface Level View



Model created by Shimon Bhuyan and Ian Schwarzenberg using SketchUp.

Figure 6.7 Map of Changes to New Oregon Park



Parcel data source: (Erie County, NY. Office of Geographic Information Services)

Much inspiration was taken from Fricano Park when considering how to best improve New Oregon Park. Many currently existing facilities in the park will be renovated in ways which include residents of all abilities in the park's activities. The facilities will also be renovated so they become more hospitable to social interaction among North Collins residents. To start, the baseball field and playground will be renovated so they become wheelchair-accessible. Wheelchair-accessible bleachers will be implemented at the baseball field, allowing people of all abilities to watch baseball games in person. Implementing wheelchair-friendly equipment in the playground will allow disabled children to enjoy the same recreational activities as their peers. In general, the visibly worn out equipment of the playground will be refurbished to clean up the look of the playground. The youth of North Collins will also have a role in drawing and painting murals at the playground. This will give

the residents a direct role in the improvement of their park. This was primarily inspired by seeing how involved North Buffalo residents were in maintaining Shoshone Park.

Figure 6.8 Wheelchair-Friendly Playground Equipment



Model created by Shimon Bhuyan and Ian Schwarzenberg using SketchUp.

Similar to Fricano Park, New Oregon Park will also be improved in a way which improves community engagement and socialization between North Collins residents. The construction next to the renovated basketball court of a new seating area decorated with a circular grass center will accomplish this.

Figure 6.9 Seating Area by Renovated Basketball Court



Model created by Shimon Bhuyan and Ian Schwarzenberg using SketchUp.

The pavilion will be redesigned to create a year-round space for social gatherings.

This will be possible with the installation of new string lights, a fireplace geared towards wintertime use, and tables and chairs to replace the existing worn out benches. A new horseshoe pit with benches and a grass lawn will also be installed next to the pavilion to further stimulate social and physical activity there. These features will inject a sense of life to the park by serving as a catalyst for activities like community gatherings and horseshoe games. This was all inspired by the improvements made to Fricano Park.

Figure 6.10 New Oregon Park Renovated Pavilion



Model created by Shimon Bhuyan and Ian Schwarzenberg using SketchUp.

Similar to Fricano Park, a new boardwalk will be constructed which bridges the creek and traverses through the small wooded area on the east side of the creek. This boardwalk is essentially a smaller-scale version of the Fricano Park nature trail. The boardwalk will not only serve to give visitors access to the small wooded area, but it will also provide opportunities for visitors to connect with nature. In addition to providing access to the woods, the boardwalk also gives visitors better access to the creek by giving them a spot to the view the creek from above. Just like with the Fricano Park nature trail, the New Oregon Park boardwalk can also provide opportunities for local schools to take their students along it in order to teach them about environmental science.

The installment of these new features will require new parking spaces. Therefore, we will build a new parking lot on the west side of the park to accommodate more visitors and to replace the current unsatisfactory parking strip.

Figure 6.11 New Oregon Park Boardwalk – Aerial View



Model created by Shimon Bhuyan and Ian Schwarzenberg using SketchUp.

Figure 6.12 New Oregon Park Boardwalk – Surface Level View



Model created by Shimon Bhuyan and Ian Schwarzenberg using SketchUp.

After the solutions were devised, posters were then created containing information about and models of the design solutions. These posters were then discussed in a five-minute presentation to a small panel of North Collins residents on November 22, 2016. The North Collins residents became excited by the proposed solutions for both parks, and greatly approved of them as a result. For Fricano Park, some of the residents especially approved of the dog park and the outdoor fitness run, as a couple of the panelists stated how they have always been advocating for the construction of them. The residents also supported the hilltop deck idea, as they understood the multiple advantages of it, such as its views of the surrounding areas.

For New Oregon Park, the panelists were greatly in favor of the construction of the horseshoe pit, as they saw the potential of all the activities which could occur there. They also agreed the current amount of parking space at New Oregon Park is insufficient, which made them heavily support the implementation of a new parking lot. Overall, the presentation was highly successful in the sense that the residents heavily supported the proposals for both parks. After all the other proposals from the rest of the two-student teams were presented, a report booklet of the proposals was eventually compiled and given to the North Collins residents.

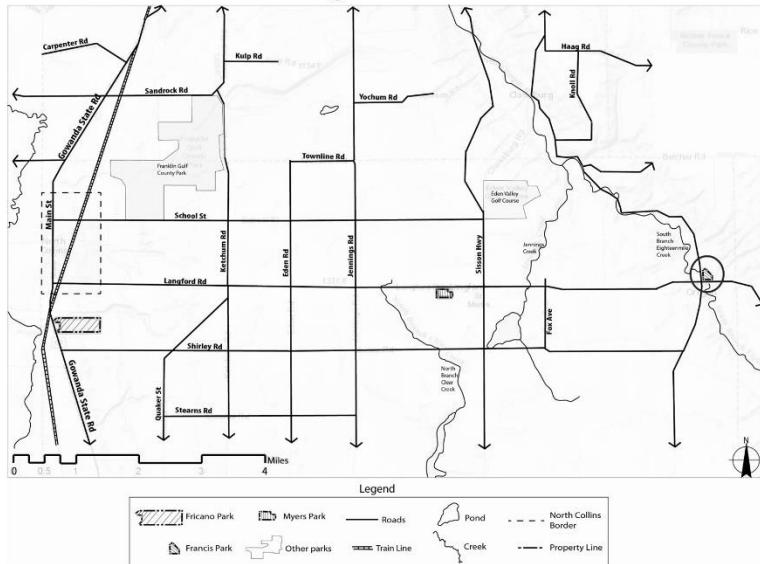
NORTH COLLINS CONCEPTS

New Oregon Park Current Condition

North Collins, NY

December 12 2016

New Oregon Park Location



Conditions of Current Facilities



Bleachers in poor condition
Taken by Shimon Bhuyan and Ian Schwarzenberg on 9/15/16



Basketball court in need of renovation
Taken by Shimon Bhuyan and Ian Schwarzenberg on 9/15/16



Children's playground in need of new equipment
Taken by Shimon Bhuyan and Ian Schwarzenberg on 9/15/16

Overall, New Oregon Park is in good condition. However, it was evident that the park would benefit from renovation and simple improvements such as installing new light posts. Observations made during our site visit allowed us to examine the issues of the park's current design such as the lack of parking space, insufficient lighting features and poorly maintained spaces. Furthermore, the current conditions of the park allowed us to see this as an opportunity to be creative with our final concepts.

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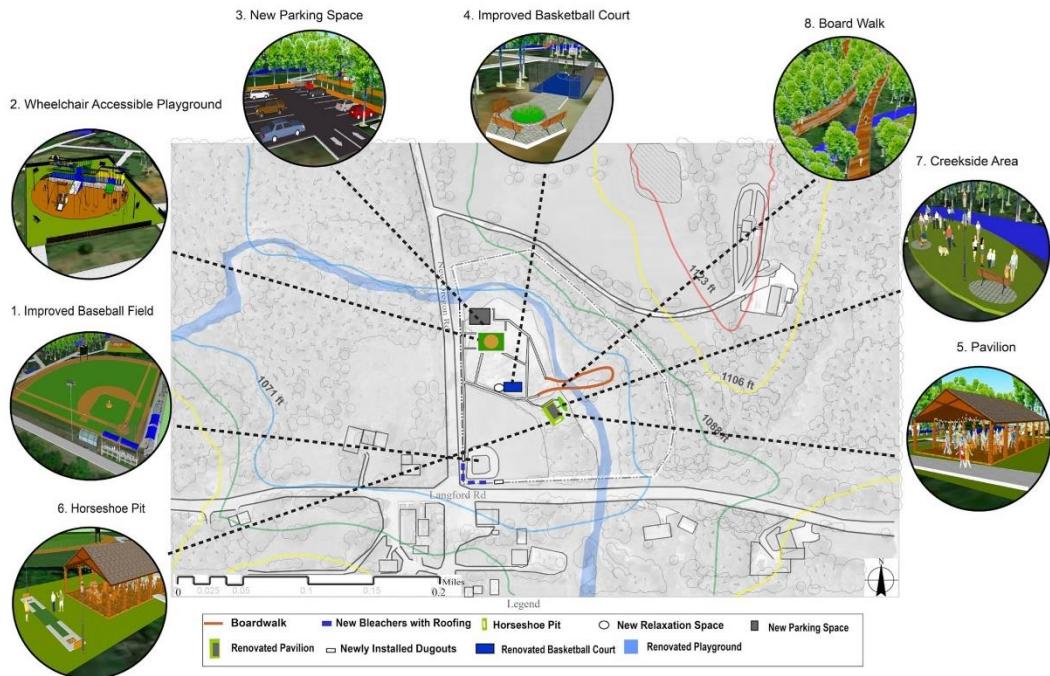
NORTH COLLINS CONCEPTS

New Oregon Park Design Solutions

North Collins, NY

December 12 2016

New Oregon Park Site Analysis and Concept Map



Summary of Changes:

- 1. Improved Baseball Field:** The renovated baseball field features upgraded lighting, fencing, wheelchair-friendly bleachers and new dugouts.
- 2. Wheelchair Accessible Playground:** This renovated playground will contain brand new wheelchair-accessible equipment and new rubber surfacing.
- 3. New Parking Space:** A new parking lot will be built in the northern part of the park to make up for the current lack of parking space. Fences and trees will surround the lot to protect kids from accidentally entering it from the nearby playground.
- 4. Improved Basketball Court:** The renovated basketball court will include a new rubber surface. A new seating area with plants and mural created by the community will also be constructed next to the court.
- 5. Renovated Pavilion:** The renovated pavilion will serve as a space for social gatherings. It will contain new string lights, a new fireplace, and tables and chairs.
- 6. Horseshoe Pit:** A new horseshoe pit which incorporates natural materials will be constructed next to the renovated pavilion.
- 7. Creekside Area:** This new grass lawn will connect visitors to the creek. Visitors can sit on the benches, have picnics, and participate in other recreational activities, all while enjoying the creek. Pathways also connect the lawn with the pavilion and the rest of the park.
- 8. Boardwalk:** This new boardwalk will link the more flat and less wooded west part of the park with the hilly, wooded area on the east part.

NORTH COLLINS CONCEPTS

New Oregon Park Design Solutions

North Collins, NY

December 12 2016

Park Overview and Key Features



Park Overview



1. Baseball Field - Side View



1. Baseball Field - Wheelchair-Friendly Bleachers



5. Pavilion - Side View



2. Wheelchair-Friendly Playground - Front View



4. Improved Basketball Court

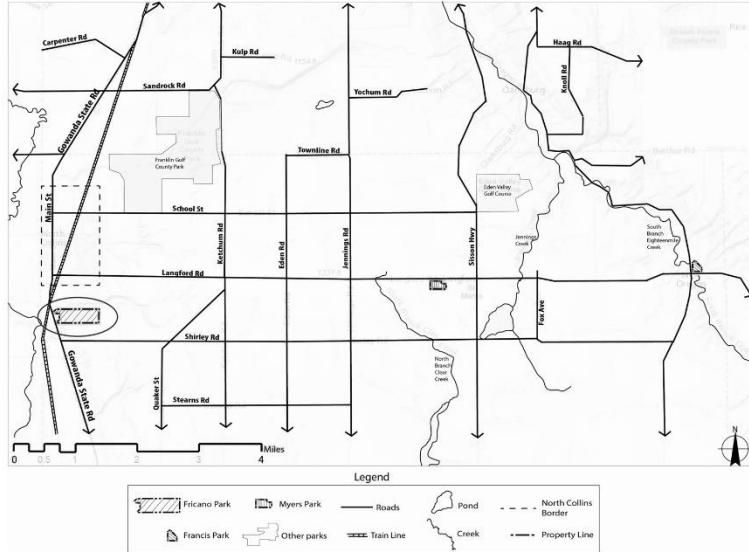
NORTH COLLINS CONCEPTS

Fricano Park Current Condition

North Collins, NY

December 12 2016

Fricano Park Location



Conditions of Current Facilities



Multi-purpose field in need of renovation

Taken by Shimon Bhuyan and Ian Schwarzenberg on 9/15/16



Basketball court in need of renovation

Taken by Shimon Bhuyan and Ian Schwarzenberg on 9/15/16



Unsatisfactory access to creek

Taken by Shimon Bhuyan and Ian Schwarzenberg on 9/15/16

Overall, most of the existing fields in Fricano Park have room for additions and renovation. Also, access to the creek in the northern part of the park needs to be improved. We also recognized that the park needs to be more accessible to people of all abilities. This gave us an opportunity for us to implement new features which improves accessibility, such as wheelchair-accessible bleachers, ramps, playgrounds, and so forth. We took all of this into consideration and aimed to tackle these issues with our proposals.

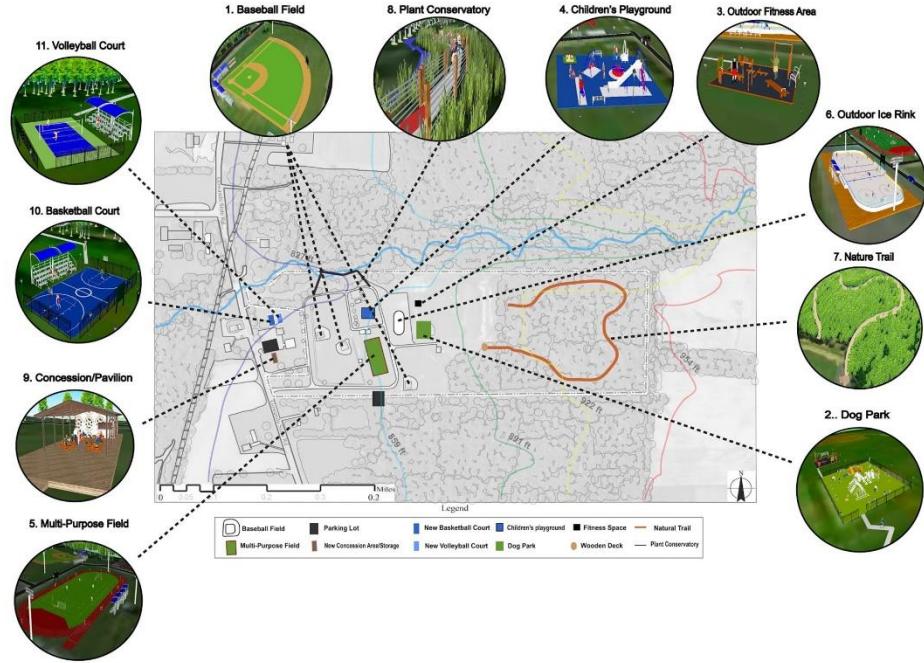
NORTH COLLINS CONCEPTS

Fricano Park Design Solutions

North Collins, NY

December 12 2016

Fricano Park Site Analysis and Concept Map



Summary of Changes:

- 1. Renovated Baseball Fields:** New sets of wheelchair-friendly bleachers, lights, scoreboards and dugouts will be implemented in the three remaining baseball fields.
- 2. Dog Park:** One baseball field will be eliminated for a new dog park, complete with a large dog obstacle course.
- 3. New Outdoor Fitness Center:** A new outdoor fitness center geared towards adults will also be constructed on the site of the eliminated baseball field.
- 4. Renovated Children's Playground:** The existing children's playground will be renovated to include new synthetic flooring, new equipment, lighting and benches.
- 5. Renovated Multi-purpose Field:** The multi-purpose field will be revamped to add a running track, new lights, a scoreboard and wheelchair-friendly bleachers.
- 6. Outdoor Hockey Rink:** A big parking lot will be eliminated to construct a new hockey and ice skating rink. It will consist of wheelchair-accessible bleachers and a scoreboard.
- 7. New Nature Trail and Deck:** A new nature trail will be built in the eastern wooded portion of the park. A new deck will also be constructed at the top of the hill at one of the trailheads, providing sweeping views of the surrounding farmland and Lake Erie.
- 8. New Plant Conservatory Area:** A small path will be constructed next to the creek at the northern end of the park. It will contain educational signs to educate visitors about the poison ivy and other plants along the path.
- 9. Pavilion:** A new pavilion will be erected next to the senior citizens home, which will contain a new cafe, restrooms and storage space.
- 10. Renovated Basketball Court:** The existing basketball court by the senior citizens' center will be renovated to include new pavement, lights, fences, a new scoreboard and wheelchair-accessible bleachers.
- 11. New Volleyball Court:** A new volleyball court will be constructed next to the basketball court, which will include the same features as the renovated basketball court.

NORTH COLLINS CONCEPTS
Fricano Park Design Solutions

Park Overview and Key Features



Overview Looking East



7. Nature Trail and Deck - Aerial View



7. Nature Trail - Surface Level



View Looking Towards Recreational Facilities



8. Plant Conservatory - Surface Level



7. Nature Trail - Entrance



5. Multi-Purpose Field - Side View



9. Concession/Pavilion - Front View

North Collins Concepts

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Bibliography for Section 6

Erie County, NY. Office of Geographic Information Services. "Erie County On-Map Application." Retrieved 6 Sept. 2016, from
<http://gis2.erie.gov/HTML5/ErieCountyNY/PublicLaunchPage.aspx>.

Section 7 – Lessons Learned

There were many interesting insights from seeing how the North Collins residents reacted to the presentation. Firstly, it was interesting to see how well the panelists responded to the models of the solutions. This illustrates the powerful role which images have in illustrating physical ideas to the public in a clear way and convincing clients. Urban planners must make sure to carefully pay attention to details when creating models of their solutions, as the smallest details can make the biggest differences in how those models are perceived by clients.

Secondly, it was also fascinating to see how well the panelists responded when they realized how their suggestions from the town meeting were carefully taken into account in the proposals. This shows when designing solutions for public spaces such as parks, urban planners must make great effort in listening to and analyzing the suggestions of residents and town officials. If the ideas of the residents and their leaders are carefully taken into consideration when designing solutions, they will clearly see that when the ideas are presented to them and they will greatly approve of those ideas as a result.

Many crucial lessons were learned throughout this project on the process of improving parks. Firstly, it was interesting to learn firsthand how much residents can care about the states of their parks, and how this can be used to improve them. Parks should ideally be the pride of the communities they are located in. When Shoshone Park was studied, it was observed how residents volunteered to help maintain their park, such as by cleaning up trash. This benefits residents in various ways. Firstly, this gives residents a sense of ownership over their parks, and therefore pride in them. Secondly, this provides an opportunity for residents to directly learn about the state of their parks, which gives them

unique insights as to what urban planners should improve about them. Therefore, these users can be some of the best people to ask for suggestions on how to improve their parks. Through this, the importance and usefulness of participatory planning was realized. Before the famed urban planning critic Jane Jacobs arose in the 1960's, urban planning was commonly done through a top-down method. This often involved planners deciding the fate of a site in an office located far away from it, and then executing those plans with little input from residents most affected by those changes. In response to this, Jacobs greatly influenced the bottom-up planning movement, where residents would take charge of the planning of their own communities: "Although her influence was often overestimated, she was highly influential 'in the background' and her book became 'basic knowledge' in local grassroots movements"¹⁵. This project showed how cooperation with North Collins residents and empowering them to take a prominent role in the process of improving their parks goes a long way in successfully improving them.

Secondly, the importance of making field visits to a site when planning improvements for it was realized. The field visits to the North Collins parks provided invaluable information about the parks which would have never been learned through online data gathering. Personally visiting the sites to take note of the strengths and weaknesses of the sites' current facilities greatly shaped the process of designing proposals. This shows how as helpful as technology can be in gaining an understanding of a park, technology can only take urban planners so far in helping them learn about a park. Field visits can provide qualitative information gained through the senses which technology alone simply cannot provide.

Finally, it was realized as to how important it is to consider as many proposal ideas as possible when considering how to best improve a park. At the end of the course, a booklet

containing all of the students' proposals were made and presented to the North Collins residents. Having a variety of options will certainly help North Collins decide what to do with their parks because each option can represent a fresh way of viewing the issue which residents could not see themselves. Each student came to the project with a unique perspective on how to best improve the North Collins parks because many of the students grew up in different places and have had diverse life experiences. For example, they grew up in different environments with different parks. This can make them see the North Collins parks in ways which the residents cannot, which can make them provide solutions for the parks which the residents may have never thought of. This proves how having a diverse group of planners create many possible ideas can help improve any site because of each planner's unique background.

In conclusion, it is key for planners to remember numerous crucial lessons when considering how to best improve parks. Firstly, planners must remember images are a powerful tool in conveying ideas to their clients. Secondly, planners must listen to their clients' suggestions, as they know their parks best. Thirdly, planners must involve the clients in the planning process, which not only increases the clients' involvement with their parks' affairs, but their sense of ownership and pride in their parks as well. Fourthly, planners must remember the importance of making field visits, since so much can be learned from them. Lastly, planners must consider diverse perspectives when thinking of solutions.

Notes

¹ Arant, Cheryl-Anne, Hagen, Sandra, Harring, Holly, Reed, Julian A., Stevens, Katherine and Princess Wells. 2008. "A Descriptive Examination of the Most Frequently Used Activity Settings in 25 Community Parks Using Direct Observation". *Journal of Physical Activity & Health* (5): S183-S195.

² Babey, S. H., D. Tan, J. Wolstein, and A. L. Diamant. 2015. "Neighborhood, family and individual characteristics related to adolescent park-based physical activity." *PREVENTIVE MEDICINE* 76:31-36. doi: 10.1016/j.ypmed.2015.04.001.

³ Chen, D., University of Guelph. School of Landscape Architecture, and University of Guelph. School of Graduate Studies. 2006. *Shared Outdoor Spaces and Community Life: Assessing the Relationship Between Design and Social Interaction*: University of Guelph.

⁴ Cheng, C.E., University of Guelph. School of Landscape Architecture, and University of Guelph. School of Graduate Studies. 2006. *Understanding the Common and Diverse Interests of a Community Through a Participatory Process for the Redesign of a Local Park and School Ground*: University of Guelph.

⁵ Chistik, C., University of Guelph. School of Landscape Architecture, and University of Guelph. School of Graduate Studies. 2007. *Accommodating Seniors in the Design of Urban Parks*: University of Guelph.

⁶ Chow, H. W. 2013. "Outdoor fitness equipment in parks: a qualitative study from older adults' perceptions." *BMC PUBLIC HEALTH* 13 (1):1216-1216. doi: 10.1186/1471-2458-13-1216.

⁷ Cohen, D. A., S. Lapham, K. R. Evenson, S. Williamson, D. Golinelli, P. Ward, A. Hillier, and T. L. McKenzie. 2013. "Use of neighbourhood parks: Does socio-economic status matter? A four-city study." *Public Health* 127 (4):325-332. doi: 10.1016/j.puhe.2013.01.003.

⁸ Dahl, B., and D.J. Molnar. 2003. *Anatomy of a Park: Essentials of Recreation Area Planning and Design*: Waveland Press.

⁹ Garvin, A., and R. Brands. 2011. *Public Parks: The Key to Livable Communities*: W.W. Norton & Company.

¹⁰ Klemm, Wiebke, Bert van Hove, Sanda Lenzholzer, and Henk Kramer. 2017. "Towards guidelines for designing parks of the future." *Urban Forestry and Urban Greening* 21:134-145. doi: 10.1016/j.ufug.2016.11.004.

¹¹ Low, S., and N. Smith. 2013. *The Politics of Public Space*: Taylor & Francis.

¹² Low, S., D. Taplin, and S. Scheld. 2009. *Rethinking Urban Parks: Public Space and Cultural Diversity*: University of Texas Press.

¹³ Marron, Catie, and Oberto Gili. 2013. *City parks: public places, private thoughts*. Vol. 1st. New York: Harper.

¹⁴ Nordh, Helena, and Kjersti Østby. 2013. "Pocket parks for people - A study of park design and use." *Urban Forestry and Urban Greening* 12 (1):12-17. doi: 10.1016/j.ufug.2012.11.003.

¹⁵ North, Alissa. 2013. *Operative landscapes: building communities through public space*. Basel, Switzerland: Birkhäuser.

¹⁶ Schubert, Dirk. 2014. *Contemporary perspectives on Jane Jacobs: reassessing the impacts of an urban visionary*. Vol. New. Farnham, Surrey: Ashgate.

¹⁷ Smith, Andrew. 2015. *Events in the City*. Florence, UNITED STATES: Taylor and Francis.

¹⁸ Tate, Alan. 2001. *Great city parks*. New York;London;: Spon Press.

¹⁹ Veitch, Jenny, Kylie Ball, David Crawford, Gavin R. Abbott, and Jo Salmon. 2012. "Park improvements and park activity: A natural experiment." *American Journal of Preventive Medicine* 42 (6):616-619. doi: 10.1016/j.amepre.2012.02.015.

²⁰ Wang, D., G. Brown, and Y. Liu. 2015. "The physical and non-physical factors that influence perceived access to urban parks." *LANDSCAPE AND URBAN PLANNING* 133:53-66. doi: 10.1016/j.landurbplan.2014.09.007.

²¹ Woudstra, Jan, Ken Fieldhouse, Trust Landscape Design, and Society Garden History. 2000. *The regeneration of public parks*. London ; New York: Published jointly by the Garden History Society, Landscape Design Trust, and E & FN Spon, with support from English Heritage.

²² Wright, A. 2013. *Future Park: Imagining Tomorrow's Urban Parks*: CSIRO PUBLISHING.

Bibliography

Erie County, NY Office of Geographic Information Services. "Erie County On-Map Application." accessed 6 Sept. 2016.

<http://gis2.erie.gov/HTML5/ErieCountyNY/PublicLaunchPage.aspx>.

Hoffmann, Torsten. 2015. "SunCalc." accessed 3 Nov. 2016.

<http://www.suncalc.org/#/42.5953,-78.9411,15/2016.10.20/01:51/1>.

Hofstetter, Christoph. 2013. "Contour Map Creator." accessed 3 Nov. 2016.

<https://contourmapcreator.urgr8.ch/>.

Inc., CustomWeather. "Almanac: Historical Information." accessed 20 Oct. 2016.

http://www.myforecast.com/bin/climate.m?city=24399&zip_code=14111&metric=true.

Railroad, Buffalo Southern. "Buffalo Southern Railroad Route Map."

<http://www.buffalosouthernrr.com/routemap>.