

March 15, 2005

TO: John Szerlag, City Manager

FROM: Brian P. Murphy, Assistant City Manager/Services
Steven Vandette, City Engineer
Carol K. Anderson, Parks and Recreation Director

SUBJECT: Agenda Item: Donald Flynn Park Report

At the Council meeting of March 7, 2005 City Management was asked to look into the feasibility of locating a minor league baseball complex at Donald Flynn Park. Staff was asked to investigate the requirements of the state DEQ regarding the issue of constructing a facility over a former landfill, as well as to identify possible city sites for relocation of Flynn Park's four lighted ball diamonds. Estimated relocation costs were also requested.

Assuming that a site for new recreational ball diamonds is available for construction no later than September 2005 and there is a desire to continue the baseball/softball programs without interruption, staff predicts ballpark construction at Flynn could begin no earlier than 2007.

Staff looked at the costs associated with constructing four new lighted ball diamonds at a single new site needing all new supporting infrastructure. Those estimated costs are itemized below:

Ball Diamond Development Costs – Four Fields at One New Location

Description	Unit Cost	Cost - 4 Fields
Topo	\$300/acre	\$ 3,000
Soil Borings	\$1000/field	\$ 4,000
Clearing/Removal	\$20,000 if new site	\$ 20,000
Site Grading	\$2.25/s.y.	\$ 108,900
Furnish/Grade Topsoil	\$1.75/s.y.	\$ 60,000
Infield Surfacing	\$9.00/s.y.	\$ 53,000
Playing field seeding	\$.80/s.y.	\$ 31,000
Backstop(s)	\$6000 ea.	\$ 24,000
Field Underdrainage	\$100,000 – lump sum	\$ 100,000
8' Chainlink Fencing	\$22.00 l.f.	\$ 88,400
Player bench slab	\$5.50/s.f.	\$ 11,000
Player Benches	\$450 ea.	\$ 3,600
Pedestrian Surfacing	\$8.00/s.y.	\$ 38,720
Pitchers mound/bases	\$750/field	\$ 3,000
Lighting	\$200,000/field	\$ 800,000
Restroom/Concession	\$150/s.f.	\$ 250,000
Parking lot	\$350,000 – lump sum	\$ 350,000
Electrical Service	\$30,000 – lump sum	\$ 30,000
Water Service	\$13,000 – lump sum	\$ 13,000
Sanitary Service	\$12,000 – lump sum	\$ 12,000

Description	Unit Cost	Cost - 4 Fields
Storm Sewer	\$50,000 – lump sum	\$ 50,000
Irrigation	\$135,000 – lump sum	\$ 135,000
Scoreboards	\$5000 ea	\$ 20,000
Drinking Fountain	\$3500 ea.	\$ 3,500
Est. Cost - Four Fields at One New Location		\$2,212,120

The estimated minimum cost to purchase a site that will accommodate four fields, approximately 20 acres, is \$ 2,000,000. Since there are very few parcels available for this type of project, the actual cost could be well in excess of that amount as it may be necessary to assemble parcels.

Alternative Locations for Four-field Complex

Staff identified several existing city parks, which are large enough to construct four new ball diamonds. Each site has positive and negative aspects to its use as a lighted softball complex. The major objection expected from residents around each potential location would be the sports lighting needed on the four fields for evening/nighttime use. All of our parks are situated near residential areas and the use of lights will impact some areas more than others.

Site #1 – Boulan Park, Size: 57 acres

Amenities: Three ball diamonds (two lighted), eight lighted tennis courts, football field, three soccer fields, one lacrosse field, two sand volleyball courts, two picnic shelters, play structures, swing structures, concession, restrooms, parking for 451 cars.

Four new fields could be constructed at this site. However, this would require reconfiguring the site, which would then have a total of six lighted fields (four new, plus the two existing) lined up from the back of the cemetery west to the western boundary of the park. The reconfiguration would result in the loss of two soccer fields and one lacrosse field, would have to be relocated elsewhere.

Positives about the site:

- Park has existing infrastructure, although another restroom/concession building would have to be added to accommodate increased park usage.
- Since two of the existing fields, and eight tennis courts are currently lighted for nighttime use and the neighboring residential areas are used to lights, this site might be the easiest to introduce additional lighted fields.
- There would be some cost savings in maintenance with all of the lighted fields in Troy located at the same park.
- Programming benefit - Tournaments could play all of their games at one site rather than having to move from site to site.

Negatives about the site:

- Six lighted fields might be a difficult sell to neighboring residential areas
- Six fields used each night would result in some traffic congestion in the park.

Negatives about the site – Continued:

- Site would lose two soccer fields, and one lacrosse field, which would all need to be relocated.

Est. Cost:	Construction of 4 new fields	\$1,860,000
	Relocation of three soccer/lacrosse fields	\$ 144,000

Staff Opinion: The site is large enough to locate four additional lighted ball diamonds, for a total of six at the park. This site holds the most promising chance of introducing lighted fields near a residential area, as there are already two ball diamonds and eight tennis courts that currently use overhead sports lighting.

Site #2 – Firefighters Park, Size: 96 acres

Amenities: Nine soccer fields, one ball diamond, play structure, swing structure, disc golf course, fishing pond, picnic shelter, two sand volleyball courts, restroom and parking for 365 cars.

The most desirable and efficient layout of four lighted ball diamonds would place them in the southwest section of the park where the soccer fields are currently located. This layout would result in the need to relocate at least seven of the eight soccer fields in this area.

Positives about the site:

- Existing infrastructure in place to support new layout, although restroom would need to be enlarged to accommodate increased park usage.

Negatives about the site:

- Site does not currently have any lighted fields. Neighbors would likely express disapproval.
- Site would lose at least seven soccer fields, which would have to be relocated elsewhere.

Est. Cost:	Construction of four new fields	\$1,612,000
	Relocation of seven soccer fields	\$ 336,000

Staff Opinion: While four ball diamonds would fit at this site, Firefighters Park is the City's premier soccer facility. The number of soccer fields located at this site allows the ability to rest fields between seasons to ensure the quality and safety of the playing surface. There is no other single park site large enough to accommodate a grouping of all of the relocated soccer fields. Spreading out the fields throughout the city will cause increased cost to prepare and maintain the fields, and is a less than desirable situation when programming soccer leagues. Also, installing lighted fields at this location will certainly invite residential opposition. A number of years ago, adjoining residents to Firefighters Park successfully fought to have newly planted trees removed because they felt their view of the park would be obscured.

Site #3– New Park Site, Livernois Road, Size: 22 acres

This site is large enough to fit only two softball fields. It is undeveloped and would require substantial work and expense to develop. Preliminary concept design did not include fenced or lighted fields. Possible residential opposition to lights, as well as to change in design.

Est. Cost Develop two lighted ball diamonds \$1,450,000

Site #4 – New Park Site, John R, Size: 14 acres

This site is large enough to fit only two softball fields. It is undeveloped and would require substantial work and expense to develop. Preliminary concept design did not include fenced, or lighted fields. Possible residential opposition to lights, as well as to change in design.

Est. Cost Develop two lighted ball diamonds \$1,450,000

Staff Opinion: Each of these new park sites is large enough for only two new fields. In order to replace the four lighted ball diamonds displaced from Flynn Park, both of these new park sights would need to be developed. The cost to construct the fields as well as the supporting infrastructure at both locations would drive up the field relocation costs. Also, since lighted fields were not discussed as part of the design process, some opposition from the adjoining residential areas may appear.

Landfill Limits at Flynn Park

Testing Engineers and Consultants (TEC) did three soil borings in 1982 for the proposed softball field development. These borings indicated trash material ranging from 27 to 36 feet below the surface. The existing landfill lies beneath nearly all of the Flynn Park property according to available records (see attached drawing) and is covered by approximately two (2) feet of clay. The total cover including fill, topsoil and turf added for the construction of ball diamonds ranges from 2.5 to 10 feet according to a study done in conjunction with development of Sanctuary Lake golf course.

The clay cap and other work associated with closing the Northeast Landfill was done in the early 1980's by the former property owner, Northeast Landfill Inc. The closure was accepted in 1984 and was required by the Michigan Department of Natural Resources to be monitored for 5 years, until late 1989, via ground water monitoring wells along the south line of the landfill. In 1986 the City of Troy spent some \$57,000 for topsoil, seed and mulch due to "considerable erosion" of the ground cover over the clay cap that the city claimed was the responsibility of Northeast Landfill, Inc. Some erosion of the ground cover and cap has also occurred over more recent years, as staff believes the cap to be less than 2 feet in some areas.

Environmental Studies and MDEQ Requirements

In order for any redevelopment of the site to take place an investigation of the following items, at minimum, would need to be performed by an environmental consultant: 1) Identify limits of the landfill waste; 2) Assess current impacts of the landfill on groundwater; 3) Assess the condition of the clay cap. NTH Consultants Ltd. performed similar services for the City during the development of the Sanctuary Lake Golf Course. The cost of this work was approximately \$30,000. This work, however, was considerably different because it did not involve any soil borings, it was only surface exploration along the toe of a slope boarding on the Troy School's property, and it was just one small part of the overall environmental work. Soil borings for the Flynn Park site could add another 30% to this study's cost.

As for other studies that were done for Sanctuary Lake, which may be needed for a ballpark at Flynn Park, there may be a Phase I and Phase II Environmental Assessment, an Overall Impact Analysis to identify any current problems with leachate, ground water or gas migration that may need correction before proceeding with a ballpark, and a study to identify the various environmental and engineering issues related to the development, operation and maintenance of a ballpark facility. We estimate that a ballpark would require a gas collection and monitoring system, a ground water monitoring system and overall monitoring of the entire site for five years before acceptance by the MDEQ.

Our opinion of the total cost of all studies, based on our review of Sanctuary Lake and consultation with our environmental consultants, is at least \$100,000 including the studies necessary for the Michigan Department of Environmental Quality (MDEQ). It is also our opinion that it would require at least 12 months to obtain MDEQ approval to allow construction of the ballpark over the landfill.

Structural Considerations

Assuming that records on the limits and depths of the landfill are correct, it would be reasonable to assume that a building the size of the proposed ballpark would require piles to support the structure. Piles are used to carry and transfer building loads to soil or rock of higher load bearing capacity than what exists at conventional depths for building foundations. The main types of piles are wood, steel and concrete that are driven, drilled or jacked into the ground. Although it is not possible with the information currently available for this site to determine the appropriate size, type, depth and number of piles needed for the ballpark structure (no soil borings for determining the load bearing capacity of the soil beneath the landfill have ever been done), it is estimated that pile foundations could add several hundred thousand to several million dollars to the cost of the ballpark.

South Boulevard

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1295.19

North Line Section 1

