

COUNCIL ACTION FORM

SUBJECT: STORMWATER MANAGEMENT IMPROVEMENTS AND DEVELOPMENT OF GREENBRIAR PARK

BACKGROUND:

In April 2008, Randall Corporation, owners of Coldwater Golf Links, requested that the City consider transferring Greenbriar Park to the Randall Corporation so they could address the storm water management issues and the overall appearance of the site that negatively impacts their golf course. In exchange for this transfer of City park land, the Randall Corporation proposed to grant the designated future right-of-way for the Grand Avenue Extension project to the City, install an adjacent shared use path of South 16th Street, and correct the storm water problem on the site. At that time the estimated costs of these site improvements totaled \$188,000.

The City acknowledged the generous proposal made by the Randall Corporation in regards to Greenbriar Park and it was noted that if the City were to focus merely on the financial aspect of the issue, the Randall Corporation offer would save the City significant out-of-pocket expenses. However, given the limited amount of potential park land to service the needs of our residents within established areas of our City, it would have been difficult to support any reduction in park land without identifying a suitable replacement. Therefore, City Council decided to retain Greenbriar Park as recommended by the Parks and Recreation Commission.

As a follow-up to this action, the Council then requested staff report back with a recommended funding source and related timeframe to ensure that the following improvements were addressed:

- Stormwater management
- Installation of a Shared Use Path along S. 16th Street
- Development of the property into a viable green space including the dirt BMX course

A Storm Water Management Issue, Not a Park Issue

As work began on the stormwater management issue, it became apparent that Greenbriar Park itself does not directly impact the flooding that occurs to the golf course. Rather, the unnamed creek that runs through the park originates in southwest Ames; encompassing a 1.9 square mile watershed area (see Attachment A – Southwest Ames Watershed). As it flows north, the creek passes through two 12' x 6' box culverts under S. 16th Street. The creek continues to flow northwest and through the eastern edge of Greenbriar Park. As it leaves

the park, the creek's flow is restricted into two culverts (36" and 48") located under the bike path as it enters Worle Creek. These culverts cannot accommodate the volume of water flowing through the two large box culverts under S. 16th Street. Rather, these two culverts restrict the creek whereby water backs-up into Greenbriar Park and then into Coldwater Golf Links.

In response to the City Council's directive in April 2008, the firm of Snyder and Associates was retained to carry out the following tasks:

1. Determine a permanent solution to the storm water management issue;
2. Develop a plan to transition the park site into a viable green space (including a BMX course); and
3. Provide cost estimates for the related work.

As shown on Attachment B (Conceptual Master Plan), to address the 1.9 square mile watershed issue Snyder and Associates recommends replacing the two small culverts with a 12' wide x 50' long bridge. Additionally, they recommend that the unnamed creek be re-channeled through the center of the park and a berm be constructed on the eastern edge of the parcel. This design will better assure that water from the watershed remains in the park, versus crossing over into the golf course during moderately high stormwater events.

Snyder and Associates project that by replacing the two smaller culverts under the bike path with a 12' x 50' long bridge, creating a berm on the eastern edge, and planting prairie in the overall park, ninety percent of the rain events (up to a 10-year rain event) should not overflow onto the golf course. In the event a significant storm event occurs (a "10% probability rainfall event"), in all likelihood Coldwater Golf Links will also be flooded from the north by Squaw Creek. Randall Corporation understands and accepts this risk since their course is built in the floodplain.

Park Development Projects

In addition to addressing the stormwater management issue, Snyder and Associates also developed a conceptual master plan that includes the following features for Greenbriar Park:

- Relocating the dirt BMX course to the center of the park
- Bringing in fill dirt, seeding the entire area with native plant material
- Installing a 6-stall parking lot
- Constructing a mini-shelter with a trail map kiosk so the park can serve as a trail head for the overall Shared Use Path system from south to north Ames

Reaction to Proposal

Staff met with Scott and Matt Randall to review the conceptual master plan. They supported the approach that is being recommended by Snyder and Associates. Coming off the Randall Corporation's gracious offer last spring to financial

contribute to addressing stormwater management issues and to enhancing the overall appearance of the park, staff asked if they would still be willing to contribute fiscal resources to this project. They responded that they no longer have interest in participating in the project. They did comment that they hope these improvements can be addressed in the near future to better assure that their golf course does not receive unnecessary stormwater run-off in the spring of 2009.

Funding Options and Scheduling of the Work Activity

As noted above, the original cost estimate to accomplish this work was \$188,000. However, that estimate was determined prior to understanding the full magnitude of the 1.9 square mile watershed area. The estimated cost to address the storm water management issue now totals \$416,750 with the park development improvements estimated at \$128,100 (Attachment C – Project Budget).

Funding to address the park development costs could be obtained from the Parkland Acquisition and Development Fund and prioritized in the upcoming Capital Improvements Plan (CIP) along with other worthy park projects.

To address the more pressing stormwater management aspect of this project, General Obligation bond revenues could be utilized. However, the project is not included in our current CIP, and must therefore be included in the 2009/10 CIP and budget that will take effect in July 2009. As with some street projects, once this stormwater management project is approved by Council, some design and construction work may take place prior to the beginning of the new fiscal year.

ALTERNATIVES:

1. Direct staff to include the Greenbriar Park Stormwater Management Improvements Project in the 2009/10 CIP and authorize initiation of design work on this stormwater project. In addition, request that the proposed Greenbriar Park development projects be prioritized with other park projects in the upcoming CIP.
2. Direct staff to prioritize the Greenbriar Park Stormwater Management Improvements Project and the proposed Greenbriar Park development projects in the 2009/14 CIP, and do not authorize initiation of design work on the stormwater project at this time.
3. Do not include the Greenbriar Park Stormwater Management Improvements Project or the Greenbriar Park development projects in the 2009/10 CIP.

CITY MANAGER'S RECOMMENDED ACTION:

Prior to Coldwater Golf Links being developed, that site was a farm field and early spring flooding onto the site was not a major concern. However, the Randall

Corporation's golf course development, which opens annually around April 1, cannot tolerate unnecessary flooding.

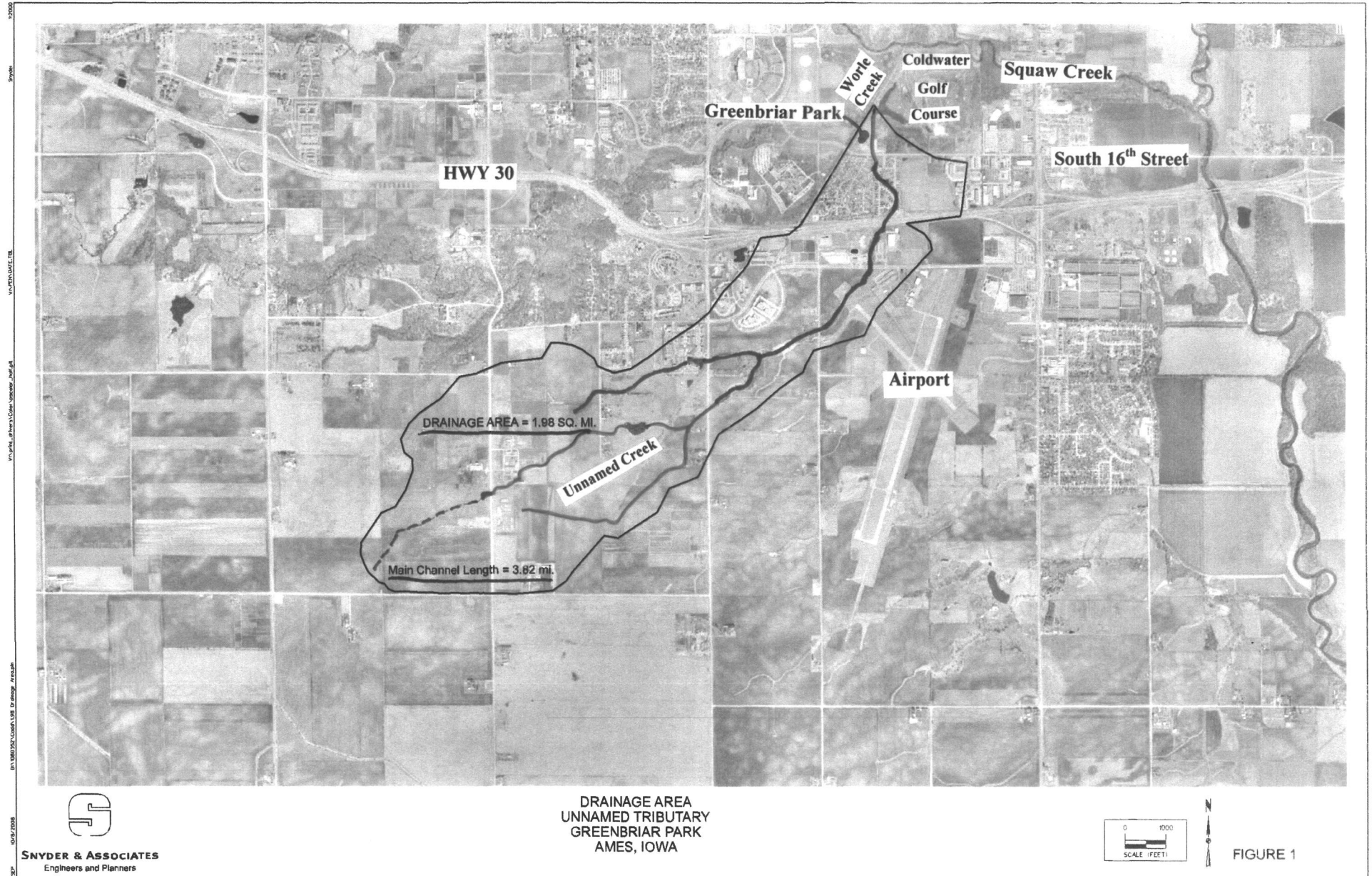
The Snyder and Associate study revealed that Greenbriar Park is not the cause of the water that spills over onto Coldwater Golf Links. Rather, stormwater run-off from a 1.9 square mile area in southwest Ames flows across the park. As this water flows north, it passes through the two culverts currently in place under the bike path on the west side of Greenbriar Park. These culverts restrict the flow so significantly that, during high water events, water is forced east across the park and onto the golf course.

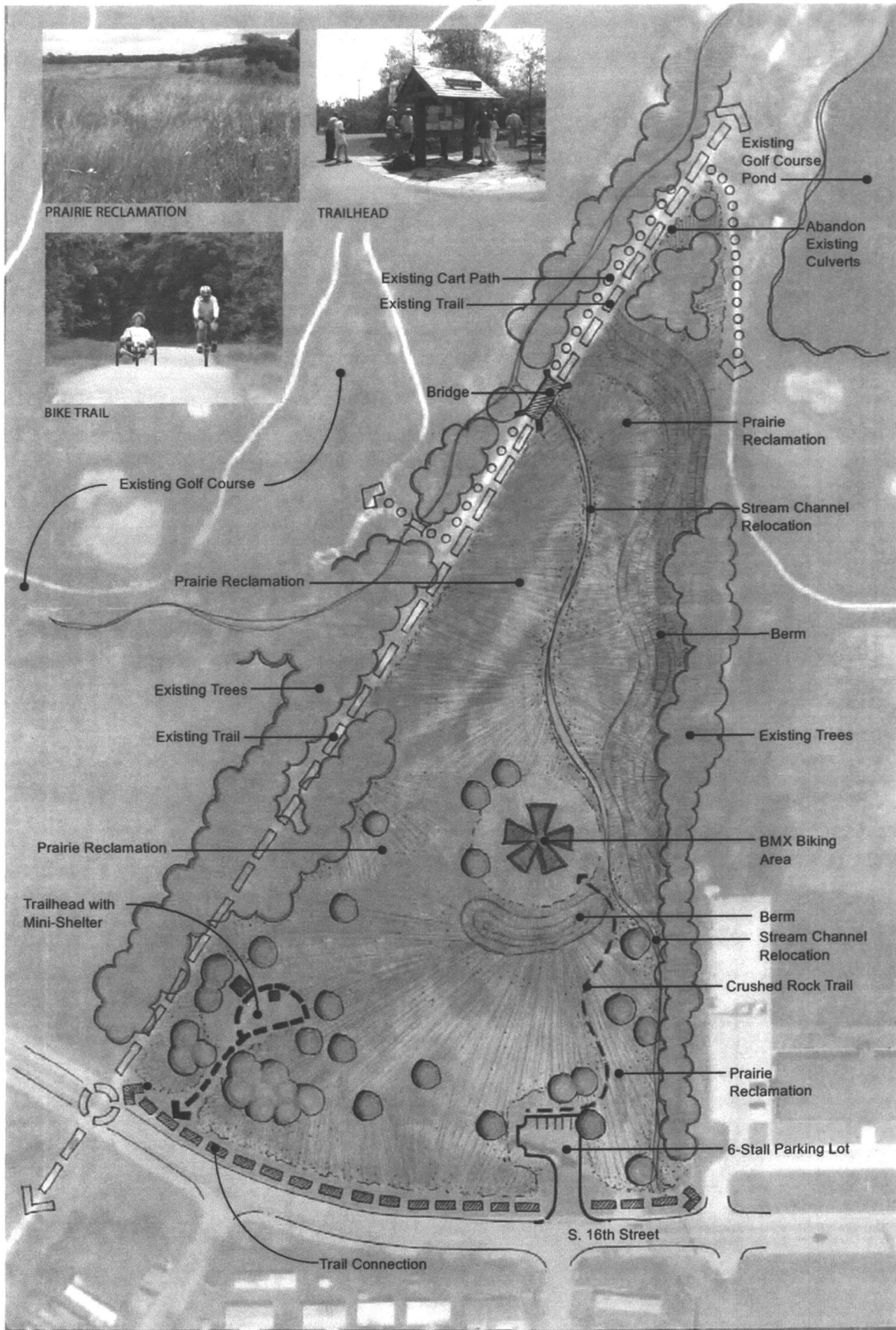
By redirecting this unnamed creek into a channel running through the park, constructing a berm and installing a 12' wide by 50' long bridge on the bike path, the storm water will be quickly released into Worle Creek and flooding to the golf course should be reduced significantly. Additionally, the strategy of planting native plant material and transitioning the site as a trailhead for the overall Shared Use Path from south Ames is a nice compliment to the park system. The 6-stall parking lot will be jointly utilized by individuals using the dirt BMX course and those utilizing the trail system.

Assuming the Council wishes to resolve these stormwater issues as soon as possible, it is the recommendation of the City Manager that the City Council adopt Alternative 1. This action will direct staff to include the Greenbriar Park Stormwater Management Improvements Project in the 2009/10 CIP, authorize initiation of design work on this stormwater project, and request that the proposed Greenbriar Park development projects be prioritized with other park projects in the upcoming CIP.

It should be understood that the proposed stormwater management improvements will be designed to handle up to a 10-year rainfall event, which should cover approximately 90% of the rain events. Therefore, the expenditures for this improvement cannot insure that the golf course will not be flooded in the future from stormwater coming from the southwest.

SOUTHWEST AMES STORMWATER MANAGEMENT
1.9 MILE WATERSHED AREA





SNYDER & ASSOCIATES
Engineers and Planners

GREENBRIAR PARK
CONCEPTUAL MASTER PLAN
CITY OF AMES

October 14, 2008



PRJ NO 108 0352

ATTACHMENT C

**SOUTHWEST AMES STORMWATER MANAGEMENT IMPROVEMENTS
AND DEVELOPMENT OF GREENBRIAR PARK
PROJECT BUDGET**

Southwest Stormwater Management Improvements

Task	G.O. Bonds	Park Development Fund
Bridge (12'x50')	\$200,000	0
Grading/Channel/Erosion Control/Rip Rap/Design	\$216,750	0

Site Restoration & Park Beautification / Development

Task	G.O. Bonds	Park Development Fund
Fill & Prairie Seeding	0	\$ 46,600
Relocation of BMX Course	0	\$ 10,000
Bike trail S-16th Street	0	\$ 44,200
Parking Lot (6 stall)	0	\$ 25,300
Trail Head (mini-shelter/kiosk)	0	\$ 2,000
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FUND TOTALS:	\$416,750	\$128,100

OVERALL PROJECT COSTS: \$538,850