Memorandum

To: Programs, Projects, and Operations Subcommittee

Subject: FY 2011 Urban Cost Share Programs
- Recreation Area Development Program
- Urban Drainageway Program
- Urban Conservation Assistance Program
- Trails Assistance Program

Date: March 26, 2010

From: Gerry Bowen

The District solicited applications for the urban cost share programs from the various units of government in the District for the upcoming fiscal year. The following applications were received.

Recreation Area Development

The Recreation Area Development Program (RAD) cost shares with cities and villages to develop and improve recreation areas within their jurisdiction. The cost share rate is 50%. On projects requesting more than $20,000, the Policy Manual requires Board approval. On all others, Management has approval authority.

The following applications require Board approval.
- The City of Omaha has requested cost-share assistance on renovations to Levi Carter Park. The improvements include trails in the park and a connection to the Riverfront Trail, and new picnic facilities. The City estimates the improvements will cost $550,000 and is asking for the maximum under the program, or $50,000.
- The City of Omaha has requested cost share assistance on establishment of a nature center at Hummel Park. The City estimates the total construction cost to be $1,400,000, and is asking for the maximum under this program, or $50,000.
- The City of Omaha has requested cost share assistance in the replacement of a pedestrian bridge in Trendwood Park. The City estimates the cost to be $42,000, and is asking for 50% of this amount, or $24,000.
- The City of Papillion has requested cost share assistance to construct a shelter in Glenwood Hills Park, and to relocate a City-owned pedestrian bridge to the park. The City estimates that the total cost of the project is $48,118, and is asking for 50% of this amount, or $24,059.
- The City of South Sioux City has requested cost share assistance to install a new shelter in Scenic Park. The City estimates that the cost of the project is $47,148, and is requesting 50% of this amount, or $23,574.

The following table summarizes the RAD project requests for FY 2011. The FY 2010 budget for this program was $447,640.
<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Total Estimated Cost</th>
<th>Cost Share Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Omaha (Levi Carter Park)</td>
<td>$550,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>City of Omaha (Hummel Park)</td>
<td>$1,400,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>City of Omaha (Trendwood Park)</td>
<td>$42,000</td>
<td>$24,000</td>
</tr>
<tr>
<td>City of Papillion (Glenwood Hills Park)</td>
<td>$48,118</td>
<td>$24,059</td>
</tr>
<tr>
<td>City of South Sioux City (Scenic Park)</td>
<td>$47,148</td>
<td>$23,574</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$2,087,266</strong></td>
<td><strong>$171,633</strong></td>
</tr>
</tbody>
</table>

- Management recommends that the Subcommittee recommend to the Board that the applications from the City of Omaha for $50,000 (Levi Carter Park), $50,000 (Hummel Park), and $24,000 (Trendwood Park), the City of Papillion for $24,059, and the City of South Sioux City for $23,574 be approved, for a total of $171,633, subject to funding in the FY 2011 budget.

**Urban Drainageway Program**

The Urban Drainageway Program (UDP) cost shares with units of government to solve erosion, flooding, and other stormwater management concerns on major drainageways within their jurisdiction. The cost share rate is 60%. Board approval is required on all applications.

In 2009, the District approved a stormwater management project for South Sioux City that called for District cost share over a four-year period. The payment for FY 11 per the interlocal agreement is $300,000.

The Mission Creek project in Sarpy County SID #162 (Millard Park) was also approved in 2009. This project had multiple year components, however, the sponsor is not planning a phase of the project in FY 11.

In addition to the above, the District received the following applications under the Urban Drainageway Program.

- The **City of Omaha Public Works** has requested cost share assistance to stabilize a creek located near 45th & McKinley. The City estimates that the cost of the project is $200,000, and is requesting 60% of this amount, or **$120,000**.
- The **City of Omaha Public Works** has requested cost share assistance to stabilize a creek located at 216th & Maple. The City estimates that the cost of the projects is $250,000, and is requesting 60% of this amount, or **$150,000**.
- The **City of Omaha Parks** has requested cost share assistance to stabilize a portion of the Little Papillion Creek to protect the Keystone Trail. The City estimates the cost of the project is $310,000 and is requesting 60% of this amount, or **$186,000**.
- The **City of Omaha Parks** has requested cost share assistance to stabilize portions of the Happy Hollow Drainageway between Underwood Avenue (Memorial Park) and Howard Street (Elmwood Park). The City estimates that the project will cost $237,830, and is requesting 60% of this amount, or **$142,698**.
- The **City of La Vista** has requested cost share assistance to stabilize Applewood Creek between 101st & Brentwood Drive and 102nd & Giles. The City estimates that the project will cost $396,660, and is requesting 60% of this amount, or **$237,996**.
• The City of South Sioux City has requested cost share assistance to construct a drainage channel and stormwater detention basin in the western part of the City. The City estimates that the project will cost $1,168,250, and is requesting 60% of this amount, or $700,950.

• The City of Bellevue has requested cost share assistance to stabilize a portion of Ft. Crook Drainageway located southeast of Ft. Crook Road and Hwy 370. The City estimates that the project will cost $1,821,897, and are requesting 60% of this amount, or $1,093,138.

• The City of Bellevue has requested cost share assistance to stabilize a portion of Quail Creek located southeast of 36th & Hwy. 370. The City estimates that the project will cost $2,490,257, and is requesting 60% of this amount, or $1,494,154.

The following table summarizes the applications for FY 2011. The FY 2010 Budget included $2,347,157 for this item.

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Total Estimated Cost</th>
<th>Cost Share Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Omaha PW (McKinley)</td>
<td>$200,000</td>
<td>$120,000</td>
</tr>
<tr>
<td>City of Omaha PW (Maple)</td>
<td>$250,000</td>
<td>$150,000</td>
</tr>
<tr>
<td>City of Omaha Parks (Democracy)</td>
<td>$310,000</td>
<td>$186,000</td>
</tr>
<tr>
<td>City of Omaha Parks (Happy Hollow)</td>
<td>$237,830</td>
<td>$142,698</td>
</tr>
<tr>
<td>City of La Vista (Applewood Creek)</td>
<td>$369,660</td>
<td>$237,996</td>
</tr>
<tr>
<td>City of South Sioux City (Hwy. 20)</td>
<td>$1,168,250</td>
<td>$700,950</td>
</tr>
<tr>
<td>City of Bellevue (Ft. Crook Drainage)</td>
<td>$1,821,897</td>
<td>$1,093,138</td>
</tr>
<tr>
<td>City of Bellevue (Quail Creek)</td>
<td>$2,490,257</td>
<td>$1,494,154</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$6,847,894</strong></td>
<td><strong>$4,124,936</strong></td>
</tr>
</tbody>
</table>

• Management recommends that the subcommittee recommend to the Board that the applications from the City of Omaha for $120,000 (McKinley), $150,000 (Maple), $186,000 (Democracy Park), and $142,698 (Happy Hollow), the City of La Vista for $237,996, the City of South Sioux City for $700,950, the City of Bellevue for $1,093,138 (Ft. Crook) and $1,494,154 (Quail), plus $300,000 for South Sioux City for a total of $4,424,936, subject to funding in the FY 2011 Budget.

**Urban Conservation Assistance Program**

The Urban Conservation Assistance Program (UCAP) cost shares with units of government to solve relatively minor erosion, flooding, and stormwater management problems within their jurisdiction. The Policy Manual allows for Management approval of all applications. Management intends to approve the following applications.

• The City of Omaha has requested cost share assistance to stabilize two drainages crossing Johnny Goodman Golf Course. The City estimates that the project will cost $61,160 and is requesting the maximum amount under this program, or $30,000.

• The City of Omaha has requested cost share assistance to replace a staircase providing access to the Keystone Trail with a ramp. The existing staircase has caused an erosion area to develop. The City estimates that the project will cost $40,000 and is requesting 60% of this amount, or $24,000.
- The City of Omaha has requested cost share assistance to stabilize a channel at the Common Ground Community Center (Elkhorn) using “green” techniques. The City estimates that the project will cost $83,000, and is requesting the maximum amount under this program, or $30,000.
- The City of Omaha has requested cost share assistance to correct an erosion problem that threatens the trail in Meadowlane Park. The City estimates that the project will cost $5,000, and is requesting 60% of this amount, or $3,000.
- The City of Omaha has requested cost share assistance to correct an erosion problem that threatens the trail in Barrington Park. The City estimates that the project will cost $10,000, and is requesting 60% of this amount, or $6,000.
- The City of South Sioux City has requested cost share assistance to install a drainage channel in the All American Subdivision. The City estimates the cost of the project to be $19,332, and is requesting 60% of this amount, or $11,600.

The FY 2010 Budget for this item was $79,798.

The projects are summarized in the following chart:

<table>
<thead>
<tr>
<th>Sponsor</th>
<th>Total Estimated Cost</th>
<th>Cost Share Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Omaha (Goodman G.C.)</td>
<td>$61,160</td>
<td>$30,000</td>
</tr>
<tr>
<td>City of Omaha (Keystone Trail)</td>
<td>$40,000</td>
<td>$24,000</td>
</tr>
<tr>
<td>City of Omaha (Common Ground)</td>
<td>$83,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>City of Omaha (Meadowlane Park)</td>
<td>$5,000</td>
<td>$3,000</td>
</tr>
<tr>
<td>City of Omaha (Barrington Park)</td>
<td>$10,000</td>
<td>$6,000</td>
</tr>
<tr>
<td>City of South Sioux City (All-Amer.)</td>
<td>$19,332</td>
<td>$11,600</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$218,492</strong></td>
<td><strong>$104,600</strong></td>
</tr>
</tbody>
</table>

- It is recommended that the Subcommittee recommend to the Board that the applications from the City of Omaha for $30,000 (Goodman), $24,000 (Keystone), $30,000 (Common Ground), $3,000 (Meadowlane), and $6,000 (Barrington), and from the City of South Sioux City for $11,600, for a total of $104,600 be approved, subject to funding in the FY 2011 budget.

**Trails Assistance Program**

The Trails Assistance Program cost shares with sponsors on trail projects approved for funding under the Transportation Enhancement Program. The cost share rate is 50% of the local share. All projects require Board approval.

The following sponsors have requested assistance.
- The City of Papillion has requested cost share assistance to install a trail connecting Savanna Shores Subdivision with Walnut Creek Recreation Area. The City estimates that the project will cost $355,000, with the local share $71,000. The City is requesting 50% of the local share, or $35,500.
- The City of Omaha has requested cost share assistance to construct a trail in Cunningham Lake Park connecting the campground to another park entrance. The City estimates that the project will cost $187,392, with the local share $59,961. They are requesting 50% of the local share, or $29,980.
The FY 2010 Budget contained $557,548 for this item.

- It is recommended that the Subcommittee recommend to the Board that the applications from the City of Papillion for $35,500, and the City of Omaha for $29,980, for a total of $65,480, be approved, subject to funding in the FY 2011 Budget.
RECREATION AREA DEVELOPMENT PROGRAM

APPLICATION FORM

1. DATE: March 5, 2010

2. PROJECT NAME: Levi Carter Park Rehabilitation

3. PROJECT SPONSOR: City of Omaha – Parks, Recreation & Public Property Dept.
   (Address) 1819 Farnam Street, Suite 701
   Omaha, NE 68183

4. CONTACT PERSON: Patrice Slaven TITLE: Park Planner II

5. TELEPHONE: 402-444-3977

6. PROJECT LOCATION **: 809 Carter Lake Shore Drive, Omaha, Nebraska. Levi Carter Park
   is a 520-acre park which wraps around the outer curve of Carter Lake, an oxbow lake near the
   eastern edge of the city, directly across from Eppley Airfield.

7. DESCRIPTION OF PROJECT **: The City of Omaha Parks, Recreation and Public Property
   Department has designated $500,000 in its capital improvements plan for improvements to the
   park; however, due to the size of the park, we know we can’t accomplish nearly everything that’s
   needed. However, cost share funding from the Papio-Missouri River Natural will supplement the
   City’s funds, therefore allowing more of the project goals to be met. Public meetings, beginning
   this month, will be held to solicit public input. It is anticipated that desired improvements will
   include a spur or loop trail to connect the main park facilities to the newly constructed riverfront
   trail located along the eastern leg of the park; new picnic facilities, historic shelter improvements; a
   new playground and recreation facilities such as volleyball courts, soccer fields, etc.

   The connector trail between park facilities and the riverfront trail has already been suggested by
   interested citizens. In addition, the historic WPA stone shelter and bathhouse are in need of
   renovation. Paths connecting parking and all park facilities are needed throughout the park. The
   park has a huge opportunity in that it will eventually connect, via the riverfront trail, to downtown
   Omaha, whose skyline is visible across the lake from the north side of the lake. Almost the entire
   length of riverfront trail between the park and downtown Omaha is lined with parks. As a result, the
   City anticipates this park will become a key destination in the near future.

8. TOTAL ESTIMATED COST: $550,000

9. COST SHARE REQUEST: $50,000

10. SIGNATURE/TITLE: William Hamilton, Director

Attach additional sheets as necessary.
Levi Carter Park Rehabilitation
Preliminary Order of Magnitude Cost Estimate
10-Mar-10

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost (EA)</th>
<th>Item Cost (EA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picnic shelter rehabilitation</td>
<td>1</td>
<td>allow</td>
<td>$50,000.00</td>
<td>$50,000</td>
</tr>
<tr>
<td>Bathhouse repair and rehabilitation</td>
<td>1</td>
<td>allow</td>
<td>$110,000.00</td>
<td>$110,000</td>
</tr>
<tr>
<td>Picnic tables</td>
<td>25</td>
<td>EA</td>
<td>$1,500.00</td>
<td>$37,500</td>
</tr>
<tr>
<td>Playground</td>
<td>1</td>
<td>LS</td>
<td>$120,000.00</td>
<td>$120,000</td>
</tr>
<tr>
<td>Accessible walkways</td>
<td>9,200</td>
<td>SF</td>
<td>$3.50</td>
<td>$32,200</td>
</tr>
<tr>
<td>Connector trail to riverfront trail</td>
<td>49,600</td>
<td>SF</td>
<td>$4.00</td>
<td>$198,400</td>
</tr>
<tr>
<td>Sand volleyball courts</td>
<td>4</td>
<td>EA</td>
<td>$12,000.00</td>
<td>$48,000</td>
</tr>
<tr>
<td>Soccer Fields</td>
<td>4</td>
<td>EA</td>
<td>$70,000.00</td>
<td>$280,000</td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td>$876,100</td>
</tr>
<tr>
<td>Contingency 15%</td>
<td></td>
<td></td>
<td></td>
<td>$131,415</td>
</tr>
<tr>
<td>Design Fees 10%</td>
<td></td>
<td></td>
<td></td>
<td>$100,752</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$1,108,267</strong></td>
</tr>
</tbody>
</table>

Note: These preliminary costs far exceed available funds at this time. The City will work with the public to set priorities for improvements in order to make the best use of available funding. In addition, the City will apply for a Land and Water Conservation Grant this fall to help supplement funds.
RECREATION AREA DEVELOPMENT PROGRAM

APPLICATION FORM

1. DATE: March 5, 2010

2. PROJECT NAME: Hummel Park Nature Camp Building and Site Improvements

3. PROJECT SPONSOR: City of Omaha – Parks, Recreation & Public Property Dept.
   (Address) 1819 Farnam Street, Suite 701
   Omaha, NE 68183

4. CONTACT PERSON: Patrice Slaven  TITLE: Park Planner II

5. TELEPHONE: 402-444-3977

6. PROJECT LOCATION **: 11808 John J. Pershing Drive, Omaha, Nebraska
   The 200-acre park is located in the loess hills on the north edge of Omaha and is heavily wooded with native trees and vegetation.

7. DESCRIPTION OF PROJECT **: see attached

8. TOTAL ESTIMATED COST: $1,400,000

9. COST SHARE REQUEST: $50,000

10. SIGNATURE/TITLE: [Signature]

** Attach additional sheets as necessary.
DESCRIPTION OF PROJECT

Hummel Park is a 202-acre park of steep, wooded slopes. Its natural character is the main factor in its becoming the home of the City of Omaha's Parks and Recreation Nature Camp program since 1948. The nature camp draws 2,200 children every summer. There they participate in nature hikes, crafts, archery, team building games, outdoor cooking, camp singing and much more.

The camp contains three existing buildings which are in critical need of replacement in order for the program to continue. The buildings no longer meet current building codes or accessibility guidelines and are in very poor condition. The City of Omaha has set aside $1,000,000 in its capital improvements program to construct a multi-purpose building, new nearby caretaker's residence, and associated site improvements. In addition, the Nebraska Environmental Trust grants review committee has recommended the project for a grant in the amount of $350,000. We anticipate we will need $1,400,000-1,600,000 in order to achieve the project goals.

The project, scheduled to begin design on March 10, 2010, will require that the design incorporate sustainable, energy efficient technology. It will be required to be sensitive to the surrounding environment in terms of siting, materials and scale. It will serve as an example of green technology not only to the children who attend the camp, but also to adults who will be encouraged to utilize the building for meetings, retreats and seminars. The goal is to make the new facility a 4-season facility available for year-round programming and rentals. This will finally allow the citizens of Omaha an opportunity to enjoy the natural environment of the park from the base of an attractive, comfortable and energy-efficient facility.

IMPLEMENTATION SCHEDULE

<table>
<thead>
<tr>
<th>Period</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>March – May 2010</td>
<td>The City has retained Leo A. Daly to design the new building and site improvements. Programming, design development and cost estimation will occur during this phase of the project.</td>
</tr>
<tr>
<td>May – June 2010</td>
<td>Final design and construction document development.</td>
</tr>
<tr>
<td>June – Aug. 2010</td>
<td>2010 Nature Camp</td>
</tr>
<tr>
<td>July 2010</td>
<td>Project Bidding</td>
</tr>
<tr>
<td>June 2011</td>
<td>2011 Nature Camp Opens with new facilities</td>
</tr>
<tr>
<td>Item</td>
<td>Quantity</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Building</td>
<td>3,920</td>
</tr>
<tr>
<td>Abandon and Demo existing facilities and utilities</td>
<td>1</td>
</tr>
<tr>
<td>Site work</td>
<td>1</td>
</tr>
<tr>
<td>Upgrade electrical service</td>
<td>1</td>
</tr>
<tr>
<td>Upgrade water service</td>
<td>1</td>
</tr>
<tr>
<td>Septic system</td>
<td>1</td>
</tr>
<tr>
<td>Heating/electricity (geothermal)</td>
<td>1</td>
</tr>
<tr>
<td>Furnishings and Equipment</td>
<td>1</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Contingency 15%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Design Fees 10%</strong></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
</tr>
</tbody>
</table>
RECREATION AREA DEVELOPMENT PROGRAM

APPLICATION FORM

1. DATE: 3-12-2010

2. PROJECT NAME: Trendwood Bridge Replacement

3. PROJECT SPONSOR: City of Omaha Department of Parks Recreation and Public Property

   Address: 1819 Farnam Street, Suite 701

   City/State/Zip: Omaha NE 68183-0701

4. CONTACT PERSON: Barbara Kohles TITLE: Park Planner

5. TELEPHONE: 444-5943

6. PROJECT LOCATION **: 13333 Pacific Street across the tree lined Hell creek on the existing path to the park features.

7. DESCRIPTION OF PROJECT **: The bridge will be the main access for the playground, ballfield, soccer field, basketball court, picnic shelter, restrooms and tennis court.

   The current bridge is closed to the public because of possible danger of the falling in the water and it is not known if the bridge is engineered for flood events. The bridge wood is rotting.

   The new bridge will be designed to handle a 10-year flood, have a concrete floor and replaceable wood railings.

8. TOTAL ESTIMATED COST: $42,000.00

9. COST SHARE REQUEST: $24,000.00

10. SIGNATURE/TITLE: [Signature]

    ** Attach additional sheets as necessary.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear and Grub</td>
<td>Remove existing Bridge</td>
<td>1 ea</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Slab 8' for 6' clear x 55' long</td>
<td>Abutments</td>
<td>2 ea</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Railing 110</td>
<td>Replace trail 35' x 6' x 5 1/2&quot;</td>
<td>110 linft</td>
<td>$66.88</td>
</tr>
<tr>
<td></td>
<td></td>
<td>210 sqft</td>
<td>$4,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$65.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$3.00</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td>$48,207.20</td>
</tr>
<tr>
<td>Consultant</td>
<td></td>
<td></td>
<td>$7,725.00</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td>$55,932.20</td>
</tr>
<tr>
<td>NRD City</td>
<td></td>
<td>0.43</td>
<td>$24,050.85</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$31,775.85</td>
</tr>
</tbody>
</table>
RECREATION AREA DEVELOPMENT

SPECIAL PROJECT REQUEST APPLICATION

1. DATE: March 10, 2010

2. PROJECT NAME
   Glenwood Hills Park Shelter & Bridge

3. PROJECT SPONSOR:
   City of Papillion

   ADDRESS:
   122 East Third Street
   Papillion, NE 68046

4. CONTACT PERSON:
   Anthony Gowan

   TITLE:
   Parks Director

5. TELEPHONE:
   (402) 597-2049

6. E-MAIL
   tgowan@papillion.org

7. PROJECT LOCATION:
   Intersection of Glenwood Avenue and Corn Drive in Southern Papillion

8. DESCRIPTION OF PROJECT:
   Project entails the installation of a new 20' by 20' shelter, grill, and picnic tables as well as a pedestrian bridge owned by the City of Papillion. This would also include the installation of a sidewalk to connect this area to the Schram Road Trail.

9. TOTAL ESTIMATED COST: $48,118.00

10. COST SHARE REQUESTED: $24,059.00

11. SIGNATURE/TITLE:

   FORM 17.27A

   [Signature]
   Anthony Gowan - Parks Director

   MAR 12 2010
GLENWOOD HILLS SIDEWALK/BRIDGE ATTACHMENT TO SCHRAM ROAD TRAIL; GLENWOOD HILLS SHELTER BUILDING AND INSTALLATION

<table>
<thead>
<tr>
<th>Description</th>
<th>Approx. Quantities</th>
<th>Unit Price</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install Pedestrian Bridge Abutments</td>
<td>2 EA.</td>
<td>$1,500.00</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>Install 40' x 4&quot; Pedestrian Bridge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(provided by City of Papillion)</td>
<td>1 LS</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Install 6&quot; x 6' PCC Sidewalk</td>
<td>3000 s.f.</td>
<td>$4.00 s.f.</td>
<td>$12,000.00</td>
</tr>
<tr>
<td>Install 22' x 22'x 4&quot; Concrete Pad</td>
<td>484 s.f.</td>
<td>$4.00 s.f.</td>
<td>$1,936.00</td>
</tr>
<tr>
<td>Install Concrete Footings (4 per structure)</td>
<td>1 EA.</td>
<td>$1,500.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Install 4' x 4' Concrete Trash Can/Grill Pad</td>
<td>32 s.f.</td>
<td>$4.00 s.f.</td>
<td>$128.00</td>
</tr>
<tr>
<td>Installation of Shelter Equipment</td>
<td>1 LS</td>
<td>$4,000.00</td>
<td>$4,000.00</td>
</tr>
<tr>
<td>Trash Receptacle, in place</td>
<td>1 EA.</td>
<td>$1,500.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Rough in Electrical Conduit</td>
<td>1 LS</td>
<td>$300.00</td>
<td>$300.00</td>
</tr>
<tr>
<td>Description</td>
<td>Units</td>
<td>Quantity</td>
<td>Cost</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------</td>
<td>----------</td>
<td>--------</td>
</tr>
<tr>
<td>20' x 20' Park Shelter, delivered to jobsite</td>
<td>LS</td>
<td>1</td>
<td>$11,500.00</td>
</tr>
<tr>
<td>Super Turf 2 with Straw matting</td>
<td>SY</td>
<td>1877</td>
<td>$2.00</td>
</tr>
<tr>
<td>Misc. Site Prep/Grading</td>
<td>LS</td>
<td>1</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>Picnic Benches</td>
<td>EA</td>
<td>4</td>
<td>$700.00</td>
</tr>
<tr>
<td>Galvanized Grill</td>
<td>EA</td>
<td>1</td>
<td>$200.00</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- Denotes New Walk/Bridge + Shelter in Grant Proposal.

SCALE: 1" = 100'
March 11, 2010

Papio-Missouri River NRD  
Attn: Gerry Bowen  
8901 South 154th Street  
Omaha, NE 68138-3621  

RE: PAPIO-MISSOURI RIVER NRD  
RECREATION AREA DEVELOPMENT PROGRAM  
SOUTH SIOUX CITY, NEBRASKA APPLICATION  

Dear Gerry:

Please find enclosed all required forms and information regarding the City of South Sioux City, Nebraska's application for the Papio-Missouri River NRD's Recreation Area Development Program.

The City of South Sioux City, Nebraska is a progressive city always looking to improve the quality of life of the citizens of our community. We take great pride in our parks system and are constantly looking for way to improve them. Through adding trails, shelters, trees and all of the things that make our parks a pleasure to visit. With the help from the Youth Leadership Council and the Parks Board, they selected a great spot for a new shelter.

The City of South Sioux City had acquired property adjacent to the largest park in our park system and that is where they decided a shelter is needed. I cannot think of a better way to conserve the attractiveness of our park than to add it to our parks. Scenic Park consists of 133 acres that are located along the banks of the Missouri River. We want to construct a shelter that could have multiple purposes for gathering in our park. Our plan is to add the lots and the shelter to Scenic Park for use by the public.

If approved, we would construct the shelter in October of 2010 with a finish date in November of 2010. If we have an early winter, we will construct the shelter in spring of 2011.

The City of South Sioux City, Nebraska would like to thank the Papio-Missouri River NRD for it's ever growing attention to protecting the ground and surface water, reducing flood threats and enhancement to wildlife habitat, all of which provides for a great quality of life in South Sioux City and the entire Papio-Missouri River NRD jurisdiction.

Thank you for your time and consideration. Should you have any question or concerns, please contact me at 402-494-7540 or by email at gmaffit@southsiouxcity.org.

Sincerely,

[Signature]

Gene Maffit  
Parks and Grounds Director
<table>
<thead>
<tr>
<th>Description</th>
<th>Qty</th>
<th>Rate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor for assembly of shelter kit.</td>
<td></td>
<td>$9,650.00</td>
<td>$9,650.00</td>
</tr>
</tbody>
</table>

Total $9,650.00

For more information visit us at www.sprayfoamforyou.com!
WeatherShield Insulators
705 Olive Street
Dakota City, NE 68731
712-203-1365

<table>
<thead>
<tr>
<th>Name / Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of SSC</td>
</tr>
<tr>
<td>Attn: Gene Maffi</td>
</tr>
<tr>
<td>1615 1st Ave</td>
</tr>
<tr>
<td>South Sioux City, NE 68776</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Qty</th>
<th>Rate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>20' Shelter</td>
<td>3,643.20</td>
<td>3,643.20</td>
<td></td>
</tr>
<tr>
<td>Foundation</td>
<td>1,820.50</td>
<td>1,820.50</td>
<td></td>
</tr>
<tr>
<td>Concrete Floor</td>
<td>1,000.00</td>
<td>1,000.00</td>
<td></td>
</tr>
<tr>
<td>Fill Sand</td>
<td>650.00</td>
<td>650.00</td>
<td></td>
</tr>
<tr>
<td>Steps (labor &amp; materials)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total

$7,113.70

For more information visit us at www.sprayfoamforyou.com
# Sales Quote

P.O. Box 1290 • #2 Industrial Drive • Salem, Illinois 62881  
800-851-0865 • Fax 618-548-2890 • www.americana.com

## Bill To:
Outdoor Recreation Products  
Harley  
1055 North 205th Avenue  
Elkhorn, NE 68022  
Phone: 402/289-0400  
Fax: 402/289-0300

## Ship To:
Outdoor Recreation Products  
1055 North 205th Avenue  
S Sioux City, NE 68022  
Phone: 402/289-0400  
Fax: 402/289-0300

## Quote #:
22945  
Quote Date: 02/18/2010  
Quote Expires: 05/19/2010  
Quoted By: Dave Gleckler  
Sales Manager: Dave Gleckler  
Customer Ref.: S Sioux City, Ne

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Description</th>
<th>Unit Price</th>
<th>Ext. Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aztec 20' double tier with 2' open cupola</td>
<td>$16,368.00</td>
<td>$16,368.00</td>
</tr>
<tr>
<td>1</td>
<td>Aztec add for 6/12 pitch</td>
<td>$2,239.00</td>
<td>$2,239.00</td>
</tr>
<tr>
<td>4</td>
<td>Aztec add for classic bottom rail</td>
<td>$504.00</td>
<td>$2,016.00</td>
</tr>
<tr>
<td>8</td>
<td>Aztec add for 12&quot; top railing</td>
<td>$257.00</td>
<td>$2,056.00</td>
</tr>
<tr>
<td>8</td>
<td>Aztec add for railing between tiers</td>
<td>$235.00</td>
<td>$1,660.00</td>
</tr>
<tr>
<td>2</td>
<td>Aztec add for benches</td>
<td>$257.00</td>
<td>$514.00</td>
</tr>
<tr>
<td>1</td>
<td>Aztec add for cedar t &amp; g</td>
<td>$2,400.00</td>
<td>$2,400.00</td>
</tr>
<tr>
<td>1</td>
<td>Aztec add for cedar shakes</td>
<td>$2,050.00</td>
<td>$2,050.00</td>
</tr>
</tbody>
</table>

**Sales Tax:** $0.00  
**Freight:** $1,375.00

### Notes:

- Quote is based on one of our standard colors. If a custom color is designated, there will be an upcharge.
- Sealed engineering drawings and calculations are available with order for $700.00. Shop drawings are available for $125.00.
- The total cost listed above is your cost. Price is for material and shipping only. Anchor bolts, concrete, unloading and installation are not included.
Google maps

Notes: We removed an old house from the lots to make room for the gazebo. It will make a nice addition to Scenic Park.

http://maps.google.com/?ie=UTF8&ll=42.484243,-96.406252&spn=0.003742,0.006877&t=... 3/9/2010
URBAN DRAINAGEWAY PROGRAM
APPLICATION

1. DATE: 3-15-10

2. PROJECT NAME: McKinley Street channel restoration

3. PROJECT SPONSOR: City of Omaha
   (Address)
   1819 Farnam Street
   Omaha, NE 68183

4. CONTACT PERSON: Adam Wilmes  TITLE: Design Engineer

5. TELEPHONE: 444-3819

6. PROJECT LOCATION **: South of McKinley Street at 45th Street

7. PROPOSED IMPROVEMENTS **: Grade banks of eroded channel, place fill to bring channel back to pre-eroded flow line, install energy dissipation.

8. TOTAL ESTIMATED COST: $200,000

9. COST SHARE REQUEST: $120,000

10. IMPLEMENTATION SCHEDULE: Design is underway. Construction would occur late 2010 or early 2011

11. SIGNATURE/TITLE: [Signature]

** Attach additional sheets as necessary.
Project Name: 45<sup>th</sup> and McKinley Drainage Channel Improvements  
Project Number: OPW-51731  
Project Location: South Side of McKinley Street at 45<sup>th</sup> Street in Omaha, Nebraska  
Located in the SE Corner of the NW Corner of Sec 20-16-13  

Project Description: This project involves rehabilitating a greatly eroded stream bed. The stream bed has eroded nearly five feet deeper than the original channel leaving an 84" flared end section and one section of 84" concrete pipe dangling into the stream. Also, the erosion has exposed a 6" petroleum pipe and a 48" sanitary sewer pipe leaving both lines entirely exposed as they cross the channel. The design includes adding fill to the channel bed to bring it back to original grade and grading of the channel walls to a 3:1 slope instead of the near vertical slope to which they have been worn to. At the stream crossings of both the petroleum pipe and the sewer pipe both pipes have designs to encase them in a reinforced concrete box with steel sheet piling on either side of the box. These structures will also serve as a broad crested weir and drop structure to step the channel grade down approximately 7 feet from the outlet of the flared end section and match the grade of the main channel downstream.
# Engineers Opinion of Probable Construction Costs

## Drainage Channel Improvements for 45th & McKinley

Revised: March 18, 2010

## ON-SITE IMPROVEMENTS

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Unit Measure</th>
<th>Estimated Quantity</th>
<th>Unit Price</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MOBILIZATION</td>
<td>LS</td>
<td>1</td>
<td>$1,500.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>2</td>
<td>CONSTRUCTION ENTRANCE</td>
<td>LS</td>
<td>1</td>
<td>$1,600.00</td>
<td>$1,600.00</td>
</tr>
<tr>
<td>3</td>
<td>CLEARING AND GRUDDING TREES OVER 6&quot; TO 18&quot; DIAMETER</td>
<td>EA</td>
<td>4</td>
<td>$500.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>4</td>
<td>CLEARING AND GRUDDING TREES OVER 18&quot; TO 48&quot; DIAMETER</td>
<td>EA</td>
<td>1</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>5</td>
<td>CLEARING AND GRUDDING - GENERAL</td>
<td>LS</td>
<td>1</td>
<td>$1,500.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>6</td>
<td>REMOVE AND RESET EXISTING 84&quot; R.C.P.</td>
<td>LF</td>
<td>8</td>
<td>$130.00</td>
<td>$1,040.00</td>
</tr>
<tr>
<td>7</td>
<td>INSTALL RC FES, 84&quot;</td>
<td>EA</td>
<td>1</td>
<td>$1,100.00</td>
<td>$1,100.00</td>
</tr>
<tr>
<td>8</td>
<td>REMOVE 6&quot; PIPE</td>
<td>LF</td>
<td>50</td>
<td>$15.00</td>
<td>$750.00</td>
</tr>
<tr>
<td>9</td>
<td>REMOVE BARBED WIRE FENCE</td>
<td>LF</td>
<td>110</td>
<td>$3.00</td>
<td>$330.00</td>
</tr>
<tr>
<td>10</td>
<td>EARTHWORK - COMMON EXCAVATION AND COMPACTION</td>
<td>CY</td>
<td>1,225</td>
<td>$10.00</td>
<td>$12,250.00</td>
</tr>
<tr>
<td>11</td>
<td>EARTHWORK - EMBANKMENT (ESTIMATED QTY)</td>
<td>CY</td>
<td>260</td>
<td>$12.00</td>
<td>$3,120.00</td>
</tr>
<tr>
<td>12</td>
<td>TRAFFIC CTRL FOR CONST</td>
<td>LS</td>
<td>1</td>
<td>$1,000.00</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>13</td>
<td>CONCRETE FOR PIPE ENCASEMENT</td>
<td>CY</td>
<td>40</td>
<td>$400.00</td>
<td>$16,000.00</td>
</tr>
<tr>
<td>14</td>
<td>REBAR FOR PIPE ENCASEMENT</td>
<td>LBS</td>
<td>1,333</td>
<td>$2.00</td>
<td>$2,666.00</td>
</tr>
<tr>
<td>15</td>
<td>7 GAGE STEEL SHEETING</td>
<td>SF</td>
<td>1,280</td>
<td>$25.00</td>
<td>$32,000.00</td>
</tr>
<tr>
<td>16</td>
<td>CONSTRUCT ROCK RIPRAP - TYPE 'C'</td>
<td>TON</td>
<td>1,044</td>
<td>$55.00</td>
<td>$57,420.00</td>
</tr>
<tr>
<td>17</td>
<td>FILTER CLOTH FOR ROCK RIPRAP</td>
<td>SY</td>
<td>515</td>
<td>$1.50</td>
<td>$772.50</td>
</tr>
<tr>
<td>18</td>
<td>PERMANENT SEEDING - TUFF TURF TYPE TALL FESCUE MIXTURE</td>
<td>AC</td>
<td>0.22</td>
<td>$1,000.00</td>
<td>$220.00</td>
</tr>
<tr>
<td>19</td>
<td>ROLLED EROSION CONTROL - TYPE IV</td>
<td>SY</td>
<td>1,125</td>
<td>$13.00</td>
<td>$14,625.00</td>
</tr>
<tr>
<td>20</td>
<td>SIZE 15 STEEL SHEET PILING OR COMPARABLE</td>
<td>LS</td>
<td>1</td>
<td>$66,000.00</td>
<td>$66,000.00</td>
</tr>
</tbody>
</table>

**Total of all Estimated Prices**: $217,894  
**Contingency (10%)**: $21,789  
**Grand Total Estimated Construction Cost**: $239,683
URBAN DRAINAGEWAY PROGRAM

APPLICATION

1. DATE: 3-15-10

2. PROJECT NAME: West Maple drainage channel restoration

3. PROJECT SPONSOR: City of Omaha
   (Address)
   1819 Farnam Street
   Omaha, NE 68183

4. CONTACT PERSON: Tim Popstein
   TITLE: Design Engineer

5. TELEPHONE: 444-3590

6. PROJECT LOCATION **: South of West Maple at 216th Street

7. PROPOSED IMPROVEMENTS **: Grade banks of eroded channel, place fill to bring channel back
to pre-eroded flow line, install energy dissipation.

8. TOTAL ESTIMATED COST: $250,000

9. COST SHARE REQUEST: $150,000

10. IMPLEMENTATION SCHEDULE: Design is underway. Construction would occur early 2011

11. SIGNATURE/TITLE: [Signature and Title]

** Attach additional sheets as necessary.
OUTFALL CHANNEL REESTABLISHMENT
SOUTH OF WEST MAPLE ROAD AT 211TH ST.

Project Description

The channel carries storm water from two storm sewer pipes which outlet into the north end of the channel just south of West Maple Road to another channel, which runs east to west, approximately 450 feet to the south. The south channel branches off of the West Papillion Creek located to the west of the site. The storm water from the sewer pipes has scoured out the north end of the drainage channel and has cut the bottom of the channel. Slope of the channel bottom varies from 2 to 4 percent. Due to the cutting of the channel the banks have become steep with several trees undercut exposing the roots. The proposed improvements to the channel include 3 sheet pile weir structures to decrease the channel bottom slope and stabilize the channel bottom; armoring the channel at the pipe outlets to mitigate the scour; removing unstable trees in the channel bank; and grading some of the channel banks to stabilize them.
City of Omaha  
OPW 51890  
West Maple Drainage Channel Restoration - 211th and West Maple Road  
Opinion of Probable Costs  

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Quantity</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Clearing and Grubbing</td>
<td>1 LS</td>
<td>$15,000.00</td>
<td>$15,000.00</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Embankment</td>
<td>1000 CY</td>
<td>$30.00</td>
<td>$30,000.00</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Sheet Pile (or Block) Weir Structure</td>
<td>3 EA</td>
<td>$18,000.00</td>
<td>$54,000.00</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Rip Rap Armoring</td>
<td>200 Tons</td>
<td>$50.00</td>
<td>$10,000.20</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Grading</td>
<td>1 LS</td>
<td>$19,000.00</td>
<td>$19,000.00</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Seeding</td>
<td>1 Acres</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Erosion Control Matting</td>
<td>2800 SY</td>
<td>$6.00</td>
<td>$16,800.00</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Silt Fence</td>
<td>1500 LF</td>
<td>$5.00</td>
<td>$7,500.00</td>
<td></td>
</tr>
</tbody>
</table>

Total Costs: $154,300.20  
Contingencies (25%) $38,575.05  
Total Construction Costs $192,875.25  
Engineering and Additional Costs (30%) $57,862.58  
Total Construction Costs $250,737.83
URBAN DRAINAGEWAY PROGRAM

SPECIAL PROJECT REQUEST APPLICATION

1. DATE: 3-12-2010

2. PROJECT NAME: Democracy Park Creek Bank Stabilization

3. PROJECT SPONSOR: City of Omaha Parks, Recreation, and Public Property
   ADDRESS: 1819 Farnam Street
   Omaha, NE 68183

4. CONTACT PERSON: Barbara Kohles
   TITLE: Park Planner

5. TELEPHONE: 444-5943

6. PROJECT LOCATION:
   The east bank of the Little Papio Creek at the location of Democracy Park and adjacent to the Keystone Trail. Democracy Park’s address is 8780 Templeton Drive. The project will encompass approximately 300’ of stream bank on both sides of the creek.

7. DESCRIPTION OF PROBLEM:
   The Little Papio Creek bends at the project location. The hydrology of the creek is causing erosion to occur on the east bank to the extent of endangering the Keystone trail and the users. The edge of the bank is within 1 foot of the concrete trail edge. The trail cannot be rerouted due to the adjacent private property, mature trees, and the park playground. The trail section is currently closed to the public because of the severe drop off at the creek bank. There is overland flow from the surrounding open space parking lot and street.

8. PROPOSED SOLUTION:
   The creek will be engineered to stabilize and straighten the water flow within the boundaries of the trail and the Humane Society’s property. The Humane Society is aware of the issue and will cooperate within reason. There are stabilization products and methods that will allow the project to be designed in the narrow corridor of the project limits. The erosion control products and methods will be as recommended by the project engineer and agreed on by the stakeholders. They will use bioengineering practices to the extent possible. There is opportunity to retain drainage for percolation and slow water velocity within the park property. The objective is to have a stabilized vegetative slope.

9. TOTAL ESTIMATED COST: $310,000.00

10. COST SHARE REQUESTED: $186,000.00

11. SIGNATURE/TITLE: [Signature] Director

FORM 17.17
# TRAIL REPAIRS - SITE 12A - GEOWEB ALTERNATIVE

**Assumptions/Comments:**

- Site Location: 87th & Fort (Democracy Park)

<table>
<thead>
<tr>
<th>Bid Item Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CLEARING AND GRUBBING</td>
<td>1</td>
<td>LS</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>2. COMMON EARTH EXCAVATION (2700 CY X 2)</td>
<td>5,400</td>
<td>CY</td>
<td>$9.00</td>
<td>$43,200.00</td>
</tr>
<tr>
<td>3. STRIP, STOCKPILE AND RESPREAD TOPSOIL (650 CY X 2)</td>
<td>1,300</td>
<td>CY</td>
<td>$3.00</td>
<td>$3,900.00</td>
</tr>
<tr>
<td>4. TYPE &quot;B&quot; ROCK RIP-RAP</td>
<td>400</td>
<td>TN</td>
<td>$35.00</td>
<td>$14,000.00</td>
</tr>
<tr>
<td>5. DRAINAGE LAYER ROCK</td>
<td>700</td>
<td>TN</td>
<td>$35.00</td>
<td>$24,500.00</td>
</tr>
<tr>
<td>6. GEOWEB EARTH RETENTION SYSTEM</td>
<td>1,050</td>
<td>SF</td>
<td>$30.00</td>
<td>$31,500.00</td>
</tr>
<tr>
<td>7. J-ROCK VANNE STRUCTURE</td>
<td>2</td>
<td>EA</td>
<td>$4,000.00</td>
<td>$8,000.00</td>
</tr>
<tr>
<td>8. CROSS VANNE STRUCTURE</td>
<td>1</td>
<td>EA</td>
<td>$5,000.00</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>9. TREES &amp; LANDSCAPING</td>
<td>1</td>
<td>LS</td>
<td>$200.000.00</td>
<td>$200.000.00</td>
</tr>
<tr>
<td>10. SEEDING</td>
<td>1.5</td>
<td>AC</td>
<td>$2,500.00</td>
<td>$3,750.00</td>
</tr>
<tr>
<td>11. EROSION CONTROL BLANKET</td>
<td>350</td>
<td>SY</td>
<td>$2.00</td>
<td>$700.00</td>
</tr>
</tbody>
</table>

**20% CONTINGENCY**

$35,010.00

**Estimated Construction Costs:**

$215,400.00

**Estimated Soft Costs**

- 25.00% Engineering Design and
- 3.00% Geotechnical and Testing:

$53,085.00

$6,403.80

**Total Estimated Soft Costs:**

20%

$60,328.80

**Total Estimated Costs:**

$275,728.80
URBAN DRAINAGEWAY PROGRAM

SPECIAL PROJECT REQUEST APPLICATION

1. DATE: March 11, 2010

2. PROJECT NAME: Happy Hollow Drainageway Improvements

3. PROJECT SPONSOR: City of Omaha – Parks, Recreation & Public Property
   ADDRESS: 1819 Farnam St., Suite 701
   Omaha, NE 68183

4. CONTACT PERSON: Patrice Slaven
   TITLE: Park Planner II

5. TELEPHONE: 402-444-3977

6. PROJECT LOCATION: The Happy Hollow drainageway project is located along the west side of Happy Hollow Boulevard from Underwood Ave. on the north end to Elmwood Park Road on the south end. The project runs approximately 2,200 feet north of Dodge St and 2,200 feet south of Dodge St, Omaha, Nebraska.

7. DESCRIPTION OF PROBLEM: There are multiple locations where the drainageway is eroding to the east toward Happy Hollow Boulevard. This is impacting the Happy Hollow Trail, constructed several years ago between the drainageway and the Boulevard. In some areas, the guardrail along the trail has already been undermined. If the problems aren’t addressed, the erosion will continue and undermine the trail itself.

   A drainage study has recently been completed by the Schemmer Associates in order to identify causes of the erosion, which varies depending on location along the creek. The study resulted in recommendations for stabilizing the creek and preventing future impacts to the trail. A preliminary magnitude of cost estimate was completed for the recommendations, as well as a priority ranking of the affected areas.

8. PROPOSED SOLUTION:

   Recommended solutions depend upon the location and cause for the erosion. In some cases, just debris removal will address the problem. In very tight locations where there creek is eroding and undermining the trail, a vertical solution such as gabion baskets, sheet piling or retaining walls will likely be necessary. This will both armor the banks and require less habitat removal. One of the most severe erosion conditions occurs where the city storm drain outletting the creek is undersized, resulting in stormwater topping the curb, crossing the trail and cutting back the slope toward the trail. Though the drainage study recommends reconstruction the storm drain system in this case, as the project moves forward to design, the City will require that green solutions such as rain gardens or bioretention be studied.

   A copy of the study is attached. Page 27 summarizes the proposed improvements, estimated costs and opinion of construction priority.

9. TOTAL ESTIMATED COST: $237,829.81

10. COST SHARE REQUESTED: $142,697.89

11. SIGNATURE/TITLE: [Signature]

FORM 17.17
After having reviewed the Parks Department document for the Happy Boulevard Trail: Creek Stabilization Project, I am in support of this effort and urge the NRD to approve funding so this work can be completed in a timely manner, preferably in later summer or early fall this year.

I would like to point out that though the report refers to the creek as a drainage channel, it really should be properly designated with the actual names, based on historic details.

Happy Hollow Creek occurs from Underwood to Dodge Street.

Wood Creek starts at the north end on the west side of Memorial Park, then continues through Elmwood Park Ravine, within the project area, and then through Elmwood Park, until it is subjugated at Pacific Street.

Since these are creeks, not just a means to drain water, there are a lot of associated values, including birds (which I have been thoroughly document in recent years), flora (well known due to educational efforts associated with UNOmaha), green space, air quality improvement, etc. which can be better conserved with attention to retaining the natural values of the creeks, which this project could help achieve.

One concern is at North Happy Hollow and Davenport street, where a railing has been placed on the west side of the trail, and gabion baskets were put in place to stabilize the creek bank (Site 4 in the submitted report). The placement of the baskets has caused the waters' flow to be forced to the west side of the creek channel, and where gabion baskets structures were not installed. This is causing the creek to downcut in a constricted flow, and causing the west bank to erode, threatening trees there. Something should be done to reestablish the flow to a wider channel.

When this project is done, the Omaha Public Works Department should also be involved. There are places along both creeks where dead fall occurs within the creekway, and which should be removed is association with any improvement effort. I refer in particular to these places:

1) a spot less than 100 feet north of where Happy Hollow Creek goes under Dodge Street. Trees in the water channel are blocking the flow and causing bank erosion.

2) Trees blocking the culvert where Happy Hollow Creek flows under Dodge Street should also be removed.

3) The huge tree at the culvert opening where Wood Creek flows from Under Dodge Street needs to be removed. This tree has been used by local youth to create a play haven, called Fort Puff, until last spring when city officials where made aware of the situation. This includes them bringing in lumber to build their fort. When any lumber falls off and gets into the creek, it is washed downstream and eventually hits a channel block, causing erosion and other problems. Removing the tree, etc., will remove this hazard for good.

4) Trees blocking the culvert where Wood Creek goes under Elmwood Park Road, just west of the round-about on Happy Hollow Boulevard, should also be removed to get rid of the tree trunks, etc. which are inhibiting flows, which also reduces water quality.

5) Though just south of the project area, I would also urge Public Works to remove tree debris gathered at
the culvert under Elmwood Park Road, just east of the grotto.

If any planting is done in association with gabion baskets, it would be nice to include some native species of wild flowers to add some color to the scene and to "soften" the hardness of the rocks.

Since most of this project area is within Memorial Park or Elmwood Park, I urge the NRD and Omaha Parks Department to complete this project in a manner sensitive to the natural values and in a manner that will improve the setting for residents.

There are also a couple of potential reforestation sites along the east side of the Elmwood Park ravine. Despite getting support from the local Audubon group, and others, my request for these was denied by the Parks Department, for no apparent reason. Planting trees and shrubs at these places with are now useless grass -- i.e., places that I have never seen being used for recreational purposes and are just places where gas is being wasted to mow them -- would be a great means to mitigate for any impacts to trees along the creek; in particular for trees removed when Omaha Public Works repaired the storm drain by Howard Street and South Happy Hollow Boulevard (Site 8).

If the project is provided funding by the NRD, the project sponsors should require that contractors do not leave behind anything such as trash, discarded rock, bits of project material, unseeded earth and that they should be aware that they are working on important green spaces that deserves to be properly dealt with. Trail users don't need to see debris left behind and need to clean up what some company left behind.

The NRD should work with the Omaha Parks department and local interested residents to improve the green space values and get rid of the useless grass.

If you would have any questions, please do not hesitate to contact me.

Jim Ducey, volunteer
Dundee

Hotmail: Trusted email with Microsoft’s powerful SPAM protection. Sign up now.
URBAN DRAINAGEWAY PROGRAM

SPECIAL PROJECT REQUEST APPLICATION

1. DATE: March 1, 2010

2. PROJECT NAME: Applewood Creek Stabilization

3. PROJECT SPONSOR: City of La Vista
   ADDRESS: 9900 Portal Road
              La Vista, NE 68128

4. CONTACT PERSON: Joe Soucie
   TITLE: Public Works Director

5. TELEPHONE: (402)331-8927 jsoucie@cityoflavista.org

6. PROJECT LOCATION:
The project begins where Applewood Creek crosses under the BNSF Railroad tracks at approximately the northwest corner of 101st Street and Brentwood Drive in La Vista, Nebraska. The project continues downstream and terminates where Applewood Creek crosses under Giles Road at approximately 102nd Street.

7. DESCRIPTION OF PROBLEM:
The creek channel is clogged with debris in numerous locations, consisting mainly of downed trees and branches. Many locations along this segment are experiencing severe bank erosion including sloughing and cutting. Left unchecked the creek channel will encroach upon abutting residential property and continue to scour trees along the creek bank.

8. PROPOSED SOLUTION:
The proposed solution includes removing debris from the channel; clearing and grubbing at stabilization locations and installing several grade control drop structures. The project will also include bank stabilization using several techniques including root wads & blankets, armor flex, vegetated gabions or geotextile layers & plantings.

9. TOTAL ESTIMATED COST: $ 396,660.00

10. COST SHARE REQUESTED: $ 237,996.00

11. SIGNATURE/TITLE: Joe Soucie Public Works Director
## APPLEWOOD CREEK STABILIZATION
PORTAL GREENWAY PROJECT
COST ESTIMATE FOR NRD URBAN DRAINAGEWAY GRANT APPLICATION
JAN. 13, 2010

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>QUANTITY</th>
<th>UNIT</th>
<th>UNIT PRICE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Remove Debris from Channel</td>
<td>1</td>
<td>LS</td>
<td>$20,000.00</td>
<td>$20,000.00</td>
</tr>
<tr>
<td>2.</td>
<td>Clear &amp; Grub at Stabilization Locations</td>
<td>1</td>
<td>LS</td>
<td>$50,000.00</td>
<td>$50,000.00</td>
</tr>
<tr>
<td>3.</td>
<td>Grade Control Drop Structures</td>
<td>3</td>
<td>EA</td>
<td>$20,000.00</td>
<td>$60,000.00</td>
</tr>
<tr>
<td>4.</td>
<td>Bank Stab., Root Wads &amp; Blanket</td>
<td>300</td>
<td>LF</td>
<td>$200.00</td>
<td>$60,000.00</td>
</tr>
<tr>
<td>5.</td>
<td>Bank Stab., Semi-Armored</td>
<td>450</td>
<td>LF</td>
<td>$200.00</td>
<td>$90,000.00</td>
</tr>
<tr>
<td>6.</td>
<td>Top Soiling &amp; Fine Grading</td>
<td>2000</td>
<td>SY</td>
<td>$2.50</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>7.</td>
<td>Native Grass Seeding</td>
<td>0.5</td>
<td>AC</td>
<td>$3,000.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>8.</td>
<td>Turf Grass Seeding Disturbed Area</td>
<td>2</td>
<td>AC</td>
<td>$2,000.00</td>
<td>$4,000.00</td>
</tr>
<tr>
<td>9.</td>
<td>Straw Wattle, Erosion Control</td>
<td>1000</td>
<td>LF</td>
<td>$2.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>10.</td>
<td>Erosion Control Blanket, Short Term</td>
<td>4000</td>
<td>SY</td>
<td>$2.00</td>
<td>$8,000.00</td>
</tr>
</tbody>
</table>

Construction Costs Subtotal: $300,500.00
Contingency, 10%: $30,050.00

Construction Costs Total: $330,550.00

Design Engineering, 10%: $33,055.00
Construction Engineering, 10%: $33,055.00

Engineering Costs, Total: $66,110.00

Total Project Costs: $396,660.00

### FUNDING SOURCES
- PMNRD Grant: 60% $237,996.00
- La Vista Share: 40% $158,664.00
March 11, 2010

Papio-Missouri River NRD
Attn: Gerry Bowen
8901 South 154th Street
Omaha, NE 68138-3621

RE: PAPIO-MISSOURI RIVER NRD
URBAN DRAINAGeway PROGRAM
SOUTH SIOUX CITY, NEBRASKA APPLICATION

Dear Gerry:

Please find enclosed all required forms and information regarding the City of South Sioux City, Nebraska's application for the Papio-Missouri River NRD's Urban Drainageway Program.

The City of South Sioux City, Nebraska realizes the importance of being prepare for known and anticipated development. In 2000, Lite-Form International, L.C. developed a 5 acres lot on Old Highway 20 / West 29th Street and has future plans to development the adjacent 2.5 acres to the west for growth of their business. Also, the City of South Sioux City, Nebraska was one of three Nebraska communities selected to development land to attract a data center facility and the potential data center site is located on Old Highway 20 / West 29th Street. Both of these developments and others will ignite future commercial growth of the project area.

The Old Highway 20 / West 29th Street Drainageway Project will be the initial drainageway for the west-central area of South Sioux City. The projects provides for storm water drainage from the Highway 77 & Old Highway 20/West 29th Street corridor west to a detention pond which will meet the drainage needs of the area. This project involves the construction of a storm water drainage ditch, flowing from east to west, and the construction and soil removal from the detention pond site. The detention pond will require a link to a permanent end point, i.e. the Missouri River, in the approximately twenty to thirty years. Also, the development of open and natural drainageways will provide means for accurate future drainage planning.

The City of South Sioux City, Nebraska would like to thank the Papio-Missouri River NRD for its ever growing attention to protecting the ground and surface water, reducing flood threats and enhancement to wildlife habitat, all of which provides for a great quality of life in South Sioux City and the entire Papio-Missouri River NRD Jurisdiction.

Thank you for your time and consideration. Should you have any question or concerns, please contact me at 402-494-7573 or by email at joejohnson@southsiouxcity.org.

Sincerely,

Joe J. Johnson
Assistant City Administrator
Form 17.17.A.

URBAN DRAINAGEWAY PROGRAM

APPLICATION

1. DATE: March 11, 2010

2. PROJECT NAME: Old Highway 20 / West 29th Street Drainage Project

3. PROJECT SPONSOR: City of South Sioux City, Nebraska
   (Address)
   1615 1st Avenue
   South Sioux City, NE 68776

4. CONTACT PERSON: Joe J. Johnson
   TITLE: Assistant City Administrator

5. TELEPHONE: 402-494-7573

6. PROJECT LOCATION**: Project location is a half block west of Daniels Lane on Old Highway 20 /
   West 29th Street west to Lake Avenue and then north a quarter of an acre.

7. PROPOSED IMPROVEMENTS**: This project involves the construction of a storm water drainage
   ditch, flowing from east to west, and the construction of detention pond to serve as an end point.

8. TOTAL ESTIMATED COST: $1,168,250

9. COST SHARE REQUEST: $700,950

10. IMPLEMENTATION SCHEDULE: Engineering will commence once grant funds are awarded and
    construction will commence during the last half of 2010 and completed in the early part of 2011.

11. SIGNATURE/TITLE:

** Attach additional sheets as necessary.
South Sioux City Data Park Grading  
Engineer’s Preliminary Estimate of Cost  
March 11, 2010

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrow (on site)</td>
<td>CY</td>
<td>381300</td>
<td>$3.00</td>
<td>$1,143,900.00</td>
</tr>
<tr>
<td>Borrow (compactor)</td>
<td>CY</td>
<td>30000</td>
<td>$7.00</td>
<td>$210,000.00</td>
</tr>
<tr>
<td>Ditch Shaping</td>
<td>LF</td>
<td>2900</td>
<td>$6.50</td>
<td>$18,850.00</td>
</tr>
<tr>
<td>RCP Culvert</td>
<td>LF</td>
<td>110</td>
<td>$5.00</td>
<td>$5,500.00</td>
</tr>
<tr>
<td><strong>subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$1,378,250.00</strong></td>
</tr>
</tbody>
</table>

Contingency 5% $68,912.50  
Survey and Design 10% $144,716.25  
Construction Observation and Testing 10% $144,716.25

**Total** $1,737,000.00
URBAN DRAINAGEWAY PROGRAM

SPECIAL PROJECT REQUEST APPLICATION

1. DATE: 3/11/10

2. PROJECT NAME  Fort Crook Creek Channel Stabilization

3. PROJECT SPONSOR:  City of Bellevue

   ADDRESS:  210 W Mission Road

   Bellevue NE 68005

4. CONTACT PERSON:  Jeff Roberts

   TITLE:  City Engineer

5. TELEPHONE:  293 3030

6. PROJECT LOCATION:

   Approximately 100 feet west of Cedar Circle. (see attached aerials)

7. DESCRIPTION OF PROBLEM:

   Stream migration is encroaching on the backyards of several properties in the problematic area.

8. PROPOSED SOLUTION:

   Reclaim the stream using bank stabilization, grade control structures and any other control measures deemed viable to prevent continual migration of the stream.

9. TOTAL ESTIMATED COST:  $1,821,897

10. COST SHARE REQUESTED:  $1,093,138

11. SIGNATURE/TITLE:  

   Jeff Roberts  City Engineer
Cedar Circle Streambank Stability

Cedar Circle is located southeast of Highway 370 and Fort Crook Rd. in Bellevue, NE. Runoff from the upstream area discharges to a channel southwest of Cedar Circle which has experienced severe streambank erosion over time. The streambanks have widened and have encroached close to properties endangering those properties, structures and utilities in the area. The area of concern highlighted in this memo is shown in Figure 4. It is the goal of residents and City officials to protect the properties in the area from further streambank migration and property loss.

The channel of interest is an unnamed tributary of the Papillion Creek according to USGS topographic maps. The area of interest is the channel upstream of Fort Crook Rd. to southwest of Cedar Circle; refer to Figure 4 for a map of the area; there are also photos of the area included at the end of this memo. There are approximately 300 acres that discharge to the culvert at Fort Crook Rd.; the upstream watershed is fully developed with a mix of residential and commercial land use.

Initial visual inspection revealed that the likely cause of the erosion is due to shear forces from channel discharges coupled with lack of streambank vegetation and protection. The geomorphic life and evolution of a streambank is a natural process that finds equilibrium over time through a process of channel incision and streambank erosion and vegetation. This process is accelerated due to the fully developed nature of the watershed which causes an increase in runoff volumes and velocities and an elimination of naturally protective vegetation. Unfortunately, development in the area has encroached on these natural areas of evolution that would allow the processes to occur. Vertical and near vertical streambanks have encroached on and close to private property eliminating setbacks from the channel and causing protective trees and vegetation to be undermined and fall into the channel. An engineered solution is recommended in this area as visual inspection supported City maintenance staff reports of a long history of rip-rap placement in this location with no apparent benefit from doing so. Property, structures and utilities in these evolving areas will be at risk of damage and failure due to streambank erosion. The problems of this area will continue to worsen with time.

The erosion problem can be solved in the immediate area by stabilizing the banks to protect against further erosion. The proposed improvements are a combination of common and proven methods used for this type of stream bank stabilization. The selected improvement practices are streambank shaping, grade control structures, rock rip-rap placement.

Rip-rap revetment is a stream repair practice used to stabilize eroding stream banks. Rip-rap is very versatile and will suit a wide range in flows and soil conditions. Rip-rap is selected for the revetment material at the channel bottom because the loose rip-rap is flexible and will accommodate small movements in soil. Above the rip-rap, the banks will be shaped with slopes ranging from 1.5 to 2.0 vertical to 1.0 horizontal slope. At the upstream portion of the project, the outlet to the channel will be excavated and raised. The creek bed will be elevated, creating a more stable grade. The creek banks will be reshaped as necessary to provide stability and protection to the creek.

The following figures below show typical cross-sections of the creek with the proposed stabilization practices. A preliminary opinion of cost was developed using general costs for these types of improvements in other areas.
Figure 1 – Raised creek bottom with rip-rap sides and channel reshaping

Figure 2 – Rip-rap bottom slope and channel reshaping

Figure 3 – Rip-rap bottom slope and channel reshaping
## Proposed Project: Cedar Circle
### Description: Streambank Stabilization

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>Unit</th>
<th>No. Req'd</th>
<th>Unit Cost</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General Clearing and Grubbing</td>
<td>Lump Sum</td>
<td>1</td>
<td>$10,000.00</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>2</td>
<td>Tree Removal</td>
<td>Lump Sum</td>
<td>1</td>
<td>$25,000.00</td>
<td>$25,000.00</td>
</tr>
<tr>
<td>3</td>
<td>Bank Stabilization with Channel Bed Raise</td>
<td>LF</td>
<td>1,400</td>
<td>$60.00</td>
<td>$840,000.00</td>
</tr>
<tr>
<td>4</td>
<td>Grade Control Structure</td>
<td>Each</td>
<td>2</td>
<td>$100,000.00</td>
<td>$200,000.00</td>
</tr>
<tr>
<td>5</td>
<td>48-in RCP, Class III</td>
<td>LF</td>
<td>150</td>
<td>$95.00</td>
<td>$14,250.00</td>
</tr>
<tr>
<td>6</td>
<td>Storm Sewer Manhole, 42&quot;-48&quot; (Complete)</td>
<td>Each</td>
<td>1</td>
<td>$2,250.00</td>
<td>$2,250.00</td>
</tr>
<tr>
<td>7</td>
<td>Remove 48-In Storm Drainage Pipe</td>
<td>LF</td>
<td>150</td>
<td>$20.00</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>8</td>
<td>Remove Storm Sewer Manhole (Complete)</td>
<td>Each</td>
<td>1</td>
<td>$750.00</td>
<td>$750.00</td>
</tr>
<tr>
<td>9</td>
<td>Seeding</td>
<td>Acre</td>
<td>2</td>
<td>$3,000.00</td>
<td>$4,500.00</td>
</tr>
<tr>
<td>10</td>
<td>Erosion Control</td>
<td>SY</td>
<td>7,260</td>
<td>$5.00</td>
<td>$36,300.00</td>
</tr>
<tr>
<td>11</td>
<td>Traffic Control for Construction</td>
<td>Lump Sum</td>
<td>1</td>
<td>$12,000.00</td>
<td>$12,000.00</td>
</tr>
<tr>
<td>12</td>
<td>Utility Conflicts</td>
<td>Lump Sum</td>
<td>1</td>
<td>$35,000.00</td>
<td>$35,000.00</td>
</tr>
</tbody>
</table>

**Construction Costs Subtotals** $1,183,050

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>No. Req'd</th>
<th>Unit Cost</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobilization*</td>
<td>Lump Sum</td>
<td>1</td>
<td>10%</td>
<td>$118,305</td>
</tr>
</tbody>
</table>

**Construction Costs Total** $1,301,355

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>Unit</th>
<th>No. Req'd</th>
<th>Unit Cost</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingency</td>
<td></td>
<td>Lump Sum</td>
<td>1</td>
<td>20%</td>
<td>$260,271</td>
</tr>
<tr>
<td>Engineering, Permitting, Construction Admin.</td>
<td>Lump Sum</td>
<td>1</td>
<td>20%</td>
<td>$260,271</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL PROJECT COSTS** $1,821,897

*Contingency to include acquisition of construction easement if necessary
URBAN DRAINAGEWAY PROGRAM

SPECIAL PROJECT REQUEST APPLICATION

1. DATE: 3/11/10

2. PROJECT NAME  Quail Creek Channel Stabilization

3. PROJECT SPONSOR: City of Bellevue
   ADDRESS: 210 W Mission Road
   Bellevue NE 68005

4. CONTACT PERSON: Jeff Roberts
   TITLE: City Engineer

5. TELEPHONE: 293 3030

6. PROJECT LOCATION:
   Approximately 100 feet north east of Hunter Cove. (see attached aerials)

7. DESCRIPTION OF PROBLEM:
   Stream migration is encroaching on the backyards of several properties in the problematic area.

8. PROPOSED SOLUTION:
   Reclaim the stream using bank stabilization, grade control structures and any other control measures deemed viable to prevent continual migration of the stream.

9. TOTAL ESTIMATED COST: $ 2,490,257

10. COST SHARE REQUESTED: $ 1,494,154

11. SIGNATURE/TITLE: [Signature]

FORM 17.17
Hunters Cove Streambank Stability

Hunters Cove is a City street southwest of Highway 370 and S 36th St. in Bellevue, NE. The Hunters Cove area is typified by single family residences in a wooded setting with significant drainage ways throughout the development. The Hunters Cove area has experienced severe streambank erosion over time and the streambanks have encroached dangerously close to properties endangering structures and utilities within the area. The area of concern highlighted in this memo is the area surrounding Hunters Cove, especially along the eastern portion where significant erosion has occurred. It is the goal of residents and City officials to protect the properties in the area from further streambank migration.

The channels in the area are unnamed tributaries of the Papillion Creek according to USGS topographic maps. The area of interest is upstream of Quail Dr. where two channels meet just south of the road before continuing to the north; the two upstream channels were identified as the east and west tributaries for the purposes of this memo. There are approximately 1230 acres that drain to the culvert at Quail Dr.; the watershed is made up of a mix of approximately 65% agricultural and 35% residential/commercial land use. There are two dam/detention locations in the watershed that collect runoff from approximately 32% of the upstream areas. Refer to Figure 4 for a map of the area.

Visual inspection revealed that the likely cause of the erosion is due to shear forces from the channel discharges coupled with lack of streambank vegetation and protection. The geomorphic life and evolution of a streambank is a natural process that finds equilibrium over time through a process of channel incision and streambank erosion and vegetation. This process is accelerated due to development in the watershed that causes an increase in runoff volumes and velocities and an elimination of naturally protective vegetation. Unfortunately development in the area has encroached on these natural areas of evolution that would allow the processes to occur; current existing structures and utilities in these evolving areas will be at risk of damage and failure due to streambank erosion. The problems of this area will continue to worsen with time and will only be accelerated by development of the agricultural areas in the watershed.

The erosion problem can be solved in the immediate area by stabilizing the banks to protect against further erosion. The proposed improvements are a combination of common and proven methods used for this type of stream bank stabilization. The selected improvement practices are streambank shaping, grade control structures, rock rip-rap placement and composite revetment.

Rip-rap revetment is a stream repair practice used to stabilize eroding stream banks. Rip-rap is very versatile and will suit a wide range in flows and soil conditions. The loose rip-rap is flexible and will accommodate small movements in soil. The revetment consists of 12 to 24 inch diameter rip-rap extending from 3 feet below the existing channel bed to 3 feet above the channel bed. Rip-rap is selected as the lower revetment material due to the above reasons and will provide the flexibility needed for transition to the upper composite revetment. Above the rip-rap, the banks will be shaped to a 1.5 vertical to 1.0 horizontal slope. Interlocking composite revetment will be placed upon the newly shaped slopes to prevent further erosion. The composite revetment will allow for grasses and other vegetation to grow giving the slopes a more "natural look" when fully developed. The establishment of grass will enhance the stability of block through both lateral restrain and root anchoring.

The following diagrams below show typical cross-sections of the creek with the proposed stabilization practices. Photographs of the area can be found at the end of this memo.
Figure 1 – Rip-rap and composite revetment will be used in areas where both banks are experiencing severe erosion.

Figure 2 – Rip-rap bottom with composite revetment on the unstable side only.

Figure 3 – Rip-rap bottom with bank reshaping

An opinion of probable cost was prepared using the above stabilization procedures along the channel bank in the applicable locations.
Proposed Project: Hunters Cove  
Description: Streambank Stabilization

## CONSTRUCTION COSTS

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item</th>
<th>Unit</th>
<th>No. Req'd</th>
<th>Unit Cost</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Clearing and Grubbing</td>
<td>Lump Sum</td>
<td>1</td>
<td>$10,000.00</td>
<td>$10,000.00</td>
</tr>
<tr>
<td></td>
<td>Tree Removal</td>
<td>Lump Sum</td>
<td>1</td>
<td>$30,000.00</td>
<td>$30,000.00</td>
</tr>
<tr>
<td></td>
<td>Bank Stabilization</td>
<td>LF</td>
<td>1500</td>
<td>$950.00</td>
<td>$1,425,000.00</td>
</tr>
<tr>
<td></td>
<td>Grade Control Structure</td>
<td>Each</td>
<td>1</td>
<td>$100,000.00</td>
<td>$100,000.00</td>
</tr>
<tr>
<td></td>
<td>Seeding</td>
<td>Acre</td>
<td>3</td>
<td>$1,500.00</td>
<td>$3,750.00</td>
</tr>
<tr>
<td></td>
<td>Erosion Control</td>
<td>SY</td>
<td>12100</td>
<td>$3.00</td>
<td>$36,300.00</td>
</tr>
<tr>
<td></td>
<td>Traffic Control for Construction</td>
<td>Lump Sum</td>
<td>1</td>
<td>$12,000.00</td>
<td>$12,000.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Construction Costs Subtotals</th>
<th>$1,617,050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobilization</td>
<td>Mobilization</td>
<td>Lump Sum</td>
</tr>
<tr>
<td></td>
<td>Construction Costs Total</td>
<td>$1,778,755</td>
</tr>
</tbody>
</table>

|                  | Contingency                         | Lump Sum  | 1          | 20%       | $355,751   |

|                  | Engineering                          | Lump Sum  | 1          | 20%       | $355,751   |

### TOTAL PROJECT COSTS

$2,490,257

*Contingency to include acquisition of construction easement if necessary*
URBAN CONSERVATION ASSISTANCE PROGRAM

SPECIAL PROJECT REQUEST APPLICATION

Date: 3/5/10

Project Name: Johnny Goodman Golf Course Stormwater Management
Project Sponsor: City of Omaha
Address: 5600 South 10th Street
City/State/Zip: Omaha, NE 68107
Contact Person/Title: Selma C. Kessler, CEng
Telephone: 444-3915 x 221

Project Location: 6111 S 95th Street
Omaha, NE, 68127

Description of Problem: Two apartment complexes have concrete flumes and storm sewers in place to convey stormwater from their property directly on to the Johnny Goodman Golf Course. Erosion damage has occurred, and continues to occur at these locations.

Proposed Solution: Regrade the damaged areas and add bioretention areas to infiltrate stormwater. Additional information is attached.

Total Estimated Cost: $61,160
Cost Share Request: $30,000
Signature/Title: [Signature]

* Attach additional sheets as necessary.

FORM 17.0.B
Proposed Solution (Additional Information)

The proposed solution for the damage to the golf course involves a combination of regrading the site to create bioretention areas, reinforcing the soil at the point where stormwater flows onto City property, and adding appropriate plant material and slope stabilization along the overflow areas.

There are a total of 4 impact points where storm water is discharged directly onto the golf course. The municipal code no longer allows this practice; however, damage has occurred and the damaged areas are continuing to degrade. This particular project was brought to the Public Works Department’s attention when a contractor applied for a plumbing permit for a project at the Cimarron Hill’s Apartment complex. The permit dealt with discharging a new storm sewer installed to pick up roof drains onto the golf course.

The City coordinated with the engineer for Cimarron Hills, E&A Consulting, to develop a series of detention/infiltration basins and drop structures at the apartment complex in lieu of discharging directly onto the golf course, and this work was completed in August, 2009. The work done by the apartment complex should mitigate both the volume and velocity of runoff, but stormwater still discharges onto City property, the existing damage needs to be repaired and the potential for additional damage remains.

The City followed up with E&A with a contract to develop additional survey and drainage data for all discharge points. The funds requested with this application will be directed toward the damage repair and long term management of stormwater runoff at impact points 1 and 4. The drainage report and detailed topo data at all discharge points studied is included as an appendix with this submittal.

The estimated volume of each bioretention/rain garden is based on the City’s standard of treating the first 0.5” of runoff from the contributing drainage area. The corresponding surface area is based on an assumed maximum depth of 0.5 ft. The estimated construction cost is $5/sq ft. Table 1 summarizes the estimated volume, area and cost of bioretention gardens at impact points 1 and 4.

<table>
<thead>
<tr>
<th></th>
<th>Contributing Area, Acres</th>
<th>Volume, Ft³ (based on 0.5” runoff)</th>
<th>Garden Area, Ft² (0.5’ depth)</th>
<th>Estimated Cost ($/ft²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area 1</td>
<td>1.21</td>
<td>2196</td>
<td>4392</td>
<td>$21,960</td>
</tr>
<tr>
<td>Area 4</td>
<td>2.16</td>
<td>3920</td>
<td>7840</td>
<td>$39,200</td>
</tr>
</tbody>
</table>

| Total Estimated Cost | $61,160 |
URBAN CONSERVATION ASSISTANCE PROGRAM

SPECIAL PROJECT REQUEST APPLICATION

1. Date:  March 10, 2010

2. Project Name:  Blondo Street steps conversion to a ramp

3. Project Sponsor:  City of Omaha Department of Parks recreation and public property

   Address:  1819 Farnam Street, Suite 701

   City/State/Zip:  Omaha NE  68183-0701

4. Contact Person:  Barbara Kohles
   Title:  Park Planner

5. Telephone:  402-444-5943

6. Project Location:  Blondo Street steps are located north of the Blondo Street Bridge on the Keystone trail at approximately 84 Ave.

7. Description of Problem: * The steps to the Keystone trail is saturated with water from multiple sources and causing the steps and landing to sag in multiple directions and the water to sit on the trail. The resulting ice dam does not melt on the shady side of the bridge and bicyclists are tearing up the grassed area to avoid the ice. The result is mud on the trail. This is also not a bicycle friendly access to the Keystone trail.

   The water sources seems to be from
   - The car wheels spraying rain water over the sides of the bridge
   - The surrounding water shed
   - The sides of the bridge
   - The sidewalks

   The area becomes dangerous with the mud, ice and settling concrete. There are deep holes behind the walls and under the sidewalk.

8. Proposed Solution: * A segmental concrete retaining wall and a concrete ramp with railing on top of the wall to the Keystone trail. This will get the ramp out of the shade of the bridge. Provide a long-term wall design. Route the water to the creek so it does not under mine the trail. The design will include 120' of wall and ramp plus design drainage, removals, seeding, erosion
control and grading. Since there is an existing retaining wall, there should be very little grade change or fill.

$20,000.00 for wall on south side by City of Omaha with out cost sharing but will be done at same time as the north side of bridge

9. Total Estimated Cost: $40,000.00 for ramp and wall on north side of bridge and done with the cost sharing program

10. Cost Share Request: $24,000.00

11. Signature/Title: [Signature]

- Attach additional sheets as necessary.

FORM 17.0.B
Keystone Trail at Blondo Street
Remove steps and replace with ramp

<table>
<thead>
<tr>
<th>Description</th>
<th>NRD</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ea testing</td>
<td>$0.60</td>
<td>$17,994.00</td>
</tr>
<tr>
<td>1 ea excavation</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>1 ea permitting wetlands and flood plain</td>
<td>$3,000.00</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>1 ea design</td>
<td>$4,000.00</td>
<td>$4,000.00</td>
</tr>
<tr>
<td>1 ea demolition</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>300 sq ft erosion control w/ seeding</td>
<td>$3.30</td>
<td>$990.00</td>
</tr>
<tr>
<td>50 lin ft drainage to creek w/brace</td>
<td>$10.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>800 sq ft concrete trail 5 1/2&quot; x 8'</td>
<td>$3.75</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>400 sq ft wall/w drainage</td>
<td>$16.00</td>
<td>$6,400.00</td>
</tr>
<tr>
<td>110 lin ft railing</td>
<td>$60.00</td>
<td>$6,600.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$29,990.00</td>
<td></td>
</tr>
</tbody>
</table>
URBAN CONSERVATION ASSISTANCE PROGRAM

SPECIAL PROJECT REQUEST APPLICATION

1. Date: 11 March 2014

2. Project Name: Common Grounds Stormwater Swale Improvements

3. Project Sponsor: City of Omaha PWD Environmental Quality Division
   Address: 5600 South 10th Street
   City/State/Zip: Omaha, NE 68107 - 3501

4. Contact Person: Nina Cudahy  Title: Quality Control Manager

5. Telephone: 402.444.3915 x 229

6. Project Location: Common Grounds Community Center
   1701 Veteran Drive
   Omaha, NE 68106

7. Description of Problem: * Significant erosion scar and cutting in 4"d long swale due to culvert point discharge from upstream watershed.

8. Proposed Solution: * SEE ATTACHED EXHIBIT.

9. Total Estimated Cost: $83,000 (€ 69,000 Construction)

10. Cost Share Request: $30,000

11. Signature/Title: Nina Cudahy

* Attach additional sheets as necessary.

FORM 178.16
Opinion of Probable Costs - Master Plan Level - Revised Preliminary
All costs based upon 2010 construction costing data

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove rip rap, vegetation, debris</td>
<td>1</td>
<td>Allow</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Earthwork</td>
<td>1</td>
<td>Allow</td>
<td>$4,500.00</td>
<td>$4,500.00</td>
</tr>
<tr>
<td>Scourstop (4'x4' Panels)</td>
<td>10</td>
<td>EA</td>
<td>$250.00</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>Geoweb</td>
<td>4,000</td>
<td>SF</td>
<td>$2.00</td>
<td>$8,000.00</td>
</tr>
<tr>
<td>Sediment Stop</td>
<td>40</td>
<td>LF</td>
<td>$2.50</td>
<td>$100.00</td>
</tr>
<tr>
<td>Raingarden Amended Soil</td>
<td>100</td>
<td>CY</td>
<td>$37.00</td>
<td>$3,700.00</td>
</tr>
<tr>
<td>Green Armor</td>
<td>70</td>
<td>SY</td>
<td>$8.00</td>
<td>$560.00</td>
</tr>
<tr>
<td>Filter Pave</td>
<td>1</td>
<td>Allow</td>
<td>$4,500.00</td>
<td>$4,500.00</td>
</tr>
<tr>
<td>Interpretive</td>
<td>1</td>
<td>Allow</td>
<td>$1,500.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Natives sod grown</td>
<td>6,500</td>
<td>SF</td>
<td>$3.75</td>
<td>$24,375.00</td>
</tr>
<tr>
<td>Buffalo sod</td>
<td>12,000</td>
<td>SF</td>
<td>$0.40</td>
<td>$4,800.00</td>
</tr>
<tr>
<td><strong>Subtotal:</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$56,535.00</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Costs</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Conditions</td>
<td>12%</td>
</tr>
<tr>
<td>Construction Contingency</td>
<td>10%</td>
</tr>
<tr>
<td>Establishment Management</td>
<td></td>
</tr>
<tr>
<td>Design and Construction Admin Fees</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Total:** **$83,103.77**
The proposed design approach is to develop a progressive sequence of stabilization and infiltration strategies for a greatly reduced velocity and peak flow rate which has contributed to the significant scour experienced currently.

**A. Stormwater Velocity Dissipation:**
Mitigate the significant scour at the existing storm culvert outlet. Replace the failed rip-rap with recompacted soil and ScourStop matting with native tallgrass vegetation.

**B. Swale Stabilization:**
Prevent future scour and cutting through the implementation of 4" Geoweb cellular grid matting and infill cores with soil and native tallgrass vegetation.

**C. Stormwater Infiltration:**
Delay the discharge rate and accommodate infiltration with a below grade cell of amended compost and sand soil mixture and establish a raingarden biainfiltration solution. No below grade drain tile to be used and placement of upstream biodegradable vegetated 'speed bump' of Sediment Stop rolled log product. Allows for hardy root structure establishment.

**D. Outfall Surround Stabilization:**
Provide soil stabilization around existing drop structure through non-biodegradable turf reinforcement mat fortified with 'Flexterra' hydro-tackifier mulch and native tallgrass vegetation.

**E. Interpretive Opportunity:**
Establish a path to interpretive panel depicting the importance and strategies of stormwater management. Incorporate new 'Filter-Pave' recycled glass pavement product.
URBAN CONSERVATION ASSISTANCE PROGRAM

SPECIAL PROJECT REQUEST APPLICATION

1. Date: 15 March 2010.

2. Project Name: Park Trails Erosion Improvements.

3. Project Sponsor: Omaha Parks, Recreation & Public Property Department.
   Address: 1819 Farnam Street – Suite 701.
   City/State/Zip Omaha, Nebraska 68183-0701.

4. Contact Person: Dennis E. Bryers, RLA, FASLA, Title: Park Planner II.

5. Telephone: 402-444-3798 (office) 402-616-3724 (cell)

6. Project Location: Meadow Lane Park, 11707 Farnam Street and Barrington Park, 764 North 164th Street.

7. Description of Problem: * Meadow Lane Park – Runoff from the existing asphalt trail and surrounding area is concentrated and eroding a portion of the creek embankment adjacent to the trail. The eroded area is encroaching on the trail causing a dangerous situation for trail users.

Barrington Park – Runoff from the existing asphalt trail and surrounding land is eroding soil from behind gabion baskets that protect the creek embankment thereby eroding the land which in time will impact the existing trail.

8. Proposed Solution: * Meadow Lane Park – Approximately 200 linear feet of the existing trail would be relocated and regressed so that it is farther from the top of the creek embankment and runoff is directed away from the portion of the embankment that is being eroded and onto a flat grass area. The eroded slope would be regarded, seeded and erosion control blankets installed to protect the slope until the vegetation can take hold.
Barrington Park – Additional gabion baskets would be placed at the east end to stop the erosion that is occurring behind the baskets. The area between the existing trail and the existing gabion baskets would be regarded so as to direct runoff away from the area being eroded. After regarding the area it would be seeded and erosion control blankets installed to protect the area until the vegetation is established.

9. Total Estimated Cost: Meadow Lane Park: $5,000.00  Barrington Park: $10,000.00
   Total Project Cost: $15,000.00

10. Cost Share Request: Meadow Lane Park: $3,000.00  Barrington Park: $6,000.00
    Total Project Cost Share Request: $9,000.00

11. Signature/Title: [Signature]

- Attach additional sheets as necessary.

FORM 17.0.B
March 11, 2010

Papio-Missouri River NRD
Attn: Gerry Bowen
8901 South 154th Street
Omaha, NE 68138-3621

RE: PAPIO-MISSOURI RIVER NRD
URBAN CONSERVATION ASSISTANCE PROGRAM
SOUTH SIOUX CITY, NEBRASKA APPLICATION

Dear Gerry:

Please find enclosed all required forms and information regarding the City of South Sioux City, Nebraska's application for the Papio-Missouri River NRD's Urban Conservation Assistance Program.

The 100-year flood, which is the standard used by most federal and state agencies, is used by the National Flood Insurance Program (NFIP) as the standard for floodplain management and to determine the need for flood insurance. Thus, added insurance cost.

The City of South Sioux City, Nebraska realizes the importance of 100 year flood plain planning. To avoid greater insurance cost, most developers will elevate property to a level that is out of the 100 year flood plain.

The All American Subdivision Floodplain Improvement and Stormwater Management Project allows for the planned growth of the City of South Sioux City, Nebraska with strict attention being paid to stormwater management from the start. As such, the All American Subdivision Floodplain Improvement and Stormwater Management Project provides for a storm water drainage ditch on the west side of the All American Subdivision which would allow storm water flows to reach the northwest established drainage system.

The All American Subdivision Floodplain Improvement and Stormwater Management Project is located between 21st Street and College Way and between Highway 77 and Golf Road in South Sioux City, Nebraska.

The City of South Sioux City, Nebraska would like to thank the Papio-Missouri River NRD for its ever growing attention to protecting the ground and surface water, reducing flood threats and enhancement to wildlife habitat, all of which provides for a great quality of life in South Sioux City and the entire Papio-Missouri River NRD jurisdiction.

Thank you for your time and consideration. Should you have any question or concerns, please contact me at 402-494-7573 or by email at joejohnson@southsiouxcity.org.

Sincerely,

Joe J. Johnson
Assistant City Administrator
1. DATE: March 11, 2010

2. PROJECT NAME: The All American Subdivision Floodplain Improvement and Stormwater Management

3. PROJECT SPONSOR: City of South Sioux City, Nebraska

   (ADDRESS) 1615 1st Ave
   South Sioux City, NE 68776

4. CONTACT PERSON: Joe J. Johnson

   TITLE: Assistant City Administrator

5. TELEPHONE: 402-494-7573

6. PROJECT LOCATION **: Between 21st and College Way and Between Highway 77 and Golf Road

   South Sioux City, Nebraska

7. DESCRIPTION OF PROBLEM **: Provide stormwater management for areas that will be developed

   Elevated to avoid cost associated with the 100 year flood plain insurance.

8. PROPOSED IMPROVEMENTS **: Improvements provide for a storm water drainage ditch on the

   West side of the All American Subdivision which would allow storm water to reach established drainage.

9. TOTAL ESTIMATED COST: $19,332

10. COST SHARE REQUEST: $11,599

11. SIGNATURE/TITLE:

   ** Attach additional sheets as necessary.
All America Subdivision Floodplain Improvement and Drainage Plan
Engineer's Preliminary Estimate of Cost
March 11, 2010

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrow</td>
<td>CY</td>
<td>984</td>
<td>$5.80</td>
<td>$5,707.00</td>
</tr>
<tr>
<td>Excavation</td>
<td>CY</td>
<td>1,580</td>
<td>$5.80</td>
<td>$9,164.00</td>
</tr>
<tr>
<td><strong>subtotal</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$14,871.00</strong></td>
</tr>
</tbody>
</table>

Contingenc 10% $1,487.00
Survey and Design 10% $1,487.00
Construction Observation and Testing 10% $1,487.00

**Total** $19,332.00
TRAILS ASSISTANCE PROGRAM

SPECIAL PROJECT REQUEST APPLICATION

1. DATE: March 10, 2010

2. PROJECT NAME: Walnut Creek Connector Trail

3. PROJECT SPONSOR: City of Papillion
   ADDRESS: 122 East Third Street
   Papillion, NE 68046

4. CONTACT PERSON: Marty Leming
   TITLE: Director of Public Works
   TELEPHONE: (402) 597-2043 /cell: 679-0364
   E-MAIL: mleming@papillion.org

7. PROJECT LOCATION:
   Approximately 98th Street and Schram Road

8. DESCRIPTION OF PROJECT:
   Project entails connecting the Savanna Shores Trail to the Walnut Creek Recreation Area Trail with a tunnel under Schram Road along with improvements to a trail head connection and a connection to the housing area on the northwest corner of 96th Street and Schram Road.

   Please note that the city was awarded 80% matching funds from the Transportation Enhancement Program in December of last year for this project.

9. TOTAL ESTIMATED COST: $355,000.00

10. COST SHARE REQUESTED: $35,500.00

11. SIGNATURE/TITLE: [Signature]
   [Title]
### ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST

<table>
<thead>
<tr>
<th>Item #</th>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>General Clearing and Grubbing</td>
<td>1.0</td>
<td>LS</td>
<td>$5,000.00</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>2</td>
<td>Earthwork (Established Quantity)</td>
<td>1,000</td>
<td>CY</td>
<td>$11.00</td>
<td>$11,000.00</td>
</tr>
<tr>
<td>3</td>
<td>Subgrade Preparation</td>
<td>1,600</td>
<td>SY</td>
<td>$1.50</td>
<td>$2,400.00</td>
</tr>
<tr>
<td>4</td>
<td>6&quot; Concrete Trail, Class 47B-3500</td>
<td>1,200</td>
<td>SY</td>
<td>$35.00</td>
<td>$42,000.00</td>
</tr>
<tr>
<td>5</td>
<td>Install Bollard</td>
<td>12</td>
<td>EACH</td>
<td>$30.00</td>
<td>$3,600.00</td>
</tr>
<tr>
<td>6</td>
<td>Detectable Warning Panels</td>
<td>60</td>
<td>SF</td>
<td>$35.00</td>
<td>$2,100.00</td>
</tr>
<tr>
<td>7</td>
<td>Concrete Trailhead</td>
<td>1.0</td>
<td>LS</td>
<td>$20,000.00</td>
<td>$40,000.00</td>
</tr>
<tr>
<td>8</td>
<td>Seeding, Type &quot;B&quot;</td>
<td>0.5</td>
<td>AC</td>
<td>$3,000.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>9</td>
<td>Install Signs with Posts</td>
<td>10</td>
<td>EACH</td>
<td>$200.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>10</td>
<td>Silt Fence</td>
<td>1,300</td>
<td>LF</td>
<td>$3.00</td>
<td>$3,900.00</td>
</tr>
<tr>
<td>11</td>
<td>Remove and Replace Street Light</td>
<td>2</td>
<td>EACH</td>
<td>$1,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>12</td>
<td>Retaining Wall</td>
<td>800</td>
<td>SF</td>
<td>$30.00</td>
<td>$24,000.00</td>
</tr>
<tr>
<td>13</td>
<td>Trail Tunnel R.C. Box (under Schram Road)</td>
<td>1</td>
<td>LS</td>
<td>$100,000.00</td>
<td>$100,000.00</td>
</tr>
<tr>
<td>14</td>
<td>Utility Reconstruction</td>
<td>1</td>
<td>LS</td>
<td>$15,000.00</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>15</td>
<td>24-Inch RCP Culvert</td>
<td>30</td>
<td>LF</td>
<td>$50.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>16</td>
<td>Traffic Control</td>
<td>1</td>
<td>LS</td>
<td>$7,500.00</td>
<td>$7,500.00</td>
</tr>
<tr>
<td>17</td>
<td>Mobilization</td>
<td>1</td>
<td>LS</td>
<td>8% of Subtotal</td>
<td>$19,480.00</td>
</tr>
</tbody>
</table>

**Subtotal Estimated Construction Cost $ 243,500.00**

**Estimated Total Probable Construction Cost $ 262,980.00**

### ENGINEERING COSTS

- Preliminary Engineering (20%) $ 52,596.00
- Construction Engineering/Contingency (14%) $ 38,817.00
- NDOR Project Representative Costs (1%) $ 2,680.00

**Engineering Costs Total $ 92,043.00**

### TOTAL ESTIMATED PROJECT COSTS $ 355,023.00

**Notes:**

1. Seeding quantity based on: (20 feet - trail width) x trail length divided by 43,560.
2. Construction Engineering/Contingency includes 5% for contingencies.
3. Subgrade Preparation includes bikeway width plus 2-feet.
4. Trail Tunnel R.C. Box under Schram Road 10' wide x 10' high x 50' long
5. Concrete Trailhead proposed 80' x 100' plus access drive.
TRAILS ASSISTANCE PROGRAM

1. **DATE:** March 10, 2010

2. **PROJECT NAME:** Cunningham Lake Trail Phase 1

3. **PROJECT SPONSOR:** City of Omaha Department of Parks Recreation and Public Property
   
   Address: 1819 Farnam Street, Suite 701
   
   City/State/Zip: Omaha NE 68183-0701

4. **CONTACT PERSON:** Barbara Kohles
   
   **Title:** Park Planner

5. **TELEPHONE:** 402-444-5943

6. **PROJECT LOCATION:** 8660 Lake Cunningham Road, Campground entrance #10 around the lake edge to entrance #9.

7. **DESCRIPTION OF PROJECT:** This portion of the Cunningham Lake Trail Master Plan will be a route near the newly renovated campground of area 10 to area 9. The trail will be an aggregate surface 6" deep, 10' wide and 4500' long. The trail users will be pedestrians, bicyclers and equestrian. Activities occurring at these locations are wind surfing, camping, playground, fishing, horseback riding, open space events, hiking and wildlife viewing. The project has been awarded the Recreation Trail Program (RTP) Grant through the Nebraska Game and Parks. The project was awarded $127,431.00. (68%)

8. **Total Estimated Cost:** $187,391.70

9. **Cost Share Request:** $29,980.35

Signature/Title: [Signature]

Attached additional sheets as necessary.
January 19, 2010

Dennis Byers
City of Omaha
1819 Farnam St. Ste. 701
Omaha, NE 68183

RE: RTP 2010 (008), Cunningham Lake Trail

Dear Dennis:

CONGRATULATIONS! On behalf of Nebraska Game and Parks Commission (NGPC) and the Recreational Trails Program Committee, I would like to congratulate you for successfully obtaining a Recreational Trails Program (RTP) grant for the Cunningham Lake project for fiscal year 2010. At this point, the Federal Highway Administration (FHWA), has not given NGPC the authority to move forward on these projects, so you MAY NOT begin any work until NGPC provides you guidance and approval.

To improve upon communication between the grant sponsor and NGPC regarding administration of this grant, you will be required to attend a one-on-one grant administration training session. It will be up to you to call me and schedule an appointment to take this training. It will take approximately one to one and a half hours of your day. Until you have received this training, your project cannot move forward. It should be noted that procurement of your engineer for design and construction will be regulated by State Statutes and we will go over that in more detail at your training. Please note that I will be out of the office until the first of April, so please contact me then to schedule your training.

In regards to the amount of funding your project received, the Committee chose to fund your project $127,431 for the construction of the trail that has been outlined in the application. This is a lesser amount than requested and we will go over the reasoning in the training. There is a new environmental process that must be completed that we will go over during training. My office will request a Section 106 review by the State Historical Society, a Threatened and Endangered Species Review from the U.S. Fish and Wildlife Service and NGPC, as well as STIP inclusion from the Nebraska Department of Roads. I will go into more detail on these items at the meeting you will schedule with me. These reviews must take place and be provided to FHWA prior to beginning the project, so FHWA can grant NGPC the authorization to go forth with the project.

See You Out There
www.OutdoorNebraska.org
Again, I want to congratulate you for receiving a RTP grant for fiscal year 2010 and I look forward to working with you on getting this project built. If you have questions regarding this or you want to set up your appointment with me to go through the grant administration training, please do not hesitate to contact me at (402) 471-5425 or email me at michelle.stryker@nebraska.gov. If you have questions between the time you receive this letter and the first part of April, please contact my Supervisor, Tim Montgomery at (402) 471-5424 or by email at tim.montgomery@nebraska.gov.

Sincerely,

Michelle Stryker
Outdoor Recreation Planner
Acting Trails Grant Administrator

See You Out There
www.OutdoorNebraska.org
<table>
<thead>
<tr>
<th>Item</th>
<th>Quant.</th>
<th>Units</th>
<th>Estimated unit cost</th>
<th>Estimated cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Mobilization</td>
<td>1</td>
<td>L.S.</td>
<td>$15,000.00</td>
<td>$15,000.00</td>
</tr>
<tr>
<td>2 Clearing and grubbing</td>
<td>2</td>
<td>acre</td>
<td>$4,000.00</td>
<td>$8,000.00</td>
</tr>
<tr>
<td>3 Embankment</td>
<td>425</td>
<td>CY</td>
<td>$8.75</td>
<td>$3,718.75</td>
</tr>
<tr>
<td>4 culvert 36&quot; R.C.P.</td>
<td>70</td>
<td>L.F.</td>
<td>$72.00</td>
<td>$5,040.00</td>
</tr>
<tr>
<td>5 Water</td>
<td>1</td>
<td>L.S.</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>6 Fabric under trail</td>
<td>5000</td>
<td>S.Y.</td>
<td>$2.00</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>7 Construct 6&quot; Granular bike trail</td>
<td>833</td>
<td>C.U.Y.</td>
<td>$22.00</td>
<td>$18,326.00</td>
</tr>
<tr>
<td>8 Seeding/w fabric</td>
<td>10000</td>
<td>S.Y.</td>
<td>$3.45</td>
<td>$34,500.00</td>
</tr>
<tr>
<td>9 Silt fence</td>
<td>4500</td>
<td>L.F.</td>
<td>$2.35</td>
<td>$10,575.00</td>
</tr>
<tr>
<td>10 Survey</td>
<td>1</td>
<td>L.S.</td>
<td>$4,000.00</td>
<td>$4,000.00</td>
</tr>
<tr>
<td>11 Testing</td>
<td>1</td>
<td>L.S.</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>12 Subgrade prep</td>
<td>5000</td>
<td>S.Y.</td>
<td>$2.50</td>
<td>$12,500.00</td>
</tr>
<tr>
<td>13 Environmental</td>
<td>1</td>
<td>L.S.</td>
<td>$6,000.00</td>
<td>$6,000.00</td>
</tr>
<tr>
<td>14 Asphalt removal</td>
<td>1</td>
<td>L.S.</td>
<td>$24,500.00</td>
<td>$24,500.00</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td></td>
<td>$156,159.75</td>
<td></td>
</tr>
<tr>
<td>20% for design and project management</td>
<td></td>
<td></td>
<td>$31,231.95</td>
<td></td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td></td>
<td></td>
<td>$187,391.70</td>
<td></td>
</tr>
</tbody>
</table>

**Funding sources**

- Cash match from sponsor: 20% $37,478.34
- Federal funding: 80% $149,913.36
LEGEND
PROPOSED TRAIL
COMPLETED TRAIL
FUTURE TRAIL
ARMY CORPS OF
ENGINEERS PROPERTY

LEGAL DESCRIPTION
LANDS SEC-TWN-RGE 22-16-12 ALL VAC 90 ST ADJ &
-EX TRA SE 469.61 FT- SE 1/4 & E 1/2 SW 1/4 & N 1/2
NW 1/4 SW 1/4 22-16-12 268.3 AC
LANDS SEC-TWN-RGE 22-16-12 ALL VAC 90 ST & IRREG
78.30 TAKEN FOR LAKE # ELEVEN NE 1/4
LANDS SEC-TWN-RGE 22-16-12 ESTLY 62.5 AC N 1/2 NW 1/4

Site Plan
CUNNINGHAM LAKE TRAIL PHASE I