

**BOARD OF COUNTY COMMISSIONERS
SARPY COUNTY, NEBRASKA**

**RESOLUTION AUTHORIZING THE CHAIRMAN TO SIGN THE PAPIO-MISSOURI NATURAL RESOURCES
DISTRICT (NRD) STORMWATER BEST MANAGEMENT PRACTICES PROGRAM GRANT**

WHEREAS, pursuant to Neb. Rev. Stat. §23-104(6) (Reissue 2007), the County has the power to do all acts in relation to the concerns of the County necessary to the exercise of its corporate powers; and,

WHEREAS, pursuant to Neb. Rev. Stat. §23-103 (Reissue 2007), the powers of the County as a body are exercised by the County Board; and,

WHEREAS, a Papio-Missouri NRD Grant is available to Sarpy County; and,

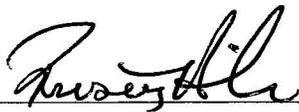
WHEREAS, Sarpy County will request funding to construct a rain garden on the corner of Golden Gate Drive and East Gold Coast Road; and,

WHEREAS, the grantor requires the signature of the Chairman; and,

WHEREAS, Sarpy County is committed to and supports the project to construct a rain garden with funding from the Papio-Missouri NRD; and;

NOW, THEREFORE, BE IT RESOLVED, By the Sarpy County Board of Commissioners that the Chairman is hereby authorized to sign the application for the Papio-Missouri NRD grant.

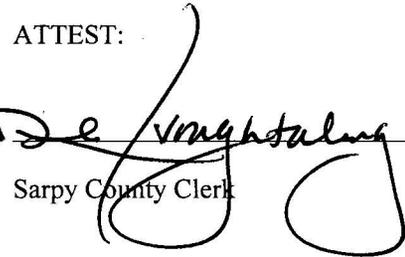
The above Resolution was approved by a vote of the Sarpy County Board of Commissioners at a public meeting duly held in accordance with applicable law on the 13th day of March, 2012.



Sarpy County Board Chairman



ATTEST:


Sarpy County Clerk

**Papio-Missouri River Natural Resources District Stormwater Grant
Rain Garden**

SECTION III. BUDGET SUMMARY

Category	Requested Amount	Match Share	Total Project Cost
A. Personnel			
B. Consultants/Contracts	\$10,000	\$10,000	\$20,000
C. Travel			
D. Supplies/ Operating Expenses			
E. Equipment			
F. Other Costs			
TOTAL AMOUNT	\$10,000	\$10,000	\$20,000
% Contribution	50%	50%	100%

**Match will be met through funding from the 2010 Stormwater Management Program (SWMP) Grant awarded to Sarpy County through the Nebraska Department of Environmental Quality (NDEQ).



17.41 STORMWATER BEST MANAGEMENT PRACTICES PROGRAM

SPECIAL PROJECT REQUEST APPLICATION

1. DATE: March 13, 2012

2. PROJECT NAME Sarpy County Rain Garden Project

3. PROJECT SPONSOR: Sarpy County

ADDRESS: 1210 Golden Gate Drive
Papillion, NE 68046

4. CONTACT PERSON: Lisa A. Haire

TITLE: Sarpy County Grant Coordinator

5. EMAIL AND PHONE: 402-593-1565 lhaire@sarpy.com

6. PROJECT LOCATION:

The Sarpy County Rain Garden Project will be located on the corner of Golden Gate Drive and East Gold Coast Road in Papillion, Nebraska on Sarpy County property. The project will be situated on the northeast corner of the Sarpy County Courthouse and the Administration overflow parking lot (attachment 1, proposed Rain Garden #1). This particular area accumulates stormwater and stormwater runoff from impervious surfaces following rainfall events and drains through a nearby outlet into the Municipal Separate Storm Sewer System (MS4).

7. DESCRIPTION OF STORMWATER BEST MANAGEMENT PRACTICE AND HOW IT WILL BE INCORPORATED IN THE PROJECT:

Sarpy County will incorporate Low Impact Development (LID) water quality measures through the implementation of a rain garden located on the corner of Golden Gate Drive and East Gold Coast Road in Papillion, Nebraska.

Rain gardens are an example of a low impact development (LID) approach to storm water management. The LID approach retains and infiltrates rainfall on-site, emphasizing site designing and planning techniques that mimic the natural infiltration-based, groundwater-driven hydrology of our historic landscape (www.papionrd.org).

Traditionally, pollutants accumulate on paved surfaces and are washed into the MS4 at concentrated levels during a rainfall event. The primary purpose of a rain garden is to store the first few inches of rain helping water infiltrate into the ground and limiting runoff pollutants which normally run through an outlet, draining into the MS4 and continuing downstream into creeks, ponds, lakes, and rivers. Rain gardens help to reduce this pollution by holding and

filtering the water. Loose, absorbent soil collects the rainwater running off streets and parking lots. Native plants help absorb water, sand and soil filter out pollutants helping to naturally manage stormwater runoff.

According to the National Pollutant Discharge Elimination System's (NPDES) menu of Best Management Practices (BMP's), "bio-retention (rain gardens) can be used in parking areas to collect and treat stormwater" (www.epa.gov/npdes/stormwater/menuofbmps/index). The Environmental Protection Agency (EPA) lists rain gardens as a Low Impact Development (LID) BMP strategy because "they restore the natural, pre-developed ability of an urban site to absorb stormwater, mimicking the natural hydrology of the area by capturing and managing storm water on-site" (www.epa.gov/npdes/stormwater/menuofbmps/index). Additionally, rain gardens recharge groundwater, keep rainwater on the property, remove standing water naturally, reduce mosquito breeding, and beautify the landscape.

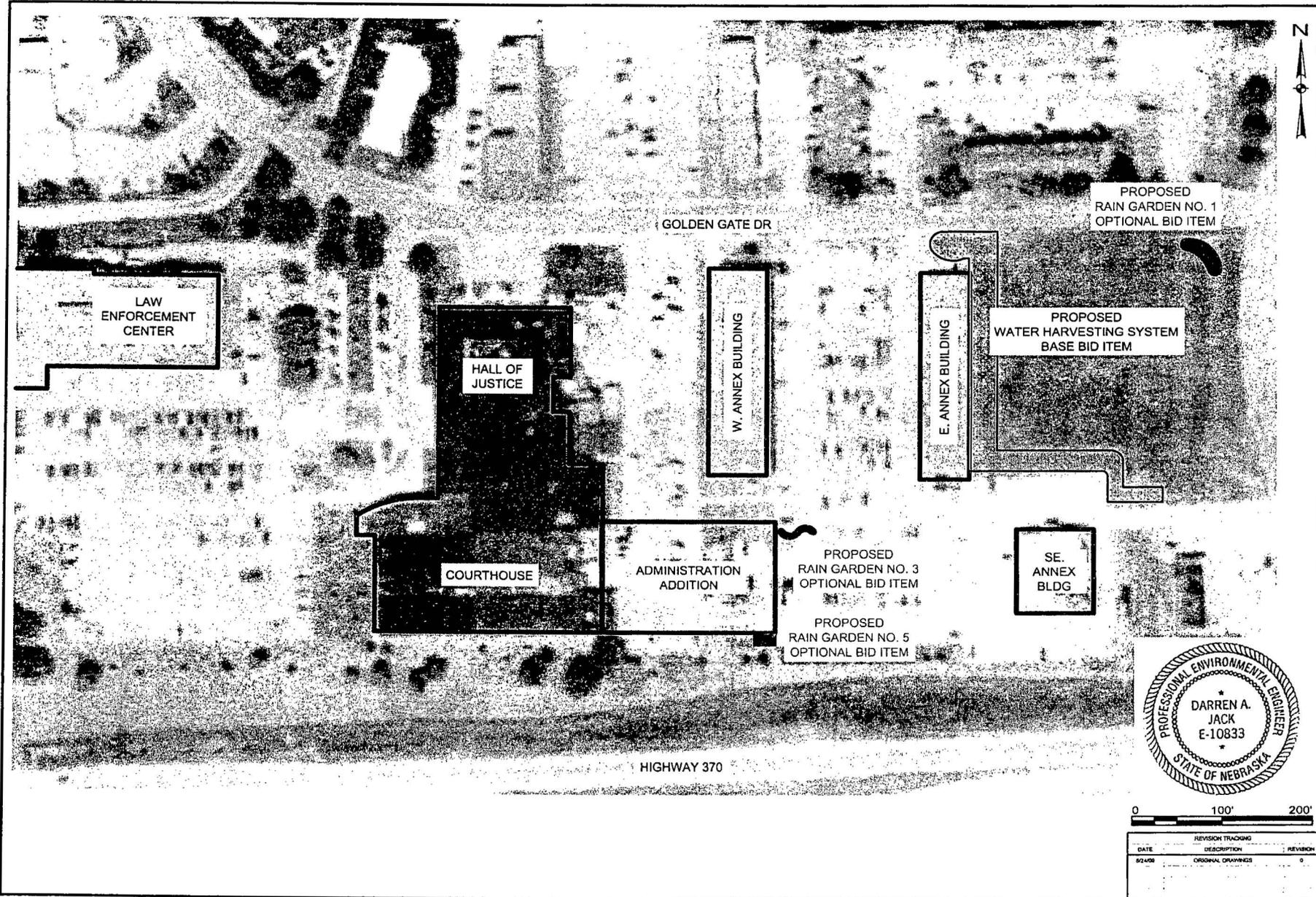
Sarpy County will work with a contractor to construct a rain garden on the northeast corner of the County Courthouse and Administration overflow parking lot. This area accumulates and holds stormwater runoff following rainfall events eventually draining into the MS4 through a nearby outlet (attachments 2-5). Constructing a rain garden in this area will assist in capturing the rainfall and runoff from nearby impervious surfaces limiting pollutants from draining into the MS4.

The Sarpy County rain garden will be landscaped with perennial flowers and native vegetation which will absorb rainfall, filtering pollutants that currently run across the parking lot. The rain garden will be a natural way to capture, filter, and hold rainfall on site helping protect fragile water resources downstream (attachments 6 and 7).

9. TOTAL ESTIMATED COST: \$ 20,000 (see attachment 8 for cost breakdown and 9 for schedule)

10. COST SHARE REQUESTED: \$ 10,000

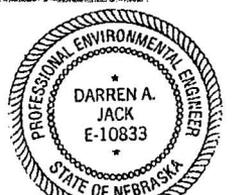
11. SIGNATURE/TITLE: 



SARY COUNTY
 STORM WATER BEST MANAGEMENT PRACTICES
 SARY COUNTY, NEBRASKA
 PROPOSED SITE PLAN

PROJECT NUMBER: 149-007
 DESIGNED: KJP
 DRAWN: DAJ
 CHECKED: BCM

1640 L STREET, SUITE D
 LINCOLN, NE 68508
 TEL (402) 477-4586
 FAX (402) 477-1656
 www.WJA-consulting.com



REVISION TRACKING		
DATE	DESCRIPTION	REVISION
8/24/09	ORIGINAL DRAWINGS	0

DRAWING NUMBER C-1
 FILE: 149007C10\STORMMPTS



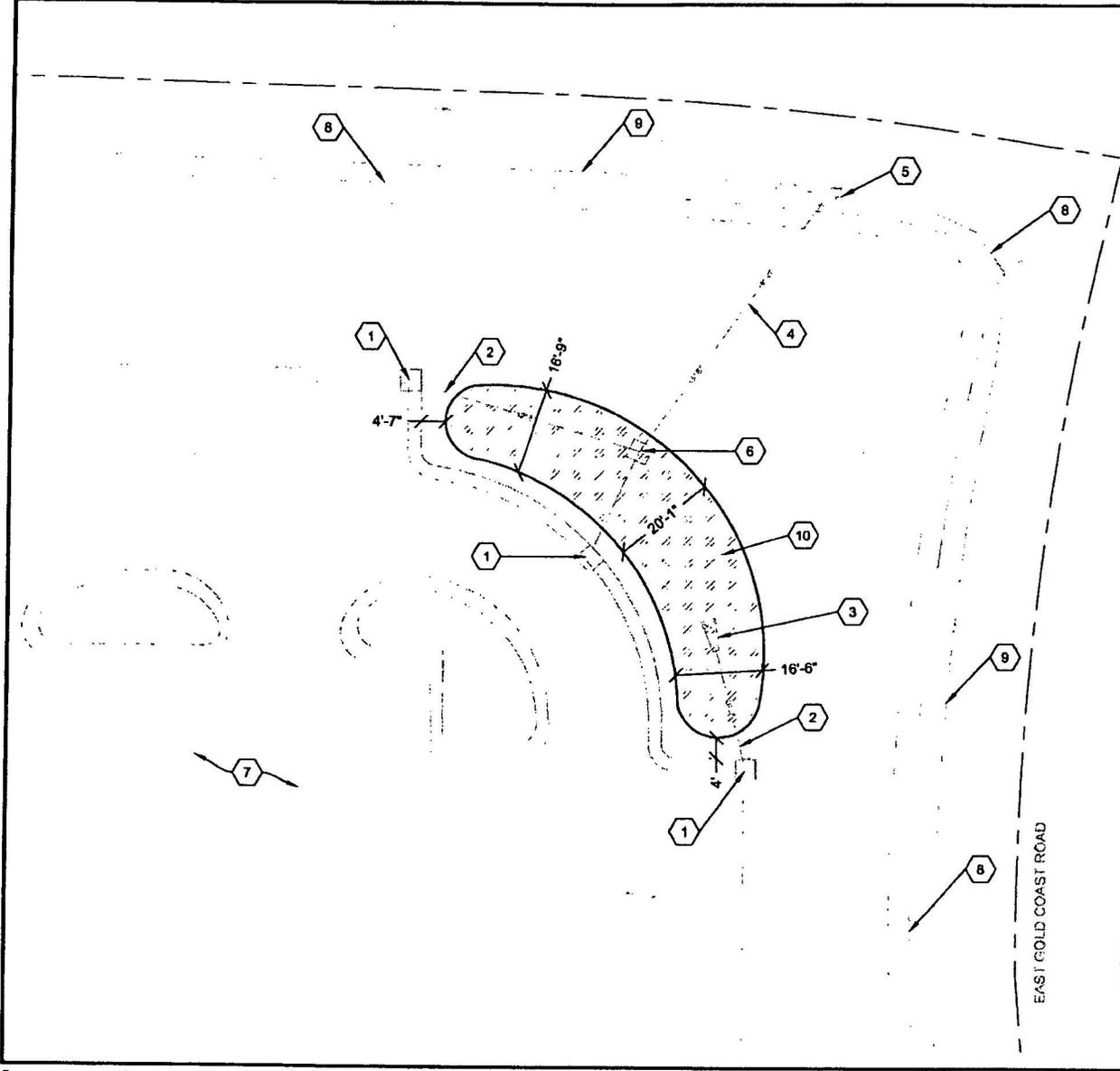


ATTACHMENT 4





P:_Drawings\16-007\Bary\160707\160707.dwg, D.A. 8/24/09 8:52:04 AM



GENERAL NOTES:

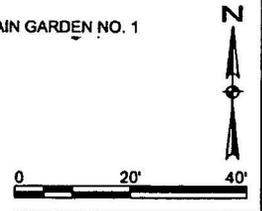
1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. CONTRACTOR SHALL NOTIFY THE NEBRASKA ONE-CALL SYSTEM BEFORE CONSTRUCTION ACTIVITIES BEGIN. NEBRASKA DIGGERS HOTLINE: 1-800-331-5666 OR 811.
3. CONTRACTOR SHALL PROTECT ALL EXISTING STORM SEWER INLETS, MANHOLES AND PIPING DURING CONSTRUCTION OF RAIN GARDEN.

SHEET KEYNOTES:

1. EXISTING 24" GRATE INLET, RIM ELEV = 1093.0'
2. EXISTING 12" STORM SEWER PIPE.
3. EXISTING 12" RCP FLARED END SECTION, RIM ELEV = 1092.5'
4. EXISTING 15" STORM SEWER PIPE.
5. EXISTING STORM SEWER CURB INLET.
6. EXISTING DRAW DOWN STRUCTURE, RIM ELEV = 1092.0'
7. PARKING LOT.
8. EXISTING CONCRETE SIDEWALK.
9. EDGE OF ROADWAY.
10. PROPOSED RAIN GARDEN NO. 1, APPROXIMATE DIMENSIONS: 85' BY 18', 1602 SF. SEE SHEET C-5 FOR VEGETATION PLAN.

LEGEND

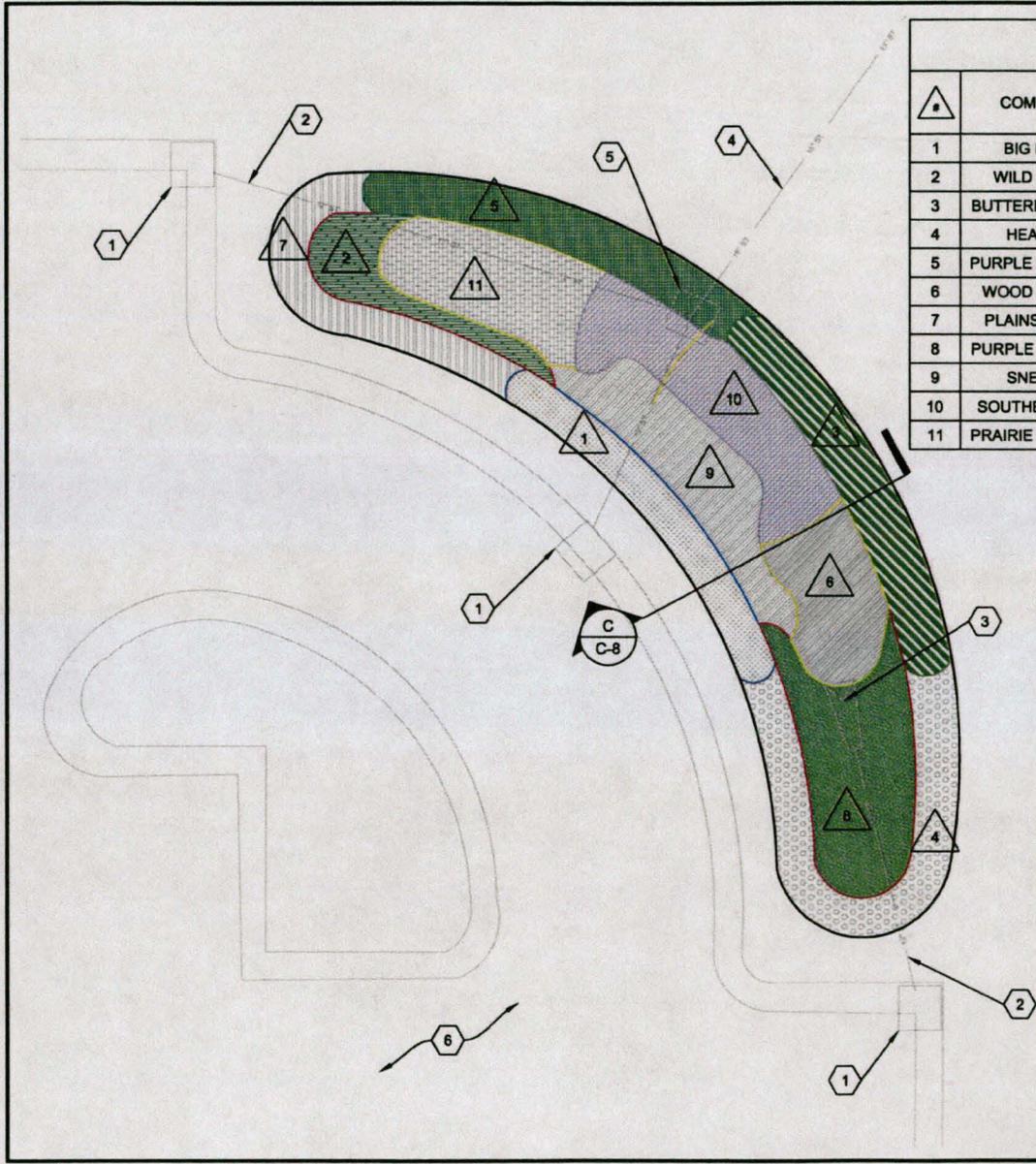
- EXISTING 15" STORM SEWER
- EXISTING 12" STORM SEWER
- ROADWAY CENTERLINE
- RAIN GARDEN NO. 1



DATE	REVISION TRACKING	REVISION
08/24/09	ORIGINAL DRAWING	1

PROJECT NUMBER: 16-007 DESIGNED: EAP DRAWN: DAL CHECKED: BCL	SARPY COUNTY STORM WATER BEST MANAGEMENT PRACTICES SARPY COUNTY, NEBRASKA
	OPTIONAL BID NO. 1 RAIN GARDEN NO. 1 PARTIAL SITE PLAN
1640 T ^h STREET, SUITE D LINCOLN, NE 68508 TEL (402) 475-6588 FAX (402) 477-1956 www.WJA-consulting.com	
Consulting, Inc. Engineers & Scientists WaterLand	
DRAWING NUMBER: C4 FILE: 16007C401TOR04M9	

This document was sealed by Darren A. Jack, #E-10833, on 8/24/09. This media should not be considered a certified document.

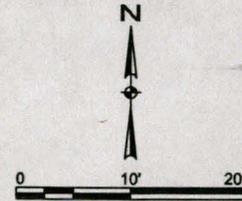


RAIN GARDEN NO. 1 PLANTING SCHEDULE

#	COMMON NAME	SPECIES NAME	PLANT SPACING	# REQUIRED	HATCH TYPE
1	BIG BLUESTEM	ANDROPOGON GERARDII	24 IN.	30	[Hatch Pattern]
2	WILD COLUMBINE	AQUILEGIA CANADENSIS	18 IN.	35	[Hatch Pattern]
3	BUTTERFLY MILKWEED	ASCLEPIAS TUBEROSA	24 IN.	35	[Hatch Pattern]
4	HEATH ASTER	ASTER ERICOIDES	15-18 IN.	80	[Hatch Pattern]
5	PURPLE DOMED ASTER	ASTER NOVAE-ANGLIAE	18 IN.	65	[Hatch Pattern]
6	WOOD GRAY SEDGE	CAREX GRISEA	18 IN.	50	[Hatch Pattern]
7	PLAINS COREOPSIS	COREOPSIS TINCTORIA	15-18 IN.	50	[Hatch Pattern]
8	PURPLE CONEFLOWER	ECHINACEA PURPUREA	18 IN.	90	[Hatch Pattern]
9	SNEEZEWEED	HELENIUM AUTUMNALE	18 IN.	70	[Hatch Pattern]
10	SOUTHERN BLUE IRIS	IRIS VIRGINICA	18 IN.	80	[Hatch Pattern]
11	PRAIRIE BLAZING STAR	LIATRIS PYCNOSTACHYA	18 IN.	65	[Hatch Pattern]

SHEET KEYNOTES:

- EXISTING 24" GRATE INLET, RIM ELEV = 1093.0'.
- EXISTING 12" Ø STORM SEWER PIPE.
- EXISTING 12" Ø RCP FLARED END SECTION, RIM ELEV = 1092.5'.
- EXISTING 15" Ø STORM SEWER PIPE.
- EXISTING DRAW DOWN STRUCTURE, RIM ELEV = 1092.0'.
- PARKING LOT.



REVISION TRACKING		
DATE	DESCRIPTION	REVISION
08/08	ORIGINAL DRAWING	0

SARPY COUNTY
STORM WATER BEST MANAGEMENT PRACTICES
SARPY COUNTY, NEBRASKA

OPTIONAL BID NO. 1
RAIN GARDEN NO. 1 VEGETATION PLAN

PROJECT NUMBER: 18027
DESIGNER: JAP
DRAWN: DAL
CHECKED: BCM

1640 L STREET, SUITE D
LINCOLN, NE 68508
TEL (402) 475-8088
FAX (402) 477-1966
www.WLCA-consulting.com

WLCA Consulting, Inc.
Engineers & Scientists
WaterLand

DRAWING NUMBER: C-5
FILE: 148007C01STORMBMP6

Attachment 8

Sarpy County Rain Garden Proposed Project

Estimated Costs for Component Parts

ITEM	DESCRIPTION	QTY	UNIT	UNIT COST	EXTENDED COST
1	Excavation	300	CY	\$11.98	\$3,594.00
2	Import Sandy Loam Fill	240	CY	\$35.86	\$8,606.40
3	Import Grave (No. 2 Stone)	30	CY	\$65.75	\$1,972.50
4	Under-Drain Piping (6" Slotted HDPE)	130	LF	\$1.79	\$232.70
5	Fittings (3-45degree elbows and 2-90 degree elbows)	6	Each	\$95.83	574.98
6	Vegetation	1600	SF	\$2.39	\$3,824.00
7	Connection to Existing Area Drain	1	Each	\$1,195.42	\$1,195.42
	TOTAL				\$20,000

ATTACHMENT 9
IMPLEMENTATION SCHEDULE
SARPY COUNTY RAIN GARDEN PROJECT

Sarpy County notified of award from Papio-Missouri NRD:	June 2012
Sarpy County Purchasing Department releases RFP:	July 9, 2012
Advertisement:	July 18-July 25, 2012
Prebid Meeting:	July 31, 2012
Open Bids:	August 9, 2012
Award Bid:	August 14, 2012
Contract Documents Completed:	August 24, 2012
Project Start:	September 3, 2012
Project Completion:	September 21, 2012

Sarpy County Board of Commissioners

1210 GOLDEN GATE DRIVE
PAPILLION, NE 68046-2895
593-4155

www.sarpy.com

ADMINISTRATOR Mark Wayne

DEPUTY ADMINISTRATOR Scott Bovick

FISCAL ADMIN./PURCHASING AGT. Brian Hanson



COMMISSIONERS

Rusty Hike District 1
Jim Thompson District 2
Tom Richards District 3
Jim Nekuda District 4
Jim Warren District 5

MEMO

TO: Sarpy County Board of Commissioners

FROM: Lisa A. Haire

RE: Papio-Missouri Natural Resources District Stormwater Grant

On March 13, 2012 the County Board will be asked to authorize the Chairman to sign the Papio-Missouri Natural Resources District (NRD) Stormwater Best Management Practices Program grant application. The application requests \$10,000 from the Papio-Missouri NRD for a rain garden which will be located on the northeast corner of the Courthouse overflow parking lot (corner of Golden Gate Drive and East Gold Coast Road).

The grant requires a \$10,000 match which will be met with funds from Sarpy County's Annual Stormwater Management Program (SWMP) Grant awarded to Sarpy County from the Nebraska Department of Environmental Quality (NDEQ).

Please contact myself or Scott Bovick with any questions.

March 9, 2012

Lisa A. Haire

402-593-1565

cc: Mark Wayne
Brian Hanson
Scott Bovick
Ross Richards
Bruce Fountain
Deb Houghtaling