

CERTIFIED COPY OF ORDER



STATE OF MISSOURI

December Session of the October Adjourned

Term. 20 11

County of Boone

} ea.

In the County Commission of said county, on the

6th

day of December

20 11

the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby authorize the Presiding Commissioner to sign the attached Finding of Public Nuisance and Order for Abatement of a public nuisance located at 1321-1323 Roseta Avenue (parcel # 17-510-16-02-012.00 01).

Done this 6th day of December, 2011.

ATTEST:

Wendy S. Noren
Wendy S. Noren
Clerk of the County Commission

Daniel K. Atwill
Presiding Commissioner

Karen M. Miller
District I Commissioner

Absent _____

Skip Elkin
District II Commissioner

**BEFORE THE COUNTY COMMISSION OF
BOONE COUNTY, MISSOURI**

In Re: Nuisance Abatement)	December Session
1321 – 1323 Roseta Ave)	November Adjourned
Columbia, MO 65201)	Term 2011
)	Commission Order No. <u>494-2011</u>

FINDING OF PUBLIC NUISANCE AND ORDER FOR ABATEMENT

NOW on this 6th day of December 2011, the County Commission of Boone County, Missouri met in regular session and entered the following findings of fact, conclusions of law and order for abatement of nuisance:

Findings of Fact and Conclusions of Law

The County Commission finds as fact and concludes as a matter of law the following:

1. The Boone County Code of Health Regulations (the "Code") are officially noticed and are made a part of the record in this proceeding.
2. The City of Columbia/Boone County Health Department administrative record is made a part of the record in this proceeding and incorporated herein by reference. In addition, any live testimony of the official(s) of the department and other interested persons are made a part of the record in this proceeding.
3. A public nuisance exists described as follows: junk and trash.
4. The location of the public nuisance is as follows: 1321-1323 Roseta Avenue Lot 12 New Haven Meadows Subdivision a/k/a parcel # 17-510-16-02-012.00 01 Section 16, Township 48, Range 12 as shown by deed book 1534 page 0746, Boone County
5. The specific violation of the Code is: junk and trash in violation of section 6.5 of the Code. The Health Director's designated Health Official made the above determination of the existence of the public nuisance at the above location. Notice of that determination and the requirement for abatement was given in accordance with section 6.10.1 of the Code on the 20th day of October 2011, to the property owner, occupant, and any other applicable interested persons.
7. The above described public nuisance was not abated. As required by section 6.10.2 of the Code, the property owner, occupant, and any other applicable interested persons were given notice of the hearing conducted this date before the Boone County Commission for an order to abate the above nuisance at government expense with the cost and expense thereof to be charged against the above described property as a special tax bill and added to the real estate taxes for said property for the current year.
8. No credible evidence has been presented at the hearing to demonstrate that no public nuisance exists or that abatement has been performed or is unnecessary; accordingly, in accordance with section 6.10.2 of the Code and section 67.402, RSMo, the County

Commission finds and determines from the credible evidence presented that a public nuisance exists at the above location which requires abatement and that the parties responsible for abating such nuisance have failed to do so as required by the Health Director or Official's original order referred to above.

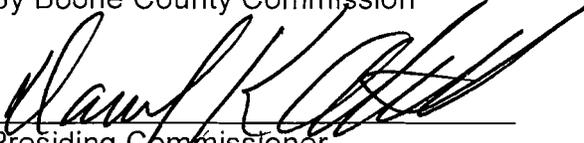
Order For Abatement Chargeable As a Special Assessment To The Property

Based upon the foregoing, the County Commission hereby orders abatement of the above described public nuisance at public expense and the Health Director is hereby authorized and directed to carry out this order.

It is further ordered and directed that the Health Director submit a bill for the cost and expense of abatement to the County Clerk for attachment to this order and that the County Clerk submit a certified copy of this order and such bill to the County Collector for inclusion as a special assessment on the real property tax bill for the above described property for the current year in accordance with section 67.402, RSMo.

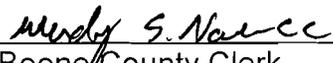
WITNESS the signature of the presiding commissioner on behalf Boone County Commission on the day and year first above written.

Boone County, Missouri
By Boone County Commission



Presiding Commissioner

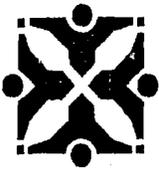
ATTEST:



Boone County Clerk

1321 | 1323 Roseta
pictures taken "Helen"





HEARING NOTICE

Joshua D & Sandra J Keller
705 Glenwood Court
Columbia, MO 65203

An inspection of the property you own located at 1321-1323 S Roseta Avenue (parcel #'s 17-510-16-02-012.00 01) was conducted on October 20, 2011 and trash and junk on the premises. This condition is declared to be a nuisance and a violation of Boone County Public Nuisance Ordinance Section 6.5.

You are herewith notified that a hearing will be held before the County Commission on Tuesday, December 6, 2011 at 9:30A M in the County Commission Chambers at the Boone County Government Center, 801 E. Walnut Street, Columbia, Missouri. The purpose of this hearing will be to determine whether a violation exists. If the County Commission determines that a violation exists, it will order the violation to be abated.

If the nuisance is not removed as ordered, the County Commission may have the nuisance removed. All costs of abatement, plus administrative fees, will be assessed against the property in a tax bill. **If the above nuisance condition has been corrected prior to the hearing, you do not have to appear for the hearing.**

The purpose of these ordinances is to create and maintain a cleaner, healthier community. If you have any questions, please do not hesitate to contact our office. If you are not the owner or the person responsible for the care of this property, please call our office at the number listed at the bottom of this letter.

Sincerely,

Kala Gunier
Environmental Health Specialist

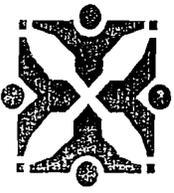
This notice deposited in the U.S. Mail, first class postage paid on the 22 day of November, 2011 by DU

1321-1323 Roseta Avenue

ACTIVITY LOG

10/19/11 complaint received from Tom O'Sullivan with BCSD
10/20/11 inspection conducted
10/21/11 notice sent via Certified Mail
10/22/11 notice signed for by Brook Keller
11/16/11 reinspection conducted
11/18/11 pictures taken
11/22/11 hearing notice sent via First Class Mail
11/23/11 spoke with property owner – he will try to get it cleaned up by hearing date

The BCSD has asked the Health Department to conduct routine inspections of El Chapparal neighborhood. The area has become run down over the years. Very few of the tenants have routine scheduled trash service. The trash piles become extremely large and are scattered around from animals.



CITY OF COLUMBIA/BOONE COUNTY, MISSOURI



HEALTH DEPARTMENT
DIVISION OF ENVIRONMENTAL HEALTH

**NOTIFICATION OF DETERMINATION OF PUBLIC HEALTH
HAZARD AND/OR NUISANCE AND ORDER FOR ABATEMENT**

Joshua D & Sandra J Keller
705 Glenwood Court
Columbia, MO 65203

An inspection of the property you own located at S 1321-1323 Roseta Avenue (parcel # 17-510-16-02-012.00 01) was conducted on October 20, 2011 and revealed trash and junk on the premises.

This condition is hereby declared to be a public nuisance. You are herewith notified that you must begin correcting this condition within 7 days of receipt of this notice and order and that if the above nuisance condition has not been fully corrected within **15 days** after the receipt of this notice, an additional enforcement action will result for violation of Boone County Public Nuisance Ordinance Section 6.5. A reinspection will be conducted at the end of the 15-day period. If the above nuisance condition has not been fully corrected by that time, a hearing before the Boone County Commission will be called to determine whether a violation exists. If the County Commission determines that a violation exists and the nuisance has not been removed as ordered under this notice, the County Commission may have the nuisance removed with the cost of abatement, plus administrative fees, charged against the property in a special tax bill. In addition, a complaint may be filed against you in Circuit Court. **If the above nuisance condition has been corrected within the 15-day period, no further action is necessary.**

The purpose of these ordinances is to create and maintain a cleaner, healthier community. If you have any questions, please do not hesitate to contact our office. If you are not the owner or the person responsible for the care of this property, please call our office at the number listed at the bottom of this letter. Your cooperation is greatly appreciated.

Sincerely,

Kala Gunter
Senior Environmental Health Specialist

This notice deposited in the U.S. Mail certified, return receipt requested on the 21 day of October 2011 by OK.

1005 W. Worley • P.O. Box 6015 • Columbia, Missouri 65205-6015
Phone: (573) 874-7346 • TTY: (573) 874-7356 • Fax: (573) 817-6407
www.GoColumbiaMo.com

Parcel 17-510-16-02-012.00 01**Property Location** S 1321-1323 ROSETA AVE

City _____ Road COUNTY ROAD DISTRICT (CO) _____ School COLUMBIA (C1)
 Library ~~BOONE COUNTY (L1)~~ Fire ~~BOONE COUNTY (F1)~~

Owner KELLER JOSHUA D & SANDRA J
 Address 705 GLENWOOD CT
 City, State Zip COLUMBIA, MO 65203

Subdivision Plat Book/Page 0012 0014
 Section/Township/Range 16 48 12

Legal Description NEW HAVEN MEADOWS SD
 LOT 12

Lot Size 82.63 x 180.63
 Irregular shape Y

Deed Book/Page 1534 0746

Type	Current Appraised			Type	Current Assessed		
	Land	Bldgs	Total		Land	Bldgs	Total
RI	18,800	94,300	113,100	RI	3,572	17,917	21,489
Totals	18,800	94,300	113,100	Totals	3,572	17,917	21,489

Previous Year's Tax

Year 2010 Amount \$1,308.24

Residence Description

Year Built 1976 (Estimate)
 Use DUPLEX (102)

Basement FULL (4) Attic NONE (1)

Bedrooms	6	Main Area	1,827
Full Bath	2	Finished Basement Area	1,100
Half Bath	2		
Total Rooms	12	Total Square Feet	2,927

www.ShowMeBoone.com, Boone County, Missouri. 801 East Walnut Columbia, MO 65201 USA.

Michala Gunier - Fwd: Trash Problems on Rosetta/Santa Barbara/Santa Anna

From: Gerald Worley
To: Kala Gunier; Kristine Vellema
Date: 10/19/2011 9:08 AM
Subject: Fwd: Trash Problems on Rosetta/Santa Barbara/Santa Anna

6/63
Cenham 21
442 2/21

We need to do a systematic look at El Chaparral. Both of you.

>>> "Tom O'Sullivan" <TOsullivan@boonecountymt.org> 10/19/2011 8:13 AM >>>
Gerry;

I was out on Rosetta/Santa Anna/Santa Barbara (El Chapparral) the last couple of days and noticed numerous apparent trash violations. There were quite a few residences where trash was stacked up at the building as well as in the back yards. At one location on Rosetta I told a woman her stacking of numerous bags of trash was going to get her a visit from the Health Department. She said she was waiting "until she could get some money for trash service."

I'd be happy to meet one of your people out there and take them around to the apparent violations. I'll bet you there are at least a dozen or 15 of these places out there. As I mentioned in the meeting a couple of weeks ago we're trying to get a handle on that place. I'm happy to report we made arrests on probably the two main trouble makers so it has quieted down, at least for now, in that regard. But I ain't lettin' up.

OCT 21 2011

Thanks for your help!

Det. Tom O'Sullivan
Boone County Sheriff's Dept.
Columbia, Mo. 65202
(573) 875-1111 ext. 6224
(573) 228-4036 (c)

11/14/11
2 pics

✓ 1321 | 1323 trash
✓ 4242 | 4240
✓ 4242 | 4240
✓ 4341 | 4343 trash / tires / furniture ?
✓ 4301 | 4303 tires ?
✓ 4400 | 4422 DE

11/14/11
✓ 4401 | 4462
✓ 4424 | 4426 furniture
✓ 4304 | 4300

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Joshua D & Sandra J Keller
 705 Glenwood Court
 Columbia, MO 65203

2. Article Number
 (Transfer from service label)

7011 1150 0000 8664 8918

PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

COMPLETE THIS SECTION ON DELIVERY

A. Signature
 X *Joshua D Keller* Agent Addressee

B. Received by (Printed Name) C. Date of Delivery

70-20-11

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

U.S. Postal Service
CERTIFIED MAIL RECEIPT
 (Domestic Mail Only; No Insurance Coverage Provided)
 For delivery information visit our website at www.usps.com

OFFICIAL USE

Postage	\$ 4.40
Certified Fee	2.88
Return Receipt Fee (Endorsement Required)	2.30
Restricted Delivery Fee (Endorsement Required)	
Total	5.59

Postmark Here
 OCT 21 2001

Sent to Joshua D & Sandra J Keller
 Street or PO 705 Glenwood Court
 City, State, ZIP+4 Columbia, MO 65203

PS Form 3800, August 2000

CERTIFIED COPY OF ORDER

~~STATE OF MISSOURI~~

December Session of the October Adjourned

Term. 20 11

County of Boone

} ea.

In the County Commission of said county, on the

6th

day of December

20 11

the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby approve the compensation fixed by the Prosecuting Attorney for Douglas Daniel Hansen as specified in the attached appointment. It is further ordered the Boone County Commissioners are hereby authorized to sign said appointment.

Done this 6th day of December, 2011.

ATTEST:

Wendy S. Noren cc
Wendy S. Noren
Clerk of the County Commission

Daniel K. Atwill

Daniel K. Atwill
Presiding Commissioner

Karen M. Miller

Karen M. Miller
District I Commissioner

Absent
Skip Elkin
District II Commissioner

IN RE: **Douglas Daniel Hansen**
Assistant Prosecuting Attorney
Boone County, Missouri

KNOW ALL MEN BY THESE PRESENT:

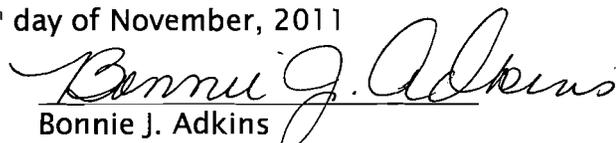
By virtue and authority of Section 56.151 RSMo., the undersigned Prosecuting Attorney within and for Boone County, State of Missouri, does hereby appoint **Douglas Daniel Hansen**, a practicing attorney licensed to practice law in the State of Missouri, possessing all qualifications required of a prosecuting attorney, as Assistant Prosecuting Attorney of Boone County, Missouri, effective from the **30th day of November 2011**, for an indefinite term until such time as this appointment is terminated by the undersigned or the appointee voluntarily resigns or leaves office; said appointee is hereby authorized and empowered to discharge duties of the office of the Prosecuting Attorney in accordance with law and shall be subject to the same fines and penalties for neglect of duty or misdemeanor in office as the Prosecuting Attorney.

The undersigned does hereby fix the appointee's compensation at **\$0** dollars per annum commencing on the date of appointment subject to approval by the Boone County Commission; said salary may be adjusted from year to year or time to time subject to the appropriations made available for that purpose.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 30th day of November, 2011


Daniel K. Knight
Prosecuting Attorney
Boone County, Missouri

Subscribed and sworn to before me this 30th day of November, 2011

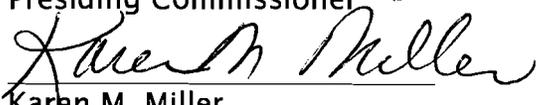

Bonnie J. Adkins
Notary Public, Boone County
State of Missouri

My commission expires June 8, 2015

BEFORE THE COUNTY COMMISSION OF BOONE COUNTY, MISSOURI

NOW ON THIS 6 day of December, 2011, the County Commission of Boone County, Missouri, hereby approves the compensation fixed by the Prosecuting Attorney for the above named appointee as specified in the aforesaid appointment.


Daniel Atwill
Presiding Commissioner


Karen M. Miller
District I Commissioner

Absent
Skip Elkin
District II Commissioner

ATTEST:


Wendy Noren
County Clerk

CERTIFIED COPY OF ORDER

STATE OF MISSOURI

December Session of the October Adjourned

Term. 20 11

County of Boone } ea.

In the County Commission of said county, on the

6th

day of December

20 11

the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby approve the request by Information Technology to replace the laptop with tag #15584, in accordance with the attached memo.

Done this 6th day of December, 2011.

ATTEST:

Wendy S. Noren
Wendy S. Noren
Clerk of the County Commission

Daniel K. Atwill
Daniel K. Atwill
Presiding Commissioner

Karen M. Miller
Karen M. Miller
District I Commissioner

Absent
Skip Elkin
District II Commissioner



BOONE COUNTY
Department of Information Technology
ROGER B. WILSON GOVERNMENT CENTER
801 E. Walnut, Room 221
Columbia, MO 65201-4890
573-886-4319

Aron Gish

Director

DATE: Dec 6th, 2011

TO: Dan Atwill, Presiding Commissioner
Karen Miller, District I Commissioner
Skip Elkin, District II Commissioner

FROM: Aron Gish

SUBJECT: Fixed Asset Emergency Replacement – Failing Hardware - Laptop Tag #15584

cc: June Pitchford, County Auditor
Caryn Ginter, Budget Analyst

The Laptop with the tag # of 15584 was purchased in July of 2006 for \$2,458.00. This laptop is an HP Model NW9440 and shows symptoms of a main board failure. This laptop is currently assigned to Wendy Noren the County Clerk. IT Helpdesk Technicians have determined parts replacement is not cost effective as there is not a single point of failure and the system's main board may not correct the current problem. I feel it is not cost effective to attempt to repair this laptop. There is no service contract on laptops and the manufacturer's warranty expired more than 9/22/2010.

Since this laptop is important to regular operations for the Boone County Clerk, I am requesting to move forward using "Unanticipated Hardware Emergencies" account 1170-92301 to purchase a replacement laptop at the cost of \$1,784.69. This price includes 1 laptop with 3 years manufacturer's warranty and shipping.

Attach this memo to Purchase Requisition.



December 2, 2011 4:47 PM
Page 1 of 1

State of MO-PVC-ST -- C211034001

Quote Number: 1461382.1

Prepared By Frost, Majesty M.

World Wide Technology, Inc.
56 Weldon Parkway
Maryland Heights, MO 63043

Phone: 314-569-7023
Fax: 800-775-5475
e-mail: majesty.frost@wwt.com
P.O.C.: FROST, MAJESTY M.

Account Manager:
Acct. Mgr. Phone:
Acct. Mgr. e-mail:

Submitted Date:
Contact: Gish, Aron
Agency/Company: Boone County, MO - Information Technology

Phone: 573-886-4319
Fax:
e-mail: agish@boonecountymo.org

Bid #: HP Laptops
WWT Quote #: 1461382.1

Item	Description	Manufacturer	Part Number	Qty	Customer Unit Price	Extended Price	*ATS (Days)
1	HP EliteBook Mobile Workstation 8760w - Core i5 2540M / 2.6 GHz - vPro - RAM 4 GB - HDD 500 GB - DVD±RW (±R DL) / DVD-RAM - FirePro M5950 - Gigabit Ethernet - WLAN : 802.11 a/b/g/n, Bluetooth 2.1 EDR - TPM - fingerprint reader, SmartCard reader - Windows 7 Pro 64-bit - 17.3" Widescreen LED backlight HD+ WVA anti-glare TFT 1600 x 900 (WXGA++) - camera - Smart Buy	HEWLETT PACKARD	XU088UT#ABA	1	\$1,784.69	\$1,784.69	1

Subtotal: \$1,784.69
0% Contract Fee (Minimum \$0.00): \$0.00
Shipping Charges: \$0.00
Grand Total: \$1,784.69

* ATS - Available to Ship

To learn more about WWT's Cisco Authorized Training Courses, Rates Promotions, go online to <http://www.wwt.com/ciscotraining.html> or call WWT today at (800) 432-7008

Please call 888-234-8898
Option #1 - Sales/Place Order
Option #2 - Order Status/Return
Option #3 - Hardware Maintenance Pricing

Any items that have been opened prior to return could be refused by the vendor/supplier. Items returned after 30 days may not be returnable due to vendor restrictions.

CERTIFIED COPY OF ORDER

STATE OF MISSOURI

} ea.

December Session of the October Adjourned Term. 20 11

County of Boone

In the County Commission of said county, on the 6th day of December 20 11

the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby award bid 45-02NOV11 – Fire Extinguisher Inspection Services Term and Supply to Korsmeyer Fire Protection. It is further ordered the Presiding Commissioner is hereby authorized to sign said contract.

Done this 6th day of December, 2011.

ATTEST:

~~Wendy S. Noren~~ Wendy S. Noren
Clerk of the County Commission


Daniel K. Atwill

Presiding Commissioner



Karen M. Miller
District I Commissioner

Absent
Skip Elkin
District II Commissioner

Boone County Purchasing

Tyson Boldan
Buyer



613 E. Ash St., Room 109
Columbia, MO 65201
Phone: (573) 886-4392
Fax: (573) 886-4390

MEMORANDUM

TO: Boone County Commission
FROM: Tyson Boldan, Buyer
DATE: November 10, 2011
RE: 45-02NOV11 – Fire Extinguisher Inspection Services Term and Supply

The Bid for Fire Extinguisher Inspection Services Term and Supply closed on November 04, 2011. Five bids were received. Purchasing and Facilities Maintenance recommend award to Korsmeyer Fire Protection, for offering the lowest and best bid for Boone County.

This will be a term and supply contract and will be paid from department 6100 –Facilities and Grounds Maintenance, account 71100 – Out Side Services. ~~\$5,436.00~~ is budgeted for this service.

Attached is the Bid Tabulation for your review.

cc: Contract File

*\$5,020 has been included
in the 2012 budget pending
Commission approval.*

45-02NOV11 - Fire Extinguisher Inspection & Maintenance Term & Supply

BID TABULATION

4.11. PRICING		Korsmeyer Fire Protection	Cintas	Fire Safety, Inc.	Simplex Grinnell	Coys
ANNUAL MAINTENANCE		UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE	UNIT PRICE
4.11.1.	ABC Unit	\$2.50	\$1.00	\$3.00	\$2.00	\$3.00
4.11.2.	Halotron Unit	\$2.50	\$1.10	\$3.00	\$2.00	\$3.00
4.11.3.	CO2	\$2.50	\$3.10	\$3.00	\$2.00	\$3.00
4.11.4.	TOTAL	\$7.50	\$5.20	\$9.00	\$6.00	\$9.00
6 YEAR MAINTENANCE						
4.11.5.	2lb- 2 ½lb ABC unit. Price must include recharge.	\$12.00		\$6.00	\$27.71	\$12.00
4.11.6.	4lb - 6lb ABC unit. Price must include recharge.	\$15.00	\$21.00	\$9.00	\$27.71	\$16.00
4.11.7.	10lb ABC unit. Price must include recharge.	\$18.00	\$24.00	\$11.00	\$27.71	\$20.00
4.11.8.	13lb - 20lb ABC unit. Price must include recharge.	\$24.00	\$39.00	\$11.00	\$27.71	\$28.00
4.11.9.	TOTAL	\$69.00	\$84.00	\$37.00	\$110.84	\$76.00
HYDROTESTING MAINTENANCE OF ABC						
4.11.10.	2lb - 2 ½lb ABC unit. Price must include hydrostatic test and recharge.	\$15.00		\$18.00	\$37.67	\$15.00
4.11.11.	4lb - 6lb ABC unit. Price must include hydrostatic test and recharge.	\$18.00	\$21.00	\$22.00	\$37.67	\$20.00
4.11.12.	10lb ABC unit. Price must include hydrostatic test and recharge.	\$22.00	\$24.00	\$32.00	\$37.67	\$25.00
4.11.13.	13lb - 20lb ABC unit. Price must include hydrostatic test and recharge.	\$27.00	\$39.00	\$44.00	\$37.67	\$33.00
4.11.14.	TOTAL	\$82.00	\$84.00	\$116.00	\$150.68	\$93.00
HYDROTESTING MAINTENANCE OF CO2						
4.11.10.a.	2 ½ Pound CO2 unit. Price must include hydrostatic test and recharge.			\$18.00	\$56.53	\$28.00
4.11.11.a.	5 Pound CO2 unit. Price must include hydrostatic test and recharge.	\$20.00	\$20.00	\$18.00	\$56.53	\$30.00
4.11.12.a.	10 Pound CO2 unit. Price must include hydrostatic test and recharge.	\$25.00	\$21.00	\$20.00	\$64.00	\$36.00
4.11.13.a.	15 Pound CO2 unit. Price must include hydrostatic test and recharge.	\$27.00	\$22.00	\$22.00	\$74.70	\$42.00
4.11.14.a.	20 Pound CO2 unit. Price must include hydrostatic test and recharge.	\$34.00	\$27.00	\$24.00	\$85.93	\$46.00
4.11.15.a.	TOTAL	106	\$90.00	\$102.00	\$337.69	\$182.00
PURCHASE OF NEW UNITS						
4.11.15.	2 ½ Pound ABC Unit with Vehicle Mounting Bracket	Brand Bid: \$29.00	\$21.00	\$27.50	\$45.10	\$26.00
4.11.16.	5 Pound ABC Unit with Wall Mount Bracket	Brand Bid: \$39.00	\$48.00	\$35.65	\$47.45	\$39.00
4.11.17.	10 Pound ABC Unit	Brand Bid: \$60.00	\$75.00	\$53.15	\$72.80	\$55.00
4.11.18.	TOTAL	\$128.00	\$144.00	\$116.30	\$165.35	\$120.00
4.11.19.	Other new fire extinguishers: %	25%		20%	15%	50%
REPLACEMENT PARTS (Provide Material Cost Only)						
4.11.20.	Fusible Links	\$8.00	\$8.00	\$10.00	\$7.00	\$8.00

Boone County Purchasing

Tyson Boldan,
Buyer



601 E. Walnut, Rm. 209
Columbia, MO 65201
(573) 886-4392
(573) 886-4390

TO:

FROM: Tyson Boldan,
Buyer

DATE: November 7, 2011

RE: Bid Award Recommendation – 45-02NOV11 – Fire Extinguisher Inspection
Services Term and Supply

Attached is the bid tabulation for the bid responses received for the above referenced bid. Please return this cover sheet with your recommendation by **fax to 886-4390** after you have completed the evaluation of this bid. If you have any questions, please call or e-mail me.

DEPARTMENT REPLY:

Please complete the following:

Department Number: 6100

Account Number: 71100

Budgeted: \$ 5,436.00

Award Bid by low bid to Korsmeyer Fire Protection.

Recommend accepting the following bid(s) for reasons detailed on attached page. (Attach department recommendation).

Recommend rejecting bid for reasons detailed on attached page. (Attach department recommendation).

Administrative Authority Signature: 

Date: 11-7-11

**PURCHASE AGREEMENT
FOR
FIRE EXTINGUISHER INSPECTION SERVICES**

THIS AGREEMENT dated the 6 day of December 2011 is made between Boone County, Missouri, a political subdivision of the State of Missouri through the Boone County Commission, herein "County" and **Korsmeyer Fire Protection** herein "Contractor".

IN CONSIDERATION of the parties performance of the respective obligations contained herein, the parties agree as follows:

1. Contract Documents - This agreement shall consist of this Purchase Agreement for **Fire Extinguisher Inspection Services**, County of Boone Request for Bid number **45-02NOV11**, Introduction and General Conditions of Bidding, Primary Specifications, Response Presentation and Review, the un-executed Response Form, Standard Terms and Conditions, any applicable addenda, as well as the Contractor's bid response dated **October 26, 2011** and executed by **Jim Korsmeyer**, on behalf of the Contractor. All such documents shall constitute the contract documents, which are attached hereto and incorporated herein by reference. Service or product data, specification and literature submitted with bid response may be permanently maintained in the County Purchasing Office bid file for this bid if not attached. In the event of conflict between any of the foregoing documents, this Purchase Agreement, the Introduction and General Conditions of Bidding, Primary Specifications, Response Presentation and Review, the un-executed Response Form, Standard Terms and Conditions, and any applicable addenda shall prevail and control over the Contractor's bid response.

2. Contract Duration - This agreement shall commence on the **January 01, 2012** and extend through **December 31, 2012** subject to the provisions for termination specified below. This agreement may be extended beyond the expiration date by the order of the county for **four (4) additional one year periods** subject to the pricing clauses in the contractor's RFB response and thereafter on a month to month basis in the event the County is unable to re-bid and/or award a new contract prior to the expiration date after exercising diligent efforts to do so or not.

3. Purchase - The County agrees to purchase from the Contractor and the Contractor agrees to supply the County all items and services per the bid specifications and responded to on the Response Form, and in conformity with the contract documents for the prices set forth in the Contractor's bid response, as needed and as ordered by County.

4. Billing and Payment - All billing shall be invoiced to the Correct Boone County Contact for each location as outlined by the original Request For Bid on Attachment B and billings may only include the prices listed in the Contractor's bid response. No additional fees or extra services not included in the bid response or taxes shall be included as additional charges in excess of the charges in the Contractor's bid response to the specifications. The County agrees to pay all correct monthly invoices within thirty days of receipt; Contractor agrees to honor any cash or prompt payment discounts offered in its bid response if county makes payment as provided therein. In the event of a billing dispute, the County reserves the right to withhold payment on the disputed amount; in the event the billing dispute is resolved in favor of the Contractor, the County agrees to pay interest at a rate of 9% per annum on disputed amounts withheld commencing from the last date that payment was due.

5. Binding Effect - This agreement shall be binding upon the parties hereto and their successors and assigns for so long as this agreement remains in full force and effect.

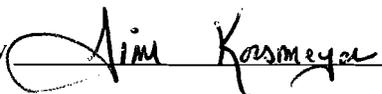
6. **Entire Agreement** - This agreement constitutes the entire agreement between the parties and supersedes any prior negotiations, written or verbal, and any other bid or bid specification or contractual agreement. This agreement may only be amended by a signed writing executed with the same formality as this agreement.

7. **Termination** - This agreement may be terminated by the County upon thirty days advance written notice for any of the following reasons or under any of the following circumstances:

- a. County may terminate this agreement due to material breach of any term or condition of this agreement, or
- b. County may terminate this agreement if in the opinion of the Boone County Commission if delivery of products are delayed or products delivered are not in conformity with bidding specifications or variances authorized by County, or
- c. If appropriations are not made available and budgeted for any calendar year.

IN WITNESS WHEREOF the parties through their duly authorized representatives have executed this agreement on the day and year first above written.

KORSMEYER FIRE PROTECTION L.L.C.

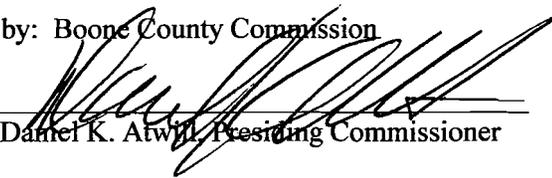
by 

title OWNER

address P.O. Box 104146

JEFFERSON City, MO. 65110

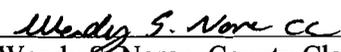
BOONE COUNTY, MISSOURI

by: Boone County Commission

Daniel K. Atwill, Presiding Commissioner

APPROVED AS TO FORM:

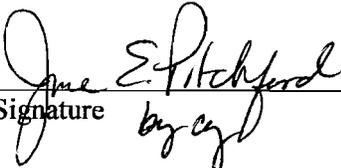

County Counselor

ATTEST:


Wendy S. Noren, County Clerk

AUDITOR CERTIFICATION

In accordance with RSMo 50.660, I hereby certify that a sufficient unencumbered appropriation balance exists and is available to satisfy the obligation(s) arising from this contract. (Note: Certification of this contract is not required if the terms of this contract do not create a measurable county obligation at this time.)


Signature by cjd

12/1/11
Date

6100/71100 Term/Supply

No Encumbrance Required
Appropriation Account

4. Revised Response Form

- 4.1. Company Name: KORSMeyer FIRE Protection L.L.C.
- 4.2. Address: P.O. Box 104746
- 4.3. City/Zip: JEFFERSON City, MO. 65110
- 4.4. Phone Number: 800 / 694-4645
- 4.5. Fax Number: 573 / 659-8805
- 4.6. E-Mail Address: KORSMeyer FIRE @ AOL.com
- 4.7. Federal Tax ID: 43 - 1793481

- 4.7.1. Corporation
- Partnership - Name _____
- Individual/Proprietorship - Individual Name _____
- Other (Specify) Limited Liability Company

4.8. PRICING – The bidder must complete the following pages in their entirety for each item identified below. The bidder must also complete and return Attachment A, Prior Experience.

RENEWALS – The bidder shall indicate below the maximum increase for each potential renewal period.

- 4.8.1. 0 % 1st Renewal Period
- 4.8.1.1. 3 % 2nd Renewal Period
- 4.8.1.2. 3 % 3rd Renewal Period
- 4.8.1.3. 5 % 4th Renewal Period

4.9. The undersigned offers to furnish and deliver the articles or services as specified at the prices and terms stated and in strict accordance with the specifications, instructions and general conditions of bidding which have been read and understood, and all of which are made part of this order.

4.9.1. Authorized Representative (Sign By Hand):
Tim Kormeyer

4.9.2. Type or Print Signed Name:
Tim KORMeyer

4.9.3. Today's Date: Oct. 26 - 2011

4.10. Will you honor the submitted prices for purchase by other entities in Boone County who participate in cooperative purchasing with Boone County, Missouri?
 Yes No

4.11. PRICING

ANNUAL MAINTENANCE		UNIT PRICE	
4.11.1.	ABC Unit	\$ 2.50	
4.11.2.	Halotron Unit	\$ 2.50	
4.11.3.	CO2	\$ 2.50	
4.11.4.	TOTAL	\$ 7.50	
6 YEAR MAINTENANCE			
4.11.5.	2lb- 2 ½lb ABC unit. Price must include recharge.	\$ 12.00	
4.11.6.	4lb - 6lb ABC unit. Price must include recharge.	\$ 15.00	
4.11.7.	10lb ABC unit. Price must include recharge.	\$ 18.00	
4.11.8.	13lb - 20lb ABC unit. Price must include recharge.	\$ 24.00	
4.11.9.	TOTAL	\$ 69.00	
HYDROTESTING MAINTENANCE OF ABC			
4.11.10.	2lb - 2 ½lb ABC unit. Price must include hydrostatic test and recharge.	\$ 15.00	
4.11.11.	4lb - 6lb ABC unit. Price must include hydrostatic test and recharge.	\$ 18.00	
4.11.12.	10lb ABC unit. Price must include hydrostatic test and recharge.	\$ 22.00	
4.11.13.	13lb - 20lb ABC unit. Price must include hydrostatic test and recharge.	\$ 27.00	
4.11.14.	TOTAL	\$ 82.00	
HYDROTESTING MAINTENANCE OF CO2			
4.11.10.a.	2 ½ Pound CO2 unit. Price must include hydrostatic test and recharge.	\$ N/A	
4.11.11.a.	5 Pound CO2 unit. Price must include hydrostatic test and recharge.	\$ 20.00	
4.11.12.a.	10 Pound CO2 unit. Price must include hydrostatic test and recharge.	\$ 25.00	
4.11.13.a.	15 Pound CO2 unit. Price must include hydrostatic test and recharge.	\$ 27.00	
4.11.14.a.	20 Pound CO2 unit. Price must include hydrostatic test and recharge.	\$ 34.00	
4.11.15.a.	TOTAL	106.00	
PURCHASE OF NEW UNITS			
4.11.15.	2 ½ Pound ABC Unit with Vehicle Mounting Bracket	Brand Bid: <i>Amerex - Ansul - Buckeye - Mini-MAX</i>	\$ 29.00
4.11.16.	5 Pound ABC Unit with Wall Mount Bracket	Brand Bid: <i>Amerex - Buckeye - Mini-MAX</i>	\$ 39.00
4.11.17.	10 Pound ABC Unit	Brand Bid: <i>Amerex - Buckeye - Mini-MAX</i>	\$ 60.00
4.11.18.	TOTAL		\$ 128.00
4.11.19.	Other new fire extinguishers: <i>25</i> % mark-up over cost		
REPLACEMENT PARTS (Provide Material Cost Only)			
4.11.20.	Fusible Links		\$ 8.00
4.11.21.	O-rings		\$ 1.50
4.11.22.	Dry Chemical Gauge		\$ 7.50
4.11.23.	Dry Chemical Valve Stem		\$ 8.50

4.11.24.	Wall Bracket		\$ 2.00
4.11.25.	Vehicle Bracket		\$ 10.00
4.11.26.	Operating Lever (Top)		\$ 5.00
4.11.27.	Pull Pin-Stainless Steel		\$ 1.50
4.11.28.	Carry Handle (Bottom Lever)		\$ 5.00
4.11.29.	Valve Body (please list different model numbers and pricing for options for the County in case of the need for future repairs)	Amerex B402-500-B456	
4.11.29.a.	Valve Body: ABC Brand Name & Model #	Amerex B402-500-B456	\$ 18.00
4.11.29.b.	Valve Body: ABC Brand Name & Model #	Buckeye	\$ 18.00
4.11.29.c.	Valve Body: CO2 Brand Name & Model #	ANSUL EE CO2V	\$ 58.00
4.11.29.d.	Valve Body: CO2 Brand Name & Model #	ANSUL EE CO2V	\$ 58.00
4.11.30.	Hose Nozzle		\$ 12.00
4.11.31.	Screw Nozzle		\$ 7.50
4.11.32.	Valve Stem Assembly-Plastic		\$ N/A
4.11.33.	Valve Stem Assembly-Metal		\$ 7.50
4.11.34.	Hose & Horn Assembly (CO2)		\$ 25.00
4.11.35.	Siphon Tube		\$ 10.00
4.11.36.	TOTAL		\$ 263.00
Note: The above parts list is not all inclusive and is not intended to reflect all fire extinguishers.			
4.11.37	Other Parts: 25 % mark-up over cost		
4.11.38.	Cost to Dispose of Halon Fire Extinguisher (Price/Each)		\$ 5.00
ANNUAL/SEMI-ANNUAL INSPECTIONS OF THE FOLLOWING RANGE HOOD ANSUL SYSTEMS			
	Location	Annual Inspection	Semi-Annual Inspection
4.11.39.	Boone County Jail-Quantity 1	\$ 60.00	\$ 60.00
4.11.40.	Boone County Fairgrounds-Quantity 1	\$ 60.00	\$ 60.00
4.11.41.	Juvenile Justice Center-Quantity 1	\$ 60.00	\$ 60.00
4.11.42.	Reality House Programs-Quantity 1	\$ 60.00	\$ 60.00
4.11.43.	TOTAL	\$ 240.00	\$ 240.00
4.12.	Emergency Twenty Four Hour Service Contact:		
	Name:	Tim KORSMEYER	BRANDON KORSMEYER
	Telephone Number:	573 / 680-0567	573 / 619-7994
4.13.	Call Response Time: Within 2 hours after notification by the County.		
4.14.	Holidays: Bidder shall list holidays observed by their company:		
	CHRISTMAS, NEW YEARS, MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, THANKSGIVING		

**ATTACHMENT A
PRIOR EXPERIENCE**

(References of similar services for governmental agencies are preferred)

1. Prior Services Performed for:

Company Name: University of Columbia
Address: Accounting Services
Jesse Room - 00325
Columbia, MO. 65211

LARRY Schilke @ 573/882-6120
Richard Drehly @ 573/999-6019

Date of Contract: 2010 —
Length of Contract: 3 years

Description of Prior Services (include dates): Recharge FIRE Extinguisher

2. Prior Services Performed for:

Company Name: Stephen's College
Address: 1200 E. Broadway Box 2021
Columbia, MO. 65215

Lee Curtis @ 573/876-7171

Date of Contract: 2001 —
Length of Contract: No TERMS

Description of Prior Services (include dates): Service, Recharge, REPAIR, FIRE Extinguisher
Service FIRE Suppression System

3. Prior Services Performed for:

Company Name: University of Columbia - HEALTH CARE
Address: Accounts Payable
1 - Hospital Drive
Columbia, MO. 65212

RANDY Huck @ 573/882-8783

Date of Contract: November 2007 —
Length of Contract: 5 years.

Description of Prior Services (include dates): monthly - service of Extinguisher
Service, Recharge, Repair, FIRE Extinguishers



BOONE COUNTY, MISSOURI
Request for Bid #: 45-02NOV11 – Fire Extinguisher Inspection and Maintenance
Term and Supply

ADDENDUM #1 - Issued October 31, 2011

This addendum is issued in accordance with the Introduction and General Conditions of Bidding in the Request for Bid and is hereby incorporated into and made a part of the Request for Bid Documents. Bidders are reminded that receipt of this addendum should be acknowledged and submitted with Bidder's *Response Form*.

Specifications for the above noted Request for Bid and the work covered thereby are herein modified as follows, and except as set forth herein, otherwise remain unchanged and in full force and effect:

1. Please replace the Bid Submission Address and Deadline and the Bid Opening Date with the following:

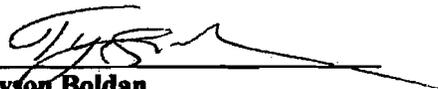
Bid Submission Address and Deadline

Day / Date: **FRIDAY, NOVEMBER 04, 2011**
Time: **1:30 P.M. (Bids received after this time will be returned unopened)**
Location / Mail Address: **Boone County Purchasing Department**
613 E. Ash, Room 109
Columbia, MO 65201
Directions: The Purchasing Building is located on the Southeast corner at 7th Street and Ash Street. Enter the building from the South Side. Wheel chair accessible entrance is available on the South side of the building.

Bid Opening

Day / Date: **FRIDAY, NOVEMBER 04, 2011**
Time: **1:30 P.M. (Bids received after this time will be returned unopened)**
Location / Address: **Boone County Purchasing Conference Room**
613 E. ASH, Room 110
Columbia, MO 65201

By:


Tyson Boldan
Buyer

OFFEROR has examined copy of Addendum #1 to Request for Bid # 45-02NOV11 – Fire Extinguisher Inspection and Maintenance Term and Supply, receipt of which is hereby acknowledged:

Company Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

Authorized Representative Signature: _____ Date: _____

Authorized Representative Printed Name: _____



Boone County Purchasing
613 E. Ash, Room 109
Columbia, MO 65201

Request for Bid (RFB)

Tyson Boldan, Buyer
(573) 886-4392 – Fax: (573) 886-4390
Email: tboldan@boonecountymo.org

Bid Data

Bid Number: **45-02NOV11**
Commodity Title: **Fire Extinguisher Inspection & Maintenance Term & Supply**

DIRECT BID FORMAT OR SUBMISSION QUESTIONS TO THE PURCHASING DEPARTMENT

Bid Submission Address and Deadline

Day / Date: **WEDNESDAY, NOVEMBER 02, 2011**
Time: **1:30 P.M. (Bids received after this time will be returned unopened)**
Location / Mail Address: **Boone County Purchasing Department
Boone County Johnson Building
613 E. Ash, Room 109
Columbia, MO 65201**
Directions: **The Johnston Paint Building is located on the Southeast corner at 7th Street and Ash Street. Enter the building from the South Side. Wheel chair accessible entrance is available on the South side of the building.**

Bid Opening

Day / Date: **WEDNESDAY, NOVEMBER 02, 2011**
Time: **1:30 P.M. (Bids received after this time will be returned unopened)**
Location / Address: **Boone County Johnston Paint Building Conference Room
613 E. ASH, Room 110
Columbia, MO 65201**

Bid Contents

- 1.0: Introduction and General Conditions of Bidding**
- 2.0: Primary Specifications**
- 3.0: Response Presentation and Review**
- 4.0: Response Form**
Attachment A Prior Experiences
Attachment B
Standard Terms and Conditions

1. Introduction and General Conditions of Bidding

- 1.1. **INVITATION** - The County of Boone, through its Purchasing Department, invites responses, which offer to provide the goods and/or services identified on the title page, and described in greater detail in Section 2.
- 1.2. **DEFINITIONS**
- 1.2.1. **County** - This term refers to the County of Boone, a duly organized public entity. It may also be used as a pronoun for various subsets of the County organization, including, as the context will indicate:
Purchasing - The Purchasing Department, including its Purchasing Director and staff.
Department(s) or Office(s) - The County Department(s) or Office(s) for which this Bid is prepared, and which will be the end user(s) of the goods and/or services sought.
Designee - The County employee(s) assigned as your primary contact(s) for interaction regarding Contract performance.
- 1.2.2. **Bidder / Contractor / Supplier** - These terms refer generally to businesses having some sort of relationship to or with us. The term may apply differently to different classes of entities, as the context will indicate.
Bidder - Any business entity submitting a response to this Bid. Suppliers, which may be invited to respond, or which express interest in this bid, but which do not submit a response, have no obligations with respect to the bid requirements.
Contractor - The Bidder whose response to this bid is found by Purchasing to meet the best interests of the County. The Contractor will be selected for award, and will enter into a Contract for provision of the goods and/or services described in the Bid.
Supplier - All business(s) entities which may provide the subject goods and/or services.
- 1.2.3. **Bid** - This entire document, including attachments. A Bid may be used to solicit various kinds of information. The kind of information this Bid seeks is indicated by the title appearing at the top of the first page. A "Request for Bid" is used when the need is well defined.
- 1.2.4. **Response** - The written, sealed document submitted according to the Bid instructions.
- 1.3. **BID CLARIFICATION** - Questions regarding this Bid should be directed in writing, by e-mail or fax, to the Purchasing Department. Answers, citing the question asked but not identifying the questioner, will be distributed simultaneously to all known prospective Bidders in the form of an addendum. We strongly suggest that you check for any addenda a minimum of [forty eight] hours in advance of the bid deadline. Bids, addendums, bid tabulations and bid awards are posted on our web site at: www.showmeboone.com
Note: written requirements in the Bid or its Amendments are binding, but any oral communications between County and Bidder are not.
- 1.3.1. **Bidder Responsibility** - The Bidder is expected to be thoroughly familiar with all specifications and requirements of this Bid. Bidder's failure or omission to examine any relevant form, article, site or document will not relieve them from any obligation regarding this Bid. By submitting a Response, Bidder is presumed to concur with all terms, conditions and specifications of this Bid.
- 1.3.2. **Bid Amendment** - If it becomes evident that this Bid must be amended, the Purchasing Department will issue a formal written Amendment to all known prospective Bidders. If necessary, a new due date will be established.
- 1.4. **AWARD** - Award will be made to the Bidder(s) whose offer(s) provide the greatest value to the County from the standpoint of suitability to purpose, quality, service, previous experience, price, lifecycle cost, ability to deliver, or for any other reason deemed by Purchasing to be in the best interest of the County. Thus, the result will not be determined by price alone. The County will be seeking the least costly outcome that meets the County needs as interpreted by the County. The County reserves the right to award this bid on an item by item basis, or an "all or none" basis, whichever is in the best interest of the County.
- 1.5. **CONTRACT EXECUTION** - This Bid and the Contractor's Response will be made part of any resultant Contract and will be incorporated in the Contract as set forth, verbatim.
- 1.5.1. **Precedence** - In the event of contradictions or conflicts between the provisions of the documents comprising this Contract, they will be resolved by giving precedence in the following order:
1) the provisions of the Contract (as it may be amended);
2) the provisions of the Bid;
3) the provisions of the Bidder's Response.
- 1.6. **COMPLIANCE WITH STANDARD TERMS AND CONDITIONS** - Bidder agrees to be bound by the County's standard "boilerplate" terms and conditions for Contracts, a sample of which is attached to this Bid.

2. Primary Specifications

- 2.1. **ITEMS TO BE PROVIDED** - Boone County, hereafter referred to as "County", proposes to contract with an individual(s) or organization(s), hereinafter referred to as "Contractor" for a Term and Supply contract for the furnishing of all labor, materials, tools, equipment, transportation, services, and supervision to perform Fire Extinguisher and Range Hood Inspection and Maintenance Services to various properties of Boone County, Missouri as specified herein.
- 2.2. **CONTRACT DURATION** - The contract shall be effective from December 1, 2012 through December 31, 2012. This contract is subject to renew annually for four (4) additional one (1) year periods following expiration of the first contract period.
 - 2.2.1. The unit prices for the items identified on the Response Form shall remain fixed for the identified original contract period. If the County exercises the option for renewal, the contractor shall agree that the prices for the items listed on the Response Form shall not increase by more than the percentages outlined on the Response Form for the renewal periods.
 - 2.2.2. If renewal percentages are not provided, then prices during any renewal period shall be the same as during the original contract period.
- 2.3. **CONTRACT EXTENSION** - The County Purchasing Director may exercise the option to extend the contract on a month-to-month basis for a maximum of six (6) months from the date of termination if it is deemed to be in the best interest of Boone County.
- 2.4. **CONTRACT DOCUMENTS** - The successful bidder(s) shall be obligated to enter into a written contract with the County within 30 days of award on contract forms provided by the County. If bidders desire to contract under their own written agreement, any such proposed agreement shall be submitted in blank with their bid. County reserves the right to modify any proposed form agreement or withdraw its award to a successful bidder if any proposed agreement contains terms and conditions inconsistent with its bid or are unacceptable to county legal counsel.
- 2.5. **PRICING** - All prices shall be as indicated on the Response Form. The County shall not pay nor be liable for any other additional costs including but not limited to: taxes, packing, handling, shipping and freight, insurance, interest, penalties, termination payments, attorney fees, liquidated damages, fuel surcharges, etc.
- 2.6. **SERVICE LOCATIONS** - The physical addresses of all portable fire extinguishers and built-in stove hoods are identified on Attachment B. The County reserves the right to add or delete locations as deemed necessary throughout the life of the contract.
 - 2.6.1. The County has approximately 175 fire extinguishers, most of which are ABC. This quantity is provided for informational purpose. Boone County does not guarantee minimum quantities. The County reserves the right to increase or decrease quantities as requirements dictate.
- 2.7. **GENERAL CONDITIONS**
 - 2.7.1. This contract shall be for fire extinguisher and built-in stove hood inspection and maintenance services as requested by the Boone County Facilities Maintenance Department, Public Works Department, or Sheriffs Department, and as outlined herein. The contract shall also include the purchase of new fire extinguishers and accessories as needed and authorized by Boone County.
 - 2.7.2. Services shall include hydrostatic testing of pressurized water, dry chemical, and carbon dioxide fire extinguishers, as well as the re-charging of exhausted extinguishers and miscellaneous repairs and updates as required. Proof of these tests is required to be submitted to the County in writing. The contractor must perform High Pressure Vessel Test Certification for the hydrotest and must provide proof of this certification upon request by the County.
 - 2.7.3. All known deficiencies affecting fire extinguisher efficiency at any location shall be identified and reported in writing to the Boone County Facilities Maintenance Manager, upon completion of the inspection at each location. The contractor's list shall include the type, capacity, and location of the deficient units.
 - 2.7.4. All repair parts used must meet or exceed specifications listed by the manufacturer of the unit being serviced.
 - 2.7.5. All work shall be performed in accordance with the National Fire Prevention Association No. 10-1998 or latest edition, or where applicable, the edition as adopted by the local authority having

jurisdiction shall apply.

- 2.7.6. In the event any provision of this contract is not fulfilled by the contractor or the quality of workmanship is deemed to be unsatisfactory by the County, the County may, upon written notice to the contractor, terminate this contract within ten (10) days after such written notice.
- 2.7.7. **Property Damage:** Contractor shall be responsible for repair of any damage to County property and restoration of any facility damage, beyond normal wear and tear, caused by Contractor's activities. Repair and restoration shall be to the satisfaction of the County. Any repair/restoration of these damages shall be performed at no cost to the County.
- 2.7.8. **Repair/Warranties:** The contractor shall guarantee all work performed under this contract. Contractor shall list on the invoice/service ticket the brand name and part/model number of all replacement parts used. All repairs shall be warranted for a minimum period of ninety (90) calendar days from the date of repair. If the same item must be repaired again for any failure during the warranty period, the follow-up service will be performed at no charge to the County. Any replacement parts that fail during the warranty period shall be replaced at no charge to the County including all labor. Parts which carry a standard warranty that exceeds ninety (90) days shall be honored by the Contractor.
- 2.7.9. **Guarantee:** The Contractor shall guarantee all work for a period of one year following Final Acceptance by Boone County Facilities Maintenance Department. During the guarantee period, any serviced fire extinguisher that loses its proper charge shall be repaired and recharged. Recharging shall be limited to those extinguishers serviced under the six year maintenance, five or twelve year Hydrotest, or where the extinguisher was recharged. Any and all work performed under this guarantee shall be subject to the original terms and conditions of this Contract, and shall be completed at no additional cost to the Commission.
- 2.7.10. **Replacement Parts:** Replacement parts furnished must be new and of the same manufacturer or an equal product. Replacement parts must meet or exceed specifications listed by the manufacturer of the unit being serviced.
- 2.7.11. When the County has a spare part available, the Contractor will be required to use that part when requested to do so by the County.
- 2.7.12. Prices shall include travel required to and from respective building sites. Contractor's pricing, per unit, shall include all of the contractor's overhead, including, but not limited to, trip related charges and mileage. Only the cost of the inspection, maintenance, repair, recharging and parts will be paid under this order. All jobs are expected to require one (1) service person.
- 2.7.13. Labor quoted shall include all labor cost, insurance, overhead, profit, travel time, mileage, and be exclusive of taxes.
- 2.7.14. Repair work shall be performed at site unless by the nature of required repairs, it would be necessary to remove a component to the Contractor's shop for repair. If a unit is to be down for more than twelve (12) hours, the Facilities Maintenance Manager will be advised and informed of the nature or repairs that cause the shutdown.
- 2.7.15. **Working With Owner's Personnel:** The Contractors must agree to work alongside the County's maintenance staff.
- 2.7.16. **Security:** The Contractor shall be responsible for providing and updating a list of the Contractor's employees working at any of the locations. The Contractor shall comply with all security measures required by Boone County. All facets of building security will be discussed with the awarded contractor at a post-award meeting.
- 2.7.17. **FOB Point:** Prices quoted shall be FOB various County locations, unloaded and installed.
- 2.7.18. **Hazardous Materials:** The Contractor shall not use any materials or chemicals which may be a physical or health hazard without prior written approval of the Facilities Maintenance Manager. At the Post Award Meeting, all requests for approval of any materials or chemicals deemed hazardous shall be submitted to the Facilities Maintenance Manager with manufacturer's specifications and a completed "Material Safety Data Sheet" listing any Environmental Protection Agency (EPA) required information on usage and handling. The definition of hazardous materials includes such physical hazards as compressed gasses, flammable liquids and solids, combustibles, and chemical oxidizers. Also included are such health hazards as carcinogens, irritants, corrosives, sensitizers,

and agents which damage the lungs, skin, eyes, or mucous membranes.

2.8. **MAINTENANCE REQUIREMENTS**

- 2.8.1. The contractor shall provide maintenance and repair services of fire extinguishers for one (1) year, five (5) year, six (6) year, and twelve (12) year maintenance cycles in accordance with the National Fire Prevention Association Standards for portable fire extinguishers and as outlined below. Any repairs or replacement of defective parts will be charged based on the pricing stated on the Response Form.
- 2.8.2. **Annual Maintenance for ABC and Halotron Portable Fire Extinguishers:** The annual maintenance will include inspection of the hose, check for leaks, check gauge, proper charge, check for last six year maintenance date, check for last hydrotesting date, and check the general condition of the extinguisher. All costs associated with the annual maintenance, to include all required tags/stickers, shall be included in the unit price of the annual inspection, as submitted in the Response Form.
- 2.8.3. **Six Year Maintenance of ABC Portable Fire Extinguishers:** The six year maintenance shall include discharge of the extinguisher, cleaning of all parts, check and/or replace valve stem, replacement and lubrication of seals, visually check the condition of the internal cylinder, refill the extinguisher with new chemicals, and reassemble the extinguisher. This service shall also include checking the reassembled extinguisher for leaks and proper charge. All costs associated with the six year maintenance, to include annual maintenance, recharging and the labor to replace any part, shall be included in the unit price of the six year maintenance, as submitted in the Response Form. The cost for new parts shall not be included in the unit price of the six year maintenance.
- 2.8.4. **Annual Maintenance of CO2:** The annual maintenance will include the inspection of the hose, weighing the extinguisher to insure proper charge, check for leaks, check for last hydrotesting date, and check the general condition of the extinguisher. Conductivity tests shall be conducted on all carbon dioxide hose assemblies. Hose assemblies found to be nonconductive shall be replaced. All costs associated with the annual maintenance, to include all required tags/stickers, shall be included in the unit price of the annual inspection, as submitted in the Response Form.
- 2.8.5. **Hydrotesting Maintenance of ABC and CO2 Fire Extinguishers:** Hydrotesting shall be performed at the direction of Boone County Facilities Maintenance Manager. Hydrotesting is required every twelve years for ABC extinguishers, and every five years for CO2. On ABC, the annual maintenance, recharging and the six year maintenance shall be included as part of the hydrotesting. On CO2, the annual maintenance and recharging shall be included as part of the hydrotesting, and in addition, the following work shall be performed: cleaning of all parts, check and/or replace valve stem, replacement and lubrication of seals, and visually check the condition of the internal cylinder. This service shall also include checking the reassembled extinguisher for leaks and proper charge. All costs associated with the hydrotesting maintenance, to include the annual maintenance recharging and the labor to replace any part, shall be included in the unit price of the five and twelve year hydrotesting maintenance, as submitted in the Response Form. The cost for new parts shall not be included in the unit price of the five and twelve year hydrotesting maintenance.
- 2.8.6. **Replacement of Parts:** The County shall pay for any and all parts required under this Contract. If any part requires replacement, the Contractor shall replace it and return the removed part(s), to Boone County Facilities Maintenance Manager. The Contractor shall not charge for labor during the installation/replacement of any part during the six year maintenance and the five and twelve year hydrotesting maintenance. The Contractor shall charge for labor during the installation/replacement of any part during the annual maintenance. The County reserves the right to purchase other miscellaneous fire extinguisher accessories at the Contractor's place of business, such as tags, stickers, hooks and signs, etc.
- 2.8.7. **Disposal of Halon Portable Fire Extinguishers:** The Bidder shall submit a unit price, on the Response Form, to legally dispose of halon fire extinguishers. The fire extinguishers shall be legally disposed to comply with any and all federal, state, county, local, and municipal statutes, laws, regulations, and ordinances.
- 2.8.8. **Replacement Extinguishers:** The Contractor shall provide replacement portable fire

extinguishers of the same size and type for all extinguishers that must be removed from site for any reason other than condemned extinguishers. Only the Boone County Facilities Maintenance Manager is authorized to condemn fire extinguishers. The County shall provide replacements for all condemned extinguishers. No extinguishers may be removed from site for service unless a replacement is provided.

- 2.8.9. **Extinguisher Purchase:** The bidder shall submit the unit costs for the purchases of new fire extinguishers. The unit cost shall also include all required tags/stickers. Only the Boone County Facilities Maintenance Manager shall have approval to purchase new extinguishers.

2.9. **VEHICLE FIRE EXTINGUISHER INSPECTIONS**

- 2.9.1. Service to fire extinguishers located in any Boone County owned vehicle (i.e. automobile, tractor, truck, van, etc.) shall be scheduled with a representative of Boone County responsible for the vehicle's operation and maintenance.
- 2.9.2. The contractor shall provide service tickets during each service call. Service requests may be cyclic or requested on an as-needed basis.
- 2.9.3. The contractor must coordinate with the Boone County designated representative to arrange for a yearly inspection of the fire extinguishers located in County owned vehicles. Typically, these inspections have been spread over three days with the Sheriff's Department vehicles done one day, the Facilities Maintenance vehicles on another day, and the Public Works vehicles on another day.

2.10. **RANGE HOOD ANSUL SYSTEM INSPECTIONS**

- 2.10.1. The contractor shall inspect the range hoods at the locations specified on the Response Form on an annual and semi-annual basis per the requirements of the National Fire Protection Association (NFPA). The contractor shall ensure that all state and local requirements are met, as well.

2.11. **CONTRACTOR RESPONSIBILITIES**

- 2.11.1. The contractor shall provide inspection, service, and maintenance on an ongoing basis, to the fire extinguishers and built-in stove hoods located in various County buildings and in County owned vehicles at the various locations identified in Attachment B, as well as any new fire extinguishers acquired during the contract period.
- 2.11.2. The contractor shall assign a trained, licensed technician(s) to provide this service, trained in providing portable fire extinguisher maintenance, servicing, repairing, testing, and recharging. This technician(s) shall have the appropriate servicing manuals, proper types of tools, recharge materials, lubricants, expellants, and manufacturer's recommended replacement parts.
- 2.11.3. The contractor shall ensure that each portable fire extinguisher is fully inspected, tested, recharged, and functionally serviced during a specified annual period to ensure ongoing operational readiness of all units at all locations.
- 2.11.4. The contractor shall provide maintenance and repair services of fire extinguishers for one (1) year, five (5) year, six (6) year, and twelve (12) year maintenance cycles in accordance with the National Fire Prevention Association Standards for portable fire extinguishers. Any repairs or replacement of defective parts will be charged based on the pricing stated on the Response Form.
- 2.11.5. The contractor shall perform emergency call service to replace and/or re-install vandalized, damaged, or new fire extinguishers as required.
- 2.11.6. The contractor shall make every effort to prevent interference with the daily activities of the building occupants during the service.
- 2.11.7. The contractor shall perform all work and furnish all supervision, labor, materials, equipment, tools, and appurtenances as necessary or proper for the performance and completion of this contract, in the manner called for by this contract, and at the appropriate price(s) listed on the Response Form, hereof, as submitted by the contractor, and to the satisfaction of the County.
- 2.11.8. The contractor shall pick up and return all items at locations specified by the County, within 24 hours of notification by the County.
- 2.11.9. **Work Hours:** Contractor shall provide unlimited service during normal business hours. Normal business hours are Monday - Friday 8 a.m. to 5 p.m. and excluding holidays as defined on the Response Form.
- 2.11.10. All County calls for service must be returned within one (1) hour of initial telephone call.
- 2.11.11. Contractor must state a realistic and true time when they can schedule the work. If this proposed

schedule is acceptable to the Boone County Facilities Maintenance Manager, the contractor shall book the job. Proposed schedule must be honored within a time frame of plus or minus one-half (1/2) hour.

- 2.11.12. **Emergency Repairs:** The Contractor may be required to perform emergency repairs at times other than normal working hours. The Contractor should be in a position to be available on a twenty-four (24) hour basis for such emergency work. Contractor shall provide a flat hourly rate for emergency service outside normal business hours to include all workmen and repairs.
- 2.11.13. **Equipment/Safety:** The Contractor shall be responsible for providing and for the placement of barricades, tarps, plastic, flag tape and other safety/traffic control equipment required to protect its employees, the public, surrounding areas, equipment and vehicles. The flow of vehicular traffic shall not be impeded at any time during this project. The safety of the Contractor's employees and the public is of prime concern to the County, and the Contractor must take all necessary steps to assure proper safety during the performance of the Contractor. If, at any time, the Manager of Boone County Facilities Maintenance Manager becomes aware that proper safety measures are not being employed, the Contractor will be stopped from working and may resume work only at such time as the condition is remedied. Any bidders that have a history of safety problems or a high incidence of accidents will not be considered for award of a Contract.
- 2.11.14. **Workmanship:** Where not more specifically described in any of the various sections of these specifications, workmanship shall conform to all of the methods and operations of best standards and accepted practices of the trade or trades involved, and shall include all items of fabrication, construction or installation regularly furnished or required for completion (including any finish, and for successful operations as intended). All work shall be executed by personnel skilled in their respective lines of work.
- 2.11.15. **Inspection Tags:** Maintenance decals must be imprinted with contractor's name, address, area code and phone number, month and year maintenance was performed; decal must be affixed to extinguisher per NFPA 10. Expired labels shall be removed.
- 2.11.16. **Cleaning:** The Contractor shall keep the premises clean of all rubbish and debris generated by the work involved and shall leave the premises neat and clean. The Contractor, at the Contractor's expense, shall dispose of all surplus material, rubbish, and debris. The work area shall be cleaned at the end of each workday. All materials, tools, equipment, etc., shall be removed or safely stored. The County is not responsible for theft or damage to the Contractor's property. All possible safety hazards to workers or the public shall be corrected immediately and left in a safe condition at the end of each workday. If there is a question in this area, the Facilities Maintenance Manager shall be consulted.
- 2.11.17. All personnel employed by the Contractor shall be advised that the County has determined its facilities "Smoke-Free Areas". Upon request, designated smoking areas will be identified by the Boone County Facilities Maintenance Manager. Violation of this requirement will result in the removal of Contractor's personnel from County property.
- 2.11.18. **Restrooms:** Restrooms shall not be used for the washing of tools and equipment.
- 2.12. **FINAL INSPECTION AND APPROVAL**
 - 2.12.1. The Contractor shall request the Facilities Maintenance Manager to conduct a site inspection after the project is complete. The Facilities Maintenance Manager will prepare a "punch-list" during the inspection and will forward a copy of the "punch-list" to the Contractor. After the "punch-list" items have been corrected, the Contractor shall request a final inspection with the Facilities Maintenance Manager. Final project approval is contingent upon the requesting department manager's final inspection and written approval.
- 2.13. **CONTRACTOR QUALIFICATIONS AND EXPERIENCE**
 - 2.13.1. The Contractor to whom a Fire Extinguisher Inspection and Maintenance Services contract is awarded must provide evidence that they have past experience in the type of work as outlined in the attached specifications for a minimum of three years.
 - 2.13.2. The Contractor must provide evidence that they have been providing Fire Extinguisher Maintenance and Inspection Service for a minimum of three years and supply three references that this service has been provided for three consecutive years. Attachment A – Prior Experience may

be used. The Contractor must have established offices in the Columbia – Jefferson City areas, and currently be engaged in the business of such work.

- 2.13.3. The Bidder, at time of bid submittal, shall possess the correct occupational licenses, all professional licenses or other authorizations necessary to carry out and perform the work required by the project pursuant to all-applicable Federal, State and Local laws, statutes, ordinances, and rules and regulations of any kind. **Copies of licenses should be submitted with the bid indicating that the entity bidding the project is licensed to perform the activities or work included in the bid documents.**
- 2.13.4. The Bidder is assumed to be familiar with all Federal, State and Local laws, ordinances, rules and regulations, that in any manner affect the work. Special attention is called to, but not limited to, the local environmental ordinances. Ignorance on the part of the Bidder will in no way relieve him from responsibility of compliance with all said laws, ordinances, rules and regulations.
- 2.13.5. In addition to complying with all pertinent codes and regulations, the successful Bidder must comply with:
1. All pertinent requirements of the local codes and utility companies.
 2. National Electric Code, latest edition.
 3. Requirements of Underwriters Laboratories, Inc., for all items installed for which UL standards have been established.
- 2.13.6. The contractor shall comply with all laws, ordinances, rules and regulations of the jurisdictions in which the work may be performed.
- 2.13.7. The Contractor will be responsible for obtaining any and all required permits. The County shall be responsible for the cost of any and all permits.
- 2.13.8. **Sub-Contractors:** No subcontractors shall be used without prior approval of the Boone County Facilities Maintenance Manager.
- 2.14.. **Insurance Requirements:** The Contractor shall not commence work under this contract until they have obtained all insurance required under this paragraph and such insurance has been approved by the County, nor shall the Contractor allow any subcontractor to commence work on their subcontract until all similar insurance required of subcontractor has been so obtained and approved. All policies shall be in amounts, form and companies satisfactory to the County which must carry an A-6 or better rating as listed in the A.M. Best or equivalent rating guide. Insurance limits indicated below may be lowered at the discretion of the County.
- 2.14.1. **Compensation Insurance** - The Contractor shall take out and maintain during the life of this contract, **Employee's Liability and Worker's Compensation Insurance** for all of their employees employed at the site of work, and in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. Worker's Compensation coverage shall meet Missouri statutory limits. Employers' Liability limits shall be \$1,000,000.00 each employee, \$1,000,000.00 each accident, and \$1,000,000.00 policy limit. In case any class of employees engaged in hazardous work under this Contract at the site of the work is not protected under the Worker's Compensation Statute, the Contractor shall provide and shall cause each subcontractor to provide Employers' Liability Insurance for the protection of their employees not otherwise protected.
- 2.14.2. **Comprehensive General Liability Insurance** - The Contractor shall take out and maintain during the life of this contract, such comprehensive general liability insurance as shall protect them and any subcontractor performing work covered by this contract, from claims for damages for personal injury including accidental death, as well as from claims for property damages, which may arise from operations under this contract, whether such operations be by themselves or for any subcontractor or by anyone directly or indirectly employed by them. The amounts of insurance shall be not less than \$2,000,000.00 combined single limit for any one occurrence covering both bodily injury and property damage, including accidental death. If the Contract involves any underground/digging operations, the general liability certificate shall include X, C, and U (Explosion, Collapse, and Underground) coverage. If providing Comprehensive General Liability Insurance, then the Proof of Coverage of Insurance shall also be included.

The Contractor has the option to provide **Owner's Contingent or Protective Liability and Property Damage** instead of the **Comprehensive General Liability Insurance**- The Contractor shall provide the County with proof of Owner's Protective Liability and Property Damage Insurance with the County as named insured, which shall protect the County against any and all claims which might arise as a result of the operations of the Contractor in fulfilling the terms of this contract during the life of the Contract. The minimum amounts of such insurance will be \$2,000,000.00 per occurrence, combined single limits. Limits can be satisfied by using a combination of primary and excess coverages. Should any work be subcontracted, these limits will also apply.

- 2.14.3. The Contractor has the option to provide **Owner's Contingent or Protective Liability and Property Damage** instead of the **Comprehensive General Liability Insurance**- The Contractor shall provide the County with proof of Owner's Protective Liability and Property Damage Insurance with the County as named insured, which shall protect the County against any and all claims which might arise as a result of the operations of the Contractor in fulfilling the terms of this contract during the life of the Contract. The minimum amounts of such insurance will be \$1,000,000.00 per occurrence, combined single limits. Limits can be satisfied by using a combination of primary and excess coverages. Should any work be subcontracted, these limits will also apply.
- 2.14.4. **COMMERCIAL Automobile Liability** – The Contractor shall maintain during the life of this contract, automobile liability insurance in the amount of not less than \$2,000,000.00 combined single limit for any one occurrence, covering both bodily injury, including accidental death, and property damage, to protect themselves from any and all claims arising from the use of the Contractor's own automobiles, teams and trucks; hired automobiles, teams and trucks; and both on and off the site of work.
- 2.14.5. **Proof of Carriage of Insurance** - The Contractor shall furnish the County with Certificate(s) of Insurance which name the County as additional insured in an amount as required in this contract, contain a description of the project or work to be performed, and requiring a thirty (30) day mandatory cancellation notice. In addition, such insurance shall be on occurrence basis and shall remain in effect until such time as the County has made final acceptance of the facility contracted.
- 2.15. **INDEMNITY AGREEMENT:** To the fullest extent permitted by law, Contractor shall indemnify, hold harmless and defend the County, its directors, officers, agents, and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any act or failure to act, negligent or otherwise, of Contractor, of any subcontractor (meaning anyone, including but not limited to consultants having a contract with contractor or a subcontract for part of the services), of anyone directly or indirectly employed by contractor or by any subcontractor, or of anyone for whose acts the contractor or its subcontractor may be liable, in connection with providing these services. This provision does not, however, require contractor to indemnify, hold harmless, or defend the County of Boone from its own negligence.
- 2.16. **SALES/USE TAX EXEMPTION** – County will provide the Contractor with a completed Missouri Project Exemption and Missouri Tax Exemption letter for Boone County, Missouri and the Contractor shall be responsible for furnishing the exemption certificate and tax exemption letter to all authorized sub-contractors and suppliers providing materials incorporated in the work. All invoices issued for purchases for such materials, supplies and taxable rentals shall be in the name of Boone County and contain the project number assigned by Boone County for the contract awarded. It shall be the responsibility of the Contractor to insure that no sales or use taxes are included in the invoices and that the County pays no sales/use taxes from which it is exempt. The Contractor shall be responsible for obtaining revised exemption certificates and revised expiration dates if the work extends beyond the estimated project completion date or a certificate expiration date. The Contractor shall also be responsible for retaining a copy of the project exemption certificate for a period of five years and for compliance with all other terms and conditions of section 144.062 RSMo. Not otherwise herein specified. The Contractor agrees not to use or permit others to use the

project exemption certificate for taxable purchases of materials or rentals and supplies not directly incorporated into or used in the work to which it applies and agrees to indemnify and hold the County harmless from all losses, expenses and costs including litigation expenses and attorney fees resulting from the unauthorized use of such project exemption certificates.

2.17. **INVOICING AND PAYMENT**

- 2.17.1. The Contractor's invoice shall itemize charges for service and parts, broken down by location and facility. Invoice amounts shall be based upon unit costs provided by the Contractor on the Response Forms. Invoices shall include Contractor's name, address and telephone number, invoice number, purchase order number, dates, description of work, unit prices, and amount requested for payment. Invoices shall be honored for all work in compliance with specifications. If the above information is not noted on the invoice, it will be returned to Contractor for additional information before payment can be made.
- 2.17.2. All monthly statements will be paid 30 days after receipt of a correct monthly statement and invoice. All maintenance and inspection of extinguishers located in buildings shall be invoiced to the corresponding contact. Listed on Attachment B.
All inspection and maintenance for fire extinguishers located in buildings and vehicles shall be invoiced to the respective department. The two departments are: Boone County Public Works, Attn: Greg Edington, 5551 Highway 63 South, Columbia, MO 65201; Boone County Sheriff, Attn: Leasa Quick, 2121 County Drive, Columbia, MO 65202.

2.18. **SPECIAL CONDITIONS AND REQUIREMENTS**

- 2.18.1. **Inspection of Facilities:** It is the bidder's responsibility to become fully informed as to where services are to be provided and/or the nature and extent of the work required and its relation to any other work in the area include possible interference from other site activities. Arrangements for bidder's inspection of facilities may be secured from Bob Davidson, Manager of Facilities Maintenance at (573) 886-4401.
- 2.18.2. **Bid Clarification** - Any questions or clarifications concerning bid documents should be addressed in writing, PRIOR TO BID OPENING, to Tyson Boldan, Buyer, Purchasing, 613 E. Ash, Room 109, Columbia, Missouri 65201. Phone: (573) 886-4392 Fax: (573) 886-4390 or Email: tboldan@boonecountymmo.org
- 2.18.3. **Designee** – Bob Davidson, Manager of Boone County Facilities Maintenance, 613 E. Ash, Room 106, Columbia, MO 65201.
- 2.18.4. The County of Boone reserves the right to accept or reject any and all bids in the best interest of the County.

3. Response Presentation and Review

- 3.1. **RESPONSE CONTENT** - In order to enable direct comparison of competing Responses, you must submit your Response in strict conformity to the requirements stated here. Failure to adhere to all requirements may result in your Response being disqualified as non-responsive. All Responses must be submitted using the provided Response Sheet. Every question must be answered and if not applicable, the section must contain "N/A" or "No Bid". Manufacturer's published specifications for the items requested shall be included with the response.
- 3.2. **SUBMITTAL OF RESPONSES** - Responses MUST be received by the date and time noted on the title page under "Bid Submission Information and Deadline". NO EXCEPTIONS. We are not responsible for late or incorrect deliveries from the US Postal Service or any other mail carrier.
 - 3.2.1. **Submittal Package** - Submit, to the location specified on the title page, **three (3) complete copies** of your Response in a single sealed envelope, clearly marked on the outside with your company name and return address, the proposal number and the due date and time.
 - 3.2.2. **Advice of Award** - A Bid Tabulation of responses received as well as Award status can be viewed at www.showmeboone.com.
- 3.3. **BID OPENING** - On the date and time and at the location specified on the title page under "Bid Opening", all Responses will be opened in public. Brief summary information from each will be read aloud.
 - 3.3.1. **Removal from Vendor Database** - If any prospective Bidder currently in our Vendor Database to whom the Bid was sent elects not to submit a Response and fails to reply in writing stating reasons for not bidding, that Bidder's name may be removed from our database. Other reasons for removal include unwillingness or inability to show financial responsibility, reported poor performance, unsatisfactory service, or repeated inability to meet delivery requirements.
- 3.4. **RESPONSE CLARIFICATION** - We reserve the right to request additional written or oral information from Bidders in order to obtain clarification of their Responses.
 - 3.4.1. **Rejection or Correction of Responses** - We reserve the right to reject any or all Responses. Minor irregularities or informalities in any Response which are immaterial or inconsequential in nature, and are neither affected by law nor at substantial variance with Bid conditions, may be waived at our discretion whenever it is determined to be in the County's best interest.
- 3.5. **EVALUATION PROCESS** - Our sole purpose in the evaluation process is to determine from among the Responses received which one is best suited to meet the County's needs at the lowest possible cost. Any final analysis or weighted point score does not imply that one Bidder is superior to another, but simply that in our judgment the Contractor selected appears to offer the best overall solution for our current and anticipated needs at the lowest possible cost.
 - 3.5.1. **Method of Evaluation** - We will evaluate submitted responses in relation to all aspects of this Bid.
 - 3.5.2. **Acceptability** - We reserve the sole right to determine whether goods and/or services offered are acceptable for our use. We also reserve the right to request samples of any and/or all equivalent products bid in order to ensure comparative quality between those items and the name brand items specified on Attachment A.
 - 3.5.3. In the event of a discrepancy between a unit price and an extended line item price, the unit price shall govern.
 - 3.5.4. **Endurance of Pricing** - Your pricing must be held until contract execution or 60 days, whichever comes first.

4. **Response Form**

4.1. Company Name: _____

4.2. Address: _____

4.3. City/Zip: _____

4.4. Phone Number: _____

4.5. Fax Number: _____

4.6. E-Mail Address: _____

4.7. Federal Tax ID: _____

4.7.1. () Corporation

() Partnership - Name _____

() Individual/Proprietorship - Individual Name _____

() Other (Specify) _____

4.8. **PRICING** – The bidder must complete the following pages in their entirety for each item identified below. The bidder must also complete and return Attachment A, Prior Experience.

RENEWALS – The bidder shall indicate below the maximum increase for each potential renewal period.

4.8.1.1. _____ % 1st Renewal Period

4.8.1.2. _____ % 2nd Renewal Period

4.8.1.3. _____ % 3rd Renewal Period

4.8.1.4. _____ % 4th Renewal Period

4.9. **The undersigned offers to furnish and deliver the articles or services as specified at the prices and terms stated and in strict accordance with the specifications, instructions and general conditions of bidding which have been read and understood, and all of which are made part of this order.**

4.9.1. Authorized Representative (Sign By Hand): _____

4.9.2. Type or Print Signed Name: _____

4.9.3. Today's Date: _____

4.10. Will you honor the submitted prices for purchase by other entities in Boone County who participate in cooperative purchasing with Boone County, Missouri?

_____ Yes _____ No

4.11. PRICING

ANNUAL MAINTENANCE		UNIT PRICE
4.11.1.	ABC Unit	\$
4.11.2.	Halotron Unit	\$
4.11.3.	CO2	\$
4.11.4.	TOTAL	\$
6 YEAR MAINTENANCE		
4.11.5.	2lb- 2 ½lb ABC unit. Price must include recharge.	\$
4.11.6.	4lb – 6lb ABC unit. Price must include recharge.	\$
4.11.7.	10lb ABC unit. Price must include recharge.	\$
4.11.8.	13lb – 20lb ABC unit. Price must include recharge.	\$
4.11.9.	TOTAL	\$
HYDROTESTING MAINTENANCE OF ABC		
4.11.10.	2lb – 2 ½lb ABC unit. Price must include hydrostatic test and recharge.	\$
4.11.11.	4lb – 6lb ABC unit. Price must include hydrostatic test and recharge.	\$
4.11.12.	10lb ABC unit. Price must include hydrostatic test and recharge.	\$
4.11.13.	13lb – 20lb ABC unit. Price must include hydrostatic test and recharge.	\$
4.11.14.	TOTAL	\$
HYDROTESTING MAINTENANCE OF CO2		
4.11.10.a.	2 ½ Pound CO2 unit. Price must include hydrostatic test and recharge.	\$
4.11.11.a.	5 Pound CO2 unit. Price must include hydrostatic test and recharge.	\$
4.11.12.a.	10 Pound CO2 unit. Price must include hydrostatic test and recharge.	\$
4.11.13.a.	15 Pound CO2 unit. Price must include hydrostatic test and recharge.	\$
4.11.14.a.	20 Pound CO2 unit. Price must include hydrostatic test and recharge.	\$
4.11.15.a.	TOTAL	\$
PURCHASE OF NEW UNITS		
4.11.15.	2 ½ Pound ABC Unit with Vehicle Mounting Bracket	Brand Bid: \$
4.11.16.	5 Pound ABC Unit with Wall Mount Bracket	Brand Bid: \$
4.11.17.	10 Pound ABC Unit	Brand Bid: \$
4.11.18.	TOTAL	\$
4.11.19.	Other new fire extinguishers: _____ % mark-up over cost	
REPLACEMENT PARTS (Provide Material Cost Only)		
4.11.20.	Fusible Links	\$
4.11.21.	O-rings	\$
4.11.22.	Dry Chemical Gauge	\$
4.11.23.	Dry Chemical Valve Stem	\$

4.11.24.	Wall Bracket		\$
4.11.25.	Vehicle Bracket		\$
4.11.26.	Operating Lever (Top)		\$
4.11.27.	Pull Pin-Stainless Steel		\$
4.11.28.	Carry Handle (Bottom Lever)		\$
4.11.29.	Valve Body (please list different model numbers and pricing for options for the County in case of the need for future repairs)		
4.11.29.a.	Valve Body: ABC Brand Name & Model #		\$
4.11.29.b.	Valve Body: ABC Brand Name & Model #		\$
4.11.29.c.	Valve Body: CO2 Brand Name & Model #		\$
4.11.29.d.	Valve Body: CO2 Brand Name & Model #		\$
4.11.30.	Hose Nozzle		\$
4.11.31.	Screw Nozzle		\$
4.11.32.	Valve Stem Assembly-Plastic		\$
4.11.33.	Valve Stem Assembly-Metal		\$
4.11.34.	Hose & Horn Assembly (CO2)		\$
4.11.35.	Siphon Tube		\$
4.11.36.	TOTAL		\$
	Note: The above parts list is not all inclusive and is not intended to reflect all fire extinguishers.		
4.11.37	Other Parts:	% mark-up over cost	
4.11.38.	Cost to Dispose of Halon Fire Extinguisher (Price/Each)		\$
ANNUAL/SEMI-ANNUAL INSPECTIONS OF THE FOLLOWING RANGE HOOD ANSUL SYSTEMS			
	Location	Annual Inspection	Semi-Annual Inspection
4.11.39.	Boone County Jail-Quantity 1	\$	\$
4.11.40.	Boone County Fairgrounds-Quantity 1	\$	\$
4.11.41.	Juvenile Justice Center-Quantity 1	\$	\$
4.11.42.	Reality House Programs-Quantity 1	\$	\$
4.11.43.	TOTAL	\$	\$
4.12.	Emergency Twenty Four Hour Service Contact:		
	Name:		
	Telephone Number:		
4.13.	Call Response Time: Within _____ hours after notification by the County.		
4.14.	Holidays: Bidder shall list holidays observed by their company:		

ATTACHMENT A
PRIOR EXPERIENCE

(References of similar services for governmental agencies are preferred)

1. Prior Services Performed for:

Company Name:

Address:

Contact Name:

Telephone Number:

Date of Contract:

Length of Contract:

Description of Prior Services (include dates):

2. Prior Services Performed for:

Company Name:

Address:

Contact Name:

Telephone Number:

Date of Contract:

Length of Contract:

Description of Prior Services (include dates):

3. Prior Services Performed for:

Company Name:

Address:

Contact Name:

Telephone Number:

Date of Contract:

Length of Contract:

Description of Prior Services (include dates):

ATTACHMENT B

Building	Address	Contact	Phone	Month Due	Month Due	Month Due
				Fire Exting.	Ansul Systems	Vehicle Fire Ext
Courthouse	705 East Walnut	Gary	999-2003	August		
BC Jail/Sheriff's Dept	2121 County Drive	Bob S	864-8912	By SD	By SD	By SD
BC Sheirff's Annex		Bob S	864-8912	By SD	By SD	
North Facility	5501 Oakland Gravel Road	Bob S	864-8912	August		
South Facility (Public Works)	5551 Hwy 63 South	Greg	228-1147	By PW		By PW
Johnson Building	601 East Walnut	Anderson	289-3285	July		
Juvenile Justice Center	5665 North Roger I. Wilson Memorial Drive	Don Roddy	886-4450	May	March / Sept.	
Government Center	801 East Walnut	Chuck	999-2020	October		
Centralia Clinic	1021 East Hwy 22, Centralia, MO 65240	Anderson	289-3285	February		
Division IV-D	605 East Walnut	Anderson	289-3285	August		
Election Warehouse	1711 Paris Road, Suite 105	Anderson	289-3285	July		
Getabout Columbia	101 North 7th Street	Anderson	289-3285	July		
Alternative Sentencing Center	607 East Ash	Anderson	289-3285	December		
Law Offices	609 East Walnut	Anderson	289-3285	August		
Child Support Office	22 North 8th Street	Anderson	289-3285	December		
Johnston Paint Building	613 East Ash	Anderson	289-3285	December		
Reality House Programs	1900 Prathersville Road East	Michelle Thompson	449-8117	by RHP	by RHP	by RHP
PW Hallsville Barn	Hwy 124	Greg	228-1147	By PW		



Standard Terms and Conditions

Boone County Purchasing

613 E. Ash, Room 109

Columbia, MO 65201

Tyson Boldan, Buyer

Phone: (573) 886-4392 – Fax: (573) 886-4390

1. Responses shall include all charges for packing, delivery, installation, etc., (unless otherwise specified) to the Boone County Department identified in the Request for Bid and/or Proposal.
2. The Boone County Commission has the right to accept or reject any part or parts of all bids, to waive technicalities, and to accept the offer the County Commission considers the most advantageous to the County. Boone County reserves the right to award this bid on an item-by-item basis, or an “all or none” basis, whichever is in the best interest of the County.
3. Bidders must use the bid forms provided for the purpose of submitting bids, must return the bid and bid sheets comprised in this bid, give the unit price, extended totals, and sign the bid.
4. When products or materials of any particular producer or manufacturer are mentioned in our specifications, such products or materials are intended to be descriptive of type or quality and not restricted to those mentioned.
5. Do not include Federal Excise Tax or Sales and Use Taxes in bid process, as law exempts the County from them.
6. The delivery date shall be stated in definite terms, as it will be taken into consideration in awarding the bid.
7. The County Commission reserves the right to cancel all or any part of orders if delivery is not made or work is not started as guaranteed. In case of delay, the Contractor must notify the Purchasing Department.
8. In case of default by the Contractor, the County of Boone will procure the articles or services from other sources and hold the Bidder responsible for any excess cost occasioned thereby.
9. Failure to deliver as guaranteed may disqualify Bidder from future bidding.
10. Prices must be as stated in units of quantity specified, and must be firm. Bids qualified by escalator clauses may not be considered unless specified in the bid specifications.
11. No bid transmitted by fax machine or **e-mail** will be accepted. **U.S. mail only.**
12. The County of Boone, Missouri expressly denies responsibility for, or ownership of any item purchased until same is delivered to the County and is accepted by the County.
13. The County reserves the right to award to one or multiple respondents. The County also reserves the right to not award any item or group of items if the services can be obtained from a state or other governmental entities contract under more favorable terms.

14. The County, from time to time, uses federal grant funds for the procurement of goods and services. Accordingly, the provider of goods and/or services shall comply with federal laws, rules and regulations applicable to the funds used by the County for said procurement, and contract clauses required by the federal government in such circumstances are incorporated herein by reference. These clauses can generally be found in the Federal Transit Administration's Best Practices Procurement Manual – Appendix A. Any questions regarding the applicability of federal clauses to a particular bid should be directed to the Purchasing Department prior to bid opening.
15. In the event of a discrepancy between a unit price and an extended line item price, the unit price shall govern.



Boone County Purchasing
613 E. Ash, Room 109
Columbia, MO 65201

“No Bid” Response Form

Tyson Boldan, Buyer
(573) 886-4392 – Fax: (573) 886-4390

“NO BID RESPONSE FORM”

**NOTE: COMPLETE AND RETURN THIS FORM ONLY IF YOU DO NOT WANT TO
SUBMIT A BID**

If you do not wish to respond to this bid request, but would like to remain on the Boone County vendor list for this service/commodity, please remove form and return to the Purchasing Department by mail or fax.

If you would like to FAX this “No Bid” Response Form to our office, the FAX number is (573) 886-4390.

**Bid: 45-02NOV11 - Fire Extinguisher Inspection and Maintenance Services
Term & Supply**

Business Name: _____

Address: _____

Telephone: _____

Contact: _____

Date: _____

Reason(s) for not bidding:

CERTIFIED COPY OF ORDER

STATE OF MISSOURI

} ea.

December Session of the October Adjourned

Term. 20 11

County of Boone

In the County Commission of said county, on the

6th

day of December 20 11

the following, among other proceedings, were had, viz:

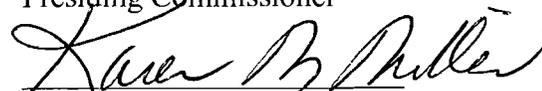
Now on this day the County Commission of the County of Boone does hereby award RFP 22-24JUN11 –Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek to Geosyntec Consultants. It is further ordered the Presiding Commissioner is hereby authorized to sign said contract.

Done this 6th day of December, 2011.

ATTEST:

Wendy S. Noren cc
Wendy S. Noren
Clerk of the County Commission


Daniel K. Atwill
Presiding Commissioner


Karen M. Miller
District I Commissioner

Absent
Skip Elkin
District II Commissioner

Boone County Purchasing

Tyson Boldan,
Buyer



613 E. Ash, Room 109
Columbia, MO 65201
Phone: (573) 886-4392
Fax: (573) 886-4390

MEMORANDUM

TO: Boone County Commission
FROM: Tyson Boldan,
DATE: November 29, 2011
RE: RFP Award Recommendation: 22-24JUN11 – Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek

The Request for Proposal for 22-24JUN11 – Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek closed on July 8, 2011. Two proposal responses were received.

The evaluation committee consisted of the following:

Georganne Bowman, Boone County Stormwater Coordinator
Bill Florea, Boone County Senior Planner
Tom Wellman, City of Columbia Stormwater Engineer

The evaluation committee recommends award to Geosyntec Consultants per their attached Evaluation Report. The Contractor is going to provide the County with five (5) scope of service tasks over the course of the next three years during this study. There will also be an optional task as outlined in Geosyntec's Best and Final Offer Proposal 2 to be used at the County's discretion. If the optional task is not utilized there will be no additional charge for Boone County.

Task 1: Guide Quality Assurance Project Plan Development	\$19,144.00
Task 2: Coordinate and Support Laboratory Data Analysis	\$46,760.00
Task 3: Data Management and Review	\$33,812.00
Task 4: Quality Assurance Oversight and Management	\$30,780.00
Task 5: Annual Summary Reports	\$25,864.00

Total Not to Exceed \$156,318.00

Optional Task: Urban Storm water Modeling Workshop Case Study \$37,870.00

This contract will be paid from department 2140 – DNR 319 Urban Retrofit Grant, account 71100 – Outside Services..

ATT: Evaluation Report & Proposal Tabulation
cc: Proposal File /

ATT: Evaluation Report & Proposal Tabulation

cc: Proposal File /

Evaluation Report for Request for Proposal

22-24JUN11 – Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed

OFFEROR #1: Geosyntec

- It has been determined that **Geosyntec** has submitted a **responsive** proposal meeting the requirements set forth in the original Request for Proposal.
- It has been determined that **Geosyntec** has submitted a **non-responsive** proposal.

Method of Performance

Strengths:

- In Task 3 of the Proposal: Will use MS Access for database which, the County already owns and maintains and would be something that is transferable. This is important because there will be no added expense to the County to use and/or share the information generated by the contractor.
- In Task 3 of the Proposal: Contractor will be responsible for data entry. This is important to the County because we lack the resources to do this in-house.
- Local staff are located in the study watershed, therefore response time is optimized. This is important because sample quality and analysis may be negatively impacted by delayed response time.
- Local staff will be available for four troubleshooting and quality assurance audits. These audits will help to make sure Boone County has defensible sample data.
- Geosyntec's proposal includes plans for quality assurance reporting that will be beneficial for project partners to conduct project monitoring and assessment. This process makes it easier for Boone County to demonstrate project success to Department of Natural Resources. Department of Natural Resources is the source of project funding.

- Geosyntec's proposed model Stormwater Management Model (SWMM) is stormwater specific. This is a benefit to Boone County because it provides modeling for stormwater volume reduction as well as pollutant reduction. (StepL is not specific to stormwater and is mainly limited to a small number of pollutants nor can StepL model stormwater flow.)
- SWMM being non-proprietary is beneficial because it is readily available for at no additional cost.
- The approach proposed by Geosyntec is clear and provides a concrete plan of action for this project.
- The Geosyntec proposal promises a quick turn around on the that they will give to Boone County. This is a critical element for subsequent tasks which, helps to meet project timelines.
- Geosyntec can provide SWMM modeling training to engineers (pg 10-3). This will help the community migrate to continuous simulation modeling and Best Management Practices (BMP) design and analysis.
- The consultant has a good understanding of the project goals and purpose. This is demonstrated by the proposed list of pollutants that would be monitored at the Grissum site.

Concerns:

- References for the ES&S Lab.
 - Per BAFO: References were provided. Item Resolved
- Is 5 events per BMP enough replication? We originally thought 20 per BMP. Revise the proposal to reflect 20 events per BMP.
 - Per BAFO: Updated sampling plan was submitted in the BAFO. Unfortunately we did not make it clear that we are only looking at sampling 3 of the BMPs, not all 6. Therefore the GeoSyntec proposal cost could be reduced by \$36,000.
- The RFP is only concerned with one sub watershed at Sunrise Estates not three as stated in the proposal. Revise the proposal to reflect the RFP.
 - Per BAFO: This change has been reflected in the BAFO, reducing project costs (-\$11,745) in this area. Resolved

Experience/Expertise of Offeror

Strengths:

- In Task 1 of the Proposal: The vendor has developed numerous QAPP (at least two in Missouri under Department of Natural Resources guidelines) and has several team members with relevant experience.
- In Task 3 of the Proposal: Has extensive database creation and management experience. Reference experience listed on Geosyntec Proposal page (3-4)
- In Task 4 of the Proposal: The vendor demonstrates extensive QA/Quality Control (QC) experience and sound internal procedures. Reference page (7-1) Representative Projects.
- Geosyntec has completed several local projects and has demonstrated experience working in Mid-Missouri soils, climate, geology, etc. Reference page (7-1).
- Firm has extensive familiarity with International BMP Data base. This will help ensure that the studies will be incorporated into the BMP database.
- The Geosyntec proposal shows that local staff have the proper education and experience to complete the project. For instance the vendor has a Hydrologist on site.
- Previous experience using the hydrology and hydraulic models. Reference (7-1) Hydrologic Modeling also ref (10-3) Urban Stormwater Modeling.

Concerns:

- Training may or may not be a strength.
 - Per BAFO: Although one person is not identified for training efforts, several examples are given (LOWA volunteers, annual updates for other 319 projects, etc.) Item Resolved
- The cost for reports is high (\$34,000).
 - Per BAFO: BAFO identifies Annual reports (60 hours), and
 - Per BAFO: Quarterly reporting assistance (14 hours).
 - Item Resolved

- **OFFEROR #2: Civil & Environmental Consultants, Inc.,**

X It has been determined that **Civil & Environmental Consultants, Inc.,** has submitted a **responsive** proposal meeting the requirements set forth in the original Request for Proposal.

 It has been determined that **Civil & Environmental Consultants, Inc.,** has submitted a **non-responsive** proposal.

Method of Performance

Strengths:

- Web accessibility of database would be good. Also the basis for the database is specific to stormwater, which might enhance its utility. This would be good for passing information on to stake holders.
- In Task 4 of the RFP: the Proposal includes detailed information about dealing with anomalous data and the company's ability to respond to concerns or questions about the data. This adds to confidence in the results.
- Internal peer review of projects is a plus and it's good that the company's work is peer reviewed regularly by outsiders.

Concerns:

- In Task 3 of the RFP: Requires purchase of MS4 Web software that would continue after the project if the County wanted to maintain the database. This requires expenditure of \$18,000 just for software modification plus \$1200 per year for subscription. This is a concern because the county could get locked into a software program that does not meet our needs, and that the County would have to pay for annually.
- There is a lot of time proposed for QAPP development with resultant high cost for this task. This is a concern because the QAPP is a primary objective with many other requirements hinging on the approval of that document. If it takes 3-6 weeks to develop a draft, then other water quality monitoring cannot commence.

- STEPL modeling with national data input will not yield accurate local results in output. The concern being that many local engineers and developers require local data that uses our climate and soils to evaluate and design functioning BMPs. StepL is mainly useful for agricultural or individual homeowner practices to estimate sediment capture, and nutrients. Because we are looking more at hydrology and reduction of stormwater volume, StepL is not the best choice. Justify the choice of STEPL model as opposed to other stormwater volume reduction models.
- Task 6 of this Proposal: Does not include parameters as specified in the RFP but does include sample collection which was not requested.
- The Sunrise Estates portion of the project is the more difficult to monitor and model. Appendix B of the Civil & Environmental Consultants, Inc. BAFO outlines an approach to monitor 4 BMPs at the Sunrise Estates Subdivision. Each BMP will be equipped with flow meters to measure the amount of water entering and leaving the BMP. Additionally a lysimeter will be used to estimate soil storage. Evapotranspiration will be indirectly estimated. The low replication of this study and high cost concerns the county. Civil & Environmental Consultants, Inc. is not focusing on looking at the cumulative affects of installing multiple BMPs in a small watershed.
- QAPP and monitoring suggest Total Suspended Sediment (TSS), Ammonia and Nutrients. With the exception of TSS, these parameters are not appropriate for sampling at the commercial (Grissum) site. Metals are more appropriate for parking lots. The use of these parameters meshes with the use of the StepL, Neither are appropriate for commercial sites.
- Project does not address hydrologic monitoring at Sunrise Estates. This is a concern because the Sunrise Estates portion of the project is the more difficult to monitor and model. Provide information on meeting the objective of measuring volume reduction at Sunrise Estates. Provide experience with direct measuring of volume reduction including evapotranspiration and soil moisture.

- In Task 3 of the Civil & Environmental Consultants proposal it is not clear who will be responsible for data entry. This is a concern because the County does not currently have the staff resources for data entry. Who is responsible for data entry?
 - Per BAFO: The BAFO clearly stated that Civil & Environmental Consultants will perform data entry. Item Resolved
- Civil & Environmental Consultants, Inc. did not identify a lab for WQ sampling. This is a concern because a reputable lab must be used to maintain accurate and precise water quality sampling results. Identify and provide references for the lab that will perform the water quality analysis.
 - Per BAFO: The BAFO identified ES&S as the lab that will perform the water quality sampling. This is the same lab identified in the GeoSyntec proposal. Item resolved.
- There seem to be hidden costs in the project and the budget is not itemized. Consultant should provide a detailed, itemized budget.
 - Per BAFO: Budget was provided in the BAFO. Item resolved
- No not to exceed cost amount for the entire proposal. Need a break out each of the options proposed in task 5.
 - Per BAFO: The BAFO provided a not to exceed amount. Item resolved
- Consultant should provide the Costs/staff member or Rate Schedule
 - Per BAFO: Rate Schedule provided in BAFO. Item resolved

Experience/Expertise of Offeror

Strengths:

- In Task 1 of the Proposal: The consultant demonstrates experience developing QAPPs.
- Prior experience with 319. Therefore the consultant would understand reporting requirements.

Concerns:

- This proposal does not illustrate that they have developed a water Quality Monitoring Plan. It is not clear that local staff have experience with pertinent equipment or monitoring. All examples are from Tennessee staff.
- Staff in St Louis who will be managing the project are mainly engineers, chemists, and one certified professional in erosion and sediment control (CPESC). They don't have any scientists/hydrologists on staff. This is a concern because we are paying for their expertise. This seems lacking in the St Louis office.
- StepL only looks at load reductions for nutrients and sediment. Metals would be more appropriate for the Grissum site. Concern that they don't have a good grasp of the entire project, they are using models that are basic and will not meet the project objectives
- Task 1: Not clear in the Proposal if Civil & Environmental Consultants have developed QAPPs in Missouri under DNR guidelines. This project requires a level 1 or level 2 QAPP. Provide examples of previous Missouri level 2 QAPPs approved by EPA or DNR.
 - Per BAFO: Although the examples provided do illustrate that they have developed previous QAPPS, including one for DNR, it is not clear that a level 2 QAPP was done. We were unable to find the referenced document on the Department of Natural Resources or CEC website. Not resolved
- The local staff have mainly conducted sediment monitoring, and grab sampling for water quality. This is a concern because they may not be familiar with many of the hydrologic monitoring equipment required to monitor Sunrise Estates.
 - Per BAFO: It was not clear that local staff have experience with this equipment or monitoring. All examples are from Tennessee. Unsatisfactory
- This proposal does not illustrate that they have developed a Water Quality Monitoring Plan.
 - Per BAFO: It was not clear that local staff have experience with this equipment or monitoring. All examples are from Tennessee. Unsatisfactory

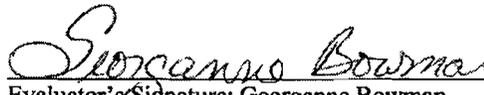
- There is a small window response requirement between notification of a problem and arrival on site. Can Civil & Environmental Consultants, Inc. meet that requirement?
 - Per BAFO: They are looking at a 2-3 hour response time. Possibly hiring a local technician. Resolved
- The consultant doesn't seem to have training experience—especially those in the St. Louis office. Who will be doing the training? Provide examples of experience.
 - Per BAFO: Trainers identified are competent, although again none of the examples provided are in Missouri. Resolved

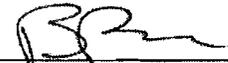
Summary:

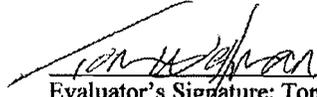
The Civil & Environmental Consultants, Inc. proposal does not clearly give detail on the correct sampling parameters, misses some of the sampling objectives (cumulative effects of Best Management Practices on a small watershed), may cause project delays in QAPP development, suggests the use of the STEPL BMP model which does not meet data objectives for hydrologic and stormwater volume reductions, recommends use of proprietary MS4 database which will include an annual fee, and has a considerably higher financial cost than the grant project budget.

The GeoSyntec project hits all of the primary requirements, provides ample experience for QAPP development, includes a more representative list of sampling parameters, involves project staff with extensive Water quality monitoring experience, and demonstrates familiarity with national Best Management Practices databases.

Geosyntec's Proposal provides superior deliverables (ACCESS database, SWMM Model, and QAPP in 2 weeks) at a lower cost.


Evaluator's Signature: Georganne Bowman Date 8/9/11


Evaluator's Signature: Bill Florea Date 8/9/11


Evaluator's Signature: Tom Wellman Date 8/9/11

EVALUATION POINTS

PURCHASING DEPARTMENT - BOONE COUNTY - MISSOURI

22-24JUN11 - Urban Retrofit Monitoring of Stormwater Practives in Hinkson Creek Watershed

NAME OF OFFEROR	Method of Performance (20 points)	Experience/Expertise of Contractor (30 points)	TOTAL SUBJECTIVE POINTS (50 pts.)	COST POINTS (50 pts.)	TOTAL POINTS (Max 100 pts.)
Geosyntec	18	27	45	50	95
Civil & Environmental Consultants, Inc.	12	17	29	37	66

We hereby attest that the subjective points assigned to each offeror above were scored pursuant to the established evaluation criteria and represent our best judgement of the subjective areas of the offerors' proposals. We have attached a brief narrative which highlights some, but not necessarily all, of the reasons for our evaluation of the proposals as indicated by the scores above. Our comments represent our opinions only and do not represent the position of the Purchasing Department of Boone County, Missouri, our any other party.

Georganne Bowman
 Evaluator's Signature Date
 Georganne Bowman BCRM

Bill Florea 8/9/11
 Evaluator's Signature Date
 Bill Florea BCRM

Tom Wellman 8/9/11
 Evaluator's Signature Date
 Tom Wellman Columbia MO

**PURCHASE AGREEMENT FOR
Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek
Watershed**

THIS AGREEMENT dated the 6 day of December 2011 is made between Boone County, Missouri, a political subdivision of the State of Missouri through the Boone County Commission, herein "County" and **Geosyntec Consultants**, herein "Contractor."

IN CONSIDERATION of the parties performance of the respective obligations contained herein, the parties agree as follows:

1. **Contract Documents** - This agreement shall consist of this Purchase Agreement for **Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed**, County of Boone Request for Proposal for Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed, proposal number **22-24JUN11** including Instructions and General Conditions, Introduction and General Information, Scope of Services, Proposal Submission Information, the unexecuted Response Page, Exhibit A, Exhibit 1, Work Authorization Certification, Attachment B, Addendum Number One, Clarification Number One, Project Overview as well as the Contractor's proposal response dated July 08, 2007, executed by Trent Stober, on behalf of the Contractor. All such documents shall constitute the contract documents, which are attached hereto and incorporated herein by reference. Service or product data, specification and literature submitted with proposal response may be permanently maintained in the County Purchasing Office proposal file for this proposal if not attached. In the event of conflict between any of the foregoing documents, the terms, conditions, provisions and requirements contained in this Purchase Agreement, the proposal specifications including Instructions and General Conditions, Introduction and General Information, Scope of Services, Proposal Submission Information, Addendum Number One, Clarification Number One, and the unexecuted Response Page shall prevail and control over the Contractor's proposal response.

2. **Purchase** - The County agrees to purchase from the Contractor and the Contractor agrees to furnish and deliver services to provide Guidance of Quality Assurance Project Plan Development, Coordinate and Support Laboratory Data Analysis, Data Management and Review, Quality Assurance Oversight and Management, and Annual Summary Reports for the Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed Program. Services shall begin November 2011 and end in December 2013. **Total compensation for the above services shall not exceed the agreed upon sum of One Hundred Fifty Six Thousand Three Hundred Eighteen Dollars (\$156,318.00)**

194,188

The County may utilize Optional Task 1. Urban Stormwater Modeling Workshop Case Study services as outlined in the Project Overview at a total cost of **Thirty Seven Thousand Eight Hundred and Seventy Dollars (\$37,870.00)**. If Optional Task 1 is not utilized, there will be no additional cost to the County.

3. **Billing and Payment** - All billing shall be invoiced to the Boone County Resource Management Department, and may only include the prices as identified in the Contractor's proposal response. No additional fees for delivery or extra services or taxes shall be included as additional charges in excess of the charges in the Contractor's proposal response to the specifications. The County agrees to pay all Monthly Statements within thirty days of receipt of a correct statement; Contractor agrees to honor any cash or prompt payment discounts offered in its bid response if County makes payment as provided therein. In the event of a billing dispute, the County reserves the right to withhold payment on the disputed amount; in the event the billing dispute is resolved in favor of the Contractor, the County agrees to pay interest at a rate of 9% per annum on disputed amounts withheld commencing from the last date that payment was due.

4. **Binding Effect** - This agreement shall be binding upon the parties hereto and their successors and assigns for so long as this agreement remains in full force and effect.

5. **Entire Agreement** - This agreement constitutes the entire agreement between the parties and supersedes any prior negotiations, written or verbal, and any other bid or bid specification or contractual agreement. This agreement may only be amended by a signed writing executed with the same formality as this agreement.

6. **Termination** - This agreement may be terminated by the County upon thirty days advance written notice for any of the following reasons or under any of the following circumstances:

- a. County may terminate this agreement due to material breach of any term or condition of this agreement, or
- b. County may terminate this agreement if in the opinion of the Boone County Commission if delivery of products are delayed or products delivered are not in conformity with bidding specifications or variances authorized by County, or
- c. If appropriations are not made available and budgeted for any calendar year.

IN WITNESS WHEREOF the parties through their duly authorized representatives have executed this agreement on the day and year first above written.

GEOSYNTEC CONSULTANTS

By: LA [Signature]

Title: Principal

BOONE COUNTY, MISSOURI

By: Boone County Commission

[Signature]
Daniel K. Atwill, Presiding Commissioner

APPROVED AS TO FORM:

[Signature]
County Counselor

ATTEST:

[Signature]
Wendy S. Noren, County Clerk

AUDITOR CERTIFICATION

In accordance with RSMo 50.660, I hereby certify that a sufficient unencumbered appropriation balance exists and is available to satisfy the obligation(s) arising from this contract. (Note: Certification of this contract is not required if the terms of this contract do not create a measurable county obligation at this time.)

[Signature]
Signature

11/21/11
Date

2140 / 71100 - \$194,230

Appropriation Account

Attachment A

Cost Estimate for Hinkson Creek BMP Investigation Support Boone County, Missouri Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed

	Rate (\$/unit)	Unit	Number of Units per each Scope of Work							Total Units	Total Cost
			Task 1	Task 2	Task 3	Task 4	Task 5	Optional #1			
Professional Costs:											
Principal	198	hour	7	2	4	6	10	36	65	\$12,870	
QA/H&S Officer	155	hour	2	8	8	8	18		44	\$6,820	
Supervising Engineer	152	hour						36	36	\$5,472	
Managing Hydrologist	148	hour	35	28	65	95	96	45	364	\$53,872	
Stormwater Data Manager and Modeler	128	hour	95		90	105	50	135	475	\$60,800	
Hydrologic Specialist	112	hour		6	95				101	\$11,312	
Staff Scientist	98	hour									
Project Assistant	54	hour	2	3		15	9	5	34	\$1,836	
Subtotal			\$19,144	\$6,614	\$33,812	\$30,738	\$25,864	\$36,810	1,119	\$152,982	
Non-Professional Direct Costs:											
Per Diem	40	day						4	4	\$160	
Mileage	0.60	mile						1,500	1,500	\$900	
Equipment BMP WQ	3037	year									
Equipment - Flow	1543	**year									
Equipment - Climate	3033	**year									
Printing	Direct										
Laboratory WQ Analysis	\$236	Samples		170					170	\$40,146	
Subtotal			\$0	\$40,146	\$0	\$0	\$0	\$1,060	\$1,674	\$41,206	
Total			\$19,144	\$46,760	\$33,812	\$30,738	\$25,864	\$37,870	\$194,188	\$194,188	

Project Overview

Boone County, Missouri (County) is embarking on a multi-year evaluation of urban Best Management Practices (BMPs) in the Hinkson Creek watershed to advance scientific and stakeholder understanding of stormwater management. Two locations are currently identified by the County for stormwater and BMP evaluations. The first site is a 200 unit residential site (Sunrise Estates) located approximately 5 miles east of Columbia, Missouri. Urban BMP evaluations at Sunrise Estates are proposed to include measurement of runoff and infiltration assessments to characterize hydrograph changes in response to distributed BMPs designed and implemented by the County. The second site is a 10 acre, municipal complex (Grissum Building) in Columbia, Missouri. Up to 3 structural BMPs may be constructed and outfitted with monitoring equipment at the Grissum Building to support input-output (by pollutant mass) treatment evaluations to quantify performance. To support the County's ongoing commitment to sustainable resource management, Geosyntec Consultants (Geosyntec) will conduct the following Project Scope of Services associated with RFP22-24JUN11 (RFP) titled "Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed".

Geosyntec proposes to schedule a project kick-off meeting with the County and project partners within one week of project initiation (pending schedules of attendees) to coordinate several near-term informational needs including:

- Establishing project goals, objectives, and collaborative expectations;
- Identifying critical project implementation paths;
- Evaluating Quality Assurance Project Plan (QAPP) elements (e.g., data quality objectives etc.); and
- Assisting the County in developing experimental designs and identifying compatible monitoring equipment.

Addressing these items at the beginning of the project will improve the opportunity for project partners to meet project schedules. This Scope of Services describes the minimum set of recommended tasks that will improve BMP performance knowledge in the Hinkson Creek watershed. Optional tasks include services that may be useful to the County in furthering stormwater management and education objectives.

SCOPE OF SERVICES

Task 1. Guide Quality Assurance Project Plan Development

Geosyntec will develop a QAPP to guide hydrologic and water quality data collection activities at two locations; Grissum Building and Sunrise Estates. Geosyntec will coordinate with the County to identify an experimental design, monitoring program, and data quality procedures to be undertaken by the County. As part of Task 1, Geosyntec will provide guidelines to the County in selecting appropriate monitoring equipment to be installed and maintained by the County. Explicit selection of monitoring equipment for placement within a specified BMP is included as an optional task pending the availability of engineering designs and runoff characteristics provided by the County. Task 1 includes one meeting in the Columbia area to discuss monitoring frameworks with stakeholders identified by the County. The deliverable for Task 1 includes a QAPP authored by Geosyntec. It is understood that the County will responsively provide supporting information (i.e., watershed characteristics, preliminary runoff estimates etc.) as requested by Geosyntec to support QAPP development. Task 1 includes a maximum of one revision in response to agency comments.

Task 2. Coordinate and Support Laboratory Data Analysis

As part of the Geosyntec project team, Engineering Surveys and Services will provide laboratory analytical services for BMP performance monitoring at the Grissum Building and runoff samples at Sunrise Estates. All laboratory samples will be collected and transported by Boone County personnel. Critical site data, including watershed areas and event discharge, will be provided to Geosyntec by the County to support quality assurance oversight activities. BMP performance data and laboratory analytical results will be reviewed and managed by Geosyntec under Task 3. Quality assured laboratory datasets will be provided to the County on a quarterly basis. In providing Task 2 laboratory services, the following sample requirements were assumed for cost-estimating purposes:

- One preliminary runoff sample for the Grissum site to confirm parameter detection;
- A maximum of 20 paired (input + output) samples for each of 3 structural BMPs at the Grissum site;
- The following analytical parameters and requirements are appropriate for the Grissum site;

Parameter	Method	Reporting Limit
Total Copper	EPA 6020A	5 µg/L
Total Lead	EPA 6020A	5 µg/L
Total Zinc	EPA 6020A	5 µg/L
Total Dissolved Solids	SM 2540C	1 mg/L
Oil & Grease	EPA 1664A	1 mg/L
Total Phosphorus	SM 4500PE	50 µg/L
Total Nitrogen	SM 4500N & EPA 354.1	1 mg/L
Total Suspended Solids	SM 2540D	1 mg/L
Volatile Suspended Solids	SM 2540E	1 mg/L
Chemical Oxygen Demand	SM 5220D	10 mg/L

- Two grab sampling events (spring and late fall) at one location at Sunrise Estates to demonstrate runoff characteristics with respect to the following parameters listed below; and

Parameter	Method	Detection Limit
Total Phosphorus	SM 4500PE	50 µg/L
Total Nitrogen	SM 4500N & EPA 354.1	1 mg/L
Total Suspended Solids	SM 2540D	1 mg/L
<i>E. coli</i>	SM 9223	*1 – 2400 mpn / 100 mL

*quantification range without dilution

- A ten percent quality assurance sample rate (10% field blanks and blind duplicates).

Geosyntec will work with the County during QAPP development (Task 1) to identify criteria for sampling events. It is understood that collection and delivery of representative samples to the analytical laboratory within holding times and hours of operation is the responsibility of the County. Geosyntec notes that collection of 20 paired samples for one BMP will take approximately one year to complete. Thus, obtaining 20 samples for 3 BMPs in less than three years may require deployment of at least four automated samplers.

Task 3. Data Management and Review

Geosyntec will validate and manage field and laboratory data associated with BMP performance investigations at the Grissum building. Laboratory data generated at the Grissum site will be reviewed in a timely manner following data receipt from laboratory partners to support adaptive corrective action, where necessary. On a quarterly basis, Geosyntec will provide updated BMP performance datasets to the County in Microsoft Excel formats, and also review data collected at Sunrise Estates. As needed, Geosyntec will coordinate corrective actions with the County as specified by the QAPP.

Task 4. Quality Assurance Oversight and Management

In coordination with the County, Geosyntec will provide quality assurance and project management support throughout the duration of the project. Proposed quality assurance activities include four random field audits and nine random reviews of field sheets and chain of custody forms. Field audits will include trips with County personnel to study sites to observe and potentially replicate samples taken for independent confirmation of measurements. Geosyntec will provide support to the County in the form of suggested data quality procedures during QAPP development. Task 4 includes preparation and attendance of a maximum of two meetings in the Columbia area to coordinate quality assurance activities.

Task 5. Annual Summary Reports

Geosyntec will prepare two annual summary reports that document quality assurance metrics (e.g., precision, accuracy, representativeness etc.) achieved by hydrologic and water quality datasets. Results from field audits will also be summarized. Data interpretation in Task 5 will be limited to analysis necessary to support quality assurance evaluations and assess general BMP performance. Task 5 includes attendance of a maximum of two meetings in the Columbia area to discuss quality assurance results.

OPTIONAL SCOPE OF SERVICES

The following optional tasks listed below may be useful to the County in furthering stormwater assessment and training objectives.

Optional Task 1. Urban Stormwater Modeling Workshop Case Study

In coordination with the County, Geosyntec will support an urban stormwater workshop during the project. The workshop would feature discussion of set-up and calibration of the EPA Stormwater Management Model (SWMM) by Geosyntec to data collected at the Sunrise Estates subdivision by Boone County. Geosyntec proposes a workshop length of 2 days in the Columbia area. At the direction of the County, workshop format may include a mixture of lecture along with the case study tutorial using the SWMM model. Optional Task 1 assumes that tutorial participants will provide their own computers capable of running SWMM and Microsoft Excel. The modeling component would focus primarily on watershed hydrology and hydraulics of BMPs, but would also include a water quality component. At the request of the County, the workshop can also include evaluation of runoff attenuation by BMPs and establishment of baseline conditions at Sunrise Estates.

Optional Task 2. Monitoring Equipment Training

To support BMP performance monitoring at Sunrise Estates and the Grissum Building, Geosyntec will provide guidance and assistance to County personnel in installing and programming hydrologic and water quality instrumentation. The primary focus of optional Task 2 is to assist the County in successfully installing paired input-output samplers at the Grissum Building.

Optional Task 3. Structural BMP Performance Modeling at Grissum Building

Geosyntec will develop a calibrated stormwater quality model to predict treatment performance (hydrologic and water quality) for a maximum of two BMPs at the Grissum Building. Data needed to support calibration of the models at the Grissum building provided by the County may include input-output flow timeseries, event mean water quality concentrations, surface and subsurface conveyance systems, BMP engineering specifications, and high resolution topography. Local data (i.e., Sanborn Field and Columbia Regional Airport precipitation gages) will be used to represent climate regimes in the model. Information obtained from this task will allow the County to more accurately predict water quality improvements achievable through BMP implementation elsewhere in mid-Missouri. Optional Task 3 includes a brief report documenting BMP modeling results.

Optional Task 4. Explicit Specification of BMP Performance Measurement Systems

As requested by the County, Geosyntec will explicitly specify monitoring equipment needed to evaluate BMP performance and effectiveness. Explicit selection of monitoring equipment or formal review of proposed data capture systems requires the County provide Geosyntec the detailed site-level engineering design for each BMP to be monitored. Geosyntec understands that site-level BMP designs may not be completed prior to QAPP development (Task 1). While the QAPP produced under Task 1 will contain guidance in selecting monitoring equipment, Geosyntec understands that the County may request formal review of equipment selection prior to installation. The intent of Optional Task 4 is to provide a formal review or specification of proposed measurement systems based on the unique hydraulic features and setting of each BMP when site-level design information becomes available.

Optional Task 5. Hydrologic or Water Quality Sampling

As requested by the County, Geosyntec will provide hydrologic and water quality sampling services to support BMP investigations. These services could include but are not limited to equipment installation or troubleshooting, storm-event stream gaging (winch & reel), primary flow structure installation, flow monitoring, and water quality sampling.

Project Compensation

Geosyntec offers this scope of services on a time and materials, not-to-exceed basis in accordance with the rate schedule effective at the time services are rendered. Our not-to-exceed estimate for the project scope of services is \$156,318. At the request of the County, Geosyntec's estimate for Optional Task #1 is \$37,870. Estimates for other Optional services will be provided at the request of the County.

Project Period of Performance

The scope of services proposed and described above assumes a two-year project schedule beginning in October 2011 and concluding in Fall of 2013. All reporting and optional deliverables will be provided to the County by November 2013 to support project completion timeframes (February 2014) included in the Request for Proposal.

Considerations for Field Monitoring Services

Geosyntec strives to accommodate the needs and schedules of our clients. However, uncontrollable or unforeseen climatic events may delay collection of defensible and representative data. Geosyntec is not liable for project schedule delays or project costs resulting from uncontrollable climatic events or sampling activities by project partners that render samples non-representative. In preparing this scope of services, Geosyntec is not tasked with developing BMP or flow structure engineering designs, or conducting sampling activities.

Landowner Access for Field Monitoring Services

The County or their representative shall coordinate and obtain necessary landowner permissions to allow legal access by Geosyntec for all field monitoring equipment installation, sampling, or auditing oversight activities.

Monitoring Equipment Provisions

Under the optional tasks, Geosyntec will assist the County in deploying hydrologic and water quality monitoring systems. In preparing this proposal, Geosyntec assumes the County will be responsible for the cost of renting or purchasing equipment required to conduct all monitoring activities. A list of monitoring equipment available for rental from Geosyntec is provided as Attachment B.

Project Schedule

Geosyntec proposes to meet with the County within one week of project initiation to kick-off project discussions. Timelines for approval of the final QAPP are dependent on Agency review schedules. Geosyntec is committed to aggressively implementing this project and will strive to meet the Schedule of Milestones wherever and whenever possible, understanding that some limitations (e.g., equipment shipping, QAPP approval, BMP design and installation, and weather delays) are uncontrollable.

Attachment A

**Cost Estimate for Hinkson Creek BMP Investigation Support
Boone County, Missouri
Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed**

	Rate (\$/unit)	Unit	Number of Units per each Scope of Work							Total Units	Total Cost
			Task 1	Task 2	Task 3	Task 4	Task 5	Optional #1			
Professional Costs:											
Principal	198	hour	7	2	4	6	10	36	65	\$12,870	
QA/H&S Officer	155	hour	2	8	8	8	18		44	\$6,820	
Supervising Engineer	152	hour						36	36	\$5,472	
Managing Hydrologist	148	hour	35	28	65	95	96	45	364	\$53,872	
Stormwater Data Manager and Modeler	128	hour	95		90	105	50	135	475	\$60,800	
Hydrologic Specialist	112	hour		6	95				101	\$11,312	
Staff Scientist	98	hour									
Project Assistant	54	hour	2	3		15	9	5	34	\$1,836	
Subtotal			\$19,144	\$6,614	\$33,812	\$30,738	\$25,864	\$36,810	1,119	\$152,982	
Non-Professional Direct Costs:											
Per Diem	40	day						4	4	\$160	
Mileage	0.60	mile						1,500	1,500	\$900	
Equipment BMP WQ	3037	year									
Equipment - Flow	1543	**year									
Equipment - Climate	3033	**year									
Printing	Direct										
Laboratory WQ Analysis	\$236	Samples		170					170	\$40,146	
Subtotal			\$0	\$40,146	\$0	\$0	\$0	\$1,060	\$1,674	\$41,206	
Total			\$19,144	\$46,760	\$33,812	\$30,738	\$25,864	\$37,870	\$194,188	\$194,188	

Attachment B

Instrument	Daily Rates	Weekly Rates	Monthly Rates
Sondes			
YSI 600 OMS Multiparameter Sonde	\$140	\$410	\$1,210
YSI 600 XLM Multiparameter Sonde	\$100	\$300	\$880
YSI 6920 Multiparameter Sonde (1Optical Port)	\$110	\$320	\$950
YSI 6920 V2 Multiparameter Sonde (2 Optical Ports)	\$110	\$310	\$930
YSI 6600 Multiparameter Sonde	\$120	\$340	\$1,020
YSI 85D	\$30	\$80	\$220
Sonde Accessories			
YSI 650 MDS	\$50	\$140	\$420
YSI 8 ft field cable	\$10	\$20	\$60
YSI 25 ft field cable	\$10	\$30	\$70
YSI 50 ft field cable	\$10	\$30	\$90
YSI 100 ft field cable	\$20	\$40	\$100
YSI 125 ft field cable	\$20	\$40	\$110
Other Sensors and Meters			
pH Pen	\$10	\$10	\$20
Oakton pH, Temp, Cond Meter	\$10	\$30	\$90
Hanna pH meter	\$10	\$20	\$60
Turbidity Meter	\$20	\$50	\$140
Light Meters	\$10	\$10	\$10
Hydrologic Monitoring Equipment			
Wading Rod	\$10	\$30	\$70
Gurley 1100 digital velocity indicator	\$20	\$60	\$170
Aquacalc	\$40	\$100	\$300
Pygmy Meter	\$10	\$30	\$90
Price AA meter	\$20	\$60	\$170
15ft Sensor Head Assembly	\$10	\$20	\$40
SonTek Flow Tracker ADV	\$140	\$420	\$1,240
SonTek 1 Mhz ADP	\$330	\$980	\$2,920
Trimble Ag300 DGPS	\$60	\$170	\$500
Trimaran hull for ADP	\$40	\$120	\$340
DH-81 Depth Integrated Sampler	\$10	\$30	\$80
Plasti-Fab XL 60° V Trapezoidal Flume	\$20	\$50	\$150
Hach/Sigma 910 Flowmeter w/ AV probe	\$70	\$210	\$620
Level and Baro Loggers			
Solinst Gold 3000 Levellogger	\$20	\$40	\$100
Solinst Gold 3000 Barologger	\$10	\$30	\$90
Automatic Water Samplers			
Sigma 900 max (built-in flow meter, no sensors)	\$90	\$250	\$750
Sigma 900 max (no sensors)	\$50	\$140	\$400
Pumps			
Cole Parmer Masterflex L/S	\$10	\$30	\$90
Geotech Geopump Easyload II	\$20	\$50	\$150

July 22, 2011

Mr. Tyson Bolden, Buyer
Boone County Purchasing
601 E. Walnut Street, Room 209
Columbia, MO 65201

Subject: Response to Best and Final Offer (BAFO) Request in association with Request for Proposal (RFP) #22-24JUN11 titled "Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed" by Geosyntec Consultants (Vendor #2745)

Dear Mr. Bolden:

Geosyntec is pleased to provide clarification of proposal items and qualifications to support Boone County's (County) Best Management Practice (BMP) assessment objectives. Our response is itemized according to the BAFO request dated July 20, 2011. If selected, we are quite willing to make further adjustments as project goals and objectives are refined further.

1.1. We originally thought 20 per BMP. Revise the proposal to reflect 20 events per BMP.

Response: We appreciate the County's clarification of this data quality objective. A sample size of 20 events (including quality assurance samples) will yield a laboratory analytical cost of \$12,000 (per BMP, per year) for the input-output suite of parameters identified in our proposal. We have adjusted our proposal to reflect a total of 20 sampling events for each of six BMPs for a single monitoring year (20 events per BMP). A revised project budget is included as Attachment A. We offer the following two comments in response to Item 1.1: (1) final sample size may be influenced by data quality objectives identified during the Quality Assurance Project Plan (QAPP) review process; and (2) the County will likely need to acquire several automated samplers to obtain 20 paired samples from six BMPs over a 2 – 3 year project period. We look forward to collaboratively identifying an optimized monitoring approach with the County that makes best use of available resources.

1.2 The RFP is only concerned with one sub-watershed at Sunrise Estates not three as stated in the proposal. Revise the proposal to reflect the RFP.

Response: We appreciate the County's clarification of this sampling process design requirement. We have adjusted our Task 5b cost-estimate (Attachment A) downward to reflect the installation assistance, data validation, and scale identification effort for a single open-conduit gaging station in lieu of multiple stations. In our response, we offer that selection of an appropriate gaging location (and scale) is critical to effectively measuring the hydrologic signature of distributed on-site BMPs. We look forward to identifying an appropriate gaging location with the County so that retained runoff volumes are successfully measured.

2.1 Give three references for the ES&S Lab.

Response: Please find below the requested references for the ES&S laboratory.

Phil Webster	Clara Haenchen	Sarah Keith
City of Sedalia	City of Jefferson	Tyson Foods
200 South Osage	320 East McCarty Street	20001 Menefee Road
Sedalia, MO 65301	Jefferson City, MO 65101	Sedalia, MO 65301
660-827-3000	573-634-6440	

2.2 Who will be doing the training? Provide examples of experience.

Response: Geosyntec scientists and engineers will directly lead all training efforts. Geosyntec is currently training and coordinating volunteers as part of the Lake of the Ozarks (LOWA) Section 319 monitoring project. In addition to LOWA, Geosyntec regularly provides annual update training to project partners in association with long-term monitoring projects including EWRAP, WRASP, and CEAP projects referenced in our proposal. Geosyntec also leads sampling training specified in QAPPs supporting our Superfund remediation projects. Several of Geosyntec's senior practitioners are adjunct or former faculty of major universities, including Dr. Wayne Huber who co-developed the EPA Stormwater Management Model (SWMM). We believe Geosyntec's mixture of university teaching experience and professional 'on the ground' insights provide the ideal training opportunity for the County to promote stormwater management in Central Missouri.

2.3 The cost for reports is high (\$34,000). Clarify products and deliverables.

Response: Geosyntec's proposed level of effort for Task 7 (reporting) includes the following deliverables as described below. Should the County have any additional questions regarding proposed deliverables, we refer to Page 10 - 10 in our proposal.

Annual Reports – Geosyntec proposes to author two annual summary reports (60 hours per report) that documents data quality (e.g., precision, accuracy etc.) and interprets BMP performance at both Sunrise Estates and the Grissum Building. Should the County require a less frequent or less intensive (i.e., limited interpretation) reporting effort, Geosyntec will consider an adjustment of our Task 7 cost estimate.

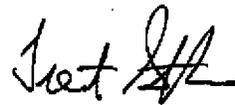
Quarterly Reporting Assistance – Geosyntec proposes to provide the County data summaries as necessary to fulfill 319 quarterly reporting requirements for a maximum of 12 quarterly reports. Geosyntec estimates each quarterly report contribution effort at 14 hours. Should the County require a less frequent or intensive reporting effort, Geosyntec will consider an adjustment of our Task 7 cost estimate.

Adjusted Cost Estimate

In this response, we propose to provide BMP monitoring, modeling, and stormwater training to Boone County, Missouri for a time and materials, not to exceed revised sum of \$250,466. In response to scope clarifications provided by the County, Task 5a was adjusted upward by \$45,989 and Task 5b adjusted downward by \$11,754.

We respectfully recommend the County weigh firm qualifications and client satisfaction over cost as the requested services are critical to overall project success. Our focus is providing Boone County with exceptional value by delivering Geosyntec's national and local expertise to address the unique challenges in the Hinkson Creek watershed. We demonstrated our client-focused approach to the County while developing comments on the Hinkson Creek Total Maximum Daily Load studies under very tight deadlines. In addition, we believe our experience and expertise in planning, designing, and monitoring urban stormwater BMPs provide valuable insights during the quality assurance planning process and study design optimization. Should you have any additional questions regarding our proposal please call Chris Zell or me at (573) 443-4100.

Sincerely,



Trent Stober, P.E.
Principal

Attachments (2)
Revised Project Cost Estimate for RFP 22-24JUN11
Best and Final Offer Form #1

ATTACHMENT A

Revised Project Cost Estimate in Response to Best and Final Offer Request Dated 07/20/2011

Boone County, Missouri

Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed

	Rate (\$/unit)	Unit	Number of Units per each Scope of Work										Total Units	Total Cost
			Task 1	Task 2a	Task 2b	Task 3	Task 4	Task 5a	Task 5b	Task 6	Task 7			
Professional Costs:														
Principal	198	hour	1	1	2	2	1	5	3	2	8	25	\$4,950	
QA/H&S Officer	155	hour	2			3	18	50	18			91	\$14,167	
Supervising Engineer	152	hour			54					5		59	\$8,968	
Managing Hydrologist	148	hour	8	4	6	35	40	34	26		120	273	\$40,404	
Database Manager	128	hour				80		118	77		112	387	\$49,485	
Hydrologic Specialist	112	hour	30	66		220	18	68	12	85		499	\$55,888	
Staff Scientist	98	hour												
Project Assistant	54	hour	2	6	6	6	6	6	6	6	6	44	\$2,376	
Subtotal			\$5,160	\$8,506	\$9,816	\$41,245	\$11,248	\$36,827	\$18,756	\$10,676	\$34,004	1,378	\$176,238	
Non-Professional Direct Costs:														
Per Diem	40	day			4			3	3			10	\$400	
Mileage	0.60	mile			3,000			15	80			3,095	\$1,857	
Printing	Direct													
Laboratory WQ Analysis	\$500	Paired Samples						144				144	\$71,971	
Subtotal			\$0	\$0	\$1,960	\$0	\$0	\$72,100	\$168	\$0	\$0	\$3,249	\$74,228	
Total			\$5,160	\$8,506	\$11,776	\$41,245	\$11,248	\$108,927	\$18,924	\$10,676	\$34,004	\$250,466	\$250,466	

- Task 1: Guide Quality Assurance Project Plan Development**
- Task 2a: Volunteer Monitoring Workshop**
- Task 2b: Urban Stormwater BMP Modeling Workshop**
- Task 3: Database Development and Management**
- Task 4: Quality Assurance Management & Oversight**
- Task 5a: BMP Retrofit Performance Monitoring at the Grissom Building**
- Task 5b: Runoff Attenuation Monitoring at Sunrise Estates**
- Task 6: Stormwater Modeling for Selected Sub-Catchment**
- Task 7: Summary Reports**

Key Budget Estimation Assumptions

1. Boone County will provide necessary sampling and monitoring equipment as guided by Geosyntec
2. Americorps staff are responsible for sampling, instrument download, and sample delivery as trained by Geosyntec
3. Geosyntec is tasked with data entry, validation, quality assurance oversight, database management, and training
4. Boone County or Americorps is to provide GIS data and field-truthing to support modeling and project needs
5. Nearby or existing climate station information is sufficient to provide study data

This proposed budget is based on our current understanding of project resource needs and assumptions described in the project approach and scope of services. Boone County may adjust the scope of sampling, analysis, training, or data management tasks included in this estimate along with a commensurate change in fee.

**CONTRACT DOCUMENTS
BOONE COUNTY, MISSOURI
PROPOSAL NUMBER AND DESCRIPTION:**

BEST AND FINAL OFFER FORM #1

This BAFO is issued in accordance with the Instructions to Bidders and is hereby incorporated into and made a part of the Contract Documents.

Bidders are reminded that receipt of this BAFO must be acknowledged and submitted on or before the end of business on July 22, 2011 in a separate envelope clearly marked **BAFO Proposal Number** 22-24JUN11.

The Offeror hereby declares understanding, agreement and certification of compliance to provide the items and/or services, at the prices quoted, in accordance with all terms and conditions, requirements, and specifications of the original RFP as modified by any previously issued RFP amendments and by this and any previously issued BAFO requests. The Offeror agrees that the language of the original RFP as modified by any previously issued RFP amendments and by this and any previously issued BAFO requests shall govern in the event of a conflict with Offeror's proposal.

By: 
Tyson Boldan
Boone County Purchasing

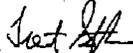
Company Name Geosyntec Consultants

Address 1123 Wilkes Blvd., Suite 400
Columbia, Missouri 65201

Phone Number 573-443-4100

Fax Number: 573-443-4140

E-mail Address: czell@geosyntec.com

Authorized Representative Signature 

Date: July 21, 2011

Printed Name: Trent Stober

Title: Principal

CLARIFICATION QUESTION LIST

Request for Bid #22-24JUN11 – Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed

1. IDENTIFIED DEFICIENCIES AND AREAS OF CONCERN:

The County of Boone makes no claim that all concerns related to your proposal have been identified herein; nor is the County obligated to do so.

1.1. We originally thought 20 per BMP. Revise the proposal to reflect 20 events per BMP.

1.2. The RFP is only concerned with one sub watershed at Sunrise Estates not three as stated in the proposal. Revise the proposal to reflect the RFP.

2. CLARIFICATIONS:

2.1. Give three references for the ES&S Lab.

2.2. Who will be doing the training? Provide examples of experience.

2.3. The cost for reports is high (\$34,000). Clarify products and deliverables.

Boone County Purchasing



601 E. Walnut, Room 209
Columbia, MO 65201

Tyson Boldan

Phone: (573) 886-4392

Buyer

Fax: (573) 886-4390

E-mail: tboldan@boonecountymo.org

October 14, 2011

Geosyntec Consultants
1123 Wilkes Blvd. Suite 400
Columbia, MO 65102
ATTN: Chris Zell, Trent Stober

Dear Vendor:

In accordance with RFP number 22-24JUN11 – Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek, this letter shall constitute an official request by the County of Boone – Missouri to enter into competitive negotiations with Geosyntec. Included with this letter are two attachments.

The first attachment is the Best and Final Offer (BAFO) Request List and it includes the following; (1) a listing of the deficiencies or other concerns identified within your proposal which do not comply to the requirements of the RFP, and (2) a listing of areas within your proposal which require further information and/or clarification.

The second attachment is a Best and Final Offer Form for RFP #22-24JUN11 – Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek which also includes any changes being made to the RFP as a result of this BAFO request. The Best and Final Offer Form must be completed, signed by an authorized representative of your organization, and returned with your detailed BAFO response.

Your detailed BAFO response should address each area identified on the BAFO Request List using the same numbering outline as the list. In addition, as a result of this request for a Best and Final Offer, you may now modify the pricing of your proposal and/or may change, add information, and/or modify any part of your proposal. However, if pricing is resubmitted, be sure to follow the pricing structure stated in the RFP. Furthermore, please understand that your response to this BAFO request is your final opportunity to ensure that (1) all mandatory requirements of the RFP have been met, (2) all RFP requirements are adequately described since all areas of the proposal are subject to evaluation, and (3) this is your best offer, including a reduction or other changes to pricing.

You are requested to respond to this BAFO request by submitting a written “Best and Final Offer” by the end of the Business on Friday, July 22, 2011 to:

Attention: Tyson Boldan
Boone County Purchasing
601 E. Walnut Street, Room 209
Columbia, MO 65201
Fax: (573) 886-4390

The outside of the envelope/box containing the BAFO response needs to state, “BAFO for Proposal #22-24JUN11” on the lower left corner. Please indicate the original plus five (5) copies (for a total of Six (6) documents) of your response. Faxed or e-mailed responses are acceptable.

You are reminded that pursuant to Section 610.021 RSMo, proposal documents including any best and final offer documents are considered closed records and shall not be divulged in any manner until after a contract is executed or all proposals are rejected. Furthermore, you and your agents (including subcontractors, employees, consultants, or anyone else acting on their behalf) must direct all questions or comments regarding the RFP, the evaluation, etc., to the buyer of record. Neither you nor your agents may contact any other County employee regarding any of these matters during the negotiation and evaluation process. Inappropriate contacts or release of information about your proposal or BAFO are grounds of suspension and/or exclusion from specific procurements.

If you have any questions regarding this BAFO request, please call (573) 886-4392 or e-mail tboldan@boonecountymo.org. I sincerely appreciate your efforts in working with the County of Boone – Missouri to ensure a thorough evaluation of your proposal.

Sincerely,



Tyson Boldan,
Buyer

cc: Evaluation Team
Proposal File

Attachments: Best and Final Offer Request List
Request for Best and Final Offer (BAFO) Form

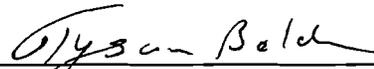
**CONTRACT DOCUMENTS
BOONE COUNTY, MISSOURI
PROPOSAL NUMER AND DESCRIPTION:**

BEST AND FINAL OFFER FORM #1

This BAFO is issued in accordance with the Instructions to Bidders and is hereby incorporated into and made a part of the Contract Documents.

Bidders are reminded that receipt of this BAFO must be acknowledged and submitted on or before the end of business on _____ in a separate envelope clearly marked **BAFO Proposal Number** _____.

The Offeror hereby declares understanding, agreement and certification of compliance to provide the items and/or services, at the prices quoted, in accordance with all terms and conditions, requirements, and specifications of the original RFP as modified by any previously issued RFP amendments and by this and any previously issued BAFO requests. The Offeror agrees that the language of the original RFP as modified by any previously issued RFP amendments and by this and any previously issued BAFO requests shall govern in the event of a conflict with Offeror's proposal.

By: 
Tyson Boldan
Boone County Purchasing

Company Name _____

Address _____

Phone Number _____

Fax Number: _____

E-mail Address: _____

Authorized Representative Signature _____

Date: _____

Printed Name: _____

Title: _____

CLARIFICATION QUESTION LIST

Request for Bid #22-24JUN11 – Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed

1. IDENTIFIED DEFICIENCIES AND AREAS OF CONCERN:

The County of Boone makes no claim that all concerns related to your proposal have been identified herein; nor is the County obligated to do so.

1.1. We originally thought 20 per BMP. Revise the proposal to reflect 20 events per BMP.

1.2. The RFP is only concerned with one sub watershed at Sunrise Estates not three as stated in the proposal. Revise the proposal to reflect the RFP.

2. CLARIFICATIONS:

2.1. Give three references for the ES&S Lab.

2.2. Who will be doing the training? Provide examples of experience.

2.3. The cost for reports is high (\$34,000). Clarify products and deliverables.



BOONE COUNTY, MISSOURI
Request for Proposal #: 22-24JUN11 – Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed

ADDENDUM #1 - Issued June 16, 2011

This addendum is issued in accordance with the Introduction and General Information in the Request for Proposal and is hereby incorporated into and made a part of the Request for Proposal Documents. Offerors are reminded that receipt of this addendum **should** be acknowledged and submitted with Offeror's *Response Page*.

Specifications for the above noted Request for Proposal and the work covered thereby are herein modified as follows, and except as set forth herein, otherwise remain unchanged and in full force and effect:

1. Please replace the Notice of Request for Proposal in the RFP documents with the attached Revised Notice of Request for Proposal: (Note that this document changes the bid date and time.)

REVISED NOTICE OF REQUEST FOR PROPOSAL

Boone County is accepting Proposals for the following:

PROPOSAL 22-24JUN11 – Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed

Sealed proposals will be accepted until **1:30 p.m. on Friday, July 08, 2011** in the Boone County Purchasing Office, Boone County Johnson Building, Room 209, 601 E. Walnut Street, Columbia, MO 65201.

The Request for Proposal is scheduled to be opened shortly after **1:30 p.m. on Friday, July 08, 2011** in Conference Room 213, Boone County Johnson Building, 601 E. Walnut Street, Columbia, MO 65201.

Request for Proposals are available in the Purchasing Office and requests for copies may be made by phone (573) 886-4392; fax (573) 886-4390 or e-mail: tboldan@boonecountymo.org. The Request for Proposal and additional information is also available on our web page at www.showmeboone.com.

During The Pre-Proposal Meeting The County Received The Following Questions and Is Providing a Response Below:

1) **Question:** Could you please give additional background or history for this project?

Response: Funding for this project is from Section 319 of the Clean Water Act (CWA). The funds are dispersed by EPA to the local state agencies. The Missouri DNR then picks projects that address nonpoint source pollution. Technically, Stormwater is a point source, because it is a permitted activity. But retrofits are not required in the permit; therefore they are an allowable expense. This project will retrofit two sites. The first is the Grissum Parking lot just north of the Business loop. The site is on 10 acres, with numerous truck and waste deliveries each day. On this site, City engineers will design 6 best management practices to treat water quality. Each design will have concentrated flow into and out of the BMP, so that water quality monitoring can be conducted. The monitoring can be conducted with portable samplers and water quality is the main goal for this part of the project. We are open to do an initial sampling with a sweet of Water Quality parameters that are usually found on a commercial site, then narrow those down to the most cost effective and descriptive parameters.

The second site is Sunrise Estates. The focus of this project will be on volume reduction. A Hobo climate station will be installed as of July 1st. And a weir can be place under a bridge to capture discharge. On this site, landowners will install rain gardens, barrels, community stormwater features and plant trees to try to reduce runoff over time. The primary objective of this site is to measure volume reduction. Therefore, it is expected that the successful candidate will also be able to estimate evapotranspiration and soil moisture.

2) **Question:** Is there any pertinent information as to how the Modeling will be used?

Response: The modeling should be targeted for the Engineering community and our partners with Missouri Society of Professional Engineers (MSPE). Additionally, stormwater managers need the ability to use the models to determine the most appropriate placement of BMPs. This is a management tool, not a land-use planning tool.

3) **Question:** Under what circumstances will our company have to respond within 1 hr? Who will be in charge of contacting the winning company to notify that a staff member is required?

Response: If there is an emergency, such as structure flooding or human health risk then a representative needs to be able to respond in a timely manner to assess the situation and provide guidance.

The project manager will be responsible for contacting the contractor.

4) **Question:** Since this project install a monitoring station to measure water volume, which will back up water under a bridge or other structure, how will the contractor be protected against financial loss or possible damage?

Response: The County is not in a position to offer legal advice to contractors and encourages anyone concerned with liability issues to consult with their own legal counsel.

The project scope contemplates many possible techniques to measure water volume, including the possible use of a discharge equation to calculate volume per unit that passes a given point in the stream (Discharge=Velocity * Cross-Sectional Area). The goal is to have an installation that would not cause any unacceptable pooling such that the installation would have to be removed prior to the collection of the desired quantity of data.

By: Tyson Boldan
Tyson Boldan, Buyer

OFFEROR has examined copy of Addendum #1 to Request for Proposal # 22-24JUN11 – Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed, receipt of which is hereby acknowledged:

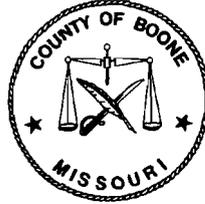
Company Name: _____
Address: _____

Phone Number: _____ Fax Number: _____
E-mail address: _____

Authorized Representative Signature: _____ Date: _____

Authorized Representative Printed Name: _____

COUNTY OF BOONE - MISSOURI



REQUEST FOR PROPOSAL

FOR

Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed

RFP #22-24JUN11

Release Date: October 14, 2011

Submittal Deadline:

June 24, 2011

not later than 1:30 P.m. Central Time

**Boone County Purchasing
601 E. Walnut Street, Room 209
Columbia, Missouri 65201**

**Tyson Boldan, Buyer
Phone: (573) 886-4392 Fax: (573) 886-4390
E-mail: tboldan@boonecountymo.org**



NOTICE OF REQUEST FOR PROPOSAL

Boone County is accepting Proposals for the following:

PROPOSAL 22-24JUN11 – Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed

Sealed proposals will be accepted until **1:30 p.m. on Friday, June 24, 2011** in the Boone County Purchasing Office, Boone County Johnson Building, Room 209, 601 E. Walnut Street, Columbia, MO 65201.

The Request for Proposal is scheduled to be opened shortly after **1:30 p.m. on Friday, June 24, 2011** in Conference Room 213, Boone County Johnson Building, 601 E. Walnut Street, Columbia, MO 65201.

Pre-Bid Conference:

An Optional pre-Bid conference has been scheduled for June, 14 2011 at 1:30 p.m. in the Boone County Resource Management office, Boone County Government Center 801 E. Walnut, Columbia, Missouri 65201. The purpose of the meeting will be to address any questions or concerns regarding the request for proposal. All offerors are strongly urged to attend.

Request for Proposals are available in the Purchasing Office and requests for copies may be made by phone (573) 886-4392; fax (573) 886-4390 or e-mail: tboldan@boonecountymo.org. The Request for Proposal and additional information is also available on our web page at www.showmeboone.com.

Tyson Boldan,
Buyer

Insertion: June 09, 2011
COLUMBIA MISSOURIAN



1. INSTRUCTIONS AND GENERAL CONDITIONS

Delivery of Proposals: Sealed proposals, subject to Instructions and General Conditions and any special conditions set forth herein, will be received at the Boone County Purchasing office until the proposal closing date and time indicated herein for furnishing the County with services as detailed in the following request for proposal.

- a) **Proposal Closing:** All proposals shall be delivered before 1:30 p.m. on Friday, June 24, 2011 to:

Boone County Purchasing Department
Tyson Boldan, Buyer
601 E. Walnut Street, Room 209
Columbia, Missouri 65201-4460

- b) The County will not accept any proposals received after 1:30 PM, and will return such late proposals to the Offeror.
- c) Offerors must submit one (1) original, and five (5) copies of the proposal (total of six). Proposals will be opened publicly but only names of Offerors will be read aloud.
- d) Proposals must be submitted in a sealed envelope identified with the proposal number and date of closing. List the proposal number on the outside of the box or envelope and note "Response to Request for Proposal enclosed."
- e) If you do not care to submit a proposal, please return the *No Bid Response Form* and note your reason. No fax or electronic transmitted proposals will be accepted, however, the *No Bid Response Form* may be returned by fax.
- f) If you have obtained this proposal document from our Web Page or from a source other than the Boone County Purchasing Department, please check with our office prior to submitting your proposal to ensure that you have a complete package. The Purchasing Department cannot be responsible for providing addenda if we do not have you on our Vendor list for this proposal.

Evaluation of Proposals (Procedure):

- a) The County will first examine proposals to eliminate those that are clearly non-responsive to the stated requirements. Therefore, Offerors should exercise particular care in reviewing the Proposal format required for this RFP.
- b) The evaluation committee shall then score all proposals based upon the evaluation factors detailed herein. Upon completion of the scoring, the committee may recommend short listing the proposals that are potentially acceptable.
- c) At this point, the County may request presentations by Offerors, and carry out negotiations for the purpose of obtaining best and final offers, and conduct detailed reference checks on the short listed Offerors.
- d) The County reserves the right to contact any and all references to obtain, without limitation, information regarding the Offeror's performance on previous projects. A uniform sample of references may be checked for each short-listed Offeror.
- e) The County reserves the right to withdraw this RFP at any time and for any reason and to issue such clarifications, modifications, and/or amendments as it may deem appropriate.
- f) Receipt of a proposal by the County or a submission of a proposal to the County offers no rights upon the Offeror nor obligates the County in any manner.
- g) No negotiations, decisions, or actions shall be initiated by any firm as a result of any verbal discussion with any County employee prior to the opening of responses to the Request for Proposal. Boone County reserves the right to select the Offeror which best meets its goals and objectives, needs, fiscal constraints, quality levels and service expectations.

Ambiguity, Conflict, or Other Errors in the RFP:

- a) If an Offeror discovers any ambiguity, conflict, discrepancy, omission, or other error in the Request for Proposal, they shall immediately notify the Purchasing Department of such error in writing and request modification or clarification of the document. The County will make modifications by issuing a written revision and will give written notice to all parties who have received this RFP from the County.
- b) The Offeror is responsible for clarifying any ambiguity, conflict, discrepancy, omission, or other error in the Request for Proposals prior to submitting the proposal or it shall be waived.

- c) Implied Requirements: Products and services that are not specifically requested in this RFP, but which are necessary to provide the functional capabilities proposed by the Offeror, shall be included in the proposal.
- d) The County will not be liable in any way for any costs incurred by any Offeror in the preparation of their proposal in response to this RFP, nor for the presentation of their proposal and/or participation in any discussions or negotiations.

Rejection of Proposals: The right is reserved to accept or reject in whole or in part any or all proposals submitted, to waive technicalities, and to accept the offer the County considers the most advantageous to the County. Further, the County shall reject the proposal of any Offeror that is determined to be non-responsive. The unreasonable failure of an Offeror to promptly supply information in connection with respect to responsibility may be grounds for a determination of non-responsibility.

Acceptance of Proposals: The County will accept all proposals that are submitted properly. However, the County reserves the right to request clarifications or corrections to proposals.

Requests for Clarification of Proposals: Requests by the Purchasing Department for clarification of proposals shall be in writing.

Validity of Proposals: Offeror should state how many days or months proposals remain valid beyond the 120 days minimum.

Receipt and Opening of Advertised, Sealed Proposals: The Offeror(s) and public are invited, but not required, to attend the formal opening of proposals. Offeror(s) names only will be read aloud to the public. No decisions related to an award of a contract or creation of any contractual or lease relationship, or purchase order will be made at the opening.

- a. Information provided in your response will be considered proprietary and will not be divulged during the selection process. The successful firm's proposal will become public record after its acceptance by the County Commission. All proposals and tabulation sheets are kept by the County for a period of time established by regulation or statutes after the award is made and are available for inspection at any time during regular working hours.
- b. Proposals will be opened and Offeror's names read aloud during the proposal opening in the Boone County Johnson Building, Conference Room 213, **1:30 p.m. on Friday, June 24, 2011**, Central Time located at the following address:
 - Boone County Johnson Building
 - Conference Room 213
 - 601 E. Walnut Street
 - Columbia, Missouri 65201

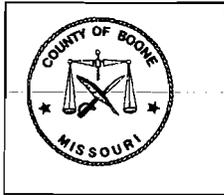
Withdrawal of Proposals: Proposals may be withdrawn without prejudice any time before the deadline for receipt of proposals. If a mistake or error is discovered by the Offeror or by the County after the proposal opening, the County has the right to call this error to the Offeror's attention and request verifications of the proposal. If the Offeror acknowledges the mistake and requests relief, the County will proceed in the following manner:

- a. **Withdrawal:** Permission to allow an Offeror to withdraw their proposal without prejudice may be given when clear and convincing evidence supports the existence of an error. If there is a significant and obvious disparity between the prices of the lowest Offeror and of the other Offerors, an Offeror may be permitted to withdraw without prejudice, upon submission of evidence that a non-intentional error occurred.

Contract Terms and Conditions:

The successful Offeror is prohibited from assigning, transferring, conveying, subletting, or otherwise disposing of this agreement or its rights, title or interest therein, or its power to execute such agreement to any other person, company or corporation without the prior consent and approval in writing by the County.

Deviations: Offeror must clearly state in writing any restrictions or deviations from these specifications. In the absence of such statement, the County will assume that all items/services offered are in strict compliance with the technical and financial requirements, contract terms and conditions as described in these specifications. The proposal of the Contractor will be included as part of the final contract.



2. INTRODUCTION AND GENERAL INFORMATION

2.1 Introduction:

This document constitutes a request for sealed proposals for **Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed**, as set forth herein.

Organization – This document, referred to as a Request for Proposal (RFP), is divided into the following parts:

- 1) Instructions and General Conditions
- 2) Introduction and General Information
- 3) Scope of Services
- 4) Proposal Submission Information
 - Attachment A – *No Bid Response Form*
 - Exhibit 1 – Certification Regarding Debarment
 - Instructions for Compliance with House Bill 1549
 - Work Authorization Certification
 - Certification of Individual Bidder
 - Attachment B – *Prior Experience*
 - (Sample) Agreement
 - Standard Contract Terms and Conditions

2.2. Guideline for Written Questions:

2.2.1 All questions regarding this Request for Proposal shall be submitted in writing no later than **Monday, June 17, 2011** to allow time to respond in the form of an addendum. All questions must be mailed, faxed or e-mailed to the attention of Tyson Boldan, Buyer.

a. Tyson Boldan, Buyer
601 E. Walnut Street, Room 209
Columbia, Missouri 65201
Phone: (573) 886-4392 Fax: (573) 886-4390
E-mail: tboldan@boonecountymo.org

2.2.2 The responses and usage will become a part of a written addendum, which will be mailed or faxed prior to proposal opening.



3.0 SCOPE OF SERVICES

3.1. Project Description:

The County of Boone – Missouri, hereafter referred to as *the County*, hereby solicits formal written proposals from qualified offerors to provide **Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed** for the County.

3.2. Background:

Hinkson Creek is a dynamic stream system, with a drainage area of 90 square miles. The creek runs southwest through agriculture and pasture land, previous mining land, and urban land. The converted Katy Trail system and Flat Branch park recreational areas provide residents with a connection to the creek system. The recent total maximum daily load discussions and excessive precipitation has focused the community's attention on the flooding problems and stream degradation issues in the watershed. Hinkson Creek has been on the 303(d) list since 1998 for unknown toxicity. In January 2011, the Environmental Protection Agency finalized a total maximum daily load that identified the source of the impairment as urban runoff and calculated a reduction in stormwater runoff volume as a surrogate for any pollutants of concern; Infiltration, evaporation, and transpiration are the major transport mechanisms to remove the stormwater volume from the watershed. This project will attempt to quantify some of those mechanisms. The information will be useful for future urban total maximum daily load plans, Columbia and Boone County stormwater management, and engineering site designs.

The goal of the project is to reduce flooding and improve water quality and health of the aquatic life of Hinkson Creek by implementing monitoring retrofit activities identified in the Hinkson Creek Watershed Management Plan. The project will provide information to local citizens, especially the engineering community on the effectiveness of selected stormwater practices by using local examples with quantifiable, repeatable monitoring data, including cost estimates.

A 10- acre Columbia city-owned site that currently does not treat stormwater runoff will be retrofitted with at least six (6) stormwater Best Management Practices including bioretention or bioswales, underground detention, and pervious pavement. Additionally, an actively eroding channel will be stabilized via installation of a three

hundred (300) foot long step-pool storm-conveyance system. Construction will be completed within the first two years of the project.

A large subdivision of two hundred (200) plus homes, build in the 1960's lacks stormwater management. Residents are experiencing problems with erosion from peak flows, flooding, and permanently standing water. To reduce peak flows and flooding, this residential subdivision will be retrofitted with rain gardens/rain barrels, tree plantings, and three (3) community stormwater treatment features over the three (3) year grant period. Monitoring is needed to determine preconstruction flow and runoff rates. Gauging stations will be kept in place throughout the grant to determine if these Best Management Practices have a positive effect on the hydrograph.

3.3. GENERAL SCOPE OF WORK:

3.3.1. Assist Boone County in the creation and implementation of a Quality Assurance Project Plan for Hinkson Creek.

3.3.2 The contractor must provide **Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed** as specified below:

Please note that some of these services are time sensitive. Due to the nature of work entailed in this RFP, Contractor's staff must be able to be onsite within one (1) hour of notification.

3.3.3. SCOPE OF SERVICES

The Consultant shall provide the necessary services, including but not limited to:

1. Assist in developing a project Quality Assurance Project Plan (QAPP) that will be reviewed and approved by the Missouri Department of Natural Resources (DNR) and the U.S. Environmental Protection Agency (EPA). In addition to meeting state and federal requirements, study designs described by the Quality Assurance Project Plan must meet or exceed requirements specified by the International Stormwater Best Management Practice (BMP) database.
 - a) Provide data quality objectives, sampling process designs (experimental design), field sampling requirements, analytical methods, quality control requirements, data management as well as data validation and review procedures.
2. Provide water quality monitoring training to project staff to support successful event-based stormwater monitoring. Provide stormwater and BMP modeling training to project stakeholders.

- a) Staff will include City and County Stormwater managers/engineers/educators and AmeriCorps staff with basic StreamTeam water quality monitoring experience.
 - b) AmeriCorps staff rotates each year, so training will need an annual update. Stakeholders for the BMP modeling training include City and County stormwater managers/engineers and local engineering firms. Two training events are required.

- 3. Develop a project database to manage, store, and report data generated throughout the project. Database structures must be capable of effectively integrating real-time data transfers and support web cast capabilities.
 - a) Please provide an explanation of services that will be provided.

- 4. Provide project quality assurance, technical oversight, and data management services.
 - a) Provide a description of parameters of interest, action levels, summary statistics and acceptable limits on decision errors
 - b) Review sample/data collection procedures, equipment needs, and identification of performance requirements.
 - c) Describe how data will be verified and validated.

- 5. Assist with Best Management Practices retrofit performance monitoring.
 - a) Assist in sampling equipment deployment and field validation.
 - b) Assist in parameter selection

- 6. Develop a stormwater model(s) for a selected area(s) to assist management decisions. Provide an explanation of services that will be provided.

- 7. Provide annual Best Management Practices performance and modeling reports. Provide technical materials to support project stakeholder activities and Section 319 reporting requirements.
 - a) Please provide an explanation of services that will be provided.

3.4 Project Timeline/Milestones:

- 3.4.1 Contractor will be responsible for all Key Milestone objectives listing *Contractor* under the Responsible Party column of the following:

Schedule of Milestones			
		YEAR ONE	3/11 - 2/12
	Key Milestone	Responsible Party	Targeted Completion Date
	BMP Construction		
1	Finalize engineering design		
	Municipal Site	City of Columbia	March, 2011
2	Construct Season 1 Best Management Practice	City of Columbia	
	Step Pool conveyance		August, 2011
	bioswale		August, 2011
	bioretention		August, 2011
3	Install 20 rain barrels/gardens @ SE	MRCN	October, 2011
4	Plant 15 trees	MRCN	October, 2011
	Monitoring		
5	subcontract for Monitoring	Boone County	June, 2011
6	Develop QAPP(s)		
	BMP Performance	Project Mgr & Contractor	July, 2011
	Soil Sampling -		July, 2011
7	Install pre-construction flow gauges	Contractor	July, 2011
8	Install climate stations	Contractor	July, 2011
9	field train sampling crew	Contractor	August, 2011
10	Conduct soil testing	AmeriCorps	October, 2011
11	Provide QA/QC, Technical Assistance	Contractor	Quarterly
12	Provide Annual Monitoring report	Contractor	May, 2012
	Outreach & Stewardship		
13	Train AmeriCorps Members	MRCN, Boone County	March - April
14	Conduct Kickoff meeting City Public Works	City of Columbia	June, 2011
15	Develop PP, and Ed materials		March, 2011
16	Conduct Kickoff Meeting - SE	MRCN, AmeriCorps	June, 2011
	develop outreach materials		March, 2011
17	Conduct 2 workshops - rain barrels/Rain Gardens	AmeriCorps	July, September
	develop outreach materials		
18	Develop Project Website	MRCN, City of Columbia	Ongoing
19	Develop Photo Journal	MRCN, City of Columbia	Ongoing
20	Develop social Networking tools/newsletters	AmeriCorps	Ongoing
21	Conduct trainings for JobPoint Students	City of Columbia	Spring/Fall
	develop curriculum	City of Columbia	
	Grant Administration		
22	Quarterly Committee meetings	Committee Chairs	Quarterly
23	Quarterly Reporting - DNR	Boone County	Quarterly
24	Invoicing - DNR	Boone County	As needed

Schedule of Milestones			
YEAR TWO			
	Key Milestone	Responsible Party	Targeted Completion Date
	BMP Construction		
1	Construct season 2 BMPs -Commercial site Bioswale (3) Rain Gardens Underground detention	City of Columbia	August, 2012
2	Install 20 Rain Gardens in SE	AmeriCorps, Residents	
3	Construct 2 Community SW features in SE	AmeriCorps, Residents	Summer 2012
4	Plant 35 Trees in SE	AmeriCorps, Residents	Fall 2012
	Monitoring		
5	Conduct precipitation event sampling	Contractor	30/yr
6	Install post-construction monitoring sites Commercial Building Rain Gardens	Contractor	April 1, 2012
7	Provide QA/QC, Technical Assistance	Contractor	Quarterly
8	Conduct BMP Modeling Training for Engineers	Contractor	Fall 2012
9	Conduct annual training for field staff	Contractor	Fall 2012
10	Provide Annual Monitoring report	Contractor	May, 2012
	Outreach & Stewardship		
11	Train New AmeriCorps, evaluate progress	MRCN, Boone County	March, 2012
12	Conduct 2 workshops Soils and Soil testing Tree Plantings and proper pruning develop outreach materials	AmeriCorps AmeriCorps, NRCS, MAPPS AmeriCorps, MDC, TreeKeepers	May, September
13	Update Project Website	MRCN, City of Columbia	ongoing
14	Update Photo Journal	MRCN, City of Columbia	ongoing
15	Update Social Networking tools/newsletters	AmeriCorps	ongoing
16	Conduct trainings for City Construction/Parks	City of Columbia, Parks and Rec	January, 2012
17	Installation and Maintenance of SW BMPs develop curriculum	City of Columbia	
18	Conduct Engineer Workshop/tour	Boone County, MSPE	Fall 2012
	Grant Administration		
19	Develop Maintenance Agreements (SE)	Boone County	Spring 2012
20	Quarterly Committee meetings	Committee Chairs	Quarterly
21	Quarterly Reporting - DNR	Boone County	Quarterly
22	Invoicing - DNR	Boone County	as needed
Schedule of Milestones			

		YEAR THREE	3/13 - 2/14
	Key Milestone	Responsible Party	Targeted Completion Date
	BMP Construction		
1	Install 20 Rain Gardens/barrels in SE	AmeriCorps, Residents	Spring/Fall 2013
2	Construct 1 Community SW features in SE	AmeriCorps, Residents	Summer 2013
3	Plant 35 Trees in SE	AmeriCorps, Residents	Fall 2013
4	Develop Design Specifications - rain gardens	City of Columbia	Spring 2014
	Monitoring		
5	Conduct precipitation event sampling	Contractor	30/yr
6	Conduct BMP Modeling Training for Engineers	Contractor	Jan-14
	Stormwater Model development		
	Provide QA/QC, Technical Assistance	Contractor	Quarterly
7	Provide Annual Monitoring report	Contractor	February, 2014
8	Prepare final monitoring reports	Contractor	October-December
9	Prepare runoff and precipitation data	Contractor	October-December
	Outreach & Stewardship		
10	Train New AmeriCorps, evaluate progress	MRCN, Boone County	March, 2013
11	Conduct 2 workshops	AmeriCorps	May, September
	Native Plants	AmeriCorps, CARP	
	Stream physics and buffers	AmeriCorps, City of Columbia	
	develop outreach materials		
12	Update Project Website	MRCN, City of Columbia	Ongoing
13	finalize Photo Journal	MRCN, City of Columbia	ongoing
14	Update Social Networking tools/newsletters	AmeriCorps	ongoing
15	Conduct trainings for Job Point Students	City of Columbia, Parks and Rec	Fall 2013
16	Installation and Maintenance of SW BMPs		
	update curriculum	City of Columbia	
	Grant Administration		
17	Quarterly Committee meetings	Committee Chairs	Quarterly
18	Quarterly Reporting - DNR	Boone County	Quarterly
19	Invoicing - DNR	Boone County	Quarterly
20	Compile final products	All Committee Chairs	February, 2014
21	Prepare Final report - DNR	Boone County	February, 2014

3.5 Proposal Submission Requirements:

- 3.5.1 The offeror must respond to each requirement listed under section 3.3.3. Scope of Services. The offeror must provide a detailed description of the proposed work and the ability of the firm to meet each specified service. Each section should have a breakdown of the number work hours anticipated that includes cost.
- 3.5.2. Give a thorough explanation of experience in developing a Level 2 (or greater) QAPP that has been reviewed and approved by DNR and the EPA.
- 3.5.3. Give thorough explanations of experience and history of providing national stormwater BMP monitoring and modeling.
- 3.5.4. The offeror may be contacted to provide a demonstration of the proposed solutions during the evaluation process. Such demonstration shall be provided free of charge.
- 3.5.5. A thorough listing of any equipment and supplies that offeror anticipates would be used in the project, describing what equipment the offeror already owns and what additional equipment may need to be purchased to effectuate the contemplated monitoring. (Note -- it is anticipated that the County would purchase any necessary equipment not already owned by offeror, upon offeror's recommendation, and any such equipment purchased would remain County property. The procurement of supplies may be purchased by the County as well.)

3.6 Contractor Requirements:

3.6.1 Insurance Requirements: The Contractor shall not commence work under this contract until they have obtained all insurance required under this paragraph and such insurance has been approved by the County, nor shall the Contractor allow any subcontractor to commence work on their subcontract until all similar insurance required of subcontractor has been so obtained and approved. All policies shall be in amounts, form and companies satisfactory to the County which must carry an A-6 or better rating as listed in the A.M. Best or equivalent rating guide. Insurance limits indicated below may be lowered at the discretion of the County.

3.6.1.1. Compensation Insurance - The Contractor shall take out and maintain during the life of this contract, **Employee's Liability and Worker's Compensation Insurance** for all of their employees employed at the site of work, and in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. Worker's Compensation coverage shall meet Missouri statutory limits. Employers' Liability limits shall be \$1,000,000.00 each employee, \$1,000,000.00 each accident, and \$1,000,000.00 policy limit. In case any class of employees engaged in hazardous work under this Contract at the site of the work is not protected under the Worker's Compensation Statute, the Contractor shall provide and shall cause each subcontractor to provide Employers' Liability Insurance for the protection of their employees not otherwise protected.

3.6.1.2. Comprehensive General Liability Insurance - The Contractor shall take out and maintain during the life of this contract, such comprehensive general liability insurance as shall protect them and any subcontractor performing work covered by this contract, from claims for damages for personal injury including accidental death, as well as from claims for property damages, which may arise from operations under this contract, whether such operations be by themselves or for any subcontractor or by anyone directly or indirectly employed by them. The amounts of insurance shall be not less than \$2,000,000.00 combined single limit for any one occurrence covering both bodily injury and property damage, including accidental death. If the Contract involves any underground/digging operations, the general liability certificate shall include X, C, and U (Explosion, Collapse, and Underground) coverage. If providing Comprehensive General Liability Insurance, then the Proof of Coverage of Insurance shall also be included.

The Contractor has the option to provide **Owner's Contingent or Protective Liability and Property Damage** instead of the **Comprehensive General Liability Insurance**- The Contractor shall provide the County with proof of Owner's Protective Liability and Property Damage Insurance with the County as named insured, which shall protect the County against any and all claims which might arise as a result of the operations of the Contractor in fulfilling the terms of this contract during the life of the Contract. The minimum amounts of such insurance will be \$2,000,000.00 per occurrence, combined single limits. Limits can be satisfied by using a combination of primary and excess coverages. Should any work be subcontracted, these limits will also apply

3.6.1.3. Commercial Automobile Liability – The Contractor shall maintain during the life of this contract, automobile liability insurance in the amount of not less than \$2,000,000.00 combined single limit for any one occurrence, covering both bodily injury, including accidental death, and property damage, to protect themselves from any and all claims arising from the use of the Contractor's own automobiles, teams and trucks; hired automobiles, teams and trucks; and both on and off the site of work.

3.6.1.4. Proof of Carriage of Insurance - The Contractor shall furnish the County with Certificate(s) of Insurance which name the County as additional insured in an amount as required in this contract, contain a description of the project or work to be performed, and requiring a thirty (30) day mandatory cancellation notice. In addition, such insurance shall be on occurrence basis and shall remain in effect until such time as the County has made final acceptance of the facility contracted.

3.6.2. Indemnity Agreement: To the fullest extent permitted by law, Contractor shall indemnify, hold harmless and defend the County, its directors, agents, and employees from and against all claims arising by reason of any act or failure to act, negligent or otherwise, of Contractor, (meaning anyone, including but not limited to consultants having a contract with Contractor or subcontractor for part of the services), of anyone directly or indirectly employed by Contractor, or of anyone for whose acts the Contractor may be liable, in connection with

11/15/11

providing these services. This provision does not, however, require Contractor to indemnify, hold harmless, or defend the County of Boone from its own negligence. For claims arising from professional liability, Contractor's duty to defend, indemnify and hold harmless as set forth hereinabove shall be only to the extent arising from Contractor's negligent acts, errors or omissions in the performance of its engineering or consulting services.
3.6.3 In performing all services under the resulting contract agreement, the Contractor shall comply with all local, state and federal laws and requirements including but not limited to those requirements stated below in section 3.6.4.

Approved as to Legal Form:
J. J. [Signature] 11/15/11

3.6.4. **Additional Requirements.** Due to the requirements imposed by the Missouri Department of Natural Resources (DNR) and the federal government as a source of funding for this project, certain additional contract terms are applicable to this procurement. All DNR-required and federal-required clauses are incorporated herein by reference, and any questions regarding the applicability of said clauses should be directed to the Purchasing Department prior to the RFP response date. Those clauses include, but are not limited to, the following:

Nonappropriation -

Obligations herein which require the payment of fund by the County are contingent upon there being a sufficient, unencumbered fund balance appropriated for that purpose. This appropriation may be contingent on funds for the grant funding a portion of the project being appropriated and made available by the Missouri General Assembly for each fiscal year included within the project, as well as being awarded by the federal or state agency supporting the project. Therefore, this contract shall automatically terminate without penalty or termination costs if such funds are not appropriated and/or granted.

Suspension and Debarment -

This contract is a covered transaction for purposes of 49 CFR Part 29. As such, the contractor is required to verify that none of the contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.

The contractor is required to comply with 49 CFR 29, Subpart C and must include the requirement to comply with 49 CFR 29, Subpart C in any lower tier covered transaction it enters into.

By signing and submitting its bid or proposal, the bidder or proposer certifies as follows: The certification in this clause is a material representation of fact relied upon by Boone County. If it is later determined that the bidder or proposer knowingly rendered an erroneous certification, in addition to remedies available to Boone County, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The bidder or proposer agrees to comply with the requirements of 49 CFR 29, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

Management Fees -

Management fees or similar charges in excess of the direct costs and approved indirect rates are not allowable. The term "management fees or similar charges" refers to expenses added to the

direct costs in order to accumulate and reserve funds for ongoing business expenses, unforeseen liabilities, or for other similar costs which are not allowable under this agreement. Management fees or similar charges may not be used to improve or expand the project funded under this agreement, except to the extent the authorized as a direct cost of carrying out the scope of work.

Civil Rights –

The following laws and regulations relating to nondiscrimination are hereby expressly made applicable to this contract, any violation of which shall constitute sufficient basis for a “for cause” termination of the contract without any liability to the County:

1. Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin;
2. Title VII the Civil Rights Act of 1964 found at 42 U.S.C. § 2000(e) et seq. which prohibits discrimination on the basis of race, color, religion, national origin, or sex;
3. Title IX of the Education Amendments of 1972, as amended (U.S.C. §§ 1681-1683 and 1685-1686) which prohibits discrimination on the basis of sex;
4. Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis disability;
5. Age Discrimination Act of 1975, as amended (42 U.S.C. §§621-634), which prohibits discrimination on the basis of age;
6. Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse;
7. Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism;
8. Chapter 213 of the Missouri Revised Statutes which prohibits discrimination on the basis of race, color, religion, national origin, sex, age, and disability;
9. The Americans with Disabilities Act, 42 U.S.C. § 12101 et seq., relating to nondiscrimination with respect to employment, public services, public accommodations and telecommunications.

Environmental Laws –

The following laws and regulations relating to environmental protection are hereby expressly made applicable to this contract, any violation of which shall constitute sufficient basis for a “for cause” termination of the contract without any liability to the County:

1. The Federal Clean Air Act, 42 U.S.C. § 7606, as amended, prohibiting award of assistance by way of grant, loan, or contract to noncomplying facilities.
2. The Federal Water Pollution Control Act, 33 U.S.C. § 1368, as amended, prohibiting award of assistance by way of grant, loan, or contract to noncomplying facilities.
3. The National Environmental Policy Act of 1969, 42 U.S.C. § 4321 et seq., as amended particularly as it relates to the assessment of the environmental impact of federally assisted projects.
4. The National Historic Preservation Act of 1966, 16 U.S.C. § 470 et seq. as amended, relating to the preservation of historic landmarks.
5. The Missouri Clean Water Law, Sections 644.006 to 644.141, RSMo.

6. The Missouri Hazardous Waste Management Law, Sections 260.350 to 260.430, RSMo.
7. The Missouri Solid Waste Management Law, Sections 260.200 to 260.245, RSMo.
8. The Missouri Air Conservation Law, Sections 643.101 to 643.190, RSMo.

Other Applicable Laws –

The following laws and regulations are additionally expressly made applicable to this contract, any violation of which shall constitute sufficient basis for a “for cause” termination of the contract without any liability to the County:

1. The Hatch Act, 5 U.S.C. § 1501 et seq., as amended, relating to certain political activities of certain State and local employees.
2. The Archaeological and Historic Preservation Act of 1974 (Public Law 93-291) relating to potential loss or destruction of significant scientific, historical, or archaeological data in connection with federally assisted activities.
3. The Wild and Scenic Rivers Act of 1968 (16 U.S.C. § 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
4. The flood insurance purchase requirements of § 102(a) of the Flood Disaster Protection Act of 1973 (Public Law 93-234) which requires the County in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
5. The Privacy Act of 1974, P.L. 93-579, as amended prohibiting the maintenance of information about any individual in a manner which would violate the provision of the Act.
6. Public Law 93-348 regarding the protection of human subjects involved in research, development and related activities supported by this award of assistance.
7. The Laboratory Animal Welfare Act of 1966 (P. L. 89-544), 7 U.S.C. § 2131 et seq., pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
8. Copeland “Anti-Kickback” Act, 18 U.S.C. § 874 et seq.

Access to Records –

The following access to records requirements apply to this Contract:

1. The Contractor agrees to provide Boone County, the federal awarding agencies, the Comptroller General of the United States, Missouri Department of Natural Resources or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions.
2. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
3. The Contractor agrees to maintain all books, records, accounts and reports required under this contract for a period of not less than three years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case Contractor agrees to maintain same

until the County, the federal awarding agency, the Comptroller General, Missouri Department of Natural Resources or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto.

Federal Changes -

Contractor shall at all times comply with all applicable federal regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Agreement between County and Missouri Department of Natural Resources, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this contract.

No Obligation by the State or Federal Government –

(1) Boone County and Contractor acknowledge and agree that, notwithstanding any concurrence by the State of Missouri or the Federal Government in or approval of the solicitation or award of the underlying contract, absent the express written consent by the State of Missouri or the Federal Government, the State of Missouri and the Federal Government is not a party to this contract and shall not be subject to any obligations or liabilities to Boone County, Contractor, or any other party (whether or not a party to that contract) pertaining to any matter resulting from the underlying contract.

(2) The Contractor agrees to include the above clause in each subcontract.

Program Fraud and False or Fraudulent Statements or Related Acts –

(1) The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § § 3801 *et seq.* and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying contract or the awarding federal agency assisted project for which this contract work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

(2) The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by awarding federal agency under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

(3) The Contractor agrees to include the above two clauses in each subcontract. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

Termination Clauses –

(1) Termination for Convenience: Boone County may terminate this contract, in whole or in part, at any time by written notice to the Contractor when it is in the Government's best interest. The Contractor shall be paid its costs, including contract close-out costs, and profit on work performed up to the time of termination. The Contractor shall promptly submit its termination claim to Boone County to be paid the Contractor. If the Contractor has any property in its possession belonging to Boone County, the Contractor will account for the same, and dispose of it in the manner Boone County directs.

(2) Termination for Default: If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract or any extension or fails to complete the work within this time, or if the Contractor fails to comply with any other provisions of this contract, Boone County may terminate this contract for default. Boone County shall terminate by delivering to the Contractor a Notice of Termination specifying the nature of the default. In this event, Boone County may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to Boone County resulting from the Contractor's refusal or failure to complete the work within specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by Boone County in completing the work.

The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause if-

1. The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include: acts of God, acts of Boone County, acts of another Contractor in the performance of a contract with Boone County, epidemics, quarantine restrictions, strikes, freight embargoes; and
2. The contractor, within [10] days from the beginning of any delay, notifies the Boone County in writing of the causes of delay. If in the judgment of Boone County, the delay is excusable, the time for completing the work shall be extended. The judgment of the Boone County shall be final and conclusive on the parties, but subject to appeal under the Disputes clauses.

If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of Boone County.

Disadvantaged Business Enterprises -

a. This contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, *Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs*. The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10%. The agency's overall goal for DBE participation is 10 %. A separate contract goal has not been established for this procurement.

b. The contractor shall not discriminate on the basis of race, color, national origin, or sex in the

performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted contract. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as Boone County deems appropriate. Each subcontract the contractor signs with a subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b)).

c. The successful bidder/offeror will be required to report its DBE participation obtained through race-neutral means throughout the period of performance.

d. The contractor is required to pay its subcontractors performing work related to this contract for satisfactory performance of that work no later than 30 days after the contractor's receipt of payment for that work from the Boone County. In addition, the is required to return any retainage payments to those subcontractors within 30 days after incremental acceptance of the subcontractor's work by the Boone County and contractor's receipt of the partial retainage payment related to the subcontractor's work.

e. The contractor must promptly notify Boone County, whenever a DBE subcontractor performing work related to this contract is terminated or fails to complete its work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of Boone County.

Clean Air Clean Water and Environmental Protection –

Compliance with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR part 15). (Contracts, subcontracts, and subgrants of amounts in excess of \$100,000)

Complete *Appendix A – Certification Regarding Lobbying* and return with bid response.

APPENDIX A, 40 CFR PART 20 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

(To be submitted with each bid or offer exceeding \$100,000)

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal Grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions [as amended by “Government wide Guidance for New Restrictions on Lobbying,” 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*)]
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352 (c) (1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure of failure.]

The Contractor _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq.*, apply to this certification and disclosure, if any.



4. PROPOSAL SUBMISSION INFORMATION

4.1. RESPONSE TO PROPOSAL

4.1.1. Submission of Proposals:

4.1.1.1. When submitting a proposal, the Offeror should include the **original and five (5) additional copies**.

a. The Offeror shall submit the proposal to:

Boone County Purchasing Department
Attn: Tyson Boldan, Buyer
601 E. Walnut Street, Room 209
Columbia, MO 65201

b. The proposal response must be delivered no later than **1:30 p.m. on Friday, June 24, 2011**. Proposals will not be accepted after this date and time.

4.1.1.2. To facilitate the evaluation process, the Offeror is encouraged to organize their proposal into distinctive sections that correspond with the individual evaluation categories described herein.

a. Each distinctive section should be titled with each individual evaluation category and all material related to that category should be included therein.

b. The signed response page from the original RFP and all signed amendments should be placed at the beginning of the proposal.

c. The Proposal must, at a minimum, address all mandatory and desired services, equipment, materials, etc. Responses will fully describe how the service will be performed and what hardware/software (if any) is required at the County to access the service.

4.1.1.3. The Offeror is cautioned that it is the Offeror's sole responsibility to submit information related to the evaluation categories, and that the County is under no obligation to solicit such information if it is not included with the proposal. The Offeror's failure to submit such information may cause an adverse impact on the evaluation of the proposal. Any Offeror whose responses deviate from the outlined specifications may automatically be disqualified.

4.1.1.4. Offeror's Contacts: Offerors and their agents (including subcontractors, employees, consultants, or anyone else acting on their behalf) must direct all of their questions or comments regarding the RFP, the evaluation, etc. to the buyer of record indicated on the first page of this RFP. Offerors and their agents may not contact any County employee other than the buyer of record regarding any of these matters during the solicitation and evaluation process. Inappropriate contacts are grounds for suspension and/or exclusion from specific procurements. Offerors and their agents who have questions regarding this matter should contact the buyer of record.

4.1.2. Competitive Negotiation of Proposals: The Offeror is advised that under the provisions of this Request for Proposal, the County reserves the right to conduct negotiations of the proposals received or to award a contract without negotiations. If such negotiations are conducted, the following conditions shall apply:

4.1.2.1. Negotiations may be conducted in person, in writing, or by telephone.

4.1.2.2. Negotiations will only be conducted with potentially acceptable proposals. The County reserves the right to limit negotiations to those proposals, which received the highest rankings during the initial evaluation phase.

4.1.2.3. Terms, conditions, prices, methodology, or other features of the Offeror's proposal may be subject to negotiation and subsequent revision. As part of the negotiations, the Offeror may be required to submit supporting financial, pricing and other data in order to allow a detailed evaluation of the feasibility, reasonableness, and acceptability of the proposal.

4.1.2.4. The mandatory requirements of the Request for Proposal shall not be negotiable and shall remain unchanged unless the County determines that a change in such requirements is in the best interest of the entities.

4.1.3. Evaluation and Award Process:

4.1.3.1. After determining a responsible Offeror and a responsive proposal through the determination that the proposal satisfies the mandatory requirements stated in the Request for Proposal, the evaluator(s) shall use both objective analysis and subjective judgment in conducting a comparative assessment of the proposal in accordance with the evaluation criteria stated below:

a. **Method of Performance**

b. **Experience/Expertise**

c. **Cost**

4.1.3.2. After an initial evaluation process, a question and answer interview may be conducted with the Offeror, if deemed necessary by the County. In addition,

the Offeror may be asked to make an oral presentation of their proposal to the evaluation team at a designated Boone County location. Attendance cost shall be at the Offeror's expense. All arrangements and scheduling will be coordinated by the County.

4.1.4. Evaluation:

- 4.1.4.1. Experience and reliability of the Offeror's organization are considered subjectively in the evaluation process. Therefore, the Offeror is advised to submit any information, which documents successful and reliable experience in past performances, especially those performances related to the requirements of this RFP.
- 4.1.4.2. The Offeror should provide the following information related to previous and current services/contracts performed by the Offeror's organization and any proposed subcontractors which are similar to the requirements of this RFP (This information may be shown on the form attached as Attachment B to this RFP or in a similar manner):
 - a. Name, address, and telephone number of client/contracting agency and a representative of that client/agency who may be contacted for verification of all information submitted;
 - b. Dates and locations of the service/contract; and
 - c. A brief, written description of the specific prior services performed and requirements thereof.
- 4.1.4.3. The Offeror should submit a copy of all licenses, certifications, accreditation, and/or permits, which may be required by state, federal, and/or local law, statute, or regulation in the course of conduct of the Offeror's business. If not submitted with the proposal, the County reserves the right to request and obtain a copy of any license or certification required to perform the defined services prior to contract award.
- 4.1.4.4. Proposals will be subjectively evaluated based on the Offeror's distinctive plan for performing the requirements of the RFP. Therefore, the Offeror should present a written narrative, which demonstrates the method or manner in which the Offeror proposes to satisfy these requirements. The language of the narrative should be straightforward and limited to facts, solutions to problems, and plans of action.
- 4.1.4.5. Where the words "shall" or "must" are used, they signify a required minimum function of system capacity that will heavily impact the Bidder's final response rating.

4.1.4.6. Where the words “should”, “may” or “desired” are used, they signify that the feature or capacity is desirable but not mandatory; therefore, the specifications in question will possess minimal impact on the Bidder’s final response rating.

4.1.4.7. The method by which the proposed method of performance is written will be left to the discretion of the Offeror. However, the Offeror should address each specific paragraph and subparagraph of the Specifications by paragraph and page number as an item for discussion. Immediately below these numbers, write descriptions of how, when, by whom, with what, to what degree, why, where, etc, the requirements will be satisfied.

4.1.5. Proposal Inclusions:

4.1.5.1. The Proposal should include a summary of the team’s history and structure; relevant experience including a description of at least two projects completed of similar scope; qualifications of key team members that would be directly involved with the project; and any supporting information that would further convey the team’s qualifications for this project assignment.

Firms wishing to submit a proposal must be:

- 1) Duly authorized to conduct business in the State of Missouri.
- 2) Professionally registered in the State of Missouri.
- 3) Able to commit adequate staff to meet the desired time frames.

4.1.5.2. Employment of Unauthorized Aliens Prohibited

Contractor agrees to comply with Missouri State Statute section 285.530 in that they shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri.

4.1.5.3. As a condition for the award of this contract, the Contractor shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. The contractor shall also sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services. **Please return a copy of the Memorandum of Understanding** that you will receive following completion of enrollment. This will provide the County the proof of enrollment.

4.1.5.4. Contractor shall require each subcontractor to affirmatively state in its contract with Contractor that the subcontractor shall not knowingly employ, hire for employment or continue to employ an unauthorized alien to perform work within the state of Missouri. Contractor shall also require each subcontractor

to provide Contractor with a sworn affidavit under the penalty of perjury attesting to the fact that the subcontractor's employees are lawfully present in the United States

Interested firms should submit one (1) Original and five (5) copies of their written proposal and qualifications to:

Tyson Boldan,
Buyer
601 East Walnuts, Room 209
Columbia, Missouri, 65201

1:30 p.m. on Friday, June 24, 2011

Proposals should include:

- 1) Business Information – Basic biographical information about the firm, including firm name and former firm names, address, date established, statement of business organization, names of all owners, principles, partners, and professional employees. This section should also detail the firm's proximity to and familiarity with the project area.
- 2) Staff Information – Resumes of each professional on the project team, including a description of experience, technical competence, and areas of expertise. The description should also include the number of ancillary staff with job descriptions or titles and relevant experience available for assignment. This section should detail the capacity and specialized experience of the firm to perform the work required within the time limits established and a discussion of how Boone County would benefit from your firm being selected to complete the work. This section should also name a designated project engineer/contact person for this project.
- 3) Registration and Licensing – Evidence of professional registration and licensing with the State of Missouri and, in the case of business entities which must be registered with the Secretary of State, current copies of registration and statements of good standing.
- 4) Work History – A listing of all government agencies for which work was performed within the preceding two years and nature of services. In the event the Consultant has not performed professional services for governmental entities, then the Consultant shall provide a listing of institutional or business clients for whom work has been performed in the preceding two years. If the references are unavailable, then the Consultant shall provide a detailed explanation of why references are not available. A separate list of references should also be included.
- 5) Insurance – Evidence of insurance coverages and amounts carried by the Consultant as required by the general qualifications for County Consultants.

- 6) Project Listing – A listing of completed and pending projects in which the Consultant was or is the primary provider of professional services or manager of the project.
 - 7) Subconsultants – A listing of subconsultants retained by the Consultant to perform work not customarily performed by the Consultant. Relevant descriptions of expertise of subconsultants should be included when appropriate.
 - 8) Quality Controls – A description of internal quality control and assurance procedures used to verify accuracy and reliability of work product.
 - 9) Approach and Schedule – A description of the approach the firm will take to complete the work, including an estimate of the total time needed for the firm to complete the work.
- 4.1.6. See also, section 3.5 Proposal Submission Requirements: Located on page (14 of this RFP).**



ATTACHMENT A

Boone County Purchasing
601 E. Walnut, Room 209
Columbia, MO 65201

“No Bid” Response Form

Tyson Boldan, Buyer
(573) 886-4392 – Fax: (573) 886-4390

“NO BID RESPONSE FORM”

**NOTE: COMPLETE AND RETURN THIS FORM ONLY IF YOU DO NOT WANT TO
SUBMIT A PROPOSAL RESPONSE**

If you do not wish to respond to this proposal request, but would like to remain on the Boone County vendor list **for this service**, please remove form and return to the Purchasing Department by mail or fax.

If you would like to FAX this “No Bid” Response Form to our office, the FAX number is (573) 886-4390.

Proposal: 22-24JUN11 – Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek

Business Name: _____

Address: _____

Telephone: _____

Contact: _____

Date: _____

Reason(s) for Not Bidding:

EXHIBIT 1

(Please complete and return with Bid)

Certification Regarding
Debarment, Suspension, Ineligibility and Voluntary Exclusion
Lower Tier Covered Transactions

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 29 CFR Part 98 Section 98.510, Participants' responsibilities. The regulations were published as Part VII of the May 26, 1988, Federal Register (pages 19160-19211).

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS FOR CERTIFICATION)

- (1) The prospective recipient of Federal assistance funds certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective recipient of Federal assistance funds is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Name and Title of Authorized Representative

Signature

Date

Tyson Boldan

Buyer



601 E. Walnut, Room 209

Columbia, MO 65201

Phone: (573) 886-4392

Fax: (573) 886-4390

INSTRUCTIONS FOR COMPLIANCE WITH HOUSE BILL 1549

House Bill 1549 addresses the Department of Homeland Security's and the Social Security Administration's E-Verify Program (Employment Eligibility Verification Program) that requires the County to verify "lawful presence" of individuals when we contract for work/service; verify that contractor has programs to verify lawful presence of their employees when contracts exceed \$5,000; and a requirement for OSHA safety training for public works projects.

The County is required to obtain certification that the bidder awarded the attached contract participates in a federal work authorization program. To obtain additional information on the Department of Homeland Security's E-Verify program, go to:

http://www.dhs.gov/xprevprot/programs/gc_1185221678150.shtm

Please complete and return form *Work Authorization Certification Pursuant to 285.530 RSMo* if your contract amount is in excess of \$5,000. **Attach to this form the first page (which shows your company's name) and the last page (which shows your signature) of the E-Verify Memorandum of Understanding that you completed when enrolling.** The link for that form is:

<http://www.uscis.gov/files/nativedocuments/save-mou.pdf>

Additional information may be obtained from:

<http://www.uscis.gov/files/nativedocuments/MOU.pdf>

If you are an Individual/Proprietorship, then you must return the attached *Certification of Individual Bidder*. On that form, you may do one of the three options listed. Be sure to attach any required information for those options as detailed on the *Certification of Individual Bidder*. If you choose option number two, then you will also need to complete and return the attached form *Affidavit*.

CERTIFICATION OF INDIVIDUAL BIDDER

Pursuant to Section 208.009 RSMo, any person applying for or receiving any grant, contract, loan, retirement, welfare, health benefit, post secondary education, scholarship, disability benefit, housing benefit or food assistance who is over 18 must verify their lawful presence in the United States. Please indicate compliance below. Note: A parent or guardian applying for a public benefit on behalf of a child who is citizen or permanent resident need not comply.

- _____ 1. I have provided a copy of documents showing citizenship or lawful presence in the United States. (Such proof may be a Missouri driver's license, U.S. passport, birth certificate, or immigration documents). Note: If the applicant is an alien, verification of lawful presence must occur prior to receiving a public benefit.

- _____ 2. I do not have the above documents, but provide an affidavit (copy attached) which may allow for temporary 90 day qualification.

- _____ 3. I have provided a completed application for a birth certificate pending in the State of _____. Qualification shall terminate upon receipt of the birth certificate or determination that a birth certificate does not exist because I am not a United States citizen.

Applicant

Date

Printed Name

AFFIDAVIT

(Only Required for Certification of Individual Bidder (Option #2))

State of Missouri)
County of _____))SS.

I, the undersigned, being at least eighteen years of age, swear upon my oath that I am either a United States citizen or am classified by the United States government as being lawfully admitted for permanent residence.

Date

Signature

Social Security Number
or Other Federal I.D. Number

Printed Name

On the date above written _____ appeared before me and swore that the facts contained in the foregoing affidavit are true according to his/her best knowledge, information and belief.

Notary Public

My Commission Expires:



ATTACHMENT B

PRIOR EXPERIENCE

(References of similar services for governmental agencies are preferred)

Consideration will be given to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

1. Prior Services Performed for:

Company Name:
Address:

Contact Name:
Telephone Number:

Date of Contract:
Length of Contract:

Description of Prior Services (include dates):

2. Prior Services Performed for:

Company Name:
Address:

Contact Name:
Telephone Number:

Date of Contract:
Length of Contract:

Description of Prior Services (include dates):

3. Prior Services Performed for:

Company Name:
Address:

Contact Name:
Telephone Number:

Date of Contract:
Length of Contract:

Description of Prior Services (include dates):

(SAMPLE) AGREEMENT FOR

Hinkson Creek Consulting and Stormwater Monitoring

THIS AGREEMENT dated the _____ day of _____ 2011 is made between Boone County, Missouri, a political subdivision of the State of Missouri through the Boone County Commission, herein "County" and **XXXXXXX** herein "Contractor."

IN CONSIDERATION of the parties performance of the respective obligations contained herein, the parties agree as follows:

1. **Contract Documents** - This agreement shall consist of this Agreement for **Hinkson Creek Consulting and Stormwater Monitoring**, County of Boone Request for Proposal number **XXXXXX** including Instructions and General Conditions, Introduction and General Information, Scope of Services, Contract Terms and Conditions, Proposal Submission Information, the unexecuted Response Page, addendum #1, Question and Clarification Form #1, Contractor's proposal response dated **XXXXXX**, Question and Clarification Response dated **XXXXXX**, and the Best and Final Offer Response dated **XXXXXX**. All such documents shall constitute the contract documents, which are attached hereto and incorporated herein by reference. In the event of conflict between any of the foregoing documents, the terms, conditions, provisions and requirements contained in this Contract, the proposal specifications including Instructions and General Conditions, Introduction and General Information, Scope of Services, Proposal Submission Information, the unexecuted Response Pricing Page and the Best and Final Offer, shall prevail and control over the Contractor's proposal, Question and Clarification and Best and Final Offer responses.

2. **Basic Services** - The County agrees to purchase from the Contractor and the Contractor agrees to supply the County services and deliverables in the bid specifications and as outlined in the Question and Clarification response and the Best and Final Offer #1 response.

3. **Contract Duration** - This Contract shall commence on the day of award and the services and deliverables under this agreement shall be provided in a prompt and timely fashion and in accordance with the Target Dates for Milestones located in section 3.4.1. of the Proposal Response with a not to exceed time limit of one thousand (1,000) days after Contractor is given authority to proceed through the various phases as set out herein.

4. **Billing and Payment** - All billing shall be invoiced to the Boone County Planning and Building Department. Contractor shall submit invoices that are progressive billings at the conclusion of each milestone identified in the Contractor's Best and Final Offer Response dated **XXXXXX**. The County agrees to pay all correct invoices within thirty days of receipt. No other fees shall be included as additional charges in excess of the charges in the Contractor's response to the proposal specifications. In the event of a billing dispute, the County reserves the right to withhold payment on the disputed amount; in the event the billing dispute is resolved in favor of the Contractor, the County agrees to pay interest at a rate of 9% per annum on disputed amounts withheld commencing from the last date that payment was due.

5. **Binding Effect** - This agreement shall be binding upon the parties hereto and their successors and assigns for so long as this agreement remains in full force and effect.

6. **Entire Agreement** - This agreement constitutes the entire agreement between the parties and supersedes any prior negotiations, written or verbal, and any other proposal or contractual agreement. This agreement may only be amended by a signed writing executed with the same formality as this agreement.

7. **Termination** - This agreement may be terminated by the County upon thirty days advance written notice for any of the following reasons or under any of the following circumstances:

a. County may terminate this agreement due to material breach of any term or condition of this agreement, or

b. County may terminate this agreement if key personnel providing services are changed such that in the opinion of the Boone County commission delivery of services are or will be delayed or impaired, or if services are otherwise not in conformity with proposal specifications, or if services are deficient in quality in the sole judgment of County, or

c. If appropriations are not made available and budgeted for any calendar year to fund this agreement.

IN WITNESS WHEREOF the parties through their duly authorized representatives have executed this agreement on the day and year first above written.

XXXXXX

BOONE COUNTY, MISSOURI

By: _____

By: Boone County Commission

Title: _____

Edward H. Robb, Presiding Commissioner

APPROVED AS TO FORM:

ATTEST:

County Counselor

Wendy S. Noren, County Clerk

AUDITOR CERTIFICATION

In accordance with RSMo 50.660, I hereby certify that a sufficient unencumbered appropriation balance exists and is available to satisfy the obligation(s) arising from this contract. (Note: Certification of this contract is not required if the terms of this contract do not create a measurable county obligation at this time.)

XXXX/XXXX \$XXXXXX

Signature

Date

Appropriation Account

STANDARD TERMS AND CONDITIONS – CONTRACT WITH BOONE COUNTY, MISSOURI

1. Responses shall include all charges for packing, delivery, installation, etc., (unless otherwise specified) to the Boone County Department identified in the Request for Bid and/or Proposal.
2. The Boone County Commission has the right to accept or reject any part or parts of all bids, to waive technicalities, and to accept the offer the County Commission considers the most advantageous to the County. Boone County reserves the right to award this bid on an item-by-item basis, or an “all or none” basis, whichever is in the best interest of the County.
3. Bidders must use the bid forms provided for the purpose of submitting bids, must return the bid and bid sheets comprised in this bid, give the unit price, extended totals, and sign the bid.
4. When products or materials of any particular producer or manufacturer are mentioned in our specifications, such products or materials are intended to be descriptive of type or quality and not restricted to those mentioned.
5. Do not include Federal Excise Tax or Sales and Use Taxes in bid process, as law exempts the County from them.
6. The delivery date shall be stated in definite terms, as it will be taken into consideration in awarding the bid.
7. The County Commission reserves the right to cancel all or any part of orders if delivery is not made or work is not started as guaranteed. In case of delay, the Contractor must notify the Purchasing Department.
8. In case of default by the Contractor, the County of Boone will procure the articles or services from other sources and hold the Bidder responsible for any excess cost occasioned thereby.
9. Failure to deliver as guaranteed may disqualify Bidder from future bidding.
10. Prices must be as stated in units of quantity specified, and must be firm. Bids qualified by escalator clauses may not be considered unless specified in the bid specifications.
11. No bid transmitted by fax machine or **e-mail** will be accepted. **U.S. mail only.**
12. The County of Boone, Missouri expressly denies responsibility for, or ownership of any item purchased until same is delivered to the County and is accepted by the County.
13. The County reserves the right to award to one or multiple respondents. The County also

reserves the right to not award any item or group of items if the services can be obtained from a state or other governmental entities contract under more favorable terms.

14. The County, from time to time, uses federal grant funds for the procurement of goods and services. Accordingly, the provider of goods and/or services shall comply with federal laws, rules and regulations applicable to the funds used by the County for said procurement, and contract clauses required by the federal government in such circumstances are incorporated herein by reference. These clauses can generally be found in the Federal Transit Administration's Best Practices Procurement Manual – Appendix A. Any questions regarding the applicability of federal clauses to a particular bid should be directed to the Purchasing Department prior to bid opening.
15. In the event of a discrepancy between a unit price and an extended line item price, the unit price shall govern.

Proposal for Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed

RFP#22-24JUN11

July 08, 2011



Prepared for:

Boone County Purchasing Department
601 E. Walnut Street, Room 209
Columbia, Missouri 65201



Submitted by:

Geosyntec[®]
consultants

1123 Wilkes Blvd., Suite 400
Columbia, MO 65201
573-443-4100

July 08, 2011

Mr. Tyson Bolden, Buyer
Boone County Purchasing
601 E. Walnut Street, Room 209
Columbia, MO 65201

Subject: Response to Request for Proposal #22-24JUN11 titled "Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed" by Geosyntec Consultants (Vendor #2745)

Dear Mr. Bolden:

Geosyntec is pleased to provide our qualifications to support stormwater management and surface water assessment needs of Boone County, Missouri. Geosyntec has earned the privilege to support our governmental clients through various stormwater BMP design or master planning projects such as the University of Missouri (MO), New Orleans (LA), New York City (NY), Orange County (CA), Los Angeles (CA), Santa Barbara (CA), and Chicago (IL). In addition to master planning, our scientists and engineers are recognized national leaders in design, monitoring, and modeling of stormwater Best Management Practices (BMPs). Our senior practitioners have co-developed the International Stormwater Best Management Practice Database (<http://www.bmpdatabase.org/>) that includes nationwide BMP performance data, monitoring guidance, and interpretive analyses for various pollutants of concern. Our Columbia, MO office is currently providing stormwater retrofit design and rainwater harvesting services to a nationwide commercial development firm at a multi-block site in St. Louis, Missouri.

Many of our surface water assessment projects are supported by Quality Assurance Project Plans (QAPPs) approved by the US Environmental Protection Agency. Our Superfund remediation projects at several confidential sites require EPA-approved QAPPs for all monitoring activities. Our Missouri office has developed multiple EPA-approved QAPPs, including those guiding the Ecological Water Resources and Assessment Project (EWRAP) that supported key state and federal water quality standards decisions. Several Geosyntec staff have been formally trained in federal quality assurance (QA) protocols, including Chris Zell P.H., from our Missouri office who has attended QAPP training administered by EPA Region 7.

This proposal includes examples of our relevant municipal and governmental project experience. The exceptional experience of our professionals enables us to quickly respond to urban wet-weather sampling, modeling, and training needs that may emerge as your project moves forward. The Geosyntec team offers our unique and proven ability to seek cost-effective, science-based solutions. For example, we would suggest optimizing placement of BMPs within study sites based on preliminary computer simulations and our unique knowledge of BMP performance gained from development of the International Stormwater Database. This approach could prevent investments in BMP types or locations that may not yield a measurable reduction of pollutants or stormwater runoff.

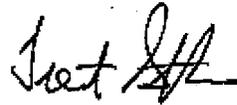
July 8, 2011

Page 2

For several years, Geosyntec has been the lead negotiating consultant for the St. Louis Metropolitan Sewer District. In addition to St. Louis MSD, our Missouri office has worked with over 75 Missouri municipalities or governments including the Cities of Kansas City, Springfield, Columbia, Joplin, Branson, Poplar Bluff, Maryville, Macon, and Jefferson City. We look forward to building on the successful partnership established during our review of the Hinkson Creek Total Maximum Daily Load (TMDL) on behalf of Boone County.

In this response, we propose to provide BMP monitoring, modeling, and stormwater training to Boone County, Missouri for a time and materials, not to exceed sum of \$216,231. Our focus is providing Boone County exceptional service and cost-effective solutions by leveraging our nationwide expertise with a unique understanding of local wet-weather issues and the regulatory environment. Should you have any questions regarding our proposal, please give Chris Zell or me a call at (573) 443-4100.

Sincerely,

A handwritten signature in black ink, appearing to read "Trent Stober". The signature is fluid and cursive, with a horizontal line extending from the end.

Trent Stober, P.E.
Principal

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*Proposal for Urban Retrofit Monitoring of
Stormwater Practices in Hinkson Creek Watershed
RFP No. 22-24Jun11*

- APPENDIX A – Resumes
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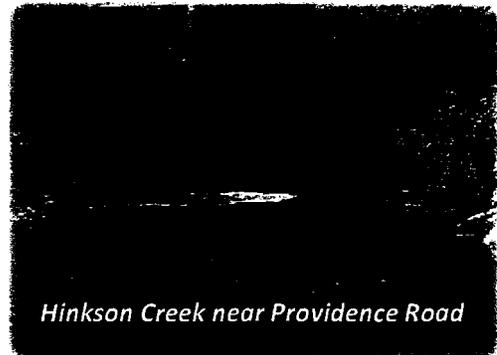
Overview and Introduction



1. Overview and Introduction

Project Overview

Hinkson Creek is a perennial Ozark border stream that flows through the boundary of a municipal separate storm sewer (MS4) permit jointly held by Boone County, the University of Missouri, and the City of Columbia, Missouri. In response to beneficial use impairments detected by agency-led biological assessments, a Total Maximum Daily Load (TMDL) document was finalized in January 2011 that seeks to restore aquatic life uses through reductions in stormwater runoff. The feasibility of achieving runoff and baseflow targets identified by the TMDL is currently unknown.



Hinkson Creek near Providence Road

The purpose of this project is to assist Boone County, Missouri (County) in evaluating and disseminating stormwater improvements that are achievable through implementation of urban Best Management Practice (BMP) retrofits, green infrastructure, and Low Impact Development (LID) within selected sub-watersheds. Information and materials generated from this project will provide key data and insights to watershed managers working to protect and maintain the health of Hinkson Creek.

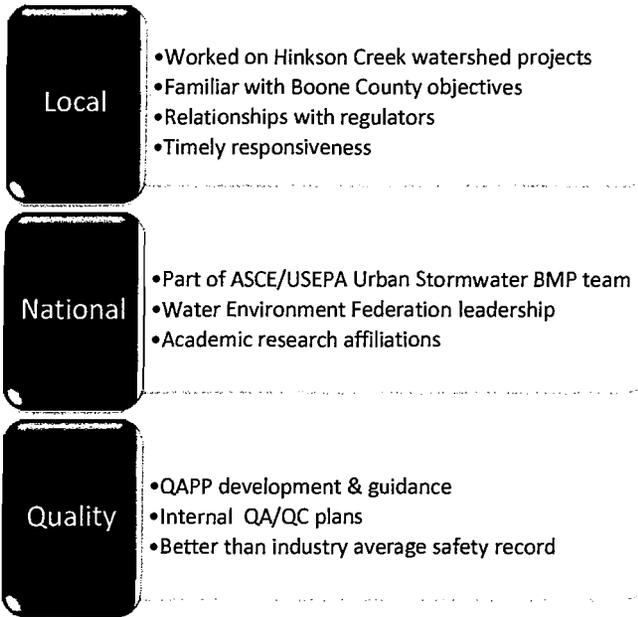
Introduction to Geosyntec

Geosyntec Consultants, Inc. (Geosyntec), was established in 1983 as a multidisciplinary engineering firm with a mission of providing high quality, cost-effective environmental consulting, engineering design, feasibility study, and construction quality assurance oversight services to public and private clients. Headquartered in Atlanta, Georgia, Geosyntec has over 750 employees and maintains offices throughout the United States and in Canada, Malaysia, Australia, and the United Kingdom.

A significant aspect of Geosyntec's multi-faceted consulting practice is our stormwater management expertise. Geosyntec is known for its innovative work in urban stormwater and surface water quality management, including green infrastructure design for Combined Sewer Overflow (CSO) controls, LID, BMP design, hydromodification management, and erosion and sediment control. Our personnel have helped shape the state of these practices through research and project work with faculty at outstanding academic institutions, as well as continuous involvement in original research, development, and application of techniques and technologies. As a result, Geosyntec is recognized for frequently facilitating the transfer of technologies from academia to commercial and public use (American Society of Civil Engineers (ASCE) Civil Engineering State-of-the-Art Award). Our professionals have been a critical and ongoing part of an award-winning team maintaining the ASCE/US EPA International Database on Urban Stormwater BMP Design and Performance. Geosyntec employees also frequently present state-of-the-practice training sessions and workshops on stormwater management, National Pollutant Discharge Elimination System (NPDES) regulatory program requirements, erosion and sediment control technologies, and BMP performance and design to a wide variety of audiences.

Geosyntec is also a leader in understanding current stormwater and surface water regulations. Our regulatory knowledge, coupled with our innovative stormwater and surface water quality experience, has provided us the opportunity to work with some of the largest property development companies and municipalities in the country. Our professionals excel in the development and implementation of innovative water quality master plans and site-specific designs using green infrastructure concepts for long term stormwater controls. We also have extensive experience in the development and design of construction, industrial, and municipal NPDES compliance programs; the assessment of TMDL implementation programs; and the implementation of hydromodification analysis tools and control plans for municipal stormwater agencies.

A major focus of Geosyntec's multi-faceted consulting practice is our stormwater management expertise



How Boone County Benefits from Selecting Geosyntec

We feel that Geosyntec offers Boone County a professional staff that possesses a unique combination of talent, local experience, and nationally-recognized expertise in urban stormwater practices. These characteristics, coupled with the strength of our project management, health & safety, and quality assurance systems, allow Geosyntec to understand the needs of the local watershed and its stakeholders and bring to bear the best practices in a manner that will meet project objectives.

As a national leader in stormwater management with intimate knowledge of local challenges facing the Hinkson Creek watershed, Geosyntec is best positioned to deliver effective, high-quality services to the County. To meet the goals of the project, local Geosyntec professionals will consult with in-house, nationally recognized stormwater management experts who will provide support for the duration of the project. The expertise of our project team, combined with the experience gained working on projects such as the University of Missouri Stormwater Master Plan and Hinkson Creek TMDL Evaluation, will ensure a level of service that is second to none. Furthermore, our extensive quality assurance planning and regulatory experience will allow us to develop a project plan that will meet the regulatory agency requirements and ensure a clear path for successfully achieving the County's objectives. Finally, our local presence and past experience working for the County will facilitate collaboration and will allow us to quickly respond to any project challenges that may occur.

*Proposal for Urban Retrofit Monitoring of
Stormwater Practices in Hinkson Creek Watershed
RFP No. 22-24Jun11*

City of Bloomington

Contact Name

Chris Zell, P.H., Project Manager
573.443.4100
czell@geosyntec.com

Trent Stober, P.E., Project Director
573.443.4100
tstober@geosyntec.com

Business and Information



2. Business and Information

Name: Geosyntec Consultants
Address: 1123 Wilkes Blvd., Suite 400
Columbia, Missouri, 65102
573-443-4100
**Date
Established:** 1983
Organization: Private Corporation
Owners: Employee-Owned

COLUMBIA, MISSOURI OFFICE INFORMATION

Established in 2002 as MEC Water Resources, Inc.
(acquired by Geosyntec in 2009)
Full-Time Employees: 12
Professionally Licensed Staff: 3

General Contact Information

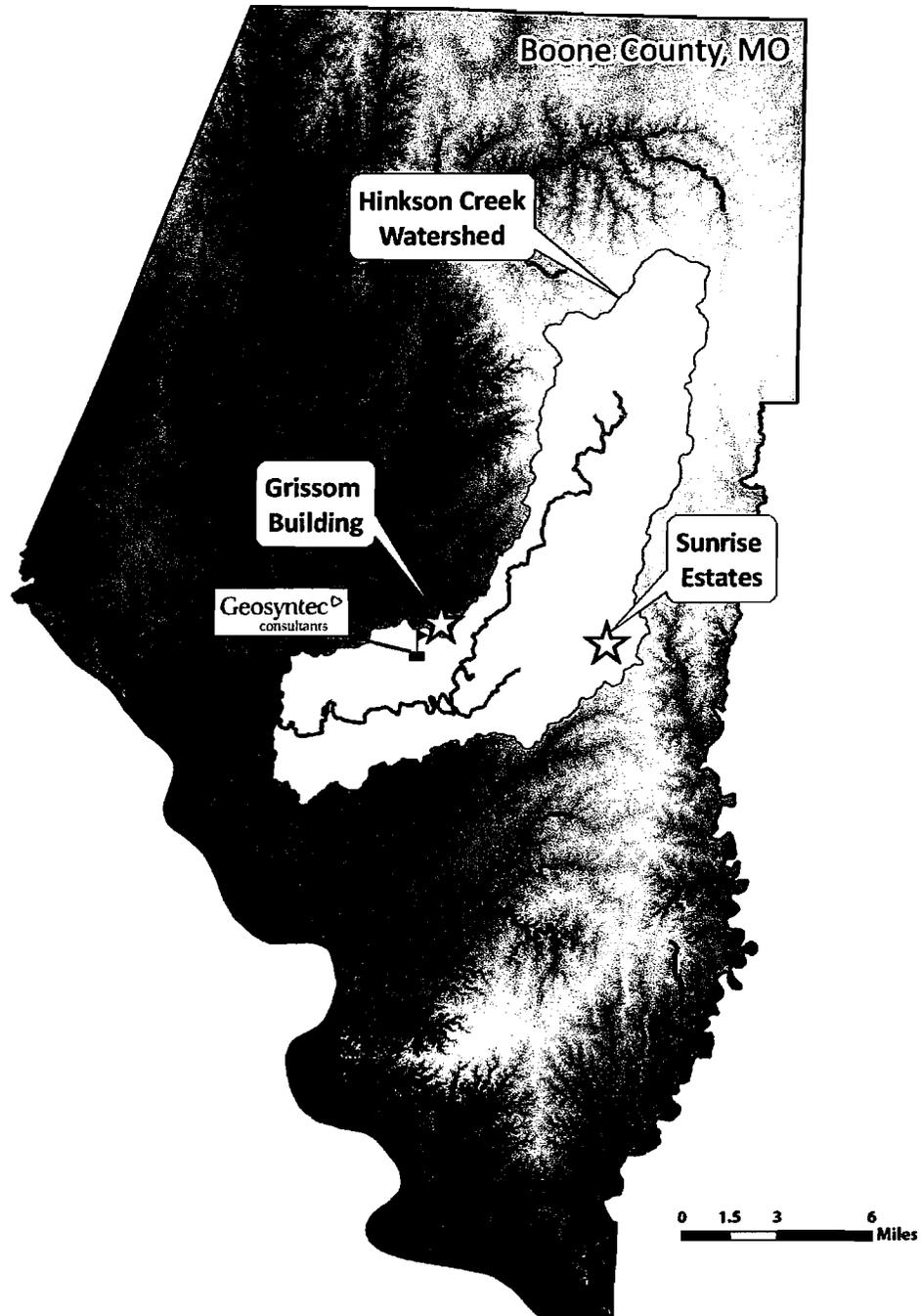
Trent Stober, P.E., Project Director
573-443-4100
tstober@geosyntec.com

Introduction to Geosyntec's Columbia, Missouri Office

Geosyntec's Columbia, Missouri office (formerly MEC Water Resources, Inc.) is staffed by 12 full time water resource scientists and engineers. Led by our Project Director Trent Stober, P.E., our Columbia office has developed a strong reputation for innovative, comprehensive, and high-quality work. We enjoy a diverse project base that includes extensive water quality monitoring, modeling, and stormwater services for over 100 Missouri municipalities, including the Metropolitan St. Louis Sewer District and the Cities of Springfield and Kansas City. We regularly integrate local and national experts into our projects to ensure that each of our clients benefit from our national-level understanding, innovative approaches, and cost-effective solutions.

Professionals in our Columbia office have considerable experience working on important issues in the project area. For example, many of the same Geosyntec scientists that successfully developed technical comments for the Hinkson Creek TMDL on behalf of Boone County are included in our proposed Project Team. Our Columbia office is also leveraging Geosyntec's national resources to develop an integrated Stormwater Master Plan for the University of Missouri. As described in the next section, our Project Team includes several national and local experts in urban hydrology, best management practice monitoring, hydrologic and hydraulic modeling, database management, and TMDL implementation.

Proximity to Site



Staff Information



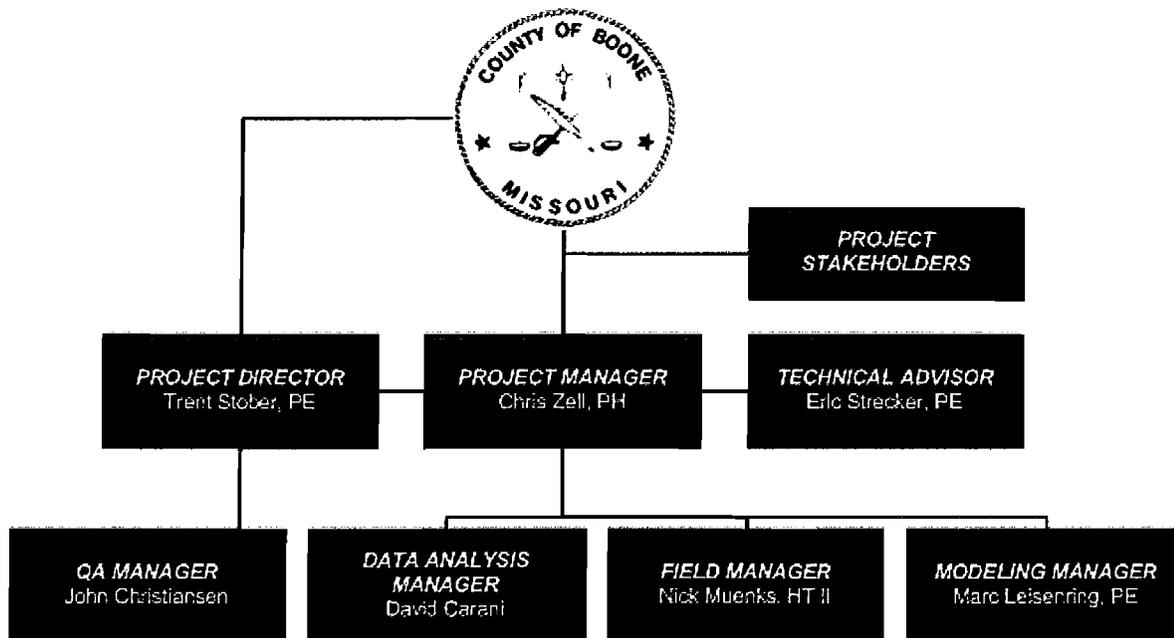
3. Staff Information

Project Organization and Key Personnel

To deliver a successful project for the County, we have selected a team of scientists and engineers that have the experience and proven ability to solve significant water quality issues and provide lasting stormwater solutions, both locally and nationally. Geosyntec will perform this work out of our Columbia, Missouri office with national assistance from our Portland, Oregon colleagues.

The proposed project organization chart is included below. Trent Stober, P.E., Geosyntec, will serve as the Project Director and will make available all the resources needed to successfully implement the project. Chris Zell, P.H., will serve as Project Manager and the primary point of contact to the County. Eric Strecker, P.E., will serve as the lead technical advisor. Individuals specializing in their respective services, ranging from quality assurance to database management, will lead critical project components. All individuals included in the project team have available workload capacity to respond to project needs.

Proposed Project Organization



Additional work history and experience of proposed key personnel are provided within brief resumes included as **Appendix A**. Brief biographies of key personnel are provided in the following paragraphs.

Trent Stober, P.E., Project Director: Mr. Stober has nearly 20 years of experience in water quality assessment and regulatory projects. A Registered Professional Engineer in Missouri, he has extensive experience in stormwater NPDES permitting, TMDL development and review, quality compliance assessment, watershed assessment and monitoring, wasteload allocations, stormwater runoff characterization and treatment, and BMP design and evaluation. Mr. Stober has managed projects involving development of water quality-based discharge limitations, assessment of beneficial uses and their attainability, development of site-specific water quality criteria, watershed management, and water quality monitoring. These projects include some of most intensive water quality monitoring projects in the Midwestern United States and used state-of-the-art water quality and flow monitoring technologies.

Chris Zell, PHWQ, Project Manager: Mr. Zell has over twelve years of experience in managing complex surface water, water quality modeling, and applied regulatory investigations. A registered professional hydrologist, Mr. Zell has led or managed over 150+ water quality studies, TMDLs, and applied regulatory investigations. Chris is currently co-managing development of the University of Missouri Stormwater Master Plan and EPIC, an agricultural BMP performance quantification study in northeast Missouri on behalf of agency and resource commodity partners. Prior to joining Geosyntec, Chris served as Missouri's water quality standards coordinator and lead technical TMDL developer for the Missouri Department of Natural Resources.

Eric Strecker, P.E., Project Technical Advisor: Mr. Eric Strecker, P.E., Principal Water Resources Engineer based in Oregon, focuses on the design, monitoring, and evaluation of stormwater best management practices (BMPs) and development of major project and watershed master plans. He has provided technical direction and assistance to public and private sector clients in stormwater master planning, National Pollutant Discharge Elimination System (NPDES) permitting, Total Maximum Daily Loads (TMDLs), and surface water pollution assessment and control for more than twenty years. He continues to advance the state of the practice by conducting applied National and local research studies for U.S. EPA, U.S. Federal Highway Administration, Water Environment Research Foundation, and the National Cooperative Highway Research Program, as well as State and Local research efforts. Mr. Strecker was recognized by the American Society of Civil Engineers for his work on BMP technology with the 2003 Civil Engineering State-of-the-Art Award. In addition to his work on guidance documents for urban stormwater management, Mr. Strecker has authored more than 45 publications on stormwater planning, low impact development approaches, and the effectiveness of BMP technologies.

Nick Muenks, HT II, Field Manager: Mr. Muenks has over ten years of experience in water quality and watershed assessment and monitoring, wasteload allocations, stormwater runoff characterization, agricultural BMP design and evaluation. A nationally licensed hydrologic technician, Mr. Muenks has concentrated on water quality studies emphasizing intense field investigations, agricultural BMP monitoring, and data management. Mr. Muenks has also provided technical training and maintenance of water quality monitoring equipment and automated sampling equipment for a number of clientele. Mr. Muenks has filled key roles in projects involving development of water quality-based effluent limitations, assessment of beneficial uses and their attainability, development of site-specific water quality criteria, watershed management, and water quality monitoring. Many of these projects utilized state-of-the-art water quality and flow monitoring technologies and include some of most intensive water quality monitoring projects in the Midwest.

David Carani, Data Analysis Manager: Mr. Carani has nine years of experience in a variety of technical and regulatory water quality issues. He has considerable experience with statistical analyses, experimental design, NPDES permitting process, antidegradation evaluations, wasteload allocation development, nutrient trading, and biological assessments. Mr. Carani has been involved in numerous water quality and antidegradation review projects that typically include water quality and stream hydraulic assessments, wasteload allocation and effluent limit development, and alternatives analysis and socioeconomic evaluations. Mr. Carani is currently managing data analysis processes for EPIC, an agricultural BMP performance quantification study in northeast Missouri on behalf of agency and resource commodity partners.

Marc Leisenring, P.E., Modeling Manager: Mr. Leisenring is Registered Professional Engineer with nearly 10 years of applied urban hydrologic and hydraulic modeling experience. His particular areas of expertise include managing complex modeling analyses to support structural treatment BMP planning and design, storm water master planning, and BMP performance quantification. Mr. Leisenring co-developed the Storm Water Management Model (SWMM) supporting the Los Angeles County-wide BMP Prioritization Methodology (www.labmpmethod.org) and the subsequent Strategic BMP Prioritization and Analysis Tool (SBPAT) for the City of LA, LA County. Mr. Leisenring will lead BMP modeling analysis activities for this project and in coordination with **Dr. Wayne Huber, P.E.** (co-developer of EPA SWMM model) will provide modeling training to project stakeholders. Mr. Leisenring managed development of the urban BMP implementation manual for the City of the New Orleans, Louisiana.

John Christiansen, Quality Assurance and Database Manager: Mr. Christiansen is a water quality scientist with over twelve years of experience in the area of water and natural resources. His experience includes environmental database management, wasteload allocation studies, antidegradation reviews, NPDES regulatory support, recreational use attainability analyses, and geospatial data analysis. He also played a significant role in the development of Missouri's antidegradation implementation procedures through his participation in stakeholder meetings. Mr. Christiansen came to Geosyntec after working for the Water Resources Division of the National Park Service as an Impaired Waters Specialist for more than three years. Since graduating with a Master of Engineering in Environmental Engineering Mr. Christiansen has continued his professional development through coursework in GIS and water quality, and by obtaining his Engineer-in-Training (EIT) certification.

A summary of key personnel expertise is provided in the following table.

Key Personnel Experience

Name/Project Role	Years of Experience	Water Quality Monitoring	BMP Performance Evaluation	Database Development	Hydrologic Modeling	QAPP Development	Sampling Training	TMDL Implementation
Trent Stober, P.E. Project Director	19	✓	✓	✓	✓	✓	✓	✓
Eric Strecker, P.E. Technical Advisor	25	✓	✓	✓	✓	✓	✓	✓
Chris Zell, P.H. Project Manager	12	✓	✓	✓	✓	✓	✓	✓
Marc Leisenring, P.E. Modeling Manager	10	✓	✓	✓	✓		✓	✓
Nick Muenks, H.T. II Field Manager	10	✓	✓	✓		✓	✓	✓
John Christiansen Database Manager	12	✓	✓	✓		✓		✓
David Carani Data Analysis Manager	9	✓		✓		✓	✓	✓

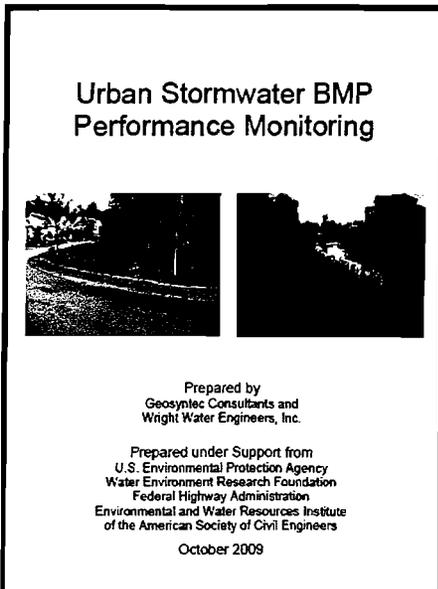
Specialized Expertise

Urban Best Management Practices Evaluation

Geosyntec is a national leader in design and evaluation of innovative stormwater Best Management Practices. Our team of professionals is at the cutting edge of this evolving practice and is continuously involved with projects that involve original research, development, and application of both urban and agricultural BMPs. Geosyntec regularly conducts research and professional activities with civil engineering faculty at outstanding academic institutions such as the University of Colorado, Oregon State University, University of California Los Angeles, San Diego State University, University of Florida, and Louisiana State University. These activities facilitate the transfer of technologies between academia and commercial and public use.



Geosyntec has played a key role in developing a national database that will enable users to evaluate BMP pollutant removal characteristics.



Geosyntec is a national leader in the design and implementation of LID techniques for storm water management. Our senior practitioners work closely with the LID Center, located in Beltsville, Maryland. The Chair of Geosyntec's Water and Natural Resources Practice Group serves on the LID Center's Board of Directors.

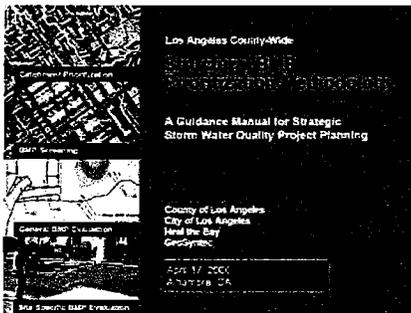
International Stormwater BMP Database

More than a decade ago, members of the American Society of Civil Engineers' Environmental and Water Resources Institute's Urban Water Resources Research Council identified a need to gather sufficient technical design and performance information to improve urban stormwater BMP selection and design. As a result, the **International Stormwater BMP Database Project** (www.bmpdatabase.org) was initiated, with Geosyntec playing a key role from 1997 to the present. The short-term project goals were to develop a national database that would enable users to evaluate BMP

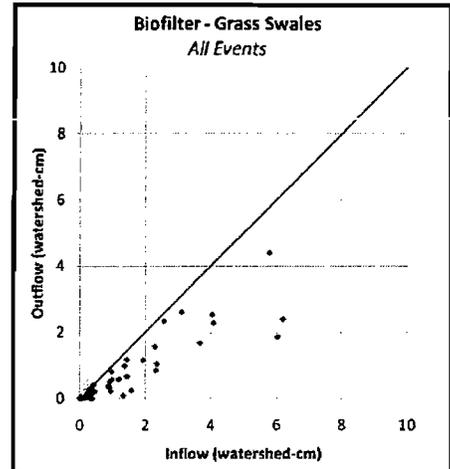
pollutant removal characteristics and assess how differences in BMP design influence the effectiveness pollutant removal and controlling runoff rates to receiving waters. The long-term goal of the project is to promote technical design improvements for BMPs. The database now has over 400 BMP data sets and includes data summaries of individual BMPs and overall BMP categories. Through our involvement and familiarity with the data sets included in the database, Geosyntec has a strong background in the effluent quality that can be expected from various BMP types, as well as pitfalls to avoid when reporting and assessing BMP performance. In 2010, Geosyntec and project partners completed a comprehensive analysis of nutrient data contained in the BMP database, which now contains over 450 stormwater BMPs. The analysis included characterization of current regulatory issues, nutrient chemistry, unit treatment processes expected to be effective at removing various nutrient forms, and statistical characterization of the performance of various BMP categories.

With regard to total phosphorus, the analysis demonstrated that BMPs with unit processes for removing particulates (i.e., sedimentation and filtration) generally provided good removal for total phosphorus. Eric Strecker, P.E. who will serve as technical advisor the Hinkson Creek retrofit study, co-managed development of the International Stormwater Database.

Urban Hydrologic Modeling and Analysis



Geosyntec regularly employs the Stormwater Management Model (SWMM) to locate, design, and simulate performance of urban

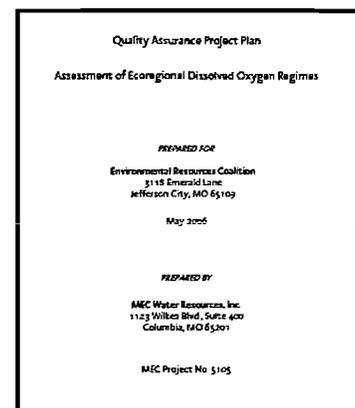


BMPs. In developing the Los Angeles County Structural BMP Manual, Geosyntec dynamically linked a continuous simulation SWMM model, geospatial mapping programs, and study area databases to prioritize BMP selection. In Columbia, Geosyntec is simulating long-term rainfall-runoff relationships to size and design urban BMPs as part of the University of

Missouri Stormwater Master Plan to aid in Hinkson Creek TMDL evaluations. Hydromodification Management Plans (HMPs), including Santa Clara County, California, frequently complement our BMP design and performance projects and are supported by a diverse set of fluvial geomorphologic tools, including the Water Erosion Prediction Project (WEPP) model. Locally, Geosyntec used the BASIN SIM platform to simulate long-term sediment yield in the Peruque Creek watershed (urban and mixed landuses) near St. Louis, Missouri to support the Wright City Antidegradation Review on behalf of the City.

Quality Assurance, Database Development, and Volunteer Training

Quality assurance, project plan development, and oversight activities are essential components to Geosyntec’s projects, both in Missouri and nationwide. Geosyntec actively implements internal quality assurance (QA) and peer-review procedures to assure technical accuracy of deliverables generated by our professionals, consultants, and subcontractors. Several of our Missouri projects have been guided by Quality Assurance Project Plans (QAPPs) approved by U.S. EPA as delegated through the Missouri Department of Natural Resources (MDNR) including the Watershed Research, Assessment and Stewardship Project, Stewardship Implementation Project, Two-Mile Prairie Stream Evaluation, and Main Ditch TMDL investigations. In addition, our **Ecological and Water Resources Assessment Project**, featured two QAPPs approved directly by U.S. EPA Region 7 Quality Assurance Managers.



Scheduled training is a mandatory part of a well-structured QAPP and QA program. Geosyntec regularly trains project staff before and during environmental monitoring studies, including many of the projects discussed in

this document. Post-development training of professional engineers and scientists by Geosyntec to implement LID technologies and BMP manuals has improved retention and long-term efficacy of project deliverables.



Our Missouri office is currently training **water quality monitoring volunteers** as part of our comprehensive assessment for the Lake of the Ozark Watershed Alliance, funded by the MDNR 319 program.

Database development and management is a critical component of many of our data-intensive environmental and stormwater assessment studies. In addition to the International BMP database discussed earlier, several of our Missouri projects have featured project-specific databases including:

- Comprehensive compilation of historic hydrologic and water quality data from five large Ozark Highland watersheds (8-digit hydrologic unit code) near Table Rock Lake as part of our **Water Quality Improvement Project (WQIP)**;
- Development of an extensive database to support storage and analysis of multi-year, multi-site agricultural BMP investigations featured in our Watershed Research, Assessment and Stewardship Project (**WRASP**) and Stewardship Implementation Project (**SIP**).
- Ongoing management of a large water quality database developed to facilitate reporting of data collected in several urban streams and the Mississippi River on behalf of the **Metropolitan St. Louis Sewer District (St. Louis MSD)**.

Staffing Commitment & Capacity

As a provider of professional environmental services, we realize that we are only as good as our people. Our personnel are the primary strength of Geosyntec and are committed to providing quality work products. Our staff possess a wealth of technical expertise (via experience and education) in the following key areas that are essential to this project: water quality sampling, hydrology, aquatic chemistry, instrumentation, statistics, and database management. It is our ability to bring these various disciplines and perspectives to bear on an environmental issue, in addition to our strong work ethic and intimate knowledge of the regulatory process, which allows us to provide outstanding service for our clients.

Geosyntec has a combined staff of more than 820 engineers, scientists, and related technical and project support personnel. For this project, ten water resource professionals from Geosyntec's Columbia, Missouri office are available to perform project duties. In addition, Geosyntec will utilize three stormwater professionals from other offices to enhance project delivery. These individuals have consistently demonstrated the ability to deliver on similar projects and possess significant technical and regulatory expertise which will benefit the project. Estimates of their availability are presented in the following table.

KEY PERSONNEL AVAILABILITY

Key Personnel Availability	Office Location	Project Role	2H2011	2012	2013	2014
Trent Stober	Columbia, MO	Project Director	10%	10%	10%	15%
Chris Zell	Columbia, MO	Project Manager	20%	25%	40%	40%
Eric Strecker	Portland, OR	Technical Advisor	5%	5%	5%	5%
John Christiansen	Columbia, MO	Quality Assurance	15%	25%	35%	50%
David Carani	Columbia, MO	Data Analysis Mgr.	10%	25%	35%	50%
Nick Muenks	Columbia, MO	Field Manager	20%	25%	35%	50%
Marc Leisenring	Portland, OR	Modeling Manager	15%	20%	25%	25%
Randy Crawford	Columbia, MO	Support Staff	20%	20%	30%	40%
James Veverka	Columbia, MO	Support Staff	35%	75%	75%	75%
Cody Luebbering	Columbia, MO	Support Staff	35%	75%	75%	75%
Tom Wallace	Columbia, MO	Support Staff	5%	20%	20%	20%
Tim Altnether	Columbia, MO	Support Staff	5%	75%	75%	75%
Mark Willobee	Oak Brook, IL	Support Staff	15%	25%	25%	25%

Registration and Licensing



4. Registration and Licensing

 <p>City of Columbia, MO. BUSINESS LICENSE</p> <p>POST IN A CONSPICUOUS PLACE</p> <p>The Licensee named herein having paid to the City of Columbia the Required Fee, license is hereby granted said Licensee to transact the business herein set forth, for the period stated, in conformity with the provisions of Ordinances of this city.</p>	Beginning 1st day of July a penalty of 15% of the annual fee will be charged each month or partial month the license remains unpaid.	
	12 00024072 ← LICENSE NO.	CONTROL NO. 20052
CLASS OF BUSINESS GEN BUS LIC - INSIDE CITY (W/O STD)		
BUSINESS LOCATION 1123 WILKES BLVD STE 400		DATE OF ISSUE 6/27/11
GEOSYNTEC CONSULTANTS GEOSYNTEC CONSULTANTS 1123 WILKES BLVD STE 400 COLUMBIA MO 65201		THRU 6/30/12 \$ [REDACTED] TOTAL
		MANAGER PHONE NUMBER <i>Janice W. Finley</i> LICENSE OFFICIAL

<p><i>State of Missouri</i></p> <p>Department of Insurance, Financial Institutions and Professional Registration Division of Professional Registration Board for Architects, Engineers, Land Surveyors & Landscape Architects Professional Engineering Corporation</p>	
<p>VALID THROUGH DECEMBER 31, 2012 ORIGINAL CERTIFICATE/LICENSE NO. 2008019742</p>	
GEOSYNTEC CONSULTANTS, INC. 5901 BROKEN SOUND PARKWAY NW SUITE 300 BOCA RATON FL 33487 USA	<p><i>Judy Kempton</i> EXECUTIVE DIRECTOR</p> <p><i>Jane A. Packard</i> DIVISION DIRECTOR</p>

Team Member	Professional Registration
Trent Stober, Project Director	MO PE No. E-29681
Chris Zell, Project Manager	10-HWQ-2016
Eric Strecker, Technical Advisor	CA PE No. C43019 OR PE No. 15355
Marc Leisenring, Modeling Manager	OR PE No. 77895

Work History



5. Work History

Representative Project Experience

Geosyntec has nationally leading qualifications and experience to provide urban runoff and stormwater quality services. Many of our urban wet-weather clients include the largest municipalities in the country, including the Cities of Los Angeles, New York City and New Orleans. Our Missouri office continues to serve a robust municipal client base including the Cities of Kansas City, Branson, Springfield, Columbia, Macon, Maryville, Poplar Bluff, Joplin, and Jefferson. In Section 7 we list many of these representative projects. **Appendix B** includes several project descriptions of representative projects for municipal and governmental clients.

Selected Client References

John Lodderhose, PE
Compliance Manager
The Metropolitan St. Louis Sewer District
10 East Grand Ave.
St. Louis, MO 63147
(314) 768-6260

Services Provided: TMDL analysis, water quality event sampling, database development and management, regulatory negotiation, water quality standards investigations

Bill Bach
Public Works Director
Poplar Bluff Municipal Utilities
U3000 North Westwood
Poplar Bluff, MO 63901
(573)686-8020

Services Provided: water quality monitoring, TMDL analysis, water quality standards investigations

Todd Wagner, PE
Stormwater Engineering
City of Springfield
840 Boonville Ave.
Springfield, MO 65802
(417) 864-1901

Services Provided: stormwater regulatory and technical support, TMDL analysis



*Proposal for Urban Retrofit Monitoring of
Stormwater Practices in Hinkson Creek Watershed
RFP No. 22-24Jun11*

Craig Stichter
Facilities Project Manager
University of Missouri
E111 General Services Building
Columbia, Missouri 65211
(573) 882-6560
Services Provided: Stormwater Master Planning

Steve Hunt, PE
Environmental Services Manager
City of Columbia
701 E. Broadway, 3rd Floor
Columbia, MO 65201
Tel: 573-874-7250
Services Provided: TMDL negotiations, stormwater regulatory and technical support, wetlands water quality sampling

Insurance





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
6/13/2011

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Greyling Insurance Brokerage 450 Northridge Parkway Suite 102 Atlanta GA 30350	CONTACT NAME: Jerry Noyola
	PHONE (A/C, No, Ext): (770) 552-4225 FAX (A/C, No): (866) 550-4082
	E-MAIL ADDRESS: jerry.noyola@greyling.com
	PRODUCER CUSTOMER ID #: 00002134
INSURED Geosyntec Consultants, Inc. 1111 Broadway 6th Floor Oakland CA 94607	INSURER(S) AFFORDING COVERAGE INSURER A: Commerce & Industry Ins. Co. 19410 INSURER B: Chartis Speciality Ins. Co. 26883 INSURER C: New Hampshire Insurance Company 23841 INSURER D: Ins. Co. of the State of PA 19429 INSURER E: INSURER F:

COVERAGES CERTIFICATE NUMBER: 2010-2011 (Geosyntec) REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR			GL 417-86-18	9/1/2010	9/1/2011	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 25,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC						
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS			CA5053937 (AOS)	9/1/2010	9/1/2011	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$
A	<input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			CA1955451 (MA)	9/1/2010	9/1/2011	PROPERTY DAMAGE (Per accident) \$ \$ \$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DEDUCTIBLE <input checked="" type="checkbox"/> RETENTION \$ 10,000			8085625	9/1/2010	9/1/2011	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$ \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below			WC 006-98-7876 (AOS)			<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER
D	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N N/A			WC 006-98-7877 (CA)	9/1/2010	9/1/2011	E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
B	Professional Liability E&O Incl. Pollution Liab.			COPS 1951904	9/1/2010	9/1/2011	Per Claim \$8,000,000 Aggregate \$10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
Re: Project 22-XXJUN11 - Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed. Boone County Missouri is named as an Additional Insured on the above referenced liability policies with the exception of workers compensation & professional liability.

CERTIFICATE HOLDER Boone County Missouri Boone County Purchasing 601 East Walnut Street Columbia, MO 65201	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE Matias Ormaza/JERRY

Representative Projects



**Proposal for Urban Retrofit Monitoring of
Stormwater Practices in Hinkson Creek Watershed
RFP No. 22-24Jun11**

7. Representative Projects

Geosyntec Representative Project Experience: National and Local Synopsis		Water Quality Monitoring	BMP Performance Evaluation	Database Development	Hydrologic Modeling	QAPP Development	Sampling Training	TMDL Implementation
Project Name	Client							
Hinkson Creek TMDL Technical Support Services	Boone County, MO, City of Columbia, MO and University of MO				<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Stormwater Master Plan*	University of Missouri		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
International Stormwater BMP Database*	ASCE, US EPA, WERF, US DOT		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Urban BMP Guidance Manuals*	City of Santa Barbara, CA, City of New Orleans, LA, Boone County, KY		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Technical Stormwater Modeling and Analysis Support	US EPA, Washington, DC		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Decentralized Stormwater Controls for Urban Retrofit and CSO Reduction*	Water Environmental Research Foundation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
City of Columbia Wetlands Evaluation	City of Columbia, Black & Veatch				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
St. Louis Water Quality Monitoring and Analysis*	Metropolitan St. Louis Sewer District	<input checked="" type="checkbox"/>						
Ecological Water Resources Assessment Project*	US EPA, Environmental Resources Coalition, Missouri Department of Natural Resources	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				
Kansas City Urban Stream and CSO and Stream Sampling*	Kansas City WSD, MO	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Water Quality Improvement Project*	Environmental Resources Coalition, Missouri Department of Natural Resources			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
Two Mile Prairie Stream Evaluation*	University of Missouri, US EPA	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				
County-Wide Structural BMP Prioritization Methodology*	City and County of Los Angeles, CA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Evaluating and Practicing Innovative Conservation*	Environmental Resources Coalition, US Department of Agriculture	<input checked="" type="checkbox"/>						
Conservation Effects Assessment Project*	Environmental Resources Coalition, US Department of Agriculture	<input checked="" type="checkbox"/>						
Watershed Research, Assessment and Stewardship Project*	US Dept. of Agriculture, Missouri Corn Growers Association	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Stewardship Implementation Project*	Environmental Resources Coalition, Bayer Crop Science, Missouri Department of Natural Resources	<input checked="" type="checkbox"/>						
Design & Construction, Urban Rainwater Harvesting*	McCormack Baron Salazar and St. Louis Housing Authority, MO		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
Wetland Demonstration-Albany*	Environmental Resources Coalition	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Ecological & Best Mgt. Practices (Blue Roof) Planning to Address CSOS*	New York City, NY	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			

*Detailed Project Descriptions are included in Appendix B.

Subconsultants



8. Subconsultants

Project Team

Geosyntec has assembled a multidisciplinary team of professionals to develop and implement an integrated BMP monitoring and modeling approach for Boone County. **Geosyntec** will lead the project team, serving as the primary firm for monitoring plan design, equipment installation, hydrologic modeling, and personnel training. Applied Environmental Solutions, Inc. (AES), and Engineering Survey and Services, Inc. (ES&S) will join Geosyntec in this effort. The targeted roles of our partners are described as follows:



Applied Environmental Solutions, Inc., is a specialized environmental monitoring firm established as a minority-owned business in 2006 by Renee Martin. Ms. Martin, HT II, has over 13 years experience in designing and performing complex hydrologic, wetland, and lake monitoring programs. AES specializes in environmental and biological assessments, wetland delineations, and surface/ground water monitoring and routinely coordinates with local and regional watershed stakeholders to implement regulatory monitoring and reporting requirements. Ms. Martin and her staff will assist Geosyntec in deploying data capture systems and training AmeriCorps volunteers to implement optimized sampling plans.



Engineering Survey and Services, Inc., operates a full-service commercial analytical laboratory based out of Columbia, Missouri. Established in 1957, the ES&S laboratory provides a wide-range of analytical instruments to meet the potential chemical, physical, and biological analysis needs of this project. Managing the laboratory is Linda Adams, a professional chemist with over 20 years of laboratory experience with ES&S. Ideally located in the study area, ES&S is capable of receiving and analyzing BMP performance samples within holding times of key parameters. In addition, AmeriCorps staff has the flexibility of delivering samples directly to the ES&S laboratory, thereby reducing the burden of shipping samples and unnecessary time delays.

Our Subcontractors	Role	Locations	Special Qualifications
Applied Environmental Solutions, Inc.	Monitoring Training, Instrument Installation,	Columbia, Missouri	<ul style="list-style-type: none"> • Extensive experience in instrumentation deployment and data collection • Rapid and adaptable volunteer sampling assistance
Engineering Survey & Services, Inc.	Laboratory Analytical Services	Columbia, Missouri	<ul style="list-style-type: none"> • Wide-range of laboratory instrumentation and capabilities • Local presence and sample delivery

Quality Controls



9. Quality Controls

The Geosyntec quality assurance program involves commitment and communication with all stakeholders and is designed to collect, assess, and present data of sound and defensible quality. We achieve our high-quality objectives through the use of systematic planning, beginning at project startup with a **Quality Assurance Project Plan (QAPP)** and a field sampling plan (FSP).

The QAPP integrates the technical and quality aspects of a project through planning, implementation, and assessment activities. The QAPP forms a comprehensive, referenced compendium of methodologies for analyzing field samples to meet the required DQOs for the project, and also explains how QA and quality control (QC) are applied to the environmental site data to assure that these objectives are met. Beyond the preparation of systematic planning documents, Geosyntec possesses depth of experience in data verification and validation following EPA National Functional Guidelines for Data Review, EPA QA/G8, or specific EPA Region validation guidance or programmatic validation guidance, as well as the analytical method requirements and laboratory standard operating procedures.

Geosyntec's systematic planning also includes development and use of FSPs which are closely associated with the QAPP and outline where and how samples will be collected, documented, and analyzed. QC requirements are set in the FSP so that field teams follow the correct procedures for collecting samples that are representative of the. Geosyntec has in-depth experience in planning for and meeting the stringent QA/QC requirements imposed at complex sites.

Geosyntec's data management experience extends into data verification and validation processes. These processes are specified in the QAPP and are followed for both field and analytical data. Geosyntec's QA program requires that independent, third-party data validation be performed on project data. Additionally, electronic data deliverables (EDD) generated by the analytical laboratory can be electronically screened and validated against the hard copy laboratory deliverables. From there, Geosyntec can either electronically transfer data from the EDDs directly to a compatible project database compatible or enter data from hard copies.

The primary data quality management goal is to facilitate the analysis, interpretation, and reporting of all data collected as part of the project. The data must be organized to allow assessment of data completeness, representativeness, and quality. This objective will be accomplished by keeping complete and correct records of samples collected, sample analytical results, QA/QC results, data evaluation results, data corrections, data analyses, and data manipulations. Maintenance of complete records, both paper and electronic, is of principal importance to accomplish the data management objective and to provide project data for statistical, spatial, and other interpretive analyses and for reporting.

Geosyntec has experience developing and obtaining EPA-approved QAPPs for numerous projects within EPA Regions 2 through 9. Several of our Missouri projects have been guided by QAPPs approved by EPA as delegated through the Missouri Department of Natural Resources (MDNR) including the Watershed Research, Assessment and Stewardship Project, Stewardship Implementation Project, Two-Mile Prairie Stream Evaluation, and Main Ditch TMDL investigations. In addition, our Ecological and Water Resources Assessment Project, featured two QAPPs approved directly by U.S. EPA Region 7 Quality Assurance Managers. Other than the QAPPs produced by our Columbia office, Geosyntec has prepared three QAPPs for EPA Region 7, including two for a site in Dodge City, Kansas (approved) and one for a site in Muscatine, Iowa (currently submitted for approval). Our experience includes preparing QAPPs specific to Brownfield Programs, stormwater monitoring, Uniform Federal Policy (UFP) for projects for the Department of Defense (DOD), EPA QA/R5 and EPA QA/5 guidance, and individual state and EPA Region requirements. Geosyntec's project staff is knowledgeable in the data quality objective (DQO) process and has QA Managers with formal EPA and DOD-documented DQO training. Chris Zell, Project Manager, has attended multiple Quality Assurance training programs led by EPA Region 7.

Approach and Schedule



10. Approach and Schedule

To complement ongoing Hinkson Creek restoration efforts coordinated by the County, Geosyntec proposes to conduct BMP performance evaluations, simulate runoff within selected sub-watersheds, and provide BMP monitoring and modeling training to watershed stakeholders, AmeriCorps volunteers, and agency or government engineers. These activities are proposed for a three-year period (beginning in 2011) but may be extended should additional needs or considerations be identified by the County. Two locations are currently identified by the County for stormwater and BMP evaluation. The first site is a 200-unit, residential site (Sunrise Estates) located in the Columbia area. Assessments at the subdivision are proposed to include measurement of runoff data and continuous simulation modeling to characterize hydrograph changes in response to BMPs designed and implemented by the County. The second site is a 10-acre, municipal complex (Grissom Building) where the County plans to install up to six structural BMPs. Presently, input-output (by pollutant mass) treatment evaluations are planned at the 10 acre site to quantify performance of BMP retrofits. To support the County's on-going commitment to sustainable resource management, Geosyntec offers the following Project Approach narrative.

Project Approach

Geosyntec proposes to schedule a project kick-off meeting within one week of project initiation to coordinate several near-term informational needs including:

- Establishing project goals, objectives, and collaborative expectations;
- Identifying critical project implementation paths;
- Determining key QAPP elements (e.g. data quality objectives etc.);
- Scheduling preliminary BMP site visits;
- Reviewing BMP engineering designs at both sites to appropriately advise the County of compatible monitoring equipment; and
- Initiating baseline monitoring activities at the subdivision site (e.g. watershed delineation, modeling and monitoring) estimate rainfall-runoff conditions prior to BMP implementation.

Definitively addressing these items at the beginning of the project will improve the opportunity for project partners to meet the Schedule of Milestones listed in the Request for Proposal. The following paragraphs contain a discussion of Geosyntec's approach to improving BMP performance knowledge and stormwater education in the Hinkson Creek watershed.

Exceptional Client Service

Geosyntec has established a local and national reputation for delivering innovative and science driven solutions to our clients. While not specifically identified in the RFP, we believe *all successful projects are supported by exceptional and responsive client service*. Throughout this project Geosyntec is committed to working collaboratively with Boone County and project partners to deliver data and analysis products that will enhance Hinkson Creek watershed management initiatives and policies.

QAPP Development Assistance

Geosyntec regularly develops agency-approved QAPPs for our environmental investigations. Ambient surface and groundwater sampling conducted as part of Geosyntec's Superfund remediation projects are supported by EPA-approved QAPPs. Our Missouri office has developed multiple EPA-approved QAPPs to support surface water quality studies (see Sections 3 and 9). As described above, Geosyntec will schedule and coordinate a project kick-off meeting within one week of project initiation to cooperatively identify critical QAPP components with project stakeholders.

Stormwater Education

Geosyntec provides a diverse set of stormwater management services including BMP simulation modeling, integrated watershed modeling, development of BMP design manuals, inspector training, and ambient environmental sampling. By selecting Geosyntec, the County has access to a national and robust set of training opportunities during scheduled workshops and throughout the project. During the project kick-off meeting, Geosyntec proposes to discuss timelines and specific needs for scheduled workshops and training events. Geosyntec is committed to achieving milestones and training requirements dictated within the approved QAPP.

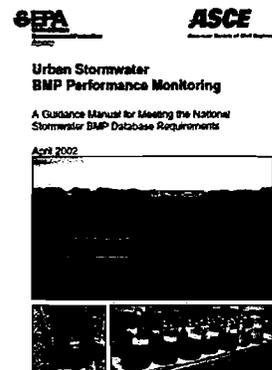
Ambient monitoring training will include a review of sampling methods (including preservation, delivery, chain of custody), automated sampler operation and maintenance, gauge station operation and maintenance, and data download procedures. Modeling training will, at the County's direction, include urban hydrologic analysis, BMP simulation modeling, and a local case example using the EPA-supported Stormwater Management Model (SWMM). At the preference of the County, an alternative model, such as RECARGA, may be used during training workshops.

Database Management and Quality Assurance Oversight

Throughout the project, Geosyntec will coordinate data entry and validation through application of state-of-the-practice database systems. Database structure will be cooperatively identified with the County and project partners to yield a cost-effective project database to facilitate 319 reporting requirements and meet storage needs specified in the approved QAPP. The project database will meet or exceed National Water Quality Monitoring Council guidelines and be constructed to support potential for web-cast capability. Geosyntec proposes to conduct random field audits, routine data quality assessments, and laboratory coordination (post-validation) to describe and document compliance with QAPP requirements for precision, accuracy, representativeness, and completeness (PARC).

Best Management Practice Performance Evaluations

Geosyntec proposes to evaluate the performance of six BMPs located at the Grissom Building using automated event sampling techniques (water quality and discharge) to measure input and output pollutant loads from each BMP. Presently, Geosyntec suggests that a minimum of five paired (input + output) samples (minimum of one winter sample) be collected for each BMP to quantify BMP performance (n = 75 total samples including quality assurance samples).



Use of statistical resampling methods (e.g., bootstrapping) is suggested to maximize use of these data to estimate performance efficiency. For more information about BMP performance monitoring, we reference our 2002 and 2009 BMP Performance Evaluation documents (<http://www.bmpdatabase.org/>).

As a result of Geosyntec's extensive urban stormwater experience, including collaboration with Dr. Robert Pitt (National Urban Runoff Program investigator), we tentatively (as dictated by the final QAPP) propose the optimized set of laboratory parameters listed below be collected at the Grissom Building. In addition to these targeted parameters, a broader pollutant detection scan would be valuable to assess the presence of unlisted contaminants at the site.

Potential Analytical Parameters for the Municipal Site

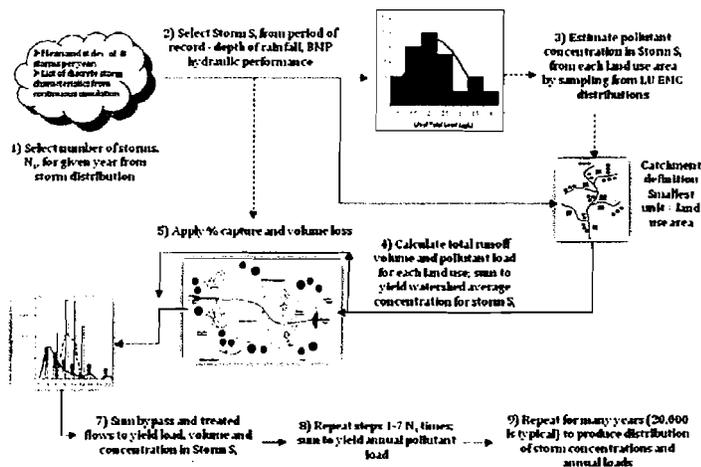
Parameter	Parameter
Total Recoverable Copper	Total Phosphorus
Total Recoverable Lead	Total Nitrogen
Total Recoverable Zinc	Total Suspended Solids
Total Dissolved Solids	Volatile Suspended Solids
Oil and Grease	Chemical Oxygen Demand

At Sunrise Estates, Geosyntec proposes to cooperatively delineate subwatersheds and prepare hydrologic models to appropriately select locations for BMP placement and performance monitoring. Selection of the appropriate monitoring scale is critical to detecting hydrologic signatures of on-site residential BMPs. Geosyntec proposes

to assist with installing three flow gauges (e.g. flumes, weirs, and level logging devices) to measure runoff from selected subwatersheds to evaluate changes in flow regime resulting from BMP installation and maintenance by the County. Geosyntec is committed to optimizing experimental designs to fit project resource constraints and requirements specified in the QAPP. In this approach, we assume that available or existing climate stations will provide sufficient and representative climate data.

Urban Stormwater Modeling

The use and application of hydrologic and hydraulic models are key components in any integrated stormwater management assessment. Models such as the SWMM package become particularly useful in evaluating catchment response to planned BMPs, filling data-gaps, and developing BMP design guidelines. Geosyntec proposes to calibrate a SWMM model to gauge data collected at the residential subdivision to compliment BMP quantification analyses. Alternatively, a model can be prepared for an ungauged location (<60 acres) to aid the County in addressing stormwater priorities elsewhere in the Hinkson Creek watershed.



Project Reporting

Geosyntec proposes to develop and structure project databases to facilitate 'turn-key' quarterly reports to meet Section 319 requirements. Annual reports documenting quantitative BMP performance and modeling results will be provided to the County in advance of scheduled milestone to encourage robust and invested stakeholder involvement.

Discussion of National Stormwater BMP Monitoring and Modeling Experience

Geosyntec provides clients throughout the United States with a superior level of knowledge and experience with stormwater BMPs. Our stormwater management specialists form one of the leading practices in the country and include individuals whose applied research have received the ASCE Civil Engineering State-of-the-Art Award and other state and regional awards.

Geosyntec staff have developed a number of national and state guidance manuals and technical protocol documents that are regularly cited by practicing professionals, regulators, and municipal officials. For example, members of our team helped develop a guidance manual for the U.S. EPA titled, "Urban Stormwater BMP Performance Monitoring: A Guidance Manual for Meeting the National Stormwater BMP Database Requirements." We also developed a report for WERF titled, "Critical Assessment of Stormwater Treatment and Control Section Issues and Decentralized Stormwater Controls for Urban Retrofit and Combined Sewer Overflow Reduction". In addition, we worked on a team to develop the International Stormwater BMP Database. This database features over 300 stormwater BMP studies, performance analysis results, and tools to provide scientifically sound information to improve the design, selection, and performance of BMPs.

As part of a team, Geosyntec was recently awarded a nationwide contract by EPA to provide support in evaluating the effectiveness of existing stormwater control standards currently in place at the state and local level. For this project, Geosyntec will work closely with the EPA to research a wide variety of stormwater control practices and green infrastructure techniques. Finally, Geosyntec worked with the Massachusetts Department of Environmental Protection to develop the Clean Water Toolkit, an electronic and interactive guide to assist municipal stormwater managers select the most appropriate BMP techniques for specific non-point source pollution problems or sites.

Our experience with stormwater BMPs is of prime importance to the County because it provides recognized national technical leadership in urban stormwater management. This expertise includes staff who actively participate in developing and disseminating the latest research, findings, and techniques for the accurate and effective monitoring and evaluation of stormwater quality and quantity.

List of Potential Equipment Required to Conduct Monitoring Available for Rental from Geosyntec Consultants

Equipment Description	Description of Purpose
Climate Station	Provide a continuous record of precipitation intensity, wind speed, air temperature, relative humidity, and solar radiation.
Automatic Sampler	Automatically collect level, flow or precipitation driven water quality samples at selected monitoring locations.
Flow Meter	Provide a continuous record of flow at selected monitoring locations prior to and following implementation of retrofit BMP(s). Flowmeter types may consist of area/velocity or ultrasonic depending on monitoring location constraints.
Trapezoidal Flume	May be installed at monitoring locations lacking a primary flow structure and will provide accurate flow data.
H-Flume	May be installed at monitoring locations lacking a primary flow structure and will provide accurate flow data.
Stilling Well Mold	Required to produce consistent flow measurements at monitoring locations with a flume.
Piezometer	Provide subsurface water collection points at selected monitoring locations.
Level Logger	Provide a continuous record of level measurements within an engineered flow structure. Levels will be used to calculate related flows.
Barometric Pressure Logger	Provide continuous record of barometric pressure changes for compensation of absolute level measurements.
Field Laptop	Interface with hardware required to conduct field monitoring and equipment maintenance, store monitoring data until it can be transferred to a secure server.
Soil Moisture Probe	May be installed to compliment modeled predictions of evapotranspiration.

Note: Any equipment that will require a permanent installation (e.g. set in concrete) would need to be purchased by the County.

Scope of Services

Task 1. Guide Quality Assurance Project Plan Development

Geosyntec will provide 40 hours of assistance to the County in preparing a QAPP to guide hydrologic and water quality data collection activities for two locations (Grissom Building, Sunrise Estates) identified by the County. In preparing the QAPP, we assume the County will provide necessary GIS and other data to support development of the experimental design. Task 1 includes one meeting in the Columbia or Jefferson City area to discuss monitoring frameworks with stakeholders identified by the County.

Task 2. Urban Stormwater Assessment and Modeling Workshops

2.a. Volunteer Monitoring Workshop

In coordination with the County, Geosyntec will support an annual, two-day training event for two years in the Columbia area to meet requirements specified in the QAPP. Topics covered in the event will include automated sampling training, gauge operation, sample collection and preservation methods, data download protocols, sample delivery and chain of custody procedures. To maximize training value to the volunteers, Geosyntec encourages that BMPs and sampling equipment be installed prior to training.

2.b. Stormwater and BMP Modeling Workshop

In coordination with the County, Geosyntec will support an annual one-day urban stormwater modeling workshop for two years in the Columbia area. Topics covered in the workshop will be coordinated with the County but could include BMP design, stormwater master planning, urban hydrology, and/or stormwater simulation modeling. As directed by the County, the workshop may feature national Geosyntec stormwater professionals, such as **Dr. Wayne Huber**, co-developer of the EPA Stormwater Management Model (SWMM) and co-author of the popular text, *Hydrology and Floodplain Analysis*. As requested, Geosyntec will coordinate with University and agency experts to structure a workshop panel and format that meets objectives identified by the County.

Task 3. Database Development and Management

Geosyntec will develop a Microsoft Access® database to store, manage, and report data (i.e., 319 quarterly reports) collected during this project. In addition, Geosyntec will provide 10 hours of support to familiarize the County with database structures, operation, and customized queries. Unless otherwise designated by the County, Geosyntec will be responsible for data entry and maintaining the database throughout the project. The project database will be structured to support potential web-cast capability should the County choose to support data broadcast.

Task 4. Quality Assurance Oversight and Management

In coordination with the County, Geosyntec will provide QA, technical oversight, and project management support throughout the duration of the project. Task 4 includes preparation and attendance of a maximum of four meetings in the Columbia or Jefferson City area to coordinate sampling plans or present study results. Geosyntec will prepare brief monthly progress reports to support quality assurance updates and an annual quality assurance memorandum to accompany 319 reports. In addition, a total of four random field audits (two for Task 5a and two for Task 5b) are included as QA measures over the duration of the project.

Task 5. Best Management Performance Monitoring

5.a. BMP Retrofit Performance Monitoring at the Grissom Building

To evaluate performance of urban BMPs within the Columbia setting, Geosyntec proposes to monitor the input and output performance of six retrofits designed and situated by County engineers. Presently, the location of these retrofits is assumed to be within or nearby the Grissom building complex. In general, this scope assumes that AmeriCorps or volunteer staff trained by Geosyntec will collect and transport event samples obtained by automated samplers. In evaluating performance Geosyntec will be responsible for training volunteer sampling staff, data entry, and data validation. The final data collection framework will be specified within the QAPP prepared under Task 1. In preparing this scope, Geosyntec tentatively prescribes the following sampling considerations and limitations:

1. A maximum of six BMP retrofits referenced in the RFP will be monitored over the course of the project. Sampling schedules and frequencies may be adjusted should fewer BMPs be selected for monitoring.
2. Laboratory parameters proposed for monitoring are listed below and referenced in the approach narrative. In addition to parameters proposed below, collection of *E. coli* (indicator bacteria) performance data would be useful given the impending bacteria TMDL planned for Hinkson Creek. It should be noted that *E.coli* samples have short holding times and may not accommodate volunteer monitoring schedules.

Proposed Laboratory Parameters

Parameter	Parameter
Total Recoverable Copper	Total Phosphorus
Total Recoverable Lead	Total Nitrogen
Total Recoverable Zinc	Total Suspended Solids
Total Dissolved Solids	Volatile Suspended Solids
Oil and Grease	Chemical Oxygen Demand

3. Retrofit performance will be quantified using automated samplers targeting collection of mass input and output estimates of performance efficiency. Data collected during each event is presumed to include continuous discharge and flow-weighted event mean concentrations of selected parameters. These

data will be collected at two locations for each retrofit (input and output) to quantify treatment performance. To accommodate sampling of six BMPs with two automated samplers being purchased by the County, Geosyntec proposes to rotate the samplers so that three BMPs are monitored each year for two years. This approach will yield performance estimates for three BMPs in Year 1 of the project and an additional three BMPs in Year 2. A third year of performance monitoring is recommended should project schedules and resources accommodate additional assessments.

In this estimate, Geosyntec proposes five runoff events for each BMP retrofit be sampled (6 BMPs x 5 events per BMP = 30 paired input-output samples). This approach will yield approximately 75 total samples (including QA samples). It is recommended that at least one of the five samples for each BMP be collected in cool or cold weather conditions to capture seasonal effects. Boone County may adjust proposed sample numbers or parameters with a commensurate change in fee.

4. Geosyntec will provide a maximum of 18 hours of guidance to Boone County in selecting and incorporating primary flow measurement structures (e.g., weirs, flumes, etc.) into retrofit designs to facilitate discharge measurements. Installation of flow structures is assumed to be the responsibility of the County. Geosyntec will assist in deploying automated samplers and integrated level-flow monitoring equipment following installation of flow structures by the County. Geosyntec, in coordination with ES&S laboratories, will provide sample containers, preservatives, and filtration equipment.
5. In this proposal, the Geosyntec team is tasked with providing laboratory analytical services for parameters listed in the Project Approach. In addition, Geosyntec is tasked with post-validation of laboratory results and entry into project databases.

5.b. Runoff Attenuation Monitoring at Sunrise Estates

To assess hydrograph changes in response to installation of BMPs by the County, Geosyntec will assist the County and volunteers in deploying level-flow monitoring equipment in a maximum of three flow control structures (e.g., weirs, flumes, etc.) installed by the County. Presently, flow monitoring is planned for a maximum of three sub-catchment locations at Sunrise Estates. Geosyntec will provide a maximum of 18 hours of guidance to the County in selecting and appropriately placing flow structures within the subwatersheds. Regularly scheduled station downloads will be performed by AmeriCorps volunteers. Geosyntec will provide a total of 20 hours of training per year to AmeriCorps volunteers (see Task 2) to support successful data collection.

Geosyntec proposes to use modeling approaches (i.e., SWMM) in conjunction with front-end data to establish baseline rainfall-runoff relationships prior to BMP installation. Establishing baseline conditions is key to quantifying improvements yielded by on-site BMPs. To support this approach, watershed delineations and initial modeling will be necessary in early stages of the project. In this proposal, Geosyntec assumes that AmeriCorps volunteers and Boone County will provide necessary geospatial data and ground-truthing information to support responsive watershed delineations.

Task 6. Stormwater Modeling for Selected Sub-Catchment

Geosyntec will develop a Stormwater Management Model (SWMM) for one sub-catchment identified by the County. The model will be used to analyze current and future alternative hydrologic conditions in response to regional and/or on-site BMPs. Presently, SWMM model development is planned for the Sunrise Estates subdivision and will incorporate site-specific flow monitoring data (Task 5). An alternative stormwater hotspot location of similar size and complexity may be modeled at the request of the County. Additional data needed to apply the SWMM model (e.g., surface and subsurface conveyance systems, topography, etc.) will be provided by the County or collected by AmeriCorps as guided by Geosyntec.

Task 7. Summary Reports

Geosyntec will prepare annual summary reports that document, describe, and interpret data collection and modeling activities. The final report will summarize overall project results, BMP effectiveness, and include recommendations for additional stormwater improvements. The intent in Task 7 is to prepare reports and documents of sufficient scope and detail to meet Section 319 reporting requirements. Quarterly 319 reports with respect to data collection and quality assurance will be generated by the project database.

Summary of Proposed Project Deliverables

Task	Description	Number or Value
1	QAPP Development Guidance	40 hours of assistance
1	Meeting to discuss QAPP needs	1
2	Monitoring Training	2 annual training events (2 days in duration each)
2	Modeling Training	2 annual training events (1 day in duration each)
3	Database Development	1 MS Access Database with 319 reporting output
3	Data Entry and Management	Data entry and management services for three years
4	Quality Assurance Oversight	Identification of parameters of interest, annual QA, PARRC analysis memo, 5 random data audits between annual reviews
5a	Sampling Equipment Specification and Installation Assistance	29 hours annually
5a	Field Audits	2 annually
5a	Laboratory and Field Data Validation	100 hours annually
5b	Preliminary Baseline SWMM model	1
5b	Watershed Delineation Assistance	35 hours
5b	Sampling Equipment Specification and Installation Assistance	18 hours
5b	Field Audits	2 annually
5b	Field Data Validation	38 hours annually
6	Calibrated SWMM model for Sunrise Estates (or 1 alternate and comparable location)	1
6	Memorandum documenting model development	1
7	319 Summary Report	1 Annually
7	319 Update Reports	Quarterly

Project Compensation

Geosyntec proposes these services on a time and materials, not-to-exceed basis in accordance with the rate schedule effective at the time services are rendered. Our not-to-exceed estimate for these services is \$216,231 according to our 2011 rate schedule itemized in **Appendix C**.

Considerations for Field Monitoring Services

Geosyntec strives to accommodate the needs and schedules of our clients. However, uncontrollable or unforeseen climatic events may delay collection of defensible and representative data. Geosyntec is not liable for project schedule delays or project costs resulting from uncontrollable climatic events or sampling activities by project partners that render sampling conditions or samples non-representative. In preparation of this proposal, Geosyntec is not tasked with developing BMP or flow structure engineering designs, or conducting routine sampling.

Landowner Access for Field Monitoring Services

The County or their representative shall coordinate and obtain necessary landowner permissions to allow legal access by Geosyntec for all field monitoring tasks and sites.

Monitoring Equipment Provisions

Geosyntec will assist the County and volunteers in deploying hydrologic and water quality monitoring systems. In preparing this proposal, Geosyntec assumes the County will be responsible for the cost of renting or purchasing equipment required to conduct all monitoring activities. A list of equipment available for rental from Geosyntec is provided in Project Approach. The County will be responsible for purchasing any equipment that will be permanently installed (e.g., flumes or weirs set in concrete). In this proposal, Geosyntec is not tasked with routine or troubleshooting maintenance of project sampling equipment. At the request of the County, Geosyntec can provide equipment rental and maintenance cost schedules to support project needs.

Project Schedule

Geosyntec proposes to meet with the County within one week of project initiation to kick-off project discussions and finalize sampling designs, as described above. Within two weeks of project initiation, Geosyntec will provide the County with a draft QAPP that describes sampling procedures, analytical methods, data storage needs, and volunteer training requirements. Following QAPP approval by the applicable party, Geosyntec will assist the County in purchasing (or renting from Geosyntec) necessary monitoring equipment compatible with BMP engineering designs (at the Municipal site) and flow path or conduit gauges (at the subdivision site). To maximize training value, Geosyntec encourages that equipment used for monitoring be available and preferably installed, prior to training. Geosyntec is committed to aggressively implementing this project and will strive to meet the Schedule of Milestones wherever and whenever possible, understanding that some limitations (e.g., equipment shipping, QAPP approval, BMP design and installation, volunteer schedules, and weather delays) are uncontrollable.

Appendix A

Resumes



TRENT STOBER, P.E.

**watershed and stormwater management
water and natural resources conservation/restoration**

EDUCATION

M.S., Civil Engineering, University of Missouri, Columbia, Missouri, 1993

B.S., Mechanical Engineering, University of Missouri, Columbia, Missouri, 1991

REGISTRATIONS AND CERTIFICATIONS

Professional Engineer, Missouri, E-29681

CAREER SUMMARY

Mr. Stober has over 19 years of experience in water quality assessment and regulatory projects and has extensive experience in watershed assessment and monitoring, stormwater runoff characterization and treatment, BMP design and evaluation NPDES permitting, TMDL development and review, quality compliance assessment, and wasteload allocations. Mr. Stober has managed projects involving development of water quality-based discharge limitations, assessment of beneficial uses and their attainability, development of site-specific water quality criteria, watershed management, and water quality monitoring. These projects include some of the most intensive water quality monitoring projects in the Midwestern United States and used state-of-the-art water quality and flow monitoring technologies. Mr. Stober is also actively involved, through various national and local trade organizations, as a stakeholder shaping water quality policies and regulations, at both the State and Federal levels.

Water Quality Permitting and Regulatory Negotiations, St. Louis MSD, Little Blue Valley Sewer District, City of Jefferson, City of St. Joseph, City of Independence, and City of Hermann (Missouri), Project Director. Mr. Stober led water quality permitting and regulatory support to St. Louis MSD, the Little Blue Valley Sewer District, the City of Jefferson, the City of St. Joseph, the City of Independence and the City of Hermann, Missouri regarding their permitted discharges to the Missouri River. These efforts guided Missouri's policies and regulatory changes related to bacteria water quality standards and water quality-based permit limitations collectively for these discharges to large receiving waters. He also provided individual permitting support and guidance for several of these clients.

Facility Planning and Water Quality Permitting, Little Blue Valley Sewer District, Project Director. Mr. Stober led water quality permitting and critical input to the facility planning for the Little Blue Valley Sewer District's upcoming wastewater treatment and collection system upgrades. Impacts of future State and Federal regulatory drivers were assessed for the project design team led by HDR, including revisions to nutrient, ammonia, bacteria, and wet weather regulations. Mr. Stober also led permit renewal negotiations with critical changes to water quality based permit limitations and bypass provisions.

Integrated Stormwater Master Plan and MS4 Program Support, University of Missouri, Columbia, MO. Mr. Stober is serving as Project Director for development of the University of Missouri's integrated stormwater master plan. This project includes reassessment of existing and development of new post-construction stormwater control measures to meet MS4 NPDES obligations. Typical BMP designs and sizing criteria will be developed for use at new building projects, as well as potential retrofit opportunities. The integrated plan will also

include evaluation of existing stormwater problem areas and potential opportunities to retrofit both building site and regional BMPs. The Stormwater Management Model (SWMM) will be used to size site level and regional BMPs within one subwatershed and evaluate the stormwater improvements. The integrated plan will also take into account local TMDL drivers.

Agricultural Best Management Practice Evaluation, ERC, Shelbina, Missouri. Mr. Stober served as Project Director for a research-driven edge of field Best Management Practice (BMP) study for the Natural Resources Conservation Services and Environmental Resources Coalition. Project elements include experimental design, coordination and quality assurance of continuous hydrologic, water quality, and meteorological data collected within wetland and subsurface bioreactor settings.

Missouri Corn Growers Association (MCGA) Watershed Research, Assessment and Stewardship Project, MCGA/MDNR/Syngenta Crop Protection/USDA, Project Manager. Mr. Stober served as Project Manager of the 5-year Missouri Corn Growers Association (MCGA) Watershed Research, Assessment and Stewardship Project, funded by MCGA, MDNR, Syngenta Crop Protection and the USDA. Under a tight timeframe, he successfully coordinated field efforts and logistics of one of the most data intensive water quality studies in the Midwest. This study included lake and stream water quality assessments within watersheds covering over 500,000 acres. Several land use best management practices were evaluated to determine the most cost-effective and technically sound means to restore impaired water bodies. Mr. Stober deployed and developed unique monitoring systems at approximately 50 water quality monitoring stations. Approximately 800-1200 water quality samples were collected each year for pesticide, nutrient and solids analyses. Data collected during this project was used to delist two major reservoirs (Mark Twain Lake and Smithville Lake) from the 303d list of impaired water bodies. This study also resulted in one of the most robust datasets for herbicide reductions by non-structural agricultural BMPs.

PROFESSIONAL EXPERIENCE

Geosyntec Consultants, Columbia, Missouri, Principal, 2009 - Present
MEC Water Resources, Columbia, Missouri, President, 2003 – 2009
Midwest Environmental Consultants, Jefferson City, Missouri, President, 1992-2003

AWARDS AND RECOGNITIONS

Arthur Sidney Bedell Award, Water Environment Federation, 2007

AFFILIATIONS

Water Environment Federation - Nonpoint Sources Committee Past Chairman (2005) WEF
TMDL Sciences 2002, 2003, 2005, 2007, 2009 – Program Committees
WEF Watershed 2000, 2002, 2004, 2006 – Program Committees
Missouri Water Environment Association –President (2004-2005), Government Affairs
Committee Chair
North American Limnological Society

CHRISTOPHER C. ZELL

**water quality assessment
surface water quality modeling
regulatory services**

EDUCATION

Masters in Natural Resources (water resources emphasis), University of Missouri, Columbia, Missouri (in progress).

B.S. Environmental Management and Fisheries & Wildlife Science, South Dakota State University, Brookings, South Dakota 1998. Minor: Chemistry

REGISTRATIONS AND CERTIFICATIONS

Professional Hydrologist-Water Quality, 10-HWQ-2016

CAREER SUMMARY

Mr. Zell maintains a diverse background in environmental and regulatory analysis that includes coordination of Missouri's water quality standards program, lead technical developer of water quality-based permit limits and wasteload allocations (150+), and principal investigator of nutrient and dissolved oxygen Total Maximum Daily Load (TMDL) studies for the Missouri Department of Natural Resources. Mr. Zell continues to develop and implement technical solutions to meet emerging water quality challenges of Geosyntec clientele.

REPRESENTATIVE EXPERIENCE

Stormwater Master Plan Development, University of Missouri, Columbia, Missouri. Project Manager. Mr. Zell is currently managing development of the University of Missouri Stormwater Master Plan including Stormwater Management Models (SWMM) development, urban BMP design, BMP modeling, and wet-weather regulatory analyses.

EPIC Agricultural Best Management Practice Evaluation, Shelbina, Missouri. Project Manager. Mr. Zell is currently managing a research-driven edge of field Best Management Practice (BMP) study for the Natural Resources Conservation Services and Environmental Resources Coalition. Project elements include experimental design, coordination and quality assurance of continuous hydrologic, water quality, and meteorological data collected within wetland and subsurface bioreactor settings.

Hinkson Creek Urban Runoff Total Maximum Daily Load Evaluation, Columbia, Missouri. Project Manager. Mr. Zell managed a comprehensive technical review of an urban runoff volume and unknown pollutant TMDL for potentially impacted municipal governments. State and federal agencies are currently redrafting the TMDL in response to Geosyntec's review. Financial impact to affected municipalities as a result of the initial TMDL is estimated at \$100 – \$500 million dollars.

Straight Fork Total Maximum Daily Load Study, City of Versailles, Missouri. Project Manager. Mr. Zell is managing ambient monitoring, surface water quality modeling, and regulatory negotiation efforts to support development of a Third-Party Total Maximum Daily Load (TMDL) study for dissolved oxygen and chloride. Results from the study will help guide facility planning and financial capability assessments negotiated within a settlement agreement framework.

Cahokia Canal Total Maximum Daily Load Evaluation, City of Collinsville, Illinois. Project Manager Working on behalf of the City of Collinsville, IL, Mr. Zell identified key TMDL data gaps within the draft Cahokia Canal TMDL document. In coordination with the Illinois Environmental Protection Agency (IEPA), Mr. Zell developed and managed an expedited monitoring and modeling study to address identified data gaps. These data were used as a springboard to coordinate a Third-Party TMDL for the City.

Ecological Water Resources and Assessment Project, Missouri. Project Manager Mr. Zell is successfully managed a series of comprehensive water quality investigations under the Federal EWRAP grant. These studies include characterization of ecoregional dissolved oxygen regimes through extensive monitoring, developing wasteload allocation and site-specific dissolved oxygen protocols for the state of Missouri, and assessing the benefits of a tiered aquatic life use system for Missouri's Water Quality Standards.

PROFESSIONAL HISTORY

Geosyntec Consultants, Columbia, Missouri, 2009 - present

MEC Water Resources, Columbia, Missouri, 2003 - 2009

Missouri Department of Natural Resources, Jefferson City, Missouri, 1999 - 2003

AWARDS

Distinguished Service Award – Missouri Department of Natural Resources. Water Quality Review and Coordination for the City of Mountain View Wastewater Planning Analysis.

AFFILIATIONS

Member, Ecological Society of America

Member, Missouri Water Environment Association]

Member, Water Environment Federation

Member, American Geophysical Union

Hydrologist, American Institute of Hydrology

ERIC W. STRECKER, P.E.

**urban watershed planning
best management practices
water quality and stormwater master planning
NPDES permitting**

EDUCATION

M.S.E., Civil Engineering, University of Washington, 1985

B.S., Fisheries Science, Humboldt State University, Arcata, California, 1983

B.S., Environmental Engineering, Humboldt State University, Arcata, California, 1983

REGISTRATIONS AND CERTIFICATIONS

Civil Engineer - California, C43019 / Oregon, 15355

Environmental Engineer, Oregon, 15355

CAREER SUMMARY

Mr. Strecker, based in Oregon, focuses on the design, monitoring, and evaluation of stormwater best management practices (BMPs) and development of major project and watershed master plans. He has provided technical direction and assistance to public and private sector clients in stormwater master planning, National Pollutant Discharge Elimination System (NPDES) permitting, Total Maximum Daily Loads (TMDLs), and surface water pollution assessment and control for more than 20 years. He continues to advance the state of the practice by conducting applied National and local research studies for U.S. EPA, U.S. Federal Highway Administration, Water Environment Research Foundation, and the National Cooperative Highway Research Program, as well as State and Local research efforts. Mr. Strecker was recognized by the American Society of Civil Engineers for his work on BMP technology applications with the 2003 Civil Engineering State-of-the-Art Award. In addition to his work on guidance documents for urban stormwater management, Mr. Strecker has authored more than 45 publications on stormwater planning, low impact development approaches, and the effectiveness of BMP technologies.

International BMP Database, United States Environmental Protection Agency (U.S. EPA), American Society of Civil Engineers, Nationwide. Mr. Strecker was one of the Principal Investigators for a comprehensive, nationwide study of BMP effectiveness and development of the International BMP Database. Included in this study was an assessment of the protocols used to evaluate BMPs. The results, which concluded that there exist wide discrepancies in evaluating the effectiveness of BMPs, were provided to U.S. EPA headquarters. He also managed the effort to develop a detailed BMP monitoring guidance document based upon the ASCE BMP database effort.

Critical assessment of Stormwater Treatment and Control Selection Issues, Water Environment Research Foundation (WERF), Nationwide. Mr. Strecker recently was the Principal Investigator of a project that provides national level guidance on BMP selection and design from a combined unit processes and research data perspective.

Decentralized Stormwater Controls for Urban Retrofit and CSO Reduction (WERF). Mr. Strecker worked cooperatively with the Low Impact Development Center, Oregon State University, and the University of Florida, to direct Geosyntec's efforts to conduct a detailed literature review and collection of existing data sets on the effectiveness of eleven individual decentralized urban stormwater control techniques for mitigating and reducing CSOs.

Linking BMP Systems Performance to Receiving Water Protection to Improve BMP Selection and Design (WERF). Mr. Strecker is currently serving as a co-principal investigator on this study directing the development of BMP performance algorithms to be included in an overall modeling framework for assessing receiving water effects of watershed implementation of BMPs.

Assessment of Stormwater Treatment Selection, National Cooperative Highway Research Program (NCHRP), Nationwide. Mr. Strecker was a co-principal investigator on a team finalizing this research project for the National Cooperative Highway Research Program (NCHRP). This report provides design guidance for utilizing unit processes and research data for selecting and designing highway BMPs.

San Diego Creek Natural Treatment Systems Master Plan, Irvine Ranch Water District, Orange County, California. Mr. Strecker served as Project Manager for the development of San Diego Creek Natural Treatment Systems Master Plan for the Irvine Ranch Water District. The plan includes the selection, sizing and initial design of over 30 wetland treatment systems in the Watershed. The purpose of the plan is to meet TMDL loading limits for stormwater system discharges. This effort now includes the design of a selenium treatment system. He has also served as the Principal-in-Charge for mesocosm and laboratory testing, and design of an innovative selenium and nitrate removal sub-surface wetland system.

PROFESSIONAL EXPERIENCE

Geosyntec Consultants, 2000-Present

URS Greiner Woodward Clyde, 1985 - 2000

University of Washington, College of Engineering, Lecturer, 1985

California Department of Fish and Game, Fisheries Seasonal Aide, 1983

U.S. Forest Service, Fisheries Technician, 1979 – 1982

Awards and Recognitions

“State-of-the-Art in Civil Engineering Award,” International BMP Database, 2003
Co-Chair of the 9th International Conference on Urban Drainage, Portland, 2002

AFFILIATIONS

American Society of Civil Engineers
Urban Water Resources Research Council
American Fisheries Society
American Water Resources Association
American Public Works Association
Oregon Association of Clean Water Agencies, Stormwater Committee
Water Environmental Federation, Watershed Management Committee

REPRESENTATIVE PUBLICATIONS

Available Upon Request

MARC LEISENRING, P.E.

**water resources engineering
geographic information systems
environmental data analysis**

EDUCATION

Completed M.S. coursework, Civil and Environ. Eng., Portland State University.
B.S., Environ. Resources Eng., Humboldt State University, Arcata, CA, 2001

REGISTRATIONS AND CERTIFICATIONS

Registered Civil Engineer, Oregon, 77895PE

CAREER SUMMARY

Mr. Leisenring has over 9 years of water resources and urban stormwater quality project experience that includes: (1) developing GIS-based and database-driven decision support tools for water quality planning (2) preparing stormwater best management practices (BMP) monitoring plans and design manuals, (3) modeling urban hydrology, water quality, and BMP performance, (4) conducting stormwater science technical research, and (5) assisting in the development and implementation of water quality control programs. Representative projects include:

Lake Tahoe Pollutant Load Reduction Model (PLRM). Mr. Leisenring was a key team member responsible for the design and development of the PLRM, which is a custom interface and a Tahoe-specific backend database that interfaces directly with the U.S. EPA's SWMM5 model. The tool allows users to investigate the water quality and hydraulic effects of implementing a wide range of BMPs, including pollutant source controls, hydrologic source controls, and centralized treatment facilities.

International BMP Database; U.S. EPA, Water Environment Research Federation (WERF), American Society of Civil Engineers (ASCE). In support of this ongoing project, Mr. Leisenring has been assisting in the analysis and summary of BMP performance information contained in the database. Both parametric and non-parametric data analysis techniques have been applied including robust regression on order statistics for estimating non-detects and bootstrap computations for estimating parameter variability. Recently, Mr. Leisenring has been investigating the effects of inflow concentrations on effluent quality for various BMP types and pollutant concentrations through the use of moving median smoothing techniques for reducing local variability while preserving overall data trends.

Critical Assessment of Stormwater Treatment and Control Selection Issues; Water Environment Research Federation (WERF). Mr. Leisenring took the lead in the preparation of this guidance manual that examines critical factors that influence selection, sizing, and design of stormwater controls, or best management practices (BMPs), for specific locations and conditions. The manual is intended to assist stormwater managers in selection and prioritization of controls to meet the goals of protecting local receiving waters and other objectives in the most cost-effective manner possible.

Lake Tahoe BMP Feasibility Study. The study evaluated the effectiveness and costs of a variety of BMPs (including designs and sizing), as well as potentially effective new technologies. The work focused on specifically addressing Lake Tahoe issues of phosphorus and fine particulates in runoff. A continuous simulation model was used to evaluate treatment performance as a function BMP size and hydraulic retention time. This information was incorporated into a GIS-based watershed model to estimate the annual loading of pollutants into the lake on a basin-wide scale as well as the potential effectiveness of various BMP implementation strategies.

Evaluation of Best Management Practices and Low Impact Development for Highway Runoff Control; National Cooperative Research Program (NCHRP) of the Transportation Research Board. With the collaborative effort of researchers at Oregon State University, the University of Colorado, the University of Florida, and the Low Impact Development Center, Mr. Leisenring led Geosyntec's component of this project to assess the fundamental treatment and control processes available for improving the quality of highway runoff and how these processes can be integrated into stormwater best management practices (BMPs).

Structural BMP Prioritization and Analysis Tool (SBPAT); City and County of Los Angeles. A technical project team led by Geosyntec and with representatives from Heal the Bay, the County of Los Angeles Department of Public Works, and the City of Los Angeles Bureau of Sanitation developed a GIS-based stormwater quality decision support tool that can be used to prioritize structural BMP retrofit projects and estimate the costs and load reductions associated with implementation. The SBPAT tool is intended to help watershed planners, stormwater managers, and stakeholders throughout Los Angeles County in conceptual planning of structural BMP retrofit projects and NPDES compliance assessments.

Clackamas County Stormwater Modeling Tool. In support of the development of a stormwater master plan for Clackamas County, Oregon, a GIS-based stormwater pollutant loads model was developed. The model was then used to estimate mean annual runoff volumes, pollutant concentrations, and pollutant loads throughout County study area. The model is useful as a planning tool to evaluate land-use alternatives, and expected performance of alternative treatment BMPs. The model was used to help target and assess potential capital improvement projects (CIPs) and stormwater retrofit projects.

PROFESSIONAL EXPERIENCE

Geosyntec Consultants, Water Resources Engineer, 2001-Present

Eileen Cashman, Ph.D., Humboldt State University Research Assistant, Spring 2001

AFFILIATIONS

American Water Resources Association

Environmental and Water Resources Institute of American Society of Civil Engineers

PUBLICATIONS AND PRESENTATIONS

Leisenring, M. and Moradkhani, H. (2010). "Snow Water Equivalent Prediction Using Bayesian Data Assimilation Methods." *Stoch. Environ. Res. Risk Assess.* 25(2): 253-270, DOI: 10.1007/s00477-010-0445-5.

Leisenring, M.; Poresky, A.; Strecker, E.; Quigley, M. (2009). "Evaluating Paired BMP Influent and Effluent Data using Running Bootstrap Medians." Presented at the 2009 American Water Resources Association (AWRA) Annual Water Resources Conference. November 9-12. Seattle, Washington.

Susilo, K.; Leisenring, M.; Strecker, E.W. (2009). "Combining GIS, BMP Performance, and Strategic Planning to Support Water Quality Implementation Planning." *Proc. World Environmental and Water Resources Congress*, Kansas City, MO, May 17-21.

Quigley, M.; Strecker, E.; Leisenring, M.; Huber, W.; Heaney, J.; Weinstein, N.; Sansalone, J.; Bodine, D. (2005). "The Integrated Unit Process Design Approach for Urban Water Quality Design." *Proc. World Water and Environmental Resources Congress*. May 15-19, Anchorage, AK.

NICHOLAS W. MUENKS

**watershed and stormwater management
water and natural resources conservation/restoration
groundwater assessment and remediation**

EDUCATION

B.S., Biology, Lincoln University, Jefferson City Missouri, 2000

REGISTRATIONS AND CERTIFICATIONS

Hydrologic Technician II

CAREER SUMMARY

Mr. Muenks has 10 years of experience in water quality and watershed assessment and monitoring, wasteload allocations, stormwater runoff characterization, agricultural BMP design and evaluation. During his tenure with Geosyntec, Mr. Muenks has concentrated on water quality studies emphasizing intense field investigations and data management. Mr. Muenks has also provided technical training and maintenance of water quality monitoring equipment and automated sampling equipment for a number of clientele. Mr. Muenks has filled key roles in projects involving development of water quality-based effluent limitations, assessment of beneficial uses and their attainability, development of site-specific water quality criteria, watershed management, and water quality monitoring. Many of these projects utilized state-of-the-art water quality and flow monitoring technologies and include some of most intensive water quality monitoring projects in the Midwest.

Berry's Creek Study Area, BCSEA Cooperation PRP Group, Surface Water Coordinator. Berry's Creek is a tidal tributary of the Hackensack River in New Jersey whose watershed encompasses approximately 12 square miles of marshes. The watershed has been found to contain elevated levels of contaminants of potential concern that have migrated to the watershed from various point and non-point sources. Mr. Muenks is currently overseeing and coordinating an extensive surface water quality monitoring operation in the Berry's Creek watershed. Quarterly sampling activities include collection of surface and ground water quality samples, sediment samples, and aquatic and terrestrial organisms.

Evaluating and Practicing Innovative Conservation, Environmental Resources Coalition. The EPIC project will evaluate the treatment efficacy of structural and non-structural BMPs installed in northern Missouri. As Field Manager, Mr. Muenks is assisting in the design and construction of the BMPs. Once the BMPs are established, Mr. Muenks is responsible for coordinating all field efforts and providing quality assurance for data generated from the project. Monitoring will include collection of input and output BMP performance over two years using continuous automated sampling equipment. Parameters analyzed will include total nitrogen, total phosphorus,

suspended solids, pesticides, discharge volume, dissolved oxygen, redox potential, water temperature, and pH.

Watershed Research, Assessment and Stewardship Project (WRASP), Missouri Corn Growers Association, Missouri Department of Natural Resources, Syngenta Crop Protection and US Department of Agriculture, Missouri. Mr. Muenks served as Field Manager of the 5-year Missouri Corn Growers Association (MCGA) Watershed Research, Assessment and Stewardship Project, funded by MCGA, MDNR, Syngenta Crop Protection and the USDA. As field manager Mr. Muenks spent an extensive amount of time performing sampling and stream discharge measurements in wet weather and at a 24 hour “on-call” basis. Mr. Muenks has also provided technical support to field staff using automatic samplers. Mr. Muenks developed and deployed unique monitoring systems at approximately 50 water quality monitoring stations. Approximately 800-1200 water quality samples were collected each year for pesticide, nutrient and solids analyses. This study produced one of the largest datasets regarding herbicide fate and transport in the Midwest.

Ecological Water Resources and Assessment Project (EWRAP), U.S. EPA, Missouri. Mr. Muenks was the Field Manager for a series of comprehensive water quality investigation under the U.S. EPA’s EWRAP grant. These studies include characterization of eco-regional dissolved oxygen regimes through extensive monitoring, developing wasteload allocation and site-specific dissolved oxygen protocols for the state of Missouri, and assessing the benefits of a tiered aquatic life use system for Missouri’s Water Quality Standards.

Conservation Effects Assessment Project, Environmental Resources Coalition. The objective of the Conservation Effects Assessment Project (CEAP) is to establish a vegetated filter strip BMP demonstration project focused on reducing herbicide and nutrient runoff from agricultural fields. As Assistant Project Manager, Mr. Muenks designed the sampling program and is currently overseeing its implementation. Water quality monitoring activities include stream gaging and rating curve development, underground outlet and vegetated filter strip assessments, routine stream monitoring, and automatic sampler operation.

PROFESSIONAL EXPERIENCE

Geosyntec Consultants, Columbia, Missouri, Water Quality Professional, 2009 - Present
MEC Water Resources, Columbia, Missouri, Water Quality Scientist, 2003 – 2009
Midwest Environmental Consultants, Jefferson City, Missouri, Specialist, 2001-2003

AFFILIATIONS

American Institute of Hydrology

DAVID CARANI

**watershed and stormwater management
water and natural resources conservation/restoration
water quality based effluent limits**

EDUCATION

M.S., Natural Resources, University of Missouri, Columbia, Missouri, 2008

M.P.A., Public Administration, University of Missouri, Columbia, Missouri, 2005

B.S., Fisheries and Wildlife Science, University of Missouri, Columbia, Missouri, 2003

CERTIFICATIONS

Aquatic Macroinvertebrate Identification Program, Hudson River Basin Watch, 2006

CAREER SUMMARY

Mr. Carani has nine years of experience in a variety of technical and regulatory water quality issues. He has considerable experience with the NPDES permitting process, antidegradation evaluations, wasteload allocation development, nutrient trading, and biological assessments. Mr. Carani has been involved in numerous water quality and antidegradation review projects that typically include water quality and stream hydraulic assessments, wasteload allocation and effluent limit development, and alternatives analysis and socioeconomic evaluations. Mr. Carani continues to develop technical and innovative solutions to meet the needs of Geosyntec's clients.

EPIC Agricultural BMP and Nutrient Trading Framework Evaluation, Shelbina, Missouri. Mr. Carani is currently assisting in the design and implementation of a Best Management Practice (BMP) study for the Natural Resources Conservation Services and Environmental Resources Coalition. As part of this project, Mr. Carani is reviewing nutrient trading frameworks from across the country to serve as the basis for development of a nutrient trading program for the State of Missouri.

Antidegradation Review and Wetlands Monitoring, Columbia, Missouri. Mr. Carani provided technical support for the Water Quality and Antidegradation Review for the City of Columbia wastewater treatment plant expansion. The review consisted of complex discharge scenarios which included 1) discharging to an adjacent conservation area, 2) indirectly discharging to the Missouri River and 3) directly discharging to the Missouri River. Permitting efforts were coordinated with the Missouri Department of Conservation who owns and manages the conservation area adjacent to the City's treatment wetlands.

Antidegradation Advisory Workgroup. Mr. Carani participated in Missouri's Antidegradation Advisory Workgroup and assisted in the development of procedures for implementing the state of Missouri's antidegradation rule. Mr. Carani researched antidegradation procedures from across the country and provided technical and

regulatory assistance to the workgroup. His research primarily focused on evaluating the various methods states use to conduct alternative and socioeconomic impact analyses with regard to federal antidegradation rule requirements. He was integral in preparing the final draft of the “Missouri Antidegradation Rule and Implementation Procedure” document.

Water Quality and Antidegradation Review, Enclave Apartment Complex, Cape Girardeau, Missouri. Mr. Carani served as the technical lead on this project designed to obtain an approved Water Quality and Antidegradation Review for a new wastewater treatment facility for a private development in Cape Girardeau, Missouri. He developed wasteload allocations for the facility, developed an alternatives analysis with the client’s engineer, and performed a socioeconomic impact analysis for the facility. Negotiations were required with the Missouri Department of Natural Resources to address modeling uncertainties which would have limited effluent limitations. As a result of the WQAR and regulatory negotiations, Geosyntec successfully secured secondary treatment limits for the facility.

Main Ditch Aquatic Life Use Attainability Analysis, Poplar Bluff, Missouri. A draft TMDL issued by the Missouri Department of Natural Resource in 2005 concluded that the City of Poplar Bluff needed to implement significant, and potentially unaffordable, upgrades to their wastewater treatment facility to attain water quality standards in Main Ditch. The City retained Geosyntec to review the technical validity of these conclusions and evaluate the applicability of implementing use attainability analysis and site-specific DO criteria flexibilities in the context of the TMDL conclusions. The study included identification of reference conditions, measurement of several continuous and discrete water quality parameters, macroinvertebrate assessments according to established protocols, evaluation of physical habitat, determination of hydraulic regimes, and diel dissolved oxygen modeling. Mr. Carani served as the field team leader overseeing all monitoring and data collection. He also co-authored the final project report and was the lead investigator evaluating the potential socioeconomic implications of the TMDL offered by MDNR. The City will likely save over \$50 million dollars in unnecessary treatment costs as a result of Geosyntec’s efforts.

PROFESSIONAL EXPERIENCE

Geosyntec Consultants, Columbia, Missouri, 2009 - present

MEC Water Resources, Inc., Columbia, Missouri, 2004 - 2009

University of Missouri Limnology Laboratory, Columbia, Missouri, 2001-2003

JOHN CHRISTIANSEN

**antidegradation reviews
water quality database management
wasteload allocation modeling**

EDUCATION

M.E., Environmental Engineering, Texas A&M University, College Station, Texas, 1998
B.A., Biology, Westminster College, Fulton, Missouri, 1995

CAREER SUMMARY

Mr. Christiansen is a water quality scientist with over ten years of experience in the area of water and natural resources. His experience includes wasteload allocation studies, antidegradation reviews, NPDES regulatory support, recreational use attainability analyses, water quality database management, and GIS. He also played a significant role in the development of Missouri's antidegradation implementation procedures through his participation in stakeholder meetings. Mr. Christiansen came to Geosyntec after working for the Water Resources Division of the National Park Service as an Impaired Waters Specialist for more than three years. Since graduating with a Master of Engineering in Environmental Engineering Mr. Christiansen has continued his professional development through coursework in GIS and water quality, and by obtaining his Engineer-in-Training (EIT) certification.

Water Quality Data Management Service, Metropolitan St. Louis Sewer District (MSD). Mr. Christiansen serves as the database manager for the Metropolitan St. Louis Sewer District (MSD) water quality monitoring project. Water quality data collected by both Geosyntec and MSD are being used in support of critical infrastructure planning decisions. Mr. Christiansen is responsible for maintaining the Geosyntec data in a database and coordinating efforts for merging the two datasets. Mr. Christiansen is also working on a web-based database application to increase the accessibility of the data for the client.

Recreational Use Attainability Analyses. Mr. Christiansen has served as the data analyst, and/or primary author for several Recreational UAA investigations including the Mississippi River at St. Louis.

Ecological Water Resources and Assessment Project. The goals of this multi-year project were to characterize ecoregional dissolved oxygen regimes through continuous monitoring, develop wasteload allocation and site-specific dissolved oxygen protocols for the state of Missouri, and assess the benefits of a tiered aquatic life use system for Missouri's Water Quality Standards. Mr. Christiansen performed much of the data management, analysis, and research involved in this project.

Southwest Missouri Water Quality Improvement Project (WQIP), Environmental Resources Coalition. In response to rapid growth and expansion in southwest Missouri, the Environmental Resources Coalition (ERC) received a U.S. Environmental Protection Agency (EPA) grant to develop and manage the Southwest Missouri Water Quality Improvement Project (WQIP), a multi-year, multi-stakeholder effort to address water quality issues in this region. Mr. Christiansen was responsible for compiling and managing water quality data from several sources into a single database for five basins in southwest Missouri. He was also responsible for analyzing the data and served as the primary author for the five basin reports.

Antidegradation Advisory Workgroup. Mr. Christiansen participated in Missouri's Antidegradation Advisory Workgroup and assisted in the development of procedures for implementing the antidegradation rule. He researched antidegradation procedures and

guidelines from across the country to help provide technical and regulatory assistance to the workgroup. He was integral in preparing the final draft of the “Missouri Antidegradation Rule and Implementation Procedure” document.

Antidegradation Review, Kansas City Water Services Department (WSD), KC Fishing River Wastewater Treatment Plant, Kansas City, Missouri. Mr. Christiansen served as the technical lead and primary author for the KC Fishing River Wastewater Treatment Plant expansion project. Mr. Christiansen managed the field data collection efforts, which included a time-of-travel dye study and characterization of the stream diurnal dissolved oxygen profile in support of the “delta method.” Additionally, he was responsible for the data analysis, water quality modeling, and served as the primary author for the water quality and antidegradation report. Mr. Christiansen. This project potentially resulted in significant cost savings for WSD by successfully demonstrating that costly filters were unnecessary to achieve water quality standards.

Antidegradation Review, Columbia Regional Wastewater Treatment Plant, Columbia, Missouri. In coordination with Black and Veatch, Mr. Christiansen served as the technical lead for the water quality and antidegradation review for the City of Columbia wastewater treatment plant expansion from 20.6 to 25.2 MGD. The water quality and antidegradation review consisted of complex discharge scenarios which included 1) discharging to an adjacent conservation area, 2) indirectly discharging to the Missouri River and 3) directly discharging to the Missouri River. Permitting efforts work coordinated with the Missouri Department of Conservation who owns and manages the conservation area adjacent to the City’s treatment wetlands.

Bacteria Limits Analysis and Regulatory Update Report, Kansas City Water Services Dept., Kansas City, Missouri. In coordination with CH2M Hill, Mr. Christiansen was the technical lead in preparing guidance for the Kansas City Water Services Department on future potential bacteria limits. State effluent regulations and federal guidance continue to evolve regarding permit limitations and recreational ambient water quality criteria. Mr. Christiansen’s knowledge and insight of this situation provided critical guidance for the Kansas City Water Services Department regarding disinfection infrastructure decisions.

PROFESSIONAL HISTORY

Geosyntec Consultants, Columbia, Missouri, 2009 - present

MEC Water Resources, Columbia, Missouri, 2005 - 2009

National Park Service, Water Resources Division, Fort Collins, Colorado, 2001 – 2005

Handex, Golden, Colorado, 1999-2001

Appendix B Projects





Owner: University of Missouri
Services Provided:

- Integrated Stormwater Master Planning
- BMP evaluation and selection
- Regulatory Watershed Management
- Hydrologic and hydraulic modeling
- GIS mapping

Geosyntec is working with the University of Missouri to develop an Integrated Stormwater Master Plan to help with long-term development goals.

Project Objective

The University of Missouri in Columbia currently maintains a Joint Stormwater Management Program (SWMP) with the City of Columbia and Boone County. In order to enhance compliance with the MS₄ requirements, the University retained Geosyntec to develop a Stormwater Master Plan (SMP) that integrates watershed hydrology, regulatory expectations (including a Total Maximum Daily Load), and implementable Best Management Practices (BMPs).

Geosyntec's Scope of Services

Geosyntec is providing the University with an initial Integrated SMP that includes:

- Regulatory analysis summarizing anticipated MS₄ permit changes resulting from state and federal policy initiatives;
- Continuous model simulation of hydrologic processes within several core campus subwatersheds to support optimized placements and selection of BMPs;
- Prepare urban stormwater BMP design guidelines for campus engineering manuals and procedures;
- Development of post-construction BMP design criteria using the EPA Stormwater Water Management (SWMM) model;
- Coordination with campus stakeholders to identify consensus-based goals and objectives for the SMP; and
- Identification of stormwater problem and critical source areas, complimented by opportunities for regional structural and non-structural (source control) BMP solutions.

Notable Accomplishments

This project provides the University of Missouri with an initial Integrated Stormwater Master Plan with emphasis on cost-effective optimization of capital investments and consideration of campus water resources needs that meet required minimum control measures. The SMP will serve as a key component of the University's long range development plan.



Geosyntec participated on a team to develop a scientifically-based approach and associated tools to evaluate the effectiveness of stormwater BMPs nationwide.

Client: American Society of Civil Engineers and
U.S. EPA

Services Provided:

- BMP data analysis
- Literature review
- Statistical analysis
- BMP design evaluation
- Database management
- Guidance manual development

Project Objective

Geosyntec participated on a team with the Denver Urban Drainage and Flood Control District, Wright Water Engineers, and other members of the American Society of Civil Engineers (ASCE) Urban Water Resources Research Council (UWRRC) on an ASCE project to develop a scientifically based approach and management tools to evaluate the effectiveness of best management practices (BMPs) for stormwater runoff nationwide.

Geosyntec's Scope of Services

The project promoted technical design improvements for BMPs and better matched their selection and design to local stormwater problems. The effort included development of a set of monitoring and reporting protocols for use by researchers in performing BMP monitoring that will make individual BMP studies much more useful for design evaluation when comparing multiple studies. Additional tasks included gathering currently available data on BMP performance, including attempting to gather as many of the protocol data as possible and developing an initial assessment of BMP design and performance.

Notable Accomplishments

Geosyntec's role was to perform the technical evaluation of the data currently in the database to investigate effects of design on BMP effectiveness and to develop a national level guidance document on how to conduct BMP effectiveness studies such that the monitoring and reporting protocols are met. In addition, Geosyntec provided technical support as requested to database users. The knowledge gained from this work is directly beneficial to clients who are looking for proven stormwater technologies to apply in their projects.



Client: City of Santa Barbara Creeks Restoration and Water Quality Improvement Division

Services Provided:

- ☑ Storm Water BMP Guidance Manual Development
- ☑ Regulatory & Local Site Conditions Review
- ☑ Stakeholder Involvement
- ☑ Municipal Department Coordination
- ☑ GIS Mapping

Project Objective and Scope

On behalf of the City of Santa Barbara's Creeks Restoration and Water Quality Improvement Division (City), Geosyntec Consultants developed a Technical Guidance Manual for the design and implementation of postconstruction storm water Best Management Practices (BMPs). The primary purpose of the Manual is to guide City staff, design engineers, architects, contractors, and residents to design and implement effective post-construction storm water management and treatment methods for proposed development and redevelopment projects. The Manual is now serving as a design requirement for City development and redevelopment projects to implement the City's Storm Water Management Program (SWMP), as required by their Phase II NPDES storm water permit and State water quality laws. The goal of the City's post-construction new and re-development storm water program is to minimize runoff pollution typically caused by land development and protect the beneficial uses of receiving waters by employing a sensible combination of pollutant source control, site design, and site-specific treatment BMPs. The role of the Geosyntec project team was to work with City staff to first review existing relevant data and information – including existing municipal codes and ordinances – and then develop a Manual, based in part on feedback received from City staff and other stakeholders, that describes recommended post-construction storm water BMPs that are specific to the unique needs of the City of Santa Barbara.

The Manual outlines City requirements for BMP implementation for new and re-development projects that exceed specified impervious area or project size thresholds, and provides guidance on BMP selection for each project depending on land use type and pollutants of concern. The Manual then provides guidance on BMP design with the general goals of maximizing storm water quality improvement and storm water quantity reduction. Property owners are encouraged to implement "green" and low impact development (LID)-type practices first (such as vegetated swales and bioretention rain gardens), and structural engineered treatment devices second (such as hydrodynamic separators and media filters). For this project Geosyntec is the prime contractor for a team that includes the Low Impact Development Center -- a nationally-recognized non-profit organization dedicated to the advancement of LID technology -- and local contractors Penfield & Smith (civil engineers) and David Black & Associates (landscape architect).

Notable Accomplishments

Geosyntec is now working with the City to train staff and local engineers/designers on usage of the Manual, and was recently selected to perform an audit of their existing municipal codes, design standards, and policies for consistency with the Manual, their SWMP, and the Phase II NPDES Permit.



Geosyntec is helping to implement low impact development design techniques, such as this blue roof, to minimize combined sewer overflows in New York City.

Client: New York City Department of Environmental Protection

Services Provided:

- ☑ Low impact development
- ☑ Blue roof designs
- ☑ Stormwater BMP effectiveness monitoring
- ☑ Watershed planning and assessment
- ☑ CSO assessment

Project Objective

According to the New York City Department of Environmental Protection (NYCDEP), more than 27 billion gallons of raw sewage and polluted stormwater discharge out of 460 combined sewer overflows (CSOs) into New York Harbor alone each year. These combined sewers carry both stormwater runoff and raw sewage, and rainfall of less than ½ inch can overload the system and result in untreated wastewater discharges. The use of green infrastructure to reduce stormwater inputs to the combined system is one of many approaches to help solve this problem. The NYCDEP retained a joint venture team of Biohabitats/HydroQual/Hazen and Sawyer, with Geosyntec as a specialty subcontractor, to implement a green infrastructure retrofit pilot program to help reduce the frequency and volume of CSOs in New York City. The objective is to design and install stormwater controls to quantify the benefits of Low Impact Development approaches as a viable solution to reduce stormwater flows to the City's CSO system.

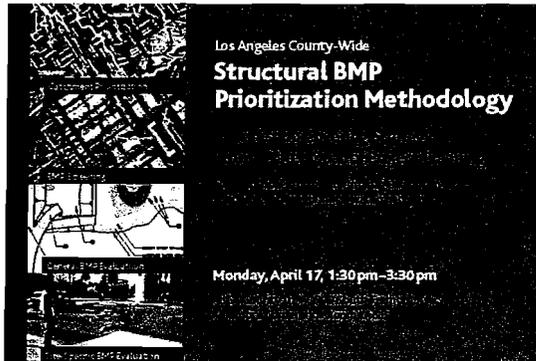
Geosyntec's Scope of Services

This three-year contract consists of four major components: Ecosystem Pilot Studies; Stormwater Pilot Studies; Sewer Code Review and BMP Design Manual; and Watershed Planning Studies. Geosyntec's assignments thus far under this contract have included several stormwater pilot studies including blue roofs, where rainwater is stored on the roof and slowly released later so as not to overwhelm the sewer system; green roofs, where the roof is planted with a variety of live plants to not only capture and use rainwater, but to also cool the building; retrofits of existing facilities to include stormwater best management practices (BMPs); porous pavement pilot projects that allow stormwater to infiltrate into the ground rather than run directly into the combined sewer system; and parks and ball field retrofits. The goal of all of these pilot studies is to keep excess stormwater runoff from entering the combined sewer system, helping to prevent or minimize the frequency and severity of CSO events.

Geosyntec will also provide input on a stormwater BMP design manual for the City, and we have been assigned to lead the development of a Watershed Plan for the Flushing Bay subwatershed. The watershed plans are forward-looking planning studies to identify further opportunities to improve stormwater management and reduce stormwater inputs to the CSO system.

Notable Accomplishments

During the first year of this project, Geosyntec developed concept plans for many different pilot projects that will reduce stormwater flows into the combined sewer system. In particular, we led the design of blue roof concepts for retrofits of roofs to hold water temporarily during rainfall events and slowly release the captured water. Several of the designs will be built in 2010, and we will be conducting monitoring of their performance. We also drafted several chapters of the new stormwater manual for the City that includes chapters on green roofs, blue roofs, and underground stormwater detention systems.



Geosyntec created a detailed BMP Prioritization Methodology for Heal the Bay, the City of Los Angeles, and the County of Los Angeles.

Client: Heal the Bay; City of Los Angeles; County of Los Angeles

Services Provided:

- BMP prioritization methodology
- Ballona Creek Watershed Demonstration (including prioritized list of BMP projects)

Project Objective

Prior to this project, there had been no organized and comprehensive County-wide effort to optimize the selection and siting of structural water quality Best Management Practices (BMPs). Retrofit structural BMPs were primarily selected and installed in an opportunistic, site-specific fashion, often focusing on only one specific pollutant (or source), regulatory requirement, or local funding opportunity. There had been little effort to regionally optimize structural BMP selection and implementation, particularly to meet regional goals. The County of Los Angeles, City of Los Angeles and Heal the Bay combined resources and successfully secured grant funding to develop sound and defensible analytical tools to meet this gap in knowledge. Geosyntec Consultants was retained to be the Technical Consultant for this Project.

Geosyntec's Scope of Services

Geosyntec developed a comprehensive methodology for using Geographic Information System (GIS) tools to prioritize implementation of structural BMPs throughout Los Angeles County to maximize the return of expenditures for structural BMPs implemented. The structural BMPs selected and implemented will treat urban runoff in a manner that maximizes pollutant reductions for multiple contaminants and benefit water quality in a cost effective manner.

Geosyntec demonstrated the use and benefits of this methodology by applying it to the Ballona Creek watershed. The final product of the project was a comprehensive, detailed blueprint for implementing structural BMPs in the Ballona Creek Watershed.

Ongoing work includes the enhancement of the BMP methodology through the development of the Strategic BMP Planning and Analysis Tool (SBPAT), which will be a flexible, transparent, user-friendly, and distributable GIS-based application for implementing the BMP methodology, with the added benefit of a modeling module for the evaluation of anticipated water quality benefits associated with the proposed BMP projects. This ongoing effort includes the active participation in regular LA Modeling forum meetings.

Notable Accomplishments

Geosyntec successfully developed a way to leverage GIS technologies and consensus-building processes to establish and prioritize areas of importance, and to identify potential solutions. The project was unique in the involvement of entities that represent, at times, opposing interests. The recognized benefits of Geosyntec's efforts were such that the State Water Resources Control Board, the City and the County all funded subsequent activities – namely development of the Structural BMP Prioritization Analysis Tool (SBPAT).

In addition, the project has been utilized in subsequent activities, including TMDL Implementation planning throughout the region, and was leveraged in the development of the City of Los Angeles Water Quality Master Plan for Urban Runoff.

The project was named **Outstanding Public/Private Civil Engineer Project** by the American Society of Civil Engineers, Metropolitan Los Angeles Branch, in 2006.



An example of maintenance of a parking lot bioretention area.

Client: Newhall Land

Services Provided:

- Development of a Stormwater BMP Design and Maintenance Manual

Project Objective

Structural stormwater treatment BMPs are an integral part of the stormwater management plans for development projects within Los Angeles County. The Los Angeles County Department of Public Works (LACDPW) requested assistance from Newhall Land in developing a BMP design specification manual that LACDPW plan reviewers could use during the development plan approval process. Additionally, LACDPW will assume operation and maintenance responsibility for certain BMPs after construction is completed and requested guidance on operation and maintenance requirements. On behalf of Newhall Land, Geosyntec Consultants prepared a Stormwater BMP Design and Maintenance Manual to assist the County in the review and approval of stormwater treatment BMP designs and specifications during the plan review process, as well as to provide guidance on maintenance requirements for publicly maintained BMPs.

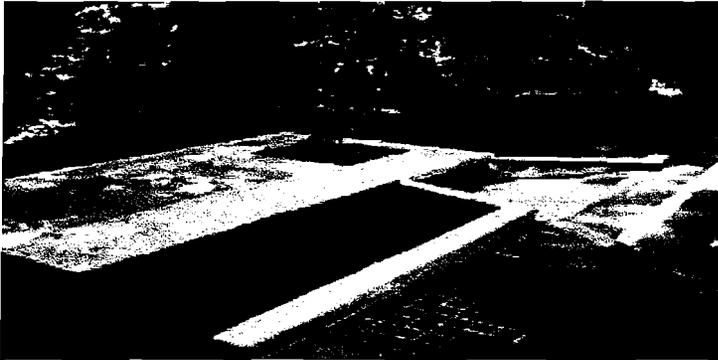
Geosyntec's Scope of Services

The LACDPW Stormwater BMP Design and Maintenance Manual prepared by Geosyntec included design and maintenance guidance for dry extended detention basins, vegetated swales, filter strips, bioretention, planter boxes, infiltration facilities, wetponds and lakes, stormwater wetland basins, sand filters, and selected proprietary devices. The manual addressed design specifications such as sizing and geometry, inlet and outlet structures, landscaping, geotechnical considerations, safety, and maintenance access. The manual also listed maintenance requirements for each BMP. Design schematics and details were provided to illustrate design specifications. The manual included introductory sections on BMP selection and hydromodification control and incorporated consideration of multi-use design to applicable BMP sections. Special considerations such as pretreatment, inline vs. offline design, and soils conditioning were also addressed. Appendices provided additional information to facilitate implementation of the guidance, including sizing methodologies, sample sizing calculation worksheets for eight BMPs, inspection and maintenance checklists, and example access and maintenance agreements.

Geosyntec conducted a workshop in September 2006 to demonstrate to County staff that each BMP type included in the Manual was an appropriate and suitable device for use in the County and that the BMPs were suitable for LACDPW maintenance – either through contractual efforts or with in-house resources. The workshop explained how each proposed device is expected to operate and what the maintenance requirements/efforts are expected to be. The workshop was well attended and Geosyntec received positive feedback on its effect on County staff and their willingness to accept the use of these types of structural treatment BMPs within the County.

Notable Accomplishments

The LACDPW Stormwater BMP Design and Maintenance Manual was adopted in 2008.



Geosyntec conducted a comprehensive technology evaluation of various alternatives for eliminating combined sewer overflows, or CSOs.

Client: Water Environment Research Foundation
Services Provided:

- Literature review
- Data compilation
- Technology evaluation

Project Objective

Every year in the U.S., it is estimated that combined sewer overflows (CSOs) result in about 850 billion gallons of sewage and stormwater overflowing from wastewater collection systems. CSOs occur in systems in which municipal wastewater is conveyed in the same pipes as stormwater runoff. These systems work well until runoff from a large storm exceeds the capacity of the pipes, causing the excess water to overflow, quite often causing significant damage to homes, roads, etc., as well as potential public health issues. Eliminating these CSOs can be very costly and technically challenging. The traditional approaches include separation or construction of large, centralized end-of-pipe or interceptor solutions that can be extraordinarily expensive. The Water Environment Research Foundation (WERF) wanted to look beyond these conventional approaches and examine the effectiveness of various decentralized controls that use more natural elements to dampen the stormwater surges that can overwhelm combined sewer systems. The overall goal of the project was to provide guidance for selecting and implementing decentralized urban best management practices (BMPs) for stormwater control, and enhance these BMPs with a specific focus on reducing stormwater volume and improving stormwater quality.

Geosyntec's Scope of Services

Working cooperatively with the Low Impact Development Center, Oregon State University, and the University of Florida, Geosyntec conducted a detailed literature review and collected existing data sets on the effectiveness of eleven individual decentralized urban stormwater control techniques for mitigating and reducing CSOs. The BMPs that Geosyntec covered in the course of our research included:

- Downspout disconnection;
- Filter strips;
- Infiltration practices;
- Pocket wetlands;
- Porous pavement;
- Rain barrels/cisterns;
- Rain gardens;
- Soil amendments;
- Tree box filters;
- Vegetated (green) roofs; and
- Vegetated swales

Our team categorized each BMP according to its functional usefulness related to process (e.g., volume control); effectiveness (load and percentage reduction); cost; and ancillary benefits (e.g., aesthetics, energy conservation, etc.). Geosyntec then co-authored the final technical report for WERF that described our research results for publication on WERF's web site (www.werf.org).

Notable Accomplishments

Geosyntec and our team provided WERF with the first comprehensive national research study to address the usefulness and effectiveness of these decentralized controls for CSO reduction purposes. The need for research in this area has been identified as a high priority topic by many major metropolitan wastewater districts. Given the high costs of centralized controls, these agencies now consider decentralized solutions as increasingly important components of their long-term CSO reduction strategies and planning processes.



Image of St. Louis skyline taken from the Mississippi River by Geosyntec during water quality monitoring activities.

Client: Metropolitan St. Louis Sewer District

Services Provided:

- Water quality monitoring
- "Clean Metals" sampling
- Data management
- Data assessment and interpretation
- Regulatory support services

Project Objective

The Metropolitan St. Louis Sewer District (MSD) is embarking on a \$5-7 Billion program of infrastructure/capital improvements to protect public health and comply with regulatory requirements. MSD is responsible for wastewater and storm water operations covering approximately 524 square miles of the City of St. Louis and St. Louis County while serving 1.4 million people. It operates and maintains approximately 2,980 miles of storm water sewers, 4,750 miles of sanitary sewers, and 1,920 miles of combined sewer systems. The collection system includes approximately 194 sanitary pump stations and 66 combined sewer pump stations. MSD provides wastewater treatment at nine facilities typically treating a total of 350 million gallons each day.

MSD has monitored water quality information on streams and rivers within its service area for the past several years. As a result of a cooperative agreement between MSD and the U.S. Geological Survey (USGS), stream discharge and water quality data have been collected at numerous locations within the study area since 1996. These data were collected to aid in developing storm water management strategies such as how to reduce bacteria in streams within the MSD jurisdiction. Data were also collected to determine the effectiveness of Sanitary Sewer Overflow (SSO) and Combined Sewer Overflow (CSO) projects and the St. Louis County Storm Water Management Plan in improving instream water quality.

Years of data collection activities have left MSD data rich but information poor. Therefore, Geosyntec designed a complete water quality monitoring program to enhance the value of historical and new water quality data. In addition to continuing the water quality monitoring network at six small urban stream sites, three Missouri River sites and six Mississippi River sites, Geosyntec is responsible for compiling new plus all historical water quality data into a database. The goal of this project is to continue providing MSD with high quality data collection services with the value added benefit of a data management system capable of addressing key project objectives and management decisions.

Geosyntec's Scope of Services

As part of ongoing CSO control efforts, Geosyntec is sampling urban stream and Missouri and Mississippi River locations within the MSD jurisdictional area using equal width increment and depth-integrated sampling procedures. The Missouri and Mississippi Rivers are sampled using Geosyntec's 24-foot Sea Ark boat equipped with a boom and winch to safely sample under sometimes rigorous field conditions. Both dry and wet weather sampling is performed to help characterize the influence of St. Louis discharges and stormwater on receiving water quality. River/stream discharge measurements are recorded from nearby USGS gauging stations or in the case of some of the large river sites, measured directly using an Acoustic Doppler Current Profiler (ADCP). Due to the very low metals detection limits required for this project, we are using "Clean Sampling" techniques for trace elements according to USEPA Method 1669 procedures.

As part of our data management services, Geosyntec has created a water quality database designed to maximize the quality and value of new plus historical water quality data. Our database conforms to practices developed by the Methods and Data Comparability Board of the National Water Quality Monitoring Council (NWQMC), which promote informed decision making. Utilizing our database and extensive regulatory experience, we continue to provide MSD with data analysis and regulatory support services. Geosyntec's use of effective data management combined with our water quality expertise allows us to identify any potential current and future regulatory issues.

Notable Accomplishments

Geosyntec has enabled MSD to receive the same water quality monitoring services historically provided by others in a timely manner and at a cost savings with the value added benefit of data management and analysis.



Geosyntec served as the lead technical consultant to help the Missouri DNR move forward with several new science-based water quality policy documents.

Client: U.S. Environmental Protection Agency;
Missouri Department of Natural Resources;
Environmental Resources Coalition

Services Provided:

- Regional dissolved oxygen criteria development
- Wasteload allocation procedure evaluation and development
- Biocriteria policy analysis
- Comprehensive ambient water quality monitoring
- Surface water quality modeling
- Policy analysis and review

Project Objective

The Missouri Department of Natural Resources (MDNR) identified science-based policy analysis as a key administrative objective following a Federal review of Missouri's Water Quality Standards Program in 2000. U.S. EPA Region 7 selected the Environmental Resources Coalition (ERC) to administer an Ecological Water Resources and Assessment Project (EWRAP) grant to assist MDNR in developing a science-oriented approach. ERC selected Geosyntec to be the lead technical consultant for ERC and MDNR.

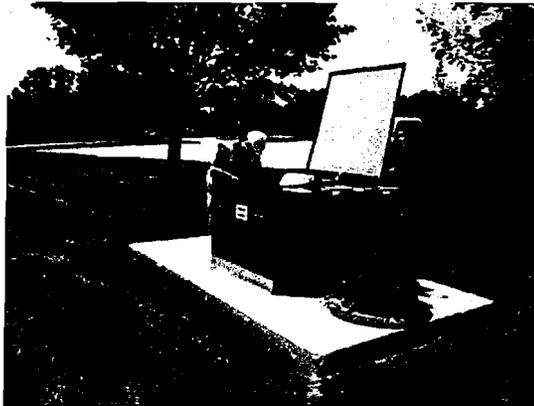
Geosyntec's Scope of Services

The EWRAP grant targeted development of several critical procedure documents supported by a 3-year intensive dissolved oxygen (DO) evaluation within state-designated reference streams.

- **Tiered Aquatic Life Use Feasibility Evaluation** – Geosyntec reviewed and summarized available state and federal guidance related to tiered aquatic life uses defined by the biological condition gradient. In coordination with ERC and key statewide stakeholder groups, we assisted state regulators in evaluating the feasibility of implementing the tiered aquatic life use framework for wadeable streams and rivers.
- **Assessment of Ecoregional Dissolved Oxygen Regimes** – Geosyntec collected over 150,000 DO, temperature, light, nutrient, chlorophyll, and stream level measurements over a 3-year period to characterize DO regimes within three selected biocriteria reference streams. We developed EPA-approved Quality Assurance Project Plans to guide data collection activities. In combination with nutrient, chlorophyll, and light data, Geosyntec modeled stream metabolism within study streams to identify sources and sinks yielding observed DO conditions.
- **Development of Regional Dissolved Oxygen Criteria Procedures** – In cooperation with regulatory staff, we synthesized available state and federal guidance documents to identify procedure elements and sections needed to successfully guide development of alternative dissolved oxygen criteria on a regional scale. Geosyntec is currently collaborating with state and federal project partners to author technical data collection and criteria calculation sections of the document.
- **Development of Wasteload Allocation Procedures** - We reviewed and synthesized available state and federal guidance documents, existing Total Maximum Daily Load evaluations, and surface water quality modeling studies to develop water quality-based wasteload allocation procedures for state permit writers. Geosyntec developed a dissolved oxygen model expert system to guide permit writers in selecting appropriate model inputs according to water body classification systems and physiogeographic provinces.

Notable Accomplishments

The comprehensive continuous dissolved oxygen dataset that Geosyntec collected definitively addressed on-going seasonal DO attainment disputes. As a result of the EWRAP grant and our contributions, the MDNR is moving forward with several new science-based policy documents. These documents and supporting data fulfill Federal requests that states develop transparent and repeatable methodologies to support implementation of key Clean Water Act mechanisms such as site-specific criteria, wasteload allocations, and tiered aquatic life uses.



Geosyntec staff maintaining a stormwater automated sampling device.

Client: Kansas City Water Services Department
Services Provided:

- Water quality monitoring
- Continuous Flow Monitoring
- Automated Sample Collection
- 24 hour On-call Event Response
- Quality Assurance Project Planning
- Regulatory support services

Project Objective

The Kansas City, Missouri (KCMO) Water Services Department (WSD) retained Geosyntec Consultants to perform extensive water quality monitoring as part of its Overflow Control Program (OCP). The combined sewer system of KCMO can discharge a mixture of stormwater and sanitary sewage to local receiving waters during and following rain events. Characterizing wet weather discharges from combined sewer overflows (CSOs) and separate storm sewers is an integral component of the OCP. Therefore, collection and analysis of water quality samples from CSOs, separate storm sewers, and receiving waters was required as a part of the OCP effort. The CSO/stormwater and receiving water sampling data was to be used in conjunction with flow metering data and sewer system mathematical models to develop pollutant loads for both monitored and non-monitored CSO and stormwater discharge locations and storms. The monitoring was designed to encompass a variety of land use areas and storms sizes to adequately represent the entire system.

Geosyntec's Scope of Services

Geosyntec's initial task assignments included quickly mobilizing staff, equipment and subcontractor resources to develop a health and safety plan, train MBE/WBE participants, finalize sampling and analysis and quality assurances plans (QAPP), and deploy 15 sampling stations. The automated sampling stations consisted of customized, secured automated samplers and confined-space sample collection devices.

Geosyntec designed and installed nine CSO automated sampling locations. Each CSO location required the collection of four sample aliquots over a four hour period through four different rain/sampling events (144 total combined sewer samples). Six storm sewer locations required three automated samplers each. Three first flush samples were collected over a three hour period during three different storm events (54 total storm sewer samples).

Geosyntec also was tasked to collect characterization of receiving water quality conditions from seventeen locations through the sewer-shed. The rigorous receiving stream efforts required collection four aliquots over a maximum of fifty-eight hours during four different storm events (108 total samples). The receiving waters characterized in this effort were Brush Creek, Town Fork Creek, the Blue River, and Penn Valley Lake.

Characterizing wet weather water quality in waters that receive discharges from combined sewer overflows (CSOs) and separate storm sewers was also integral component of the OCP. Therefore, discrete water quality measurements were collected at all sampling locations in the receiving waters.

Notable Accomplishments

Demanding project mobilization needs required Geosyntec establish a project field office in the Kansas City area. Because of the analytical parameter holding times and the critical nature of collecting "first flush" storm events, Geosyntec maintained three sampling crews who could (and did) respond around the clock to storm events.



Geosyntec's water quality data analysis allows a better understanding of the effects of land use on surface water quality in southwest Missouri.

Client: Environmental Resources Coalition

Services Provided:

- Database development
- Data gap analysis
- Water quality trend analysis

Project Objective

Several of the streams and reservoirs within the Ozark Highlands of southwest Missouri are important State and National water resources. These waterbodies maintain critical ecosystems and valuable recreational opportunities. For instance, the recreational opportunities at Table Rock Lake greatly affect the southwest Missouri tourism industry that is estimated at approximately \$1 billion annually. Effective water quality management is critically important to protect these water resources and the local economies that are inextricably tied to these resources. The water quality of southwest Missouri's streams and reservoirs is being challenged by sustained rapid population and agricultural growth. Specifically, the aesthetics of James River, Table Rock Lake, and Elk River (and its tributaries) are considered impaired by the Missouri Department of Natural Resources (MDNR).

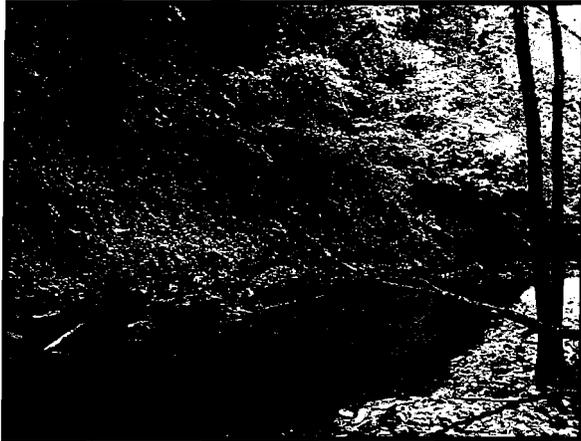
Geosyntec's Scope of Services

Geosyntec assembled an expert team to compile and analyze existing water quality and land use data for the Missouri portion of hydrologic units 11010002, *James River Basin*; 11010003, *Bull Shoals Basin*; 11070208, *Elk River Basin*; 11070207, *Spring River Basin*; 10290106, *Sac River Basin*; and 11010001, *Table Rock Lake Basin*. Specific objectives of the analysis included:

- characterize regional background or reference surface water quality conditions;
- characterize regional and seasonal surface water quality and flow variations and their underlying processes;
- characterize regional aquatic biological communities and habitats;
- assess regional and temporal trends in water quality;
- characterize the impacts of point and nonpoint source discharges on surface water quality including microbial, sediment, and nutrient discharges; and
- provide surface water quality information to:
 1. Better understand the effects of land uses and use changes on surface water quality
 2. Measure effectiveness of watershed management programs
 3. Support development of management strategies to return impaired waters to compliance with surface water quality standards.

Notable Accomplishments

As part of the effort, Geosyntec compiled data sets from the USGS, MDNR, and various local utilities and watershed groups. We assessed the data for quality before performing various statistical analyses on the datasets. We also completed data gap analysis reports for the James, Sac, and Spring Rivers and Table Rock Lake.



Geosyntec collaborated with Dr. Steve Chapra to apply Qual2K to shallow systems

Client: US Environmental Protection Agency & University of Missouri

Services Provided:

- ☑ Qual2K Water Quality Modeling
- ☑ Reference Stream Identification and Verification
- ☑ Site-Specific Dissolved Oxygen Criteria Development
- ☑ Long-Term Water Quality Monitoring
- ☑ Quality Assurance Project Plan Development

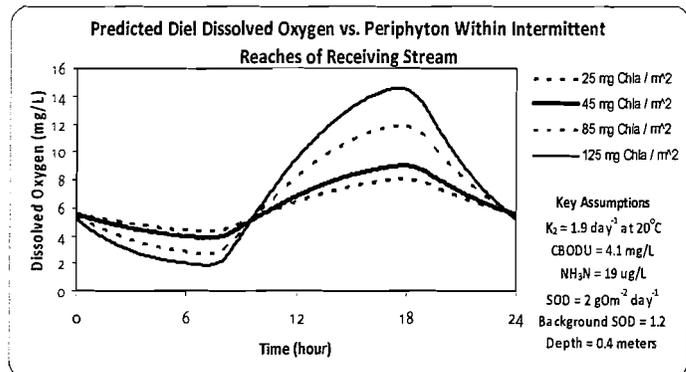
Project Objective

The Two-Mile Prairie region between Columbia and Ashland, Missouri is a growing suburban area located within ecologically sensitive watersheds on the northern edge of the Ozark Plateau ecoregion. The project area is characterized by expansive forested land and relatively unimpacted watersheds. Because the area is experiencing rapid growth, local, state and federal decision-makers concluded additional water quality assessments and refinement of existing waste load allocation modeling efforts were needed to address planning and development of the Ashland wastewater treatment facility. With funding from US EPA, the University of Missouri (MU) retained Geosyntec to monitor and model water quality within stream reaches that receive treated wastewater from the Ashland facility. Data were collected to support full verification of the QUAL2K surface water quality model and development of site-specific dissolved oxygen criteria.

Geosyntec's Scope of Services

Geosyntec conducted a First-Order Error Analysis (FOEA) of previous modeling efforts to evaluate the relative contribution of individual model parameters to the overall variance of predicted dissolved oxygen and ammonia concentrations.

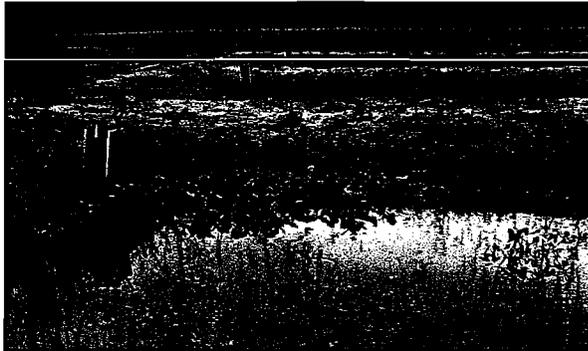
To address uncertainties identified in the FOEA, Geosyntec extensively evaluated stream travel time and hydrogeomtry under varying flow conditions to reliably and accurately describe model hydraulic parameters. Geosyntec also conducted several intensive water quality surveys during which continuous and discrete data (including bottom algae, or periphyton) were collected to aid in model calibration and verification. In order to create a more robust dataset and increase model accuracy, these studies were conducted during both summer and winter seasons. Geosyntec identified, verified, and continuously monitored best-available reference streams to determine highest attainable dissolved oxygen in the study region.



Geosyntec documented significant impacts of periphyton on shallow-system DO balances

Notable Accomplishments

Geosyntec worked closely with Dr. Steve Chapra, co-creator of the Qual2K water quality model, on the Two-Mile Prairie project. Geosyntec also documented the significant impact that low periphyton densities have on shallow-stream dissolved oxygen balances and proposed site-specific DO criteria which, when implemented, will decrease wastewater treatment costs for the City.



Geosyntec is monitoring and modeling the performance of edge-of-field wetland best management practices.

Client: Environmental Resources Coalition, Natural Resources Conservation Service

Services Provided:

- ☑ Agriculture BMP design and evaluation
- ☑ Multi-year hydrologic and water chemistry monitoring
- ☑ Run-off and BMP performance modeling
- ☑ Nutrient trading framework development
- ☑ Stakeholder coordination

Project Objective

The Natural Resources Conservation Service (NRCS) and Environmental Resources Coalition (ERC) both support projects that seek a sustainable balance between agricultural production and resource conservation. The “Evaluating and Practicing Innovative Conservation” (EPIC) project furthers these groups’ goals by quantifying mass-removal performance of practical Best Management Practices (BMPs). EPIC will also evaluate the efficacy of structural and non-structural BMPs within a draft nutrient trading framework (NTF) developed in coordination with state and local stakeholders. Understanding regional improvements possible through implementation of practical BMPs will shape non-point source and watershed management policies in the Midwest. ERC chose Geosyntec as a teaming partner because we have demonstrated success in past BMP projects and specialize in water quality monitoring, modeling, and Water Quality Standards regulations.

Geosyntec’s Scope of Services

Experimental and Engineering Design Services

Geosyntec began by developing a study design featuring statistical replication of surface water wetland and subsurface bioreactor BMPs at edge of field locations. Geosyntec is providing professional engineering design services to support successful placement and operation of these BMPs.

Monitoring & Modeling Services

Geosyntec will monitor input-output performance of BMPs over two years using continuous automated sampling equipment. We will sample for parameters that will include: total nitrogen, total phosphorus, suspended solids, pesticides, and discharge volume. In addition, we will collect several model-driven parameters such dissolved oxygen, redox potential, water temperature, and pH. We will assess the transferability of BMP performance through development and calibration of mechanistic BMP performance models.

Nutrient Trading Framework Development

In conjunction with BMP performance assessments, Geosyntec is coordinating with ERC, the Missouri Department of Natural Resources (MDNR), and stakeholder groups to assess the viability of a nutrient trading framework in Missouri.

Notable Accomplishments

Geosyntec is expanding our national-level expertise in urban stormwater BMPs and management to agricultural settings by:

- Assessing edge of field BMP performance in the context of a nutrient trading framework relevant at the state and regional scale;
- Successfully coordinating with private landowners to implement and monitor practices that improve run-off water quality; and
- Assisting regulatory decision makers in developing a sustainable nutrient management approach



Geosyntec designed an underground outlet/vegetated filter strip to evaluate herbicide and nutrient removal efficiency.

Clients: Environmental Resources Coalition, Natural Resources Conservation Service

Services Provided:

- ☑ Underground outlet/vegetated filter strip design
- ☑ Edge of field monitoring
- ☑ Data management, assessment and interpretation
- ☑ Stormwater runoff treatment
- ☑ Herbicide fate and transport
- ☑ Automatic sampler deployment

Project Objective

In 2003, the Environmental Resources Coalition (ERC) received funding from the US Department of Agriculture's Conservation Effects Assessment Project (CEAP) to establish a vegetated filter strip (VFS) best management practice (BMP) demonstration project focused on reducing herbicide and nutrient runoff from agricultural fields. Specifically, ERC wanted to compare the effectiveness of tall fescue and reed canary grass filter, eligible for USDA's Conservation Reserve Program (CRP) incentive payments, in maximizing infiltration and reducing the amounts of herbicides, nutrients, and solids from an underground outlet (UGO) in a terraced, row-crop field in the Mark Twain Lake basin. ERC retained Geosyntec to oversee the design, installation, and monitoring of the BMP project.

Geosyntec's Scope of Services

UGO/VFS Design and Installation

The design and installation of the BMP system was challenging because, to adequately test the treatment efficacy of the two VFSs being tested, we had to ensure that an equal volume of stormwater runoff from the terraced drain tile was diverted to both VFSs. To address this problem, we designed the BMP system so that flow was first collected from the UGO into a bubble up outlet and then distributed evenly over the two VFS treatments using water level control structure flow splitters (modified Agridrain[®] Inlet Water Level Control Structures). Geosyntec installed weirs to measure flow coming from the cropped field and flumes to measure flow at the outlet to the filter strips.

Water Quality Monitoring

Geosyntec installed automatic samplers at three locations to collect water quality and flow information. Flow-weighted runoff samples were collected just above the flow splitter (upstream of the filter strips) and at the outlet of the two filter strips. We then analyzed water quality samples for herbicides (e.g., atrazine and its metabolites), inorganic nitrogen compounds, total nitrogen and phosphorus, and suspended solids.

Notable Accomplishments

Prior to this study, little information regarding the effectiveness of UGO/VFS BMP systems eligible for USDA's CRP incentive payments had been available. As Total Maximum Daily Load requirements move to the implementation phase, agriculture must be in a position to offer producers approaches that effectively treat runoff from UGOs. Results from this project will help provide a better understanding of the variables which affect the quality of water in runoff from agricultural fields and will accelerate the implementation of farming practices that improve both water quality and farm profitability. Project results may also be valuable in assisting the Natural Resources Conservation Service in adopting outlet designs for CRP buffers which serve to better enhance water quality.



Geosyntec developed an extensive stream, lake, and terrace segment water quality and hydrologic database containing the results from a 5-year study within catchments cooperatively identified with state resource agencies.

Client: Missouri Corn Growers Association, U.S.
Department of Agriculture, Missouri
Department of Natural Resources,
Syngenta Crop Protection

Services Provided:

- ☑ Watershed-scale ambient water quality monitoring network
- ☑ Hydrography dataset development
- ☑ Quality Assurance Project Plan
- ☑ Integrated database development
- ☑ Agricultural BMP performance monitoring
- ☑ Total Maximum Daily Load source assessment

Project Objective

Non-point source contributions within the Total Maximum Daily Load (TMDL) framework are challenging to quantify and manage. The "Watershed Research, Assessment and Stewardship Project" (WRASP) project filled critical data gaps by evaluating land use best management practices necessary to support technically sound TMDLs for nutrients, sediment, pesticides, and herbicides within northern Missouri watersheds. Because Geosyntec has extensive experience performing large-scale, long-term water quality monitoring and TMDL studies, ERC asked us to design and implement the technical approach for the WRASP project.

Geosyntec's Scope of Services

Experimental Design, Quality Assurance, and Database Management Services

Geosyntec developed an approved Quality Assurance Project Plan in cooperation with the Missouri Department of Natural Resources (MDNR) to support TMDL studies. We integrated hydrologic and water quality data into the database software that were compatible with the needs specified by our project partners.

Hydrologic Monitoring

Geosyntec then developed verified rating curves at several locations to support continuous open-channel flow measurements. We established flow control structures (e.g., weirs, flumes, etc.) to measure runoff volume from targeted terrace segments and edge-of-field locations.

Ambient Water Quality Monitoring

Geosyntec also collected more than 6,000 water quality samples (10+ analytes per sample) at over 50 locations over a 5-year study period within a study area covering 780 square miles. In accomplishing this, we successfully coordinated field quality assurance audits, chain of custody logistics, and periodic sampling training. The data that we collected from targeted edge-of-field locations provided our project partners with realistic performance data for implementable BMPs such as vegetated filter strips.

Total Maximum Daily Load Data Analysis

Geosyntec coordinated with our project partners to interpret the WRASP dataset to support TMDL needs of state and federal resource agencies.

Notable Accomplishments

The datasets that Geosyntec generated from the WRASP project represent one of the most comprehensive commitments to data-driven TMDL development in the Midwest. The WRASP project has significantly improved regional understanding of water quality in Missouri agricultural environments, and the design and successful execution of the WRASP monitoring program has set the standard for state-of-the-practice assessment in Missouri.



Geosyntec designed and evaluated farming best management practices to determine the effects on nutrient and herbicide runoff.

Clients: Environmental Resources Coalition, Missouri Department of Natural Resources, Syngenta Crop Protection, Bayer CropScience

Services Provided:

- ☑ Wetland treatment design and installation
- ☑ Automatic sampler application
- ☑ Data management, assessment and interpretation
- ☑ Atrazine fate and transport
- ☑ Reservoir monitoring
- ☑ Non-structural BMP design and implementation

Project Objective

The Environmental Resources Coalition (ERC) created the Stewardship Implementation Project (SIP) in 2002 with the objective of using data collected by Geosyntec during the Watershed Research, Assessment, and Stewardship Project (WRASP) to select and implement economical farming management practices that improve water quality. In addition, ERC wanted to gain a better understanding of the relationship between watershed loading, natural lake mechanisms, herbicide fate and transport within municipal drinking water supplies, nutrient loss from various non-structural BMPs, and nutrient removal through wetland systems.

Geosyntec's Scope of Services

In designing the technical approach for the SIP, we divided the study into three evaluations. These evaluations included performing watershed assessments, reservoir assessments, and evaluating farming systems and best management practices (BMPs).

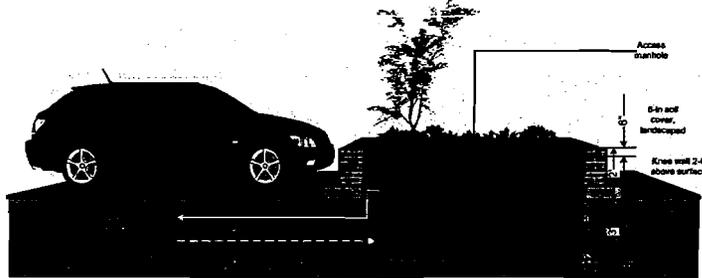
The purposes of the watershed assessment were to determine the areas or sub-basins that account for the majority of the pollutant loadings, estimate pollutant loading to the receiving water bodies, and provide insight into the impacts of land use and the effectiveness of BMPs on key water quality parameters. To evaluate water quality in the study watersheds, we deployed automatic samplers set to collect flow weighted water quality samples. We analyzed the samples for various herbicides (e.g., atrazine and its metabolites), inorganic nitrogen compounds, total nitrogen and phosphorus, and suspended solids.

Because natural reservoir processes can differentially influence the fate and transport of nutrients and herbicides within a surface water body, Geosyntec also performed intensive reservoir assessments. These assessments included monitoring major arms of the project reservoirs at multiple locations including reservoir inflows and outflows. We collected discrete samples to determine pollutant (nutrients, herbicides, and atrazine degradation products) distributions in the water column. We also deployed continuous level and temperature monitoring equipment at the deepest reservoir location and conducted bathymetric surveys.

To assess farming systems and BMPs, we designed and evaluated three types of BMPs aimed at reducing nutrient and herbicide runoff. These BMPs included an underground outlet (UGO) vegetated filter strip, a constructed wetland, and field plots which tested herbicide and nutrient application methods. We evaluated BMP effectiveness by setting up edge of field monitoring stations equipped with automatic samplers. Geosyntec collected samples during runoff events and dry weather. We also installed continuous flow measurement devices to ensure that the runoff data collected were flow-weighted to the storm event. In conjunction with this phase of the evaluation, we conducted an information and education campaign which included distributing written material and conducting landowner meetings, conferences, exhibits, field days and tours.

Notable Accomplishments

The SIP project tied edge of field nutrient and herbicide losses with in-stream fate and transport. The reservoir data allowed for the determination of mass loadings and fate and transport of nutrient and herbicide runoff to drinking water reservoirs in northern Missouri. Data collected during SIP will aid producers, herbicide manufacturers, farm agencies, and regulators in developing nutrient and herbicide management approaches that protect drinking water supplies.



Geosyntec's design approach helped to minimize construction costs while providing aesthetically pleasing landscaping.

**Client: McCormack Baron Salazar, Developer, and
St. Louis Housing Authority**

Services Provided:

- ✓ Conceptual design of rainwater harvesting systems
- ✓ Detailed design and construction document preparation
- ✓ Construction bid review
- ✓ Permitting support
- ✓ Economic analyses
- ✓ Construction oversight

Project Objective

McCormack Baron Salazar (MBS) owns and manages several mixed-income housing developments in the St. Louis metropolitan area. Together with the St. Louis Housing Authority (SLHA), MBS developed a goal of implementing several types of green retrofits at some of these facilities, including solar power, water conservation, and innovative stormwater management systems, as part of their sustainability initiative and to save on long-term operating costs. To minimize excavation costs and to simplify construction, MBS and SLHA wanted to install shallow rainwater harvesting (RWH) systems. They retained Geosyntec to deliver the conceptual and detailed design and provide construction oversight of the RWH systems. The goal of these RWH systems is to provide multiple benefits, including maximizing water conservation for the on-site irrigation systems, and reducing wet weather flows to the Metropolitan St. Louis Sewer District's (MSD) combined sewer system (CSS).

Geosyntec's Scope of Services

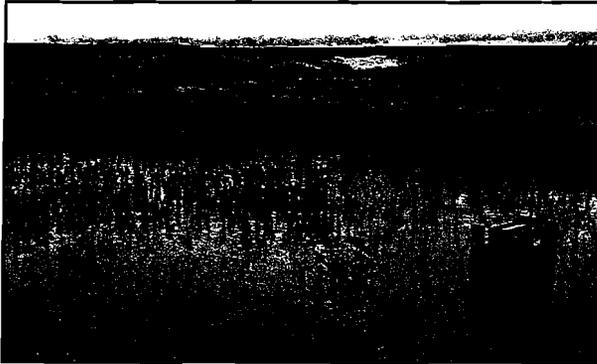
As part of our conceptual design, Geosyntec performed feasibility analyses and selected RWH sites that would maximize water conservation and minimize wet weather flows to the CSS. We worked with MSD to establish the stormwater design criteria for the RWH systems for demonstration purposes. We delivered construction documents, including engineering plans and specifications, for seven RWH systems and one bioretention system. The design disciplines included in the construction documents were civil, electrical, mechanical, structural/geotechnical, and landscaping. We also solicited and reviewed the contractor's construction bids, and provided permitting support by interfacing with MSD and the St. Louis Building Department.

The main components of the RWH systems included pretreatment for stormwater collected from paved areas, partially buried cisterns, lift stations, and connections to the irrigation system. We sited the partially buried systems within parking lot islands to minimize excavation costs and to provide aesthetic landscaping for residents. A key design component of these RWH systems was our patented advanced harvesting controller. This internet-enabled system allows for maximum utilization of the cistern storage volume both for reduction of combined sewer overflows and reduction of potable water used for irrigation.

Geosyntec is currently performing the construction oversight for the stormwater retrofits. Construction will be complete for all systems in 2011.

Notable Accomplishments

Geosyntec delivered custom design plans for the RWH systems and is providing construction oversight within a very short schedule. We also provided value engineering services to reduce construction costs. Once complete, the RWH systems will be the largest systems in the metropolitan St. Louis area. Also, the use of our advanced harvesting controller will help attain the goals of water conservation and reduced wet weather flows to the CSS.



Geosyntec worked with researchers from the University of Missouri to design and monitor the treatment efficacy of a constructed wetland.

Clients: Missouri Department of Agriculture, US EPA, Environmental Resources Coalition

Services Provided:

- Constructed wetlands
- Comprehensive BMP monitoring
- Data management, assessment and interpretation
- Quality Assurance Project Plan
- Herbicide and nutrient control
- Automatic sampler deployment

Project Objective

The US Environmental Protection Agency (USEPA) awarded the Missouri Department of Agriculture (MDA) and the Environmental Resources Coalition (ERC) with a grant to establish the Albany Experimental Wetland Demonstration Project. The goal of this project is to develop innovative, integrated processes for effectively and efficiently addressing the downstream Gulf of Mexico hypoxia and nutrient issues related to the State of Missouri. When completed, USEPA would like to use the results from this study to promote uniquely designed, site-specific wetlands that maximize nutrient uptake, and reduce sediment and herbicide loading to local streams. Based on our previously successful projects related to constructed wetlands and other best management practice (BMP) systems, ERC asked Geosyntec to provide a study design that would achieve USEPA's objectives, and to oversee implementation of the project.

Geosyntec's Scope of Services

Experimental Design and Quality Assurance

Geosyntec, in coordination with ERC, developed a Quality Assurance Project Plan (QAPP) that was approved by all project partners. We are the primary quality assurance contractor responsible for verification and validation of all data generated by the project, and are also responsible for providing all monitoring equipment, training, data analysis, and summary reports.

Experimental Wetland Design

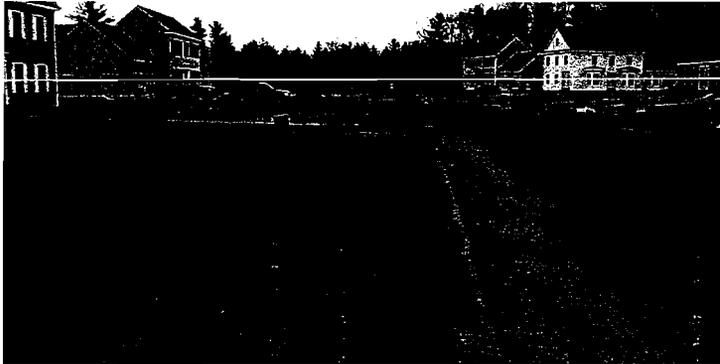
Geosyntec worked with researchers from the University of Missouri (MU) to design the Albany Experimental Wetland. The unique three-cell wetland is located at the MU Hundley-Whaley Research Center near Albany, Missouri to serve as a BMP demonstration project and to allow for extensive monitoring of wetland treatment effectiveness. For the Albany project, Geosyntec planted 30 different species of wetland plants (e.g., arrowheads, rushes, bulrushes, grasses, and sedges) designed to maximize removal of high levels of nutrient, sediment, and herbicide from row-crop runoff.

Ambient Water Quality Monitoring

We placed automatic samplers and weirs at the inflow and outflow points of the wetland cells to collect flow data, which will collect flow-paced composite samples from up to 10 runoff events to estimate nutrient, sediment, and herbicide loadings into and out of the wetlands. MU personnel will collect flow-paced composite samples during runoff events. In addition, during quiescent periods, samples will be collected from each of the wetland cells to estimate the nitrification/denitrification and atrazine degradation kinetics occurring in the wetland cells between runoff events.

Notable Accomplishments

When completed, this project will allow us evaluate the use of a site-specific constructed wetland as an innovative, integrated process for effectively and efficiently removing nutrients, sediments, and herbicides in runoff from agricultural fields and improving water quality. The data collected during this study should also be valuable in developing future planning frameworks for achieving nutrient, sediment, and herbicide reduction goals and complying with water quality criteria, thereby reducing the likelihood of waters being placed on the Clean Water Act 303(d) list. If successful, agricultural constructed wetlands could become an important BMP for addressing Gulf of Mexico hypoxia problems and nutrient issues specific to the State of Missouri.



Geosyntec incorporated LID design techniques, such as this water quality swale, into a 41-unit subdivision to allay concerns over potential impact to a nearby municipal well.

Client: Transformations, Inc.

Services Provided:

- Residential stormwater design
- Stormwater management
- Hydraulic and hydrologic modeling
- LID stormwater designs and controls
- Permitting support

Project Objective

Transformations, Inc., a residential housing developer, was looking to design and build a 41-unit subdivision in Townsend, a small town in north central Massachusetts. Unfortunately, the site was within the Zone II wellhead protection area of one of the town's municipal water supply wells. Several town boards, including the Board of Health, Conservation Commission, and Zoning Board of Appeals, objected to the development due mainly to perceived potential negative impacts of the project from nitrogen to the well. These town boards held the permitting process up for four years and 21 separate public hearings. At one point, the town denied the project, and Transformations was forced to appeal to the State.

After year two of the process, Transformations retained Geosyntec to incorporate low impact development, or LID, techniques into the design of the subdivision. The goal of incorporating LID was to overcome objections to the project by providing innovative and cost-effective methods of handling nitrogen and stormwater runoff that would minimize or eliminate potential impacts to the supply well.

Geosyntec's Scope of Services

Geosyntec began by conducting analyses of surface and subsurface hydrology, nitrogen loading, and potential impacts to the nearby municipal supply well, and presented these results to the Zoning Board of Appeals. Once we had developed a thorough understanding of the hydrology of the site, we then conceived and designed a number of innovative LID measures to reduce stormwater runoff from the site, decrease wetland infringement, and limit nitrogen loading from septic systems and lawn fertilizers. The LID features that Geosyntec designed for this residential subdivision include:

- Nitrogen reducing septic systems
- Water quality swales
- Wetland stormwater treatment areas (vs. detention basins)
- Bioretention cells
- Porous pavers on walkways
- Phyto-enhanced water quality buffers
- Raingardens
- Disconnected stormwater flow paths

Notable Accomplishments

After a four-year permitting process, and after our client's successful appeals to the State, the project was finally approved. The State Office of Housing refuted the Town's denials and lent their enthusiastic support to the project. Their support was based largely on Geosyntec's innovative LID techniques and our demonstration that there would be little to no impact to the water supply well from the project now or in the future. In fact, the State Office of Housing went on to recommend that all projects of this type incorporate LID techniques to minimize the impact of stormwater and septic runoff.

Appendix C

Fees and Cost Budget



Project Cost Estimate
Boone County, Missouri
Urban Retrofit Monitoring of Stormwater Practices in Hinkson Creek Watershed

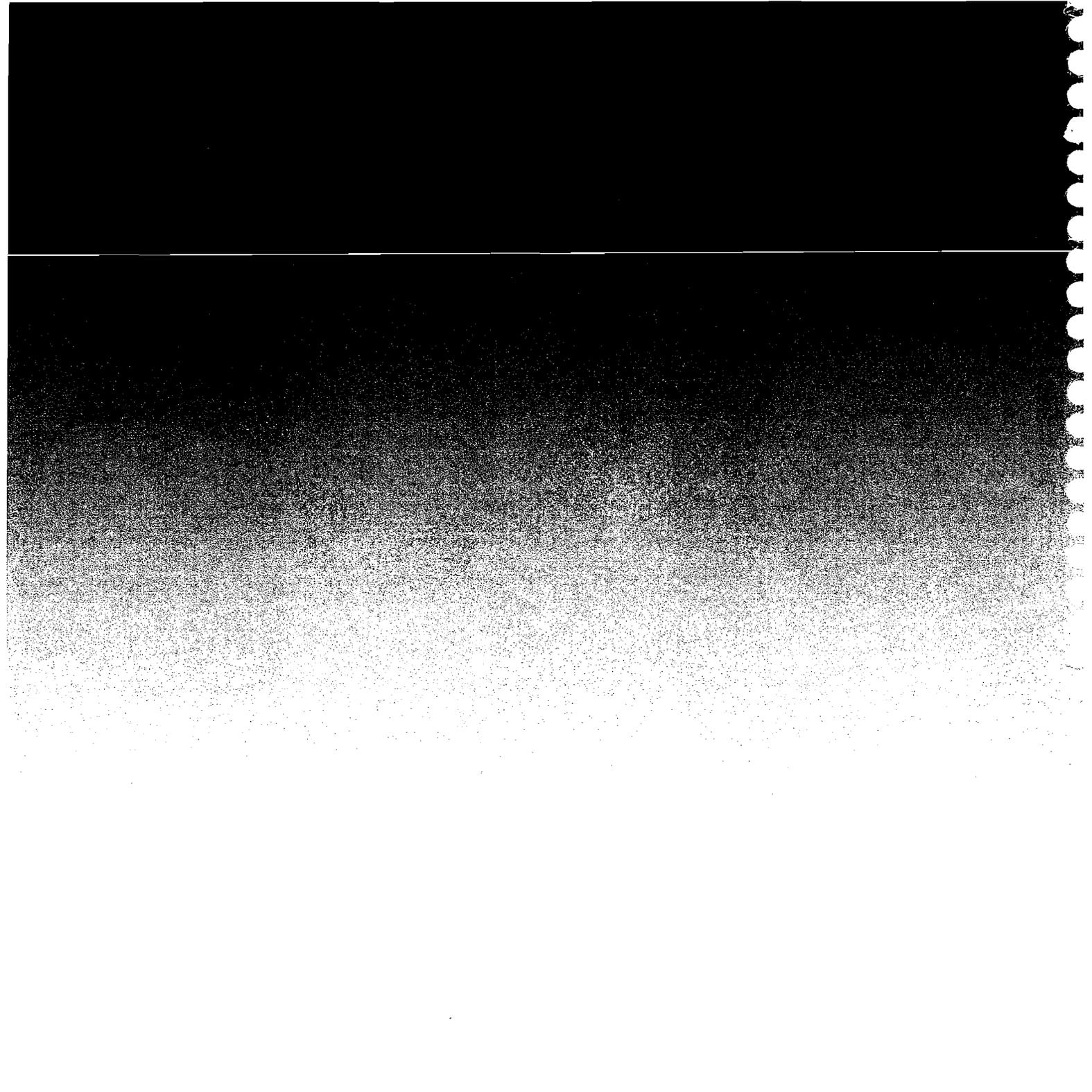
Professional Costs:	Rate	Unit	Number of Units per each Scope of Work										Total Units	Total Cost
	(\$/unit)		Task 1	Task 2a	Task 2b	Task 3	Task 4	Task 5a	Task 5b	Task 6	Task 7			
Principal	198	hour	1	1	2	2	1	5	3	2	8	25	\$4,950	
QA/H&S Officer	155	hour	2			3	18	50	23			96	\$14,865	
Supervising Engineer	152	hour			54					5		59	\$8,968	
Managing Hydrologist	148	hour	8	4	6	35	40	34	78		120	325	\$48,100	
Database Manager	128	hour				80		118	88		112	397	\$50,829	
Hydrologic Specialist	112	hour	30	66		220	18	68	30	85		517	\$57,904	
Staff Scientist	98	hour												
Project Assistant	54	hour	2	6	6	6	6	6	6		6	44	\$2,376	
Subtotal			\$5,160	\$8,506	\$9,816	\$41,245	\$11,248	\$36,827	\$30,510	\$10,676	\$34,004	1,463	\$187,991	
Non-Professional Direct Costs:														
Per Diem	40	day			4			3	3			10	\$400	
Mileage	0.60	mile			3,000			15	80			3,095	\$1,857	
Printing	Direct													
Laboratory WQ Analysis	\$702	Paired Samples						37				37	\$25,983	
Subtotal			\$0	\$0	\$1,960	\$0	\$0	\$26,112	\$168	\$0	\$0	\$3,142	\$28,240	
Total			\$5,160	\$8,506	\$11,776	\$41,245	\$11,248	\$62,939	\$30,678	\$10,676	\$34,004	\$216,231	\$216,231	

- Task 1: Guide Quality Assurance Project Plan Development**
- Task 2a: Volunteer Monitoring Workshop**
- Task 2b: Urban Stormwater BMP Modeling Workshop**
- Task 3: Database Development and Management**
- Task 4: Quality Assurance Management & Oversight**
- Task 5a: BMP Retrofit Performance Monitoring at the Grissom Building**
- Task 5b: Runoff Attenuation Monitoring at Sunrise Estates**
- Task 6: Stormwater Modeling for Selected Sub-Catchment**
- Task 7: Summary Reports**

Key Budget Estimation Assumptions

1. Boone County will provide necessary sampling and monitoring equipment as guided by Geosyntec
2. Americorps staff are responsible for sampling, instrument download, and sample delivery as trained by Geosyntec
3. Geosyntec is tasked with data entry, validation, quality assurance oversight, database management, and training
4. Boone County or Americorps is to provide GIS data and field-truthing to support modeling and project needs
5. Nearby or existing climate station information is sufficient to provide study data

This proposed budget is based on a preliminary understanding of project resource needs and assumptions described in the project approach and scope of services. Boone County may adjust the scope of sampling, analysis, training, or data management tasks included in this estimate along with a commensurate change in fee.



CERTIFIED COPY OF ORDER

STATE OF MISSOURI }
County of Boone } ea.

December Session of the October Adjourned

Term. 20 11

In the County Commission of said county, on the 6th day of December 20 11

the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby approve the utilization of the City of Columbia cooperative contract 152/2009 – Tree and Stump Removal Service with Arthur Ratliff Tree & Stump Removal, LLC. It is further ordered the Presiding Commissioner is hereby authorized to sign said contract.

Done this 6th day of December, 2011.

ATTEST:

Wendy S. Noren
Wendy S. Noren
Clerk of the County Commission

Daniel K. Atwill
Daniel K. Atwill
Presiding Commissioner

Karen M. Miller
Karen M. Miller
District I Commissioner

Absent
Skip Elkin
District II Commissioner

Boone County Purchasing

Melinda Bobbitt, CPPB
Director



601 E. Walnut, Room 208
Columbia, MO 65201
Phone: (573) 886-4391
Fax: (573) 886-4390

MEMORANDUM

COPY

TO: Boone County Commission
FROM: Melinda Bobbitt, CPPB
DATE: November 1, 2011
RE: Cooperative Contract – 152/2009 – *Tree and Stump Removal Service*

Purchasing and Facilities Maintenance request permission to utilize the City of Columbia cooperative contract 152/2009 – *Tree and Stump Removal Service* with Arthur Ratliff Tree & Stump Removal, LLC of Columbia, Missouri.

Invoices from this Term and Supply contract will be paid from department 6100 – Facilities and Grounds Maintenance; 1610 – Parks & Recreation, account 60400 – Grounds Maintenance.

cc: Contract File
Bob Davidson, Facilities Maintenance

**PURCHASE AGREEMENT
FOR
TREE AND STUMP REMOVAL**

THIS AGREEMENT dated the 6 day of December 2011 is made between Boone County, Missouri, a political subdivision of the State of Missouri through the Boone County Commission, herein "County" and **Arthur Ratliff Tree & Stump Removal, LLC**, herein "Vendor."

IN CONSIDERATION of the parties performance of the respective obligations contained herein, the parties agree as follows:

1. **Contract Documents** - This agreement shall consist of this Purchase Agreement for **Tree and Stump Removal Service** in compliance with all bid specifications and any addendum issued for the City of Columbia bid **152/2009**, Boone County Standard Terms and Conditions, Boone County Insurance Requirements, and Work Authorization Certification. All such documents shall constitute the contract documents which are incorporated herein by reference. Service or product data, specification and literature submitted with bid response may be permanently maintained in the County Purchasing Office bid file for this bid if not attached. In the event of conflict between any of the foregoing documents, this Purchase Agreement, the City of Columbia Contract **152/2009** and Boone County Standard Terms and Conditions shall prevail and control over the vendor's bid response.

2. **Purchase** - The County agrees to purchase from the Vendor and the Vendor agrees to supply the County with tree and stump removal service for the following per inch rates:

<u>Description</u>	<u>Per Inch Rate</u>
1. Small Tree up to 12" stump grinding only	\$1.89
2. Small tree up to 12" stump grinding, removal, cleanup & backfill	\$2.48
3. Small tree up to 12" stump grinding, removal, cleanup, backfill, straw, seeding	\$2.63
4. Medium tree 13"- 20" stump grinding only	\$2.20
5. Medium tree 13" - 20" stump grinding, removal, cleanup & backfill	\$2.92
6. Medium tree 13" - 20" stump grinding, removal, cleanup, backfill, straw & seeding	\$3.07
7. Large tree 21" up stump grinding only	\$2.78
8. Large tree 21" up stump grinding, removal, cleanup & backfill	\$4.24
9. Large tree 21" up stump grinding, removal, cleanup, backfill, straw & seeding	\$4.53

3. **Contract Term** - This agreement shall commence on **the date written above and extend through November 30, 2012** subject to the provisions for termination specified below. This agreement may be extended beyond the expiration date by order of the County for **three (3) additional one-year periods** subject to a **maximum of a 5% increase** in each renewal period. This contract may renew on a month to month basis following expiration of the last renewal period for a maximum of six (6) months in the event the County is unable to re-bid and/or award a new contract prior to the expiration date after exercising diligent efforts to do so or not.

4. **Billing and Payment** - All billing shall be invoiced to the Facilities Maintenance department at 613 E. Ash Street, Columbia, MO 65201. Billings may only include the prices listed in the vendor's bid response. No additional fees for paper work processing, labor, or taxes shall be included as additional charges in excess of the charges in the Vendor's bid response to the specifications. The County agrees to pay all Monthly Statements within thirty days of receipt. In the event of a billing dispute, the County reserves the right to withhold payment on the disputed amount; in the event the billing dispute is resolved in favor of the Vendor, the County agrees to pay interest at a rate of 9% per annum on disputed amounts withheld commencing from the last date that payment was due.

5. **Binding Effect** - This agreement shall be binding upon the parties hereto and their successors and assigns for so long as this agreement remains in full force and effect.

6. **Termination** - This agreement may be terminated by the County upon thirty days advance written notice for any of the following reasons or under any of the following circumstances:

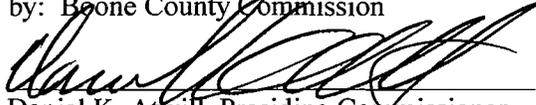
- a. County may terminate this agreement due to material breach of any term or condition of this agreement, or
- b. County may terminate this agreement if in the opinion of the Boone County Commission if delivery of products are delayed or products delivered are not in conformity with bidding specifications or variances authorized by County, or
- c. If appropriations are not made available and budgeted for any calendar year.

IN WITNESS WHEREOF the parties through their duly authorized representatives have executed this agreement on the day and year first above written.

**ARTHUS RATLIFF TREE & STUMP
REMOVAL, LLC**

by 
title V.P.

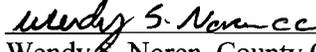
BOONE COUNTY, MISSOURI

by: Boone County Commission

Daniel K. Atwill, Presiding Commissioner

APPROVED AS TO FORM:


County Counselor

ATTEST:


Wendy S. Noren, County Clerk

In accordance with RSMo 50.660, I hereby certify that a sufficient unencumbered appropriation balance exists and is available to satisfy the obligation(s) arising from this contract. (Note: Certification of this contract is not required if the terms of this contract do not create a measurable county obligation at this time.)


Signature *by ag*

11/23/11
Date

6100 / 1610 / 60400 - Term & Supply
No Encumbrance Required
Appropriation Account

STANDARD TERMS AND CONDITIONS – CONTRACT WITH BOONE COUNTY, MISSOURI

1. Responses shall include all charges for packing, delivery, installation, etc., (unless otherwise specified) to the Boone County Department identified in the Request for Bid and/or Proposal.
2. The Boone County Commission has the right to accept or reject any part or parts of all bids, to waive technicalities, and to accept the offer the County Commission considers the most advantageous to the County. Boone County reserves the right to award this bid on an item-by-item basis, or an “all or none” basis, whichever is in the best interest of the County.
3. Bidders must use the bid forms provided for the purpose of submitting bids, must return the bid and bid sheets comprised in this bid, give the unit price, extended totals, and sign the bid.
4. When products or materials of any particular producer or manufacturer are mentioned in our specifications, such products or materials are intended to be descriptive of type or quality and not restricted to those mentioned.
5. Do not include Federal Excise Tax or Sales and Use Taxes in bid process, as law exempts the County.
6. The delivery date shall be stated in definite terms, as it will be taken into consideration in awarding the bid.
7. The County Commission reserves the right to cancel all or any part of orders if delivery is not made or work is not started as guaranteed. In case of delay, the Contractor must notify the Purchasing Department.
8. In case of default by the Contractor, the County of Boone will procure the articles or services from other sources and hold the Bidder responsible for any excess cost occasioned thereby.
9. Failure to deliver as guaranteed may disqualify Bidder from future bidding.
10. Prices must be as stated in units of quantity specified, and must be firm. Bids qualified by escalator clauses may not be considered unless specified in the bid specifications.
11. No bid transmitted by fax machine or **e-mail** will be accepted. **U.S. mail only.**
12. The County of Boone, Missouri expressly denies responsibility for, or ownership of any item purchased until same is delivered to the County and is accepted by the County.
13. The County reserves the right to award to one or multiple respondents. The County also reserves the right to not award any item or group of items if the services can be obtained from a state or other governmental entities contract under more favorable terms. The resulting contract will be considered a non-exclusive contract.
14. The County, from time to time, uses federal grant funds for the procurement of goods and services. Accordingly, the provider of goods and/or services shall comply with federal laws, rules and regulations applicable to the funds used by the County for said procurement, and contract clauses required by the federal government in such circumstances are incorporated herein by reference. These clauses can generally be found in the Federal Transit Administration’s Best Practices Procurement Manual – Appendix A. Any questions regarding the applicability of federal clauses to a particular bid should be directed to the Purchasing Department prior to bid opening.
15. In the event of a discrepancy between a unit price and an extended line item price, the unit price shall govern.

Insurance Requirements: The Contractor shall not commence work under this contract until they have obtained all insurance required under this paragraph and such insurance has been approved by the County, nor shall the Contractor allow any subcontractor to commence work on their subcontract until all similar insurance required of subcontractor has been so obtained and approved. All policies shall be in amounts, form and companies satisfactory to the County which must carry an A-6 or better rating as listed in the A.M. Best or equivalent rating guide. Insurance limits indicated below may be lowered at the discretion of the County.

Compensation Insurance - The Contractor shall take out and maintain during the life of this contract, **Employee's Liability and Worker's Compensation Insurance** for all of their employees employed at the site of work, and in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. Worker's Compensation coverage shall meet Missouri statutory limits. Employers' Liability limits shall be \$1,000,000.00 each employee, \$1,000,000.00 each accident, and \$1,000,000.00 policy limit. In case any class of employees engaged in hazardous work under this Contract at the site of the work is not protected under the Worker's Compensation Statute, the Contractor shall provide and shall cause each subcontractor to provide Employers' Liability Insurance for the protection of their employees not otherwise protected.

Comprehensive General Liability Insurance - The Contractor shall take out and maintain during the life of this contract, such comprehensive general liability insurance as shall protect them and any subcontractor performing work covered by this contract, from claims for damages for personal injury including accidental death, as well as from claims for property damages, which may arise from operations under this contract, whether such operations be by themselves or for any subcontractor or by anyone directly or indirectly employed by them. The amounts of insurance shall be not less than \$2,000,000.00 combined single limit for any one occurrence covering both bodily injury and property damage, including accidental death. If the Contract involves any underground/digging operations, the general liability certificate shall include X, C, and U (Explosion, Collapse, and Underground) coverage. If providing Comprehensive General Liability Insurance, then the Proof of Coverage of Insurance shall also be included.

The Contractor has the option to provide **Owner's Contingent or Protective Liability and Property Damage** instead of the **Comprehensive General Liability Insurance**- The Contractor shall provide the County with proof of Owner's Protective Liability and Property Damage Insurance with the County as named insured, which shall protect the County against any and all claims which might arise as a result of the operations of the Contractor in fulfilling the terms of this contract during the life of the Contract. The minimum amounts of such insurance will be \$2,000,000.00 per occurrence, combined single limits. Limits can be satisfied by using a combination of primary and excess coverages. Should any work be subcontracted, these limits will also apply.

COMMERCIAL Automobile Liability – The Contractor shall maintain during the life of this contract, automobile liability insurance in the amount of not less than \$2,000,000.00 combined single limit for any one occurrence, covering both bodily injury, including accidental death, and property damage, to protect themselves from any and all claims arising from the use of the Contractor's own automobiles, teams and trucks; hired automobiles, teams and trucks; and both on and off the site of work.

Proof of Carriage of Insurance - The Contractor shall furnish the County with Certificate(s) of Insurance which name the County as additional insured in an amount as required in this contract, contain a description of the project or work to be performed, and requiring a thirty (30) day mandatory cancellation notice. In addition, such insurance shall be on occurrence basis and shall remain in effect until such time as the County has made final acceptance of the facility contracted.

INDEMNITY AGREEMENT: To the fullest extent permitted by law, Contractor shall indemnify, hold harmless and defend the County, its directors, officers, agents, and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any act or failure to act, negligent or otherwise, of Contractor, of any subcontractor (meaning anyone, including but not limited to consultants having

a contract with contractor or a subcontract for part of the services), of anyone directly or indirectly employed by contractor or by any subcontractor, or of anyone for whose acts the contractor or its subcontractor may be liable, in connection with providing these services. This provision does not, however, require contractor to indemnify, hold harmless, or defend the County of Boone from its own negligence.

RFQ #152/2009

TERM AND SUPPLY CONTRACT for furnishing the City of Columbia, Missouri, various locations in and/or around Columbia, **STUMP GRINDING SERVICES** on an as needed basis from date of award through November 30, 2010, with an option by the City to renew for four (4) additional one (1) year periods, each to be exercised separately.

QUALIFICATIONS

Must possess all the tools and equipment to perform the work and be skilled in the operation of such equipment. Need to be available for work on short notice and to provide reasonable priority if necessitated.

Submit with your quotation a list of references for whom similar work has been performed during the last 12 months (ATTRIBUTE 15) along with a list showing equipment to be used showing make, model, age, etc. (ATTRIBUTE 16)

SCOPE OF WORK

Stump Grinding: Stumps shall be ground to a depth of 4" below ground level. Removal, Cleanup and Backfill shall include the removal from the site of all stump grindings, and backfill of the affected area with clean topsoil. Seed to be used shall be a turf type fescue with a sufficient amount of straw covering to protect and cover the seed during germination.

City of Columbia Purchasing (City of Columbia) Supplier Response

Bid Information		Contact Information	Ship to Information
Bid Creator	Barb Rorman Procurement Officer	Address	Address
Email		Contact	Contact
Phone	(573) 8747374	Department	Department
Fax	(573) 8747762	Building	Building
Bid Number	152/2009	Floor/Room	Floor/Room
Title	Stump Grinding Services Term & Supply	Telephone	Telephone
Bid Type	RFQ-F	Fax	Fax
Issue Date	09/29/2009	Email	Email
Close Date	10/20/2009 2:00:00 PM CST		
Need by Date			

Supplier Information

Company Arthur Ratliff Tree & Stump Removal, LLC
 Address 8251 S High Point Lane
 Columbia, MO 65203
 Contact
 Department
 Building
 Floor/Room
 Telephone 1 (573) 446-2266
 Fax 1 (573) 446-9010
 Email
 Submitted 10/20/2009 8:21:25 AM CST
 Total \$26.74

V# 10296

Signature _____

Supplier Notes

Bid Notes

It is preferred that this bid be submitted electronically through this e-bid system. Bidders must first register, then upon approval, enter the system (hyper-link is below) utilizing the login name and password chosen by your firm during the registration process. <https://customer.lonwave.net/prod/default.aspx?company=columbia>

Bid Messages

Please review the following and respond where necessary

#	Name	Note	Response
1	Terms and Conditions	Accept terms and conditions	Accept

2	Certificate of Insurance Requirement Acknowledgment	The City of Columbia's insurance requirements have been attached to this bid document. The Bidder hereby acknowledges that these insurance requirements have been reviewed and if awarded a contract, bidder will provide a Certificate of Insurance meeting these requirements as set forth herein.	Certificate of Insurance Requirement Acknowledgment
3	Payment Terms	Please Indicate Payment Terms:	30 days
4	Renewal Years - % of Increase	Indicate in percentage how much (if any) the first contract year's quoted prices will be increased in each of the four renewal periods after the first contract year expires. Provide this information in the following format in the space provided: 1st renewal year = ____ %; 2nd renewal year = ____ %; 3rd renewal year = ____ %; 4th renewal year = ____ %.	1st renewal year = 5%; 2nd renewal year = 5%; 3rd renewal year = 5%; 4th renewal year = 5%
5	If you have done business under a different name, please give that name and location:	If you have done business under a different name, please give that name and location:	NA
6	Have you ever failed to complete any work awarded to your company?	Have you ever failed to complete any work awarded to your company? If so, where and why?	NO
7	References	List three references, minimum, for same type of work performed in the past six months. State name and telephone number of contact person, as well as nature of services performed. Attach separate sheet if necessary.	University of Missouri Columbia, Scott Kellh, 573-808-4877, grind stumps; Lenoir Woods, Wayne, 573-999-0147, grind stumps, clean up chips, fill holes with dirt; Shelter Insurance, Joy Long, 573-214-4715, grind stumps
8	LENGTH OF TIME YOUR FIRM	LENGTH OF TIME YOUR FIRM HAS BEEN ENGAGED IN THE BUSINESS OF STUMP GRINDING SERVICES.	10 years
9	ACCOUNTS IN THE PAST 36 MONTH	NUMBER OF ACCOUNTS YOUR FIRM HAS	One
10	Number of accounts	Indicate the number of accounts your firm presently services.	One
11	Any additional information that you feel is required to perform the work specified.	Any additional information that you feel is required to perform the work specified in this bid and the number of workers that will be assigned to this job. Attach additional pages if needed.	3 workers will be assigned to this job
12	Any additional information regarding your firm	Any additional information that you consider pertinent to our evaluation of your firm. Attach additional pages if needed.	
13	RESPONSE TIME	SPECIFY YOUR NORMAL RESPONSE TIME AFTER NOTIFICATION FOR WORK TO BE PERFORMED IN HOURS	48 hours
14	Cooperative Contract Pricing	Would you be willing to offer the same pricing to members of the Mid-Missouri Public Purchasing Cooperative? (Not responding to this question will not impact the evaluation of this bid.)	

- | | | | |
|----|---|--|--|
| 15 | LIST OF REFERENCES FOR WHOM SIMILAR WORK HAS BEEN PERFORMED DURING THE LAST 12 MONTHS | PROVIDE REFERENCE NAME, ADDRESS, CONTACT PERSON AND PHONE NUMBER. | Country Club of MO, 1501 Nilfong, Columbia, MO 65203 Ryan Sears, 573-881-6606; Bill Frazier, 402 Rochford, Sturgeon 65284, 573-887-3303; Billy Sapp, 6100 New Haven Rd, Columbia, MO 65201, 573-864-0032 |
| 16 | EQUIPMENT TO BE USED FOR SERVICES | PROVIDE LIST INCLUDING MAKE, MODEL AND AGE OF EQUIPMENT TO BE USED IN PERFORMING SERVICES. | 2006 F650; 2004 F850; 1997 Ford Super Duty; 4020 John Deere Tractor; 955 John Deere Tractor; Ashland Stump Grinder |

Line Items

#	Qty	UOM	Description	Response
1	1	EA	PROVIDE THE PRICING AT WHICH YOU WILL PROVIDE YOUR SERVICES TO THE CITY OF COLUMBIA, INCLUDING ALL TRAVEL TIME, MILAGE, EQUIPMENT, MARKUP, ETC.	\$1.89

Item Notes: SMALL TREE UP TO 12" BASE BID TO BE BASED UPON STUMP GRINDING ONLY.

Supplier Notes: The bid price is per inch. The actual extended price is based upon the actual diameter of the stump in inches times the bid price

2	1	EA	PROVIDE THE PRICING AT WHICH YOU WILL PROVIDE YOUR SERVICES TO THE CITY OF COLUMBIA, INCLUDING ALL TRAVEL TIME, MILAGE, EQUIPMENT, MARKUP, ETC.	\$2.48
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Item Notes: SMALL TREE UP TO 12" ALTERNATE BID #1 TO INCLUDE STUMP GRINDING, REMOVAL, CLEANUP AND BACKFILL.

Supplier Notes: The bid price is per inch. The actual extended price is based upon the actual diameter of the stump in inches times the bid price

3	1	EA	PROVIDE THE PRICING AT WHICH YOU WILL PROVIDE YOUR SERVICES TO THE CITY OF COLUMBIA, INCLUDING ALL TRAVEL TIME, MILAGE, EQUIPMENT, MARKUP, ETC.	\$2.63
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Item Notes: SMALL TREE UP TO 12" ALTERNATE BID #2 TO INCLUDE STUMP GRINDING, REMOVAL, CLEANUP AND BACKFILL, STRAW AND SEEDING.

Supplier Notes: The bid price is per inch. The actual extended price is based upon the actual diameter of the stump in inches times the bid price

4	1	EA	PROVIDE THE PRICING AT WHICH YOU WILL PROVIDE YOUR SERVICES TO THE CITY OF COLUMBIA, INCLUDING ALL TRAVEL TIME, MILAGE, EQUIPMENT, MARKUP, ETC.	\$2.20
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Item Notes: MEDIUM TREE 13" TO 20" BASE PRICE TO BE BASED UPON STUMP GRINDING ONLY.

Supplier Notes: The bid price is per inch. The actual extended price is based upon the actual diameter of the stump in inches times the bid price

5	1	EA	PROVIDE THE PRICING AT WHICH YOU WILL PROVIDE YOUR SERVICES TO THE CITY OF COLUMBIA, INCLUDING ALL TRAVEL TIME, MILAGE, EQUIPMENT, MARKUP, ETC.	\$2.92
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Item Notes: MEDIUM TREE 13" TO 20" ALTERNATIVE BID #1 TO INCLUDE STUMP GRINDING REMOVAL, CLEANUP AND BACKFILL.

Supplier Notes: The bid price is per inch. The actual extended price is based upon the actual diameter of the stump in inches times the bid price

6	1	EA	PROVIDE THE PRICING AT WHICH YOU WILL PROVIDE YOUR SERVICES TO THE CITY OF COLUMBIA, INCLUDING ALL TRAVEL TIME, MILAGE, EQUIPMENT, MARKUP, ETC.	\$3.07
Item Notes: MEDIUM TREE 13" TO 20" ALTERNATIVE BID #2 TO INCLUDE STUMP GRINDING, REMOVAL, CLEANUP AND BACKFILL STRAW AND SEEDING.				
Supplier Notes: The bid price is per inch. The actual extended price is based upon the actual diameter of the stump in inches times the bid price				
7	1	EA	PROVIDE THE PRICING AT WHICH YOU WILL PROVIDE YOUR SERVICES TO THE CITY OF COLUMBIA, INCLUDING ALL TRAVEL TIME, MILAGE, EQUIPMENT, MARKUP, ETC.	\$2.78
Item Notes: LARGE TREE 21" AND UP BASE PRICE TO BE BASED UPON STUMP GRINDING ONLY.				
Supplier Notes: The bid price is per inch. The actual extended price is based upon the actual diameter of the stump in inches times the bid price				
8	1	EA	PROVIDE THE PRICING AT WHICH YOU WILL PROVIDE YOUR SERVICES TO THE CITY OF COLUMBIA, INCLUDING ALL TRAVEL TIME, MILAGE, EQUIPMENT, MARKUP, ETC.	\$4.24
Item Notes: LARGE TREE 21" ALTERNATIVE BID #1 TO INCLUDE STUMP GRINDING ONLY, REMOVAL, CLEANUP AND BACKFILL.				
Supplier Notes: The bid price is per inch. The actual extended price is based upon the actual diameter of the stump in inches times the bid price				
9	1	EA	PROVIDE THE PRICING AT WHICH YOU WILL PROVIDE YOUR SERVICES TO THE CITY OF COLUMBIA, INCLUDING ALL TRAVEL TIME, MILAGE, EQUIPMENT, MARKUP, ETC.	\$4.53
Item Notes: LARGE TREE 21" ALTERNATIVE BID #2 TO INCLUDE STUMP GRINDING ONLY, REMOVAL, CLEANUP AND BACKFILL, STRAW AND SEEDING.				
Supplier Notes: The bid price is per inch. The actual extended price is based upon the actual diameter of the stump in inches times the bid price				
Response Total:				\$26.74



INSTRUCTIONS AND GENERAL CONDITIONS OF BIDDING

The following terms and conditions, unless otherwise modified by the City of Columbia within this document, shall govern the submission of bids and subsequent contracts. The City of Columbia reserves the right to reject any bid that takes exception to these conditions.

Definitions as used herein:

- a. The term "bid" means a solicitation of a formal or informal, sealed offer.
- b. The term "bidder" means the person, firm or corporation who submits a formal sealed bid.
- c. The term "City" means City of Columbia, MO.
- d. The term "City Council" means the governing body of the City of Columbia, MO.
- e. The term "contractor" means the bidder awarded a contract under this bid document.

1. **Submission of Bids:** Sealed bids, subject to Instructions and General Conditions, and any special conditions set forth herein, will be received at the Office of the Purchasing Agent, 701 E. Broadway, 5th Floor, Columbia MO 65201, until the bid closing date and time indicated for furnishing the City of Columbia the materials, supplies, equipment or services shown in the bid request.
 - **Submission of Hard Copy Paper Bids:** Bidders may submit hard copy paper bids. If the bid was published by way of hard copy, the forms provided shall be utilized and submitted as outlined in the instructions. If the bid was an electronic bid only, all the questions asked in the electronic bid must be answered in the paper response and all documents attached to the electronic bid must be downloaded, printed and submitted to the Purchasing Division by the bid closing date and time in order to be considered.
 - **Electronic Bidding:** Bidders are encouraged to use the electronic bid system for the purpose of submitting bids and must complete all required fields. If you do not care to bid, please respond to the bid request by submitting a "no bid" and note your reason.
2. **Specifications:** Bidders shall identify the item to be furnished by brand or manufacturer's name and catalog numbers and shall also furnish specifications and descriptive literature.
3. **Item Descriptions:** Whenever products or materials of any particular producer or manufacturer are mentioned in our specifications, such product or material mentioned is intended to be descriptive of type or quality and not restrictive to those mentioned.
4. **Reserved Rights/Awards:** The right is reserved to accept or reject all or part of the bid, to waive technicalities, and to accept the offer the Purchasing Agent considers the most advantageous to the City. The City of Columbia awards contracts to the lowest responsive and responsible bidder. It shall be understood that "responsible" means best and the best bidder is not necessarily the lowest bid.

5. **Taxes:** Bidder shall not include Federal Excise Tax or Sales and Use Taxes in bid prices, as the City is exempt from them by law. A tax exemption letter will be furnished if required.
6. **Delivery:** The delivery date(s) or when work will start, if requested, shall be stated in definite terms, as they will be taken into consideration in making the award. The City of Columbia reserves the right to cancel all or part of orders if delivery is not made or work is not started as guaranteed. In case of delay, the Vendor or Contractor must notify the City Purchasing Agent.
7. **Freight:** All bids shall be submitted FOB Destination, Columbia, Missouri. Unit prices shall include all applicable freight and handling charges.
8. **Default:** In case of any default by the bidder, the City of Columbia may procure the product or service from other sources and hold the bidder responsible for any damages incurred including, but not limited to, excess cost or handling charge. The Purchasing Division shall have the right to remove any bidder who defaults on any contract with the City from all bidders' lists.
9. **Pricing:** Prices must be stated in units of quantity specified, and must be firm. Bids qualified by escalator clauses may not be considered.
10. **Payments:** Partial payment for delivered items or quantities of a bid may be made by the City of Columbia except in the case of "Lump Sum" bids. In the latter case, only one payment will be made in the amount of the Lump Sum price, with any Cash Discount quoted, after all the materials, supplies, or equipment have been fully delivered to the satisfaction of the Head of the Department to which the items were furnished, and the City Purchasing Agent.
11. **Addenda:** The Purchasing Agent, in the form of a written Addendum, will issue all changes, additions and/or clarifications in connection with this bid. Bidder shall review and return the signature sheet of any and all such addendum issued for said bid. In the event multiple copies of the bid are requested, equal number of addendum shall be included. In the event an addendum is not submitted with the bid by the time of bid closing, the Purchasing Agent shall make a determination as to whether or not submission of the addendum(s) may be waived as technicality or not. In general, any addendum which significantly alters the scope of work, terms of the contract or which revises any pricing information may not be waived. In the case of an addendum not submitted with the bid, which cannot be waived, the bid will be found non-responsive and will not be evaluated. Addendums that are informational in nature only and do not alter scope of work, contract terms or pricing may be agreed upon after bid opening and returned by bidder, signed, prior to contract award. It shall be the sole discretion of the Buyer of Record and the Purchasing Agent to make this determination.
12. **Receipt and Opening of Advertised Sealed Bids:** The bidders and public are invited, but not required, to attend the formal opening of bids. Prices will be read aloud to the public. No decisions related to an award of a contract or purchase order will be made at the opening.
 - a. It is the bidder's sole responsibility to ensure that a bid is successfully submitted with the Purchasing Division prior to the time and the date specified. Late bids will not be opened and will be rejected unopened regardless of the degree of lateness or the reason thereto, including causes beyond the control of the bidder.
 - b. All bids and tabulation sheets are kept by the Purchasing Division for a period of time established by regulation or statutes after the award is made, and are available for inspection at any time during regular working hours.

13. **Withdrawal of Bids:** Bids may be withdrawn without prejudice any time before the deadline for receipt of bids. If a mistake or error is discovered by the bidder or by the Purchasing Agent after the bid opening, the Purchasing Agent has the right to call this error to the bidder's attention and request verification of the bid. If the bidder acknowledges the mistake and requests relief, the Purchasing Agent will proceed in the following manner:
 - a. **Clerical Mistakes:** Any mistake which is obviously a clerical one, such as an error in price extension, or in placement of decimal points, reversal of prices, etc., may be corrected by the Purchasing Agent after verification is made by the bidder. However, the unit price shown shall always prevail.
 - b. **Withdrawal:** Permission to allow a bidder to withdraw his bid without prejudice may be given when clear and convincing evidence supports the existence of an error. If there is a significant and obvious disparity between the prices of the lowest bidder and of the other bidders, a bidder may be permitted to withdraw without prejudice, upon submission of evidence that a non-intentional error occurred.
 - c. **Changes in pricing,** terms or conditions will not be permitted after the deadline for receipt of bids.
14. **Rebidding:** The Purchasing Agent reserves the right, when only one bid has been received by the bid closing date, to delay the opening of bids to another advertised date and time in order to revise specifications and/or establish further competition for the commodity or service required. The one (1) bid received will be returned unopened to the offeror for re-submittal at the new date and time of bid closing.
15. **Bid Response:** The City is interested in doing business with your firm. In the event you are unable to quote on this requirement, please submit a "no bid response" which will indicate your desire to remain on the City's active vendor list. In addition, please indicate the reason/reasons you are unable to participate in this solicitation.
16. **Bid Acceptance:** A bid acceptance period of sixty (60) calendar days is required. Bids offering less than sixty (60) calendar days may be rejected. Unless otherwise indicated, sixty (60) days prevail. In the event bid evaluation and award are projected to exceed sixty (60) days, the Purchasing Agent may request bidder to extend bid acceptance time for a reasonable period of time in order to make award.
17. **Material Standards:** All material or equipment furnished shall meet the minimum requirements of the Occupational Safety & Health Standards (OSHA) published in the Federal Register or other nationally recognized certifying body.
18. **Inspection and Acceptance:** Inspection and acceptance will be at destination. Until delivery and acceptance, or after any rejection, risk or loss shall be the responsibility of the Contractor unless loss results from negligence of the City.
19. **Variation in Quantity:** No variation in the quantity of any item called for in this contract will be accepted unless such variation has been caused by conditions of loading, shipping, or packing, or allowances in manufacturing processes, and then only to the extent, if any, specified elsewhere in this contract.
20. **Commercial Warranty:** The Contractor agrees that the supplies or services furnished under this contract shall be covered by the most favorable commercial warranties the Contractor gives to any customer for such supplies or services and that the rights and remedies provided herein are in addition to and do not limit any rights afforded to the City by any other clause of this contract or by law.
21. **Discounts:** Discount time will be computed from date of delivery at place of acceptance or from receipt of correct invoice at the office specified by the City, whichever is later. For discount purposes, payment is made when the check is mailed.

22. **Patents:** The successful bidder shall defend, indemnify and save harmless, the City of Columbia, Missouri, against all claims for royalties for patents or suit for infringement thereon which may be involved in the manufacture or use of the material to be furnished.
23. **Hold Harmless Agreement:** To the fullest extent not prohibited by law, Contractor shall indemnify and hold harmless the City of Columbia, its directors, officers, agents, and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any act or failure to act, negligent or otherwise, of Contractor, of any subcontractor (meaning anyone, including but not limited to consultants having a contract with Contractor or a subcontractor for part of the services), of anyone directly or indirectly employed by Contractor or by any subcontractor, or of anyone for whose acts the Contractor or its subcontractor may be liable, in connection with providing these services. This provision does not, however, require Contractor to indemnify, hold harmless, or defend the City of Columbia from its own negligence.
24. **Contract Changes:** The Purchasing Agent may at any time, by a written order, make changes within the general scope of this contract in (a) drawings, designs, or specifications, where the supplies to be furnished are to be specially manufactured for the City in accordance therewith, (b) method of shipment or packing, and (c) place of delivery. If any such change causes an increase or decrease, an equitable adjustment shall be made by written modification of the contract. Any claim by the Contractor for adjustment under this clause must be made within thirty (30) days from the date of receipt by the Contractor of the notification of change; provided that the Purchasing Agent, if he or she decides that the facts justify such action, may receive and act upon such claim if submitted prior to final payment under this contract. Failure to agree to any adjustment shall be a dispute within the meaning of the paragraph entitled "Disputes". However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.
25. **Disputes:** If any dispute concerning a question of fact arises under this contract, other than termination for default or convenience, the Contractor and the City Department responsible for the administration of this contract shall make a good faith effort to resolve the dispute. If the dispute cannot be resolved by agreement, then the Purchasing Agent with advice of the City Counselor, shall resolve the dispute and send a written copy of his decision to the Contractor and the responsible City Department.
26. **Termination for Default:** The Purchasing Agent may, by written notice, terminate this contract in whole or in part for failure of the Contractor to perform any of the provisions thereof. In such event, the Contractor shall be liable for damages, including the excess cost of reprocurring similar supplies or services; provided, that if (a) it is determined for any reason that the Contractor was not in default or, (b) failure to perform is beyond the Contractor's or subcontractor's control, fault or negligence, the termination shall be deemed to be a termination for convenience. In general, termination for default shall be effective ten (10) days from the Contractor's receipt of notice. In the event the goods or services provided under the contract are deemed to serve an emergency purpose, and the provision of those goods/services is somehow compromised, the Purchasing Agent reserves the right to issue an immediate, same day, termination notice and secure the goods/services elsewhere.
27. **Termination for Convenience:** The Purchasing Agent may, by written notice, terminate this contract in whole or in part when it is in the best interest of the City. If this contract is for supplies and is so terminated, the Contractor shall be compensated in accordance with his auditable costs to point of notification of termination. To the extent that this contract is for services and is so terminated, the City shall be liable only for payment in accordance with the payment provisions of this contract for services rendered to the effective date of termination. Termination for convenience shall be effective thirty (30) days from the Contractor's receipt of notice unless a longer time period is provided in the notice.

28. **Term & Supply Contract Defined:** A term and supply contract shall be deemed to mean a contract under which the supplier of articles, commodities, supplies, materials and equipment agrees to furnish all of the needs of the various departments of the City for the articles, commodities, supplies, materials and equipment set forth in the quotation, during the period of the contract at the unit price bid and as required from time to time by the City, be such needs in excess of or less than the estimated quantities set forth in the Request for Quotation. The contract will provide that the City will purchase, by issuance of Purchase Orders, such articles, commodities, supplies, materials and equipment solely from the supplier to whom the requirement contract is awarded for the contract term.
29. **Estimated Quantities:** The estimated quantities indicated in this Request for Quotation represent anticipated requirements only and are not purchased hereby, nor is the City obligated in any way to purchase the quantities shown. The right is reserved to exceed or diminish these estimates or to omit any one or more items if desired.
30. **Fund Allocation:** Continuance of any resulting agreement, contract or issuance of purchase orders after September 30 of the current calendar year is contingent upon the allocation of City funds for the next proceeding fiscal year, (10/1-9/30).
31. **Conflict of Interest:** No salaried officer or employee of the City, and no member of the City Council shall have a financial interest, direct or indirect, in this contract. A violation of this provision renders the contract void. Federal conflict of interest regulations and applicable provisions of Sections 105.450 – 105.496 shall not be violated. Contractor covenants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services to be performed under this contract. The Contractor further covenants that in the performance of this contract no person having such interest shall be employed.
- OFFICIALS NOT TO BENEFIT:** No regular employee or elected or appointed member of the City Government shall be admitted to any share or part of this contract, or to any benefit that shall arise there from; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.
32. **Hazardous Material:** When material furnished is hazardous material as defined by D.O.T. regulations, the following certification must be made on the bill of lading: "This is to certify that the above named articles are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to applicable regulations of the Department of Transportation."
33. **Domestic Products:** Bidders are encouraged to offer products manufactured, assembled or produced in the United States if the quality and price are comparable with other goods.
34. **Debarment and Suspension:** By submission of its response, the Contractor certifies that neither it nor its principals is presently debarred or suspended by any Federal Department or agency, including listing in the U.S. General Services Administrations List of Parties Excluded from Federal Procurement or Non-Procurement programs; or if the amount of this response is equal to in excess of \$100,000, that neither it nor its principals nor its subcontractors receiving sub-awards equal to or in excess of \$100,000 is presently disbarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by an Federal Department , agency or prevision of law. If the Contractor is unable to certify any of the statements in this certification, the responder must attach an explanation to its response.

35. **Americans with Disabilities Act:** The successful contractor agrees to comply with all applicable provisions of the Americans with Disabilities Act and the regulations implementing the Act, including those regulations governing employment practices. If this contract involves the contractor providing services directly to the public, the successful contractor shall make the services, programs and activities governed by this agreement accessible to the disabled as required by the Americans with Disabilities Act and its implementing regulations. Payment of funds under this agreement is conditional upon the successful contractor certifying to the City Manager in writing that it is complying with the Americans with Disabilities Act and 28 CFR Part 35 and suspension.
36. **Non-Discrimination in Employment:** In connection with the furnishing of supplies or performance of work under this contract, the Contractor agrees to comply with the Fair Labor Standard Act, Fair Employment Practices, Equal Opportunity Employment Act, and all other applicable Federal and State Laws, and further agrees to insert the foregoing provision in all subcontracts awarded hereunder.
37. **DBE Firms:** It is the policy of the City of Columbia that businesses owned by socially and economically disadvantaged individuals have an opportunity to participate in the performance of contracts financed in whole or in part with federal funds. Consequently, the requirements of 49 CFR Part 26 (as amended) and the City's implementing state regulations in Title 7 CSR Division 10, Chapter 8, "Disadvantaged Business Enterprise Program", will apply to any contract with federal funds. If federal funds are involved in this contract they shall be so identified in the Notice to Bidders.
38. **Business License Requirements:** Unless exempted by City ordinance, any company awarded a contract with the City, who operates an office(s) within the City limits of Columbia, will be required to obtain a business license.

CERTIFIED COPY OF ORDER

STATE OF MISSOURI }
County of Boone } ea.

December Session of the October Adjourned

Term. 20 11

In the County Commission of said county, on the 6th day of December 20 11

the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby approve the utilization of the City of Columbia cooperative contract 15/2010 – Tree Cutting and Removal Service with Arthur Ratliff Tree & Stump Removal, LLC. It is further ordered the Presiding Commissioner is hereby authorized to sign said contract.

Done this 6th day of December, 2011.

ATTEST:

Wendy S. Noren
Wendy S. Noren
Clerk of the County Commission

Daniel K. Atwill

Daniel K. Atwill
Presiding Commissioner

Karen M. Miller

Karen M. Miller
District I Commissioner

Absent
Skip Elkin
District II Commissioner

Boone County Purchasing

Melinda Bobbitt, CPPB
Director



601 E. Walnut, Room 208
Columbia, MO 65201
Phone: (573) 886-4391
Fax: (573) 886-4390

MEMORANDUM

COPY

TO: Boone County Commission
FROM: Melinda Bobbitt, CPPB
DATE: November 1, 2011
RE: Cooperative Contract - 15/2010 – *Tree Cutting and Removal Service*

Purchasing and Facilities Maintenance request permission to utilize the City of Columbia cooperative contract 15/2010 – *Tree Cutting and Removal Service* with Arthur Ratliff Tree & Stump Removal, LLC of Columbia, Missouri.

Invoices from this Term and Supply contract will be paid from department 6100 – Facilities and Grounds Maintenance; 1610 – Parks & Recreation, account 60400 – Grounds Maintenance.

cc: Contract File
Bob Davidson, Facilities Maintenance

**PURCHASE AGREEMENT
FOR
TREE CUTTING & REMOVAL**

THIS AGREEMENT dated the 6 day of December 2011 is made between Boone County, Missouri, a political subdivision of the State of Missouri through the Boone County Commission, herein "County" and **Arthur Ratliff Tree & Stump Removal, LLC** herein "Vendor."

IN CONSIDERATION of the parties performance of the respective obligations contained herein, the parties agree as follows:

1. **Contract Documents** - This agreement shall consist of this Purchase Agreement for **Tree Cutting and Removal Service** in compliance with all bid specifications and any addendum issued for the City of Columbia bid **15/2010**, Boone County Standard Terms and Conditions, Boone County Insurance Requirements, and Work Authorization Certification. All such documents shall constitute the contract documents which are incorporated herein by reference. Service or product data, specification and literature submitted with bid response may be permanently maintained in the County Purchasing Office bid file for this bid if not attached. In the event of conflict between any of the foregoing documents, this Purchase Agreement, the City of Columbia Contract **15/2010** and Boone County Standard Terms and Conditions shall prevail and control over the vendor's bid response.

2. **Purchase** - The County agrees to purchase from the Vendor and the Vendor agrees to supply the County with tree cutting and removal service for the following hourly rates:

<u>Description</u>	<u>Hourly Rate</u>
Foreman	\$40.00
Journeyman Trimmer	\$34.00
Groundsperson	\$26.00
2004 Ford F550 Chip Truck	\$30.00
2006 Ford F650 Dump Truck	\$30.00
1998 GMC 7500 s/60' Lift	\$40.00
2004 Bandit Chipper, 12" capacity	\$45.00
2007 Bobcat T320 w/grapple	\$50.00
Bandit 2090 Chipper, 20" capacity	\$100.00

3. **Contract Term** - This agreement shall commence on **the date written above and extend through April 30, 2012** subject to the provisions for termination specified below. This agreement may be extended beyond the expiration date by order of the County for **three (3) additional one-year periods** subject to a **maximum of a 5% increase** in each renewal period. This contract may renew on a month to month basis for a maximum of six (6) months in the event the County is unable to re-bid and/or award a new contract prior to the expiration date after exercising diligent efforts to do so or not.

4. **Billing and Payment** - All billing shall be invoiced to the Facilities Maintenance department at 613 E. Ash Street, Columbia, MO 65201. Billings may only include the prices listed in the vendor's bid response. No additional fees for paper work processing, labor, or taxes shall be included as additional charges in excess of the charges in the Vendor's bid response to the specifications. The County agrees to pay all Monthly Statements within thirty days of receipt. In the event of a billing dispute, the County reserves the right to withhold payment on the disputed amount; in the event the billing dispute is resolved in favor of the Vendor, the County agrees to pay interest at a rate of 9% per annum on disputed amounts withheld commencing from the last date that payment was due.

5. **Binding Effect** - This agreement shall be binding upon the parties hereto and their successors and assigns for so long as this agreement remains in full force and effect.

6. **Termination** - This agreement may be terminated by the County upon thirty days advance written notice for any of the following reasons or under any of the following circumstances:

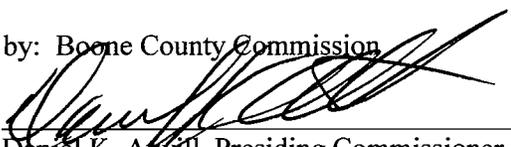
- a. County may terminate this agreement due to material breach of any term or condition of this agreement, or
- b. County may terminate this agreement if in the opinion of the Boone County Commission if delivery of products are delayed or products delivered are not in conformity with bidding specifications or variances authorized by County, or
- c. If appropriations are not made available and budgeted for any calendar year.

IN WITNESS WHEREOF the parties through their duly authorized representatives have executed this agreement on the day and year first above written.

ARTHUS RATLIFF TREE & STUMP REMOVAL, LLC

by 
title V.P.

BOONE COUNTY, MISSOURI

by: Boone County Commission

Daniel K. Atwill, Presiding Commissioner

APPROVED AS TO FORM:


County Counselor

ATTEST:


Wendy S. Noren, County Clerk

In accordance with RSMo 50.660, I hereby certify that a sufficient unencumbered appropriation balance exists and is available to satisfy the obligation(s) arising from this contract. (Note: Certification of this contract is not required if the terms of this contract do not create a measurable county obligation at this time.)


Signature *by of*

11/23/11
Date

6100 / 1610 / 60400 - Term & Supply
No Encumbrance Required
Appropriation Account

STANDARD TERMS AND CONDITIONS – CONTRACT WITH BOONE COUNTY, MISSOURI

1. Responses shall include all charges for packing, delivery, installation, etc., (unless otherwise specified) to the Boone County Department identified in the Request for Bid and/or Proposal.
2. The Boone County Commission has the right to accept or reject any part or parts of all bids, to waive technicalities, and to accept the offer the County Commission considers the most advantageous to the County. Boone County reserves the right to award this bid on an item-by-item basis, or an “all or none” basis, whichever is in the best interest of the County.
3. Bidders must use the bid forms provided for the purpose of submitting bids, must return the bid and bid sheets comprised in this bid, give the unit price, extended totals, and sign the bid.
4. When products or materials of any particular producer or manufacturer are mentioned in our specifications, such products or materials are intended to be descriptive of type or quality and not restricted to those mentioned.
5. Do not include Federal Excise Tax or Sales and Use Taxes in bid process, as law exempts the County.
6. The delivery date shall be stated in definite terms, as it will be taken into consideration in awarding the bid.
7. The County Commission reserves the right to cancel all or any part of orders if delivery is not made or work is not started as guaranteed. In case of delay, the Contractor must notify the Purchasing Department.
8. In case of default by the Contractor, the County of Boone will procure the articles or services from other sources and hold the Bidder responsible for any excess cost occasioned thereby.
9. Failure to deliver as guaranteed may disqualify Bidder from future bidding.
10. Prices must be as stated in units of quantity specified, and must be firm. Bids qualified by escalator clauses may not be considered unless specified in the bid specifications.
11. No bid transmitted by fax machine or **e-mail** will be accepted. **U.S. mail only.**
12. The County of Boone, Missouri expressly denies responsibility for, or ownership of any item purchased until same is delivered to the County and is accepted by the County.
13. The County reserves the right to award to one or multiple respondents. The County also reserves the right to not award any item or group of items if the services can be obtained from a state or other governmental entities contract under more favorable terms. The resulting contract will be considered a non-exclusive contract.
14. The County, from time to time, uses federal grant funds for the procurement of goods and services. Accordingly, the provider of goods and/or services shall comply with federal laws, rules and regulations applicable to the funds used by the County for said procurement, and contract clauses required by the federal government in such circumstances are incorporated herein by reference. These clauses can generally be found in the Federal Transit Administration’s Best Practices Procurement Manual – Appendix A. Any questions regarding the applicability of federal clauses to a particular bid should be directed to the Purchasing Department prior to bid opening.
15. In the event of a discrepancy between a unit price and an extended line item price, the unit price shall govern.

Insurance Requirements: The Contractor shall not commence work under this contract until they have obtained all insurance required under this paragraph and such insurance has been approved by the County, nor shall the Contractor allow any subcontractor to commence work on their subcontract until all similar insurance required of subcontractor has been so obtained and approved. All policies shall be in amounts, form and companies satisfactory to the County which must carry an A-6 or better rating as listed in the A.M. Best or equivalent rating guide. Insurance limits indicated below may be lowered at the discretion of the County.

Compensation Insurance - The Contractor shall take out and maintain during the life of this contract, **Employee's Liability and Worker's Compensation Insurance** for all of their employees employed at the site of work, and in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. Worker's Compensation coverage shall meet Missouri statutory limits. Employers' Liability limits shall be \$1,000,000.00 each employee, \$1,000,000.00 each accident, and \$1,000,000.00 policy limit. In case any class of employees engaged in hazardous work under this Contract at the site of the work is not protected under the Worker's Compensation Statute, the Contractor shall provide and shall cause each subcontractor to provide Employers' Liability Insurance for the protection of their employees not otherwise protected.

Comprehensive General Liability Insurance - The Contractor shall take out and maintain during the life of this contract, such comprehensive general liability insurance as shall protect them and any subcontractor performing work covered by this contract, from claims for damages for personal injury including accidental death, as well as from claims for property damages, which may arise from operations under this contract, whether such operations be by themselves or for any subcontractor or by anyone directly or indirectly employed by them. The amounts of insurance shall be not less than \$2,000,000.00 combined single limit for any one occurrence covering both bodily injury and property damage, including accidental death. If the Contract involves any underground/digging operations, the general liability certificate shall include X, C, and U (Explosion, Collapse, and Underground) coverage. If providing Comprehensive General Liability Insurance, then the Proof of Coverage of Insurance shall also be included.

The Contractor has the option to provide **Owner's Contingent or Protective Liability and Property Damage** instead of the **Comprehensive General Liability Insurance**- The Contractor shall provide the County with proof of Owner's Protective Liability and Property Damage Insurance with the County as named insured, which shall protect the County against any and all claims which might arise as a result of the operations of the Contractor in fulfilling the terms of this contract during the life of the Contract. The minimum amounts of such insurance will be \$2,000,000.00 per occurrence, combined single limits. Limits can be satisfied by using a combination of primary and excess coverages. Should any work be subcontracted, these limits will also apply.

COMMERCIAL Automobile Liability – The Contractor shall maintain during the life of this contract, automobile liability insurance in the amount of not less than \$2,000,000.00 combined single limit for any one occurrence, covering both bodily injury, including accidental death, and property damage, to protect themselves from any and all claims arising from the use of the Contractor's own automobiles, teams and trucks; hired automobiles, teams and trucks; and both on and off the site of work.

Proof of Carriage of Insurance - The Contractor shall furnish the County with Certificate(s) of Insurance which name the County as additional insured in an amount as required in this contract, contain a description of the project or work to be performed, and requiring a thirty (30) day mandatory cancellation notice. In addition, such insurance shall be on occurrence basis and shall remain in effect until such time as the County has made final acceptance of the facility contracted.

INDEMNITY AGREEMENT: To the fullest extent permitted by law, Contractor shall indemnify, hold harmless and defend the County, its directors, officers, agents, and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any act or failure to act, negligent or otherwise, of Contractor, of any subcontractor (meaning anyone, including but not limited to consultants having

a contract with contractor or a subcontract for part of the services), of anyone directly or indirectly employed by contractor or by any subcontractor, or of anyone for whose acts the contractor or its subcontractor may be liable, in connection with providing these services. This provision does not, however, require contractor to indemnify, hold harmless, or defend the County of Boone from its own negligence.



CITY OF COLUMBIA, MISSOURI
FINANCE DEPARTMENT
PURCHASING DIVISION

4/26/11

NOTIFICATION OF CONTRACT RENEWAL

CITY OF COLUMBIA CONTRACT
15/110

CONTRACT PERIOD: May 1, 2011 through April 30, 2012

The City of Columbia has renewed the above contract with your firm with no price increase, per your renewal offer dated 4/4/11, for one additional year. The current City purchase orders on file will be used for services against this contract. Please contact the Procurement Officer shown below if there are any questions pertaining to this contract.

CONTRACT NUMBER	RENEWAL TERM	CONTRACT YEAR	VENDOR NUMBER	VENDOR NAME/ADDRESS/PHONE
15/10	5/1/11-4/30/12	2 of 5	10296	Arthur Ratliff Tree & Stump Removal 8251 S High Point Lane Columbia, MO 65203 Attn: Scott Ratliff Phone: 446-2266 Fax: 446-9010

Contract Description: Tree Cutting & Removal

Terms: Net 30

Response Time: 48 hrs.

Price: See Attachment

Notes from Procurement Officer:

Sincerely,

Barb Rorman
 Procurement Officer
 City of Columbia



cc: Gerald Worley, Mike Griggs

Contract #15/10 – Arthur Ratliff pricing

Item	Description	Hourly Rate Yr. 2
1	Foreman	\$40.00
2	Journeyman Trimmer	\$34.00
3	Groundsperson	\$26.00
4	2004 Ford F550 Chip Truck	\$30.00
5	2006 Ford F650 Dump Truck	\$30.00
6	1998 GMC 7500 w/60' Lift	\$40.00
7	2004 Bandit Chipper, 12" capacity	\$45.00
8	2007 Bobcat T320 w/grapple	\$50.00
9	Bandit 2090 Chipper, 20" capacity	\$100.00

RFQ# 15/2010

**SPECIFICATIONS AND GENERAL PROVISIONS
FOR TREE CUTTING AND REMOVAL TERM & SUPPLY
FOR THE CITY OF COLUMBIA, VARIOUS DEPARTMENTS**

I. SCOPE OF WORK

A. Contractor shall furnish all supervision, labor, tools, transportation, equipment, and materials necessary to remove trees in City parks and other City-operated facilities, and to dispose of all debris resulting from such work, as directed by the City.

B. Contractor shall perform all work to the complete satisfaction of City and in accordance with all applicable federal, municipal, county, state, and other local laws, ordinances, and regulations.

II. QUALIFICATIONS OF CONTRACTOR

A. Contractor shall have considerable experience actively engaged in tree removal work.

B. All personnel utilized by the contractor shall have a minimum of two years experience in the tree removal business and be properly trained in the operation of tree cutting, grinding, and other related equipment.

III. SAFETY STANDARDS

A. The Contractor shall be solely responsible for pedestrian and vehicular safety and control within the worksite and shall provide the necessary warning devices, barricades, and ground personnel need to give safety, protection, and warning to person and vehicular traffic within the area.

B. Traffic control is the responsibility of the Contractor and shall be accomplished in conformance with State, County and Local highway construction codes.

C. Any practice determined hazardous by the City shall be immediately discontinued by the "Contractor upon receipt of either written or oral notice to discontinue such practice.

IV. WORKING IN PROXIMITY TO ELECTRICAL HAZARDS

An inspection shall be made by the contractor to determine whether an electrical conductor passes through the tree or passes within reaching distance of the tree worker before climbing, entering, or working around any tree. Care shall be taken to avoid contact with all overhead utilities.

V. WORKING HOURS

The Contractor will schedule work between 7:00 a.m. and 6:00 p.m. Monday through Friday unless authorized by the City to do otherwise.

VI. EQUIPMENT

A. Contractor's equipment shall be in excellent condition and of modern design made expressly for use in tree removal work. Chippers shall be of low noise level design for use in urban areas.

B. The Contractor shall maintain his equipment in excellent working order and have it available for work at any time. Failure to maintain the equipment in a dependable condition will be considered as non-performance and cause to terminate this Contract.

C. The contractor shall include with his initial proposal, a complete descriptive list of all items of equipment to be used. This list shall describe each piece of equipment by year, make, model, and capacity, and any other pertinent data.

D. Inoperable equipment shall not be charged to the City. Time spent to repair, lubricate or sharpen equipment shall not be charged to the City. Sharp, replacement saw chains shall be available at each job site to replace dull saw chains. Work shall not stop to sharpen saws.

E. The City reserves the right to demand replacement of any equipment which, in the opinion of the City, has an unsatisfactory performance.

VII. TREE CUTTING & DISPOSAL

Work shall be completed on each project within one week after notification by the City to the Contractor. Trees shall be cut as low to the ground as permissible with the conditions. In no event will a stump be left remaining that is higher than 6" from the immediate surrounding ground. Stump removal will be handled by the City on a separate contract.

All brush and trunk material shall be removed from the site immediately following the cutting, and shall be disposed of in an appropriate and legal manner. The site shall be left free of twigs, branches, trunk material and other debris associated with the work.

VIII. INDEMNIFICATION

Contractor shall agree to indemnify, hold harmless, and defend City from and against any and all liability for loss, damage, or expense which City personnel or general public may suffer or for which City may be held liable by reason of injury (including death) or damage to any property arising out of negligence on the part of Contractor in the execution of the work to be performed hereunder.

IX. INVOICES

Contractor shall submit to City an itemized invoice based upon the information contained in the daily time sheets and prepared in accordance with the attached proposal, setting forth rates for each labor, material and equipment item.

X. SUBCONTRACTS

Contractor shall not assign any of its rights or duties under this agreement, or subcontract the whole or any part of the work to be performed hereunder, without first having obtained the written consent of City authorizing such assignment of subcontract.

XI. CONTRACT PERIOD

The period of said contract shall be from date of award through March 31, 2011. Said contract may, upon mutual written consent with contractor, be renewed for a maximum of four (4) additional one year periods, based on the following criteria. Quoted prices herein shall be firm for the initial 12 month contract period.

Prior to any contract renewal, the following three (3) criteria must be met by the contractor:

- A. Vendor's performance during the prior contract period must have been acceptable to the City. The City shall be the sole judge as to whether the vendor's performance has been acceptable; and whether the vendor has properly fulfilled the contract terms, conditions and intent.
- B. Vendor's requests for price adjustment are determined by the City to be reasonable and competitive.
- C. All renewals must be in writing and signed by both parties prior to renewal becoming effective.

Contractor shall be able to furnish crew, fully equipped equipment with trucks, chipping equipment, power and hand tools as required to perform the work. Crew personnel shall include, but not be limited to the following:

-
1. Groundsman/laborer who has skills necessary in ground operations such as loading trucks, cutting limbs on the ground, operating chipper, raking and cleaning up area.
 2. Foreman (working) who shall provide supervision and shall have responsibility for giving directions, making decisions, and assuming responsibility for all completed by the contractor.

City of Columbia Purchasing (City of Columbia) Supplier Response

Bid Information		Contact Information	Ship to Information
Bid Creator	Barb Rorman Procurement Officer	Address	Address
Email		Contact	Contact
Phone	(573) 8747374	Department	Department
Fax	(573) 8747762	Building	Building
Bid Number	15/2010	Floor/Room	Floor/Room
Title	Tree Cutting and Removal	Telephone	Telephone
Bid Type	RFQ-F	Fax	Fax
Issue Date	02/01/2010	Email	Email
Close Date	3/2/2010 2:00:00 PM CST		
Need by Date			

Supplier Information

Company Arthur Ratliff Tree & Stump Removal, LLC
 Address 8251 S High Point Lane
 Columbia, MO 65203

Contact
 Department
 Building
 Floor/Room
 Telephone 1 (573) 446-2266
 Fax 1 (573) 446-9010
 Email
 Submitted 3/2/2010 9:37:39 AM CST
 Total \$395.00

Signature _____

Supplier Notes

Bid Notes

It is preferred that this bid be submitted electronically through this e-bid system. Bidders must first register, then upon approval, enter the system (hyper-link is below) utilizing the login name and password chosen by your firm during the registration process. <https://customer.ionwave.net/prod/default.aspx?company=columbia>

Bid Messages

Please review the following and respond where necessary

#	Name	Note	Response
1	Terms and Conditions	Accept terms and conditions	Accept

2	Certificate of Insurance Requirement Acknowledgment	The City of Columbia's insurance requirements have been attached to this bid document. The Bidder hereby acknowledges that these insurance requirements have been reviewed and if awarded a contract, bidder will provide a Certificate of Insurance meeting these requirements as set forth herein.	Certificate of Insurance Requirement Acknowledgment
3	Payment Terms	Please Indicate Payment Terms:	30 days
4	Renewal Years - % of Increase	Indicate in percentage how much (if any) the first contract year's quoted prices will be increased in each of the four renewal periods after the first contract year expires. Provide this information in the following format in the space provided: 1st renewal year = ____ %; 2nd renewal year = ____ %; 3rd renewal year = ____ %; 4th renewal year = ____ %.	5% per year
5	If you have done business under a different name, please give that name and location:	If you have done business under a different name, please give that name and location:	
6	Have you ever failed to complete any work awarded to your company?	Have you ever failed to complete any work awarded to your company? If so, where and why?	No
7	References	List three references, minimum, for same type of work performed in the past six months. State name and telephone number of contact person, as well as nature of services performed. Attach separate sheet if necessary.	Same as the list on line 15
8	LENGTH OF TIME YOUR FIRM	LENGTH OF TIME YOUR FIRM HAS BEEN ENGAGED IN THE BUSINESS OF TREE CUTTING AND REMOVAL SERVICES.	10 years
9	ACCOUNTS IN THE PAST 36 MONTH	NUMBER OF ACCOUNTS YOUR FIRM HAS	3, City of Sturgeon, City of Booneville, and Columbia
10	Number of accounts	Indicate the number of accounts your firm presently services.	1, city of Columbia
11	Any additional information that you feel is required to perform the work specified.	Any additional information that you feel is required to perform the work specified in this bid and the number of workers that will be assigned to this job. Attach additional pages if needed.	
12	Any additional information regarding your firm	Any additional information that you consider pertinent to our evaluation of your firm. Attach additional pages if needed.	
13	RESPONSE TIME	SPECIFY YOUR NORMAL RESPONSE TIME AFTER NOTIFICATION FOR WORK TO BE PERFORMED IN HOURS	48 hours
14	Cooperative Contract Pricing	Would you be willing to offer the same pricing to members of the Mid-Missouri Public Purchasing Cooperative? (Not responding to this question will not impact the evaluation of this bid.)	Agree

15 LIST OF REFERENCES FOR WHOM SIMILAR WORK HAS BEEN PERFORMED DURING THE LAST 12 MONTHS

PROVIDE REFERENCE NAME, ADDRESS, CONTACT PERSON AND PHONE NUMBER.

City of Booneville, Gary Nauman
660-621-0281
REMSEL Corp., Mel Smarr
573-474-8715
Marjo Price, 107 Bingham Rd,
573-442-1240
Rader Properties, Jack Rader,
573-446-6456

16 EQUIPMENT TO BE USED FOR SERVICES

PROVIDE LIST INCLUDING MAKE, MODEL AND AGE OF EQUIPMENT TO BE USED IN PERFORMING SERVICES.

2004 Ford F550 chip truck
2006 Ford F650 dump truck
1998 GMC 7500 w/60' High
Ranger Lift
2004 Bandit 250 Chipper, 12"
capacity, 125 HP, w/hyd winch
2007 Bobcat T320 w/grapple or tree
shear attachment
Bandit 2090 Chipper, 20" capacity,
300 HP, w/hyd grapple

Line Items

#	Qty	UOM	Description	Response
1	1	hour	Hourly rate for foreperson	\$40.00
Item Notes:				
Supplier Notes:				
2	1	hour	Hourly rate for Journeyperson Trimmer	\$34.00
Item Notes:				
Supplier Notes:				
3	1	hour	Hourly rate for Groundperson	\$26.00
Item Notes:				
Supplier Notes:				
4	1	hour	Hourly rate for Equipment to be used if awarded contract.	\$30.00
Item Notes: List Equipment in supplier notes you intend to provide if awarded this contract.				
Supplier Notes: 2004 Ford F550 chip truck				
5	1	hour	Hourly rate for Equipment to be used if awarded contract.	\$30.00
Item Notes: List Equipment in supplier notes you intend to provide if awarded this contract.				
Supplier Notes: 2006 Ford F650 dump truck				
6	1	hour	Hourly rate for Equipment to be used if awarded contract.	\$40.00
Item Notes: List Equipment in supplier notes you intend to provide if awarded this contract.				
Supplier Notes: 1998 GMC 7500 with 60' High Ranger Lift				
7	1	hour	Hourly rate for Equipment to be used if awarded contract.	\$45.00
Item Notes: List Equipment in supplier notes you intend to provide if awarded this contract.				
Supplier Notes: 2004 Bandit 250 Chipper, 12" capacity, 125 HP, w/hyd winch				
8	1	hour	Hourly rate for Equipment to be used if awarded contract.	\$50.00
Item Notes: List Equipment in supplier notes you intend to provide if awarded this contract.				
Supplier Notes: 2007 Bobcat T320 w/grapple or tree shear attachment				

9	1	hour	Hourly rate for Equipment to be used if awarded contract.	\$100.00
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Item Notes: List Equipment in supplier notes you intend to provide if awarded this contract.

Supplier Notes: Bandit 2090 Chlpper, 20" capacity, 300 HP, w/hyd grapple

Response Total:				\$395.00
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INSTRUCTIONS AND GENERAL CONDITIONS OF BIDDING

The following terms and conditions, unless otherwise modified by the City of Columbia within this document, shall govern the submission of bids and subsequent contracts. The City of Columbia reserves the right to reject any bid that takes exception to these conditions.

Definitions as used herein:

- a. The term "bid" means a solicitation of a formal or informal, sealed offer.
- b. The term "bidder" means the person, firm or corporation who submits a formal sealed bid.
- c. The term "City" means City of Columbia, MO.
- d. The term "City Council" means the governing body of the City of Columbia, MO.
- e. The term "contractor" means the bidder awarded a contract under this bid document.

1. **Submission of Bids:** Sealed bids, subject to Instructions and General Conditions, and any special conditions set forth herein, will be received at the Office of the Purchasing Agent, 701 E. Broadway, 5th Floor, Columbia MO 65201, until the bid closing date and time indicated for furnishing the City of Columbia the materials, supplies, equipment or services shown in the bid request.
 - **Submission of Hard Copy Paper Bids:** Bidders may submit hard copy paper bids. If the bid was published by way of hard copy, the forms provided shall be utilized and submitted as outlined in the instructions. If the bid was an electronic bid only, all the questions asked in the electronic bid must be answered in the paper response and all documents attached to the electronic bid must be downloaded, printed and submitted to the Purchasing Division by the bid closing date and time in order to be considered.
 - **Electronic Bidding:** Bidders are encouraged to use the electronic bid system for the purpose of submitting bids and must complete all required fields. If you do not care to bid, please respond to the bid request by submitting a "no bid" and note your reason.
2. **Specifications:** Bidders shall identify the item to be furnished by brand or manufacturer's name and catalog numbers and shall also furnish specifications and descriptive literature.
3. **Item Descriptions:** Whenever products or materials of any particular producer or manufacturer are mentioned in our specifications, such product or material mentioned is intended to be descriptive of type or quality and not restrictive to those mentioned.
4. **Reserved Rights/Awards:** The right is reserved to accept or reject all or part of the bid, to waive technicalities, and to accept the offer the Purchasing Agent considers the most advantageous to the City. The City of Columbia awards contracts to the lowest responsive and responsible bidder. It shall be understood that "responsible" means best and the best bidder is not necessarily the lowest bid.

5. **Taxes:** Bidder shall not include Federal Excise Tax or Sales and Use Taxes in bid prices, as the City is exempt from them by law. A tax exemption letter will be furnished if required.
6. **Delivery:** The delivery date(s) or when work will start, if requested, shall be stated in definite terms, as they will be taken into consideration in making the award. The City of Columbia reserves the right to cancel all or part of orders if delivery is not made or work is not started as guaranteed. In case of delay, the Vendor or Contractor must notify the City Purchasing Agent.
7. **Freight:** All bids shall be submitted FOB Destination, Columbia, Missouri. Unit prices shall include all applicable freight and handling charges.
8. **Default:** In case of any default by the bidder, the City of Columbia may procure the product or service from other sources and hold the bidder responsible for any damages incurred including, but not limited to, excess cost or handling charge. The Purchasing Division shall have the right to remove any bidder who defaults on any contract with the City from all bidders' lists.
9. **Pricing:** Prices must be stated in units of quantity specified, and must be firm. Bids qualified by escalator clauses may not be considered.
10. **Payments:** Partial payment for delivered items or quantities of a bid may be made by the City of Columbia except in the case of "Lump Sum" bids. In the latter case, only one payment will be made in the amount of the Lump Sum price, with any Cash Discount quoted, after all the materials, supplies, or equipment have been fully delivered to the satisfaction of the Head of the Department to which the items were furnished, and the City Purchasing Agent.
11. **Addenda:** The Purchasing Agent, in the form of a written Addendum, will issue all changes, additions and/or clarifications in connection with this bid. Bidder shall review and return the signature sheet of any and all such addendum issued for said bid. In the event multiple copies of the bid are requested, equal number of addendum shall be included. In the event an addendum is not submitted with the bid by the time of bid closing, the Purchasing Agent shall make a determination as to whether or not submission of the addendum(s) may be waived as technicality or not. In general, any addendum which significantly alters the scope of work, terms of the contract or which revises any pricing information may not be waived. In the case of an addendum not submitted with the bid, which cannot be waived, the bid will be found non-responsive and will not be evaluated. Addendums that are informational in nature only and do not alter scope of work, contract terms or pricing may be agreed upon after bid opening and returned by bidder, signed, prior to contract award. It shall be the sole discretion of the Buyer of Record and the Purchasing Agent to make this determination.
12. **Receipt and Opening of Advertised Sealed Bids:** The bidders and public are invited, but not required, to attend the formal opening of bids. Prices will be read aloud to the public. No decisions related to an award of a contract or purchase order will be made at the opening.
 - a. It is the bidder's sole responsibility to ensure that a bid is successfully submitted with the Purchasing Division prior to the time and the date specified. Late bids will not be opened and will be rejected unopened regardless of the degree of lateness or the reason thereto, including causes beyond the control of the bidder.
 - b. All bids and tabulation sheets are kept by the Purchasing Division for a period of time established by regulation or statutes after the award is made, and are available for inspection at any time during regular working hours.

13. **Withdrawal of Bids:** Bids may be withdrawn without prejudice any time before the deadline for receipt of bids. If a mistake or error is discovered by the bidder or by the Purchasing Agent after the bid opening, the Purchasing Agent has the right to call this error to the bidder's attention and request verification of the bid. If the bidder acknowledges the mistake and requests relief, the Purchasing Agent will proceed in the following manner:
 - a. **Clerical Mistakes:** Any mistake which is obviously a clerical one, such as an error in price extension, or in placement of decimal points, reversal of prices, etc., may be corrected by the Purchasing Agent after verification is made by the bidder. However, the unit price shown shall always prevail.
 - b. **Withdrawal:** Permission to allow a bidder to withdraw his bid without prejudice may be given when clear and convincing evidence supports the existence of an error. If there is a significant and obvious disparity between the prices of the lowest bidder and of the other bidders, a bidder may be permitted to withdraw without prejudice, upon submission of evidence that a non-intentional error occurred.
 - c. **Changes in pricing,** terms or conditions will not be permitted after the deadline for receipt of bids.
14. **Rebidding:** The Purchasing Agent reserves the right, when only one bid has been received by the bid closing date, to delay the opening of bids to another advertised date and time in order to revise specifications and/or establish further competition for the commodity or service required. The one (1) bid received will be returned unopened to the offeror for re-submittal at the new date and time of bid closing.
15. **Bid Response:** The City is interested in doing business with your firm. In the event you are unable to quote on this requirement, please submit a "no bid response" which will indicate your desire to remain on the City's active vendor list. In addition, please indicate the reason/reasons you are unable to participate in this solicitation.
16. **Bid Acceptance:** A bid acceptance period of sixty (60) calendar days is required. Bids offering less than sixty (60) calendar days may be rejected. Unless otherwise indicated, sixty (60) days prevail. In the event bid evaluation and award are projected to exceed sixty (60) days, the Purchasing Agent may request bidder to extend bid acceptance time for a reasonable period of time in order to make award.
17. **Material Standards:** All material or equipment furnished shall meet the minimum requirements of the Occupational Safety & Health Standards (OSHA) published in the Federal Register or other nationally recognized certifying body.
18. **Inspection and Acceptance:** Inspection and acceptance will be at destination. Until delivery and acceptance, or after any rejection, risk or loss shall be the responsibility of the Contractor unless loss results from negligence of the City.
19. **Variation in Quantity:** No variation in the quantity of any item called for in this contract will be accepted unless such variation has been caused by conditions of loading, shipping, or packing, or allowances in manufacturing processes, and then only to the extent, if any, specified elsewhere in this contract.
20. **Commercial Warranty:** The Contractor agrees that the supplies or services furnished under this contract shall be covered by the most favorable commercial warranties the Contractor gives to any customer for such supplies or services and that the rights and remedies provided herein are in addition to and do not limit any rights afforded to the City by any other clause of this contract or by law.
21. **Discounts:** Discount time will be computed from date of delivery at place of acceptance or from receipt of correct invoice at the office specified by the City, whichever is later. For discount purposes, payment is made when the check is mailed.

22. **Patents:** The successful bidder shall defend, indemnify and save harmless, the City of Columbia, Missouri, against all claims for royalties for patents or suit for infringement thereon which may be involved in the manufacture or use of the material to be furnished.
23. **Hold Harmless Agreement:** To the fullest extent not prohibited by law, Contractor shall indemnify and hold harmless the City of Columbia, its directors, officers, agents, and employees from and against all claims, damages, losses and expenses (including but not limited to attorney's fees) arising by reason of any act or failure to act, negligent or otherwise, of Contractor, of any subcontractor (meaning anyone, including but not limited to consultants having a contract with Contractor or a subcontractor for part of the services), of anyone directly or indirectly employed by Contractor or by any subcontractor, or of anyone for whose acts the Contractor or its subcontractor may be liable, in connection with providing these services. This provision does not, however, require Contractor to indemnify, hold harmless, or defend the City of Columbia from its own negligence.
24. **Contract Changes:** The Purchasing Agent may at any time, by a written order, make changes within the general scope of this contract in (a) drawings, designs, or specifications, where the supplies to be furnished are to be specially manufactured for the City in accordance therewith, (b) method of shipment or packing, and (c) place of delivery. If any such change causes an increase or decrease, an equitable adjustment shall be made by written modification of the contract. Any claim by the Contractor for adjustment under this clause must be made within thirty (30) days from the date of receipt by the Contractor of the notification of change; provided that the Purchasing Agent, if he or she decides that the facts justify such action, may receive and act upon such claim if submitted prior to final payment under this contract. Failure to agree to any adjustment shall be a dispute within the meaning of the paragraph entitled "Disputes". However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.
25. **Disputes:** If any dispute concerning a question of fact arises under this contract, other than termination for default or convenience, the Contractor and the City Department responsible for the administration of this contract shall make a good faith effort to resolve the dispute. If the dispute cannot be resolved by agreement, then the Purchasing Agent with advice of the City Counselor, shall resolve the dispute and send a written copy of his decision to the Contractor and the responsible City Department.
26. **Termination for Default:** The Purchasing Agent may, by written notice, terminate this contract in whole or in part for failure of the Contractor to perform any of the provisions thereof. In such event, the Contractor shall be liable for damages, including the excess cost of reprocurring similar supplies or services; provided, that if (a) it is determined for any reason that the Contractor was not in default or, (b) failure to perform is beyond the Contractor's or subcontractor's control, fault or negligence, the termination shall be deemed to be a termination for convenience. In general, termination for default shall be effective ten (10) days from the Contractor's receipt of notice. In the event the good or services provided under the contract are deemed to serve an emergency purpose, and the provision of those goods/services is somehow compromised, the Purchasing Agent reserves the right to issue an immediate, same day, termination notice and secure the goods/services elsewhere.
27. **Termination for Convenience:** The Purchasing Agent may, by written notice, terminate this contract in whole or in part when it is in the best interest of the City. If this contract is for supplies and is so terminated, the Contractor shall be compensated in accordance with his auditable costs to point of notification of termination. To the extent that this contract is for services and is so terminated, the City shall be liable only for payment in accordance with the payment provisions of this contract for services rendered to the effective date of termination. Termination for convenience shall be effective thirty (30) days from the Contractor's receipt of notice unless a longer time period is provided in the notice.

28. **Term & Supply Contract Defined:** A term and supply contract shall be deemed to mean a contract under which the supplier of articles, commodities, supplies, materials and equipment agrees to furnish all of the needs of the various departments of the City for the articles, commodities, supplies, materials and equipment set forth in the quotation, during the period of the contract at the unit price bid and as required from time to time by the City, be such needs in excess of or less than the estimated quantities set forth in the Request for Quotation. The contract will provide that the City will purchase, by issuance of Purchase Orders, such articles, commodities, supplies, materials and equipment solely from the supplier to whom the requirement contract is awarded for the contract term.
29. **Estimated Quantities:** The estimated quantities indicated in this Request for Quotation represent anticipated requirements only and are not purchased hereby, nor is the City obligated in any way to purchase the quantities shown. The right is reserved to exceed or diminish these estimates or to omit any one or more items if desired.
30. **Fund Allocation:** Continuance of any resulting agreement, contract or issuance of purchase orders after September 30 of the current calendar year is contingent upon the allocation of City funds for the next proceeding fiscal year, (10/1-9/30).
31. **Conflict of Interest:** No salaried officer or employee of the City, and no member of the City Council shall have a financial interest, direct or indirect, in this contract. A violation of this provision renders the contract void. Federal conflict of interest regulations and applicable provisions of Sections 105.450 – 105.496 shall not be violated. Contractor covenants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services to be performed under this contract. The Contractor further covenants that in the performance of this contract no person having such interest shall be employed.
- OFFICIALS NOT TO BENEFIT:** No regular employee or elected or appointed member of the City Government shall be admitted to any share or part of this contract, or to any benefit that shall arise there from; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.
32. **Hazardous Material:** When material furnished is hazardous material as defined by D.O.T. regulations, the following certification must be made on the bill of lading: "This is to certify that the above named articles are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to applicable regulations of the Department of Transportation."
33. **Domestic Products:** Bidders are encouraged to offer products manufactured, assembled or produced in the United States if the quality and price are comparable with other goods.
34. **Debarment and Suspension:** By submission of its response, the Contractor certifies that neither it nor its principals is presently debarred or suspended by any Federal Department or agency, including listing in the U.S. General Services Administrations List of Parties Excluded from Federal Procurement or Non-Procurement programs; or if the amount of this response is equal to in excess of \$100,000, that neither it nor its principals nor its subcontractors receiving sub-awards equal to or in excess of \$100,000 is presently disbarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by an Federal Department , agency or prevision of law. If the Contractor is unable to certify any of the statements in this certification, the responder must attach an explanation to its response.

35. **Americans with Disabilities Act:** The successful contractor agrees to comply with all applicable provisions of the Americans with Disabilities Act and the regulations implementing the Act, including those regulations governing employment practices. If this contract involves the contractor providing services directly to the public, the successful contractor shall make the services, programs and activities governed by this agreement accessible to the disabled as required by the Americans with Disabilities Act and its implementing regulations. Payment of funds under this agreement is conditional upon the successful contractor certifying to the City Manager in writing that it is complying with the Americans with Disabilities Act and 28 CFR Part 35 and suspension.
36. **Non-Discrimination in Employment:** In connection with the furnishing of supplies or performance of work under this contract, the Contractor agrees to comply with the Fair Labor Standard Act, Fair Employment Practices, Equal Opportunity Employment Act, and all other applicable Federal and State Laws, and further agrees to insert the foregoing provision in all subcontracts awarded hereunder.
37. **DBE Firms:** It is the policy of the City of Columbia that businesses owned by socially and economically disadvantaged individuals have an opportunity to participate in the performance of contracts financed in whole or in part with federal funds. Consequently, the requirements of 49 CFR Part 26 (as amended) and the City's implementing state regulations in Title 7 CSR Division 10, Chapter 8, "Disadvantaged Business Enterprise Program", will apply to any contract with federal funds. If federal funds are involved in this contract they shall be so identified in the Notice to Bidders.
38. **Business License Requirements:** Unless exempted by City ordinance, any company awarded a contract with the City, who operates an office(s) within the City limits of Columbia, will be required to obtain a business license.

CERTIFIED COPY OF ORDER

STATE OF MISSOURI }
 County of Boone } ea.

December Session of the October Adjourned

Term. 20 11

In the County Commission of said county, on the 6th day of December 20 11

the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby adopt the attached Order Restating and Amending Prior Orders Concerning Funding and Policies for the Administration of Funding of Shelters for Victims of Domestic Violence. The terms of said Order are attached hereto and incorporated herein.

Done this 6th day of December, 2011.

ATTEST:

Wendy S. Noren cc
 Wendy S. Noren
 Clerk of the County Commission



Daniel K. Atwill
 Presiding Commissioner



Karen M. Miller
 District I Commissioner

Absent
 Skip Elkin
 District II Commissioner

1. The Human Services Manager of the Columbia/Boone Department of Public Health and Human Services will administer the application, reporting, and payment recommendation processes as provided for in this Order.
2. In the event that the Human Services Manager determines that there is only one (1) qualified applicant for this funding, the Human Services Manager will make recommendations on that application directly to the County Commission. If, however, there are two (2) or more qualified applicants for this funding, the Human Services Manager will present the requisite information and whatever recommendations to the Boone County Community Services Advisory Commission which shall, in the normal course of its duties, make funding recommendations to the County Commission in a fashion so as to allow the written notification of award to be transmitted by November 15th of the year in which the application is filed.
3. The Human Services Manager is authorized to incorporate the application, reporting and other aspects of administering this funding into the automated systems that are maintained by the Human Services Manager and the Columbia/Boone Department of Public Health and Human Services for other fund administration duties. The incorporation of the administration of this funding into these automated systems is intended to reduce the administrative burdens on both the Human Services Manager and the domestic violence shelters applying for this funding. In that regard, the Human Services Manager may, consistent with the other funding administration duties handled by the Columbia/Boone Department of Public Health and Human Services, authorize an application/allocation/reporting process that is as consistent as possible with the administration of other social services funding while ensuring that the process complies with statutory requirements.
4. Applications for shelter funding shall be submitted by the first day of October of the year preceding the calendar year for which the funding is desired, and shall include all of the following either in the application or by reference back to existing filings with the Human Services Manager for a current funding cycle:
 - a. Evidence that the shelter is incorporated in this state as a nonprofit corporation;
 - b. A list of the directors of the corporation, and a list of the trustees of the shelter if different;

- c. The proposed budget of the shelter for the following calendar year;
 - d. A summary of the services proposed to be offered in the following calendar year;
 - e. An estimate of the number of persons to be served during the following calendar year; and
 - f. A detailed description of any services the shelter is providing in cooperation with any County office, including but not limited to, the Circuit Clerk of Boone County, Boone County Sheriff, Boone County Juvenile Office and/or the Boone County Prosecuting Attorney.
5. To qualify for funds allocated and distributed pursuant to these policies, a shelter shall meet all of the following requirements:
- a. Be incorporated in the state as a nonprofit corporation;
 - b. Have trustees who represent the racial, ethnic and socioeconomic diversity of the community to be served, at least one of whom must possess personal experience in confronting or mitigating the problems of domestic violence;
 - c. Receive at least twenty-five percent of its funds from sources other than funds distributed pursuant these policies or other policies which distribute funds pursuant to RSMo §455.215, as amended. These other sources may be public or private and may include contributions of goods or services, including materials, commodities, transportation, office space or other types of facilities or personal services;
 - d. Provide residential service or facilities for children when accompanied by a parent, guardian, or custodian who is a victim of domestic violence and who is receiving temporary residential service at the shelter;
 - e. Require persons employed by or volunteering services to the shelter to maintain the confidentiality of any information that would identify individuals served by the shelter and any information or records that are directly related to the advocacy services provided to such individuals;
 - f. Prior to providing any advocacy services, inform individuals served by the shelter of the nature and scope of the confidentiality requirement set out above; and

BOONE COUNTY, MISSOURI

By and through its County Commission:



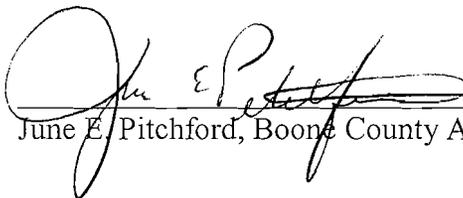
Daniel K. Atwill, Presiding Commissioner

ATTEST:



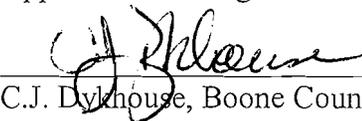
Wendy S. Noren, Boone County Clerk

**Received and Accepted for Budget and Audit
Purposes:**



June E. Pitchford, Boone County Auditor

Approved as to Legal Form:



C.J. Dylhouse, Boone County Counselor