

# CERTIFIED COPY OF ORDER

(Rev. Stat. Sec. 2321.)

February Session of the February Adjourned Term. 20 01

STATE OF MISSOURI }  
County of Boone } ea.

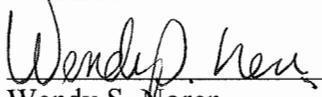
In the County Commission of said county, on the 27<sup>th</sup> day of February 20 01

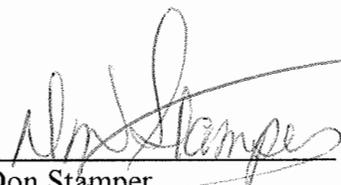
the following, among other proceedings, were had, viz:

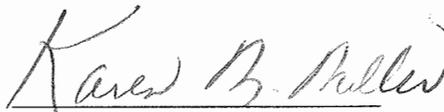
Now on this day the County Commission of the County of Boone does hereby approve the Review Plan for Midway Communications Subdivision located at 7301 W Henderson Rd, Columbia and authorize the Presiding Commissioner to sign the document.

Done this 27<sup>th</sup> day of February, 2001.

ATTEST:

  
Wendy S. Noren  
Clerk of the County Commission

  
Don Stamper  
Presiding Commissioner

  
Karen M. Miller  
District I Commissioner

  
Skip Elkin  
District II Commissioner

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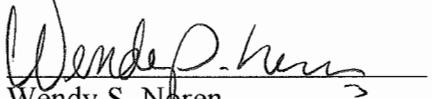
In the County Commission of said county, on the 27<sup>th</sup> day of February 20 01

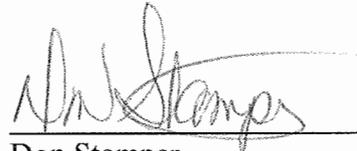
the following, among other proceedings, were had, viz:

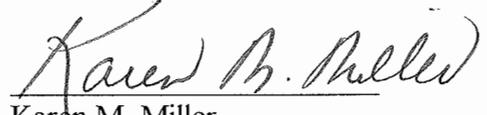
Now on this day the County Commission of the County of Boone does hereby receive and accept the Subdivision Plat for Midway Communications and authorize the Presiding Commissioner to sign said plat.

Done this 27<sup>th</sup> day of February, 2001.

ATTEST:

  
 Wendy S. Noren  
 Clerk of the County Commission

  
 Don Stamper  
 Presiding Commissioner

  
 Karen M. Miller  
 District I Commissioner

  
 Skip Elkin  
 District II Commissioner

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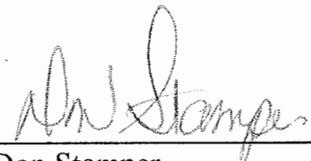
STATE OF MISSOURI }  
County of Boone } ea.

In the County Commission of said county, on the 27<sup>th</sup> day of February 20 01

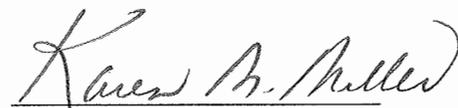
the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby receive and accept Williams Estate. S21-T48N-R12W. R-S. George and Ethel Williams, owners.

Done this 27<sup>th</sup> day of February, 2001.



Don Stamper  
Presiding Commissioner

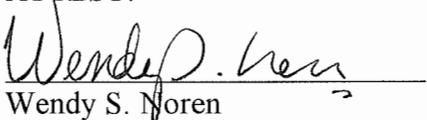


Karen M. Miller  
District I Commissioner



Skip Elkin  
District II Commissioner

ATTEST:



Wendy S. Noren  
Clerk of the County Commission

**CERTIFIED COPY OF ORDER**

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STATE OF MISSOURI }  
 County of Boone } ea.

February Session of the February Adjourned Term. 20 01

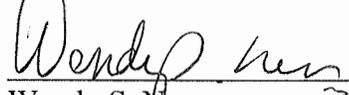
In the County Commission of said county, on the 27<sup>th</sup> day of February 20 01

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

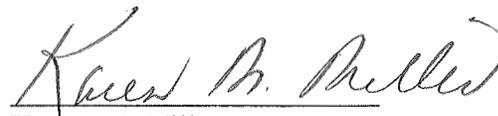
Now on this day the County Commission of the County of Boone does hereby authorize the Public Works Department to pursue a Sole Source Contract for the Bridge Rehabilitation work (as outlined in the attached documentation) through Harrington & Cortelyou. The Presiding Commissioner is hereby authorized to sign any related documentation.

Done this 27<sup>th</sup> day of February, 2001.

ATTEST:

  
 Wendy S. Noren  
 Clerk of the County Commission

  
 Don Stamper  
 Presiding Commissioner

  
 Karen M. Miller  
 District I Commissioner

  
 Skip Elkin  
 District II Commissioner



**SUMMARY ON PROPOSED UPGRADE  
REHABILITATION TO THREE BRIDGES**

Bridge No. 81 on Creasy Springs Road  
Bridge No. 82 on Brown School Road  
Bridge No. 4710012 on Coats Lane

**PURPOSE:** To upgrade all three structures in such a manner to be able to remove their 15 ton load limits; thus enabling heavier traffic to use these structures. Thereby improving public safety and provide greater accessibility to the surrounding areas.

CONVENTIONAL CONSTRUCTION

FIBER REINFORCED POLYMER (FRP)

METHOD:

Replace existing beams and deck with new beams and new deck

Strengthen the existing beams by attaching FRP material to them. (Like adding flexible high strength steel to the existing beams.)

CONSTRUCTION TIME:

60 days per bridge.  
Equivalent to 2 - 3 months per bridge.

2 days or less per bridge.  
One week total for all 3 bridges.

COSTS:

Estimated construction cost per bridge is \$65,000 to \$75,000.  
Total estimated cost = \$220,000

Quoted cost of \$70,000 or less.  
Total for all 3 bridges.

PROS:

- Use of known and established construction methods with an expected service life of 50 years or more.

- Cost is 1/3 of conventional method.
- Downtime is nominal and all 3 bridges can be worked on simultaneously.
- No right-of-way or construction easements are required.

CONS:

- 2 to 3 month disruption of traffic at each sight.
- Stage construction will be required to avoid closure of Creasy Springs and Brown School Road at the same time. simultaneously.
- Construction easements or right-of-way will be required to allow for construction equipment and access.

- Sole-Source contract required due to the high quality control and experience required to manufacture, supply and properly install the FRP material.
- Relatively new technology that is expected to achieve a 50 year service life.



## Boone County Public Works Memorandum

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**Date:** February 22, 2001

**To:** Boone County Commission

**From:** David Nichols *DN*

**Through:** David Mink *DWM*

**Subject:** Presentation on Sole-Source Contract for Bridge Rehabilitation Work  
**Coats Lane Bridge, Creasy Springs Bridge, Brown School Road Bridge**

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Public works is recommending approval of a sole-source contract for rehabilitation work on the above referenced bridges. Mark Huck, with the engineering consulting firm of Harrington and Cortelyou, will make a presentation at the February 27, 2001 commission meeting on a new technology of rehabilitating existing bridges for the purpose of removing the load postings. Enclosed is a packet of information explaining the technology of Fiber Reinforced Polymer (FRP) and a summary explaining the benefits of its installation. Its application is relatively new and it is considered as an innovative and sole-source type material/installation in the country. Therefore, an experienced design/build contractor is recommended by the consulting engineer, in order to achieve the desired end results.

The two main Benefits of this type of rehabilitation for these particular bridges are:

**Construction Time-** using the FRP upgrade, each structure would be closed for 2 days or less versus 60 days or more for conventional construction.

**Cost Savings-** the consultant has estimated the conventional construction rehabilitation cost at \$220,000 and the proposed FRP upgrade at \$70,000, a savings of approximately \$150,000.

If you concur with the recommendation, a contract for this work will be prepared and presented for your approval at an upcoming commission meeting. The County should receive a lot of positive attention from other public works/transportation departments and from the community if we proceed with this new technology. This should also be a solution to consider for any future bridge rehabilitation work.



August 4, 2000

Re: Bridge No. 81 on Creasy Springs Road  
Bridge No. 82 on Brown School Road  
Bridge No. 4710012 on Coats Lane

Mr. David Nichols, P.E.  
Project Engineer  
Boone County Public Works  
5551 Hwy. 63 South  
Columbia, Missouri 65201

Dear Mr. Nichols:

The upgrading of the above-mentioned bridges to HS20 load carrying capacity can be achieved with a Fiber Reinforced Polymer application at a very competitive cost with minimal inconvenience imposed on the drivers who use these structures.

By utilizing the FRP method for rehabilitation, each structure would need to be closed a maximum of two days and in some cases may allow traffic to be on the structure during the construction. If conventional rehabilitation methods were used, the structures would need to be closed for at least 60 calendar days per bridge. We recommend closing Bridges 81 and 82 for two days to enable FRP construction due to the large number of heavy trucks and very high volume of users these two bridges accommodate.

There is considerable cost savings to the County by choosing the FRP procedure for both construction and design phases. The total estimated conventional construction cost for Creasy Springs, Brown School Road and Coats Lane exceeds \$180,000. The total estimated FRP rehabilitation cost for all three structures is \$59,000. In addition to the construction cost savings, the design fee for these three bridges is reduced from \$48,600 to approximately \$20,000 by choosing the FRP option.

We propose utilizing the expertise of Dr. Antonio Nanni from the University of Missouri-Rolla. Dr. Nanni's work is unprecedented on similar MoDOT approved projects. Dr. Nanni and Co-Force America, Inc. will combine efforts in a design-build atmosphere to upgrade these structures to HS20 status. We have included a report from Dr. Nanni's staff that describes other jobs they have successfully accomplished in Missouri and also information on this innovative, practical rehabilitation process for concrete bridges.

The FRP process is limited only with respect to availability of material producers and contractors. The design-build process, in particular the proven participants chosen, appears to be the best choice due to this limited product availability and their knowledge of construction. We have included a fax from Chris Criswell, of MoDOT Bridge Division, stating they recommend contacting Dr. Nanni for prospective contractors and suppliers.

Mr. David Nichols, P.E.  
Page 2  
August 2, 2000

In summary we are recommending the upgrade to be done to these three structures as a design/build procedure for the following reasons:

1. **Construction Time:** Under the proposed FRP upgrade each structure would be closed for 2 days or less vs. 60 days or more for conventional construction. We feel this factor is particularly important on Creasy Springs Road and Brown School Road where the daily traffic exceeds 3,000 vehicles per day.
2. **Cost Savings:** We have estimated a cost savings of approximately \$150,000 for the proposed FRP upgrade over conventional construction. This is due to the fact that portions of the existing structures will not have to be demolished then reconstructed.
3. **Fiber Reinforced Polymer (FRP)** and its application is relatively new. It is considered as an innovative and sole-source type material in this country. Therefore, an experienced design/build team is recommended for its use and application to maintain quality control and to achieve the desired end results.

If we can be of assistance in obtaining more information or explaining any that has been provided, please feel free to contact either myself or Mark Huck.

Sincerely,

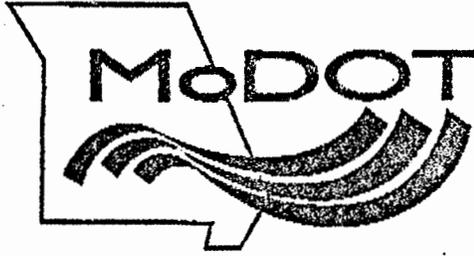
HARRINGTON & CORTELYOU, INC.



Michael J. Turner, P.E.

MJT:cas

Enclosure



# Telefax Transmission

from  
Bridge Division  
Missouri Department of Transportation  
P.O. Box 270 Jefferson City, MO 65102  
Fax Number 573-526-5488

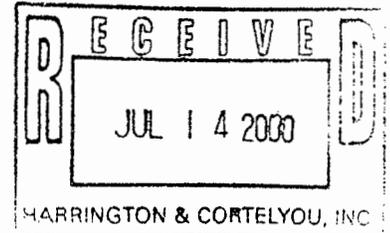
Date: 7/14/00

Time: 2:35 a.m./p.m. (p.m.)

TO: Mark Huck, P.E  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

FAX NO.: 816-471-6109  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

If this box is checked, please acknowledge receipt to sender,  
at \_\_\_\_\_  
(Sender's Phone No.)



### Messages or Additional Instructions:

I do not have a list of contractors with FRP experience as MoDOT's limited experience with FRP application has been through University of Missouri-Bolla and their research projects. Since the Boone Co. bridge projects are also with UMR, I would suggest obtaining a list from UMR. (Dr. Nanni ph. 573-341-4553). I will be in the office on Monday and can discuss with them if I could provide other information. Sorry that I was no help on this issue.

Sent by: Chris Criswell  
Bridge - MoDOT  
573-751-0267

HARD COPY TO FOLLOW:  
YES \_\_\_\_\_  
NO X

Number of pages to follow 0 File 959-05 MIT-  
If copy is illegible or incomplete, please call 573-751-4676. MCH

# STRENGTHENING OF CONCRETE BRIDGES USING ADVANCED FRP STRENGTHENING SYSTEM

*Co-Force America, Inc.  
800 W 14 th Street  
Suite 108  
Rolla, MO 65401*

July 17, 2000

Recently, advanced composites made of fibers embedded in a polymeric resin, also known as fiber-reinforced polymer (FRP) materials, have emerged as a practical solution for the upgrade/repair of deficient concrete structures. FRP materials exhibit several properties suitable for their use as structural reinforcement. They are characterized by excellent tensile strength in the direction of the fibers. FRP composites are corrosion resistant, and therefore should perform better than other construction materials in terms of weathering behavior over time.

The most important characteristic of FRP in the repair and strengthening application is the speed and ease of installation. Labor, shut-down costs, and site constraints typically offset the material cost of FRP making FRP strengthening systems very competitive with traditional strengthening techniques such as steel plate bonding and section enlargement.

The increase in the use of FRP composites was attained after the 1995 Hyogoken Nanbu Earthquake in Japan. As of 1997, the Japanese lead the FRP reinforcement usage with 100+ demonstration/commercial projects and FRP design provisions in their standard specifications of the Japan Society of Civil Engineers (JSCE, 1997). By 1997, more than 1,500 concrete structures worldwide had been strengthened with externally bonded FRP composites.

With the rapid and wide spread use of FRP strengthening systems, the process of quality control and quality assurance is becoming a high priority since inexperienced contractors and suppliers of materials entered the market. The performance of FRP strengthening systems is sensitive to the process in which the material is stored, handled, installed, and cured. FRP strengthening systems should be installed by an experienced specialty contractor to ensure the quality of the construction process and the constituent materials used in a system. Quality control tests and inspection should be performed regularly to ensure proper installation and performance of the system. There are many manufacturers that can provide the fibers and resins used to build externally bonded FRP laminates. However, the variation in compatibility and mechanical properties of the components may significantly influence the properties and performance of the laminates. Strengthening with FRP composites should therefore be achieved using a system of specific components optimized to ensure superior performance and backed by sufficient research and testing data to ensure field performance.

Co-Force America (CFA) is an engineering and consulting service company that provides engineering service for FRP composite strengthening systems. CFA draws from a close collaboration with university personnel and the facilities that an academic environment has to offer. The manufacturer of the strengthening system provides the system components. Experienced contractors carry out the strengthening contracts. These contractors complete an intensive training program covering design considerations to hands-on application sponsored by the system manufacturer.

CFA Missouri business in strengthening with FRP materials is conducted in with partners such as Structural Preservation Systems (SPS), Baltimore, MD, a specialty contractor performing concrete repair work nation-wide and Master Builders Technologies (MBT), Cleveland, OH, a leading innovator in the development, manufacturing and marketing of construction chemicals.

The **MBrace Composite Strengthening System** is an FRP strengthening system provided by these two partners. MBrace System is a comprehensive approach to bringing innovative strengthening techniques to the construction industry. It is more than an economical, field-proven technology for supplemental structural reinforcement; it offers single source support from specification through completion. Some of the features of this system are listed below:

Lightweight - Minimal additional dead load

Noncorrosive - High durability, low maintenance

Ease of Installation - Cost savings, minimal down time

Minimal Thickness - Minimal increase in member geometry, easily concealed

Flexible - Adapts to various shapes

10-Year History - Well-established technology

Single Source Support - Quality assurance through use of integrated components

In 1988, the Maryland Chapter of the American Concrete Institute presented the Excellence in Concrete Award for the floor slab strengthening of Loyola College Center West in Baltimore, Maryland. The concrete slab was strengthened with the MBrace Composite Strengthening System to accommodate a change-in-use. The project was submitted and presented by the Baltimore branch of Structural Preservation Systems.

## **PROJECT APPROACH**

The project involves the design and construction of FRP upgrade for three bridges as well as the inspection of FRP strengthening work. The three bridges (Brown School Road Bridge, Creasy Springs Bridge, and Coats Lane Bridge) are located in Boone County, Missouri. To accommodate current traffic demand, these bridges need to be upgraded to HS20 loading. The project is to be constructed as a design/built. This approach provides the expertise of a strengthening team in the engineering, materials, and application of the MBrace strengthening system, which was developed after an extensive research and has been applied to a significant number of strengthening projects nationwide and in the state of Missouri (see attached publication). Based on this approach the strengthening team will develop the strengthening design and recommended strengthening procedure, material and installation specifications, the required quality control tests, and total cost estimate.

## EXAMPLES OF SIMILAR PROJECTS IN MISSOURI

Members of the strengthening team were involved in many strengthening projects. Description of projects conducted in Missouri are given below:

### Bridge G270

Externally bonded carbon fiber reinforced polymer (CFRP) sheets were applied to strengthen the simple span reinforced concrete solid slab bridge that was built in 1922. Strengthening with MBrace system was accomplished in three days without traffic interruption, and preparation consisted of only light sandblasting. Bridge G270 is the only load-posted structure on a heavy truck route that serves a lead mining operation and the objective was to strengthen the bridge to allow removal of the load posting. The University of Missouri-Rolla conducted the pilot study for the Missouri Department of Transportation (MoDOT) under MoDOT Contract No. RI98-012.



Installation of the CFRP Sheets

### Bridge J857

The main objective of Bridge J857 testing program was to investigate the effects of different strengthening techniques on the stiffness, structural performance, ultimate capacity, and mode of failure of the bridge decks. The bridge was built in the 1930s and was located on Route 72 in Phelps County, Missouri. Due to the realignment of Route 72, the bridge was decommissioned in December 1998 and scheduled for demolition. The bridge consisted of three simply supported solid reinforced concrete slabs with an original roadway width of 25 feet. One of the bridge decks was strengthened using near-surface mounted (NSM) CFRP rods. The second deck was strengthened with MBrace Composite strengthening system. The third deck was left unstrengthened to be used as a benchmark. Bridge columns were also strengthened for flexure. Results of testing to failure indicated that the ultimate capacity and mode of failure of strengthened decks could be predicted with great accuracy using the developed design model. As expected, capacity improvement was in excess of 30% of the original capacity of the bridge decks.



Bridge J857



After strengthening

**Bridge A10052**

Bridge A10062, located at the interchange of Interstates 44 and 270 in St. Louis, Missouri, had suffered damage at one of its exterior precast/prestressed concrete girders due to vehicular impact. As a result of the impact, the exterior concrete of the damaged member was spalled off and two prestressing steel tendons were fractured. This resulted in an approximate 10 percent reduction in the moment capacity. It was decided to use MBrace carbon FRP laminates to restore the original structural capacity of the girder. A maintenance crew from the Missouri Department of Transportation (MoDOT) executed the repair work with the assistance of research personnel from the University of Missouri-Rolla. Strengthening with CFRP laminates was accomplished in one day without traffic interruption on the affected bridge.



Impacted Bridge



MoDOT crew applying MBrace System

**Bridge A3050**

Due to vehicular impact Bridge A3050 in I44, which crosses Waynsville and Lebanon about 36 miles south-west of Rolla, Missouri, was damaged. The vehicular impact completely damaged one pier and partially damaged another pier. Flexural cracks were identified after the collision extending from top to bottom of the pier cap, meaning the pier was bent concave upwards during collision. MoDOT replaced both piers and a portion of the pier cap. New piers were constructed lapping the rebars from the existing footing. To provide increased confinement in the region where new rebars were lapped to the existing rebars from the footing and the pier cap, 2 layers of MBrace carbon sheets were wrapped around the

column, for a depth of 40 inches, both at top and bottom of the pier. The cracks, which were caused in the pier cap due to impact damage, were epoxy injected.



Bridge Profile After Impact



After Repair and Strengthening

## REFERENCES ON FRP STRENGTHENING

- ACI Committee 440, (1996), "State-of-the-Art Report on FRP for Concrete Structures," ACI440R-96, Manual of Concrete Practice, ACI, Farmington Hills, MI, 68 pp.
- Canadian Standards Association (1996) *Canadian Highway Bridge Design Code*, Section 16, *Fiber Reinforced Structures* (Final Draft).
- Chajes, M. J., Januska, T.F., Mertz, D.R., Thomson, T.A., and Finch, W.W., "Shear Strengthening of Reinforced Concrete Beams Using Externally Applied Composite Fabrics," *ACI Structural Journal*, Vol. 92, No. 3, 1995, pp. 295-303.
- Craστο, A., Kim, R.Y., Fowler, C., and Mistretta, J.P. (1996), "Rehabilitation of Concrete Bridges Beams with Externally-Bonded Composite Plates. Part I," *Proceeding of the First International Conference on Composites in Infrastructure (ICCI-96)*, Tucson, Arizona, pp. 857-869.
- El-Badry, M. (editor), August 1996, "Advanced Composite Materials in Bridges and Structures," *Proceedings ACMBS-II*, Montreal, Canada, pp. 1027.
- Iyer, S.L. and R. Sen, Editors (1991), "Advanced Composite Materials in Civil Engineering Structures," *Proc.*, American Society of Civil Engineers, New York, NY, 443 pp.
- Khalifa, A., and Nanni, A., "Improving Shear Capacity of Existing RC T-Section Beams Using CFRP Composites," *Journal of Cement & Concrete Composites*, Submitted for Publication.
- Master Builders Technologies, (1998), "MBrace Composite Strengthening System - Engineering Design Guidelines," Second Edition, Cleveland, OH, 1998, pp. 140.
- Mayo, R., Nanni, A., Gold, W., and Barker, M., "Strengthening of Bridge G270 with Externally-Bonded CFRP Reinforcement," *Proceeding of the Fourth International Symposium on Non-Metallic (FRP) Reinforcement for Concrete Structures (FRPRCS-4)*, ACI, Baltimore, Maryland, August 1999. Accepted for Publication.
- Nanni, A., Alkhrdaji, T., Chen, G., Barker, M., Yang, X., and Mayo, R., "Testing to failure program for a Highway Bridge Strengthened with FRP Composites," *Proceeding of the Fourth International Symposium on Non-Metallic (FRP) Reinforcement for Concrete Structures (FRPRCS-4)*, ACI, Baltimore, Maryland, August 1999. Accepted for Publication.
- Neale, K.W. and Labossiere, P., Editors (1992), "Advanced Composite Materials in Bridges and Structures," *Proc.*, Canadian Society for Civil Engineering, Montreal, Canada, 705 pp.

*MSH Copy*



**Co-Force America, Inc.**  
800 West 14<sup>th</sup> Street, Suite 213  
Rolla, MO 65401  
Ph. (573) 364-7997  
e-mail: cfam@rollanet.org

### FAX COVER SHEET

Please deliver the following pages to:

FIRM NAME:	<i>Harrington &amp; Corteljon, Inc.</i>	DATE:	<i>4-26-2000</i>
ATTENTION:	<i>Mike Turner</i>	TIME:	
FAX NO:	<i>816-471-6109</i>		
FROM	<i>Tarek Alkhrdaji</i>		
PROJECT:	<i>Boone County Bridges</i>	CFA-PROJECT NO:	
TOTAL NO. OF PAGES (INCLUDING COVER SHEET):	<i>7</i>		
MESSAGE:			

*Attached, please find strengthening design.*

*Thanks.*

*Tarek*

ORIGINALS: Will be mailed \_\_\_  
Will not be mailed

CONFIDENTIALITY NOTE

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*We need costs.*

*MSH* ↓

*95905*



**Co-Force America, Inc.**  
800 West 14<sup>th</sup> Street, Suite 108  
Rolla, MO 65401  
Ph. (573) 364-7997  
e-mail: cfam@rollanet.org

To: Mike Turner

Harrington & Cortelyou, Inc.  
127 West 10<sup>th</sup> Street  
Kansas City, Missouri 64105

From: A. Nanni

Date: April 25, 2000

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Re: Boone County Bridges

Attached, please find a summary of flexural and shear requirements and drawings showing strengthening schemes for the three bridges in Boone County. Please note that the summary tables provide information for a typical RC bridge channel. Capacity calculations and strengthening design were based on HS20 truck loading and the information provided earlier by Harrington & Cortelyou, Inc. Strengthening design is conducted based on the MBrace CF-130 system.

Only Brown School and Creasy Springs Bridge were found to be deficient in flexure. No flexural strengthening would be required for Coats Lane Bridge; however, we recommend the use of some CFRP to ensure a flexural strength reserve.

All bridges are deficient in shear and require strengthening.

For implementation, we suggest a design-build approach. If you and the client find this proposal technically acceptable, we will price it and submit it for final approval.

We look forward to hearing from you

Regards.

*Need price for*

## SUMMARY

The following tables summarize flexural and shear requirements of a typical RC bridge channel for strengthening design calculations. Capacity calculations were based on concrete strength of 5,000 psi and steel yield point of 40,000 psi.

**Table 1: Summary of Flexural Requirement**

Bridge	Demand due to factored loads, $M_u$ (ft-k)	Existing Capacity, $\phi M_n$ (ft-k)	Required Strengthening (%)
Brown School Road	177.2	147.7	20
Creasy Springs	166.9	147.7	13
Coats Lane	461.8	473	0*

\*Minimum flexural strengthening will be added to ensure comparable reserve strength

**Table 2: Summary of Shear Requirement**

Bridge	Demand due to factored loads, $V_u$ (k)	Existing Capacity, $\phi V_n$ (k)	Required Strengthening (%)
Brown School Road	43	35.8	20
Creasy Springs	41.9	35.8	17
Coats Lane	56.1	46.1	22

Strengthening of each channel is achieved using MBrace CF 130. Table 3 provides a summary of requirements to correct the flexural deficiency of a typical bridge channel.

**Table 3: Flexural MBrace Reinforcement Requirements**

Bridge	Number of Plies*	Ply Width (in)	Ply Length	Strips Spacing (in)
Brown School Road	2	5	18.8'	N/A
Creasy Springs	2	5	18.1'	N/A
Coats Lane	2	4	35.5'	N/A

\* One ply per web soffit

Table 4 provides a summary of requirements to correct the shear deficiency of a bridge channel.

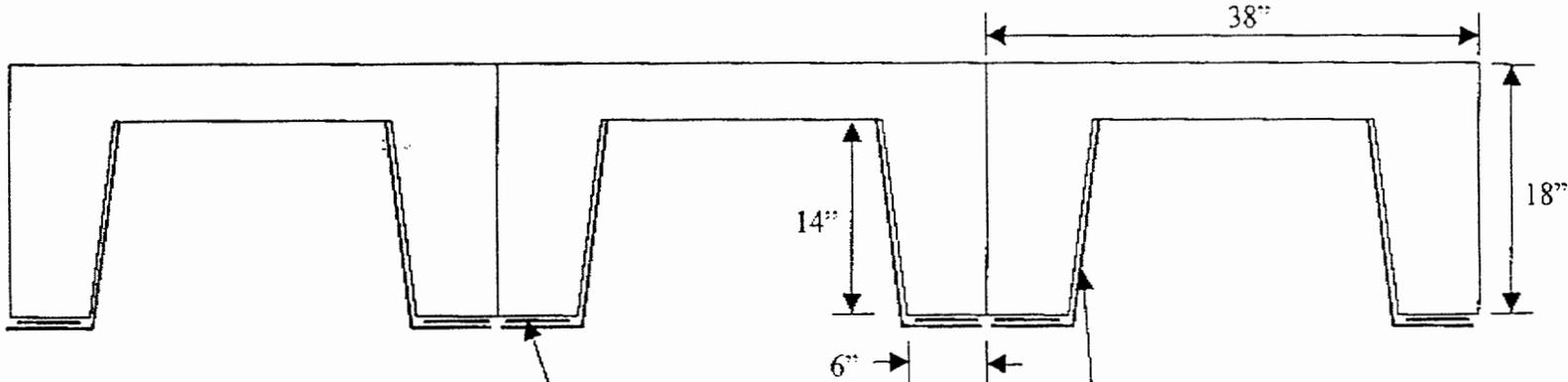
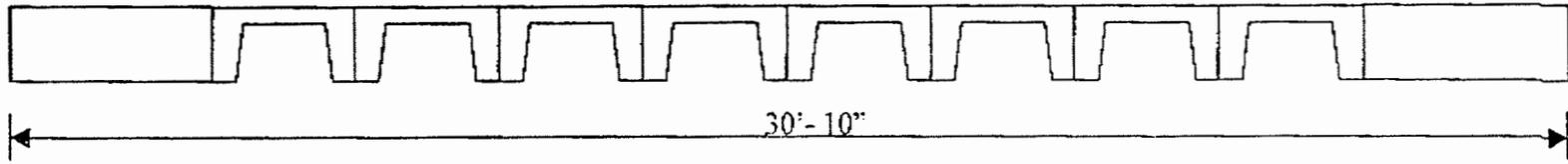
**Table 4: Shear MBrace Reinforcement Requirements**

Bridge	Number of Plies*	Ply Width (in)	Ply Length	Strips Spacing (in)
Brown School Road	2	24	20" <sup>b</sup>	N/A
Creasy Springs	2	24	20" <sup>b</sup>	N/A
Coats Lane	2	24	26" <sup>c</sup>	N/A

\* One ply per web side

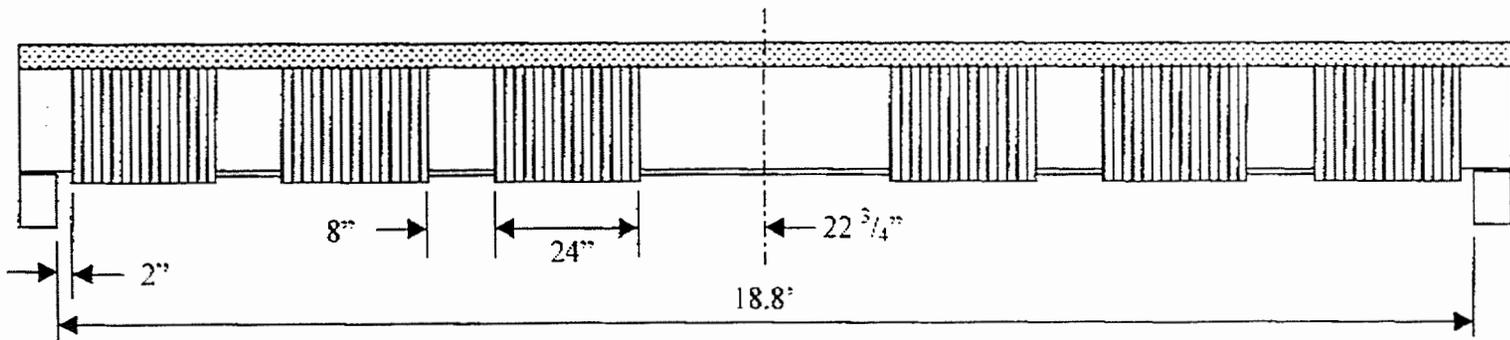
<sup>b</sup> Add 18" for exterior channel

<sup>c</sup> Add 24" for exterior channel

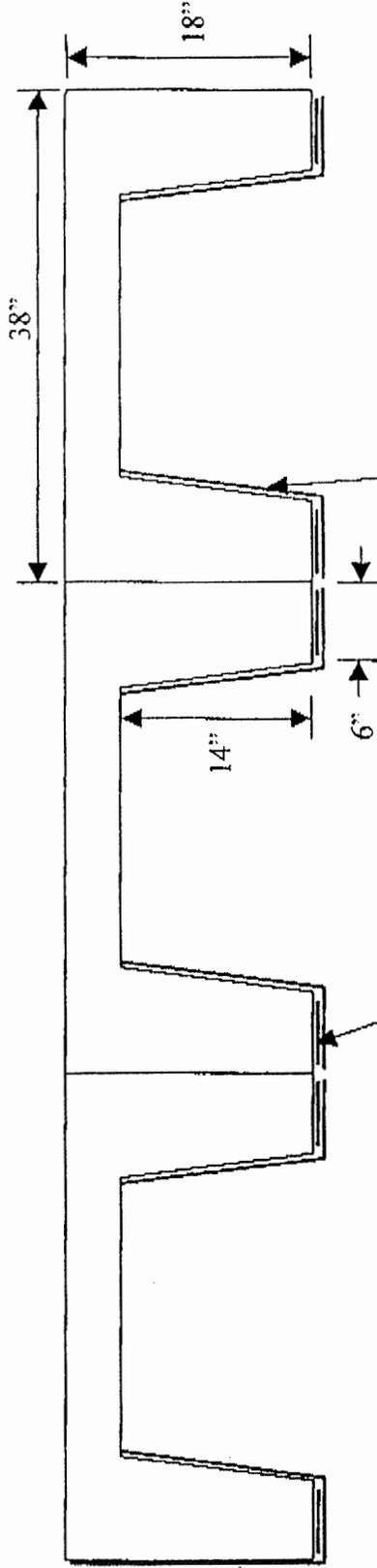
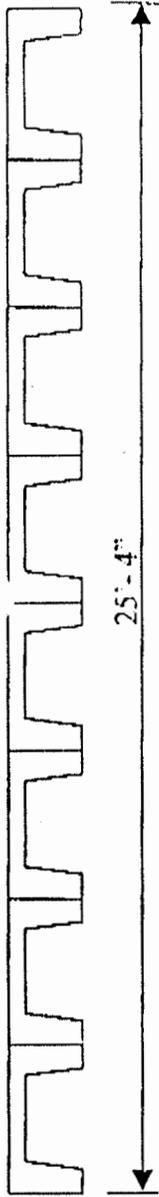


Flexural Strengthening  
 5-in. wide MBrace CF-130  
 Run the entire span  
 Centered on 6-in web bottom.

Shear Strengthening (interior channel)  
 24-in. wide MBrace CF-130  
 Spaced at 34-in c/c, 10-in clear edge/edge  
 Sheets attached to web side and continuing on  
 web bottom. Sheets are terminated 0.5-in  
 from channel interface.



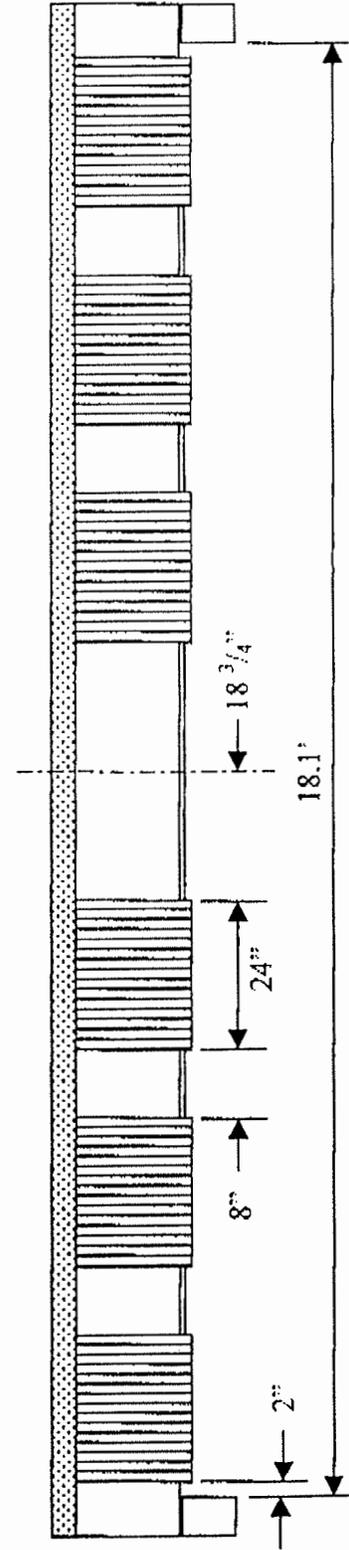
 <p><b>CO-FORCE AMERICA, INC.</b> International Consultants</p>	Title: <b>Brown School Road Bridge</b>		Job No: _____
	Made By: _____	Date: _____	Section: _____
	Checked: _____	Date: _____	Page No: _____



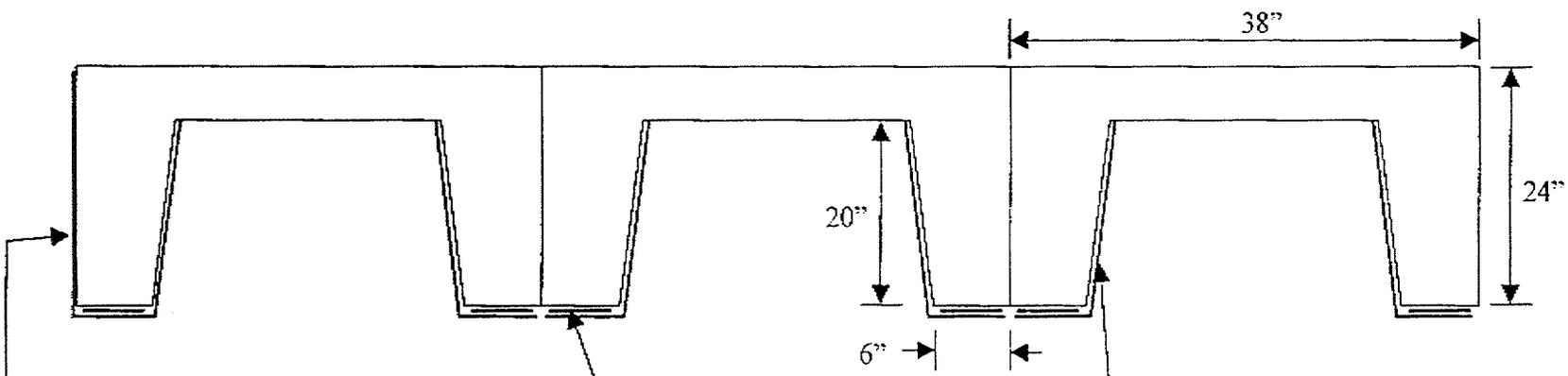
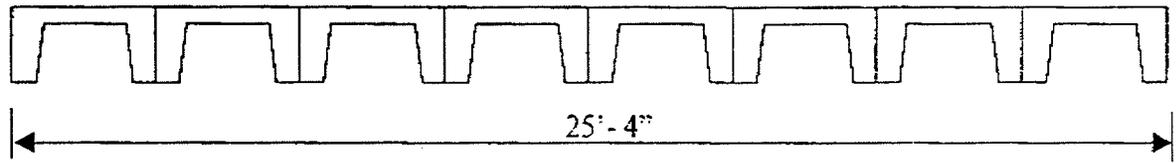
Shear Strengthening (exterior channel)  
 24-in. wide MBrace CF-130  
 Spaced at 34-in c/c, 10-in clear edge/edge  
 Sheets U-wrapped on web. Sheets are terminated 0.5-in from channel interface.

Flexural Strengthening  
 5-in. wide MBrace CF-130  
 Run the entire span  
 Centered on 6-in web bottom.

Shear Strengthening (interior channel)  
 24-in. wide MBrace CF-130  
 Spaced at 34-in c/c, 10-in clear edge/edge  
 Sheets attached to web side and continuing on web bottom. Sheets are terminated 0.5-in from channel interface.



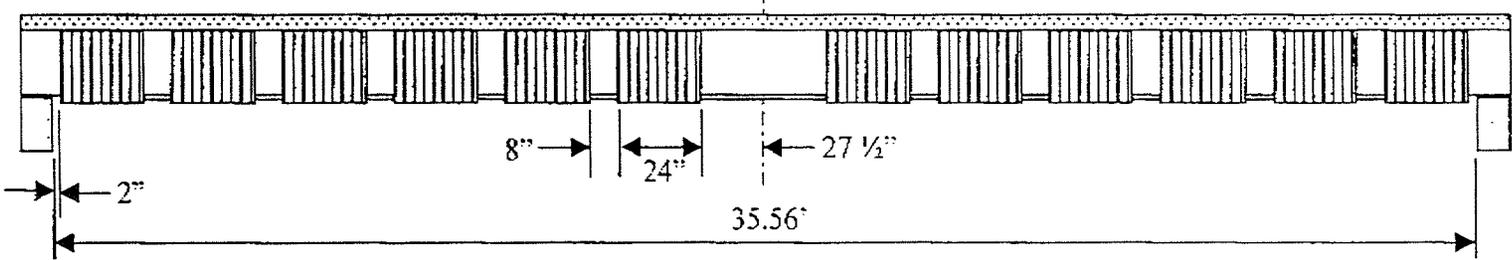
 <b>CO-FORCE AMERICA, INC.</b> International Consultants	<b>Title:</b> Creasy Springs Bridge		Job No: _____
	Made By: _____	Date: _____	Section: _____
	Checked: _____	Date: _____	Page No: _____



Shear Strengthening (exterior channel)  
 24-in. wide MBrace CF-130  
 Spaced at 34-in c/c, 10-in clear edge/edge  
 Sheets U-wrapped on web. Sheets are terminated 0.5-in from channel interface.

Flexural Strengthening  
 4-in. wide MBrace CF-130  
 Run the entire span  
 Centered on 6-in web bottom.

Shear Strengthening (interior channel)  
 24-in. wide MBrace CF-130  
 Spaced at 34-in c/c, 10-in clear edge/edge  
 Sheets attached to web side and continuing on web bottom. Sheets are terminated 0.5-in from channel interface.



ADD 02.00 (REV) 12.10 COMMUNICATION N. 97 PAGE 7

 <b>CO-FORCE AMERICA, INC.</b> International Consultants	Title: <b>Coats Lane Bridge</b>		Job No: _____
	Made By: _____	Date: _____	Section: _____
	Checked: _____	Date: _____	Page No: _____

# CERTIFIED COPY OF ORDER

(Rev. Stat. Sec. 2321.)

February Session of the February Adjourned Term. 20 01

STATE OF MISSOURI }  
County of Boone } ea.

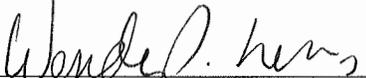
In the County Commission of said county, on the 27<sup>th</sup> day of February 20 01

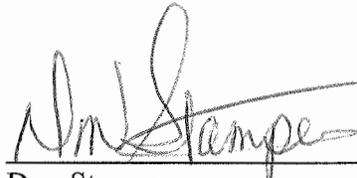
the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby approve and authorize the Presiding Commissioner to sign the Quit Claim Deed between Boone County and the Southern Boone County Fire Protection District for 2.65 acres of property as described in said document.

Done this 27<sup>th</sup> day of February, 2001.

ATTEST:

  
Wendy S. Nofen  
Clerk of the County Commission



Don Stamper  
Presiding Commissioner



Karen M. Miller  
District I Commissioner



Skip Elkin  
District II Commissioner

**Quitclaim Deed**

THIS INDENTURE, made this 27<sup>th</sup> day of February, 20 01 between Boone County, Missouri, a political subdivision of the state of Missouri, through its County Commission, party of the first part and Southern Boone County Fire Protection District, a political subdivision of the state of Missouri organized and operating under chapter 321, RSMo, (mailing address of the grantee: Southern Boone County Fire Protection District, 208 Henry Clay Blvd, PO Box 199, Ashland, Missouri 65010) of the County of Boone, State of Missouri, party of the second part.

WITNESSETH: In consideration of the payment of the sum of ONE AND NO/100 DOLLARS (\$1.00), the receipt of which is hereby acknowledged, the said party of the first part does hereby REMISE, AND FOREVER QUITCLAIM to the said party of the second part, a tract of land, lying situated and being in the County of Boone, State of Missouri, to wit:

A tract of land in the Northeast Quarter of the Northeast Quarter of Section 3, Township 45 North, Range 12 West of the Fifth Principal Meridian in Boone County, Missouri, described as follows: Starting at U.S. Highway 63 centerline median station 914+00 = side road connector centerline station 10+64.27, (incorrectly shown as side road connector centerline station 11+06.27 on the plans for Job Number 249 B); thence in a direct line to side road connector station 11+06.27; thence in a direct line to side road connector PC station 13+40.14; thence along a 240.00-foot radius curve to the right a distance of 114.86 feet to side road connector station 14+55.00; thence in a direct line to a point 55.00 feet left of side road connector centerline station 14+55.00 and the Point of Beginning; Thence in a direct line to a point 40 feet left of Old Highway 63 centerline station 231+94.14 as said Old Highway 63 is described within the Quit Claim Deed attached to the CERTIFIED COPY OF ORDER, being Boone County Commission Order No. 284-2000, recorded in Book 1637, Page 346 of the Records of said County; thence in a direct line to a point 40 feet left of Old Highway 63 centerline PC station 238+45; thence continuing on preceding course to its intersection with the West Right of way line for U.S. Highway 63 at a point 142 feet right of the U.S. Highway 63 centerline median; thence along said West Right of Way line to a point 142 feet right of U.S. Highway 63 centerline median station 915+40; thence in a direct line to a point 55 feet left of side road connector centerline station 12+50; thence in a direct line to a point 55 feet left of side road connector PC station 13+40.14; thence along a 295 foot-radius curve to the right a distance of 141.18 feet to the Point of Beginning and containing 2.65 acres, more or less.

Grantee, for itself, its successors and assigns, by acceptance of this conveyance, covenants and agrees, and it is made a condition of this conveyance, that the property herein described shall not be used for the construction, erection or maintenance of billboards or advertising signs other than signs advertising activities conducted on the property or services and products therein provided. This shall be covenant running with the land and is binding upon the Grantee, its successors and assigns. Upon a breach of this covenant after 10 days' written notice to Grantee or its assigns to remove said offending sign as described above, Grantor retains the right to enter the property herein conveyed and remove said sign at the sole expense and liability of Grantee or its successors and assigns.

Grantee, by acceptance of this conveyance, covenants and agrees for itself, its successors and assigns, to permit all known and unknown utilities existing as of the date of the deed, to maintain easements for the purpose of maintaining, constructing or reconstructing utility lines and their

appurtenances over, under or across the lands herein conveyed.

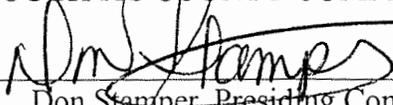
The Grantee, for itself, its personal representatives, successors in interest and assigns, as a part of the consideration hereof, does hereby covenant and agree as a covenant running with the land that (1) no person on the grounds of race, color, religion, creed, sex, age, ancestry, national origin, disability or veteran status shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination in the use of said facilities, (2) no person shall be excluded from participation in denied the benefits of, or otherwise be subjected to discrimination, in the construction of an improvement on, over or under such land and the furnishing service thereon, on the grounds of race, color, religion, creed, sex, age, ancestry, national origin, disability or veteran status, (3) that Grantee shall comply with the provisions of Executive Order No. 94-03, issued by the Honorable Mel Carnahan, Governor, on January 14, 1994, which executive order is incorporated herein by reference and is made a part of this Agreement. This Executive Order promulgates a Code of Fair Practices for the Executive Branch of Missouri Government and prohibits discrimination against recipients of services, and employees or applicants or employment of state contractors and subcontractors, on the grounds of race, color, religion, national origin, sex, age, disability, or veteran status. The Grantee shall also comply with all state and federal statutes applicable to the Grantee relating to nondiscrimination, including but not limited to Chapter 213, RSMo; Title VI and Title VII of the Civil Rights Act of 1964 as amended (42 U.S.C. Sections 2000d and 20003, et seq.); and with any provision of the "Americans with Disabilities Act" (42 U.S.C. Section 12101 et seq.) which applies to the Grantee. The Grantee shall use the premises in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Part 21.

In the event of breach of any of the nondiscriminatory covenants, the State of Missouri shall have the right to re-enter said land and facilities thereon, and the above-described land and facilities shall thereupon revert to and vest in and become the absolute property of the State of Missouri and its assigns.

TO HAVE AND TO HOLD THE SAME, with all and singular rights, immunities, privileges, and appurtenances thereunto belonging, unto the said party of the second part, their successors, heirs and assigns forever.

IN WITNESS WHEREOF, the said party of the first part has hereunto set its hand and seal the day and year first written above.

BOONE COUNTY, MISSOURI  
THROUGH ITS COUNTY COMMISSION

By   
Don Stamper, Presiding Commissioner

ATTEST:

By  W  
Wendy S. Noren, County Clerk

STATE OF MISSOURI                    )  
  )     SS  
COUNTY OF BOONE                    )

On this 27<sup>th</sup> day of February, 2001, before me appeared Don Stamper, to me personally known, who being by me duly sworn did say that he is presiding commissioner of the Boone County Commission; that the seal affixed to the foregoing instrument is the official seal of said county; that said instrument was signed in behalf of said commission and county by authority of said commission, and that said Don Stamper acknowledged said instrument to be the free act and deed of said commission.

IN TESTIMONY WHEREOF, I have hereunto set my hand affixed my official seal at my office in Boone County, the day and year first above written.

Cathy D Richards  
Notary Public

My commission expires: 10/15/2004

" NOTARY SEAL "  
Cathy D. Richards, Notary Public  
Boone County, State of Missouri  
My Commission Expires 10/15/2004

old  
copy 2/21/30

**Quitclaim Deed**

THIS INDENTURE, made this 27<sup>th</sup> day of February, 2001 between Boone County, Missouri, a political subdivision of the state of Missouri, through its County Commission, party of the first part and Southern Boone County Fire Protection District, a political subdivision of the state of Missouri organized and operating under chapter 321, RSMo, (mailing address of the grantee: Southern Boone County Fire Protection District, 208 Henry Clay Blvd, PO Box 199, Ashland, Missouri 65010) of the County of Boone, State of Missouri, party of the second part.

WITNESSETH: In consideration of the payment of the sum of ONE AND NO/100 DOLLARS (\$1.00), the receipt of which is hereby acknowledged, the said party of the first part does hereby REMISE, AND FOREVER QUITCLAIM to the said party of the second part, a tract of land, lying situated and being in the County of Boone, State of Missouri, to wit:

Starting at U.S. Highway 63 centerline median station 914+00 = side road connector centerline station 10+64.27, (incorrectly shown as side road connector centerline station 11+06.27 on the plans for Job Number 249 B); thence in a direct line to side road connector station 11+06.27; thence in a direct line to side road connector PC station 13+40.14; thence along a 240.00-foot radius curve to the right a distance of 114.86 feet to side road connector station 14+55.00; thence in a direct line to a point 55.00 feet left of side road connector centerline station 14+55.00 and the Point of Beginning;

Thence in a direct line to a point 40 feet left of Old Highway 63 centerline station 231+94.14 as said Old Highway 63 is described within the Quit Claim Deed attached to the CERTIFIED COPY OF ORDER, being Boone County Commission Order No. 284-2000, recorded in Book 1637, Page 346 of the Records of said County; thence in a direct line to a point 40 feet left of Old Highway 63 centerline PC station 238+45; thence continuing on preceding course to its intersection with the West Right of way line for U.S. Highway 63 at a point 142 feet right of the U.S. Highway 63 centerline median; thence along said West Right of Way line to a point 142 feet right of U.S. Highway 63 centerline median station 915+40; thence in a direct line to a point 55 feet left of side road connector centerline station 12+50; thence in a direct line to a point 55 feet left of side road connector PC station 13+40.14; thence along a 295 foot-radius curve to the right a distance of 141.18 feet to the Point of Beginning and containing 2.65 acres, more or less.

Grantee, for itself, its successors and assigns, by acceptance of this conveyance, covenants and agrees, and it is made a condition of this conveyance, that the property herein described shall not be used for the construction, erection or maintenance of billboards or advertising signs other than signs advertising activities conducted on the property or services and products therein provided. This shall be covenant running with the land and is binding upon the Grantee, its successors and assigns. Upon a breach of this covenant after 10 days' written notice to Grantee or its assigns to remove said offending sign as described above, Grantor retains the right to enter the property herein conveyed and remove said sign at the sole expense and liability of Grantee or its successors and assigns.

Grantee, by acceptance of this conveyance, covenants and agrees for itself, its successors and assigns, to permit all known and unknown utilities existing as of the date of the deed, to maintain

easements for the purpose of maintaining, constructing or reconstructing utility lines and their appurtenances over, under or across the lands herein conveyed.

The Grantee, for itself, its personal representatives, successors in interest and assigns, as a part of the consideration hereof, does hereby covenant and agree as a covenant running with the land that (1) no person on the grounds of race, color, religion, creed, sex, age, ancestry, national origin, disability or veteran status shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination in the use of said facilities, (2) no person shall be excluded from participation in denied the benefits of, or otherwise be subjected to discrimination, in the construction of an improvement on, over or under such land and the furnishing service thereon, on the grounds of race, color, religion, creed, sex, age, ancestry, national origin, disability or veteran status, (3) that Grantee shall comply with the provisions of Executive Order No. 94-03, issued by the Honorable Mel Carnahan, Governor, on January 14, 1994, which executive order is incorporated herein by reference and is made a part of this Agreement. This Executive Order promulgates a Code of Fair Practices for the Executive Branch of Missouri Government and prohibits discrimination against recipients of services, and employees or applicants or employment of state contractors and subcontractors, on the grounds of race, color, religion, national origin, sex, age, disability, or veteran status. The Grantee shall also comply with all state and federal statutes applicable to the Grantee relating to nondiscrimination, including but not limited to Chapter 213, RSMo; Title VI and Title VII of the Civil Rights Act of 1964 as amended (42 U.S.C. Sections 2000d and 20003, et seq.); and with any provision of the "Americans with Disabilities Act" (42 U.S.C. Section 12101 et seq.) which applies to the Grantee. The Grantee shall use the premises in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Part 21.

In the event of breach of any of the nondiscriminatory covenants, the State of Missouri shall have the right to re-enter said land and facilities thereon, and the above-described land and facilities shall thereupon revert to and vest in and become the absolute property of the State of Missouri and its assigns.

TO HAVE AND TO HOLD THE SAME, with all and singular rights, immunities, privileges, and appurtenances thereunto belonging, unto the said party of the second part, their successors, heirs and assigns forever.

IN WITNESS WHEREOF, the said party of the first part has hereunto set its hand and seal the day and year first written above.

BOONE COUNTY, MISSOURI  
THROUGH ITS COUNTY COMMISSION

By Don Stamper  
Don Stamper, Presiding Commissioner

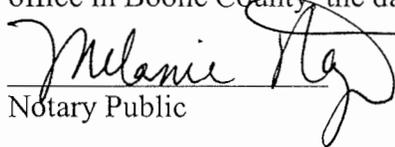
ATTEST:

By Wendy S. Noren  
Wendy S. Noren, County Clerk

STATE OF MISSOURI            )  
  )  
  )        SS  
COUNTY OF BOONE            )

On this 27th day of February, 2001, before me appeared Don Stamper, to me personally known, who being by me duly sworn did say that he is presiding commissioner of the Boone County Commission; that the seal affixed to the foregoing instrument is the official seal of said county; that said instrument was signed in behalf of said commission and county by authority of said commission, and that said Don Stamper acknowledged said instrument to be the free act and deed of said commission.

IN TESTIMONY WHEREOF, I have hereunto set my hand affixed my official seal at my office in Boone County, the day and year first above written.

  
\_\_\_\_\_  
Notary Public

My commission expires: \_\_\_\_\_

MELANIE STAPLETON  
Notary Public-Notary Seal  
State of Missouri  
County of Boone  
My Commission Expires December 2, 2002

**CERTIFIED COPY OF ORDER**

(Rev. Stat. Sec. 2321.)

STATE OF MISSOURI }  
 County of Boone } ea.

February Session of the February Adjourned Term. 20 01

In the County Commission of said county, on the 27<sup>th</sup> day of February 20 01

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

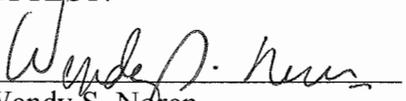
Now on this day the County Commission of the County of Boone does hereby approve a budget amendment as follows:

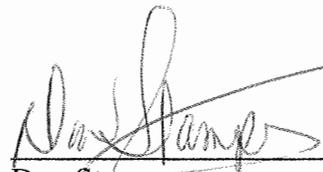
AMOUNT	(increasing) ACCOUNT
\$11,282	1251-10110 Sheriff: Overtime
\$2,497	1251-03411 Federal Grant Reimbursement: Sobriety Checkpoint
\$6,785	1251-03411 Federal Grant Reimbursement: Hazardous Moving Violation ("Operation Slowdown")
\$2,000	1251-03411 Federal Grant Reimbursement: Operation Cash Crop

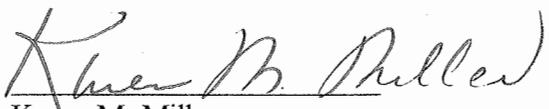
Said amendment is to account for overtime expense reimbursed by grants throughout year 2000.

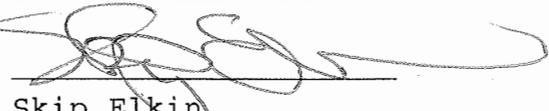
Done this 27<sup>th</sup> day of February, 2001.

ATTEST:

  
 Wendy S. Noren  
 Clerk of the County Commission

  
 Don Stamper  
 Presiding Commissioner

  
 Karen M. Miller  
 District I Commissioner

  
 Skip Elkin  
 District II Commissioner



# SHERIFF

## PERSONNEL DETAIL

POSITION TITLE	1998 FULL - TIME EQUIVALENT	1999 FULL - TIME EQUIVALENT	2000 FULL - TIME EQUIVALENT	1999-2000 CHANGE
Sheriff (Elected)	1.00	1.00	1.00	0.00
Major	*0.50	*0.50	1.00	+0.50
Captain	*1.00	*1.00	*1.50	+0.50
Lieutenant	3.00	3.00	3.00	0.00
Sergeant	5.00	5.00	5.00	0.00
Deputy	25.00	25.00	25.00	0.00
Investigator I	5.00	6.00	6.00	0.00
Office Service Assistant	*0.50	*0.50	*0.50	0.00
Clerk IV	*0.50	*0.50	*0.50	0.00
Warrant Supervisor	1.00	1.00	1.00	0.00
Warrant Clerk	6.00	**6.20	6.20	0.00
Other Clerks	5.00	5.00	5.00	0.00
Warrant Clerk Pool/ Records Clerk Pool	0.27	0.27	0.27	0.00
Crossing Guard Pool	0.12	0.12	0.12	0.00
Contract MU Security Pool	0.00	***1.00	1.00	0.00
<b>Total FTEs</b>	<b>53.89</b>	<b>56.09</b>	<b>57.09</b>	<b>+1.00</b>
Holiday Pay	\$23,680	\$28,883	\$28,270	-\$613
Overtime - Regular	\$73,370	\$80,184	\$70,926	-\$9,258
Overtime - Grants	\$15,172	\$4,456	\$0	-\$4,456
Overtime - Balloon	\$0	\$0	\$0	\$0

\* 0.50 FTE in Corrections (Department 1255)

\*\* One (1) 1.0 FTE Warrant Clerk position converted to two (2) 0.60 Warrant Clerk positions mid-year 1999

\*\*\* Position added mid-year 1999

Position 155 (Major) and position 42 (Captain) have been split equally between departments 1251 and 1255. Beginning January 1, 2000, both of these positions will be fully incorporated into department 1251.

In years prior to 1999, some overtime expense to be reimbursed through grants has been included in the original overtime expense and grant revenue appropriations. However, a new procedure was implemented in 1999. The original appropriations will not include amounts to be reimbursed from grants. Instead, the expenditure and revenue accounts will be amended throughout the year as grant reimbursement is received.

From 1996 to 1999, the following new positions have been added to the Sheriff's operations:

- 2 Deputies COPS Ahead Grant awarded mid-year 1996
- 2 Deputies COPS Ahead Grant awarded mid-year 1997
- 1 Warrant Clerk 1998 Approved supplemental request
- 1 Investigator I DOVE Grant awarded early 1998
- Contract MU Security Pool Contract with MU to provide security during home football games
- 1 Warrant Clerk One existing 1.0 FTE position converted to two 0.6 FTE positions

Dept	Program Name Description CFDA# & %Fed, State, Local	Revenue Code	2000 Budget	2000 Revenue Received	Receipt Date	Receipt Number	For Period	Receivable at 12-31-2000	2000 Requests for Reimbursement Date	Amount	Reimbursement Request Less Revenue Received
1251	US Dept of Justice Office of Community Oriented Policing Services (COPS) Violent Crime Control & Law Enforcement Act of 1994 <b>COPS AHEAD</b> Mid 1995 to mid 1998: One Officer Award: \$55,610 Mid 1996 to mid 1999: Two Officers Award: \$122,254 Dec 1996 to Nov 1999: Two Officers (Grant accepted May 1997) Award: \$122,254 Grant ended 11-30-99	1251-3411	Original Budget 0	2000 0.00 2001 0.00 Total 0.00							
1251	US Dept of Transportation Missouri Dept of Public Safety Division of Highway Safety <b>Police Traffic Services</b> <b>Sobriety Checkpoint</b> CFDA#20.600 10-1-96 to 9-30-97 Award: \$2,250 Project #97-PT-02-51 10-1-97 to 9-30-98 Award: \$2,500 Project #98-PT-02-57 10-1-98 to 9-30-99 Award: \$2,388 Project #99-PT-02-66 10-1-99 to 9-30-00 Award: \$2,500 Project #00-PT-02-23 (Recorded in 1253-3411 through 12-31-97)	1251-3411	Original Budget 5-12-00 Budget Amendment (for equipment) Total 920	0 920 2000 2,230.68 2001 992.15 992.15 Total 3,222.83	7-26-2000 11-9-2000 1-2-2001	1914 2827 8	June (equipment) June-Aug Sept	June June-Aug Sept	726.33 1504.35 992.15	0 0 0	
1251	US Dept of Transportation Missouri Dept of Public Safety Division of Highway Safety <b>Police Traffic Services</b> <b>Hazardous Moving Violation Enforcement</b> Sheriff's Dept title: "Operation Slowdown" CFDA#20.600 10-1-97 to 9-30-98 Award: \$7,000 Project #98-PT-02-57 10-1-98 to 9-30-99 Award: \$7,000 Project #99-PT-02-66 10-1-99 to 9-30-00 Award: \$6,500 Project #00-PT-02-23	1251-3411	Original Budget 3-7-00 Budget Amendment (for equipment) Total 2,000	0 2,000 2000 4,326.20 2001 4,459.08 Total 8,785.28	4-4-2000 5-4-2000 6-2-2000 7-6-2000 11-9-2000 1-2-2001 2-1-2001 2-1-2001	882 1164 1421 1716 2827 8 310 310	Jan (OT) March (OT) Feb (OT) April-May (OT) June-July (OT) Aug-Oct (OT) Radar unit Nov (OT)	Jan March Feb April-May June-July Aug-Oct (OT) Radar unit Nov (OT)	526.64 684.36 601.68 1,012.04 1,501.48 1,891.84 2,000.00 567.24 1,891.84 2,000.00 567.24	0 0 0 0 0 0 0 0	

Dept	Program Name Description CFDA# & %Fed, State, Local	Revenue Code		2000 Budget	2000 Revenue Received	Receipt Date	Receipt Number	For Period	Receivable at 12-31-2000	2000 Requests for Reimbursement Date	Amount	Reimbursement Request Less Revenue Received
1251	US Dept of Justice Federal Bureau of Investigation (FBI) <b>MUSTANG</b> Mid-Missouri Unified Strike Team & Narcotics Group Overtime Reimbursement 100% Federal CFDA #: n/a	1251-3411	Original Budget	0								
				2000	0.00							
				2001	0.00							
				Total	0.00				0.00			
1251	US Dept of Health & Human Services Substance Abuse & Mental Health Services Administration Substance Abuse Prevention & Treatment Block Grant Missouri State Highway Patrol Missouri Dept of Mental Health Division of Alcohol & Drug Abuse Missouri Tobacco Outlet Compliance Project CFDA# 93.959 100% Federal	1251-3411	Original Budget	0								
				2000	0.00							
				2001	0.00							
				Total	0.00				0.00			
1251	US Dept of Justice Drug Enforcement Administration (DEA) Marijuana Eradication Grant Missouri Sheriff's Association Drug Interdiction Committee <b>Operation Cash Crop</b> Reimbursement for drug buys & overtime 100% Federal	1251-3411	Original Budget	0	1,100.00	11-9-2000	2828	Jan-Oct		Jan-Oct	1,100.00	0
					900.00	12-18-2000	3203	Jan-Oct		Jan-Oct	900.00	0
				2000	2,000.00							
				2001	0.00							
				Total	2,000.00				0.00			
1251	US Dept of Justice Missouri Dept of Public Safety Missouri State Highway Patrol <b>Domestic Violence Enforcement (DOVE)</b> CFDA #: 16.588 100% Federal 2-1-1998 to 12-31-1998 Award: \$37,418 Grant contract #98-VAWA-0005 1-1-1999 to 12-31-1999 Award: \$33,548 Grant contract #98-VAWA-0005 Changed to #96-VAWA-0079 1-1-2000 to 12-31-2000 Award: \$33,548 Grant contract #99-VAWA-0004 According to Beverly Braun, we will not receive any reimbursement for overtime from the DOVE grant during 1999.	1251-3411	Original Budget	33,548	2,397.37	4-4-2000	883	Jan		Jan	2,397.37	0
					4,985.64	6-23-2000	1618	Feb-March		Feb-March	4,985.64	0
					7,637.98	8-7-2000	2011	April-May		April-May	7,637.98	0
					2,397.37	9-20-2000	2406	June		June	2,397.37	0
					2,397.37	11-20-2000	2911	July		July	2,397.37	0
				2000	19,815.73							
				2001	0.00							
				Total	19,815.73				0.00			

Dept	Program Name Description CFDA# & %Fed, State, Local	Revenue Code	2000 Budget	2000 Revenue Received	Receipt Date	Receipt Number	For Period	Receivable at 12-31-2000	2000 Requests for Reimbursement Date	Amount	Reimbursement Request Less Revenue Received
1251	US Dept of Justice Missouri Dept of Public Safety Narcotics Control Assistance Program	1251-3411	Original Budget	0							
			8-23-00 Budget Amendment	7,166							
				<u>7,166</u>							
	<b>Pawnshop Tracking &amp; Recovery System Grant</b> CFDA #: 16.579 75% Federal, 25% Local 7-1-2000 to 6-30-2001			2000				0.00			
	Grant award (federal funds): \$7,166							4,257.00			
	Local match (from Forfeiture Fund): \$2,388				2-2-2001	318	Dec		Dec	4,257.00	0
	Grant contract #2000-NCD5-070			2001							
								4,257.00			
				<u>Total</u>				<u>4,257.00</u>			

# CERTIFIED COPY OF ORDER

(Rev. Stat. Sec. 2321.)

February Session of the February Adjourned Term. 20 01

STATE OF MISSOURI }  
County of Boone } ea.

In the County Commission of said county, on the 27<sup>th</sup> day of February 20 01

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

Now on this day the County Commission of the County of Boone does hereby rescind Commission Order 50-2001 and reappoint Scott Cristal to a 2-year term on the Community Services Advisory Commission. Said term will be retroactive to January 1, 2001 and will expire on December 31, 2003.

Done this 27<sup>th</sup> day of February, 2001.

ATTEST:

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



Don Stamper  
Presiding Commissioner



Karen M. Miller  
District I Commissioner



Skip Elkin  
District II Commissioner

# CERTIFIED COPY OF ORDER

(Rev. Stat. Sec. 2321.)

STATE OF MISSOURI }  
County of Boone } ea.

February Session of the November Adjourned Term. 20 01

In the County Commission of said county, on the 1<sup>st</sup> day of February 20 01

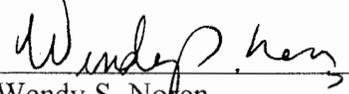
the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby reappoint Scott Cristal to a three-year term on the Community Services Advisory Commission. Said term will be retroactive to January 1, 2001 and will expire on December 31, ~~2004~~ 2003.

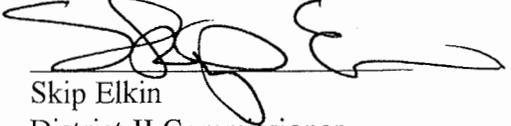
Done this 1<sup>st</sup> day of February, 2001.

  
Don Stamper  
Presiding Commissioner

ATTEST:

  
Wendy S. Nofen  
Clerk of the County Commission

  
Karen M. Miller  
District I Commissioner

  
Skip Elkin  
District II Commissioner

Don Stamper, Presiding Commissioner  
Karen, M. Miller, District I Commissioner  
Linda Vogt, District II Commissioner



Boone County Government Center  
801 E. Walnut Room 245  
Columbia, MO 65201  
573-886-4305 FAX 573-886-4311  
E-mail: commission@boonecountymissouri.org

Melanie,  
Put thru  
Commission  
for re-appointment

# Boone County Commission

RECEIVED  
DEC 20 2000  
Boone County Commission

## BOONE COUNTY BOARD OR COMMISSION APPLICATION FORM

Board or Commission: Boone County Community Services Advisory Commission Term \_\_\_\_\_

Current Township: \_\_\_\_\_ Today's Date: 12/13/00

Name: Scott Cristal

Home Address: 10650 W. Kings Lane Zip Code: 65201

Business Address: PO Box 40 Zip Code: \_\_\_\_\_

Home Phone: 573 447-1193 Work Phone: 573 446 0600  
Fax: 573 447 1193 E-mail: scristal@midgarden.net

Qualifications: Served 1 partial term on the commission. Involved w/ commission  
aware of how issues & people are effected by actions of this commission, and  
as county co vice chair, able to work w/ members to allocate money on equitable basis.

Past Community Service: Served term on the commission, elected co-vice chair  
member. Now have Corp (KERN) worked w/ RUMEL on various issues including problem w/ Court  
take, serve as commissioner on City of Columbia Cultural Affairs Commission - also secret  
work on various campaigns including issue oriented ones - Member Community Partnership

References: Kay Bonette Cullison, Almeta Crayton, Cheryl Miller or please refer to  
original application as well as anyone on the commission

I have no objections to the information in this application being made public. To the best of my knowledge at this time I can serve a full term if appointed. I do hereby certify that the above information is true and accurate.

Scott Cristal  
Applicant Signature

Return Application To: Boone County Commission Office  
Boone County Government Center  
801 East Walnut, Room 245  
Columbia, MO 65201  
Fax: 573-886-4311

Don Stamper, Presiding Commissioner  
Karen M. Miller, District I Commissioner  
Skip Elkin, District II Commissioner



Boone County Government Center  
801 East Walnut Room 245  
Columbia, MO 65201-7732  
573-886-4305 • FAX 573-886-4311

# Boone County Commission

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February 14, 2001

Mr. Phil Steinhaus  
Manager, Office of Community Services  
13 N. 8<sup>th</sup> St.  
P.O. Box N  
Columbia, MO 65205

Dear Mr. Steinhaus:

The Boone County Commission has met and reappointed Scott Cristal to the Boone County Community Services Advisory Commission. Mr. Cristal's three year term will expire on December 31, 2004. I have enclosed his application, the letter confirming his appointment, and an updated roster of the Community Services Advisory board.

If I can be of further assistance, please let me know.

Sincerely,

A handwritten signature in cursive script that reads "Donna".

Donna Minnis  
Administrative Assistant

enclosures

Don Stamper, Presiding Commissioner  
Karen M. Miller, District I Commissioner  
Skip Elkin, District II Commissioner



Boone County Government Center  
801 East Walnut Room 245  
Columbia, MO 65201-7732  
573-886-4305 • FAX 573-886-4311

# Boone County Commission

---

February 14, 2001

Mr. Scott Cristal  
10650 W. Kings Lane  
Rocheport, MO 65279

Dear Mr. Cristal:

The Boone County Commission is pleased to inform you, that you have been reappointed to the Boone County Community Services Advisory Commission, with a three year term ending, December 31, 2004. An updated roster is enclosed.

We appreciate your interest in serving Boone Countians and look forward to working with you through your new term.

Sincerely,

Don Stamper  
Presiding Commissioner

Karen M. Miller  
District I Commissioner

Skip Elkin  
District II Commissioner

DS:dm

Enclosure

# CERTIFIED COPY OF ORDER

(Rev. Stat. Sec. 2321.)

STATE OF MISSOURI }  
County of Boone } ea.

February Session of the February Adjourned Term. 20 01

In the County Commission of said county, on the 27<sup>th</sup> day of February 20 01

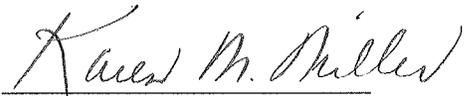
the following, among other proceedings, were had, viz:

Now on this day the County Commission of the County of Boone does hereby authorize the Presiding Commissioner to sign a proposal in the amount of \$3200 authorizing the Public Works Director to work with Malicot-Winslow Engineers, PC for the Boone County Jail Humidity Study.

Done this 27<sup>th</sup> day of February, 2001.



Don Stamper  
Presiding Commissioner

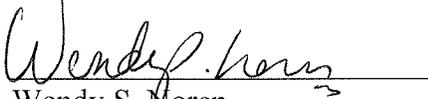


Karen M. Miller  
District I Commissioner



Skip Elkin  
District II Commissioner

ATTEST:



Wendy S. Moren  
Clerk of the County Commission

84

MALICOAT-WINSLOW ENGINEERS, P.C.  
5649 NORTH CLEARVIEW ROAD  
COLUMBIA, MISSOURI 65202-9687

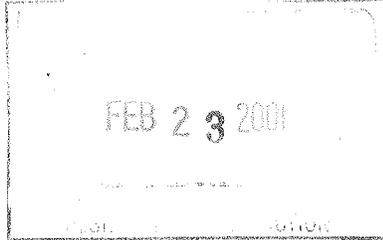
DIE L. MALICOAT, P.E.  
573-875-1300 EXT 22

MECHANICAL AND ELECTRICAL ENGINEERS  
email: mw-engrs@socket.net

CARROLL E. WINSLOW, P.E.  
573-875-1300 EXT 2 FAX 573-875-1305

February 20, 2001

David Mink, P.E. Director  
Boone Co. Public Works  
601 E. Walnut  
Columbia, MO 65201



RE: Boone County Jail  
Humidity Study

Dear Mr. Mink:

We propose to study the excessive humidity situation being experienced at the above project and propose solutions and budgets for your review. We will plan to prepare a report of our conclusions and present it to you and also to the County Commission. We will provide 10 copies of our report.

It is assumed that the owner will be able to provide us with complete original building blueprints.

Our total fee for all of the above will be \$3200.00

We will plan to complete the report by April 10, 2001.

Please sign and return one copy of this proposal if you want us to proceed.

Sincerely,

*Carroll Winslow*  
Carroll Winslow

CW:jw

cc: file

*Alvin Stamps*

Approved

MALICOAT-WINSLOW ENGINEERS, P.C.  
5649 NORTH CLEARVIEW ROAD  
COLUMBIA, MISSOURI 65202-9687

EDDIE L. MALICOAT, P.E.  
875-1300 EXT 22

MECHANICAL AND ELECTRICAL ENGINEERS  
email: mw-engrs@socket.net

CARROLL E. WINSLOW, P.E.  
573-875-1300 EXT 2 FAX 573-875-1300

February 20, 2001

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Boone Co. Public Works  
601 E. Walnut  
Columbia, MO 65201



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Please sign and return one copy of this proposal if you want us to proceed.

Sincerely,

*Carroll Winslow*  
Carroll Winslow

CW:jw

cc: file

*Mark Stampe*

Approved