Boone County Purchasing



601 E. Walnut, 2nd Floor Columbia, MO 65201

Alice Winkelman, Buyer

(573) 886-4392 - FAX (573) 886-4390 Email: awinkelman@boonecountymo.org

Bid Data

Bid Number: 45-08JUL04

Commodity Title: Pavement Repair & Drainage Improvements

DIRECT BID FORMAT OR SUBMISSION QUESTIONS TO THE PURCHASING DEPARTMENT

Bid Submission Address and Deadline

Day / Date: THURSDAY, JULY 8, 2004

Time: 10:30 A.M. (Bids received after this time will be returned unopened)

Location / Mail Address: Boone County Purchasing Department

Boone County Johnson Building

601 E. Walnut, Room 208 Columbia, MO 65201

Directions: The Johnson Building is located on the Northeast corner at 6th

Street and Walnut Street. Enter the building from the East Side. Wheel chair accessible entrance is available on the West side of

the building.

Bid Opening

Day / Date: THURSDAY, JULY 8, 2004

Time: 10:30 A.M.

Location / Address: Boone County Johnson Building Conference Room

601 E. Walnut, Room 213 Columbia, MO 65201

Bid Contents

1.0: Introduction and General Terms and Conditions of

Bidding

2.0: Primary Specifications

3.0: Response Presentation and Review

4.0: Response Form

Exhibit A - Prior Experience

Exhibit B – Standard Terms and Conditions

Exhibit C - Drawings for Base Bid 1 & Alternate Bid 1

Note: Bidders are strongly encouraged to visit the site.

- 1. Introduction and General Conditions of Bidding
- 1.1. **INVITATION** The County of Boone, through its Purchasing Department, invites responses 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 the primary contact(s) for interaction regarding Contract performance.

1.2.2. **Bidder/Contractor/Supplier -** The businesses having some sort of relationship to or with the County. 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 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. An "Invitation For Bid" is used when the need is well defined. An "Invitation For Proposal" is used when the County will consider solutions, which may vary significantly from each other or from the County's initial expectations.
- 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, preferably by fax or e-mail, to the Purchasing Department. Answers citing the questions asked, but not identifying the questioner will be distributed simultaneously to all known prospective Bidders. Note: Written requirements in the Bid or its Amendments are binding, but any oral communications between County and Bidder are not binding.
- 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.
- 1.3.3. **Pre-Bid Meeting** There will <u>not</u> be a pre-bid meeting for this project. Bidders are strongly encouraged to visit the site.
 - 1.4. AWARD Award will be made to the Bidder(s) whose offer(s) provides 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.
 - 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; and
- 3) The provisions of the Bidder's Response.
- 1.6. **CONTRACT PERIOD** Contracting resulting from this Bid will have an initial start of approximately August 2004.
- 1.7. **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 AND/OR SERVICES 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 contract for the furnishing of all labor, materials, equipment, and supervision to perform **Pavement Repair & Drainage Improvements** at two locations owned by Boone County, Missouri.
- 2.1.1. **Scope of Services** The Contractor shall provide all labor, materials, equipment, and supervision to complete the following improvements. Drawings and details for each bid are located in Exhibits C and D. *Base Bid 1: Courthouse Sidewalk* Patch Pavement, replace joint sealer, and replace concrete panels. *Alternate Bid 1: Johnson Building* Install drainage piping.
- 2.1.2. **Contract Documents -** The successful Bidder 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 the Bidder desires to contract under his own written agreement, any such proposed agreement shall be submitted in blank with his bid. The 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 the County legal counsel.
- 2.1.3. **Project Schedule** Work can be performed weekdays 7:00 a.m. to 5:00 p.m. It is the Contractor's responsibility to notify the County within 48 hours of starting the work. A project schedule depicting the progression of the work shall be submitted for the County's approval.

Bid #45-08JUL04

2.2. TECHNICAL REQUIREMENTS

2.2.1. Pavement Repair (See Exhibit C for Drawings)

Base Bid 1: Court House Sidewalk:

Pavement Patch = 390 Linear Feet Joint Sealer = 6,032 Linear Feet Concrete Remove and Replace = 51 Square Yards

Pavement Patch:

- 1. Remove loose material and clean area thoroughly.
- 2. Prepare epoxy polymer concrete as recommended by the manufacture and apply to patch area in approximately ¼-inch layers. Patch areas are of variable width. Smooth each layer and allow to partially dry before applying the next layer. Build up layers until it reaches the same level as the original concrete. Smooth out the area with a trowel or float, as you would finish regular concrete.
- 3. Use Thermal-Chem Mortar Resin 3VO epoxy polymer concrete or approved equal.
- 4. Contractor is responsible to keep foot and vehicle traffic off of the area until cured.

Joint Sealer:

- 1. Remove existing joint sealer and all other foreign particles so that the joint is clean.
- 2. Prepare and apply joint sealer as recommended by the manufacture.
- 3. Use Thermal-Chem FlexGard 125, Produce 104 or approved equal.
- 4. Contractor is responsible to keep foot and vehicle traffic off of the area until joint sealer has become tack-free.

Concrete Remove and Replace:

- 1. Concrete Remove and Replace include the two panels at the courthouse and the eight panels east of the Johnson Building Parking Lot. At the courthouse over cut the south panel by approximately 6 inches.
- 2. Remove the existing concrete panels and dispose of waste material legally off-site. Plan views of the of the two panels at the courthouse and of the eight panels east of the Johnson Building Parking Lot are shown in Exhibit C.
- 3. At the site east of the Johnson Building Parking Lot, do <u>not</u> remove and replace the 6-foot by 6-foot concrete panel that has been previously replaced. Remove and replace the deterioration 8-foot 8-inch curb section.
- 4. Remove the loose materials and prepare the subgrade for concrete replacement.
- 5. Replacement Portland cement concrete shall meet Boone County, Missouri Roadway Regulations, Chapter II, Section 234.2.
- 6. Use #4 dowels on 16-inch spacing to tie new panels into existing panels. Tie the elevations of the new panels into the elevations of the existing adjacent panels such that there will not be an elevation difference between abutting concrete panels.
- 7. Broom finished payement such that repair area has the same appearance as the remaining sidewalk.
- 8. Seal the joints to match the adjacent panels. The joint sealer shall be the same as used on the remainder of the project.
- 9. Contractor is responsible to keep foot and vehicle traffic off of the area until cured.

$2.2.2. \quad \textbf{Drainage Improvements (See Exhibit C for Drawings)}$

Alternate Bid 1: Johnson Building:

Install drainage piping = 1 Lump Sum Unit.

- 1. The attached plans (Exhibit C show the location of work and instructions for installation. Measurements provided are approximate and shall be verified by interested Bidders.
- 2. Materials to be provided shall meet the minimum standards as stated in the <u>Boone County, Missouri Roadway Regulations</u>, Chapter II, Road, <u>Bridge & Right of Way Regulations</u>, Revised-April 22, 2003. All materials specified on the plans shall be submitted as such or an approved equal.
- 3. The Contractor will need to obtain a right-of-way permit from the City of Columbia.
- 4. The alley will need to be repaired in accordance with the City of Columbia standard for patching paved streets (Section 120.01).
- 5. Materials required for submittal review include, but are not limited to:
 - Drainage Grate and Cover, and
 - Drainage Pipe.

2.3. GENERAL CONDITIONS

- 2.3.1. The Contractor shall be responsible for the removal and lawful disposal of all excess materials and costs for the said services are included in the bid price.
- 2.3.2. The Contractor shall complete all required utility locations prior to commencement of work. The Contractor shall ascertain the presence and location of utilities within the work area. The Contractor shall notify and coordinate the utility that may be affected by the work.
- 2.3.3. The Contractor shall be responsible for accurately measuring the quantity of material required for the entire project. Quantities are estimated. The Contractor is strongly encouraged to view the proposed areas. The County does not guarantee minimum order quantities.
- 2.3.4. The Contractor shall comply 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 or her from responsibility of compliance with all said laws, ordinances, rules, and regulations.
- 2.3.5. The Contractor is required to schedule the project inspections with the Facility Maintenance Department.
- 2.3.6. The Contractor shall provide all material safety data sheets prior to use of any hazardous materials on the sites.
- 2.3.7. The Contractor shall be responsible for removing and replacing damaged surfaces during the project at no additional expense to the County.
- 2.3.8. The Contractor shall be responsible for the demolition and removal of any existing materials in the work area. The Contractor shall leave the site neat and clean at the end of each day.
- 2.3.9. The Contractor shall be required to provide appropriate warning signs and barricades during the project to insure public safety.
- 2.3.10. The contractor shall provide new material of high quality that shall give long life. The workmanship shall be of high quality in every detail. Material submittal shall be sent to Facility Maintenance Department for review prior to installation. Any item installed prior to approval may be subject to removal at the Contractor's expense.
- 2.3.11. The Contractor shall begin the project no later than 7 days after the Notice to Proceed. The Contractor will be expected to complete the project within 15 working days after the Notice to Proceed.
- 2.3.12. The Contractor shall request the County to conduct site inspections after the project is complete. The County 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 County. Final project approval is contingent upon the County's final inspection and written approval.

2.4. WARRANTY – The Contractor shall be responsible for a period of one year from and after the date of final acceptance by the County of the work covered by this Contract, for any repairs or replacements caused by defective materials, workmanship, or equipment which, in the judgment of the County, shall become necessary during such period. The Contractor shall undertake with due diligence to make the aforesaid repairs and/or replacements within ten days after receiving written notice that such repairs or replacements are necessary.

- 2.5. PREVAILING WAGE Prevailing hourly rate of wages is <u>only</u> required for the Alternate Bid 1 of this Contract. The Base Bid 1 does <u>not</u> have to be completed at the prevailing hourly rate of wages.
- 2.6. **BILLING AND PAYMENT -** Payment shall be made after the work has been completed and an invoice has been received. The vendor must submit an invoice and charges must only include prices listed in the vender's bid response. Any additional costs associated with this project must be approved through the appropriate Change Order mechanism approved by the Boone County Commission. No additional fees or taxes shall be included as additional charges. Invoices should be submitted to Boone County Facility Maintenance for payment which will be made 30 days after receipt of a correct and valid invoice. The billing address is Boone 601 E. Walnut St. 2nd Floor, Columbia, MO 65201.
- 2.7. **INSURANCE REQUIREMENTS** The Contractor shall not commence work under this Contract until they have obtained all insurance required under this paragraph and the County has approved such insurance. All policies shall be in amounts, form, and companies satisfactory to the County. The County must carry an A-6 or better rating as listed in the A.M. Best or Equivalent Rating Guide.
- 2.7.1. **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. 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 Employee's Liability Insurance for the protections of their employees not otherwise protected.
- 2.7.2. 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 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 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.
- 2.7.3. **Automobile Public Liability and Property** The Contractor shall maintain during the life of the this Contract, automobile public liability insurance in the amount of not less than \$2,000,000.00 combined single limit for any one occurrence and not less than \$150,000.00 per individual. Said insurance shall cover both bodily injury, including accidental death and property damaged, to protect Contractor 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.
- 2.7.4. Owner's Contingent or Protective Liability and Property Damage The Contractor shall provide the County with proof of Owner's Protective Liability and Property Damage Insurance, 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. It is preferred that this policy includes a provision for alleged assault and battery. The minimum amounts of such insurance will be \$2,000,000.00 per occurrence, combined single limits. Should any work be subcontracted, these limits will also apply.
- 2.7.5. **Insurance Certifications** 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 and requiring a 30 day mandatory cancellation notice. In addition, such insurance shall be on an occurrence basis and shall remain in effect until such time as the County has made final acceptance of each project.

2.7.6. **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 providing these services. This provision does not, however, require Contractor to indemnify, hold harmless, or defend the County of Boone from its own negligence.

- SALES/USE TAX EXEMPTION County will provide the Contractor with a completed Missouri Project 2.7.7. 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 subcontractors 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.
 - 2.9. **LIEN WAIVERS** Prior to the release of Contract amount, the Contractor shall file with the County the following:
 - 1. An affidavit, to the effect that all payments have been made and all claims have been released for all materials, labor, and other items covered by the Contract;
 - 2. Lien waivers signed by each supplier furnishing materials to the project releasing all claims to said materials; and
 - 3. Lien waivers signed by each Sub-Contractor furnishing labor to the project releasing all claims against Boone County for said labor.
- 2.10. **BID CLARIFICATION -** Any questions or clarifications concerning bid documents should be addressed in writing, PRIOR TO BID OPENING, to Alice Winkelman, 601 E. Walnut, 2nd Floor, Columbia, Missouri 65201. Phone: 573-886-4392, Fax: 573-886-4390 or Email: awinkelman@boonecountymo.org.
- 2.11. **DESIGNEE** Ken Roberts, Manager of Boone County Public Facility Maintenance, 573-886-4401, 601 E. Walnut St. 2nd Floor, Columbia, MO 65201

- 3. Response Presentation and Review
- 3.1. **RESPONSE CONTENT** In order to enable direct comparison of competing Responses, Bidder must submit Response in strict conformity to the requirements stated herein. Failure to adhere to all requirements may result in Bidder's 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."
- 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. The County is 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 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**, **the due date**, **and time**.
- 3.2.2. **Advice of Award -** If you wish to be advised of the outcome of this Bid, enclose with your Response a self-addressed stamped return envelope (size 10, first-class one-ounce postage) for our use in mailing a copy of the summary recap of the award. Notification will be by mail only, except to awarded Bidder.
- 3.2.3. **Web Page -** Vendors may view Bids, Bid Tabulations, and Bid Awards on the Boone County Web Page at http://www.showmeboone.com.
- 3.3. **BID OPENING -** On the date, time, and 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** The County reserves 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** The County reserves 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** The County's 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** The County will evaluate submitted Responses in relation to all aspects of this Bid.
- 3.5.2. **Acceptability** The County reserves the sole right to determine whether goods and/or services offered are acceptable for County use.
- 3.5.3. **Endurance of Pricing** Bidder's pricing must be held until contract execution or 60 days, whichever comes first.

County o	of Boone		P	Purchasing De	<u>partment</u>					
4.	Response Form – Submit three complete copies of your Response in a single sealed envelope, clearly marked on the outside, left corner with your company name and return address, the proposal number and the due date and time.									
4.1.	Company Name:									
4.2.	Address:									
4.3.	City/Zip:									
4.4.	Phone Number:									
4.5.	Fax Number:									
4.6.	Federal Tax ID:									
4.6.1.	() Corporation									
4.7.	Bid Response - Bid prices must include any as work described in Section 2 of this bid request		s, and materi	al required to	perform the					
	Description	Unit of Measure	Quantity	Unit Price	Extended Total					
4.7.1.	Base Bid 1: Concrete Repair									
	Pavement Patch	Linear Foot	390	\$	\$					
	Joint Sealer	Linear Foot	6,032	\$	\$					
	Concrete Remove and Replace	Square Yards	51	\$	\$					
			Base Bid 1	Total Cost =	\$					
4.7.2.	Alternate Bid 1: Drainage Improvements									
	Under Drain Construction	Lump Sum	1	\$	\$					
	Note: All quantities are approximate. Payma County has the right to overrun or und				The					
4.8.	The undersigned offers to furnish and deliver the articles or services as specified at the prices an 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.									
	Authorized Representative (Sign By Hand): Date:									
	Type or Print Signed Name:									
	Company:									
4.9.	Bidder must provide three references for service size and scope of this project. References show				similar in					

Bid #45-08JUL04

EXHIBIT A

<u>PRIOR EXPERIENCE</u>
(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):

1.



Exhibit B Standard Terms and Conditions

Boone County Purchasing 601 E. Walnut, Room 209 Columbia, MO 65201 Alice Winkelman, Buyer P: 573-886-4392 – F: 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 shall 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 will be accepted.
- 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.

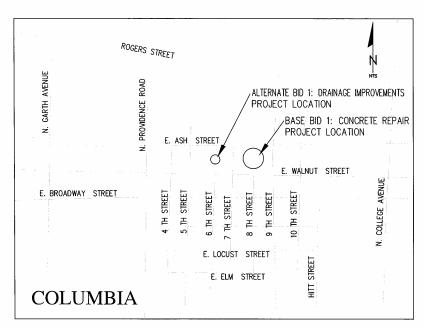
EXHIBIT C (8 Pages)

DRAWINGS AND SPECIFICATIONS

FOR BASE BID 1 & ALTERNATE BID 1

CONCRETE REPAIR

DRAINAGE IMPROVEMENTS



VICINITY MAP

GENERAL NOTES

- UTILITIES: LOCATIONS OF EXISTING UTILITIES ARE NOT SHOWN.
 IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES AND OBTAIN UTILITY STAKING PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN PERMIT FROM CITY OF COLUMBIA PUBLIC WORKS PROTECTIVE INSPECTION, DAVE SORRELL AT 875-7575.
- CONTRACTOR SHALL COORDINATE PARKING SERVICES IN ALLEY WITH CITY OF COLUMBIA PUBLIC WORKS, PARKING SERVICES.
- 4. ALL GRADES SHOWN ARE APPROXIMATE, CONTRACTOR IS TO VERIFY POSITIVE DRAINAGE TO THE GUTTER FLOWLINE OF 6th STREET.
- 5. ALL UNPAYED OR UNSURFACED AREAS DISTURBED DURING CONSTRUCTION SHALL BE FERTILIZED, SEEDED AND MULCHED TO MINIMIZE EROSION, AS SOON AS POSSIBLE AFTER INSTALLATION OF THE CATCH BASIN AND PIPING.
- 6. TO MINIMIZE INCONVENIENCE TO THE PUBLIC, THE CONTRACTOR SHALL SUBMIT A COMPLETE SCHEDULE FOR CONSTRUCTION FOR THE COUNTY'S APPROVAL WHICH STATES THE SEQUENCE AND THE SECOND EACH PUBLIC STATES THE SEQUENCE AND THE SHALL SECOND OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE CONTRACTOR MUST COORDINATE ACCESS TO PARKING LOT WITH BOONE COUNTY FACILITY MAINTENANCE DEPTARTMENT.

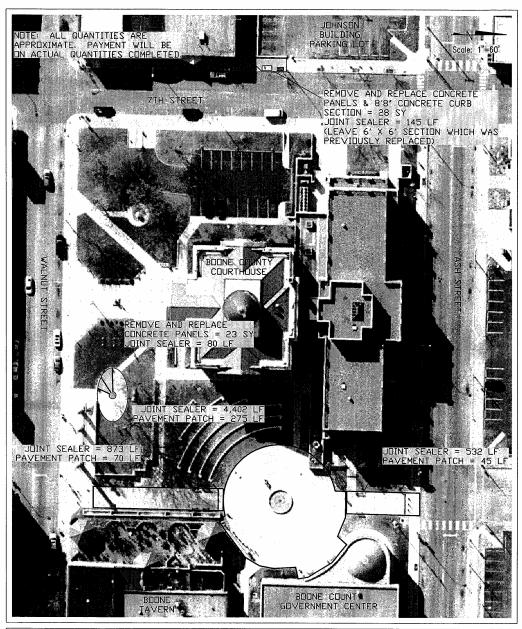
UTILITY COMPANIES

WATER SUPPLY & ELECTRIC POWER
CITY OF COLUMBIA
WATER & LIGHT DEPT.
15 NORTH 7th ST.
COLUMBIA , MO 65205
573-874-7325

NATURAL GAS TOM MILLS AMEREN UE(GAS) 210 ORR ST. COLUMBIA , MO 65202 573-876-3030 TELEPHONE
DON WILSON
CENTURYTEL
625 CHERRY STREET
COLUMBIA , MO 65201
573-886-3500

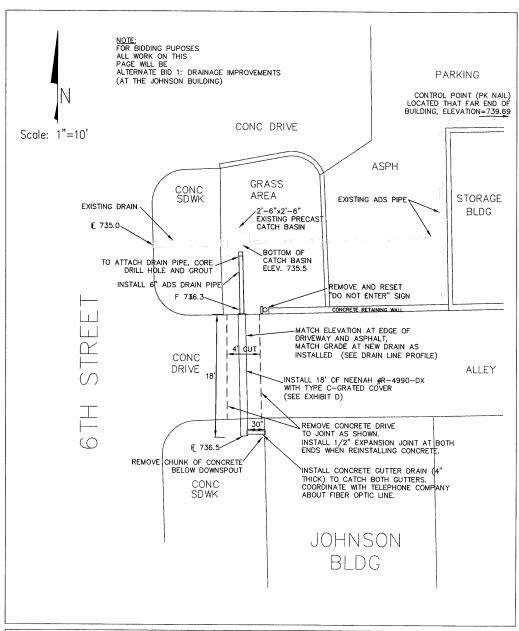
LOCATES MISSOURI ONE CALL INC. 1022 B NORTHEAST DRIVE JEFFERSON CITY , MO 65109 800-344-7483

BOONE COUNTY PUBLIC WORKS DESIGN AND CONSTRUCTION DIVISION 5551 HIGHWAY 63 SOUTH COLUMBIA, MISSOURI 65201-9711 PHONE (573) 449-8515 FAX (573) 875-1602 PAVEMENT REPAIRS & DRAINAGE IMPROVEMENTS
BASE BID 1 & ALTERNATE BID 1
SITE LOCATION/GENERAL NOTES
SHEET 1 OF 4



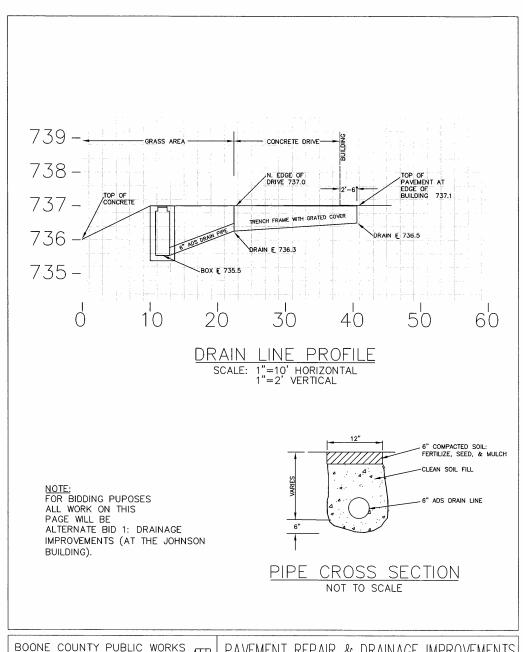
BOONE COUNTY PUBLIC WORKS
DESIGN AND CONSTRUCTION DIVISION
5551 HIGHWAY 63 SOUTH
COLUMBIA, MISSOURI 65201—9711
PHONE (573) 449—8515
FAX (573) 875—1602

PAVEMENT REPAIR & DRAINAGE IMPROVEMENTS
BASE BID 1: CONCRETE REPAIR
SITE LAYOUT SHEET 2 OF 4



BOONE COUNTY PUBLIC WORKS
DESIGN AND CONSTRUCTION DIVISION
5551 HIGHWAY 63 SOUTH
COLUMBIA, MISSOURI 65201-9711
PHONE (573) 449-8515
FAX (573) 875-1602

PAVEMENT REPAIR & DRAINAGE IMPROVEMENTS
ALTERNATE BID 1: DRAINAGE IMPROVEMENTS
SITE LAYOUT
SHEET 3 OF 4



BOONE COUNTY PUBLIC WORKS
DESIGN AND CONSTRUCTION DIVISION
5551 HIGHWAY 63 SOUTH
COLUMBIA, MISSOURI 65201-9711
PHONE (573) 449-8515
FAX (573) 875-1602

PAVEMENT REPAIR & DRAINAGE IMPROVEMENTS
ALTERNATE BID 1: DRAINAGE IMPROVEMENTS
PROFILE LINE A SHEET 4 OF 4

NOTE: When specifying/ordering grates, refer to "CHOOSING THE PROPER INLET GRATE" on pages 108-109. For FREE OPEN AREAS of Neenah Grates, refer to pages 326-330.

R-4990 Series

Heavy Duty Trench Frames with Grated or Solid Covers

MATERIALS: All frames and grates are furnished standard in Gray Iron, Class 35, for heavy duty use. For extra heavy duty use, see page 204 for Airport Trenches.

Neenah recommends project designers avoid the use of light duty trench installations because it is likely that applications will be subjected to heavy delivery vehicle traffic at some time. Furthermore, the use of a site could be changed to heavy duty use patterns at some unanticipated future date.

Standard Cover Dimensions

Dimensions in inches									
Catalog No.	A	В	C	Туре А	Type G	Type D	Туре Е	Type P	Туре (
R-4990-AX	8	1 1/2	6	х	х	Х	Х	X	
R-4990-BX	10	1 1/2	8	Χ.	x	x	x	x	
R-4990-CX	12	1 1/2	10	X	х	X	X	X	х
R-4990-DX	14	1 1/2	12	х	X	X	X	X	х
R-4990-EX	17	1 1/2	15	х	х	X	x	X	
R-4990-FX	20	1 1/2	18	х	X	х	х	Х	
R-4990-GX	23	1 1/2	21	х	X	×			
R-4990-HX	26	1 1/2	24	х	х	X			x
R-4990-JX	30	2	27	х	х	X			
R-4990-KX	33	2	30	х	х	x	х .		_
R-4990-LX	36	2	33	Х	х	x			
R-4990-MX	39	2	36	х	x	x			
R-4990-NX	45	. 2	42	х	х	X			
R-4990-0X	51	2	48	x		x			



Illustrating heavy duty trench frames and Type A grates to drain loading ramp. Trench castings such as these are being used successfully in subway construction, intersecting elevated highways and underpasses, airport hanger doors, ramps and other special purposes.

Note: Rib depths on larger span trench grates and covers exceed the noted "B" dimension-please contact Neenah for detail drawings.

R-4999 Series Bolted Transverse Drainage Structures

Heavy Duty

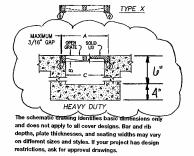
Illustrating flat type surface showing Type X frame and Type C grate.

Standard frame and cover sections of this type are bolted and manufactured in 24" standard lengths. See page 284 for R-4999 series with Type L vane grates.



When botted frames and grates are furnished, they are shipped assembled. AT NO TIME SHOULD THE UNITS BE DISASSEMBLED DURING INSTALLATION!

	Dimensions in Inches								
Catalog No.	Α	В	C	Туре А	Type C	Туре D	Туре Е	Type P	Type Q
R-4999-AX	8	1 1/2	6	х	x	X	х	X	
R-4999-BX	10	1 1/2	8	х	X	X		X	
R-4999-CX	12	1 1/2	10	X	Х	х	х	x	X
R-4999-DX	14	1 1/2	12	х	х	X	X	×	x
R-4999-EX	17	1 1/2	15	х	X	x	x	x	
R-4999-FX	20	1 1/2	18	х	x	×	X	. х	
R-4999-GX	23	1 1/2	21	x	X	x			
R-4999-HX	26	1 1/2	24	х	x	X			х
R-4999-JX	30	2	27	х	X	x			
R-4999-KX	33	2	30	X	X	X	x		
R-4999-LX	36	2	33	X	X	x			
R-4999-MX	39	2	36	x	x	X			
R-4999-NX	45	2	42	X	x	X			
R-4999-0X	51	2	48	x		X			
x-Indicates av	/ailahilit	,							



NEENAH IVE

NOTE: When specifying/ordering grates, refer to "CHOOSING THE PROPER INLET GRATE" on pages 108-109. For FREE OPEN AREAS of Neenah Grates, refer to pages 326-330.

Read Carefully Before Ordering

The various standard trench drains shown here are available with a number of alternates illustrated below. It is important to examine all of the variables carefully and specify fully your requirements. Your order will be entered correctly and promptly, if it includes this information:

Specify:

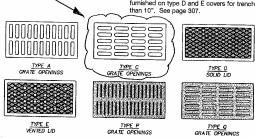
- 1. Complete catalog number
- 2. Frame end pieces, when required.
- 3. Type of grate or lid: A, C, D, E, P, or Q.
- 4. Length of trench.
- 5. Special dimensions such as changes in trench direction, etc. Send details.
- 6. Intersections required: (Y, T, 90°, 45°). (Not available for all trench styles.)
- 7. Pickholes or lift handles if required on "D" or "E" lids.
- If trench drain grates are to be installed in areas having bicycle, pedestrian or handicapped traffic, see
 "CHOOSING THE PROPER INLET GRATE" on page 108.

Standard Support Frame

Standard Cover Types

Frames manufactured in standard lengths up to 36". Fractional frame sections can be furnished to produce a trench drain of any overall length. When necessary, frames can be closed at ends by specifying end frame sections.

Grated and solid covers shown below are usually manufactured in standard maximum lengths of 24". They can be furnished in fractional sizes to fit any overall trenchlength required. When ordering R-4990 or R-4999 trench drains, specify type of covers. Lift holes or handles are furnished on type D and E covers for trench widths larger than 10". See page 307.



Type "P" grates with 1/a" slot widths and type "Q" grates with 1/a" slot widths are especially suitable for areas of heavy pedestrian traffic.

Trench Intersections

All styles are not available for all trench types and sizes.



45' TURN



90° TURN



T SECTION



NEENAH INT

Suggested Forming Procedures For Installing Neenah Drainage Structures

Heavy Duty

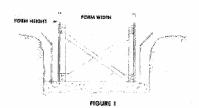
For those who are not experienced in the installation of Neenah drainage structures (R-4990 and R-4999 series), the following procedures are one way of achieving desirable results.

Materials

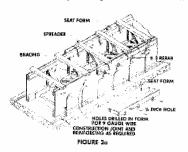
Materials
Under normal situations it would be customary to use a good grade of weather resistant %1 inch piywood for forming walls. Construction grade 2 x 4's are suitable for studs, plates, bracing and spreaders. The amount and position of the bracing, studs and spreaders to assure a safe working environment is a function of site conditions along with the depth and width of the trench. A typical installation is shown in Figure 1. Details shown and suggestions are based on using the Neenah Foundry Type X frame.

Forming Procedures

Once the floor slab of the trench has been poured and cured according to the plans and/or specifications, begin the forming procedure. The width of the forming (see Figure 1), measured from the outside edges of the forms, corresponds to the "C" dimension in the catalog and on Figure 6. During the entire forming procedure, continually verify that the forms are PLUMB, STRAIGHT, SOLID and LEVEL

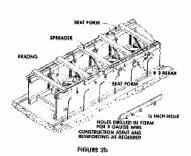


The height of the form corresponds to the final grade elevation when installing the non-bolted frame and grates. Extend the spreaders beyond the edge of the forms as shown in Figure 2a to provide a stop for the frame and seat form. Once the elevation has been verified and the forms are level, begin attaching the frames to the formwork.



To attach the C.I. frame to the forming, the use of a "seat form" is recommended to assure that the frame is at the proper elevation and level. The seat form has the same dimensions as the frame, with the height corresponding to the frame height (the "B" dimension in the catalog), and the width the same as the seat width of the frame. The seat width should be field measured to assure a proper fit. All Neenah frames have a slight radius at the corner of the seat and vertical face so the seat form should be beveled to accommodate this radius and assure that solid contact is made along the entire length of the C.I. frame made along the entire length of the C.I. frame.

Several methods may be used to attach the C.I. frames - two are shown here. One involves attaching the seat to the frame using the holes in the face of the frame to nail it in place (Figure 2a) and the other requires nailing the seat form to the framework (Figure 2b).



Both then are held in place by using a 9 gauge wire to force the frame into the proper position (Figure 3a & 3b). Frames should but together snugly, leaving as little gap as possible to eliminate any "creep" if the installations are long. Place a #3 bent rebar through the holes in the anchor lugs to provide additional anchorage in the concrete. Prior to pouring the concrete, verify the annular space allowance (space between the edge of the grate and frame) so grates will fit properly in the space allowance this should be \$\frac{4}{3}\$, inch (Figure 6). should be 3/16 inch (Figure 6).

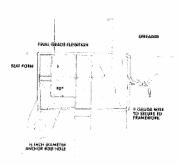
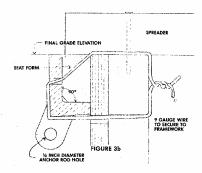


FIGURE 35

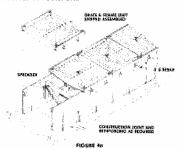
NEENAH IVE 286

Forming Procedures Continued

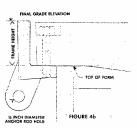


BOLTED UNITS

When bolted frames and grates are furnished, they are shipped assembled (see Figure 4a) and therefore require different forming procedures. AT NO TIME SHOULD THE UNITS BE DISASSEMBLED DURING INSTALLATION! DO CHECK THAT THE \$\(^{3}\)₁₆" GAP HAS NOT CHANGED IN TRANSPORT.



The height of the side of the form is such that the top of the form is the final grade minus the seat depth of the C.I. frame (this is actually the same as the "B" dimension referred to in the R-4990 series shown on page 285. Figure 4b illustrates the positioning of the casting on the forms.



Once the elevation has been verified and the forms are level and braced, begin installing the frame and grate units on the forms. Be sure to keep the sections tight up against one another to eliminate creep due to spacing voids. When the sections are in the proper position, wire them to the bracing as shown in Figure 5. Place a #3 bent rebar through the holes in the anchor lugs to provide additional anchorage in the concrete.

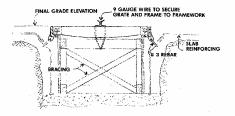


FIGURE 5

Once the concrete has been poured and cured, strip the forms and remove any exposed wire which was used to secure the grate or frames to the forms. The completed installation should resemble the illustration shown in Figure 6.



FIGURE 6

General Comments

NOTE: All frame sections are furnished in standard manufactured lengths. It is the responsibility of the installer to cut frame pieces to the proper length and to mitter corners where applicable. In cases where trench direction must change, special drawings will be furnished by our Engineering Services Department. These prints will show special grate lengths and cuts, as well as other essential information. Forming procedures, however, are basically the same.

