

CITY OF FOUNTAINS  
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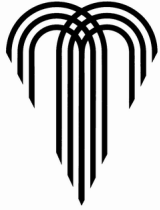
KANSAS CITY  
MISSOURI

**City of Kansas City, Missouri  
General Services Department  
Yolanda McKinzy, Director**

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| <input type="checkbox"/> Executed Contract File |
| <input type="checkbox"/> Contractor             |
| <input type="checkbox"/> Surety                 |
| <input type="checkbox"/> Project Manager        |
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# **CONTRACT NO. EV 3040 CITY-WIDE IDIQ TRAFFIC SAFETY IMPROVEMENTS**

Roberto Everidge, Sr. Procurement Officer  
Procurement Services Division  
Phone: (816) 513-0804  
E-mail: [Roberto.everidge@kcmo.org](mailto:Roberto.everidge@kcmo.org)



## **FACILITY REPAIR & MAINTENANCE INSTRUCTIONS TO BIDDERS**

**Project/Contract No. EV3040**

**Project Title CITY-WIDE IDIQ TRAFFIC SAFETY IMPROVEMENTS**

1. Sealed Bids for EV3040 – IDIQ for Traffic Safety Improvements will be received by the **General Services Department until 2:00 P.M., November 28, 2023** at which time bidding will be closed.

- a. All Bids will be opened and read aloud. The Bid Envelope must contain all required submissions to be included with the Bid. No Bid may be withdrawn for a period of ninety (90) days after the Bid is opened. Bid security, if required, shall likewise continue for the same ninety (90) days unless earlier released by the City. The successful Bidder shall comply with all Bidding and contract requirements. Bids, once opened and read, may not be withdrawn without forfeiture of the Bid security.
- b. All Bids shall be addressed to the Chief Procurement Officer, shall state on the outside of the sealed Bid envelope “Bid Enclosed”, title and Project /Contract number, and shall be deposited in the locked Bid box. All Bids must comply with the Bidding Requirements of the City.

2. **Bid Package** The Bid Package (“Bidding Documents”) contains the following:

### **Facility Repair and Maintenance Contract Part I and II**

#### **Attachment A – Scope of Services**

#### **Attachment B – Facility Repair & Maintenance Bid Form/Contract**

00412 Unit Prices , 00410.01 Experience Reference Form

#### **Attachment C – 01290.01 Application for Payment**

01290.02 Schedule of Values

#### **Attachment D – CREO KC Forms & Instructions**

00440 CREO KC 5: Construction Contract CREO KC Instructions

00450 CREO KC 8: Contractor Utilization Plan/Request for Waiver

00450.01 Letter of Intent to Subcontract

00460 CREO KC 10: Timetable for MBE/WBE Utilization

00470 CREO KC 11: Request for Modification or Substitution

00485 CREO KC Monthly Reporting Instructions

#### **Attachment E - Bonds**

00430 Bid Bond

00610 Performance and Maintenance Bond

00615 Payment Bond

00616 Performance Bond

#### **Attachment F – 00830 Wage Rate Requirements**

Annual Wage Order

County – Cass, Clay, Jackson, Platte or Ray

Work Type: State – Heavy

State – Building  
Federal – Heavy  
Federal – Building  
Federal – Building

Division of Labor Standards Rules & Regulations

01290.08 Prevailing Wage Interview Form

01290.09 Subcontractors and Major Material Suppliers List

01290.11 Daily Labor Force Report

01290.14 Contractor Affidavit for Final Payment

01290.15 Subcontractor Affidavit for Final Payment

**Attachment G – 00560 Missouri Project Exemption Certificate**

00560.01 Kansas City Missouri Tax Exempt Certificate

**Attachment H – 00620 Insurance Certificate**

**Attachment I – 00630 Revenue Clearance Release Authorization**

**Attachment J – 00515.01 Employee Eligibility Verification Affidavit**

3. **Bid Submittal** The following items should be completed and returned to the City with your Bid:

- a. Bid Form
- b. 00410 Experience and Reference
- c. Identify the following Key Personnel proposed for the Project. (**NOTE:** Key Personnel must be committed to the Project for its duration, and may not be removed or substituted without the City's prior written consent.)
  - (1). GC Project Manager
  - (2). On-Site Field Superintendent
  - (3). QC/QA Manager
  - (4). Safety Officer
- d. For each of the Key Personnel, provide the following background information.
  - (1). Years of employment with current employer.
  - (2). City of residence.
  - (3). Identify any other projects this person will be involved with concurrently with the Project, and state the time commitment for the Project and each other project.
  - (4). Discuss professional registrations, education, certifications, and credentials held by this person that are applicable to the Project.
- e. Discuss generally the tasks involved in the Project.
- f. Illustrate clearly and concisely Bidder's understanding of the technical elements that must be addressed for successful completion of the Project.
- g. Submit a bid schedule with anticipated milestones for the Project using Primavera Project Planner® or Primavera SureTrak® Project Manager Software.
- h. Describe key issues that might affect the Project schedule and how Bidder proposes to address them.

- i. Summary of the Project Safety Plan for the Project.
  - (1). Describe how Bidder proposes to address any unique safety issues for the Project
  - (2). Describe your safety record and environmental compliance record along with your Firm's OSHA reportable accident rates on recent comparable size projects.
  - (3). Statement of Bidder's Experience Modification Ratio (EMR)
- j. Discuss Bidder's understanding of the traffic control required for the Project, if applicable, and how traffic control will impact the Project schedule. Discuss any major traffic control issues that need to be addressed and Bidder's proposed solutions.
- k. Identify any other special issues or problems that are likely to be encountered. Outline the manner in which Bidder suggests resolving them.
- l. Outline key community relations issues and how they might be resolved.
- m. Describe any difficulties Bidder anticipates encountering in serving the City, in light of the City's status as a municipality and public entity. Explain how Bidder plans to manage them.
- n. Summary of Bidder's Quality Assurance/Quality Control Plan for this project
- o. Statement regarding all work performed two (2) years immediately preceding the date of the Bid, that contains either (a) a contract by contract listing of any written notices of violations of any federal or state prevailing wage statute in which prevailing wage penalties were assessed against the Bidder or paid by the Bidder; or (b) a statement that there have been no such written notices of violations or such penalties assessed; and a statement that Bidder is current on payment of Federal and State income tax withholdings and unemployment insurance payments
- p. Statement regarding all work performed two (2) years immediately preceding the date of the Bid, that contains either (a) a contract by contract listing of any written notices of violations of any federal, state or local DBE/MBE/WBE Program and any damages assessed; or (b) a statement that there have been no such written notices of violations or such penalties assessed; and a statement that Program requirements have been met.
- q. Statement that the Bidder has not been rescinded or debarred from any bidding, contractual, procurement, or other such programs by federal, state or local entities.
- r. Statement that Bidder is current on payment of Federal and State income tax withholdings and unemployment insurance payments
- s. Statement of Bidder's litigation and/or arbitration history over the past five (5) years including final ruling.
- t. Statement of Bidder's bond history over the past five (5) years including any incidences of failure to perform.
- u. MBE / WBE past project performance and compliance with participation goals in comparable size commercial projects
- v. Other



4. **Consideration of Bids** The City will determine the lowest, responsive and responsible Bid. Price will not be the only consideration in that selection process.

- a. Bid Alternates, if accepted, will be selected in any order or combination. The City reserves the right to include alternates in determining the lowest, responsive and responsible Bid.
- b. The City shall let the contract to the lowest, responsive and responsible bidder; however, the City may reject any or all bids, including, without limitation, all nonconforming, non-responsive, unbalanced or conditional bids and may reject the Bid of any bidder if the City believes that it would not be in the best interests of the City to contract with that bidder.
- c. The City reserves the right to waive irregularities and/or formalities.

5. **Rejection of All Bids** If the City rejects all Bids, the City may re-solicit Bids only from those Bidders that submitted a Bid pursuant to the original Invitation for Bids and/or use an expedited Bid submission schedule with or without re-advertising or issuing any other public notice when the City determines that the delay from the normal solicitation procedure would not be in the City's best interests.

6. **Bids that Exceed the City Department's Available Funds** A director may negotiate a revised Bid with the apparent lowest, responsive and responsible bidder, including changes in Bid requirements, price, scope or quantity if: (a) the Bid is more than the appropriation or relevant budget item for this project; and (b) it is not in the City's best interests to re-solicit Bids because of time or other circumstances.

7. **Late Bids and Modifications**

- a. Bids and modifications of received after bid opening will not be considered unless: (1) they are sent by a delivery method that guarantees the bid will be delivered prior to the time of bid opening; or (2) it is determined by the City that the late receipt was due solely to mishandling by the City after receipt.
- b. If an emergency, weather or unanticipated event poses an interruption so that bids might not be received at the City office designated for receipt of bids by the exact time specified in the IFB, the time specified for receipt of bids will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which the City declares normal government operations resume.
- c. Bids may be modified or withdrawn by written or telegraphic notice received prior to the exact hour and date specified for receipt of bid.

8. **Waiver of Bid Requirements** The City Manager or his/her delegate at any time may waive any requirements imposed by this solicitation or by any City regulation when failure to grant the waiver will result in an increased cost to the City and the requirement waived would be waived for all Bidders for this solicitation and it is in the best interest of the City to grant the waiver. The City Council at any time may waive any requirements imposed in this solicitation by the City's code of ordinances when it finds failure to grant the waiver would be detrimental to preserving the public health, welfare, safety or essential operations of the City; or the waiver is necessary in order to participate in a purchasing pool or cooperative or a contract derived from a purchasing pool or cooperative; or the good, supply, material, equipment or service is from a sole

source; or failure to grant the waiver would result in an increased cost to the City, the requirement is one that would be waived for any bidder or proposer responding to the solicitation, and it is in the best interest of the City to grant the waiver; or it is otherwise in the best interests of the city for any other reason as determined by the City Council.

9. **Interpretations and Addenda** All questions about the meaning or intent of the Bidding Documents may be directed to the Contracting Officer listed at the end of these Instructions to Bidders. Interpretations or clarifications considered necessary by the Contracting Officer in response to such questions will be issued by Addenda to all parties recorded as having received the Bidding Documents. Questions received less than ten (10) days prior to the date for opening of Bids may not be answered. Only answers issued by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect. Addenda may also be issued to modify the Bidding Documents as deemed advisable by City.

10. **Affirmative Action** It is the policy of the City that any person or entity entering into a contract with the City, will employ applicants and treat employees equally without regard to their race, color, sex, religion, national origin or ancestry, disability, sexual orientation, gender identity or age. Bidder will be required to comply with the City's Affirmative Action ordinance if Bidder is awarded a contract from the City totaling more than \$300,000.00 and employs fifty (50) or more persons. If you have any questions regarding the City's Affirmative Action requirements, please contact CREO KC at (816) 513-1836 or visit the City's website at [www.kcmo.gov](http://www.kcmo.gov).

11. **Buy American and Missouri Preference Policies** It is the policy of the City that any manufactured goods or commodities used or supplied in the performance of any City contract or any subcontract thereto shall be manufactured or produced in the United States whenever possible. When Bids offer quality, price, conformity with specifications, term of delivery and other conditions imposed in the specifications that are equal, the City shall select the Bid that uses manufactured goods or commodities that are manufactured or produced in the United States. The City shall give preference to all commodities manufactured, produced, or grown within the State of Missouri and to all firms, corporations, or individuals doing business as Missouri firms, corporations, or individuals, when quality is equal or better and delivered price is the same or less. It is the bidder's responsibility to claim these preferences.

12. **Contract Bonding Requirements** The successful Bidder will be required to furnish a Payment Bond and a Performance Bond as security for the faithful performance of the Work and the payment of all bills and obligations arising from the performance of the Contract.

13. **Indemnification** This Contract contains a requirement that the Contractor shall indemnify, defend and hold harmless City and any of its agencies, officials, officers, or employees from and against all Claims, damages, liability, losses, costs, and expenses, including reasonable attorneys' fees, arising out of or resulting from any acts or omissions in connection with this Contract, caused in whole or in part by Contractor, its employees, agents, or Subcontractors, or caused by others for whom Contractor is liable, including negligent acts or omissions of City, its agencies, officials, officers, or employees. This Contract requires Contractor to obtain specified limits of insurance to insure the indemnity obligation. Bidder has the opportunity to recover the cost of the required insurance in the Contract Price by including the cost of that insurance in the Bid amount.

14. **Bid Security Requirements** All Bids submitted must be accompanied by a Bid deposit in the amount of five percent (5%) of the base Bid which shall be in the form of a Bid Bond (on the

form provided in these Bidding Documents), Cashier's Check, Letter of Credit, Certificate of Deposit or other instrument approved in advance by the City. Prior to submittal of the Bid, the City Treasurer must approve both the financial institution and text of a Letter of Credit. A Cashier's Check or a Certificate of Deposit shall be payable to the City Treasurer. Bid security shall likewise continue for the same ninety (90) days unless earlier released by the City.

15. **Forfeiture/Mistake in Bid Security** By submitting a Bid, Bidder is agreeing to correct any mistakes on a Bid security submission when requested by the City. If a Bidder fails or refuses to correct such mistake or to execute the Contract when requested by the City, any Bid security given to the City shall immediately become due and payable and forfeited to the City as liquidated damages and the Bidder shall also be subject to debarment and damages.

16. **MBE/WBE/DBE Program Requirements** The City desires that Minority Business Enterprises (MBE) and Women's Business Enterprises (WBE) have a maximum opportunity to participate in the performance of City contracts. The goals for this specific project are 15 percent (15%) MBE participation and 15 percent (15%) WBE participation. The City's CREO KC Forms and Instructions are incorporated into this Instruction to Bidders and are part of the BIDDING DOCUMENTS and CONTRACT DOCUMENTS. The MBE/WBE/DBE Directory is available on the City's website at [www.kcmo.gov](http://www.kcmo.gov). Please call the Civil Rights and Equal Opportunity Department at (816) 513-1836 for assistance.

Successful Bidder shall be required to use City's Internet web based MBE/WBE Program Reporting System provided by City and protocols included in that software during the term of this Contract. When requested by the City, Bidder shall submit user applications to City's provided MBE/WBE Program Reporting System for all applicable personnel and shall require subcontractors/subconsultants to submit same.

17. **Waiver of MBE/WBE/DBE Requirements** The City Council may waive any and all MBE/WBE/DBE requirements imposed by any Bid document or the MBE/WBE/DBE Ordinance and award the Contract to the lowest, responsive and responsible Bidder if the City Council determines a waiver is in the best interests of the City.

18. **Contract Information Management System**. Successful Bidder shall be required to use City's Internet web based Contract Information Management System/Project Management Communications Tool provided by City and protocols included in that software during the term of this Contract. Bidder/Proposer shall submit user applications to City's provided Contract Information Management System for all personnel, subcontractors or suppliers as applicable.

19. **Prevailing Wage Requirements** The successful Bidder shall pay the prevailing hourly rate of wages as determined by the Missouri Annual Wage Order and/or Federal Wage Determination. In case of a conflict between Missouri and Federal wage rates, the higher rate shall apply.

Successful Bidder shall be required to use City's Internet web based Prevailing Wage Reporting System provided by City and protocols included in that software during the term of this Contract. When requested by the City, Bidder shall submit user applications to City's provided Prevailing subcontractors to submit same.

20. **Workforce Program Requirements** City desires that minorities and women have a maximum opportunity to practice their trades on city construction projects. The minimum

company-wide goals are a ten percent (10%) minority workforce and two percent (2%) women workforce. The City's CREO KC Forms and CREO KC Instructions for Construction Projects are incorporated into these Bidding Documents and the Contract Documents.

Successful Bidder shall be required to use City's Internet web based Workforce Program Reporting System provided by City and protocols included in that software during the term of this Contract. When requested by the City, Bidder shall submit user applications to City's provided Workforce Program Reporting System for all applicable personnel and shall require subcontractors to submit the same.

21. **Mandatory Pre-Bid Conference.** The General Services Department will hold a Mandatory Pre-Bid conference on on **Wednesday November 8, 2023, at 2:00 PM in SPEC Conference Room at 4721 E Coal Mine Rd, Kansas City, MO-64130.** Attendance at the pre-Bid conference is encouraged [mandatory]. Attendance at the pre-Bid conference is encouraged [mandatory] for all Bidders on this Project. For this Project, the City shall not contract with a Bidder who has not attended the entire pre-Bid conference for this Project.

22. Forward all questions in writing to the following Project Manager and Contract Administrator. Questions received less than twelve (12) days prior to the Bid Date may not be answered. Interpretations or clarifications considered necessary by the Project Manager in response to such questions will be issued by Addenda to all Bidders. Oral or other interpretations or clarifications shall be without legal effect, even if made at a Pre-Bid Meeting.

Uday Manepalli., Project Manager  
Public Works Department  
4721 Coal Mine Rd  
Kansas City, MO 64130  
(816) 513-914-8775 Phone  
E-mail: uday.manepalli@kcmo.org

Roberto Everidge, Contract Administrator  
General Services Department  
1<sup>st</sup> Floor, City Hall, 414 East 12 Street  
Kansas City, MO 64106  
(816) 513-0804 Phone  
(816) 513-2812 Fax  
Email: roberto.everidge@kcmo.org



*For persons with disabilities needing reasonable accommodations please contact Andrea Dorch at 816-513-1818 or Paul Pierce at 816-513-1824. If you need to use the Relay Missouri Center call 1-800-RELAY-MO (1-800-735-2966).*

**PART II**  
**FACILITY REPAIR & MAINTENANCE**  
**CONTRACT**

**STANDARD TERMS AND CONDITIONS**

**Sec. 1. General Indemnification.**

A. For purposes of this Section 1 only, the following terms shall have the meanings listed:

1. **Claims** means all claims, damages, liability, losses, costs and expenses, court costs and reasonable attorneys' fees, including attorneys' fees incurred by the City in the enforcement of this indemnity obligation.

2. **Contractor's Agents** means Contractor's officers, employees, subconsultants, subcontractors, successors, assigns, invitees and other agents.

3. **City** means City and its agents, officials, officers and employees.

B. Contractor's obligations under this Section with respect to indemnification for acts or omissions, including negligence, of City, shall be limited to the coverage and limits of General Liability insurance that Contractor is required to procure and maintain under this Contract. Contractor affirms that it has had the opportunity to recover the costs of the liability insurance required in this Contract in its contract price.

C. Contractor shall defend, indemnify and hold harmless City from and against all claims arising out of or resulting from all acts or omissions in connection with this Contract caused in whole or in part by Contractor or Contractor's Agents, regardless of whether or not caused in part by any act or omission, including negligence, of City. Contractor is not obligated under this Section to indemnify City for the sole negligence of City.

D. In no event shall the language in this Section constitute or be construed as a waiver or limitation of the City's rights or defenses with regard to sovereign immunity, governmental immunity, or other official immunities and protections as provided by the federal and state constitutions or by law.

**Sec. 2. Independent Contractor.** Contractor is an independent contractor and is not City's

agent. Contractor has no authority to take any action or execute any documents on behalf of City.

**Sec. 3. Insurance.**

A. Contractor shall procure and maintain in effect throughout the duration of this Contract insurance coverage not less than the types and amounts specified in this section. In the event that additional insurance, not specified herein, is required during the term of this Contract, Contractor shall supply such insurance at City's cost. Policies containing a Self-Insured Retention are unacceptable to City unless City approves in writing the Contractor's Self-Insured Retention.

1. Commercial General Liability Insurance: with limits of \$1,000,000 per occurrence and \$2,000,000 aggregate, written on an "occurrence" basis. The policy shall be written or endorsed to include the following provisions:

a. Severability of Interests Coverage applying to Additional Insureds

b. Contractual Liability

c. Per Project Aggregate Liability Limit

d. No Contractual Liability Limitation Endorsement

e. Additional Insured Endorsement, ISO form CG20 10 and CG20 37, current edition, or their equivalent.

2. Workers' Compensation Insurance: as required by statute, including Employers Liability with limits of:

Workers' Compensation Statutory  
Employers Liability \$100,000 accident  
with limits of:  
\$500,000 disease-policy limit  
\$100,000 disease-each employee

3. Commercial Automobile Liability Insurance: with a limit of \$1,000,000, covering owned, hired, and non-owned automobiles. Coverage provided shall be on an "any auto" basis and written on an "each accident" basis. This insurance will be written on a Commercial Automobile Liability form, or acceptable equivalent, and will protect against claims arising out of the operation of motor vehicles, as

to acts done in connection with the Contract, by Contractor.

4. If applicable, Professional Liability Insurance with limits per claim and annual aggregate of \$2,000,000.

B. The Commercial General Liability Insurance specified above shall provide that City and its agencies, officials, officers, and employees, while acting within the scope of their authority, will be named as additional insureds, including completed operations, for the services performed under this Contract. Contractor shall provide to City at execution of this Contract a certificate of insurance showing all required coverage and additional insureds. The certificates of insurance will contain a provision stating that should any of the policies described in the certificate be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

C. All insurance coverage must be written by companies that have an A.M. Best's rating of "A-V" or better, and are licensed or authorized by the State of Missouri to do business in Missouri.

D. Contractor's failure to maintain the required insurance coverage will not relieve Contractor of its contractual obligation to indemnify the City pursuant to Section 1. If the coverage afforded is cancelled or changed or its renewal is refused, Contractor shall give at least thirty (30) days prior written notice to City. In the event of Contractor's failure to maintain the required insurance in effect, City may order Contractor to immediately stop work, and upon ten (10) days notice and an opportunity to cure, may pursue its remedies for breach of this Contract as provided for herein and by law.

E. In no event shall the language in this Section constitute or be construed as a waiver or limitation of the City's rights or defenses with regard to sovereign immunity, governmental immunity, or other official immunities and protections as provided by the federal and state constitutions or by law.

F. Contractor shall obtain evidence that all Subcontractors have in force general, automobile, and employer's and workers' compensation liability insurance in the amounts

required by these Contract Documents, and evidence that each is current on its unemployment insurance payments before Subcontractors begin Work at the Site. Contractor shall retain such evidence in its files and make available to City within ten (10) days after written request.

**Sec. 4. Governing Law.** This Contract shall be construed and governed in accordance with the laws of the State of Missouri without giving effect to Missouri's choice of law provisions. The City and Contractor: (1) submit to the jurisdiction of the state and federal courts located in Jackson County, Missouri; (2) waive any and all objections to jurisdiction and venue; and (3) will not raise forum non conveniens as an objection to the location of any litigation.

**Sec. 5. Compliance with Laws.** Contractor shall comply with all federal, state and local laws, ordinances and regulations applicable to the work and this contract.

**Sec. 6. Termination for Convenience.**

A. City may, at any time upon ten (10) days notice to Contractor specifying the effective date of termination, terminate this Contract, in whole or in part. If this Contract is terminated by City, City shall be liable only for payment for services rendered before the effective date of termination. Contractor shall prepare an accounting of the services performed and money spent by Contractor up to the effective date of termination and shall return to City any remaining sums within thirty (30) days of such date.

B. If this Contract is terminated prior to Contractor's completion of services, all work or materials prepared or obtained by Contractor pursuant to this contract shall become City's property.

C. If this Contract is terminated prior to Contractor's completion of the services to be performed hereunder, Contractor shall return to City any sums paid in advance by City for services that would otherwise have had to be rendered between the effective date of termination and the original ending date of the Contract. Contractor shall prepare an accounting of the services performed and money spent by Contractor up to the effective date of termination

and shall return to City any remaining sums within thirty (30) days of such date.

## **Sec. 7. Resolution of Claims**

A. For purposes of this Section 7 only, the following terms shall have the meanings listed:

1. A Claim is a demand or assertion by the Contractor seeking, as a matter of right, the adjustment of Contract price and/or times with respect to the terms of the Contract.

2. City's Representative--Person or agency designated to act for the Director.

B. The Contractor must give written notice to the City's Representative within fourteen (14) calendar days after the occurrence of the event giving rise to the Claim or within fourteen (14) calendar days after the first recognition of the conditions giving rise to the Claim. After the fourteen (14) day period for filing claims has expired, the Claim shall be considered waived unless the Director grants an extension based on good cause shown by the Contractor that such additional time is warranted. The responsibility to substantiate Claims shall rest with the Contractor.

C. If the claim cannot be resolved by direct negotiation between the City's Representative and the Contractor, the parties must submit the Claim to the Director within five (5) days after the parties agree that they cannot resolve the Claim.

D. The submittal of the Claim position statements shall: 1) be in writing; 2) state the issues; 3) and state the respective positions of the parties.

E. The Director shall review the written statements and reply in writing to both parties within ten (10) working days. The Director may extend this period if necessary by notifying the parties.

F. Absent fraud, gross mistake or bad faith, the Director's decision shall be final and binding on City and Contractor within fourteen (14) calendar days after issuance.

G. All administrative procedures set forth in this contract must first be exhausted before suit is filed.

H. The time frame for the Director's decision may be tolled if the parties mutually

agree to participate in mediation. Mediator selection and the procedures to be employed in the mediation shall be mutually acceptable to both parties. Cost of the mediation, including the mediator's fees, shall be shared equally among the parties.

I. If the Claim is not resolved during mediation, the Contractor agrees that it will file no suit based on facts or evidentiary materials that were not presented for consideration to the City during the mediation process or of which the Contractor had knowledge and failed to present during the administrative procedures.

**Sec. 8. Default and Remedies.** If Contractor shall be in default or breach of any provision of this Contract, City may terminate this contract, suspend City's performance, withhold payment or invoke any other legal or equitable remedy after giving Contractor notice and opportunity to correct such default or breach.

**Sec. 9. Waiver.** Waiver by City of any term, covenant, or condition hereof shall not operate as a waiver of any subsequent breach of the same or of any other term, covenant or condition. No term, covenant, or condition of this Contract can be waived except by written consent of City, and forbearance or indulgence by City in any regard whatsoever shall not constitute a waiver of same to be performed by Contractor to which the same may apply and, until complete performance by Contractor of the term, covenant or condition, City shall be entitled to invoke any remedy available to it under this Contract or by law despite any such forbearance or indulgence.

**Sec. 10. Modification.** Unless stated otherwise in this Contract, no provision of this Contract may be waived, modified or amended except in writing signed by City.

**Sec. 11. Headings; Construction of Contract.** The headings of each section of this Contract are for reference only. Unless the context of this Contract clearly requires otherwise, all terms and words used herein, regardless of the number and gender in which used, shall be construed to include any other number, singular or plural, or any other gender, masculine, feminine or neuter, the same as if such words had been fully and properly written in that number or gender.

**Sec. 12. Severability of Provisions.** Except as specifically provided in this Contract, all of the provisions of this Contract shall be severable. In the event that any provision of this Contract is found by a court of competent jurisdiction to be unconstitutional or unlawful, the remaining provisions of this Contract shall be valid unless the court finds that the valid provisions of this Contract are so essentially and inseparably connected with and so dependent upon the invalid provision(s) that it cannot be presumed that the parties to this Contract could have included the valid provisions without the invalid provision(s); or unless the court finds that the valid provisions, standing alone, are incapable of being performed in accordance with the intentions of the parties.

**Sec. 13. Records.**

A. For purposes of this section:

1. "City" shall mean the City Auditor, the City's Internal Auditor, the City's Director of Civil Rights and Equal Opportunity Department, the City Manager, the City department administering this Contract and their delegates and agents.

2. "Record" shall mean any document, book, paper, photograph, map, sound recordings or other material, regardless of physical form or characteristics, made or received in connection with this Contract and all Contract amendments and renewals.

B. Contractor shall maintain and retain all Records for a term of five (5) years that shall begin after the expiration or termination of this Contract and all Contract amendments. City shall have a right to examine or audit all Records and Contractor shall provide access to City of all Records upon ten (10) days written notice from the City.

**Sec. 14. Affirmative Action.** If this Contract exceeds \$300,000.00 and Contractor employs fifty (50) or more people, Contractor shall comply with City's Affirmative Action requirements in accordance with the provisions of Chapter 3 of City's Code, the rules and regulations relating to those sections, and any additions or amendments thereto; in executing any Contract subject to said provisions, Contractor warrants that it has an affirmative action program in place and will maintain the affirmative action program in place for the duration of the Contract. Contractor shall not

discriminate against any employee or applicant for employment because of race, color, sex, religion, national origin or ancestry, disability, sexual orientation, gender identity or age in a manner prohibited by Chapter 3 of City's Code. Contractor shall:

1. Execute and submit the City of Kansas City, Missouri CREO Affirmative Action Program Affidavit warranting that the Contractor has an affirmative action program in place and will maintain the affirmative action program in place for the duration of the Contract.

2. Submit, in print or electronic format, a copy of Contractor's current certificate of compliance to the City's Civil Rights and Equal Opportunity Department (CREO) prior to receiving the first payment under the Contract, unless a copy has already been submitted to CREO at any point within the previous two calendar years. If, and only if, Contractor does not possess a current certification of compliance, Contractor shall submit, in print or electronic format, a copy of its affirmative action program to CREO prior to receiving the first payment under the Contract, unless a copy has already been submitted to CREO at any point within the previous two calendar years.

3. Require any Subcontractor awarded a subcontract exceeding \$300,000.00 to affirm that Subcontractor has an affirmative action program in place and will maintain the affirmative action program in place for the duration of the subcontract.

4. Obtain from any Subcontractor awarded a subcontract exceeding \$300,000.00 a copy of the Subcontractor's current certificate of compliance and tender a copy of the same, in print or electronic format, to CREO within thirty (30) days from the date the subcontract is executed. If, and only if, Subcontractor does not possess a current certificate of compliance, Contractor shall obtain a copy of the Subcontractor's affirmative action program and tender a copy of the same, in print or electronic format, to CREO within thirty (30) days from the date the subcontract is executed.

City has the right to take action as directed by City's Civil Rights and Equal Opportunity Department to enforce this provision. If Contractor fails, refuses or neglects to comply with the provisions of Chapter 3 of City's Code, then such failure shall be deemed a total breach of this Contract and this Contract may be terminated, canceled or suspended, in whole or



in part, and Contractor may be declared ineligible for any further contracts funded by City for a period of one (1) year. This is a material term of this Contract.

**Sec. 15. Tax Compliance.** Contractor shall provide proof of compliance with the City's tax ordinances administered by the City's commissioner of revenue as a precondition to the City making the first payment under this contract or any contract renewal when the total contract amount exceeds \$160,000.00.

**Sec. 16. Assignability or Subcontracting.**

A. Assignability. Contractor shall not assign or transfer any part or all of Contractor's obligation or interest in this Contract without prior written approval of City. If Contractor shall assign or transfer any of its obligations or interests under this Contract without the City's prior written approval, it shall constitute a material breach of this Contract. This provision shall not prohibit contractor from subcontracting as otherwise provided for herein.

B. Subcontracting. Contractor shall not subcontract any part or all of Contractor's obligations or interests in this Contract unless the subcontractor has been identified in a format required by City. If Contractor shall subcontract any part of Contractor's obligations or interests under this Contract without having identified the subcontractor, it shall constitute a material breach of this Contract. The utilization of subcontractors shall not relieve Contractor of any of its responsibilities under the Contract, and Contractor shall remain responsible to City for the negligent acts, errors, omissions or neglect of any subcontractor and of such subcontractor's officers, agents and employees. City shall have the right to reject, at any point during the term of this Contract, any subcontractor identified by Contractor, and to require that any subcontractor cease working under this Contract. City's right shall be exercisable in its sole and subjective discretion. City shall not be obligated to pay or be liable for payment of any monies which may be due to any subcontractor. Contractor shall include in any subcontract a requirement that the subcontractor comply with all requirements of this Contract in performing Contractor's services hereunder.

**Sec. 17. Conflicts of Interest.** Contractor certifies that no officer or employee of City has, or will have, a direct or indirect financial or personal interest in this Contract, and that no officer or employee of City, or member of such officer's or employee's immediate family, either has negotiated, or has or will have an arrangement, concerning employment to perform services on behalf of Contractor in this Contract.

**Sec. 18. Rules of Construction.** The judicial rule of construction requiring or allowing an instrument to be construed to the detriment of or against the interests of the maker thereof shall not apply to this Contract.

**Sec. 19. Reports.** Contractor shall provide City detailed reports of actual contract usage by category each quarter and annually at no cost.

**Sec. 20. Employee Eligibility Verification.** If this contract exceeds five thousand dollars (\$5,000.00), Contractor shall execute and submit an affidavit, in a form prescribed by the City, affirming that Contractor does not knowingly employ any person in connection with the contracted services who does not have the legal right or authorization under federal law to work in the United States as defined in 8 U.S.C. §1324a(h)(3). Contractor shall attach to the affidavit documentation sufficient to establish Contractor's enrollment and participation in an electronic verification of work program operated by the United States Department of Homeland Security to verify information of newly hired employees, under the Immigration and Reform and Control Act of 1986. Contractor may obtain additional information about E-Verify and enroll at [www.dhs.gov/xprevprot/programs/gc\\_1185221678150.shtm](http://www.dhs.gov/xprevprot/programs/gc_1185221678150.shtm). For those Contractors enrolled in E-Verify, the first and last pages of the E-Verify Memorandum of Understanding that Contractor will obtain upon successfully enrolling in the program shall constitute sufficient documentation for purposes of complying with this section. Contractor shall submit the affidavit and attachments to the City prior to execution of the contract, or at any point during the term of the contract if requested by the City.

**Sec. 21. Buy American and Missouri Preference Policies.** It is the policy of the City that any manufactured goods or commodities

used or supplied in the performance of any City contract or any subcontract thereto shall be manufactured or produced in the United States whenever possible. Pursuant to Section 71.140 RSMo., preference shall be given to materials, products, supplies and all other articles produced, manufactured, made or grown within the State of Missouri.

**Sec. 22. Missouri Sales Tax Exemption.**

Pursuant to Section 144.062, RSMo, City is a Missouri exempt entity and tangible personal property to be incorporated or consumed in the construction of this Project may be purchased without sales tax. City shall furnish Contractor a Missouri Project Exemption Certificate for Sales Tax at the time of issuance of the Notice to Proceed.

**Sec. 23. Quality Services**

**Assurance Act.** If this Contract exceeds \$160,000.00, by executing this Contract, CONTRACTOR certifies CONTRACTOR will pay all employees who will work on this Contract in the city limits of Kansas City, Missouri at least \$15.00 per hour in compliance with the CITY's Quality Services Assurance Act, Section 3-66, Code of Ordinances or CITY has granted CONTRACTOR an exemption.

**Sec. 24. Anti-Discrimination Against**

**Israel.** If this Contract exceeds \$100,000.00 and Contractor employs at least ten employees, pursuant to Section 34.600, RSMo., by executing this Contract, Contractor certifies it is not currently engaged in and shall not, for the duration of this contract, engage in a boycott of goods or services from the State of Israel; companies doing business in or with Israel or authorized by, licensed by, or organized under the laws of the State of Israel; or persons or entities doing business in the State of Israel.

**Sec. 24.**

# ATTACHMENT A

**ATTACHMENT A**  
**CONTRACT NO. EV3040 – IDIQ TRAFFIC SAFETY IMPROVEMENTS**  
**SCOPE OF SERVICES**

**A. GENERAL REQUIREMENTS**

1. The work required consists of providing City-Wide Concrete Sidewalk, Walkway, Curb, Repair, Maintenance and Replacement Services in Jackson, Clay, Platte and Cass Counties in accordance with the terms and specifications of this Contract.
2. This is an indefinite delivery indefinite quantity (IDIQ) contract and individual Work Orders will be issued with specified quantities for a particular location/project and schedule for completion.
3. This is a unit price Contract. The Contract contains measurement and payment sections in the technical specifications which describes each item of work and the ancillary items that are to be included in the work item. All work is to be included in these work items. No compensation for additional work will be made.
4. This contract is available to all City departments requiring the services provided under this contract.
5. The estimated annual expenditure is \$1,000,0000.00-\$2,500,000.00.
6. The contract is for use on planned projects as well as when unforeseen situations arise which require expeditious service.
7. All work shall be performed during regular working hours of regular working days unless otherwise authorized by the City Representative.
  - a. Contractor shall proceed with work when so requested and work continuously and diligently until completed.
  - b. Skilled tradesmen shall be provided to perform all work required under this Contract.
  - c. Contractor shall maintain direct communication capability with the City's Representative 24 hours a day, seven (7) days a week, during the Contract period.
  - d. Emergency Work - Respond to the service location with two (2) hours of receiving notification from the City Representative.
  - e. Non-Emergency - Schedule within three (3) working days of notification or as otherwise approved by the City's Representative.
  - f. Perform any and all work requested by City.
  - g. Conferences will be held at the request of City or Contractor.

## **B. SERVICES TO BE PERFORMED**

1. The work required consists of the reconstruction of the Portland Cement Concrete Sidewalks, Walkways, Curbs, Driveway Entrances, Appurtenances and ADA Ramps at various city-owned facilities in Jackson, Clay, Platte and Cass Counties.
2. Services shall include but not be limited to:
  - a. Maintenance work orders for preventative maintenance to repair or replace failed concrete on as-needed basis.
  - b. Emergency repairs of concrete services on short notice where life safety conditions are reported and must be quickly restored to a safe condition.
  - c. Provide all necessary minor excavation/trenching/ grading/forming equipment and supplies.

## **C. AUTHORIZATION TO WORK**

1. When service is needed for an individual project, the City may notify Contractor(s) by phone, email or fax.
  - a. Contractor(s) shall submit, at no cost to the City, a binding project specification/cost proposal to the departmental City Representative within seven (7) days of notification; unless an alternate time is specified by the City Representative.
  - b. Contractor shall submit the proposal on the City's Cost Proposal form (**sample attached**), based upon **Attachment B Bid Form** and **Attachment B1 00412 Unit Prices**.
  - c. Particular unit prices may be negotiated for items not covered or different from the units bid.
  - d. Contractor shall not begin work until the City issues a Purchase Order to Contractor and the City has given Contractor a Work Authorization.
  - e. If after work begins, unforeseen issues arise, changes to the proposal will be documented and approved using City's 00945 Work Change Directive (**form attached**). Final costs of the additional work will be incorporated into the approved Purchase Order by means of a Change Order to the Purchase Order.
2. If emergency project should occur, City's Representative will coordinate with Contractor on scope and schedule.
3. Stop Work Orders
  - a. The City reserves the right to verbally order that all work cease on a project at any time.
  - b. The individuals authorized to issue verbal work stop orders are:
    - (1) City's representative
    - (2) City Risk Manager
  - c. The City will be obligated to pay for supplies used and service performed up to the

stop work order.

**D. TECHNICAL SPECIFICATIONS – ATTACHMENT A1**

1. 02055 Embankment
2. 02060 Untreated Compacted Aggregate
3. 02130 Cold Milling Asphaltic Pavement Surface
4. 02220 Selective Demolition
5. 02225 Concrete Sawing
6. 02231 Concrete Removal
7. 02233 Tree Removal and/or Stump Removal
8. 02236 Tree Root Pruning
9. 02280 Utility Adjustments
10. 02310 Site Grading
11. 02480 Modular Wall
12. 02513 Asphaltic Concrete, Hot Recycling, and Resurfacing
13. 02630 Drainage Structures and Storm Sewers
14. 02740 Pavement
15. 02760 Speed Humps
16. 02770 Portland Cement Concrete Curbs
17. 02775 Portland Cement Concrete Sidewalks, Driveways, and ADA Accessible Ramps
18. 02777 Concrete Steps
19. 02781 Brick/Stone Sidewalks, Borders, Driveways
20. 02783 Concrete Paver Sidewalks and Driveways
21. 02810 Lawn Sprinkler System
22. 02820 Site Improvements
23. 02830 Integral Reinforced Concrete Wall
24. 02870 Mailboxes
25. 02890 Meter Posts and Sign Posts
26. 02891 Street Name Tiles
27. 02920 Landscaping
28. 02936 Tree Replacement
29. 02980 Concrete Slab Raising
30. 02985 Concrete Sidewalk Grinding Detail

**E. “GREEN”, ECO-FRIENDLY, AND SUSTAINABLE PRODUCT**

1. Contractor shall include in their project proposals any “green, eco-friendly or sustainable” products as requested by City.

**F. CONTRACTOR RESPONSIBILITIES**

1. Prepare binding project specification/cost estimate for each project requested by the City, at no cost to the City.
2. Supply all personnel, equipment, supplies, and services to complete the requested project.
3. Exercise best professional judgment in performing the contract services (and shall be liable for any loss incurred by the City resulting from failure to meet standards).
4. Perform this contract in compliance with all applicable present and future federal, state, and local laws and regulations.
5. Contractor shall supervise, inspect and direct the work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the work in accordance with the Contract documents.
  - a. Contractor shall be solely responsible for the means, methods, techniques, sequences and procedures of construction.
  - b. Contractor shall be solely responsible for scheduling and coordinating the work of subcontractors, suppliers and other persons and organizations performing or furnishing any of the work under a direct or indirect contract with Contractor.
  - c. Contractor shall be responsible to see that the completed work complies accurately with the Contract documents.
  - d. At all times during the progress of the work, Contractor shall assign a competent resident superintendent of the work.
  - e. The superintendent will be Contractor’s representative at the Site and shall have authority to act on behalf of Contractor.
  - f. All communications given to or received from the superintendent shall be binding on Contractor.
  - g. If it is determined to be in the best interest of the work, Contractor shall replace the project manager, resident superintendent or any other employee of the Contractor, Subcontractors, Suppliers or other persons or organizations performing or furnishing any of the work on the project upon written request by the City.
6. All materials shall be of good quality as provided in the Contract documents.

**G. SITE INSPECTIONS**

1. The City reserves the right to make site inspections and/or take samples at any time on an unannounced basis for the purpose of verifying the accuracy of services, procedures, and/or documentation applicable to the contract.

**H. JOB SITE ADMINISTRATION**

1. General: The contractor or a duly authorized project manager acting for the contractor shall continually be present at the site of the work while work is in progress for the duration of the project.

**I. USE OF SITE**

1. Contractor shall minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during tree removal operations.
2. During execution of Work, all areas of all buildings shall remain occupied except those where work is actually being performed.
3. Contractor shall confine Contractor's equipment, the storage of materials and equipment, and the operations of workers to the site and other areas identified in and permitted by the City.
4. Contractor shall not unreasonably encumber the site and the other areas with equipment or other materials or equipment.
5. Contractor shall assume full responsibility for any damage to the site or the other areas, or to the owner or occupant thereof, or of any adjacent land or areas, resulting from the performance of the work.
6. During the progress of the work, Contractor shall keep the site and the other areas free from accumulations of waste materials, rubbish and other debris resulting from the work.
7. At the completion of the work, Contractor shall remove all waste materials, rubbish and debris from Site and other areas as well as all tools, appliances, construction equipment and machinery and surplus materials.
8. Contractor shall leave the site clean and ready for utilization or occupancy by City at completion of the work.
9. Contractor shall restore to all property not designated for alteration by the Contract documents to its pre-work condition.



# ATTACHMENT B

Bidder: \_\_\_\_\_

CITY OF FOUNTAINS  
HEART OF THE NATION



KANSAS CITY  
MISSOURI

## **FACILITY REPAIR & MAINTENANCE BID FORM/CONTRACT**

**Project/Contract No. EV3040**

**Title IDIQ for Traffic Safety Improvements**

1. The undersigned Bidder, having examined the Bidding Documents, related documents and the Site of the Work, and being familiar with all the conditions affecting the provision of services of the proposed Specification/Scope of Work, including Laws and Regulations and the availability of labor, materials and equipment, agrees, if this Bid is selected by City, this Bid Form/Contract will become the Contract between Bidder and City for Bidder to furnish all labor, materials, equipment and services necessary for the proper completion of the Work in accordance with the contract documents, at the price(s) stated below, which stated sum(s) include(s) all fees and other charges applicable to materials, appliances, labor and all things subject to and upon which other charges may be levied.

2. Bidder agrees the Contract will comprise the entire agreement between City and Bidder. The Contract documents are identified in the Part I Special Terms and Conditions and Part II Standard Terms and Conditions and are incorporated into and made a part of this Bid Form/Contract by reference.

3. Bidder agrees that if this Bid Form/Contract is executed by City, Bidder's offer is accepted and this Bid Form/Contract that incorporates all other Contract Documents shall constitute the Contract between the parties. Bidder authorizes the City to fill in the Contract Price on this Bid Form/Contract in accordance with Bidder's Bid. Bidder agrees that this Bid Form/Contract may be executed in one or more counterparts, each of which will be deemed an original copy of this Bid Form/Contract and all of which, when taken together, will be deemed to constitute one and the same Bid Form/Contract. This Bid Form/Contract shall be effective upon the execution of counterparts by both parties, notwithstanding that both parties may not sign the same counterpart. The parties' signatures transmitted by facsimile or by other electronic means shall be proof of the execution of this Bid Form/Contract and shall be acceptable in a court of law. A copy of this Bid Form/Contract shall constitute an original and shall be acceptable in a court of law.

4. The Bid Price(s) shall be shown in figures.

TOTAL BASE BID PRICE IN NUMERIC FIGURES \$ \_\_\_\_\_

5. The undersigned Bidder has given City written notice of all conflicts, errors or discrepancies that it has discovered in the bidding and contract documents and the written resolution thereof by City is acceptable to Bidder.

6. The undersigned Bidder agrees that this Bid shall remain subject to selection by City, and may not be withdrawn for ninety (90) days after the day Bids are opened.

7. The undersigned Bidder certifies that this Bid contains no modifications, deviations, riders or qualifications.

Bidder: \_\_\_\_\_

8. Form(s) 00412 Unit Prices contain prices included in the Base Bid, and are incorporated into this Bid. Form(s) must be completed and returned with this Bid.

9. The undersigned Bidder acknowledges receipt of the following addenda listed by number and date appearing on each addendum:

Addendum Number	Dated	Addendum Number	Dated
(_____)	(_____)	(_____)	(_____)
(_____)	(_____)	(_____)	(_____)
(_____)	(_____)	(_____)	(_____)
(_____)	(_____)	(_____)	(_____)
(_____)	(_____)	(_____)	(_____)
(_____)	(_____)	(_____)	(_____)
(_____)	(_____)	(_____)	(_____)

10. By submitting its bid, Bidder is agreeing to meet or exceed the minimum employment goals of 10% minority and 2% women during the term of its contract with the City, or request a waiver of the goals. If a waiver is requested, Bidder must establish good faith efforts towards meeting the goals as set forth in the CREO-KC Instructions for Construction Contracts and the City's Workforce Ordinance. Should Bidder fail to meet or exceed the minimum employment goals or otherwise establish that Bidder is entitled to a waiver under circumstances in which Bidder has previously failed to meet or exceed the goals on one or more occasions with the twenty-four month period immediately preceding the completion of the Work under this Bid Form/Contract, Bidder may be suspended from participating, either as a contractor or subcontractor, on any future contract with the City for a period ranging from thirty days to six months as further specified in the Contract Documents.

11. By submitting its bid, Bidder warrants that if its bid should exceed \$300,000.00 and Bidder employs fifty (50) or more people, Bidder has an affirmative action program in place and will maintain the affirmative action program in place for the duration of its contract with the City. Bidder further warrants that it will comply with the affirmative action requirements contained in Part II Standard Terms and Conditions as incorporated by reference into this Bid Form/Contract.

Bidder: \_\_\_\_\_

Business Entity Type:

- ☐ Missouri Corporation  
☐ Foreign Corporation  
☐ Fictitious Name Registration  
☐ Sole Proprietor  
☐ Limited Liability Company  
☐ Partnership  
☐ Joint Venture  
☐ Other: \_\_\_\_\_

(Specify)

Legal name and address of Bidder:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Telephone No. \_\_\_\_\_

Facsimile No: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Federal Identification Number \_\_\_\_\_

I hereby certify that I have authority to execute this document on behalf of Bidder, person, firm, partnership, corporation or association submitting Bid.

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

Title: \_\_\_\_\_

Date: \_\_\_\_\_

(Attach corporate seal if applicable)

Bidder: \_\_\_\_\_  
**ACCEPTANCE OF BID**

City, by executing this Bid Form/Contract, hereby accepts Bidder's Bid and this Bid Form/Contract that incorporates all other Contract documents shall constitute the Contract between the Parties.

City shall pay Contractor for completion of the Work in accordance with the Contract documents a maximum amount of \_\_\_\_\_ Dollars, (\$ \_\_\_\_\_). The Contract Price includes:

00412 Unit Prices, included in the Bid, a copy of which is attached

**KANSAS CITY, MISSOURI**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Approved as to form:

\_\_\_\_\_  
Assistant City Attorney



## EXPERIENCE AND REFERENCE SUMMARY

Project Number: EV 3040

Project Title: IDIQ Traffic Safety Improvements

<b>Firm's Legal Name</b>	
<b>Mailing Address</b>	
<b>Contact – Name &amp; Email</b>	
<b>Contact – Phone &amp; Fax</b>	

NO.	PROJECT & LOCATION	OWNER NAME & ADDRESS CONTACT & PHONE NUMBER	PROJECT DURATION & DATE COMPLETED	\$ VALUE
1.				
2.				
3.				
4				
5				
6				
7				
9				
10				



## UNIT PRICES

**Project Number EV 3040**

**Project Title IDIQ Traffic Safety Improvements**

**NOTE: IN THE EVENT OF DISCREPANCY, UNIT PRICE SHALL GOVERN.**

Item No.	Unit	Quantity	Item Description:	Unit	Extension
1	EACH	1	Speed Humps installation including Pavement Marking and Signage	\$	\$
2	EACH	1	Raised Crosswalk installation including Pavement Marking and Signage - 24ft wide	\$	\$
3	EACH	1	Raised Crosswalk installation including Pavement Marking and Signage - 48ft wide	\$	\$
4	EACH	1	Chicanes Installation including Signage	\$	\$
5	LIN-FT	10	Various Curb/Curb Extension/Bumpouts, Remove and Replace	\$	\$
6	EACH	1	Daylighting with Signage - each corner	\$	\$
7	EACH	1	Traffic Signs with Installation	\$	\$
8	SQ-FT	25	8" Sidewalk, Remove and Replace	\$	\$
9	SQ-FT	25	4" Sidewalk, Remove and Replace	\$	\$
10	SQ-FT	10	ADA Detectable Warning Pad	\$	\$
11	EACH	10	Street Name Tiles	\$	\$
12	LIN-FT	10	Retroreflective Paint	\$	\$
13	LS	1	Mobilization	\$	\$
14	LS	1	Traffic Control	\$	\$
15	EACH	10	Delineators (yellow/white)	\$	\$
16	EACH	10	Parking Stops - concrete and include installation	\$	\$
17	EACH	1	MUTCD Signs include installation	\$	\$
18	EACH	1	Crosswalk - 10x2x2 - 24ft wide - Thermoplastic/Epoxy	\$	\$
19	EACH	1	Crosswalk - 10x2x2 - 48ft wide - Thermoplastic/Epoxy	\$	\$
			TOTAL BID ITEMS #1 THROUGH #19		

Note: May be printed, for manual fill-in, or filled in on electronic excel spreadsheet version.

# ATTACHMENT C





# APPLICATION FOR PAYMENT

Project Number \_\_\_\_\_

Project Title \_\_\_\_\_

Final Payment<sup>5</sup> ☐

CONTRACTOR \_\_\_\_\_

Address \_\_\_\_\_

Application Number<sup>2</sup>: \_\_\_\_\_

Date: \_\_\_\_\_

Ordinance/Resolution Number: \_\_\_\_\_

Effective: \_\_\_\_\_

PO Number \_\_\_\_\_

Vendor Number \_\_\_\_\_

Application for Work Accomplished from \_\_\_\_\_

to \_\_\_\_\_

Original Contract Price	[1]	\$	-
Net by Change Orders through	[2]	\$	-
Current Contract Price (1+2)	[3]	\$	-
Completed Work	[4]	\$	-
Disputed Amounts <sup>3</sup>	[-] [4a]	\$	-
Stored Material <sup>4</sup>	[5]	\$	-
Disputed Amounts <sup>3</sup>	[-] [5a]	\$	-
Total Completed and Stored to Date (4+5)	[6]	\$	-
Previous Payments	[7]	\$	-
Previous Retainage	[8]	\$	-
Total Previous Applications (7+8)	[9]	\$	-
Amount This Application (6-9)	[10]	\$	-
Less Retainage This Application (5%)	[-] [11]	\$	-
Release of Retainage	[12]	\$	-
Total Due This Application (10-11+12)	[13]	\$	-
Liquidated Damages			
Completion of Work	[14]	\$	-
Prevailing Wage <sup>7</sup>	[15]	\$	-
MBE/WBE Program <sup>7</sup>	[16]	\$	-
Workforce Program <sup>7</sup>	[17]	\$	-
<b>Total Amount Due Contractor (13 - 14 through 17)</b>	[18]	\$	-

Accompanying Documentation: <sup>1, 2, 3, 4, 5, & 6</sup> and any other information as necessary.

NOTE: Initial all figures on this Application and on the Schedule of Values that are changed to correct errors or conform to the amount recommended. Attach explanation of changes that have been made.

## CONTRACTOR's Certification:

The undersigned CONTRACTOR certifies that (a) all previous progress payments received from OWNER on account of Work done under this Contract have been applied on account to discharge CONTRACTOR's legitimate obligations incurred in connection with Work covered by all prior Applications for Payment; (b) at time of payment, title of all Work, materials and equipment incorporated into said Work or otherwise listed in or covered by this Application for Payment will pass to OWNER free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to OWNER indemnifying OWNER against any such Lien, security interest or encumbrance); and (c) all Work covered by this Application for Payment is in accordance with the Contract Documents and not defective; and (d) all manufactured goods or commodities used or supplied for this Project are in compliance with Kansas City's Buy America ordinance.

By \_\_\_\_\_  
Contractor Authorized Representative (Print) Signature

Date \_\_\_\_\_

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) SS

Subscribed and Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

My commission expires:

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

**DESIGN PROFESSIONAL's Recommendation of Payment:**

In accordance with the Contract Documents, based on on-Site observations and the data comprising this application, the DESIGN PROFESSIONAL recommends to the OWNER that to the best of the DESIGN PROFESSIONAL's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the CONTRACTOR is entitled to payment of the Amount above listed in this application.

\_\_\_\_\_  
Name of firm (Print)                      DESIGN PROFESSIONAL (Print)                      (Signature)

Date: \_\_\_\_\_

**Construction/Program Manager's Recommendation of Payment: (if applicable)**

In accordance with the Contract Documents, based on on-Site observations and the data comprising this application, the Construction/Program Manager recommends to the OWNER that to the best of the Construction/Program Manager's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the CONTRACTOR is entitled to payment of the Amount above listed in this application.

\_\_\_\_\_  
Construction/Program Manager firm (Print)                      Authorized Representative (Print)                      (Signature)

Date: \_\_\_\_\_

**City's Representative's Agreement with Recommendation of Payment**

\_\_\_\_\_  
City's Representative(print)                      (Signature)                      (Date)

**City's Approval**

The amount previously recommended is approved for payment.

\_\_\_\_\_  
Director or Designee (Print)                      (Signature)                      (Date)

<sup>1</sup>See General Conditions Article 14.02 A and B

<sup>2</sup>Proof of tax compliance if 1st payment and if Contract amount exceeds \$150,000.00

<sup>3</sup>Schedule of Values—Denote any amounts currently disputed in this application. Attach additional dispute documentation if required.

<sup>4</sup>If requesting payment for stored materials, see General Conditions Article 14.02 A.1

<sup>5</sup>If final payment, current proof of tax compliance if Contract is longer than 1 year and amount exceeds \$150,000.00.

<sup>6</sup> Per General Conditions Sec. 14.02 attach a copy of the most recent 00485.01 M/WBE Monthly Utilization Report, 00485.02 Project Workforce Monthly Report and 00485.03 Company-Wide Workforce Monthly Report CONTRACTOR has submitted to the City's Human Relations Department

<sup>7</sup>Applicable only if final payment

**REMINDER:** CONTRACTOR is responsible for meeting or exceeding the the D/M/WBE participation amounts in its Contractor Utilization Plan (CUP) as amended by any previously approved Request for Modification/Substitution. Any Change Orders or amendements modifying the amount CONTRACTOR is to be compensated will have correspondingly impacted the amount of compensation due D/M/WBEs for purposes of meeting or exceeding the Bidder/Proposer participation. CONTRACTOR is again reminded to consider the effect of any Change Order or amendment, and to submit a Request for Modification/Substitution if appropriate.

Distribution:      Owner                      Project Manager  
                         Contractor                      Design Professional  
                         Construction Manager                      \_\_\_\_\_

## SCHEDULE OF VALUES

Project Number \_\_\_\_\_

Project Title \_\_\_\_\_

HRD APPROVED CUP		
MBE	WBE	DBE
\$0.00	\$0.00	\$0.00
%	%	%

[illegible]

# ATTACHMENT D

**CREO KC INSTRUCTIONS  
FOR CONSTRUCTION CONTRACTS**

**PART A. ECONOMIC EQUITY & INCLUSION GOALS--MBE/WBE PROGRAM**

**I. City's Economic Equity & Inclusion Goals--MBE/WBE Program.**

- A. The City has adopted an Economic Equity & Inclusion Goals--Minority/Women Business Enterprise ("MBE/WBE") Program (Sections 3-421 through 3-469, Code of Ordinances) (the "Program") to implement the City's policy of supporting the fullest possible participation in City contracts and change orders of firms owned and controlled by minorities and women. Each construction contract may have an MBE and/or WBE goal for participation. An MBE or WBE goal is a numerical objective the City has set for the contract that may be awarded pursuant to these bid specifications. Goals are stated as a percentage of contract dollars. For example, if an MBE goal for a contract is 10% and a Bidder submits a bid of \$100,000, the goal for MBE participation would equal \$10,000. The specific MBE/WBE goals on this contract are set forth elsewhere in the bid specifications.
- B. These Civil Rights & Equal Opportunity Department ("CREO KC") Forms & Instructions are part of the BIDDING DOCUMENTS and CONTRACT DOCUMENTS as defined in the General Conditions. By submitting a Bid, the Bidder agrees, as a material term of the contract, to carry out the City's MBE/WBE Program by making good faith efforts to include certified MBE/WBEs in the contract work to the extent of the goals listed for the contract and to the fullest extent consistent with submitting the lowest and best bid to the City. Bidder agrees that the Program is incorporated into this document and agrees to follow the Program. Although it is not a requirement that a Bidder in fact meet or exceed both the MBE and WBE Goals, it is a requirement for approval of the Bid that a Bidder objectively demonstrate to the City that good faith efforts have been made to meet the Goals. Bidders must attempt to meet both the MBE and WBE goals and request a waiver if either is not met.
- C. The following CREO KC Forms are attached and must be used for MBE/WBE submittals:
1. Contractor Utilization Plan/Request for Waiver (CREO KC Form 8); and
  2. Letter of Intent to Subcontract (CREO KC Form 00450.01); and
  3. Timetable for MBE/WBE Utilization (CREO KC Form 10); and
  4. Request for Modification or Substitution (CREO KC Form 11); and
  5. Contractor Affidavit for Final Payment (Form 01290.14); and
  6. Subcontractor Affidavit for Final Payment (Form 01290.15).

Warning: The City only gives MBE/WBE credit for a Bidder's use of City certified MBE/WBEs. A certified MBE/WBE firm is a firm that has been certified by the City's Civil Rights & Equal Opportunity Department as such. An MBE/WBE firm must be certified before the date on which the contractor utilization plan is due. Certified MBEs and WBEs are listed in the M/W/DBE Kansas City Mo. Online Directory, which is available on the City's website at [www.kcmo.org](http://www.kcmo.org). Before a Bidder submits a bid, Bidder



should contact CREO KC and consult the directory to make sure any firm proposed for use for MBE/WBE participation has been certified.

## **II. Required Submissions Following Bid Opening.**

A. Bidder must submit the following documents within forty-eight (48) hours of bid opening:

1. **Contractor Utilization Plan/Request for Waiver (CREO KC Form 8).** This form states a Bidder's plan to use specific certified MBE/WBEs in the performance of the contract and includes the following:
  - a. The work to be performed by each MBE/WBE and the amounts each is to be paid for the work; and
  - b. The name, address, race or ethnic origin, gender and employer identification number or social security number of each MBE/WBE that will perform the work.
  - c. An automatic request for waiver in the event Bidder has not met or exceeded the MBE and/or WBE goals for the contract but believes that it has made good faith efforts to meet or exceed the goals and desires a waiver of the goals. If a waiver is requested, CREO KC will examine the Bidder's documentation of good faith efforts and make a recommendation to grant or deny the waiver. CREO KC will recommend a waiver be granted only if the Bidder has made good faith efforts to obtain MBE/WBE participation.
2. **Letter(s) of Intent to Subcontract (CREO KC Form 00450.01).** A letter must be provided from each MBE/WBE listed on the Contractor Utilization Plan. These letters verify that the MBE/WBE has agreed to execute a formal agreement for the work and indicate the scope of work to be performed and the price agreed upon for the work.

## **III. Required Submission when Requested by City.**

A. Bidder must submit the following documents when requested by City:

1. **Timetable for MBE/WBE Utilization (CREO KC Form 10).**
2. **Documentation of good faith efforts.**

## **IV. Required Monthly Submissions during term of Contract.**

A. Bidder must submit the following report on a monthly basis if awarded the contract:

1. **M/WBE Monthly Utilization Report.** This report must be submitted to the Director by the 15<sup>th</sup> of each month. Failure to submit timely reports may result in delays in processing of current and future contract approvals and payment applications. The method of submission of this report is through the B2GNow Diversity Management System (B2GNow).

## **V. Required Submittals for Final Contract Payment.**

A. Contractor must submit the following documents with its request for final payment under

the contract:

1. **Contractor Affidavit for Final Payment (Form 01290.14)**
2. **Subcontractor Affidavit(s) for Final Payment (Form 01290.15)**
3. **Final B2GNow Monthly Contract Audit Report with all payment audits confirmed.**

#### **VI. Additional Submittals.**

- A. Contractor may be required to make additional submittals during the term of the Contract, including **Request for Modification or Substitution (CREO KC Form 11)**. Refer to Section IX, Modification of the Contractor Utilization Plan or Substitution of an MBE/WBE, for additional instructions on when this form must be submitted.

#### **VII. MBE/WBE Participation Credit.**

- A. The following shall be credited towards achieving the goals:
1. The total contract dollar amount that a prime contractor has paid or is obligated to pay to a subcontractor that is a certified MBE or WBE, except as otherwise expressly provided for herein.
  2. The total contract dollar amount that a prime contractor that is a certified MBE or WBE performed itself.
  3. Sixty percent (60%) of the total dollar amount paid or to be paid by a prime contractor to obtain supplies or goods from a supplier who is a certified MBE or WBE.
  4. Ten percent (10%) of the total dollar amount paid or to be paid by a prime contractor to obtain supplies or goods from a supply broker who is a certified MBE or WBE.
  5. One hundred percent (100%) of the total dollar amount paid or to be paid by a prime contractor to a manufacturer of construction supplies who is a certified MBE or WBE.
  6. Subcontractor participation with a lower tier MBE/WBE subcontractor using one of the above methods of participation.
- B. **NO CREDIT**, however, will be given for the following:
1. Participation in a contract by a MBE or WBE that does not perform a commercially useful function as defined by the Program; and
  2. Any portion of the value of the contract that an MBE or WBE subcontractor subcontracts back to the prime contractor or any other contractor who is not a qualified MBE/WBE; and
  3. Materials and supplies used on the contract unless the MBE/WBE is responsible for negotiating the price, determining quality and quantity, ordering the materials and installing (where applicable) and paying for material itself; and
  4. Work performed by an MBE or WBE in a scope of work other than that in which the MBE or WBE is currently certified.



### **VIII. Methods for Securing Participation of MBE/WBEs and Good Faith Efforts.**

- A. A bidder is required to make good faith efforts to achieve the MBE/WBE goals. Good faith efforts are efforts that, given all relevant circumstances, a Bidder actively and aggressively seeking to meet the goals can reasonably be expected to make. Good faith efforts must be made before the Bidder submits a Contractor Utilization Plan, in other words, within 48 hours of bid opening. However, efforts made to increase participation of MBEs and WBEs following submission of the CUP can be considered as evidence of good faith efforts to meet the goals.
- B. In evaluating good faith efforts, the Director of CREO KC will consider whether the Bidder has performed the following, along with any other relevant factors:
  - 1. Advertised for at least 15 calendar days prior to the bid or proposal due date opportunities to participate in the contract in general circulation media, trade and professional association publications, small and minority business media, and publications of minority and women's business organizations which are included in a list along with their current contact information identified on the directory as the list of publications available to publish such advertisements, which list shall be updated by CREO KC no less than every three (3) month.
  - 2. Sent written notices at least fifteen (15) calendar days prior to the bid or proposal due date containing the information required in section (9) below, by certified mail, e-mail, or facsimile, to at least 80% of MBEs and WBEs which are included in a list along with their contact information identified on the directory as the list of organizations available to receive such notices, which list shall be updated by CREO KC no less than every three (3) months.
  - 3. Sent written notices, containing the information required by section (9) below, by certified mail, e-mail or facsimile, to at least 80% of MBEs and WBEs listed on the directory certified in the applicable scopes of work for the particular bid soliciting their participation in the contract at least 15 calendar days prior to the bid or proposal due date.
  - 4. Attempted to identify portions of the work for qualified MBE and/or WBE participation in order to increase the likelihood of meeting the goals, including breaking down contracts into economically feasible units that take into consideration the capacity of available MBE/WBEs appearing on the CREO KC directory.
  - 5. At any time prior to submission of the CUP or submittal of a request for modification of a CUP, requested assistance in achieving the goals from the Director and acted on the Director's recommendations.
  - 6. Conferred with certified MBEs and WBEs which inquired about or responded to the bid solicitation and explained to such MBEs and WBEs the scope and requirements of the work for which their bids or proposals were solicited, and if not all certified MBEs and WBEs in the particular scopes listed on the directory have inquired about or responded to the bid solicitation for each scope of work, then contact by certified mail, e-mail or telephone the greater of ten (10) or 80% of additional certified MBEs and WBEs in the particular scopes of work listed on the directory and offer to confer with such MBEs and WBEs for such particular scope of work and request such MBEs



and WBEs to submit a proposal.

7. Attempted to negotiate in good faith with certified MBEs and WBEs which responded to the bid solicitation or those certified MBEs and WBEs that were conferred with as contemplated in section (6) above, and other qualified MBEs and WBEs, at the option of the bidder, proposer, or contractor, as applicable, to perform specific subcontracts, not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities by the bidder, proposer, or contractor; in the event an MBE or WBE is the low bid, but rejected as unqualified, the bidder, proposer, or contractor and the director or board, as applicable, shall provide sound reasons for rejecting such MBE or WBE.
8. Attended pre-bid meeting when such meetings were indicated in the solicitation of bids or otherwise by the bidder, proposer, or contractor, as applicable or by the director provided the director provides written direction to the bidder, proposer, or contractor at the time the goals are recommended.
9. Written notices and advertisements to be provided pursuant to sections (1), (2) and (3) above shall include the following information:
  - a. The bid due date;
  - b. The name of the project;
  - c. The address or general location of the project;
  - d. The location of plans and specifications for viewing;
  - e. Contact information of the prime contractor;
  - f. A general description of the scopes of work that are the subject of the solicitation;
  - g. The goals established for the applicable contract, and if the goals are still subject to board approval, then a statement that the goals as stated are preliminary and are subject to board approval;
  - h. If the project or any portion of the project is subject to prevailing wage then a statement that all or a portion of the project will be subject to prevailing wage, as applicable; and if only a portion of the scopes are subject to prevailing wage, then identification of such scopes provided that such scopes are known as of the time of bid solicitation;
  - i. The date and time of any pre-bid meeting(s), if any, which have been scheduled by the bidder, proposer, contractor or developer as of the bid solicitation; and

Any other information deemed relevant by the bidder, proposer, contractor or developer, as applicable, or the director to the extent the director provides written direction to the bidder, proposer, contractor or developer of such additional information at the time the goals are recommended by the director. 8. Within five (5) working days after drawing the bid specifications, sent certified letters, verifiable e-mails or proof of facsimiles to certified MBEs and WBEs listed in the M/W/DBE Kansas City Mo. Online Directory.

- C. A Bidder may be required to give the City documentation to prove that it made good faith efforts. The Bidder will be contacted by the City with further instructions about when this documentation must be submitted.

#### **IX. Modification of the Contractor Utilization Plan or Substitution of an MBE/WBE.**

- A. After bid opening, a Bidder or Contractor may need to substitute an MBE and/or WBE or request that the amount of MBE/WBE participation listed in its Contractor Utilization Plan be modified. Bidder or Contractor must file a **Request for Modification or Substitution (CREO KC Form 11) prior to actual substitution and within a reasonable time after learning that a modification or substitution is necessary.** The Director may approve substitutions or modifications and upon approval, the modifications and substitutions will become an amendment to the Contractor Utilization Plan. Modifications or substitutions may be approved when:
1. The Director finds that the Bidder or Contractor made and provided evidence of good faith efforts to substitute the MBE/WBE listed on the Contractor Utilization Plan with other certified MBE/WBEs for the scope of work or any other scope of work in the contract; and
  2. The Bidder or Contractor has not attempted intentionally to evade the requirements of the program and it is in the best interests of the City to allow a modification or substitution; and
  3. The Director also finds one of the following:
    - a. The listed MBE/WBE is non-responsive or cannot perform; or
    - b. The listed MBE/WBE has increased its previously quoted price to the bidder, proposer or contractor without a corresponding change in the scope of the work; or
    - c. The listed MBE/WBE has committed a material default or breach of its contract with the contractor; or
    - d. Requirements of the scope of work of the contract have changed and render subcontracting not feasible or not feasible at the levels required by the goals established for the contract; or
    - e. The listed MBE/WBE is unacceptable to the contracting department; or
    - f. The listed MBE/WBE thereafter had its certification revoked; or
- B. A modification shall not be made unless the modification or substitution has first been requested and approved by the Director. Once a modification has been made, a Construction Contractor Employee Identification Report (CREO KC Form 0485.04) for the newly approved subcontractor must be submitted at least ten (10) days prior to the approved subcontractor commencing work on a City contract.

#### **X. Appeals.**

- A. In conformance with the Act, appeals may be made to the City Fairness in Construction Board or Fairness in Professional Services and Goods Board on the following:

1. The grant or denial of a Request for Waiver;
  2. Substitution for an MBE/WBE listed on a Contractor Utilization Plan;
  3. Modification of the percentage of MBE/WBE participation on a Contractor Utilization Plan;
  4. Liquidated Damages;
  5. The amount of MBE/WBE credit the Contractor may receive for MBE/WBE participation identified in the contractor utilization plan.
- B. Any appeal must be filed in writing with the Director within fifteen (15) calendar days of notice of the determination. Mailing, faxing, personal delivery or posting at CREO KC of determinations shall constitute notice. The appeal shall state with specificity why the Bidder or Contractor believes the determination is incorrect
- C. Failure to file a timely appeal shall constitute a waiver of a Bidder's or Contractor's right to appeal such determination and such person shall be estopped to deny the validity of any determination which could have been timely appealed.

#### **XI. Access to Documents and Records.**

- A. By submitting a Bid, each Bidder agrees to permit the City, its duly authorized agents or employees, access at all reasonable times to all books and business records of Bidder as may be necessary to ascertain compliance with the requirements of this document and the Act, within ten (10) calendar days of the date of the written request.
- B. All Bidders agree to cooperate with the contracting department and CREO KC in studies and surveys regarding the MBE/WBE program.

#### **XII. Miscellaneous.**

- A. A Bidder or Contractor shall bear the burden of proof with regard to all issues on appeal.
- B. In the event of any conflict between this document and the Program, the provisions of the Program shall control. The terms used in this document are defined in the Program.
- C. Oral representations are not binding on the City.
- D. The City Council may waive the requirements of this document and the Program and award the contract to the lowest and best bidder if the City Council determines a waiver is in the best interests of the City.
- E. The Director may grant extensions of time to Bidders to submit Letters of Intent to Subcontract (CREO KC Form 00450.01).

#### **XIII. Liquidated Damages – Economic Equity & Inclusion Goals--MBE/WBE Program.**

- A. If Contractor fails to achieve the MBE/WBE goals stated in its Contractor Utilization Plan, as amended, the City will sustain damages, the exact extent of which would be difficult or impossible to ascertain. Therefore, in order to liquidate those damages, the monetary difference between either (1) the amount of the MBE/WBE goals set forth in the Contractor Utilization Plan, as amended, or (2) the goals established (whichever is lower) and the amount actually paid to qualified MBEs and WBEs for performing a commercially useful function will be deducted from the Contractor's payments as

liquidated damages. In determining the amount actually paid to qualified MBEs and WBEs, no credit will be given for the portion of participation that was not approved by the Director, unless the Director determines that the Contractor acted in good faith. No deduction for liquidated damages will be made when, for reasons beyond the control of the Contractor, the MBE/WBE participation stated in the Contractor Utilization Plan, as amended and approved by the Director is not met.

## **PART B. CONSTRUCTION EMPLOYMENT PROGRAM REQUIREMENTS**

**IMPORTANT:** This Part B is applicable to City construction contracts estimated by the City prior to solicitation as: (1) requiring more than 800 construction labor hours and (2) valued in excess of \$300,000.00. This program is distinguished from the M/WBE Program in that it is based on workforce hours of the Bidder and *all* its participating subcontractors rather than the actual contract value of work. The instructions herein detail the specifics related to this program. This program is in *addition* to the M/WBE program.

### **I. City's Construction Employment Program.**

- A. The City has adopted a Construction Employment Program (Sections 3-501 through 3-525, Code of Ordinances) (the "Workforce Program" or "Program") to implement the City's policy of supporting the fullest possible utilization of minority and women workers in the construction industry.
- B. The minimum workforce goals are currently set by ordinance at 10% for minorities and 2% for women. These goals are separate from M/WBE goals. Public recognition may be provided if the bidder achieves at least twice the minimum participation.
- C. Construction contracts subject to the Workforce Program and the company-wide and project-specific workforce goals ("workforce goals") are those contracts to construct, reconstruct, improve, enlarge or alter any fixed work that is estimated by the City prior to solicitation to: (1) require more than 800 construction labor hours, (2) has estimated costs that exceed \$300,000.00, and (3) involve the expenditure of public funds.
- D. The successful bidder may meet company-wide goals by counting the bidder's utilization of minorities and women throughout the Kansas City metropolitan statistical area. In addition, the successful Bidder is responsible to ensure that it and its subcontractors cumulatively make good faith efforts to meet project-specific goals for utilization of minorities and women.
- E. These Civil Rights & Equal Opportunity Department ("CREO KC") Forms & Instructions are part of the BIDDING DOCUMENTS and CONTRACT DOCUMENTS as defined in the General Conditions. By submitting a Bid, the Bidder agrees, as a material term of the contract, to carry out the City's Construction Employment Program by making good faith efforts to utilize minority and women workers to the fullest extent consistent with submitting the lowest and best bid to the City. Bidder agrees that the Program is incorporated into this document and agrees to follow the Program. Although it is not a requirement that a Bidder in fact meet or exceed the construction employment goals to receive approval from CREO KC, a Bidder not doing so is required to

objectively demonstrate to CREO KC that good faith efforts have been made.

F. The following reports are to be used for Construction Employment Program submittals:

1. Project Workforce Monthly Report
2. Company-Wide Workforce Monthly Report

## II. Required Submissions.

A. Within forty-eight (48) hours after bid opening, the construction contractor shall submit the **Construction Employee Identification Report** (CREO KC Form 00485.04) and shall include: the name, home address, job title, sex and race/ethnicity of each person working for the Prime. The individuals to be listed on the form are those which the construction contractor *anticipates* will be performing construction labor hours creditable towards the minimum workforce goals applicable to the construction contractor individually.

The following circumstances also require the submission of a Construction Employee Identification Report:

- a. Prior to contract execution for those City construction contracts awarded pursuant to a request for proposals (RFP), the construction contractor shall submit a **Construction Employee Identification Report** (CREO KC Form 00485.04).
  - b. At least ten (10) days prior to the date upon which any subcontractor is to commence work under a City construction contract, the Prime shall submit a **Construction Employee Identification Report** (CREO KC Form 00485.04) for the subcontractor.
- B. The CREO KC Director has established the B2GNow Diversity Management System (“B2GNOW”) (an online reporting tool) as the preferred method for fulfilling reporting requirements of the Workforce Program. The CREO KC Director will allow paper submission in lieu of on-line submission if the on-line submission process presents a hardship to the contractor.
- C. Bidder must submit the following documents through B2GNow on a monthly basis if awarded the contract:
1. **Project Workforce Monthly Report.** This report is contract specific. This report must be submitted to the Director by the 15<sup>th</sup> of each month for the Contractor and each subcontractor. It will be utilized to report the Contractor’s own workforce compliance data with regard to the City’s construction contract. Failure to submit timely reports may result in delays in processing of current and future contract approvals and payment applications.
  2. **Company-Wide Workforce Monthly Report.** This report is not contract specific; it is used to report on the utilization of women and minorities, by trade, company-wide. This report must be submitted to the Director by the 15<sup>th</sup> of each month. It will be utilized to report the Contractor’s own workforce compliance data with regard to

every contract (both privately and publicly funded) that the Contractor has in progress throughout the Kansas City Metropolitan Statistical Area. Failure to submit timely reports may result in delays in processing of current and future contract approvals and payment applications.

### **III. Submittal Required for Final Contract Payment.**

- A. The final Project Workforce Monthly Report(s) and Company-Wide Workforce Monthly Report must be submitted before final payment will be made and/or retainage released. Contractor shall note the submittal of the final reports by notation in the box entitled “Final Report”

### **IV. Methods for Securing Workforce Participation and Good Faith Efforts.**

- A. A bidder is required to make good faith efforts to achieve the construction employment goals and ensure its subcontractors are making good faith efforts to achieve the construction employment goals. If a Bidder or its subcontractors will be unable to secure enough minority and female participation to meet or exceed the construction employment goals, a bidder must, within a reasonable time after so learning, request a waiver or modification of the goals by the Director of CREO KC. The Director will request evidence of the Bidder’s and its’ subcontractors’ good faith efforts to meet the goals. The Director will examine the Bidder’s request and the Bidder’s documentation of good faith efforts for itself and its subcontractors. The Director will examine the Bidder’s request and the Bidder’s documentation of good faith efforts and grant or deny a waiver or modification. The Director will grant a waiver or modification only if the Bidder has made good faith efforts to secure minority and female participation.

**IMPORTANT:** The Bidder’s subcontractors on a city construction contract must meet the workforce goals collectively. The bidder is responsible to ensure the subcontractors make good faith efforts to meet the workforce goals. Bidders are required to include language in its subcontracts that ensure the subcontractors make good faith efforts to meet or exceed the workforce goals.

- B. In evaluating good faith efforts, the Director will consider whether the Bidder and its subcontractors have performed the following:
  - 1. For those bidders that are not signatories to a collective bargaining agreement with organized labor:
    - a. Requested in writing the assistance of the Director with respect to efforts to promote the utilization of minorities and women in the workforce and acted upon the Director’s recommendations; and
    - b. Advertised in minority or women trade association newsletters and/or minority or women owned media at least 15 calendar days prior to the utilization of any construction services on the city construction contract and used terminology that sufficiently describes the work available, the pay scale, the application process, and anything else that one might reasonably be expected to be informed of relevant to the position being advertised; and
    - c. Maintained copies of each advertisement and a log identifying the publication and date of publication; and



- d. Conducted real and substantial recruitment efforts, both oral and written, targeting resident, minority and women community-based organization, schools with a significant minority student population, and training organizations serving the recruitment area; and
  - e. Established and maintained a current list of resident, minority and women recruitment sources, providing written notification to the recruitment sources of available employment opportunities, and maintained records of the notices submitted to the organizations and any responses thereto; and
  - f. Maintained a current file for the time period of the city construction contract with the name, address, and telephone number of each resident, minority and woman job applicant, the source of the referral, whether or not the person was hired, and in the event that the applicant was not hired, the reason therefore; and
  - g. Promoted the retention of minorities and women in its workforce with the goals of achieving sufficient annual hours for minorities and women to qualify for applicable benefits; and
  - h. Required by written contract that all subcontractors comply with the above efforts.
2. For those bidders that are signatories to collective bargaining agreements with organized labor:
- a. Requested in writing from each labor union representing crafts to be employed that:
    - i. the labor union make efforts to promote the utilization of residents of the City, minorities and women in the workforce; and
    - ii. the labor union identify any residents of the City, minorities and women in its membership eligible for employment; and
  - b. Collaborated with labor unions in promoting mentoring programs for journeypersons intended to assist minorities and women in increasing retention with the goals of achieving sufficient annual hours to qualify for applicable benefits; and
  - c. Maintained a current file with the name, address, and telephone number of each resident, minority and women worker identified by the labor union, whether or not the person was hired, and in the event the person was not hired, the reason therefore.
  - d. To the extent the good-faith efforts applicable to bidders that are signatories to collective bargaining agreements with organized labor conflict with the procedures implemented by the bidder in order to comply with the relevant bargaining agreement, the bidder shall substitute other procedures as may be approved by the Director in writing, in order to accomplish the purpose and intent of this section.

C. In the event workforce goals are not met or there is anticipation that goals will not be

met, a Bidder will be required to give the City documentation to prove that it and/or its subcontractors made good faith efforts. The Bidder will be contacted by the City with further instructions about when this documentation must be submitted.

## **V. Access to Documents and Records.**

- A. By submitting a Bid, each Bidder agrees to permit the City, its duly authorized agents or employees, access at all reasonable times to all books and business records of Bidder as may be necessary to ascertain compliance with the requirements of this document and the Program, within ten (10) days of the date of the written request. Each bidder further agrees to require, if awarded the contract, that every subcontractor permit the City the same access to documents and records.
- B. All Bidders agree to cooperate with the contracting department and CREO KC in studies and surveys regarding the construction employment program.

## **VI. Appeals.**

- A. In conformance with the Program, appeals may be made to the Construction Workforce Board on the following:
  - 1. Determinations by the Director that a contractor did not meet the construction employment goals and did not make a good faith effort to meet the goals;
  - 2. Recommendations by the Director to assess liquidated damages;
  - 3. Recommendation by the Director that a contractor be declared ineligible to receive any city construction contract for a period of time up to one year.
- B. Any appeal must be filed in writing with the Director within ten (10) working days of notice of the recommendation or determination. The appeal shall state with specificity why the Bidder or Contractor believes the recommendation or determination is incorrect.
- C. Failure to file a timely appeal shall constitute a waiver of a Bidder's or Contractor's right to appeal such determination or recommendation and such person shall be estopped to deny the validity of any order, determination, recommendation or action of CREO KC which could have been timely appealed.

## **VII. Miscellaneous.**

- A. A Bidder or Contractor shall bear the burden of proof with regard to all issues on appeal.
- B. The successful bidder may be required to meet with the Director of CREO KC or the Director's designee for the purpose of discussing the construction employment program, the bidder's efforts to realize the goals, and any other problems and/or issues affecting the realization of the goals or the program in general.
- C. In the event of any conflict between this document and the Program, the provisions of the Program shall control. The terms used in this document are defined in the Program.
- D. Oral representations are not binding on the City.

## **VIII. Failure to Meet Workforce Goals**

- A. If Contractor or its subcontractors fail to achieve the construction employment goals or make good faith efforts to achieve those goals without having previously obtained a

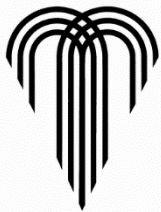


waiver or modification of those goals, the City will sustain damages, the exact extent of which would be difficult or impossible to ascertain. These damages are magnified if the failure to abide by the requirements of the Workforce Program is recurring. Therefore, if the directory finds that the contractor or subcontractor have not met, or made good faith efforts to meet, the construction employment goals for any quarter, the director may:

1. Assess liquidated damages against the construction contractor, as specified in the city construction contract;
2. Require the contractor to attend mandatory training, as specified in the construction contract;
3. Declare the contractor ineligible to receive any city construction contract or participate as a subcontractor under any city construction contract for a period of time up to six months, as specified in the construction contract.

## **IX. First Source Program**

- A. The City has established a labor force recruiting program intended to assist contractors in identifying, interviewing and hiring qualified job applicants residing in Kansas City, Missouri. While the contractor awarded a City construction contract is not prohibited from hiring persons residing outside Kansas City, Missouri, the recruiting resource provided for herein (the “First Source Program”) must be utilized by the contractor subject to the construction employment goals as set forth in this **PART B, CONSTRUCTION EMPLOYMENT PROGRAM REQUIREMENTS**.
- B. The City utilizes the services of the Full Employment Council, Inc., to administer the First Source Program. The contractor shall contact the Full Employment Council within 48 hours of contract award, regardless of whether the contractor has any hiring needs at that time, and within 48 hours following any job vacancy which the contractor reasonably anticipates filling during the term of the City construction contract. The contractor shall comply with the First Source Program requirements as implemented by the Full Employment Council unless otherwise excused in writing by the Director of CREO KC for good cause shown. To ensure compliance with the First Source Program, the contractor shall contact those persons at the Full Employment Council responsible for administering the program, which may be identified by visiting their website at [www.feckc.org](http://www.feckc.org) and clicking on the link for KCMO First Source Hiring Program. The contractor shall not hire any individual to provide construction services on a City construction contract unless the contractor has met the requirements of the First Source Program.
- C. The contractor shall require that its subcontractors utilize the First Source Program to the same extent that the contractor is required to do so, and shall incorporate the requirements of this Section IX into every subcontract. Every subcontractor shall be required to contact the Full Employment Council within 48 hours of subcontract award, regardless of whether the subcontractor has any hiring needs at that time, and within 48 hours following any job vacancy which the subcontractor reasonably anticipates filling during the term of their subcontract on a City construction project.



## CONTRACTOR UTILIZATION PLAN/REQUEST FOR WAIVER

Project Number \_\_\_\_\_

Project Title \_\_\_\_\_

\_\_\_\_\_  
(Department Project)

\_\_\_\_\_  
Department

\_\_\_\_\_  
(Bidder/Proposer)

STATE OF \_\_\_\_\_ )

) ss

COUNTY OF \_\_\_\_\_ )

I, \_\_\_\_\_, of lawful age and upon my oath state as follows:

1. This Affidavit is made for the purpose of complying with the provisions of the MBE/WBE submittal requirements on the above project and the MBE/WBE Program and is given on behalf of the Bidder/Proposer listed below. It sets out the Bidder/Proposer's plan to utilize MBE and/or WBE contractors on the project.
2. The project target goals are \_\_\_\_\_% MBE and \_\_\_\_\_% WBE.
3. Bidder/Proposer assures that it will utilize a minimum of the following percentages of MBE/WBE participation in the above project:

**BIDDER/PROPOSER PARTICIPATION:** \_\_\_\_\_% MBE \_\_\_\_\_% WBE

**POST-BID/POST-RFP ESTIMATED BUDGET:** \$ \_\_\_\_\_

4. The following are the M/WBE subcontractors whose utilization Bidder/Proposer warrants will meet or exceed the above-listed Bidder/Proposer Participation. Bidder/Proposer warrants that it will utilize the M/WBE subcontractors to provide the goods/services described in the applicable Letter(s) of Intent to Subcontract, copies of which shall collectively be deemed incorporated herein). (*All firms must currently be certified by Kansas City, Missouri*)

Name of M/WBE Firm \_\_\_\_\_

Address \_\_\_\_\_

Telephone No. \_\_\_\_\_

I.R.S. No. \_\_\_\_\_



Name of M/WBE Firm \_\_\_\_\_  
Address \_\_\_\_\_  
Telephone No. \_\_\_\_\_  
I.R.S. No. \_\_\_\_\_

Name of M/WBE Firm \_\_\_\_\_  
Address \_\_\_\_\_  
Telephone No. \_\_\_\_\_  
I.R.S. No. \_\_\_\_\_

Name of M/WBE Firm \_\_\_\_\_  
Address \_\_\_\_\_  
Telephone No. \_\_\_\_\_  
I.R.S. No. \_\_\_\_\_

Name of M/WBE Firm \_\_\_\_\_  
Address \_\_\_\_\_  
Telephone No. \_\_\_\_\_  
I.R.S. No. \_\_\_\_\_

Name of M/WBE Firm \_\_\_\_\_  
Address \_\_\_\_\_  
Telephone No. \_\_\_\_\_  
I.R.S. No. \_\_\_\_\_

*(List additional M/WBEs, if any, on additional page and attach to this form)*

4. The following is a breakdown of the percentage of the total contract amount that Bidder/Proposer agrees to pay to each listed M/WBE:

**MBE/WBE BREAKDOWN SHEET**

**MBE FIRMS:**

Name of MBE Firm	Supplier/Broker/Contractor	Subcontract Amount*	Weighted Value**	% of Total Contract
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

\_\_\_\_\_

**TOTAL MBE \$ / TOTAL MBE %:** \$ \_\_\_\_\_ %

**WBE FIRMS:**

Name of WBE Firm	Supplier/Broker/Contractor	Subcontract Amount*	Weighted Value**	% of Total Contract
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
<b>TOTAL WBE \$ / TOTAL WBE %:</b>		\$ _____		_____ %

\*“Subcontract Amount” refers to the dollar amount that Bidder/Proposer has agreed to pay each M/WBE subcontractor as of the date of contracting and is indicated here solely for the purpose of calculating the percentage that this sum represents in proportion to the total contract amount. Any contract amendments and/or change orders changing the total contract amount may alter the amount due an M/WBE under their subcontract for purposes of meeting or exceeding the Bidder/Proposer participation.

\*\*“Weighted Value” means the portion of the subcontract amount that will be credited towards meeting the Bidder/Proposer participation. See CREO KC Forms and Instructions for allowable credit and special instructions for suppliers.

- Bidder/Proposer acknowledges that the monetary amount to be paid each listed M/WBE for their work, and which is approved herein, is an amount corresponding to the percentage of the total contract amount allocable to each listed M/WBE as calculated in the MBE/WBE Breakdown Sheet. Bidder/Proposer further acknowledges that this amount may be higher than the subcontract amount listed therein as change orders and/or amendments changing the total contract amount may correspondingly increase the amount of compensation due an M/WBE for purposes of meeting or exceeding the Bidder/Proposer participation



6. Bidder/Proposer acknowledges that it is responsible for considering the effect that any change orders and/or amendments changing the total contract amount may have on its ability to meet or exceed the Bidder/Proposer participation. Bidder/Proposer further acknowledges that it is responsible for submitting a Request for Modification or Substitution if it will be unable to meet or exceed the Bidder/Proposer participation set forth herein.
7. If Bidder/Proposer has not achieved both the M/WBE goal(s) set for this Project, Bidder/Proposer hereby requests a waiver of the MBE and/or WBE goal(s) that Bidder/Proposer has failed to achieve
8. Bidder/Proposer will present documentation of its good faith efforts, a narrative summary detailing its efforts and the reasons its efforts were unsuccessful when requested by the City.
9. I hereby certify that I am authorized to make this Affidavit on behalf of the Bidder/Proposer named below and who shall abide by the terms set forth herein:

Bidder/Proposer primary contact: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Facsimile number: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

(Attach corporate seal if applicable)

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

My Commission Expires: \_\_\_\_\_

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





# LETTER OF INTENT TO SUBCONTRACT

Check one:

Original LOI: ☐

Updated LOI: ☐

Project Name/Title \_\_\_\_\_

Project Location/Number \_\_\_\_\_

**PART I:** Prime Contractor \_\_\_\_\_ agrees to enter into a contractual agreement with M/W/DBE Subcontractor \_\_\_\_\_ who will provide the following goods/services in connection with the above-reference contract: [Insert a brief narrative describing goods/services to be provided. Broad Categorizations (e.g., "electrical," "plumbing," etc.) or the listing of NAICS Codes in which M/W/DBE Subcontractor is certified are insufficient and may result in denial of this Letter of Intent to Subcontract.]

for an estimated amount of \$ \_\_\_\_\_ (or \_\_\_\_\_ % of the total estimated contract value.)

M/WBE Vendor type: ☐ Subcontractor/manufacture (counts as 100% of contract value towards goals)  
☐ Supplier (counts as 60% of the total dollar amount paid or to be paid by a prime contractor for supplies or goods towards goals)  
☐ Broker (counts as 10% of the total dollar amount paid or to be paid by a prime contractor for supplies or goods towards goals)

M/W/DBE Subcontractor is, to the best of Prime Contractor's knowledge, currently certified with the City of Kansas City's Civil Rights & Equal Opportunity Department to perform in the capacities indicated herein. Prime Contractor agrees to utilize M/W/DBE Subcontractor in the capacities indicated herein, and M/W/DBE Subcontractor agrees to work on the above-referenced contract in the capacities indicated herein, contingent upon award of the contract to Prime Contractor.

**PART 2:** This section is to be completed by the M/W/DBE subcontractor listed above. Please attach additional sheets as needed for more than one intended sub-tier contract. **IMPORTANT: Falsification of this document will result in denial and other remedies available under City Code.**

Select one: ☐ The M/W/DBE Subcontractor listed above **IS NOT** subcontracting any portions of the above-stated scope of work(s). (Continue to Part 3.)  
☐ The M/W/DBE Subcontractor listed above **IS** subcontracting certain portions of the above stated scope of work(s) to:

(1) Company name: \_\_\_\_\_

Full address: \_\_\_\_\_

Street number and name

City, State and Zip Code

Primary contact: \_\_\_\_\_

Name

Phone

a) This subcontractor is (select one): MBE WBE DBE N/A

i: If this subcontractor is an M/W/DBE certified with the City of Kansas City, Missouri, a separate Letter of Intent must be attached to this document.

ii. If this subcontractor is NOT a certified M/W/DBE certified with the City of Kansas City, Missouri, the firm must still be listed for reporting purposes but a Letter of Intent is not required.

b) Scope of work to be performed: \_\_\_\_\_

c) The dollar value of this agreement is: \_\_\_\_\_



### **PART 3:**

**NOTE: SIGNATURES AND NOTARIZATIONS REQUIRED FOR NEW LETTERS OF INTENT (LOI);  
SIGNATURES ONLY FOR UPDATED LOI (ADDING VALUE TO EXISTING CONTRACT).**

PRIME CONTRACTOR BUSINESS NAME: \_\_\_\_\_

\_\_\_\_\_  
Signature: Prime Contractor

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

State of \_\_\_\_\_ )

County of \_\_\_\_\_ )

I, \_\_\_\_\_, state that the above and foregoing is based on my best knowledge and belief.

Subscribed and sworn to before me, a notary public, on this  
day of \_\_\_\_\_, 20\_\_\_\_

My Commission Expires: \_\_\_\_\_

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

STAMP:

MWDBE SUBCONTRACTOR BUSINESS NAME: \_\_\_\_\_

\_\_\_\_\_  
Signature: Subcontractor

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

State of \_\_\_\_\_ )

County of \_\_\_\_\_ )

I, \_\_\_\_\_, state that the above and foregoing is based on my best knowledge and belief.

Subscribed and sworn to before me, a notary public, on this  
day of \_\_\_\_\_, 20\_\_\_\_

My Commission Expires: \_\_\_\_\_

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

STAMP:



## REQUEST FOR MODIFICATION OR SUBSTITUTION

(This Form **must** be submitted to CREO KC to request substitutions for an MBE/WBE listed in the Contractor Utilization Plan or for modification of the amount of MBE/WBE participation listed in the Contractor Utilization Plan. This Form shall be an amendment to the Contractor Utilization Plan.)

**BIDDER/PROPOSER/CONTRACTOR:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**PROJECT NUMBER OR TITLE:** \_\_\_\_\_

**AMENDMENT/CHANGE ORDER NO: (if applicable)** \_\_\_\_\_

<b>Project Goals:</b>	_____ % MBE	_____ % WBE
<b>Contractor Utilization Plan:</b>	_____ % MBE	_____ % WBE

1. I am the duly authorized representative of the above Bidder/Contractor/Proposer and am authorized to request this substitution or modification on behalf of the Bidder/Contractor/Proposer.

2. I hereby request that the Director of CREO KC recommend or approve: (check appropriate space(s))

a. \_\_\_\_\_ A substitution of the certified MBE/WBE firm \_\_\_\_\_,  
(Name of new firm)  
to perform \_\_\_\_\_,  
(Scope of work to be performed by new firm)

for the MBE/WBE firm \_\_\_\_\_ which is currently  
(Name of old firm)  
listed on the Bidder's/Contractor's/Proposer's Contractor Utilization Plan to  
perform the following scope of work: \_\_\_\_\_.  
(Scope of work of old firm)

b. \_\_\_\_\_ A modification of the amount of MBE/WBE participation currently listed on the Bidder's/Contractor's/Proposer's Contractor Utilization Plan from

\_\_\_\_\_ % MBE \_\_\_\_\_ % WBE (Fill in % of MBE/WBE Participation currently listed on Contractor Utilization Plan)

**TO**

\_\_\_\_\_ % MBE \_\_\_\_\_ % WBE (Fill in New % of MBE/WBE Participation requested for Contractor Utilization Plan)

- c. Attach 00450.01 Letter of Intent to Subcontract letter for each new MBE/WBE to be added.
- d. Attach a copy of the most recent 00485.01 or on-line M/WBE Monthly Utilization Report

3. Bidder/Contractor/Proposer states that a substitution or modification is necessary because: (check applicable reason(s) )





\_\_\_The MBE/WBE listed on the Contractor Utilization Plan is non-responsive or cannot perform.

\_\_\_The MBE/WBE listed on the Contractor Utilization Plan has increased its previously quoted price without a corresponding change in the scope of work.

\_\_\_The MBE/WBE listed on the Contractor Utilization Plan has committed a material default or breach of its contract.

\_\_\_Requirements of the scope of work of the contract have changed and make subcontracting not feasible or not feasible at the levels required by the goals established for the contract.

\_\_\_The MBE/WBE listed on the Contractor Utilization Plan is unacceptable to the City contracting department.

\_\_\_Bidder/Contractor/Proposer has not attempted intentionally to evade the requirements of the Act and it is in the best interests of the City to allow a modification or substitution.

4. The following is a narrative summary of the Bidder's/Contractor's/Proposer's good faith efforts exhausted in attempts to substitute the MBE/WBE firm named above which is currently listed on the Contractor Utilization Plan with other qualified, certified MBE/WBE firms for the listed scope of work or any other scope of work in the project:

5. Bidder/Proposer/Contractor will present documentation when requested by the City to evidence its good faith efforts.

Dated:\_\_\_\_\_

\_\_\_\_\_  
(Bidder/Proposer/Contractor)

By: \_\_\_\_\_  
(Authorized Representative)



## **CREO KC MONTHLY REPORTING INSTRUCTIONS**

### **M/WBE Monthly Utilization Report Instructions**

1. MBE/WBE Reporting applies to Contracts that have approved MBE/WBE goals assigned.
2. The City will utilize a web-based MBE/WBE Reporting System in the administration of this Contract. This web-based application database is a collaboration tool selected and provided by the City, which will allow Contractors and Consultants/Subcontractors and Subconsultants to enter data and report on compliance.

### **Prevailing Wage Certified Payroll Report Instructions**

1. Prevailing Wage Certified Payroll Report applies to Contracts that include Prevailing Wage or Davis Bacon Provisions.
2. This web-based application database is provided by the City for reporting certified payrolls and other related prevailing wage data.
3. Computer Requirements: Minimum Intel Pentium® 4 Processor 2.4 GHz or equivalent processor with 512MB of RAM; recommended Centrino Duo® Processors 1.6 GHz or equivalent with 2GB of RAM, or higher.
  - a. Computer Operation System: Windows XP, Windows Vista, or Windows 7
  - b. Web Browser: Google Chrome
  - c. Connection Speed/Minimum Bandwidth: DSL, ADSL or T1 Line for transferring a minimum of 3 Mbps Downstream and 512 Kbps Upstream
4. City will assist Contractor in providing training of personnel and Subcontractor's personnel.
5. Contractor and Subcontractors shall have the responsibility for visiting the web site and entering data in on timely basis, and as necessary to be in compliance with Prevailing Wage Requirements included in their contracts.

### **Workforce Monthly Report Instructions**

1. Workforce Monthly Reporting only applies to Construction Contracts greater than \$300,000 and greater than 800 projected labor hours.
2. The City will utilize a web-based Reporting System in the administration of this Contract. This web-based application database is a collaboration tool selected and provided by the City, which will allow Contractors and Subcontractors to enter data and report on Workforce compliance.



**City of Kansas City, Missouri**  
**Civil Rights & Equal Opportunity Department**  
**Construction Contractor Employee Identification Report**

**Company Name:** \_\_\_\_\_  
**Company Address:** \_\_\_\_\_  
**Company City, State, Zip:** \_\_\_\_\_

**Prime's Name:** \_\_\_\_\_  
**KCMO Project Name:** \_\_\_\_\_  
**KCMO Project Number:** \_\_\_\_\_

**Name of Person Completing Report:** \_\_\_\_\_  
**Phone Number:** \_\_\_\_\_  
**Email:** \_\_\_\_\_

**Today's Date:** \_\_\_\_\_  
**City Department:** \_\_\_\_\_

**Instructions:**

- 1) Each applicable Prime Contractors **must complete this form for its company within 48 hours of bid opening**
- 2) The Civil Rights & Equal Opportunity Department strongly recommends usage of the electronic version of this form. This form may be obtained by visiting [www.kcmo.gov](http://www.kcmo.gov) website. The website is enabled with a "search" function on the Home page on the right corner. Select the magnifying glass and type in the search field "Contract Central". Select the first result, then click on the link to Standard City Contract Forms. Scroll down to Construction Contractor Employee Identification Report and click the link to open this document. Complete the fields in the Employee section; the Official Use Only section will automatically populate. NOTE: This form can be printed and attached to other required Bid documents.
- 3) All subcontractors shall be required to complete this form and submit to the Prime Contractor. For each subcontractor, the Prime must submit this form to City at least at least (10) days prior to the date the subcontractor shall commence work under a city construction contract.
- 4) Complete this form if you are the Prime contractor on a City construction project estimated over **\$300,000 & over 800 man hours**.
- 5) Complete this form with data from your **current construction workforce** (no office personnel).
- 6) Prime contractor is responsible to ensure subcontractor completes this form as required in #3 above.

**Official Use Only**

Females		KCMO Resident	Males		KCMO Resident	Journeyman		Apprentice	Journeyman		Apprentice
African American	0	0	African American	0	0	Foreman/Supervisor	0	--	Operating Engineer	0	0
Asian/Pacific Islander American	0	0	Asian/Pacific Islander American	0	0	Asbestos Worker	0	0	Painter	0	0
Caucasian American	0	0	Caucasian American	0	0	Boilermaker	0	0	Pipe Fitter/Plumber	0	0
Hispanic/Latino American	0	0	Hispanic/Latino American	0	0	Bricklayer	0	0	Plasterer	0	0
Native American	0	0	Native American	0	0	Carpenter	0	0	Roofer	0	0
Other	0	0	Other	0	0	Cement Mason	0	0	Sheet Metal	0	0
	0	0		0	0	Electrician	0	0	Sprinkler Fitter	0	0
						Elevator Constructor	0	0	Truck Driver	0	0
						Glazier	0	0	Welder	0	0
						Iron Worker	0	0	Other	0	--
						Laborer	0	0		0	0
							0	0			

Number of KCMO Residents 0  
Number of Journeyman 0  
Number of Apprentice 0

Company Name: 0

KCMO Project Name: 0

KCMO Project Number: 0

	Name		Job Title (use drop down menu )	Address	City	State	Zip Code	KCMO Resident	Gender	Ethnicity
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Company Name:

0

KCMO Project Name: 0

KCMO Project Number: 0

	Name		Job Title <i>(use drop down menu )</i>	Address	City	State	Zip Code	KCMO Resident	Gender	Ethnicity
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Company Name:

0

KCMO Project Name: 0

KCMO Project Number: 0

	Name		Job Title <i>(use drop down menu )</i>	Address	City	State	Zip Code	KCMO Resident	Gender	Ethnicity
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	Name		Job Title <i>(use drop down menu )</i>	Address	City	State	Zip Code	KCMO Resident	Gender	Ethnicity
	Last	First								
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83										





## AFFIDAVIT OF TRAINING PROGRAM

*This form must be submitted with 48 hours of Bid Opening*

Bidder \_\_\_\_\_

Project Title and Number \_\_\_\_\_

STATE OF MISSOURI )  
 ) ss:

COUNTY OF \_\_\_\_\_ )

After being duly sworn the person whose name and signature appears below hereby states under penalty of perjury that:

1. I am the duly authorized officer of the business indicated above ("Bidder") and I make this affidavit on behalf of Bidder.
2. Bidder certifies that it presently participates in a training program that facilitates entry into the construction industry and which may include an on-the-job or in-house training program, further described as follows:

(attach additional pages, if necessary)

3. If requested by the City, Bidder agrees to provide City further documentation of, or other information about, this training program within 48 hours of the request.
4. Bidder acknowledges that failure to submit this form to the City within 48 hours of the Bid Opening will automatically render its bid non-responsive.

I am authorized to make this Affidavit on behalf of the Bidder named below as:

\_\_\_\_\_ of \_\_\_\_\_  
(Title) (Name of Bidder)

Dated: \_\_\_\_\_ By: \_\_\_\_\_  
(Affiant)

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

My Commission Expires: \_\_\_\_\_  
Notary Public



# ATTACHMENT E





## BID BOND

Project/Contract Number EV3041

Project Title SLBE – IDIQ Sidewalk, Walkway and ADA Repairs

Bond Number \_\_\_\_\_

---

**KNOW ALL MEN BY THESE PRESENTS:** That \_\_\_\_\_ of \_\_\_\_\_, as Principal, and \_\_\_\_\_ as Surety, hereby bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents unto KANSAS CITY, MISSOURI, a constitutionally chartered municipal corporation, as Obligee, in the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), lawful money of the United States.

**WHEREAS**, Principal is herewith submitting its Bid to enter into a contract with Kansas City for the above referenced project,

**NOW, THEREFORE** the condition of this obligation is such that if the Principal is awarded the contract the Principal will, within the time required, enter into a contract and give a good and sufficient surety bonds to secure the performance of the terms and conditions of the contract and for the prompt payment of all labor and material furnished in the prosecution thereof as required by the contract documents, then this obligation shall be void; otherwise the Principal and Surety will immediately pay unto the Obligee the full amount of this bond as liquidated damages for failure to fulfill the conditions of this obligation, but in no event shall the Surety's liability exceed the penal sum hereof.

Signed, sealed and delivered this \_\_\_\_\_ day of \_\_\_\_\_.

### BIDDER AND PRINCIPAL

Name, address and facsimile number of Bidder and Principal

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I hereby certify that I have authority to execute this document on behalf of Bidder and Principal.

By: \_\_\_\_\_

Title: \_\_\_\_\_

(Attach corporate seal if applicable)

**SURETY**

Name, address and facsimile number of Surety:

---

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I hereby certify that (1) I have authority to execute this document on behalf of Surety; (2) Surety has an A.M. Best rating of A- or better; (3) Surety is named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (most current revision) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury; and (4) Surety is duly licensed to issue bonds in the State of Missouri and in the jurisdiction in which the Project is located.

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

(Attach seal and Power of Attorney)



## PERFORMANCE AND MAINTENANCE BOND

Project Number \_\_\_\_\_

Project Title \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_, as PRINCIPAL (CONTRACTOR), and \_\_\_\_\_, (SURETY), licensed to do business as such in the State of Missouri, hereby bind themselves and their respective heirs, executors, administrators, successors, and assigns unto Kansas City, Missouri, a constitutionally chartered municipal corporation, (OWNER), as obligee, in the penal sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) for the payment whereof CONTRACTOR and SURETY bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

CONTRACTOR has entered into a Contract with OWNER for \_\_\_\_\_ which Contract, including any present or future amendment thereto, is incorporated herein by reference and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if CONTRACTOR shall promptly and faithfully perform said Contract including all duly authorized changes thereto, and including any maintenance requirements contained therein, according to all the terms thereof, including those under which CONTRACTOR agrees to pay legally required wage rates including the prevailing hourly rate of wages in the locality, as determined by the Department of Labor and Industrial Relations or by final judicial determination, for each craft or type of workman required to execute the Contract and, further, shall defend, indemnify, and hold harmless OWNER from all damages, including but not limited to, liquidated damages, loss and expense occasioned by any failure whatsoever of said CONTRACTOR and SURETY to fully comply with and carry out each and every requirement of the Contract, then this obligation shall be void; otherwise, it shall remain in full force and effect.

WAIVER. That SURETY, for value received, hereby expressly agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the Work to be performed thereunder, shall in any way affect the obligations of this Bond; and it does hereby waive notice of any such change, extension of time, or alteration or addition to the terms of the Contract or the Work to be performed thereunder.

IN WITNESS WHEREOF, the above parties have executed this instrument the \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

### CONTRACTOR

Name, address and facsimile number of Contractor

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I hereby certify that I have authority to execute this document on behalf of Contractor.

By: \_\_\_\_\_  
Title: \_\_\_\_\_

(Attach corporate seal if applicable)

**SURETY**

Name, address and facsimile number of Surety:

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I hereby certify that (1) I have authority to execute this document on behalf of Surety; (2) Surety has an A.M. Best rating of A-, V, or better; (3) Surety is named in the current list of "Companies Holding Certificates of Authority as Acceptable Reinsuring Companies: as published in Circular 570 (most current revision) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury; and (4) Surety is duly licensed to issue bonds in the State of Missouri and in the jurisdiction in which the Project is located.

By: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

(Attach seal and Power of Attorney)



## PAYMENT BOND

Project Number \_\_\_\_\_

Project Title \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_, as PRINCIPAL (CONTRACTOR), and \_\_\_\_\_, (SURETY), licensed to do business as such in the State of Missouri, hereby bind themselves and their respective heirs, executors, administrators, successors, and assigns unto Kansas City, Missouri, a constitutionally chartered municipal corporation, (OWNER), as obligee, in the penal sum of \_\_\_\_\_ Dollars (\$\_\_\_\_\_) for the payment whereof CONTRACTOR and SURETY bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS,

CONTRACTOR has entered into a contract with OWNER for \_\_\_\_\_, which Contract, including any present or future amendment thereto, is incorporated herein by reference and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if in connection with the Contract, including all duly authorized modifications thereto, prompt payment shall be made to all laborers, subcontractors, teamsters, truck drivers, owners or other suppliers or for equipment employed on the job, and other claimants, for all labor performed in such work whether done for CONTRACTOR, a subcontractor, SURETY, a completion contractor or otherwise (at the full wage rates required by any law of the United States or of the State of Missouri, where applicable), for services furnished and consumed, for repairs on machinery, for equipment, tools, materials, lubricants, oil, gasoline, water, gas, power, light, heat, oil, telephone service, grain, hay, feed, coal, coke, groceries and foodstuffs, either consumed, rented, used or reasonably required for use in connection with the construction of the work or in the performance of the Contract and all insurance premiums, both for compensation and for all other kinds of insurance on the work, for sales taxes and for royalties in connection with, or incidental to, the completion of the Contract, in all instances whether the claim be directly against CONTRACTOR, against SURETY or its completion contractor, through a subcontractor or otherwise, and, further, if CONTRACTOR shall defend, indemnify and hold harmless OWNER from all such claims, demands or suits by any such person or entity, then this obligation shall be void; otherwise, it shall remain in full force and effect.

Any conditions legally required to be included in a Payment Bond on this Contract, including but not limited to those set out in §107.170 RSMo. are included herein by reference.

SURETY agrees that, in the event that CONTRACTOR fails to make payment of the obligations covered by this Bond, it will do so and, further, that within forty-five (45) days of receiving, at the address given below, a claim hereunder stating the amount claimed and the basis for the claim in reasonable detail, it (a) will send an answer to the claimant, with a copy to OWNER stating the amounts that are undisputed and the basis for challenging any amounts that are disputed, and (b) will pay any amounts that are undisputed. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.

While this Bond is in force, it may be sued on at the instance of any party to whom any such payment is due, in the name of OWNER to the use for such party. OWNER shall not be liable for the payment of any costs or expenses of any such suit.

No suit shall be commenced or pursued hereunder other than in a state court of competent jurisdiction in Jackson, Clay or Platte County, Missouri, or in the United States District Court for the Western District of Missouri.

WAIVER. That SURETY, for value received, hereby expressly agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the Work to be performed thereunder, shall in any way affect the obligations of this Bond; and it does hereby waive notice of any such change, extension of time, or alteration or addition to the terms of the Contract or the Work to be performed thereunder.

IN WITNESS WHEREOF, the above parties have executed this instrument the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

**CONTRACTOR**

Name, address and facsimile number of Contractor

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I hereby certify that I have authority to execute this document on behalf of Contractor.

By: \_\_\_\_\_  
Title: \_\_\_\_\_

(Attach corporate seal if applicable)

**SURETY**

Name, address and facsimile number of Surety:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I hereby certify that (1) I have authority to execute this document on behalf of Surety; (2) Surety has an A.M. Best rating of A- or better; (3) Surety is named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (most current revision) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury; and(4) Surety is duly licensed to issue bonds in the State of Missouri and in the jurisdiction in which the Project is located.

By: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

(Attach seal and Power of Attorney)

# ATTACHMENT F

## SECTION 00830

### PREVAILING WAGE

1. Annual Wage Order No. 30
2. **0830.03 Division of Labor Standards Rules & Regulations** are incorporated into and made part of this Contract and are available at  
<http://s1.sos.mo.gov/cmsimages/adrules/csr/current/8csr/8c30-3.pdf>.



# Missouri

## Division of Labor Standards

### WAGE AND HOUR SECTION



MICHAEL L. PARSON, Governor

## Annual Wage Order No. 30

Section 019  
**CASS COUNTY**

In accordance with Section 290.262 RSMo 2000, within thirty (30) days after a certified copy of this Annual Wage Order has been filed with the Secretary of State as indicated below, any person who may be affected by this Annual Wage Order may object by filing an objection in triplicate with the Labor and Industrial Relations Commission, P.O. Box 599, Jefferson City, MO 65102-0599. Such objections must set forth in writing the specific grounds of objection. Each objection shall certify that a copy has been furnished to the Division of Labor Standards, P.O. Box 449, Jefferson City, MO 65102-0449 pursuant to 8 CSR 20-5.010(1). A certified copy of the Annual Wage Order has been filed with the Secretary of State of Missouri.

Original Signed by

Todd Smith, Director  
Division of Labor Standards

Filed With Secretary of State: March 10, 2023

Last Date Objections May Be Filed: April 10, 2023

Prepared by Missouri Department of Labor and Industrial Relations

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Asbestos Worker	\$69.41
Boilermaker	\$25.95*
Bricklayer	\$61.19
Carpenter	\$61.84
Lather	
Linoleum Layer	
Millwright	
Pile Driver	
Cement Mason	\$57.77
Plasterer	
Communications Technician	\$65.95
Electrician (Inside Wireman)	\$68.40
Electrician Outside Lineman	\$25.95*
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Elevator Constructor	\$25.95*
Glazier	\$25.95*
Ironworker	\$68.15
Laborer	\$48.11
General Laborer	
First Semi-Skilled	
Second Semi-Skilled	
Mason	\$25.95*
Marble Mason	
Marble Finisher	
Terrazzo Worker	
Terrazzo Finisher	
Tile Setter	
Tile Finisher	
Operating Engineer	\$61.28
Group I	
Group II	
Group III	
Group III-A	
Group IV	
Group V	
Painter	\$45.33
Plumber	\$75.60
Pipe Fitter	
Roofer	\$58.60
Sheet Metal Worker	\$73.24
Sprinkler Fitter	\$25.95*
Truck Driver	\$25.95*
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

\*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. The public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

\*\*The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title as defined in RSMO Section 290.210.

Heavy Construction Rates for  
CASS County

Section 019

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Carpenter	\$61.78
Millwright	
Pile Driver	
Electrician (Outside Lineman)	\$25.95*
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Laborer	\$50.07
General Laborer	
Skilled Laborer	
Operating Engineer	\$58.69
Group I	
Group II	
Group III	
Group IV	
Truck Driver	\$50.31
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

If a worker is performing work on a heavy construction project within an occupational title that is not listed on the Heavy Construction Rate Sheet, use the rate for that occupational title as shown on the Building Construction Rate Sheet.

\*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. Public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

\*\*The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title.

# **OVERTIME and HOLIDAYS**

## **OVERTIME**

For all work performed on a Sunday or a holiday, not less than twice (2x) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work.

For all overtime work performed, not less than one and one-half (1½) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work or contractual obligation. For purposes of this subdivision, "overtime work" shall include work that exceeds ten hours in one day and work in excess of forty hours in one calendar week; and

A thirty-minute lunch period on each calendar day shall be allowed for each worker on a public works project, provided that such time shall not be considered as time worked.

## **HOLIDAYS**

January first;  
The last Monday in May;  
July fourth;  
The first Monday in September;  
November eleventh;  
The fourth Thursday in November; and  
December twenty-fifth;

If any holiday falls on a Sunday, the following Monday shall be considered a holiday.

# Missouri

## Division of Labor Standards

### WAGE AND HOUR SECTION



MICHAEL L. PARSON, Governor

## Annual Wage Order No. 30

Section 024  
**CLAY COUNTY**

In accordance with Section 290.262 RSMo 2000, within thirty (30) days after a certified copy of this Annual Wage Order has been filed with the Secretary of State as indicated below, any person who may be affected by this Annual Wage Order may object by filing an objection in triplicate with the Labor and Industrial Relations Commission, P.O. Box 599, Jefferson City, MO 65102-0599. Such objections must set forth in writing the specific grounds of objection. Each objection shall certify that a copy has been furnished to the Division of Labor Standards, P.O. Box 449, Jefferson City, MO 65102-0449 pursuant to 8 CSR 20-5.010(1). A certified copy of the Annual Wage Order has been filed with the Secretary of State of Missouri.

Original Signed by

Todd Smith, Director  
Division of Labor Standards

Filed With Secretary of State: \_\_\_\_\_ **March 10, 2023**

Last Date Objections May Be Filed: **April 10, 2023**

Prepared by Missouri Department of Labor and Industrial Relations

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Asbestos Worker	\$65.71
Boilermaker	\$33.49*
Bricklayer	\$59.97
Carpenter	\$61.87
Lather	
Linoleum Layer	
Millwright	
Pile Driver	
Cement Mason	\$55.31
Plasterer	
Communications Technician	\$63.17
Electrician (Inside Wireman)	\$69.27
Electrician Outside Lineman	\$62.80
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Elevator Constructor	\$33.49*
Glazier	\$33.49*
Ironworker	\$67.92
Laborer	\$49.75
General Laborer	
First Semi-Skilled	
Second Semi-Skilled	
Mason	\$54.81
Marble Mason	
Marble Finisher	
Terrazzo Worker	
Terrazzo Finisher	
Tile Setter	
Tile Finisher	
Operating Engineer	\$61.84
Group I	
Group II	
Group III	
Group III-A	
Group IV	
Group V	
Painter	\$51.95
Plumber	\$75.62
Pipe Fitter	
Roofer	\$58.52
Sheet Metal Worker	\$70.65
Sprinkler Fitter	\$64.91
Truck Driver	\$33.49*
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

\*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. The public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

\*\*The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title as defined in RSMO Section 290.210.

Heavy Construction Rates for  
CLAY County

Section 024

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Carpenter	\$61.71
Millwright	
Pile Driver	
Electrician (Outside Lineman)	\$62.80
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Laborer	\$50.36
General Laborer	
Skilled Laborer	
Operating Engineer	\$56.41
Group I	
Group II	
Group III	
Group IV	
Truck Driver	\$50.25
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

If a worker is performing work on a heavy construction project within an occupational title that is not listed on the Heavy Construction Rate Sheet, use the rate for that occupational title as shown on the Building Construction Rate Sheet.

\*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. Public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

\*\*The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title.

# **OVERTIME and HOLIDAYS**

## **OVERTIME**

For all work performed on a Sunday or a holiday, not less than twice (2x) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work.

For all overtime work performed, not less than one and one-half (1½) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work or contractual obligation. For purposes of this subdivision, "overtime work" shall include work that exceeds ten hours in one day and work in excess of forty hours in one calendar week; and

A thirty-minute lunch period on each calendar day shall be allowed for each worker on a public works project, provided that such time shall not be considered as time worked.

## **HOLIDAYS**

January first;  
The last Monday in May;  
July fourth;  
The first Monday in September;  
November eleventh;  
The fourth Thursday in November; and  
December twenty-fifth;

If any holiday falls on a Sunday, the following Monday shall be considered a holiday.



# Missouri

## Division of Labor Standards

### WAGE AND HOUR SECTION



MICHAEL L. PARSON, Governor

## Annual Wage Order No. 30

Section 048  
**JACKSON COUNTY**

In accordance with Section 290.262 RSMo 2000, within thirty (30) days after a certified copy of this Annual Wage Order has been filed with the Secretary of State as indicated below, any person who may be affected by this Annual Wage Order may object by filing an objection in triplicate with the Labor and Industrial Relations Commission, P.O. Box 599, Jefferson City, MO 65102-0599. Such objections must set forth in writing the specific grounds of objection. Each objection shall certify that a copy has been furnished to the Division of Labor Standards, P.O. Box 449, Jefferson City, MO 65102-0449 pursuant to 8 CSR 20-5.010(1). A certified copy of the Annual Wage Order has been filed with the Secretary of State of Missouri.

Original Signed by

Todd Smith, Director  
Division of Labor Standards

Filed With Secretary of State: March 10, 2023

Last Date Objections May Be Filed: April 10, 2023

Prepared by Missouri Department of Labor and Industrial Relations

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Asbestos Worker	\$68.67
Bollermaker	\$38.37*
Bricklayer	\$60.27
Carpenter	\$61.82
Lather	
Linoleum Layer	
Millwright	
Pile Driver	
Cement Mason	\$55.22
Plasterer	
Communications Technician	\$60.34
Electrician (Inside Wireman)	\$69.22
Electrician Outside Lineman	\$59.91
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Elevator Constructor	\$102.69
Glazier	\$58.17
Ironworker	\$68.53
Laborer	\$49.56
General Laborer	
First Semi-Skilled	
Second Semi-Skilled	
Mason	\$54.80
Marble Mason	
Marble Finisher	
Terrazzo Worker	
Terrazzo Finisher	
Tile Setter	
Tile Finisher	
Operating Engineer	\$61.54
Group I	
Group II	
Group III	
Group III-A	
Group IV	
Group V	
Painter	\$50.40
Plumber	\$76.04
Pipe Fitter	
Roofer	\$59.33
Sheet Metal Worker	\$72.78
Sprinkler Fitter	\$75.09
Truck Driver	\$52.39
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

\*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. The public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

\*\*The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title as defined in RSMO Section 290.210.

Heavy Construction Rates for  
JACKSON County

Section 048

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Carpenter	\$61.98
Millwright	
Pile Driver	
Electrician (Outside Lineman)	\$87.19
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Laborer	\$50.25
General Laborer	
Skilled Laborer	
Operating Engineer	\$58.85
Group I	
Group II	
Group III	
Group IV	
Truck Driver	\$50.18
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

If a worker is performing work on a heavy construction project within an occupational title that is not listed on the Heavy Construction Rate Sheet, use the rate for that occupational title as shown on the Building Construction Rate Sheet.

\*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. Public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

\*\*The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title.

# **OVERTIME and HOLIDAYS**

## **OVERTIME**

For all work performed on a Sunday or a holiday, not less than twice (2x) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work.

For all overtime work performed, not less than one and one-half (1½) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work or contractual obligation. For purposes of this subdivision, "overtime work" shall include work that exceeds ten hours in one day and work in excess of forty hours in one calendar week; and

A thirty-minute lunch period on each calendar day shall be allowed for each worker on a public works project, provided that such time shall not be considered as time worked.

## **HOLIDAYS**

January first;  
The last Monday in May;  
July fourth;  
The first Monday in September;  
November eleventh;  
The fourth Thursday in November; and  
December twenty-fifth;

If any holiday falls on a Sunday, the following Monday shall be considered a holiday.

# **OVERTIME and HOLIDAYS**

## **OVERTIME**

For all work performed on a Sunday or a holiday, not less than twice (2x) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work.

For all overtime work performed, not less than one and one-half (1½) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work or contractual obligation. For purposes of this subdivision, "overtime work" shall include work that exceeds ten hours in one day and work in excess of forty hours in one calendar week; and

A thirty-minute lunch period on each calendar day shall be allowed for each worker on a public works project, provided that such time shall not be considered as time worked.

## **HOLIDAYS**

January first;  
The last Monday in May;  
July fourth;  
The first Monday in September;  
November eleventh;  
The fourth Thursday in November; and  
December twenty-fifth;

If any holiday falls on a Sunday, the following Monday shall be considered a holiday.

# Missouri

## Division of Labor Standards

### WAGE AND HOUR SECTION



MICHAEL L. PARSON, Governor

## Annual Wage Order No. 30

Section 083  
**PLATTE COUNTY**

In accordance with Section 290.262 RSMo 2000, within thirty (30) days after a certified copy of this Annual Wage Order has been filed with the Secretary of State as indicated below, any person who may be affected by this Annual Wage Order may object by filing an objection in triplicate with the Labor and Industrial Relations Commission, P.O. Box 599, Jefferson City, MO 65102-0599. Such objections must set forth in writing the specific grounds of objection. Each objection shall certify that a copy has been furnished to the Division of Labor Standards, P.O. Box 449, Jefferson City, MO 65102-0449 pursuant to 8 CSR 20-5.010(1). A certified copy of the Annual Wage Order has been filed with the Secretary of State of Missouri.

Original Signed by

Todd Smith, Director  
Division of Labor Standards

Filed With Secretary of State: March 10, 2023

Last Date Objections May Be Filed: April 10, 2023

Prepared by Missouri Department of Labor and Industrial Relations

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Asbestos Worker	\$68.54
Boilermaker	\$33.80*
Bricklayer	\$60.87
Carpenter	\$61.62
Lather	
Linoleum Layer	
Millwright	
Pile Driver	
Cement Mason	\$33.80*
Plasterer	
Communications Technician	\$63.38
Electrician (Inside Wireman)	\$68.28
Electrician Outside Lineman	\$58.82
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Elevator Constructor	\$33.80*
Glazier	\$33.80*
Ironworker	\$67.98
Laborer	\$48.19
General Laborer	
First Semi-Skilled	
Second Semi-Skilled	
Mason	\$54.59
Marble Mason	
Marble Finisher	
Terrazzo Worker	
Terrazzo Finisher	
Tile Setter	
Tile Finisher	
Operating Engineer	\$61.68
Group I	
Group II	
Group III	
Group III-A	
Group IV	
Group V	
Painter	\$53.97
Plumber	\$74.61
Pipe Fitter	
Roofer	\$58.79
Sheet Metal Worker	\$72.86
Sprinkler Fitter	\$66.39
Truck Driver	\$33.80*
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

\*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. The public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

\*\*The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title as defined in RSMO Section 290.210.

Heavy Construction Rates for  
PLATTE County

Section 083

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Carpenter	\$61.99
Millwright	
Pile Driver	
Electrician (Outside Lineman)	\$58.82
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Laborer	\$49.79
General Laborer	
Skilled Laborer	
Operating Engineer	\$58.57
Group I	
Group II	
Group III	
Group IV	
Truck Driver	\$51.31
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

If a worker is performing work on a heavy construction project within an occupational title that is not listed on the Heavy Construction Rate Sheet, use the rate for that occupational title as shown on the Building Construction Rate Sheet.

\*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. Public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

\*\*The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title.



# **OVERTIME and HOLIDAYS**

## **OVERTIME**

For all work performed on a Sunday or a holiday, not less than twice (2x) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work.

For all overtime work performed, not less than one and one-half (1½) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work or contractual obligation. For purposes of this subdivision, "overtime work" shall include work that exceeds ten hours in one day and work in excess of forty hours in one calendar week; and

A thirty-minute lunch period on each calendar day shall be allowed for each worker on a public works project, provided that such time shall not be considered as time worked.

## **HOLIDAYS**

January first;  
The last Monday in May;  
July fourth;  
The first Monday in September;  
November eleventh;  
The fourth Thursday in November; and  
December twenty-fifth;

If any holiday falls on a Sunday, the following Monday shall be considered a holiday.

# Missouri

## Division of Labor Standards

### WAGE AND HOUR SECTION



MICHAEL L. PARSON, Governor

## Annual Wage Order No. 30

Section 089  
**RAY COUNTY**

In accordance with Section 290.262 RSMo 2000, within thirty (30) days after a certified copy of this Annual Wage Order has been filed with the Secretary of State as indicated below, any person who may be affected by this Annual Wage Order may object by filing an objection in triplicate with the Labor and Industrial Relations Commission, P.O. Box 599, Jefferson City, MO 65102-0599. Such objections must set forth in writing the specific grounds of objection. Each objection shall certify that a copy has been furnished to the Division of Labor Standards, P.O. Box 449, Jefferson City, MO 65102-0449 pursuant to 8 CSR 20-5.010(1). A certified copy of the Annual Wage Order has been filed with the Secretary of State of Missouri.

Original Signed by

Todd Smith, Director  
Division of Labor Standards

Filed With Secretary of State: \_\_\_\_\_ **March 10, 2023**

Last Date Objections May Be Filed: **April 10, 2023**

Prepared by Missouri Department of Labor and Industrial Relations

Building Construction Rates for  
RAY County

Section 089

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Asbestos Worker	\$24.33*
Boilermaker	\$24.33*
Bricklayer	\$61.34
Carpenter	\$61.29
Lather	
Linoleum Layer	
Millwright	
Pile Driver	
Cement Mason	\$24.33*
Plasterer	
Communications Technician	\$24.33*
Electrician (Inside Wireman)	\$67.54
Electrician Outside Lineman	\$24.33*
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Elevator Constructor	\$24.33*
Glazier	\$24.33*
Ironworker	\$24.33*
Laborer	\$24.33*
General Laborer	
First Semi-Skilled	
Second Semi-Skilled	
Mason	\$24.33*
Marble Mason	
Marble Finisher	
Terrazzo Worker	
Terrazzo Finisher	
Tile Setter	
Tile Finisher	
Operating Engineer	\$24.33*
Group I	
Group II	
Group III	
Group III-A	
Group IV	
Group V	
Painter	\$24.33*
Plumber	\$24.33*
Pipe Fitter	
Roofer	\$24.33*
Sheet Metal Worker	\$24.33*
Sprinkler Fitter	\$24.33*
Truck Driver	\$24.33*
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

\*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. The public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

\*\*The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title as defined in RSMO Section 290.210.

Heavy Construction Rates for  
RAY County

Section 089

OCCUPATIONAL TITLE	**Prevailing Hourly Rate
Carpenter	\$24.33*
Millwright	
Pile Driver	
Electrician (Outside Lineman)	\$24.33*
Lineman Operator	
Lineman - Tree Trimmer	
Groundman	
Groundman - Tree Trimmer	
Laborer	\$24.33*
General Laborer	
Skilled Laborer	
Operating Engineer	\$24.33*
Group I	
Group II	
Group III	
Group IV	
Truck Driver	\$24.33*
Truck Control Service Driver	
Group I	
Group II	
Group III	
Group IV	

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

If a worker is performing work on a heavy construction project within an occupational title that is not listed on the Heavy Construction Rate Sheet, use the rate for that occupational title as shown on the Building Construction Rate Sheet.

\*The Division of Labor Standards received fewer than 1,000 reportable hours for this occupational title. Public works contracting minimum wage is established for this occupational title using data provided by Missouri Economic Research and Information Center.

\*\*The Prevailing Hourly Rate includes any applicable fringe benefit amounts for each occupational title.

# **OVERTIME and HOLIDAYS**

## **OVERTIME**

For all work performed on a Sunday or a holiday, not less than twice (2x) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work.

For all overtime work performed, not less than one and one-half (1½) the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed or the public works contracting minimum wage, whichever is applicable, shall be paid to all workers employed by or on behalf of any public body engaged in the construction of public works, exclusive of maintenance work or contractual obligation. For purposes of this subdivision, "overtime work" shall include work that exceeds ten hours in one day and work in excess of forty hours in one calendar week; and

A thirty-minute lunch period on each calendar day shall be allowed for each worker on a public works project, provided that such time shall not be considered as time worked.

## **HOLIDAYS**

January first;  
The last Monday in May;  
July fourth;  
The first Monday in September;  
November eleventh;  
The fourth Thursday in November; and  
December twenty-fifth;

If any holiday falls on a Sunday, the following Monday shall be considered a holiday.



## SUBCONTRACTORS AND MAJOR MATERIAL SUPPLIERS LIST

Project Number \_\_\_\_\_ Project Title \_\_\_\_\_

From Contractor \_\_\_\_\_ To \_\_\_\_\_ Date \_\_\_\_\_

Spec. No.	Section Title	4	Firm, Address (Check box if Supplier)	Phone, FAX and e-mail	Contact

☐ Attachments:

Signed by: \_\_\_\_\_ Date \_\_\_\_\_

Distribution: ☐ Owner ☐ Contractor ☐ Construction Manager ☐ Design Professional ☐ Consultant ☐ Other



## DAILY LABOR FORCE REPORT

Project Number \_\_\_\_\_ Day \_\_\_\_\_ Date \_\_\_\_\_

Project Title \_\_\_\_\_

Contractor \_\_\_\_\_

Subcontractor \_\_\_\_\_

Weather: (Indicate if weather prevented work and why) \_\_\_\_\_

Shift: (circle) 5–8 hr Days 4–10 hr Days Other \_\_\_\_\_

\* This report *MUST be completed and turned in* for EACH DAY until FINAL COMPLETION.

Worker's Full Legal Name	Occupational Title or Classification Group & Skill	Hours Worked & Time (i.e. 10AM – 4PM)	Race & Gender

I CERTIFY THAT ALL OF THE INFORMATION PROVIDED ABOVE IS TRUE AND COMPLETE.

Contractor/Subcontractor Representative:

Complete Name: (print) \_\_\_\_\_ Title: (print) \_\_\_\_\_

Signature: \_\_\_\_\_

Page \_\_\_\_ of \_\_\_\_

Distribution: ☐ City Department ☐ Contractor ☐ Subcontractor ☐ Other



## CONTRACTOR AFFIDAVIT FOR FINAL PAYMENT

Project Number \_\_\_\_\_

Project Title \_\_\_\_\_

STATE OF \_\_\_\_\_ )  
 )SS  
COUNTY OF \_\_\_\_\_ )

The Undersigned, \_\_\_\_\_ of lawful  
(Name)

age, being first duly sworn, states under oath as follows:

1. I am the \_\_\_\_\_ of \_\_\_\_\_ who is the general  
(Title) (CONTRACTOR)  
CONTRACTOR for the CITY on Project No. \_\_\_\_\_ and Project Title \_\_\_\_\_.

2. All payrolls, material bills, use of equipment and other indebtedness connected with the Work for this Project have been paid and all Claims of whatever nature have been satisfied, as required by the Contract.

3. (✓) \_\_\_\_\_ Prevailing wage does not apply; or

(✓) \_\_\_\_\_ All provisions and requirements set forth in Chapter 290, Section 290.210 through and including 290.340, Missouri Revised Statutes, pertaining to the payment of wages to workmen employed on public works projects have been fully satisfied and there has been no exception to the full and complete compliance with these provisions and requirements and the Annual Wage Order contained in the Contract in carrying out the Contract and Work. CONTRACTOR has fully complied with the requirements of the prevailing wage law as required in the Contract and has attached affidavits from all Subcontractors on this Project, regardless of tier, affirming compliance with the prevailing wage law as stipulated in the Contract.

4. I hereby certify that (a) at project completion and pursuant to contractor's final request for payment, contractor achieved (\_\_\_\_%) Minority Business Enterprise (MBE) participation and (\_\_\_\_%) Women Business Enterprise (WBE) participation on this contract, and (b) listed herein are the names of all certified M/WBE subcontractors, regardless of tier, with whom I, or my subcontractors contracted.

1. Name of MBE/WBE Firm \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
Telephone Number (\_\_\_\_\_) \_\_\_\_\_  
IRS Number \_\_\_\_\_  
Area/Scope\*of Work \_\_\_\_\_  
Subcontract Final Amount \_\_\_\_\_

2. Name of MBE/WBE Firm \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
Telephone Number (\_\_\_\_\_) \_\_\_\_\_  
IRS Number \_\_\_\_\_  
Area/Scope\*of Work \_\_\_\_\_  
Subcontract Final Amount \_\_\_\_\_



List additional subcontractors, if any, on a similar form and attach to the bid.

Supplier\*\* Final Amount: \_\_\_\_\_

\*Reference to specification sections or bid item number.

- (✓) \_\_\_\_\_ Met or exceeded the Contract utilization goals; or  
(✓) \_\_\_\_\_ Failed to meet the Contract utilization goals (attach waiver, substitution or modification); or  
(✓) \_\_\_\_\_ No goals applied to this Project.

5. CONTRACTOR certifies that each Subcontractor has received full payment for its respective work in connection with the Contract.

6. If applicable, I hereby certify that (a) at project completion and pursuant to contractor's final request for payment, contractor achieved, company-wide, at least ten percent (10%) minority workforce participation and two percent (2%) women workforce participation and (2) a true and accurate copy of my final project workforce monthly report (HRD Form 00485.02 and final company-wide workforce monthly report (HRD Form 00485.03) are attached. **NOTE: This paragraph is only applicable if you completed a construction contract that was estimated by the City, prior to solicitation, as requiring more than 800 construction labor hours and costing in excess of \$324,000.01. If applicable you MUST attach copies of your final monthly workforce reports.**

7. This affidavit is made in behalf of the CONTRACTOR for the purpose of securing from Kansas City, Missouri, the certification of completion of the Project and receiving payment therefore.

8. If the Contract amount exceeded \$150,000, CONTRACTOR has submitted proof of compliance with the City tax ordinances administered by the City's Commissioner of Revenue and has on file proof of tax compliance from all Subcontractors. If the Contract term exceeded one (1) year, CONTRACTOR has provided proof of compliance with the City tax ordinances administered by the City's Commissioner of Revenue prior to receiving final payment and has on file proof of tax compliance from all Subcontractors prior to the Subcontractor receiving final payment from CONTRACTOR.

CONTRACTOR \_\_\_\_\_

By \_\_\_\_\_  
(Authorized Signature)

Title \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me

appeared \_\_\_\_\_, to me personally known to be the

\_\_\_\_\_ of the \_\_\_\_\_,

and who executed the foregoing instrument and acknowledged that (s)he executed the same on behalf of

\_\_\_\_\_ as its free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal on the day and year first above written.

My commission expires:

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



## SUBCONTRACTOR AFFIDAVIT FOR FINAL PAYMENT

Project Number \_\_\_\_\_

Project Title \_\_\_\_\_

STATE OF MISSOURI )

) ss:

COUNTY OF \_\_\_\_\_ )

After being duly sworn the person whose name and signature appears below hereby states under penalty of perjury that:

1. I am the duly authorized officer of the business indicated below (hereinafter Subcontractor) and I make this affidavit on behalf of Subcontractor in accordance with the requirements set forth in Section 290.290, RSMo. Subcontractor has completed all of the Work required under the terms and conditions of a subcontract as follows:

Subcontract with: \_\_\_\_\_, Contractor

Work Performed: \_\_\_\_\_

Total Dollar Amount of Subcontract and all Change Orders: \$\_\_\_\_\_

City Certified ☐ MBE ☐ WBE ☐ DBE ☐ NA

List certifications: \_\_\_\_\_

2. Subcontractor fully complied with the provisions and requirements of the Missouri Prevailing Wage Law set forth in Sections 290.210, RSMo through 290.340, RSMo.

**Business Entity Type:**

- ( ) Missouri Corporation  
( ) Foreign Corporation  
( ) Fictitious Name Corporation  
( ) Sole Proprietor  
( ) Limited Liability Company  
( ) Partnership  
( ) Joint Venture  
( ) Other (Specify) \_\_\_\_\_

**Subcontractor's Legal Name and Address**

\_\_\_\_\_

Phone No. \_\_\_\_\_

Fax: \_\_\_\_\_

E:mail: \_\_\_\_\_

Federal ID No. \_\_\_\_\_

I hereby certify that I have the authority to execute this affidavit on behalf of Subcontractor.

By: \_\_\_\_\_

(Signature)

\_\_\_\_\_

(Print Name)

(Title)

(Date)

**NOTARY**

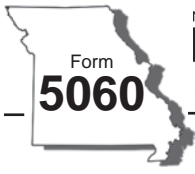
Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

My Commission Expires: \_\_\_\_\_ By \_\_\_\_\_

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

# ATTACHMENT G



MISSOURI DEPARTMENT OF

**REVENUE****Project Exemption Certificate**

This form is to be completed and given to your contractor.

Exempt Entity and Project Information

Name of Exempt Entity Issuing the Certificate		Missouri Tax Exemption Number 	
Address		City	State   ZIP Code
E-mail Address			
Project Number	Project Begin Date (MM/DD/YYYY) ____ / ____ / ____	Estimated Project End Date (MM/DD/YYYY) ____ / ____ / ____	
Description of Project			
Project Location		Certificate Expiration Date (MM/DD/YYYY) ____ / ____ / ____	
Provide a signed copy of this certificate, along with a copy of the exempt entity's Missouri Sales and Use Tax Exemption Letter to each contractor or subcontractor who will be purchasing tangible personal property for use in this project. It is the responsibility of the exempt entity to ensure the validity of the information on the certificate. The exempt entity must issue a new certificate if any of the information changes.			
Signature of Authorized Exempt Entity		Printed Name of Authorized Exempt Entity	Date (MM/DD/YYYY) ____ / ____ / ____

Contractor

The Missouri exempt entity named above hereby authorizes the purchase, without sales tax, of tangible personal property to be incorporated or consumed in the construction project identified herein and no other, pursuant to [Section 144.062, RSMo](#). Under penalties of perjury, I declare that the above information and any attached supplement is true, complete, and correct.

Name of Purchasing Contractor	Signature of Contractor	Date (MM/DD/YYYY) ____ / ____ / ____	
Address		City	State   ZIP Code

Subcontractor

Contractors - Present this to your supplier in order to purchase the necessary materials tax exempt. Complete the Subcontractor portion if extending the certificate to your subcontractor. The contractor must sign the form in the space provided below.

Name of Purchasing Subcontractor			
Address		City	State   ZIP Code
Signature of Contractor		Contractor's Printed Name	Date (MM/DD/YYYY) ____ / ____ / ____

Form 5060 (Revised 11-2019)

Taxation Division  
P.O. Box 358  
Jefferson City, MO 65105-0358

**Phone:** (573) 751-2836  
**Fax:** (573) 522-1666  
**E-mail:** [salestaxexemptions@dor.mo.gov](mailto:salestaxexemptions@dor.mo.gov)

Visit <http://dor.mo.gov/business/sales/sales-use-exemptions.php> for additional information.

# State of Missouri

## EXEMPTION FROM MISSOURI SALES AND USE TAX ON PURCHASES

Issued to:

CITY OF KANSAS CITY  
414 E 12TH ST 3RD FLOOR  
KANSAS CITY MO 64106

Missouri Tax ID  
Number: 12490466

Effective Date:  
07/11/2002

Your application for sales/use tax exempt status has been approved pursuant to Section 144.030.1, RSMo. This letter is issued as documentation of your exempt status.

Purchases by your Agency are not subject to sales or use tax if within the conduct of your Agency's exempt functions and activities. When purchasing with this exemption, furnish all sellers or vendors a copy of this letter. This exemption may not be used by individuals making personal purchases.

A contractor may purchase and pay for construction materials exempt from sales tax when fulfilling a contract with your Agency only if your Agency issues a project exemption certificate and the contractor makes purchases in compliance with the provisions of Section 144.062, RSMo.

Sales by your Agency are subject to all applicable state and local sales taxes. If you engage in the business of selling tangible personal property or taxable services at retail, you must obtain a Missouri Retail Sales Tax License and collect and remit sales tax.

This is a continuing exemption subject to legislative changes and review by the Director of Revenue. If your Agency ceases to qualify as an exempt entity, this exemption will cease to be valid. This exemption is not assignable or transferable. It is an exemption from sales and use taxes only and is not an exemption from real or personal property tax.

Any alteration to this exemption letter renders it invalid.

If you have any questions regarding the use of this letter, please contact the Division of Taxation and Collection, P.O. Box 3300, Jefferson City, MO 65105-3300, phone 573-751-2836.

# ATTACHMENT H



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

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

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

PRODUCER  AGENT NAME AND ADDRESS	CONTACT NAME:	
	PHONE (A/C, No, Ext):	FAX (A/C, No):
INSURED  CONTRACTOR NAME AND ADDRESS	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	
	INSURER A : ABC INSURANCE COMPANY	
	INSURER B :	
	INSURER C :	
	INSURER D :	
INSURER E :		
INSURER F :		

**COVERAGES****CERTIFICATE NUMBER:****REVISION NUMBER:**

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

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<b>GENERAL LIABILITY</b> <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC	Y	Y	POLICY NUMBER	1/1/2011	Current	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 50,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS	Y	Y	POLICY NUMBER	1/1/2011	Current	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB EXCESS LIAB <input checked="" type="checkbox"/> RETENTION \$ 10,000 <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE	Y	Y	POLICY NUMBER	1/1/2011	Current	EACH OCCURRENCE \$ 2,000,000 AGGREGATE \$ 2,000,000 \$
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	POLICY NUMBER	1/1/2011	Current	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	Leased/Rented/Equip. Owned Equipment <u>Builders Risk/Installation Floater</u>	N/A	Y	POLICY NUMBER	1/1/2011	Current	Limit; Deductible Limit; Deductible Limit; Deductible

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Project No. [Title]. Certholder (City) and [Design Professional] and any other entities named in 00800 SCs are named as primary, noncontributing Additional Insureds including products and completed operations, excluding workers compensation, employers liability and professional liability. Waiver of subrogation applies as allowed by law. [The policies required above shall contain no exclusions for work expressly within the subcontractors scope of work.]

**CERTIFICATE HOLDER****CANCELLATION**

City of Kansas City, Missouri  [Department]  [Address]  Kansas City, MO [Zip]	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE
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# ATTACHMENT I





# AUTHORIZATION TO RELEASE A REVENUE CLEARANCE LETTER

Revenue Division

414 East 12<sup>th</sup> Street, 2<sup>nd</sup> floor, Room 202 W

Kansas City, MO 64106 Phone (816) 513-1135 Fax (816) 513-1077 email: revenue@kcmo.org

I authorize the City of Kansas City, Missouri, Finance Department, Revenue Division, to release a Revenue Clearance Letter for:

Name of Taxpayer: \_\_\_\_\_ Tax I.D.# \_\_\_\_\_  
(PRINT)

Address: \_\_\_\_\_

**Check this box and the City will send the Clearance Letter to you or the contractor designated.**

☐ I authorize the City to provide a copy of the Taxpayer's Revenue Clearance Letter to the following:

NAME (PRINT)		BUSINESS NAME	TITLE
ADDRESS		CITY, STATE, ZIP CODE	
PHONE NUMBER	FAX NUMBER		E-MAIL ADDRESS

☐ I authorize the City to provide the Taxpayer's Revenue Clearance Letter to all City Departments and to publish on the City's internet/intranet website that the Taxpayer is in compliance with the tax ordinances administered by the City's Commissioner of Revenue.

Please send my 1<sup>st</sup> Revenue Clearance Letter to: \_\_\_\_\_  
(Print Name of City Department/Contact Person/E-mail/Fax Number)

This authorization shall expire one (1) year from the date of the signature.

The City, Commissioner of Revenue and the Revenue Division personnel (hereinafter "the City"), are hereby held harmless from any and all liability relating to unauthorized disclosure of confidential tax information resulting from release of information under all applicable confidentiality laws including federal, state, or local including any damages sustained by wrongful transmission of confidential tax information to any other person.

UNDER PENALTIES OF PERJURY, I DECLARE THAT I HAVE EXAMINED THIS AUTHORIZATION, AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT IS TRUE, CORRECT AND COMPLETE.

**I hereby certify that I am the Taxpayer named herein or that I have the authority to execute this authorization and hold harmless agreement on behalf of the Taxpayer.**

NAME (PRINT)		TITLE (IF APPLICABLE)	
SIGNATURE	PHONE NUMBER	DATE	

**A FACSIMILE OF THIS DOCUMENT SHALL CONSTITUTE AN ORIGINAL**

# ATTACHMENT J

**EMPLOYEE ELIGIBILITY VERIFICATION AFFIDAVIT**

(Required for any contract with the City of Kansas City, Missouri in excess of \$5,000.00)

STATE OF \_\_\_\_\_ )  
 ) ss  
COUNTY OF \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me appeared \_\_\_\_\_, personally known by me or otherwise proven to be the person whose name is subscribed on this affidavit and who, being duly sworn, stated as follows:

I am of sound mind, capable of making this affidavit, and personally swear or affirm that the statements made herein are truthful to the best of my knowledge. I am the \_\_\_\_\_ (title) of \_\_\_\_\_ (business entity) and I am duly authorized, directed or empowered to act with full authority on behalf of the business entity in making this affidavit.

I hereby swear or affirm that the business entity does not knowingly employ any person in connection with the contracted services who does not have the legal right or authorization under federal law to work in the United States as defined in 8 U.S.C. § 1324a(h)(3).

I hereby additionally swear or affirm that the business entity is enrolled in an electronic verification of work program operated by the United States Department of Homeland Security (E-Verify) or an equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, under the Immigration Reform and Control Act of 1986, and that the business entity will participate in said program with respect to any person hired by the business entity to perform any work in connection with the contracted services. I have attached hereto documentation sufficient to establish the business entity's enrollment and participation in the required electronic verification of work program.

I am aware and recognize that unless certain contractual requirements are satisfied and affidavits obtained as provided in Section 285.530, RSMo, the business entity may face liability for violations committed by its subcontractors, notwithstanding the fact that the business entity may itself be compliant.

I acknowledge that I am signing this affidavit as the free act and deed of the business entity and that I am not doing so under duress.

\_\_\_\_\_  
Affiant's signature

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

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

My Commission expires:



## SUPPLEMENTARY CONDITIONS

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

---

These Supplementary Conditions amend or supplement the General Conditions of the Construction Contract and other provisions of the Contract Documents as indicated below. All provisions that are not so amended or supplemented remain in full force and effect.

**SC-2.03 A.** Article 2, Paragraph 2.03, Copies of Documents, is amended by deleting Paragraph 2.03 A and replacing it with the following:

A. CITY shall furnish to CONTRACTOR up to two (2) copies of the Drawings and Specifications, including Addenda.

**SC-4.02** Article 4, Paragraph 4.02, Subsurface and Physical Conditions; Subparagraphs A and B are supplemented as follows:

In the preparation of the Contract Documents, no reports of explorations and tests of subsurface conditions at or contiguous to the Site of the Work have been prepared.

In the preparation of the Contract Documents, no drawings of physical conditions in or relating to existing surface or subsurface structures which are at or contiguous to the Site of the Work were utilized.

**SC-4.06** Article 4, Paragraph 4.06, Asbestos, Lead-Based Paint, PCBs, Petroleum Waste or Radioactive Material, Subparagraphs A and B are supplemented as follows:

In the preparation of the Contract Documents, no reports of explorations and tests of any Hazardous Environmental Condition(s) at the Site of the Work have been prepared.

**SC- 5.01 A.** Article 5, Paragraph 5.01, Performance, Payment and Other Bonds, Subparagraph A, second sentence, is revised as follows:

These Bonds shall remain in effect at least until **two (2) years** after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents. CONTRACTOR shall furnish the following additional Bonds, which shall remain in effect as stated: Maintenance Bond – Two (2) years.

**SC-5.03 A.** Article 5, Paragraph 5.03 Certificates of Insurance, Subparagraph A is amended by adding the following Subparagraph 1:

1. CONTRACTOR shall obtain evidence that all Subcontractors have in force the required coverage in the amounts required by these Contract Documents, and evidence that each is current on its unemployment insurance payments before Subcontractors begin Work at the Site. CONTRACTOR shall retain such evidence in its files and make available to CITY within ten (10) days after written request.

**SC-5.06 A.** Article 5, Paragraph 5.06, Property Insurance, is amended by deleting Subparagraph A and inserting the following:

A. CONTRACTOR shall not be required to purchase and maintain property insurance on the Work at the Site.

**SC-6.06 A.1** Article 6, Paragraph 6.06 Substitutes and "Or-Equal" Items, Paragraph A is amended by adding the following at the end of Paragraph A.1:

Proposed "or-equal" items must be submitted to CITY at least 14 days prior to Bid date at the following address:

4721 Coal Mine Road  
Kansas City, Missouri 64130  
Attn: Uday Manepalli, Project Manager

Only Bidders may submit proposed "or-equal" items and such items must require no change in related Work. Acceptance by CITY of any proposed "or-equal" items will be made by Addendum only.

**SC-6.06 A.2.** Article 6, Paragraph 6.06 Substitutes and "Or-Equal" Items, Paragraph A is amended by adding the following at the end of Paragraph A.2:

Proposed substitute items must be submitted to CITY's Representative not later than 14 days prior to the time the item is to be incorporated into the Work. Only CONTRACTOR may submit proposed substitute items, and such items must be submitted to CITY's Representative on the standard City form 01630 - Substitution Request. Acceptance by CITY of any proposed substitute item will be made by Change Order.

**SC-6.07 B.** Article 6, Paragraph 6.07, Concerning Subcontractors, Suppliers and Others, Subparagraph B is supplemented as follows:

The following Subcontractors, Suppliers or other persons or organizations (including those who are to furnish the principal items of materials or equipment) are to be submitted to CITY for acceptance, on or before the date stated.

**SC-6.09.** Article 6, Paragraph 6.09, Permits, Subparagraph A is supplemented as follows:

CONTRACTOR shall secure a permit from the Missouri Highway and Transportation Commission's District Engineer prior to performing any work in state-controlled Right-of-Way.

CONTRACTOR does need to obtain but does not need to pay for the following construction permits and licenses, which have been paid for by CITY: all Public Works permits, all Parks & Recreation Department permits.

**SC-6.10.** Article 6, Paragraph 6.10, Compliance with Laws and Regulations, is amended by adding the following new Subparagraphs immediately following Subparagraph 6.10 I 2:

a. CONTRACTOR will be required to comply with wage rates as follows:

County –Clay, Platte, Jackson, Cass                      Work Type:    State – Heavy

**SC-6.10.** Article 6, Paragraph 6.10, Compliance with Laws and Regulations, is amended by adding the following new Subparagraph 6.10 S:

1. "Resident Laborers" means laborers who have been residents of the State of Missouri for at least thirty days and who intend to remain Missouri residents, and residents of Nonrestrictive States.

2. "Nonrestrictive States" means states identified by the Missouri Department of Labor and Industrial Relations Division of Labor Standards that have not enacted state laws

restricting Missouri laborers from working on public works projects. A list of Nonrestrictive States can be found on the Division web site at <http://www.dolir.mo.gov/ls/index.htm>.

3. A period of Excessive Unemployment is declared when the Missouri Department of Labor and Industrial Relations Division of Labor Standards provides notice of such declaration. When in effect, notice will be provided on the Division web site at <http://www.dolir.mo.gov/ls/index.htm>. It is CONTRACTOR's obligation to determine whether a period of Excessive Unemployment is in effect when this Contract is let.

4. CONTRACTOR agrees to follow the provisions of Section 290.560 - 290.575 RSMo and agrees that if a period of Excessive Unemployment has been declared at any point during the term of this Contract, it will employ and require all Subcontractors of whatever tier to employ only Resident Laborers for the Work to be performed under this CONTRACT. Provided, however, CONTRACTOR may use laborers who are not Resident Laborers when Resident Laborers are not available or are incapable of performing the particular type of work involved if CONTRACTOR so certifies in writing to CITY and CITY issues a written approval. This provision does not apply to regularly employed nonresident executive, supervisory or technical employees.

**SC-6.11.** Article 6, Paragraph 6.11, Taxes, is amended by adding the following sentence to Subparagraph 6.11 B:

B. Tax Compliance. The following subparagraphs apply if the Contract is over \$150,000.00.

**SC-12.01** Article 12, Paragraph 12.01, Time of the Essence is amended by adding the following new Subparagraphs immediately following Subparagraph 12.01 A:

B. Starting and Completion

1. The Work to be performed under this Contract shall begin on the date specified in the written Notice to Proceed issued by the Director of Public Works, and the Work shall be substantially complete, in accordance with Paragraph 14.04, within **240 Calendar Days** thereafter. Once the Work starts, CONTRACTOR shall continuously pursue completion of the Work.
2. The Work shall be completed and ready for final payment in accordance with Paragraph 14.07 within **30 Calendar Days** after the date of Substantial Completion of the Work.

C. Liquidated Damages

1. If the Work is not substantially completed, in accordance with Paragraph 14.04, within the period stated in Paragraph 12.01 B.1, CONTRACTOR shall pay to CITY the amount of one thousand dollars (\$1000.00) as liquidated damages and not as a penalty for each Calendar Day until the Work is substantially complete. The amount of liquidated damages shall be deducted from any payments due or to become due CONTRACTOR.
2. If the Work is not completed and ready for final payment in accordance with Paragraph 14.07, within the period stated in Paragraph 12.01 B.2, CONTRACTOR shall pay to CITY the amount of fifty dollars (\$50.00) as liquidated damages and not as a penalty for each Calendar Day until the Work is completed and ready for final payment. The amount of liquidated damages shall be deducted from any payments due or to become due CONTRACTOR.

3. This contract involves the issuance of special assessment tax bills. To approximate the additional costs of delay in levying special assessments and issuing special assessment tax bills, additional liquidated damages shall be deducted in the amount of fifty dollars (\$50.00) for each Calendar Day for any delay in closing the Contract caused by CONTRACTOR.

**SC-13.07** Article 13, Paragraph 13.07, Correction Period, Subparagraph A is amended as follows:

The correction period set forth in Paragraph 13.07 A shall be two (2) years instead of one (1) year, which longer period of time shall also be applicable to the correction period set forth in Paragraph 13.07 C. All other provisions of Paragraph 13.07 remain unchanged except as necessary to accommodate the revised length of the correction period.

**SC-14.02 A.** Article 14, Paragraph 14.02, Application for Progress Payments, Subparagraph A is amended by deleting Item 3 and adding the following:

3. CITY shall make payments to CONTRACTOR monthly on or about the last day of each month. Payments to CONTRACTOR will be made on the basis of ninety-five percent (95%) of the value of the Work satisfactorily completed plus ninety-five percent (95%) of the value of properly stored and insured, unused materials on hand on the Site of the Work. CITY shall retain five percent (5%) of each partial payment until completion and acceptance of the Work covered by the Contract and final payment is due. All Work covered by a payment becomes CITY's property, provided that the Work paid for remains the sole responsibility of CONTRACTOR until all terms and conditions of the Contract have been met.

**SC-14.04.** Article 14, Paragraph 14.04, Substantial Completion, Subparagraph A is supplemented as follows:

- A. To be considered substantially complete, the following items of the Work must be operational and ready for CITY's continuous use as intended: all work except landscape restoration.



CITY OF FOUNTAINS  
HEART OF THE NATION



KANSAS CITY  
MISSOURI

## SEWER MANHOLE ADJUSTMENT

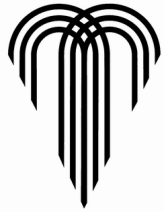
Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

- A. All sewer manhole covers shall be adjusted to the new elevation of the street surface resulting from resurfacing of the street. Public Works will provide the CONTRACTOR data from Water Services Department (WSD) regarding the location of WSD facilities. If a known manhole cannot be located by the CONTRACTOR in the field, the CONTRACTOR shall immediately notify the on-site inspector or engineer so that it can be located and adjusted by the CONTRACTOR.
- B. Sewer manhole cover **adjusting rings will be furnished by the CONTRACTOR**, and approved for use by the Engineer. Adjustment in the elevation of manholes shall be made before the final surface course is placed, and after any wedge, leveling, or base course.
- C. Manhole cover adjusting rings shall result in a "flush condition" defined as within ¼" of the surrounding pavement, measured four feet in all directions. The adjusting ring shall be traffic rated and available in increments of **1 inch, 1-½ inch, 2 inch, and 2-½ inches**. Adjusting rings of all required increments shall be labeled and on site before work commences on any street segment. No adjustment rings shall be used in conjunction with "adjustable" or "self-leveling" manhole castings. Any adjustment of adjustable or self-leveling manholes shall be the sole discretion of the engineer representative and shall be subsidiary.
- D. **Only new adjustment rings will be paid for. The reuse of existing rings shall be as directed by the engineer representative in regard to condition and current manufacture – the size increment shall remain the judgment of the contractor to achieve the flush condition.**
- E. If a sewer manhole is improperly adjusted, not adjusted to the correct elevation or line as directed or for any reason the final location or alignment is not satisfactory, the CONTRACTOR shall correct the adjustment for the fixture to the satisfaction of the Director of Public Works. No payment will be made for correcting unsatisfactory adjustments of fixtures, or for any asphaltic concrete surface material used for patching around the fixture if the correction is made after the final course has been placed.

**Payment** for this item shall be made at the contract unit bid price for "Sewer Manhole Adjustment-Ring" per each, as listed in the Proposal. Such payment shall constitute full compensation for all labor, equipment and materials necessary to complete this item.

CITY OF FOUNTAINS  
HEART OF THE NATION



KANSAS CITY  
MISSOURI

## ADEQUATE MANPOWER

Project Number

EV 3040

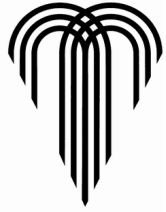
Project Title

IDIQ Traffic Safety Improvements

Adequate manpower in the form of equipment operators, laborers, concrete finishers, form setters, and foreman shall be on the job at all times during progress of work. The minimum crew shall consist of two (2) laborers, one (1) equipment operator, one (1) concrete finisher, one (1) form setter, and one (1) foreman. If at any time the CONTRACTOR fails to provide adequate equipment or manpower, the Engineer or his representative, may at his sole discretion, cease all operations until the situation is corrected.

Job abandonment shall be considered if adequate manpower has not been on the jobsite for one (1) week. If at any time the CONTRACTOR fails to provide adequate manpower for one (1) week, the Engineer or his representative, may at his sole discretion, contact the CONTRACTOR surety.

CITY OF FOUNTAINS  
HEART OF THE NATION



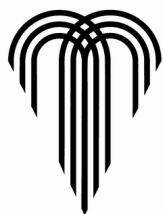
KANSAS CITY  
MISSOURI

## SUMMARY OF WORK

Project Number: E 3040

Project Title: IDIQ Traffic Safety Improvements

CONSTRUCTION OF SPEED HUMPS, CURBS, RAISED CROSSWALKS, CHICANES, CURB EXTENSIONS AND OTHER TRAFFIC CALMING MEASURES AT VARIOUS LOCATIONS WITHIN THE CITY LIMITS OF KANSAS CITY, CLAY, PLATTE, JACKSON AND CASS COUNTY, MISSOURI

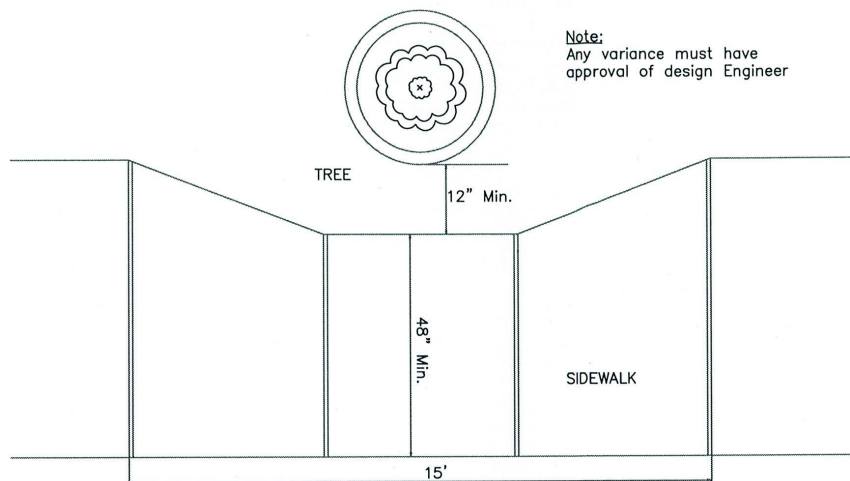
CITY OF FOUNTAINS  
HEART OF THE NATIONKANSAS CITY  
MISSOURI**DRAWING INDEX**Project Number EV 3040Project Title IDIQ Traffic Safety Improvements

The work shall conform to the drawings in this section and to specifications, plans and details issued by, or approved by, an authorized representative or manufacturer of products used for this project. All specifications, plans and work must conform to requirements of the warranty.

## Index of Sheets

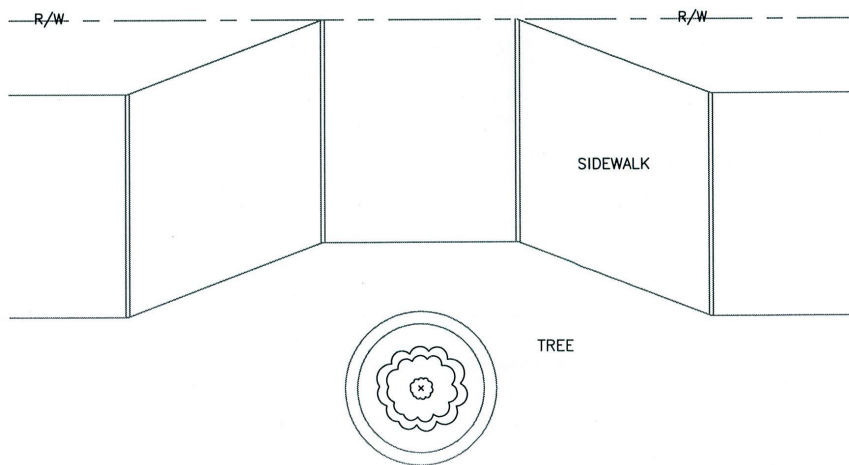
Page	01115-2	-	Block Out For Trees
Page	01115-3	-	Additional Right-of-Way for Trees
Page	01115-4	-	Flume Replacement/Typical Gutter Drain Extension Detail
Page	01115-5	-	Tree Inspection Report
Page	01115-9	-	Project Drawings (Speed Humps, Chicanes, Curb Extension etc.)

## BLOCK OUT FOR TREES



**Note:**  
Any variance must have  
approval of design Engineer

**Note:**  
If roots are in conflict with the work and  
can not be avoided by these methods,  
Refer to Section 02236 "Tree Root Pruning"  
of The PROJECT MANUAL



1.5% CROSS SLOPES ON SIDEWALKS

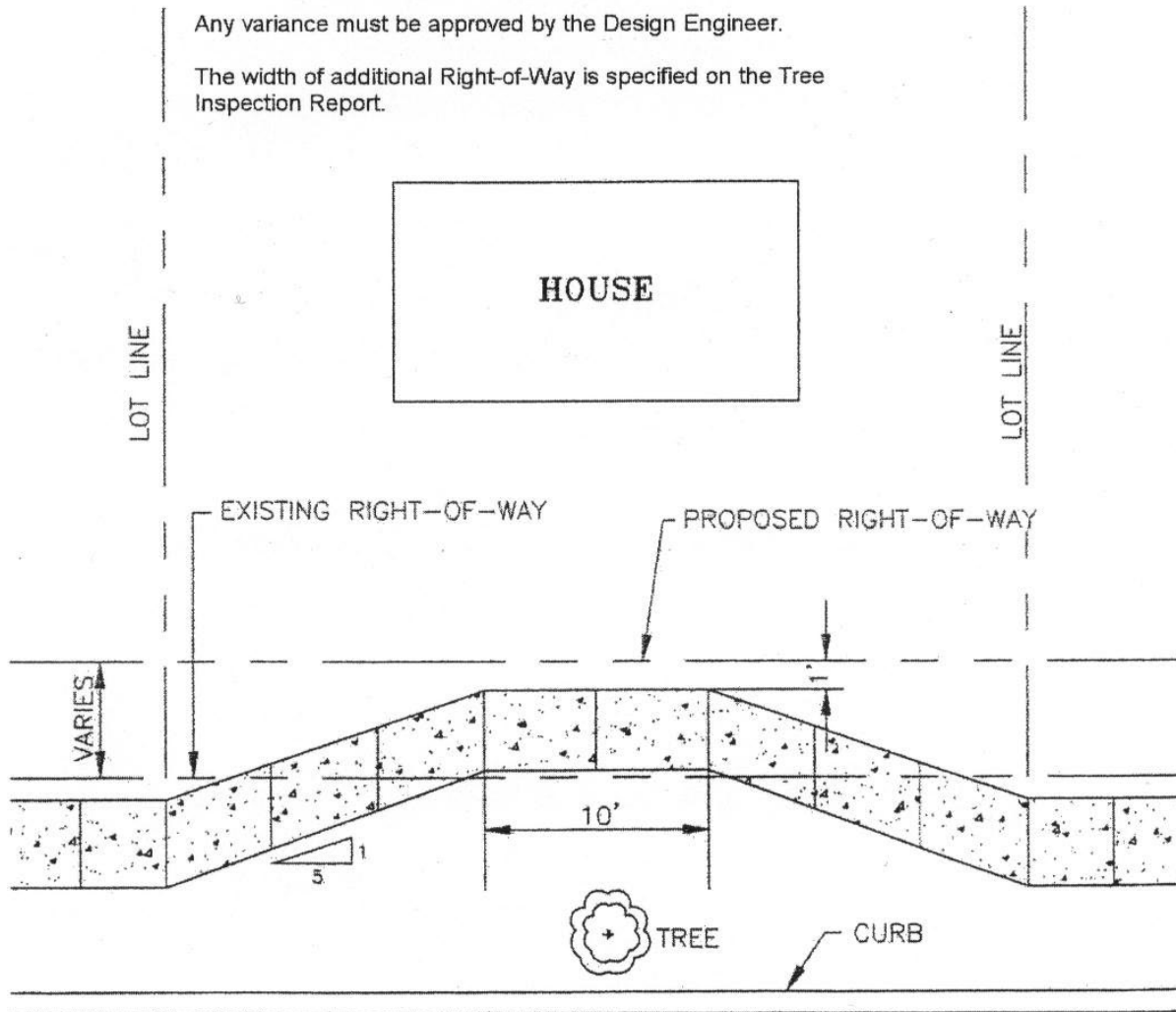
## ADDITIONAL RIGHT-OF-WAY FOR TREES

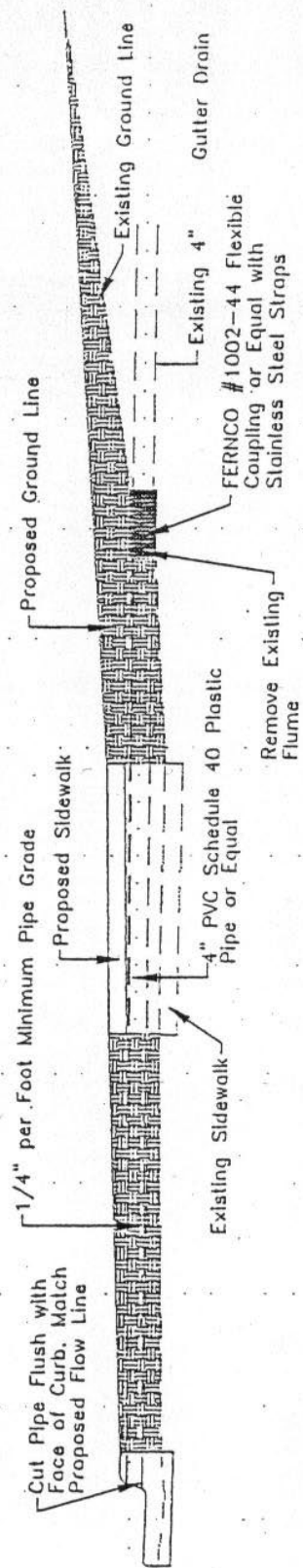
### NOTE:

To be used by approval of the Design Engineer.

Any variance must be approved by the Design Engineer.

The width of additional Right-of-Way is specified on the Tree Inspection Report.





Flume Replacement / Typical Gutter Drain Extension Detail



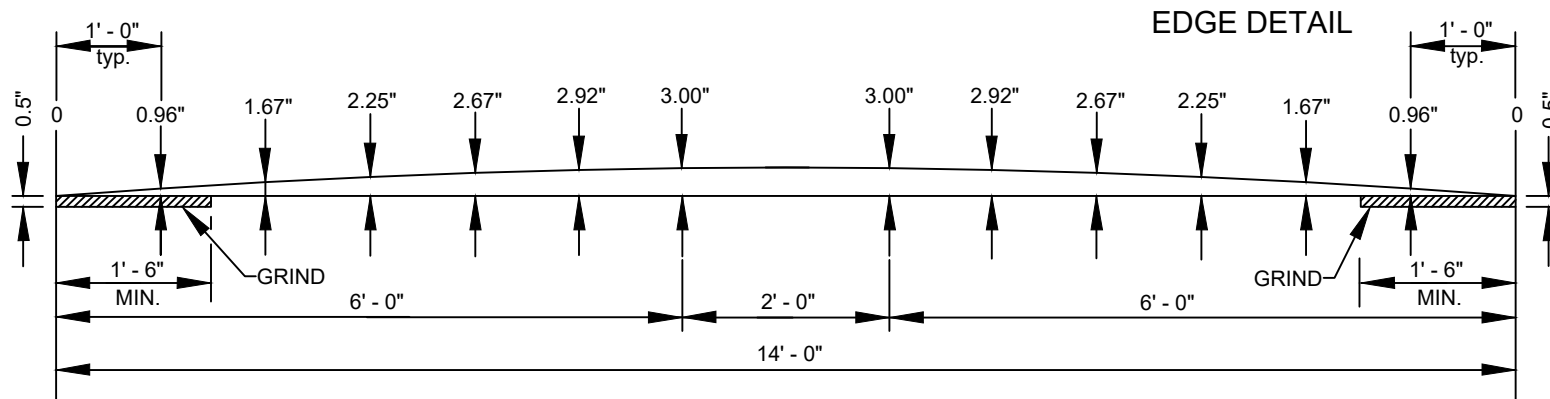
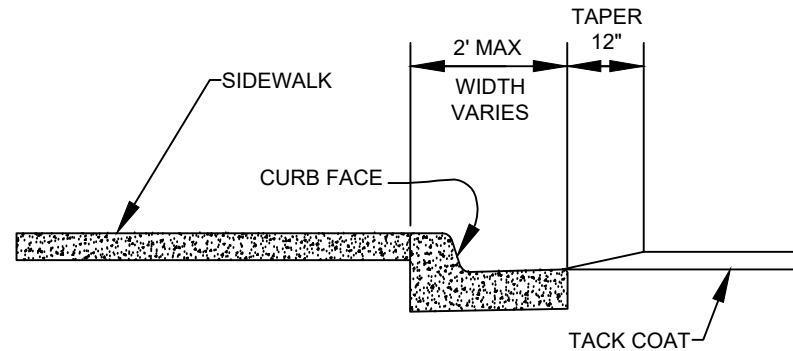
**THE TREE INSPECTION REPORT WILL BE AVAILABLE AT THE PRECONSTRUCTION  
MEETING FOR THIS PROJECT**





# SPEED HUMP SPECIFICATIONS

IMPORTANT: SPEED HUMPS TO BE 3" IN HEIGHT TO PROVIDE MAXIMUM EFFECTIVENESS, WHILE NOT BEING OVERLY RESTRICTIVE TO EMERGENCY, POLICE AND FIRE VEHICLES.



CROSS SECTION

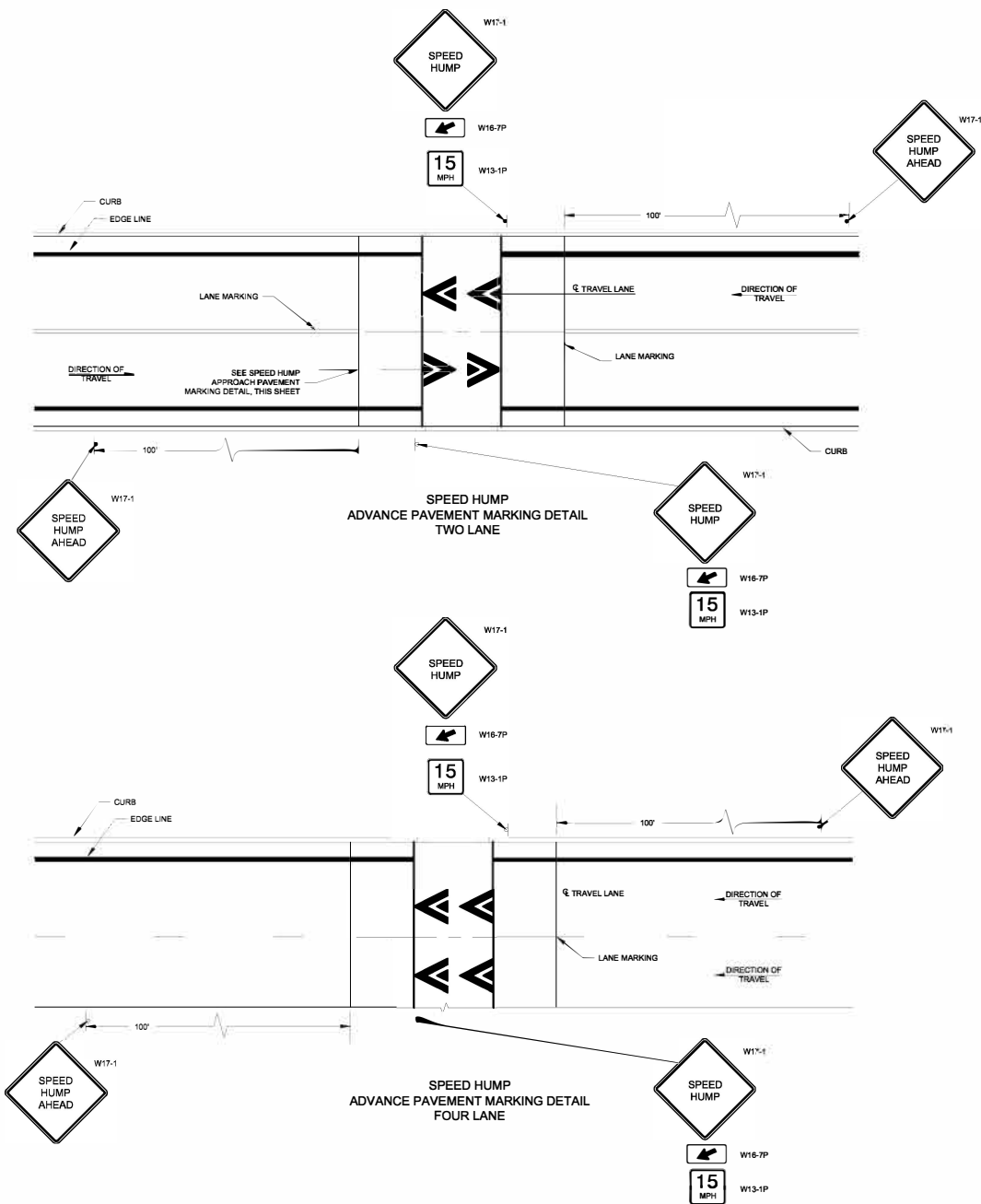


**Kansas City, Missouri**  
Public Works Department  
Capital Improvements

**SPEED HUMP DETAILS**



**SHEET  
1 OF 2**



#### GUIDELINES:

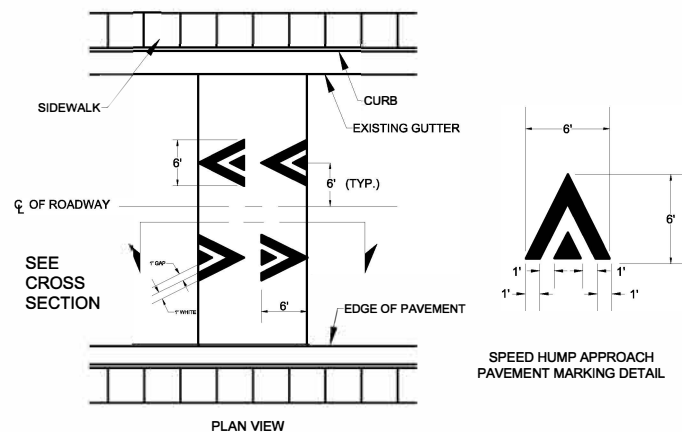
1. FOR SPEED HUMPS TO BE EFFECTIVE, THEY MUST BE INSTALLED IN A SERIES, APPROXIMATELY 250 TO 600 FEET APART.
2. SPEED HUMPS CAN ONLY BE INSTALLED ON PAVED RESIDENTIAL STREETS WITH CURBING.
3. SPEED HUMPS SHOULD BE LOCATED A MINIMUM DISTANCE OF 125 FEET FROM THE INTERSECTION.
4. SPEED HUMPS MUST BE INSTALLED AT LEAST 15-20 FEET AWAY FROM DRIVEWAYS AND ALLEYS.
5. SPEED HUMPS MUST NOT BE PLACED ON RESIDENTIAL COLLECTOR STREET WITH A DOUBLE YELLOW CENTERLINE AND WHERE THE TYPICAL WEEKDAY 24-HOUR TRAFFIC VOLUME EXCEEDS 1,500 VEHICLES PER DAY.
6. THE GRADE OF STREET MUST NOT EXCEED 8%, AND DRAINAGE OF THE STREET MUST NOT BE COMPROMISED.

#### SIGNAGE:

1. THE SPEED HUMP (W17-1) SIGN SHOULD BE USED TO GIVE WARNING OF A VERTICAL DEFLECTION IN THE ROADWAY THAT IS DESIGNED TO LIMIT THE SPEED OF TRAFFIC.
2. IF USED, THE SPEED HUMPS SIGN SHOULD BE SUPPLEMENTED BY AN ADVISORY SPEED PLAQUE.
3. W17-1 SPEED HUMP SIGN WITH A W16-7P DOWNWARD DIAGONAL ARROW(S) OF APPROACH, AT EACH OF THE DEVICES.
4. W17-1A SPEED HUMP AHEAD WITH A W13-1 ADVISORY SPEED (10 MPH BELOW THE POSTED SPEED LIMIT), DIRECTION(S) OF APPROACH, NO LESS THAN 100 FEET IN ADVANCE OF EACH GROUPING ON EACH BLOCK.
5. REFER TO THE MUTCD FOR ADDITIONAL ADVANCED WARNING SIGNS, TYPE AND LOCATION.
6. SPEED HUMP AHEAD SIGN W17-1

#### NOTES:

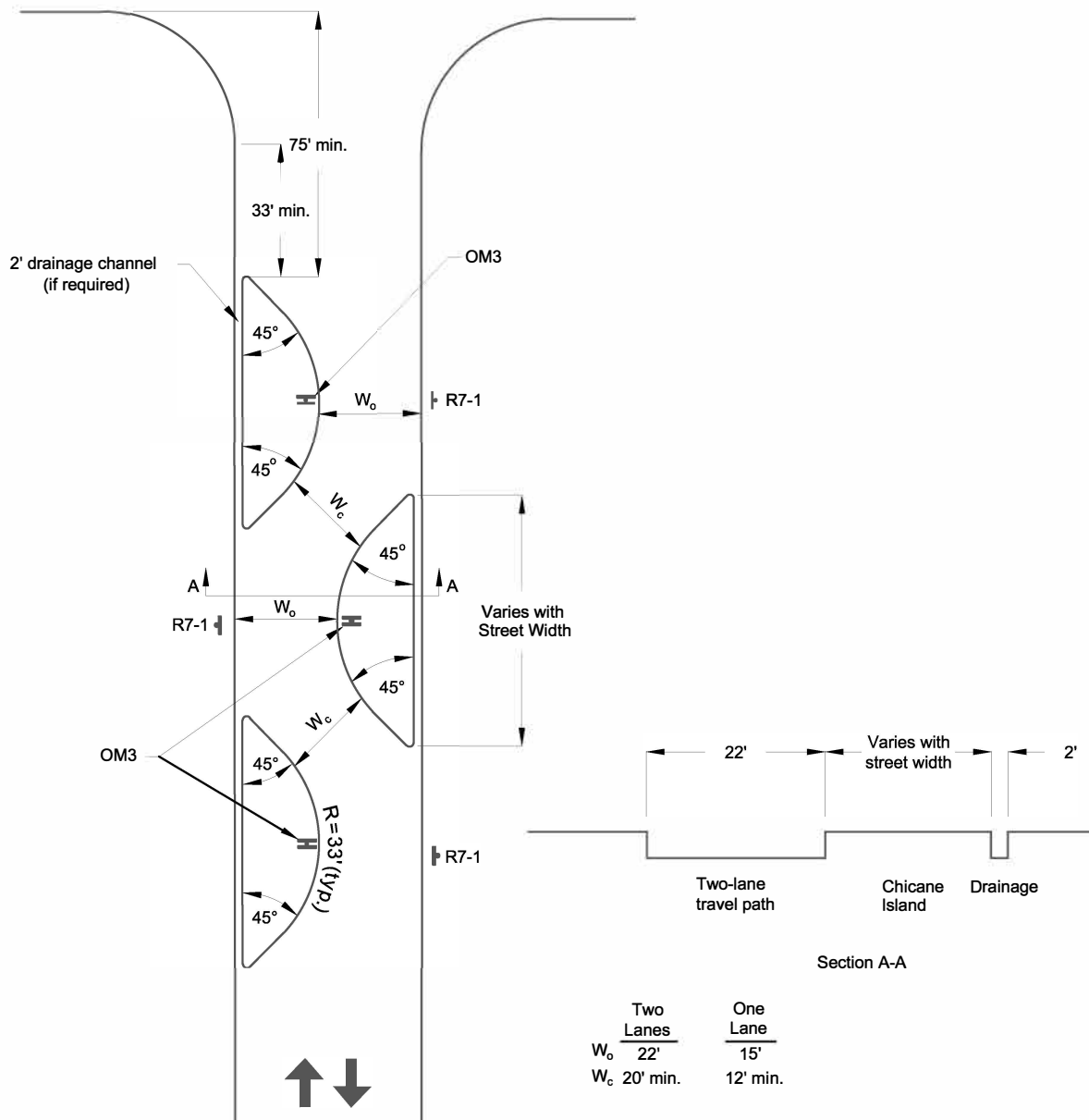
1. SPEED HUMPS SHALL NOT BE PLACED OVER MANHOLES, WATER VALVES, SURVEY MONUMENTS, ETC.
2. SPEED HUMPS SHALL NOT BE INSTALLED IN A LOCATION SUCH THAT ROADWAY DRAINAGE IS COMPROMISED.
3. SPEED HUMPS TO BE CONSTRUCTED WITH RC TYPE 5 ASPHALTIC CONCRETE OR AS DIRECTED BY KCMO. A TACK COAT SHALL BE APPLIED PRIOR TO APPLICATION OF PAVEMENT MATERIAL.
4. STRIPING TO BE INSTALLED BY CONTRACTOR PER KCMO STANDARDS. CONTACT CITY OF KCMO SIGN SHOP ONE WEEK PRIOR TO INSTALLATION TO COORDINATE PLACEMENT OF SIGNS.





**Kansas City, Missouri**  
Public Works Department  
Capital Improvements

#### SPEED HUMP DETAILS

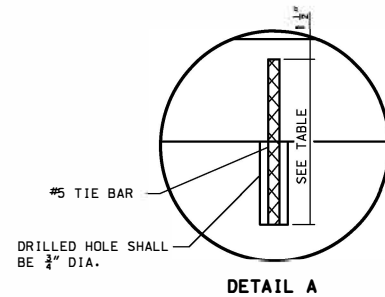
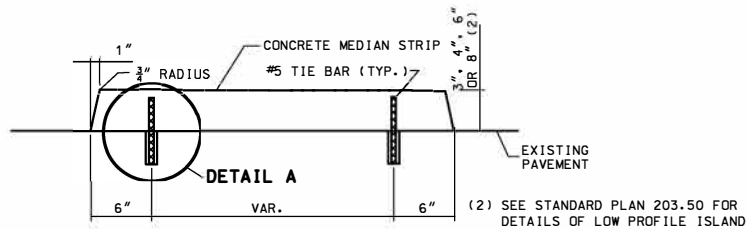




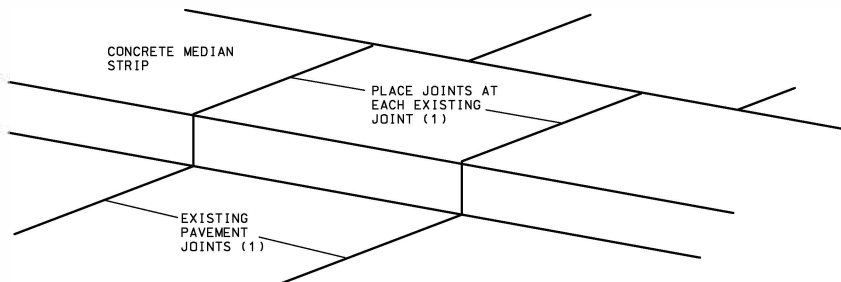
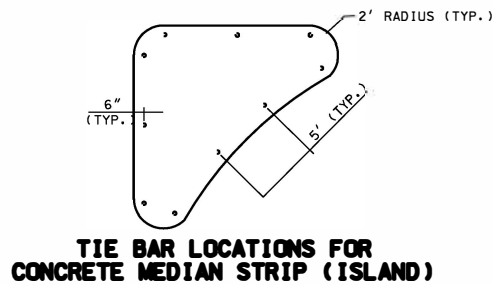
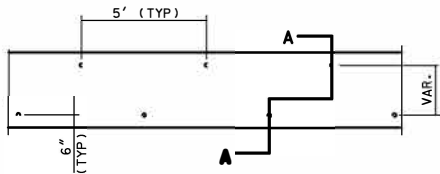
1. The travel path through the chicane can be one lane or two lanes as noted
2. Spacing of chicane segments dependent on site considerations. e.g. driveway locations.
3. Island planting should not obscure drivers view of chicane traffic.
4. Additional R7-1 signs may be required to satisfy local convention.
5. Bicycles are to use the same path as motor vehicles, not the drainage channel.
6. Depending of locale climate and preference, vertical delineation other than Object Markers (OM3) may be more appropriate. Possible alternatives include landscaping and curb painting.
7. The drainage channel should be 2 feet wide or a minimum of gutter length as specified by CG-1 / CG-2.

	<b>Kansas City, Missouri</b> Public Works Department Capital Improvements		
	<b>CHICANES</b>		
	DESIGNED BY: <u>UM</u> DATE: <u>12/22</u>	DRAWN BY: <u>HB</u> DATE: <u>12/22</u>	APPROVED BY: <u>   </u> DATE: <u>   </u>
			<b>PAGE 1</b>

NO SCALE



MEDIAN HEIGHT	BAR LENGTH
3"	8"
4"	9"
6"	11"
8"	13"



(1) WHEN THERE ARE NO VISIBLE JOINTS IN THE  
ADJACENT PAVEMENT, THE JOINT SPACING WILL  
BE EQUAL TO THE MEDIAN STRIP WIDTH, WITH  
A MINIMUM SPACING OF 10'.

#### GENERAL NOTES:

TIE BARS SHALL BE EPOXY COATED.

BONDING FOR TIE BARS SHALL BE EPOXY OR POLYESTER.

THE FACE OF THE MEDIAN MAY BE CONSTRUCTED WITHOUT  
BATTER WHEN CONSTRUCTED ON A RADIUS OF 6' OR LESS.

WHEN CONCRETE MEDIANS ARE CONSTRUCTED DIRECTLY  
BENEATH GUARDRAIL, THE MEDIAN HEIGHT WILL BE 4".

Source: MoDOT EPG

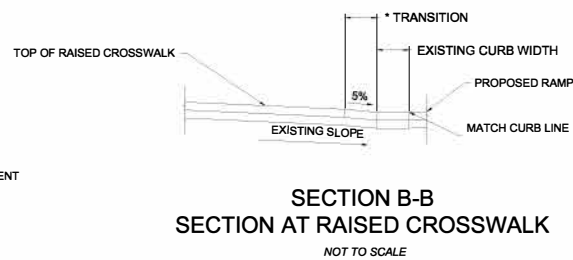
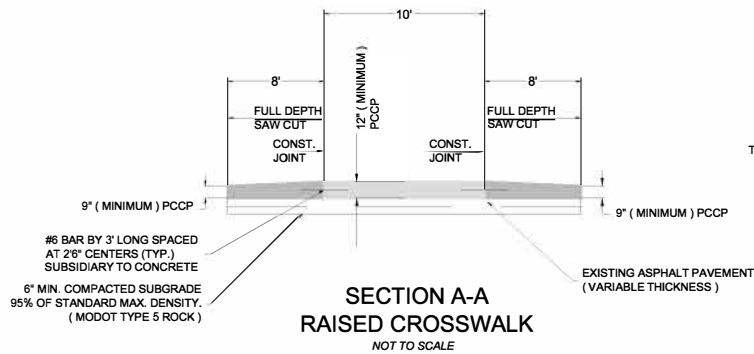
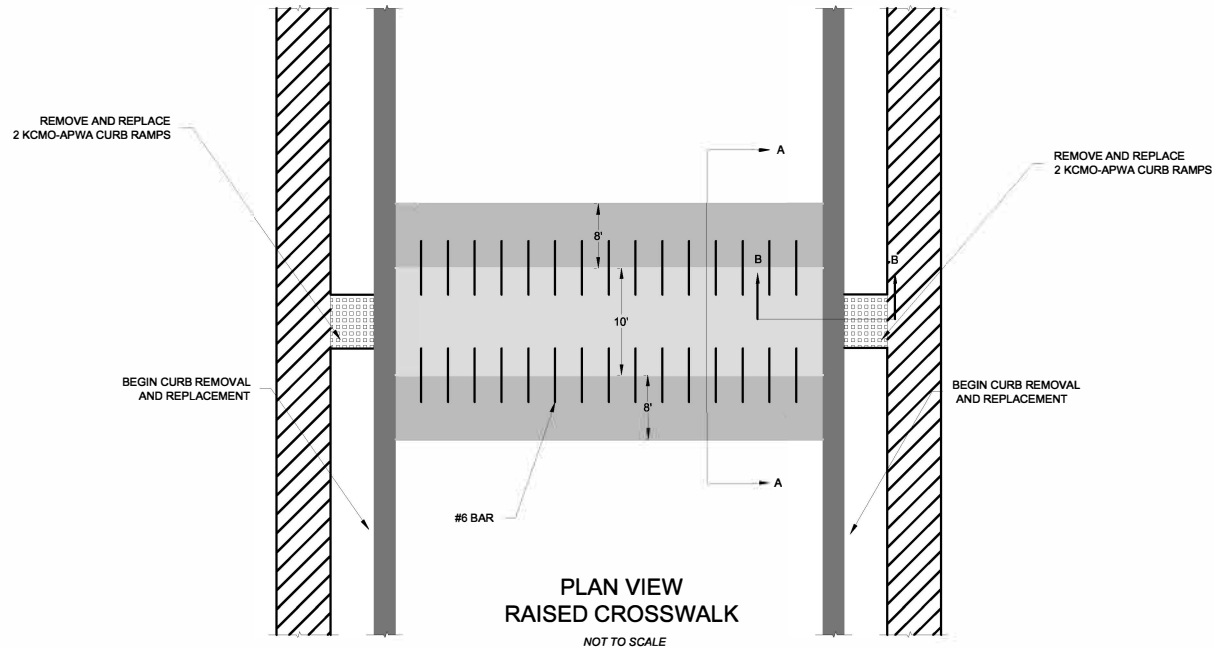







**Kansas City, Missouri**  
Public Works Department  
Capital Improvements

**CHICANES**



NO SCALE



-  RAISED CROSSWALK
-  CURB
-  SAW CUT
-  SIDEWALK
-  ADA CURB RAMPS

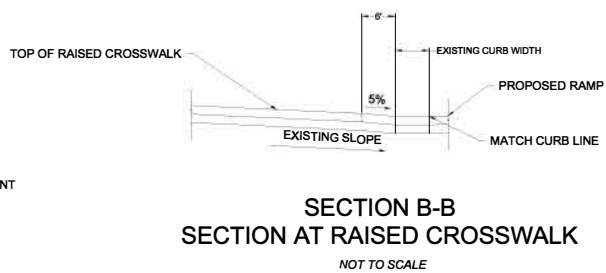
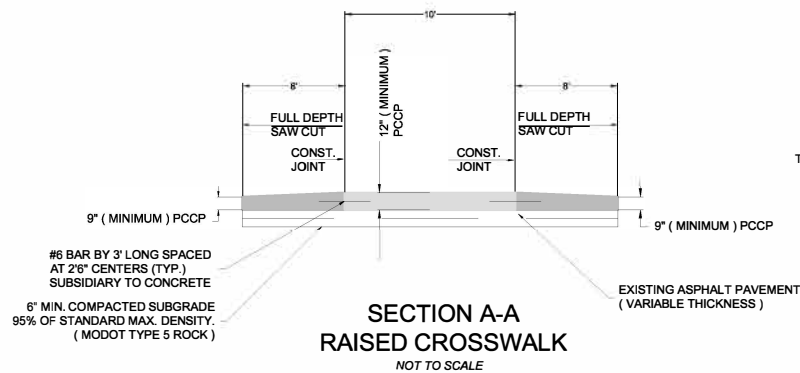
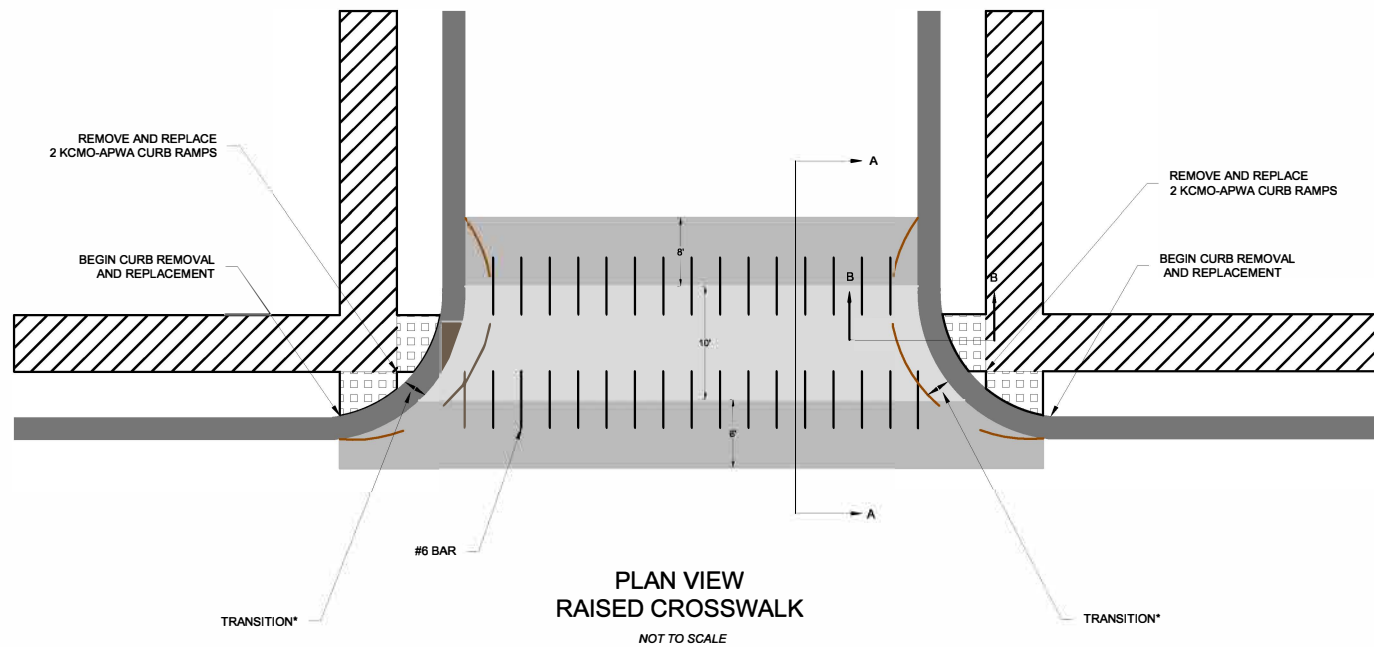


**Kansas City, Missouri**  
Public Works Department  
Capital Improvements

**RAISED CROSSWALK DETAILS**



**SHEET  
1 OF 7**



- RAISED CROSSWALK
- CURB
- SAW CUT
- SIDEWALK
- ADA CURB RAMPS

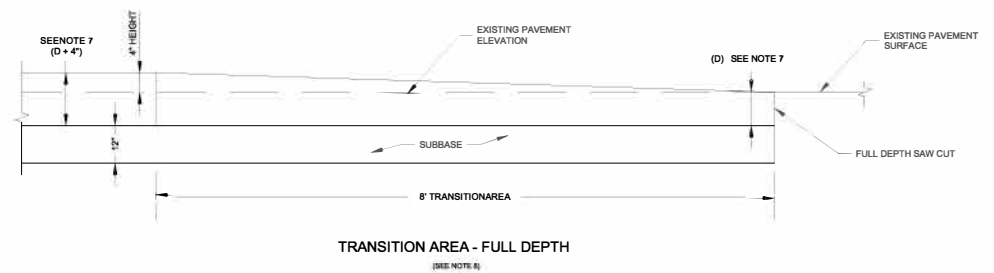
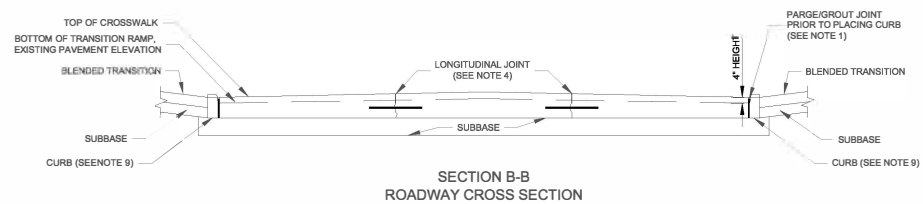
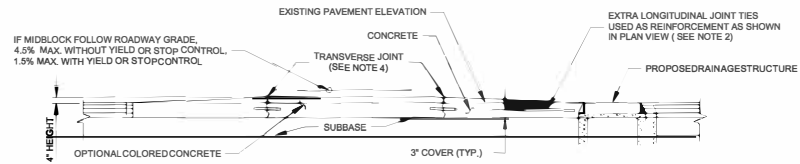
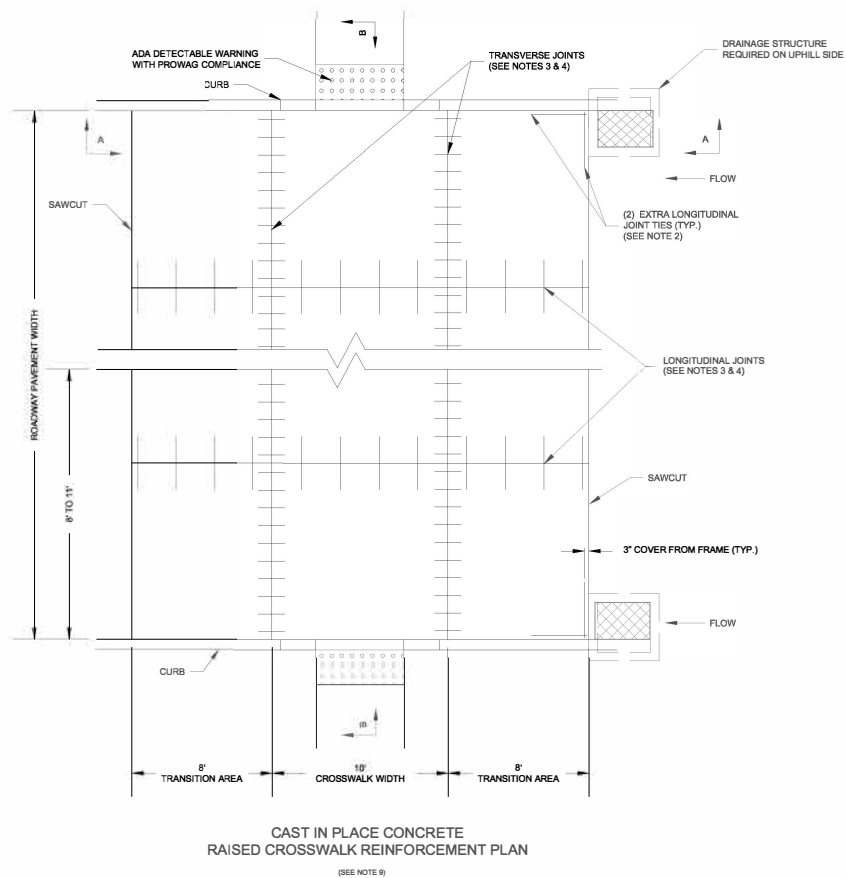


**Kansas City, Missouri**  
Public Works Department  
Capital Improvements

**RAISED CROSSWALK DETAILS**



**SHEET  
2 OF 7**



#### NOTES:

- SEE SECTION 2600 FOR GROUT SPECIFICATIONS.
- EXTRA LONGITUDINAL JOINT TIES, USED AS REINFORCEMENT, ARE NEEDED ONLY WHEN DRAINAGE STRUCTURES ARE PRESENT.
- SEE SECTION 2600 FOR PROPER DOWEL BAR/TIE BAR SPACING.
- SEE SECTION 2600 FOR LONGITUDINAL AND TRANSVERSE JOINT DETAILS.
- SIGNAGE AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD, SEE STANDARD SHEET: SHEET 4 OF 7 FOR SIGNING AND SHEET 7 OF 7 FOR PAVEMENT MARKING DETAILS.
- SEE CURB AND GUTTER STANDARD SHEETS FOR ANCHOR REQUIREMENTS, IF APPLICABLE.
- CAN BE USED FOR RESIDENTIAL AND COLLECTOR ROADWAYS.
- FULL DEPTH PAVEMENT IS REQUIRED.
- SOURCE/ REFERENCES: NYSDOT

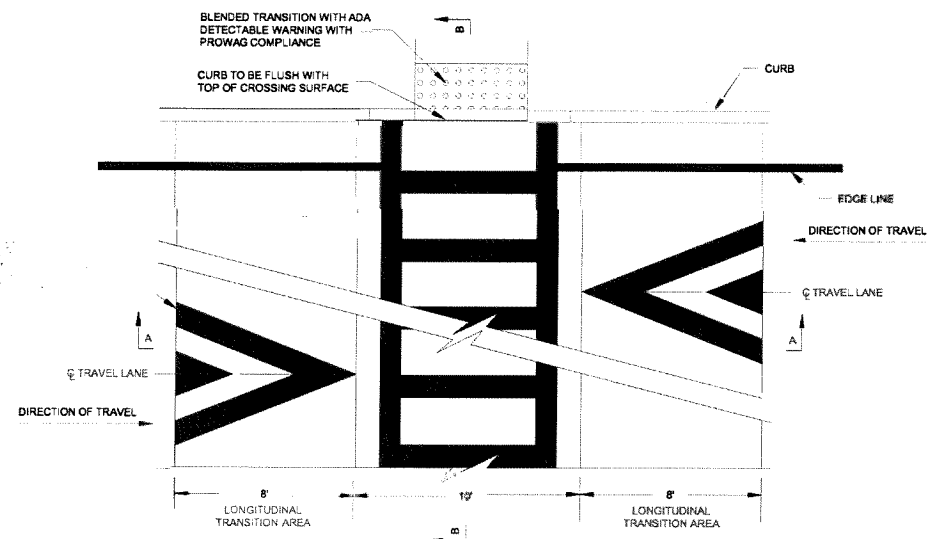


**Kansas City, Missouri**  
Public Works Department  
Capital Improvements

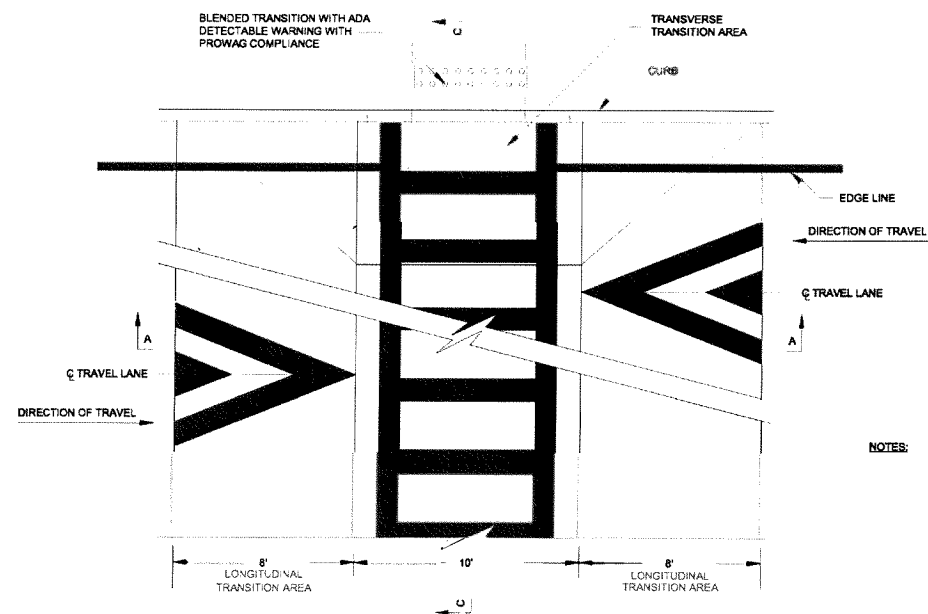
**RAISED CROSSWALK DETAILS**



**SHEET  
3 OF 7**



PLAN VIEW WITHOUT OPTIONAL DRAINAGE TREATMENT



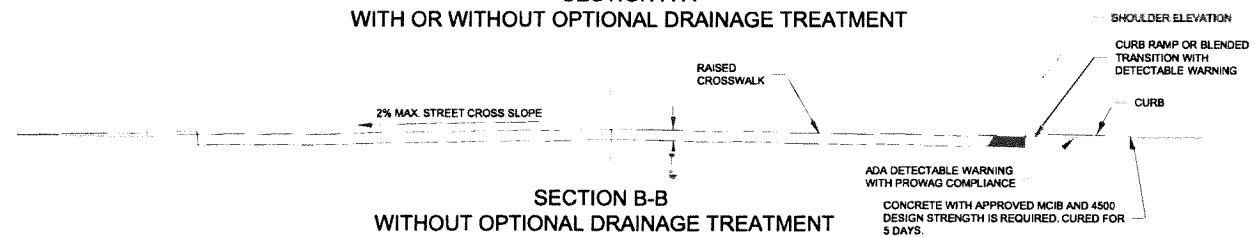
PLAN VIEW WITH OPTIONAL DRAINAGE TREATMENT  
(SEE NOTE 2)

NOTES:

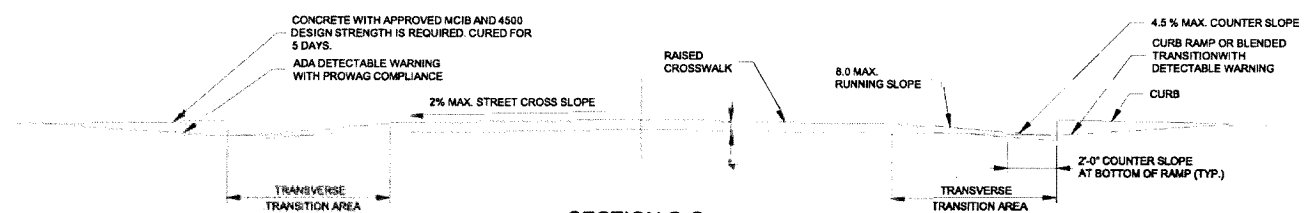
1. RAISED CROSSWALK REQUIRES STORM WATER TO BE COLLECTED AND CONVEYED TO AN APPROPRIATE LOCATION.
2. THE OPTIONAL DRAINAGE TREATMENT SHALL ONLY BE USED IN RETROFIT SITUATIONS. THE TRANSVERSE TRANSITION AREA DETAIL ABOVE IS FOR USE ON ROADWAYS WITH CROSS SLOPES. RETROFIT RAISED CROSSWALKS ON ROADWAYS THAT EXCEED THIS LIMIT SHALL BE DETAILED IN THE PLANS.
3. THE TRANSITION AREA MAY BE CONCRETE, WILL BE AS SHOWN ON THE PLANS.
4. SIGNING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD.
5. ADA COMPLIANCE REQUIRED. REFER TO PROWAG.



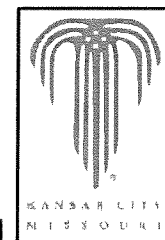
SECTION A-A  
WITH OR WITHOUT OPTIONAL DRAINAGE TREATMENT



SECTION B-B  
WITHOUT OPTIONAL DRAINAGE TREATMENT



SECTION C-C  
WITH OPTIONAL DRAINAGE TREATMENT  
(SEE NOTE 2)



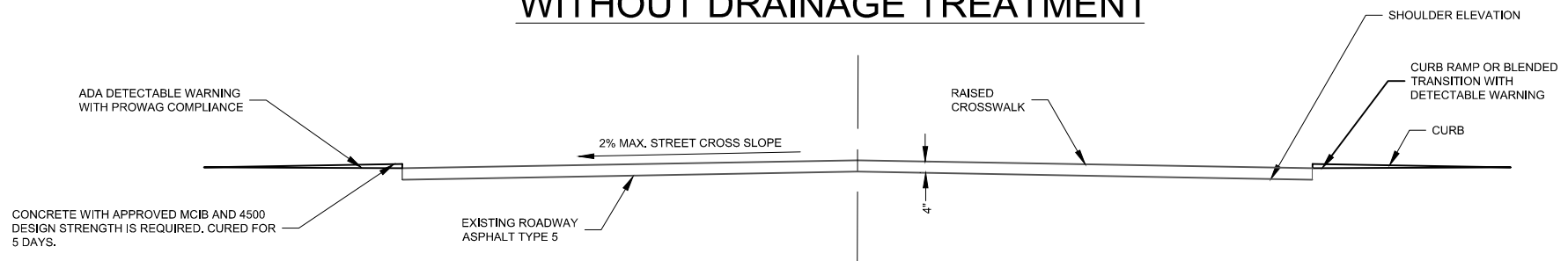
**Kansas City, Missouri**  
Public Works Department  
Capital Improvements

**RAISED CROSSWALK DETAILS**





# TYPICAL SECTION RAISED CROSSWALK WITHOUT DRAINAGE TREATMENT



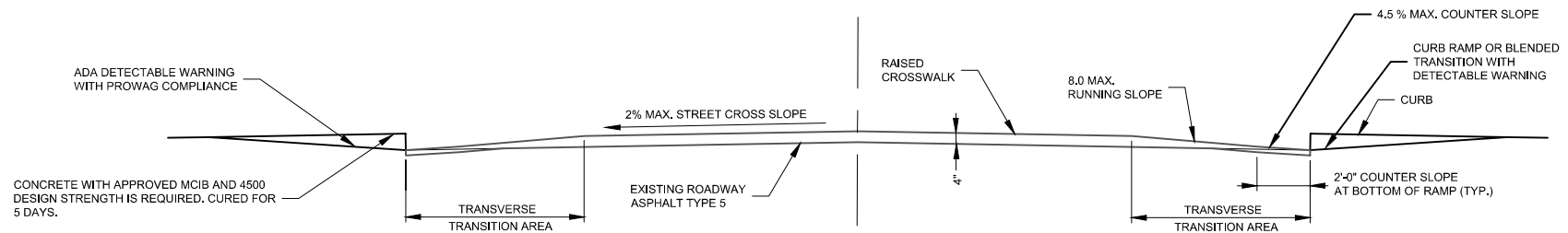
**Kansas City, Missouri**  
 Public Works Department  
 Capital Improvements

**RAISED CROSSWALK DETAILS**



**SHEET**  
**5 OF 7**

# TYPICAL SECTION RAISED CROSSWALK WITH OPTIONAL DRAINAGE TREATMENT

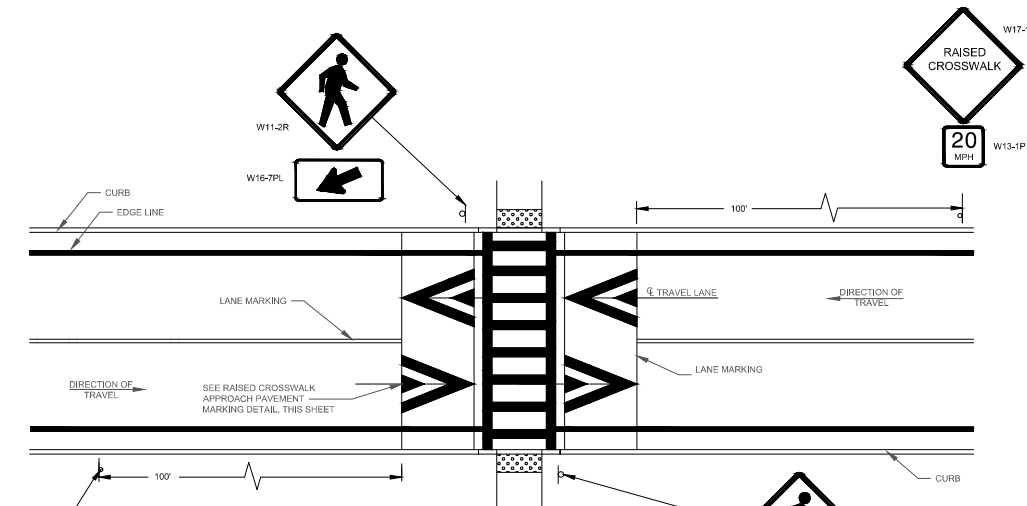


Kansas City, Missouri  
Public Works Department  
Capital Improvements

RAISED CROSSWALK DETAILS

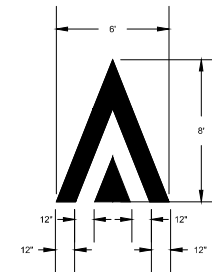
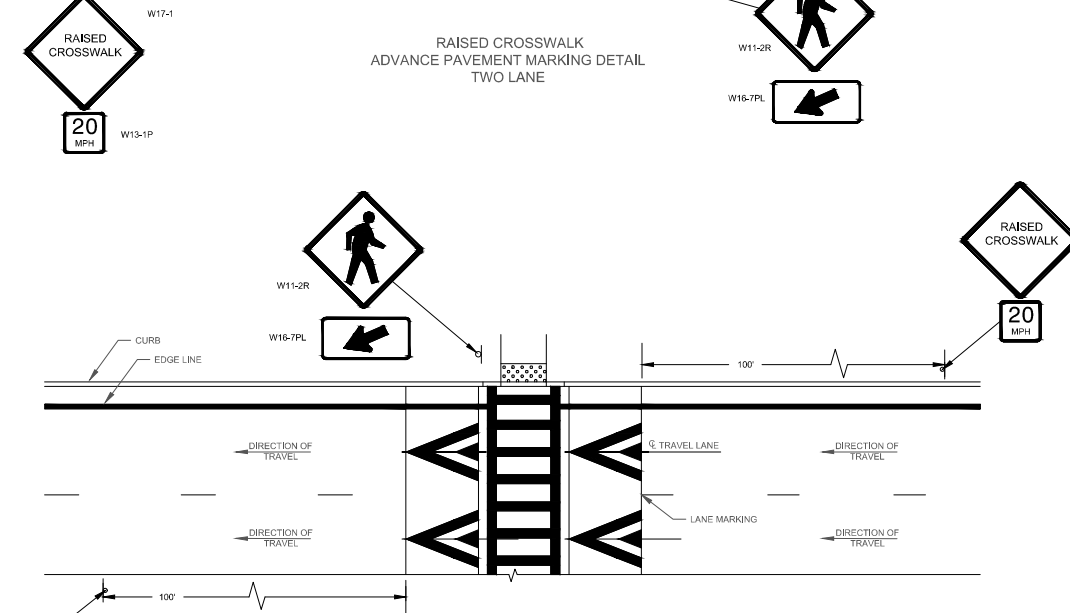


SHEET  
6 OF 7



NOTES:

1. FOR ONE-WAY TRAFFIC, PAVEMENT MARKING SHALL BE PLACED ON APPROACH SIDE ONLY
2. REFER TO THE MUTCD FOR ADDITIONAL ADVANCED WARNING SIGNS, TYPE AND LOCATION.



RAISED CROSSWALK APPROACH PAVEMENT MARKING DETAIL



**Kansas City, Missouri**  
Public Works Department  
Capital Improvements

**RAISED CROSSWALK DETAILS**



**SHEET**  
**7 OF 7**

# Traffic Calming Fact Sheets

May 2018 Update



## Introduction

### **Purpose:**

The purpose of these fact sheets is to provide transportation practitioners, public agencies, and the general public general facts and information regarding the most popular traffic calming measures used today. ITE and the Federal Highway Administration (FHWA) recently produced a Traffic Calming ePrimer (web link shown below), which documents the results of several decades of traffic calming experience in the United States, presenting a thorough review of current traffic calming practices. These fact sheets summarize information presented in the ePrimer.

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgmt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgmt/traffic_calm.cfm)

### **Traffic Calming Measures Included:**

A **horizontal deflection** hinders the ability of a motorist to drive in a straight path by creating a horizontal shift in the roadway. This shift reduces the ability of a motorist to maintain speed while comfortably navigating the measure.

- Lateral shift
- Chicane
- Realigned Intersection
- Traffic Circle
- Small Modern Roundabout/Mini-Roundabout
- Roundabout

A **vertical deflection** creates a change in the height of the roadway that typically forces a motorist to slow down to maintain an acceptable level of comfort.

- Speed Hump
- Speed Cushion
- Speed Table
- Raised Crosswalk
- Raised Intersection

A **street width reduction** narrows the width of a vehicle travel lane or roadway, so a motorist likely needs to slow the vehicle to maintain an acceptable level of comfort and safety. The measure can also reduce the distance required for pedestrian crossings, reducing exposure to vehicular conflicts.

- Corner Extension/Bulb-Out
- Choker
- Median Island
- On-Street Parking
- Road Diet

A **routing restriction** prevents particular vehicle movements at an intersection and is intended to eliminate some portions of cut-through traffic.

- Diagonal Diverter
- Closure
- Median Barrier/Forced Turn Island

### **Measures Not Included:**

A variety of other measures have been part of traffic calming efforts in jurisdictions throughout the United States. These measures are not included in these fact sheets for a variety of reasons, including:

- The measure is a standard traffic control measure typically used for improving traffic flow and has a secondary benefit for non-motorist safety
- The measure produces only a temporary benefit
- The measure requires additional enforcement beyond typical activities
- The measure has minimal or no measurable effect on vehicle speed or non-motorist safety

The excluded measures include:

- Signs
- Pavement Markings
- Gateways
- Corner Radius Reductions
- Textured Pavements and/or Rumble Strips
- Streetscaping/Landscaping

Although these fact sheets focus on mostly physical measures to calm traffic, non-physical measures can also be effective as part of traffic calming efforts. For example, education and enforcement efforts have long been used as part of neighborhood traffic calming programs and should continue to be considered as either supplements to self-enforcing physical means or as precursors to physical measures.

# Traffic Calming Fact Sheets

May 2018 Update

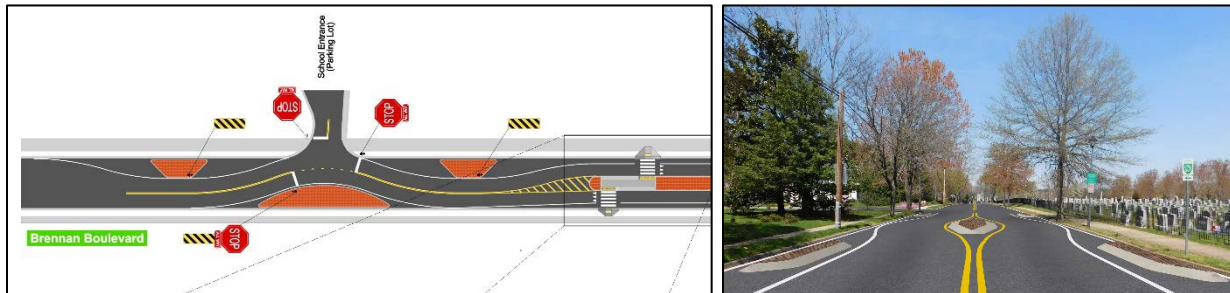
## Chicane

### Description:

- A series of alternating curves or lane shifts that force a motorist to steer back and forth instead of traveling a straight path
- Also called deviations, serpentines, reversing curves, or twists

### Applications:

- Appropriate for mid-block locations but can be an entire block if it is relatively short
- Most effective with equivalent low volumes on both approaches
- Appropriate speed limit is typically 35 mph or less
- Typically, a series of at least three landscaped curb extensions
- Can use alternating on-street parking from one side of a street to the other
- Applicable on one-lane one-way and two-lane two-way roadways
- Can be used with either open or closed (i.e. curb and gutter) cross-section
- Can be used with or without a bicycle facility



(Source: Delaware Department of Transportation)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Chicanes may still permit speeding by drivers cutting straight paths across the center line
- Minimize relocation of drainage features
- May force bicyclists to share travel lanes with motor vehicles
- Maintain sufficient width for ease of emergency vehicles and truck throughput

### Potential Impacts:

- No effect on access, although heavy trucks may experience challenges when negotiating
- Limited data available on impacts to speed and crash risk
- Street sweeping may need to be done manually
- Minimal anticipated volume diversion from street
- May require removal of some on-street parking
- Provides opportunity for landscaping
- Unlikely to require utility relocation
- Not a preferred crosswalk location
- Bus passengers may experience discomfort due to quick successive lateral movements

### Emergency Response Issues:

- Appropriate along primary emergency vehicle routes

### Typical Cost (2017 dollars):

- Reported costs range between \$8,000 and \$25,000

# Traffic Calming Fact Sheets

May 2018 Update

## Choker

### Description:

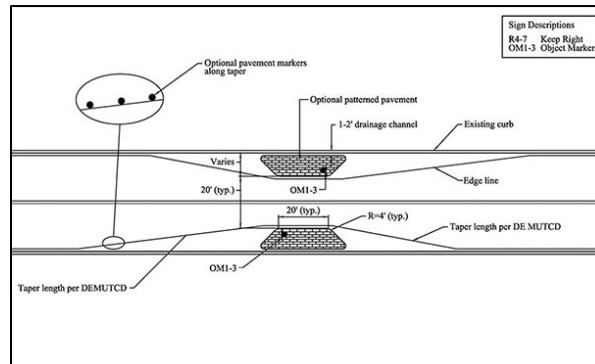
- Curb extension is a lateral horizontal extension of the sidewalk into the street, resulting in a narrower roadway section
- If located at an intersection, it is called a corner extension or a bulb-out
- If located midblock, it is referred to as a choker
- Narrowing of a roadway through the use of curb extensions or roadside islands

### Applications:

- Can be created by a pair of curb extensions, often landscaped
- Encourages lower travel speeds by reducing motorist margin of error
- One-lane choker forces two-way traffic to take turns going through the pinch point
- If the pinch point is angled relative to the roadway, it is called an angled choker
- Can be located at any spacing desired
- May be suitable for a mid-block crosswalk
- Appropriate for arterials, collectors, or local streets



(Source: City of An Arbor, Michigan)



(Source: Delaware DOT)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Only applicable for mid-block locations
- Can be used on a one-lane one-way and two-lane two-way street
- Most easily installed on a closed-section road (i.e. curb and gutter)
- Applicable with or without dedicated bicycle facilities
- Applicable on streets with, and can protect, on-street parking
- Appropriate for any speed limit
- Appropriate along bus routes
- Typical width of 6 to 8 feet; offset from through traffic by approximately 1.5 feet
- Locations near streetlights are preferable
- Length of choker island should be at least 20 feet

### Potential Impacts:

- Encourages lower speeds by funneling it through the pinch point
- Can result in shorter pedestrian crossing distances if a mid-block crossing is provided
- May force bicyclists and motor vehicles to share the travel lane
- May require some parking removal
- May require relocation of drainage features and utilities

### Emergency Response Issues:

- Retains sufficient width for ease of use for emergency vehicles

### Typical Cost (2017 dollars):

- Between \$1,500 and \$20,000, depending on length and width of barriers

# Traffic Calming Fact Sheets

May 2018 Update

## Closure

### Description:

- **Half closures** are barriers that block travel in one direction (creates a one-way street) for a short distance on otherwise two-way streets; sometimes called partial closures or one-way closures
- **Full-street closures** are barriers placed across a street to completely close the street to through-traffic, usually leaving open space for pedestrians and bicyclists; they are sometimes called cul-de-sacs, dead-ends, or mini-parks

### Applications:

- Appropriate for local streets (half and full), at intersection (half and full), or mid-block (full closure only)
- Typically applied only after other measures have failed or are deemed inappropriate or ineffective
- Typically found on closed-section roadways (i.e. curb and gutter)
- Can be applied with and without dedicated bicycle facilities and on roads with on-street parking
- Often used in sets to make travel through neighborhoods more circuitous
- Not appropriate along bus transit routes
- Can be used to assist crime prevention



(Source: James R. Barrera, Horrocks, New Mexico)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Potential legal concerns
- Can be placed at intersections or mid-block locations
- Barriers may consist of landscaped islands, walls, gates, side-by-side bollards, or other obstructions that result in openings smaller than the width of a typical passenger car
- Appropriate signing needed at entrances to full-closure street blocks
- May require modifications to maintain surface drainage capacity
- Should consider traffic diversion patterns and associated impacts
- Possible to make diverters passable for pedestrians and bicyclists

### Potential Impacts:

- Concerns regarding street network connectivity and capacity
- May result in traffic diverting to other local streets (should be used in groups/clusters)
- No significant impact on vehicle speeds beyond the closed block
- Can improve pedestrian crossing safety

### Emergency Response Issues:

- Full or half closures can increase response times and should not be used on roads/streets that provide access to hospitals or emergency medical services; half closures allow for a higher degree of emergency vehicle access than full closures
- Both closure types can be designed to allow emergency vehicle access with removable, or breakaway delineators or bollards, gates, mountable curbs, etc.

### Typical Cost (2017 dollars):

- **Full Closure** - <\$10,000 for simple closures, to \$100,000 for complex closures with drainage mods.
- **Half Closure** - \$3,000 for simple closure, to \$40,000 for complex closures with drainage mods.



# Traffic Calming Fact Sheets

May 2018 Update

## Corner Extension/Bulb-Out

### Description:

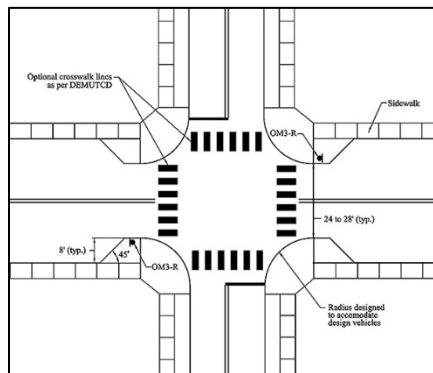
- Horizontal extension of the sidewalk into the street, resulting in a narrower roadway section
- If located at a mid-block location, it is typically called a choker

### Applications:

- When combined with on-street parking, a corner extension can create protected parking bays
- Effective method for narrowing pedestrian crossing distances and increase pedestrian visibility
- Appropriate for arterials, collectors, or local streets
- Can be used on one-way and two-way streets
- Installed only on closed-section roads (i.e. curb and gutter)
- Appropriate for any speed, provided an adequate shy distance is provided between the extension and the travel lane
- Adequate turning radii must be provided to use on bus routes



(Source: James Barrera, Horrocks, New Mexico)



(Source: Delaware DOT)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Effects on vehicle speeds are limited due to lack of deflection
- Must check drainage due to possible gutter realignment
- Major utility relocation may be required, especially drainage inlets
- Typical width between 6 and 8 feet
- Typical offset from travel lane at least 1.5 feet
- Should not extend into bicycle lanes

### Potential Impacts:

- Effects on vehicle speeds are limited due to lack of deflection
- Can achieve greater speed reduction if combined with vertical deflection
- Smaller curb radii can slow turning vehicles
- Shorter pedestrian crossing distances can improve pedestrian safety
- More pedestrian waiting areas may become available
- May require some parking removal adjacent to intersections

### Emergency Response Issues:

- Retains sufficient width for ease of emergency-vehicle access
- Shortened curb radii may require large turning vehicles to cross centerlines

### Typical Cost (2017 dollars):

- Cost between \$1,500 and \$20,000, depending on length and width of barriers



# Traffic Calming Fact Sheets

May 2018 Update

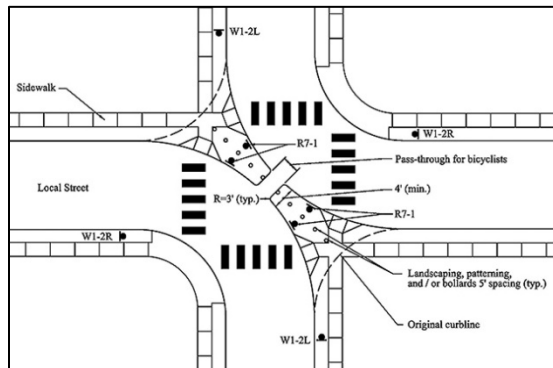
## Diagonal Diverter

### Description:

- Barriers placed diagonally across four-legged intersections, blocking through movements
- Sometimes called full diverters or diagonal road closures

### Applications:

- Typically applied only after other measures are deemed ineffective or inappropriate
- Provisions are available to make diverters passable for pedestrians and bicyclists
- Often used in sets to make travel through neighborhoods more circuitous



(Source: Delaware Department of Transportation)



(Source: PennDOT Local Technical Assistance Program)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Possible legal issues associated with closing public streets (e.g., business and/or emergency access)
- Can only be placed at intersections
- Can be used on both one-way and two-way streets
- Typically found on closed-section roads (i.e. curb and gutter)
- Typical maximum appropriate speed limit is 25 mph
- Maintain drainage as necessary to mitigate potential flooding
- Corner radii should be designed to allow full-lane width for passing motor vehicle traffic
- SU-30 default design vehicle
- Appropriate signing and pavement markings needed on approaches
- Openings for pedestrians and bicyclists should allow movement between all intersection legs
- Barriers may consist of landscaped islands, walls, gates, side-by-side bollards, or any other obstruction that leave an opening smaller than the width of a typical passenger car

### Potential Impacts:

- Concern regarding impacts to emergency response, street network connectivity, and capacity
- Should consider traffic diversion patterns and associated impacts
- No significant impacts on vehicle speeds beyond the approach to the diverter
- Not appropriate for bus transit routes
- Improved pedestrian and bicycle safety

### Emergency Response Issues:

- Should not be used on roads that provide access to hospitals or primary emergency services
- Restricts emergency vehicle access through intersections
- Can be designed to allow emergency vehicle access with removable, or breakaway delineators or bollards, gates, mountable curbs, etc.

### Typical Cost (2017 dollars):

- Typical cost of \$6,000 for diverter with limited drainage modifications

# Traffic Calming Fact Sheets

May 2018 Update

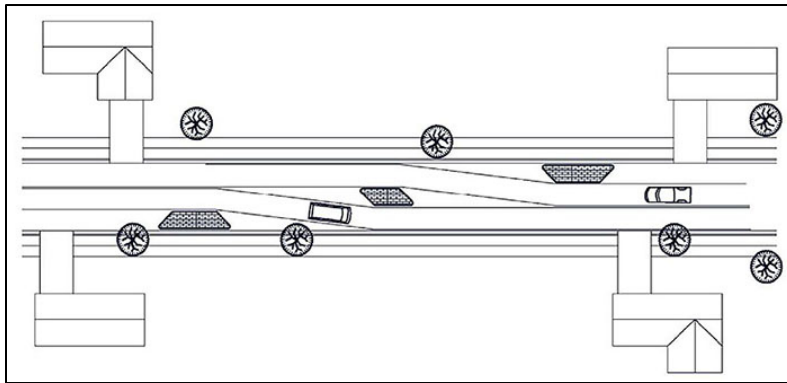
## Lateral Shift

### Description:

- Realignment of an otherwise straight street that causes travel lanes to shift in at least one direction
- A chicane is a variation of a lateral shift that shifts alignments more than once

### Applications:

- Appropriate for local, collector, or arterial roadways
- Appropriate for one-lane one-way and two-lane two-way streets
- Appropriate on roads with or without dedicated bicycle facilities
- Maximum appropriate speed limit is typically 35 mph
- Appropriate along bus transit routes



(Source: Delaware Department of Transportation)



(Source: Google Street View)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Typically separates opposing traffic through the shift with the aid of a raised median
- Applicable only to mid-block locations
- Can be installed on either open- or closed-section (i.e. curb and gutter) roads
- Location near streetlights preferred
- May require drainage feature relocation
- Should not require utility relocation

### Potential Impacts:

- Without islands, motorists could cross the centerline to drive the straightest path possible
- No impact on access
- May require removal of some on-street parking
- Limited data available on impacts on speed, volume diversions, and crash risk
- Provides opportunities for landscaping
- Can provide locations for pedestrian crosswalks

### Emergency Response Issues:

- Appropriate along primary emergency vehicle routes or on streets with access to hospitals/emergency medical services, provided vehicles can straddle the street centerline

### Typical Cost (2017 dollars):

- Reported costs range between \$8,000 and \$25,000

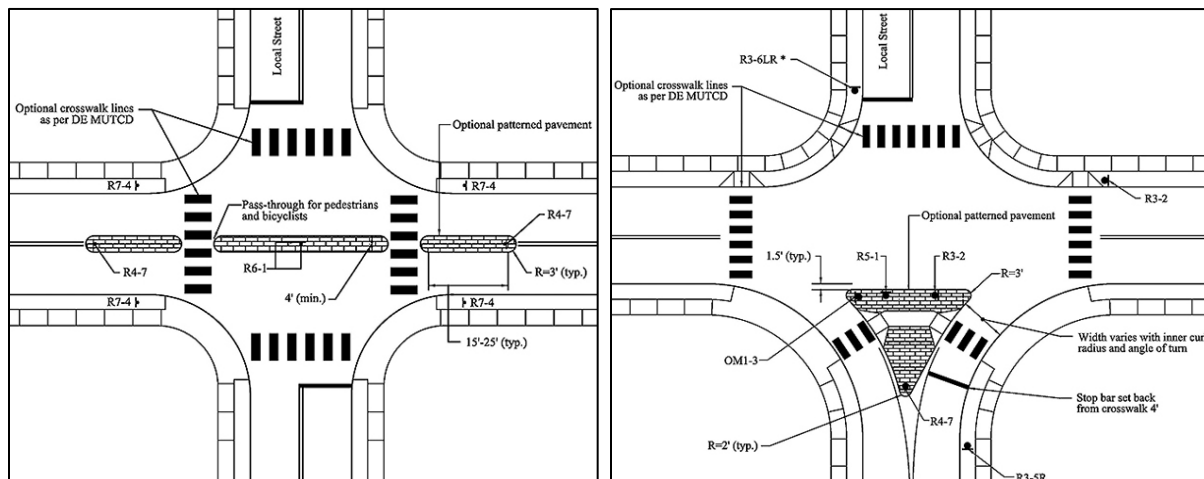
## Median Barrier/Forced Turn Island

### Description:

- Raised islands along the centerline of a street and continuing through an intersection that block the left-turn movement from all intersection approaches and the through movement from the cross street; also called median diverter, intersection barrier, intersection diverter, and island diverter
- Raised island that forces a right turn is called a forced turn island

### Applications:

- For use on arterial or collector roadways to restrict access to minor roads or local streets and/or to narrow lane widths
- Typically applied only after other measures have failed or been deemed inappropriate/ineffective
- Barriers are made passable for pedestrians and bicyclists
- Often used in sets to make travel to/through neighborhoods more circuitous



(Source: Delaware Department of Transportation)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Potential legal issues associated with blocking a public street (e.g., business/emergency access)
- Placed on major roads on approaches to and across intersections with minor roads
- Should extend beyond the intersection to discourage improper/illegal turn movements
- Barriers may consist of landscaped islands, mountable features, walls, gates, side-by-side bollards, or any other obstruction that leave an opening smaller than the width of a passenger car

### Potential Impacts:

- May divert traffic volumes to other parallel and/or crossing streets
- May require removal or shortening of on-street parking zones on approaches/departures
- May impact access to properties adjacent to intersection
- No significant impacts on vehicle speeds beyond the approaches to intersection

### Emergency Response Issues:

- Restricts emergency vehicle access using minor street
- Can be designed to allow emergency vehicle access

### Typical Cost (2017 dollars):

- Cost between \$1,500 and \$20,000, depending on length and width of barriers

# Traffic Calming Fact Sheets

May 2018 Update

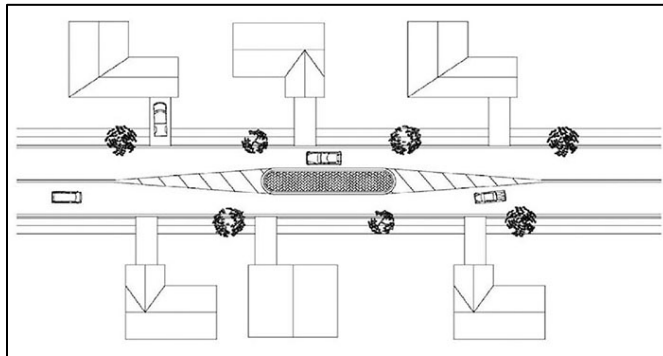
## Median Island

### Description:

- Raised island located along the street centerline that narrows the travel lanes at that location
- Also called median diverter, intersection barrier, intersection diverter, and island diverter

### Applications:

- For use on arterial, collector, or local roads
- Can often double as a pedestrian/bicycle refuge islands if a cut in the island is provided along a marked crosswalk, bike facility, or shared-use trail crossing
- If placed through an intersection, considered a median barrier



(Source: Delaware Department of Transportation)



(Source: James Barrera, Horrocks, New Mexico)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Potential legal issues associated with blocking a public street (e.g., business or emergency access)
- Barriers may consist of landscaped islands, mountable facilities, walls, gates, side-by-side bollards, or any other obstruction that leave an opening smaller than the width of a passenger car
- Can be placed mid-block or on the approach to an intersection
- Typically installed on a closed-section roadway (i.e. curb and gutter)
- Can be applied on roads with or without sidewalks and/or dedicated bicycle facilities
- Maximum appropriate speed limits vary by locale
- Typically not appropriate near sites that attract large combination trucks

### Potential Impacts:

- May impact access to properties adjacent to islands
- No significant impact on vehicle speeds beyond the island
- Little impact on traffic volume diversion
- Safety can be improved without substantially increasing delay
- Shortens pedestrian crossing distances
- Bicyclists may have to share vehicular travel lanes near the island
- May require removal of some on-street parking
- May require relocation of drainage features and utilities

### Emergency Response Issues:

- Appropriate along primary emergency vehicle roads or street that provides access to hospitals/emergency medical services

### Typical Cost (2017 dollars):

- Cost between \$1,500 and \$10,000, depending on length and width of island



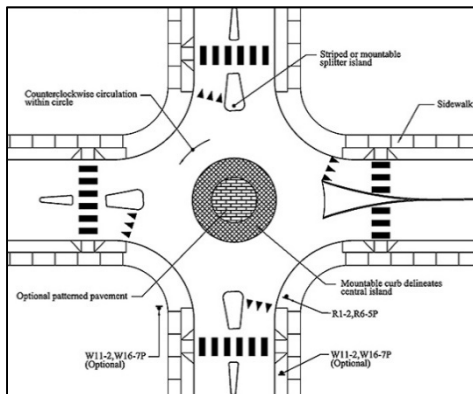
## Mini Roundabout / Small Modern Roundabout

### Description:

- Raised islands, placed in unsignalized intersections, around which traffic circulates
- Motorists yield to motorists already in the intersection
- Require drivers to slow to a speed that allows them to comfortably maneuver around them
- Center island of mini roundabout is fully traversable, whereas it is not for a small modern roundabout

### Applications:

- Intersections of local and/or collector streets
- One lane each direction entering intersection
- Not typically used at intersections with high volume of large trucks or buses turning left
- Appropriate for both one-way and two-way streets, urban and suburban settings



(Source: Delaware DOT)



(Source: Gary Schatz)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Typically circular in shape, but may be an oval shape
- Small modern roundabouts usually landscaped in their center islands
- Recommend YIELD or STOP signs on all approaches
- Minimum design vehicle SU-30
- Preferable for roadway to have urban cross section (i.e., curb and gutter)
- Can be applied to road with on-street parking
- Can be applied to roads both with and without a bicycle facility. Bike lane not striped in circle.
- Key design features are the offset distance (distance between projection of street curb and center island), lane width for circling the circle, the circle diameter, and height of mountable outer ring for large vehicles such as school buses and trash trucks

### Potential Impacts:

- Slight speed reduction
- Little diversion of traffic
- Bicycle and motorist will share lanes at intersections because of narrowed roadway
- Large vehicles/buses usually not able to circulate around the center island for left turns
- Landscaping needs to be designed to allow adequate sight distance
- Care must be taken to avoid routing vehicles through unmarked crosswalks on side-streets

### Emergency Response Issues:

- Emergency vehicles maneuver around small modern roundabouts using the apron or mini roundabouts using the center island at slow speeds

### Typical Cost (2017 dollars):

- Cost ranges between \$15,000 to \$60,000

# Traffic Calming Fact Sheets

May 2018 Update

## On-Street Parking

### Description:

- Allocation of paved space to parking
- Narrows road travel lanes and increases side friction to traffic flow
- Can apply on one or both sides of roadway
- Can be either parallel or angled, but parallel is generally preferred for maximized speed reduction

### Applications:

- High likelihood of acceptability for nearly all roadway functional classifications and street functions
- More appropriate in urban or suburban settings
- Can be combined with other traffic calming measures
- Can apply alternating sides of street for chicane effect
- Can combine with curb extensions for protected parking, including landscaping for beautification
- Can apply using time-of-day restrictions to maximize throughput during peak periods
- Can be used on one-way or two-way streets
- Preferable to have a closed-section road (i.e. curb and gutter)
- Appropriate along bus transit routes



(Source: PennDOT Local Technical Assistance Program)



(Source: Google Earth, Fort Collins, CO)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Appropriate distance needed between travel lane and parking lane
- Impact is directly affected by demand; must have parked vehicles present to be effective
- If used for chicane effect, must verify parking demand to ensure that majority of spaces are occupied when effect is desired most during the day; can use parallel, angled, or combination
- Should not be considered near traffic circles nor roundabouts
- Should not be applied along median island curbs
- For lower-demand locations, can counteract negligible impact with curb extensions or other road-narrowing features

### Potential Impacts:

- Can be blocked in by snow during plowing operations; required vehicle removal
- May limit road user visibility and sight distance at driveways/alleys/intersections
- Can put bicyclists at risk of colliding with car doors
- May be impacted if other traffic calming measures are considered or implemented
- Provides buffer between moving vehicles and pedestrian facilities

### Emergency Response Issues:

- Preferred by emergency responders to most other traffic calming measures
- Requires consideration of design of parking lanes near hydrants and other emergency features

# Traffic Calming Fact Sheets

May 2018 Update



## **Typical Cost (2017 dollars):**

- Approximately \$6000 or less (factor of design specifics and length of application); can be much higher

# Traffic Calming Fact Sheets

May 2018 Update

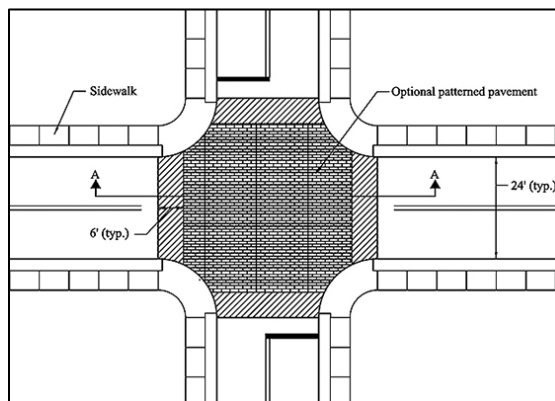
## Raised Intersection

### Description:

- Flat raised areas covering entire intersections, with ramps on all approaches and often with brick or other textured materials on the flat section and ramps
- Sometimes referred to as raised junctions, intersection humps, or plateaus

### Applications:

- Intersections of collector, local, and residential streets
- Typically installed at signalized or all-way stop controlled intersections with high pedestrian crossing demand
- Works well with curb extensions and textured crosswalks
- Often part of an area-wide traffic calming scheme involving both intersecting streets in densely-developed urban areas



(Source: Delaware Department of Transportation)



(Source: Chuck Huffine, Phoenix AZ)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Used at intersections with a maximum speed limit of 35 mph
- Typically rise to sidewalk level; appropriate if crosswalks exist on all four legs
- Appropriate if a dedicated bicycle facility passes through the intersection
- Detectable warnings and/or color contrasts must be incorporated to differentiate the roadway and the sidewalk
- May require bollards to define edge of roadway
- Storm drainage/underground utility modifications are likely necessary
- Minimum pavement slope of 1 percent to facilitate drainage

### Potential Impacts:

- Reduction in through movement speeds likely at intersection
- Reduction in mid-block speeds typically less than 10 percent
- No impact on access
- Can make entire intersections more pedestrian-friendly
- No data available on volume diversion or safety impacts

### Emergency Response Issues:

- Slows emergency vehicles
- Appropriate for primary emergency vehicle routes and streets with access to a hospital or emergency medical services

### Typical Cost (2017 dollars):

- Costs range between \$15,000 and \$60,000



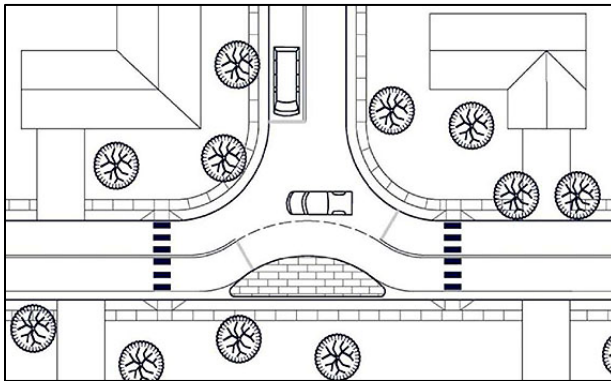
## Realigned Intersection

### Description:

- Reconfiguration of an intersection with perpendicular angles to have skewed approaches or travel paths through the intersection
- Also called modified intersection

### Applications:

- Appropriate for collector or local streets
- Most applicable at T-intersections
- Can be used where on-street parking exists
- Applicable on one-way and two-way roadways
- Most commonly installed on closed-section roads (i.e. curb and gutter)
- Can be applied with and without a dedicated bicycle facility
- Can be applied with or without on-street parking



(Source: Delaware Department of Transportation)



(Source: Delaware DOT)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Need to avoid relocating drainage features such as catch basins, concrete channels, valley gutters, inlets, and trench drains
- Bicyclists and motorists may have separate lanes or may share lanes at intersections
- Be cognizant of pedestrian crossing needs (e.g., ADA, wheelchair ramps at T-intersections)
- Default design vehicle SU-30
- Typical maximum speed limit of 25 mph
- May be appropriate for buses if adequate turning radii can be provided

### Potential Impacts:

- Limited-to-no impact on access
- Minimal anticipated diversion of traffic
- Can result in speed reductions between 5 and 13 mph within intersection limits
- Provides opportunity for landscaping
- Can improve pedestrian safety
- Consider additional intersection lighting

### Emergency Response Issues:

- Appropriate along an emergency vehicle route or on a street with access to hospital/emergency medical services
- Little impact on response time

### Typical Cost (2017 dollars):

- Costs range between \$15,000 and \$60,000

# Traffic Calming Fact Sheets

May 2018 Update

## Road Diet

### Description:

- Revision of lane use or widths to result in one travel lane per direction with minimum practical width, with goal of reducing cross-section; common application involves conversion of four-lane Two-way road to three-lane road – two through lanes and center two-way left-turn lane (TWLTL)
- Can also involve narrowing of existing travel lanes
- Alternate cross-section uses can include dedicated bicycle facilities, left-turn lanes, on-street parking, raised medians, pedestrian refuge islands, sidewalks, etc.

### Applications:

- High likelihood of acceptability for nearly all roadway functional classifications
- Can be applied in urban, suburban, or rural settings
- Appropriate for most common urban speed limits
- Can be applied at/near intersections or along road segments
- Appropriate along bus routes



(Source: Chuck Huffine, Phoenix, AZ)



(Source: Chuck Huffine, Denver, CO)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Must consider transitions from adjacent roadway sections and through intersections
- AADT can be considered but is not the primary volume factor that needs to be evaluated

### Potential Impacts:

- Usually reduces number of available travel lanes – impacts demand that can be accommodated; typical acceptable threshold of 1000 vehicles per direction during peak hour
- Reduction of through lanes tends to reduce speeds
- Can improve pedestrian crossing ease and safety
- Can improve bicycle accessibility if travel lanes can be used for shoulders/bike lanes instead

### Emergency Response Issues:

- Generally accepted from emergency services; leaves available space for through flow of emergency vehicles

### Typical Cost (2017 dollars):

- \$6000 or less, depending on physical geometric changes and length of application
- The biggest impact to cost involves signal modifications, if applicable; other primary costs include pavement marking and signing revisions
- Costs can be much higher if outside portion of pavement is converted to other non-motorized uses (dedicated bicycle facilities, sidewalks, grass buffers)

# Traffic Calming Fact Sheets

May 2018 Update

## Roundabout

### Description:

- Raised islands placed in unsignalized intersections around which traffic circulates
- Approaching motorists yield to motorists already in the intersection
- Requires drivers to slow to a speed that allows them to comfortably maneuver around them
- Different from traffic circles or mini-roundabouts; possible substitute for traffic signal control

### Applications:

- Intersections of arterial and/or collector streets
- One or more entering lanes
- Can be used at intersections with high volumes of large trucks and buses, depending on design



(Source: Grant Kaye)



(Source: PennDOT Local Technical Assistance Program)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- See ITE *Roundabout Primer* for design details
- Default design vehicle WB – 50
- Typically circular in shape but may be an oval shape
- Usually have landscaped center islands
- Typically controlled by YIELD signs on all approaches
- Key design features include: offset distance (distance between projection of street curb and center island), lane width for circulatory roadway, circle diameter, and height of mountable apron for large vehicles
- Large vehicles circulating around the center island for all movements may traverse the apron
- Landscaping needs to be designed to allow adequate sight distance per AASHTO
- Preferable to have a closed-section road (i.e. curb and gutter)
- Cross-section possible with or without a dedicated bicycle facility – not striped within circulatory roadway

### Potential Impacts:

- Limited impact on access, except for access points immediately adjacent to intersection
- Limited impact on roadways with on-street parking
- Minimal diversion of traffic

### Emergency Response Issues:

- Appropriate for emergency vehicle routes or streets that provide access to hospitals
- Emergency vehicles maneuvering without using the center island may traverse the apron

### Typical Cost (2017 dollars):

- Cost ranges between \$150,000 and \$2,000,000



# Traffic Calming Fact Sheets

May 2018 Update

## Speed Cushion

### Description:

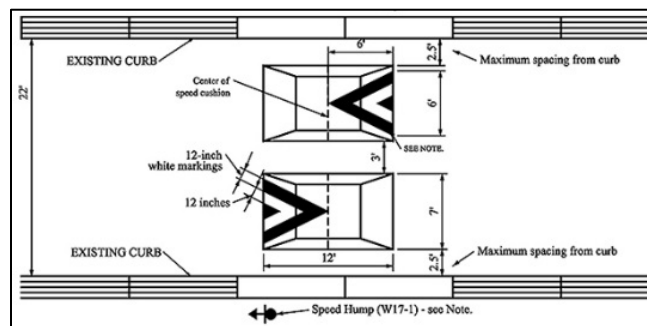
- Two or more raised areas placed laterally across a roadway with gaps between raised areas
- Height and length similar to a speed hump; spacing of gaps allow emergency vehicles to pass through at higher speeds
- Often placed in a series (typically spaced 260 to 500 feet apart)
- Sometimes called speed lump, speed slot, and speed pillow

### Applications:

- Appropriate on local and collector streets
- Appropriate at mid-block locations only
- Not appropriate on grades greater than 8 percent



(Source: James Barrera, Horrocks, New Mexico)



(Source: Delaware Department of Transportation)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Two or more cushions at each location
- Typically 12 to 14 feet in length and 7 feet in width
- Cushion heights range between 3 and 4 inches, with trend toward 3 - 3 ½ inches maximum
- Speed cushion shapes include parabolic, circular, and sinusoidal
- Material can be asphalt or rubber
- Often have associated signing (advance-warning sign before first cushion at each cushion)
- Typically have pavement markings (zigzag, shark's tooth, chevron, zebra)
- Some have speed advisories

### Potential Impacts:

- Limited-to-no impact on non-emergency access
- Speeds determined by height and spacing; speed reductions between cushions have been observed averaging 20 and 25 percent
- Speeds typically increase by 0.5 mph midway between cushions for each 100 feet of separation
- Studies indicate that average traffic volumes have reduced by 20 percent depending on alternative routes available
- Average collision rates have been reduced by 13 percent on treated streets

### Emergency Response Issues:

- Speed cushions have minimal impact on emergency response times, with less than a 1 second delay experienced by most emergency vehicles

### Typical Cost (2017 dollars):

- Cost ranges between \$3,000 and \$4,000 for a set of rubber cushions

# Traffic Calming Fact Sheets

May 2018 Update

## Speed Hump

### Description:

- Rounded (vertically along travel path) raised areas of pavement typically 12 to 14 feet in length
- Often placed in a series (typically spaced 260 to 500 feet apart)
- Sometimes called road humps or undulations

### Applications:

- Appropriate for residential local streets and residential/neighborhood collectors
- Not typically used on major roads, bus routes, or primary emergency response routes
- Not appropriate for roads with 85<sup>th</sup>-percentile speeds of 45 mph or more
- Appropriate for mid-block placement, not at intersections
- Not recommended on grades greater than 8 percent
- Work well in combination with curb extensions
- Can be used on a one-lane one-way or two-lane two-way street



(Source: City of Boulder, Colorado)



(Source: PennDOT Local Technical Assistance Program)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- ITE recommended practice - "Guidelines for the Design and Application of Speed Humps"
- Typically 12 to 14 feet in length; other lengths (10, 22, and 30 feet) reported in practice in U.S.
- Speed hump shapes include parabolic, circular, and sinusoidal
- Typically spaced no more than 500 feet apart to achieve an 85th percentile speed between 25 and 35 mph
- Hump heights range between 3 and 4 inches, with trend toward 3 - 3 ½ inches maximum
- Often have associated signing (advance warning sign before first hump in series at each hump)
- Typically have pavement markings (zigzag, shark's tooth, chevron, zebra)
- Taper edge near curb to allow gap for drainage
- Some have speed advisories
- Need to design for drainage, without encouraging means for motorists to go around a hump

### Potential Impacts:

- No impact on non-emergency access
- Average speeds between humps reduced between 20 and 25 percent
- Speeds typically increase approximately 0.5 to 1 mph midway between humps for each 100 feet Beyond the 200-foot approach and exit of consecutive humps
- Traffic volumes diversion estimated around 20 percent; average crash rates reduced by 13 percent

### Emergency Response Issues:

- Impacts to ease of emergency-vehicle throughput
- Approximate delay between 3 and 5 seconds per hump for fire trucks and up to 10 seconds for ambulances with patients

### Typical Cost (2017 dollars):

- Cost ranges between \$2,000 and \$4,000

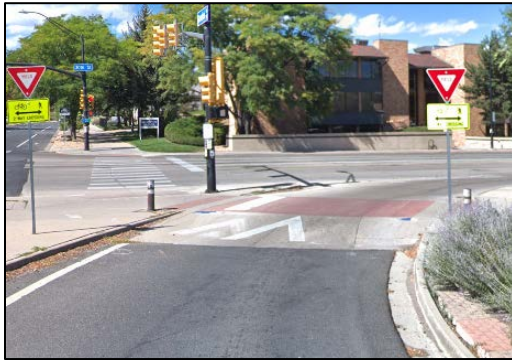
## Speed Table/Raised Crosswalks

### Description:

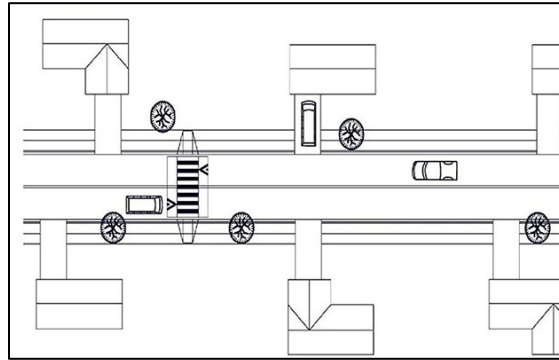
- Long, raised speed humps with a flat section in the middle and ramps on the ends; sometimes constructed with brick or other textured materials on the flat section
- If placed at a pedestrian crossing, it is referred to as a raised crosswalk
- If placed only in one direction on a road, it is called an offset speed table

### Applications:

- Appropriate for local and collector streets; mid-block or at intersections, with/without crosswalks
- Can be used on a one-lane one-way or two-lane two-way street
- Not appropriate for roads with 85<sup>th</sup> percentile speeds of 45 mph or more
- Typically long enough for the entire wheelbase of a passenger car to rest on top or within limits of ramps
- Work well in combination with textured crosswalks, curb extensions, and curb radius reductions
- Can be applied both with and without sidewalks or dedicated bicycle facilities
- Typically installed along closed-section roads (i.e. curb and gutter) but feasible on open section



(Source: Google Maps, Boulder, Colorado)



(Source: Delaware Department of Transportation)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- ITE recommended practice – “Guidelines for the Design and Application of Speed Humps”
- Most common height is between 3 and 4 inches (reported as high as 6 inches)
- Ramps are typically 6 feet long (reported up to 10 feet long) and are either parabolic or linear
- Careful design is needed for drainage
- Posted speed typically 30 mph or less

### Potential Impacts:

- No impact on non-emergency access
- Speeds reductions typically less than for speed humps (typical traversing speeds between 25 and 27 miles per hour)
- Speeds typically decline approximately 0.5 to 1 mph midway between tables for each 100 feet beyond the 200-foot approach and exit points of consecutive speed tables
- Average traffic volumes diversions of 20 percent when a series of speed tables are implemented
- Average crash rate reduction of 45 percent on treated streets
- Increase pedestrian visibility and likelihood of driver yield compliance
- Generally not appropriate for BRT bus routes

### Emergency Response Issues:

- Typically preferred by fire departments over speed humps, but not appropriate for primary emergency vehicle routes; typically less than 3 seconds of delay per table for fire trucks

### Typical Cost (2017 dollars):

- Cost ranges between \$2,500 and \$8,000 for asphalt tables; higher for brickwork, stamped asphalt, concrete ramps, and other enhancements sometimes used at pedestrian crossings

# Traffic Calming Fact Sheets

May 2018 Update

## Traffic Circle

### Description:

- Raised islands placed in unsignalized intersections around which traffic circulates
- Approaching motorists yield to motorists already in the intersection
- Require drivers to slow to a speed that allows them to comfortably maneuver around them
- Approaches not designed to modern roundabout principals - no deflection

### Applications:

- Appropriate at intersections of local streets
- One lane each direction entering intersection
- Not typically used at intersections with high volumes of large trucks or buses turning left
- appropriate for both one-way and two-way streets in urban and suburban settings



(Source: Scott Batson)



(Source: Scott Batson)

**ITE/FHWA Traffic Calming EPrimer:** [https://safety.fhwa.dot.gov/speedmgt/traffic\\_calm.cfm](https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm)

### Design/Installation Issues:

- Typically circular in shape but may be an oval shape
- Usually have landscaped center islands
- Recommend YIELD signs on all approaches
- Preferable for roadways to be closed-section (i.e. curb and gutter)
- Can be applied to roads with on-street parking
- Can be applied to roads both with and without dedicated bicycle facilities; bike lanes not striped in circulatory roadway
- Key design features include: offset distance (distance between projection of street curb and center island), lane width of circulatory roadway, circle diameter, and height of mountable apron for large vehicles

### Potential Impacts:

- Minimal anticipated traffic diversion
- Bicyclist and motorists will share lanes at intersections because of narrowed roadway
- Large vehicles/buses usually not able to circulate around center island for left turns
- Landscaping needs to be designed to allow adequate sight distance, per AASHTO
- Minimize routing of vehicles through unmarked crosswalks on side-streets
- May require additional street lighting

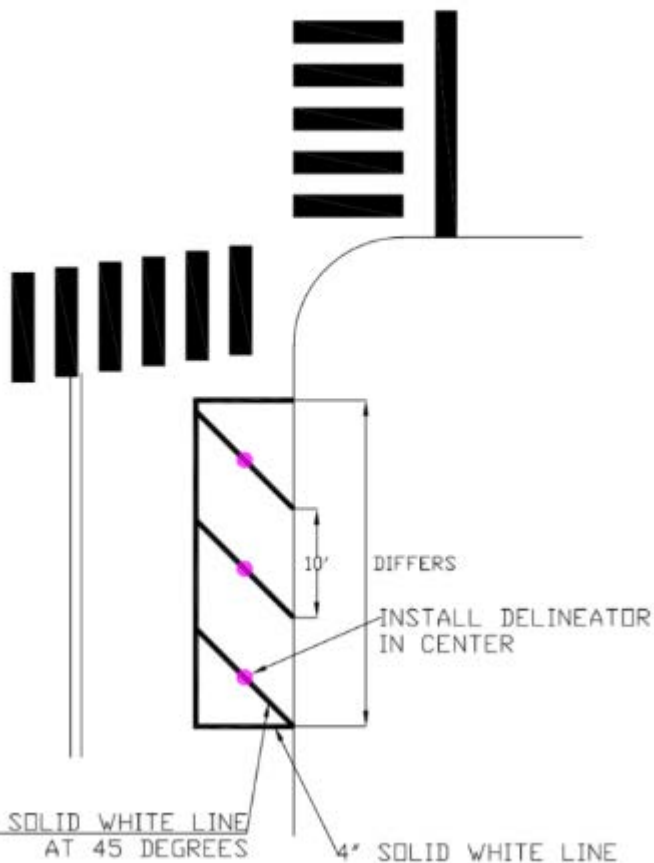
### Emergency Response Issues:

- Emergency vehicles maneuver intersections at slow speeds
- Constrained turning radii typically necessitates a left turn in front of the circle for large vehicles

### Typical Cost (2017 dollars):

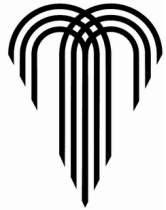
- Typical cost is \$15,000, with a range between \$10,000 and \$25,000

# TYPICAL DETAIL INTERSECTION DAYLIGHTING





CITY OF FOUNTAINS  
HEART OF THE NATION



KANSAS CITY  
MISSOURI

## UTILITY LISTING - PHONE NUMBERS

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

The Contractor shall perform all the Work necessary to make the Work compatible with utilities within the project limits, including coordination with utility owners, protection of existing utilities and the coordination of any required utility relocations.

## 1.0 General Utility Work Obligations

### 1.1 Utility Work

Utility Work includes, but is not limited to the following:

- Identification and verification of utilities locations within or near the project limits or otherwise affected by the project. This may include may include physical location of utilities facilities (pot-holing).
- Work as necessary to protect existing utilities.
- Identifying early-on in the project all of the utility facility relocations that may be necessary to complete the Work, including their extent and characteristics.
- Coordination with utility owners for utility owners to accomplish any necessary relocation work within the constraints of the project schedule.
- Performing traffic control Work as necessary to accommodate utility relocations required for the project.

Except for the Work specifically stated above and elsewhere in the Contract Documents, the Contractor will not be responsible for the cost of the required utility relocations whose facilities are not owned by the City of Kansas City, Missouri.

### 1.2 Utility Work Performance

The Contractor shall perform all utility Work regardless of whether or not the utility is indicated in any Reference Documents or information provided by the City.

## 2.0 Identification of Utilities

The Contractor shall take all actions necessary to identify and confirm the exact location, size and type of all utilities within the project limits that may affect the Work or be impacted by the Work. Such actions may include diligent inquiries at the offices of utility owners, consulting public records and conducting field studies. The Contractor should recognize and take into consideration that utilities information provided by utility owners may be inaccurate.

## 3.0 Damage to Utilities

### 3.1 Responsibilities

The Contractor shall be responsible for any damage caused by the Contractor, or its subcontractors, employees or agents, to property, utilities, structures subcontractors, employees, or agents of the utilities' owners. The Contractor shall immediately notify the affected utility owner of any utility damaged by the Contractor.

### 3.2 Damages Repair

Promptly after the Contractor's discovery of damage caused by the Contractor, or its subcontractors, employees or agents, the Contractor shall repair the damage to the satisfaction of the utility owner; or, at the utility owner's option the utility owner shall make such repairs at the Contractor's expense.

#### **24 Hour Emergency Phone Numbers**

UTILITY COMPANY/AGENCY	EMERGENCY PHONE NUMBER
<b>Also notify Missouri One-Call about any facility damages.</b>	
AT&T	1-800-246-8464
CenturyLink [Qwest]	1-800-283-4237
Comcast	888-262-5101
Google Fiber NOC	1-866-954-1572
KCMO Parks & Recreation	816-513-7500
KCMO Street and Traffic Division	311, or 816-513-0421
KCMO Street Lighting /Black & McDonald	816-483-0257
KCMO Water Services Dept Dispatcher	311, or 816-513-1313
KCMO Water Services Pollution Control	311, or 816-513-1313
KCP&L	1-888-544-4852
City of North KC, liNKCity	816-564-9994
Level 3	1-877-2LEVEL3
Magellan Midstream Partners LP	1-800-720-2417
Missouri Gas Energy	1-800-582-0000
Missouri Department of Transportation	1-888-275-6636
<b>MISSOURI ONE-CALL</b>	1-800-344-7483
NKC School District	816-390-6998
Sprint	1-800-521-0579
Surewest	913-825-3000
Time Warner Cable	1-866-967-7611
[TW Telecom] Level 3	800-829-0420
Unite Private Networks	866-963-4237
Veolia Energy [Trigen]	816-889-4950
Verizon Communications Inc.	1-800-624-9675
Zayo	1-866-236-2824

## 4.0 Utilities Coordination

The Contractor shall be responsible for the coordination of all utilities' activities and the coordination with utility owners and the City as necessary to accomplish the Work, including the following activities:

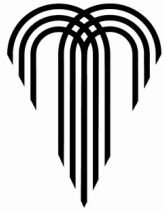
- Keep affected utility owners informed of the project schedule and in particular those elements of the Work that directly affect their facilities.
- Inform utility companies of Work in the vicinity of their facilities a minimum of seven (7) Days before commencement of the Work.
- Keep affected utilities informed of any changes to the Work that affect their facilities.
- Schedule, coordinate, administrate and provide minutes of all meetings with the utility companies, the Contractor, and the City as necessary to organize the Work.
- Use the utility company contacts provided at the pre-construction meeting to coordinate the utility Work, as needed. If no names were provided, use the following listing to find the appropriate project contact person.

### Utility Company Engineering Contacts

UTILITY COMPANY / AGENCY	COORDINATION / ENGINEERING		
	CONTACT		
AT&T - North of River	Craig Perkins	(816) 275-2721	cp0772@att.com
AT&T - South of River	Darren Ostrum	(913) 383-4936	do7374@att.com
CenturyLink	Brian Cornish	(913) 390-2746	Brian.Cornish@CenturyLink.com
Comcast	Barbara Brown	(816) 795-2255	Barb_Brown@cable.comcast.com
Consolidated	Melissa Stringer	(913) 322-9622	Melissa.Stringer@consolidated.com
Google Fiber NOC	Teresa Erb	(913) 638-4455	teresaerb@google.com
KCMO Parks & Recreation	Jimmi Lossing	(816) 513-7627	Jimmi.Lossing@kcmo.org
KCMO Street and Traffic Division	Corey Goodloe	(816) 513-4701 (816) 215-0242	Corey.Goodloe@kcmo.org
KCMO Street Lighting	Mahmoud Hadjian	(816) 513-9852	Mahmoud.Hadjian@kcmo.org
KCMO Water Services, Water	Reza Zonnooz	(816) 513-0309	Reza.Zonnooz@kcmo.org
KCMO Water Services, Sanitary Sewer	Matt Thomas	(816) 513-0306	matt.thomas@kcmo.org
KCMO Water Services, Storm Sewer	Robert A. Davis	(816) 513-0573	robert.davis@kcmo.org
KCP&L N/O River	Ronald McCall	(816) 420-4803	Ronald.McCall@kcpl.com
KCP&L S/O River N/O 39th St	Nathan Michael	(816)245-3659	Nathan.Michael@kcpl.com
KCP&L S/O 39th St	Nathan Michael	(816)245-3659	Nathan.Michael@kcpl.com
Level 3	Jerry Woodall	(913) 645 5032	Jerry.Woodall@level3.com
Level 3 (TW Telecom)	Clement Helmstetter	(913) 312-2744	Clement.Helmstetter@Level3.com
Magellan Midstream	Tonya Cape	(913) 310-7740	Tonya.Cape@magellanlp.com

Partners			
Missouri Gas Energy	Richard Frock	(816) 472-3489	Richard.Frock@thelacledegroup.com
Missouri Dept of Transportation	Richard Orr	(816) 607-2233	Richard.Orr@modot.mo.gov
NKC iLink	Brooks Brown	(816) 564-9994	Brooks@datashack.net
Sprint / Ericsson	McCoy Ingalls	(404) 396-9726	mccoy.w.ingalls@sprint.com
Time Warner Cable	Steven Baxter	(913) 643-1901	steven.baxter@twcable.com
Unite Private Networks	Steve Wilson	(816) 560-6354	Steve.Wilson@upnfiber.com
Veolia Energy (Trigen)	Richard Behrens	(816) 889-4977	rbehrens@veoliaenergyna.com
Verizon Communications Inc.	Don Torbett	(918) 877-7333	donald.torbett@verizon.com
Zayo	Thomas Adams	(816) 699-0320	Thomas.Adams@zayo.com

CITY OF FOUNTAINS  
HEART OF THE NATION



KANSAS CITY  
MISSOURI

## MEASUREMENT AND PAYMENT

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

- A. General:** Payment for work performed by the CONTRACTOR under these Contract Documents will be made in accordance with the General Conditions at the approved contract unit prices. Such payment shall compensate the Contractor for all labor, equipment, materials, tools, incidental expense, and all work and risk necessary to complete the project as indicated by the Plans, Specifications, and Contract Documents.
- B. Subsidiary Items:** Work required to complete the project as indicated by the Plans, Specifications, and Contract Documents, but which has no corresponding unit or lump sum price, shall be a subsidiary item, whether or not so indicated. Contractor's cost to complete subsidiary items shall be included as part of the contract unit prices for other items.
- C. Measurement:**
1. **Plan Measure:** Pay item quantities specified to be "Plan Measure" have been calculated from the dimensions indicated on the plans. The quantities of such items, as listed on the Unit Price Schedule, shall be the final quantities, except where scope is modified by a duly executed Change Order.
  2. **Field Measure:** Quantities specified to be field measured will be measured in-place by the Engineer or his representative following their construction. Payment will be made for actual quantities constructed in accordance with the Contract Documents, be they more or less than the listed quantities. The method and precision of such measurements for each respective "field measure" item is specified in the **APWA Construction and Material Specifications** unless modified herein.

CITY OF FOUNTAINS  
HEART OF THE NATION



KANSAS CITY  
MISSOURI

## PROJECT MANAGEMENT AND COORDINATION

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

- A. General:** The Contractor shall coordinate the construction with local residents and/or businesses by written communication or door-to-door signage. This notification shall include the date of distribution, the length of time in which the concrete should be protected and the conditions of **"EMERGENCY NO PARKING"** that will be in force during construction, as indicated on the sample provided on page 01310-2 of this section. The Contractor shall be responsible for providing and distributing the notifications at least 24 hours prior to tear-out. If construction is delayed more than 72 hours from when the notice indicates that construction is to begin, the Contractor shall re-issue the notifications at least 24 hours prior to tear-out. If access to a property is to be restricted during construction (i.e. the driveway is to be removed and replaced), the contractor must try to make personal contact with the property owner the day before tear out or the morning of, to insure that personal vehicles have been moved and/or appropriate access arrangements have been made.
- B. City-owned facilities:** When replacement of concrete approaches, drives, sidewalks and curbs is planned at City-owned Police, Fire and Emergency facilities, the Architectural Division of Public Works must be notified before work can be scheduled. The Architectural Division will coordinate with the tenant at these facilities to prepare for the disturbance to their operation. The contractor cannot block, close or partition off access to these facilities without written permission from the City Architect's office. Some locations may require that the scope of the work be modified to accommodate phasing the project to complete smaller areas, thereby allowing access to the facility during the improvement project. At some locations, the City Architect can arrange to have the facility closed to allow completion of the improvements in one phase. This, again, can only be approved by the City Architect's office.
- C. Authorized Representative:** The Contractor, or a duly authorized representative to act for the Contractor, shall continually be present at the site of the work while work is in progress for the duration of this project. In the absence of the Contractor or representative, suitable communication equipment which will assure receipt of messages within one (1) hour will be required.

The Contractor shall designate, in writing, a duly authorized representative(s) at the preconstruction meeting. The duly authorized representative(s) shall be an official liaison between the City and Contractor regarding the signing of pay estimates, change orders, work day reports and other forms necessary for communication and project status inquiries. Upon project commencement the City Engineer shall be notified, in writing, within five (5) working days of any changes in the Contractor's representative(s)

- B. Payment:** No separate payment will be made for "Project Management and Coordination". All costs pertaining thereto shall be included in the contract prices for other items as listed in section 00412 – Unit Prices.

#### SAMPLE NOTIFICATION TO PROPERTY OWNERS

**DATE:** \_\_\_\_\_

TOMORROW construction will begin on your block to replace curb, driveways and sidewalks.

SORRY to inconvenience you, but if you wish to remove your car from the driveway, you must do so before 8:00 a.m. tomorrow.

PROTECTION of the new concrete must be enforced for FIVE DAYS after it is placed.

PARKING along your side on the street will not be permitted during construction, so you may wish to make other parking arrangements.

WEATHER permitting, the inconvenience of our work should last no longer than FIVE DAYS. Please caution children to keep clear of the work.

#### THANK YOU FOR YOUR COOPERATION

CONSTRUCTION BY: \_\_\_\_\_ (Contractor name, Superintendent name and number)

Public Works Department  
of Kansas City, Missouri  
Construction Office (816) 513-6979

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## CONSTRUCTION PROGRESS DOCUMENTATION

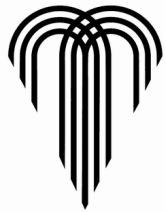
Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

- A. **General:** The Contractor shall prepare a construction schedule which shall be presented to the City Construction Engineer at the preconstruction meeting. A sample of the desired method of scheduling shall be provided by the City upon execution of contract documents. All changes to this schedule requested by the Construction Engineer shall be resubmitted in writing within fifteen (15) days.
- B. **Construction:** Construction shall be performed in accordance with Street and Traffic Division Regulations as outlined in Section 01550 of this Project Manual.
- C. **Payment:** No separate payment will be made for "Construction Schedule". All costs pertaining thereto shall be included in the contract prices for other items as listed in section 00412 – Unit Prices.



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## SUBMITTAL PROCEDURES

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

- A. General:** This section supplements the requirements of General Condition 6.16. These procedures shall apply to all types of submittals including shop drawings, samples, and material certifications, and supporting documentation.

CONTRACTOR shall provide to the Engineer no less than six (6) copies of all shop drawings and material certifications. If the CONTRACTOR requires more than three (3) copies of “approved” submittals to be returned, additional copies shall be included with the original submittal. All additional copies will be returned to the CONTRACTOR.

Review action by the Engineer will be distributed as shown:

<u>Action by Engineer</u>	<u>Retained</u>	<u>Returned to Contractor</u>	<u>Number Required For Re-Submittal</u>
Approved	3	3	0
Approved if Corrected as noted	3	3	0
Correct & Re-Submit	1	5	6
Not Approved	1	5	6

“Approved if corrected as noted” will be used only for very minor corrections and obvious typos. Engineer will reject all submittals not properly stamped or annotated with CONTRACTOR’S approval. Engineer may reject submittals of marginal legibility.

Portions of the Work requiring a shop drawing, sample, or material certification shall not begin until the Engineer has approved the Shop drawing, sample, or certification. A copy of all approved submittals shall be kept in good order by the Contractor at the site and shall be available to the Engineer.

The approval of any shop drawing which substantially deviates from the requirements of the contract must be evidenced by a Change Order.

- B. Payment:** No separate payment will be made for “Shop Drawings and Material Submittals.” All costs pertaining thereto shall be included in the contract unit prices for other items listed in section 00412 – Unit Prices.



## TRANSMITTAL LETTER

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

TO: \_\_\_\_\_

Date \_\_\_\_\_

Re: \_\_\_\_\_

ATTN: \_\_\_\_\_

We are sending you ☐ Attached ☐ Under separate cover via \_\_\_\_\_ the following items:  
☐ Shop Drawings ☐ Prints ☐ Drawings ☐ Samples ☐ Specifications  
☐ Copy of Letter ☐ Change Order ☐ \_\_\_\_\_

Copies	Date	No.	Description

These are transmitted as checked below:

☐ For Approval ☐ Approved as Submitted ☐ Resubmit \_\_\_\_\_ Copies for Approval  
☐ For Your Use ☐ Approved as Noted ☐ Submit \_\_\_\_\_ Copies for Distribution  
☐ As Requested ☐ Returned for Corrections ☐ Return \_\_\_\_\_ Corrected Prints  
☐ For Review and Comment ☐ \_\_\_\_\_

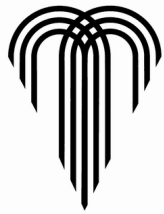
Remarks: \_\_\_\_\_

\_\_\_\_\_  
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\_\_\_\_\_

By: \_\_\_\_\_

Distribution: ☐ Owner  
☐ Contractor  
☐ Construction Manager  
☐ Design Professional  
☐ Consultant  
☐ Other

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## REGULATORY REQUIREMENTS

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

### A. GENERAL

1. As authorized and directed by City Code, the Director of Public Works has approved and adopted Standard Specifications and Drawings, the latest modification of which shall govern the construction Work. Many Kansas City standards and design criteria of the Metropolitan Chapter of the American Public Works Association have been adopted by the City, and others have been adopted with modifications. All current KCMO Standard Drawings and Supplements are available to download from <http://www.kcmo.org/pubworks.nsf/web/pwestandards>; however, the documents made available electronically do not form a part of the Contract.
2. All contract documents for construction bids are available through the Kansas City Plan Room on-line at <http://www.kcmoplanroom.org/>.
3. The City of Kansas City, Missouri, "Erosion and Sediment Control Specifications," City Standards and KCMO Supplements are available on the Internet at the above website address, or from the 5<sup>th</sup> Floor, City Hall, 816-513-2552.
4. The APWA *Standard Specifications and Design Criteria* of the Metropolitan Chapter of the American Public Works Association are available online at <http://www.kcapwa.net>, or from US Reprographics (above locations).

### B. STANDARD DRAWINGS AND SPECIFICATIONS

1. Some of the most recently adopted standards include the following:
  - a. KCMO Supplement to Section 2600 of 5/1/09
  - b. KCMO Supplement to Section 2500 of 5/1/09
2. The current standard drawings, specifications, and KCMO Supplements adopted by the Director of Public Works are listed in the following pages.

**Kansas City, Missouri Standard Drawings, Specifications and Policies**

<b>DRAWING NUMBER</b>	<b>SOURCE</b>	<b>TITLE</b>	<b>DATE ADOPTED</b>	<b>LATEST REVISION</b>	<b>REMARKS</b>
AS-1	KCMO	Typical Alley Standard	12/09/86		
B-KC	KCMO	<b>Kansas City Concrete Barrier, Type A &amp; B</b>	10/10/86		
BCI(-S)(-SD)	KCMO	Brick Curb Inlet	11/06/70	09/17/82	
C	KCMO	Curbs	12/22/88	10/01/05	
CI-1	KCMO	<b>Curb Inlet - Type 1</b>	06/26/96	07/14/03	
CI-2	KCMO	Curb Inlet – Type 2	06/26/03	07/14/03	
CI-3	KCMO	Curb Inlet (Precast Details)	09/25/91		
CL	KCMO	City Logo	02/10/94		
D-1	KCMO	Concrete Driveways	01/25/01	10/01/05	
D-2	KCMO	Concrete Reconstruction Driveways	01/25/01	10/01/05	
D-3	KCMO	Concrete Driveway Location	01/25/01		
D-US	KCMO	Driveway, Unimproved Streets	01/19/90		
FI-1	APWA	Field Inlet Details	04/17/96	07/01/98	Modified By KCMO Supplement
FI-1(M)	APWA	Field Inlet Details (Metric)	04/17/96	07/01/98	Modified By KCMO Supplement
GI-1	APWA	Grate Inlet Details	08/27/07	09/01/07	
GI-1(M)	APWA	Grate Inlet Details (Metric)	04/17/96	07/01/98	
GR-1	KCMO	Formed Steel Beam and Post for Guardrail	06/26/74		
I-1	KCMO	PC Concrete Intersection	05/31/89		
J-1	KCMO	PC Concrete Pavement Joints	05/31/89		
JB-1	APWA	Junction Box Details	04/17/96	07/01/98	Modified By KCMO Supplement
JB-1(M)	APWA	Junction Box Details (Metric)	04/17/96	07/01/98	Modified By KCMO Supplement
LRCR	KCMO	Long Radius Curb Returns	07/17/97		
MH-1	APWA	Manhole Details	04/17/96	07/01/98	Modified By KCMO Supplement
MH-1(M)	APWA	Manhole Details (Metric)	04/17/96	07/01/98	Modified By KCMO Supplement
MH-B	KCMO	Manhole-Brick 4' or 5' Diameter	08/23/71	09/19/75	
MH-D(M)	KCMO	Manhole Details	12/03/96		
MH-CP	KCMO	Manhole-Cast in Place 4' or 5' Diameter	01/19/71	09/19/75	
MH-DB	KCMO	Developed Base Manhole, Precast Concrete 4' or 5'	07/30/91	08/19/82	
MH-OD	KCMO	Manhole-Outside Drop Use with any Standard Manhole	01/17/68	09/19/75	
MH-RC(M)	KCMO	Manhole Ring & cover	12/03/96	8/1/06	
MH-S	KCMO	Manhole Step	09/25/91	8/1/06	
P-E	KCMO	Pipe Encasement	3/22/06	4/1/06	
P-C	KCMO	Pipe Collar	3/22/06	4/1/06	
PB-2	KCMO	Pipe Bedding and Cradle for Sanitary Sewer Pipe	01/03/79	04/09/84	
PS-4	KCMO	Project Sign	01/06/97	09/30/71	
PS-5A(5B)(5C)	KCMO	Project Sign	03/25/85		
PS-6	KCMO	Sales Tax Sign Mounting Detail	10/08/86		
PS-7	KCMO	Construction Site Signage		5/27/04	
RRC-1	KCMO	Railroad Crossing Timber	05/17/77	09/01/81	
RRC-2	KCMO	Railroad Crossing Non-Timber Panel	05/16/83		
S-RC	KCMO	Steps Reinforced Concrete	03/05/68		

SL	KCMO	Standard Legend	05/10/68		
SL-1	APWA	Street Lighting Feed Point, Type A	12/15/82		
SL-2	APWA	Street Lighting Feed Point, Type B	12/15/82		
SL-2A	APWA	Street Lighting Feed Point, Type B	11/18/87		
SL-3	APWA	Street Lighting-Miscellaneous Details	12/15/82		
SMB	APWA	Survey Monument Box	04/17/96	7/1/98	Figure in APWA Section 5200
SMB(M)	APWA	Survey Monument Box (Metric)	04/17/97	7/1/98	Figure in APWA Section 5200(M)
SR-1	KCMO	Street Cut Restoration	06/03/95	09/01/08	
ST-L2	KCMO	Local Street-Phase I	05/18/83		
ST-PS	KCMO	Private Street	03/21/83		
ST-1	APWA	Street Section Details	04/17/96	07/01/98	Modified By KCMO Supplement
ST-1(M)	APWA	Street Section Details (Metric)	04/17/96	07/01/98	Modified By KCMO Supplement
ST-2	APWA	Street Section Details	04/17/96	07/01/98	Modified By KCMO Supplement
ST-2(M)	APWA	Street Section Details (Metric)	04/17/96	07/01/98	Modified By KCMO Supplement
ST-BL	KCMO	Bike Lane Sections	1/1/04		
Street Plate Detail	KCMO	Street Plate Detail	3/6/06	9/1/08	
SW-1	APWA	Sidewalk Ramp Details	1/1/04		
SW-205	KCMO	Sidewalk Ramp Details	10/01/05		
SW-305	KCMO	Sidewalk Ramp Details	10/01/05		
SW-405	KCMO	Sidewalk Ramp Details	10/01/05		
SW-ADA	KCMO	Sidewalk Ramp Details	10/01/05		
SW-NOTES	KCMO	Sidewalk Ramp Details	10/01/05		

**Kansas City, Missouri Standard Drawings, Specifications and Policies**

<i>SPECIFICATION NUMBER</i>	<b>SOURCE</b>	<b>TITLE</b>	<b>DATE ADOPTED</b>	<b>LATEST REVISION</b>	<b>REMARKS</b>
2000	APWA	General	10/21/81		
2100	APWA	Grading and Site Preparation	10/9/06	10/9/06	Supplemented by KCMO 2100
2200	APWA	Paving	05/23/01	5/1/07	Supplemented by KCMO 2200
2300	APWA	Incidental Construction	12/18/02	5/1/07	Supplemented by KCMO 2300
2400	APWA	Seeding and Sodding	10/21/81	3/01/05	Supplemented by KCMO 2400
2500	APWA	Sanitary Sewers	12/16/92	5/1/09	Supplemented by KCMO 2500
2600	APWA	Storm Sewers	04/17/96	5/1/09	Supplemented by KCMO 2600
2700	APWA	Structures	11/16/88	8/1/06	Supplemented by KCMO 2700
2800	APWA	Street Lights	12/15/82	05/01/01	Supplemented by KCMO 2800
5100	APWA	Site Work and Erosion and Sediment	10/9/06		
ESC Drawings	APWA	Erosion and Sediment Control Drawings	10/9/06		
5200	APWA	Street Design Criteria	04/17/96	07/01/98	Supplemented by KCMO 5200
5200(M)	APWA	Street Design Criteria (Metrics)	04/17/96	07/01/98	Supplemented by KCMO 5200
5500	APWA	Sanitary Sewers and	09/01/98	8/1/06	Supplemented by KCMO

		Appurtenances			5500
5600	APWA	Storm Sewer Design	10/9/06	2/14/08	Supplemented by KCMO 5600
5700	APWA	Structures	12/17/86	01/01/04	Supplemented by KCMO 5700
5800	APWA	Street Lighting	12/15/82	05/01/01	Supplemented by KCMO 5800
Street Name Signs	KCMO	Street Name Signs		2/03	
Traffic Calming Guidelines	KCMO	Traffic Calming Guidelines		6/03	
Speed Hump Drawing	KCMO	Speed Hump Drawing		7/03	
Traffic Circle Design	KCMO	Traffic Circle Design		7/03	
BMP Manual	APWA		10/9/06		

**Kansas City, Missouri Standard Drawings, Specifications and Policies**

POLICY NUMBER	SOURCE	TITLE	DATE ADOPTED	LATEST REVISION	REMARKS
	KCMO	Plan Presentation Criteria and Procedure	06/26/91		
850801	KCMO	Criteria for Condemnation of Sidewalk, Driveways & Curbs	12/16/85		
890524	KCMO	Guidelines for Guardrail Use	08/01/89		
900639	<b>KCMO</b>	Guidelines for Fencing of Improved Open Channels	10/08/90		Includes Maintenance and Repair Policy
950769	KCMO	Guidelines on Special MH Ring and Cover Requirements	11/29/95		
81783	KCMO	Replacement of Sidewalks That Have Been Cut	12/01/67		
880544	KCMO	As Built Drawings for Sewers Built by Permit	07/11/88		Requires as built to be furnished by Contractor
890332	KCMO	Policy for Portland Cement Concrete Intersections	06/01/89		Associated with Drawing I-1
890721	KCMO	Street Lighting	11/22/89		Replaced Previous 880393
SP-1	Mo DNR	Missouri DNR Standards of Practice No.1	06/25/87		Available from the State Surveyor.
800576	KCMO	Private Building Sewer Lines in Public Right of Way	12/10/80		
930418	KCMO	Policy for PVC Pipe Wall Thickness	08/09/93		
950768	KCMO	Policy for Inspection and Construction of Manholes	11/29/95		
940108	KCMO	Erosion and Sediment Control Specifications	03/18/94		Approved by Missouri Department of Natural Resources November 23, 1992.

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## TRAFFIC CONTROL

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

### A. General Requirements:

1. The Contractor must obtain a street closure permit at least 14 days in advance of the proposed closure date in order to allow sufficient time for public notification.
2. The Contractor shall take any and all proper precautions to guard against injury to persons or damage to property until final acceptance of the work by the Director of Public Works. These precautions should include, but not be limited to, protection of vehicular and pedestrian traffic from injury or damage due to open excavations by the proper placement of appropriate safety devices. The Contractor shall maintain safety devices and their proper placement throughout the needed period. Construction practices should be followed that will eliminate all safety hazards as quickly as possible or practicable.
3. The Contractor shall provide all barricades, cones, drums, construction warning signs, flagmen and incidental devices to protect, warn, and guide vehicular and pedestrian traffic, and to protect his personnel and equipment on the job site. During all phases of construction, the Contractor shall display the required signs. Any traffic control device not in use shall be covered, removed or turned away from view of oncoming traffic. Whenever the work area changes, all construction warning signs and traffic channelization devices shall be made current in both legend and function.
4. All traffic control devices shall conform to the "Manual on Uniform Traffic Control Devices for Streets and Highways" 2009 Edition, and its most current revisions. No substitutions for the devices required by the above referenced manual or changes in the methods of traffic control as outlined herein will be allowed without the written approval of the Director of Public Works.
5. The Contractor's representative on this project will make daily inspections of the traffic control devices installed as part of this contract and maintain records of any maintenance required and the date on which it was completed. These records will be maintained for the duration of the project and be incorporated as part of the final records. It shall be the Contractor's responsibility to maintain all traffic control devices in proper working condition and placement at all times. The Contractor shall promptly correct any deficiencies in traffic control.
6. The Contractor will be required at the time of the preconstruction conference to designate a specific employee to be responsible for the maintenance of the traffic control devices and establish a method of contacting this person during both working and non-working hours. This

information will be provided to the resident engineer, and to the Kansas City, Missouri Public Works - Streets and Traffic Division. The Contractor may, at his option, establish a maintenance agreement with a qualified firm, approved by the City, to supply, install, and maintain the required traffic control devices throughout the duration of this project.

7. Damage to existing utilities during construction of this project which would required immediate repair may be considered as an "emergency", and as such may not be subject to all of the restrictions contained herein. Therefore, the Contractor should immediately contact the utility company whose facilities are involved and the Streets and Traffic Division whenever any utilities are damaged which may require immediate repair. Such repair work, once declared an "emergency" by the utility company or by the Streets and Traffic Division, shall be pursued on a continuous (24 hours per day) basis until complete or advanced to such a point that use of the roadway can be returned to normal operation and any subsequent repairs can be completed during regular working hours. However, the Streets and Traffic Division reserves the right to determine which utility work will be considered an "emergency". Any costs incurred by the Contractor for such "emergency" utility repair, including the cost of any additional traffic control that may be required, will be the Contractor's sole responsibility.
8. Streets and Traffic Division reserves the right to make adjustments or revisions in traffic handling requirements that may become necessary after construction on the project has started. These changes will be determined on the basis of periodic inspections throughout the duration of the project. Notice of such change will be transmitted to the Contractor and it will be his responsibility to make the necessary changes as soon as practicable after receipt of the notification.
9. If the Contractor encounters conditions that would require a change in method of traffic control the Contractor shall immediately notify the inspector. At least 48 hours before the start of the proposed change, the inspector will request approval of the change in method of maintaining traffic from the Street and Traffic Division ((816) 513-2670, 8 a.m. to 5 p.m., Monday through Friday). Upon approval the Contractor shall obtain a revised street closure permit from Streets and Traffic Division. The Contractor shall not proceed with the change without the approval of the Street and Traffic Division.
10. The Contractor shall be required to maintain access to all properties served by streets affected by the construction work, unless otherwise stated in the Specific Requirements of this Project Manual.
11. Construction work that requires sidewalk closures or temporary restriction of on-street parking will be permitted along one side of alternating blocks on one side of the street at a time, or in any other combination, provided that in any one block both sidewalks or curb parking are not closed or restricted at the same time. A maximum of two (2) blocks shall be under construction at any one time.



**B. Construction:** Construction will be permitted along one side of alternating blocks, one side of the street at a time, or any other combination, provided that both sides in any one block are not under construction at the same time.

**C. Emergency No Parking Signs:**

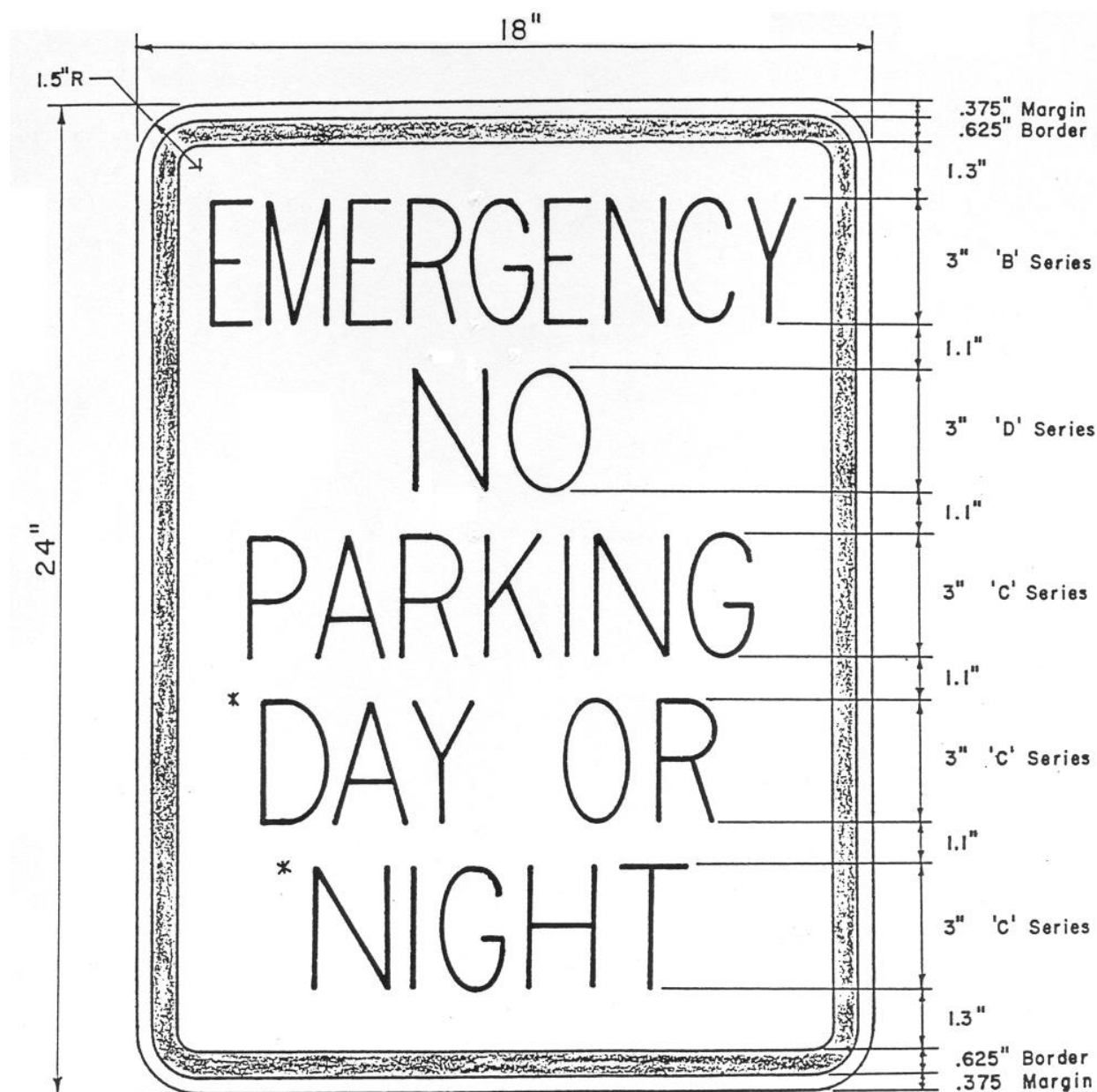
1. When it is necessary to eliminate parking on a part of a street to facilitate construction work, the Contractor shall, subject to the approval of the Streets and Traffic Division, post **"EMERGENCY NO PARKING, 7 a.m. to 6 p.m."** or **"EMERGENCY NO PARKING, DAY OR NIGHT"** signs on the side of the street where parking is to be eliminated. The signs must read as shown on page 01550-5 of this section and must be on aluminum or plywood panels. **Paper or cardboard signs will not be allowed.** These signs must be installed a minimum of 18 hours and a maximum of 48 hours in advance of the time the Contractor plans to begin work. The Contractor must contact the inspector as soon as the signs are installed. The inspector will contact the Street and Traffic Division ((816) 513-2670 from 8 a.m. to 5 p.m., Monday through Friday) as soon as the signs are installed so that a temporary regulation can be written by the Streets and Traffic Division and the Kansas City, Missouri, Police Department can be notified. The signs cannot be enforced without this notification from the City. The notification to the City must be made by 12 noon for enforcement to be effective the following day.
2. The signs are to be installed on either steel drive posts or existing utility poles at a height of five (5) feet to the bottom of the sign. The signs are to be installed at the beginning and end of each block and at 150-foot maximum intervals in between. If there are existing parking restriction signs of a lesser degree of restriction, the Contractor shall install the **EMERGENCY NO PARKING** signs as outlined above and shall cover the existing signs with the **EMERGENCY NO PARKING** sign or some type of permanent cover (**paper and tape will not be accepted**). The Contractor shall immediately remove all signs and covers as soon as work in a block has been completed. If it becomes apparent, for any reason, that work will cease for more than 72 hours, the same signs and covers shall be removed and must be reinstalled subject to the minimum 18 hours advance notice before work can proceed. If work does not begin within 48 hours after the signs are posted, the same procedure must be followed. Failure by the Contractor to abide by all the provisions concerning **"EMERGENCY NO PARKING"** signs, will result in the cancellation of the permit.

**D: Sidewalk Closed Signs:** The Contractor shall utilize sidewalk closed signs as shown on Page 01570-6 of this section to direct pedestrians to walk along the opposite side of the street while the sidewalk is closed.

**E. Specific Requirement:**

1. The contractor may close only one curb lane of the roadway at a time, maintaining two-way traffic in the other half of the roadway or using **FLAGGERS** to direct traffic as typically shown on 01550-09 and 01550-10.

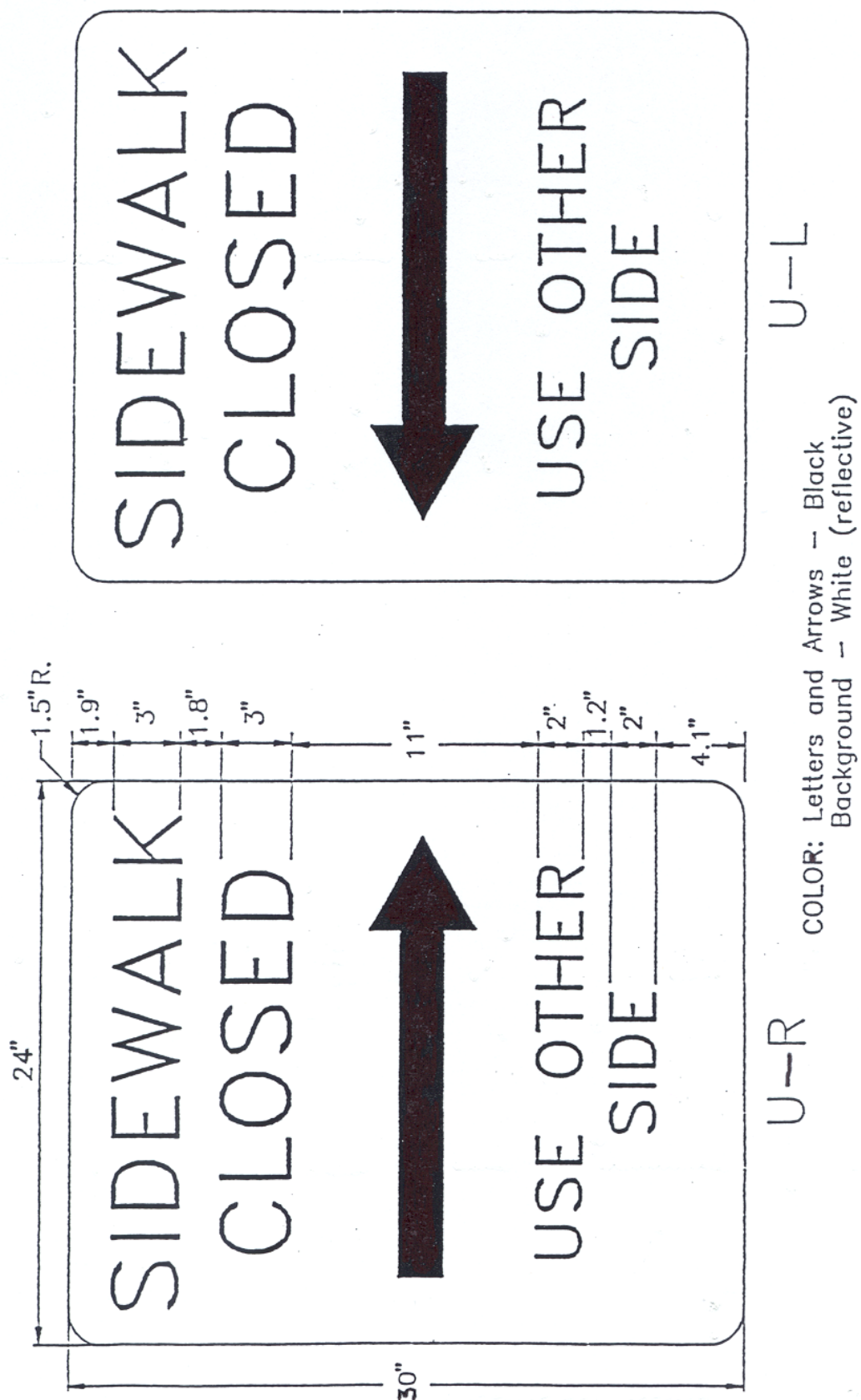
2. On the streets where there is restricted parking during rush hours, the contractor shall be prohibited from working on the side of the street where restrictions apply during those hours. For example, if the northbound lane of a street has **No Parking from 7:00 a.m. to 9:00 a.m.**, the contractor shall be prohibited from working in that lane during those hours. On the streets where there is **No Parking Anytime**, the contractor shall obtain approval for work hours ahead of time from the Engineer, so they may work anytime.
  3. During non-working hours, all roadways shall be opened to normal operating conditions. No construction related equipment shall be on the roadway. Barrels with Type C warning lights shall be placed adjacent to the work area. All of the construction signs except the **ROAD CONSTRUCTION AHEAD** signs shall be covered or turned away from traffic.
  4. Access to adjacent properties shall be maintained at all times.
  5. Emergency No Parking 7:00 a.m. to 6:00 p.m. may be required for this construction.
- F. Payment:** No separate payment will be made for "Traffic Regulations". All costs pertaining thereto shall be included in the contract prices for other items listed in section 00412 – Unit Prices.

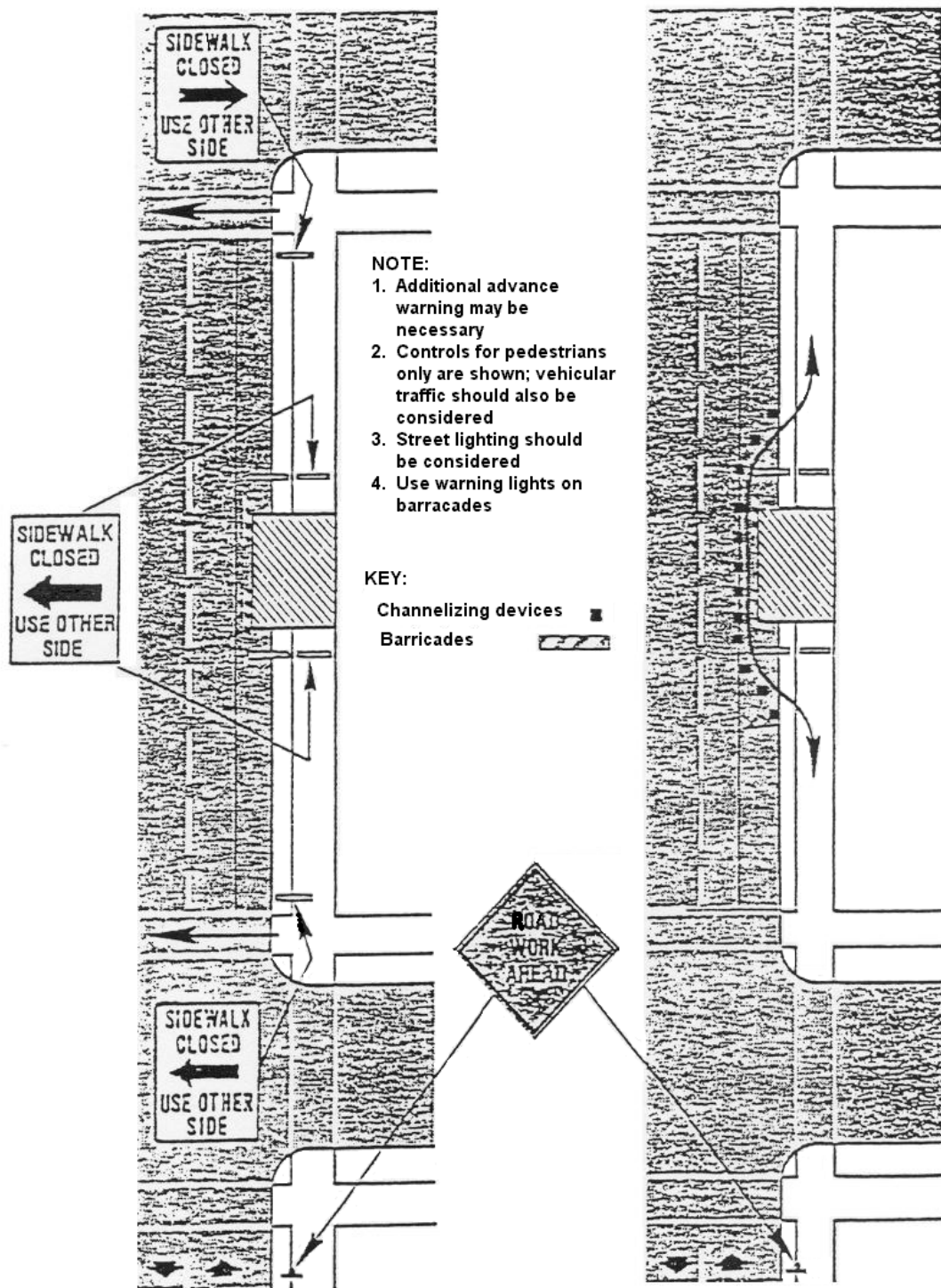


COLOR: Letters and Border - Red  
Background - Silver (reflective)

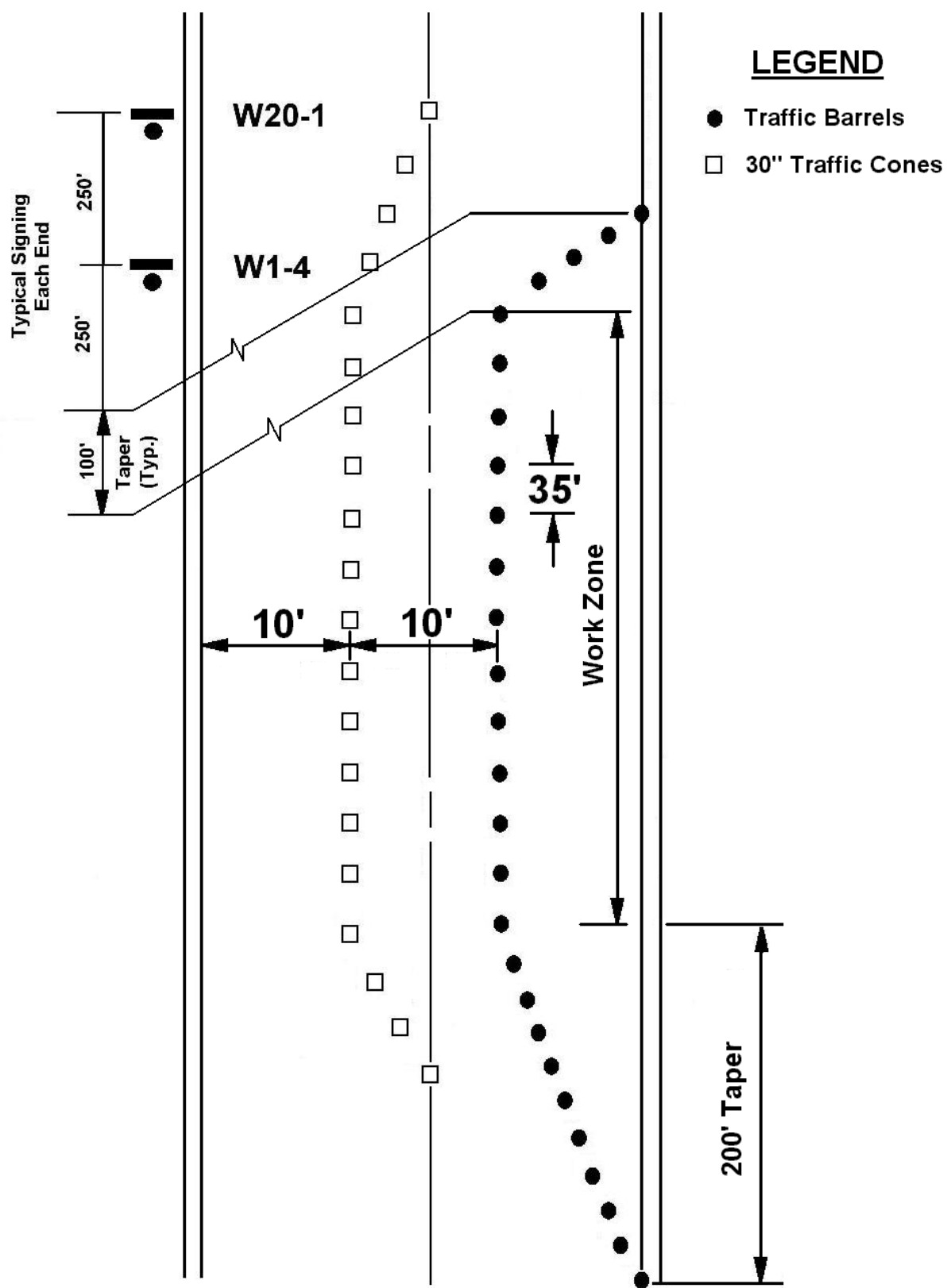
\* ALTERNATE FOR  
LINES 4 & 5

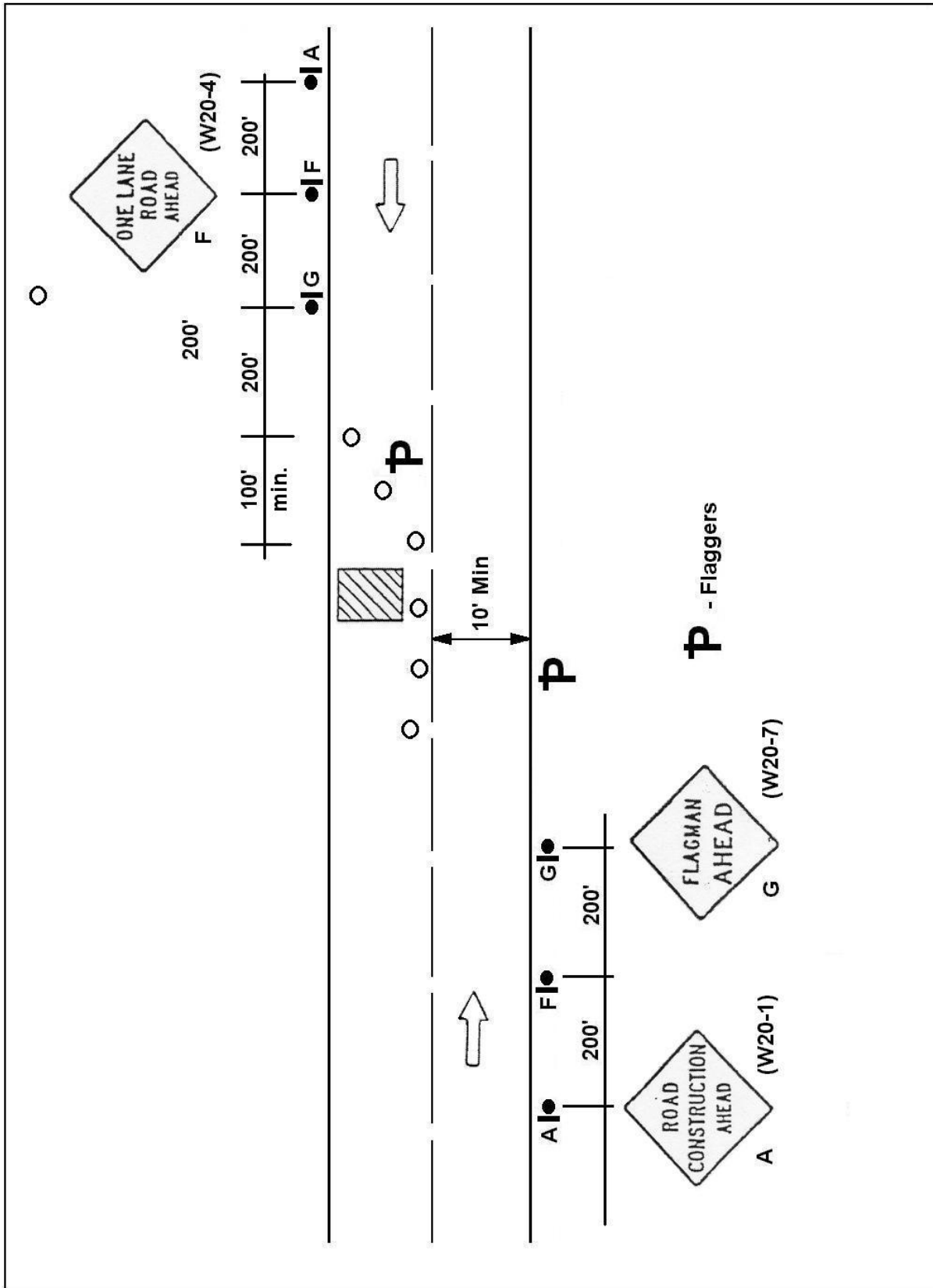
7AM TO  
6PM

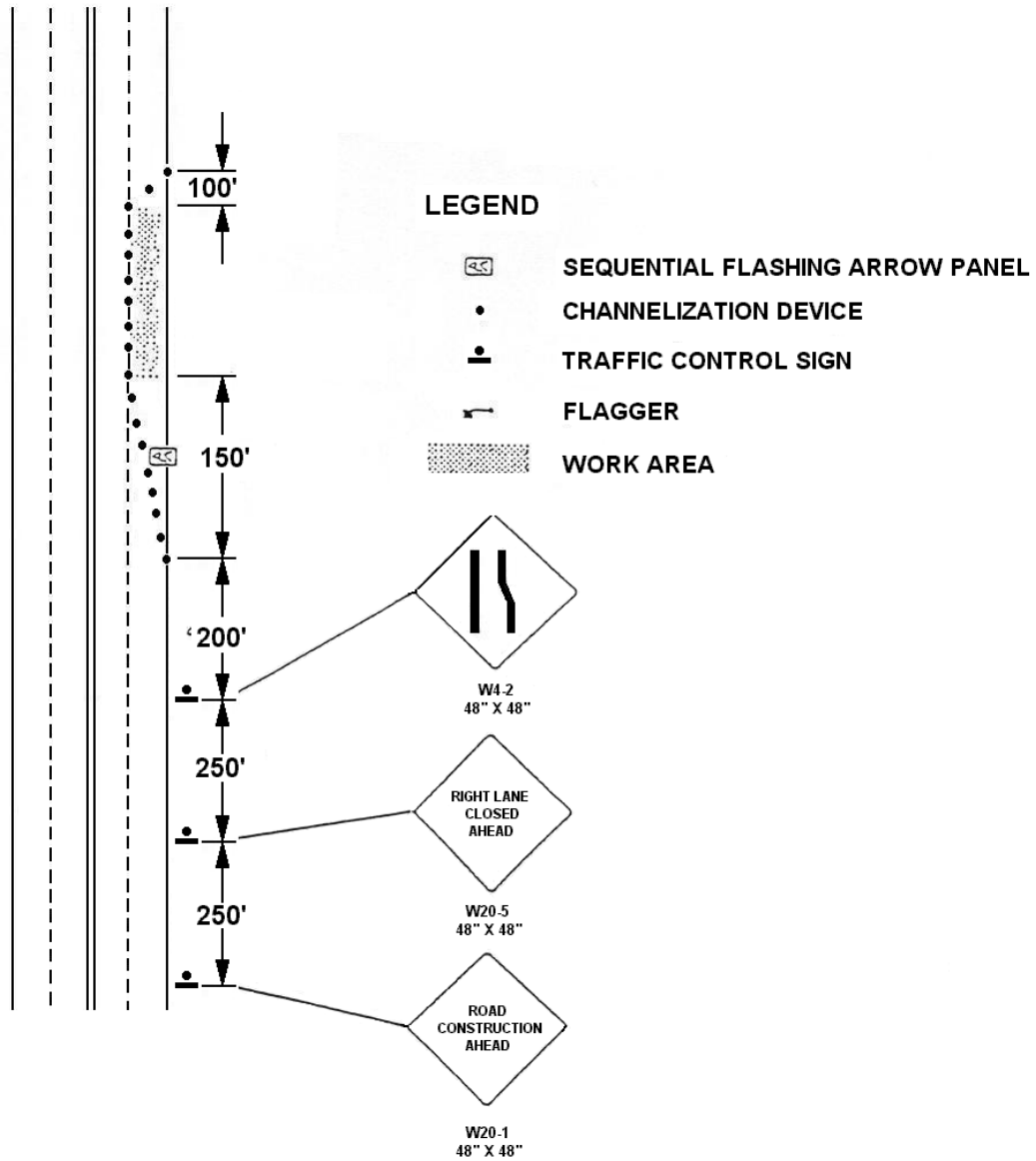




**Figure 6-24 Typical Applications - Two Methods for Controlling Pedestrian Traffic by Either Directing Pedestrians to Another Route or Providing a Walkway**





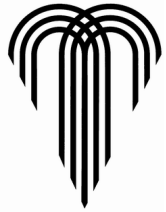


TYPICAL RIGHT LANE CLOSURE



[illegible]

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HEART OF THE NATION



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## TREE OR SHRUB DAMAGE

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

- A. **General:** The contractor is to use appropriate precautions when working around trees and shrubs to prevent any damages to them. The contractor will be responsible for any damage caused by careless or reckless work in the vicinity of any trees or shrubs along the project. All damages to trees are to be reported, and immediate repair or care efforts will be coordinated with the Kansas City Parks Department at (816) 513-9550, and the Design Engineer at (816) 513-6979.
- B. **Payment:** No separate payment will be made for "Tree or Shrub Damage". Any repair or replacement costs required due to careless or reckless damage to a tree or shrub will be the sole responsibility of the contractor.

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## POLLUTION CONTROL

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

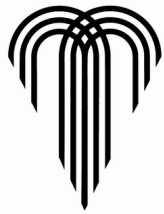
### General Requirements:

No open burning will be permitted.

All activity associated with the project, including equipment cleaning and maintenance shall be conducted in a workmanlike manner that prevents millings or other construction debris, sediment, asphalt emulsion, or any other material from entering the sewer system.

The CONTRACTOR shall have sand bags, straw bales, wrapped perforated pipe, or other apparatus specifically manufactured and marked for said use, or as otherwise approved by the engineer, on the job site before work starts for use as requested by the Engineer.

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## EROSION CONTROL

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

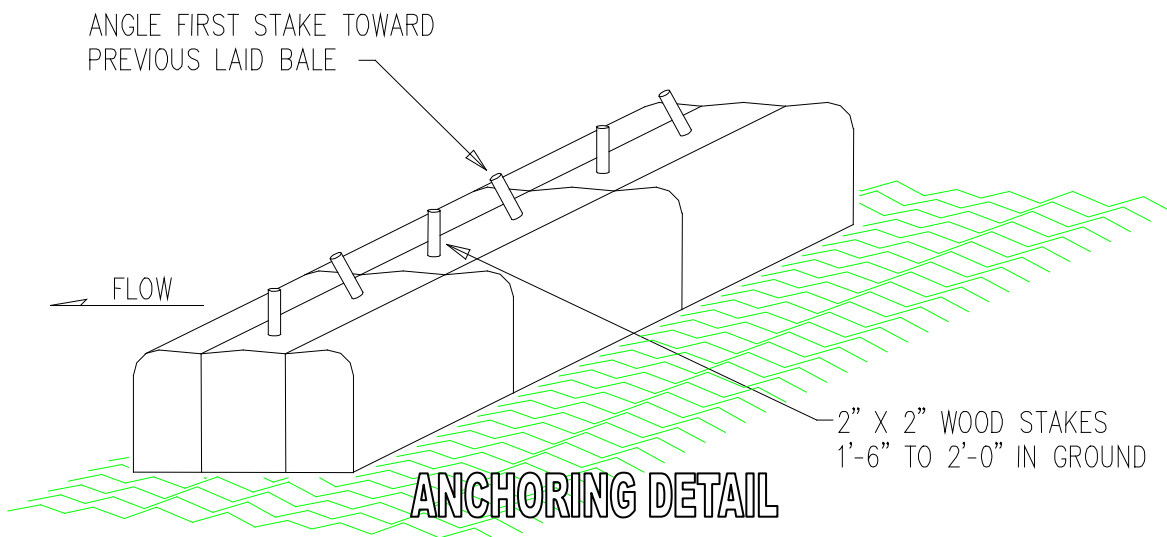
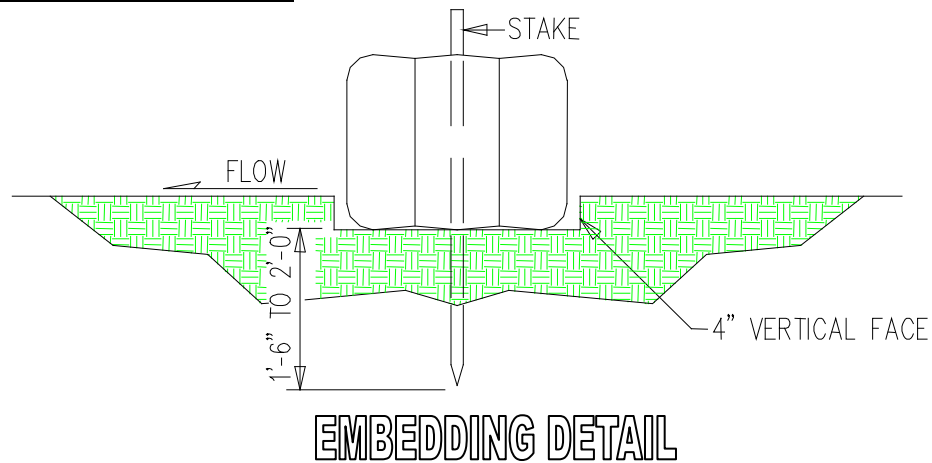
### A. General:

1. The CONTRACTOR shall provide erosion control for all areas disturbed during construction. The City has adopted a set of guidelines and procedures for controlling erosion entitled Erosion and Sediment Control Specifications (ESCS), dated March 18, 1994. These guidelines are available on the 5<sup>th</sup> Floor of City Hall at the permit Counter. The CONTRACTOR is to assume that the work is to be done under the City's General Permit. The CONTRACTOR does not need to make separate application with the Missouri Department of Natural Resources.
2. All the requirements of the Kansas City Metropolitan Chapter of the American Public Works Association (APWA), *Standard Specifications and Design Criteria* apply as amended and supplemented by the Department of Public Works of the City of Kansas City, Missouri (KCMO). Sections of said Specifications will be hereinafter referred to as "APWA-KCMO."
3. The Engineer must approve all erosion control placement prior to it being installed. If it is not approved by the Engineer, the CONTRACTOR may not get paid for it if it is not installed properly or is unneeded.

### B. Erosion Control Plan:

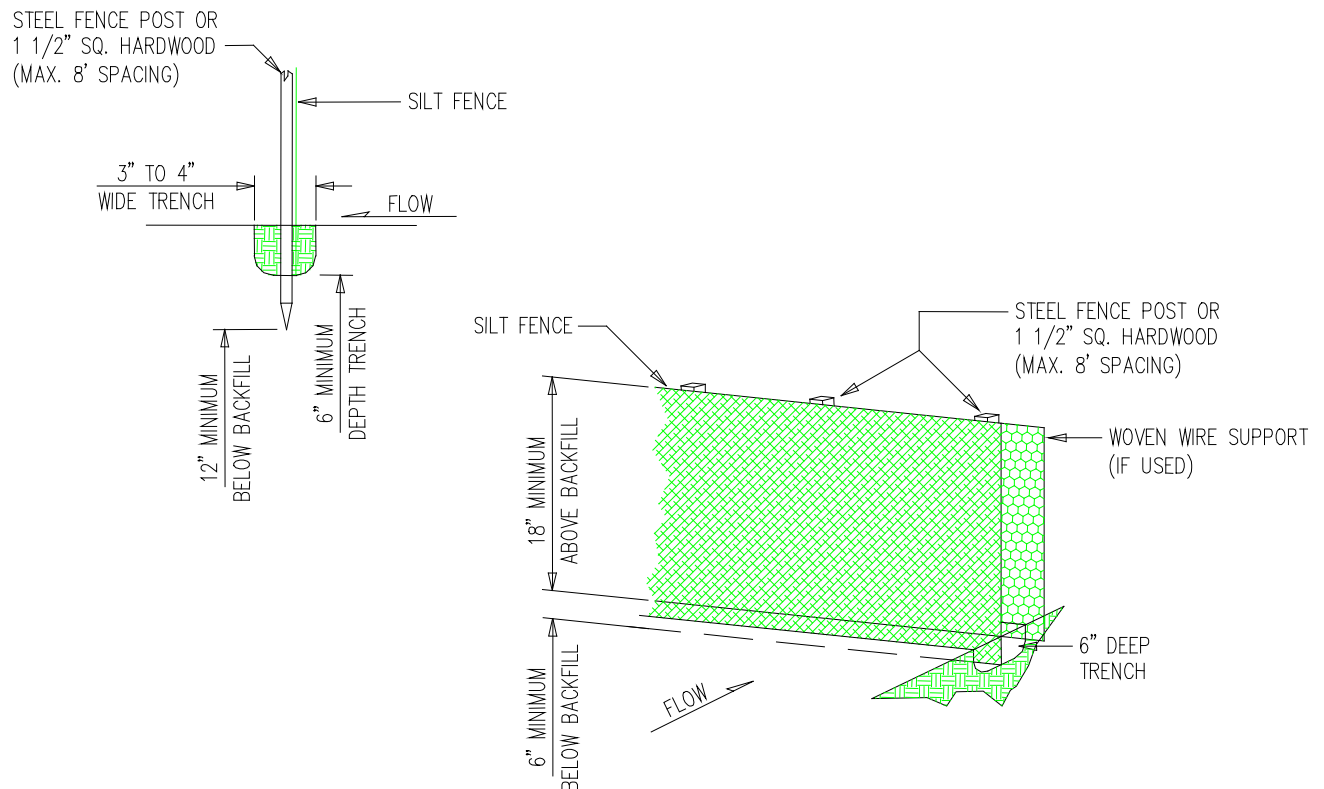
1. The Contractor shall follow the erosion control plan that is shown in the Contract Drawings, unless otherwise directed by the Engineer. In the event that the overall disturbance of ground cover is less than one acre, an erosion control plan may not be included with the Contract Drawings.
2. If an erosion control plan is not provided in the Contract Drawings, this does not excuse the CONTRACTOR from making a constructive effort to prevent unrestrained erosion during his operations. Upon notification of a weather forecast with a reasonable likelihood of rain, or at the direction of the Engineer, the CONTRACTOR shall construct temporary berms and install enough erosion control fencing as necessary to control the erosion.
3. If the CONTRACTOR'S construction operations are complete to the point where sodding is the major item at hand before final acceptance can be made, and sodding is out-of-season or disallowed by the Engineer, the CONTRACTOR shall construct one of the following erosion control measures:
  - a. Incorporate the use of erosion control fencing immediately downstream of vulnerable areas that are susceptible to the formation of small streams. Maintain the erosion control devices until sodding season returns. Upon return of the sodding season, the area shall be re-graded to

- the lines and grades established in the Contract Drawings and sodded at the direction of the Engineer.
- b. Terrace the ground with graded berms and incorporate the use of both temporary slope drains (as specified in ESCS Section 10.03.4.3) and erosion control fencing (as specified in this Section on pages 3-5). Maintain the erosion control devices until sodding season returns. Upon return of the sodding season, the area shall be re-graded to the lines and grades established in the Contract Drawings and sodded at the direction of the Engineer.
  - c. Fertilize, place sod, and irrigate as directed by APWA-KCMO 2400. Maintain the erosion control devices until sodding season returns. Upon return of the sodding season the CONTRACTOR shall re-establish the grade and replace all dead sod at the direction of the Engineer.
  - 4. The construction and materials specifications for final seeding and sodding for the re-vegetation of disturbed ground surface areas shall be governed by APWA-KCMO 2400.
- C. **Reference Figures:** See the following pages of these specifications for details of the Straw Bale Fence, Silt Fence, and Graded Berm.
- D. **Payment:**
- 1. Payment for properly installed Straw Bale Fence and Silt Fence will be made at their respective Contract Unit Prices as listed in the Line Item Pricing. Such payments and prices constitute full compensation for all labor, materials, and equipment necessary to complete the items.
  - 2. No payment shall be made for Graded Berms. Graded Berms or Temporary Slope Drains are to be considered subsidiary to other items in the Line Item Pricing.

**STRAW BALE FENCE DETAIL**

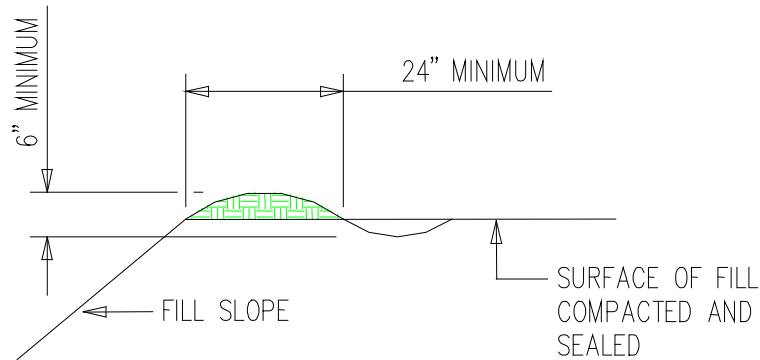
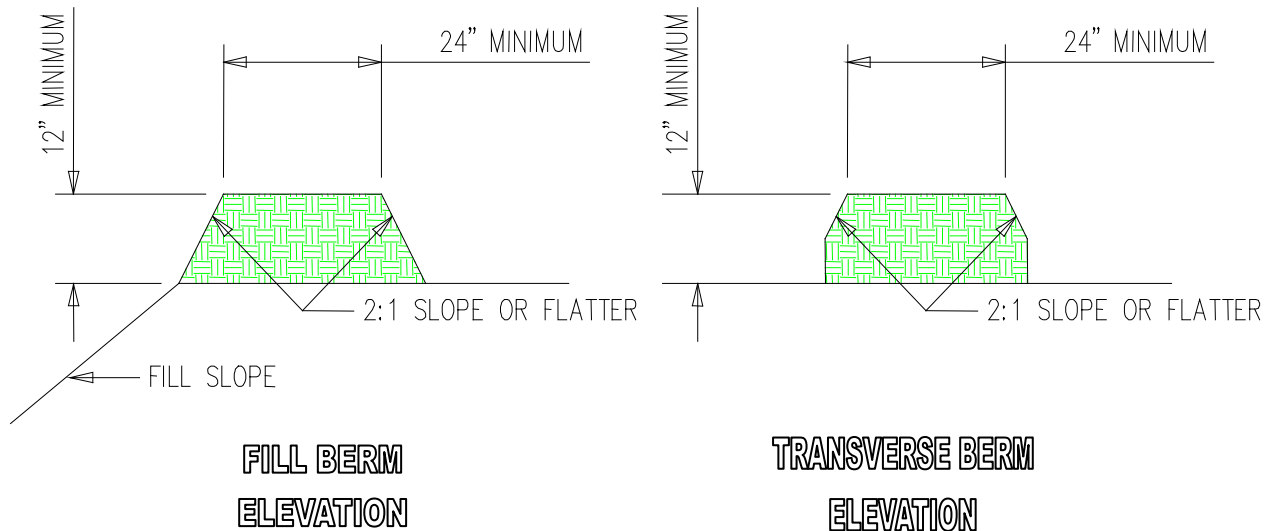
1. Bales shall be placed in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a minimum of 4".
3. Bales shall be securely anchored in place by stakes driven through the bales. The first stake in each bale shall be angled towards previously laid bale to force bales together.
4. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
5. Remove sediment deposits as necessary to provide adequate storage volume for the next rain and to reduce pressure on the barrier.
6. The contractor shall remove bales when they have served their usefulness.
7. Sediment trapped by this practice shall be uniformly distributed on the source area prior to seeding or sodding.

## **SILT FENCE DETAIL**



## **EMBEDDING DETAIL**

8. Posts which support the silt fence shall be installed on a slight angle towards the anticipated runoff source and placed at a maximum 8' apart or to silt fence manufacturer specifications, whichever is stricter.
9. Silt Fence shall be trenched in with a spade or mechanical trencher so that the down-slope face of the trench is flat and perpendicular to the line of flow.
10. The trench shall be a minimum of 6" deep and 3" to 4" wide to allow for the silt fence to be laid in the ground and back-filled.
11. Silt Fence shall be securely fastened to each support post or to woven wire, which is in turn attached to the fence posts.
12. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
13. Remove sediment deposits as necessary to provide adequate storage volume for the next rain and to reduce pressure on the barrier.
14. The contractor shall remove silt fences when they have served their usefulness.
15. Sediment trapped by this practice shall be uniformly distributed on the source area prior to seeding or sodding.
16. Silt Fence shall be Mirafi-100X Filter Fabric or approved equal.

**BERM DETAIL****TYPE "A"****TYPE "B"**

17. Berms are required if the silt fence is not installed or properly maintained.
18. Type "A" Berms will be constructed at the end of each day's operations on embankments.
19. Type "B" Berms will be constructed when embankment operations are shut down over the winter season or discontinued at the direction of or with the concurrence of the Engineer.
20. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
21. Remove sediment deposits as necessary to provide adequate storage volume for the next rain.
22. The contractor shall remove berms when they have served their usefulness.
23. Sediment trapped by this practice shall be uniformly distributed on the source area prior to seeding or sodding.





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## SUBSTITUTION REQUEST

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

To: \_\_\_\_\_

Authorization Number: \_\_\_\_\_

Re: \_\_\_\_\_

From: \_\_\_\_\_

Date: \_\_\_\_\_

Contract For: \_\_\_\_\_

Specification Title: \_\_\_\_\_

Section: \_\_\_\_\_ Page: \_\_\_\_\_ Article/Paragraph: \_\_\_\_\_

Proposed Substitution: \_\_\_\_\_

Manufacturer: \_\_\_\_\_ Address: \_\_\_\_\_ Phone No. \_\_\_\_\_

Trade Name: \_\_\_\_\_ Model No. \_\_\_\_\_

Installer: \_\_\_\_\_ Address: \_\_\_\_\_ Phone No. \_\_\_\_\_

History: ☐ New Product ☐ 2-5 years old ☐ 5-10 years old ☐ More than 10 years old

Differences between proposed substitution and specified product: \_\_\_\_\_

☐ Point-by-point comparative data attached – REQUIRED

Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance, service, and availability of replacement parts, as applicable, are available.
- Proposed substitution will not affect or delay Progress Schedule, except as stated below.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances, except as stated below.
- Payment will be made for changes to building design, including architectural or engineering design, detailing, licenses, royalties, and construction costs caused by the requested substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be completed in all respects.

Reason for not providing specified item: \_\_\_\_\_

Similar Installation:

Project: \_\_\_\_\_

Design Professional: \_\_\_\_\_

Address: \_\_\_\_\_

Owner: \_\_\_\_\_

Date Installed: \_\_\_\_\_

Proposed substitution affects other parts of Work: ☐ No ☐ Yes; explain \_\_\_\_\_

Savings to Owner for accepting substitution: \_\_\_\_\_

Proposed substitution changes Contract Time: ☐ No ☐ Yes; add/deduct \_\_\_\_\_ days.

Supporting Data Attached:

☐ Product Data ☐ Drawings ☐ Tests ☐ Reports ☐ Samples ☐ \_\_\_\_\_

Attachments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Submitted by: \_\_\_\_\_

Signature: \_\_\_\_\_

Firm: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-Mail: \_\_\_\_\_

Additional Comments: ☐ Contractor ☐ Subcontractor ☐ Supplier ☐ Manufacturer ☐ DP ☐ \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

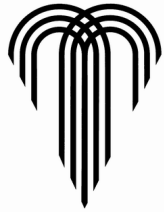
#### DESIGN PROFESSIONAL'S REVIEW AND ACTION

- ☐ Substitution approved – Make submittals in accordance with Specification Section 01300.
- ☐ Substitution approved as noted – Make submittals in accordance with Specification Section 01300.
- ☐ Substitution rejected – Use specified materials.
- ☐ Substitution Request received too late – Use specified materials.

Signed by: \_\_\_\_\_ Date: \_\_\_\_\_

Distribution: ☐ Owner  
☐ Design Professional  
☐ Contractor  
☐ Consultant  
☐ Construction Manager  
☐ Other

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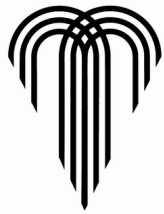
## MATERIAL AND EQUIPMENT STORAGE

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

- A. **General:** The Contractor shall make arrangements for material and equipment storage areas and field office location. When private properties are used for any of the preceding reasons, the Contractor shall contact the Engineer prior to usage of the property, to form a three party agreement between the City, the Contractor and the Property Owner.
- B. **Payment:** No separate payment will be made for "Material and Equipment Storage". All costs pertaining thereto shall be included in the contract prices for other items as listed in section 00412 – Unit Prices.

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## FIELD ENGINEERING

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

- A. **General:** The City will provide services as outlined below, but nothing contained herein shall infer that the contractor will not be allowed or required to set additional offset stakes where he may find it necessary to destroy stakes furnished by the Engineer, or where the Contractor may desire additional stakes to expedite or complete the work. Stakes furnished by the Engineer are intended to indicate the lines and grades of the work and may not provide sufficient working offsets to allow the Contractor to complete the work solely from the initial stakes.
- B. **Street, Storm and Sanitary Sewers and Miscellaneous Construction:** The Engineer will with one day's notice furnish bench marks, baselines and other reference or offset points to enable the Contractor to layout and construct the work. Such initial survey work furnished by the may include one set each of slope stakes, curb line and grade offsets, catch basin or drainage structure location, storm and sanitary sewer line ad grades, and location offsets and elevations for all such structures to be constructed under the contract.
- C. **Bridge Construction:** The Engineer will furnish one set of bench mark(s) and baseline control points for construction of bridges. The Contractor shall from such bench mark(s) and baseline control points, at his own expenses, make all necessary measurements and staking for the layout and construction, of all bridge structures. If the scope of the work includes construction of structures other than bridges, the Engineer will with one day's notice furnish one set of bench marks, baselines and other reference or offset points to enable the Contractor to layout and construct the work for that portion other than the bridge.
- D. **Water Line and Related Items:** The Contractor shall be responsible for all necessary measurements, staking and layout for water line and related items. All cost pertaining thereto shall be included in the contract prices for water lines as listed in the proposal.
- E. **Land Corner and Control Monuments:** All existing land corner and control monuments shall be carefully preserved. Before disturbing any existing monuments, the Contractor shall give one day's notice so that the Engineer can set reference points beyond the limits of the work. The Contractor shall obtain verification directly from the Engineer that reference marks have been set, before disturbing any monuments.

Existing land corner or control monuments with monument boxes shall be adjusted by the Contractor at the locations shown on the plans. All measurements to preserve and adjust the monument box shall be approved by the Engineer prior to adjustment of the monument.

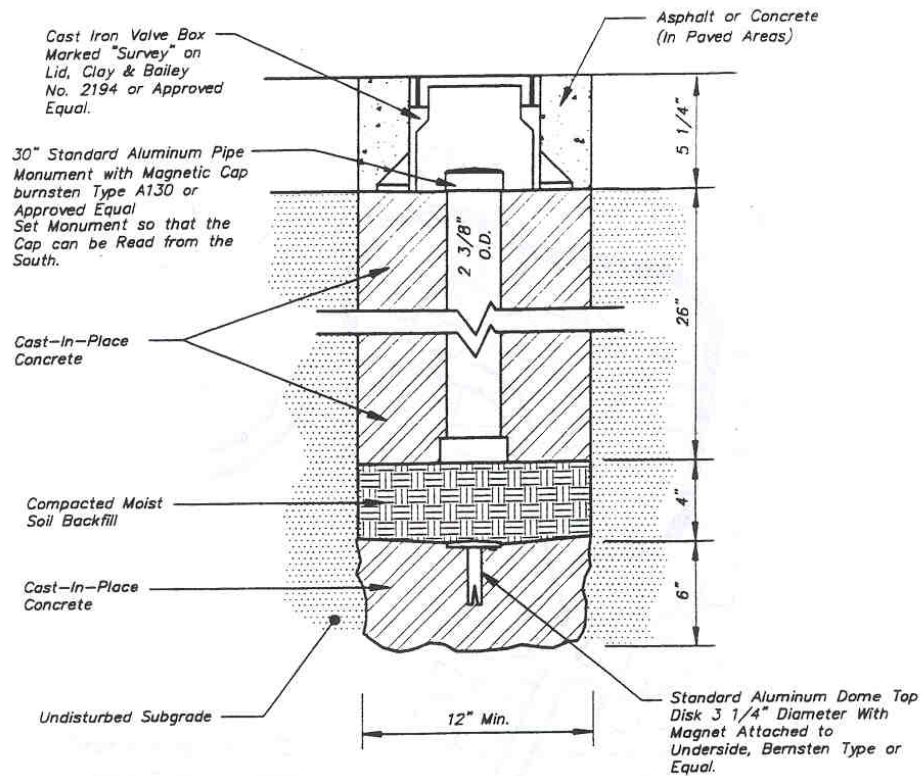
Existing land corner or control monuments without monument boxes shall be reset as shown on Standard Drawing SMB (attached) Materials shown shall be furnished and set by the Contractor at the location provided by the Engineer.

- F. Lot Corner / Property Corner Monuments:** All existing Lot or Property corner monuments shall be carefully preserved. Before disturbing any existing monuments, the Contractor shall give one day's notice so that the Engineer can set reference points beyond the limits of the work. The Contractor shall obtain verification directly from the Engineer that reference marks have been set, before disturbing any monuments.

Existing Lot or Property corner monuments shall be adjusted by the Contractor when located in concrete driveway or sidewalk. Monument shall be plumb and flush with the concrete surface. All measurements to preserve and adjust the monument box shall be approved by the Engineer prior to adjustment of the monument.

- G. Payment:** No separate payment will be made for additional surveying, layout work of monument box adjustments as outlined in paragraph B, C, D and F of this section. All cost pertaining thereto shall be included in the respective contract prices for other items as listed in section 00412 – Unit Prices.

Payment for monument box adjustments as outlined in paragraph E of this section shall be made at the contract unit price per each for “Land Corner and Control Monument Adjustment” as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials and equipment necessary to complete the item




### STANDARD LAND CORNER MONUMENT

(No Scale)

Note:

Disk marking for section corners shall comply with Missouri DNR Land Survey Division Standards of Practice 10CSR30-3.060 for monument markings in Missouri and with Kansas Society of Land Surveyors Standards of Practice #1 for monuments in Kansas.

AMERICAN PUBLIC WORKS ASSOCIATION	
	KANSAS CITY
	METROPOLITAN CHAPTER
SURVEY MONUMENT BOX	STANDARD DRAWING NUMBER FIGURE SMB
	ADOPTED: APRIL 17, 1996

CITY OF FOUNTAINS  
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## CLEANUP OPERATIONS

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

- A. General:** After a minimum period of fourteen (14) hours from the placement of concrete, the Contractor shall be responsible for cleanup operations related to completed concrete work as follows:
1. Within a maximum period of three (3) working days after tear-out of drive approaches, walk-ins and walk-outs, sidewalks, and curbs, the new concrete shall be placed.
  2. No debris shall be placed in the street during the construction process. The contractor shall remove all debris as it is created. Debris stockpiling of any kind shall be prohibited.
  3. Removal of forms, backfilling of the form excavation and debris removal from sidewalks and parkway areas shall be accomplished within three (3) working days after the concrete placement. The backfilled areas within one foot of new concrete shall not be compacted until the concrete has cured a minimum of three (3) days. Backfill shall be in accordance with Sections 2100, 2200 and 2300, "Standard Specifications and Design Criteria", and Section 02920 of this Project Manual.
  4. The contractor shall not operate any mechanical equipment, such as a bobcat, on or within two (2) feet of newly placed concrete to perform the cleanup operations. The contractor shall not work on or place materials on the newly placed concrete for a minimum of 24 hours. The contractor is responsible to repair or replace any locations showing visible marring of the concrete caused during the performance of the cleanup operations.
  5. Within a maximum period of ten (10) working days after the concrete is placed, the Contractor shall be required to complete all joint caulking, pavement restoration and sodding. If construction is being performed during periods other than designated sod seasons, all unsodded locations shall be completed within ten (10) working days after the beginning of the next sod season. The Contractor shall coordinate the construction with local residents and/or businesses by door-to-door signage. This notification shall include the date of distribution, the length of time in which the sodding or hydro seeding will be placed, as indicated on the sample provided on page 01740-3 of this section. The Contractor shall be responsible for providing and distributing the notifications at least 24 hours after concrete is placed.

6. If cleanup, backfilling, sodding, joint caulking or pavement restoration is not accomplished within the above limits, all tear-out operations shall cease until these items are finished or as directed by the Engineer.
7. Measurement for payment of completed items will be subject to the completion of these cleanup operations.
8. Construction will be permitted along one side of alternating blocks, one side of the street at a time, or any other combination, provided that both sides in any one block are not under construction at the same time.
9. The Contractor shall be limited to working no more than two (2) consecutive blocks on a street at any one time.

**B. Seasonal- Construction Periods:** The following conditions will apply to construction performed in the period beginning November 1st and ending March 15th.

1. Tear-out operations shall be limited to an amount that will be replaced the next day. Tear-out shall not begin if unfavorable conditions for concrete placement are forecast for the next day.
2. All cleanup operations, as stated above, shall be completed within three (3) calendar days of concrete placement.

**C. Payment:** No separate payment will be made for "Cleanup Operations". All costs pertaining thereto shall be included in the contract prices for other items as listed in section 00412 – Unit Prices.



**SAMPLE NOTIFICATION TO PROPERTY OWNERS**

**DATE:** \_\_\_\_\_

SORRY to inconvenience you, but if you wish to remove your car from the driveway, you must do so before 8:00 a.m. tomorrow.

PROTECTION of the new sod or hydro seed for Twenty-one DAYS after it is placed.

WEATHER permitting, the inconvenience of our work should last no longer than 10 DAYS. Please caution children to keep clear of the work.

**THANK YOU FOR YOUR COOPERATION**

CONSTRUCTION BY: \_\_\_\_\_

Public Works Department  
of Kansas City, Missouri  
Construction Office (816) 513-6979



## EMBANKMENT

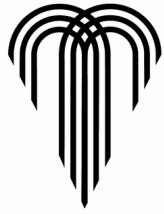
Project Number

**EV 3040**

Project Title

**IDIQ Traffic Safety Improvements**

- A. General:** This section covers operations requiring earth fill greater than six (6) inches below finished grade, placed and compacted prior to preparation for "Landscaping", as further described in Section 02920 of this Project Manual. Operation and materials shall be as specified in Section 2102.6 of the "Standard Specifications and Design Criteria".
- B. Payment:** Payment will be made at the contract unit bid price per cubic yard for "Embankment" as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials and equipment necessary to complete the item.



## UNTREATED COMPACTED AGGREGATE

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. **General:** Untreated Compacted Aggregate shall be in accordance with Section 2202 of the "Standard Specifications and Design Criteria."
- B. **Payment:** If it has been determined by the Engineer that additional aggregate is necessary in excess of six (6) inches below the finished subgrade, payment for said additional aggregate will be made at the contract unit bid price per ton for "Untreated Compacted Aggregate" as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials and equipment necessary to complete the item.



## COLD MILLING ASPHALTIC PAVEMENT SURFACE

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. **Description:** This item shall consist of cold milling the existing asphalt surface with equipment, which shall mill or shave the surface irregularities out of the existing asphaltic pavements to produce a smooth surface and, in some cases, to cut the pavement down to predetermined depths.

All cold milling work and equipment shall conform to Section 2207 of the APWA Standard Specifications and Design Criteria as supplemented by KCMO.

- B. **Cleanup:** Before milling has begun, the Contractor shall clean all dirt, trash, and debris from the street. This material shall not be mixed with the milled material. Immediately after the street has been milled, all loose asphalt and debris shall be removed to the satisfaction of the Engineer. The Contractor shall remove all asphalt material and debris left in the gutter and any material and debris that adheres to the curb and gutter. Final measurements for each street will not be made until said cleanup has been approved by the Engineer.

C. **Details:**

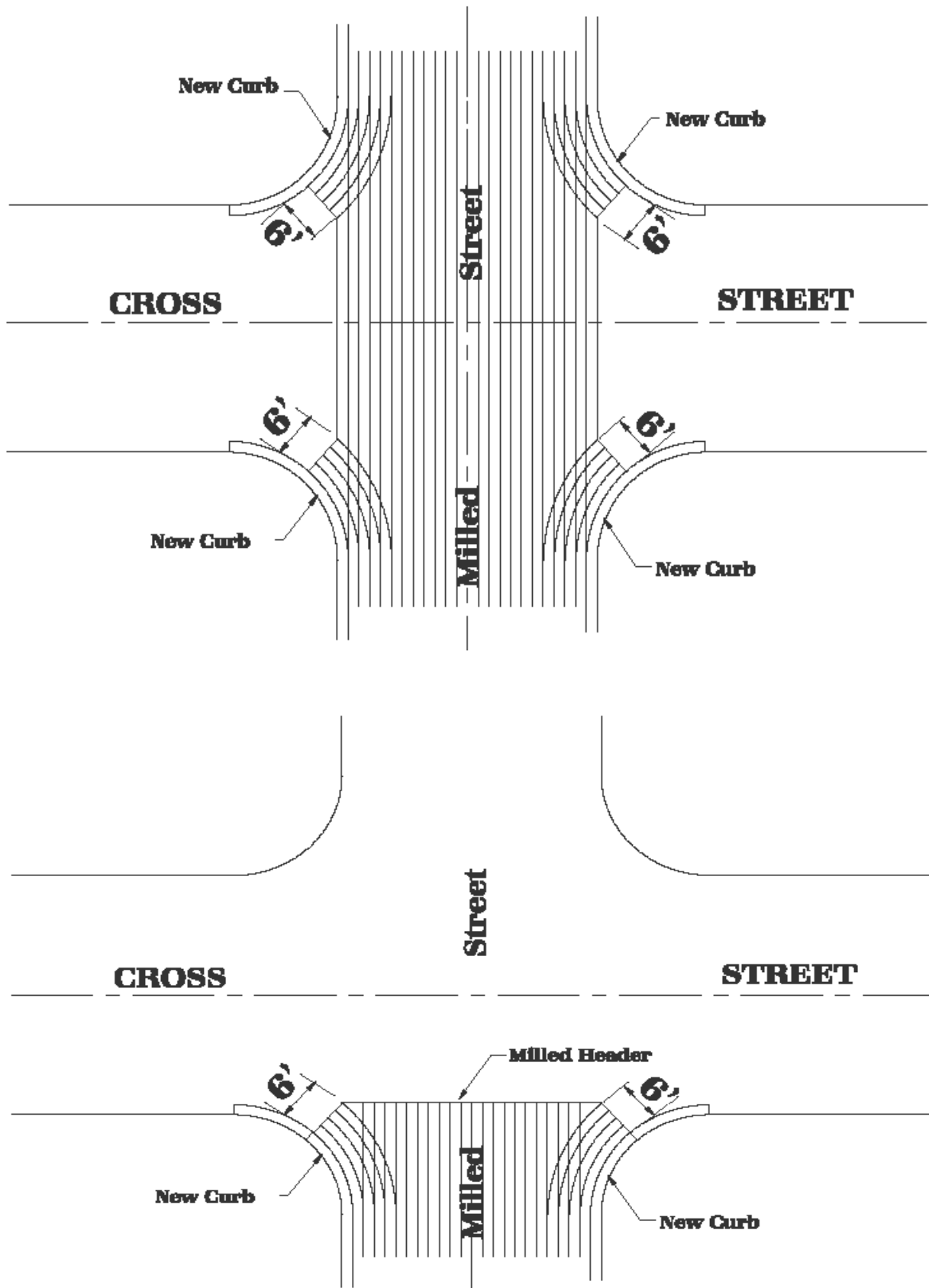
1. Sufficient passes shall be made with a cold milling machine in order to expose a substantial amount of curb face so that the new overlay will match the new gutter line elevation. The cut should be the maximum required depth at the curb face and decrease to a 0 inch depth at a point away from the curb face. The maximum depth at the curb face and 0 inch depth point will depend on individual conditions, such as type of curb and existing grade of the street. Generally speaking, a minimum of 1-1/2 inch depth at the curb face and 0 inch depth 4 feet away will be required but conditions may require the entire street width to be milled.
2. Headers shall be cut at all intersecting streets in order to allow for the new overlay to approximately match the existing asphalt elevation of the intersecting street. The cut should be the maximum required depth at the edge of the intersecting street and decrease to a 0 inch depth at a point approximately 4 feet away.
3. Consideration shall be given to the overall grade and cross-slope being created for the newly paved street. Cold milling shall be done in any area that would require asphalt to be placed less than 1-1/2 inches deep.
4. All passes with the cold milling machine shall be parallel to the curb except for the passes cutting headers at intersecting streets.

5. The texture of the milled pavement shall be smooth and uniform.
6. The groove depths shall not exceed ¼ inch and the groove spacing shall not exceed 1 inch.

**D. Measurement:**

1. Asphalt pavement milling performed and provided by these specifications shall be measured by the square yard of pavement milled at the completion of all cold milling work. The Project Engineer and Job Superintendent will perform all measurements and will agree to the area of work satisfactorily performed at the end of each day.
2. The City will require no weight tickets on the material retained by the Contractor. The City makes no guarantee of the tonnage of cold milled material generated.
3. No separate payment will be made for measuring, weighing vehicles, or disposing of millings. All costs pertaining to this work shall be included in other bid items.

**E. Payment:** Payment for cold milling shall be made at the price bid per square yard of pavement milled.





## SELECTIVE DEMOLITION

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. **Disposal of Demolition Debris:** All demolition debris shall be disposed of at a legal landfill or at a site where dumping of such materials is allowed under federal, state and local laws.

Demolition debris is defined as used building materials resulting from demolition, and waste materials from the construction of buildings or site clearing. Broken concrete, reinforcing steel, and asphalt are some of the many things considered to be demolition debris.

- B. **B.Z.A. Approved Dumpsites:** In Kansas City, demolition debris dumpsites are permitted by the Board of Zoning Adjustment. These sites are not obligated to take your debris.

For further information on approved dumpsites contact: Diane Binckley, City Development, 15th Floor, City Hall, 513-2874. Other sites are available in the metropolitan area.

- C. **Earthen Landfills:** Soil, rock, and gravel are not considered to be demolition debris and can be placed at properly permitted locations. Obtain grading permits, erosion control permits, and floodplain certificates as applicable (from Codes Administration in KC). Broken concrete, with reinforcing closely trimmed and removed, may be placed in some earthen landfills, subject to approval by the landfill owner.

- D. **Submittals:** At the pre-construction conference, CONTRACTOR shall submit the proposed sites for disposal of demolition debris and earthen material, in writing, to the OWNER. Once work starts, all substitute sites shall be submitted in writing to the OWNER. Submittals shall include a copy of the permit authorizing disposal at each site whether in or out of the City Limits.

Owner's Representative will confirm that the proposed sites, both within and out the City Limits, are properly authorized. Owners Representative will advise Contractor in writing if a disposal site is not properly authorized. Lack of a response to inquiry is sufficient cause to reject a disposal site.

- E. **Remedy:** Failure to abide by these contract requirements to use only approved dumpsites, whether intentional or inadvertent, is deemed to be a major violation of the contract. In the event of such violation, the City shall have two special remedies, in addition to local ordinance penalties. It may, at its sole option:

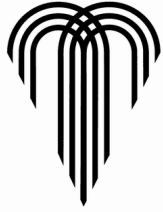
1. Direct that the materials which have been dumped at a site other than the approved one be moved to the approved location, and that the site where the unapproved dumping took place to be restored to its previous condition, or

2. Terminate the contract immediately by written notice to the CONTRACTOR, in which case the CONTRACTOR shall have no right to cure its default. The CONTRACTOR shall be entitled to be paid for the completed portion of his contract less the expense to remedy the unauthorized dumping. Such payment shall be made only after the work is complete and all costs are finally determined.

Before either of such remedies is invoked, the CONTRACTOR will be given five (5) Working Days written notice of the alleged violation. During the five (5) day period, the contractor may submit information for consideration by the OWNER. Due to the nature of illegal dumping, OWNER need not have proof positive; “alleged” is herewith adjudged sufficient evidence to terminate this contract.

- F. Payment:** No separate payment will be made for “Demolition Disposal”. All costs pertaining thereto shall be incidental to the other contract pay items.





## CONCRETE SAWING

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. General:** Where part of the existing concrete curb, sidewalk, driveway, and asphaltic or Portland Cement Concrete pavement is to be removed at locations other than contraction (tooled) or expansion joints, the existing concrete shall be cut with a concrete saw to a minimum depth of two (2) inches or one-half (1/2) the existing slab, whichever is greater. Water shall be used as required to control dust during sawing operations. In order to provide true alignment and a vertical face against which the new concrete will be placed, greater depth of cut may be necessary. If the remaining concrete is chipped or cracked during sawing or removal, it shall be resawed beyond the limits of the chip or crack, along a line parallel to or perpendicular with the nearest joint, and/or as directed by the Engineer to assure uniform appearance.
- B. Payment:** No separate payment will be made for concrete sawing. All costs pertaining thereto shall be included in the contract prices for other items as listed in section 00412 – Unit Prices.



## CONCRETE REMOVAL

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. Removal:** When it is determined by the Engineer that an existing sidewalk or driveway or any portion of sidewalk or driveway should be removed and not replaced, (except on tree block outs) the area not replace with new concrete shall be restored as specified in Section 02920 entitled "Landscaping".
- B. Payment:** No separate payment will be made for concrete removal, disposal of old concrete, backfill, sodding and cleanup. No payment will be made for curb removal. All costs pertaining thereto shall be included in the contract prices for other items as listed in section 00412 – Unit Prices. No payment will be made for curb removal.



## TREE REMOVAL AND/OR STUMP REMOVAL

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. General:** This work shall be done in accordance with Section 2100 of the "Standard Specifications and Design Criteria", Division II, except as otherwise specified.

The Contractor shall remove all trees and stumps as shown on the plans, listed in Section 01115 – Drawing Index, in the Tree Inspection report provided by the Kansas City Parks and Recreation Forestry Section, or as designated by the Engineer. All trees and stumps removed shall be removed and disposed of to a minimum depth 12 inches below the ground line or subgrade. All trees removed shall be replaced with a new tree as specified in Section 02935 of this Project Manual.

Every effort shall be made to save trees that are in conflict with the work. This shall include the use of the “Block Out For Trees” details shown in Section 01115 of this Project Manual for trees listed as “Requires 42” blocks” or “42” blocks” in the comment section of the Tree Inspection report. Only trees with prior approvals from the City Forester may be removed.

See the “Additional Right-of-Way for Trees” detail shown in Section 01115 of this Project Manual for trees listed in the comment section of the Tree Inspection report that require additional Right-of-Way. Additional Right-of-Way will be negotiated with the property owner by the City. These trees may be removed if additional Right-of-Way cannot be acquired by the City.

For trees listed as “modified curb” or “modified forms” in the comment section of the Tree Inspection report shall require minimal disturbance to the tree root system. This shall be done by the use of minimal excavation and removal, by hand if necessary, of the curb adjacent to the tree. In addition, the contractor shall use masonite forms supported by the tree root system or other methods to achieve minimal excavation as approved by the Engineer.

Section 00412 – Unit Prices includes an estimated number of “Tree Removal”. The actual number of “Tree Removal” may be greater, less, or none at all. The contract unit bid price for any change in quantity shall not be adjusted.

- B. Payment:** Payment will be made at the contract unit price per each for "Tree Removal" or "Stump Removal" as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials, and equipment necessary to complete this and no additional compensation shall be allowed.

No separate payment will be made for “Block Out For Trees”, Additional Right-of-Way for Trees”, “modified curb”, or “modified forms” as listed above. All costs pertaining thereto shall be included in the contract prices for other items as listed in section 00412 – Unit Prices.



## TREE ROOT PRUNING

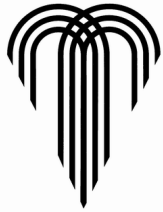
Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. General:** Tree roots cannot be severed, pruned, or removed without approval of the Kansas City Parks Department. If tree roots are in conflict with the work, the contractor shall contact the City Forester at (816) 513-9550 for review and approval. Tree roots approved for removal shall be removed to a point at least six (6) inches below and six (6) inches outside the limits of the proposed flatwork. Cuts shall be smooth and perpendicular. Severed roots larger than two (2) inches in diameter shall be painted with either a pruning paint or an asphalt base paint. Clearance between the edge of the sidewalk or driveway and tree trunk shall be at least six (6) inches and the sidewalk shall be neatly blocked out when necessary. Location of contraction and expansion joints shall be adjusted to align with resulting changes in sidewalk width. The Parks Department will not remove roots for the Contractor and suitable provisions must be made by the Contractor to provide the necessary equipment to effect the removal of roots.

In areas where a tree has been removed but the roots or stump have not, the contractor must remove the roots and/or stump to a point at least six (6) inches below and six (6) inches outside the limits of the proposed flatwork.

- B. Payment:** No separate payment will be made for "Tree Root Pruning", regardless of size. All costs pertaining thereto shall be included in contract prices for other items as listed in section 00412 – Unit Prices.



## UTILITY ADJUSTMENTS

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

### **A. Water Meter Adjustment:**

1. **General:** The Contractor shall be responsible for locating all utilities prior to the work commencing. Water meters, which are affected by the work, shall be adjusted as necessary to conform to the "Regulations of the Water Department" as published by the Water Department of Kansas City, Missouri. The completed items shall be subject to the approval of the Director of the Water Department.
2. **Payment:** Payment will be made at the contract unit price per each for "Water Meter Adjustment" as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all the labor, materials and equipment necessary to complete the item.

### **B. Water Valve and Cut-Off Adjustment:**

1. **General:** The Contractor shall be responsible for locating all utilities prior to the work commencing. Water valves and water cut-offs which are affected by the work shall be adjusted as necessary to conform with the "Regulations of the Water Department" as published by the Water Department of Kansas City, Missouri. Once adjusted to finish grade, and following the installation of sod, each water valve box shall be blown clear of debris with compressed air, and the Contractor shall be responsible for the protection of surrounding structures and/or vehicles which may be affected by this procedure. The completed items shall be subject to the approval of the Director of the Water Department. **Water valve covers and stems shall be provided by the contractor.**
2. **Metal Water Valve:** Metal Water Valve Covers and Stems will be used in any walking or driving surface. **Metal water valve covers and stems shall be provided by the contractor.**
3. **Payment:** Payment will be made at the contract unit price per each for "Water Valve and Cut-Off Adjustment" as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all the labor, materials and equipment necessary to complete the item.

### **C. Gas Valve Adjustment:**

1. **General:** The Contractor shall be responsible for locating all utilities prior to the work commencing. The Contractor shall not place new concrete over a gas valve cover that has not

been adjusted to the new grade elevation. The Contractor shall notify the appropriate Gas Service Company District Supervisor at least two (2) days in advance, of any tear-out location which involves a gas valve cover within the actual concrete area. This notification shall include the specific location and the date of the scheduled tear-out.

2. **Payment:** No separate payment will be made for "Gas Valve Adjustment". All costs pertaining thereto shall be included in the contract prices for other items as listed in section 00412 – Unit Prices.

#### **D. Sewer Manhole Adjustment:**

1. **General:** All sewer manhole covers shall be adjusted to the new elevation of the street surface, sidewalk, driveway or yards. Adjustable sewer manhole assemblies shall be used in all paved areas and will be furnished by the CONTRACTOR. Adjustable sewer manhole assemblies are not required in non-paved areas. The adjustable manhole assemblies shall be installed according to the manufacturer's recommendation. The new manhole assembly shall be set at ¾" to allow future lowering and raising of the manhole. Once installed or adjusted, internal or external seals must be installed in all manholes as per KCMO Standards.
2. **Payment:** Payment for this item shall be made at the contract unit bid price for "Sewer Manhole – Adjustment" per each, as listed in the Proposal. Such payment shall constitute full compensation for all labor, equipment and materials necessary to complete this item. Subsurface conditions that require additional work beyond manufacturer's recommendations for installation of adjustable manhole assemblies shall be included in the Unit Bid Price.

#### **E. Fire Hydrant Replacement:**

1. **General:** Installing a new hydrant in place of an existing hydrant that cannot be extended to facilitate vertical adjustment. Hydrant to be provided by Contractor and shall be in conformance with the latest "KCMO Standard and Specifications for Water Main Extensions and Relocations" and "KCMO Rules and Regulations for Water Services Lines" as published by the Water Department of Kansas City, Missouri.
  - a. The Contractor shall furnish at no extra cost to the Water Department any bends or fittings necessary to make proper vertical alignment of hydrants.
  - b. The exact locations and sets of hydrant installations may be adjusted according to field conditions and the location of the existing mains, at the discretion of the Water Department.
  - c. All work shall be done in accordance with the "KCMO Standard and Specifications for Water Main Extensions and Relocations"

- d. The interior of the hydrant branch shall be swabbed or powdered with a hypo-chlorite solution or powder for disinfection.
- e. All joints shall be left exposed, to allow visual observation for leakage under pressure, prior to backfilling.

It is the contractor's responsibility to expose and determine if the existing tee branch for the existing hydrant is Lead joint or Mechanical joint.

If the existing tee branch for existing fire hydrant encountered is found to be lead joint, the hydrant assembly shall be replace in accordance with section E. 2. of this specification.

If the existing tee branch for existing fire hydrant encountered is found to be Mechanical joint the hydrant assembly shall be replace in accordance with section E. 3. of this specification.

**2. Existing Hydrant With Lead Joint Tee:**

- a. Coordinate supply main shut with WSD Pipeline Division.
- b. Excavate and remove existing hydrant, Return to the Water Department's store at 2409 East 18th Street. Plug existing branch piping, remove hydrant branch valve or remove ring and cover and fill existing valve box.
- c. Remove lead joint tee from distribution main.
- d. Install new MJ Tee with MJ solid sleeves and necessary DIP.
- e. Pour thrust block as necessary for new MJ Tee.
- f. Install new KCMO Spec. hydrant assembly with new branch valve, fittings and branch piping as necessary.
- g. Restore disturbed area including any grading and seeding as necessary.

**3. Existing Hydrant with Mechanical Joint:**

- a. Remove the existing hydrant and return to the Water Department's store at 2409 East 18th Street.
- b. Install new KCMO Spec. Hydrant assembly with new branch valve, fittings and branch piping as necessary.

- c. All hydrant sets are to be made with anchoring fittings, CLOW F-1211, F-1215, F1217, F-1218, or approved equal. The Contractor may at his option; use approved restraining glands in lieu of anchoring fittings.
- 4. **Payment:** Payment will be made at the contract unit bid price per each for "Fire Hydrant Replacement" as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials (including pipe and hydrant) and equipment necessary to complete the item.

**F. Fire Hydrant Relocation:**

- 1. **General:** Utilizing existing hydrant tee, laterally adjusting hydrant location. Hydrant to be provided by Contractor and shall be in conformance with the latest "KCMO Standard and Specifications for Water Main Extensions and Relocations" and "KCMO Rules and Regulations for Water Services Lines" as published by the Water Department of Kansas City, Missouri.
  - a. The Contractor shall furnish at no extra cost to the Water Department any bends or fittings necessary to make proper vertical alignment of hydrants.
  - b. The exact locations and sets of hydrant installations may be adjusted according to field conditions and the location of the existing mains, at the discretion of the Water Department.
  - c. All work shall be done in accordance with the "KCMO Standard and Specifications for Water Main Extensions and Relocations"
  - d. The interior of the hydrant branch shall be swabbed or powdered with a hypo-chlorite solution or powder for disinfection.
  - e. All joints shall be left exposed, to allow visual observation for leakage under pressure, prior to backfilling.

It is the contractor's responsibility to expose and determine if the existing tee branch for the existing hydrant is Lead joint or Mechanical joint.

If the existing tee branch for existing fire hydrant encountered is found to be lead joint the hydrant assembly shall be replace in accordance with section F. 2. of this specification.

If the existing tee branch for existing fire hydrant encountered is found to be Mechanical joint the hydrant assembly shall be replace in accordance with section F. 3. of this specification.

**2. Existing Hydrant with Lead Joint:**

- a. Coordinate supply main shut with WSD Pipeline Division.



- b. Excavate and remove existing hydrant, Return to the Water Department's store at 2409 East 18th Street. Plug existing branch piping, remove hydrant branch valve or remove ring and cover and fill existing valve box.
- c. Remove lead joint tee from distribution main.
- d. Install new MJ Tee with MJ solid sleeves and necessary DIP.
- e. Pour thrust block as necessary for new MJ Tee.
- f. Install new KCMO Spec. hydrant assembly with new branch valve, fittings and branch piping as necessary.
- g. Restore disturbed area including any grading and seeding as necessary.

**3. Existing Hydrant with Mechanical Joint:**

- a. Remove the existing hydrant and return to the Water Department's store at 2409 East 18th Street.
- b. Install new KCMO Spec. hydrant assembly with new branch valve, fittings and branch piping as necessary.
- c. All hydrant sets are to be made with anchoring fittings, CLOW F-1211, F-1215, F1217, F-1218, or approved equal. The Contractor may at his option; use approved restraining glands in lieu of anchoring fittings.

- 4. Payment:** Payment will be made at the contract unit bid price per each for "Fire Hydrant Relocation" as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials (including pipe and hydrant) and equipment necessary to complete the item.

**G. Fire Hydrant Removal:**

- 1. **General:** Existing fire hydrant removal will be necessary where the hydrant is not required due to new construction as determined by Field Engineer and the Water Department.
- 2. **Construction:**
  - a. At those locations on the plans where there is a conflict with the existing fire hydrant, the hydrant, hydrant valve, and hydrant tee shall be removed and replaced with new DIP and solid sleeves, backfill and restore excavations in accordance with these specifications.

- b. All work shall be similar to that described above for Fire Hydrant replacement and in accordance with the "KCMO Standard and Specifications for Water Main Extensions and Relocations"
- 3. **Payment:** Payment will be made at the contract unit bid price per each for "Fire Hydrant Removal" as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials (including pipe) and equipment necessary to complete the item.

#### **H. Fire Hydrant Installation:**

- 1. **General:** Installing a new hydrant where hydrant currently exist and is deemed necessary by WSD. Hydrant will be furnished without charge by Contractor. The work shall be in strict conformance with the latest KCMO Standards and Specifications for Water Main Extensions and Relocations; and, is available on the City website at <http://www.kcmo.org>. The hypertext path to click is as follows: Departments; Water Services; information link; Water Main Extension at Relocation Project; Standards and Specifications.
  - a. All new hydrant settings shall be as shown on the Plans and shall include all necessary excavation and backfill to make the installation complete.
  - b. The Contractor shall furnish all labor and material necessary in laying out the Work. The Contractor shall be responsible for setting any offset stakes he may require. The Engineer shall approve the staked location of each hydrant before its installation.
- 2. **Products:**
  - a. Hydrants shall be current Kansas City, MO. pattern hydrants manufactured especially for WSD. Hydrants shall be Clow Medallion, M&H 129i, or Mueller Centurion.
- 3. **Execution:**
  - a. The areas around each hydrant valve shall be thoroughly compacted to prevent settlement of these areas.
  - b. The weep holes of the hydrant shall be kept clear and free to drain with 1-½ C.Y. of coarse stone (¾" clean minimum).
  - c. Hydrant shall stand plumb and when placed behind curbs, the centerline of the hydrant shall be at least twenty-four (24) inches from the back of the curb or 4' from the edge of pavement when there is no curb. Hydrant shall not be set in drainage ditch.
  - d. Hydrant shall be rotated so as to have the nozzle facing the street or rotated to face any direction as required by the WSD.
  - e. Hydrants are to be installed with mechanical joint anchoring fittings or approved restraint devices. Refer to Section 02669 – "Thrust Restraints" of the Standards and Specifications.

- f. Hydrants are to be installed in accordance with Details 02645-1, 02645-2, and 02645-3 (attached) in Section 02645 – “Hydrants, Blowoff and Flushing Assemblies” of the Standards and Specifications.
- g. After installation and before hydrants are placed in service, Contractor shall field apply two separate coats of all surface spray enamel paint, in accordance with paint manufacturers recommendations, to completely cover each hydrant dome in accordance with the following:

Hydrants connected to 12” or larger mains

Krylon 5816 Green (or approved equal)

Hydrants connected to mains smaller than 6”

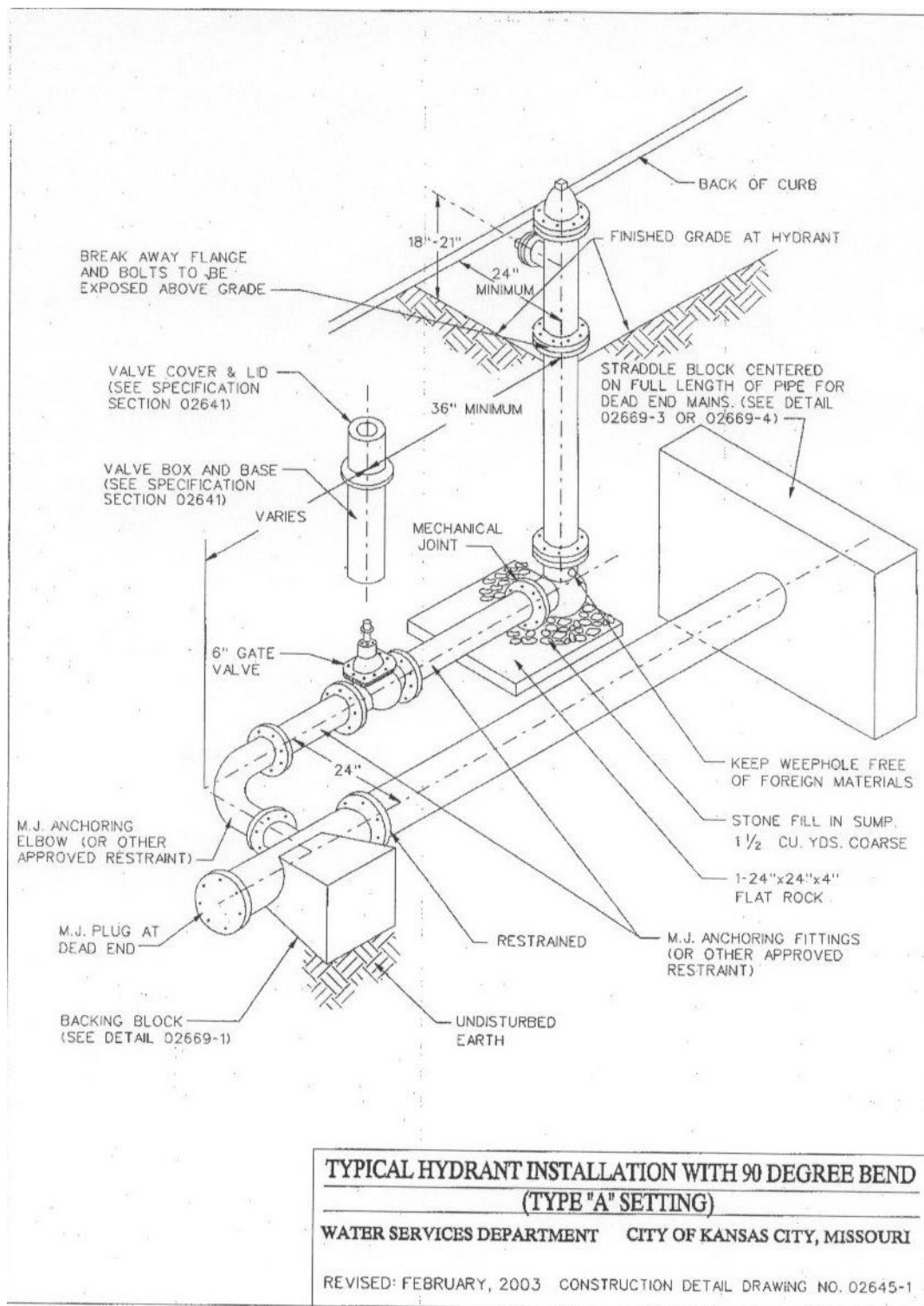
Krylon 5814 Red (or approved equal)

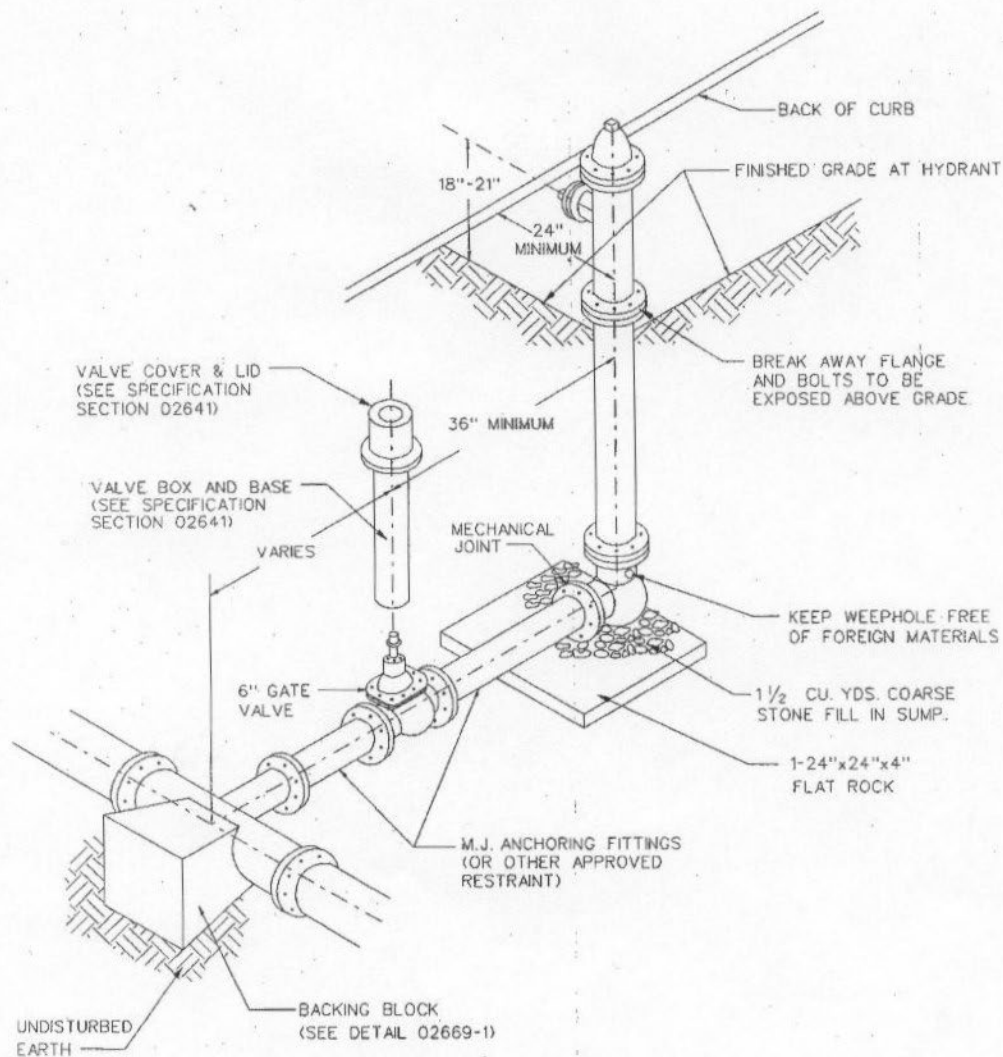
Hydrants connected to 6” or larger mains, but smaller than 12” mains.

Krylon 5812 Black (or approved equal)

This color-coding is intended to provide firefighters and other emergency workers a permanent, quick visual reference to indicate the size of water main connected to each hydrant.

- 4. **Payment:** Payment will be made at the contract unit bid price per each for “Fire Hydrant Installation” as listed in Section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials (all hydrant sets, including all pipe, valves, fittings, hardware, and polyethylene encasement) and equipment necessary to complete the item.





**NOTE:**

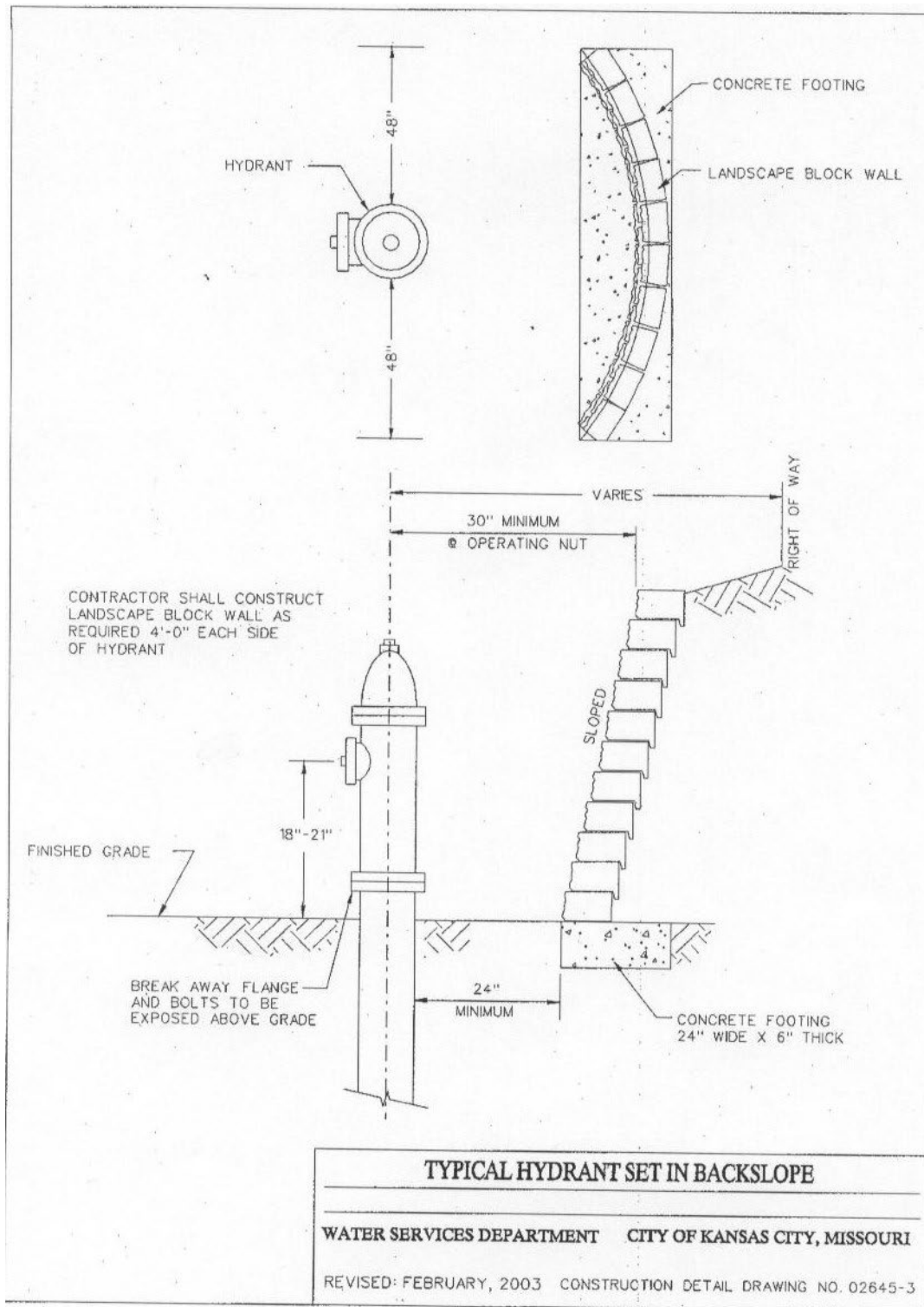
1. VALVE BOX AND BASE CAN BE ONE PIECE, OR TWO PIECES AS SPECIFIED IN SECTION 02641.

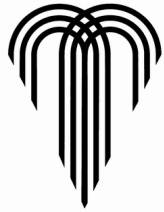
**STRAIGHT SET HYDRANT INSTALLATION**

**(TYPE "B" SETTING)**

**WATER SERVICES DEPARTMENT CITY OF KANSAS CITY, MISSOURI**

REVISED: FEBRUARY, 2003 CONSTRUCTION DETAIL DRAWING NO. 02645-2





## SITE GRADING

Project Number

**EV 3040**

Project Title

**IDIQ Traffic Safety Improvements**

### A. General

Grading, including excavation and fill embankment shall be in accordance with Section 2100, Division II Construction and Materials Specifications, and sub grade preparation in accordance with Section 2200, of Division II Construction and Materials Specifications, except as otherwise specified herein.

Excavation on this project shall be considered as unclassified excavation.

All suitable material removed by excavation may be used for preparation of embankment as required to complete the work. All material that are not incorporated into the construction of this project shall be disposed of at a legal landfill under federal, state, and local laws.

### B. Payment

All Payments shall be included under "Embankment" as listed in Section 00412-Unit prices, for which cost for "Grading" shall be included in the contract prices for other items as listed in section 00412- Unit Prices.



## MODULAR WALL

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. General:** This work includes furnishing and installing modular block wall units to the lines, grades, and typical sections determined by the Engineer and as specified herein. Work shall include preparing the foundation soil, furnishing and installing leveling pad, unit fill, geogrid reinforcement and backfill. Retaining-walls shall be Keystone Standard Straight Retaining Wall System or approved equal. Color of units shall be approved by the Engineer.

Concrete modular block retaining wall design and installation shall comply with the manufacturer's specifications and an accepted design methodology, such as NCMA Design Manual for Segmental Retaining Walls. Design calculations and shop drawings shall be submitted to the Engineer with a Professional Engineer's Seal (in Missouri) and shall be approved by the Engineer.

Any wall taller than 30" above the ground shall have a fence installed as shown in the specifications. The fence shall be Ameristar Montage Majestic 2-Rail (Flush Bottom) or approved equal. The fence shall meet the requirements of KCMO-APWA section 2308.

- B. References:** Where specifications and reference documents conflict, the Engineer shall make the final determination of applicable document.

### Segmental Retaining Wall Units

- ASTM C1372 – Standard Specification for Segmental Retaining Wall Units
- ASTM C140 – Standard Test Methods of Sampling and Testing Masonry Units
- ASTM C1262 – Freeze-Thaw Durability of Concrete Units

### Geosynthetic Reinforcement

- ASTM D4595 – Tensile Properties of Geotextiles by the Wide-Width Strip Method
- ASTM D5262 – Test Methods for Evaluating the Unconfined Creep Behavior of Geosynthetics
- ASTM D6638 – Determining Connection Strength Between Geogrid and Segmental Unit
- GRI:GG1 – Single Rib Geogrid Tensile Strength
- GRI:GG5 – Geogrid Pullout

### Soils

- ASTM D698 – Moisture Density Relationship for Soils, Standard Method
- ASTM D442 – Gradation of Soils
- ASTM D424 – Atterberg Limits of Soils
- ASTM D4318 – Liquid Limit, Plastic Limit and Plasticity Index of Soils



#### Drainage Pipe

- ASTM 3034 – Specification for Polyvinyl Chloride (PVC) Plastic Pipe
- ASTM D1248 – Specification for Corrugated Plastic Pipe

#### Engineering Design

- NCMA Design Manual for Segmental Retaining Wall
- NCMA SRWU-1 Test Method for Determining Connection Strength of SRW
- NCMA SRWU-2 Test Method for Determining Shear Strength of SRW

- C. **Submittals:** Submit manufacturer's product data and certifications for approval prior to the start of the work. The submittal package shall include, but is not limited to, actual test results for tension/creep, durability/aging, construction damage, geogrid/facing connection, pullout, and quality control.

Submit certification, prior to the start of work, that the retaining wall has been used successfully utilized on a minimum of five (5) similar projects, ie. height, soil fill types, erection tolerances, etc.

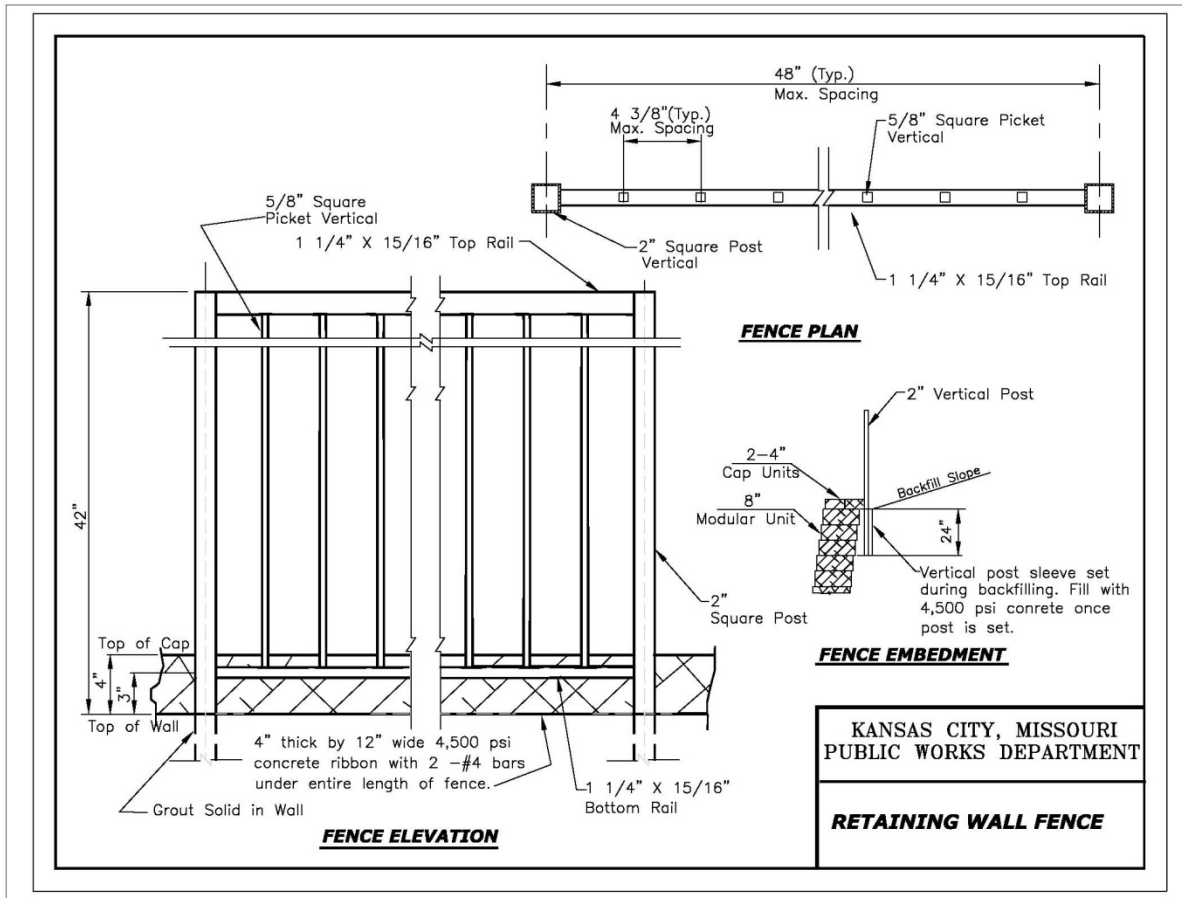
Submit test reports documenting strength of specific modular concrete unit and geogrid reinforcement connection. The maximum design tensile load of the geogrid shall be equal to the laboratory tested ultimate strength of geogrid/concrete retaining wall unit connection at a maximum normal force limited by the "Hinge Height" of the structure divided by a safety factor of 1.5. The connection strength evaluation shall be performed in accordance with NCMA test method SRWU-1.

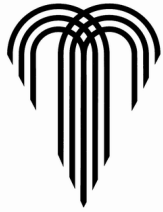
Submit engineer plans prepared and sealed by a professional engineer experienced with Mechanically Stabilized Earth retaining wall systems and registered in Missouri. Perform engineering design, techniques, and material evaluations in accordance with NCMA Design Manual for Segmental Retaining Walls (latest revision).

- D. **Measurement:** "Modular Retaining Wall" shall be measured by the square feet of the face of the wall constructed above grade. "Fencing" shall be measured by the linear foot of fence installed along the retaining wall.
- E. **Payment:** Payment for modular retaining walls will be based on constructed quantity and will be made at the contract unit bid price per square foot for "Modular Retaining Wall" as listed in section 00412-Unit Prices. Such payment and price shall constitute full compensation for designing, furnishing and installing all wall materials, leveling pad, granular backfill, geogrid, filter fabric, underdrain pipe, and backfilling and for all labor, materials, and equipment necessary to complete the item.

Payment for fencing will be based on constructed quantity and will be made at the contract unit bid price per linear foot for "Fence" as listed in section 00412-Unit Prices. Such payment and price shall constitute full compensation for furnishing and installing all fence materials, footings, and the concrete

ribbon, and for all labor, materials, and equipment necessary to complete the item.





## ASPHALTIC CONCRETE, HOT RECYCLING, AND RESURFACING

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. **General:** Except as modified herein, the recycled asphaltic concrete shall be equal to that produced as new materials meeting Section 2205 titled Asphaltic Concrete Surface and Base of the Standard Specifications and Design Criteria. The Reclaimed Asphalt Pavement (RAP) and/or Reclaimed Aggregate Material (RAM) shall represent a maximum of 30 percent of the composition of all surface mixtures and maximum of 50 percent of the composition for all base mixtures. Virgin Surface shall be used on all new construction projects and on restoration projects recycled surface or virgin surface may be used. Recycled base may be used as an alternate on any project. The Recycled Asphaltic Concrete, if required, shall contain a combination of RAP, RAM, coarse aggregate, fine aggregate, mineral filler, asphalt cement, recycling agent, anti-stripping agent and approved additives, to produce an acceptable mixture.

The City makes no guarantee on quantities of the milled material to be generated. The Contractor should make his own calculations of milled material to be generated based on the square yards to be cold milled.

The Contractor will be expected to lay the quantity of recycled mix used in the proposal regardless of the percent composition used. The Contractor will have to obtain reclaimed material from another source, at no cost to the City, or lay virgin material at the recycled unit bid price if no reclaimed material remains from the supply generated by this contract.

The Contractor shall commence resurfacing only after concrete flat work and utility adjustments have been made.

The Contractor shall clean all dirt, trash, and debris from the street before resurfacing. After the street has been resurfaced, all loose asphalt and debris shall be removed to the satisfaction of the Engineer. The Contractor shall remove all asphalt material and debris left in the gutter. All costs pertaining to this work shall be included in other bid items.

- B. **Materials Evaluation:** The RAP and/or RAM shall have the following tests performed in addition to the usual Marshall procedures.
1. A sieve analysis shall be performed on the RAP and/or RAM in accordance with ASTM C117, Test Method for Material Finer than No. 200 Sieve in Mineral Aggregate by Washing and ASTM C136, Method for Sieve Analysis of Fine and Coarse Aggregates.

2. The Asphalt content shall be determined for the RAP using method A of ASTM Designation D2172, Test Method for Quantitative Extraction of Bitumen from Bituminous Paving Mixtures where the RAP content exceeds 30%. For Mixtures with RAP contents less than 30%, asphalt content may be determined using ASTM D6307.

3. The asphalt cement used shall be determined as follows:

For RAP contents of up to 20%, the asphalt grade shall be as specified in the mix design.

For RAP contents from 20% up to 30%, the asphalt grade shall be decreased one temperature range.

For RAP contents from 30% to 50%, the asphalt grade of the new asphalt shall be determined using the procedures outlined in MS-2, 6<sup>th</sup> Edition, Appendix A.

4. All sources of RAP and/or RAM shall be approved by the Engineer.

**C. Material Requirements:**

1. New asphalt cements added to the aged asphalt shall meet the requirements of section 2205.2A of the "Standard Construction and Materials Specifications".
2. Recycling Agents, if used, shall meet ASTM D 4552, Standard Practice for Classifying HOT MIX Recycling Agents.
3. The blend of RAP and/or RAM and virgin aggregates shall be checked for resistance to stripping. Using an accepted water sensitivity test and the same asphalt chosen for the project, determine if an anti-stripping agent is needed. The immersion compression test, ASTM D 1075, Effect of water on Cohesion of Compacted Bituminous Mixtures shall be performed for the compacted mixtures. The retained strength shall exceed 75 percent.
4. The RAP and/or RAM stockpiled at the plant site shall be maintained if adequate space is available, in numerous stockpiles separated on the bases of mix type-surface, binder and base. The RAP and/or RAM shall be processed such that 100% will pass the 1 ½ inch sieve and 90% will pass the 1 inch sieve.
5. The RAP and/or RAM stockpiles shall be free of foreign matter (e.g., old planer teeth, concrete, broken sewer casting, loop detector wire, protective membranes, rubberized joint filler materials and thermoplastic turn and lane markers.

**D. Mix Design Requirements:** The necessary steps for a final mix design for recycled mixtures shall be done in accordance with the Asphalt Institute's Manual Series No. 2 (MS-2) 6<sup>th</sup> Edition. When a change in the RAP and/or RAM exceeds 15 percent, a new mix design must be submitted.

E. **Asphalt Plant Requirements:** All delivery tickets shall designate RC-Type 3-01 recycled mix.

F. **Asphalt Plant Certification and Equipment Approval:** All asphaltic concrete used on this project shall be from a “certified” plant. All asphalt paving equipment used by the contractor or subcontractor shall meet the requirements of Section 2205.7 of the Construction and Material Specifications, Division II. For a list of “certified” asphalt plants, or to arrange for approval of the plant and equipment, consult with Materials Laboratory, at (816) 513-8700.

G. **Asphalt Truck Load Limit:**

The maximum truck load on streets shall not exceed 20 tons.

H. **Asphaltic Concrete Mix:** The mix to be used shall be Type 3-01 and shall conform to the mix tables in Section 2205.3 of the “Standard Construction and Materials Specifications”.

I. **Sealing:** Small areas which have a rough or open texture, and all joints and places where headers are cut shall be sealed with emulsified asphalt and covered with concrete sand within one (1) week following completion of any street paved. Any expenses in connection with the item shall be included in other bid items.

J. **Asphaltic Concrete Wedging:** Areas of the street that require asphalt to be placed deeper than 3 inches to reach the final pavement grade shall be wedged with asphalt prior to the surface being placed. All wedges shall be placed using a mechanical self-powered paving machine. Asphalt wedges shall be placed in lifts of 3 inch maximum depth and each lift shall be properly compacted and allowed to cool before the successive lift(s) or surface is placed.

K. **Compaction:**

1. **General:** Rolling equipment for use in compacting mixes shall meet the requirements of Section 2205.7B of the “Standard Construction and Materials Specification”, entitled “Rollers”. Unless otherwise approved by the Engineer at least three (3) rollers shall be required at all times. Additional rollers shall be used as necessary to provide specified pavement density. Asphaltic concrete surface density shall be 97 percent of maximum density and asphaltic concrete base shall be 95 percent of maximum density obtained by the Marshall Method.
2. **Breakdown Rolling:** Breakdown rolling shall immediately follow the rolling of the longitudinal joint and edges. Roller shall be operated as close to the paver as necessary to obtain adequate density without causing undue displacement. The breakdown roller shall be operated with the drive wheel nearest the finishing machine. Exceptions may be made by the Engineer when working on steep slopes or super-elevated curves.
3. **Intermediate Rolling:** Pneumatic-tired rollers shall be used for intermediate rolling. The intermediate rolling shall follow the breakdown rolling as closely as possible and while the paving mix is still of a temperature that will result in maximum density from this operation.

Pneumatic-tired rolling shall be continuous after the initial rolling until all of the mix placed has been compacted to the required density. Turning of pneumatic-tired rollers on the hot paving mix which caused displacement shall not be permitted.

4. **Finish Rolling:** The finish rolling shall be accomplished while the material is still warm enough for the removal of roller marks. All roller marks shall be removed by the finish rolling operation.

All rolling operations shall be conducted in close sequence. In places inaccessible for the operations of standard rollers as specified, compaction shall be performed by trench rollers or others meeting the requirements of Section 2205.7B entitled "Rollers". The trench roller shall be operated until the course is thoroughly compacted. Hand tamping, manual or mechanical, may be used in such areas, if operations will give required density.

**L. Spot Patching:**

All soft areas shall be repaired by spot patching prior to paving.

Whenever a soft area is encountered in a street to be paved, the soft area shall be repaired by the following procedure:

1. Remove all soft material from the area.
2. Compact area prior to placing new asphalt.
3. Place asphalt in hole in lifts of six (6) inch maximum depth and compact each lift.
4. Place asphalt to the level of the surface to be paved.

All removed material shall be disposed of within 48 hours of paving the street.

No separate payment shall be made for spot patching. All costs shall be included in the unit bid price for other items.

- M. Paving Restrictions:** All paving shall be completed during the daylight hours. No paving shall begin before sunrise. All paving shall cease a minimum of one-half (1/2) hour before sunset to allow rolling to be completed during daylight hours.

- N. Payment:** Payment will be made at the applicable contract price per square yard for: "1½" Asphaltic Concrete (Type 3-01) Surface".

Payment will be made at the applicable contract price per ton for "Asphaltic Concrete (Type 3-01) Wedge". Such payment and price shall constitute full compensation for cleaning and tacking of the

underlying course, for furnishing all labor, equipment and materials and for the performance of all work necessary to complete the item.

The square yardages listed for cold milling are approximate and the City makes no guarantee as to the quantity of recyclable material. The Contractor may use recyclable material from other sources subject to the approval of the materials engineer.



## DRAINAGE STRUCTURES AND STORM SEWERS

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

A. **General:** Construction, reconstruction, adjustment, or removal of storm sewer structures, pipes and appurtenances shall be in accordance with all applicable standards and specifications of the Public Works Department of the City of Kansas City, Missouri in current usage. All materials and construction shall conform to Section 2600, Storm Sewers, of the "Standard Specifications and Design Criteria," Division II, Construction and Materials Specifications; and the latest KCMO Supplement 2600.

B. **Curb Inlet/Drop Inlet and Manhole Adjustment:**

1. **General:** Curb inlets, drop inlets, and manholes indicated by the Engineer to be adjusted shall be brought to the elevation set by the Engineer with brick and mortar construction in accordance with Standard Drawing CI-1, CI-2 and CI-3. Bricks shall conform to ASTM C 32, Grade SM.
2. **Construction:** The top of the inlet or the ring of the manhole shall be removed to a depth necessary to obtain a good joint between old and new construction and as necessary to remove deteriorated brick and mortar as determined by the Engineer. All portions of the inlet or manhole shall be adjusted and the Contractor shall be responsible for damage to the inlet or manhole during the performance of any work covered in the contract. All brick shall be new and completely saturated with water prior to laying. All mortar shall be of masonry cement and clean, damp sand. All new brick work shall be plastered front and back. The existing tops or ring and cover shall be salvaged and reused for the adjusted inlet or manhole. If the existing CI top cannot be salvaged, the Contractor shall install new tops as specified in the contract specifications or as directed by the Engineer according to Section 2630 Part. C "Precast Reinforced Concrete Curb Inlet and Top Slab (Replacement)" of the specification.
3. **Payment:** Payment will be made at the contract unit price per each for the applicable type of adjustment as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials and equipment necessary to complete each item.

C. **Precast Reinforced Concrete Curb Inlet Top Slab Replacement:**

1. **General:** Where obsolete cast iron inlet tops are encountered, or as directed by the Engineer, the inlet tops shall be removed and replaced with precast reinforced concrete inlet top slabs and listed in the Proposal. Top slabs shall be and in accordance with Standard Drawing CI. The Contractor shall deliver the obsolete curb inlet tops to the Street Maintenance District 3 Yard at 4725 Coal Mine Road.



2. **Payment:** Payment will be made at the contract unit bid price per each for each size “Precast Reinforced Concrete Curb Inlet Top Slab Replacement” as listed in section 00412 – Unit Prices. Such payment and prices shall constitute full compensation for all labor, materials and equipment necessary to complete each item.

**D. Curb Inlet/Drop Inlet (Grate) Reconstruction or Replacement:**

1. **General:** New curb inlets shall conform to KCMO Standard Plan CI-1, CI-2 or CI-3 and as directed by the Engineer. New drop inlets shall conform to KCMO Standard Plan GI-1
2. **Construction:** The existing structure currently in place (if one exists) shall be demolished and removed. A new structure shall be constructed the size and type shall be as listed in the Itemized Proposal. The new inlet shall be constructed to match the existing flowlines and grades entering and exiting the structure. Refer to page(s) beginning with 02630-4 of this section for pipe depths, sizes and locations, if available for curb inlets. If it is determined by the Engineer that portion of pipe connected to the structure requires removal, the first eight linear feet of pipe and the connection shall be considered as incidental to the structure. The pipe type and connection type shall be determined by the Engineer. A new curb inlet top slab shall be included in the installation and shall be constructed in conformance with KCMO Standard Plans. The curb inlet top slab shall have a type RC4C (with cam locks) ring and cover.
3. **Payment:** Payment will be made at the contract unit bid price per each for the applicable type of inlet as listed in section 00412 – Unit Prices. Such payment shall constitute full compensation for all labor, materials and equipment necessary to complete each item including the removal of the existing structure and the complete installation of the new structure and no additional compensation shall be allowed.

**E. Curb Inlet/Drop Inlet Removal:**

1. **General:** Where the Contractor is required to remove an existing curb inlet or drop inlet, the Contractor shall completely remove the existing structure unless otherwise specified by the Engineer. All connecting pipe(s) shall be abandoned in place unless otherwise specified. Pipes abandoned in place shall be backfilled with Controlled Low Strength Material (Flowable Backfill). Flowable backfill material shall conform to Section 2602.2G of the “Standard Specification and Design Criteria.” All work shall be performed to the satisfaction of the Engineer.
2. **Payment:** Payment will be made at the contract unit bid price for the applicable type of inlet removal as listed in section 00412 – Unit Prices. Such payment and prices shall constitute full compensation for all labor, materials and equipment necessary to complete the item.

**F. Pipes:**

1. **Materials:** Pipes shall be ASTM C-76 Class III R.C.P. wall B, or aluminized type II, 2 2/3" x 1/2 corrugated steel pipe, thickness = 0.079", and the pipe shall have helical corrugations. Pipes shall be placed in conformance with 2600 of "Standard Specifications and Design Criteria."
2. **Payment:** The first 8 linear feet of pipe from the curb inlet necessary to connect into the existing pipe or structure shall be considered incidental to the structure and no additional payments will be allowed.

Payment for pipe beyond 8' from the structure will be made at the contract unit bid price for the applicable type and size of pipe listed in section 00412 – Unit Prices. Such payment shall constitute full compensation for all labor, materials and equipment necessary to complete this item.

#### **G. Connection to Existing Pipes:**

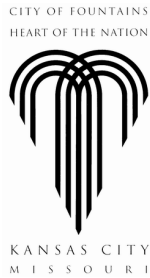
1. **General:** Where the Contractor is required to replace existing pipe, the Contractor shall make a connection between the old and new pipes with a concrete collar. The collar shall be a minimum of 6" thick and 1' long using MCIB Mix No. A558-1-2 and shall encircle the pipe. The connection should be properly supported to prevent settlement. All work shall be performed to the satisfaction of the Engineer.
2. **Payment:** No separate payment will be made for this item. All costs for this item shall be considered incidental to the cost of the curb inlet or drop inlet and no additional compensation will be allowed.

#### **H. Flume Replacement/Gutter Drain Extension:**

1. **General:** Where the Contractor is required to remove and existing concrete flume and extend the existing gutter drain, the Contractor shall make the extension as shown on the "Flume Replacement/Typical Gutter Drain Extension Detail" included in section 01115 of this Project Manual. All work shall be performed to the satisfaction of the Engineer.
2. **Payment:** Payment will be made at the contract unit bid price per each for the "Flume Replacement" as listed in section 00412 – Unit Prices. Such payment constitutes full compensation for all labor, materials and equipment necessary to complete this item.

#### **I. Curb Inlet Sizing:**

1. **General:** The Contractor shall be responsible for verifying the pipe inlet and/or outlet elevations, and the openings for the existing pipe sizes, for the construction of curb inlets as listed above.
2. **Payment:** No separate payment will be made for the verification of these items as listed above. All cost pertaining thereto shall be included in the contract prices for other items as listed in section 00412 – Unit Prices.



## PAVEMENT

Project Number

**EV 3040**

Project Title

**IDIQ Traffic Safety Improvements**

- A. **General:** This section shall cover all pavement patching and repairs. For complete street resurfacing, refer to Section 02513 – “Asphaltic Concrete, Hot Recycling, and Resurfacing.”

Section 00412 – Unit Prices includes an estimated amount of "Asphaltic Concrete Surface" or "Full Depth Pavement". This estimate is based on experience with prior contracts and the actual amount of "Asphaltic Concrete Surface" or "Full Depth Pavement" may be greater, less, or none at all.

Patching of streets, driveways and parking lots shall be accomplished after a minimum period of fourteen (14) hours, but no longer than five (5) days, from completion of concrete placement. The Contractor shall replace any disturbed pavement abutting the new concrete to provide a smooth transition and a neat appearance.

"Asphaltic Concrete Surface" or "Full Depth Pavement" repairs for the first six (6) horizontal inches of pavement restoration abutting and parallel to the new concrete work will be the contractor's responsibility and no payment will be made.

When the new edge of pavement is to be above existing edge of pavement as shown on typical cross sections in section 01115 of this Project Manual, the first twelve (12) horizontal inches of “asphalt wedge” abutting and parallel to the new concrete work will be the contractor's responsibility and no payment will be made.

- B. **Asphaltic Concrete Surface:** The existing pavement shall be sawed along a line parallel with, and six (6) inches out, from the edge of the new concrete to a minimum depth of two (2) inches. An approved tack coat shall be evenly applied to all edges and the bottom of the excavation. APWA Type 3.01 Asphalt shall then be placed in accordance with Section 2205 of the "Standard Specifications and Design Criteria", and as directed by the Engineer. The Contractor shall be prohibited from using recycled asphalt.
- C. **Payment for Asphaltic Concrete Surface:** Asphaltic Concrete Surface repairs completed as shown in the plans or at locations directed by the Engineer will be made at the contract unit bid price for "Asphaltic Concrete Surface". Bid prices and Payments for Asphaltic Concrete Surface shall constitute full compensation for all sawing, preparation, priming, labor, materials and equipment necessary to complete the work.

Where it is determined by the Engineer that the Contractor's carelessness has caused damage to the existing pavement beyond the planned or directed reconstruction, the Contractor shall, at the Contractor's expense, accomplish the appropriate restoration of the damaged area.

- D. Full Depth Pavement:** Pavement width less than 3 feet shall consist of a minimum eight (8) inch thick Portland Cement Concrete Base in combination with a two (2) inch APWA Type 3.01 Asphalt surface. Where pavement width is greater than three (3) feet, seven (7) inch Asphalt Base, Type 1-01 can be used in lieu of Portland Cement Concrete Base. **Portland Cement Concrete Base shall conform to MCIB Section 1 and shall have a design strength of 4,500 psi or greater using Special Aggregate (Hard Rock) and shall be in accordance with Section 2208, "Standard Specifications and Design Criteria",** and as directed by the Engineer. Asphalt Concrete Base and surface shall be placed in accordance with Section 2204 and 2205 of "Standard Specifications and Design Criteria", and as directed by the Engineer.

The length and width of the full depth pavement shall be plan measure regardless of width damaged and repaired.

- E. Payment for Full Depth Pavement:** Full Depth Pavement repairs completed as shown in the plans or at approved locations, as directed by the Engineer, will be made at the contract unit bid price for "Full Depth Pavement Patch" as listed in section 00412 – Unit Prices. Bid prices and payments for Full Depth Pavement shall constitute full compensation for all sawing, preparation, concrete base, priming, asphalt, labor, materials and equipment necessary to complete the work.

Where it is determined by the Engineer that the Contractor's carelessness has caused damage to existing pavement beyond the planned or directed reconstruction, the Contractor shall, at the Contractor's expense, accomplish the appropriate restoration of the damaged area.



## SPEED HUMPS

**Project Number:** EV 3040

**Project Title:** IDIQ Traffic Safety Improvements

- A. General:** Speed Humps are a permanent section of pavement 14 ft. wide, parabolic in shape, rising to a maximum height of three (3) inches in the center. All work in this section shall conform to the APWA-KCMO 2200 PAVING. This includes all the equipment, supplies, materials, and labor necessary to construct this item.
- B. Material:** Speed humps shall be constructed of type 5-01 recycled meeting the requirements of section 02513. Speed humps shall be striped with Type I Preformed Pavement Marking Tape Pavement Markings meeting the requirements of APWA section 2606.
- C. Construction:** Speed humps shall be constructed and striped as per the "Speed Hump Drawing." Locations of all speed humps shall be field determined by the Engineer.
- D. Payment:** Speed hump install will be paid for at the Contract Unit Price, per each, as listed in Section 00412 Bid Form Unit Prices. This amount shall be full compensation for all work and incidentals necessary to complete the item including but not limited to cold milling, removal and disposal of the old material, as well as supplying, placing, compacting, and finish of the new.



## PORTLAND CEMENT CONCRETE CURBS

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

A. **General:** The curbs shall conform to the Standard Drawing C for Type C-1, CG-1, CG-2, or CS Curb. The Contractor shall be responsible for the cost of providing fill material consisting of untreated compacted aggregate within six (6) inches of subgrade.

1. **Removal of Existing Curb:** Removal of existing curb, regardless of type, shall be considered work incidental to construction of the proposed curb or curb and gutter. Pavement shall be sawed full depth and parallel, six (6) inches out from the front of the curb to be installed. Where existing pavement is damaged, pavement shall be sawed two (2) inches deep parallel and/or perpendicular to the curb and gutter, pavement removed to a depth of at least two (2) inches and patched with asphaltic concrete.

2. **Non-Standard Curb:** Where thirty (30) inch curb or other non-standard curb exists, it shall be replaced with the applicable standard curb, maintaining approximate alignment at the back of the existing curb. Where it is determined that additional asphaltic concrete fill is needed due to irregular existing curb width, pavement shall be restored as specified in Section 02740 of this Project Manual. Pavement restoration thus accomplished in conjunction with curb removal shall be paid for as described in said Section 02740.

3. **Curbs on Corner Radii:**

a. **General:** Where Type C-1, CG-1, CG-2 or Type CS curb is at a corner radius, the sidewalk and "curb section" shall be constructed monolithically and a false joint shall be tooled at the appropriate back of curb location as directed by the Engineer.

b. **Payment:** Payment for Type C-1, CG-1, CG-2 and Type CS "curb sections" will be the same as for sidewalks as described in Section 02775 of this Project Manual. Such payments and prices shall constitute full compensation for all labor, materials and equipment necessary to complete each item.

4. **Sidewalk Curb:**

a. **General:** Where indicated by the Engineer sidewalk curb shall be installed along the edge of the sidewalk. The sidewalk curb shall match the profile of type C-1 curb, except that it can be up to 14" tall and shall be poured monolithically

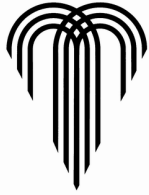
with the sidewalk. This does not include curb installed in conjunction with ADA ramps.

- b. **Payment:** Payment for sidewalk curb will be as described in subsection E of this section.

- B. **Curb Drains:** Where existing curb drains are encountered within the public right-of-way, the Contractor shall restore an adequate length of drain material which shall extend through, but not extrude past, the face of the curb section being replaced. Curb drains shall be reinstalled at a grade adequate to facilitate drainage from the existing structure. Curb drain restoration shall be considered incidental to the curb reconstruction.
- C. **Reinforced Curbs:** All curbs reconstructed along streets under the jurisdiction of the Parks and Recreation Department shall be in accordance with the plans and specifications of that department, except that the continuous No. 4 rebar shall be placed centered two (2) inches from the top of the curb. Work on side streets shall also require a separate permit from the Parks and Recreation Department.
- D. **Special Aggregate:** The special aggregates for curbs shall be Iron Mountain Trap Rock, Nepheline Syenite, Sioux Quartzite (quarried in South Dakota or Minnesota) or approved equal conforming to the requirements as mentioned in **Section 2208.2 "Standard Specifications and Design Criteria**

**Class F fly ash and/or slag** shall be added as necessary to offset any alkali-silica reactivity (ASR) or alkali-carbonate reaction (ACR) potential. Fly Ash shall conform to ASTM C 618. Slag shall conform to ASTM C989, Strength Grade 120.

- E. **Payment:** Payment for type C-1, CG-1, CG-2, and CS curb will be made at the contract unit bid prices per linear foot regardless of type as listed in section 00412 – Unit Prices. Payment for all other applicable types of curb will be made at the contract unit bid price per linear foot for the applicable type of curb as listed in section 00412 – Unit Prices. Such payment and prices shall constitute full compensation for removal of existing curb, curb drain restoration, and for all labor, materials and equipment necessary to complete the item.



## PORTLAND CEMENT CONCRETE SIDEWALKS, DRIVEWAYS AND ADA ACCESSIBLE RAMPS

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

### A. **Sidewalks:**

1. **General:** Portland Cement Concrete sidewalk shall be a minimum of four (4) inches thick and shall conform to the requirements of Standard Drawing SW-1. The Contractor shall be responsible for the cost of providing fill material consisting of untreated compacted aggregate within the top six (6) inches of subgrade. During construction, care shall be taken to ensure public safety along the sidewalk. Any damage to existing improvements not intended for replacement may be repaired at Contractor cost. Minor variations in alignment shall be permitted on all sidewalk locations to save some trees and other structures of permanent nature. All curb boxes, tile covers and meterpit covers shall be adjusted to grade and movable portions shall be left free and clean.
2. **Joints:** All expansion and contraction joints shall be reconstructed and all catch basins, poles, fire hydrants, manholes and fire alarm bases shall be adjusted to grade and boxed in with expansion joints. Expansion material shall be located as directed by the Engineer. Wherever possible, the expansion joints shall be located in lieu of other joints giving the sidewalk an appearance of continuity. Expansion joints shall be constructed where the new sidewalk abuts existing sidewalk, curb or driveways.
3. **Payment:** Payment will be made at the contract unit bid prices per square foot for the applicable type of sidewalk as listed in section 00412 – Unit Prices. Such payment and prices shall constitute full compensation for removal of existing sidewalk, expansion joint material, and for all labor, materials and equipment necessary to complete the item, **including any curb, up to 8” tall, along the edge of a sidewalk that is in conjunction with an ADA ramp.** Sidewalk square footage for tree block outs shall be measured by multiplying the length of the block out by the width of the sidewalk, immediately prior to the start of the block out.

### B. **Driveways:**

1. **General:** Driveways shall be constructed in accordance with Standard Drawing D-1, D-2, and D-3 and the drawings in Section 01115 of this Project Manual. The Contractor shall be responsible for the cost of providing fill material consisting of untreated compacted aggregate within the top six (6) inches of subgrade.



2. **Driveway Curb:** No separate payment will be made for curb transitions on driveway flares or radii. Work shall be considered incidental to driveways and all costs shall be included in the contract unit bid price for driveways as listed in section 00412 – Unit Prices.
3. **Payment:** Payment will be made at the contract unit bid prices per square foot for the applicable type of driveway as listed in section 00412 – Unit Prices. Such payment and prices shall constitute full compensation for removal of existing driveway, and for all labor, materials and equipment necessary to complete the item.

**C. ADA Accessible Ramps with Detectable Warning:**

1. **General:** Detectable warnings are required standardized surface features built in or applied to walking surfaces on sidewalks or ramps to warn visually impaired people of hazards on circulation path. ADA accessible ramps shall conform to the details as shown on pages 02775-05 through 02775-07 in this Project Manual. The Contractor shall be responsible for the cost of providing fill material consisting of untreated compacted aggregate within the top six (6) inches of subgrade.

Contractor shall submit shop drawings in accordance with section 01325 – Shop Drawings and Material Submittals of this Project Manual which clearly defines the method and materials used for detectable warning. Pavers which meet the standard criteria will be permitted. Refer to section 02783 – Concrete Paver Sidewalks and Driveways of this Project Manual. Concrete base under pavers shall be six inches instead of four inches as shown in the Typical Detail on page 02783-2. Rolled or stamped detectable warning will not be permitted.

2. **Dimensions:** Detectable warnings shall consist of raised truncated domes with a 0.9 inch nominal diameter, a nominal 0.2 inch height, and a nominal center to center spacing of 2.35 inches. They shall extend across the full walking surface of the walk or ramp, and shall be 2 feet long in the direction of pedestrian travel.
3. **Contrast:** Detectable warnings shall contrast visually with adjoining surfaces, either light-on-dark or dark-on-light. The material used to provide contrast should contrast by at least 40%.

Contrast in percent is determined by:

$$\text{Contrast} = [(B1-B2)/B1] \times 100$$

Where: B1 = light reflectance value (LRV) of the lighter area

B2 = light reflectance value (LRV) of the darker area

Light Reflectance Value shall be determined by ASTM D2805 for painted surfaces, or by visual comparison to paint chips with LRVs determined by ASTM D2805 for non-painted surfaces. The material used to provide contrast shall be an integral part of the walking surface.

4. **Payment:** Payment will be made at the contract unit bid price per square foot for the applicable type of 8 inch sidewalk as listed in section 00412 – Unit Prices. Such payment and prices shall constitute full compensation for removal of existing sidewalk, and for all labor, materials and equipment necessary to complete the item. No other payment will be considered applicable or necessary.

**Payment for Detectable Warning:** Payment for Detectable Warning will be made at the contract unit bid price per square foot for “ADA Ramp Detectable Warning” as listed in section 00412 – Unit Prices. Such payment and prices shall constitute full compensation for the raised truncated domes, color contrast, and for all labor, materials and equipment necessary to complete the item. No other payment will be considered applicable or necessary.

**D. Curbs on Corner Radii:**

1. **General:** Where any standard curb type is at a corner radius, the sidewalk and "curb section" shall be constructed monolithically and a false joint shall be tooled at the appropriate back of curb location as directed by the Engineer.
2. **Payment:** Payment for "curb sections" will be the same as for sidewalks as described in Subsection A of this Section. Such payments and prices shall constitute full compensation for all labor, materials and equipment necessary to complete each item.

**E. Special Aggregate Sidewalks and Driveways:**

1. **General:** In addition to meeting the requirements for sidewalks and driveways as outlined above, special aggregate sidewalk and driveways shall also conform to the following requirements. In the Central Business District (CBD) of Kansas City, MO (defined as being bounded by Interstate Highway I-70 on the north and east, I-670 on the south and I-35 on the west) MCIB Mix No. WA585-3/4-2-0.410 or Mix No. WA634-3/4-4-0.410, both with special aggregate and 6x6 – W2.9 x W2.9 welded steel wire fabric, shall be used. The special aggregate shall be Iron Mountain Trap Rock, Nepheline Syenite, Sioux Quartzite (quarried in South Dakota or Minnesota) or approved equal conforming to the gradation requirements of 2208.2.B as supplemented.

**Class F fly ash and/or slag** shall be added as necessary to offset any alkali-silica reactivity (ASR) or alkali-carbonate reaction (ACR) potential. Fly Ash shall conform to ASTM C 618. Slag shall conform to ASTM C989, Strength Grade 120.

2. **Payment:** Payment will be made at the contract unit bid price for the applicable type of special aggregate sidewalk or driveway as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for removal of existing sidewalk or driveway, expansion joint material, and for all labor, materials and equipment necessary to complete the item.

**F. Reinforced Sidewalks and Driveways:**

1. **General:** In addition to meeting the requirements for sidewalks and driveways as outlined above, reinforced sidewalk and driveways shall also conform to Section 2301 of the “Standard Specifications and Design Criteria.” All sidewalks and driveways reconstructed along streets under the jurisdiction of the Parks and Recreation Department shall be in accordance with the

plans and specifications of that department. Reinforcing shall be 6 x 6 - W2.9 x W2.9 welded steel wire fabric. Work on Parks and Recreation Department streets shall also require a separate permit from that Department.

2. **Payment:** Payment will be made at the contract unit bid price for the applicable type of reinforced sidewalk or driveway as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for removal of existing sidewalk or driveway, expansion joint material, and for all labor, materials and equipment necessary to complete the item.

**G. Grout Patching:**

1. **General:** Only a commercial grade, non-shrink patching grout compound approved by the engineer shall be used. Areas identified for grout patching the sidewalk, driveway, or curb shall have all loose material removed by hand utilizing a masonry hammer. All exposed surfaces shall be cleaned with a wire brush removing any type of any type of foreign matter, grease, paint, oil, dust or efflorescence. The area shall be thoroughly flushed and soaked with clean water prior to grouting, leaving no standing water. Apply a thin primer coat of acrylic latex bonding agent with added 10% neat Type 1 portland cement into all surfaces. Place the grout quickly and continuously using light rodding to eliminate air bubbles. Finish the patch with a texture matching the surrounding concrete. Protect the patch area until fully set.
2. **Payment:** Payment will be made at the contract unit bid price per linear foot for “Grout Patch” as listed in section 00412 – Unit Prices. Patch areas shall be up to 2” wide and up to 2” deep. Such payment and price shall constitute full compensation for all labor, materials and equipment necessary to complete the item.



## CONCRETE STEPS

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. General:** This item shall consist of removing any existing steps and constructing steps at locations shown on the plans or at locations designated by the Engineer.

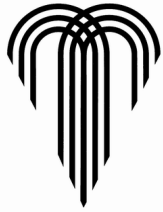
The subgrade shall be prepared in accordance with section 2301.3B of the Standard Specifications and Design Criteria.

The Contractor shall remove any existing steps as required by the Engineer and shall construct the new concrete steps in accordance with Kansas City, Missouri standard drawing S-RC.

Where the steps abuts other concrete or permanent structures, expansion joints shall be constructed and caulked as specified in Section 02775 of this Project Manual and as shown on the standard drawing.

Concrete steps shall be measured to the nearest square foot. This measurement shall be along the front face of the riser and the top of the tread.

- B. Payment:** Payment shall be made at the contract unit bid price per square foot for “Concrete Steps”, as listed in section 00412 – Unit Prices. Such payment and prices shall constitute full compensation for removal of any existing steps and construction of the new step, and all labor, equipment and materials, and equipment necessary to complete this item.



## BRICK AND STONE SIDEWALKS, BORDERS, AND DRIVEWAYS

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

### A. **Brick and Stone Sidewalks**

1. **General:** Where it is determined by the Engineer that existing brick or stone work shall be replaced, existing material shall be removed to full depth and subgrade shall be prepared as specified in Section 02310 entitled "Site Grading". A base of four inch Portland Cement Concrete conforming to MCIB Mix No. WA610-1-4 shall be placed prior to the installation of the brick or stone surface. Concrete base shall be rough finished to provide a bonding surface for mortar setting bed. Concrete which is partially or completely set shall be cleaned and wetted prior to placing of mortar. Brick pavers or stones shall be placed in 1/2" mortar setting bed and laid to match existing pattern.
2. **Materials:** Brick pavers shall conform to ASTM C902-79a, Class SX, Type 1, or match, existing. Stone shall match existing as approved by the Engineer. Mortar shall conform to ASTM C270-82, Cement Lime Type M. Where possible, undamaged bricks or stone shall be reused.
3. **Joints:** Where brick or stone sidewalk abuts other concrete or permanent structures, expansion joints shall be constructed and caulked as specified for "Sidewalks" in Section 02775 of this Project Manual.
4. **Payment:** Payment shall be made at the contract unit bid price per square foot for "Brick Sidewalk" or "Stone Sidewalk" as listed in section 00412 – Unit Prices. Such payment and prices shall constitute full compensation for removal of existing bricks or stones, all labor, materials and equipment necessary to complete the item.

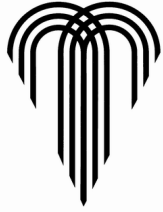
### B. **Brick and Stone Driveways**

1. **General:** Where it is determined by the Engineer that existing brick or stone work shall be replaced, existing material shall be removed to full depth and subgrade shall be prepared as specified in Section 02310 entitled "Site Grading". A base of four inch Portland Cement Concrete conforming to MCIB Mix No. WA610-1-4 shall be placed prior to the installation of the brick or stone surface. Concrete base shall be rough finished to provide a bonding surface for mortar setting bed. Concrete which is partially or completely set shall be cleaned and wetted prior to placing of mortar. Brick pavers or stones shall be placed in 1/2" mortar setting bed and laid to match existing pattern.

2. **Materials:** Brick pavers shall conform to ASTM C902-79a, Class SX, Type 1, or match, existing. Stone shall match existing as approved by the Engineer. Mortar shall conform to ASTM C270-82, Cement Lime Type M. Where possible, undamaged bricks or stone shall be reused.
3. **Payment:** Payment shall be made at the contract unit bid price per square foot for “Brick Driveway” or “Stone Driveway” as listed in section 00412 – Unit Prices. Such payment and prices shall constitute full compensation for removal of existing bricks or stones, all labor, materials and equipment necessary to complete the item.

**C. Brick Border Resetting:**

1. **General:** Where it is determined by the Engineer that existing brick or stone work shall be replaced, existing material shall be removed to full depth and subgrade shall be prepared as specified in Section 02310 entitled "Site Grading". A base of four inch Portland Cement Concrete conforming to MCIB Mix No. WA610-1-4 shall be placed prior to the installation of the brick or stone surface. Concrete base shall be rough finished to provide a bonding surface for mortar setting bed. Concrete which is partially or completely set shall be cleaned and wetted prior to placing of mortar. Brick pavers or stones shall be placed in 1/2" mortar setting bed and laid to match existing pattern.
2. **Materials:** Brick pavers shall conform to ASTM C902-79a, Class SX, Type I, or match existing. Stones shall match existing as approved by the Engineer. Mortar shall conform to ASTM C270-82, Cement Lime Type M. Where possible, undamaged bricks or stones shall be reused.
3. **Joints:** Where brick abuts concrete or permanent structures, expansion joints shall be constructed and caulked as specified for "Sidewalks" and "Driveways" in Section 02775 of this Project Manual.
4. **Payment:** Payment shall be made at the contract unit bid price per square foot for "Brick Border" or “Stone Border” as listed in section 00412 – Unit Prices. Such payment and prices shall constitute full compensation for removal of existing bricks or stones, all labor, materials and equipment necessary to complete the item.



## PAVER SIDEWALKS, DRIVEWAYS AND CURBS

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

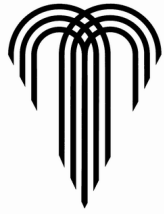
- A. **General:** Where it is shown on the plans or determined by the Engineer that the existing paver sidewalks, driveways, or curb shall be replaced; the contractor shall remove and store the existing pavers. The contractor shall document the patterns, locations and design of the existing sidewalk or driveway prior to disturbing the pavers.
- B. **Subgrade:** The subgrade shall be prepared in accordance with section 2201 of the Standard Specifications and Design Criteria and the base material in accordance with section 2202. The subgrade and sub-base shall be brought up to the needed grade with untreated compacted aggregate.
- C. **Bedding:** Bedding sand shall be clean, non-plastic, free from deleterious or foreign matter. The sand shall be natural or manufactured from crushed rock. Limestone screenings or stone dust shall not be used. Bedding sand shall conform to the grading requirements of ASTM C 33 or as recommended by the manufacturer.

The contractor shall spread the sand evenly over the base course and screed to a nominal 1 inch thickness, not exceeding 1-1/2 inch thickness. The screeded sand should not be disturbed. The contractor shall place sufficient sand to stay ahead of the laid pavers. Do not use the bedding sand to fill depressions in the base surface. Depressions shall be filled as described previously in this section.

D. **Installation:** The contractor shall relay the concrete pavers at the grade specified by the engineer. The contractor shall reuse the undamaged concrete pavers in the reconstruction of the sidewalk or driveway. If additional concrete pavers are required to complete the work, the contractor shall obtain materials that match the existing material. Any new concrete pavers required to complete the sidewalk or driveway shall meet the requirements of ASTM C936 and shall be approved by the Engineer prior to the incorporation into the work. The contractor shall also match the pattern and shape of the existing sidewalk or driveway. The contractor shall ensure that pavers are free of foreign materials before installation. The joints between the pavers shall match the existing pavers. The contractor shall fill gaps at the edges of the paved area with cut pavers or edge units. Any pavers to be cut shall be cut with a masonry saw. The contractor shall use a low amplitude, high frequency, plate vibrator to vibrate the pavers into the sand. The contractor shall vibrate the pavers, sweeping dry joint sand into the joints and vibrating until they are full. Joint sand shall be **polymeric sand** that is clean, non-plastic, free from deleterious or foreign matter. In addition the concrete pavers and jointing sand are to be installed according to the manufacturers' recommendations and to the satisfaction of the Engineer and the property owner.

- E. **Joints**: Where the concrete paver sidewalk, driveway, or curb abuts other concrete or permanent structures, expansion joints shall be constructed and caulked as specified in Section 02775 of this Project Manual.
- F. **Environmental Conditions**: Do not install sand or pavers during heavy rain or snowfall. Do not install sand and pavers over frozen base materials. Do not install frozen sand.
- G. **Payment**: Payment shall be made at the contract unit bid price per square foot for “Paver Reset” and per linear foot for “Granite Curb Resetting” as listed in section 00412 – Unit Prices. Such payment and prices shall constitute full compensation for removal of existing concrete pavers, subgrade preparation, sand bedding, resetting of pavers, joint sand, and all labor, equipment and materials, and equipment necessary to complete this item.





## LAWN SPRINKLER SYSTEM

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. **General:** Lawn sprinkler systems which are in the work area shall be adjusted to the new grade elevations.
- B. **Payment:** There will be no separate payment for lawn sprinkler adjustment or repair. All costs pertaining thereto shall be incidental to the other contract pay items.



## SITE IMPROVEMENTS

Project Number

**EV 3040**

Project Title

**IDIQ Traffic Safety Improvements**

### **A. Fence and/or Gate Adjustment:**

1. **General:** Fences which are to be removed to facilitate grading shall be reinstalled at the new grade. The existing fence fabric, posts and other appurtenances may be reused or the Contractor may use new materials. However, materials damaged in removal shall be replaced with new materials. All new materials used shall restore the fence to its original condition or better.

2. **Material:** Fence materials shall conform to the following:

- a. **Fabric:** Chain-link fence fabric shall be No. 9-gauge (0.148 inch) zinc-coated steel wire woven in two (2) inch mesh with top and bottom of fabric knuckled. The fabric shall conform to ASTM A117.

The woven wire fabric shall be made of zinc-coated or aluminized steel wire. Zinc-coated fabric shall conform to the requirements of ASTM A II 6-73, Class-3 Coating. Line wires shall have tension curves. Aluminized fabric shall conform to the requirements for zinc-coated fabric except that the coating shall be aluminum alloy applied at the rate of not less than 0.25 oz. per square foot of uncoated wire surface.

- b. **Posts, Braces and Tie Rods:** Posts, braces and tie rods shall be of the appropriate size to match existing fencing. All ferrous materials shall be zinc-coated; the zinc-coating shall weigh not less than two (2.0) ounces per square foot of actual surface. Tubular sections shall be zinc-coated both inside and outside.

3. **Payment:** Payment will be made at the contract unit price per linear foot for "Fence and/or Gate Adjustment" as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials and equipment necessary to complete the item.

### **B. Handrail Adjustment:**

1. **General:** Handrails which are to be removed to facilitate grading and/or step construction shall be reinstalled at the new grade. The existing railing, posts and appurtenances may be reused or the Contractor may use new materials; however, materials damaged in removal shall be replaced with new materials. All new materials used shall restore the handrail to its original condition or better. Installation shall be in accordance with Standard Plan S-RC.

2. **Payment:** Payment will be made at the contract unit price per each for “Handrail Adjustment” as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials and equipment necessary to complete the item.

**C. Bench Adjustment and/or Relocation:**

1. **General:** Benches shall be adjusted and/or relocated as directed by the Engineer, with epoxy concrete grout (wedged for leveling if necessary).
2. **Payment:** Payment will be made at the contract unit price per each for “Bench Adjustment and/or Relocation” as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials and equipment necessary to complete the item.



## INTEGRAL REINFORCED CONCRETE WALL

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

### **A. Reinforced Integral Sidewalk and Concrete Wall:**

1. **General:** Portland Cement Concrete sidewalk and wall shall be a minimum of six (6) inches thick and shall conform to the requirements of the drawing included herein. Portland Cement Concrete and reinforcing steel shall comply with KCMO-APWA specifications 2200 and 2300. All reinforcing bars shall be epoxy coated and supported in the proper location utilizing steel chairs. The exposed faces of the wall shall have a broom finish and be free of “honey combing” or “bug holes”. The bottom 8” of the wall shall be backfilled with ½” clean aggregate wrapped in a filter fabric. The Contractor shall be responsible for the cost of providing fill material consisting of untreated compacted aggregate within the top six (6) inches of subgrade and any embankment needed as fill behind the wall. During construction, care shall be taken to ensure public safety along the sidewalk. Any damage to existing improvements not intended for replacement may be repaired at Contractor cost. All curb boxes, tile covers and meter pit covers shall be adjusted to grade and movable portions shall be left free and clean.
2. **Joints:** All expansion and contraction joints shall be reconstructed and all catch basins, poles, fire hydrants, manholes and fire alarm bases shall be adjusted to grade and boxed in with expansion joints. Expansion material shall be located as directed by the Engineer. Wherever possible, the expansion joints shall be located in lieu of other joints giving the sidewalk an appearance of continuity. Expansion joints shall be constructed where the new sidewalk abuts existing sidewalk, curb or driveways.
3. **Payment:** Payment will be made at the contract unit bid prices per square foot for 6” reinforced sidewalk as listed in section 00412 – Unit Prices and per linear foot for integral sidewalk retaining wall as listed in section 00412 – Unit Prices. Such payment and prices shall constitute full compensation for removal of existing sidewalk, expansion joint material, reinforcing steel, PVC drains, rock backfill, filter fabric, soil backfill and for all labor, materials and equipment necessary to complete these items.

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Public Works Department



## MAILBOXES

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. General:** U.S. Postal Service regulations prohibit the delivery of mail to addresses where there are no mailboxes or where the mailbox is not readily accessible, i.e. due to construction. Hence, when it is necessary to move a resident's mailbox to facilitate construction, CONTRACTOR shall install a temporary mailbox at a location accessible to both residents and the mail carrier. Permanent mailboxes shall be reestablished within 24 hours of when it is practical. The area of access to the mailbox shall be stabilized with aggregate or mulch, until permanent restoration is completed.

Federally owned mailboxes shall not be disturbed. If such a facility must be adjusted, Contractor shall give at least twenty-four hour advance notice to the Manager of Delivery and Collections, (816) 374-2337 and 2338. Tampering with Federal mail facilities is an offense subject to Federal prosecution.

- B. Payment:** There will be no separate payment for mailbox adjustment or maintenance.



## METER POSTS AND SIGN POSTS

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. General:** Where necessary, meter posts and sign posts shall be carefully removed by the Contractor. During the time the signs are down, the Contractor shall be responsible for the safe and expeditious passage of traffic by use of temporary signs, flaggers, barricades or other means as may be required. For street closings or questions regarding traffic sign removal, contact the Streets and Traffic Division of the Public Works Department at (816) 513-9300. The Contractor shall be required to replace Meter Posts and Sign Posts upon completion of the work. The Manager of Streets and Traffic shall be notified if new poles are required so that they can be delivered. The Contractor shall be required to take reasonable care of signs and poles. Damage to them during construction may necessitate the Contractor purchasing replacements from the Street and Traffic Division.
- B. Payment:** No separate payment will be made for "Meter Posts and Sign Posts". All costs pertaining thereto shall be included in the contract prices for other items as listed in section 00412 – Unit Prices.



## STREET NAME TILES

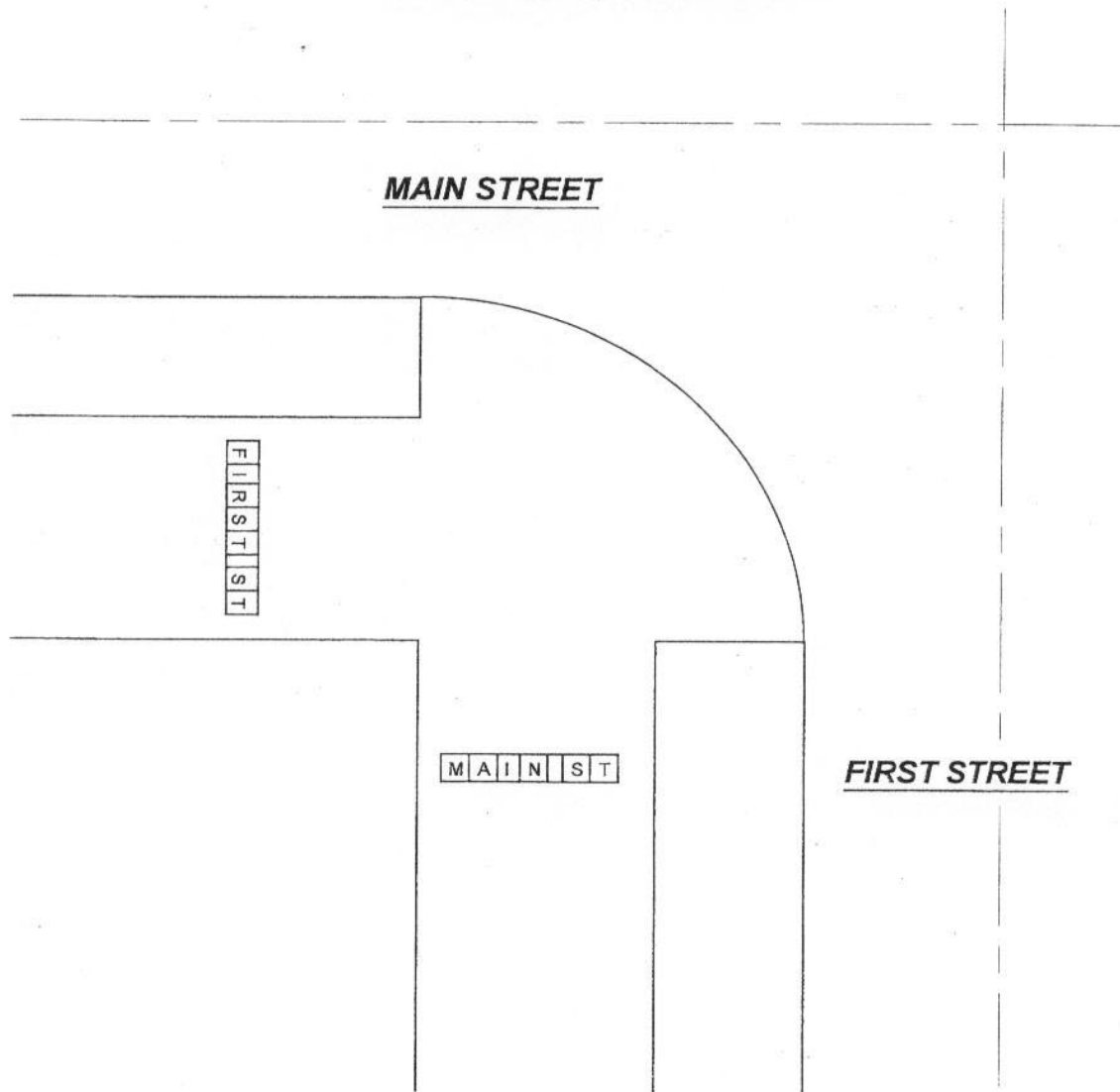
Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. **General:** The Contractor shall furnish all labor, equipment, tools, and materials and do all work necessary to install the street name tiles. All work shall be as described herein and as directed by the Engineer.
- B. **Installation:** The street name tiles shall be imbedded directly in the concrete sidewalk before the concrete has begun to set. The tiles shall be installed at locations designated by the Engineer. The tiles shall be placed as to read the cross street name as approaching the intersection, see page 02891-2 of this Project Manual. The tiles shall be laid in a straight line centered in the sidewalk square. After placement of the tiles the joints between the tiles shall be filled with grout.
- C. **Materials:** The street name tiles shall be 6" in height, 4" in width, and ½" thick and shall contain a single letter. They shall be made of Porcelain Tile with a 1/600 of 1% moisture absorption rate. The letters shall be blue with a white background and the size, design, and color shall match the existing tiles that are being removed. The spacer tiles shall be white in color and of the same material as the letter tiles. The tiles shall have a minimum of three layers of glaze of a type suitable for exterior use. The tile grout shall be an exterior acrylic or polymer grout. The street name tiles and the tile grout shall be approved by the engineer before the materials are ordered.
- D. **Payment:** Payment will be made at the contract unit price per each tile for "Street Name Tiles" as listed in section 00412 – Unit Prices. Such payment shall constitute full compensation for furnishing and installing each tile including spaces (sp).



# STREET NAME TILES TYPICAL INSTALLATION





## LANDSCAPING

Project Number **EV 3040**

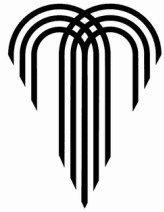
Project Title **IDIQ Traffic Safety Improvements**

- A. **General:** After a minimum waiting period of fourteen (14) hours from the time the curing compound is applied, the Contractor shall remove the forms, backfill or excavate as necessary, and grade the disturbed area behind the curb, or the area between the new curb and the sidewalk, whichever is the greater. Install sod or hydro seed in accordance with Section 2402, "Standard Specifications and Design Criteria".
- B. **Backfill:** As a part of "Landscaping", the Contractor shall provide up to three (3) inches of topsoil and up to three (3) inches of normal embankment for an average maximum backfill of six (6) inches. Any additional backfill required shall be paid as "Embankment" as listed in section 00412 – Unit Prices.
- C. **Topsoil:** Topsoil shall be obtained from approved sources. It shall be a fertile, friable, and loamy soil of uniform quality, without admixture of subsoil materials, and shall be free from materials such as hard clods, stiff clay, hardpan, partially disintegrated stone, pebbles larger than one inch in diameter, and any other similar impurities. Topsoil shall be relatively free from grass, roots, weeds, and other objectionable plant material or vegetable debris undesirable or harmful to plant life.
- D. **Sod:** Sod shall be fescue blend suited to this area.
- E. **Payment:** The Contractor shall be responsible for grading, excavating or backfilling, and sodding where it may be determined that his carelessness caused damage. All costs pertaining to this shall be at the Contractor's expense.

No separate payment for landscaping will be made. Contractor shall be responsible for all labor, materials and equipment necessary to complete the item and to warranty it for one growing season. All costs pertaining thereto shall be included in contract prices for other items as listed in section 00412 – Unit Prices.

### D. **Zoysia Landscaping:**

1. **General:** All items included under this heading shall be as specified for "Landscaping" except that zoysia sod shall be used.
2. **Payment:** No separate payment for zoysia landscaping will be made. Contractor shall be responsible for all labor, materials and equipment necessary to complete the item and to warranty it for one growing season. All costs pertaining thereto shall be included in contract prices for other items as listed in section 00412 – Unit Prices



## TREE REPLACEMENT

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

- A. **General:** The contractor shall plant trees at the locations shown on the plans or as designated by the Engineer. The type and variety of the tree to be planted will be shown on the plans, designated by the Engineer, or designated by the City Forester. Any changes in tree type and variety or trees designated by the Engineer or City Forester shall be selected from the type and variety listed below.

**Type one trees:**

Oak (i.e., Bur Oak, Scarlet Oak, and Red Oak)

Maples (Red Maple, Sugar Maple, Norway Maple)

Linden (Littleleaf, Greenspire)

**Type two trees:**

Locust (Skyline)

Ash (White, Green)

**Reference Standards:**

"Standardize Plant Names" by the American Joint Committee of Horticultural Nomenclature.

"American Standard of Nursery Stock" by the American Association of Nurserymen.

American National Standards Institute (ANSI) Publication Z60.1.

**Substitutions:** Substitutions of plant material will not be permitted unless authorized in writing by the City. If proof is submitted that any plant specified is not obtainable, a proposal will be considered for use of the nearest equivalent size or variety with corresponding adjustment of Contract Price. These provisions shall not relieve Contractor of the responsibility of obtaining specified materials in advance if special growing conditions or other arrangements must be made in order to supply specified materials.

**Source Quality Control:** Plant shall be available for inspection and approval by the Parks and Recreation Department at place of growth, and upon delivery, for conformity to specifications. Such approvals shall not impair the right of inspection and rejection during progress of the work. All plants inspected at the nursery by the Parks and Recreation Department shall be tagged with self-locking tags. Trees delivered to the site without these tags or with broken tags shall be sufficient reason for rejection.

The Contractor shall have a competent arborist in direct and personal charge of the work and the arborist shall be on the job at least 75% of the working hours.

The City Forester shall inspect all work to insure that the planting work is performed according to project specifications.

- B. Packaging, Delivery, Storage and Handling:** Plants shall be properly marked for identification and for checking. Each block of plants and at least 25% of each variety of separate plants in any one shipment shall have legible labels securely attached upon delivery to the site. Each shipment shall be certified by state and federal authorities to be free from disease and infestation. Any inspection certificates required by law to this effect shall accompany each shipment, invoice, order, or stock. On arrival, the certificate shall be filed with the Engineer.

During hot weather and when practical, the contractor may be required to transport plant materials between sunset and sunrise if transported in an open trailer or un-refrigerated box. Where plant material is to be transported over 30 miles, it must be covered so as to prevent damage.

Dug material should be maintained and watered as required at the nursery to guarantee its vitality and health until shipping.

**Protect all trunks, branches, and root balls from damage during tree tying, wrapping and loading operations.**

Load balls or containers onto transport vehicle and secure in a manner that protects the structural integrity of the root balls.

The contractor shall be solely responsible for the safe transportation of plants to the site and their condition upon arrival. Trees damaged, dehydrated or abused during transit or storage will be rejected.

Plant materials shall not be stored on concrete or asphalt.

Roots and balls of plants shall be adequately protected at all times from the sun and drying winds. Balled and burlapped plants that cannot be planted within 24 hours of delivery to the site shall be heeled-in using bark mulch or other approved material.

Root Balls shall not be dropped at any stage of shipping, handling, or planting.

If existing plants are damaged during planting, Contractor shall replace such plants with the same species and size as those damaged at no cost to the City.

**C. Materials:**

**Size: All trees shall be 2" minimum caliper.**

**Nursery Stock:** All plants shall be true to species and variety in accordance with "Standardized Plant Names" referenced herein. Upon request, Contractor shall furnish a list indicating the source of each of the different trees to be planted.

All plants shall be symmetrical in growth with balanced root and top growth and shall be No. 1 in grade type, conforming with the latest edition of "American Standard of Nursery Stock" referenced herein. Trees shall have a single straight trunk, single dominant central leader (when characteristic of the species), and a well-balanced branch structure.

Size of plants spread of roots, and size of balls shall be in accordance with the reference listed.

Plant material specified as Balled and Burlapped (B & B) must have a ball of firm earth from the original soil in which the plant grew. The ball shall be wrapped with burlap and tightly tied to hold it firm and intact. Any plants with loose or broken balls or manufactured balls will be rejected. Wire baskets shall be used where necessary to protect the balls.

The City will not accept B & B plant material tied with string or cord that is not biodegradable. Plants balled in biodegradable burlap only will be acceptable; those balled in polypropylene type materials will be rejected.

Plants shall be nursery grown and shall have received the proper fertilizing, watering, root pruning, and other care as is normally used in nursery practice. Collected stock will be rejected. Trees shall have been transplanted or root pruned at least once in the past 3 years. Stock shall consist of plants grown under natural conditions in soils and climate compatible with the City of Kansas City.

Plants shall be free from defects and injuries. All shipments or plant stock shall comply with existing State and Federal laws and regulations governing plant disease and infection, and interstate, movement of nursery stock.

**Fertilizer:** Fertilize trees after planting with a "Plant Starter/Root Stimulator" liquid solution applied according to the manufacturer's instructions. No other fertilizer is to be used.

**Mulch:** Wood mulch shall consist of bagged or bulk aged wood chips, or shredded hardwood bark. Walnut bark or chips are not acceptable.

**Tree Guards:** Each tree shall be protected after planting with a plastic protector, 9" nominal height, 4" minimum diameter. Material shall be vented polyethylene or equivalent.

#### **D. Planting:**

Planting Season: Actual planting shall be performed only when weather and soil conditions are suitable in accordance with locally accepted practice and as approved by the Engineer.

**Spring:** Unfrozen soil condition until first leaves are one-half developed. (About April 30)

**Fall:** October 1 until frozen soil conditions prevent work.

**Layout:** A Representative of the City shall mark the locations of all trees before planting. If underground construction, obstructions, or large rocks are encountered in excavation of planting areas, other locations for the planting may be selected by the City.

**Planting:** Holes shall be a minimum of 10" larger in diameter than the spread of roots or size of root ball. The bottom of the hole shall be no deeper than the height of the root ball so that the tree ball is placed on solid earth. Planting holes shall have approximately vertical sides and flat bottoms.

**Setting and Backfilling:** Set all trees plumb and straight. Set at such a level that the top of the tree ball is at or slightly above the original level when grown in the nursery.

Soil used for backfilling all plants shall consist of the soil excavated at the time of planting. Backfill each hole about 2/3. Flood the plant with water and allow soil to settle. Root stimulator shall be applied at the time of watering.

Cut and remove all ties from the ball. Cut and fold back the top 1/3 of the burlap. The top of wire baskets shall be folded outward at the same time.

In no case should the burlap be pulled out from under the balls, and baskets should not be removed.

**Do not plant trees whose balls have been broken during the planting process.**

**Application of Mulch:** Place 2 to 4 inches of mulch around all trees to cover an area approximately 3 feet in diameter. **Do not mound around tree trunk.**

**Final Operations:** Remove all remaining tags, ties, and transit protectors from trees. Install tree guard as specified. Stakes and guys are not required.

#### **E. Plant Guarantee and Maintenance Requirements:**

All trees shall be guaranteed by the Contractor to be in vigorous growing condition at the time of planting.

Rejected trees shall be promptly removed and replaced.

Contractor shall promptly raise and straighten trees that settle or lean, for a period of one growing season.

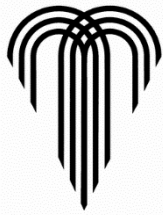
Contractor will be responsible for watering the trees on the following schedule. Two (2) times a week for the first four weeks (week 1 to week 4) after planting, and one (1) time a week for the following four weeks (week 4 to week 8).

Following the initial eight weeks contractor will water as needed to maintain health and aesthetic quality of the trees for the term of the contract.

Contractor will treat for any disease, or insect problem that could cause significant harm to the tree.

Contractor will guarantee and replace any tree that dies for a period of one year. First time replacement trees will be guaranteed for a period of one year.

- F. Payment:** Payment will be made at the contract unit price per each for "Tree Replacement" as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials, and equipment necessary to complete this item as specified and no additional compensation shall be allowed.



## CONCRETE SLAB RAISING

Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

1. **Description:** These specifications cover the furnishing, boring, drilling, pumping cementitious grout slurry and appurtenances for raising existing concrete slabs to their original lines and grade, or filling the void between the bottom of the existing concrete slab and the subgrade. The work described in each Item includes the furnishing of all materials, equipment, supplies, tools, the performance of all labor and services, and all incidentals necessary to complete the concrete slab raising and / or void filling under the concrete slab in a neat, substantial and workman-like manner.
2. **Slab Raising:**
  - A. **Materials**
    1. **Cement Slurry Mixture:** The slurry mixture used for raising concrete slabs shall be composed of lime, sand, ground clay, Portland Cement (Type 1A conforming to A.S.T.M. C150), and fly ash in the following proportions by volume:

Lime / Fly Ash Mixture passing #50 sieve	100%	27%
Sand passing #4 sieve	100%	15%
Ground clay passing #4 sieve	100%	50%
Portland Cement – 3 ½ bag mix (approx.)		8%

This shall be accomplished by use of continuous mixer. All aggregate shall be metered for precise mix design to assure consistent quality control.
    2. All materials for job site shall at all times be mobile and not stored in the road or walk area.
    3. Slurry material for Slab and Curb Raising shall be mixed with enough potable water to a workable consistency (3 to 6 inch slump). Material once mixed shall be utilized within one hour and may not be retempered.
    4. There will be no deviation from the specified mix design.
    5. All holes drilled for injection pumping shall be repaired with an aggregate mixture to match existing surface as best as possible. Holes will be patched utilizing a mixture of Portland Type 1A Cement and mason sand in a 2 to 1 proportion.
    6. If crack repair is required by contract, install a 2-part epoxy to within ¾" of the top surface and allow to dry. Grout remaining crack to surface with 2-part sand, 1-part cement.
  - B. **Equipment**
    1. Mixing equipment shall be a self-contained continuous mixer, with calibrated mixing and delivery capability, carrying all water, cement and aggregate needed for the job site. The continuous mixer shall meet or exceed the Standards of Calibration as set forth by the Volumetric Mixer Manufacturer Bureau (VMMB), a member of the National Ready Mix Concrete Association (NRMCA), and conforming to ASTM 685, ACI 304.6 and CSA 23.7.
    2. All materials pumped shall be of a minimum of 500 PSI to a maximum of 1,000 PSI mix design.
  - C. **Work**
    1. **Holes:** The Contractor shall drill holes by whatever means convenient to him, however Contractor shall exercise caution to prevent cracking of concrete slab in



which the hole is being drilled. The hole size for slab raising operations shall be a minimum of one inch (1") up to a maximum of two inches (2") in diameter. The holes shall be spaced as necessary to uniformly assure complete communication of slurry between holes.

2. Slab Raising: Slabs shall be raised to the required elevation and slope. If needed, saw cuts shall be made at joints to allow free movement of the work. Saw cutting is incidental to the unit price as bid for slab raising.
3. Patching Holes: Holes shall be cleaned the full depth of the slab by removing excess slurry and wire brushing exposed sidewalls. Prior to placement of the Portland Cement, the surface around the holes shall be damp. Slab raising holes shall not be cleaned out and patched until the slurry that was pumped has been allowed to stabilize. Patching of holes is incidental to the unit price as bid for slab raising.
4. Clean Up: Slabs raised shall be thoroughly scraped and swept after completion, but prior to patching. Surrounding grass areas adjacent to slab raising shall be left in a clean, non-debris condition. Clean-up is included in the unit price as bid for slab raising.

D. Damage

1. Any concrete that is damaged by the Slab Raising operation shall be replaced by the Contractor at the Contractor's expense per Section 2 below, unless otherwise specified in the written Contract.
2. Removal shall be accomplished by whatever means considered practical by the Contractor (subject to the approval of the Engineer, if applicable). Removal and replacement limits shall be defined by the nearest existing contraction joint.
3. Replacement Sidewalk replacement shall be in accordance with this contract.
4. Restoration of grass areas that are damaged by the Contractor shall be restored to existing conditions at Contractor's expense

E. Clean-Up and Final Inspection

The Contractor shall have thorough and systematic clean-up operations following closely behind the construction work. He shall remove and properly dispose of all dirt and debris resulting from execution of the work. Defects of any nature whatsoever shall be promptly corrected.

3. **Payment:** Payment will be made at the contract unit bid price per cubic yard for "Concrete Slab Raising" as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials and equipment necessary to complete the item.

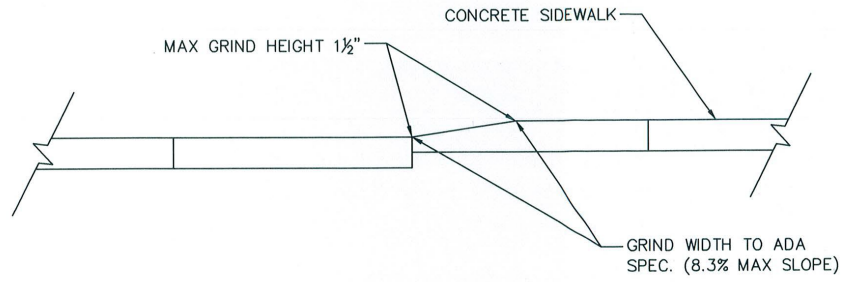


## Concrete Sidewalk Grinding Detail

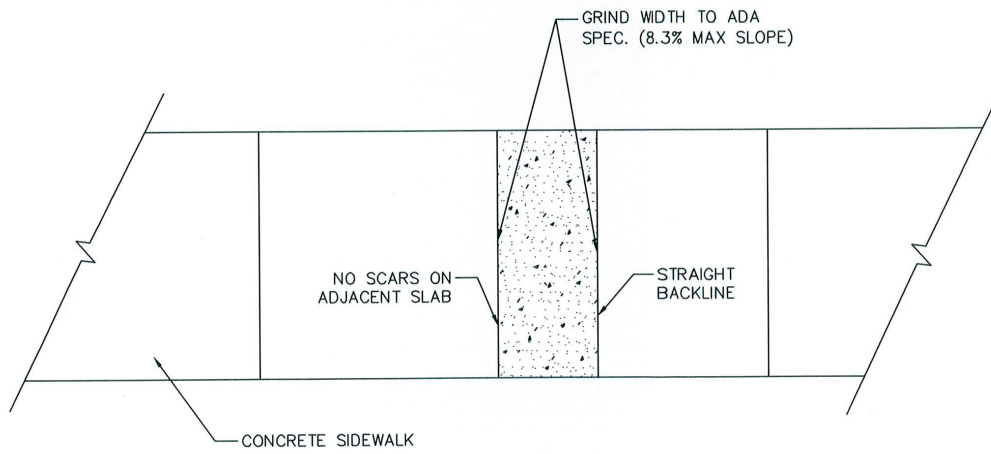
Project Number **EV 3040**

Project Title **IDIQ Traffic Safety Improvements**

1. **Description:** These specifications cover the grinding and cleanup for grinding concrete sidewalk, driveway, and curb to remove trip hazards. The work described in each Item includes the furnishing of all materials, equipment, supplies, tools, the performance of all labor and services, and all incidentals necessary to complete the grinding in a neat, substantial and workman-like manner.
2. **Materials:** Perform grinding using dry, vertical carbide grinding equipment that will leave a non-slip surface. Grinding can also be performed by saw cutting with flush mounted diamond tipped blades capable of horizontal cutting to remove the concrete completely to all edges of the w.
3. **Construction:** Perform grinding so that the surface has essentially the same texture adjacent to either side of the joint or crack. Ground surfaces will not be smooth or polished and have a coefficient of friction of not less than 0.30. Perform grinding so that the finished grind has a rectangular appearance consisting of a straight back line with no stray grinding marks. The adjacent concrete will remain untouched by the grinding process without scars or damage. The finished slope will be a maximum of 8.3% per attached details. All dust and debris from the grinding process shall be contained to the work area during the grinding operation and then immediately removed once the grinding is complete at that location.
4. **Measurement:** The City will measure grinding by the number of linear foot of grinding. Each unit shall consist of a grind up to a maximum of 1.5 inches high.
5. **Payment:** Payment will be made at the contract unit bid price per linear foot for "Concrete Grinding" as listed in section 00412 – Unit Prices. Such payment and price shall constitute full compensation for all labor, materials, equipment, grinding, clean up and removing all excess debris necessary to complete the item.



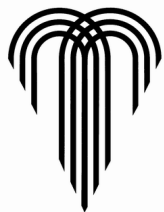
SIDE VIEW



TOP VIEW

CONCRETE SIDEWALK GRINDING DETAIL	

CITY OF FOUNTAINS  
HEART OF THE NATION



KANSAS CITY  
MISSOURI

## STREETLIGHT CONFLICTS/RESTORATION

Project Number EV 3040

Project Title IDIQ Traffic Safety Improvements

- A. General:** The Contractor will be responsible for restoring all street lighting facilities damaged or altered during the construction of the project. Any damage caused by the Contractor's construction operations to existing street lighting facilities shall be restored by the appropriate agencies. The contractor shall be responsible for the cost of such conflicts and restorations.

The Contractor will be responsible for the restoration of the existing street lighting facilities to APWA and KCMO Standards and Specifications. Restoration will be required in such cases as, but not limited to, grade changes, design changes, and relocations. **Underground splicing will NOT be allowed.** Verification of streetlight operations will be required prior to acceptance of the project.

- B. Payment:** No separate payment will be made for "Streetlight Conflicts/Restoration". All costs associated with restoring street lighting facilities damaged or altered by the Contractor will be the Contractor's responsibility.