



201 N. State, Knob Noster MO 65336

Phone: 660-563-2595 Fax: 660-563-5634

Knob Noster, Missouri is seeking Proposals from qualified Respondents for Sidewalk Construction in the City of Knob Noster.

Enclose your proposal in a sealed, opaque envelope with "Knob Noster 2024 Sidewalk Construction Proposal" written on the face of the envelope and deliver it to Knob Noster City Hall, **201 N. State Street, Knob Noster, MO, 65336**, no later than **4:00 pm CDT on Friday, August 16, 2024** otherwise your Proposal will be **REJECTED**. There will be a public opening of proposals at **4:05pm CDT on August 16, 2024**, in the Knob Noster Council Chambers at the above address.

Disabled Persons wishing to participate in the Request for Proposal Opening and who require a reasonable accommodation may call Knob Noster City Hall at (660) 563-2595. (48) hour notice is required.

Point of Contact for this Request for Proposal is Scott Peterson, City Administrator. All questions must be emailed to speterson@cityofkn.net, prior to **5:00 pm on Friday, August 9, 2024**. Answers to any questions will be made available as an addendum on the City's website at www.cityofkn.net, and to those who request to be notified.

By submitting a Proposal, you offer to enter into a Contract with the City, and your offer is not revocable for Ninety (90) Days following the Response Deadline indicated above.

Knob Noster, Missouri reserves the right to: (1) waive any defect in the offer of any Respondent; and (2) to reject any or all offers.

Your returned Proposal shall be an original plus two (2) copies as detailed in Paragraph 2 of this page.

Knob Noster, Missouri reserves the right to request corrections, clarifications, and/or additional information pertaining to Respondent's proposal. Such information must be received by the City Administrator within forty-eight (48) hours immediately following notification to the Respondent or the Respondent's proposal will be deemed NON-RESPONSIVE.

PLEASE NOTE: The Successful Respondent will have complied with all requirements listed in this Request for Proposal.

A handwritten signature in blue ink, appearing to read "S. Peterson", is written over a faint, circular official stamp.

Scott Peterson
City Administrator

I. PURPOSE AND GENERAL INFORMATION

It is the intent of this Request for Proposal to solicit bids for professional concrete services for the City of Knob Noster, through its Public Works Department. The City of Knob Noster is inviting proposals from Contractors to provide reconstruction of the designated sidewalks at proposed locations, with a project completion date of November 1, 2024.

II. SCOPE OF SERVICES

- Construction of new five-foot concrete sidewalk on the south side of W. Wimer St. between Jefferson Ave and Washington Ave.
- Construct new barrier-type street curb on the South side of W. Wimer St. between Jefferson Ave and Washington Ave.
- Public works department may remove existing sidewalk and curbing and perform rough grading and compacting of native soil. Contractor will be responsible for compacting of base rock. Successful respondents will provide a bid with the removal of the existing sidewalk and required grading AND provide an alternate option bid without removal of the existing sidewalk and required grading.
- New sidewalk location to be identical to existing sidewalk, if applicable. All constructed sidewalk must be ADA compliant. Concrete sidewalk to be four (4) inches thick with a minimum of five (5) feet in width. Curbing to be installed as required at the specific locations to meet ADA requirements. Concrete to be a minimum of 3500PSI mix. Construction Joints to have dowels installed at twelve (12) inch intervals at all curbs, driveway and street locations. Longitudinal cut joint spacing to be not more than five (5) feet in spacing and must match the entire width of sidewalk. Isolation joints to be placed where sidewalk abuts driveways and similar structures and 250- foot centers maximum. Surface must be broom finished.
- All curbing, if applicable, must be made to match existing or new curb to be barrier style, but still meet ADA ramp requirements.
- All constructed sidewalks must meet ADA requirements with a ramp slope not to exceed 1 inch/ft and a cross slope of not more than 2%. Ramps to be installed will be at the discretion of the contractor that best fits the application, but will always be Type A or Type B ramp.
- Detectable warnings must meet ADA requirements at required locations.
- All driveways approaches within the project scope, if not already ADA compliant, must be brought into ADA compliance by the contractor.
- Please refer to the provided APWA sidewalk and ramp details for clarification.
- All culverts will be replaced as necessary and will be a minimum of 12" with a minimum of 12" exposed at each end.
- Replacement seeding, mulching and/or gravel will be required on all

- graded areas to match existing site conditions.
- Contractor will be required to repair street cuts made during installation of ramps.
- It is the responsibility of the Successful Respondent to accurately measure the length of sidewalk and to be familiar with the work required for the project.

III. PREPARATION OF THE PROPOSAL

Proposals should provide a straightforward, concise description of the bidder's capabilities to satisfy the requirements of this Request for Proposals. Emphasis should be on completeness, clarity of content, and conveyance of the information required by the City of Knob Noster. At a minimum, the proposal should contain the following information:

- Business Organization - State the full name, address, phone number, fax number and email address of your business and whether you operate as an individual, partnership, or corporation.
- Qualifications - Include a brief narrative description of the proposed services that will be delivered and the equipment available to perform the services.
- Bid Sheet- Contractor shall provide prices and quantities required for the project on the attached bid sheet.

GENERAL CONDITIONS

The General Conditions which follow apply to and are a part of this Request for Proposal unless otherwise specified herein. Subject to State and local laws and all rules, regulations and limitations imposed by legislation of the Federal Government, responses on all advertisements, and invitations issued by the City of Knob Noster will bind Respondents to applicable conditions and requirements herein set forth unless otherwise specified in the Request for Proposal. Respondents or their authorized representatives are expected to fully inform themselves as to the conditions, requirements, and scope of services before submitting proposals; failure to do so will be at the Respondent's own risk and he cannot secure relief on the plea of error.

1. Withdrawal of Proposals: A written request for the withdrawal of a proposal or any part thereof may be granted if the request is received by the City of Knob Noster prior to the response deadline.

2. Completeness: All information required by the Request for Proposal must be supplied to constitute a proper proposal. Respondents shall not alter the Request for Proposal documents except upon instruction by receipt of addendum. Respondents shall furnish information required by the Request for Proposal in the form requested. The City reserves the right to reject proposals with incomplete information or which are presented in a form other than that requested in this Request for Proposals. Proposals must be submitted in a hard copy form.

Proposals submitted electronically, on computer diskettes, or by FAX will not be considered by the City.

3. Proposals Binding For 90 Days: Unless otherwise specified all proposals submitted shall be binding for ninety (90) calendar days following the response deadline, unless the Respondent(s), upon request of the City Administrator, agrees to an extension.

4. Exceptions: Conditional or qualified proposals are subject to rejection in whole or in part. All exceptions to the scope of services for this Request for Proposal must be made in writing and attached to the proposal when it is submitted by the Respondent. The City will consider minor exceptions to its requirements. A minor exception is one which is a matter of form, not substance. The minor exception is considered immaterial and inconsequential when its significance to price, quantity, quality, or delivery is trivial or negligible when contrasted with total scope of the Request for Proposal (ex: comparable manufacturer or alternate proposals where allowed by the Request for Proposal). The City will not consider exceptions to its General Conditions, Forms or Insurance Requirements. The City reserves the right in its sole discretion to accept or reject any exceptions requested. Exceptions made in any other manner or form whether by omission or by inclusion in any other manner other than as specifically entered and described in full shall not be made a part of the resulting contract. Exceptions which are made by the Respondent and entered and determined to be acceptable to the City shall be made a part of the resulting contract by inclusion as a provision of a mutually executed Amendment to the contract. Exceptions which are not made a part of said Amendment shall not be included in the contract nor be binding upon the City and the scope of services for the Request for Proposal shall prevail.

5. Questions Regarding Scope of Services: Any information relative to interpretation of scope of services shall be requested of the Building Administrator, in writing, in ample time before the response deadline. All questions must be received by the City by July 8, 2022. Any interpretation made to prospective respondents will be expressed in the form of an addendum to the Request for Proposal which, if issued, will be posted no later than three (3) business days before the response deadline. Addendums to the Request for Proposal will be posted on the city's website @ www.cityofkn.net. Oral answers will not be binding on the City. Each respondent shall ascertain prior to submitting his proposal that he has received all Addenda issued and shall acknowledge the receipt of such on the form provided herein. Failure to adhere to this policy may cause your bid to be REJECTED.

6. The City reserves the right to split the award of the contract, reject any or parts of proposals, to waive technical defects in proposals, consider administrative costs and to select the proposals(s) deemed most advantageous to the City. The City shall consider proposals submitted on an "all or nothing" basis only if the proposal is clearly designated as such by the Respondent, affixing the words "ALL OR NOTHING" on the quotation portion of the Request for Proposal.

7. Applicable State Law: The contract shall be construed according to the laws of the State of Missouri. The Contractor must be registered and maintain good standing with the Secretary of

State, of the State of Missouri and other regulatory agencies as may be required by law or regulation.

8. Communications and Notices: Any notice to the Contractor shall be deemed sufficient when deposited in the United States Mail postage prepaid; faxed; e-mailed; delivered to a telegraph office fee prepaid; or hand-carried and presented to an authorized employee of the Contractor at the Contractor's address as listed on the signature page of the contract or at such address as the contractor may have requested in writing,

9. Bankruptcy or Insolvency: Upon filing for any bankruptcy or insolvency proceedings by or against the Contractor, whether voluntary or involuntary, or upon the appointment of a receiver, trustee, or assignee for the benefit of creditors, the Contractor must notify the City Administrator immediately in writing. Upon learning of the actions herein identified Knob Noster reserves the right at its sole discretion to either affirm the contract or cancel the contract and hold the Contractor responsible for damages.

10. Patents: Contractor agrees to defend, indemnify, protect, and save harmless, Knob Noster, Missouri, against all claims for royalties for patents or suit for infringement thereon which may be involved in the manufacture or use of the materials or items to be furnished.

11. By virtue of statutory authority, the City Administrator shall give preference to all commodities manufactured, mined, 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 same or less.

12. Material Standards: All material or equipment furnished shall meet the minimum requirements of the Occupational Safety & Health Standard (OSHA) published in the Federal Register.

13. Tax Clearance Required: No person, firm or corporation, resident in Knob Noster, or otherwise legally within the taxing jurisdiction of the City, shall be eligible to provide any goods, contractual services or anything covered by the City Purchasing Policy unless said person, firm or corporation is duly listed and assessed on the City tax rolls, and is in no way delinquent on any taxes payable to the City. Further, no person, firm or corporation, regardless of state of residency, shall be eligible to provide any goods, contractual services, or anything covered by this chapter, of a cost in excess of \$150,000 per annum, if that person, firm or corporation is in any way delinquent on any taxes payable to any local government entity with which Knob Noster has entered into an "Intergovernmental Agreement for Tax Verification Information".

Where any individual, firm or corporation is a resident of Knob Noster, or it otherwise appears that such firm is legally within the taxing jurisdiction of the City, and has made an offer, bid, or quotation for any City purchase, or has submitted an application to be given an opportunity to make quotations for City purchases, the City Administrator shall cause a search to be made of the City tax rolls, and, if applicable, an inquiry to be made of the appropriate personnel of any other local government entity with which Knob Noster has entered into an "Intergovernmental Agreement for Tax Verification Information", to determine the eligibility of that person, firm or corporation under this section.

When the lowest/highest responsible bidder for a given Purchase Order or Contract is ineligible under this section, the City Administrator may, where time is not of the essence to the City, notify the bidder and allow three (3) days for the bidder to correct the deficiency or pay up any delinquency involved. If the bidder fails, after such notice, to comply within three (3) days, or if the City Administrator deems to be of the essence, he shall proceed as though the next lowest/highest responsible bidder who is eligible under this section had entered the lowest/highest bid.

14. The City is not responsible for articles or services furnished without a Purchase Order,

15. Inspection and Acceptance: Inspection and acceptance will be at destination. Prior to the time of delivery and acceptance by the City, or after any rejection, risk or loss shall be the responsibility of the Contractor unless loss results from negligence of the City.

16. Equal Opportunity: The Contractor shall maintain policies of employment as follows:

a) The Contractor and the Contractor's Subcontractor(s) shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, disability, or national origin. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, religion, color, sex, disability, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the policies of non-discrimination

b) The Contractor and the Contractor's Subcontractor(s) shall, in all solicitations or advertisements for employees placed by them or on their behalf, state that all qualified applicants will receive consideration for employment without regard to race, religion, color, sex or national origin,

17. Foreign Corporations: Firms submitting proposals as corporations which are not incorporated in the State of Missouri must include with their proposal a properly executed Certificate of Registration for Foreign Corporation authorizing the firm to do business in the State of Missouri.

18. Errors in Proposals: Respondent shall be bound by its proposal even though the proposal is based on an erroneous calculation, and Respondent shall have no right to withdraw its proposal after the Response Deadline on the basis of an error in calculation of its proposal,

Carelessness in quoting prices, or in preparation of proposal, will not relieve the Respondent in case of errors. Erasures or changes in proposals must be initialed,

19. Omission in Proposals: Omission in the proposal of any provision herein prescribed shall not be construed as to relieve the contractor of any responsibility or obligation requisite to the complete and satisfactory operation of any and all equipment and services. Any exception to the provision of the Request for Proposals must be in writing and not by omission.

20. No lowest/highest Respondent shall receive a business expectancy merely because his proposal is the lowest/highest one received; until the contract has been awarded, no business expectancy exists.

21. Conflict of Interest: Respondent warrants that no officer or employee of the City, whether elected or appointed, shall in any manner whatsoever be interested in or receive any benefit from the profits or emoluments of this contract.

No official or employee of Knob Noster or its governing body and no public official in Knob Noster who exercises any functions or responsibilities in the review or approval of the undertaking of carrying out of the project covered by this contract shall voluntarily acquire any personal interest, directly or indirectly, in this contract.

The Contractor covenants that he/she presently has no interest and shall not acquire any interest, directly or indirectly, which would conflict in any manner or degree with the performance of this services hereunder. The Contractor further covenants that no person having such known interest shall be employed or conveyed an interest, directly or indirectly, in this contract.

22. It shall be the responsibility of all Respondents to warrant that all goods, services, and/or work to be procured and/or performed under this contract shall conform to and/or be performed in compliance with all applicable Federal, State, and Local Statutes, Ordinances and Codes including but not limited to the American with Disabilities Act of 1990. Failure to comply in any manner with applicable Statutes, Ordinances or Codes shall result in said Contractor replacing the goods, services and/or work performed in order to effect compliance or in liquidated damages in the amount required to effect compliance with said Statutes, Ordinances and Codes together with any costs associated with collection of said damages.

23. Respondent certifies that all goods to be supplied to the City as a result of contracts awarded under this Request for Proposal were produced in compliance with all applicable requirements of section 6, 7, and 12 of the Fair Labor Standards Act, as amended, and of regulations and orders of the United States Department of Labor issued under section 14 thereof,

24. Fund Allocation: Continuance of any resulting contract or issuance of purchase orders after December 31 of the current calendar year is contingent upon the allocation of City funds for the next proceeding calendar year.

25. Qualifications of Respondents: The City may make such reasonable investigations as deemed proper and necessary to determine the ability of the respondent to perform the work and the respondent shall furnish to the City all such information and data for this purpose, as may be requested. The City reserves the right to inspect respondent's physical plant prior to award to satisfy questions regarding the respondent's capabilities. The City further reserves the right to reject any proposal if the evidence submitted by or investigations of such respondent fails to satisfy the City that such respondent is properly qualified to carry out the obligations of the contract and to complete the work contemplated herein.

26. Except for the furnishing and transportation of materials, the Contractor shall not sublet, sell, transfer, assign, or otherwise dispose of any portion of this contract to any individual, firm, or corporation without written consent of Knob Noster. This consent of the City will not be given unless, and until the Contractor has submitted satisfactory evidence that the proposed subcontractor is qualified to execute the work and has an Affirmative Action Plan acceptable to the City, together with a complete copy of the subcontract, if so requested by the City. The subcontract shall bind the subcontractor to comply with all requirements of this contract including, but not limited to, wage rates, equal employment opportunity regulations, submittal of payrolls, etc. Assignment of the entire contract may be made only upon written consent of the City.

27. If awarded a Contract as a result of this Request for Proposal; you must have a hard copy of a purchase order issued by the Knob Noster City Administrator BEFORE providing any goods and/or services. Failure to adhere to this policy will result in the immediate termination of said contract.

28. As a condition for the award of any contract or grant in excess of five thousand dollars by the City to a business entity, the business entity shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. Every such business entity shall also sign an affidavit affirming that it does not knowingly employ any person who is an unauthorized alien in connection with the contracted services. Any entity contracting with the state or any political subdivision of the state shall only be required to provide the affidavits required in this subsection to the state and any political subdivision of the state with which it contracts, on an annual basis.

29. This contract shall be construed according to the laws of the State of Missouri, including Missouri Revised Statute Chapter 610.111.1, which requires that all records of Knob Noster, Missouri will be open to the public, unless subject to statutory exception, as Knob Noster, Missouri is a public governmental body. Pursuant to Missouri Revised Statute Chapter 610.02(12), sealed bids and related documents, once the bid documents have been opened, along with any related documents, are considered public records subject to disclosure upon request. Missouri Revised Statute Chapter 610.021(12) also requires, upon request, disclosure of any negotiated contract and documents related to such contract once the contract has been executed or until all bids have been rejected.

31. Discussions and Negotiations: The City, in its sole discretion, may do any or all of the following:

a) evaluate proposals and award a contract with or without discussions or negotiations with any or all Respondents; b) discuss and negotiate anything and everything with any Respondent or Respondents at any time; c) request additional information from any Respondent; d) request a Respondent or Respondents to submit a new Proposal; e) request one or more best and final offers from any or all Respondents; f) accept any Proposal in whole or part; g) require a Respondent to make modifications to their initial Proposal; h) make a partial award to any or all Respondents; i) make multiple awards to any or all Respondents; j) terminate this RFP and reissue an amended RFP.

CITY OF KNOB NOSTER
2024 SIDEWALK IMPROVEMENTS BID FORM JULY 2024

<u>DESCRIPTION</u>	<u>QUANTITY</u>	<u>UNIT</u>	<u>UNIT COST</u>	<u>TOTAL COST</u>
Start Up, Mobilization, Miscellaneous				
Mobilization/Demobilization	1	L.S.	\$ _____	\$ _____
			Subtotal for Item 1.00: Start Up, Mobilization, Miscellaneous	\$ _____
 Sidewalk and Traffic Calming Improvements				
Unclassified Excavation, Disposal and Compacted Backfills and replacements.	1	L.S.	\$ _____	_____
4" Thick Concrete Sidewalk w/ 4" of 1" Rolled Stone Base	175	S.Y.	\$ _____	\$ _____
18" Concrete Curb and Gutter (6" Thick) w/ 4" of 1" Rolled Stone Base	280	L.F.	\$ _____	\$ _____
6" Concrete Pavement (Sidewalk approaches) w/ 4" of 1" Rolled Stone Base	30	S.Y.	\$ _____	\$ _____
Driveway Transition Grading & Rock	30	S.Y.	_____	_____
Erosion Control/Silt Fence	300	L.F.	\$ _____	\$ _____
Detectable Warnings	2	EA.	\$ _____	\$ _____
Traffic Control	1	L.S.	\$ _____	\$ _____
Finished grading, seeding, and mulching	1	L.S.	\$ _____	\$ _____
			Subtotal for Item 2.00: Sidewalk Improvements	\$ _____
			TOTAL BID:	\$ _____

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEATED AND DATE

GENERAL NOTES:

A MINIMUM 4" TYPE 1 OR 5 AGGREGATE BASE SHALL BE PLACED BENEATH ALL CURB AND GUTTER SECTIONS AND INCLUDED WITHIN THE MAINLINE BASE PAY LIMITS.
WHEN CURBS ARE CONSTRUCTED DIRECTLY BENEATH GUARDRAIL, CURB HEIGHT SHALL BE 4 INCH BARRIER CURB, AS SHOWN ON STANDARD PLAN 606.00.

- CURB, GUTTER AND CURB AND GUTTER CONSTRUCTED ALONG AND ATTACHED TO CONCRETE PAVEMENT OR BASE SHALL HAVE:
1. JOINT (E) ONE-QUARTER DEPTH OF CURB AND GUTTER THICKNESS AS A CONTINUATION OF EACH CONTRACTION JOINT IN THE BASE OR PAVEMENT.
 2. JOINT (E) AS CONTINUATION OF 2" EXPANSION JOINT (E) IN THE CONCRETE PAVEMENT SHALL EXTEND AND GUTTER. CONTINUE THROUGH THE CURB, CUTTER AND CURB AND GUTTER.
 3. JOINT (E) THROUGH CURB AND CURB AND GUTTER AT THE BEGINNING AND END OF EACH PAVED APPROACH.

CURB, CURB AND GUTTER AND GUTTER CONSTRUCTED APART OR SEPARATED FROM CONCRETE PAVEMENT SHALL HAVE A JOINT (E) ENTIRELY ASHRAIL. THE CURB, CURB AND GUTTER AND GUTTER, AT THE BEGINNING AND END OF EACH "PAVED APPROACH" AND A JOINT (E) TO 1" DEPTH OF CURB AND GUTTER THICKNESS AT INTERVALS OF 30 FEET BETWEEN APPROACHES.

JOINTS (E) AND (E) THROUGH CURB SHALL BE FILLED WITH PREFORMED FILLER MATERIAL AND SEALED WITH HOT Poured FILLER FOR JOINTS.

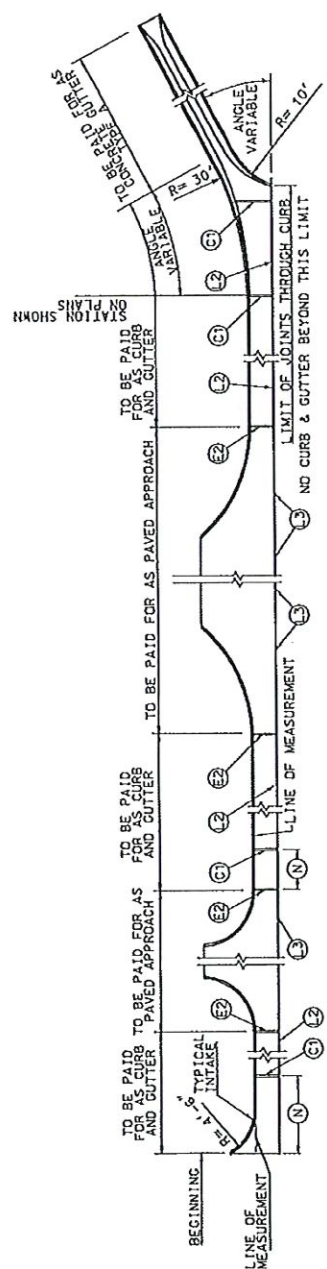
JOINT (E) IN GUTTER SHALL BE FILLED WITH PREFORMED FILLER AND SEALED WITH HOT FILLER MATERIAL.

JOINT (E) IN GUTTER SHALL BE FILLED WITH PREFORMED FILLER AND SEALED WITH FILLER OR FILLED WITH HOT Poured FILLER. PREFORMED FILLER MATERIAL SHALL BE PLACED TO PROVIDE 1" HOT Poured FILLER FOR JOINTS.

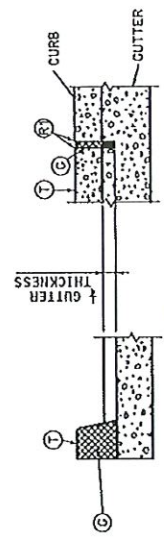
THE BARRIER CLASS CURBS MAY BE CONSTRUCTED WITHOUT BAITER WHEN CONSTRUCTED ON A RADIUS OF 6 FEET OR LESS. THE (E) WILL BE REQUIRED.

WHERE A SIDEWALK INTERSECTS A CURB, THE SIDEWALK SHALL BE RAMPED NO STEEPER THAN 12:1 SLOPE TO PROVIDED ACCESS FOR WHEELCHAIR ACROSS APPROACHES.

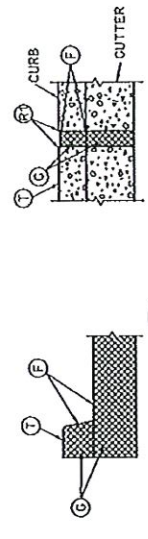
PRECAST TYPE A AND B GUTTER ARE ONLY ALLOWED WHEN CONSTRUCTABILITY ISSUES MAKE CAST IN PLACE NOT PRACTICAL. PRECAST IS ONLY ALLOWED WITH THE APPROVAL OF THE ENGINEER. WHEN ALLOWED BY THE ENGINEER, TYPES A AND B GUTTER MAY BE PRECAST TO CONFORM TO THE DIMENSIONS SHOWN. THE PRECASTER SHALL SUBMIT SHOP DRAWINGS INDICATING THE SECTION LENGTH, SECTION CONNECTION, AND PROPOSED JOINT TO BE USED. WHEN PRECAST CURBS ARE CAST IN PLACE, THE ONLY OPTION, A COMBINATION OF CAST IN PLACE AND PRECAST GUTTER MAY BE PERMITTED.



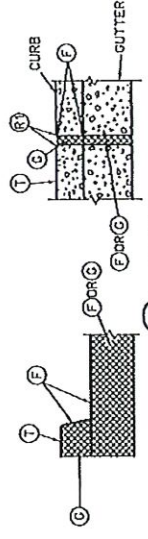
PLAN OF MEASUREMENT OF CURB & GUTTER AND JOINT PLAN



(C1) JOINT

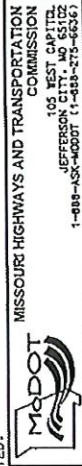


(E1) JOINT



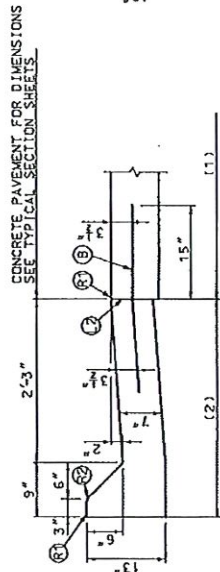
(E2) JOINT

- LEGEND**
- (E1) 1" MAXIMUM WIDTH TRANSVERSE CONTRACTION JOINT (PREFORMED OR SAWED).
 - (E2) 2" TRANSVERSE EXPANSION JOINT (PREFORMED OR SAWED).
 - (E) 1" TRANSVERSE EXPANSION JOINT (PREFORMED OR SAWED).
 - (F) FILLER FOR JOINTS - HOT Poured.
 - (E) PREFORMED JOINT FILLER MATERIAL.
 - (E) LONGITUDINAL JOINT WITH TIE BARS.
 - (N) NOT LESS THAN 10' OR MORE THAN 30'.
 - (T) TOP OF CURB.
 - (E) ROUND TO 1/2" RADIUS (EXCEPT FOR SAWED JOINTS).

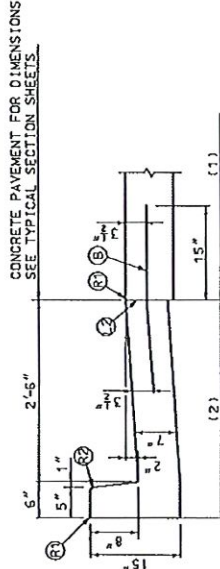


CONCRETE CURB, CURB AND GUTTER AND GUTTER

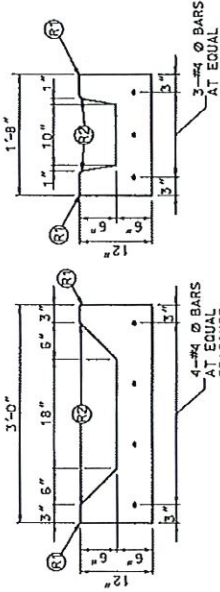
DATE EFFECTIVE:	10/01/2022	SHEET NO.:	1 OF 2
DATE PREPARED:	7/19/2022	PROJECT NO.:	609.000



TYPE A
(MOUNTABLE)



TYPE B
(BARRIER)



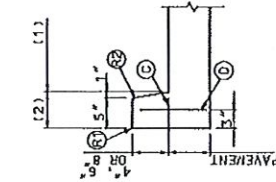
TYPE A

TYPE B

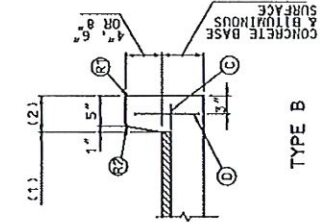
CURB & GUTTER

GUTTERS

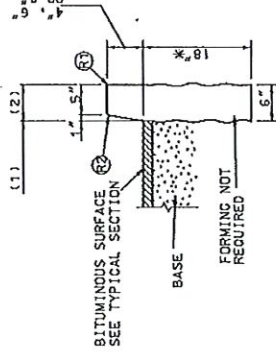
SEE STANDARD PLAN 607.11 FOR MODIFIED TYPE A AND B GUTTERS



TYPE A
(INTEGRAL)



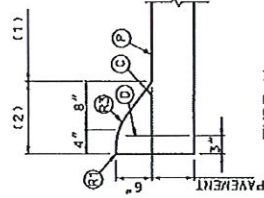
TYPE B



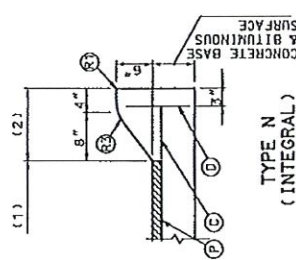
TYPE S
(SEPARATED)

* DEPTH MAY BE REDUCED IF KEYED 6" IN ROCK

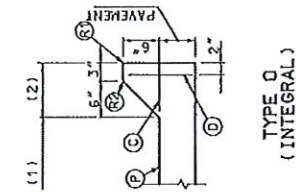
BARRIER CURBS



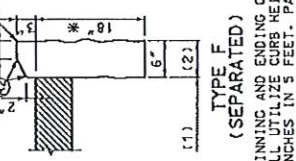
TYPE M
(INTEGRAL)



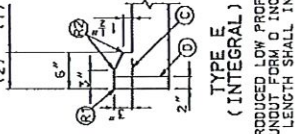
TYPE N
(INTEGRAL)



TYPE O
(INTEGRAL)



TYPE F
(SEPARATED)



TYPE E
(INTEGRAL)

BEGINNING AND ENDING OF INTRODUCED LOW PROFILE CURB SHALL UTILIZE CURB HEIGHT RUNOUT FORM D INCHES TO 3 INCHES IN 5 FEET. PAYMENT LENGTH SHALL INCLUDE TAPERS.
* DEPTH MAY BE REDUCED IF KEYED 6" IN ROCK.

LOW PROFILE CURB

LEGEND

- (B) TIE BARS - 30" X #5 @ 30" CTRS.
- (C) PERMISSIBLE CONSTRUCTION JOINT. IF CONSTRUCTED IN THIS MANNER TIE BARS MUST BE USED.
- (D) #4 @ TIE BAR AT 24" CENTERS LENGTH OF THE TIE BARS EQUALS THICKNESS OF PAVEMENT PLUS HEIGHT OF CURB. LESS 3 INCHES.
- (E) LONGITUDINAL JOINT WITH TIE BARS.
- (F) TOP OF PAVEMENT OR CONCRETE BASE.
- (G) ROUND TO 1/2" RADIUS (EXCEPT FOR SAWED JOINTS).
- (H) ROUND TO 1/4" RADIUS.
- (I) CONSTRUCT TO 9" RADIUS.
- (1) PAY LIMIT FOR PAVEMENT
- (2) PAY LIMIT FOR CURB, OR CURB & GUTTER.



MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-800-452-6000 (T-800-275-8883)



CONCRETE CURB, GUTTER AND GUTTER

DATE EFFECTIVE: 10/01/2022	SHEET NO. 2 OF 2
DATE PREPARED: 7/19/2022	609.000

SECTION 234

CONCRETE SIDEWALKS

234.1. Description. Concrete sidewalks shall be constructed to the line, grade and dimensions shown on the plans or as established by the Engineer. Unless otherwise specifically designated, concrete sidewalks shall have a width of five (5) feet and a depth of four (4) inches, except that at driveways or other points designated on the plans, the depth shall be increased to six (6) inches.

232.2. Concrete. Concrete used in the construction of sidewalks shall be MoDOT "Pavement" concrete as specified in MoDOT's Missouri Standard Specifications for Highway Construction and with Section 230, Portland Cement Concrete, with the additional requirement that the amount of chert in crushed limestone aggregate shall not exceed two percent (2%) by weight. All materials, proportioning, air-entraining, mixing, and transporting for concrete shall be in accordance with Section 230.

234.3. Detectable Warnings. Truncated Domes are required standardized surface features built in or applied to walking surfaces on sidewalks or ramps to warn visually impaired people of hazards on a circulation path. Those hazards include, but are not limited to interfaces between sidewalks and areas where moving vehicles may be present.

- a. 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 between 1.6 in. and 2.4 in. 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.
- b. Materials. The material used to provide contrast shall be an integral part of the walking surface. Detectable warning plates are to be 24"x36", 24"x48", or 24"x60" and Colonial or Brick Red (Federal Color No. 20109) in color. Detectable Warning tile to be ADA Solutions Part number 2436REPBR, 2448REPBR, or 2460REPBR or approved equal. In situations that detectable warnings are to be placed around a radius the detectable warning tile to be ADA Solutions Part number 24RADREPBR or approved equal. Stamped concrete is not acceptable.
 1. Detectable warnings are to meet ADA and State requirements and meet dynamic vehicle loading, AASHTO HS20-44 wheel load test requirements.
 2. Detectable warning must be a minimum 1/2" thick or have a perimeter flange at least 5/8" thick.
 3. Bolts shall be stainless steel, minimum 3/8" diameter and bolt caps shall be provided.
 4. Embeds shall be galvanized steel, stainless steel or approved equal.
- c. Installation.

1. The physical characteristics of the concrete shall be consistent with the Contract specifications while maintaining a slump range of 2-4 inches to permit solid placement of the cast in place detectable warning tiles. An overly wet mix will cause the tile to float. Under these conditions, suitable weights such as 2 concrete blocks or sandbags (25 lb) shall be placed on each tile.
2. A four-foot long level, 25 lb. weights, and a large non-marring rubber mallet are specific to the installation of the cast in place tile system.
3. The factory-installed plastic sheeting must remain in place during the entire installation process to protect the finished surface of the tile.
4. When preparing to set the tile, it is important that no concrete be removed in the area to accept the tile. It is imperative that the installation technique eliminates any air voids under the tile. Holes in the tile perimeter allow air to escape during the installation process. Concrete will flow through the large holes in each embedment flange on the underside of the tile. This will lock the tile solidly into the cured concrete.
5. The concrete shall be poured and finished true and smooth to the required dimensions and slope prior to the tile placement. The tile shall be placed true and square to the curb edge in accordance with the Contract drawings. The cast in place detectable tile shall be tamped into the fresh concrete to ensure that the field level of the tile is flush to the adjacent concrete surface. The embedment process should not be accomplished by stepping on the tile as this may cause uneven setting which can result in air voids under the tile surface.

234.4. Construction.

- a. Subgrade. Concrete sidewalks shall be constructed on a prepared smooth subgrade of uniform density. The subgrade shall be graded, compacted and rolled to ensure maximum density to the exact cross section and elevations and shall be tested with an approved template before concreting. Large boulders and ledge rock found in the subgrade shall be removed to a minimum depth of six (6) inches below the finished subgrade elevation and the space shall be backfilled with suitable material which shall be thoroughly compacted by rolling or tamping. The Contractor shall furnish a template and shall thoroughly check the subgrade prior to depositing concrete.
- b. Forms. The forms shall be of either metal or wood and shall be straight, free from warp, of sufficient strength to resist springing during construction, and of a height equal to the full depth of the sidewalk to be constructed. Wood forms shall have a minimum nominal thickness of two (2) inches. Metal forms shall be of a type approved by the Engineer. Flexible or curved forms of proper radius shall be furnished on curves. The forms shall be thoroughly cleaned, well oiled, securely staked, braced, and held to the required line and grade before any concrete is deposited.

234.5. Depositing Concrete. The concrete shall be deposited between the forms on moistened subgrade and shall be struck off and compacted to the required thickness. Concrete shall be compacted by internal vibrating equipment.

234.6. Joints. Saw joints shall be spaced approximately at five (5) feet intervals, and shall be provided for the full width to a depth of one (1) to two (2) inches. Joints shall be sawn within twelve (12) hours of concrete placement after initial set and before shrinkage cracks occur. **Tooled joints are not acceptable.**

Premoulded expansion joint material, one-half (1/2) inch thick, shall be installed in the sidewalk for its full depth wherever it meets another sidewalk, driveway, building, curb, lighting standard, fireplug, or other rigid object with the exception of curb inlets and junction boxes. Expansion joints shall be placed on all four (4) sides of the square formed by the intersection of two (2) sidewalks. When the sidewalk fills the space between the curb and a building or wall, an expansion joint shall be placed between the sidewalk and the curb and between the sidewalk and the building or wall.

234.7. Finishing. After the concrete has been brought true to line and grade it shall be finished to a medium rough finish by use of a stiff broom or other approved method to produce an even, gritty texture. All edges shall be rounded with an edging tool to one-fourth (1/4) inch radius.

234.8. Curing. Immediately after finishing, the sidewalk shall be cured in the same manner as required under Section 231.

234.9. Hot and Cold Weather Concreting. Temperature of the concrete and hot and cold weather construction requirements shall be the same as specified in Section 231.

234.10. Backfilling. After the concrete has sufficiently set, the form shall be removed and the space on each side of the walk shall be backfilled. The earth shall be compacted and graded in a manner satisfactory to the Engineer.

234.11. Inspection and tests. Inspection and testing shall be performed in accordance with the requirements of Section 230.4. Concrete for concrete sidewalks shall have a slump of two (2) to four (4) inches.

234.12. Basis of payment. Concrete sidewalks, complete in place and accepted, will be paid for at the Contract unit price per square foot, which payment shall be full compensation for furnishing, hauling and placing all materials including detectable warnings, preparing subgrade, forms and all joints, backfilling, equipment, tools, labor, and work incidental thereto. Payment will be made under:

Item No. 234.1. 4" or 6" Concrete sidewalks, per square foot.