



June 8, 2023

Bid: 23-05-20

Subject: Invitation to Bid

Prospective Bidders:

Sealed bids for furnishing services to Hydro-Excavation of Lead Service Lines. The attached forms will be received in the Purchasing Department of the Birmingham Water Works Board, located at 3600 First Avenue North, Birmingham, Alabama 35222 until 10:00 a.m., Friday, June 23, 2023, at which time and place they will be publicly opened and read. A Mandatory Pre-Bid is scheduled for Friday, June 16, 2023, @ 10:00 a.m.

The Mandatory Pre-bid and bid opening will be via Zoom meeting. The link is listed in the email for the Invitation to bid. We advise you to check your connection a day before the Pre-Bid and bid opening to make sure you can join. Please join or call in 5 minutes before Pre-Bid and bid opening.

“Specifications and Conditions” and “Bid Forms” are attached, and all bids shall be F.O.B. destination, freight prepaid, and at no charge. One copy of the bid form should be returned, and the bidder should retain a copy.

The right is reserved to reject any or all bids submitted, waive any informalities and technicalities, and award to the bidder it is deemed to serve the “Board’s” interests best and most economically. The Board reserves the right to award the bid on an individual or total cost of bid basis. The Board reserves the right to cancel this bid within thirty (30) days with written notice. The Board reserves the right to cancel the contract due to non-satisfactory performance or if the contractor is found to violate the terms and conditions or does not correct any violations of specifications within two days after given notice. The Board reserves the right to RE-BID.

Any bids mailed must be sent to 3600 First Avenue North, Birmingham, Alabama 35222, directed to the attention of the Purchasing Manager, and marked in the lower left-hand corner of the envelope as follows: “Bids on Hydro-Excavation of Lead Service Lines are due on Friday, June 23, 2023, @ 10:00 a.m.” at which time and place they will publicly be opened and read.

Yours truly,

Matthew Shiver

Matthew Shiver
Purchasing Manager

**SPECIFICATIONS AND CONDITIONS
HYDRO EXCAVATION OF LEAD SERVICE LINES.**

GENERAL

Purpose: The intent of this Invitation to Bid and the resulting pricing agreement is to obtain the services of a qualified contractor to hydro-excavate lead service lines. This bid will include excavation, hydro excavation, backfilling, paving, landscaping, pressure washing, concrete, service line repairs, and traffic control. All labor, installation, and materials to be used in the replacement of the hydro excavation of lead service lines shall be furnished by and at the expense of the successful contractor and shall be placed in accordance with the enclosed Summary of Work. This bid will be awarded to the contractor deemed the lowest responsible and responsive bidder.

The Contractor must comply with the most current edition of the local jurisdiction's regulations and requirements for pavement replacement. The contractors shall also be required to furnish all supervision, labor, machinery, tools, and other equipment necessary for the replacement of permanent paving. The Contractor must work expeditiously to complete jobs in a timely manner, without delay.

Contract Period: *The contract shall cover a period of approximately two months, beginning on or about July 17, 2023 or an equivalent period depending upon the date the Board approves the bid award.*

Substantial completion of the project in

August 15, 2023. The right is reserved to reject any or all bids submitted, to waive any informalities and technicalities, and to award to the bidder it is deemed will best and most economically serve the "Board's" interests. The Board reserves the right to award the bid on an individual or total cost of bid basis. The Board reserves the right of canceling this bid within thirty (30) days with written notice.

The Board reserves the right to re-bid.

Mandatory Pre-Bid Conference: A **MANDATORY** Pre-Bid Conference will be held via Teams meeting, on **Friday, June 16th @10:00 AM**. Each contractor will have the opportunity to partake using a link that will be provided in the email. Contractors will have an opportunity to ask questions about the bid. This is a **mandatory pre-bid teams meeting** and any contractor interested in bidding will need to join the meeting or call in. You may allow a **representative to partake in this meeting** if you cannot attend. If you are not in attendance and do not have a representative, you will be deemed **"non-responsive"** and **WILL NOT BE ALLOWED** to bid.

Termination of Contract: Without prejudicing any other rights or remedies, the Board may terminate this Agreement, with or without cause, upon written notice to the Contractor. Upon receipt of the Board's written notification of termination, the Contractor shall immediately cease all work and activities as instructed by the Board. The Contractor shall be entitled to be paid for services and performance rendered, subject to the Board's claims for any damages, losses, or expenses resulting from the Contractor's performance hereunder.

Hold Harmless: Contractor further agrees to indemnify, hold harmless, and defends the Water Works Board and its officers, agents, servants, and employees from and against all claims, lawsuits, damages, losses, and expenses including reasonable attorneys' fees, arising out of or resulting from the performance of work, provided that any such claim, damage, loss or expense (A) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of any property, including the loss of use resulting therefrom, and (B) is caused in whole or in part by a negligent act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

References: Bidder should include with their bid, a list of three references, including contact name and phone number.

Insurance: The contractor shall *not* commence any work until all the insurance as provided herein is obtained nor until the Board has approved such insurance. Certificates issued by the Contractor's Insurance Company must be filed with the Board before any work is commenced as evidence of the insurance as provided herein. Such certificates must contain a clause stating that the Insurance Company will notify the Board ten (10) calendar days prior to any change, cancellation, or renewal of the Contractor's insurance.

Workmen's Compensation Insurance: The Contractor shall carry Workmen's Compensation Insurance during the life of the Contract to insure statutory liability to their employees.

Comprehensive General Liability and Property Damage: The Contractor shall carry Comprehensive General Liability and Property Damage Insurance during the life of the contract covering all the Contractor's own operations. The limits shall not be less than \$1,000,000 for bodily injury and \$500,000 for property damage.

Comprehensive Automobile Liability and Property Damage: The Contractor shall carry Comprehensive Automobile Liability and Property Damage Insurance during the life of the contract covering (a) the Contractor's own automobile equipment and (b) hired and non-owned vehicles. The limits shall be not less than \$100,000 for each person, \$300,000 for each accident for bodily injury and \$100,000 for property damage.

Inquiries: General inquiries pertaining to Invitation to Bid should be directed in writing to Matthew Shiver, Purchasing Manager at matthew.shiver@bwwb.org or by phone at 205-244-4302 and cc: tonja.levert@bwwb.org. Questions about excavation, hydro excavation, backfilling, paving, landscaping, pressure washing, concrete, service line repairs, and traffic control should be directed in writing to Jarrod Shotts, Regulatory Compliance Officer at jarrod.shotts@bwwb.org or by phone at 205-244-4206. Submission of a bid will be accepted by the Board as evidence that the Contractor is familiar with the nature of work to be performed and the limits of the Board's distribution system and will accept and comply with all specifications, invitation to bid, and contract documents.

Qualifications: The Bidder, at the time of bid submittal, shall possess the correct occupational licenses, all professional licenses, or other authorizations necessary to carry out and perform the work required. It is to be specifically understood that the successful contractor shall comply with all the conditions imposed by ordinances or rules and regulations of the governing political districts. The Contractor shall secure, at his own expense, any and all licenses and work permits, as required by the governing political districts. All such licenses and work permits shall be obtained before any work is performed after the contract has been awarded.

General Contractor's State Licensing Requirements: When the amount bid for a contract exceeds \$50,000.00, the bidder must be licensed by the Alabama State Licensing Board for General Contractors and must show the Board evidence of licensure before bidding by putting the General Contractor's License number outside the submitted envelope in the lower left-hand corner and submit a copy of the General Contractor's License with your bid. If these requests are not met the bidder will be deemed non-responsive and your bid will not be received or considered by the Board. A bid exceeding the bid limit stipulated in the bidder's general contractor license, or which is for work outside of the type or types of work stipulated in the bidder's General Contractor License, at the sole discretion of the Board may not be considered, but if accepted, a bid award will be limited to the type of work and/or bid limit stipulated on the bidder's General Contractor License. In case of a joint venture of two or more contractors, the amount of the bid shall be within the maximum bid limitations as set by the State Licensing Board for General Contractors of the combined limitations of the partners to the joint venture. In the space provided on the "Bid Form," the bidder must insert their "current" general contractors state license number, current bid limit, and type(s) of work for which the bidder is licensed.

Business License Per Municipality: *The Contractor shall be required to obtain their own Business License per Municipality. For example: If you are working within the city limits of Mountain Brook, the Contractor will need to have a Business License for this Municipality. Therefore, the Contractor must obtain a Business License per the Municipality city limits that they will be working in.*

Bonds

Title 39 Public Works Bid Law – Ala. Code §§ 39-1-1 thru 39-5-6

All bids involving an amount over \$50,000.00 for public works projects for construction, repair, renovation, or maintenance of public buildings, structures, sewers, waterworks, roads, or other improvements constructed installed maintained, renovated, or repaired on public property must be accompanied with a form of a bid bond. The bidder shall be required to file with his or her bid either a cashier's check drawn on an Alabama bank or a bid bond executed by a surety company duly authorized and qualified to make such bonds in the State of Alabama, using the enclosed "FORM OF BID BOND", payable to the Water Works Board of the City of Birmingham for an amount not less than five percent (5%) of the Water Works Board's estimated cost or of the contractor's bid, but in no event, more than ten thousand dollars (\$10,000).

Public Works Bids – Performance Bond and Labor and Material Payment Bond Requirements:

A Performance bond is required with a penalty equal to 100% of the amount of the contract price.

A Labor and Material Payment bond is required in an amount not less than 50% of the contract price.

A Performance bond and Labor and Material bond will need to be submitted by the successful bidder after the bid has been awarded.

Award: It is the intent of the Board to award this bid and enter into a contract with the lowest responsive and responsible bidder. The lowest responsive and responsible bidder shall be considered as the primary contractor for all work. All work shall be issued on a job-by-job basis to the primary. If the primary is unable to perform the work on any job in a timely manner the Board shall, at its discretion, award the specific job to the second responsive and responsible bidder. This will be done throughout the contract on a job-by-job basis.

Price List: Each bidder is to provide firm pricing for each item listed. The attached "Bid Form" will serve as a pricing agreement between the Contractor and the Board. The enclosed "Bid Form" contains estimated quantities for bidding purposes only. Also, the Board reserves the right to perform work normally covered under this bid with Board personnel and equipment.

Invoicing: Invoices should be submitted to the Board for payment within thirty (30) days of completion of work. Any invoices submitted sixty (60) days or later are subject to, at the Board's discretion, a deduction in payment of 5% of the total invoice for every thirty (30) days past due. Each invoice must be submitted with a P.O. number included and given to you by BWWB personnel.

Materials: All materials must meet "current" Alabama Department of Transportation Standard Specifications of Highway Construction, latest edition.

Safety: The Contractor is required to comply with all OSHA, State, and Local Occupational Health Standards and any other applicable rules and regulations. The Contractor shall be held responsible for the safety of their employees and any unsafe acts or conditions that may cause injury or damage to any persons or property within or around the work site area under this contract.

Use of Minority Businesses and Subcontractors:

The use of Historically Underutilized Businesses (HUB) is ***highly encouraged*** by the Board, to that end you will find attached a series of forms, the BWWB HUB Program document. The appropriate forms are to be filled out and submitted with the bid. ALL forms need to be filled out and returned with the bid submittal.

The Water Works Board of the City of Birmingham has adopted a voluntary Historically Underutilized Business (“HUB”) Program designed to encourage the participation of HUB firms. *To that end, the BWWB will never exclude any firm from participation in, deny any person benefits of, or otherwise discriminate in connection with the award and performance of BWWB contracts based on racial, gender, social, or economic status.*

It is the intent of BWWB to foster competition among suppliers and contractors that will result in better quality and more economical services for the BWWB. Under this program, the BWWB has established a goal of 30% participation of HUB firms for services/ commodities required for BWWB operation.

The BWWB’s stated goal will not be the determining factor in contract awards: *rather bidders must demonstrate compliance with the Good Faith Efforts, more particularly outlined in the HUB Program, toward meeting said goal. Failure on the part of a bidder to fully submit the information required herein may be considered by the BWWB in evaluating whether the bidder is responsive to bid requirements.*

SUMMARY OF WORK

PART 1 - GENERAL

1.1 PROJECT AWARD

After the determination of pipe material by the BOARD STAFF, the CONTRACTOR shall backfill the excavated area with suitable backfill and replace the permanent paving.

1.2 SCOPE OF WORK TO BE PERFORMED BY THE CONTRACTOR

The CONTRACTOR shall vacuum excavate and expose at least 12 inches of the potable service line. Hole of a minimum size of four feet by four feet and up to a size sufficient to allow BOARD STAFF to physically access and test the surface of the pipe. *Care shall be taken not to damage, impact, or disturb the service line.* After the determination of pipe material by the BOARD STAFF, the CONTRACTOR shall backfill the excavated area with suitable backfill and replace the permanent paving. **CONTRACTOR will be responsible for the re-compaction of the exposed backfill surface and new paving by means of a mechanical roller or vibratory compacting device, to the local authority's requirements. Compaction with a backhoe bucket or any other heavy apparatus not designed specifically for soil compaction is not allowed. CONTRACTOR is to place all necessary material in layers not exceeding three inches (3") loose depth and to uniformly tamp and compact each layer necessary by means of a mechanical roller or vibratory compacting device.**

The **permanent patch paving** is to be installed by the **Point Patch Asphalt Repair** method as defined in this section and as shown on the attached typical detail drawing. "Tack" shall be placed in the surrounding areas, both vertically and horizontally within the excavated trench. **ALL** paving shall be in accordance with these Specifications and shall cover the various roadways in the different governing political districts within the BOARD'S service area. In addition, all required materials must meet the Standard Specifications for Highway Construction of the Alabama Department of Transportation, latest edition.

The CONTRACTOR shall be responsible for the removal and disposal of spoil dirt, stone, sand, and temporary paving. ALL materials used for permanent paving shall be furnished by and at the expense of the CONTRACTOR. In addition, the CONTRACTOR shall furnish all necessary labor, equipment, traffic control; saw cutting (if required), and supervision to perform the work in a suitable and reasonable manner at **NO** additional cost to the contract.

The CONTRACTOR shall replace all traffic striping, markings, and legends in kind. The CONTRACTOR must also adhere to the current Manual of Uniform Traffic Control Devices (MUTCD) and the current Standard Specification for Highway Construction of the Alabama Department of Transportation Section 700 for **ALL** traffic control devices, temporary and permanent, including but not limited to lane closures, signs, and pavement markers.

The CONTRACTOR shall be obligated to protect all existing facilities and structures and to repair or have repaired at his expense any damage to the same.

BID#: _____

NO BID

If you are not bidding on this service/commodity, please complete and return this form to **Birmingham** Water Works, Attn: Purchasing **Manager**, 3600 First **Avenue North, Birmingham, Alabama** 35222. All Statement of No-Bid forms must be received prior to the bid opening.

Failure to respond may result in the deletion of the vendor's name from the Vendor/Contractor's list/or the Birmingham Water Works Board.

Company Name: _____

Address: _____

Telephone: _____

Date: _____

We, the undersigned have declined to respond to your Bid No. _____ for _____ because of the following reasons.

(Service/Commodity)

___ Specifications too "tight", i.e., geared toward one supplier or manufacturer only.
(explain below)

___ Insufficient time to respond to the Bid.

___ We do not offer this product/service.

___ Specifications unclear. (explain below)

___ Unable to meet bond requirements.

___ Other (specify below)

REMARKS: _____

BY: _____ Signed: _____

(Print or Type)

BID FORM

Matthew Shiver, Purchasing Manager
The Water Works Board of the City of Birmingham
3600 First Avenue North
Birmingham, Alabama 35222

Submitted below is our firm bid for items and services, which are in accordance with your “Invitation to Bid” and “Specifications and Conditions” for Hydro Excavation of Lead Service Lines due on Friday, June 23, 2023, @ 10:00 a.m. Mandatory Pre-Bid via Teams will be held on Friday, June 16, 2023, @ 10:00 a.m. The undersigned has read and understands said “Invitation to Bid” and “Specifications and Conditions” and expressly agrees to be bound by the terms. All bidders are required to submit a Resource Plan with a bid package.

LABOR AND INSTALLATION

<u>Description</u>	<u>Estimated Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
1. Hydro Excavation			
A. 4 x 4 sq. ft. holes to expose Lead Service Line	225 hours	\$ _____	\$ _____
2. Backfilling			
A. Replacement of all removed materials during the hydro excavation process	1000 sq. ft.	\$ _____	\$ _____
3. Paving			
A. Replacement of asphalt within the roadway right-of-way.	1500 sq. ft.	\$ _____	\$ _____
4. Landscaping			
A. Replacement of all disturbed planting, grading, lawn area, and specialized horticulture work	1000 sq. ft.	\$ _____	\$ _____
5. Pressure Washing			
A. Removal of dirt and grime from the work area	1000 sq. ft.	\$ _____	\$ _____

6. Concrete

A. Replacement of concrete curb within the roadway right of way

600 lin. ft.

\$ _____

\$ _____

B. Replacement of concrete sidewalk

600 sq. ft

\$ _____

\$ _____

7. Traffic Control

50 Each

\$ _____

\$ _____

8. Repairs/Replacements

50 Each

\$ _____

\$ _____

Bidder's Alabama License

Current General Contractors State License Number: _____

This should also be placed on the outside envelope of your bid submittal in the lower left-hand corner. Failure to place your General Contractors License Number on the outside envelope of your bid package may deem you non-responsive and your bid can be rejected.

Current bid limit: _____

Type of work for which Bidder is licensed: _____

Mail Bid must be submitted in a sealed Envelope, directed to the attention of the Purchasing Manager, and marked in the Lower left-hand corner as follows:

Bid on Hydro Excavation of Lead Service Lines
Due Friday, June 23, 2023 @ 10:00 a.m.

DATE _____

COMPANY _____

ADDRESS _____

CITY _____

BY _____

(Signature)

(Attach evidence of authority to sign.)

STATE _____ ZIP _____

TELEPHONE _____

NAME _____

EMAIL _____

TITLE _____

TERMS _____

1.3 SPECIAL NOTE TO CONTRACTOR

The CONTRACTOR shall be responsible for any failure or defect in the work performed by him due to faulty workmanship or materials for a period of not less than nor more than one (1) calendar year after acceptance by the BOARD and the governing body having jurisdiction and will be corrected at his expense. The CONTRACTOR shall also be responsible for the pickup and delivery of all materials needed per job site.

1.4 INSPECTION OF WORK

All work done in conjunction with the "Point Patch Asphalt Repair" will be subject to inspection by the Department Superintendent of the BOARD and/or the Engineer of the governing political district or other authorized representatives of the same. **The BOARD shall, at their discretion, randomly sample the patches in place. This testing will be done by coring the new patch and the adjacent roadways to ensure compliance with the minimum asphalt depth as specified in Section 2.1.A below.**

1.5 METHOD OF PAYMENT

The payment for hydro excavation work shall be expressed as indicated on the attached Bid Form. Payment shall be made for the quantity determined in this manner at the applicable unit price at any location of repair where one or more excavations were made that require permanent paving.

PART 2 - SPECIFICATIONS

2.1 ASPHALT PAVEMENT

2.1.A REPLACEMENT OF ASPHALT PAVEMENT ON ROADWAYS AND HIGHWAYS IN THE STATE

Patch Paving (Permanent)

The CONTRACTOR shall remove all temporary pavement and stone to a minimum depth of six (6) inches or to match the existing build-up, whichever is greater, as measured from the top surface of the existing pavement. Approximately six (6) inches minimum or to match the existing buildup of Superpave Bituminous Concrete Wearing Layer, 3/4" maximum aggregate size mix, ESAL Range C/D shall be placed on the "tacked" backfill material and compacted to the satisfaction of the Distribution Superintendent. The wearing surface shall be relatively consistent in composition to the existing pavement surface (i.e., siliceous mix removed is replaced with siliceous mix). As stated, ALL layers of asphalt including backfill material must be compacted thoroughly and must be to the satisfaction of the Department Superintendent. This patch shall be used in all areas serviced by the BOARD. This is a patch repair only. See Typical Point Patch Repair Detail attached at the end of this document.

2.1.B REPLACEMENT OF ASPHALT DRIVEWAY IN ROADWAY RIGHT-OF-WAY

The CONTRACTOR shall replace asphalt driveways in roadway right-of-way in accordance with the specifications for the replacement of roadway pavement in the governing political district in which the work is to be performed.

NOTE TO CONTRACTOR: The above specifications for the replacement of bonded asphalt pavement also apply to the replacement of all other asphalt roadways except double surface treatment.

2.2 TRAFFIC CONTROL

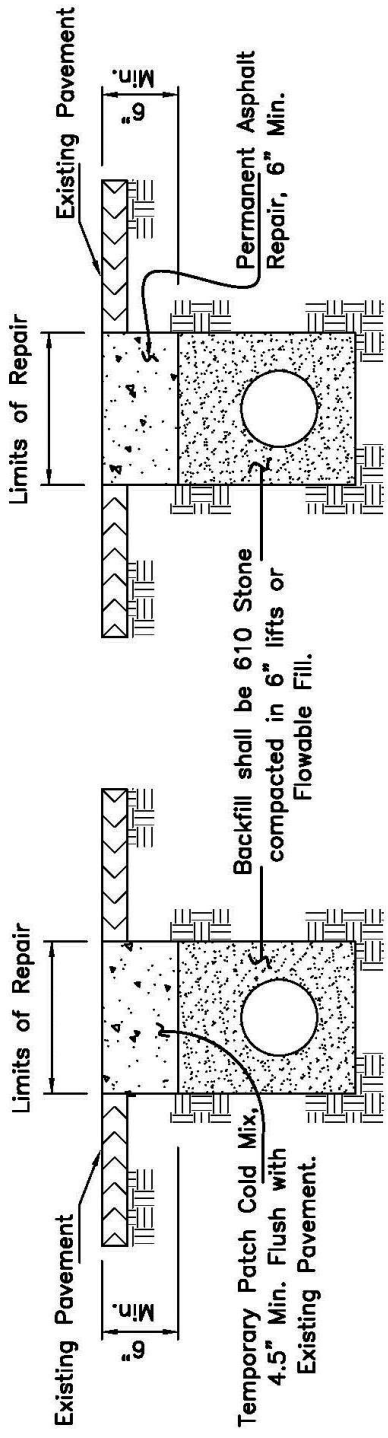
All necessary traffic control devices shall conform to the current edition of the MUTCD and the local governing agencies' specifications. All signage, cones, barricades, flagmen, etc. required per these rules and regulations MUST be in place during all paving operations and shall be considered an incidental cost of the paving work (all types). For Jefferson County roadways, see the attached minimum requirements for traffic control operations. See Appendix I for some Typical Traffic Control activities as shown in the MUTCD.

2.3 ADDITIONAL PROJECT SPECIFICATION

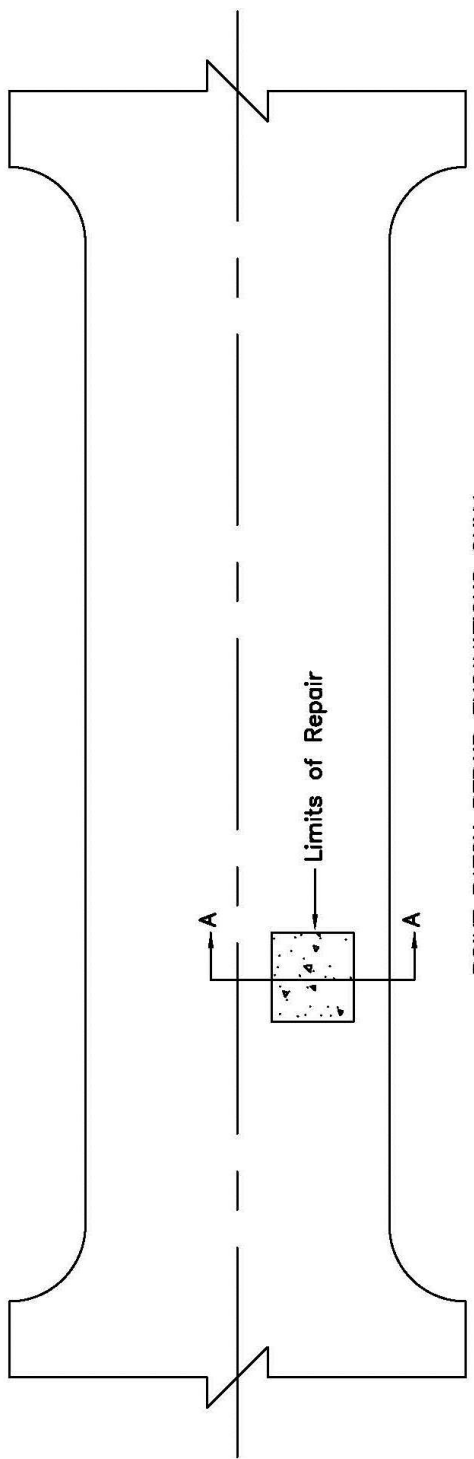
Listed below are some of the appropriate sections from the Alabama Department of Transportation's Standard Specification for Highway Construction Manual. As noted, the CONTRACTOR shall be required to refer to the "Spec Book" for further reference per project:

- Section 230 Roadbed Procession
- Section 305 Soil and Aggregate for Miscellaneous Use
- Section 306 Density Requirements for Compaction
- Section 327 Plant Mix Bituminous Base and PATB
- Section 405 Tack Coat
- Section 407 Joint Sealant for HMA Pavement
- Section 408 Planning (Milling) of Existing Pavement
- Section 410 Asphalt Pavement
- Section 424 Superpave Bituminous Concrete Base, Binder, and Wearing Surface Layers
- Section 450 Portland Cement Concrete Pavement
- Section 600 Mobilization
- Section 601 Field Laboratories
- Section 622 Resetting Gratings and Covers for Catch Basins, Inlets and Manholes
- Section 700 Traffic Control Devices and Highway Lighting
- Section 821 Granular Soil Materials
- Section 823 Soil Aggregate Materials
- Section 825 Crushed Aggregate Base Materials
- Section 863 Water Pipe, Fire Hydrants, Valves and Appurtenances

**End of
Specifications**



Backfill shall be 610 Stone compacted in 6" lifts or Flowable Fill.



POINT PATCH REPAIR EXCAVATIONS ONLY

Not To Scale

Birmingham Pavement Repair - General Notes

1. The Permittee shall notify the Engineer and the governing agency at least 24 hours in advance of commencing work.
2. The Permittee shall perform all work in accordance with the governing agencies standard specifications and details.
3. Existing pavements, bases, curbs & gutters, etc. shall be cut to form neat and straight lines making squares or rectangular shapes as directed by the Engineer.
4. The Engineer shall determine the limits *or* extent of the permanent repair.
5. Backfill material shall be either ALDOT 610 stone placed in approximate 12 inch lifts or flowable fill with a maximum compressive strength of 100 psi.
6. No excavated material shall be used as backfill.
7. The Engineer may approve the use of alternative crushed stone materials as backfill subject to the Permittee complying with the following:
 - Backfill material shall be compacted in lifts not exceeding 6 inches to 100% of the Standard Proctor maximum dry density.
 - The Permittee shall provide Proctor values for the backfill material to be used, compaction test reports and a certification from licensed geotechnical engineer, approved by the Engineer, stating that the backfill material has been compacted to the required density for the full depth of the excavation.
 - The Permittee shall bear all costs associated with testing.
8. No excavated material shall be used as backfill.
9. The repaired area shall be allowed to stabilize for 30 days before the permanent repair is made.
10. The cold mix asphalt temporary repair shall be removed prior to making the permanent repair.
11. The Permittee shall be responsible for repairing any defects, including settlement, in the completed repair for a period of one year from the date of completion of the permanent repair.
12. The Permittee shall restore, as directed by the Engineer, any pavement markings, lane striping or traffic loops damaged as a result of the Permittee's work.

**Jefferson County
Pavement Repair –Traffic Control Notes**

1. Temporary traffic control on a public roadway is the responsibility of the authority of the government agency having jurisdiction for guiding road users. The Contractor shall be responsible for implementing and maintaining all necessary temporary traffic control measures to comply with the requirements provided herewith, the standards set forth in the Manual on Uniform Traffic Control Devices, Latest Edition (MUTCD), and other reasonable safety precautions needed to provide a safe environment for the traveling public, construction personnel, and others who have access to and responsibilities in the project site.
2. The Contractor shall be responsible for providing the proper equipment, apparel, and training necessary for all construction personnel to render safe construction operations and traffic conditions.
3. All traffic control devices shall be installed and maintained in accordance with these notes, the MUTCD, and as otherwise required by County or Municipal personnel responsible for roadway inspection or traffic operations.
4. Traffic control devices shall meet the standard material and installation requirements specified in the latest edition of the ALDOT Standard Specifications for Highway Construction. Signs shall be a minimum of 36"x36" with Type III High-Intensity retro-reflective sheeting in good condition.
5. The Contractor shall keep a log of the type and location of traffic control measures used and devices installed at each construction site. The log should include photographs, dimensioned sketches, date and time of work, equipment, and personnel used, and any problems or unusual conditions encountered.
6. Flaggers shall communicate with each other using two-way radios and shall be properly equipped with stop/slow paddles, attired with high visibility safety apparel meeting ANSI 107-2004 Class 2 requirements, and trained to meet all requirements and follow all procedures of the MUTCD.
7. For construction or repair operations within a roadway travel lane, it will be necessary to close the lane in accordance with the appropriate lane closure requirement provided herewith and the standards set forth in the MUTCD and maintain two-way traffic operations on the roadway. Otherwise, the Contractor is not authorized to temporarily close a public road.
8. The Contractor shall keep open roadways clean and free of construction debris, dirt, loose gravel, or other objectionable material that may cause hazardous driving conditions.
9. The Contractor shall coordinate construction operations and accommodate traffic operations and driveway ingress and egress within the work zone.
10. Pavement repair operations within public roadways are not allowed on weekends, holidays, and after 4:00 pm or before 8:00 am Monday through Friday unless specifically permitted by the jurisdictional authority.
11. MUTCD Figure 6H-10 Lane Closure on a Two-Lane Road Using Flaggers (TA-10) shall be applied in the establishment of temporary traffic control on two-lane roads if there is center line striping; or if the posted speed limit is 30 mph or greater; or if the work zone is in or near an intersection; or if traffic speed or volume otherwise dictate the need. When the construction operations will not exceed one workday between 8:00 am and 4:00 pm, the distance plaque, Road Work XXXX Ft, and End Road Work signs are not required; 36" orange cones may be used for channelizing traffic; and portable supports may be used for sign installation.
12. If there is no center line stripe, the posted speed limit is 25 mph or less, the traffic volume and speed is low, and there is adequate sight distance from each approach through the work zone, a single flagger located on the opposite side of the road from the lane closure may be used to direct traffic with the temporary traffic control measures described in Note 11 in place.

13. A white, yellow, or orange-colored construction vehicle or truck outfitted with multiple high-intensity amber strobe, rotating, or flashing beacons shall be placed in the closed traffic lane behind the work zone to attract the attention of approaching drivers.
14. If the work zone is in or near an intersection such that traffic operations through the intersection are interrupted by the lane closure, Flagger signs and flaggers shall be posted on each intersecting leg to direct traffic through the intersection and work zone.