

**STANDARD AGREEMENT
BETWEEN CITY AND CONTRACTOR
ON THE BASIS OF A STIPULATED PRICE**

THIS AGREEMENT is dated as of the 2nd day of April, 2024 by and between the City of Johnson City, 303 E. Pecan Dr., Johnson City, Texas 78636 (hereinafter called "CITY") and Asphalt, Inc., LLC (dba Lone Star Paving) (hereinafter called "CONTRACTOR").

CITY and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

Article 1. WORK:

Atlas Technical Consultants, LLC, as professional consultant and agent for CITY, shall serve as project manager and oversee all work conducted by CONTRACTOR. CONTRACTOR shall complete all work, as specified in the bid documents, including the General Conditions and Technical Specifications, and this Agreement. The work is generally described as follows:

QTY	UNIT	DESCRIPTION
500	TN	Pothole Repair / Level Up. \$272.28/Ton
184,183	SY	Seal Coat / One-Course Surface Treatment \$5.00/SY
1	LS	Avenue I Scarify Base & Existing HMA Reprocess with 2.0" of Added Base Material Roll & Prep for Chip Seal \$17911.25/LS

Article 2. DESIGN:

The Project has been designed by: N/a

Article 3. CONTRACT TIME:

CONTRACTOR shall submit a proposed sequence and schedule of work segments with estimated dates of start / finish of each segment to determine total contract time. The work shall be fully completed and ready for final payment within three (3) months from the date of the Notice to Proceed.

Article 4. CONTRACT PRICE:

CITY shall pay CONTRACTOR for completion of the work based upon job measured bid unit in

accordance with the bid documents, including the General Conditions and Technical Specifications, and this Agreement as follows:

CONTRACTOR's Base Bid dated the 21st day of February, 2024 in the total amount of One Million Seventy-Four Thousand Nine Hundred Sixty-Six Dollars and Twenty-Five Cents (\$1,074,966.25).

Article 5. PAYMENT PROCEDURES:

CONTRACTOR shall submit Invoices for Payment to the CITY upon completion of work, and the CITY shall, upon acceptance of the work, pay the CONTRACTOR the Contract Unit Price based upon job measured quantities and in accordance with the General Conditions and Technical Specifications. Partial payments for any bid item will not be considered.

Article 6. CONTRACTOR'S REPRESENTATIONS:

CONTRACTOR makes the following representations:

6.1. CONTRACTOR has familiarized itself with the nature and extent of the bid documents, Agreement, work, segment limits, CITY, and all other local conditions, laws, and regulations that, in any manner, may affect cost, progress, performance, or furnishing of the work.

6.2 CONTRACTOR has or will obtain and carefully study all examinations, investigations, explorations, tests, reports, and studies which pertain to the subsurface and physical conditions at or contiguous to the site(s) that may affect the cost, progress, performance, or furnishing of the work. CONTRACTOR certifies that, upon examination, no additional examinations, investigations, explorations, tests, reports, studies, similar information, or data will be required by CONTRACTOR.

6.3 CONTRACTOR assumes responsibility for the accurate location of all underground facilities within Project limits, if any. No examinations, investigations, explorations, tests, reports, studies, or similar information or data with respect to underground facilities will be furnished to CONTRACTOR by CITY.

6.4 CONTRACTOR has given CITY written notice, if applicable, of all conflicts, errors, or discrepancies that it has discovered in the bid documents or this Agreement, and CITY's written response(s) thereof is/are acceptable to CONTRACTOR.

Article 7. CONTRACT DOCUMENTS:

The Contract Documents comprise the entire agreement between CITY and CONTRACTOR concerning the work. Contract Documents consist of the following:

7.1 Bid document titled: *CONTRACT DOCUMENTS & TECHNICAL SPECIFICATIONS FOR THE CITY OF JOHNSON CITY 2023-2024 STREET IMPROVEMENTS PROJECT*, including:

- Notice to CONTRACTORS

- Instructions to CONTRACTORS
- Bid Form
- Standard Agreement Between CITY and CONTRACTOR
- General Conditions
- Technical Specifications
- Addenda, if applicable.

7.2 Notice of Award.

7.3 Notice to Proceed.

There are no Contract Documents other than those listed in Article 7. Contract Documents may only be amended, as provided for in the General Conditions.

Article 8. MISCELLANEOUS:

8.1. Terms used in this Agreement, which are defined in the General Conditions, will have the meanings indicated in the General Conditions.

8.2 CITY and CONTRACTOR each bind themselves and their partners, successors, assigns, and legal representatives to the other party with respect to all covenants, agreements, and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, the CITY and CONTRACTOR have signed this Agreement. All portions of the Contract Documents have been signed or identified by CITY and CONTRACTOR.

This Agreement will be effective on the 2nd day of April, 2024.

CITY:

City of Johnson City



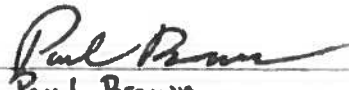
By: Rick A. Schroder
Chief Administrative Officer

Address for giving notices:

CITY of Johnson City
303 E. Pecan Dr. (Physical)
P.O. Box 369 (Mailing)
Johnson City, Texas 78636

CONTRACTOR:

Lone Star Paving



By: Paul Brown
Title: Estimator

Address for giving notices:

9017 W Hwy 29 Ste 103
Liberty Hill, Tx 78642

GENERAL CONDITIONS

The project to be completed, pursuant to this Agreement, is subject to all applicable Federal, State, and Local laws and regulations.

DEFINITIONS

Whenever used in any of the Contract Documents, the following meanings shall be given to the terms herein defined:

- A. The term "Agreement" means the contract executed between CITY of Johnson City, hereinafter called "CITY", and Lone Star Paving, hereinafter called "CONTRACTOR", of which these GENERAL CONDITIONS form a part.
- B. The term "Project Area" or "Project Segment" means the area within which the improvements contemplated by the Agreement are to be completed in whole or in part.
- C. The term "Contract Documents" means / includes the Bid Document, Executed Agreement, Notice of Award, Notice to Proceed, General Conditions, Technical Specifications and Addenda, if applicable.

PROJECT MEETING(S)

Prior to starting work, CONTRACTOR shall attend a pre-construction conference with the CITY to review schedules, to establish procedures for processing applications for payment, and to establish a working understanding between CITY and CONTRACTOR. Other meetings will be scheduled during the work, if necessary.

SUPERVISION BY ATLAS

ATLAS shall provide project oversight and management of CONTRACTOR's work, as memorialized in a Professional Services Agreement dated December 4, 2023, executed by CITY and ATLAS.

SUPERVISION BY CONTRACTOR

- A. Except where CONTRACTOR is an individual and provides his/her personal supervision to the work, CONTRACTOR shall provide a competent superintendent, satisfactory to CITY, to supervise the work at all times during working hours with full authority to act for CONTRACTOR. CONTRACTOR shall also provide an adequate staff for the proper coordination and expediting of the work.
- B. CONTRACTOR shall lay out its own work and shall be responsible for all work executed under the Agreement and shall verify all figures and surface preparation requirements before proceeding with the work and will be held responsible for any error(s) resulting from its failure to do so.

SUBCONTRACTS

- A. All subcontractors, if any, doing work on this project shall be fully qualified to do the work and carry the full, required insurance coverages as stipulated herein.
- B. CONTRACTOR shall be as fully responsible to CITY for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by the subcontractors.
- C. CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts where the Contract Documents require compliance with the provisions of these documents by each subcontractor on the project.
- D. Nothing contained in the Agreement shall create any contractual relationship between any subcontractor and the CITY.
- E. The names and contact information of all subcontractors scheduled to work on this project shall be submitted to the CITY with the bid documents.

SCHEDULING AND COORDINATION OF WORK

The CONTRACTOR shall be responsible for the proper scheduling of all work and the coordination of the operations of all trades, subcontractors, or material suppliers scheduled to work on this project.

PAYMENTS TO CONTRACTOR

- A. **Payment**
After final inspection and acceptance by CITY of all work under this Agreement, CONTRACTOR shall prepare an invoice for payment which shall be based upon the careful inspection of the work at the applicable prices stipulated in the Agreement.
- B. **Withholding Payments**
CITY may withhold payment due the CONTRACTOR whenever it is deemed necessary to protect the CITY from incomplete or unsatisfactory work. The foregoing provision shall be construed solely for the benefit of the CITY.

MEASUREMENT AND PAYMENT

Quantities shown in the Contract Documents are only estimates and are provided solely for the purpose of allowing a uniform comparison of submitted bids. Payment will be made on the basis of actual measured quantities. For those items for which payment is based on actual measured quantities, CONTRACTOR shall verify all measurements at the site and shall be responsible for the correctness of same. Unit prices shall then be used to calculate payment. Methods of measurement shall be given in the Technical Specifications for each measured item.

CHANGES IN THE WORK

- A. CITY may make changes in the scope of work required to be performed by CONTRACTOR under this Agreement without relieving or releasing the CONTRACTOR

from any of its obligations or any guarantee given by it, pursuant to the Agreement provisions.

B. Except for the purpose of affording protection against any emergency endangering health, life, limb or property, the CONTRACTOR shall make no change in the materials used, the specified manner of completing the project, or supply additional labor, services, or materials beyond those actually required by the Agreement, unless, in receipt of a written order from the CITY, the CONTRACTOR is authorized to proceed with the change. No CONTRACTOR claim for an adjustment of the Agreement will be valid unless so ordered or authorized by the CITY.

C. CITY may order CONTRACTOR to proceed with changes in the scope of work at applicable unit prices; provided that the net value of all changes does not increase the original total bid amount by more than twenty-five percent (25%) nor decrease the original total bid amount by more than eighteen percent (18%).

D. Each change order document shall include:

1. A detailed description of the change in the work requested.
2. The CONTRACTOR's bid for the change, shown as an "extra" or "credit".
3. A statement as to the resulting change in the Agreement price and/or time by the approval of the change order.
4. A statement that all work shall be performed in accordance with the Contract Documents, except as modified by the change order.

TERMINATION

Right of the CITY to Terminate Agreement

In the event that any of the provisions of this Agreement are violated by CONTRACTOR or its subcontractors, CITY may serve written notice upon CONTRACTOR of its intention to terminate this Agreement. The notice shall contain the reason(s) for such termination and, unless such violation or delay shall cease and be satisfactorily corrected to the approval of CITY within five (5) business days from CONTRACTOR's receipt of the written notice, the Agreement shall, upon the expiration of said five (5) business days, terminate.

In the event of any such termination, CITY shall immediately serve notice thereof upon CONTRACTOR. CITY may take over the work and complete the project by bid or contract at the expense of CONTRACTOR, including any excess cost incurred by the CITY. In such event, CITY may take possession of and utilize, in completing the work, such materials and equipment that may be on the site(s) and necessary to complete the work.

DISPUTES

A. All disputes arising under this Agreement, whether involving law or fact or both, and all claims for alleged breach of contract shall, within ten (10) calendar days of commencement of the dispute, be presented by CONTRACTOR to CITY for decision. Any claim not presented within the time limit specified in this Paragraph shall be deemed to have been waived.

B. If CONTRACTOR does not agree with any decision of CITY, it shall not allow the dispute to delay the work, but rather, it shall notify the CITY promptly that it is proceeding with the work under protest.

REQUESTS FOR SUPPLEMENTARY INFORMATION

It shall be the responsibility of CONTRACTOR to make timely requests to CITY for any additional information not already in its possession which should be furnished by CITY under the terms of this Agreement and which it will require in the planning and execution of the work. Such requests may be submitted from time to time as the need approaches, but each shall be filed in ample time to permit appropriate action to be taken by CITY so as to avoid delay. Each request shall be in writing, list the various needed items, and include the latest date that the request can be filled by CITY. CONTRACTOR shall, if requested, furnish any assistance and information CITY may require in responding to the requests. CONTRACTOR shall be responsible for any delay in its work arising from its failure to comply with the provisions of this Paragraph.

MATERIAL AND WORKMANSHIP

A. Unless otherwise specifically provided for in the Contract Documents, all materials incorporated in the work shall be new and the best grade of the respective kinds for the purpose. Where materials are referred to in the Contract Documents as "equal to" any particular standard, CITY shall decide the question of equality.

B. CONTRACTOR shall furnish to CITY for approval, if requested by CITY, the manufacturer's detailed specifications for all materials which it contemplates installing, together with full information as to the type, performance characteristics, and all other pertinent information, as required, and, shall likewise submit for approval, full information concerning all other materials which it proposes to incorporate into the work.

C. Materials installed or used without prior approval shall be at the risk of rejection by CITY.

D. Unless specifically stated otherwise in the Contract Documents, materials specified by reference to a number, symbol, or specific standard shall comply with the requirements contained within the latest version thereof and any amendment or supplement thereto in effect on the bid date.

SAMPLES, CERTIFICATES, AND TESTS

A. CONTRACTOR shall submit all material samples, certificates, affidavits, et cetera, as called for in the Contract Documents or required by CITY, promptly after the award of the Agreement. No such material or equipment shall be manufactured or delivered to the site, except at the CONTRACTOR's own risk, until the required samples or certificates have been approved in writing by CITY. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the Agreement time.

B. Each sample submitted by CONTRACTOR shall carry a label giving the name of the manufacturer. The accompanying certificate or letter from CONTRACTOR shall 1) state that the sample complies with Agreement requirements, 2) give the name and brand of the product, including its place of origin and the name and address of the producer, and 3) all specifications or other detailed information which will assist CITY in making a prompt decision regarding the acceptability of the sample. It shall also include the statement that all materials or equipment furnished for use in the project will comply with the samples and/or certified statements.

C. Approval of any materials shall be general only and shall not constitute a waiver of CITY's right to demand full compliance with Agreement requirements. After samples are delivered, CITY may perform testing as it deems necessary and reject materials, equipment, and accessories for cause, even though such materials and articles have been given general approval. If materials, equipment, or accessories which fail to meet performed tests have been incorporated in the work, CITY will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by CONTRACTOR as is equitable.

PERMITS AND CODES

A. CONTRACTOR shall immediately report any discrepancy between the Contract Documents and applicable Federal, State, and Local laws and regulations to CITY. Where the contemplated work will fail to comply with such laws and regulations, CITY will adjust the Agreement by Change Order to conform to such laws and regulations and make an appropriate adjustment(s) in the Contract Price or stipulated unit prices, if necessary. Should CONTRACTOR fail to observe the foregoing provisions and proceed with the work, CONTRACTOR shall remove such work, if deemed necessary, without cost to CITY.

B. CONTRACTOR shall, at its own expense, secure and pay for all Federal and State permits, if applicable. The CONTRACTOR is exempted from securing and paying for CITY permits.

C. CONTRACTOR shall comply with applicable Federal and State laws and regulations governing the disposal of materials, debris, and rubbish within or outside the work area and commit no trespass on any private property in any operation due to or connected with this Agreement.

WATER FOR CONSTRUCTION

Water used for any purposes incidental to this project shall be furnished by CONTRACTOR.

LINES AND GRADES

N/a

MAINTENANCE OF SERVICES

CONTRACTOR shall take all precautions in protecting existing utilities, both above and below ground.

CARE OF WORK

- A. CONTRACTOR shall be responsible for all damages to persons or properties that occur as a result of its fault or negligence in connection with the prosecution of the work and shall be responsible for the proper care and protection of all materials delivered and work performed until final acceptance.
- B. In an emergency affecting the safety of life, limb, or property, including adjoining properties, CONTRACTOR, without special instructions or authorization from CITY, is authorized to act at its discretion to prevent such threatened loss or injury, and it shall so act. It shall likewise act if instructed to do so by CITY.
- C. CONTRACTOR shall avoid damage as a result of its operations, especially overspray, to driveway approaches, existing sidewalks, streets, curbs, pavements, drainage structures, mailboxes, signs, utilities (except those which are to be replaced or removed), and it shall, at its own expense, completely repair any damage thereto caused by its operations.
- D. CONTRACTOR shall be responsible for the giving of any and all required notices to any adjoining or adjacent properties or other parties before the commencement of any work. CONTRACTOR shall indemnify and save harmless CITY from any damages on account of settlements, the loss of lateral support of adjoining properties, and from all other loss, expense, and damage for which CITY may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

ACCIDENT PREVENTION

- A. No person employed in the performance of this Agreement shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his/her health or safety, as determined by the U.S. Secretary of Labor and promulgated construction safety and health standards.
- B. CONTRACTOR shall maintain an accurate record of all cases of death, occupational disease, or injury requiring medical attention or causing loss of time from work, arising out of and in the course of employment on work under the Agreement. CONTRACTOR shall promptly furnish CITY with reports concerning these matters.
- C. CONTRACTOR shall indemnify and save harmless CITY from any claims for damages resulting from property damage, personal injury, and/or death suffered or alleged to have been suffered by any person as a result of any work conducted under this Agreement.

TRAFFIC CONTROL

It will be CONTRACTOR's responsibility to adequately provide for the safety of the public during the course of the work. CONTRACTOR shall provide traffic control in accordance with the Technical Specifications. The traffic control plan for each segment of the Project shall be submitted to the CITY for approval prior to the commencement of work. The traffic control plan shall include the method of communication of traffic delays to the public.

SANITARY FACILITIES

CONTRACTOR shall furnish, install, and maintain ample sanitary facilities for its employees. As the needs arise, a sufficient number of enclosed temporary toilets shall be conveniently placed as required. Drinking water for its employees shall be provided from an approved source, so piped or transported as to keep it safe and fresh. All such facilities and services shall be furnished in strict accordance with existing and governing health regulations.

USE OF PREMISES

A. CONTRACTOR shall confine its equipment, storage of materials, and construction operations to the project limits, as shown within the Contract Documents or as may be desired by CITY, and shall not unreasonably encumber the site(s) or public rights of way with its materials and construction equipment.

B. CONTRACTOR shall comply with all reasonable instructions of CITY and all existing Federal and State law and regulations regarding signage, traffic control, and barricades.

LIMITATION OF OPERATIONS

The work shall be conducted so as to create a minimum amount of inconvenience to the public. At any time, when, in the judgment of CITY, CONTRACTOR has obstructed, closed, or is carrying on operations on a greater portion of the street or public right of way than is necessary for the proper execution of the work, CITY may require CONTRACTOR to expeditiously finish that portion before operations are started on any additional sections.

PERMITS AND RIGHT-OF-WAY

CITY will provide right-of-way, if necessary, for the purpose of construction without cost to CONTRACTOR. It shall be the responsibility of CONTRACTOR prior to the initiation of construction on easements through private property or upon areas of public dedication to familiarize itself with the requirements of the pertinent easement and to abide by all of the stated terms of the easement.

REMOVAL OF DEBRIS, CLEANING, ETC.

CONTRACTOR shall, periodically or as directed by CITY during the progress of the work, remove and legally dispose of all surplus materials and debris and keep the work area and public rights of way reasonably clear and clean. Upon completion of the work, CONTRACTOR shall remove all temporary construction facilities, debris, and unused materials provided for the work and return the work site and public rights of way to a neat and clean condition.

INSPECTION

A. All workmanship shall be subject to inspection, examination, or testing by CITY at any and all times and places. CITY shall have the right to reject defective workmanship and

require its correction. If CONTRACTOR fails to proceed within five (5) calendar days with the correction of rejected workmanship, CITY may, by contract or other mechanism, have the defects remedied and charge the cost of the same against any monies which may be due CONTRACTOR, without prejudice to any other rights or remedies of CITY.

B. Neither inspection, testing, approval, nor acceptance of the work, in whole or in part, by CITY shall relieve CONTRACTOR of full responsibility for materials furnished or work performed that are not in strict accordance with this Agreement.

REVIEW BY CITY

CITY shall have access and be able to review all work, materials, equipment, material invoices, and other relevant data and records pertaining to this Agreement during normal business hours.

FINAL INSPECTION

When each Project Segment included in this Agreement is substantially complete, CONTRACTOR shall notify CITY in writing or by e-mail that the work will be ready for final inspection on a definite date which shall be stated in the notice. CITY will make arrangements to have the final inspection commence on the date indicated in the notice, or as soon thereafter as is practicable.

INSURANCE

A copy of an insurance certificate showing CITY as "other insured" for the following insurances must be submitted a minimum of ten (10) calendar days prior to the commencement of work. Failure to provide a valid insurance certificate may result in cancellation of this Agreement.

Insurance shall be carried with a financially responsible insurance company, licensed in the State of Texas, with an A.M. Best Rating Category of Excellent or better.

Comprehensive General Liability Insurance. With limits of liability for bodily injury of not less than \$1,000,000.00 any one occurrence, and for property damage of not less than \$1,000,000.00 any one occurrence, and \$2,000,000.00 aggregate.

Comprehensive Automobile Liability Insurance. With limits of liability for bodily injury of not less than \$1,000,000.00 any one person, and \$2,000,000.00 any one occurrence, and for property damage of not less than \$1,000,000.00 any one occurrence. Such coverage shall include owned, hired, and non-owned vehicles.

Worker's Compensation Insurance. Statutory limits.

GUARANTEES

CONTRACTOR shall provide CITY with performance, payment, and maintenance bonds. Bid bonds are not required for this Project. The performance bond is:

(1) solely for the protection of the state or governmental entity awarding the public work contract;

- (2) in the amount of the contract; and
- (3) conditioned on the faithful performance of the work in accordance with the plans, specifications, and contract documents.

The payment bond is:

- (1) solely for the protection and use of payment bond beneficiaries who have a direct contractual relationship with the prime contractor or a subcontractor to supply public work labor or material; and
- (2) in the amount of the contract.

The maintenance bond shall guarantee all work against defective materials and workmanship for a period of twelve (12) months from the date of final acceptance. CONTRACTOR'S failure to repair or replace defects upon notice and in a timely manner entitles the CITY to repair or replace same and recover reasonable costs thereof from the CONTRACTOR and/or his surety.

WARRANTY OF TITLE

No material, supplies, or equipment to be installed or furnished under this Agreement shall be purchased subject to any chattel mortgage or under a conditional sale, lease-purchase, or other agreement by which an interest is retained by the seller or supplier. The CONTRACTOR shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work. CONTRACTOR will be required to sign a Release of Lien form with each payment. Nothing contained in this Paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover funds due CONTRACTOR and in CITY's possession. The provisions of this Paragraph shall be inserted in all sub- and material contracts, and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

WARRANTY OF WORKMANSHIP AND MATERIALS

CONTRACTOR shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of twelve (12) months from the date of final acceptance of the work.

JOB OFFICES

A. CONTRACTOR and its subcontractors may maintain office and storage facilities within the public right of way and/or on private property, with owner's permission, as are necessary for the proper completion of the work. These shall be located so as to cause no interference to any work to be performed within the public rights of way. CITY shall be consulted with regard to and approve all designated locations prior to use.

B. Upon completion of the work, or as directed by CITY, CONTRACTOR shall remove all such temporary structures and facilities from the site(s) and leave the site(s) of the work in good condition.

PARTIAL USE OF SITE IMPROVEMENTS

CITY may give notice to CONTRACTOR and place in use those sections of the work which have been completed, inspected, and can be accepted as complying with the Contract Documents, provided:

- A. The use of such sections of the work shall in no way impede the completion of the remainder of the work by CONTRACTOR.
- B. CONTRACTOR shall not be responsible for any damages or maintenance costs due directly to the use of such sections.
- C. The period of warranty stipulated in the General Conditions hereof shall not begin until the date of final acceptance of all work which CONTRACTOR is required to construct under this Agreement.

TECHNICAL SPECIFICATIONS

ITEM 100 RIGHT OF WAY PREPARATION

Right of Way Preparation is not paid for directly. It is considered subsidiary to pertinent items.

Item 100

Preparing Right of Way



1. DESCRIPTION

Prepare the right of way and designated easements for construction operations by removing and disposing of all obstructions when removal of such obstructions is not specifically shown on the plans to be paid by other Items.

2. CONSTRUCTION

Protect designated features on the right of way and prune trees and shrubs as directed. Do not park equipment, service equipment, store materials, or disturb the root area under the branches of trees designated for preservation. Treat cuts on trees with an approved tree wound dressing within 20 min. of making a pruning cut or otherwise causing damage to the tree when shown on the plans. Follow all local and state regulations when burning. Pile and burn brush at approved locations as directed. Coordinate work with state and federal authorities when working in state or national forests or parks. Test, remove, and dispose of hazardous materials in accordance with Article 6.10., "Hazardous Materials."

Clear areas shown on the plans of all obstructions, except those landscape features that are to be preserved. Such obstructions include remains of houses and other structures, foundations, floor slabs, concrete, brick, lumber, plaster, septic tank drain fields, basements, abandoned utility pipes or conduits, equipment, fences, retaining walls, and other items as specified on the plans. Remove vegetation and other landscape features not designated for preservation, curb and gutter, driveways, paved parking areas, miscellaneous stone, sidewalks, drainage structures, manholes, inlets, abandoned railroad tracks, scrap iron, and debris, whether above or below ground. Removal of live utility facilities is not included in this item. Remove culverts, storm sewers, manholes, and inlets in proper sequence to maintain traffic and drainage.

Notify the Engineer in writing when items not shown on the plans and not reasonably detectable (buried with no obvious indication of presence) are encountered and required to be removed. These items will be handled in accordance with Article 4.5., "Differing Site Conditions."

Remove obstructions not designated for preservation to 2 ft. below natural ground in areas receiving embankment. Remove obstructions to 2 ft. below the excavation level in areas to be excavated. Remove obstructions to 1 ft. below natural ground in all other areas. Cut trees and stumps off to ground level when allowed by the plans or directed. Plug the remaining ends of abandoned underground structures over 3 in. in diameter with concrete to form a tight closure. Backfill, compact, and restore areas where obstructions have been removed unless otherwise directed. Use approved material for backfilling. Dispose of wells in accordance with Item 103, "Disposal of Wells."

Accept ownership, unless otherwise directed, and dispose of removed materials and debris at locations off the right of way in accordance with local, state, and federal requirements.

3. MEASUREMENT

This Item will be measured by the acre; by the 100-ft. station, regardless of the width of the right of way; or by each tree removed.

4. PAYMENT

For "acre" and "station" measurement, the work performed in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Preparing Right of Way." For "each" measurement, the work performed in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Preparing Right of Way (Tree)" of the diameter specified. This price is full compensation for pruning of designated trees and shrubs; removal and disposal of structures and obstructions; backfilling of holes; furnishing and placing concrete for plugs; and equipment, labor, tools, and incidentals.

Total payment of this Item will not exceed 10% of the original contract amount until final acceptance. The remainder will be paid on the estimate after the final acceptance under Article 5.12., "Final Acceptance."

ITEM 316 SEAL COAT / ONE-COURSE SURFACE TREATMENT

City Specifications:

Asphalt Type – CRS2P or HFRS2P.

Aggregate Type – Ty D Grade 4 – Sac B.

Asphalt Application Rate – 0.40-0.50 gallons per square yard, with an application bid rate of 0.45.

Aggregate Application Rate – 1 CY : 125 SY.

Asphalt season shall be from May 1st through September 15th.

Emulsion shall be heated to a temperature of 170° before being applied.

Roadway shall be swept, same day, prior to beginning seal coat of each roadway.

Strap method shall be conducted to ensure application rate.

All shots shall start on paper and end on paper.

Contractor is responsible for cleaning / disposing of all shot paper.

Flat wheel rollers are not allowed.

Minimum 2 pneumatic rollers, 3 passes, on each shot.

Roadways shall be shot in a two-lane configuration, unless otherwise allowed.

All sealed roadways shall be back-broomed / swept the following day. Any loose / excess materials shall be removed at Contractor's expense.

Item 316

Seal Coat



1. DESCRIPTION

Construct a surface treatment consisting of one or more applications of a single layer of asphalt material covered with a single layer of aggregate.

2. MATERIALS

Furnish materials of the type and grade shown on the plans in accordance with the following:

2.1. Asphalt. Furnish asphalt materials meeting the requirements of Item 300, "Asphalts, Oils, and Emulsions."

Furnish Type II or Type III A-R binder in accordance with Section 300.2.9., "Asphalt-Rubber Binders," as shown on the plans. Furnish a blend design for approval. Include in the design, at a minimum, the following:

- manufacturer and grade of asphalt cement;
- manufacturer and grade of crumb rubber;
- manufacturer, type, and percentage of extender oil, if used;
- test report on crumb rubber gradation in accordance with Tex-200-E, Part I;
- design percentage of crumb rubber versus asphalt content,
- blending temperature; and
- test results on the properties at reaction times of 60, 90, 240, 360, and 1,440 min. in accordance with Section 300.2.9., "Asphalt-Rubber Binders."

Furnish a new asphalt-rubber blend design if the grade or source for any of the components changes.

If a tack coat is specified when using asphalt-rubber, unless otherwise shown on the plans or approved, furnish CSS-1H, SS-1H, or a performance grade (PG) binder with a minimum high temperature grade of PG 58 for tack coat binder. Do not dilute emulsified asphalts at the terminal, in the field, or at any other location before use. If required, verify that emulsified asphalt proposed for use meets the minimum residual asphalt percentage specified in Item 300, "Asphalts, Oils, and Emulsions."

2.2. Aggregate. Furnish aggregate meeting Item 302, "Aggregates for Surface Treatments," of the type and grade shown on the plans. Unless otherwise shown on the plans, furnish aggregate with a minimum B Surface Aggregate Classification.

2.3. Materials Selections. Furnish asphalt and aggregate shown on the plans.

3. EQUIPMENT

3.1. Distributor. Furnish a distributor that will apply the asphalt material uniformly at the specified rate or as directed.

3.1.1. Transverse Variable Rate. When a transverse variable rate is shown on the plans, ensure that the nozzles outside the wheel paths will output a predetermined percentage more asphalt material by volume than the nozzles over the wheel paths. Use a dual spray bar distributor as desired to provide for a transverse variable rate.

- 3.1.2. **Agitation for Asphalt-Rubber.** If using asphalt-rubber, furnish a distributor capable of keeping the rubber in uniform suspension and adequately mixing the asphalt, rubber, and any additional additives.
- 3.1.3. **Calibration.**
- 3.1.3.1. **Transverse Distribution.** Furnish a distributor test report, less than 1 yr. old, when tested in accordance with Tex-922-K, Part III. The Department reserves the right to witness the calibration testing. Notify the Engineer 3 days before calibration testing.
- Include the following documentation on the test report:
- the serial number of the distributor,
 - a method that identifies the actual nozzle set used in the test, and
 - the fan width of the nozzle set at a 12-in. bar height.
- When a transverse variable rate is required, and a single spray bar is to be used, perform the test using the type and grade of asphalt material to be used on the project. The Engineer may verify the transverse rate and distribution at any time. If verification does not meet the requirements, correct deficiencies and furnish a new test report.
- 3.1.3.2. **Tank Volume.** Furnish a volumetric calibration and strap stick for the distributor tank in accordance with Tex-922-K, Part I.
- Provide documentation of distributor calibration performed not more than 5 yr. before the date first used on the project. The Engineer may verify calibration accuracy in accordance with Tex-922-K, Part II.
- 3.1.4. **Computerized Distributor.** When paying for asphalt material by weight, the Engineer may allow use of the computerized distributor display to verify application rates. Verify application rate accuracy at a frequency acceptable to the Engineer.
- 3.2. **Aggregate Spreader.** Use a continuous-feed, self-propelled spreader to apply aggregate uniformly at the specified rate or as directed. If raked in aggregate is specified on the plans, furnish a second aggregate spreader for the raked in aggregate to apply aggregate uniformly at the specified rate.
- 3.3. **Rollers.** Unless otherwise shown on the plans, furnish light pneumatic-tire rollers in accordance with Item 210, "Rolling."
- 3.4. **Broom.** Furnish rotary, self-propelled brooms.
- 3.5. **Asphalt Storage and Handling Equipment.** When the plans or the Engineer allows storage tanks, furnish a thermometer in each tank to indicate the asphalt temperature continuously. Keep equipment clean and free of leaks. Keep asphalt material free of contamination.
- 3.6. **Aggregate Haul Trucks.** Unless otherwise approved, use trucks of uniform capacity to deliver the aggregate. Provide documentation showing measurements and calculation in cubic yards. Clearly mark the calibrated level. Truck size may be limited when shown on the plans.
- 3.7. **Digital Distance Measuring Instrument.** Furnish a vehicle with a calibrated digital distance measuring instrument accurate to ± 6 ft. per mile.

4. CONSTRUCTION

- 4.1. **General.** Comply with the seal coat season as shown on the plans. Asphalt and aggregate rates shown on the plans are for estimating purposes only. Adjust the rates for existing conditions as directed.

- 4.2. **Temporary Aggregate Stockpiles.** The Engineer will approve the location of temporary aggregate stockpiles on the right of way before delivery. Place stockpiles in a manner that will not:
- obstruct traffic or sight distance,
 - interfere with the access from abutting property, or
 - interfere with roadway drainage.
- Locate stockpiles a minimum of 30 ft. from roadway when possible. Sign and barricade as shown on the plans.
- 4.3. **Aggregate Furnished by the Department.** When shown on the plans, the Department will furnish aggregate to the Contractor without cost. Stockpile locations are shown on the plans.
- 4.4. **Adverse Weather Conditions.** Do not place surface treatments when, in the Engineer's opinion, general weather conditions are unsuitable. Meet the requirements for air and surface temperature shown below.
- 4.4.1. **Standard Temperature Limitations.** Apply seal coat when air temperature is above 50°F and rising. Do not apply seal coat when air temperature is 60°F and falling. In all cases, do not apply seal coat when surface temperature is below 60°F.
- 4.4.2. **Polymer-Modified Asphalt Cement Temperature Limitations.** When using materials described in Section 300.2.2., "Polymer Modified Asphalt Cement," apply seal coat when air temperature is above 70°F and rising. Do not apply seal coat when air temperature is 80°F and falling. In all cases, do not apply seal coat when surface temperature is below 70°F.
- 4.4.3. **Asphalt-Rubber Temperature Limitations.** Do not place hot asphalt-rubber seal coat when, in the Engineer's opinion, general weather conditions are unsuitable. Apply seal coat when the air temperature is 80°F and above, or above 70°F and rising. In all cases, do not apply seal coat when surface temperature is below 70°F.
- 4.4.4. **Cool Weather Night Air Temperature.** The Engineer reserves the right to review the National Oceanic and Atmospheric Administration (NOAA) weather forecast and determine if the nightly air temperature is suitable for asphalt placement to prevent aggregate loss.
- 4.4.5. **Cold Weather Application.** When asphalt application is allowed outside of the above temperature restrictions, the Engineer will approve the binder grade and the air and surface temperatures for asphalt material application. Apply seal coat at air and surface temperatures as directed.
- 4.5. **Mixing Hot A-R Binder.** If using asphalt-rubber, mix in accordance with the approved blend design required in Section 316.2.1., "Asphalt."
- At the end of each shift, provide the Engineer with production documentation, which includes the following:
- amount and temperature of asphalt cement before addition of rubber,
 - amount of rubber and any extender added,
 - viscosity of each hot A-R batch just before roadway placement, and
 - time of the rubber additions and viscosity tests.
- 4.6. **Surface Preparation.** Remove existing raised pavement markers. Repair any damage incurred by removal as directed. Remove dirt, dust, or other harmful material before sealing. When shown on the plans, remove vegetation and blade pavement edges. When directed, apply a tack coat before applying the hot asphalt-rubber treatment on an existing wearing surface in accordance with Section 340.2.5., "Tack Coat."

- 4.7. **Rock Land and Shot.**
- 4.7.1. **Definitions.**
- A "rock land" is the area covered at the aggregate rate directed with 1 truckload of aggregate.
 - A "shot" is the area covered by 1 distributor load of asphalt material.
- 4.7.2. **Setting Lengths.** Calculate the lengths of both rock land and shot. Adjust shot length to be an even multiple of the rock land. Verify that the distributor has enough asphalt material to complete the entire shot length. Mark shot length before applying asphalt. When directed, mark length of each rock land to verify the aggregate rate.
- 4.8. **Asphalt Placement.**
- 4.8.1. **General.** The maximum shot width is the width of the current transverse distribution test required under Section 316.3.1.3.1., "Transverse Distribution," or the width of the aggregate spreader box, whichever is less. Adjust the shot width so operations do not encroach on traffic or interfere with the traffic control plan, as directed. Use paper or other approved material at the beginning and end of each shot to construct a straight transverse joint and to prevent overlapping of the asphalt. Unless otherwise approved, match longitudinal joints with the lane lines. The Engineer may require a string line if necessary to keep joints straight with no overlapping. Use sufficient pressure to flare the nozzles fully.
- Select an application temperature, as approved, in accordance with Item 300, "Asphalts, Oils, and Emulsions." Uniformly apply the asphalt material at the rate directed, within 15°F of the approved temperature, and not above the maximum allowable temperature.
- 4.8.2. **Limitations.** Do not apply asphalt to the roadway until:
- traffic control methods and devices are in place as shown on the plans or as directed,
 - the loaded aggregate spreader is in position and ready to begin,
 - haul trucks are loaded with enough aggregate to cover the shot area and are in place behind the spreader box, and
 - rollers are in place behind the haul trucks.
- 4.8.3. **Nonuniform Application.** Stop application if it is not uniform due to streaking, ridging, puddling, or flowing off the roadway surface. Verify equipment condition, operating procedures, application temperature, and material properties. Determine and correct the cause of nonuniform application. If the cause is high or low emulsion viscosity, replace emulsion with material that corrects the problem.
- 4.8.4. **Test Strips.** The Engineer may stop asphalt application and require construction of test strips at the Contractor's expense if any of the following occurs:
- nonuniformity of application continues after corrective action;
 - on 3 consecutive shots, application rate differs by more than 0.03 gal. per square yard from the rate directed; or
 - any shot differs by more than 0.05 gal. per square yard from the rate directed.
- The Engineer will approve the test strip location. The Engineer may require additional test strips until surface treatment application meets specification requirements.
- 4.9. **Aggregate Placement.** As soon as possible, apply aggregate uniformly at the rate directed without causing the rock to roll over.

- 4.9.1. **Nonuniform Application.** Stop application if it is not uniform in the transverse direction. Verify equipment condition, operating procedures, and transverse application rate. The transverse application rate should be within 1 lb. Determine and correct the cause of nonuniform application.
- 4.10. **Rolling.** Start rolling operation on each shot as soon as aggregate is applied. Use sufficient rollers to cover the entire mat width in 1 pass, i.e., 1 direction. Roll in a staggered pattern. Unless otherwise shown on the plans, make a minimum of:
- 5 passes; or
 - 3 passes when the asphalt material is an emulsion.
- If rollers are unable to keep up with the spreader box, stop application until rollers have caught up, or furnish additional rollers. Keep roller tires asphalt-free.
- 4.11. **Patching.** Before rolling, repair spots where coverage is incomplete. Repair can be made by hand spotting or other approved method. When necessary, apply additional asphalt material to embed aggregate.
- 4.12. **Racked-in Aggregate.** If specified on the plans, apply racked-in aggregate after patching, uniformly at the rate directed. The racked-in aggregate must be applied before opening the roadway or intersection to traffic.
- 4.13. **Brooming.** After rolling, sweep as soon as aggregate has sufficiently bonded to remove excess. In areas of racked-in aggregate, sweep as directed.
- 4.14. **Final Acceptance.** Maintain seal coat until the Engineer accepts the work. Repair any surface failures. Before final project acceptance, remove all temporary stockpiles and restore the area to the original contour and grade.

5. MEASUREMENT

- 5.1. **Asphalt Material.** Unless otherwise shown on the plans, asphalt material will be measured by one of the following methods:
- 5.1.1. **Volume.** Asphalt material, including all components, will be measured at the applied temperature by strapping the tank before and after road application. The distributor calibrated strap stick will be used for measuring the asphalt level in the distributor asphalt tank. The certified tank chart will be used to determine the beginning gallons and the final gallons in the distributor tank. The quantity to be measured for payment will be the difference between the beginning gallons and the final gallons.
- 5.1.2. **Weight.** Asphalt material will be measured in tons using certified scales meeting the requirements of Item 520, "Weighing and Measuring Equipment," unless otherwise approved. The transporting truck must have a seal attached to the draining device and other openings. Random checking on public scales at the Contractor's expense may be required to verify weight accuracy.
- Upon work completion or temporary suspension, any remaining asphalt material will be weighed by a certified public weigher, or measured by volume in a calibrated distributor or tank and the quantity converted to tons at the measured temperature. The quantity to be measured will be the number of tons received minus the number of tons remaining after all directed work is complete and minus the amount used for other items.
- 5.1.3. **Quantity Adjustments.** When shown on the plans, the measured quantity will be adjusted to compensate for variation in required application or residual rates for different types of asphalt.
- 5.2. **Aggregate.** Aggregate will be measured by the cubic yard in the trucks as applied on the road. Strike off the loaded aggregate for accurate measurement when directed.

- 5.3. **Loading, Hauling, and Distributing Aggregate.** When the Department furnishes the aggregate, the loading, hauling, and distributing will be measured by the cubic yard in the trucks as applied on the road.

6. **PAYMENT**

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit prices bid for "Asphalt," "Aggregate," and "Loading, Hauling, and Distributing Aggregate" of the types-grades specified on the plans. These prices are full compensation for surface preparation; furnishing, preparing, hauling, and placing materials; removing existing pavement markers and excess aggregate; rolling; cleaning up stockpiles; and equipment, labor, tools, and incidentals.

ITEM 340 LEVEL UP

City Specifications:

Level up materials shall be Ty D 64-22 material.

Roadway shall be swept clean, free of loose material, before lay down operation.

A tack coat is required, subsidiary to placement, prior to placement.

Transverse joints shall be rolled in to match existing pavement to minimize "bumps" at joints.

Level up is a minimum of 1" of entire roadway. Match existing x-slopes.

Level up shall be allowed to cure for a minimum of six (6) weeks prior to seal coat being placed.

All base failures shall be repaired prior to placement of Hot Mix.

Item 340

Dense-Graded Hot-Mix Asphalt (Small Quantity)



1. DESCRIPTION

Construct a hot-mix asphalt (HMA) pavement layer composed of a compacted, dense-graded mixture of aggregate and asphalt binder mixed hot in a mixing plant. This specification is intended for small quantity (SQ) HMA projects, typically under 5,000 tons total production.

2. MATERIALS

Furnish uncontaminated materials of uniform quality that meet the requirements of the plans and specifications.

Notify the Engineer of all material sources and before changing any material source or formulation. The Engineer will verify that the specification requirements are met when the Contractor makes a source or formulation change, and may require a new laboratory mixture design, trial batch, or both. The Engineer may sample and test project materials at any time during the project to verify specification compliance in accordance with Item 6, "Control of Materials."

- 2.1. **Aggregate.** Furnish aggregates from sources that conform to the requirements shown in Table 1 and as specified in this Section. Aggregate requirements in this Section, including those shown in Table 1, may be modified or eliminated when shown on the plans. Additional aggregate requirements may be specified when shown on the plans. Provide aggregate stockpiles that meet the definitions in this Section for coarse, intermediate, or fine aggregate. Aggregate from reclaimed asphalt pavement (RAP) is not required to meet Table 1 requirements unless otherwise shown on the plans. Supply aggregates that meet the definitions in Tex-100-E for crushed gravel or crushed stone. The Engineer will designate the plant or the quarry as the sampling location. Provide samples from materials produced for the project. The Engineer will establish the Surface Aggregate Classification (SAC) and perform Los Angeles abrasion, magnesium sulfate soundness, and Micro-Deval tests. Perform all other aggregate quality tests listed in Table 1. Document all test results on the mixture design report. The Engineer may perform tests on independent or split samples to verify Contractor test results. Stockpile aggregates for each source and type separately. Determine aggregate gradations for mixture design and production testing based on the washed sieve analysis given in Tex-200-F, Part II.

- 2.1.1. **Coarse Aggregate.** Coarse aggregate stockpiles must have no more than 20% material passing the No. 8 sieve. Aggregates from sources listed in the Department's *Bituminous Rated Source Quality Catalog* (BRSQC) are preapproved for use. Use only the rated values for hot-mix listed in the BRSQC. Rated values for surface treatment (ST) do not apply to coarse aggregate sources used in hot-mix asphalt.

For sources not listed on the Department's BRSQC:

- build an individual stockpile for each material;
- request the Department test the stockpile for specification compliance; and
- once approved, do not add material to the stockpile unless otherwise approved.

Provide aggregate from non-listed sources only when tested by the Engineer and approved before use. Allow 30 calendar days for the Engineer to sample, test, and report results for non-listed sources.

Provide coarse aggregate with at least the minimum SAC shown on the plans. SAC requirements only apply to aggregates used on the surface of travel lanes. SAC requirements apply to aggregates used on surfaces other than travel lanes when shown on the plans. The SAC for sources on the Department's *Aggregate Quality Monitoring Program* (AQMP) (Tex-499-A) is listed in the BRSQC.

- 2.1.1.1. **Blending Class A and Class B Aggregates.** Class B aggregate meeting all other requirements in Table 1 may be blended with a Class A aggregate to meet requirements for Class A materials. Ensure that at least 50% by weight, or volume if required, of the material retained on the No. 4 sieve comes from the Class A aggregate source when blending Class A and B aggregates to meet a Class A requirement. Blend by volume if the bulk specific gravities of the Class A and B aggregates differ by more than 0.300. Coarse aggregate from RAP and Recycled Asphalt Shingles (RAS) will be considered as Class B aggregate for blending purposes.

The Engineer may perform tests at any time during production, when the Contractor blends Class A and B aggregates to meet a Class A requirement, to ensure that at least 50% by weight, or volume if required, of the material retained on the No. 4 sieve comes from the Class A aggregate source. The Engineer will use the Department's mix design template, when electing to verify conformance, to calculate the percent of Class A aggregate retained on the No. 4 sieve by inputting the bin percentages shown from readouts in the control room at the time of production and stockpile gradations measured at the time of production. The Engineer may determine the gradations based on either washed or dry sieve analysis from samples obtained from individual aggregate cold feed bins or aggregate stockpiles. The Engineer may perform spot checks using the gradations supplied by the Contractor on the mixture design report as an input for the template; however, a failing spot check will require confirmation with a stockpile gradation determined by the Engineer.

- 2.1.2. **Intermediate Aggregate.** Aggregates not meeting the definition of coarse or fine aggregate will be defined as intermediate aggregate. Supply intermediate aggregates, when used that are free from organic impurities.

The Engineer may test the intermediate aggregate in accordance with Tex-408-A to verify the material is free from organic impurities. Supply intermediate aggregate from coarse aggregate sources, when used that meet the requirements shown in Table 1 unless otherwise approved.

Test the stockpile if 10% or more of the stockpile is retained on the No. 4 sieve, and verify that it meets the requirements in Table 1 for crushed face count (Tex-460-A) and flat and elongated particles (Tex-280-F).

- 2.1.3. **Fine Aggregate.** Fine aggregates consist of manufactured sands, screenings, and field sands. Fine aggregate stockpiles must meet the gradation requirements in Table 2. Supply fine aggregates that are free from organic impurities. The Engineer may test the fine aggregate in accordance with Tex-408-A to verify the material is free from organic impurities. No more than 15% of the total aggregate may be field sand or other uncrushed fine aggregate. Use fine aggregate, with the exception of field sand, from coarse aggregate sources that meet the requirements shown in Table 1 unless otherwise approved.

Test the stockpile if 10% or more of the stockpile is retained on the No. 4 sieve, and verify that it meets the requirements in Table 1 for crushed face count (Tex-460-A) and flat and elongated particles (Tex-280-F).

Table 1
Aggregate Quality Requirements

Property	Test Method	Requirement
Coarse Aggregate		
SAC	Tex-499-A (AQMP)	As shown on the plans
Deleterious material, %, Max	Tex-217-F, Part I	1.5
Decantation, %, Max	Tex-217-F, Part II	1.5
Micro-Deval abrasion, %	Tex-461-A	Note 1
Los Angeles abrasion, %, Max	Tex-410-A	40
Magnesium sulfate soundness, 5 cycles, %, Max	Tex-411-A	30
Crushed face count, ² %, Min	Tex-460-A, Part I	85
Flat and elongated particles @ 5:1, %, Max	Tex-260-F	10
Fine Aggregate		
Linear shrinkage, %, Max	Tex-107-E	3
Combined Aggregate³		
Sand equivalent, %, Min	Tex-203-F	45

- Not used for acceptance purposes. Optional test used by the Engineer as an indicator of the need for further investigation.
- Only applies to crushed gravel.
- Aggregates, without mineral filler, RAP, RAS, or additives, combined as used in the job-mix formula (JMF).

Table 2
Gradation Requirements for Fine Aggregate

Sieve Size	% Passing by Weight or Volume
3/8"	100
#8	70-100
#200	0-30

2.2.

Mineral Filler. Mineral filler consists of finely divided mineral matter such as agricultural lime, crusher fines, hydrated lime, or fly ash. Mineral filler is allowed unless otherwise shown on the plans. Use no more than 2% hydrated lime or fly ash unless otherwise shown on the plans. Use no more than 1% hydrated lime if a substitute binder is used unless otherwise shown on the plans or allowed. Test all mineral fillers except hydrated lime and fly ash in accordance with Tex-107-E to ensure specification compliance. The plans may require or disallow specific mineral fillers. Provide mineral filler, when used, that:

- is sufficiently dry, free-flowing, and free from clumps and foreign matter as determined by the Engineer;
- does not exceed 3% linear shrinkage when tested in accordance with Tex-107-E; and
- meets the gradation requirements in Table 3.

Table 3
Gradation Requirements for Mineral Filler

Sieve Size	% Passing by Weight or Volume
#8	100
#200	55-100

2.3.

Baghouse Fines. Fines collected by the baghouse or other dust-collecting equipment may be reintroduced into the mixing drum.

2.4.

Asphalt Binder. Furnish the type and grade of performance-graded (PG) asphalt specified on the plans.

2.5.

Tack Coat. Furnish CSS-1H, SS-1H, or a PG binder with a minimum high-temperature grade of PG 58 for tack coat binder in accordance with Item 300, "Asphalts, Oils, and Emulsions." Specialized or preferred tack coat materials may be allowed or required when shown on the plans. Do not dilute emulsified asphalts at the terminal, in the field, or at any other location before use.

The Engineer will obtain at least one sample of the tack coat binder per project in accordance with Tex-500-C, Part III, and test it to verify compliance with Item 300, "Asphalts, Oils, and Emulsions." The Engineer will obtain the sample from the asphalt distributor immediately before use.

- 2.6. **Additives.** Use the type and rate of additive specified when shown on the plans. Additives that facilitate mixing, compaction, or improve the quality of the mixture are allowed when approved. Provide the Engineer with documentation, such as the bill of lading, showing the quantity of additives used in the project unless otherwise directed.
- 2.6.1. **Lime and Liquid Antistripping Agent.** When lime or a liquid antistripping agent is used, add in accordance with Item 301, "Asphalt Antistripping Agents." Do not add lime directly into the mixing drum of any plant where lime is removed through the exhaust stream unless the plant has a baghouse or dust collection system that reintroduces the lime into the drum.
- 2.6.2. **Warm Mix Asphalt (WMA).** Warm Mix Asphalt (WMA) is defined as HMA that is produced within a target temperature discharge range of 215°F and 275°F using approved WMA additives or processes from the Department's MPL.

WMA is allowed for use on all projects and is required when shown on the plans. When WMA is required, the maximum placement or target discharge temperature for WMA will be set at a value below 275°F.

Department-approved WMA additives or processes may be used to facilitate mixing and compaction of HMA produced at target discharge temperatures above 275°F; however, such mixtures will not be defined as WMA.

- 2.7. **Recycled Materials.** Use of RAP and RAS is permitted unless otherwise shown on the plans. Do not exceed the maximum allowable percentages of RAP and RAS shown in Table 4. The allowable percentages shown in Table 4 may be decreased or increased when shown on the plans. Determine asphalt binder content and gradation of the RAP and RAS stockpiles for mixture design purposes in accordance with Tex-236-F. The Engineer may verify the asphalt binder content of the stockpiles at any time during production. Perform other tests on RAP and RAS when shown on the plans. Asphalt binder from RAP and RAS is designated as recycled asphalt binder. Calculate and ensure that the ratio of the recycled asphalt binder to total binder does not exceed the percentages shown in Table 5 during mixture design and HMA production when RAP or RAS is used. Use a separate cold feed bin for each stockpile of RAP and RAS during HMA production.

Surface, intermediate, and base mixes referenced in Tables 4 and 5 are defined as follows:

- **Surface.** The final HMA lift placed at or near the top of the pavement structure;
- **Intermediate.** Mixtures placed below an HMA surface mix and less than or equal to 8.0 in. from the riding surface; and
- **Base.** Mixtures placed greater than 8.0 in. from the riding surface.

- 2.7.1. **RAP.** RAP is salvaged, milled, pulverized, broken, or crushed asphalt pavement. Crush or break RAP so that 100% of the particles pass the 2 in. sieve. Fractionated RAP is defined as 2 or more RAP stockpiles, divided into coarse and fine fractions.

Use of Contractor-owned RAP, including HMA plant waste, is permitted unless otherwise shown on the plans. Department-owned RAP stockpiles are available for the Contractor's use when the stockpile locations are shown on the plans. If Department-owned RAP is available for the Contractor's use, the Contractor may use Contractor-owned fractionated RAP and replace it with an equal quantity of Department-owned RAP. This allowance does not apply to a Contractor using unfractionated RAP. Department-owned RAP generated through required work on the Contract is available for the Contractor's use when shown on the plans. Perform any necessary tests to ensure Contractor- or Department-owned RAP is appropriate for use. The Department will not perform any tests or assume any liability for the quality of the Department-owned RAP unless otherwise shown on the plans. The Contractor will retain ownership of RAP generated on the project when shown on the plans.

The coarse RAP stockpile will contain only material retained by processing over a 3/8-in. or 1/2-in. screen unless otherwise approved. The fine RAP stockpile will contain only material passing the 3/8-in. or 1/2-in. screen unless otherwise approved. The Engineer may allow the Contractor to use an alternate to the 3/8-in.

or 1/2-in. screen to fractionate the RAP. The maximum percentages of fractionated RAP may be comprised of coarse or fine fractionated RAP or the combination of both coarse and fine fractionated RAP.

Do not use Department- or Contractor-owned RAP contaminated with dirt or other objectionable materials. Do not use Department- or Contractor-owned RAP if the decantation value exceeds 5% and the plasticity index is greater than 8. Test the stockpiled RAP for decantation in accordance with Tex-406-A, Part I. Determine the plasticity index in accordance with Tex-106-E if the decantation value exceeds 5%. The decantation and plasticity index requirements do not apply to RAP samples with asphalt removed by extraction or ignition.

Do not intermingle Contractor-owned RAP stockpiles with Department-owned RAP stockpiles. Remove unused Contractor-owned RAP material from the project site upon completion of the project. Return unused Department-owned RAP to the designated stockpile location.

Table 4
Maximum Allowable Amounts of RAP¹

Maximum Allowable Fractionated RAP ² (%)			Maximum Allowable Unfractionated RAP ³ (%)		
Surface	Intermediate	Base	Surface	Intermediate	Base
20.0	30.0	40.0	10.0	10.0	10.0

1. Must also meet the recycled binder to total binder ratio shown in Table 5.
2. Up to 5% RAS may be used separately or as a replacement for fractionated RAP.
3. Unfractionated RAP may not be combined with fractionated RAP or RAS.

- 2.7.2. **RAS.** Use of post-manufactured RAS or post-consumer RAS (tear-offs) is permitted unless otherwise shown on the plans. Up to 5% RAS may be used separately or as a replacement for fractionated RAP in accordance with Table 4 and Table 5. RAS is defined as processed asphalt shingle material from manufacturing of asphalt roofing shingles or from re-roofing residential structures. Post-manufactured RAS is processed manufacturer's shingle scrap by-product. Post-consumer RAS is processed shingle scrap removed from residential structures. Comply with all regulatory requirements stipulated for RAS by the TCEQ. RAS may be used separately or in conjunction with RAP.

Process the RAS by ambient grinding or granulating such that 100% of the particles pass the 3/8 in. sieve when tested in accordance with Tex-200-F, Part I. Perform a sieve analysis on processed RAS material before extraction (or ignition) of the asphalt binder.

Add sand meeting the requirements of Table 1 and Table 2 or fine RAP to RAS stockpiles if needed to keep the processed material workable. Any stockpile that contains RAS will be considered a RAS stockpile and be limited to no more than 5.0% of the HMA mixture in accordance with Table 4.

Certify compliance of the RAS with DMS-11000, "Evaluating and Using Nonhazardous Recyclable Materials Guidelines." Treat RAS as an established nonhazardous recyclable material if it has not come into contact with any hazardous materials. Use RAS from shingle sources on the Department's MPL. Remove substantially all materials before use that are not part of the shingle, such as wood, paper, metal, plastic, and felt paper. Determine the deleterious content of RAS material for mixture design purposes in accordance with Tex-217-F, Part III. Do not use RAS if deleterious materials are more than 0.5% of the stockpiled RAS unless otherwise approved. Submit a sample for approval before submitting the mixture design. The Department will perform the testing for deleterious material of RAS to determine specification compliance.

- 2.8. **Substitute Binders.** Unless otherwise shown on the plans, the Contractor may use a substitute PG binder listed in Table 5 instead of the PG binder originally specified, if the substitute PG binder and mixture made with the substitute PG binder meet the following:
- the substitute binder meets the specification requirements for the substitute binder grade in accordance with Section 300.2.10., "Performance-Graded Binders;" and
 - the mixture has less than 10.0 mm of rutting on the Hamburg Wheel test (Tex-242-F) after the number of passes required for the originally specified binder. Use of substitute PG binders may only be allowed at the discretion of the Engineer if the Hamburg Wheel test results are between 10.0 mm and 12.5 mm.

Table 5
Allowable Substitute PG Binders and Maximum Recycled Binder Ratios

Originally Specified PG Binder	Allowable Substitute PG Binder	Maximum Ratio of Recycled Binder ¹ to Total Binder (%)		
		Surface	Intermediate	Base
HMA				
76-22 ²	70-22 or 64-22	20.0	20.0	20.0
	70-28 or 64-28	30.0	35.0	40.0
70-22 ²	64-22	20.0	20.0	20.0
	64-28 or 58-28	30.0	35.0	40.0
64-22 ²	58-28	30.0	35.0	40.0
76-28 ²	70-28 or 64-28	20.0	20.0	20.0
	64-34	30.0	35.0	40.0
70-28 ²	64-28 or 58-28	20.0	20.0	20.0
	64-34 or 58-34	30.0	35.0	40.0
64-28 ²	58-28	20.0	20.0	20.0
	58-34	30.0	35.0	40.0
WMA³				
76-22 ²	70-22 or 64-22	30.0	35.0	40.0
70-22 ²	64-22 or 58-28	30.0	35.0	40.0
64-22 ⁴	58-28	30.0	35.0	40.0
76-28 ²	70-28 or 64-28	30.0	35.0	40.0
70-28 ²	64-28 or 58-28	30.0	35.0	40.0
64-28 ⁴	58-28	30.0	35.0	40.0

1. Combined recycled binder from RAP and RAS.
2. Use no more than 20.0% recycled binder when using this originally specified PG binder.
3. WMA as defined in Section 340.2.6.2., "Warm Mix Asphalt (WMA) "
4. When used with WMA, this originally specified PG binder is allowed for use at the maximum recycled binder ratios shown in this table.

3. EQUIPMENT

Provide required or necessary equipment in accordance with Item 320, "Equipment for Asphalt Concrete Pavement."

4. CONSTRUCTION

Produce, haul, place, and compact the specified paving mixture. In addition to tests required by the specification, Contractors may perform other QC tests as deemed necessary. At any time during the project, the Engineer may perform production and placement tests as deemed necessary in accordance with Item 5, "Control of the Work." Schedule and participate in a pre-paving meeting with the Engineer on or before the first day of paving unless otherwise directed.

- 4.1. **Certification.** Personnel certified by the Department-approved hot-mix asphalt certification program must conduct all mixture designs, sampling, and testing in accordance with Table 6. Supply the Engineer with a list of certified personnel and copies of their current certificates before beginning production and when personnel changes are made. Provide a mixture design developed and signed by a Level 2 certified specialist.

Table 6
Test Methods, Test Responsibility, and Minimum Certification Levels

Test Description	Test Method	Contractor	Engineer	Level ¹
1. Aggregate and Recycled Material Testing				
Sampling	Tex-221-F	✓	✓	1A
Dry sieve	Tex-200-F, Part I	✓	✓	1A
Washed sieve	Tex-200-F, Part II	✓	✓	1A
Deleterious material	Tex-217-F, Parts I & III	✓	✓	1A
Decantation	Tex-217-F, Part II	✓	✓	1A
Los Angeles abrasion	Tex-410-A		✓	TxDOT
Magnesium sulfate soundness	Tex-411-A		✓	TxDOT
Micro-Daval abrasion	Tex-461-A		✓	2
Crushed face count	Tex-460-A	✓	✓	2
Flat and elongated particles	Tex-280-F	✓	✓	2
Linear shrinkage	Tex-107-E	✓	✓	2
Sand equivalent	Tex-203-F	✓	✓	2
Organic impurities	Tex-408-A	✓	✓	2
2. Asphalt Binder & Tack Coat Sampling				
Asphalt binder sampling	Tex-500-C, Part II	✓	✓	1A/1B
Tack coat sampling	Tex-500-C, Part III	✓	✓	1A/1B
3. Mix Design & Verification				
Design and JMF changes	Tex-204-F	✓	✓	2
Mixing	Tex-205-F	✓	✓	2
Molding (TGC)	Tex-206-F	✓	✓	1A
Molding (SGC)	Tex-241-F	✓	✓	1A
Laboratory-molded density	Tex-207-F	✓	✓	1A
VMA ² (calculation only)	Tex-204-F	✓	✓	2
Rice gravity	Tex-227-F	✓	✓	1A
Ignition oven correction factors ³	Tex-236-F	✓	✓	2
Indirect tensile strength	Tex-226-F	✓	✓	2
Hamburg Wheel test	Tex-242-F	✓	✓	2
Boil test	Tex-530-C	✓	✓	1A
4. Production Testing				
Mixture sampling	Tex-222-F	✓	✓	1A
Molding (TGC)	Tex-206-F		✓	1A
Molding (SGC)	Tex-241-F		✓	1A
Laboratory-molded density	Tex-207-F		✓	1A
VMA ² (calculation only)	Tex-204-F		✓	1A
Rice gravity	Tex-227-F		✓	1A
Gradation & asphalt binder content ³	Tex-236-F		✓	1A
Moisture content	Tex-212-F		✓	1A
Hamburg Wheel test	Tex-242-F		✓	2
Boil test	Tex-530-C		✓	1A
5. Placement Testing				
Trimming roadway cores	Tex-207-F	✓	✓	1A/1B
In-place air voids	Tex-207-F		✓	1A/1B
Establish rolling pattern	Tex-207-F	✓		1B
Ride quality measurement	Tex-1001-S	✓	✓	Note 4

1. Level 1A, 1B, and 2 are certification levels provided by the Hot Mix Asphalt Center certification program.
2. Voids in mineral aggregates.
3. Refer to Section 340.4.6.3., "Production Testing," for exceptions to using an ignition oven.
4. Profiler and operator are required to be certified at the Texas A&M Transportation Institute facility when Surface Test Type B is specified.

4.2.

Reporting, Testing, and Responsibilities. Use Department-provided templates to record and calculate all test data pertaining to the mixture design. The Engineer will use Department templates for any production and placement testing. Obtain the current version of the templates at <http://www.txdot.gov/inside-txdot/forms-publications/consultants-contractors/forms/site-manager.html> or from the Engineer.

The maximum allowable time for the Engineer to exchange test data with the Contractor is as given in Table 7 unless otherwise approved. The Engineer will immediately report to the Contractor any test result that requires suspension of production or placement or that fails to meet the specification requirements.

Subsequent mix placed after test results are available to the Contractor, which require suspension of operations, may be considered unauthorized work. Unauthorized work will be accepted or rejected at the discretion of the Engineer in accordance with Article 5.3., "Conformity with Plans, Specifications, and Special Provisions."

Table 7
Reporting Schedule

Description	Reported By	Reported To	To Be Reported Within
Production Testing			
Gradation	Engineer	Contractor	1 working day of completion of the test
Asphalt binder content			
Laboratory-molded density			
VMA (calculation)			
Hamburg Wheel test			
Moisture content			
Boil test			
Binder tests	Placement Testing		
In-place air voids	Engineer	Contractor	1 working day of completion of the test ¹

1. 2 days are allowed if cores cannot be dried to constant weight within 1 day.

4.3. Mixture Design.

4.3.1. **Design Requirements.** The Contractor may design the mixture using a Texas Gyrotory Compactor (TGC) or a Superpave Gyrotory Compactor (SGC) unless otherwise shown on the plans. Use the dense-graded design procedure provided in Tex-204-F. Design the mixture to meet the requirements listed in Tables 1, 2, 3, 4, 5, 8, 9, and 10.

4.3.1.1. **Target Laboratory-Molded Density When The TGC Is Used.** Design the mixture at a 96.5% target laboratory-molded density. Increase the target laboratory-molded density to 97.0% or 97.5% at the Contractor's discretion or when shown on the plans or specification.

4.3.1.2. **Design Number of Gyration (Ndesign) When The SGC Is Used.** Design the mixture at 50 gyrations (Ndesign). Use a target laboratory-molded density of 96.0% to design the mixture; however, adjustments can be made to the Ndesign value as noted in Table 9. The Ndesign level may be reduced to no less than 35 gyrations at the Contractor's discretion.

Use an approved laboratory from the Department's MPL to perform the Hamburg Wheel test in accordance with Tex-242-F, and provide results with the mixture design, or provide the laboratory mixture and request that the Department perform the Hamburg Wheel test. The Engineer will be allowed 10 working days to provide the Contractor with Hamburg Wheel test results on the laboratory mixture design.

The Engineer will provide the mixture design when shown on the plans. The Contractor may submit a new mixture design at any time during the project. The Engineer will verify and approve all mixture designs (JMF1) before the Contractor can begin production.

Provide the Engineer with a mixture design report using the Department-provided template. Include the following items in the report:

- the combined aggregate gradation, source, specific gravity, and percent of each material used;
- asphalt binder content and aggregate gradation of RAP and RAS stockpiles;
- the target laboratory-molded density (or Ndesign level when using the SGC);
- results of all applicable tests;

- the mixing and molding temperatures;
- the signature of the Level 2 person or persons that performed the design;
- the date the mixture design was performed; and
- a unique identification number for the mixture design.

Table 8
Master Gradation Limits (% Passing by Weight or Volume) and VMA Requirements

Sieve Size	A Coarse Base	B Fine Base	C Coarse Surface	D Fine Surface	F Fine Mixture
2"	100.0 ¹	—	—	—	—
1-1/2"	98.0–100.0	100.0 ¹	—	—	—
1"	78.0–94.0	98.0–100.0	100.0 ¹	—	—
3/4"	64.0–85.0	84.0–98.0	95.0–100.0	100.0 ¹	—
1/2"	50.0–70.0	—	—	98.0–100.0	100.0 ¹
3/8"	—	60.0–80.0	70.0–85.0	85.0–100.0	98.0–100.0
#4	30.0–50.0	40.0–60.0	43.0–63.0	50.0–70.0	70.0–90.0
#8	22.0–36.0	29.0–43.0	32.0–44.0	35.0–46.0	38.0–48.0
#30	8.0–23.0	13.0–28.0	14.0–28.0	15.0–29.0	12.0–27.0
#50	3.0–19.0	6.0–20.0	7.0–21.0	7.0–20.0	6.0–19.0
#200	2.0–7.0	2.0–7.0	2.0–7.0	2.0–7.0	2.0–7.0
Design VMA, % Minimum					
—	12.0	13.0	14.0	15.0	16.0
Production (Plant-Produced) VMA, % Minimum					
—	11.5	12.5	13.5	14.5	15.5

1. Defined as maximum sieve size. No tolerance allowed.

Table 9
Laboratory Mixture Design Properties

Mixture Property	Test Method	Requirement
Target laboratory-molded density, % (TGC)	Tex-207-F	96.5 ¹
Design gyrations (N _{design} for SGC)	Tex-241-F	50 ²
Indirect tensile strength (dry), psi	Tex-226-F	85–200 ³
Boil test ⁴	Tex-530-C	—

1. Increase to 97.0% or 97.5% at the Contractor's discretion or when shown on the plans or specification.
2. Adjust within a range of 35–100 gyrations when shown on the plans or specification or when mutually agreed between the Engineer and Contractor.
3. The Engineer may allow the IDT strength to exceed 200 psi if the corresponding Hamburg Wheel rut depth is greater than 3.0 mm and less than 12.5 mm.
4. Used to establish baseline for comparison to production results. May be waived when approved.

Table 10
Hamburg Wheel Test Requirements

High-Temperature Binder Grade	Test Method	Minimum # of Passes @ 12.5 mm ¹ Rut Depth, Tested @ 50°C
PG 64 or lower	Tex-242-F	10,000 ²
PG 70		15,000 ³
PG 76 or higher		20,000

1. When the rut depth at the required minimum number of passes is less than 3 mm, the Engineer may require the Contractor to increase the target laboratory-molded density (TGC) by 0.5% to no more than 97.5% or lower the N_{design} level (SGC) to no less than 35 gyrations.
2. May be decreased to no less than 5,000 passes when shown on the plans.
3. May be decreased to no less than 10,000 passes when shown on the plans.

4.3.2.

Job-Mix Formula Approval. The job-mix formula (JMF) is the combined aggregate gradation, target laboratory-molded density (or N_{design} level), and target asphalt percentage used to establish target values for hot-mix production. JMF1 is the original laboratory mixture design used to produce the trial batch. When

WMA is used, JMF1 may be designed and submitted to the Engineer without including the WMA additive. When WMA is used, document the additive or process used and recommended rate on the JMF1 submittal. Furnish a mix design report (JMF1) with representative samples of all component materials and request approval to produce the trial batch. Provide approximately 10,000 g of the design mixture and request that the Department perform the Hamburg Wheel test if opting to have the Department perform the test. The Engineer will verify JMF1 based on plant-produced mixture from the trial batch unless otherwise determined. The Engineer may accept an existing mixture design previously used on a Department project and may waive the trial batch to verify JMF1. Provide split samples of the mixtures and blank samples used to determine the ignition oven correction factors. The Engineer will determine the aggregate and asphalt correction factors from the ignition oven used for production testing in accordance with Tex-236-F.

The Engineer will use a TGC calibrated in accordance with Tex-914-K in molding production samples. Provide an SGC at the Engineer's field laboratory for use in molding production samples if the SGC is used to design the mix.

The Engineer may perform Tex-530-C and retain the tested sample for comparison purposes during production. The Engineer may waive the requirement for the boil test.

4.3.3.

JMF Adjustments. If JMF adjustments are necessary to achieve the specified requirements, the adjusted JMF must:

- be provided to the Engineer in writing before the start of a new lot;
- be numbered in sequence to the previous JMF;
- meet the mixture requirements in Table 4 and Table 5;
- meet the master gradation limits shown in Table 8; and
- be within the operational tolerances of the current JMF listed in Table 11.

The Engineer may adjust the asphalt binder content to maintain desirable laboratory density near the optimum value while achieving other mix requirements.

Table 11
Operational Tolerances

Description	Test Method	Allowable Difference Between Trial Batch and JMF1 Target	Allowable Difference from Current JMF Target
Individual % retained for #8 sieve and larger	<u>Tex-200-F</u> or <u>Tex-236-F</u>	Must be within master grading limits in Table 8	±5.0 ^{1,2}
Individual % retained for sieves smaller than #8 and larger than #200			±3.0 ^{1,2}
% passing the #200 sieve			±2.0 ^{1,2}
Asphalt binder content, %	<u>Tex-236-F</u>	±0.5	±0.3 ²
Laboratory-molded density, %	<u>Tex-207-F</u>	±1.0	±1.0
VMA, %, min	<u>Tex-204-F</u>	Note 3	Note 3

1. When within these tolerances, mixture production gradations may fall outside the master grading limits; however, the % passing the #200 will be considered out of tolerance when outside the master grading limits.
2. Only applies to mixture produced for Lot 1 and higher.
3. Mixture is required to meet Table 8 requirements.

4.4.

Production Operations. Perform a new trial batch when the plant or plant location is changed. Take corrective action and receive approval to proceed after any production suspension for noncompliance to the specification. Submit a new mix design and perform a new trial batch when the asphalt binder content of:

- any RAP stockpile used in the mix is more than 0.5% higher than the value shown on the mixture design report; or
- RAS stockpile used in the mix is more than 2.0% higher than the value shown on the mixture design report.

4.4.1.

Storage and Heating of Materials. Do not heat the asphalt binder above the temperatures specified in Item 300, "Asphalts, Oils, and Emulsions," or outside the manufacturer's recommended values. Provide the Engineer with daily records of asphalt binder and hot-mix asphalt discharge temperatures (in legible and discernible increments) in accordance with Item 320, "Equipment for Asphalt Concrete Pavement," unless

otherwise directed. Do not store mixture for a period long enough to affect the quality of the mixture, nor in any case longer than 12 hr. unless otherwise approved.

4.4.2.

Mixing and Discharge of Materials. Notify the Engineer of the target discharge temperature and produce the mixture within 25°F of the target. Monitor the temperature of the material in the truck before shipping to ensure that it does not exceed 350°F (or 275°F for WMA) and is not lower than 215°F. The Department will not pay for or allow placement of any mixture produced above 350°F.

Produce WMA within the target discharge temperature range of 215°F and 275°F when WMA is required. Take corrective action any time the discharge temperature of the WMA exceeds the target discharge range. The Engineer may suspend production operations if the Contractor's corrective action is not successful at controlling the production temperature within the target discharge range. Note that when WMA is produced, it may be necessary to adjust burners to ensure complete combustion such that no burner fuel residue remains in the mixture.

Control the mixing time and temperature so that substantially all moisture is removed from the mixture before discharging from the plant. The Engineer may determine the moisture content by oven-drying in accordance with Tex-212-F, Part II, and verify that the mixture contains no more than 0.2% of moisture by weight. The Engineer will obtain the sample immediately after discharging the mixture into the truck, and will perform the test promptly.

4.5.

Hauling Operations. Clean all truck beds before use to ensure that mixture is not contaminated. Use a release agent shown on the Department's MPL to coat the inside bed of the truck when necessary.

Use equipment for hauling as defined in Section 340.4.6.3.2., "Hauling Equipment." Use other hauling equipment only when allowed.

4.6.

Placement Operations. Collect haul tickets from each load of mixture delivered to the project and provide the Department's copy to the Engineer approximately every hour, or as directed. Use a hand-held thermal camera or infrared thermometer to measure and record the internal temperature of the mixture as discharged from the truck or Material Transfer Device (MTD) before or as the mix enters the paver and an approximate station number or GPS coordinates on each ticket unless otherwise directed. Calculate the daily yield and cumulative yield for the specified lift and provide to the Engineer at the end of paving operations for each day unless otherwise directed. The Engineer may suspend production if the Contractor fails to produce and provide haul tickets and yield calculations by the end of paving operations for each day.

Prepare the surface by removing raised pavement markers and objectionable material such as moisture, dirt, sand, leaves, and other loose impediments from the surface before placing mixture. Remove vegetation from pavement edges. Place the mixture to meet the typical section requirements and produce a smooth, finished surface with a uniform appearance and texture. Offset longitudinal joints of successive courses of hot-mix by at least 6 in. Place mixture so that longitudinal joints on the surface course coincide with lane lines, or as directed. Ensure that all finished surfaces will drain properly.

Place the mixture at the rate or thickness shown on the plans. The Engineer will use the guidelines in Table 12 to determine the compacted lift thickness of each layer when multiple lifts are required. The thickness determined is based on the rate of 110 lb./sq. yd. for each inch of pavement unless otherwise shown on the plans.

Table 12
Compacted Lift Thickness and Required Core Height

Mixture Type	Compacted Lift Thickness Guidelines		Minimum Untrimmed Core Height (in.) Eligible for Testing
	Minimum (in.)	Maximum (in.)	
A	3.00	6.00	2.00
B	2.50	5.00	1.75
C	2.00	4.00	1.50
D	1.50	3.00	1.25
F	1.25	2.50	1.25

- 4.6.1. **Weather Conditions.** Place mixture when the roadway surface temperature is at or above 60°F unless otherwise approved. Measure the roadway surface temperature with a hand-held thermal camera or infrared thermometer. The Engineer may allow mixture placement to begin before the roadway surface reaches the required temperature if conditions are such that the roadway surface will reach the required temperature within 2 hr. of beginning placement operations. Place mixtures only when weather conditions and moisture conditions of the roadway surface are suitable as determined by the Engineer. The Engineer may restrict the Contractor from paving if the ambient temperature is likely to drop below 32°F within 12 hr. of paving.
- 4.6.2. **Tack Coat.** Clean the surface before placing the tack coat. The Engineer will set the rate between 0.04 and 0.10 gal. of residual asphalt per square yard of surface area. Apply a uniform tack coat at the specified rate unless otherwise directed. Apply the tack coat in a uniform manner to avoid streaks and other irregular patterns. Apply a thin, uniform tack coat to all contact surfaces of curbs, structures, and all joints. Allow adequate time for emulsion to break completely before placing any material. Prevent splattering of tack coat when placed adjacent to curb, gutter, and structures. Roll the tack coat with a pneumatic-tire roller to remove streaks and other irregular patterns when directed.
- 4.6.3. **Lay-Down Operations.**
- 4.6.3.1. **Windrow Operations.** Operate windrow pickup equipment so that when hot-mix is placed in windrows substantially all the mixture deposited on the roadbed is picked up and loaded into the paver.
- 4.6.3.2. **Hauling Equipment.** Use belly dumps, live bottom, or end dump trucks to haul and transfer mixture; however, with exception of paving miscellaneous areas, end dump trucks are only allowed when used in conjunction with an MTD with remixing capability unless otherwise allowed.
- 4.6.3.3. **Screed Heaters.** Turn off screed heaters, to prevent overheating of the mat, if the paver stops for more than 5 min.
- 4.7. **Compaction.** Compact the pavement uniformly to contain between 3.8% and 8.5% in-place air voids.
- Furnish the type, size, and number of rollers required for compaction as approved. Use a pneumatic-tire roller to seal the surface unless excessive pickup of fines occurs. Use additional rollers as required to remove any roller marks. Use only water or an approved release agent on rollers, tamps, and other compaction equipment unless otherwise directed.
- Use the control strip method shown in Tex-207-F, Part IV, on the first day of production to establish the rolling pattern that will produce the desired in-place air voids unless otherwise directed.
- Use tamps to thoroughly compact the edges of the pavement along curbs, headers, and similar structures and in locations that will not allow thorough compaction with rollers. The Engineer may require rolling with a trench roller on widened areas, in trenches, and in other limited areas.
- Complete all compaction operations before the pavement temperature drops below 160°F unless otherwise allowed. The Engineer may allow compaction with a light finish roller operated in static mode for pavement temperatures below 160°F.

Allow the compacted pavement to cool to 160°F or lower before opening to traffic unless otherwise directed. Sprinkle the finished mat with water or limewater, when directed, to expedite opening the roadway to traffic.

4.8. **Production Acceptance.**

4.8.1. **Production Lot.** Each day of production is defined as a production lot. Lots will be sequentially numbered and correspond to each new day of production. Note that lots are not subdivided into sublots for this specification.

4.8.2. **Production Sampling.**

4.8.2.1. **Mixture Sampling.** The Engineer may obtain mixture samples in accordance with Tex-222-F at any time during production.

4.8.2.2. **Asphalt Binder Sampling.** The Engineer may obtain or require the Contractor to obtain 1 qt. samples of the asphalt binder at any time during production from a port located immediately upstream from the mixing drum or pug mill in accordance with Tex-500-C, Part II. The Engineer may test any of the asphalt binder samples to verify compliance with Item 300, "Asphalts, Oils, and Emulsions."

4.8.3. **Production Testing.** The Engineer will test at the frequency listed in the Department's *Guide Schedule of Sampling and Testing* and this specification. The Engineer may suspend production if production tests do not meet specifications or are not within operational tolerances listed in Table 11. Take immediate corrective action if the Engineer's laboratory-molded density on any sample is less than 95.0% or greater than 98.0%, to bring the mixture within these tolerances. The Engineer may suspend operations if the Contractor's corrective actions do not produce acceptable results. The Engineer will allow production to resume when the proposed corrective action is likely to yield acceptable results.

The Engineer may use alternate methods for determining the asphalt binder content and aggregate gradation if the aggregate mineralogy is such that Tex-236-F does not yield reliable results. Use the applicable test procedure if an alternate test method is selected.

Table 13
Production and Placement Testing

Description	Test Method
Individual % retained for #8 sieve and larger	<u>Tex-200-F</u>
Individual % retained for sieves smaller than #8 and larger than #200	or
% passing the #200 sieve	<u>Tex-236-F</u>
Laboratory-molded density	
Laboratory-molded bulk specific gravity	<u>Tex-207-F</u>
In-Place air voids	
VMA	<u>Tex-204-F</u>
Moisture content	<u>Tex-212-F</u> , Part II
Theoretical maximum specific (Rice) gravity	<u>Tex-227-F</u>
Asphalt binder content	<u>Tex-236-F</u>
Hamburg Wheel test	<u>Tex-242-F</u>
Recycled Asphalt Shingles (RAS) ¹	<u>Tex-217-F</u> , Part III
Asphalt binder sampling and testing	<u>Tex-500-C</u>
Tack coat sampling and testing	<u>Tex-500-C</u> , Part III
Boil test	<u>Tex-530-C</u>

1. Testing performed by the Construction Division or designated laboratory.

4.8.3.1. **Voids in Mineral Aggregates (VMA).** The Engineer may determine the VMA for any production lot. Take immediate corrective action if the VMA value for any lot is less than the minimum VMA requirement for production listed in Table 8. Suspend production and shipment of the mixture if the Engineer's VMA result is more than 0.5% below the minimum VMA requirement for production listed in Table 8. In addition to suspending production, the Engineer may require removal and replacement or may allow the lot to be left in place without payment.

- 4.8.3.2. **Hamburg Wheel Test.** The Engineer may perform a Hamburg Wheel test at any time during production, including when the boil test indicates a change in quality from the materials submitted for JMF1. In addition to testing production samples, the Engineer may obtain cores and perform Hamburg Wheel tests on any areas of the roadway where rutting is observed. Suspend production until further Hamburg Wheel tests meet the specified values when the production or core samples fail the Hamburg Wheel test criteria in Table 10. Core samples, if taken, will be obtained from the center of the finished mat or other areas excluding the vehicle wheel paths. The Engineer may require up to the entire lot of any mixture failing the Hamburg Wheel test to be removed and replaced at the Contractor's expense.

If the Department's or Department-approved laboratory's Hamburg Wheel test results in a "remove and replace" condition, the Contractor may request that the Department confirm the results by re-testing the failing material. The Construction Division will perform the Hamburg Wheel tests and determine the final disposition of the material in question based on the Department's test results.

- 4.8.4. **Individual Loads of Hot-Mix.** The Engineer can reject individual truckloads of hot-mix. When a load of hot-mix is rejected for reasons other than temperature, contamination, or excessive uncoated particles, the Contractor may request that the rejected load be tested. Make this request within 4 hr. of rejection. The Engineer will sample and test the mixture. If test results are within the operational tolerances shown in Table 11, payment will be made for the load. If test results are not within operational tolerances, no payment will be made for the load.

4.9. **Placement Acceptance.**

- 4.9.1. **Placement Lot.** A placement lot is defined as the area placed during a production lot (one day's production). Placement lot numbers will correspond with production lot numbers.

- 4.9.2. **Miscellaneous Areas.** Miscellaneous areas include areas that typically involve significant handwork or discontinuous paving operations, such as temporary detours, driveways, mailbox turnouts, crossovers, gores, spot level-up areas, and other similar areas. Miscellaneous areas also include level-ups and thin overlays when the layer thickness specified on the plans is less than the minimum untrimmed core height eligible for testing shown in Table 12. The specified layer thickness is based on the rate of 110 lb./sq. yd. for each inch of pavement unless another rate is shown on the plans. Compact miscellaneous areas in accordance with Section 340.4.7., "Compaction." Miscellaneous areas are not subject to in-place air void determination except for temporary detours when shown on the plans.

- 4.9.3. **Placement Sampling.** Provide the equipment and means to obtain and trim roadway cores on site. On site is defined as in close proximity to where the cores are taken. Obtain the cores within one working day of the time the placement lot is completed unless otherwise approved. Obtain two 6-in. diameter cores side-by-side at each location selected by the Engineer for in-place air void determination unless otherwise shown on the plans. For Type D and Type F mixtures, 4-in. diameter cores are allowed. Mark the cores for identification, measure and record the untrimmed core height, and provide the information to the Engineer. The Engineer will witness the coring operation and measurement of the core thickness.

Visually inspect each core and verify that the current paving layer is bonded to the underlying layer. Take corrective action if an adequate bond does not exist between the current and underlying layer to ensure that an adequate bond will be achieved during subsequent placement operations.

Trim the cores immediately after obtaining the cores from the roadway in accordance with Tex-207-F if the core heights meet the minimum untrimmed value listed in Table 12. Trim the cores on site in the presence of the Engineer. Use a permanent marker or paint pen to record the date and lot number on each core as well as the designation as Core A or B. The Engineer may require additional information to be marked on the core and may choose to sign or initial the core. The Engineer will take custody of the cores immediately after they are trimmed and will retain custody of the cores until the Department's testing is completed. Before turning the trimmed cores over to the Engineer, the Contractor may wrap the trimmed cores or secure them in a manner that will reduce the risk of possible damage occurring during transport by the Engineer. After testing, the Engineer will return the cores to the Contractor.

The Engineer may have the cores transported back to the Department's laboratory at the HMA plant via the Contractor's haul truck or other designated vehicle. In such cases where the cores will be out of the Engineer's possession during transport, the Engineer will use Department-provided security bags and the Roadway Core Custody protocol located at <http://www.txdot.gov/business/specifications.htm> to provide a secure means and process that protects the integrity of the cores during transport.

Instead of the Contractor trimming the cores on site immediately after coring, the Engineer and the Contractor may mutually agree to have the trimming operations performed at an alternate location such as a field laboratory or other similar location. In such cases, the Engineer will take possession of the cores immediately after they are obtained from the roadway and will retain custody of the cores until testing is completed. Either the Department or Contractor representative may perform trimming of the cores. The Engineer will witness all trimming operations in cases where the Contractor representative performs the trimming operation.

Dry the core holes and tack the sides and bottom immediately after obtaining the cores. Fill the hole with the same type of mixture and properly compact the mixture. Repair core holes with other methods when approved.

4.9.4. **Placement Testing.** The Engineer may measure in-place air voids at any time during the project to verify specification compliance.

4.9.4.1. **In-Place Air Voids.** The Engineer will measure in-place air voids in accordance with Tex-207-F and Tex-227-F. Cores not meeting the height requirements in Table 12 will not be tested. Before drying to a constant weight, cores may be pre-dried using a Corelok or similar vacuum device to remove excess moisture. The Engineer will use the corresponding theoretical maximum specific gravity to determine the air void content of each core. The Engineer will use the average air void content of the 2 cores to determine the in-place air voids at the selected location.

The Engineer will use the vacuum method to seal the core if required by Tex-207-F. The Engineer will use the test results from the unsealed core if the sealed core yields a higher specific gravity than the unsealed core. After determining the in-place air void content, the Engineer will return the cores and provide test results to the Contractor.

Take immediate corrective action when the in-place air voids exceed the range of 3.8% and 8.5% to bring the operation within these tolerances. The Engineer may suspend operations or require removal and replacement if the in-place air voids are less than 2.7% or greater than 9.9%. The Engineer will allow paving to resume when the proposed corrective action is likely to yield between 3.8% and 8.5% in-place air voids. Areas defined in Section 340.9.2., "Miscellaneous Areas," are not subject to in-place air void determination.

4.9.5. **Irregularities.** Identify and correct irregularities including segregation, rutting, raveling, flushing, fat spots, mat slippage, irregular color, irregular texture, roller marks, tears, gouges, streaks, uncoated aggregate particles, or broken aggregate particles. The Engineer may also identify irregularities, and in such cases, the Engineer will promptly notify the Contractor. If the Engineer determines that the irregularity will adversely affect pavement performance, the Engineer may require the Contractor to remove and replace (at the Contractor's expense) areas of the pavement that contain irregularities and areas where the mixture does not bond to the existing pavement. If irregularities are detected, the Engineer may require the Contractor to immediately suspend operations or may allow the Contractor to continue operations for no more than one day while the Contractor is taking appropriate corrective action.

4.9.6. **Ride Quality.** Use Surface Test Type A to evaluate ride quality in accordance with Item 585, "Ride Quality for Pavement Surfaces," unless otherwise shown on the plans.

5. MEASUREMENT

Hot mix will be measured by the ton of composite hot-mix, which includes asphalt, aggregate, and additives. Measure the weight on scales in accordance with Item 520, "Weighing and Measuring Equipment."

6. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under Article 340.5., "Measurement," will be paid for at the unit bid price for "Dense Graded Hot-Mix Asphalt (SQ)" of the mixture type, SAC, and binder specified. These prices are full compensation for surface preparation, materials including tack coat, placement, equipment, labor, tools, and incidentals.

Trial batches will not be paid for unless they are included in pavement work approved by the Department.

Payment adjustment for ride quality, if applicable, will be determined in accordance with Item 585, "Ride Quality for Pavement Surfaces."

ITEM 500 MOBILIZATION

Mobilization is not paid for directly. It is considered subsidiary to pertinent items.

Item 500

Mobilization



1. DESCRIPTION

Establish and remove offices, plants, and facilities. Move personnel, equipment, and supplies to and from the project or the vicinity of the project site to begin work or complete work on Contract Items. Bonds and insurance are required for performing mobilization.

For Contracts with emergency mobilization, provide a person and method of contact available 24 hrs. a day, 7 days a week unless otherwise shown on the plans. The time of notice will be the transmission time of the written notice or notice provided orally by the Department's representative.

2. MEASUREMENT

This Item will be measured by the lump sum or each as the work progresses. Mobilization is calculated on the base bid only and will not be paid for separately on any additive alternate items added to the Contract.

3. PAYMENT

For this Item, the adjusted Contract amount will be calculated as the total Contract amount less the lump sum for mobilization. Except for Contracts with callout or emergency work, mobilization will be paid in partial payments as follows:

- Payment will be made upon presentation of a paid invoice for the payment or performance bonds and required insurance,
- Payment will be made upon verification of documented expenditures for plant and facility setup. The combined amount for all these facilities will be no more than 10% of the mobilization lump sum or 1% of the total Contract amount, whichever is less,
- When 1% of the adjusted Contract amount for construction Items is earned, 50% of the mobilization lump sum bid or 5% of the total Contract amount, whichever is less, will be paid. Previous payments under this Item will be deducted from this amount,
- When 5% of the adjusted Contract amount for construction Items is earned, 75% of the mobilization lump sum bid or 10% of the total Contract amount, whichever is less, will be paid. Previous payments under the Item will be deducted from this amount,
- When 10% of the adjusted Contract amount for construction Items is earned, 90% of the mobilization lump sum bid or 10% of the total Contract amount, whichever is less, will be paid. Previous payments under this Item will be deducted from this amount,
- Upon final acceptance, 97% of the mobilization lump sum bid will be paid. Previous payments under this Item will be deducted from this amount, and
- Payment for the remainder of the lump sum bid for "Mobilization" will be made after all submittals are received, final quantities have been determined and when any separate vegetative establishment and maintenance, test, and performance periods provided for in the Contract have been successfully completed.

For projects with extended maintenance or performance periods, payment for the remainder of the lump sum bid for "Mobilization" will be made 6 months after final acceptance.

For Contracts with callout or emergency work, "Mobilization," will be paid as follows:

- Payment will be made upon presentation of a paid invoice for the payment of performance bonds and required insurance,
- Mobilization for callout work will be paid for each callout work request, and
- Mobilization for emergency work will be paid for each emergency work request.

**ITEM 502 BARRICADES, SIGNS & TRAFFIC HANDLING
ITEM 510 ONE-WAY TRAFFIC CONTROL**

All traffic control, including one-way traffic control, is not paid for directly. It is considered subsidiary to pertinent items.

City Specifications:

One lane of traffic shall remain open during all operations.

The closing of an entire roadway is NOT allowed unless approved by the City.

All workers shall have Class 3 vests.

All machinery shall have a warning light that is visible from 360°.

Item 502

Barricades, Signs, and Traffic Handling



1. DESCRIPTION

Provide, install, move, replace, maintain, clean, and remove all traffic control devices shown on the plans and as directed.

2. CONSTRUCTION

Comply with the requirements of Article 7.2., "Safety."

Implement the traffic control plan (TCP) shown on the plans.

Install traffic control devices straight and plumb. Make changes to the TCP only as approved. Minor adjustments to meet field conditions are allowed.

Submit Contractor-proposed TCP changes, signed and sealed by a licensed professional engineer, for approval. The Engineer may develop, sign, and seal Contractor-proposed changes. Changes must conform to guidelines established in the TMUTCD using approved products from the Department's Compliant Work Zone Traffic Control Device List.

Maintain traffic control devices by taking corrective action when notified. Corrective actions include, but are not limited to, cleaning, replacing, straightening, covering, and removing devices. Maintain the devices such that they are properly positioned and spaced, legible, and have retroreflective characteristics that meet requirements day or night and in all weather conditions.

The Engineer may authorize or direct in writing the removal or relocation of project limit advance warning signs. When project limit advance warning signs are removed before final acceptance, provide traffic control in accordance with the TMUTCD for minor operations as approved.

Remove all traffic control devices upon completion of the work as shown on the plans or as directed.

3. MEASUREMENT

Barricades, Signs, and Traffic Handling will be measured by the month. Law enforcement personnel with patrol vehicles will be measured by the hour for each person.

4. PAYMENT

4.1. **Barricades, Signs, and Traffic Handling.** Except for Contracts with callout work and work orders, the work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Barricades, Signs, and Traffic Handling." This price is full compensation for installation, maintenance, adjustments, replacements, removal, materials, equipment, labor, tools, and incidentals.

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit price bid for "Barricades, Signs, and Traffic Handling." This price is full compensation for installation, maintenance, adjustments, replacements, removal, materials, equipment, labor, tools, and incidentals.

When the plans establish pay items for particular work in the TCP, that work will be measured and paid under pertinent items.

- 4.1.1. **Initiation of Payment.** Payment for this item will begin on the first estimate after barricades, signs, and traffic handling devices have been installed in accordance with the TCP and construction has begun.
- 4.1.2. **Paid Months.** Monthly payment will be made each succeeding month for this item provided the barricades, signs, and traffic handling devices have been installed and maintained in accordance with the TCP until the Contract amount has been paid.
- If, within the time frame established by the Engineer, the Contractor fails to provide or properly maintain signs and barricades in compliance with the Contract requirements, as determined by the Engineer, the Contractor will be considered in noncompliance with this item. No payment will be made for the months in question, and the total final payment quantity will be reduced by the number of months the Contractor was in noncompliance.
- 4.1.3. **Maximum Total Payment Before Acceptance.** The total payment for this item will not exceed 10% of the total Contract amount before final acceptance in accordance with Article 5.12., "Final Acceptance." The remaining balance will be paid in accordance with Section 502.4.1.5., "Balance Due."
- 4.1.4. **Total Payment Quantity.** The quantity paid under this item will not exceed the total quantity shown on the plans except as modified by change order and as adjusted by Section 502.4.1.2., "Paid Months." An overrun of the plans quantity for this item will not be allowed for approving designs; testing; material shortages; closed construction seasons; curing periods; establishment, performance, test, and maintenance periods; failure to complete the work in the number of months allotted; nor delays caused directly or indirectly by requirements of the Contract.
- 4.1.5. **Balance Due.** The remaining unpaid months of barricades less non-compliance months will be paid on final acceptance of the project, if all work is complete and accepted in accordance with Article 5.12., "Final Acceptance."
- 4.1.6. **Contracts with Callout Work and Work Orders.** The work performed and the materials furnished with this item and measured as provided under "Measurement," will be considered subsidiary to pertinent items, except for federally funded Contracts.
- 4.2. **Law Enforcement Personnel.** The work performed and materials furnished in accordance with this item and measured as provided under "Measurement," will be paid by Contractor force account for "Law Enforcement Personnel." This price is full compensation for furnishing all labor, materials, supplies, equipment, patrol vehicle, fees, and incidentals necessary to complete the work as directed.

Item 510

One-Way Traffic Control



1. DESCRIPTION

Provide one-way traffic control using one of the methods shown on the plans.

2. WORK METHODS

- 2.1. **Flagger Control Method.** Furnish flaggers in accordance with the requirements of Article 7.2., "Safety," at all entry points to the work zone, to stop traffic. Furnish a Stop/Slow paddle that meets the requirements of the TMUTCD for each flagger. If desired, use Automated Flagger Assistance Devices if approved.
- 2.2. **Pilot Car Method.** Furnish a licensed driver and pilot vehicle with required signs attached. Furnish flaggers on each approach to the activity area to control traffic. Provide Stop/Slow paddles and signs that meet the requirements of the TMUTCD. Instruct drivers to follow the pilot vehicle and to not pass the cars ahead.
- 2.3. **Portable Traffic Signal Method.** Furnish, operate, and maintain new or used portable traffic signal units. Assure used units are in good working condition and are approved before use. A list of approved units can be found in the Department's *Compliant Work Zone Traffic Control Device List*. Units will remain the property of the Contractor.

3. MEASUREMENT

When shown on the plans as a bid item, this item will be measured as follows:

- 3.1. **Flagger Control Method.** By the actual number of hours flaggers are engaged in flagging activities. Each flagger will be measured separately.
- 3.2. **Pilot Car Method.** By the actual number of hours of use for the combination of flaggers and pilot vehicle.
- 3.3. **Portable Traffic Signal Method.** By the month, including 2 units operated by a single controller set up and operational on the worksite.

4. PAYMENT

Unless otherwise shown on the plans, the work performed and materials furnished in accordance with this item will not be paid for directly but will be subsidiary to pertinent items.

When shown on the plans as a bid item, the work performed and materials furnished in accordance with this item and measured as provided under "Measurement" will be paid for at the unit price bid for the method specified. This price is full compensation for furnishing and operating equipment, pilot car, pilot vehicle driver, flaggers, signs, labor, tools, and incidentals. Payment for Portable Traffic Signal units and Portable Traffic Signals will be full compensation for the units, set up, relocating, removing, replacing parts, batteries, fuel, oil, and incidentals.

ITEM 700 POTHOLE REPAIR

City Specifications:

Pothole repair shall be per TxDOT Specification 700, Standard Repair.

Material shall be a Ty D Premix, Cold Lay.

Material shall be allowed to cure for a minimum of six (6) weeks prior to seal coat being placed.

All lines and grades of existing roadway shall be matched.

Any settling or bumps created by procedure shall be corrected prior to seal coat.

Item 700

Pothole Repair



1. DESCRIPTION

Repair potholes, spalled areas, depressions, and raveled or damaged pavement edges in roadway surfaces.

2. MATERIALS

Furnish materials, unless otherwise shown on the plans. Use materials that meet the requirements of the following items, as shown on the plans.

- Item 300, "Asphalt, Oils, and Emulsions,"
- Item 330, "Limestone Rock Asphalt Pavement,"
- Item 334, "Hot-Mix Cold-Laid Asphalt Concrete Pavement,"
- Item 340, "Dense-Graded Hot-Mix Asphalt (Small Quantity),"
- DMS-9202, "Asphaltic Concrete Patching Material (Stockpile Storage or Bagged)."
- DMS-9203, "Rapid-Curing Asphaltic Concrete Patching Material (Containerized)," and
- DMS-9204, "Fiber Additives for Bituminous Mixtures."

3. WORK METHODS

Work requests are made on a callout basis. Begin physical repair within 24 hr. of notification, 3 hr. if emergency mobilization is required, unless otherwise shown on the plans.

- 3.1. **Standard Repair.** Remove loose and foreign materials from the repair area. Remove water, dry, and apply tack coat to surfaces of the repair area unless otherwise directed.

Place repair material in horizontal lifts as directed. Finish to grade and compact to conform to roadway surface. Compact with hand tamp, mechanical tampers, or rollers as directed or approved. Compact to achieve full consolidation.

Repair pavement edges to the line and grade of original pavement. Clean roadway surface after repair operations. Dispose of materials removed as directed or approved.

- 3.2. **Saw-Cut Repair.** Square the sides of the repair area by saw-cutting or other approved methods. Remove loose and foreign material. Clean and dry the repair area. Apply tack coat to surfaces of the repair area unless otherwise directed.

Place repair material in horizontal lifts no more than 3 in. deep. Finish to grade and compact to conform to roadway surface. Compact with hand tamp, mechanical tampers, or rollers as directed or approved. Compact to achieve full consolidation.

Repair pavement edges to the line and grade of original pavement. Clean roadway surface after repair operations. Dispose of materials removed as directed or approved.

4. MEASUREMENT

Emergency mobilization will be measured by each emergency work request. Pothole repair will be measured by the square yard of surface area or by the cubic yard, ton, or pound of material used. For Contracts with

callout work without emergency mobilization, the minimum quantity per callout respectively is 5 sq. yd., 1/2 cu. yd., 1/2 ton, or 150 lb., unless otherwise shown on the plans.

- 4.1. **Area.** The surface area of repairs will be measured.
- 4.2. **Volume.** Trucks will be measured and the loose volume in cubic yards will be calculated for legally transported loads. Level the load for measurement before beginning work. Level off the material remaining on the last load for measurement. Material not used at the end of the day will be deducted from the volume.
- 4.3. **Weight (Ton).** Trucks will be weighed on certified scales. Provide weight tickets. Material not used at the end of the day will be deducted from the weight. Measurement will be in accordance with Item 520, "Weighing and Measuring Equipment."
- 4.4. **Weight (Pound).** Materials furnished in a container will be measured by the pound as shown on the container.

5. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid for at the unit prices bid for "Pothole Repair (Standard)" or "Pothole Repair (Saw-Cut)" and "Emergency Mobilization," If required. The price bid for pothole repair is full compensation for furnishing materials, unless otherwise shown on the plans; application of the tack coat; removal and disposal of debris and excess material; leveling off or weighing the load for measurement; and equipment, labor, tools, and incidentals.

The price bid for emergency mobilization is full compensation for beginning physical work within 3 hr. of notification. Emergency mobilization will be paid for in addition to pothole repair.



Dear Policyholder,

Thank you for choosing Federated Insurance to handle your insurance and risk management needs. The attached certificate document(s) have been issued or updated.

Please feel free to contact us with any additional changes, additions or deletions that may be needed by contacting the Federated Client Contact Center at:

E-mail: clientcontactcenter@fedins.com

Phone: 1-888-333-4949

Fax: 507-446-4664

Thank you for your business!

Client Contact Center

Enclosed:
Certificate Document(s)



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
03/29/2024

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 have ADDITIONAL INSURED provisions or 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 FEDERATED MUTUAL INSURANCE COMPANY HOME OFFICE: P.O. BOX 328 OWATONNA, MN 55080	CONTACT NAME: CLIENT CONTACT CENTER		
	PHONE (A/C, No, Ext): 888-333-4949	FAX (A/C, No): 507-446-4664	
E-MAIL ADDRESS: CLIENTCONTACTCENTER@FEDINS.COM			
INSURED 383-986-7 ASPHALT INC LLC, LONE STAR PAVING COMPANY PO BOX 200608 AUSTIN, TX 78720-0608	INSURERS AFFORDING COVERAGE		NAIC #
	INSURER A: FEDERATED MUTUAL INSURANCE COMPANY		13835
	INSURER B:		
	INSURER C:		
	INSURER D:		
	INSURER E:		
INSURER F:			

COVERAGES CERTIFICATE NUMBER: 3232 REVISION NUMBER: 0

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

INSTR	TYPE OF INSURANCE	ADDL	SUBR	POLICY NUMBER	POLICY EFF. (MM/DD/YYYY)	POLICY EXP. (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GENL AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	Y	N	9151293	01/19/2024	01/19/2025	EACH OCCURRENCE: \$1,000,000 DAMAGE TO RENTED PREMISES (EA ACCIDENT): \$100,000 MED EXP (Any one person): \$5,000 PERSONAL & ADV INJURY: \$1,000,000 GENERAL AGGREGATE: \$2,000,000 PRODUCTS & COMPROP AGG: \$2,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY	N	N	9151293	01/19/2024	01/19/2025	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 <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION	N	N	9151295	01/19/2024	01/19/2025	EACH OCCURRENCE: \$10,000,000 AGGREGATE: \$10,000,000
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/ EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory In NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A				PER STATUTE OTHER E.L. EACH ACCIDENT E.L. DISEASE EA EMPLOYEE E.L. DISEASE POLICY LIMIT

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101. Additional Remarks Schedule, may be attached if more space is required)

RE: CITY OF JOHNSON CITY STREET IMPROVEMENTS
THE CERTIFICATE HOLDER IS AN ADDITIONAL INSURED SUBJECT TO THE CONDITIONS OF THE ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - AUTOMATIC STATUS WHEN REQUIRED IN A WRITTEN CONSTRUCTION AGREEMENT WITH YOU ENDORSEMENT FOR GENERAL LIABILITY.

CERTIFICATE HOLDER

383-986-7
CITY OF JOHNSON CITY
303 E PECAN DR
JOHNSON CITY, TX 78836-5534

CANCELLATION

3232 0
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

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED - OWNERS, LESSEES OR
CONTRACTORS - AUTOMATIC STATUS WHEN
REQUIRED IN A WRITTEN CONSTRUCTION
AGREEMENT WITH YOU**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

- A. Section II - Who Is An Insured** is amended to include as an additional insured any person or organization for whom you are performing operations when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy. Such person or organization is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:
1. Your acts or omissions; or
 2. The acts or omissions of those acting on your behalf;
- in the performance of your ongoing operations for the additional insured.
- However, the insurance afforded to such additional insured:
1. Only applies to the extent permitted by law; and
 2. Will not be broader than that which you are required by the contract or agreement to provide for such additional insured.
- A person's or organization's status as an additional insured under this endorsement ends when your operations for that additional insured are completed.
- B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:**
- This insurance does not apply to:
1. "Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:
 - a. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
 - b. Supervisory, inspection, architectural or engineering activities.
- This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or the failure to render any professional architectural, engineering or surveying services.

2. "Bodily injury" or "property damage" occurring after:

- a. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
- b. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

C. With respect to the insurance afforded to these additional insureds, the following is added to **Section III - Limits Of Insurance:**

The most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement you have entered into with the additional insured; or
2. Available under the applicable limits of insurance;

whichever is less.

This endorsement shall not increase the applicable limits of insurance.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
03/28/2024

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 have ADDITIONAL INSURED provisions or 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 Primary Source Insurance Agency Inc 121 E Park Square Owatonna MN 55080		CONTACT NAME: Lisa Bueckler PHONE (A/C, No, Ext): (800) 760-2009 FAX (A/C, No): (877) 448-4631 E-MAIL ADDRESS: LMBueckler@fedins.com	
INSURED Asphalt Inc LLC, DBA Lone Star Paving Company 11675 Jollyville Rd Ste 250 Austin TX 78758-4108		INSURER(S) AFFORDING COVERAGE INSURER A: Texas Mutual Ins Co MAIC # 22945 INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** 24-25 WC **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 SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO. JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER					EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/CPAGL \$ \$	
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY <input type="checkbox"/> AUTOS ONLY					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$	
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$					EACH OCCURRENCE \$ AGGREGATE \$ \$	
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPERTY OR PARTNER EXECUTIVE OFFICER MEMBER EXCLUDED? (Mandatory in MN) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N Y	N/A Y	0001298828	01/19/2024	01/19/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH ER E.L. EACH ACCIDENT \$ 1,000,000 F.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

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

BLANKET WAIVER OF SUBROGATION APPLIES TO THE WORK COMP POLICY WHERE REQUIRED BY WRITTEN CONTRACT. WE WILL ENDEAVOR TO PROVIDE 30 DAYS NOTICE OF CANCELLATION.
Excluded Officers - JACK WHEELER, President.

CERTIFICATE HOLDER

City of Johnson City
303 E Pecan Dr
Johnson City TX 78636

CANCELLATION

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

TEXAS WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

This endorsement applies only to the insurance provided by the policy because Texas is shown in Item 3.A. of the Information Page.

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule, but this waiver applies only with respect to bodily injury arising out of the operations described in the schedule where you are required by a written contract to obtain this waiver from us.

This endorsement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

The premium for this endorsement is shown in the Schedule.

Schedule

1. Specific Waiver

Name of person or organization

Blanket Waiver

Any person or organization for whom the Named Insured has agreed by written contract to furnish this waiver.

2. Operations: ALL TEXAS OPERATIONS

3. Premium:

The premium charge for this endorsement shall be 2.00 percent of the premium developed on payroll in connection with work performed for the above person(s) or organization(s) arising out of the operations described.

4. Advance Premium: Included, see Information Page

This endorsement changes the policy to which it is attached effective on the inception date of the policy unless a different date is indicated below.
(The following "attaching clause" need be completed only when this endorsement is issued subsequent to preparation of the policy.)
This endorsement, effective on 1/19/24 at 12:01 a.m. standard time, forms a part of:

Policy no. 0001299829 of Texas Mutual Insurance Company effective on 1/19/24

Issued to: ASPHALT INC LLC

DBA: LONE STAR PAVING

This is not a bill



Authorized representative

NCCI Carrier Code: 29939

1/19/24

1 of 1

PO Box 12058, Austin, TX 78711-2058
texasmutual.com | (800) 859-5995 | Fax (800) 359-0650

WC 42 03 04 B

**PROFESSIONAL SERVICES AGREEMENT
FOR
CITY OF JOHNSON CITY 2023-2024 STREET IMPROVEMENTS**

STATE OF TEXAS §
 §
COUNTY OF BLANCO §

This Agreement is entered into by and between the City of Johnson City, a Texas Municipal Corporation (“City”), acting by and through its Chief Administrative Officer, and Atlas Technical Consultants, LLC, (“Professional”), both of which may be referred to herein singularly as “Party” or collectively as the “Parties.”

The Parties hereto severally and collectively agree, and by the execution hereof are bound, to the mutual obligations herein contained and to the performance and accomplishment of the tasks hereinafter described.

I. DEFINITIONS

As used in this Agreement, the following terms shall have meanings as set out below:

“City” is defined in the preamble of this Agreement and includes its successors and assigns.

“Professional” is defined in the preamble of this Agreement and includes its successors.

“Chief Administrative Officer” shall mean the Chief Administrative Officer and/or his designee.

II. TERM

2.1 This agreement shall become effective upon execution by the City and shall remain in effect until satisfactory completion of the Scope of Work unless terminated as provided for in this Agreement.

2.2 If funding for the entire Agreement is not appropriated at the time this Agreement is entered into, City retains the right to terminate this Agreement at the expiration of each of City’s budget periods, and any subsequent contract period is subject to and contingent upon such appropriation.

III. SCOPE OF SERVICES AND PROJECT SCHEDULE

Professional agrees to provide the services described in this Article III entitled Scope of Services and Project Schedule in exchange for the compensation described in Article IV. Compensation. Scope of Services and Project Schedule are detailed in *Attachment A* which are incorporated by reference as if written and copied herein. The terms and conditions of this Agreement shall control in the event of a conflict with any terms and conditions set forth therein.

All work performed by Professional hereunder shall be performed to the satisfaction of the Chief Administrative Officer. The determination made by Chief Administrative Officer shall be final, binding and conclusive on all Parties hereto. City shall be under no obligation to pay for any work performed by Professional, which is not satisfactory to Chief Administrative Officer. City shall have the right to terminate this Agreement, in accordance with Article VII. Termination,

in whole or in part, should Professional's work not be satisfactory to Chief Administrative Officer; however, City shall have no obligation to terminate and may withhold payment for any unsatisfactory work, as stated herein, even should City elect not to terminate.

IV. COMPENSATION TO PROFESSIONAL

4.1 In consideration of Professional's performance in a satisfactory and efficient manner, as determined solely by Chief Administrative Officer, of all services and activities set forth in this Agreement, City agrees to pay Professional an amount not to exceed Seventy-Five Thousand Three Hundred Ninety-Two dollars and Fifty Cents (\$75,392.50) as total compensation, to be paid to Professional as further detailed in *Attachment A*.

4.2 No additional fees or expenses of Professional shall be charged by Professional nor be payable by City. The parties hereby agree that all compensable expenses of Professional have been provided for in the total payment to Professional as specified in section 4.1 above. Total payments to Professional cannot exceed that amount set forth in section 4.1 above, without prior approval and agreement of all parties, evidenced in writing and approved by the City.

4.3 Final acceptance of work products and services require written approval by City. The approval official shall be the Chief Administrative Officer. Payment will be made to Professional following written approval of the final work products and services by the Chief Administrative Officer. City shall not be obligated or liable under this Agreement to any party, other than Professional, for the payment of any monies or the provision of any goods or services.

V. OWNERSHIP OF DOCUMENTS

5.1 Any and all writings, documents or information in whatsoever form and character produced by Professional pursuant to the provisions of this Agreement are the exclusive property of City; and no such writing, document or information shall be the subject of any copyright or proprietary claim by Professional.

5.2 Professional understands and acknowledges that as the exclusive owner of any and all such writings, documents and information, City has the right to use all such writings, documents and information as City desires, without restriction. Any use of such writings, documents and information on extensions of this project or on any other project without specific adaptation by Professional shall be at the City's sole risk and without liability to the Professional.

VI. RECORDS RETENTION

6.1 Professional and its subcontractors, if any, shall properly, accurately and completely maintain all documents, papers, and records, and other evidence pertaining to the services rendered hereunder (hereafter referred to as "documents"), and shall make such materials available to the City at their respective offices, at all reasonable times and as often as City may deem necessary during the Agreement period, including any extension or renewal hereof, and the record retention period established herein, for purposes of audit, inspection, examination, and making excerpts or copies of same by City and any of its authorized representatives.

6.2 Professional shall retain any and all documents produced as a result of services provided hereunder for a period of four (4) years (hereafter referred to as "retention period") from the date of termination of the Agreement. If, at the end of the retention period, there is litigation or other questions arising from, involving or concerning this documentation or the services

provided hereunder, Professional shall retain the records until the resolution of such litigation or other such questions. Professional acknowledges and agrees that City shall have access to any and all such documents at any and all times, as deemed necessary by City, during said retention period. City may, at its election, require Professional to return said documents to City prior to or at the conclusion of said retention.

6.3 Professional shall notify City, immediately, in the event Professional receives any requests for information from a third party, which pertain to the documentation and records referenced herein. Professional understands and agrees that City will process and handle all such requests.

VII. TERMINATION

7.1 For purposes of this Agreement, "termination" of this Agreement shall mean termination by expiration of the Agreement term as stated in Article II. Term, or earlier termination pursuant to any of the provisions hereof.

7.2 *Termination Without Cause.* This Agreement may be terminated by either Party upon 15 calendar days' written notice, which notice shall be provided in accordance with Article VIII. Notice.

7.3 *Termination For Cause.* Upon written notice, which notice shall be provided in accordance with Article VIII. Notice, City may terminate this Agreement as of the date provided in the notice, in whole or in part, upon the occurrence of one (1) or more of the following events, each of which shall constitute an Event for Cause under this Agreement:

7.3.1 The sale, transfer, pledge, conveyance or assignment of this Agreement without prior approval, as provided in Article XII. Assignment and Subcontracting.

7.4 *Defaults With Opportunity for Cure.* Should Professional default in the performance of this Agreement in a manner stated in this section 7.4 below, same shall be considered an event of default. City shall deliver written notice of said default specifying such matter(s) in default. Professional shall have fifteen (15) calendar days after receipt of the written notice, in accordance with Article VIII. Notice, to cure such default. If Professional fails to cure the default within such 15-day cure period, City shall have the right, without further notice, to terminate this Agreement in whole or in part as City deems appropriate, and to contract with another consultant to complete the work required in this Agreement. City shall also have the right to offset the cost of said new Agreement with a new consultant against Professional's future or unpaid invoice(s), subject to the duty on the part of City to mitigate its losses to the extent required by law.

7.4.1 Bankruptcy or selling substantially all of company's assets

7.4.2 Failing to perform or failing to comply with any covenant herein required

7.4.3 Performing unsatisfactorily

7.5 *Termination By Law.* If any state or federal law or regulation is enacted or promulgated which prohibits the performance of any of the duties herein, or, if any law is interpreted to prohibit such performance, this Agreement shall automatically terminate as of the effective date of such prohibition.

7.6 Regardless of how this Agreement is terminated, Professional shall effect an orderly transfer to City or to such person(s) or firm(s) as the City may designate, at no additional cost to City, all completed or partially completed documents, papers, records, charts, reports, and any other materials or information produced as a result of or pertaining to the services rendered by Professional, or provided to Professional, hereunder, regardless of storage medium, if so requested by City, or shall otherwise be retained by Professional in accordance with Article VI. Records Retention. Any record transfer shall be completed within thirty (30) calendar days of a written request by City and shall be completed at Professional's sole cost and expense. Payment of compensation due or to become due to Professional is conditioned upon delivery of all such documents, if requested.

7.7 Within forty-five (45) calendar days of the effective date of completion, or termination or expiration of this Agreement, Professional shall submit to City its claims, in detail, for the monies owed by City for services performed under this Agreement through the effective date of termination. Failure by Professional to submit its claims within said 45 calendar days shall negate any liability on the part of City and constitute a **Waiver** by Professional of any and all rights or claims to collect monies that Professional may rightfully be otherwise entitled to for services performed pursuant to this Agreement.

7.8 Upon the effective date of expiration or termination of this Agreement, Professional shall cease all operations of work being performed by Professional or any of its subcontractors pursuant to this Agreement.

7.9 *Termination not sole remedy.* In no event shall City's action of terminating this Agreement, whether for cause or otherwise, be deemed an election of City's remedies, nor shall such termination limit, in any way, at law or at equity, City's right to seek damages from or otherwise pursue Professional for any default hereunder or other action.

VIII. NOTICE

Except where the terms of this Agreement expressly provide otherwise, any election, notice or communication required or permitted to be given under this Agreement shall be in writing and deemed to have been duly given if and when delivered personally (with receipt acknowledged), or three (3) days after depositing same in the U.S. Mail, first class, with proper postage prepaid, or upon receipt if sending the same by certified mail, return receipt requested, or upon receipt when sent by a commercial courier service (such as Federal Express or DHL Worldwide Express) for expedited delivery to be confirmed in writing by such courier, at the addresses set forth below or to such other address as either Party may from time to time designate in writing.

If intended for City, to: City of Johnson City
Attn: Rick A. Schroder
Chief Administrative Officer
P.O Box 369
Johnson City, Texas 78636

If intended for Professional, to: Atlas Technical Consultants, LLC
Attn: Bryan Raschke, P.E.
Project Manager
3989 Highway 290 East
Dripping Springs, Texas 78620

IX. INSURANCE

9.1 Prior to the commencement of any work under this Agreement, Professional shall furnish copies of all required endorsements and an original completed Certificate(s) of Insurance to the City, which shall be clearly labeled "*City of Johnson City 2023-2024 Street Improvements*" in the Description of Operations block of the Certificate. The original Certificate(s) shall be completed by an agent and signed by a person authorized by that insurer to bind coverage on its behalf. The City will not accept Memorandum of Insurance or Binders as proof of insurance. The original Certificate(s) or form must have the agent's original signature, including the signer's company affiliation, title and phone number, and be mailed, with copies of all applicable endorsements, directly from the insurer's authorized representative to the City. The City shall have no duty to pay or perform under this Agreement until such certificate and endorsements have been received and approved by the City. No officer or employee, other than the City Attorney, shall have authority to waive this requirement.

9.2 The City reserves the right to review the insurance requirements of this Article during the effective period of this Agreement and any extension or renewal hereof and to modify insurance coverages and their limits when deemed necessary and prudent by City Attorney based upon changes in statutory law, court decisions, or circumstances surrounding this Agreement. In no instance will City allow modification whereupon City may incur increased risk.

9.3 Professional's financial integrity is of interest to the City; therefore, subject to Professional's right to maintain reasonable deductibles in such amounts as are approved by the City, Professional shall obtain and maintain in full force and effect for the duration of this Agreement, and any extension hereof, at Professional's sole expense, insurance coverage written on an occurrence basis, by companies authorized and admitted to do business in the State of Texas and with an A.M Best's rating of no less than A- (VII), in the following types and for an amount not less than the amount listed below:

Insurance Requirements

Professional performing work on City property or public right-of-way for the City of Johnson City shall provide the City a certificate of insurance evidencing the coverage provisions identified herein. Professional shall provide the City evidence that all subcontractors performing work on the project have the same types and amounts of coverage as required herein or that the subcontractors are included under the contractor's policy. The City, at its own discretion, may require a certified copy of the policy.

All insurance companies and coverage must be authorized by the Texas Department of Insurance to transact business in the State of Texas and must be acceptable to the City of Johnson City.

Listed below are the types and amounts of insurance required. The City reserves the right to amend or require additional types and amounts of coverage or provisions depending on the nature of the work.

Type of Insurance	Amount of Insurance	Provisions
Commercial (Public) Liability to include coverage for: Premises/Operations	General 1,000,000 per occurrence, 2,000,000 general aggregate Or	City to be listed as additional insured and provide 30 days' notice of cancellation or material change in coverage
Products/ Completed Operations	2,000,000 combined single coverage limit	City to be provided a waiver of subrogation
Independent Contractors		City prefers that insurer be rated B+V1 or higher by A.M. Best or A or higher by Standard & Poors
Personal Injury		
Contractual Liability		
Business Auto Liability	1,000,000 combined single limit	City to be provided a waiver of subrogation
Workers' Compensation & Employers Liability	Statutory Limits 1,000,000 each accident	City to be provided a waiver of subrogation
Professional Liability	1,000,000	

Questions regarding this insurance should be directed to the City of Johnson City, (830) 868-7111. A contract will not be issued without evidence of Insurance. City will only accept the ACORD 25 or ISO certificate of insurance forms.

9.4 The City shall be entitled, upon request and without expense, to receive copies of the policies, declaration page and all endorsements thereto as they apply to the limits required by the City, and may require the deletion, revision, or modification of particular policy terms, conditions, limitations or exclusions (except where policy provisions are established by law or regulation binding upon either of the Parties hereto or the underwriter of any such policies). Professional shall be required to comply with any such requests and shall submit a copy of the replacement certificate of insurance to City at the address provided below within ten (10) days of the requested change. Professional shall pay any costs incurred resulting from said changes.

City of Johnson City
P.O. Box 369
Johnson City, Texas 78636

9.5 Professional agrees that with respect to the above required insurance, all insurance policies are to contain or be endorsed to contain the following provisions:

- Name the City, its officers, officials, employees, volunteers, and elected representatives as ***additional insured by endorsement under terms satisfactory to the City***, as respects operations and activities of, or on behalf of, the named insured performed under contract with the City, with the exception of the workers' compensation and professional liability policies;
- Provide for an endorsement that the "other insurance" clause shall not apply to the City of Johnson City where the City is an additional insured shown on the policy;

- Workers' compensation and employers' liability policies will provide a waiver of subrogation in favor of the City.
- Provide thirty (30) calendar days advance written notice directly to City of any suspension, cancellation, non-renewal or material change in coverage, and not less than ten (10) calendar days advance notice for nonpayment of premium.

9.6 Within five (5) calendar days of a suspension, cancellation or non-renewal of coverage, Professional shall provide a replacement Certificate of Insurance and applicable endorsements to City. City shall have the option to suspend Professional's performance should there be a lapse in coverage at any time during this Agreement. Failure to provide and to maintain the required insurance shall constitute a material breach of this Agreement.

9.7 In addition to any other remedies the City may have upon Professional's failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, the City shall have the right to order Professional to stop work hereunder, and/or withhold any payment(s) which become due to Professional hereunder until Professional demonstrates compliance with the requirements hereof.

9.8 Nothing herein contained shall be construed as limiting in any way the extent to which Professional may be held responsible for payments of damages to persons or property resulting from Professional's or its subcontractors' performance of the work covered under this Agreement.

9.9 It is agreed that, excepting Professional Liability, Professional's insurance shall be deemed primary and non-contributory with respect to any insurance or self-insurance carried by the City of Johnson City for liability arising out of operations under this Agreement.

9.10 It is understood and agreed that the insurance required is in addition to and separate from any other obligation contained in this Agreement.

9.11 Professional and any of its subcontractors are responsible for all damage to their own equipment and/or property.

X. INDEMNIFICATION

10.1 **PROFESSIONAL** covenants and agrees to **INDEMNIFY** and **HOLD HARMLESS**, the **CITY** and the elected officials, employees, officers, directors, volunteers and representatives of the **CITY**, individually and collectively, from and against any and all costs, claims, liens, damages, losses, expenses, fees, fines, penalties, proceedings, actions, demands, causes of action, or liability for damages caused by or resulting from an act of negligence, intentional tort, intellectual property infringement, or failure to pay a subcontractor or supplier committed by the **PROFESSIONAL** or **PROFESSIONAL's** agent, **PROFESSIONAL** under contract, or another entity over which the **PROFESSIONAL** exercises control. Such acts may include personal or bodily injury, death and property damage, made upon the **CITY** directly or indirectly arising out of, resulting from or related to **PROFESSIONAL's** activities under this Agreement, including any negligent or intentional acts or omissions of **PROFESSIONAL**, any agent, officer, director, representative, employee, consultant or subcontractor of **PROFESSIONAL**, and their respective officers, agents employees, directors and representatives while in the exercise of

the rights or performance of the duties under this Agreement. The indemnity provided for in this paragraph shall not apply to any liability resulting from the negligence of CITY, its elected officials, employees, officers, directors, volunteers and representatives, in instances where such negligence causes personal injury, death, or property damage. In no event shall the indemnification obligation extend beyond the date with when the institution of legal or equitable proceedings for the professional negligence would be barred by any applicable statute of repose or statute of limitations.

10.2 The provisions of this INDEMNITY are solely for the benefit of the Parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity. PROFESSIONAL shall advise the CITY in writing within twenty-four (24) hours of any claim or demand against the CITY or PROFESSIONAL known to PROFESSIONAL related to or arising out of PROFESSIONAL's activities under this AGREEMENT.

10.3 Duty to Defend – Professional covenants and agrees to hold a DUTY TO DEFEND the CITY and the elected officials, employees, officers, directors, volunteers and representatives of the CITY, individually and collectively, from and against any and all claims, liens, proceedings, actions or causes of action, other than claims based wholly or partly on the negligence of, fault of, or breach of contract by the CITY, the CITY'S agent, the CITY'S employee or other entity, excluding PROFESSIONAL or PROFESSIONAL's agent, employee or sub-consultant, over which the CITY exercises control. PROFESSIONAL is required under this provision and fully satisfies this provision by naming the CITY and those representatives listed above as additional insured under the PROFESSIONAL's general liability insurance policy and providing any defense provided by the policy upon demand by CITY.

10.4 PROFESSIONAL is required to perform services to the City under the standard of care provided for in Texas Local Government Code § 271.904 (d)(1-2).

10.5 Employee Litigation – In any and all claims against any Party indemnified hereunder by any employee of PROFESSIONAL, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation herein provided shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for PROFESSIONAL or any subcontractor under worker's compensation or other employee benefit acts.

10.6 Force Majeure - City agrees that the PROFESSIONAL is not responsible for damages arising from any circumstances such as strikes or other labor disputes; severe weather disruptions, natural disasters, fire or other acts of God; riots, war or other emergencies; pandemics; or failure of any third-party governmental agency to act in timely manner not caused or contributed to by PROFESSIONAL.

XI. ASSIGNMENT AND SUBCONTRACTING

11.1 Professional shall supply qualified personnel as may be necessary to complete the work to be performed under this Agreement. Persons retained to perform work pursuant to this Agreement shall be the employees or subcontractors of Professional. Professional, its employees or its subcontractors shall perform all necessary work.

11.2 It is City's understanding and this Agreement is made in reliance thereon, that Professional intends to use the following subcontractors in the performance of this Agreement:

NA. Any deviation from this subcontractor list, whether in the form of deletions, additions or substitutions shall be approved by City prior to the provision of any services by said subcontractor.

11.3 Any work or services approved for subcontracting hereunder shall be subcontracted only by written contract and, unless specific waiver is granted in writing by the City, shall be subject by its terms to each and every provision of this Agreement. Compliance by subcontractors with this Agreement shall be the responsibility of Professional. City shall in no event be obligated to any third party, including any subcontractor of Professional, for performance of services or payment of fees. Any references in this Agreement to an assignee, transferee, or subcontractor, indicate only such an entity as has been approved by the City.

11.4 Except as otherwise stated herein, Professional may not sell, assign, pledge, transfer or convey any interest in this Agreement, nor delegate the performance of any duties hereunder, by transfer, by subcontracting or any other means, without the consent of the City Council, as evidenced by passage of an ordinance. As a condition of such consent, if such consent is granted, Professional shall remain liable for completion of the services outlined in this Agreement in the event of default by the successor to Professional, assignee, transferee or subcontractor.

11.5 Any attempt to transfer, pledge or otherwise assign this Agreement without said written approval, shall be void ab initio and shall confer no rights upon any third person. Should Professional assign, transfer, convey, delegate, or otherwise dispose of any part of all or any part of its right, title or interest in this Agreement, City may, at its option, cancel this Agreement and all rights, titles and interest of Professional shall thereupon cease and terminate, in accordance with Article VII. Termination, notwithstanding any other remedy available to City under this Agreement. The violation of this provision by Professional shall in no event release Professional from any obligation under the terms of this Agreement, nor shall it relieve or release Professional from the payment of any damages to City, which City sustains as a result of such violation.

XII. INDEPENDENT CONTRACTOR

Professional covenants and agrees that he or she is an independent contractor and not an officer, agent, servant or employee of City; that Professional shall have exclusive control of and exclusive right to control the details of the work performed hereunder and all persons performing same, and shall be responsible for the acts and omissions of its officers, agents, employees, contractors, subcontractors and consultants; that the doctrine of respondent superior shall not apply as between City and Professional, its officers, agents, employees, contractors, subcontractors and consultants, and nothing herein shall be construed as creating the relationship of employer-employee, principal-agent, partners or joint venturers between City and Professional. The Parties hereto understand and agree that the City shall not be liable for any claims which may be asserted by any third party occurring in connection with the services to be performed by the Professional under this Agreement and that Professional has no authority to bind the City.

XIII. CONFLICT OF INTEREST

13.1 Professional acknowledges that it is informed that the Charter of the City of Johnson City and its Code of Ordinances prohibit a City officer or employee, as those terms are defined in Chapter 9 Article 2 of City's Code of Ordinances, from having a financial interest in any contract with the City or any City agency such as city owned utilities. An officer or employee has a "prohibited financial interest" in a contract with the City or in the sale to the City of land,

materials, supplies or service, if any of the following individual(s) or entities is a Party to the contract or sale: a City officer or employee; his parent, child or spouse; a business entity in which the officer or employee, or his parent, child or spouse owns ten (10) percent or more of the voting stock or shares of the business entity, or ten (10) percent or more of the fair market value of the business entity; a business entity in which any individual or entity above listed is a subcontractor on a City contract, a partner or a parent or subsidiary business entity.

13.2 Pursuant to the subsection above, Professional warrants and certifies, and this Agreement is made in reliance thereon, that it, its officers, employees and agents are neither officers nor employees of the City. Professional further warrants and certifies that it will comply with the City's Code of Ordinances.

13.3 Certificate of Interested Parties (TEC Form 1295). For contracts needing City Council approval, or any subsequent changes thereto requiring City Council approval, the City may not accept or enter into a contract until it has received from Professional a completed, signed, and notarized TEC Form 1295 complete with a certificate number assigned by the Texas Ethics Commission ("TEC"), pursuant to Texas Government Code § 2252.908 and the rules promulgated thereunder by the TEC. Professional understands that failure to provide said form complete with a certificate number assigned by the TEC may prohibit the City from entering into this Agreement. Pursuant to the rules prescribed by the TEC, the TEC Form 1295 must be completed online through the TEC's website, assigned a certificate number, printed, signed and notarized, and provided to the City. The TEC Form 1295 must be provided to the City prior to the award of the contract. The City does not have the ability to verify the information included in a TEC Form 1295, and does not have an obligation or undertake responsibility for advising Professional with respect to the proper completion of the TEC Form 1295.

XIV. AMENDMENTS

Except where the terms of this Agreement expressly provide otherwise, any alterations, additions, or deletions to the terms hereof, shall be effected by amendment, in writing, executed by both City and Professional, and, if applicable, subject to formal approval by the City Council.

XV. SEVERABILITY

If any clause or provision of this Agreement is held invalid, illegal or unenforceable under present or future federal, state or local laws, including but not limited to the, City Code of Ordinances, or ordinances of the City of Johnson City, Texas, then and in that event it is the intention of the Parties hereto that such invalidity, illegality or unenforceability shall not affect any other clause or provision hereof and that the remainder of this Agreement shall be construed as if such invalid, illegal or unenforceable clause or provision was never contained herein; it is also the intention of the Parties hereto that in lieu of each clause or provision of this Agreement that is invalid, illegal, or unenforceable, there be added as a part of the Agreement a clause or provision as similar in terms to such invalid, illegal or unenforceable clause or provision as may be possible, legal, valid and enforceable.

XVI. LICENSES/CERTIFICATIONS

Professional warrants and certifies that Professional and any other person designated to provide services hereunder has the requisite training, license and/or certification to provide said services, and meets all competence standards promulgated by all other authoritative bodies, as applicable to the services provided herein.

XVII. COMPLIANCE

Professional shall provide and perform all services required under this Agreement in compliance with all applicable federal, state and local laws, rules and regulations.

XVIII. NONWAIVER OF PERFORMANCE

Unless otherwise specifically provided for in this Agreement, a waiver by either Party of a breach of any of the terms, conditions, covenants or guarantees of this Agreement shall not be construed or held to be a waiver of any succeeding or preceding breach of the same or any other term, condition, covenant or guarantee herein contained. Further, any failure of either Party to insist in any one or more cases upon the strict performance of any of the covenants of this Agreement, or to exercise any option herein contained, shall in no event be construed as a waiver or relinquishment for the future of such covenant or option. In fact, no waiver, change, modification or discharge by either Party hereto of any provision of this Agreement shall be deemed to have been made or shall be effective unless expressed in writing and signed by the Party to be charged. In case of City, such changes must be approved by the City Council, as described in Article XIV. Amendments. No act or omission by a Party shall in any manner impair or prejudice any right, power, privilege, or remedy available to that Party hereunder or by law or in equity, such rights, powers, privileges, or remedies to be always specifically preserved hereby.

XIX. LAW APPLICABLE

19.1 THIS AGREEMENT SHALL BE CONSTRUED UNDER AND IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND ALL OBLIGATIONS OF THE PARTIES CREATED HEREUNDER ARE PERFORMABLE IN BLANCO COUNTY, TEXAS.

19.2 Venue for any legal action or proceeding brought or maintained, directly or indirectly, as a result of this Agreement shall be heard and determined in a court of competent jurisdiction in Blanco County, Texas.

XX. LEGAL AUTHORITY

The signer of this Agreement for Professional represents, warrants, assures and guarantees that he has full legal authority to execute this Agreement on behalf of Professional and to bind Professional to all of the terms, conditions, provisions and obligations herein contained.

XXI. PARTIES BOUND

This Agreement shall be binding on and inure to the benefit of the Parties hereto and their respective heirs, executors, administrators, legal representatives, and successors and assigns, except as otherwise expressly provided for herein.

XXII. CAPTIONS

The captions contained in this Agreement are for convenience of reference only, and in no way limit or enlarge the terms and/or conditions of this Agreement.

XXIII. INCORPORATION OF EXHIBITS

Each of the Exhibits listed below is an essential part of the Agreement, which governs the rights and duties of the Parties, and shall be incorporated herein for all purposes:

Exhibit A – Project Information, Scope of Services, Cost and Terms

XXIV. ENTIRE AGREEMENT

This Agreement, together with its authorizing ordinance and its exhibits, if any, constitute the final and entire agreement between the Parties hereto and contain all of the terms and conditions agreed upon. No other agreements, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind the Parties hereto, unless same be in writing, dated subsequent to the date hereto, and duly executed by the Parties, in accordance with Article XIV. Amendments.

XXV. MISCELLANEOUS CITY CODE PROVISIONS

25.1 Representations and Warranties by Professional. If Professional is a corporation, partnership or a limited liability company, Professional warrants, represents, covenants, and agrees that it is duly organized, validly existing and in good standing under the laws of the state of its incorporation or organization and is duly authorized and in good standing to conduct business in the State of Texas.

25.2 Franchise Tax Certification. Professional certifies that it is not currently delinquent in the payment of any Franchise Taxes due under Chapter 171 of the *Texas Tax Code*, or that the corporation or limited liability company is exempt from the payment of such taxes, or that the Professional is an out-of-state corporation or limited liability company that is not subject to the Texas Franchise Tax, whichever is applicable.

25.3 Eligibility Certification. Professional certifies that the individual or business entity named in the Agreement is not ineligible to receive payments under the Agreement and acknowledges that the Agreement may be terminated and payment withheld if this certification is inaccurate.

25.4 Payment of Debt or Delinquency to the State or Political Subdivision of the State. Professional agrees that any payments owing to Professional under the Agreement may be applied directly toward any debt or delinquency that Professional owes the City of Johnson City, State of Texas or any political subdivision of the State of Texas regardless of when it arises, until such debt or delinquency is paid in full.

25.5 Texas Family Code Child Support Certification. Professional certifies that they are not delinquent in child support obligations and therefore are not ineligible to receive payments under the Agreement and acknowledges that the Agreement may be terminated and payment may be withheld if this certification is inaccurate.

25.6 Texas Government Code Mandatory Provision. The City of Johnson City may not enter into a contract with a company for goods and services unless the contract contains a written verification from the company that it (i) does not boycott Israel; (ii) will not boycott Israel during the term of the contract; (iii) does not boycott energy companies; (iv) will not boycott energy companies during the term of the contract; (v) does not have a practice, policy, guidance or directive that discriminates against a firearm entity or firearm trade association; and (vi) will not discriminate during

the term of the contract against a firearm entity or firearm trade association (Texas Government Code, Chapter 2271.002; 2274.002).

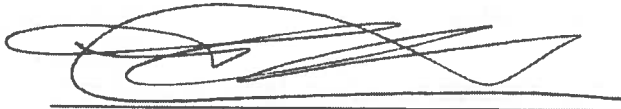
Professional hereby verifies that it does not boycott Israel, and agrees that, during the term of this agreement, will not boycott Israel as this term is defined in the Texas Government Code, Section 808.001, as amended. Company hereby verifies that it does not boycott energy companies, and agrees that, during the term of this agreement, will not boycott energy companies as this term is defined in Texas Government Code, Section 809.001, as amended. Professional hereby verifies that it does not have a practice, policy, guidance or directive that discriminates against a firearm entity or firearm trade association, and agrees that, during the term of this Agreement, will not discriminate against a firearm entity or firearm trade association as those terms are defined in Texas Government Code, Section 2274.001, as amended.

Further, Professional hereby certifies that it is not a company identified under Texas Government Code, Section 2252.152 as a company engaged in business with Iran, Sudan, or Foreign Terrorist Organizations.

EXECUTED and AGREED to as of the dates indicated below.

**CITY OF JOHNSON
CITY**

ATLAS



(Signature)



(Signature)

Printed Name: Rick Schroder

Printed Name: Joseph Fiello

Title: Chief Administrative Officer

Title: General Manager

Date: 12/4/23

Date: 12/4/2023

APPROVED AS TO FORM:

Charles E. Zech
City Attorney
DENTON NAVARRO ROCHA BERNAL & ZECH, P.C.

Exhibit A

Project Information

Construction Engineering Inspection services are to be conducted in accordance with industry standards and COJC Plans and Specifications.

Scope of Services

To provide Construction Engineering Inspection and Quality Assurance testing services for the 2023-2024 Street Improvements. Inspection and Testing will be based on the quantities shown in the plans. All test results will be reviewed and sealed by a licensed engineer prior to distribution.

1. Bid review, reference checks, and award recommendation.
2. Contract negotiation with apparent bid winner. (See below for comments)
3. Project oversight and management, including any required testing.
4. Review and approval of contract invoicing prior to City release of funds to contractor.
5. Project close out.

Item No. 2 above, Professional review the apparent bid winner if alternative construction methods for particular parts of town would be preferable to what is included in the bid document.

1. Bid review, reference checks, and award recommendation.

Provide writing review of bids received, check references of bidders and provide a recommendation of award. Provide project sight evaluations and report with recommendations.

2. Contract negotiation with apparent bid winner. (See below for comments)

Meet with the COJC and review the apparent bid winner if alternative construction methods for particular parts of town would be preferable to what is included in the bid document.

3. Project oversight and management, including any required testing.

Professional will notify the COJC project manager of any non-compliant issues encountered in the field in writing and verbally.

Crack Sealing

Inspection and measurement of crack sealing based on the linear footage of centerline of roadway.

Pothole Repair/Level Up

Inspection and measurement of potholes and level up based on the square yards of roadway.

Seal Coat /One -Course Surface Treatment

Inspection and measurement of Seal Coat based on the square yards of roadway.

Mastic (Onyx) Surface Treatment (Additive Alternate

Inspection and measurement of Surface Treatment based on the square yards of roadway.

Reporting

PROFESSIONAL will complete a daily report for each site visit. The report will include a description of all observations and test results. The reports will be reviewed by an PROFESSIONAL Project Manager and will be distributed in electronic format (PDF) to the COJC project manager and two hard copies distributed to the field office. A distribution list provided by our client, can be established by request and will be distributed typically on a weekly basis.

4. Review and approval of contract invoicing prior to City release of funds to contractor. Provide a monthly estimate for review by the COJC. Provide project documentation supporting payment.

5. Project close out.

Provide final estimate for review by the COJC. Provide project documentation including but not limited to Bill of Ladings, Haul tickets, Material Certifications and any testing data requested.

Cost and Terms

We propose to perform the above Scope of Services on a time and materials basis in accordance with the Schedule of Fees found in Exhibit A. PROFESSIONAL's assumptions are based upon the design document requirements and our experience with similar projects. The proposed scope of work is anticipated to be completed for an estimated fee of \$75,392.50 This amount will not be exceeded without an addendum to the current proposal.

Our estimated costs are based on the following:

- 82,631 LF Crack Sealing
- 124,975 SY Pothole Repair/ Level Up
- 42,342 SY Seal Coat/ One-Course Surface Treatment
- 191,331 SY Mastic (onyx) Surface Treatment

Notes:

- Charges for engineering and technical personnel will be made for the time spent in the field, in review and preparation of reports, and in travel to and from the work location.
- Services not listed above can be quoted on request and submitted as an addendum to the current proposal.
- A 24-hr. business day notice for services is requested.
- PROFESSIONAL will perform testing upon request and compare the results to the project specifications and provide opinions if requested and capable. PROFESSIONAL is not responsible for the quality of materials or work performed by others and cannot direct, guide, or supervise construction activities.

EXHIBIT "A"

SCHEDULE OF FEES

Cost proposal for City of JOHNSON CITY 2023-2024 STREET IMPROVEMENT PROJECTS

Requested by Rick A. Schroder (830)686-7111 Ext 8
 Chief Administrative Officer
 303 E. Pecan Dr.
 Johnson City Texas 78636

Phase 1 1. Bid review, reference checks, and award recommendation.

SUB TOTAL	\$	5,500.00
ODE	\$	327.50
Total	\$	5,827.50

Phase 2 2. Contract negotiation with apparent bid winner. (See below for comments)

SUB TOTAL	\$	1,000.00
ODE	\$	-
Total	\$	1,000.00

Phase 3 3. Project oversight and management, including any required testing.

SUB TOTAL	\$	46,050.00
ODE	\$	6,550.00
Total	\$	52,600.00

Phase 4 4. Review and approval of contract Involcing prior to City release of funds to contractor.

SUB TOTAL	\$	10,975.00
ODE	\$	-
Total	\$	10,975.00

Phase 5 5. Project close out.

SUB TOTAL	\$	4,990.00
ODE	\$	-
Total	\$	4,990.00

Total	\$	75,392.50
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Testing Rates Attached

Tests performed per Unit cost upon request

1. Bid review, reference checks, and award recommendation.					
	Service	Staff	Rate	HR	Total
	Bid Review	PM	\$ 250.00	4	\$ 1,000.00
	References	PM	\$ 250.00	2	\$ 500.00
	Recommendation	PM	\$ 250.00	2	\$ 500.00
Request for project sight evaluation					
	Sight Evaluation	PM	\$ 250.00	10	\$ 2,500.00
		Chief Inspector	\$ 100.00	10	\$ 1,000.00
ODE	Truck Milage Portal to Portal		\$ 0.655	500	\$ 327.50
				SUB TOTAL	\$ 5,500.00
				ODE	\$ 327.50
				Total	\$ 5,827.50

2. Contract negotiation with apparent bid winner. (See below for comments)					
	Service	Staff	Rate	HR	Total
	Contract Neg	PM	\$ 250.00	4	\$ 1,000.00
				SUB TOTAL	\$ 1,000.00
				ODE	\$ 1,000.00
				Total	\$ 1,000.00

3. Project oversight and management, including any required testing

		Staff	Rate	HR	Total
Crack Seal					
Project Oversight	PM		\$ 250.00	2	\$ 500.00
Chief Inspection			\$ 120.00	10	\$ 1,200.00
Inspection			\$ 90.00	100	\$ 9,000.00
Sampling			\$ 65.00	10	\$ 650.00
Pothole repair					
Project Oversight	PM		\$ 250.00	2	\$ 500.00
Chief Inspection			\$ 120.00	10	\$ 1,200.00
Inspection			\$ 90.00	80	\$ 7,200.00
Sampling			\$ 65.00	20	\$ 1,300.00
Seal Coat					
Project Oversight	PM		\$ 250.00	4	\$ 1,000.00
Chief Inspection			\$ 120.00	10	\$ 1,200.00
Inspection			\$ 90.00	100	\$ 9,000.00
Sampling			\$ 65.00	20	\$ 1,300.00
Onyx					
Project Oversight	PM		\$ 250.00	2	\$ 500.00
Chief Inspection			\$ 120.00	10	\$ 1,200.00
Inspection			\$ 90.00	100	\$ 9,000.00
Sampling			\$ 65.00	20	\$ 1,300.00
ODE	Truck		\$ 0.655	10,000	\$ 6,550.00
SUB TOTAL					\$ 46,050.00
ODE					\$ 6,550.00
Total					\$ 52,600.00

4 Review and approval of contract Invoicing prior to City release of funds to contractor.

Invoicing	Staff	Rate	HR	Total
Review	PM	\$ 250.00	4	\$ 1,000.00
Records	Record Keeper	\$ 105.00	55	\$ 3,775.00
Materials	Record Keeper	\$ 105.00	20	\$ 2,100.00
Estimate	Record Keeper	\$ 105.00	20	\$ 2,100.00
SUB TOTAL				\$ 10,975.00
ODE				\$ -
Total				\$ 10,975.00

5. Project close out.

Invoicing	Staff	Rate	HR	Total
Plans	PM	\$ 250.00	4	\$ 1,000.00
Records/Plans	Record Keeper	\$ 105.00	20	\$ 2,100.00
Materials	Record Keeper	\$ 105.00	8	\$ 840.00
Estimate	Record Keeper	\$ 105.00	10	\$ 1,050.00
SUB TOTAL				\$ 4,990.00
ODE				\$ -
Total				\$ 4,990.00

