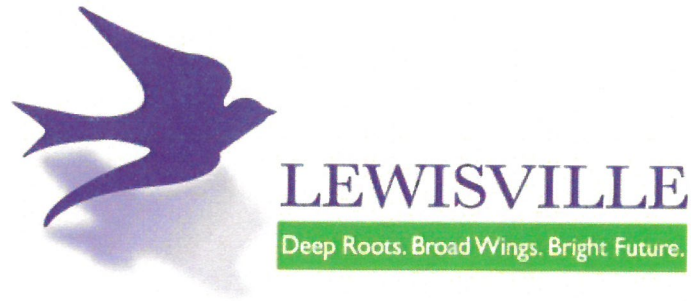


EXHIBIT A



**CONTRACT DOCUMENTS
AND
SPECIFICATIONS**

FOR

**CDBG Morningside Sanitary Sewer Manhole and
Main Line Replacement Project**

BID # 20-09-C

NOVEMBER 2019

Prepared by: RJN GROUP, Inc.

SEALS

The professional license seals listed on this page represent design responsibility for plans and technical specifications represented in this project.



11/13/19

RJN GROUP INC.
Engineering infrastructure for tomorrow
Texas Registered Engineering Firm F-3260
14755 Preston Rd. Suite 710
Dallas TX 75254

PROPOSAL

City of Lewisville
 Purchasing Office
 151 West Church Street
 P.O. Box 299002
 Lewisville, Texas 75029-9002

**CDBG Morningside Sanitary Sewer Manhole and Main Line Replacement
 Project
 Bid No. 20-09-C**

Proposal of _____
 (hereinafter called Bidder), a corporation organized and existing under the laws of the State of _____, a partnership, or an individual doing business as _____

 (Strike out inapplicable terms).

To the City of Lewisville, Texas (Owner)

The undersigned Bidder, in response to the Notice to Bidders for the construction of the above project and in conformity with the bidding documents; having examined the plans, specifications, related documents and the site of the proposed work; being familiar with all of the conditions relating to the construction of the proposed project, including the availability of materials and labor, hereby proposes to furnish all labor, materials, supplies, equipment, staking, testing, traffic control, superintendence, etc., for the construction of the project in accordance with the plans, specifications, and contract documents at the unit prices proposed herein.

The undersigned Bidder proposes, acknowledges and agrees to construct the entire project as shown on the plans, fully in accordance with the requirements of the plans, specifications, and the contract documents for the prices included in this Proposal and fully understands and agrees that the various items of material, labor and construction not specifically enumerated and provided for herein are considered subsidiary to the several items for which direct payment is specifically provided. Further, the undersigned agrees that one such subsidiary item is the protection, adjustment, maintenance, repair or replacement of all underground lines and services, whether shown on the plans or not, all to the full satisfaction of the City Engineer in a timely manner.

The undersigned Bidder agrees to begin work under the contract on or before the date specified in the written Notice to Proceed, and to fully complete the project within **175 calendar days**. It is specifically stated and understood that the entire construction including clean up shall be completed within the above stated time.

Proposal: Timber Creek Utility Crossings Phase 1

Project No. U1001

A 5% contingency line item will be included with the resulting contract and purchase order for this project. The contingency shall be used at the City's discretion and only upon written approval from the City. The amount listed as a contingency is not an obligation for payment from the City. Any unused contingency is retained by the City and is not payable to the Contractor.

The undersigned Bidder has contacted, within 72 hours prior to the bid opening, the Office of the City Engineer (972) 219-3490, and has determined that all Addenda are as follows:

Addendum No. 1 dated _____ (Signature) _____

Addendum No. 2 dated _____ (Signature) _____

Addendum No. 3 dated _____ (Signature) _____

The undersigned Bidder acknowledges that the Owner reserves the right to waive any informality and to reject any or all proposals.

The undersigned Bidder acknowledges and agrees that this Proposal shall be good and may not be withdrawn for 60 days from the date of bid opening.

The undersigned Bidder has shown unit prices and amounts and agrees that in the case of discrepancy, the unit prices shown in figures shall stand and that the amounts and total will be adjusted to correspond to the unit prices shown.

City of Lewisville, Texas

SPECIAL PROVISIONS

Note: The specification references shown in the Proposal are for either the Texas Department of Transportation (TxDOT) Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges (2004), the North Central Texas Council of Governments (NCTCOG) Standard Specifications for Public Works Construction, Fourth Edition (October 2004), or the City of Lewisville applicable specification item number(s). The changes to the various item sections and/or standard specification language, such as; materials, construction, measurement and payment of those items will be noted in the plans and in the pay item descriptions below. Such changes include redefining “Department” as the “City” to make the specifications applicable.

A. Location and Scope of Work

1. This project consists of the rehabilitation of approximately 1,100 feet of 6 and 8-inch sanitary sewer lines in north Lewisville roughly bounded by Jones St. to the north, Valley Ridge Blvd. to the south, Mill St. to the west and Cowan Ave. to the east. Rehabilitation methods consists of remove and replace by open-cut and pipe bursting and cured-in-place liner and by other than open-cut. Both Lines A will be bid as two alternates. For Line A, Alternate A will consist of rehabilitation using cured-in-place method and Alternate B will consist of rehabilitation using open-cut method.

For Line B, rehabilitation will consist of using combinations of open-cut and pipe bursting methods along with either cured-in-place or by other than open-cut methods. The televising of one of the existing line segments of Line B during construction and the results will determine whether cured-in-place or by other than open-cut will be used on that line segment.

2. In addition to the line work the project also includes new manhole installations and rehabilitation of sanitary sewer manholes by remove and replace.
3. The work to be performed shall consist of furnishing all plant, tools, equipment, materials, supplies, and manufactured articles and for furnishing all transportation and services, including fuel, power, water, and essential communications, and for performance of all labor, work, or other operations required for the fulfillment of the contract in strict accordance with the specifications, drawings, and other Contract Documents as herein before defined, all of which are made a part hereof, and including such detail sketches as may be furnished by the Engineer from time to time during construction in explanation of said drawings.
4. The work shall be complete, and all work, materials, and services not expressly called for in the specifications or not shown on the drawings which may be necessary for the complete and proper construction of the work in good faith shall be performed, furnished, and installed by the Contractor as though originally so specified or shown, at no increase in cost to the Owner.

B. Special Provisions to the General Provisions of the Standard Specifications:

1. Technical specifications (Special Specifications, Special Provisions), if included, in the Contract document package shall supersede the standard specifications.

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City of Lewisville, Texas

2. Prospective bidders may make written request to the City Engineer for clarification and alterations in the plans, specifications, and form of contract. Such request must be received by the City Engineer no later than 2:00 p.m. on the Wednesday first preceding the Thursday on which the bids are to be opened. The City Engineer will be the sole judge as to the necessity to an addendum or letter of clarification. Oral statements shall in no way be considered as part of the contract and will not be considered as binding.
3. Five (5) sets of the contract documents, exclusive of the "Public Works Construction Standards" referenced above will be furnished without charge to the CONTRACTOR for construction purposes. Additional copies may be obtained from the City at actual reproduction cost.
4. **Item 102.4. Preparation of Proposal:** Sentence 4 shall be changed to read: "In the cases of discrepancy between unit prices and amounts, the unit price shown in figures shall stand and the amount and total will be adjusted to correspond to the unit price shown".
5. **Item 103.3.1.1. Performance Bonds:** Paragraph (a) Performance Bond. The last sentence of this paragraph is hereby deleted and replaced with: This Bond shall provide for the repair and/or replacement of all defects due to faulty materials and workmanship that appears within a period of two years from the date of acceptance of the improvements project by the Lewisville City Council.
6. **Item 103.3.3. Sureties: The following applies to Surety Bonds:**

Texas Government Code Title 10, Chapter 2253

“(d) A bond required by this section must be executed by corporate surety in accordance with Chapter 3503, Texas Insurance Code.”

Texas Insurance Code Section 3503.005. Additional Requirements for Certain Bonds

“(a) A bond that is made, given, tendered, or filed under Chapter 53, Property Code, or Chapter 2253, Government Code, may be executed only by a surety company that is authorized to write surety bonds in this state. If the amount of the bond exceeds \$100,000, the surety company must also:

- (1) hold a certificate of authority from the United States secretary of the treasury to qualify as a surety on obligations permitted or required under federal law; or
- (2) have obtained reinsurance for any liability in excess of \$100,000 from a reinsurer that:
 - (A) is an authorized reinsurer in this state; and
 - (B) holds a certificate of authority from the United States secretary of the treasury to qualify as a surety or reinsurer on obligations permitted or required under federal law.

“(b) To determine whether the surety on the bond or the reinsurer holds a certificate of authority from the United States secretary of the treasury, a party may conclusively rely on the list published in the Federal Register by the United States Department of the Treasury, covering the date on which the bond was executed, of the companies holding certificates of authority as acceptable sureties on federal bonds and as acceptable reinsuring companies. A purchaser, insurer of title, or lender acquiring or insuring an interest in or title to real property may also

City of Lewisville, Texas

conclusively rely on, and is protected by, a statement on a recorded bond or a sworn, recorded statement by the surety that refers to the specific recorded bond and states that, at the time the bond was executed, the surety complied with Subsection (a)(1) or (2).”

7. **Item 103.4. Insurance:** delete and replace with the following:

Contractor shall procure and maintain for the duration of the contract, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the contractor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Contractor’s bid.

A. **MINIMUM SCOPE OF INSURANCE**

Coverage shall be at least as broad as:

1. ISO Form Number GL 00 01 (Ed 10 01) covering Comprehensive General Liability. “Occurrence” form only, “claim made” forms are unacceptable.
2. Workers’ Compensation insurance as required by the Labor Code of the State of Texas, including Employers’ Liability Insurance.
3. Automobile Liability – as required by the State of Texas, covering all owned, hired, or non-owned vehicles. Automobile Liability is only required if vehicle(s) will be used under this contract. Coverage not required for delivery services.

B. **MINIMUM LIMITS OF INSURANCE**

Contractor shall maintain throughout contract limits not less than:

1. Commercial General Liability: \$500,000 per occurrence for bodily injury, personal injury and property damage. \$1,000,000 Aggregate Policy will include coverage for:
 - a. Premises – Operations
 - b. Broad Form Contractual Liability
 - c. Products and Completed Operations
 - d. Use of Contractors and Subcontractors
 - e. Personal Injury
 - f. Broad Form Property Damage
 - g. Explosion Collapse and Underground (XCU) Coverage (when applicable, Fire Damage, Medical Expense).
2. Workers’ Compensation and Employer’s Liability: Workers’ Compensation limits as required by the Labor Code of the State of Texas and Statutory Employer’s Liability minimum limits of \$100,000 per injury, \$300,000 per occurrence, and \$100,000 per occupational disease.
3. Automobile Liability - \$500,000 Combined Single Limit. Limits can only be reduced if approved by the Risk Manager or designee.

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C. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductible or self-insured retentions must be declared to and approved by the City.

D. OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain the following provisions:

1. General Liability and Automobile Liability Coverages

- a.** The City, its officers, officials, employees, Boards and Commissions and volunteers are to be added as “Additional Insured” as respects liability arising out of activities performed by or on behalf of the contractor, products and completed operations of the contractor, premises owned, occupied or used by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officers, officials, employees or volunteers. It is understood that the business auto policy under “Who is an Insured” automatically provides liability coverage in favor of the City.
- b.** The contractor’s insurance coverage shall be primary insurance as respects the City, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees or volunteers shall be excess of the contractor’s insurance and shall not contribute with it.
- c.** Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the City, its officers, officials, employees, Boards and Commissions or volunteers.
- d.** The contractor’s insurance shall apply separately to each insured against whose claim is made or suit is brought, except to the limits of the insured’s liability.

2. Workers’ Compensation and Employer’s Liability Coverage

The insurer shall agree to waive all rights of subrogation against the City, its officers, officials, employees and volunteers for losses arising from work performed by the contractor for the City.

3. All Coverages

Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled or non-renewed by either party, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given the City.

E. ACCEPTABILITY OF INSURERS

The City prefers that Insurance be placed with insurers with an A.M. Best’s rating of no less than **A-:VI, or, A or better** by Standard and Poors.

F. VERIFICATION OF COVERAGE

Contractor shall furnish the City with certificates of insurance affecting coverage required. The Certificate of Insurance shall be project specific and include the name of the project. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. Certificates of Insurance similar to the ACCORD Form are acceptable. City will not accept Memorandums of Insurance or Binders as proof of insurance. The City reserves the right to require complete, certified copies of all required insurance policies at any time.

G. HOLD HARMLESS AND INDEMNIFICATION

Contractor covenants to save, defend, keep harmless and indemnify the City, its officers, officials, employees or volunteers (collectively the "City") from and against any and all claims, loss, damage, injury, cost (including court costs and attorney fees), charges, liability or exposure, however caused, resulting from or arising out of or in any way connected to Contractor's actions, performance, or operations relating to contract, including any and all sub-contractors involved in the contract.

H. PROOF OF INSURANCE

Contractor is required to submit proof of insurance on a form acceptable to the City of Lewisville. Certificates of Insurance similar to the ACCORD form are acceptable. City will not accept Memorandums of Insurance or Binders as proof of insurance. City, at its own discretion, may require a copy of any policy presented to the City.

STATE REQUIREMENTS FOR WORKERS COMPENSATION INSURANCE

Figure: 28 §110.110(c)(7)

A. Definitions:

Certificate of coverage ("certificate")- A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement (TWCC-81, TWCC-82, TWCC-83, or TWCC-84), showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

Duration of the project - includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

Persons providing services on the project ("subcontractor" in §406.096) - includes all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling, or delivering equipment or materials, or providing labor,

City of Lewisville, Texas

transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

B. The contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.

C. The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract.

D. If the coverage period shown on the contractor's current certificate of coverage ends during the duration of the project, the contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

E. The contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

(1) a certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

(2) no later than seven days after receipt by the contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

F. The contractor shall retain all required certificates of coverage for the duration of the project and for one year thereafter.

G. The contractor shall notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

H. The contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

I. The contractor shall contractually require each person with whom it contracts to provide services on a project, to:

(1) provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of

City of Lewisville, Texas

Texas Labor Code, Section 401.011(44) for all of its employees providing services on the project, for the duration of the project;

(2) provide to the contractor, prior to that person beginning work on the project, a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project;

(3) provide the contractor, prior to the end of the coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

(4) obtain from each other person with whom it contracts, and provide to the contractor:

(a) a certificate of coverage, prior to the other person beginning work on the project; and

(b) a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

(5) retain all required certificates of coverage on file for the duration of the project and for one year thereafter;

(6) notify the governmental entity in writing by certified mail or personal delivery, within 10 days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

(7) contractually require each person with whom it contracts, to perform as required by paragraphs (1) - (7), with the certificates of coverage to be provided to the person for whom they are providing services.

J. By signing this contract or providing or causing to be provided a certificate of coverage, the contractor is representing to the governmental entity that all employees of the contractor who will provide services on the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

K. The contractor's failure to comply with any of these provisions is a breach of contract by the contractor which entitles the governmental entity to declare the contract void if the contractor does not remedy the breach within ten days after receipt of notice of breach from the governmental entity.

9. **Item 105.1.1. Priority of Contract Documents** is revised as follows: Insert the words "addenda (last over first)" between "Proposal" and "Special Provision".
10. **Item 105.1.3. Contract Drawings and Specifications:** Obtaining copies of NCTCOG Public Works Construction Standards is the responsibility of the CONTRACTOR.
11. **Item 105.2.2. Special Warranty:** The first sentence of this paragraph is hereby deleted and replaced with:
"If within two years after the final acceptance of the work by the OWNER, as evidenced by the final certificate of acceptance or within a longer or shorter period of time as may be prescribed by law or by the terms of any other special warranty on designated equipment, any of the work is found to be defective or not in accordance with the contract documents, the CONTRACTOR shall correct it promptly after receipt of a written notice from the OWNER to do so".
12. **Special Provision to Item 105.3. Shop Drawings, Product Data and Samples:** add the following:
"Review of Shop Drawings by the CITY and/or ENGINEER shall be for the sole purpose of determining the sufficiency of said drawings or schedules to result in finished improvements in conformance with the plans and specifications, and shall not relieve the CONTRACTOR of his duty as an independent contractor. It being understood and agreed that the Engineer does not assume any duty to pass upon the propriety or adequacy of such drawings or schedules or any means or methods reflected thereby in relation to the safety of either person or property during the contractor's performance hereunder."
13. **Item 105.4: "Construction Stakes" is amended to the extent that the CONTRACTOR** will provide initial horizontal and vertical control and construction staking for the project. The CONTRACTOR will provide the following construction staking:
 - a. Verify and re-establish the design baseline and monuments set for horizontal and vertical control.
 - b. Provide offset line and grade stakes at a minimum of 100-foot intervals for tangents, and at 50-foot intervals for curves. The CONTRACTOR will provide line and grade stakes for valves, points of intersection, points of curvature, points of tangency, bends, pipe size changes, and grade changes. The offset distance will be determined by the CONTRACTOR. Lost or destroyed stakes will be replaced at the CONTRACTOR'S expense.

The CONTRACTOR shall provide any additional stakes and other materials and incidentals necessary for the correct construction of all facilities at no additional charge. It is the CONTRACTOR'S sole responsibility to ensure the correctness of all stakes and that the work is constructed to the lines and grades shown on the plans.

14. **Item 105.6 Supervision by Contractor:** The CONTRACTOR shall designate a **full-time superintendent who shall be on the job site at all times during construction including times when work is being performed by subcontractors.** The OWNER'S Representative will

communicate only with the superintendent. The CONTRACTOR may replace the designated superintendent by written notification to the OWNER.

15. Special Provision to Item 105.7.1. Authority of the Engineer: add the following:

“The Engineer shall make periodic visits to the site to familiarize himself generally with the progress of the executed work and to determine if such work generally meets the essential performance and design features and the technical and functional engineering requirements of the Contract Documents; provided and except, however, that the Engineer shall not be responsible for making any detailed, exhaustive, comprehensive or continuous on-site inspection of the quality or quantity of the work or be in any way responsible, directly or indirectly, for the construction means, methods, techniques, sequences, quality, procedures, programs, safety precautions or lack of same incident thereto or in connection therewith. Notwithstanding any other provision of this agreement or any other Contract Document, the Engineer shall not be in any way responsible or liable for any acts, errors, omissions or negligence of the CONTRACTOR, any subcontractor or any of the CONTRACTOR’S or sub-contractor’s agents, or employees or any other person, firm or corporation performing or attempting to perform any of the work.”

16. Item 106.5: Samples and Tests of Materials: Delete the first and last paragraphs on Item 106.5 and replace with the following:

“The CONTRACTOR shall engage the services of an acceptable testing laboratory company to perform all required testing services. The CONTRACTOR (not the OWNER) shall pay all costs for these services, including any retesting after failure to pass tests. The CONTRACTOR shall obtain OWNER’S acceptance of the testing laboratory before having the services performed.”

Written reports of tests and engineering data furnished by CONTRACTOR for OWNER’S review shall be submitted as specified in Item 105.3, “Shop Drawings, Product Data and Samples” and as modified by the Special Specifications.

17. Special Provisions to Item 107.2. Indemnification: delete Item 107.2. in its entirety and substitute the following:

"The CONTRACTOR and his sureties shall indemnify, defend and save harmless the OWNER and all of their officers, agents and employees, Engineer and all of its officers and employees from all suits, actions or claims of any character, name and description brought for or on account of any injuries, including death or damages received or sustained by any person, persons or property on account of the operations of the CONTRACTOR, his agents, employees or subcontractors; or on account of any negligent act or fault of the CONTRACTOR, his agents, employees or subcontractors in the execution of said contract; or on account of the failure of the CONTRACTOR to provide the necessary barricades, warning lights or signs; and shall be required to pay any judgment, with cost, which may be obtained against the OWNER or Engineer growing out of such injury, including death or damage."

18. Item 107.11. Supervision and Construction Procedures: The CONTRACTOR'S attention is drawn to paragraphs 1 and 4 of this item and paragraphs 1 and 3 of Item 105.6.

19. **Item 107.24. Project Clean-Up:** All objectionable surplus and waste material due to construction shall be removed from the site at the CONTRACTOR'S expense.

20. **Item 108.1. Progress Schedule:** add the following paragraph:

“The CONTRACTOR shall submit to the OWNER a construction schedule setting out items of construction, road closings, detours, utility interruptions, limits, times and actual dates. If the schedule is acceptable to the OWNER, the OWNER will approve it; if the schedule is unacceptable, it will be returned to the CONTRACTOR for revision and resubmittal. If the CONTRACTOR wants to deviate from the approved schedule, he must submit a revised schedule to the OWNER for consideration. The entire work shall be prosecuted in a continuous manner in accordance with the approved schedule. Proposed stockpile locations must be approved by the OWNER prior to depositing material. The CONTRACTOR shall update this schedule on a monthly basis.”

21. **Item 108.5. Subcontracts:** add the following paragraph:

"The CONTRACTOR shall perform with his own organization and with the assistance of workmen under his immediate superintendence, work of a value not less than 50 percent of the value of all work embraced in the contract exclusive of items not commonly found in contract for similar work and exclusive of items that require highly specialized knowledge, craftsman and/or equipment not ordinarily available in the organization of CONTRACTORS performing work of the character embraced in the contract". For the purpose of evaluating the percentage of work performed by subcontractors, the cost of all equipment, supplies, and materials used or installed on the project by subcontractors shall be considered as part of the work of subcontractors. This will apply even if the contractor supplies and pays for some or all equipment, supplies, or materials used by subcontractors.

22. **Item 108.8. Delays; Extension of Time; Liquidated Damages:** Delete the first paragraph of Section 108.8. and replace with the following:

“The CONTRACTOR hereby agrees that no work will be performed on CITY holidays or on Sundays. In addition, he agrees that work will be performed between 7:00 a.m. and sunset on weekdays and between 8:00 a.m. and 6:00 p.m. on Saturdays. The only exception to the preceding will be the performance of work in response to emergency situations and/or when directed to work by the OWNER. Also, the CONTRACTOR hereby concurs that the preceding has been taken into account in setting the contract time.” The CONTRACTOR will be responsible for reimbursing the City of Lewisville for overtime charges for construction inspection services on Saturdays, Sundays and all City holidays. The overtime charges will be based on the top of range overtime rate for an Engineering Construction Inspector plus eighteen percent (18%) per hour and a minimum of four (4) hours will be charged for each occurrence of such service. The overtime charges will be billed on a monthly basis. Failure to pay for these services will result in delaying the final acceptance and payment.

“The CONTRACTOR shall be entitled to an extension of working time under this contract only when claim for such extension is submitted to the OWNER in writing by the CONTRACTOR within seven days from and after the time when any alleged cause of delay shall occur; and then

City of Lewisville, Texas

only when such time is approved by the OWNER. In adjusting the working time for the completion of the project, the OWNER will consider delays due to acts of God, or the public enemy, acts of the OWNER, fires, floods, epidemics and quarantine restrictions. The OWNER may, but is not obligated to, take into account any unforeseeable causes of delay which the OWNER considers beyond the control and without the fault or negligence of the CONTRACTOR. It is anticipated that during the course of the contract, inclement weather (rain or freezing temperatures) will hinder or prevent work. The contract time has been established assuming that up to 20% of the contract days will be inclement weather days, during which no work can be performed. No extension of time will be granted for such inclement weather days. The OWNER may grant an extension of time for inclement weather days beyond 20% of the contract time, but is under no obligation to do so.”

23. **Item 109.3. Payment for Extra Work:** Replace the first sentence of 109.3.1. General; with the following:

“No work shall be undertaken which requires extra payment without having executed a change order or field change approved by the CONTRACTOR and the OWNER, except when specifically ordered to do so in writing.”

24. **Item 109.5. Monthly Estimate, Partial Payments, Retainage, Final Inspection, Acceptance and Final Payment**

Delete from the first paragraph of 109.5.1: "The monthly estimate may include acceptable non-perishable materials delivered to the work; such payment shall be allowed on same percentage basis of the net invoice value as provided hereinafter."

Add in its place, the following:

The OWNER will pay for materials on hand only under the following conditions:

- a. The CONTRACTOR shall provide proof of payment for the materials.
 - b. The materials shall be secured in a manner acceptable to the OWNER.
 - c. Payment will not be made for small items, and other items not easily measured.
 - d. No payment will be made for small quantities of material on hand (less than 0.5 percent of the contract amount).
 - e. No payment for materials on hand will be made for items such as paint, mastics, cement, and other similar materials.
25. Delays associated with delivery of materials of appurtenances by the manufactures will not be considered for any extension of contract time. It shall be the sole responsibility of the CONTRACTOR to insure that the materials are manufactured and delivered on time.

C. Special Provisions to the Materials and Construction Methods of the Standard Specifications:

Only items in the Proposal are Pay Items. Other specification items will be complied with; however, their measurement and payment provisions are hereby deleted.

The price bid shall cover all work required by the Contract Documents. All costs in connection with the proper and successful completion of the work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction plant, equipment, and tools; and performing all necessary labor and supervision to fully complete the work, shall be included in the unit and lump sum prices bid. All work not specifically set forth as a pay item in the Proposal shall be considered a subsidiary obligation of the CONTRACTOR and all costs in connection therewith shall be included in the prices bid.

Work that is subsidiary to pay items includes, but is not limited to the following: bypass pumping of sanitary sewer; protection, adjustment, maintenance, repair or replacement of all underground public or franchise utilities and services, whether shown on the plans or not; cutting and removing and plugging existing utilities, as required; crushed stone base, embedment sand; modified flowable backfill; pipe fittings; bends; joint restraint and thrust blocks; valve stack risers, concrete valve boxes; valve extensions; grouting abandoned waterlines; cutting and plugging waterlines as required; removal or abandonment of existing valves; delivery of salvaged items to 1100 North Kealy Avenue; maintaining water and sanitary sewer service to all adjacent properties; adjustment of the existing water line to avoid conflicts; trench dewatering; preventive measures of pipe flotation; installation of temporary orange polyethylene construction fencing adjacent to residences and businesses in construction areas as required; removal of existing thrust blocks; repair and replacement of landscape irrigation systems damaged during construction by a licensed irrigator; topsoil and sodding in areas outside of pay limits; placement of sod in all remaining disturbed areas after contract time has expired; concrete and/or asphalt pavement replacement (in areas outside of pay limits damaged by contractor); protection against flooding; removal of waste material from the site; replacement of property markers or monuments disturbed; sawcut and removal of existing pavement; replacement of damaged fences; clean up; additional traffic control not in plans including message boards; temporary asphalt pavement; replacement of existing traffic buttons and striping; miscellaneous grading; all other work required to complete the project and restore the areas of construction to their preconstruction condition; disposal of heavily chlorinated water main flushing water and all required testing of all the of the components of the project.

Special provisions to the materials and construction methods of the Standard Specifications as applicable to the Proposal Pay Items are as follows:

1. Payment for "Start-Up" shall be on a lump sum basis. The amount bid for these items shall not exceed five (5) percent of the Total Amount Bid. If the bid for these items exceeds 5% of the total amount bid, the amount in excess of 5% shall be paid on the project progress estimates throughout the duration of the project, with the amount determined by the percent complete on all other bid items for the project.
2. Payment for "Traffic Control" shall be on a lump sum basis. This pay item shall consist of furnishing, installing, maintaining, and removing the required traffic control devices during each phase of construction in accordance with the approved traffic control plan and TMUTCD. Inclusive with this pay item is the requirement for adequate notification and instruction to be given

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to adjacent businesses and property owners and to the traveling public regarding interruptions or changes to established traffic flow patterns to, from and along the work site. This item shall include detours, barrels, panels, arrow boards, removing striping, temporary lane lines and/or markers, construction signing and barricades, construction pavement markers, temporary asphalt, message boards and all other work required to provide for passage of vehicular traffic for all phases of construction. Access must be maintained at all times to all houses and businesses. The amount bid for this item shall be paid over the duration of the project with the amount paid on each monthly progress estimate determined by the percent complete on all other bid items.

3. Payment for "Prepare Right-of-Way" shall be per 100-foot station as measured along centerline of streets right-of-way from beginning of utility installation to end of utility installation. It will include the area within the right-of-way and easement limits shown on the plans. This pay item will also include removal of improvements or obstructions not specifically provided for in other pay items of the bid proposal such as temporary relocation and reinstallation of mailboxes, as required. Additional items included in this pay item, but not limited to, will be removing landscaping, shrubbery, and plantings and trimming trees as needed that are located within the right-of-way. Any damage to yard areas shall be restored at no additional pay, including planters and landscape edging and irrigation systems. Disposal of materials in City of Lewisville City limits must be taken to Waste Management. **All materials removed shall be properly disposed of offsite in a timely manner.**
4. Surveying and Construction Staking includes all survey work required for construction of the project. The CONTRACTOR shall offset alignment control and bench marks as required to ensure that they are protected during construction. The CONTRACTOR shall submit all survey information to the City Engineer and the City will determine if any adjustments to proposed improvements are required. The City will issue revisions as required. The amount bid for this work shall be paid over the duration of the project with the amount paid on each monthly progress estimate determined by the percent complete on all other bid items.
5. Payment for "Abandon Existing Sanitary Sewer and Plug" shall be paid per each location of plugged pipe. Payment shall include the cost of cutting the existing pipe and plugging each end of the pipe with grout.
6. Payment for "Cap Existing Sanitary Sewer" shall be paid per each location of capped pipe. Payment shall include the cost of cutting the existing pipe and installing a cap at each location.
7. Payment for "Sanitary Sewer Pipe by Open-Cut" shall be made on the basis of price bid per linear foot (LF) and shall be total compensation for furnishing all labor, materials and equipment, including testing all lines, reinstatement of service connections, excavation, embedment and backfill and any other incidentals necessary to complete the work. A partial payment of 30%, inclusive of the standard 5% retainage, for bid items for all sanitary sewer pipe will be withheld until the that sanitary sewer has been successfully tested. Sewer tests required include backfill compaction, television inspection, mandrel deflection test, and air test. This pay item shall consist of the installation per each designated diameter of sanitary sewer pipes, PVC (SDR 26), by open cut in the locations and to the depth as shown on the construction plans. The Contractor is responsible for taking any necessary precautions or construction measures necessary to protect and support existing utilities. Work shall be in accordance with City of Lewisville and NCTCOG Division 500.

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8. Payment for "Sanitary Sewer Service Laterals", unless otherwise indicated on the drawings, shall be measured at the contract unit price per each, complete in place. The Contract unit price shall be total compensation for furnishing of all labor, materials and equipment, including testing all lines, cleanouts and incidentals, excavation, embedment and backfill and any other incidentals necessary to complete the work, including excavation, concrete encasement, disposal of excess material, backfill, embedment, saw cut, removal and replacement of curb, sidewalks, sod, all in accordance with the plans and specifications. Furnishing and installation of Y or saddle connection shall be included in the contract unit price of service laterals. Removal and replacement of pavement will not be measured and paid separately for installation of service laterals. Work shall be in accordance with City of Lewisville and NCTCOG Division 500.

Contractor shall be responsible for locating service connections prior to construction.

Contractor shall verify by testing all service connections to determine if they are active or inactive. Only active services shall be connected to the new sanitary sewer system. Inactive services shall be plugged with grout. The Contractor shall be responsible for any liability associated with the accidental plugging of active services. All active laterals shall be removed from the existing sewer line to the private property line. Replace existing laterals with new laterals of same size from the new sewer main to the ROW line. In no case shall the size of service lateral be smaller than 4 inches in diameter.

Install wyes at an angle of no more than forty-five degrees (45°) or less with springline.

Install service laterals with a straight alignment and at a uniform grade not less than one percent (1%) unless otherwise specified. Embedment and service lateral connection shall be as per Standard Details of City of Lewisville.

All service laterals crossing concrete pavement shall be installed by method other than open-cut (jacking, boring, or tunneling). The Contractor may, at his option, install the laterals by open cut. However, he must provide a two (2) year maintenance bond on the lateral and pavement.

Maintain an accurate record of location and size of all active service laterals.

9. Payment for "Cured-In-Place Liner" shall be made on the basis of price bid per linear foot (LF) and shall be total compensation for furnishing all labor, materials and equipment, including testing all lines, hydrophilic end seal sleeve, reinstatement of service connections, excavation, embedment and backfill and any other incidentals necessary to complete the work. A partial payment of 30%, inclusive of the standard 5% retainage, for bid items for all sanitary sewer pipe will be withheld until the that sanitary sewer has been successfully tested. Sewer tests required include television inspection, mandrel deflection test, and air test. This pay item shall consist of the installation per each designated diameter of cured-in-place liner in existing sewer pipes in the locations as shown on the construction plans. The Contractor is responsible for taking any necessary precautions or construction measures necessary to protect and support existing utilities. Work shall be in accordance with City of Lewisville and NCTCOG Division 600.
10. Payment for "Pipe Bursting Sanitary Sewer" shall be made on the basis of price bid per linear foot (LF) and shall be total compensation for furnishing all labor, materials and equipment, including testing all lines, reinstatement of service connection, launching and receiving pits, excavation,

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embedment and backfill and any other incidentals necessary to complete the work. A partial payment of 30%, inclusive of the standard 5% retainage, for bid items for all sanitary sewer pipe will be withheld until the that sanitary sewer has been successfully tested. Sewer tests required include television inspection, mandrel deflection test, and air test. This pay item shall consist of the installation per each designated diameter of sanitary sewer pipe by pipe bursting of existing sewer pipes in the locations as shown on the construction plans. The Contractor is responsible for taking any necessary precautions or construction measures necessary to protect and support existing utilities. Work shall be in accordance with City of Lewisville and NCTCOG Division 600.

11. Payment for “Sanitary Sewer Pipe By Other Than Open-Cut” shall be made on the basis of price bid per linear foot (LF) and shall be total compensation for furnishing all labor, materials, including carrier and casing pipe and equipment, including testing all lines, reinstatement of service connections, excavation, embedment and backfill and any other incidentals necessary to complete the work. A partial payment of 30%, inclusive of the standard 5% retainage, for bid items for all sanitary sewer pipe will be withheld until the that sanitary sewer has been successfully tested. Sewer tests required include backfill compaction, television inspection, mandrel deflection test, and air test. This pay item shall consist of the installation per each designated diameter of sanitary sewer pipes in casing pipe by other than open cut, including jacking, boring and tunneling in the locations and to the depth as shown on the construction plans. The Contractor is responsible for taking any necessary precautions or construction measures necessary to protect and support existing utilities. Work shall be in accordance with City of Lewisville and NCTCOG Division 500.
12. Payment for “Pre-Cast Sanitary Sewer Manhole” shall be made on the basis of price bid per each (EA) manhole installed and shall be total compensation for furnishing all labor, materials, equipment, including pre-casting, delivery, excavation, embedment, backfill, manhole frame & cover, steps, connections, drop connections, coatings, linings, foundation and any other incidentals necessary to complete the work. This pay item shall consist of the installation of pre-cast concrete sanitary sewer manholes of the specified diameter and lid type in the locations and to the depths shown on the plans. There is no additional compensation for extra depth of manhole. The manhole shall be pre-cast and the work shall include all appurtenances necessary for a complete manhole installation. Concrete used for the manhole shall be Class "F" concrete having a minimum compressive strength of 4,200 psi at 28 days. Work shall be in accordance with City of Lewisville and NCTCOG Division 500.
13. Payment for “Cast-In-Place Sanitary Sewer Manhole” shall be made on the basis of price bid per each (EA) manhole installed and shall be total compensation for furnishing all labor, materials, equipment, including form work, rebar, excavation, embedment, backfill, manhole frame & cover, steps, connections, drop connections, coatings, linings, foundation and any other incidentals necessary to complete the work. This pay item shall consist of the installation of cast-in-place concrete sanitary sewer manholes of the specified diameter and lid type in the locations and to the depths shown on the plans. There is no additional compensation for extra depth of manhole. The manhole shall be cast-in-place and the work shall include all appurtenances necessary for a complete manhole installation. Concrete used for the manhole shall be Class "F" concrete having a minimum compressive strength of 4,200 psi at 28 days. Work shall be in accordance with City of Lewisville and NCTCOG Division 500.
14. Payment to “Connect to Existing Sanitary Sewer Manhole” shall be made on the basis of price bid per each (EA) and shall be total compensation for furnishing all labor, materials, equipment

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including coring, connecting, sealing, plugging, damming, pumping, blocking, and disposal of waste materials and any other incidentals necessary to complete the work. This pay item shall consist of connecting the proposed sanitary sewer lines to existing sanitary sewer manholes at the locations shown on the plans. Work shall be in accordance with City of Lewisville and NCTCOG Division 500.

15. Preparation of subgrade shall not be measured for payment as a separate contract pay item. Preparation of the subgrade or fine grading shall not be paid for as a separate contract pay item; and cost thereof shall be included in such contract items as are provided, which pay items shall be the total compensation for the furnishing of all labor, tools, materials, equipment and incidentals necessary to complete the work, including disposal or surplus material, all in accordance with the plans and these specifications.
16. Payment for “4-inch Unreinforced Concrete Pavement Subgrade” shall be made on the basis of price bid per square yard (SY) and shall be total compensation for furnishing all labor, materials, equipment, concrete, compaction, finishing, curing, and any other incidentals necessary to complete the work. All concrete for construction shall have a minimum compressive strength of 2000 psi at 28 days. Work shall be in accordance with City of Lewisville specifications.
17. Payment for “2-inch Hot Mix Asphalt (Type D)” shall be made on the basis of price bid per square yard (SY) and shall be total compensation complete in place. Work shall be in accordance with City of Lewisville specifications and standard details.
18. Payment for “Concrete Flatwork Removal” shall be made on the basis of price per square yard (SY). Payment will be made using the plan quantities given in the Bid Schedule for these items. This item shall include sawcutting, removing, and disposing off-site the existing concrete pavements, sidewalks, driveways, curb, gutter, etc. The CONTRACTOR shall provide a saw cut joint at the limits of pavement removal. All materials removed shall be properly disposed of offsite in a timely manner. Disposal of materials in City of Lewisville City limits must be taken to Waste Management.
19. Payment for “Asphalt Removal” shall be made on the basis of price per square yard (SY). Payment will be made using the plan quantities given in the Bid Schedule for these items. This item shall include sawcutting, removing, and disposing off-site the existing asphalt pavements, etc. The CONTRACTOR shall provide a saw cut joint at the limits of pavement removal. All materials removed shall be properly disposed of offsite in a timely manner. Disposal of materials in City of Lewisville City limits must be taken to Waste Management.
20. Payment for “Concrete Encasement” shall be made on the basis of the price bid per cubic yard (CY) and shall be total compensation for furnishing all labor, materials, equipment, compaction, concrete and any other incidentals necessary to complete the work. The concrete encasement shall be as shown on the plans or as designated by the Owner. All concrete for construction shall be Class 'B' having a minimum of 5 sacks of cement per cubic yard and a minimum compressive strength of 3,000 psi at 28 days. The cost for furnishing and placing reinforcement is subsidiary to the concrete. Work shall be in accordance with City of Lewisville and NCTCOG Division 300.
21. Payment for “5-inch Reinforced Concrete Sidewalk” shall be made on the basis of the price bid per square yard (SY) and shall be total compensation for furnishing all labor, materials, equipment, compaction, sand leveling course, concrete, reinforcing steel, finishing, jointing, curing and any other incidentals necessary to complete the work. The new sidewalk to be constructed shall be 5-

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inches thick and the width as shown on the plans or as designated by the Owner. All concrete for construction shall be Class 'A' having a minimum of 5 sacks of cement per cubic yard and a minimum compressive strength of 3,000 psi at 28 days. The cost for furnishing and placing reinforcement is subsidiary to the concrete. Work shall be in accordance with City of Lewisville and NCTCOG Division 300. All sidewalk construction shall be in compliance with the Texas Accessibility Act Article 9102 of the Texas Civil Statute as administered by the Texas Department of Licensing and Regulations. Any sidewalk found to be in non-compliance shall be removed and brought to compliance at the Contractor's expense.

22. Payment for "Railroad Coordination" shall be per lump sum (LS) basis. This pay item shall include total compensation for obtaining required permits, Railroad Liability Insurance (RRP) and DCTA Flaggers and all the coordination with DART and DCTA. The CONTRACTOR must obtain a Limited Right of Entry Permit from DART thru DCTA prior to the start of construction by contacting DCTA at (972)221-4600. DCTA "Roadway Worker Protection Course Request" form is attached as Attachment A. DCTA "Roadway Worker Protection Request" form is attached as Attachment B. DCTA "Limited Right of Entry Permit" form is attached as Attachment C. This item includes insurance requirements and requirements for obtaining DCTA flaggers and ensuring that all personnel working within the flaggers area have completed a credited Roadway Worker Protection Course. All requirements outlined in any agreement/right of entry/permit are subsidiary to all bid items in the contract.
23. Payment for "Trench Excavation Safety and Support" shall be made on the basis of price bid per linear foot (LF) for the actual implementation of the trench safety excavation and support system required for the actual construction activities and shall be total compensation for furnishing the design and all materials, tools, equipment, labor, and any other incidentals necessary to complete the work. This pay item shall consist of the design and implementation of a trench safety excavation and support system required for construction activities. The Contractor shall furnish a site-specific trench safety plan prior to construction. The system shall meet the requirements of the Occupational Safety and Health Administration (OSHA). The Contractor is directed to become knowledgeable with the standards as set forth by OSHA and to provide a viable trench safety system at all times during construction activities, and the Contractor is responsible for conforming to such regulations as prescribed by OSHA standards. This pay item includes all additional excavation, backfill, pavement reconstruction and repair made necessary by the protection system. No separate payment shall be made for excavation protection made necessary due to the selection of an optional design or sequence of work that creates the need for the protection system. The trench safety plan shall be signed and sealed by a Texas Licensed Professional Engineer.
24. Payment for "Block Sod with 4-inch Topsoil" shall be made on the basis of price bid per square foot (SF) and shall be total compensation for furnishing all materials, equipment, labor including fine grading, placing the topsoil and solid sod, rolling and tamping, fertilizing, water, disposal of waste materials, and any other incidentals necessary to complete the work. No more than 50% of this item shall be paid until 100% grass coverage has been established to the satisfaction of the Owner. This pay item shall consist of all work, materials and incidentals necessary to restore solid grass sod in all disturbed areas to an equal or better condition than prior to construction. Disturbed areas along the length of the project shall be fine graded and cut to receive sod as determined by the Owner. Topsoil shall be placed in low areas to bring them to grade and shall consist of a friable, dark clayey loam material free of lumps, stones, and other extraneous material obtained from borrow sources. Unless otherwise directed by the Owner, solid block sod matching the

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species that existed prior to construction and/or the species adjacent to the disturbed areas shall be placed in all disturbed areas where improved lawn or established turf existed prior to construction. Contractor shall be required to water, establish growth, and protect and repair any damaged areas until completion and final acceptance of the project by the Owner. It is the intent of the Owner that all disturbed areas along the project be restored. If there are areas outside of the project limits that are disturbed by the Contractor during the performance of this work, those additional areas shall be restored in accordance with the requirements provided herein at the Contractor's sole expense. Work shall be in accordance with City of Lewisville and NCTCOG Item 202.5.

25. Payment for "Erosion Control" shall be on a lump sum basis. The amount bid for this item shall be paid over the duration of the project with the amount paid on each monthly progress estimate determined by the percent complete on all other bid items. This item shall include installation and maintenance of silt fence, construction entrances, inlet protection, rock check dams, other erosion control features, and all costs for preparing, implementing and maintaining a Storm Water Pollution Prevention Plan (SWPPP), from the beginning of construction through final acceptance and establishment of grass coverage, including all fees and costs associated with submitting an NOI and NOT for both the CONTRACTOR and the CITY. It will be the responsibility of the CONTRACTOR to develop a SWPPP. The CONTRACTOR shall submit two (2) copies of the plan to the OWNER for general conformance review. Once the SWPPP is deemed acceptable, the CONTRACTOR shall obtain a National Pollutant Discharge Elimination System (NPDES) permit. The SWPPP is to be kept on the construction site and implemented throughout the construction duration. Once construction is complete, the system shall be dismantled and removed from the site.
26. Bid items for sanitary sewer lines will be measured along the pipe centerline once in place. There shall be no separate payment for pipe through structures such as manholes, junction boxes, etc. There shall be no separate payment for cement stabilized backfill where specified on the plans. All fittings and thrust restraint shall be subsidiary to sanitary sewer bid items.
27. Payment for "Pre-construction/Post-construction Television Inspection of Existing and Proposed Sanitary Sewer" shall be based on Linear Foot (LF). The CONTRACTOR shall make repairs on the existing sanitary sewer pipe if the OWNER'S Representative notes problems with pipe structure, grade, pulled joint, etc. due to construction activity around the sewer pipe, at the CONTRACTOR'S expense. If repairs are required, another television inspection of the repaired area may be made after the repairs are complete if deemed necessary by the OWNER'S representative, at the CONTRACTOR'S expense. Repairs shall be made to the satisfaction of the OWNER'S Representative.

D. Special Specifications

1. Shop Drawings:

The CONTRACTOR shall submit four copies of shop drawings to the OWNER for all proposed materials. CONTRACTOR shall keep one (1) set of prints for making construction notes and mark-ups for submittal of as-built drawings.

2. **Property Owner Notification/Approval:**

The Contractor must notify all affected property owners 30 days prior to accessing the property. Notification must be made by certified mail with a copy of the letter, certified mail receipt and domestic return receipt submitted to the City. The CONTRACTOR shall obtain a written letter of approval from the affected property owners prior to city acceptance of the work.

3. Inspection:

The word “inspection” or other forms of the word, as used in the contract documents for this project shall be understood as meaning the OWNER’S Representative will observe the construction on behalf of the OWNER. The OWNER’S Representative will observe and check the construction in sufficient detail to satisfy himself that the work is proceeding in general accordance with the contract documents, but he will not be a guarantor of the CONTRACTOR’S performance.

4. Construction signing shall be placed on new 4” X 4” wooden posts (two required except “Street Construction Ahead” may be on one post). Upon post removal, the holes shall be filled and compacted. Signs shall be new.
5. Street signs shall be mounted in accordance with TxDOT standard details. All posts and hardware shall be galvanized in accordance with Item 445 – Galvanizing, contained in the Standard Specifications for Construction of Highways, Streets, and Bridges, published by the Texas Department of Transportation.
6. The CONTRACTOR shall provide detour signs, barricades, barrels, vertical panels, flashing lights, construction pavement markers, construction and maintenance signs, construction lights, construction speed limit signs, channelizing devices, and flagmen as required providing for the safety of the traveling public. These items shall be in accordance with the traffic control plan and the recommended practices of the “Texas Manual on Uniform Traffic Control Devices for Streets and Highways”, latest edition. The installation of “Street Construction Ahead,” “Utility Construction Ahead” and “End Construction” signs shall be made and such approved at least 48 hours prior to any construction or the moving of any equipment or materials onto or nearby the site.
7. The CONTRACTOR shall provide a project sign at that site with active construction, the cost of which will be subsidiary to the various bid items. Signs will be installed as directed by the City. The City will provide the CONTRACTOR with information with regards to the size of lettering, content, and size of signs (see detail at back of spec book). The two project signs shall be relocated, as directed by the City, as the work locations progress within each stage of construction.

- 8. Construction signing shall not be removed from the project until approved by the OWNER.
- 9. No existing street shall be closed except upon written authority from the OWNER.
- 10. The CONTRACTOR shall remove all trees, stumps, vegetation, roots, brush, logs, shrubs, plants, and landscaping within the right-of-way. All trees, stumps, slashings, brush, other debris or deleterious material generated as a part of this work shall be removed from the project. Any required disposal permits shall be in the sole responsibility of the CONTRACTOR. All stumps shall be grounded to below the finished grade, using a stump grinder. Tree branches that overhang into the right-of-way shall be trimmed by the CONTRACTOR, if required, to facilitate the construction. Tree removal or trimming shall be paid for as a part of the bid item "Prepare Right of Way".

Trees to remain outside the right-of-way or easement on private property will be protected from damage by the CONTRACTOR. Employees of the CONTRACTOR (his subcontractors) will not part closer than ten (10) feet to any tree that is to remain.

- 11. The CONTRACTOR shall coordinate his activities with other CONTRACTOR'S working within, and close proximity to the project. To facilitate cooperation, regular progress meetings will be held among all CONTRACTOR'S.
- 12. Water and sanitary sewer service shall be maintained for all properties during construction. This includes the construction of temporary connections, if required. Temporary connections shall be considered subsidiary to the various bid items.
- 13. At the end of each day, the CONTRACTOR shall prepare the work to the satisfaction of the OWNER.
- 14. Prior to beginning construction, the CONTRACTOR shall contact all utility companies with utilities in the area and the property owners, 48 hours in advance of starting work. If necessary, test ditches will be dug to verify actual locations and conditions.

| | |
|-------------------------------------|---------------------------------|
| Verizon | 972-318-0264 |
| Texas-New Mexico Power Company..... | 972-317-5110 |
| Oncor Electric..... | 817-868-2575 |
| AT&T | 214-745-2976 |
| Time Warner Cable | 214-320-5435 |
| City of Lewisville Public Services | |
| Attn: James Wallingsford | 972-219-3517 |
| United States Post Office | (Fax) 972-436-7230 |
| Atmos Energy | 214-206-2717 |
| For line locates, call..... | 1-800-DIG-TESS (1-800-233-8377) |

- 15. Information shown on these plans concerning type and location of underground utilities is not guaranteed to be accurate or all-inclusive. The CONTRACTOR is responsible for making his own determination as to type and location of underground utilities as may be necessary to avoid damage thereto. The CONTRACTOR shall verify location of underground pipelines, conduits and structures by contacting the owners of the underground facilities and prospecting in advance of excavation operations. The

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CONTRACTOR shall pay for all repairs of damaged of utilities resulting from the construction of this project and no additional payment will be made by the CITY.

Furthermore, whenever the OWNER requests the CONTRACTOR to uncover any water line, sewer line or pipe line, or any other underground utility line well in advance of his construction activity in order to confirm locations of utilities, the CONTRACTOR shall comply with the OWNER'S request.

16. Boundary fences or other improvements removed to permit this construction shall be replaced in the same location as specified on the plans. Temporary fencing shall be installed as required and subsidiary to contract.
17. The CONTRACTOR shall at all times keep the job site as free from all material, debris and rubbish as is practical and shall remove same from any portion of the job site as construction of that portion is completed. No item of work will be considered complete for payment purposes until required cleanup has been performed.

Upon completion of the work, the CONTRACTOR shall remove from the site all plants, materials, tools and equipment belonging to him and leave the site with an acceptable appearance.

18. No material, which has been used by the CONTRACTOR for any temporary purpose whatever, is to be incorporated in the permanent structure without written consent of the CITY.

Where materials or equipment are specified by a trade or brand name, it is not the intention of the OWNER to discriminate against an equal product of another manufacturer, but rather to set a definite standard of quality of performance, and to establish an equal basis for the evaluation of bids. Where words "equivalent", "proper", or "equal to" are used, they shall be understood to mean that the thing referred to shall be proper, the equivalent to, or equal to some other thing, in the opinion or judgment of the ENGINEER. Unless otherwise specified, all materials shall be the best of their respective kinds and shall be in all cases fully equal to approved samples. Notwithstanding that the words "or equal to" or other such expressions may be used in the specifications in connection with a material, article or process specifically designated shall be used, unless a substitute shall be approved in writing by the ENGINEER, and the ENGINEER shall have the right to require the use of such specifically designated material, article or process.

19. Tree Protection

The CONTRACTOR shall be responsible for taking measures to minimize damage to tree limbs, tree trunks, and tree roots adjacent to the project. CONTRACTOR shall inspect the work site in advance and arrange to have any tree limbs pruned that might be damaged by equipment operations. The City shall be notified at least 24 hours prior to any tree trimming work. Nothing shall be stored or parked over the tree root system within the drip line area of any tree. The CONTRACTOR shall employ a qualified landscaper for all the work required for tree care to ensure utilization of the best agricultural practices and procedures.

20. The CONTRACTOR'S attention is directed to the requirement by Item 505.1 Open Cut – General Conduit Installation in the Standard Specifications for Public Works Construction. Specifically the last paragraph of 505.1.6 the CONTRACTOR is

required to provide, and to install at the end of each working day or when work is suspended, a temporary plug or watertight seal in the end of the utility main being installed under this contract. All caps (plugs) used shall be manufactured by the supplier of the pipe being used, or approved equal.

21. The following material tests will be required for the project:
- a. **Trench Backfill Compaction:** All trench backfill under roadbed areas shall be mechanically compacted as required by North Central Texas Council of Governments Specifications and these special site specific specifications. The testing laboratory will make tests of in-place density in accordance with ASTM D 698 of points selected by the City Inspector. All trenches shall be compacted to 95% of standard Proctor maximum dry density within the range of 1% below and 3% above the material's optimum moisture content. A minimum of one density test will be made for each 100 linear feet of every 8 inch loose lift of fill for water, storm drain and sanitary sewer construction. When backfill tested fails to meet the required density, trench backfill in the vicinity of the test, i.e. for a minimum of 50 feet in both directions from the test location, shall be removed and replaced with compaction. Thereafter, three tests shall be performed on the material removed and replaced, to determine if it is in accordance with the project compaction requirements.
 - b. **Pavement Subgrade:** The testing laboratory will make tests of in-place subgrade density in accordance with ASTM D 2922-81 at points selected by the City Inspector. A minimum of one field density test shall be conducted per lift for each 5,000 square feet of pavement subgrade.
 - c. **Concrete:** Four standard 6-inch test cylinders shall be made from each type or strength of concrete for each pouring operation, but not less than five cylinders from each 100 yards of concrete placed. For twenty-eight (28) day concrete test cylinders shall be made and cured, as prescribed by ASTM Specification C-31, and broken, one at seven (7) days, two at twenty-eight (28) days, and hold one, as prescribed by ASTM Specification C-39. For three (3) day concrete test cylinders shall be made and cured, as prescribed by ASTM Specification C-31, and broken, two at three (3) days, one at seven (7) days, and hold one, as prescribed by ASTM Specification C-39.
 - d. **Pavement Thickness Test:** The CONTRACTOR shall have any repaired pavement cored (1 inch diameter) for thickness testing. One core shall be required at each area that is hand-poured pavement. The CONTRACTOR shall pay the cost of coring pavement. A City inspector must be present when coring is performed. The OWNER shall determine the locations for taking cores.
22. Existing concrete pavement, sidewalks, driveways, curb, asphalt pavement, curb and gutter, or concrete channel paving to be removed, shall be sawed along neat lines where portions are to be left in place. When sidewalks must be removed, full panels shall be removed and then replaced.
23. All excavated earth in excess of that required for backfilling shall be removed from the project site and disposed of in a satisfactory manner. All materials removed shall be properly disposed of offsite in a timely manner. Disposal of materials in City of Lewisville City limits must be taken to Waste Management.

24. Positive drainage shall be established during the initial phase of grading and maintained throughout construction. Any softening or saturation of any lift will necessitate removal and replacement of the affected area. Where surface drainage channels are blocked during construction, they shall be restored to their original grade and cross-section.
25. Delays associated with delivery of materials by the manufacturer will not be considered for any extension of contract time. It shall be the sole responsibility of the CONTRACTOR to assure that the materials are manufactured and delivered on time.
26. **Construction Sequencing and Temporary Traffic Control**

The following is the construction sequence for this project:

- a. New manhole and CIPP of sanitary sewer within the DCTA ROW along Miller Rd.
- b. Sanitary Sewer replacement near Morningside and Cowan.

The traffic control plans shown on the construction plans shall be considered the minimum requirements necessary to construct the project. Additional measures may be needed to address local traffic control issues and additional sequencing not covered by the construction plans. Prior to construction, the CONTRACTOR will be required to submit a detailed construction sequencing and temporary traffic control plan to address all issues not covered by the construction plans. A schedule shall also be submitted to address times of completion of each stage of the construction sequence and projected dates of road closings, detours, and utility interruptions. The CONTRACTOR shall update this schedule on a monthly basis.

The construction schedule shall address measures to be taken in the event of heavy rain or wet weather during construction. If, in the opinion of the City, wet weather renders unpaved streets or driveways impassable to traffic or prevents access to adjacent property by residents, the Contractor shall place gravel or crushed stone in the streets. The cost of furnishing or placing such materials shall be incidental to the unit cost of the various items of construction. Contractor's personnel shall be on call 24 hours a day to handle wet weather problems.

Proper notification must be given to all affected property owners at least 48 hours in advance of all construction operations **including sawcutting**.

No street shall be closed except upon written authority from the OWNER.

The Contractor shall provide all barricades, signing, and traffic control devices required for maintaining traffic flow.

At the end of each day, trenches shall be backfilled and streets maintained in an all-weather condition by the addition of asphalt millings, crushed stone or other means approved by the Engineer when permanent pavement is not in place. The temporary surface shall be maintained until permanent pavement is placed. This work shall be subsidiary to the Proposal Bid Items.

Construction signing shall not be removed from the project until approved by the OWNER. **Construction signing shall be maintained in good working condition throughout the duration of the project.**

27. Block Sodding with 4-Inch Depth Topsoil

Item 204.2 Topsoil and Item 204.5 Sodding of the Standard Specifications area hereby deleted and replaced with this specification. Item 204.4 Fertilizer is hereby revised as indicated below.

- a. Description – The CONTRACTOR shall provide topsoil and block sod to all designated areas. The CONTRACTOR shall water, mow and protect the seeded areas until acceptance. Acceptance will not be made until all seeded areas are in full growth with a well-established root system. No on-site topsoil shall be used for establishing grass. **The CONTRACTOR shall provide imported topsoil obtained from a commercial source.**
- b. Preparation of Areas – All areas to receive topsoil and sod shall be graded to the lines, grades and cross-sections shown on the plans and as provided for in other items of this contract, with the surface grade set four (4) inches low to allow for the placement of 4-inch depth topsoil plus sod. All rocks and foreign material shall be raked off the surface prior to the placement of topsoil.
- c. **Imported Topsoil - Imported topsoil shall be obtained from an approved commercial source. Topsoil shall consist of natural, fertile, friable, screened, dark-colored sandy loam. It shall contain no acidity or alkalinity detrimental to plant growth. It shall contain no subsoil, lumps, stones, roots or other foreign matter.**
- d. Grass Type – Sod shall be of the same type as on areas adjacent to the area being sodded.
- e. Block Sodding – Sod blocks shall be carefully placed on the prepared areas. Sod shall be so placed that the entire designated area and disturbed areas shall be covered. Any voids left in the block sod shall be filled with additional sod and tamped. The entire sodded areas shall be rolled and tamped to form a thoroughly compact solid mass. When necessary the sodded areas shall be smoothed after planting has been completed and shaped to conform to the cross-section. Any excess dirt shall be removed to give a neat appearance.
- f. Fertilizer – Fertilizer shall conform to the requirements of Item 204.4, Fertilizer of the Standard Specifications. Fertilizer shall be applied at the rate of 400 pounds/acre and be considered subsidiary to bid item “4-Inch Topsoil and Sodding”. Section 204.4.4, Measurement and Payment is hereby deleted.
- g. Watering – Sodded areas shall be watered by the CONTRACTOR as required to promote rapid growth of grass without unnecessary delay. The CONTRACTOR shall install a temporary irrigation system to water the grass in areas not covered by the permanent irrigation systems. Re-sodding shall be performed immediately, when required, without delay. Temporary irrigation, re-sodding, and replacing eroded topsoil are incidental to the contract.

- h. Acceptance – The CITY will accept sodding as complete upon establishment of a growth of grass covering all areas requiring seeding. The CONTRACTOR shall mow and maintain the grass until accepted.
- i. Payment – Payment will be per plan quantity. No measurement will be made.

Topsoil, sod and fertilizer required in areas disturbed by the CONTRACTOR outside of the designated areas shall be incidental to the project and not paid for separately. The CONTRACTOR shall pay for all water costs until grass is accepted by the CITY.

28. Storm Water Prevention Pollution Plan (SWPPP)

It shall be the full responsibility of the CONTRACTOR to acquire and comply with any and all permits as may be required to avoid delay of the project.

Prior to construction, the CONTRACTOR shall comply with Federal and State storm water management regulations. The plan shall employ measures to prevent erosion and siltation from the construction disturbance from reaching stream beds, channels, storm water structures, ponds, etc. The plan shall comply with the requirements of the “Integrated Storm Water Management Design Manual for Construction” published by NCTCOG. In the event of a conflict between these requirements and Federal and State pollution control laws, rules, and regulations or other Federal, State or Local agency laws, rules, and regulations, the more restrictive shall apply. The release of the plan for construction by the CITY in no way relinquishes the CONTRACTOR of all responsibility and liability for the pollution control. The CONTRACTOR shall be solely responsible and liable for all activities at the construction site necessary for compliance with Federal and State storm water regulations and the Storm Water Pollution Prevention Plan for the site.

The SWPPP shall conform to the following City of Lewisville requirements:

- a. All site specific information required by the TCEQ Construction General Permit (Part III, Section F) must be included in the SWPPP. Restatement of information directly from the Construction General Permit is not acceptable. The CONTRACTOR must describe specifically what measures are planned at the construction site.
- b. All signature documents must be signed and dated prior to submittal for review. This includes SWPPP certifications, Notices of Intent (NOI), Construction Site Notices, and Inspector Delegation Letters. If there are multiple Operators for the project, each Operator’s signature documents must be signed and dated. The City of Lewisville will complete its own signature documents during the review process. All forms must be signed by an appropriate signatory authority, and include the person’s job title, where required. SWPPPS without the proper signatures will be returned without review.
- c. The specific inspection schedule must be described in the SWPPP. The CONTRACTOR must clearly state whether he will be implementing the 14-day (and within 24 hours after a ½ inch rainfall) schedule, or the 7-day schedule.
- d. The CONTRACTOR must include a copy of the inspection form that will be used. The form must include the required certification statement and allow for signature by the inspector, as required by the Construction General Permit.

- e. The SWPPP must include a section in which to document the dates of the following activities: when major grading activities occur; when construction activities temporarily or permanently cease on a portion of the site; the dates when stabilization measures are initiated. If there is no section for this information, the CONTRACTOR must document the information on the inspection reports, and the CONTRACTOR must state in the SWPPP that the information will be documented in this manner.
- f. The SWPPP must describe what types of temporary and/or permanent stabilization will be implemented at the site. For example, if the plan is to seed the disturbed area and maintain it until a uniform, established vegetative growth is achieved, then this must be detailed in the SWPPP.
- g. The CONTRACTOR must identify the erosion and sediment controls that are planned at the site, including sweeping activities. All structural controls (i.e. silt fence, check dams, rock entrances) must be shown on the site map. The CONTRACTOR must also describe how he plans to maintain those erosion and sediment controls in proper working order.
- h. The SWPPP must include both a General Vicinity Map and a Detailed Site Map. The site map must include all of the information listed in Part III, Section F (g) of the Construction General Permit. The CONTRACTOR may use the Erosion Control map from the Construction Plans, provided that it includes all of the necessary information. It is recommended that a separate site map be developed for the SWPPP, to avoid deficiencies.
- i. The SWPPP must clearly state whether or not any support activities, such as concrete or batch plants, are planned. This is because support activities do not always qualify for coverage under the Construction General Permit, and separate permit coverage may be necessary.
- j. If the project disturbs 10 acres or more with a common drainage location, and a sediment basin is not employed, the rationale for this decision must be documented in the SWPPP. The equivalent erosion and sediment control devices that are to be used must be described.
- k. Allow a minimum of 2 days for review of the SWPPP.
- l. The City of Lewisville does not currently utilize electronic submittal of Notices of Intent. **Construction will not be allowed to begin until 7 days after the NOI has been signed by the signatory authority and postmarked for delivery.** For this reason, early submission of the SWPPP and NOI are highly recommended.
- m. At least two copies of the completed SWPPP must be submitted to the City. One copy will be maintained by the Storm Water Division, and one other copy will be reviewed and returned to the CONTRACTOR.

The cost to the CONTRACTOR for the preparation of the SWPPP for the project shall be incidental to the various items of erosion control. The erosion control plan included in the project construction plans shall be incorporated into the SWPPP. Items required by the SWPPP that are not included as bid items are subsidiary to the various items of erosion control. The various bid items for erosion control shall include all costs for implementing

City of Lewisville, Texas

and maintaining the Storm Water Pollution Prevention Plan, from the beginning of construction through final acceptance and establishment of grass coverage.

Any disturbed areas, whether inside or outside the project limits, where construction activities are complete or won't be worked on for 14 days, must be permanently or temporarily stabilized. **Stabilization measures must be initiated no later than one day after completing work in an area or determining that work will be temporarily stopped for more than 14 days in that area.** Temporary stabilization can include the use of erosion blankets such as Curlex or other methods approved by the City inspector. Permanent stabilization will require topsoil and sod, unless otherwise shown on the project landscaping plans.

Final acceptance of sodded areas will be granted when sod has taken root. Placement of temporary or permanent erosion control measures in unstabilized areas after contract time has expired will be considered subsidiary to this bid item. Once final acceptance of permanent stabilized areas is granted, **the Contractor shall notify the City inspector prior to removing the Construction Site Notice sign and submit the final copy to the City within one week of removal.**

29. Grout shall be controlled low-strength material (minimum 1000 psi concrete) consisting of fluid mixture of cement, fly ash, aggregate, water and with admixtures as necessary to provide workable properties to flow into and fill the pipe, with no voids.

30. **Wastewater Conduit Installation:** The costs of all testing shall be the responsibility of the CONTRACTOR. The CONTRACTOR shall perform a pre-construction television inspection of all sanitary sewer lines to determine existing service locations. The costs of this test are included under a separate Pay Item: Pre-Construction/Post-Construction Television Inspection for Sanitary Sewer.

The CONTRACTOR shall perform a post-construction television inspection of all sanitary sewer lines prior to the acceptance of the project. The costs of this test are included under a separate Pay Item; Pre-Construction/Post-Construction Television Inspection for Sanitary Sewer.

Add the following:

All sewer lines shall be tested by 4% (>12" - 30") and 5% (12" or smaller) Deflection Mandrel Test, low-pressure air test and television inspection. Television inspection shall conform to the following:

Television Inspection:

- a. The CONTRACTOR, at his own entire expense, shall perform a color television inspection of all sanitary sewer lines prior to the acceptance of the project.
- b. The CONTRACTOR shall employ a firm qualified in the type of work to make the television inspections.
- c. The OWNER'S Representative must be present during the television inspection, unless specifically otherwise authorized in writing.

City of Lewisville, Texas

- d. The visual inspection by photographic means of the sanitary sewer mains shall commence after the backfill, the air test, and the Mandrel test are completed.
- e. The jet ball technique may be used to remove all foreign debris and silt, prior to photographic inspection.

Television Inspection Equipment:

- a. All television equipment used shall have a minimum of 600 lines of horizontal resolution and the picture shall be in color.
- b. All information gathered must be legible, clearly understandable, and of good picture quality.
- c. A run sheet shall be made, and it shall be compatible with the tape in noting deficiencies.
- d. By audio on the tape/CD, the operator must:
 - 1) Note the date and time the recording is made.
 - 2) Note the developer or CONTRACTOR'S name, project name, and contract number.
 - 3) Note the name of company performing the inspection.
 - 4) Note the location, line, designation, main size, and direction of run.
 - 5) Identify every 50-foot station.
 - 6) Identify the station of each manhole.
 - 7) Identify deficiencies and include station number.
- e. The sewer mains must be televised from manhole to manhole downstream and manhole to clean-out upstream.
- f. All sanitary sewer mains must be laced with water. The television inspection must be done immediately following the lacing of the main with no water flow.

DVD:

- a. Two DVDs per visual photographic inspection shall be furnished to the OWNER.
- b. All DVDs and run sheets shall be submitted to the OWNER'S Representative for storage and inspection by the OWNER. All DVD and run sheets shall become the property of the OWNER.

Criteria for Repair:

- a. The CONTRACTOR shall make repairs if the OWNER'S Representative notes problems, including but not limited to the following:
 - 1) Pulled or slipped joints.
 - 2) Water infiltration.
 - 3) Cracked or damaged pipe.
 - 4) If standing water is found in pipes of gradients equal to or greater 0.7 percent.
 - 5) In pipes or gradients less than 0.7 percent, a maximum one-half (1/2) inch of standing water will be allowed in 6 inches through 12 inches diameter pipes; and a maximum 10 percent of pipe size or 3 inches, whichever is less in pipes greater than 12 inches diameter.
 - 6) Structural damage to pipe.
 - 7) The OWNER shall make the final determination for repairs and shall review the visual photographic tape for additional data. A letter must be transmitted

to the CONTRACTOR for needed repairs within five (5) working days after the inspection. (All verbal repair requests shall be valid and noted in the letter.)

- b. If repairs are required, another television inspection of the repaired area may be made after the repairs are complete if deemed necessary by the OWNER'S representative, at the CONTRACTOR'S expense.
- c. Repairs shall be made to the satisfaction of the OWNER'S Representative.

31. Low Pressure Air Test for Gravity Sewers

The CONTRACTOR shall employ a firm qualified in the type of work to make the air tests on all sanitary sewer lines placed. The following air test requirements shall replace all less restrictive air test requirements of Item 507.5.1.3.2. Low Pressure Air Line Test Procedures. The low-pressure air test shall conform to the procedures described in ASTM C-828, ASTM C-924 or other appropriate procedures.

For sections of pipe up to 36-inch average inside diameter, the minimum time allowable for the pressure to drop from 3.5 pounds per square inch gauge to 2.5 pounds per square inch gauge shall be computed from the following equation:

$T = 0.0850 (D) (K) / (Q)$ where T = time for pressure to drop 1.0 pound per square inch gauge in seconds
 K = 0.000419 (D) (L), but not less than 1.0
 D = average inside diameter in inches
 L = length of line in feet of same pipe size being tested
 Q = rate of loss, 0.0015 cubic feet per minute per square foot interval surface shall be used

Since a K value of less than 1.0 shall not be used, there are minimum testing times for each pipe diameter as outlined below:

| Pipe Diameter (inches) | Minimum Time (seconds) | Length for Minimum Time (feet) | Time for Longer Length (seconds) |
|-------------------------------|-------------------------------|---------------------------------------|---|
| 6 | 340 | 398 | 0.855 (L) |
| 8 | 454 | 298 | 1.520 (L) |
| 10 | 567 | 239 | 2.374 (L) |
| 12 | 680 | 199 | 3.419 (L) |
| 15 | 850 | 159 | 5.342 (L) |

| Pipe Diameter (inches) | Minimum Time (seconds) | Length for Minimum Time (feet) | Time for Longer Length (seconds) |
|-------------------------------|-------------------------------|---------------------------------------|---|
| 18 | 1020 | 133 | 7.693 (L) |
| 21 | 1190 | 114 | 10.471 (L) |
| 24 | 1360 | 100 | 13.676 (L) |
| 27 | 1530 | 88 | 17.309 (L) |
| 30 | 1700 | 80 | 21.369 (L) |
| 33 | 1870 | 72 | 25.856 (L) |

For sections of pipe that have an average inside diameter of **15 inches to 33 inches**, the following option is available. If no pressure loss has occurred during the first 25% of the calculated testing time, then the test may be stopped at that point. If any pressure loss or leakage has occurred during the first 25% of the testing period, then the test shall continue for the entire test duration as outlined above or until failure.

32. PVC Gravity Sewer Pipe

The work to be performed under this section of the specifications shall consist of furnishing and installing PVC sanitary sewer pipe and fittings, including all clearing, grubbing, excavation, sheeting, shoring, dewatering, embedment with magnetic tape, encasement, pipe laying, jointing, testing, blocking, backfilling, and any other work that is required or necessary to complete the installation as shown in the plans and as specified herein.

Sanitary sewer pipe 15-inch diameter and smaller shall be manufactured in accordance with the latest edition of Standard Specification ASTM D-3040, SDR 26.

The quoted standard specifications cite other ASTM standards covering topics such as definitions, abbreviations, compounds or materials of construction, determination of dimensions, quality testing, recommendations for installation, tests for external loading and impact resistance, solvent cement compounds and application procedures, joints with elastomeric seals, and elastomeric seals. These related documents shall be considered part of the standard specifications cited herein.

Installation of all pipe and materials shall be in accordance with ASTM D 2321-74 (89) and as shown on the plans and these specifications.

The specified embedment shall be accurately shaped and trimmed to receive the pipe barrel and each pipe section, when in place, shall have a uniform bearing on the subgrade for the full length

City of Lewisville, Texas

of the pipe barrel. Pipe shall not be laid unless the subgrade is free of water and in a satisfactory condition. Adjustments of the pipe to line and grade shall be made by scraping away or filling in with granular material, and not by wedging or blocking up the bell.

The interior of the pipe shall be clean and joint surfaces shall be clean and dry when the pipe is lowered into the trench. Each pipe, fitting and valve shall be lowered into the trench carefully and laid true to line and grade.

33. Sanitary Sewer Manholes

All sanitary sewer manholes shall be as indicated in the plans. All sanitary sewer manholes shall be vacuum tested and pass the requirements of 502.1.5.2.

34. Prevailing Wage Rate Determination

The General Services Commission has adopted the Federal Davis-Bacon wage rates for our use.

City of Lewisville, Texas



General Services Commission

1711 San Jacinto - P.O. Box 13047

Austin, Texas 78711-3047

Web Site: www.gsc.state.tx.us

(512) 463-3035

CHAIRMAN
Alfonso Jackson
VICE-CHAIRMAN
Ramiro "Ram" Guzman
COMMISSIONERS
Ofelia de los Santos
Dionicio Vidal Flores, P.E.
Barbara Rusing
Gene Shull
EXECUTIVE DIRECTOR
Tom Treadway

Prevailing Wage Rate Determination Information

The following information from Chapter 2258 Texas Government Code Title 10 should be included in your bid specification documents and contract documents:

2258.021. Duty of Governmental Entity to Pay Prevailing Wage Rates

- (a) The state or any political subdivision of the state shall pay a worker employed by it or on behalf of it:
 - (1) not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the work is performed; and
 - (2) not less than the general prevailing rate of per diem wages for legal holiday and overtime work.
- (b) Subsection (a) does not apply to maintenance work.
- (c) A worker is employed on a public work for the purposes of this section if the worker is employed by a contractor or subcontractor in the execution of a contract for the public work with the state, a political subdivision of the state, or any officer or public body of the state or a political subdivision of the state.

2258.023. Prevailing Wage Rates to be Paid by Contractor and Subcontractor; Penalty

- (a) The contractor who is awarded a contract by a public body or a subcontractor of the contractor shall pay not less than the rates determined under Section 2258.022 to a worker employed by it in the execution of the contract.
- (b) A contractor or subcontractor who violates this section shall pay to the state or a political subdivision of the state on whose behalf the contract is made, \$60 for each worker employed for each calendar day or part of the day that the worker is paid less than the wage rates stipulated in the contract. A public body awarding a contract shall specify this penalty in the contract.
Note: This penalty applies even if the contractor or subcontractor and the worker come to an agreement on the underpaid wages (see Attorney General Opinion DM-469).
- (c) A contractor or subcontractor does not violate this section if a public body awarding a contract does not determine the prevailing wage rates and specify the rates in the contract as provided by Section 2258.022.
- (d) The public body shall use any money collected under this section to offset the costs incurred in the administration of this chapter.
- (e) A municipality is entitled to collect a penalty under this section only if the municipality has a population of more than 10,000.

2258.051. Duty of Public Body to Hear Complaints and Withhold Payment

- (a) A public body awarding a contract, and an agent or officer of the public body, shall:
 - (1) take cognizance of complaints of all violations of this chapter committed in the execution of the contract; and
 - (2) withhold money forfeited or required to be withheld under this chapter from the payments to the contractor under the contract, except that the public body may not withhold money from other than the final payment without determination by the public body that there is good cause to believe that the contractor has violated this chapter.

ATTACHMENT A

Roadway Worker Protection Course Request

Pursuant to the provisions of 49 CFR Part 214, any person who willfully fails to provide worker protection in accordance with those regulations is subject to a civil penalty in the minimal amount of \$2,500.00 per violation.

This form must be completed in its entirety prior to any roadway worker protection (RWP) services being authorized. Services should be requested 15 days in advance of the requirement for such services. Work may not commence until the approved form is returned to the applicant requesting the flagging services.

- Date of Course: _____
- Location of Course: _____
- Number of Attendees: _____

TO BE COMPLETED BY APPLICANT

Roadway Worker Protection Course:

No work or activity shall be conducted less than twenty-five feet (25.0') from the closest rail of any DCTA track (also referred to as "the foul zone") or perform any work in which a catastrophic event could cause equipment, people or materials to enter into the Foul Zone unless DCTA representative Flaggers are present and also within the last 365 days have completed a creditable Roadway Worker Protection Course.

The Roadway Worker Protection Course can be scheduled by calling Alex Ison (817) 471-7132 or Mark Richroath (817) 374-3092. The course cost is \$1,000.00 and can have multiple attendees for no additional charge up to 50 people. A training venue will need to be provided for classes exceeding 15 people at the requestor's expense. Payment for the course is required prior to, or on the day of the course. The flagging cost is \$95.00/hour per flagger with an 8 hour minimum and \$95.00/hour for each hour in excess of 8 hours.

Payment is required upon billing. In the event flagging is required for a period exceeding ten (10) days, a Ten Thousand Dollar (\$10,000.00) retainer will be required. RWP billing will reflect travel time, preparation, and close-down time of up to two hours (per day) beyond work group protection hours.

RWP requests that are not formally canceled before 4:30 PM the business day prior will result in applicant being charged the full 8 hour minimum.

Company information and signature of authorized officer requesting and accepting the financial terms above:

Company Name: _____

Authorizing Officer: _____

Billing Contact: _____ Phone: _____ Email: _____

Billing Address: _____

Purchase Order #: _____

Signature of Authorizing Officer: _____

Applicant to email completed form to flagging@ctcinc.com. Upon receipt of request, CTC will invoice requester for services.

CTC Approval: _____ Date: _____

ATTACHMENT B

Roadway Worker Protection Request

Pursuant to the provisions of 49 CFR Part 214, any person who willfully fails to provide worker protection in accordance with those regulations is subject to a civil penalty in the minimal amount of \$2,500.00 per violation.

This form must be completed in its entirety prior to any roadway worker protection (RWP) services being authorized. Services should be requested 15 days in advance of the requirement for such services. Work may not commence until the approved form is returned to the applicant requesting the flagging services.

- Location requiring protection: _____
- Date(s) Required: _____
- Workgroup Hours: _____
- Description of work activity: _____
- Project Name & Number: _____

TO BE COMPLETED BY APPLICANT

Roadway Worker Protection Course:

No work or activity shall be conducted less than twenty-five feet (25.0') from the closest rail of any DCTA track (also referred to as "the foul zone") or perform any work in which a catastrophic event could cause equipment, people or materials to enter into the Foul Zone unless DCTA representative Flaggers are present and also within the last 365 days have completed a creditable Roadway Worker Protection Course.

The Roadway Worker Protection Course can be scheduled by calling Alex Ison (817) 471-7132 or Mark Richroath (817) 374-3092. The course cost is \$1,000.00 and can have multiple attendees for no additional charge up to 50 people. A training venue will need to be provided for classes exceeding 15 people at the requestor's expense. Payment for the course is required prior to, or on the day of the course. The flagging cost is \$95.00/hour per flagger with an 8 hour minimum and \$95.00/hour for each hour in excess of 8 hours.

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Authorizing Officer: _____

Billing Contact: _____ Phone: _____ Email: _____

Billing Address: _____

Purchase Order #: _____

Signature of Authorizing Officer: _____

Applicant to email completed form to flagging@ctcinc.com. Upon receipt of request, CTC will invoice requester for services.

CTC Approval: _____ Date: _____

ATTACHMENT C

PERMIT NO.XXXXX
Mile Post: XXX.XX

LIMITED RIGHT OF ENTRY PERMIT (Construction)

This **LIMITED RIGHT OF ENTRY PERMIT** ("Permit") is granted by **DENTON COUNTY TRANSPORTATION AUTHORITY** ("DCTA"), a regional transportation authority created, organized and existing pursuant to Chapter 460, Texas Transportation Code, as amended (the "Act") to _____ ("Permittee"), a _____, acting herein by and through its duly authorized official, whose mailing address is _____, _____, Texas _____, for the consideration and subject to the restrictions., conditions, and agreements stated herein.

WHEREAS, pursuant to that certain *Transportation and Access Agreement and Easement* dated and effective May 25, 2010, between DCTA and Dallas Area Rapid Transit ("DART")("the DART Agreement"), DCTA is operating, and maintaining a public rail transportation system within the former Missouri-Kansas-Texas rail corridor from Mile Post 742.42 in the City of Carrollton, Texas, to Mile Post 721.53 in the City of Denton, Texas, ("the DCTA Corridor") which is presently owned by DART; and

WHEREAS, pursuant to agreements between and/or among DCTA, DART, and Dallas, Garland & Northeastern Railroad ("Railroad"), both passenger and freight railroad operations are occurring on the DCTA Corridor; and

WHEREAS, Permittee desires to enter the DCTA Corridor for the Permitted Purpose, as defined below;

NOW THEREFORE, DCTA does hereby grant to Permittee a non-exclusive revocable license to enter on, over, across and upon that certain portion of the DCTA Corridor between Mile Post _____ and Mile Post _____ in Denton County, Texas ("the Licensed Premises") for the Permitted Purpose subject to the following terms and conditions:

1. **Permitted Purpose:** The "Permitted Purpose" as that phrase is used in this Permit, shall mean the performance of construction activities by Permittee or Permittee's employees and/or contractor generally described in Exhibit "A" hereto.
2. **Term:** Permittees right to enter the Licensed Premises for the Permitted Purpose shall begin at _____ on _____, **20**____ and end at _____ on _____, **20**____, unless this Permit is terminated earlier as provided herein or extended by written agreement of the Parties.
3. **Consideration:** In consideration for the granting of this Permit Permittee shall pay DCTA (a) a one-time payment by Permittee to DCTA the sum of **TEN AND NO/100 (\$10.00) DOLLARS** (the "Permit Fee").
4. **Cost:** Permittee shall be solely responsible for all costs relating to performing the Permitted Purposes. Upon completion of the Permitted Purpose and prior to termination of this Permit, Permittee shall restore the Licensed Premises to the same condition as when Permittee entered upon the Licensed Premises unless DCTA consents to Permittee leaving the Licensed Premises in a different condition.

**Limited Right-of-Entry
Denton County Transportation Authority**

PERMIT NO.XXXXX
Mile Post: XXX.XX

5. **Performance of Work - Generally:** Permittee and/or its contractor shall use reasonable care, to avoid damaging any existing buildings, equipment and vegetation on or about the Licensed Premises and any adjacent property owned by or under the control of DCTA, DART, or Railroad. If the failure to use reasonable care by Licensee and/or its contractor results in damage to the Licensed Premises or such adjacent property, Permittee and/or its contractor shall immediately make appropriate replacement or repair the damage at no cost or expense to DCTA, DART and/or Railroad. If Permittee or its contractor fails or refuses to make such replacement, DCTA shall have the right, but not the obligation, to make or affect any such repair or replacement at the sole cost and expense of Permittee, which cost and expense Permittee agrees to pay to DCTA upon demand. Permittee shall require that the work and activities associated with the Permitted Purpose shall be conducted in such a manner and at such times to not endanger or interfere with DCTA's or Railroad's operations, and in accordance with the regulations and instructions of DCTA and the Railroad.

6. **DCTA to Review Plans:** Prior to the commencement of any work on the Licensed Premises by Permittee or its contractor, Permittee shall submit to DCTA for review and approval Permittee's plans and specifications for the portion of Permittee's project to be constructed within the DCTA Corridor. Permittee, its employees, contractors, and subcontractors shall perform that portion of the Work located in the DCTA Corridor strictly in accordance with the plans and specifications approved by DCTA. Permittee shall further submit to DCTA, for approval, all construction details, falsework and other incidentals not detailed in plans, insofar as they are located within the DCTA Corridor or otherwise may reasonably affect DCTA or its property and/or operations. Not later than sixty (60) days following completion of Permittee's work within the DCTA Corridor, Permittee shall deliver to DCTA a full set of as-built drawings showing all improvements made by or on behalf of Permittee within the DCTA Corridor including, but not limited to, all materials, equipment, and other personal property,

7. **Operational Safety Matters:** Permittee, its contractors and subcontractors, and the employees of any of the foregoing, shall at all times comply with the following operational safety measures while present in the DCTA Corridor:
 - a. Flagger(s), who are representatives of DCTA engaged to protect DCTA's interest while in the DCTA Corridor and who have been determined by DCTA to be knowledgeable and qualified to perform flagging duties within the DCTA Corridor in accordance with DCTA's operating and safety rules must be present and on-duty.
 - b. No work or other activity shall be conducted less than twenty-five feet (25.0') from the closest rail of any DCTA track (also referred to as "the Foul Zone") or perform any work in which a catastrophic event could cause equipment, people or materials to enter into the Foul Zone unless the above mentioned flaggers are present.
 - c. Every person working under the control of Permittee or otherwise under authority of Permittee pursuant to this Permit who are engaged in any activity that requires flagger(s), as described in Section 7.b., above, shall have received within the 365 day period prior to the date the work is to be performed, attended a creditable

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Roadway Worker Protection course and have successfully passed all required examinations associated with that course. Permittee, Permittee's contractor, or the employee working within the DCTA Corridor will provide proof of course completion upon request from DCTA or its representatives. Whether or not the above mentioned Roadway Worker Protection course is creditable shall be determined at the sole discretion of DCTA.

- d. All equipment, tools and materials must be stored not less than twenty-five (25) feet from the closest rail of any operable track unless otherwise approved in writing by DCTA. Explosives or other highly flammable substances or any hazardous materials regulated pursuant to federal or state regulation shall not be stored on DCTA property, including, but not limited to, the DCTA Corridor, without the prior written approval of DCTA.
 - e. Permittee shall remove or have removed all tools, equipment and materials from the DCTA Corridor promptly upon completion of work, but in no case later than ten (10) unless a longer period is authorized in writing by DCTA.
 - f. Permittee shall reimburse DCTA for all costs and expense incurred by DCTA in connection with the provision of any services or work in relation to the Permittee's work as described in Exhibit "A", including without limitation the expense of furnishing such inspectors, watchmen and flagmen as DCTA deems reasonably necessary or which are otherwise requested by Permittee, the installation and removal of falsework beneath tracks which DCTA is required to do in order for Permittee to construct its work as described in Exhibit "A".
 - g. Permittee understands and acknowledges that flagging and safety rules will be administered by CTC, Inc. (CTC), through the CTC Roadway Worker Safety Training, conducted at 9601 Camp Bowie West, Fort Worth, Texas 76116.
8. **Required Notifications:** Prior to entering the Licensed Premises pursuant to this Permit, Permittee shall provide notification to DCTA as follows:
- a. No prior notification is required if a work schedule setting forth the specific dates and times during which Permittee and/or its contractor will be performing work within the DCTA Corridor is set forth in Exhibit "A", hereto, and entry into the Licensed Premises occurs within those dates and times.
 - b. If Permittee must enter the Licensed Premises in a situation constituting an Emergency Event (as defined below), Permittee shall notify DCTA by telephone not later than one hour prior to entry into the Licensed Premises at the following phone numbers:
 - i. Between the hours of 5:00 AM and 11:00 PM Central Time, contact Mr. Alex Ison, Signal Supervisor, at 817-471-7132 (cell)
 - ii. At anytime, contact Mr. Danny Bailey, DCTA Rail Operations, at (972) 966-5103 or (512) 848-7399 (cell).

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- c. In all other situations not described in Paragraphs a. or b. of this Section 8, Permittee shall notify DCTA not later than fifteen (15) days prior to entry into the Licensed Premises by providing written notice to DCTA in accordance with Section 14.a., below.
- d. Permittee shall notify DCTA that the work described in Exhibit "A" is completed not later than five (5) business days after the work is completed, such notification to be in accordance with Section 14.a., below.
- e. For purposes of Section 8.b., above, an "Emergency Event" shall mean an event in which Permittee requires access to the Licensed Premises to perform repairs, replacement, or maintenance to Permittee's leased or owned property or facilities located within the DCTA Corridor, which, if not performed within a short time after the discovery of the need for such repair, replacement, or maintenance, will reasonably:
 - i. result in personal injury or death or damage to or destruction of real or personal property;
 - ii. endanger the public health or safety; or
 - iii. result in an interruption of utility, communication, or data transmission services to the public or a governmental entity whose operations are dependent on such transmission.

9. Indemnification:

- a. **TO THE EXTENT ALLOWED BY LAW, PERMITTEE AGREES TO INDEMNIFY, DEFEND, AND HOLD HARMLESS, DCTA, DART, RAILROAD AND THEIR RESPECTIVE OFFICERS, AGENTS, AND EMPLOYEES FROM AND AGAINST ANY PENALTY, OR ANY DAMAGE, OR CHARGE, IMPOSED FOR ANY VIOLATION OF ANY LAW, ORDINANCE, RULE OR REGULATION ARISING OUT OF THE PERMITTED USE OF THE LICENSED PREMISES BY PERMITTEE, WHETHER OCCASIONED BY THE INTENTIONAL OR NEGLIGENT ACTS OR OMISSIONS OF PERMITTEE, ITS EMPLOYEES, OFFICERS, PARTNERS, SHAREHOLDERS, AGENTS, CONTRACTORS, INVITEES, OR GUESTS.**
- b. **TO THE EXTENT ALLOWED BY LAW, PERMITTEE SHALL AT ALL TIMES INDEMNIFY, DEFEND, AND HOLD HARMLESS DCTA, DART, RAILROAD, AND THEIR RESPECTIVE OFFICERS, AGENTS, AND EMPLOYEES AGAINST AND FROM ANY AND ALL LOSS, COST, DAMAGE, OR EXPENSE, INCLUDING REASONABLE ATTORNEY'S FEES, ARISING OUT OF OR FROM ANY ACCIDENT OR OTHER OCCURRENCE CAUSING PERSONAL INJURY, DEATH OR PROPERTY DAMAGE RESULTING FROM OR RELATED TO USE OF THE LICENSED PREMISES BY PERMITTEE, ITS AGENTS, EMPLOYEES, PARTNERS, SHAREHOLDERS, AGENTS, CONTRACTORS, INVITEES, OR GUESTS, WHETHER OCCASIONED BY THE INTENTIONAL OR NEGLIGENT**

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ACTS OR OMISSIONS OF LICENSEE, ITS EMPLOYEES, OFFICERS, PARTNERS, SHAREHOLDERS, AGENTS, CONTRACTORS, INVITEES, OR GUESTS. EXCEPT WHEN CAUSED BY THE WILLFUL MISCONDUCT OR GROSS NEGLIGENCE OF DCTA, DART, RAILROAD OR THEIR OFFICERS, EMPLOYEES AND/OR AGENTS, AND ONLY THEN TO THE EXTENT OF THE PROPORTION OF ANY FAULT DETERMINED AGAINST DCTA, DART, OR RAILROAD FOR THEIR WILLFUL MISCONDUCT OR GROSS NEGLIGENCE.

- c. If Permittee is a “governmental unit” as that term is defined in Tex. Civ. Prac. & Rem. Code §101.001, Permittee does not by agreement to and acceptance of this Permit waive its right to claim immunity to liability or suit or to invoke the limits of liability set forth in Chapter 101 of the Texas Civil Practices & Remedies Code, as amended, to the extent sovereign immunity has been waived by said statutes. DCTA and Permittee further acknowledge and agree that nothing in this Permit is intended to be for the benefit of any third parties except to the extent expressly provided in this Permit.
 - d. The provisions of this Section 9 shall survive the termination of this Permit, regardless of the means of termination.
- 10. Insurance:** Prior to occupancy of the Licensed Premises under this Permit, Permittee agrees to procure and maintain at its sole cost and expense the following types and amounts of insurance with an insurer or insurers and in form satisfactory to DCTA, which insurance shall be primary and non-contributory.
- a. Commercial General Liability with Contractual Liability Endorsement.
 - i. Combined single limit of not less than \$2,000,000.
 - ii. DCTA, DART, Railroad and all affiliated companies and organizations named as additional insureds without any qualification or restriction.
 - iii. DCTA must be provided 30 days notice of cancellation or modification.
 - b. Commercial Automobile Liability Policy
 - i. Combined single limit of not less than \$2,000,000.
 - ii. DCTA, DART, and Railroad named as additional insureds without any qualification or restriction.
 - iii. DCTA must be provided not less than 30 days notice of cancellation or modification.
 - c. Workers' Compensation Insurance
 - i. Providing Statutory Benefits under the Workers' Compensation Act of the State of Texas and/or any other State or Federal Law or Laws applicable to the Contractor's employees performing the work under this Permit.

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- ii. Employer's Liability Insurance with limits of liability of not less than \$500,000 each accident, \$500,000 each employee for disease and \$500,000 policy limit for disease.
 - iii. Endorsed with a Waiver of Subrogation Endorsement, waiving the carrier's right of recovery under subrogation or otherwise from DCTA, DART, and Railroad.
- d. Permittee agrees to furnish DCTA Certificates of Insurance and copies of Endorsements for Additional Insured, Waiver of Subrogation and Contractual Liability Railroads (or, as and when DCTA may direct, copies of the actual insurance policies) as evidence of the coverage's outlined in Paragraphs a, b, and c, above, and this Paragraph d. Approval will be expedited if all required coverage's and the following endorsements are included on the Certificates:
- i. Endorsement showing DCTA, DART, Railroad and their affiliate companies and organizations named as additional insureds in as required by Paragraphs a. and b., above and requiring that DCTA be given 30 days notice of cancellation or modification. The certificate must specify that the endorsement is applicable to the General Liability and Auto Liability Policies.
 - ii. Contractual liability endorsement.
 - iii. Endorsement removing exclusions from contractual liability coverage for operations within 50 feet of a railroad or the purchase of a Railroad Protective Liability Policy with limits of liability of no less than \$2,000,000 per occurrence and \$6,000,000 aggregate.
 - iv. Endorsement removing exclusions for XCU hazards.
 - v. Waiver of subrogation endorsement specific to Workers Compensation.
- e. All policies must contain a cross liability endorsement reading as follows:
- "It is agreed that the inclusion of more than one person, corporation, organization, firm or entity as insured under this policy shall not in any way affect the rights of any such person, corporation, organization, firm or entity with respect to any claim, demand, suit or judgment made, brought or recovered by or in favor of any other insured. This policy shall protect each person, corporation, organization, firm or entity in the same manner as though a separate policy had been issued to each; provided that this endorsement shall not operate to increase the company's limits of liability as set forth elsewhere in this policy."
- f. Unless Permittee's insurance covers the operations of Permittee's contractors and subcontractors, Permittee shall require all contractors and subcontractors engaged by Permittee to perform work within the Licensed Premises pursuant to this Permit to comply with the provisions of this Section 8 in the same manner as

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Permittee.

11. **Removal from Licensed Premises:** At the request of DCTA or Railroad, Permittee shall remove from the DCTA Corridor any employee of Permittee, or Permittee's contractor or subcontractor who fails to comply with DCTA and/or Railroad's operating and safety rules and any right of Permittee to enter upon the DCTA Corridor shall be suspended until compliance with such rules is obtained. To the extent allowed by law, Permittee shall indemnify DCTA and the Railroad against any claim arising from the removal of any such employee from the DCTA Corridor.
12. **Identification:** Company-issued photo identification is required of all Permittee's employees, contractors, and subcontractors working on the Licensed Premises which clearly identifies the person as someone authorized to be on the Licensed Premises pursuant to this Permit.
13. **Termination:** The Permit shall terminate on the earliest of:
- a. The date set forth in Section 2, above, as the end of the Term; or
 - b. The date established by mutual written agreement of the Parties; or
 - c. The date Permittee has completed all work and/or other activities related to the Permitted Purpose and has completed restoration of the Licensed Premises as required by Section 4, above; or
 - d. 5:00 p.m., Central Time on the fifth (5th) day following DCTA;s delivery of notice to Permittee of Permittee's non-compliance with the provisions of this Permit if Permittee has failed to cure such non-compliance by that time; provided, however, if the non-compliance is the failure to comply with a DCTA and/or Railroad operating and safety rule pursuant to Section 11, above, termination shall be at 5:00 p.m. Central Time on the second (2nd) day after delivery of the notice to Permittee if Permittee remains out of compliance with such operating or safety rule unless the notice of non-compliance expressly provides a longer period for Permittee to come into compliance; or
 - e. The date any of the insurance coverage required to be provided by Permittee and/or its contractors or subcontractors pursuant to Section 9, above, expires without being renewed.
14. **Miscellaneous.**
- a. **Notice.** When written notice is permitted or required by this Permit, it shall be deemed delivered when delivered in person or when placed, postage prepaid, in the U.S. Mail, Certified, Return Receipt Requested, and addressed to the parties at the following addresses:

DCTA: Denton County Transportation Authority
1955 Lakeway, Suite 260
Lewisville, Texas 75067

**Limited Right-of-Entry
Denton County Transportation Authority**

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ATTN: Rail Development

With Copy to: Peter G. Smith, General Counsel
Nichols, Jackson, Dillard, Hager & Smith, LLP
500 N. Akard, Suite 1800
Dallas, Texas 75201

PERMITTEE: _____

Either party may change its address for notice by giving the other party notice thereof.

- b. **Parties Bound.** This Permit shall be binding upon and inure to the benefit of the executing parties.
- c. **Entirety and Amendments.** This Permit embodies the entire agreement between the parties and supersedes all prior agreements and understandings, if any, relating to the Licensed Premises and the matters addressed herein, and may be amended or supplemented only by a written instrument executed by the party against whom enforcement is sought.
- d. **Governing Law; Venue.** This Permit shall be construed under and in accordance with the laws of the State of Texas. Venue for any dispute between the parties to this Permit arising from or related to this Permit shall be in a state court in Denton County, Texas, the personal jurisdiction to which the parties hereto agree to submit.
- e. **Number and Gender.** Words of any gender used in this Permit shall be held and construed to include any other gender; and words in the singular shall include the plural and vice versa, unless the text clearly requires otherwise.
- f. **Assignment.** This Permit is not assignable.
- g. **No Joint Enterprise.** The parties do not intend this Permit to be construed as finding that the parties have formed a joint enterprise. The purposes for which each party has entered into this Permit are separate and distinct. It is not the intent of any of the parties that a joint enterprise relationship is being entered into and the parties hereto specifically disclaim such relationship. This Permit does not constitute a joint enterprise, as there are no common pecuniary interests, no common purpose and no equal right of control among the parties hereto.
- h. **Counterparts.** This Permit may be executed in any number of counterparts with the same effect as if all signatory parties had signed the same document. All counterparts will be construed together and will constitute one and the same

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instrument.

- i. **Waiver of Default.** It is not a waiver of or consent to default if the non-defaulting party fails to declare immediately a default or delays in taking any action. Pursuit of any remedies set forth in this agreement does not preclude pursuit of other remedies in this agreement or provided by law.
- j. **No Property Conveyance.** Permittee understands, acknowledges, and agrees that this Permit is solely contractual and does not constitute a conveyance of an interest in real property.
- k. **Effective Date.** This Permit shall become effective on the date it is signed by the authorized representatives of DCTA and Permittee.
- l. **DART as Third Party Beneficiary.** Permittee understands, acknowledges, and agrees that to the extent any right of indemnification or other obligation stated herein is expressly made in favor of DART, DART constitutes a third party beneficiary of this Permit with the right to enforce said provisions in this Permit without the necessity of DART acknowledging its rights as a third party beneficiary hereto.

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SIGNED AND AGREED this ____ day of _____, 2019.

DENTON COUNTY TRANSPORTATION
AUTHORITY

BY: _____
Raymond Suarez, CEO

SIGNED AND AGREED this ____ day of _____, 2019.

PERMITTEE

BY: _____

Printed Name: _____

Title: _____

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EXHIBIT "A"
DESCRIPTION OF PERMITTED PURPOSE

**CITY OF LEWISVILLE
PURCHASING DIVISION**

INSTRUCTIONS TO BIDDERS

1. **INSTRUCTIONS:** These instructions apply to all bids and become a part of the terms and conditions of any bid submitted.

2. **BIDS** must not be faxed but are to be submitted to the City in **one** of the following manners:

A. **Electronic Receipt:** Bidders are encouraged to submit bids to the City through Bidsync.com. The City is a member of this internet service and the submittal of bids to the City is at no cost to the bidder. The internet site is www.bidsync.com.

or

B. **Paper Bid Receipt:** Paper bids may be submitted to the City. Bidders are to submit the original and one copy of their bid in a sealed envelope to the Purchasing Division prior to response due date/time. The sealed envelope is to be marked on the outside with the Bidder's name, address, the bid invitation number and closing date recorded on the bottom left corner of the envelope.

Address to:

City of Lewisville
Finance Administration - Purchasing Division
151 W. Church St.
Lewisville, Texas 75057

Sealed bids must be returned in sufficient time as to be received and time stamped at the above location on or before the published bid date and time shown on the bid invitation. Bids received after submission deadline shall be returned unopened and will be considered void and unacceptable. The City of Lewisville is not responsible for lateness of mail carrier, etc.

3. **BID:** The bidder should quote its lowest and best price, F.O.B. destination on each item bid. If delivery and shipping quantities affect unit bid price, multiple bids may be made so as to indicate "price break" quantities in order for the City to determine maximum economic benefits. Pricing for paper bids shall be entered on the Bid Sheet in ink or typewritten. Totals shall be entered in the "Total Price" column of the Bid Sheet. In all cases of discrepancy between unit price and extended price, the unit price will be presumed to be correct.

4. **MAKE-MODEL** Items must be the best and latest model available of the type specified. If the bid invitation indicates a specific brand of product, the brand listed is deemed to be descriptive and not restrictive and is used to indicate the type and quality level desired for comparison purposes. Bidders may offer an approved equal to the brand listed, unless otherwise noted. The City shall make the final determination as to the brand offered being an approved equal to the brand listed. A Complete catalog or brochure showing in detail the item offered must accompany the bid.

5. **SPLIT-AWARD:** Bidders may furnish pricing for all or any portion of the bid invitation. Unless the bidder specifies otherwise in his bid, the City may award the contract for any item or group of items shown on the bid invitation.

6. **BID FORMS:** Bids submitted on other than City forms, whether electronic or paper, or with different terms or provisions may not be considered as responsive bids.

7. **Bids** must be held firm for ninety (90) days to allow for evaluation unless otherwise noted in the bid document.
8. **F.O.B./DAMAGE:** Quotations shall be bid F.O.B. Inside Delivery, Municipal Facility, Lewisville, Texas, and shall include all delivery and packaging costs. The City of Lewisville assumes no liability for goods delivered in damaged or unacceptable condition. The successful bidder shall handle all claims with carriers, and in case of damaged goods, shall ship replacement goods immediately upon notification by the City of damage.
9. **INVOICES:** Invoices must be submitted by the successful bidder in duplicate to the City of Lewisville Accounts Payable, P O Box 299002, Lewisville, TX 75029-9002 or emailed to accountspayable_col@cityoflewisville.com.
10. **TAXES:** The City of Lewisville is exempt from Federal Manufacturer's Excise, and State Sales taxes. **TAX MUST NOT BE INCLUDED IN BID.** Tax exemption certificates will be executed by the City and furnished upon request.
11. **PRICING:** Bids should be firm. If the bidder, however, believes it necessary to base its price on price adjustment, such a bid may be considered, but only as an alternate bid.
12. **PAYMENT TERMS:** Payment terms are net 30 days after the goods are provided or services are completed, as required, or a correct invoice is received, whichever is later.
13. **DELIVERY PROMISE - PENALTIES:** Bids **MUST** show the number of calendar days required to place the materials in the possession of the City. **DO NOT** quote shipping dates. Consistent failure of a bidder to meet his delivery promises without valid reason may be cause for removal from the Bidder's List. When Delivery delays can be foreseen, the bidder shall give prior notice to the Purchasing Division which shall have the right to extend the delivery due date if reasons for delay appear acceptable. Default in promised delivery, without acceptable reasons, or failure to meet specifications, authorizes the Purchasing Division to purchase the goods elsewhere, and charge any increase in cost and handling to the defaulting bidder.
14. **PACKAGING:** Unless otherwise indicated, items will be new, unused, and in first class condition in containers suitable for damage-free delivery and storage.
15. **CORRESPONDENCE:** The bid number must appear on **ALL** correspondence, inquiries, etc. pertaining to the bid.
16. **DELIVERY TIMES:** Deliveries will be acceptable only during normal working hours at the designated City Municipal Facility.
17. **PATENT RIGHTS:** The Vendor agrees to indemnify and hold the City harmless from any and all claims involving patent right infringement or copyrights on goods supplied.
18. **EVALUATION:** Response to the specification in this bid is of primary importance in determining the lowest responsible bid.
19. **BID AWARD:** Bids will be awarded either on Lowest Responsible Bid or Best Value. The Criteria used to determine Best Value is as follows:
 - A. Purchase Price
 - B. The reputation of the bidder and of the bidder's goods and service

- B. The quality of the bidder's goods or services
 - C. The extent to which the goods or services meet the municipality's needs.
 - D. The bidder's past relationship with the municipality.
 - E. The impact on the ability of the city to comply with laws and rules relating to contracting with historically underutilized businesses and non-profit organizations employing persons with disabilities.
 - F. The total long-term cost to the city to acquire the bidders good or services (Life Cycle Costing).
 - G. Any other relevant factors that a private business would consider in selecting a bidder.
- 20. FUNDING:** The City of Lewisville is a home-rule municipal government operated and funded on an October 1 to September 30 Fiscal Year; accordingly, the City reserves the right to terminate, without liability to the City any contract for which funding is not available.
- 21. RESERVATIONS:** The City expressly reserves the right to:
- A. Waive as an informality, minor deviations from specifications.
 - B. Waive any defect, irregularity or informality in any bid or bidding procedure.
 - C. Reject or cancel any or all bids.
 - D. Reissue a bid invitation.
 - E. Extend the bid opening time and date.
 - F. Procure any item by other means.
 - G. Increase or decrease the quantity specified in the bid invitation, unless the Bidder specifies otherwise.
 - H. Consider and accept an alternate bid as provided herein when most advantageous to the City.
- 22. ASSIGNMENT:** The successful bidder shall not sell, assign, transfer or convey this contract in whole or in part, without the prior written consent of the City.
- 23. AUDIT:** The City of Lewisville reserves the right to audit the records and performance of the successful bidder during the term of the contract and for three years after the contract is completed.
- 24. PROTESTS:** All protests regarding the bid solicitation process must be submitted in writing to the City Purchasing Manager within five (5) working days following the opening of bids. This includes all protests relating to advertising of bid notices, deadlines, bid opening, and all other related procedures under the Local Government Code, as well as any protests relating to alleged improprieties with the bidding process.
- A. This limitation does not include protests relating to staff recommendations as to award of this bid. Protests relating to staff recommendations may be directed to the City Council by contacting the City Secretary.
 - B. Failure to Protest within the time allotted shall constitute a waiver of any protest.
- 25. ALTERING BIDS:** Bid cannot be altered or amended after submission deadline. Any interlineation, or alteration made before opening time for sealed bids must be initialed by the signer of the bid, guaranteeing authenticity.
- 26. CHANGE ORDERS:** No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders to the contract will be made in writing by the City of Lewisville.

- 27. ADDENDA:** Any interpretations, corrections or changes to this Invitation for Bid and Specifications will be made by ADDENDA. Sole authority to issue addenda shall be vested in the City of Lewisville. Bidders shall acknowledge receipt of all addenda on bid form.
- 28. MINIMUM STANDARDS FOR RESPONSIBLE PROSPECTIVE BIDDERS:** A prospective bidder must affirmatively demonstrate bidder's responsibility. A prospective bidder must meet the following requirements:
- A. Have adequate financial resources, or the ability to obtain such resources as required;
 - B. Be able to comply with the required or proposed delivery schedule;
 - C. Have a satisfactory record of performance;
 - D. Have a satisfactory record of integrity and ethics;
 - E. Be otherwise qualified and eligible to receive an award; and
 - F. The City of Lewisville may request representation and other information sufficient to determine bidder's ability to meet these minimum standards listed above.
- 29. BIDDER SHALL PROVIDE** with this bid response, all documentation required. Failure to provide this information may result in rejection of bid.
- 30. SUCCESSFUL BIDDER SHALL** defend, indemnify and save harmless the City of Lewisville and all its officers, agents and employees and all entities, their officers, agents and employees who are participating in this contract from all suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the successful bidder, or of any agent, employee, subcontractor or supplier in the execution of, or performance under, any contract which may result from bid award. Successful bidder shall pay any judgment with cost which may be obtained against the City of Lewisville and participating entities growing out of such injury or damages.
- 31. TERMINATION FOR DEFAULT:** The City of Lewisville reserves the right to enforce the performance of this contract in any manner prescribed by law or deemed to be in the best interest of the City in the event of breach or default of this contract. The City reserves the right to terminate the contract immediately in the event the successful bidder fails to 1) meet delivery schedules, or 2) otherwise perform in accordance with these specifications. Breach of contract or default authorizes the City to award to another bidder. Purchase elsewhere and charge the full increase in cost and handling to the defaulting successful bidder.
- 32. TESTING:** Testing may be performed at the request of the City without expense to the City.
- 33. REMEDIES:** The successful bidder and City of Lewisville agree that each party have all rights, duties, and remedies available as stated in the Uniform Commercial Code.
- 34. VENUE:** This agreement will be governed and construed according to the laws of the State of Texas. This agreement is performable in Denton County, Texas.
- 35. SILENCE OF SPECIFICATION:** The apparent silence of these specifications as to any detail or to the omission from it of a detailed description concerning any point shall be regarded as meaning that only the best commercial products and practices are to prevail. All interpretations of the specifications in this bid shall be made on the basis of this statement.
- 36. DEVIATIONS** from specifications and alternate bids must be clearly shown on the bid form with complete information attached to form. They may or may not be considered.

37. **NO EMPLOYEE** of the City of Lewisville who has a financial interest in a prospective vendor shall participate in submitting a bid or proposal to conduct work for the City.
38. **NO EMPLOYEE** of the City of Lewisville shall receive any compensation for or as a result of a contract for goods or services purchased by the City if that employee was in a position to influence the City with respect to the contract.
39. **ELIGIBLE BIDDER:** Bidders are limited to those persons or firms who are qualified and engaged in a full-time business and can assume liabilities for any performance or warranty service required.
40. **REJECTED ITEM(S):** Item(s) that are rejected for failure to meet prescribed minimum specifications shall be returned to the supplier at no cost to the City of Lewisville.
41. **INDEMNITY:** The City of Lewisville will not accept a contract that contains any provision causing the City of Lewisville to indemnify the vendor for any reason.
42. **VENDOR AGREEMENT:** Any vendor agreements (service, maintenance, etc.) to be signed by the City of Lewisville **must** be submitted with your bid.

**DIVISION 1 – GENERAL REQUIREMENTS
SECTION D1**

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FOR
SPECIAL CONDITIONS
DIVISION 1 GENERAL
REQUIREMENTS

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D1-1 SUMMARY OF WORK

A. General

1. The Plans, Special Conditions and Provisions Documents, and the rules, regulations, requirements, instructions, drawings or details referred to by manufacturer's name, number or identification included therein as specifying, referring or implying product control, performance, quality, or other shall be binding upon the Contractor. The specifications and drawings shall be considered cooperative; therefore, work or material called for by one and not shown or mentioned in the other shall be accomplished or furnished in a faithful manner as though required by all.

The order of precedence in case of conflicts or discrepancies between various parts of the Contract Documents subject to the ruling of the Engineer shall generally, but not necessarily, follow the guidelines listed below:

1. Contract Documents
2. North Central Texas Council of Governments Specifications

The following special conditions shall be applicable to this project and shall be given over any conflicts with the Contract Documents under the provisions stated above.

- a. Wherever the word OWNER appears in the Special Conditions, it shall be construed to mean the City of Lewisville.
2. Work Covered By Contract

The work to be performed is generally described in the Invitation to Bid and indicated in the Contract Documents. The manhole rehabilitation work to be completed under this contract shall be as indicated on Manhole Rehabilitation Schedule Section G and as described in the Contract Documents.

3. Contractor's Duties
 - a. Except as specifically noted, provide and pay for:
 - 1) Labor, materials, and equipment.
 - 2) Tools, construction equipment, and machinery.
 - 3) Samples, shipping costs, and tests.

- 4) Necessary utilities, such as water supply, electrical power, telephones, roads, fences, and sanitary facilities, including maintenance thereof.
 - 5) Other facilities and services necessary for proper execution and completion of work.
- b. Perform all the work described in these General Requirements except where specifically indicated to be done by others.
 - c. Pay legally required patent fees, sales, consumer, and use taxes.
 - d. Secure and pay for legally required permits, licenses, and government fees.
 - e. Give required notices.
 - f. Employ workmen and foremen with sufficient knowledge, skill, and experience to perform the work assigned to them.
 - g. Comply with codes, laws, ordinances, rules, regulations, orders, and other legal requirements of public authorities bearing on the conduct of the work.
 - h. Submit written notice to Owner's Representative of observed variance of Contract Documents from legal requirements. Any necessary changes will be adjusted as provided in the Contract for changes in the work.
 - i. Enforce discipline and good order among Contractor and subcontractor employees. Any person employed by Contractor or subcontractors who does not perform his work in a skillful manner, is incompetent, or acts in a disorderly or intemperate manner shall, at the written request of Owner, be removed from the project immediately and shall not be employed in any portion of the work without the approval of Owner.
 - j. Provide at all times facilities for access and inspection of the work by representatives of Owner and by official governmental agencies designated by Owner as having the right to inspect the work.
 - k. Cooperate with other contractors who may be performing work of Owner, and with Owner's employees working in the vicinity of the work done under the Contract.
 - l. Submit shop drawings on all materials and equipment to be installed on the project.
 - m. The labor classification and minimum wage rates herein were established pursuant to the Texas Prevailing Wage Law and shall govern on all work performed by the contractor or any sub-contractor on the site of the project

covered by these contract documents. At a minimum, the prevailing hourly rate of wages following shall be paid to all workers performing work under the contract. The scale of wages shall be posted by the contractor in a prominent and easily accessible place at the work site.

4. Contractor's Use of Premises

- a. Confine operations at site to areas permitted by law, ordinances, permits, and the Contract Documents.
- b. Do not load or permit any part of a structure to be subjected to any force that will endanger its safety.
- c. Comply with and enforce Owner's instructions regarding signs, advertisements, fires, and smoke.
- d. Assume responsibility for protection and safekeeping of products stored on premises.
- e. Do not discharge smoke, dust, or other contaminants into the atmosphere, or fluids or materials into any waterway as will violate regulations of any legally constituted authority.
- f. Move stored products which interfere with the operations of Owner or other Contractors.
- g. Obtain and pay for additional storage or work areas needed for operations.
- h. No alcohol shall be consumed on the site.
- i. Existing Manhole Steps

The steps of the existing manholes can not be guaranteed for safety, therefore, Contractor shall provide all necessary equipment to assure safe access and a safe working environment inside the manhole.
- j. Comply with Confined Space Entry as noted in Section D1-5 Control of Construction Site.

5. Existing Facilities

- a. The existing facilities will be in continuous operation during the construction period.

- b. Plan and conduct construction operations to avoid disturbing existing structures, piping, equipment, and services in any manner which will interrupt or impair operations, except as approved by Owner's Representative.
 - c. Submit for approval a construction sequence, and written explanations of the temporary facilities and appurtenances intended to be used in maintaining the uninterrupted operation of the existing sanitary sewer system and any other affected utilities.
6. Sequence of Construction
- a. The Contractor shall contact property owners 48 hours in advance describing the work to be performed on private property prior to any construction or rehabilitation work on that property.
 - b. Repair items associated with all manhole rehabilitation work except installation of watertight inserts, shall be performed in the presence of the Resident Engineer or such work will not be accepted by Engineer.
 - c. Excavation work shall be performed in an orderly manner so that all excavation work is completed in an area before moving to another area unless authorization is given by the Engineer or Owner.
 - d. Prior to final surface restoration, the Contractor shall insure that all testing has been completed and reviewed by the Engineer.
 - e. The Contractor shall submit to the Engineer each night the next days proposed activities.
 - f. The Contractor shall submit a weekly schedule on each Thursday for the next week's construction activities.
 - g. A revised monthly progress schedule shall be submitted with each payment request.
 - h. The City shall not reimburse the Contractor for any water used to perform the work as required in the contract.
 - i. The Contractor shall preserve all trees, shrubs, sprinkler systems, fences, and other property owner improvements located within the limits of the construction. The removal and/or replacement of the said property owner improvements by the Contractor shall be considered as a non-pay item unless noted otherwise.
 - j. All local residents who will be denied access to their driveways shall be notified by the Contractor two (2) working days prior to the closure of their access.

- k. All driveways which are open cut shall have at least a temporary riding surface at the end of each day and will be considered a non-pay item.
- l. All cast iron frames and lids from manhole structures which are required to be removed per the Manhole Repair Work Item Schedule (Section G), shall be disposed by the Contractor as a non-pay item.

7. Abbreviations

The following abbreviations as used in the Contract Documents have the listed meanings:

- Aampere
- AASHTOAmerican Association of State Highway and Transportation Officials
- ACIAmerican Concrete Institute
- ANSIAmerican National Standards Institute
- AREAAmerican Society for Testing and Materials
- AWWAAmerican Water Works Association

- Bilbasic impulse insulation level
- BOD.....biochemical oxygen demand
- btu.....British Thermal Unit

- Cdegrees Celsius
- cccubic centimeter
- cfcubic foot
- cfm.....cubic feet per minute
- CoCompany
- concconcrete
- CorpCorporation
- CRSIConcrete Reinforcing Steel Institute
- cucubic
- cycubic yard

- Fdegrees Fahrenheit
- FIA.....Factory Insurance Association
- FMFactory Mutual
- fpmfeet per minute
- fpsfeet per second
- ftfeet
- FSFederal Specifications

- ggram
- gagauge

galgallon
 gpdgallons per day
 gpmgallons per minute

H-O-AHand-off-automatic
 hhour
 HP.....horsepower
 hzhertz

IEEEInstitute of Electrical and Electronic Engineers
 Inc.Incorporated

LLiter
 lbpound
 lbspounds

maxmaximum
 minminimum
 mg/Lmilligrams per liter
 mgdmillion gallons per day
 mmMilitary Specifications

NBBPVINational Board of Boiler and Pressure Vessel Inspectors
 NBSNational Bureau of Standards
 NECNational Electrical Code
 NEMANational Electrical Manufacturers Association
 NFPANational Fire Protection Association
 nonumber
 OSHAOccupational Safety and Health Administration

ppmparts per million
 psfpounds per square foot
 psipounds per square inch gauge
 pvcpolyvinyl chloride

SDHPTTexas State Department of Highways and Public
 Transportation
 sfsquare feet
 sqsquare
 SSPCSteel Structural Painting Counsel
 sysquare yard

Vvolt

ULUnderwriters Laboratory
 U.SUnited States

8. Archeological Discoveries

No archeological or historic sites are anticipated within the limits of this project however, if archeological sites or historic structures are discovered after construction operations have begun, the Contractor shall immediately cease operations in that particular area and notify the Owner and the Texas Historical Commission. The Contractor shall take reasonable steps to protect and preserve the discoveries until the Owner's representative and the ANRC inspects the discoveries. The Owner will promptly coordinate with the Texas Historical Commission and any other appropriate agencies to obtain any necessary approvals or permits to enable the work to continue. The contractor shall not resume work in the area of the discovery until authorized to do so by the Owner.

9. Endangered Species

No endangered species are anticipated to live within the limits of this project however, if a threatened or endangered species is encountered during construction, the Contractor shall immediately cease work in the area of the encounter and notify the Owner, who will immediately implement actions in accordance with the ESA and applicable State statutes. These actions shall include reporting the encounter to the Owner and the U.S. Fish and Wildlife Service, obtaining any necessary approvals or permits to enable the work to continue, or implement other mitigative actions. The Contractor shall not resume construction in the area of the encounter until authorized to do so by the Owner.

END OF SECTION D1-1

D1-2 CUTTING AND PATCHING

A. General

1. Description

- a. Cutting and patching shall include the cutting (including excavation), fitting, or patching necessary to:
 - 1) Remove and replace defective work.
 - 2) Remove and replace work not conforming to the Contract Documents.
 - 3) Remove samples of completed work for specified testing.
 - 4) Install specified work in existing construction.
 - 5) Inspection of covered work.
 - 6) Obtaining samples of completed work for testing.
 - 7) Alteration of completed work.
- b. Work performed by another Contractor shall not be cut or altered without written consent of Owner's Representative.

2. Submittals

- a. Before doing any cutting submit a written notice to Owner's Representative requesting consent, including:
 - 1) Description of affected work.
 - 2) Necessity for cutting.
 - 3) Scope of cutting and patching.
 - 4) Trades and products to be used and extent of refinishing.
- b. Prior to doing cutting and patching identified in writing by Owner's Representative as additional work, submit a cost estimate.
- c. Notify Owner's Representative when work is to be performed.

B. Materials

Materials used for replacement of work removed shall comply with the Specifications for the type of work to be done.

C. Execution

1. Provide shoring, bracing, and support as necessary to maintain structural integrity of the project and to conform with all safety requirements established by law.
2. Protect adjacent portions of work and existing facilities from damage due to cutting and patching operations.
3. Execute excavating and backfilling as specified.
4. Restore work which has been cut or removed. Install new products to provide completed work meeting all requirements of the Contract Documents.
5. Refinish entire surfaces as necessary to provide an even and uniform finish.
6. Any manhole inlet or outlet called to be permanently plugged shall be done in such a manner that the end of the plug is visible from the ground surface.

D. Measurement and Payment

Cutting and patching required to perform the work will not be measured nor paid for separately. The cost shall be included in the Contract Price for the items of work that require cutting and patching.

END OF SECTION D1-2

D1-3 SUBMITTALS

A. Progress Schedule

1. Prepare a detailed progress schedule in graphic form showing proposed dates of starting and completing each major division of the work, monthly completion percentages, and anticipated monthly payment requests.
2. The schedule shall be consistent with the time and order of work requirements of the Specifications, and shall be the basis of Contractor's operations.
3. A condensed critical path method schedule is preferred but another practicable form of presentation (bar chart) will be acceptable.
4. Submit three copies to Engineer on or before the Pre-construction Conference. The Notice to Proceed shall be given contingent to the receiving and approval of the Construction Schedule.
5. At the end of every pay request period, submit a revised schedule showing the current status of the work as compared to the projected status. The current application for a progress payment will not be processed until the revised schedule is delivered to Engineer.

B. General

1. Shop Drawings, Project Data, and Samples
 - a. General

Submit to Owner's Representative shop drawings, project data, and samples required by the Specifications.
 - b. Shop Drawings
 - 1) Shop drawings are original drawings prepared by the Contractor, subcontractors, suppliers, or distributors which illustrate some portion of the work and show fabrication, layout, setting, or erection details of equipment, materials, and components.
 - 2) Unless otherwise instructed, submit to Owner's Representative for review and approval three prints of each plan or two prints and one

reproducible sepia or reproducible on vellum. Owner Representative will return with review comments one print or one reproducible.

- 3) Shop drawings shall be 8-1/2 by 11 inches, 8-1/2 by 14 inches or standard size plans, or as directed by Owner Representative, and shall be clearly identified as to location of the equipment, material, and apparatus in the work.
- 4) Fold drawings to an approximate size of 8-1/2 by 11 inches in such a manner that the title block will be located in the lower right hand corner of the exposed surface. Roll, do not fold, reproducible copies of drawings.
- 5) Furnish Owner Representative, as requested, without extra charge, the number of complete sets of prints of shop drawings as Owner Representative shall request for office files and for use in the field.

c. Project Data

- 1) Project data are manufacturers' standard schematic drawings, catalog sheets, brochures, diagrams, schedules, performance charts, material data sheets, illustrations, parts lists and other standard descriptive data.
- 2) Modify drawings to delete information not applicable and to add information applicable to the project.
- 3) Mark copies of printed material to identify pertinent materials, products, or models.
- 4) Show dimensions and clearances required, performance characteristics and capacities, and wiring diagrams and controls.
- 5) Submittal procedures shall be the same as for shop drawings.

d. Samples

- 1) Samples are examples to illustrate materials, equipment, or workmanship, and to establish standards by which completed work is judged.
- 2) Samples submitted shall be of sufficient size and quantity to illustrate functional characteristics of product or material and full range of colors available.
- 3) Field samples and mock-ups when required by the specifications shall be erected at the project site where directed.

e. Contractor Responsibilities

- 1) Review and approve shop drawings, project data, and samples before submitting them.
- 2) Verify field measurements, field construction criteria, catalog numbers, and similar data.
- 3) Coordinate each submittal with the requirements of the Contract Documents.
- 4) Submit shop drawings for major equipment items in one package to permit checking complete installation details.
- 5) In a clear space above the title block, or on the back, hand stamp the following, and enter the required information:

Name of Owner – City of Lewisville

Project Name - City of Lewisville
CDBG Morningside Line & MH Rehab Project

Date _____

Identification _____

Contract Drawing No. _____

Specification Section _____

This document has been checked for accuracy of content and for compliance with the Contract Documents and is hereby approved. The information contained herein has been coordinated with all involved Contractors.

Contractor _____

Signed _____

- 6) Contractor's responsibility for errors, omissions, and deviations from requirements of the Contract Documents in submittals is not relieved by Owner's Representative's review.
- 7) Notify Owner's Representative, in writing at time of submittal, of deviations in submittals from requirements of the Contract Documents.

- 8) Do not install materials or equipment which require submittals until the submittals are returned with Owner's Representative's stamp and initials or signature indicating review.
- 9) Revise returned shop drawings as required and resubmit until final approval is obtained. Indicate on the drawings any changes which have been made other than those requested by Owner's Representative.
- 10) Submit new project data and samples when the initial submittal is returned disapproved.
- 11) No claim will be allowed for damages or extension of time because of delays in the work resulting from rejection of material or from revision and resubmittal of shop drawings, project data, or samples.

f. Owner's Representative's Duties

- 1) Owner's Representative will review submittals for compliance with the Contract Documents and with the design concept of the project.
- 2) Review of a separate item does not constitute acceptance of an assembly in which the item functions.
- 3) Owner's Representative will affix a stamp to the returned copy of each submittal. The stamp will be marked to indicate "Furnish as Submitted", "Furnish as Corrected", "Rejected", or "No Review Required". The stamp will be initialed or signed certifying the submittal review.

2. Photographs of Surface Conditions

- a. A still picture (photographic or digital images with a 2 megapixel minimum) of existing surface conditions shall be provided for all manhole repairs. A log of photo numbers will be required with the submittal of all photos.
- b. The following information shall be provided with each photo.
 - 1) Date of photograph.
 - 2) Cover enough area to show all existing conditions within a 10' radius of the work area.
 - 3) Job and/or manhole number and work to be performed.

- c. Contractor shall have the option of providing a Video Tape Recording of the surface conditions. Audio descriptions on the tape will give job and/or manhole number and location of each site. Quality of video shall be acceptable to the Owner's Representative.
 - d. Before beginning work in each Basin or Mini System, Contractor shall complete and furnish the Surface Video Documentation to the Engineer for approval. The Contractor may begin work in that respective area upon authorization from the Engineer in writing.
3. Final Inspections
 - a. Notify Owner in writing when project, or designated portion of project, is substantially complete.
 - b. Owner's Representative will make an inspection of the substantially completed work, and prepare and submit to Contractor a list of items to be completed or corrected.
 - c. Take immediate steps to remedy the listed deficiencies, and notify Owner in writing that the project is complete and ready for final inspection.
 - d. Owner's Representative will make a final inspection and, if he considers the work is complete, he will notify Owner that the work is ready for final acceptance.
4. Closeout Submittals
 - a. Special guarantees and bonds.
 - b. Certificates of inspection required by laws and ordinances for mechanical and electrical work, and any other legally required inspections.
 - c. Contractor's Waiver of Liens.
 - d. Separate Waivers of Lien for subcontractors, suppliers, and others with lien rights against property of Owner.
 - e. Final payment estimate.
5. Work Schedule
 - a. Prepare a detailed weekly work schedule and submit the schedule to the Owner's Representative on the Thursday before the schedule is to take effect.

- b. Contractor shall update the weekly work schedule on a daily basis so to advise the Owner's Representative where and on what the Contractor will be working.
- c. Work schedule shall include, but not be limited to, a listing of job and/or manhole numbers that will be worked on a daily basis and a brief description of the type of work to take place.

C. Measurement and Payment

Payment will be at the contract lump sum price for Video Documentation which price shall include all labor, equipment, and materials necessary to complete the work. No other Contract Prices are established for Submittals.

END OF SECTION D1-3

D1-4 MATERIAL AND PERFORMANCE TESTING

A. General

1. Scope
 - a. Perform the inspections and tests required by the Specifications.
 - b. Provide product certification as required by the Specifications.
 - c. Neither observations by Owner's Representative, nor inspections, tests, or approvals by other than Contractor, shall relieve Contractor from his obligation to perform the work in accordance with the requirements of the Contract Documents.
2. Testing Laboratory Services
 - a. Employ the services of an independent testing laboratory (Kleinfelder is the City's preferred testing lab) to perform specified services.
 - b. Obtain approval of Owner before employing laboratory. Testing laboratories other than Kleinfelder may be used with prior City approval.
 - c. Laboratory shall meet "Recommended Requirements for Independent Laboratory Qualification" published by the American Council of Independent Laboratories.
 - d. Laboratory shall meet basic requirements of ASTM E329, "Standards of Recommended Practice for Inspection and Testing Agencies for Concrete and Steel as Used in Construction".
3. Laboratory Duties
 - a. Perform specified tests and services.
 - b. Comply with specified standards, ASTM, other recognized authorities, and as specified.
 - c. Ascertain compliance with requirements of Contract Documents and so note in writing on all reports.
 - d. Promptly notify Owner's Representative and Contractor of irregularities or deficiencies of work observed during performance of services.
 - e. Promptly submit three copies of reports of inspections and tests to Owner's Representative.

- f. Include in the reports, the date, project title, number, name and signature of inspector, date of inspection or sample, record of temperature and weather, date of test, identification of product and Specification Section, location in project, type of test, and observations regarding compliance with requirements.

4. Contractor's Responsibilities

- a. Cooperate with laboratory personnel.
- b. Provide laboratory with samples of materials to be tested in required quantities.
- c. Furnish to the Owner's Representative three copies of test results.
- d. Provide facilities for storage and curing of test samples.
- e. Notify Owner's Representative sufficiently in advance of time and place of tests to be made at point of manufacture, assembly, or fabrication to permit Owner's Representative to witness tests if he so desires.

B. Measurement and Payment

No Contract Prices are established for Material and Performance Testing.

END OF SECTION D1-4

D1-5 CONTROL OF CONSTRUCTION SITE

A. General

1. Removal of Debris

Keep the work sites free from accumulating waste materials and rubbish caused by his work or employees. All materials and equipment required on the site shall be kept in such a manner so as to cause a minimum of inconvenience and nuisance to other Contractors and the general public. The site shall be kept broom clean.

2. Traffic Control

- a. Contractor shall, at all times, conduct the work in such a manner as to insure least obstruction to vehicular and pedestrian traffic while paying particular attention to avoid inconvenience in hospital and school zones. Notify Owner's Representative at least three work days in advance of starting any construction work which might inconvenience or endanger traffic. A minimum of one lane shall be open to traffic at all times.
- b. Submit a traffic control plan to Owner, Owner's Representative, and appropriate highway official one week prior to closing any road. Contractor shall inform police, fire, public works, and bus service companies 24 hours before and on the day of closure.
- c. When any section or portion of road is closed to traffic, provide, erect, and maintain barricades, red flags, detour signs, and torches or lights at each end of the closed section, and at all intersecting roads.
- d. Contractor shall provide a sequencing arrow panel when performing construction on heavily traveled roads and streets. The sign panel shall consist of a minimum of 22 amber lamps. The lamps shall be divided into two groups of three arrowheads each with arrowheads of each group aligned or behind the other laterally and the arrowheads of separate groups being opposed.
- e. Replace any traffic sign or post which has been damaged or removed because of the contractor's operations.
- f. Contractor shall provide access to private property. Driveways, sidewalks, and alleys shall not be blocked for periods greater than two hours.

3. Fencing shall be placed around open excavation or trenches at the end of a day in a manner acceptable to the Owner's Representative and the Owner. Fencing and placement of same shall meet the approval of the Owner's Representative.
4. Equipment Operation
 - a. Where the Contractor's equipment is operated on any portion of a traveled surface or structures used by traffic on or adjacent to the section under construction, the Contractor shall clean the traveled surface of all dirt and debris at the end of each day's operations. The cost of this work shall be included in the unit price bid and no additional compensation will be allowed.
 - b. Protect traveled surfaces and structures on or adjacent to the work, in a manner satisfactory to the Owner's Representative, from damage by lugs or cleats or equipment. Walking of tracked-rolled equipment directly on paved streets, driveways, curbs, or sidewalks shall not be allowed.
 - c. Equipment used in the performance of the work shall comply with legal loading limits established by the statutes of State or local regulations when moved over or operated on any traveled surface or structure unless permission in writing has been issued by the Owner's Representative. Before using any equipment which may exceed the legal loading, the Contractor shall secure a permit, allowing ample time for an analysis of stresses to determine whether or not the proposed loading is within safe limits. The Owner will not be responsible for any delay in construction operations or for any costs incurred by the Contractor as a result of compliance with the above requirements.
5. Utilities
 - a. The Contractor shall notify public and private utility companies which may have overhead or underground facilities in the area at least 48 hours before construction begins. Contractor must call Texas811 at 1-800-344-8377 for locating utilities. The Contractor shall make necessary arrangements for having these companies locate, protect, brace or move their facilities as may be necessary for construction of the improvements. Costs incurred due to the moving, bracing, or protection of utilities or in satisfying the requirements of the utility companies shall be incidental to the cost of the proposed improvement.
 - b. The Contractor shall proceed with caution with excavation operations so that the exact location of underground utilities and structures, both known and unknown, may be determined. The Contractor shall take all reasonable precautions against damage to the utility or structure. However, in the event of a break in an existing utility, he shall immediately notify a responsible official from the organization operating the utility. The Contractor shall lend all possible assistance in restoring service, and shall assume all costs connected with the repair of any damaged utility.

- c. It is understood and agreed that the Contractor has considered in his bid all of the permanent and temporary utility appurtenances in their present or relocated positions and that no additional compensation will be allowed for any delays, inconvenience, or damage sustained by him due to any interference from the said utility appurtenances or the operation of moving them either by the utility companies or by him; or on account of any special construction methods required in prosecuting his work due to the existence of said appurtenances either in their present or relocated positions.
- d. The Drawings do not show all underground or above ground utilities. The information shown concerning utilities is based on information provided by the Utility Owner. This information is not guaranteed to be correct.

6. Accident Reporting

a. Notification

Accidents occurring on the job which damage public or private property, or result in injury to workers or other persons, shall be promptly reported to the Police Department.

b. Utilities

Accidents involving utilities shall also be reported to them. This applies to all accidents, including, but not limited to, traffic accidents, broken pipe lines, power and telephone facilities and damage to adjacent properties.

7. Confined Space Entry

The latest version of the U.S. Department of Labor, Occupational Safety and Health Administration Standards, 29 CFR Part 1910, Permit-Required Confined Spaces for General Industry shall be the minimum governing requirements for confined space entry.

8. Archeological Discoveries

No archeological or historic sites are anticipated within the limits of this project however, if archeological sites or historic structures are discovered after construction operations have begun, the Contractor shall immediately cease operations in that particular area and notify the Owner and the Texas Historical Commission. The Contractor shall take reasonable steps to protect and preserve the discoveries until the Owner's representative inspects the discoveries. The Owner will promptly coordinate with the Texas Historical Commission and any other appropriate agencies to obtain any necessary approvals or permits to enable the work to continue. The contractor shall not resume work in the area of the discovery until authorized to do so by the Owner.

9. Endangered Species

No endangered species are anticipated to live within the limits of this project however, if a threatened or endangered species is encountered during construction, the Contractor shall immediately cease work in the area of the encounter and notify the Owner, who will immediately implement actions in accordance with the ESA and applicable State statutes. These actions shall include reporting the encounter to the Owner, ANRC, and the U.S. Fish and Wildlife Service, obtaining any necessary approvals or permits to enable the work to continue, or implement other mitigative actions. The Contractor shall not resume construction in the area of the encounter until authorized to do so by the Owner.

B. Measurement and Payment

No Contract Prices are established for Control of Construction Site.

END OF SECTION D1-5

D1-6 MEASUREMENT AND PAYMENT

A. General

The Contract price shall cover all Work required by the Contract Documents. All costs in connection with the proper and successful completion of the Work, including furnishing all materials, equipment, supplies, and appurtenances; providing all equipment and tools; and performing all necessary labor and supervision to fully complete the Work, shall be included in the unit and lump sum prices bid. All Work not specifically set forth as a pay item in the Agreement shall be considered a subsidiary obligation of Contractor and all costs in connection therewith shall be included in the Contract prices.

1. Estimated Quantities

Quantities stipulated in the Bid Form or Contract Documents are approximate and are to be used only (a) as a basis for estimating the probable cost of the Work and (b) for the purpose of comparing the bids submitted for the Work. The actual amounts of work done and materials furnished under unit price items may differ from the estimated quantities. The basis of payment for work and materials will be the actual amount of work done and materials furnished. Contractor agrees that he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts therefore.

2. Measurements and Payments

Payments will be made in accordance with the General Conditions for actual quantities constructed or installed in accordance with the Contract Documents, be they more or less than the listed quantities; said quantities being measured as hereinafter specified.

3. Items Not Listed In Contract

There shall be no measurement or separate payment for any items not listed in the Contract and all costs pertaining thereto shall be included in the contract unit prices for other items listed.

END OF SECTION D1-6

D1-7 MANHOLE TESTING

A. General

1. Scope

This section describes manhole testing to effectively confirm the watertight integrity of existing manholes following infiltration related repairs and inflow related repairs.

2. Description

- a. Infiltration may be observed in manhole defects at manhole walls, pipe seals or bench/trough areas. Infiltration related repairs are intended to eliminate leakage of groundwater into manholes.
- b. Inflow may be observed in manhole defects at manhole frames, covers, frame seals, grade adjustments, grade adjustment seals, corbels, or walls. Inflow related repairs are intended to eliminate sources of surface water entry that become active during rainfall events.

3. Testing, Observations and Guarantee Period

- a. The testing required shall be performed by the Contractor at all rehabilitated manholes and documented to the satisfaction of the Engineer.
- b. Any rehabilitated manholes that are observed to be leaking by the Engineer shall be subject to additional repairs and retested by the Contractor at no additional cost to the Owner.

B. Materials

Not specified.

C. Execution

1. Vacuum Testing

- a. All manholes that are coated by the contractor shall be vacuum tested by the Contractor in the presence of the Engineer for sources of infiltration. Testing will be made during high groundwater conditions, wherever possible.
- b. Manholes shall be tested after installation with all connections (existing and/or proposed) in place. Drop-connections and gas sealing connections shall be installed prior to testing. The lines entering the manhole shall be temporarily plugged with the plugs braced to prevent them from being drawn into the manhole. The plugs shall be installed in the lines beyond drop-connections, gas sealing connections, etc. The test head shall be placed inside the frame at the top of the manhole and inflated in accordance with the manufacturer's recommendations. A vacuum of 10 inches of mercury shall be drawn, and the vacuum pump will be turned off. With the valve closed, the level of vacuum shall be read after the required test time. If the drop in the level is less than 1-inch of mercury (final vacuum greater than 9 inches of mercury), the manhole will have passed the vacuum test. After a successful test, the temporary plugs will be removed. The required test time is determined from Table I.

| Table I | | | |
|---|----------|----------|----------|
| MINIMUM TIME REQUIRED FOR A VACUUM DROP OF 1" H _g (10"H _g - 9"H _g) (MIN:SEC) | | | |
| DEPTH OF M.H. (DEPTH IN FT.) | 48" M.H. | 60" M.H. | 72" M.H. |
| 0 - 20' | :40 | :50 | 1:00 |
| 22' | :44 | :55 | 1:06 |
| 24' | :48 | 1:00 | 1:12 |
| 26' | :52 | 1:05 | 1:18 |
| 28' | :56 | 1:10 | 1:24 |
| 30' | 1:00 | 1:15 | 1:30 |
| ADDITIONAL 2' DEPTHS-ADD FOR EACH 2' | :04 | :05 | :06 |

- c. Manhole vacuum levels observed to drop greater than 1-inch of mercury (Final vacuum less than 9 inches of mercury) will have failed the test and will require additional rehabilitation. The Contractor shall make the necessary repairs at no additional compensation for only those work items completed by the Contractor. The manhole shall then be retested as described above until a successful test is made.

2. Infiltration / Inflow Testing

- a. All frame seal and pipe seal repairs shall be dyed water tested. Manholes shall be dye water tested in the presence of the Engineer. The dye test shall consist of applying a concentrated dye solution around the manhole frame, prior to backfilling and restoration. Dyed water shall be applied for at least ten (10) minutes.
- b. Manholes observed to be actively leaking will have failed the test and will not be acceptable. Manholes failing the test will require additional rehabilitation by the Contractor at no additional compensation. The Contractor shall be responsible for only those work items listed in the Manhole Rehabilitation Schedule, Section G. The manhole shall then be retested as described above until a successful test is made.

3. Spark Testing

After the coating or lining product(s) have set in accordance with manufacturer instructions, selected structures may be inspected for, at the discretion of the Engineer, holidays with high-voltage holiday detection equipment. Reference NACE RPO 188-99 for performing holiday detection. All detected holidays as indicated by the audible or visual signal of the test apparatus shall be marked and repaired by abrading the coating or lining surface with grit disk paper or other hand tooling method. After abrading and cleaning, additional coating or lining can be hand applied to the repair area. All touch-up/repair procedures shall follow the coating or lining manufacturer's recommendations. All surfaces shall be retested after the repairs at no additional cost to the Owner. Documentation on areas tested, results and repairs made shall be provided to Owner by Contractor.

Spark testing shall not be performed in any explosive environment.

The Contractor will not be required to perform Spark Testing on installed liners. The Owner reserves the right to perform this test on lined manholes with Owner's staff and equipment.

4. Adhesion Testing

Adhesion testing shall be performed on all coated or lined manholes and structures. Testing shall be conducted in accordance with ASTM D7234 as modified herein.

- a. For each test manhole a minimum of three 20 mm dollies shall be affixed to the coated surface; one at the cone area, one at the mid section, and one near the bottom of the structure.
- b. For larger structures a minimum of three 20 mm dollies shall be affixed to the coated surface at random locations within each 1000 square foot area or as otherwise agreed upon.
- c. The adhesive used to attach the dollies to the coating shall be rapid setting with tensile strengths in excess of at least twice the anticipated failure point (generally at least 1000 psi) and permitted to cure in accordance with manufacturer recommendations. The coating and dollies shall be adequately cleaned and prepared to receive the adhesive. Failure of the dolly adhesive shall be deemed a non-test and require retesting.
- d. Prior to performing the pull test, the coating shall be scored to the substrate, or within 10 mils of the substrate surface, by mechanical means without disturbing the dolly or coating system bond within the test area.
- e. Two of the three adhesion pulls in each test area shall exceed 200 psi and shall include substrate adhered to the back of the dolly or no visual signs of the coating product in the test hole. Pulls tests with results between 150 and 200 psi may be acceptable if more than 50 percent of the substrate in the test area is adhered to the dolly.
- f. Should a structure, or area, fail to achieve two successful pulls as described above, additional testing shall be performed at the discretion of the Owner or Project Engineer. Any areas detected to have inadequate bond strength shall be evaluated by the Project Engineer. Further bond tests may be performed in that area to determine the extent of potentially deficient bonded area and repairs shall be made by Contractor.
- g. All adhesion testing shall be performed by qualified personnel using calibrated equipment as specified by the applicable ASTM standard(s).
- h. All adhesion testing shall be documented and submitted in a consistent format detailing location, test values, description of the failure point/mode, scoring method employed, adhesive used, cure time of coating and adhesive and other data as deemed necessary by the Owner/Engineer.
- i. All adhesion test locations shall be repaired by the Contractor at no cost to the Owner.

D. Measurement and Payment

No contract unit prices are established for manhole testing. However, specific sections of the Contract Documents indicate that certain percentages of various contract prices will not be eligible for payment unless testing has been performed.

END OF SECTION D1-7

TABLE 1-9.2

(9 Arm Mandrel)

"D" DIMENSIONS FOR
ASTM D3034
SDR 35

| NOM. DIA. | L | For Deflection of | |
|-----------|----|-------------------|-------------|
| | | 3% (In.) | 5% (In.) |
| 8 | 8 | 7.71 | 7.56 |
| 10 | 10 | 9.63 | 9.45 |
| 12 | 10 | 11.46 | 11.26 |
| 15 | 12 | 14.03 | 13.78 |

(10 Arm Mandrels)

"D" DIMENSIONS FOR
ASTM D3034
SDR 35

| NOM. DIA. | L | For Deflection of | |
|-----------|----|-------------------|-------------|
| | | 3% (In.) | 5% (In.) |
| 8 | 8 | 7.72 | 7.58 |
| 10 | 10 | 9.65 | 9.48 |
| 12 | 10 | 11.48 | 11.29 |
| 15 | 12 | 14.06 | 13.82 |

**DIVISION 2 – SITE WORK
SECTION D2**

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FOR

SPECIAL CONDITIONS

DIVISION 2

SITE WORK

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D2-1 SITE PREPARATION

A. General

1. Clear areas necessary for performance of the work and confine operations to that area provided through easements, licenses, agreements and rights-of-way. Entrance upon any lands outside of that area provided by easements, licenses, agreements or public rights-of-way, shall be at the Contractor's sole liability.
2. Do not occupy any portion of the project site prior to the date established in the Notice to Proceed without prior approval of the Owner.

B. Materials

Not specified

C. Execution

1. General

Remove, relocate, reconstruct or work around natural obstructions, existing facilities and improvements encountered during site preparation as herein specified. Take care while performing site preparation work adjacent to facilities intended to remain in place. Promptly repair damage to existing facilities. Dispose of waste materials in a lawful manner off the work site.

2. Surface Obstructions

- a. Saw cut obstructions in straight lines or remove it to the nearest construction joint if located within five feet of the centerline of the trench. In no case shall the joint or line of cut be less than one foot outside the edge of the trench. Reconstruct surface obstructions removed to permit construction as specified and to the dimensions, lines and grades of original construction. Restore damaged utilities as required by the utility company at no additional cost to the Owner.
- b. Protect, move, or brace public and private utilities as specified in Section D1-5.

- c. Maintain mailboxes in the manner that the Postal Service requires in order to prevent interruption of mail delivery.
- d. Site preparation includes the removal of trees, shrubs, brush, crops, and other vegetation within the limits of the easements (right-of-way), or as may be provided for in licenses, permits and agreements. All efforts shall be made to retain existing landscaping. In the event that trees, shrubbery, and hedges cannot be saved, then prior approval of the Owner and the Owner's Representative must be obtained before the existing landscaping is removed.
- 1) Trees
- All trees shall be saved unless removal is approved by the Owner and the Owner's Representative. Trim trees in accordance with the Owner's instructions.
- 2) Shrubby
- Shrubby shall be saved unless removal is approved by the Owner and the Owner's Representative. Make reasonable efforts to save all shrubby by trimming, in accordance with acceptable pruning practices, and treating wound surfaces with a commercial pruning compound.
- 3) Small Plants and Flowers
- At least two weeks prior to the start of construction notify property owners of the proposed starting date so that the property owners can remove any small plants or flowers.
- e. Fences interfering with construction, and located within public rights-of-way or as may be allowed for in permits or agreements, may be removed only if the opening is provided with a temporary gate which will be maintained in a closed position except to permit passage of equipment and vehicles, unless otherwise herein specified. Fences within temporary construction easements may be removed provided that temporary fencing is installed in such a manner as to serve the purpose of the fencing removed.
- Fencing removed shall be restored to the condition existing prior to construction unless otherwise specified. The Contractor is solely liable for the straying of any animals protected or corralled or other damage caused by any fence so removed.

f. Private Sewer Facilities

Make every reasonable effort to protect private sewer facilities. Private sewer facilities are not shown on the Plans. When these facilities are disturbed or damaged by the work, make necessary repairs to the facilities to maintain continuous service prior to the close of the work day at no additional cost to the Owner.

g. Property Pins

Preserve property corners, pins and markers. In the event any property corners, pins, or markers are removed by the Contractor, such property points shall be replaced at the contractor's expense and shall be re-set by competent surveyors properly licensed to do such work. In the event such points are section corners or Federal land corners, they shall be referenced and filed with the appropriate authority.

h. Sodded and Landscaped Areas

Minimize disturbance to sodded and/or landscaped thoroughfares and areas on or adjacent to improved property. Do not use such areas as storage sites for construction supplies and insofar as practicable, keep free from stockpiles or excavated materials.

3. Subsurface Obstruction

- a. Where existing utilities and service lines are encountered, notify the Owner thereof at least 48 hours (not including weekends and/or holidays) in advance of performing any work in the vicinity. Excavate, install pipeline and backfill in the vicinity of such utilities in the manner required by the respective Owner and, if requested, under his direct supervision. The Contractor shall be responsible for damages to a public or private utility that may occur as the result of the construction.
- b. Protect, move, or brace public and private utilities as specified in Section D1-5.
- c. Make a reasonable effort to ascertain the existence of obstructions and locate obstructions by digging in advance of machine excavation where definite information is not available as to their exact location. Where such facilities are unexpectedly encountered and damaged, notify responsible officials and other affected parties and arrange for the prompt repair and restoration of service. Contractor shall call Texas Dig Tess or Texas811 prior to beginning construction.

D. Measurement and Payment

No contract prices are established for Site Preparation.

END OF SECTION D2-1

D2-2 REPLACEMENT OF MANHOLE FRAMES AND COVERS

A. General

1. Description

This Section describes replacement of manhole frames and covers. Manholes designated for replacement of frames and covers are listed on the Manhole Rehabilitation Schedule.

B. Materials

1. Frames

- a. Frame material shall be ERGO, Hinged, ductile iron conforming to ASTM A 48-83, Class 35 or better, or City approved equal. The frame shall exhibit a tensile strength of not less than 35,000 psi.
- b. Frames for standard manhole shall be ERGO, Hinged, ASTM A 48-83, Class 35 or better for Ductile Iron, or City approved equal.
- c. Bearing surfaces between the ring and cover shall be machine finished or ground to assure nonrocking fit in any position, and interchangeability.
- d. Bolt down frames shall be anchored mechanically to the manhole corbel.

2. Covers

- a. The replacement cover shall form a water resistant seal between the frame and manhole cover surface. The cover shall have concealed pick holes and a machined bearing surface on the bottom of the casting. The cover shall conform to ASTM A 48-83, Class 35 or better for ductile iron, ERGO, Hinged, or City approved equal. The cover shall have a tensile strength of 35,000 psi.
- b. A typical standard manhole cover design shall be ERGO, Hinged, Ductile Iron or City approved equal.
- c. Covers shall set flush with the rim of the frame and shall have no larger than a 1/8-inch gap between the frame and cover.
- d. Bearing surfaces shall be machine finished.

- e. Combined weights of manhole ring and cover shall not weigh less than 260 pounds. The size of the opening shall be 30". The words "SANITARY SEWER" shall be cast into the lid. Manhole lids shall be cast with the City of Lewisville logo.
3. Bolts for Bolt Down Covers
- a. Materials and Design
 - 1) The bolts for bolt down covers shall be ASTM A325 or better. They shall meet the manufacturer's recommendations as replacement bolts for the existing frame and cover.
 - b. Installation
 - 1) The bolts shall be installed as per the manufacturer's recommendations for the required ft/lbs of torque for tightening.
 - 2) All existing female bolt threads shall be thoroughly cleaned and those deemed as deteriorated and unusable by the Engineer shall be re-threaded.
 - 3) All gaskets encountered on bolt down covers shall be replaced. There will be no separate pay item for gaskets.
 - 4) The payment for replacement of bolts for bolt down covers shall include materials, labor and equipment for complete installation and be paid for per each cover. If the existing bolt down frame and cover is determined to be insufficient and cannot be reused, the Contractor shall notify the Engineer.

C. Execution

- 1. The contractor shall be responsible for supplying the required material for the replacement of manhole frames and covers, including the unloading, temporary storage, and transporting of the materials.
- 2. The replacement manhole frame shall be compatible with the replacement manhole cover specified insuring a water resistant seal between frame and cover.
- 3. Seal replacement frames to the existing manhole in accordance with Section D2-4.
- 4. Manhole frames that are observed to be cracked, broken, pitted, or contain gaps in the bearing surface preventing a water resistant seal shall be replaced.

5. Remove scrap frames and covers from site.
6. Contractor shall clean the existing bolt holes and re-tab if necessary.
7. The replacement manhole cover bolts shall be compatible with the existing waterproof manhole cover and frame insuring a water-resistant seal between frame and cover.
8. Manhole cover bolts found to be missing but not indicated on the Manhole Rehabilitation Schedule shall be replaced in accordance with this Section, if authorized by the City.
9. Manhole frames or covers that are observed to be defective or contain defective threads preventing a water-resistant seal shall be replaced in accordance with this Section, or Section D2-3 and Section D2-4.
10. Contractor shall make the manhole lid gasket available to the Resident Engineer for inspection, and if found to be defective by the Engineer, the gasket shall be replaced by the Contractor.

D. Measurement and Payment

1. Payment shall be based on the Contract Unit Price per manhole frame and cover or manhole bolts replaced and shall be for material only. Payment for sealing of the manhole frame and surface restoration shall be paid for in accordance with Section D2-4. Payment for replacement of the manhole cover, frame, or bolts not indicated on the Manhole Rehabilitation Schedule, but authorized to be replaced by the City, shall be paid for in accordance with this Section, or Section D2-3 and Section D2-4. No separate or additional payment will be made for any lid gaskets replaced.

END OF SECTION D2-2

D2-3 REPLACEMENT OF MANHOLE FRAME AND GRADE ADJUSTMENTS

A. General

1. Description

This section describes replacement of existing defective manhole frame grade adjustments and the installation of new adjustments where existing manholes must be raised. Manholes designated for replacement of frames are listed on the Manhole Rehabilitation Schedule. Installation of new adjustments where existing manholes must be raised will be designated by the Engineer. Materials designated for shallow manhole construction are given on the Drawings.

B. Materials

1. Precast Concrete Adjustment Rings

- a. Precast concrete grade adjustment rings and flattops shall conform to the requirements of ASTM C-478 and shall be one continuous structure. To accommodate steep surface grades, non-uniform precast adjustment rings may be manufactured so that they are two-inches deep on one side and three-inches deep on the opposite side. In no instance may any non-uniform precast adjustment rings be less than two-inches thick or be of multiple piece construction. Adjustment rings of uniform thickness shall be at least two inches thick.
- b. The maximum height adjustment to be provided by precast concrete adjustment rings shall be 24 inches or less.
- c. The replacement precast grade adjustments shall provide a structural capacity equal to or greater than the existing or specified manhole frame, and shall not affect the opening size or surface appearance.
- d. Cracked or multiple piece precast concrete grade adjustment rings will not be accepted.
- e. Flattop Section shall have a 30-inch diameter opening and the following minimum thickness:
 - 1) 8-inch in nontraffic areas for 48-inch diameter manhole
 - 2) 10-inch in non-traffic areas for 60-inch diameter
 - 3) 10-inch in traffic areas/design for H-20 loading

C. Execution

1. Existing Grade Adjustment Rings
 - a. Existing grade adjustment rings constructed of precast concrete may be reused provided they are not cracked, are in otherwise good condition, and approved by the City inspector prior to use.
 - b. Existing frame grade adjustments that are constructed of brick, block, or materials other than precast concrete rings shall be replaced.
2. Seal frame and grade adjustments in accordance with Section D2-4.
3. Existing flattops found to be defective shall be replaced.
4. Seal flattops in accordance with Section D2-4.

D. Measurement and Payment

1. Payment shall be made at the Contract Unit Price per vertical foot for new precast grade adjustments. This shall be for the cost of the new precast concrete adjustment material only. Payment for grade adjustments with a nonuniform depth shall be based on the average vertical depth dimension. All other material costs and labor costs shall be compensated in payment made at the Contract Unit Price for sealing of frame and grade adjustments.
2. Payment will not include the height of joint material.
3. Existing adjustments that are reinstalled are not eligible for payment.
4. Payment for sealing of the frame and grade adjustments shall be paid for in accordance with Section D2-4.
5. Payment for flattop replacement shall be at the Contract Unit Price per flattop. This shall be for the cost of the new flattop material only. All other material costs and labor costs shall be compensated in payment made at the Contract Unit Price for sealing of frame and grade adjustments.

END OF SECTION D2-3

D2-4 SEALING OF MANHOLE FRAME AND GRADE ADJUSTMENTS

A. General

1. Scope

This section governs the materials required and construction procedures for sealing manhole frames and grade adjustments. Manholes designated for Seal Frame and Grade Adjustment with Polyurea are listed on the Manhole Rehabilitation Schedule. All sealing of manhole frame and grade adjustments are intended to be completed from inside the manhole without removal of the frame or adjustments. Full replacement of the frame and adjustments shall only be performed when directed by Owner's Representative.

B. Materials

1. Bitumastic Gasket Material

Bitumastic gasket material shall meet or exceed Federal Specification SS-S-210A. The material shall show no signs of deterioration for a period of 30 days when immersed in solutions of acid, alkali or saturated hydrogen sulfide. Joints shall show no sagging when tested at 135F for a period of five days. Bitumastic Gasket Material shall be EZ-STIK or approved equal. Trowelable bitumastic material shall be GS-702 compound or equal.

2. Precast Grade Adjustments and Flattops shall be as specified in Section D2-3.

3. Concrete Bonding Agent

Bonding agent shall be Acyrl #60 as manufactured by the Thuro-Seal Company or equal.

4. Portland Cement Concrete

As specified in Section D2-9.

5. Polyethylene

Minimum thickness of 4 mils.

6. Polyurea (ElastaSeal® or approved equal) (Chosen Sealant)

Primer coat:

- Specific gravity > 1.0
- >90 % solids as measured by ASTM D2369
- Elongation 650 +/- 50 as measured by ASTM D412
- Adhesive strength > 700 psi on steel or concrete as measured by Eclometer 109
- Tensile strength = 3200 +/- 50 psi as measured by ASTM D412
- Tear resistance = 325 +/- 10 psi as measured by ASTM D624
- Nonflammable as measured by ASTM D-93 in a Pensky-Martens closed cup
- Temperature Range -65 to 200 F
- Minimal water absorption capacity (<0.5%)

Top Coat

- Specific gravity > 1.0
- >99 % solids as measured by ASTM D2369
- As applied, solids greater than 70%
- Ultimate Elongation equal to or greater than 850% +/- 50 as measured by ASTM D412
- Elongation as applied equal to or greater than 325% +/- 10 as measured by ASTM D412
- Adhesive strength > 700 psi on steel or concrete as measured by Eclometer 109
- Tensile strength = 2300 +/- 50 psi as measured by ASTM D412
- Tear resistance = 345 +/- 10 psi as measured by ASTM D624
- Nonflammable as measured by ASTM D-93 in a Pensky-Martens closed cup
- Temperature Range -65 to 200 F
- Kevlar® fiber (Aramid Fiber Reinforcer)
- Minimal water absorption capacity (<0.5%)
- Shore A Hardness equal to 75 +/- 5 as measured by ASTM 2240

Neither material shall contain VOCs. The final sealing system shall remain flexible with time to account for surface loading variations.

C. Execution

1. Excavation (Only Required When Directed by Owner's Representative)

a. Nonpaved Areas

Excavate adjacent to the manhole to expose the entire frame to a minimum depth of 6-inches below the top of the structurally sound structure. Limit excavation to a 6-foot by 6-foot work area. The sides of the trench shall not deviate from the vertical for more than 1/2 inch for each foot of depth.

b. Paved Areas

Make a square or rectangular full depth sawcut and remove the pavement by breaking out from the sawcut toward the manhole to avoid breaking the frame. Do not use pavement breaking equipment in the sawcut. Frames broken during excavation shall be replaced at the Contractor's expense. Excavate the work area to expose the entire frame to a minimum depth of 6-inches below the top of the structurally sound structure.

2. Sealing Procedure

- a. Remove manhole frame from the manhole structure only when directed to by Owner's representative. Separate and observe the condition of the grade adjustments. If the grade adjustments are loose, deteriorated, broken, or show structural defects replace them in accordance with these Specifications. Replace adjustments that are constructed of brick, block, or materials other than precast concrete rings with precast concrete rings, or where necessary, and approved by the Owner's Representative, a precast flattop section. Precast concrete and rubber rings, or a precast concrete flattop sections will be the only adjustments allowed.
- b. In brick or block manholes where it is difficult to determine where grade adjustments and walls meet, replace the upper portion of the manhole to a point 24 inches below the frame. If the walls or cone section below this level are structurally unsound, notify the Owner's Representative prior to replacement of the grade adjustments or manhole frame. Existing brickwork, which is structurally satisfactory, if damaged by the Contractor shall be replaced at the Contractor's expense. Replacement of brick sections as noted in this area shall only be performed at the direction of the Owner's representative.
- c. Wire brush manhole frame and exposed manhole surfaces to remove dirt and loose debris. Coat exposed manhole surfaces with an approved bonding agent followed with an application of a quick setting hydraulic cement to provide a smooth working surface as thin as possible.
- d. If the inside diameter of the manhole is too large to safely support new adjustments or frame, then a flattop section shall be installed.
- e. Joint surfaces between the frame, adjustments, and cone section shall be free of dirt, stones, debris, and voids to ensure a watertight seal. Place a flexible gasket joint material, minimum 1/2 inch thick, in two concentric rings along the inside and outside edge of each joint. Position the butt joint for each length of joint material on opposite sides of the manhole. No steel shims, wood, stones, or any material not specifically accepted by

the Owner's Representative may be used to obtain final surface elevation of the manhole frame.

- f. When precast concrete grade adjustment rings are placed on the manhole structure to obtain proper grade, no more than 24 vertical inches may be used, unless approved by the Owner's Representative.
- g. Seal the rubber manhole adjusting ring to the precast concrete adjusting ring and the manhole frame as shown on the drawings.
- h. In paved areas or future paved areas, castings shall be installed by using a straight edge not less than ten (10) feet long so that the top of casting will conform to the slope and finish elevation of the paved surface. The top of the casting shall be 1/8 inch below the finished elevation. Allowances for the compression of the joint material shall be made to assure a proper final grade elevation.
- i. Manhole rims in parkways, lawns and other improved lands shall be at an elevation not more than one (1) nor less than one-half (1/2) inch above the surrounding ground. Backfill shall provide a uniform slope from the top of manhole casting for not less than three (3) feet each direction to existing finish grade of the ground. The grade of all surfaces shall be checked for proper slope and grade by string lining the entire area regraded near the manhole.
- j. Manholes in open fields, unimproved land, or drainage courses shall be set as required by the Owner's Representative.
- k. On non-paved manholes, exterior surfaces of all exposed grade adjustments and four inches below sound structure shall be cleaned with a wire brush and then waterproofed with trowelable bitumastic gasket material in accordance with the manufacturer's specifications. A protective polyethylene cover shall be placed over the waterproofing material when backfilling, following sealing of the frame and grade adjustment.

3. Backfill (Only Performed at Direction of Owner's Representative)

a. Non-paved

Excavated material subject to review of the Engineer shall be used for backfill and mechanically compacted following sealing of the frame and grade adjustments. Bentonite may be added to backfill at the Contractor's discretion. The level of the backfill shall be to one inch above the frame

bottom with the removed topsoil being placed on top of the compacted impervious backfill prior to replacement of sod.

b. Paved

Portland cement concrete(c.f. Section D2-16) shall be used for backfill following sealing and testing of the frame and grade adjustments to prevent compaction of the joint material and extend to 6 inches below the top of structurally sound structure as shown on the Detail for Manhole Restoration.

4. Restoration

Restore surfaces in accordance with Section D2-16. Grassed areas shall be replaced with sod to match existing conditions. Pavement replacement shall match existing pavement material. Restoration of all surfaces will not be paid for separately.

5. Testing of Rehabilitated Frame and Grade Adjustment Seals.

Test rehabilitated frame and grade adjustment seals for water tightness in accordance with Section D1-7.

D. Measurement and Payment

Items listed below shall be paid for separately. Cost of all items not specifically listed for separate payment shall be considered incidental to the contract.

1. Seal Frame and Grade Adjustment with Polyurea.
2. Seal Corbel with Polyurea.

Unit Price for sealing frames and grade adjustments shall be eligible for 60 percent payment after the repair is made, an additional 10 percent is eligible after testing is complete and an additional 30 percent is eligible after restoration is complete (less retainage if applicable).

The Unit Price bid for these items shall include all labor and equipment necessary to complete the work described, including, but not limited to, sawcut, pavement removal, excavation, sealing of manhole frame and adjusting rings, backfill, testing, pavement repair, seed, and sod. The cost of grade adjustment materials shall be paid in accordance with Section D2-3.

END OF SECTION D2-4

D2-5 COMPLETE AND PARTIAL REPLACEMENT OF MANHOLES

A. General

1. Description

This section describes complete and partial replacement of manholes. ARMOROCK concrete manholes are required per the City of Lewisville for all complete and partial replacement of manholes in this project.

B. Materials

1. Precast ARMOROCK concrete manholes will be required for complete manhole replacements and precast ARMOROCK concrete sections will be required for partial replacement of manholes. Manholes and sections shall conform to the requirements of ASTM C-478 and shall be as specified in Section D2-9.
2. Frames and covers shall be as specified in Section D2-2.
3. Exterior surfaces of manhole sections shall be coated with two mop coats of coal tar epoxy paint, Kop Coat "Bitumastic Black Solution", Tnemec, "46-450 Heavy Tnemecol", or equal. Dry film thickness shall be a minimum of 14.0 mils per coat. Recoating shall be done in accordance with manufacturer's recommendations.
4. Opening for each connecting pipe shall be circular with a compression type flexible rubber gasket cast integrally into the manhole wall. Flexible gaskets shall be manufactured in accordance with rubber joint specification ASTM C 443 and shall meet the performance and test requirements of ASTM C 425 for compression joints. Flexible gaskets shall include a coupling with O-Ring Gasket, A-Lok, Presswedge, or equal.
5. Preformed and trowelable bitumastic joint sealants shall be EZ-STIK, or equal. The minimum dimension of preformed material shall be one-half (1/2) inch square.
6. Backfill shall be in accordance with Section D2-7.
7. Rubber couplings shall be Non-Shear as manufactured by Mission Rubber Co., Fernco, DFW, or equivalent. Rubber couplings shall be fastened using two type C-305 stainless steel adjustable clamps to provide a leakproof seal. Encase the joint with Controlled Low Strength Material (CLSM) with greater than or equal to 2,000 psi compressive strength a minimum distance of 12" each side of the coupling. Replacement pipe shall be of the same size as existing pipe. Pipe shall be Schedule 35 PVC meeting ASTM D-3034 for 4-inch pipe, SDR 26 PVC, meeting the requirements

of ASTM D-3034 for pipes 6 inches through 15 inches in diameter, and of ASTM F-794 or ASTM F-679 for pipes 18 inches or larger in diameter.

C. Execution

1. Complete Manhole Replacement

- a. Manholes designated for complete replacement shall be completely reconstructed using ARMOROCK precast concrete sections (c.f. Section D2-9). The existing manhole structure shall be completely removed prior to installation of the new structure.
- b. The Contractor shall remove all debris and prevent any material from entering the sewer line. Debris shall be taken to an approved TCEQ landfill.
- c. All sanitary and storm pipe damaged during excavation shall be replaced at no additional compensation unless otherwise noted.
- d. Any incoming pipes, not including service laterals, which are 2 feet or more above the outgoing invert elevation, shall be equipped with internal drop connections.
- e. Complete manhole replacement shall also include replacement of frame, cover, bench/trough, sealing of frame, replacement of sewer line within five (5) linear feet outside of the manhole, frame and grade adjustments, and surface restoration.
- f. Where determined by the engineer that a good connection can not be made, the contractor will be paid for additional footage outside of the five (5) linear feet covered by the complete manhole replacement bid item and be paid for at the unit price per linear foot for additional pipe.
- g. By-pass Pumping shall be performed per D2-11. Payment for bypass pumping shall be subsidiary to the complete manhole replacement items.

2. Partial Manhole Replacement

- a. The extent of partial manhole replacement shall be based on the depth of deterioration shown on the rehabilitation schedule. The Owner's Representative shall be notified if additional deterioration exists. The remaining structure shall be capable of supporting the newly constructed portions of the manhole.
- b. Excavate the work area to expose the entire depth of deterioration in the existing manhole to a minimum depth of 6 inches below the top of structurally-sound structure.

- c. Perform reconstruction to allow easy access to the manhole. No more than 12 inches of depth of precast concrete grade adjustment rings shall be allowed to obtain proper grade.
 - d. Seal manhole joints in accordance with Section D2-4.
 - e. Precast ARMOROCK concrete corbel, or barrel sections may be used as necessary. The diameter of the sections shall be consistent with the existing remaining structure. Place a flattop section on existing manhole structure prior to setting sections. Flattop sections shall not overhang existing manhole structures by more than 6 inches. If the clearance from the underside of the proposed flattop to the manhole invert is less than 4 1/2 feet, the manhole shall be completely replaced.
 - f. Partial manhole replacement shall also include replacement of frame, cover, sealing of frame, frame and grade adjustments, and surface restoration.
 - g. Remove any debris in any manhole which has had work performed on it.
 - h. By-pass Pumping shall be performed per D2-11. Payment for bypass pumping shall be subsidiary to other bid items.
3. Shallow manholes shall be constructed at locations in the sanitary sewer system where depths are less than four feet, or as directed by the Engineer. Shallow manholes shall be constructed from 4000 psi concrete, formed in place as detailed in Section E on the Manhole Rehabilitation Details.
4. Testing of Reconstructed Manholes
- Test manholes in accordance with Section D1-7.

D. Measurement and Payment

- 1. Measurement and Payment for complete and partial replacement of manholes shall be as specified in Section D2-9, Part D – Measurement and Payment.
- 2. The Unit Price for complete and partial manhole replacement shall be eligible for 60 percent of the bid price after the repair is made, an additional 10 percent is eligible after testing is complete and an additional 30 percent is eligible after restoration is complete.

END OF SECTION D2-5

D2-6 EXCAVATION

A. General

1. Excavation work shall be accomplished under the supervision of a person experienced with the materials and procedures which will provide protection to existing improvements, including utilities and the proposed pipeline.
2. The alignment, depth, and pipe subgrades of all sewer trenches may be determined by overhead grade lines parallel to the sewer invert, or by the use of a laser.
3. In the event hazardous wastes as defined by the Resource Conservation and Recovery Act of 1976 (PL94-580) are encountered work shall be halted and the Owner shall be notified. Work shall be resumed only after the Owner notifies the Contractor.
4. If the specified maximum trench widths are exceeded, either through accident or otherwise, and if the Engineer determines that the design loadings of the pipe will be exceeded, the Contractor will be required to support the pipe with an improved trench bottom. The expense of such remedial measures shall be entirely the Contractor's own. All trenching operations shall be confined to the width of permanent rights-of-way, permanent easements, and any temporary construction easements. All excavation shall be in strict compliance with the Trench Safety System Special Condition (D1-8) of this document.
5. Contractor shall provide City with traffic control plan and shall obtain approval prior to any work within paved areas or along thoroughfares. Payment for the Traffic Control or Traffic Control plan shall not be paid for separately, but shall be included in the unit price bid for all work items affected thereby.
6. Definitions

a. Excavation

Excavation is the removal of all material from the trench area. Included in excavation is the removal of existing paved surfaces including but not limited to concrete curb and gutter, PCC pavement, and bituminous pavement.

B. Materials

Not specified.

C. Execution

1. Open Cut Method (Trenching)

a. General

Open cut (trench) pipeline excavations except as otherwise specified or approved by the Engineer. Minimize inconvenience and disturbance to the general public.

Sort and stockpile the excavated material so the proper material is available for backfill.

b. Trench Depths

Excavate trenches to depths required for proper pipe embedment. Overdepth excavation may be required when the subgrade is unstable. Backfill overdepth excavations with granular pipe embedment material, unless otherwise directed by the Engineer.

c. Trench Walls

Undercutting of trench walls is not permitted.

d. Trench Widths

- 1) The bottom width of the trench at and below the top of the pipe and inside the sheeting and bracing, if used, shall not exceed the trench widths indicated on the Drawings.
- 2) If the allowable maximum widths are exceeded at manholes, bore pits, tees, and in unstable earth material, provide bedding adequate to develop the required lateral support for the pipe and/or provide a sufficient strength class of pipe to accommodate the loading conditions as approved by the Engineer.

e. Trench Safety

Trench safety shall be in accordance with Section D1-8.

f. De-Watering

- 1) Should groundwater be encountered, Contractor shall be responsible for utilizing a dewatering system(s) to remove water

from the excavations. Contractor shall install and operate dewatering system(s) to achieve the following:

- a) Keep excavations free from water.
 - b) Prevent displacement of surrounding soils.
 - c) Prevent water from crossing road or driveways during icing conditions or other potentially hazardous conditions.
- 2) Form dams, flumes or other works necessary to keep the trenches clear of water while the sewers and their foundations, and other foundation works, are being constructed. Remove water from such excavation in a manner that does not damage property.
 - 3) Repair pit excavations shall be kept free of water and sewage during sewer pipe replacements through final inspection. Plug lines upstream and if necessary provide bypass pumps of sufficient capacity to reroute water and sewage to a downstream manhole until pipe replacements have been completed and bedding material has been effectively placed and compacted. No bypassed wastewater from the sanitary sewer shall be allowed to discharge to natural or manmade surface drainage. Where plugging only is used for flow control, the Contractor shall monitor upstream manholes and prevent excessive surcharge conditions. Flow bypassing equipment shall be set up for immediate use and available on site in all stages of construction.

g. Unsuitable Soil

When unsuitable soil conditions are encountered under sewers below the depth of standard bedding, replace the unsuitable material with trench foundation material of gradation approved by the Engineer.

h. Blasting Areas

- 1) Blasting of any kind for rock excavation or any other purpose will not be allowed unless approved by the Engineer.
- 2) When blasting is permitted by the Engineer the Contractor shall use the utmost care to protect life and property. The Contractor shall comply with all laws, ordinances, and the applicable safety code requirements and regulations relative to the handling, storage and use of explosives and protection of life and property, and he shall be responsible for all damage thereto caused by his or his subcontractor's operations.

- 3) Contractor shall provide insurance as required by the Owner before performing any blasting. The governing agency shall be notified at least 24 hours before blasting operations begin.

D. Measurement and Payment

Only items listed below will be measured for payment. All other costs shall be included in the unit or lump sum prices for the item affected thereby.

1. Trench safety system shall be paid for in accordance with Section D1-8.

END OF SECTION D2-6

D2-7 BACKFILL

A. General

1. This section governs all labor, equipment, materials and testing required to properly backfill trenches and excavations around manholes and structures.
2. No granular embedment or other backfill material shall be used by the Contractor without approval by the Engineer.

B. Materials

1. Trench Foundations Materials: Three-inch minus river-run or pit-run gravel, free from clay balls, roots, and organic matter; well crushed gravel or crushed rock graded with less than 8 percent by weight passing the 1/4-inch sieve. Submit samples for approval prior to delivery of the material to the site. Trench foundation material shall only be used where unsuitable soil conditions are encountered under sewers before the depth of standard embedment as defined in Section D2-9.
2. Embedment:
 - a. Embedment material shall be crushed rock free from dirt, clay balls, and organic material.
 - b. Embedment material shall be placed per the Standard Embedment Sanitary Sewer Detail.
3. Trench Backfill: Trench backfill will be divided into the general classification as follows:
 - a. Street Backfill: See D2-7(D) 2.
 - b. Trench Backfill: Backfill for trenches in unpaved areas shall meet the following requirements:
 - (1) Excavated material free from roots, organic matter, trash, debris, rocks larger than one inch, and other deleterious materials. Suitable material may be obtained by the Contractor from the excavation for the proposed pipelines. Provide imported material of equivalent quality, if required to accomplish the work.

C. Description

1. The Contractor shall be responsible for the furnishing of all labor, supervision, materials, equipment and testing for the completion of backfill operations in accordance with the Contract Documents.
 - a. Unless otherwise specified, all sewer trenches and excavation around structures shall be backfilled to the original surface of the ground.
 - b. The Contractor shall be responsible for all damage or damages which might occur as a result of the settlement of trench or other backfill made by him in the fulfillment of these Contract Documents, within and during a period of two (2) years from and after the date of final acceptance thereof by the Owner, including the cost to the owner of all claims of damages filed with and court actions brought against the said Owner for and because of such damage, and the repair to the satisfaction of the Owner of any and each pavement, driveway, curb, slab, walk, or structure damages by such backfill settlement.
2. "Pavement Areas" shall be defined as all streets, paved alleys, parking areas, driveways, curbs and gutters, and sidewalks.

D. Execution

1. General
 - a. Remove trash and debris from the excavation prior to backfilling.
 - b. Backfilling trenches and excavations to the original ground surface unless otherwise indicated on the Drawings.
 - c. Carefully place backfill materials to avoid damage to or displacement of the pipeline and other exposed utilities or structure.
 - d. Do not backfill with frozen material or when a blanket of snow prevents proper compaction. Backfill shall not contain waste material, trees, organic material, rubbish or other deleterious substances.

- e. The backfill material shall be placed in lifts. Each lift shall be compacted to the required density prior to the next lift being placed.
 - f. In gardens or flower gardens, the original topsoil shall be replaced to original elevation, location, and depth. Minimum depth shall be twelve (12) inches.
2. Backfilling in Street Right-of-Way and Pavement Areas
- a. Backfill trenches under and within 2 feet of all existing and proposed pavement, driveway pavement, sidewalk, and curb and gutter using granular trench backfill. Any other excavation fill must be CLSM under paving per City specifications. The CLSM must be allowed to set prior to the placement of any overlying material.
 - b. Compaction Method

Trench backfill shall be mechanically compacted in layers per the City standard detail. Each layer shall be firmly compacted to 95 percent of maximum density as determined by ASTM D 1557 (Modified Proctor Test). Material may be compacted by tamping or by using surface vibrators in such a manner as not to disturb or injure the pipe. At least 48 inches of cover over sewer pipe shall be provided before using mobile trench compactors of the hydrohammer or impactor type.
 - c. Undermining of Paved Surfaces

Where undermining of paved surfaces has occurred, Contractor shall remove the paved surface above the undermined area prior to placing backfill.
3. Backfilling in Areas Other Than Street Right-of-Way and Pavement Areas
- a. Backfill trenches using acceptable job excavated materials or as directed by the Engineer.
 - b. Backfill in layers of eighteen inches maximum and mechanically compact to 95 percent of maximum density as defined by ASTM D 1557 (Modified Proctor test).
 - c. Place a minimum of 18 inches of granular backfill above the top of pipe in areas where the existing surface elevation is less than 24 inches above the proposed top of pipe. The granular backfill shall extend one foot from each side of the pipe and shall be placed at a 1:1 slope to bedding material or the existing ground surface.
4. Testing

All density tests shall be performed per A.S.T.M. standards by an independent

testing laboratory whose qualifications have been reviewed by the Engineer.

- a. Tests shall be performed at two (2) feet vertical intervals beginning at a level two (2) feet above the top of all installed pipes and continuing to the top of the completed backfill, at excavations for partial or complete manhole replacements only, to assure a minimum density of 95 percent Proctor. Test reports shall be furnished to the Engineer and City upon completion of testing, as part of the qualification for acceptance of the installed manhole. The Engineer and City expects to perform unannounced spot checks of the compaction tests for verification and control purposes. These spot checks will be performed by Engineer at Owner expense and will not be charged to the Contractor. However, the Contractor will be responsible for providing access and trench safety system to the level of trench backfill to be tested. No extra compensation will be allowed for exposing the backfill layer to be tested or providing trench safety system for tests conducted by the Engineer.
- b. The cost of providing access to the level of trench backfill to be tested will be a cost to the Contractor, and no extra compensation will be allowed for exposing of the backfill layer to be tested by the Owner.
- c. Test results not conforming to specified densities shall be paid for by the Contractor at no additional cost to the Owner.

5. Responsibility of Contractor for Backfill Settlement

Wherever trenches or other excavations made by the Contractor in the performance of work under these Contract Documents have not been properly filled, or where settlement has occurred at any time prior to the completion of the entire work covered by these Contract Documents, to the extent that the top of the backfill is below the original ground surface, such trenches shall be refilled and backfill surface compacted and smoothed to conform to the elevation of the adjacent ground surface. All sod in lawns damaged by reasons of such settlement, and the repair thereof, shall be replaced.

E. Measurement and Payment

1. Payment for the work in this Section shall not be paid for separately, but shall be included in the unit price bid for all work items affected thereby.
2. Payment for trench foundation material will be based on the Contract unit price per cubic yard actually used as authorized by the Engineer. No measurement and payment shall be made for existing material which is reused. Payment for this item shall constitute full compensation for all materials, labor, equipment, and incidentals necessary to furnish material at trench side and for placing and

compacting it in the trench and for the extra depth of trench excavation required below the manhole base grade to provide for a stable base for the manhole. This item is to provide for unstable base encountered in the progress of the work and shall be used only at the direction of the Engineer.

END OF SECTION D2-7

D2-8 SANITARY SEWER CONSTRUCTION

A. General

1. Scope

This Section governs all work, materials and testing required for installation of gravity pipelines of the respective types and sizes shown on the Drawings for the particular location and conforming to the requirements of these specifications. All pipelines shall be constructed to proper line and grade as shown on the Drawings and shall result in an unobstructed, smooth and uniform conduit. Only domestically produced (U.S.) materials shall be used for this project.

2. Description

Sanitary sewer construction shall consist of furnishing all labor, materials and equipment for the complete installation of sewers and appurtenances in accordance with the Drawings.

3. Revisions of Standards

When reference is made to a Standard Specification i.e. ASTM, ANSI, AWWA, MCIB, the Specification referred to shall be understood to mean the latest revision of said specification as amended at the time of the Notice to Bidders, except as noted on the Drawings or in the Specifications.

B. Materials

1. General

This section governs materials required for pipeline construction.

a. Requirements

Furnish pipe of materials, joint types, sizes, and strength classes indicated and specified. Higher strengths may be furnished at the Contractor's option, at no additional cost to the Owner.

b. Manufacturer

The manufacturer shall be experienced in the design, manufacture and commercial supplying of the specific material.

c. Testing

Testing shall be performed by the manufacturer's quality control personnel in conformance with applicable standards. Testing may be witnessed by Owner, Engineer, or an independent testing laboratory. The Contractor shall provide three (3) copies of certified test reports indicating that material does conform to the specifications.

d. Handling

The manufacturer and contractor shall use equipment and methods adequate to protect the pipe, joint elements and prevent shock contact of adjacent unit during moving or storage. Contractor shall provide protection for all material from exposure to ultraviolet light. Damaged sections that cause reasonable doubt as to their structural strength or watertightness will be rejected.

2. Pipe, Fittings, Joints, Coatings and Linings

a. General

Furnish pipe and fittings of materials, joint types, sizes, strength classes, coatings and linings as indicated and specified.

Rigid rubber couplings shall be as manufactured by Mission Rubber Co., Fernco, or equivalent. Rigid rubber couplings shall be fastened using two type C-305 stainless steel adjustable clamps to provide a leakproof seal.

b. Ductile-iron pipe and fittings shall be Class 50 conforming to ANSI A21.51, except as otherwise specified herein. Ductile-iron pipe will not be used without prior approval from City staff.

1) General

Furnish maximum pipe lengths normally produced by the manufacturer, except for fittings, closures, and specials.

2) Joints

Mechanical and push-on joints for pipe and fittings shall conform to the requirements of ANSI A21.11. Flanged joints for ductile iron pipe and fittings shall conform to the requirements of ANSI A21.10. Gaskets shall be neoprene or other synthetic rubber material. Natural rubber gaskets will not be allowed.

3) Fittings

Fittings shall be in accordance with ANSI/AWWA C110/A21.10 and shall have a pressure rating of not less than that specified for the pipe. Fittings used with ductile iron pipe shall be ductile iron or cast iron. Fittings for pipe with mechanical joints shall have mechanical joints. Fittings for pipe with push-on joints shall have either mechanical joints or push-on joints.

4) Coatings

Where required pipe and fittings shall be furnished with exterior bituminous coating conforming to ANSI A21.51.

5) Linings

Polyethylene Lining: Polyethylene complying with ANSI/ASTM D1248 fusion bonded to the interior of pipe and fittings. The material shall be compounded to prevent ultraviolet degradation during storage above ground. The standard nominal thickness of the lining shall be 40 mils. After lining, the product shall be tested for voids and holidays in accordance with ASTM G-62, Method B, using a 7500 volt High Voltage Tester.

c. SDR 26 Polyvinyl Chloride (PVC) Plastic Sewer Pipe and Fittings shall conform to ASTM D3034 for pipes 6 inches through 15 inches in diameter. SDR 35 Polyvinyl Chloride (PVC) sewer pipe and fittings shall conform to ASTM F-679 for pipes 18 inches to 37 inches in diameter. Pipes 4 inches in diameter shall be SDR 21 PVC to conform to ASTM D3034.

- 1) Furnish maximum pipe lengths normally produced by the manufacturer except for fittings, closures and specials.
- 2) The pipe shall be made of PVC plastic having a cell classification of 12454 B as defined in ASTM D1784. The resin portion of the copolymer compounds shall contain a minimum of 90 percent vinyl chloride and the compounding ingredients shall not exceed 10 percent by weight. The compounding ingredients may consist of lubricants, stabilizers, non poly (vinyl chloride) resin modifiers, and pigment essential for processing, property control, and coloring. Certification of resin compounding shall be provided by the pipe manufacturer prior to shipment to the job site.

One test to verify resin compounding may be required by the Owner or Engineer. The test shall be performed by an independent testing laboratory to which the Owner has no objection and shall be performed on a sample of pipe obtained from the job site. The test shall be performed at no additional cost to the Owner and shall be performed in accordance with ASTM D817 - Ash Determination for pipe manufactured with primarily noncombustible compounding ingredients.

- 3) Pipe shall have an integral wall bell and spigot joint and a minimum wall thickness conforming to SDR 26.
- 4) Joints shall conform to ASTM D 3212. Joints shall be push-on type only with the bell-end grooved to receive a gasket. Electrometric seal (gasket) shall have a basic polymer of synthetic rubber conforming to ASTM F477. Natural rubber gaskets will not be allowed.
- 5) Fittings defined as tee or wye connections suitable for assembly to four (4) inch or six (6) inch building service lines shall be bell-end with a minimum wall thickness conforming to SDR 26 and shall be furnished by the pipe manufacturer.

d. Polyvinyl Chloride (PVC) Plastic Water Pipe

The pipe material shall be Polyvinyl Chloride (PVC) meeting the requirements of ASTM D1784, with a cell classification of 12454-B. The standard Dimensional Ratio for the pipe will be DR14 (Class 200) conforming to AWWA C900.

e. Non-Metallic Water and Sanitary Sewer Pipe Detection Tape

- 1. The detectable tape shall be "Detect Tape" as manufactured by Allen Systems, Inc. or approved equal, and shall consist of a minimum thickness 0.35 mils solid aluminum foil encased in a protective inert plastic jacket that is impervious to all known alkalis, acids, chemical reagents and solvents found in the soil. The minimum overall thickness of the tape shall be 5.5 mils and the width shall not be less than two (2) inches.
- 2. The tape shall be color coded and imprinted with the message as follows:

| <u>Type of Utility</u> | <u>Color Code</u> | <u>Legends</u> |
|------------------------|------------------------|---------------------------------|
| Water | Safety Precaution Blue | Caution Buried Water Line Below |
| Sewer | Safety Green | Caution Buried Sewer Line Below |

f. Sewer Pipeline Markers

The sewer pipeline markers shall be Carsonite International Dual-Sided Utility Marker (CIB-380), or approved equal. All markers shall be installed according to the manufacturer's recommendations. The uppermost portion of the marker shall be made of Visibility Enhancer (CVE-360), or approved equal and must be bolted to the utility marker. The utility marker shall read as follows: "CAUTION, SEWER PIPELINE", "City of Lewisville", and "Before Digging Call TEXAS811". The label shall also include the official City Logo and be green in color with white lettering.

Sewer line pipeline markers shall be installed beside all manholes that are located in easements and backyards. Those manholes located in front yards and in streets do not require markers. Concrete shall be placed 6-inches around and 1-foot deep around the base of each marker.

C. Installation

1. General

- a. Install pipelines in accordance with the applicable reference standard listed below and as specified herein.
 - 1) Water Main Construction shall be constructed per City of Lewisville standards. Latest standards can be accessed through the City website.
 - 2) ASTM D2321 - PVC Solid Wall, PVC Composite Wall.
 - 3) AWWA C600 - Installation of Ductile Iron Water Mains and Appurtenances.

2. Site Preparation and Excavation

- a. Site preparation shall be as specified in Section D2-1 – Site Preparation.
- b. Excavation shall be as specified in Section D2-9 - Excavation.
- c. All existing lines which are to be abandoned shall be internally inspected to identify locations of all existing service connections.

3. Pipe Embedment

- a. Install a minimum of 6 inches of Class 7 Base as per AHTD Standard Specifications for pipe bedding at all locations except where the pipe is encased in concrete.
- b. Place pipe bedding below and on the sides of the pipe as indicated in the

typical trench details on the Drawings.

- c. Compact bedding and dig bell holes for bell and socket pipe so that the pipe is uniformly supported for its entire length and will be true to line and grade after installation.
- d. After each pipe has been brought to grade, aligned, and placed in final position, extend the crushed limestone bedding to the pipe spring line. Shovel slice sufficient bedding material under the pipe haunches and on each side of the pipe to hold the pipe in proper position during subsequent pipe jointing, bedding, and backfilling operations. Crushed limestone embedment material shall then be added to a compacted depth of twelve (12") inches above the top of pipe.
- e. Place pipe that is to be concrete encased in proper position on temporary supports consisting of wood blocks or bricks with wood wedges. When necessary, anchor or weight the pipe to prevent flotation when the concrete is placed.
- f. Place concrete for embedment or encasement uniformly on each side of the pipe and deposit at approximately its final position. Do not move concrete more than five (5) feet from its point of placement.

4. Pipe Laying

- a. Pipe laying shall not proceed if the trench width as measured at the top of pipe exceeds the maximum allowable trench width. If this occurs the Contractor shall provide, to the approval of the Engineer better bedding for the pipe or pipe of sufficient strength to provide safe supporting strength.
- b. Store and handle pipe and fittings with care to prevent damage thereto. Do not use hooks to transport or handle pipe or fittings. Do not drop pipe or fittings.
- c. Rejected pipe and fittings shall be marked and removed from the Project Site at no cost to the Owner. Examine pipe and fittings for soundness and specification compliance prior to placement in the trench.
- d. Clean joint contact surfaces prior to jointing. Use lubricants, primers, or adhesives as recommended by the pipe or joint manufacturer.
- e. Pipe laying normally shall begin at the lowest point.
- f. Unless otherwise required, lay all pipe straight between manholes. Excavate bell holes for each pipe joint. When jointed, the pipe shall form a true and smooth pipeline.
- g. Plug pipelines at the end of each day's progress. Utilize plugs or other

positive methods of sealing at all times to protect any existing system from entrance of stormwater or other foreign matter.

Contractor shall reconnect the existing active service connections and activate the sewer line as directed by the Engineer.

5. Building Service Laterals

- a. Unless otherwise noted on the plans, all active service connections on sewer segments to be abandoned or removed and replaced shall be connected to the proposed sanitary sewer. Contractor shall be responsible for locating service connections prior to construction.
- b. Install tees at an angle of no more than forty-five (45) degrees or less with pipe springline, for pipe sizes 8 through 21-inch diameter.
- c. Reconnection of building service shall include replacement of service lateral and new service line as directed by Engineer.
- d. Install Building service lines with a straight alignment and at a uniform grade not less than two (2) percent unless otherwise specified. Embedment shall be same as main sewer. When a building service line grade exceeds twenty (20) percent, pipeline anchors shall be installed as required for anchors, with the first anchor not more than twelve (12) nor less than seven (7) feet upstream of the wye.
- e. Maintain an accurate record for submittal to the Engineer of location, size and direction of each tee, saddle and/or location, size and length of each building service line. Locations shall use the pipeline stationing as shown on the Plans, or the distance from the first downstream manhole.
- f. The Contractor shall verify by testing all service connections in the repair area to determine if they are active or inactive. Only active services shall be reconnected to the sanitary sewer system. Inactive services shall be verified with City staff prior to plugging the service line. The Contractor shall be responsible for any liability associated with the accidental plugging of active services. All service lines serving an empty lot, must remain connected after being tested to verify customer side is capped to prevent inflow and infiltration.
- g. All service laterals shall be inspected by the Owner's Representative prior to reconnection to the replacement sewers. If the service laterals are found to be in a deteriorated condition in the opinion of the Owner's Representative, then the Contractor shall replace the service lateral to the property line as directed by the Owner's Representative.
- h. All service lateral tee connections shall be ductile iron Class 50. Service lateral wye connections shall be PVC SDR 26.

i. No bends greater than 45 degrees shall be allowed in service laterals.

6. Extension of Service Laterals

Service laterals which require a connection to the relief/replacement sewer greater than four (4) feet in length, measured horizontally, shall be considered a service lateral extension. The service location for all abandoned, replacement, or relief sewer shall be determined prior to excavation. The extension pipe shall be laid to provide sufficient slope to the new sanitary sewer not less than two (2) percent unless otherwise specified. All building lateral extensions on private property shall be made by a licensed Master plumber.

7. Anchors

Anchor pipelines in accordance with the table below:

PIPELINE ANCHORS

| <u>Percent of Grade</u> | <u>Center to Center Max. Spacing (Feet)</u> |
|-------------------------|---|
| 0-20 | Not Required |
| 20-35 | 36 |
| 35-50 | 24 |
| > 50 | 16 |

The anchor shall be made of concrete or other material approved by the Engineer. Concrete anchors shall have a minimum thickness of twelve (12) inches. The anchor shall extend not less than one (1) foot into undisturbed earth on the sides and bottom and one (1) foot above top of pipe. In incompressible material, the above dimensions may be six (6) inches each side and bottom. The anchor shall support a joint fitting.

8. Connection of Pipes of Dissimilar Materials

Connect different pipe materials using proprietary transition couplings, that will provide permanent and watertight connections which will withstand the hydrostatic test pressure.

9. Sewer Pipe and Water Main Separation

Sanitary sewers, house sewers or storm drains that are laid in the vicinity of pipe lines designated to carry potable water shall meet all TCEQ design criteria.

a. Parallel Installation - Sewers and Water Mains

1) Normal Conditions - Any sanitary sewer, storm sewer or sewer

manhole shall be located at least ten (10) feet in all directions from water mains, whenever possible; the distance shall be measured from edge to edge.

- 2) Unusual Conditions - Where the ten (10) foot separation cannot be achieved, the vertical separation shall be a minimum of two (2) feet between outside diameters and the horizontal separation shall be a minimum of four (4) feet. The sewer shall be located below the water main.

b. Crossings - Sewers and Water Mains

- 1) Normal Conditions - A vertical separation of at least 18 inches shall be maintained between any potable water supply and sanitary sewers.
- 2) Unusual Conditions - When local conditions prevent a vertical separation as described above, the water main can be relocated with the approval of the Engineer.

10. Drainage Course Crossing

Pipelines that cross well-defined drainage courses and have less than three (3) feet of cover shall be ductile iron or concrete encased. The length of ductile iron pipe or concrete encasement shall be as indicated, or if not indicated, as specified by the Engineer. All ductile iron sections must be interior lined with a factory applied ceramic, epoxy coating.

11. Polyethylene Wrapping

Polyethylene material for pipe encasement and all ductile iron pipe shall meet the requirements of ANSI/AWWA C105/A21.5-82, or latest revision thereof.

12. Non-Metallic Water and Sanitary Sewer Pipe Detection Tape

Detectable underground utility warning tapes which can be located from the surface by a pipe detector shall be installed above non-metallic pipe at all locations and above ductile iron pipe only where pipe crosses existing or other proposed utilities.

Installation of detectable tapes shall be per manufacturer's recommendation and shall be as close to the grade as is practical for optimum protection and detectability. Allow a minimum of 18 inches between the tape and the line.

13. Backfill

Backfill trenches as specified in Section D2-10 - Backfill. Clay dams or concrete dams (1500 psi minimum) shall be placed at locations as shown on the Contract Drawings, or as directed by the Engineer.

14. Testing

Test new sanitary sewers in accordance with Section D1-9 – Sanitary Sewer Repair Testing. Test replacement sewers (where previous cross connections with storm sewers existed) in accordance with Section D1-8 Sanitary Sewer Repair Testing.

15. Bypass Pumping

Perform bypass pumping for flow control. No bypassed wastewater shall discharge to natural or manmade drainage structures.

16. Abandonment of Existing Manholes

- a. Prior to the abandonment of a manhole, Contractor shall verify that no existing services will be affected.
- b. The top of the manhole shall be lowered to an elevation at least 24 inches below final grade.
- c. All pipes shall be plugged with hydraulic cement, to a minimum depth of one (1) foot. After the cement has set, the manhole shall be filled with thoroughly tamped sand or Class 7 Base. Surface restoration shall be compatible with surrounding surface.
- d. Frames and covers shall be removed from the site.

17. Pipe Plugging and Sanitary Sewers to be Abandoned

- a. Prior to the plugging of a sewer segment, Contractor shall verify that no existing services will be affected.
- b. Physically remove sanitary sewer pipe outside of the manhole for a minimum distance of one foot.
- c. Fill pipe for a minimum length of one foot with hydraulic cement. Fill void outside of manhole with hydraulic cement, and repair manhole wall.

18. Clay Dams

Clay dams shall be in accordance with Section D2-11 – Sanitary Sewer Repairs, Paragraph 6.

D. Measurement and Payment

Only items listed below will be measured for payment. All other costs shall be included in the unit or lump sum prices for the item affected thereby.

1. Sewer Pipe

Sewer pipe of the respective type, size, and/or strength including specified pipe embedments (other than concrete), and testing will be paid for at the Contract Unit Price per linear foot of pipeline actually required and installed, measured along the centerline of the pipeline from center of manhole to center of manhole. This item includes costs for location of existing services, excavation, existing pipe removal and disposal (for open cut only), furnishing and placing pipe embedment materials, tees, furnishings and placing pipe, fittings and joint material, making connections to pipe of dissimilar materials, making connections to manholes, backfill, testing, and any resulting restoration and repairs and incidental and appurtenant work required to complete the item. Restoration in paved areas will be paid for in accordance with the Bid Schedule for the various applicable items affected by the sewer construction.

2. Trench Depth

Depth categories for payment purposes shall be zero (0) to six (6) feet and four (4) foot increments for pipe depths greater than six feet. Trench depth shall be measured from the surface of the ground to the flow line of the pipe. Exceptions to this section include boring and jacking where no depth categories for payment purposes shall be applicable.

3. Connect Service Laterals

Payment for connection of service laterals to the proposed replacement/relief sewer shall be at the Contract Unit Price indicated. Payment shall include four (4) linear feet of the service lateral which may be required to connect the service lateral to the proposed replacement/relief sewer. Payment shall also include trench backfill, restoration and testing.

4. Extension of Service Laterals

Payment for extension of service laterals from the initial four (4) feet of lateral shall be at the Contract Unit Price per linear foot installed. Payment shall include the length of service lateral required to extend the service lateral to the property line or as indicated on the Plans and shall include all material, labor, excavation, backfill, restoration (except pavement), testing, and all other incidentals necessary to complete the work. Pavement repair shall be paid separately in accordance with Section D2-16.

5. Installation of Service Lateral Cleanout

Payment for installation of service lateral cleanouts shall be at the Contract Unit Price indicated. Payment shall include furnishing and installation of the cleanouts at locations indicated on the drawings.

6. Internal Television Inspection

Payment for internal television inspection and cleaning shall be considered a subsidiary obligation of the Contractor and shall be included in the bid price for the item affected thereby.

7. Controlled Low Strength Material (CLSM) Encasement of Sewer Pipe

Payment for installation of controlled low strength material encasement where indicated on the plans or as directed by the Engineer, shall be at the contract price per cubic yard. Payment shall include all labor, materials, and form work necessary to perform the work.

8. Sewer Main Pipe and Water Main Separation

When a minimum vertical clearance of three (3) feet cannot be maintained between sanitary sewer main and water main, the sanitary sewer main shall be ductile iron pipe. Compensation for excavation, furnishing and placing pipe embedment material, tees, furnishing and placing pipe, fittings and joint material, making connections to pipe of dissimilar materials, backfill, polywrap, testing and any resulting repairs and incidental and appurtenant work shall be included in the Contract Unit Price for linear footage of ductile iron pipe.

9. Sewer Main Pipe and Storm Sewer Conflict

When conflicts occur between sanitary sewers and storm sewers, the sanitary sewer main shall be ductile iron pipe. Compensation for excavation, furnishing and placing pipe embedment material, tees, furnishing and placing pipe, fittings and joint material, making connections to pipe of dissimilar materials, backfill, polywrap, testing and any resulting repairs and incidental and appurtenant work shall be included in the Contract Unit Price for linear footage of ductile iron pipe.

10. Abandon Manhole

Abandonment of manholes shall be paid at the Contract Unit Price per each manhole. Payment shall include pipe plugging, and all labor and materials necessary to complete this item.

11. Pipe Plugging and Sanitary Sewers to be Abandoned.

Pipe plugging and abandoning of sanitary sewers shall be incidental to the Contract.

12. Installation of Aerial Creek Crossing

Payment for installation of concrete piers, steel encasement, concrete encasement, and anchors associated with the aerial crossing shown on the Drawings shall be at the Lump Sum Price indicated. Payment shall include all labor, material, and form work necessary to complete the work.

13. Clay Dams

Payment for clay dams shall be at the Contract Unit Price indicated and shall include all labor and materials necessary to complete the work.

14. The unit price for sanitary sewer pipe replacement shall be eligible for 60 percent after the replacement is made, an additional 10 percent is eligible after testing is complete and an additional 30 percent is eligible after restoration is complete.

END OF SECTION D2-8

D2-9 CONCRETE STRUCTURES

A. General

1. Description

This section describes the installation of new cast-in-place concrete manholes, new precast concrete manholes, and other miscellaneous structures.

2. Furnish the labor, materials, equipment, tools, and services required for the installation of the concrete work required on this project.

B. Materials

1. Coal-Tar Epoxy Paint

Kop Coat "Bitumastic Black Solution," Tnemec, "46-450 heavy Tnemecol", or equal. Dry film thickness shall be a minimum of 14.0 mils per coat.

2. Non-Shrink Grout

Grout shall be non-shrink in the plastic state and show no expansion after set as tested in accordance with ASTM C827 and shall develop compressive strength not less than 3,000 psi with a trowelable mix within 24 hours per ASTM C109. The placement time shall be not less than 45 minutes based on initial set per ASTM C191. Test results shall be furnished by the manufacturer and submitted to the Engineer.

3. Flexible Gaskets

Openings for each connecting pipe shall be circular with a compression type flexible rubber gasket cast integrally into the manhole wall. Flexible gaskets shall be manufactured in accordance with rubber joint specification ASTM C443 and shall meet the performance and test requirements of ASTM C425 for compression joints. Flexible gaskets shall include a coupling with O-Ring Gasket, A-Lok, Presswedge, or equal.

4. Frames and Covers

- a. Manhole frames and covers shall be in accordance with Section D2-5 - Removal and Replacement and New Construction of Manholes.

5. Portland Cement Concrete
 - a. All concrete utilized shall be minimum 4000 psi unless otherwise specified by Engineer or in the drawings or specifications.
6. Steps
 - a. Manhole steps will not be required.
7. Cast-In-Place (Monolithic) Concrete Manholes

The design of standard manholes shall be the responsibility of the Contractor. Shallow manholes shall be constructed as detailed on the Drawings. Sketches of all manholes indicating complete details of the proposed design shall be submitted to the Engineer for review prior to ordering material and/or construction. Cast in place construction will be considered for circular manholes only when appropriately designed with reinforcing steel. The concrete for circular manholes shall be reinforced with wire mesh conforming with this document. The minimum sidewall thickness shall be 6 inches or one-eighth the inside diameter whichever is greater. The base thickness of manhole below the underside of flow channel shall vary, depending on the diameter, the depth of manhole, whether base is reinforced or not and on the type of joint occurring between base slab and wall. The minimum base thickness shall be 8 inches or 1/8 the manhole diameter plus 1/30th of the manhole depth, whichever is greater.

- a. Foundations of manholes for sanitary sewer shall be concrete of a minimum compressive strength of 4000 psi at 28 days. The invert channels shall be smooth, accurately shaped, and in accordance with the plans. Where changing line sizes occur, the crowns (top insides) of the pipe should be matched unless otherwise approved by the Engineer. The invert of the manholes shall be shaped and smooth so that no projections will exist. Flow channels will be formed in the inverts so that the manhole will be self-cleaning and free of areas where solids may be deposited as sewage flows through the manhole from all inlet pipes to all outlet pipes. Where the pipe can be laid continuously through the manhole, the pipe can be placed in the base. After the construction of the manhole, the pipe can be trimmed by cutting out the top half after the concrete base is constructed and has cured sufficiently. If it is not possible to lay the pipe continuously through the manhole base, the invert may be poured and formed directly in the concrete of the manhole base. The invert floor shall have a minimum slope of 1-inch per foot unless noted otherwise. The manhole invert shall extend from wall to wall. The minimum thickness for all bases shall be eight (8) inches. Reinforce bases with #4 bars at 12-inch centers each way. Tie and place reinforcing steel above the midpoint. The minimum cover over the reinforcement shall be two (2) inches. When the connecting pipelines are required to have concrete

embedment, extend the embedment reinforcing steel not less than twenty (20) bar diameters into the manhole base.

- b. A minimum of six (6) inches rock cushion shall be used beneath manhole foundations. Where trench has been over excavated, the void created shall be completely filled with a rock cushion to the underside of the manhole base.
- c. In the event that ground water is present during the pouring of a cast-in-place manhole foundation, a pump shall be used to remove the ground water. Prior to pouring, the subgrade shall be stable, free from muck and groundwater. After the concrete foundation has been placed, the pump shall continue to run for at least two (2) hours to enable the concrete to obtain its initial set.
- d. Cast-in-place concrete manholes shall have a minimum inside diameter at the base of four (4) feet and an inside diameter at the top of the cone section of not less than twenty-four (24) inches unless specified otherwise herein. The manhole shall have a minimum wall thickness of six (6) inches and shall be smooth having no form marks on the interior wall or exterior wall of the manhole exceeding one-quarter (0.25) inch in depth. If cold joints are necessary because of a time lapse of more than one hour between placements, then a concrete bonding adhesive shall be applied to the existing concrete. Concrete used for the manhole barrel and cone section shall be a minimum compressive strength of 4000 psi at 28 days, with a slump of five (5) inches to seven (7) inches during the placement. Concrete shall not be so dry as to cause extensive honeycombing. During the placement of the concrete in the manhole barrel forms, thorough vibrating shall be completed at two (2) foot intervals. If cold joints are necessary because of a time lapse of more than one hour between placements, then a concrete bonding adhesive shall be applied to the existing concrete. A concrete collar at least four (4) inches thick shall extend a minimum of eight (8) inches above and below the new joint around the outside of the manhole. If honeycombing of the barrel of the manhole is found to be present after removal of the forms, such honeycombing shall be repaired as directed by the Engineer. Any form marks on the inside wall shall be smoothed and grouted as directed. Curing compounds or covers may or may not be used at the option of the Contractor to protect the concrete to prevent cracking during the curing process and to protect the manhole during freezing temperatures. The manhole shall not be backfilled for at least two (2) working days after forms have been removed or a minimum of three (3) working days after the concrete has been placed.
- e. Reinforcing steel used in design of reinforced manhole foundations shall conform to ASTM A615, Grade 60, deformed bars.

- f. Manholes bases shall be integral cast. The diameter of the integral base pad shall be eight (8) inches greater than outside diameter of the manhole.
8. Shallow manholes shall be constructed at locations in the sanitary sewer system where depths are less than four feet, or as directed by the Engineer. Shallow manholes shall be constructed from 4000 psi reinforced concrete formed in place as shown on construction plans.
9. Precast Concrete Manhole Sections
 - a. Manholes shall conform to ASTM C478 and as specified herein.
 - b. Wall thickness shall be minimum six (6) inches for all precast sections.
 - c. Concentric cones shall be utilized when manhole depth exceeds six feet. The clear opening of the cone shall be twenty six (26) inches.
 - d. Reinforced concrete flat-top sections shall have a minimum twenty six (26) inch diameter opening and be a minimum eight (8) inches thick in non-traffic areas and a minimum ten (10) inches thick in traffic areas (designed for H-20 loading). Reinforce flat-top sections with #4 bars at twelve (12) inch centers each way. Tie and place reinforcing steel below the mid point. The minimum cover over the reinforcement shall be two (2) inches. The top or bottom of the flattop shall be clearly labeled or marked.
 - e. Openings for each connecting pipe shall be circular with a compression type flexible rubber gasket cast integrally into the manhole wall. Flexible gaskets shall be manufactured in accordance with rubber joint specification ASTM C443 and shall meet the performance and test requirements of ASTM C425 for compression joints. Flexible gaskets shall include a coupling with O-Ring Gasket, A-Lok, Presswedge, or equal.
 - f. Preformed and trowelable bitumastic joint sealants shall be Kent-seal, Ram-Nek, EZ-STIK, or equal. The minimum dimension of preformed material shall be one-half (1/2) inch square.
 - g. Do not deliver precast concrete sections to the job until representative concrete cylinders have attained a strength of at least 80 percent of the specified minimum. Inspect precast concrete sections when delivered. Cracked or otherwise visibly defective units will be rejected.

- h. The maximum depth of lifting holes shall be no more than one-half the manhole wall thickness. After placement of the manhole, the lifting holes shall be sealed with a non shrink grout.
- i. Contractor is responsible for verifying all manhole depths, sewer pipe flowlines, and angle of sewer lines entering and exiting manhole prior to delivery of precast manholes. The contractor will be responsible for removing and replacing any manhole that is not properly fitted to the sewer grades at the existing site.

C. Execution

1. General

Install manholes of the respective types at the designated locations with flowlines at elevations to match existing.

- 2. Interior manhole diameters unless otherwise noted shall be 48 inches for pipe between 6 inches and 24 inches in diameter and 60 inches in diameter for pipe between 27 inches and 36 inches in diameter.
- 3. Install frames and covers in accordance with Section D2-5 – Removal and Replacement and New Construction of Manholes.
- 4. Form inverts with mortar material and steel-trowel to produce a dense, smooth finish and shape to form a "U"- shaped channel extending to the crown of the pipe encompassing the full cross section of the connecting pipelines. Provide smooth transitions for pipes of different sizes, different elevations, and/or at different angles. Also form inverts to provide self-cleaning by sloping normally two (2) inches from manhole wall to edge of "U" channel with a smooth finish.
- 5. Pipe Stubs
 - a. Install pipe stubs for future connections at locations, angles, elevations, and of materials as specified or as determined by the Engineer.
 - b. Install each pipe stub with the bell of the pipe abutting the outside manhole wall, or the joint if other than a bell, as near the manhole wall as is practicable but not more than two (2) feet from outside manhole wall for later connection thereto.
- 6. Pipe holes at manholes shall be permanently sealed watertight after installation of the connecting pipelines.

7. Construct connections to existing manholes in conformance with this section. Excavate around the existing manhole so as not to disturb the manhole. The manhole wall shall be removed for no greater diameter than required to insert new pipe. Reshape manhole invert and channel to accept the flows from the new pipe. Chip the existing invert to a rough new surface and install a new channel and invert the entire side where the new pipe enters. Take care to prevent brick or other foreign material from entering the existing downstream sewer. Retrieve such debris. After the new pipe is installed, completely fill and render permanently watertight the void around the new pipe with a grout conforming to the material specifications herein.
8. Manhole Adjustments

Provide new manholes with a maximum of one (1) foot of adjustment ring(s) underneath the casting. Seal adjustment ring joints as specified in Section D2-4 – Sealing of Manhole and Grade Adjustments.
9. Apply two coats of coal-tar epoxy paint to the manhole exterior. Coating shall be in accordance with Manufacturer's recommendations.
10. Testing

Test manholes in accordance with Section D1-7 – Manhole Testing.
11. Formwork
 - a. Vertical concrete surfaces shall be formed. The underside of slabs and beams shall be formed except where the concrete is placed against the ground. Sloping surfaces shall be formed unless otherwise authorized by Engineer.
 - b. Construct and erect forms so that the concrete will have the shape, line, and grade indicated. Make forms mortar tight and sufficiently rigid to prevent deformation under load. Use an adequate number of walers, stiffeners, and braces to insure straight walls.
 - c. Formwork, shoring, and bracing design shall meet the requirements of ACI 347.
 - d. Except as noted, tolerances for formed surfaces shall meet the requirements of ACI 301. Edges of form panels in contact with concrete exposed to view in the finished work shall be flush within 1/32 inch. Forms for plane surfaces shall be such that the concrete will be plane within 1/8-inch in four ft. Leading edges of concrete shall lie within 1/4-inch as measured from a 10-ft template.

- e. Provide as-cast smooth form finish for formed concrete surfaces that are to be exposed to view, or that are to be covered with a coating material other than cement plaster applied directly to the concrete.
- f. Produce smooth form finish by selecting form material to impart a smooth, hard, uniform texture and arranging them orderly and symmetrically with a minimum of seams.
- g. Repair and patch defective areas with all fins and other projections completely removed and smoothed.

12. Reinforcement

- a. Reinforcing steel shall be placed in accordance with ACI 301 and ACI 318. When concrete is placed, reinforcing shall be free of rust, scale, or other coatings that will affect the bond. Reinforcement shall be accurately placed, adequately supported, and secured in position at intersections with annealed wire not less than 16-ga or with clips. Reinforcement shall be supported to keep it away from exposed surfaces. Nails or other devices shall not be driven into forms to support reinforcement.
- b. Provide the following concrete cover unless otherwise shown on the drawings:

| | |
|----------------------|----------|
| Bottom face of slabs | 3 inches |
| Top face of slabs | 3 inches |

13. Placing Concrete

- a. General
 - 1) Do not place concrete until forms have been oiled, reinforcement has been fastened in position, form ties at construction joints have been retightened, and embedments and openings have been placed and anchored.
 - 2) Remove debris from the space in which concrete is to be placed.
- b. Convey concrete from the mixer to the place of final deposit by methods which will prevent separation or loss of materials. The free fall of concrete shall not exceed three feet.
- c. Consolidating
 - 1) Consolidate concrete with mechanical vibrating equipment and provide stand by equipment. Apply vibration directly to the

concrete. Vibration shall be sufficient to cause flow or settlement of the concrete into place. Apply vibration at the point of deposit and in the freshly placed concrete. It shall be of sufficient duration to accomplish compaction and embedment of reinforcement and fixtures.

- 2) Supplement vibration by forking and spading by hand in the corners and angles of forms and along form surfaces while the concrete is plastic under the vibratory action.

14. Curing

- a. Maintain concrete in a moist condition for seven days after placement. Curing may be by any of the following means:
 - 1) Curing with burlap, cotton, or mats kept continuously wet, or by keeping forms continuously wet.
 - 2) Waterproof paper curing. Lay four inches at seams and seal with tape.
 - 3) Membrane curing by power spraying with a fugitive dye included. Do not use this method on surfaces which will receive a finish treatment of any kind. Submit manufacturer's descriptive data of curing compounds for approval.

D. Measurement and Payment

Only items listed below will be measured for payment. All other costs shall be included in the unit or lump sum prices for the item affected thereby.

1. Standard Manhole

- a. The manhole depth shall be determined by measuring from top of casting to the invert at the center of the manhole. Payment will be made at the contract unit price for the applicable type, size and depth for each manhole. Such payment and price shall constitute full compensation for all labor, materials, equipment and for the performance of all work necessary to complete the manholes, including removal of existing manhole, excavation, concrete base, manhole frame and cover, frame and cover grade adjustment and sealing, waterproofing, concrete masonry, reinforced concrete, backfilling, replacement of any sewers, conduits, disposal of excess material and restoration.

- b. Payment for a standard manhole will be in accordance with the contract prices as follows:
- 1) A unit price to cover the construction of one standard manhole of the diameter and type indicated; 0 to 6 feet in depth.
 - 2) A unit price which shall cover the entire cost of each additional foot of vertical manhole depth in excess of 6 feet, measured to the nearest 0.1 foot.

2. Shallow Manhole

Payment for shallow manholes will be made at the contract unit price for each manhole constructed.

3. Partial Manhole

Partial manhole replacement shall be paid at the Contract Unit Price per vertical foot of depth measured to the nearest 0.1 foot from the top of the frame to the bottom of section required to be replaced.

Such payment and price shall constitute full compensation for all labor, materials, equipment and for the performance of all work necessary to complete the manholes, including removal of existing manhole, excavation, concrete base, manhole frame and cover, frame and cover grade adjustment and sealing, waterproofing, concrete masonry, reinforced concrete, backfilling, replacement of any sewers, conduits, disposal of excess material and restoration.

4. Additional Pipe

Where determined by the Engineer that a good connection cannot be made, the Contractor will be paid for additional footage outside of the five (5) linear feet covered by the complete manhole replacement bid item and shall be paid at the unit price per linear foot for additional pipe.

END OF SECTION D2-9

D2-10 RESTORATION

A. General

1. Restore the project site to conditions not less than that existing prior to starting construction unless otherwise required by these specifications.
 - a. Coordinate surface restoration work with the affected private property owners.
 - b. Private property over which the Owner has prior rights (i.e. utility easement, sewer easement) and/or has obtained rights-of-way, agreements, licenses and/or agreements from the property owner to allow construction of a sanitary sewer pipeline and appurtenances, shall be restored in conformance with these Contract Documents.
 - c. Restore public property with strict adherence to the requirements of the public body having jurisdiction therein.
 - d. No restoration shall occur until testing is complete and accepted by the Owner's Representative.
 - e. Complete final surface restoration within one week of the sewer manhole installation or repair or as directed by the Owner's Representative.
2. Reference Standards

Surface restoration including pavement, driveways, sidewalks, curb and gutters, and sodding shall be in accordance with the current edition of North Central Texas Council of Government Specifications and these specifications.

B. Materials

1. Topsoil
 - a. Topsoil shall be free from large roots, sticks, weeds, brush, stones or other litter and waste products. A minimum of 4 inches compacted depth of topsoil shall be used.

- b. The soil texture shall be classified as loam or sandy loam according to the following criteria:

| | | <u>Loam</u> | <u>Sandy Loam</u> |
|------|---|-------------|-------------------|
| Sand | (2.0 to 0.05 mm diameter) (No. 10 sieve) | 25-50% | 45-85% |
| Silt | (0.05 to 0.002 mm diameter) (No. 270 sieve) | 30-50% | Less than 50% |
| Clay | (smaller than 0.002 mm diameter) (Hydrometer analysis) | 5-25% | Less than 20% |

- c. Soil texture shall be determined by utilizing processes as prescribed in ASTM D 422 using the No. 20 and No. 270 sieves and a hydrometer analysis.

2. Fertilizer

Fertilizer shall be a standard commercial 16-8-8, uniform in composition, free flowing and suitable for application with approved equipment, delivered to the site in bags or other convenient containers each fully labeled, conforming to applicable State laws.

3. Sod

- a. Sod shall be approved nursery or field grown grass that is native to the locality of the work and shall match existing in the area of excavation. Sod shall be well rooted in soil of such consistency that it will not break, crumble or tear during handling and placing. Sod shall be free of noxious weeds and other objectionable plants and shall not contain substances injurious to growth.
- b. Grass shall be between 1-1/2 and 4 inches in length when the sod is cut. The sod shall be cut within 48 hours of placement in rectangular pieces not less than 12 inches in width and not less than one inch in soil thickness. Keep sod in a moist condition between the initiation of cutting and the completing of placing and protect against exposure to the sun, wind, freezing during transportation to the site, and during storage prior to placing.

4. Seed

Grass seed shall be fresh and shall match existing grass in the area of excavation.

5. Portland Cement Concrete

Portland cement concrete shall be constructed in accordance with City of Lewisville Specifications. Portland Cement concrete shall have a minimum compression strength of 3000 psi at 28 days, a slump of 2-4 inches, and shall conform to ASTM C 94, Alternate 3. Reinforcement shall be 6" x 6" No. 4 x No. 4 Woven Wire Fabric, as specified, or as necessary to match existing reinforcing. No. 4 dowel bars shall be provided of 3 foot centers, each side. Minimum length of extension into existing base shall be 12 inches.

6. Curing Compound

Commercial grade conforming to ASTM C 309, Type I.

7. Reinforcing Steel

Conform to ASTM A 615, Grade 40.

8. Asphalt Cement

Asphalt cement shall be in accordance with City of Lewisville specifications. Asphalt cement for binder shall be AC 85-100 paving asphalt conforming to the Standard Specifications unless otherwise specified.

9. Prime Coat

Prime coat shall be in accordance with City of Lewisville specifications. Asphalt to be used for a prime coat shall be asphalt emulsion Type RS-2, CRS-2, or liquid asphalt MC-70, MC-250, or RC-250 conforming to ASTM D 977, D 2397, D 2027, or D 2028.

10. Tack Coat

Tack coat shall be in accordance with City of Lewisville specifications. Asphalt emulsion conforming to ASTM D 977 or D 2397, unless otherwise specified.

11. Asphalt Concrete

Asphalt concrete shall be in accordance with City of Lewisville specifications. Asphalt concrete for paving the designated area shall be Type II hot-plant mix and all materials shall conform to the requirements of Section 408 of the Standard Specifications for Highway Construction. Portions of the referenced specification that are obviously not applicable for the type of work to be done shall be disregarded.

C. Execution

1. Cleanup

Upon completion of installation and backfill operations, clean and dress up the work area as follows.

- a. Remove construction debris and litter from the site.
- b. Remove excess excavation material from the site including material which has washed into stream beds, storm water facilities, streets, culverts, etc.
- c. Remove tools, equipment and construction materials except for designated storage areas. Maintain designated storage areas in a neat appearing manner.
- d. Restore surface and subsurface drainage and provide drainage wash checks necessary to prevent soils from being washed downstream.
- e. Machine or hand grade the area in preparation of final grading, seeding, sodding, pavement replacement, etc.
- f. Restore all street signs and mail boxes.
- g. Maintain adequate safety signs, barricades and lights until final restoration of work area is completed.

2. Finish Grading

Finish grade the area to lines and grades which existed prior to the area being disturbed, with special attention directed to proper surface drainage, and the refilling of settled excavations with earth compacted to densities required. The area shall be smoothed by raking or dragging. Flower and vegetable gardens in existence prior to this project shall have the separately stored top soils restored unless otherwise required. Areas to be sodded or seeded shall have a minimum four-inch depth of topsoil.

3. Sod

- a. Restore grassed areas disturbed by construction with sod to match existing. Sod may be placed between the average date of the last freeze in the Spring and six weeks prior to the average date for the first freeze in the Fall according to the U.S. Weather Bureau for the area unless otherwise approved by the Owner's Representative in writing. Place sod at any time during this period except when the temperature is over 90 degrees

Fahrenheit, drought conditions exist or the sod or ground surface is frozen. Cut sod as thick as possible to aid the sod in taking root at the earliest possible date.

- b. Spread fertilizer nutrients over the area at a rate of 160 pounds per acre (nutrient weight only) or as recommended by the manufacturer.
- c. Place sod on the prepared surface with the edges in close contact and the alternate courses staggered. Bury exposed edges of the sod flush with the adjacent soil. In ditches, place sod with the longer dimension perpendicular to the flow of the water in the ditch. On slopes, starting at the bottom of the slope, place sod with the longer dimension perpendicular to the slope of the ground and where the slope is 2:1 or greater, stake the sod. Sod shall be rolled after placement and joints filled between sections with scarified soil. Within eight hours after placing the sod, apply five gallons of water per square yard.
- d. Provide sufficient water to prevent the sod from drying out.
- e. Existing sod which was salvaged during construction may be reused at the contractor's option.
- f. Sod shall have taken root before acceptance. Contractor shall guarantee sodding one year after acceptance by the Owner.

4. Seeding

- a. The areas to be restored by seeding shall be only as directed by Engineer. Seed bed preparation shall not be started until all stones, boulders, and debris larger than 3 inches in diameter have been removed. The area to be seeded shall be worked to a minimum depth of 3 inches with a disk or other method approved by the Engineer, reducing all soil particles to a size not larger than 2 inches in diameter. The prepared surface shall be relatively free from all weeds, stones, roots, and sticks. No seeds shall be sown until the seed bed has been approved by the Engineer.
- b. Spread fertilizer nutrients over the area at a rate of 160 pounds per acre (nutrient weight only) or as recommended by the manufacturer.
- c. Mechanically apply grass seed.
- d. Do not seed during high winds or when the seed bed is too wet for working. Within 12 hours lightly rake seeded areas and roll with a 200 pound roller. After raking and rooking, water the seeded areas with a fine spray until a uniform moisture depth of one inch has been obtained.

- e. In lieu of mechanical application of seed, hydraulic application may be used. The seed slurry shall be constantly agitated unit pumped from the tanks. The seed shall not be allowed to set in water more than four hours before application.
 - f. Water seeded areas as required for the seed to maintain suitable growth for at least three mowings performed a minimum of one week apart.
 - g. Reseed areas where the grass did not take.
5. Tree, Bush, and Hedge Transplanting and Replacement
- a. Existing trees, bushes, and hedges which cannot be tied back or trimmed to prevent damage and require removal because of the proposed construction shall be transplanted with a tree spade or replaced. Tree removal shall include removal of stump and roots four inches below grade. Transplanting shall be at the location directed by the Owner's Representative. After digging the plants, properly store them until they can be transplanted. Replacement plants shall not be delivered until they can be planted.
 - b. Plant during the proper seasons. Do not plant in frozen soil or during unfavorable weather conditions. Dig tree pits of such size as to provide ample space for the entire root system, as the tree comes from the nursery, without crowding or bending the roots. The pits shall be 12 inches wider than the ball diameter, have vertical sides, and be six inches deeper than the thickness of the ball.

Thoroughly loosen the soil in the bottom of the pit by spading to a depth of six inches. Dig holes immediately before planting. Dispose of soil earth dug from the tree pits.
 - c. Set trees at a depth slightly below finished grade, half-fill the hole with planting soil and thoroughly water. Loosen and fold down the upper half of the burlap, fill the hole with planting soil and thoroughly water. Fill the top two inches with a well-rotted mulch.
 - d. After planting, prune the branches in proportion to the amount of root system lost in the transplanting operations but in such a manner as to retain the form typical of the tree. In general, remove approximately one-third of the branch structure. Pruning shall be done by expert workmen in such a manner as to insure healthy and symmetrical growth of new wood.
 - e. After planting, wrap trunks of trees planted after October 15 with special tree wrap from the crotch of the first major branches down to the ground. Tie wrapping with cotton twine to keep the wrapping in place.
 - f. Plant trees vertically. Trees found leaning during the guarantee period shall immediately be staked with two 2-inch by 3-inch wood stakes, eight feet

long, pointed on one end. The stake shall be long enough to properly support the tree. Drive the stakes to a depth of 18 inches below the bottom of the tree pit. Locate the stakes on the north side and on the south side of the tree, and 12 inches to 18 inches from the trunk. Do not drive stakes into the ball and burlap. Guy the trees using a figure eight hitch consisting of No. 14 gauge wire encased in a section of rubber hose.

6. Restoration of Pavement Surfaces

a. General

- 1) Restore (unless otherwise specified or ordered by the Owner's Representative) permanent type pavements, sidewalks, driveways, curbs, gutters, and surface structures removed or disturbed during or as a result of construction operations to a condition which is equal in appearance and quality to the condition that existed before the work began. The surface of all improvements shall match the appearance of the existing surface.
- 2) Pour concrete only after inspection by the Engineer of the pouring site to verify proper forms and reinforcement. Reinforcement shall be equal in quantity and type of materials to reinforcement that existed prior to the work, or as indicated in the plans or specifications.
- 3) Sawcut existing paved surfaces to provide a straight joint between the existing and new surface. Sawcutting shall be full depth and square or rectangular in shape.
- 4) Cure and protect all exposed concrete installed under this contract in accordance with the reference standard.
- 5) Allow concrete to attain a minimum 7 day strength before allowing traffic or construction equipment on the concrete.
- 6) Remove entire sidewalk squares. Removal of partial squares shall not be allowed.

b. Concrete Sidewalks

- 1) Concrete sidewalks shall consist of a minimum thickness of six inches of nonreinforced Portland cement concrete over six inches of compacted granular material.
- 2) Sidewalk shall have a minimum width of sixty (60) inches.

- 3) Sawcut existing sidewalks at construction joints. Patching existing sidewalk squares damaged during construction activities shall not be allowed.
- 4) When removing portions of a concrete sidewalk, an entire "Square" shall be removed. Removal of a partial sidewalk "Square" shall not be allowed.
- 5) Sidewalk replacement shall be constructed according to the Sidewalk Replacement Detail Drawing in Section E - Manhole Rehabilitation Details.

c. Concrete Curb and Gutter

- 1) Curb and Gutter dimensions and cross sections shall conform with existing installations.
- 2) Place two dowels at each junction with existing work. Dowels shall be 3/4-inch diameter and a minimum of 12 inches in length.
- 3) Place one-half inch preformed bituminous expansion joints at junctions with existing work and at intervals not exceeding 50 feet, or as directed by the Engineer.
- 4) Sawcut control joints at intervals not exceeding 20 feet and at junctions with existing traverse cracks in the pavement, or as directed by the Engineer.

d. Concrete Driveways

Replace concrete driveways to the condition and thickness which existed prior to construction. Minimum thickness shall be 6 inches.

e. Bituminous Concrete Driveway

Replace bituminous driveways to the condition and thickness which existed prior to construction. Minimum thickness shall be 2 inches. Construction shall be executed in accordance with Asphalt Concrete Pavement Replacement for Pipe Trenches.

f. Tack Coat

Apply a tack coat on existing asphalt concrete pavement and to each lift of new pavement that is to receive a succeeding lift in conformance with the City of Lewisville Specifications and Section 403 of the Standard Specifications for Highway Construction.

g. Prime Coat

The prime coat shall be applied to the leveling course in accordance with the City of Lewisville Specifications and Section 403 of the referenced specification at the rate of 0.20 to 0.30-gallon per square yard of surface area. The exact amount is to be determined by the Engineer.

h. Construction Of Asphalt Concrete Pavement

Construction of asphalt concrete pavement shall be in accordance with the City of Lewisville specifications. Lay asphalt concrete over the base course in a single lift and the compacted depth shall be 3-inches. The method of proportioning, mixing, transporting, laying, processing, rolling the material, and the standards of workmanship shall conform to the applicable requirements of Section 408 of the Standard Specifications.

The Engineer will examine the base before the paving is begun and bring any deficiencies to the Contractor's attention to be corrected before the paving is started. Roll each lift of the asphalt concrete and compact to the density specified in the referenced Standard Specification for Highway Construction. The grade, line, and cross section of the finished surface shall conform to the Drawings. Asphalt or asphalt stains which are noticeable upon surfaces of concrete or materials which will be exposed to view shall be promptly and completely removed.

i. Asphalt Highway Repair

Asphalt Highway Repair shall be in accordance with the City of Lewisville Specifications and the Texas Department of Transportation Standard Specifications for Highway Construction.

j. Concrete Highway Repair

Concrete Highway repair shall be in accordance with the City of Lewisville Specifications and the Texas Department of Transportation Standard Specifications for Highway Construction.

k. Weather Conditions

Asphalt shall not be applied to wet material. Asphalt shall not be applied during rainfall, sand or dust storm, or any imminent storms that might adversely affect the construction. The Engineer will determine when surfaces and material are dry enough to proceed with construction. Asphalt concrete shall not be placed (1) when the atmospheric temperature is lower than 40 degrees F, (2) during heavy rainfall, or (3) when the surface upon

which it is to be placed is frozen or wet. Asphalt for prime coat shall not be applied when the surface temperature is less than 50 degrees F. Exceptions will be permitted only in special cases and only with prior written approval of the Engineer.

l. Concrete Pavement

Pavement replacement shall be constructed in accordance with the City of Lewisville specifications. The replacement shall be the same thickness as that removed, except that in no instance shall it be less than a minimum of 6-inches. Protect the newly placed concrete from traffic for a period of 7 days and cure by covering with burlap, sand, earth, or sawdust, which is kept continuously wet.

Handle and place concrete pavement in accordance with the Standard Specifications for Highway Construction of the Texas Department of Transportation.

m. Gravel Surfacing

Where required by the Drawings, and where necessary to match existing surfaces, place crushed rock, gravel surfacing material, as specified herein, on streets, driveways, parking areas, street shoulders, and other graveled areas disturbed by the construction. Spread the rock by tailgating and supplement by hand labor where necessary. Level and grade the rock to conform to the existing grades and surfaces.

D. Measurement and Payment

1. The cost of restoration will not be paid for separately, but shall be included in the price of the pay item being performed.

END OF SECTION D2-10

D2-11 Bypass Pumping of Existing Sewer Systems

A. General

1. Bypass pumping of the existing sewer system, required on sewer lines unless otherwise specified in the Contract Documents
 - a. Drawings and general provisions of the Contract, including Supplementary Conditions, apply to work of this section.
 - b. Division 1 – General Requirements

B. Materials

1. Pumping
 - a. Provide equipment that will convey 100 percent of wet peak flow conditions.
 - b. Provide fully automatic self-priming pumps. Foot-valves or vacuum pumps are not permitted for the priming the system.
 - c. Pumps must be constructed to allow for dry running periods of time to account for the cyclical nature of sewer flow.
 - d. Provide 1 stand-by pump for each size to be maintained on site. Place back up pumps on line, isolated from the primary system by valve.
 - e. If multiple pumps are required to meet the flow requirements, provide the necessary fittings and connections to incorporate multiple discharges.
 - f. Noise levels of the pumping system must follow requirements of the City's noise standards.
 - g. Pumps shall be sound attenuated, producing at or below, 70dBA at 23 feet. Pump system shall be Quiet Flow as provided by Sunbelt Rentals or approved equals.
2. Piping
 - a. Install pipes with joints which prevent the incident of flow spillage.

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3. Plugs or Stop Logs

a. Plugs

- Select a plug that is made for the size and potential pressure head that will be experienced.
- Provide an additional anchor, support or bracing to secure plug when back pressure is present.
- Use accurately calibrated air pressure gauges for monitoring the inflation pressure.
- Place inflation gauge at location outside of confined space area. Keep the inflation gauge and valve a safe distance from the plugs.
- Never over inflate the plug beyond its pressure rating.

b. Stop Logs

- Use stop logs devices designed for the manhole or sewer vault structure in use.

C. Execution

1. Preparation

- a. Locate the bypass pipelines in area to minimize disturbance to existing utilities and obtain approval of those locations from the City.
- b. Make preparations to comply with OSHA requirements when working in the presence of sewer gases, oxygen-deficient atmospheres and confined spaces.
- c. Do not begin bypass preparation and operation until City approval of the submittals requested per this Specification.
- d. Prior to beginning bypass operations, Contractor shall check 10 day weather forecast and verify that rain is not anticipated. Contractor shall not begin bypass operation if chance of rain exceeds 30% on any one day.

D2-11 (2)

City of Lewisville
CDBG Morningside Line & MH Rehab Project

2. Installation

- a. Install and operate pumping and piping equipment in accordance to the submittals provided per this Specification.
- b. Sewer flow stoppage
 - Plugging
 - Use a confined space procedure and equipment during installation when necessary.
 - Thoroughly clean the pipe before insertion of the plug.
 - Insert the plug seal surface completely so it is fully supported by the pipe.
 - Position the plug where there are not sharp edges or protrusions that may damage the plug.
 - Use pressure gauges for measuring inflation pressures.
 - Minimize upstream pressure head before deflating and removing.
- c. Sewer flow control and monitoring
 - Take sufficient precautions to ensure sewer flow operations do not cause flooding or damage to public or private property. The Contractor is responsible for any damage resulting from bypass pumping operations.
 - Begin continual monitoring of the sewer system as soon as the sewer is plugged or blocked. Be prepared to immediately start bypass pumping if needed due to surcharge conditions.
 - Sewer discharge may be into another sewer manhole or appropriate vehicle or container only. Do not discharge any sewer into an open environment such as an open channel or earthen holding facility.
 - Do not construct bypass facilities where vehicular traffic may travel over the piping.

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- Provide details in the suction and discharging piping plan that accommodate both the bypass facilities and traffic without disrupting either service.
3. Field or Site Quality Control
 - a. Field [OR] Site Test and Inspections
 - Perform leakage and pressure tests of the bypass pumping pipe and equipment before actual operation begins. Have City staff on site during tests.
 4. Closeout Activates
 - a. Once plugging or blocking is no longer necessary, remove in such a way that permits the sewer flow to slowly return to normal – preventing surge, surcharging and major downstream disturbance.
- D. Price and Payment Procedures
1. Measurement and Payment
 - a. Measurement
 - Measurement for this Item will be by lump sum.
 - b. Payment
 - The work performed and materials furnished in accordance with this Item will be paid for at the lump sum price bid for “Bypass Pumping”.
 - c. The price bid shall include:
 - Mobilization
 - Development of bypass plans
 - Transportation and storage
 - Setup
 - Confined space entry
 - Plugging
 - Pumping
 - Clean up
 - Manhole restoration
 - Surface restoration

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CDBG Morningside Line & MH Rehab Project

E. References

1. Reference Standards

- a. Reference standards cited in this Specification refer to the current reference standard published at the time of the latest revision date logged at the end of this Specifications, unless a date is specifically cited.
- b. Occupational Safety and Health Organization (OSHA).

F. Administrative Requirements

1. Coordination

- a. Schedule meeting with City to review sewer shutdown prior to replacing or rehabilitating any facilities.
- b. City reserves the right to delay schedule due to weather conditions, or other unexpected emergency within the sewer system.
- c. Review bypass pumping arrangement or layout in the field with City prior to beginning operations. Facilitate preliminary bypass arrangement or layout in the field with City staff present to affirm the operation is satisfactory to the City.
- d. After replacement or rehabilitation of facilities, coordinate the reestablishment of sewer flow with City staff.
- e. Provide onsite continues monitoring during all bypass pumping operations using one of the following methods:
 - f. Personnel on site
 - g. Portable SCADA equipment

G. Submittals

1. Submittals shall be in accordance with Section 01340.
2. All submittals shall be approved by the Engineer of the City prior to delivery.

H. Action Submittals/ Informational Submittals

1. Submit a detailed plan and description outlining all provisions and precautions that will be taken with regard to the handling of sewer flows. Submit the plan to the City for approval a minimum of 7 days prior to commencing work. Include the following details:

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- a. Schedule for installation and maintenance of the bypass pumping system
- b. Staging areas for pumps
- c. Pump sizes, capacity, number of each size, and the power requirements
- d. Calculations for static lift, friction losses, and velocity
- e. Pump curves showing operating range and system head curves
- f. Sewer plugging methods
- g. Size, length, material, joint type, and method for installation of suction and discharging piping
- h. Method of noise control for each pump and/or generator, if required.
- i. Standby power generator size and location
- j. Suction and discharge piping plan
- k. Emergency action plan identifying the measures taken in the event of a pump failure or sewer spill
- l. Staffing plan for responding to alarm conditions identifying multiple contacts by name and phone numbers (office, mobile)
- m. A contingency plan to implement in the event the replacement has unexpected delays or problems.

END OF SECTION D2-11

D2-11 (6)

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ATTACHMENT A

Roadway Worker Protection Course Request

Pursuant to the provisions of 49 CFR Part 214, any person who willfully fails to provide worker protection in accordance with those regulations is subject to a civil penalty in the minimal amount of \$2,500.00 per violation.

This form must be completed in its entirety prior to any roadway worker protection (RWP) services being authorized. Services should be requested 15 days in advance of the requirement for such services. Work may not commence until the approved form is returned to the applicant requesting the flagging services.

- Date of Course: _____
- Location of Course: _____
- Number of Attendees: _____

TO BE COMPLETED BY APPLICANT

Roadway Worker Protection Course:

No work or activity shall be conducted less than twenty-five feet (25.0') from the closest rail of any DCTA track (also referred to as "the foul zone") or perform any work in which a catastrophic event could cause equipment, people or materials to enter into the Foul Zone unless DCTA representative Flaggers are present and also within the last 365 days have completed a creditable Roadway Worker Protection Course.

The Roadway Worker Protection Course can be scheduled by calling **Alex Ison (817) 471-7132** or **Mark Richroath (817) 374-3092**. The course cost is \$1,000.00 and can have multiple attendees for no additional charge up to 50 people. A training venue will need to be provided for classes exceeding 15 people at the requestor's expense. Payment for the course is required prior to, or on the day of the course. The flagging cost is \$95.00/hour per flagger with an 8 hour minimum and \$95.00/hour for each hour in excess of 8 hours.

Payment is required upon billing. In the event flagging is required for a period exceeding ten (10) days, a Ten Thousand Dollar (\$10,000.00) retainer will be required. RWP billing will reflect travel time, preparation, and close-down time of up to two hours (per day) beyond work group protection hours.

RWP requests that are not formally canceled before 4:30 PM the business day prior will result in applicant being charged the full 8 hour minimum.

Company information and signature of authorized officer requesting and accepting the financial terms above:

Company Name: _____

Authorizing Officer: _____

Billing Contact: _____ Phone: _____ Email: _____

Billing Address: _____

Purchase Order #: _____

Signature of Authorizing Officer: _____

Applicant to email completed form to flagging@ctcinc.com. Upon receipt of request, CTC will invoice requester for services.

CTC Approval: _____ Date: _____

ATTACHMENT B

Roadway Worker Protection Request

Pursuant to the provisions of 49 CFR Part 214, any person who willfully fails to provide worker protection in accordance with those regulations is subject to a civil penalty in the minimal amount of \$2,500.00 per violation.

This form must be completed in its entirety prior to any roadway worker protection (RWP) services being authorized. Services should be requested 15 days in advance of the requirement for such services. Work may not commence until the approved form is returned to the applicant requesting the flagging services.

- Location requiring protection: _____
- Date(s) Required: _____
- Workgroup Hours: _____
- Description of work activity: _____
- Project Name & Number: _____

TO BE COMPLETED BY APPLICANT

Roadway Worker Protection Course:

No work or activity shall be conducted less than twenty-five feet (25.0') from the closest rail of any DCTA track (also referred to as "the foul zone") or perform any work in which a catastrophic event could cause equipment, people or materials to enter into the Foul Zone unless DCTA representative Flaggers are present and also within the last 365 days have completed a creditable Roadway Worker Protection Course.

The Roadway Worker Protection Course can be scheduled by calling **Alex Ison (817) 471-7132** or **Mark Richroath (817) 374-3092**. The course cost is \$1,000.00 and can have multiple attendees for no additional charge up to 50 people. A training venue will need to be provided for classes exceeding 15 people at the requestor's expense. Payment for the course is required prior to, or on the day of the course. The flagging cost is \$95.00/hour per flagger with an 8 hour minimum and \$95.00/hour for each hour in excess of 8 hours.

Payment is required upon billing. In the event flagging is required for a period exceeding ten (10) days, a Ten Thousand Dollar (\$10,000.00) retainer will be required. RWP billing will reflect travel time, preparation, and close-down time of up to two hours (per day) beyond work group protection hours.

RWP requests that are not formally canceled before 4:30 PM the business day prior will result in applicant being charged the full 8 hour minimum.

Company information and signature of authorized officer requesting and accepting the financial terms above:

Company Name: _____

Authorizing Officer: _____

Billing Contact: _____ Phone: _____ Email: _____

Billing Address: _____

Purchase Order #: _____

Signature of Authorizing Officer: _____

Applicant to email completed form to flagging@ctcinc.com. Upon receipt of request, CTC will invoice requester for services.

CTC Approval: _____ Date: _____

ATTACHMENT C

PERMIT NO.XXXXX
Mile Post: XXX.XX

LIMITED RIGHT OF ENTRY PERMIT (Construction)

This **LIMITED RIGHT OF ENTRY PERMIT** ("Permit") is granted by **DENTON COUNTY TRANSPORTATION AUTHORITY** ("DCTA"), a regional transportation authority created, organized and existing pursuant to Chapter 460, Texas Transportation Code, as amended (the "Act") to _____ ("Permittee"), a _____, acting herein by and through its duly authorized official, whose mailing address is _____, _____, Texas _____, for the consideration and subject to the restrictions., conditions, and agreements stated herein.

WHEREAS, pursuant to that certain *Transportation and Access Agreement and Easement* dated and effective May 25, 2010, between DCTA and Dallas Area Rapid Transit ("DART")("the DART Agreement"), DCTA is operating, and maintaining a public rail transportation system within the former Missouri-Kansas-Texas rail corridor from Mile Post 742.42 in the City of Carrollton, Texas, to Mile Post 721.53 in the City of Denton, Texas, ("the DCTA Corridor") which is presently owned by DART; and

WHEREAS, pursuant to agreements between and/or among DCTA, DART, and Dallas, Garland & Northeastern Railroad ("Railroad"), both passenger and freight railroad operations are occurring on the DCTA Corridor; and

WHEREAS, Permittee desires to enter the DCTA Corridor for the Permitted Purpose, as defined below;

NOW THEREFORE, DCTA does hereby grant to Permittee a non-exclusive revocable license to enter on, over, across and upon that certain portion of the DCTA Corridor between Mile Post _____ and Mile Post _____ in Denton County, Texas ("the Licensed Premises") for the Permitted Purpose subject to the following terms and conditions:

1. **Permitted Purpose:** The "Permitted Purpose" as that phrase is used in this Permit, shall mean the performance of construction activities by Permittee or Permittee's employees and/or contractor generally described in Exhibit "A" hereto.
2. **Term:** Permittees right to enter the Licensed Premises for the Permitted Purpose shall begin at _____ on _____, **20**____ and end at _____ on _____, **20**____, unless this Permit is terminated earlier as provided herein or extended by written agreement of the Parties.
3. **Consideration:** In consideration for the granting of this Permit Permittee shall pay DCTA (a) a one-time payment by Permittee to DCTA the sum of **TEN AND NO/100 (\$10.00) DOLLARS** (the "Permit Fee").
4. **Cost:** Permittee shall be solely responsible for all costs relating to performing the Permitted Purposes. Upon completion of the Permitted Purpose and prior to termination of this Permit, Permittee shall restore the Licensed Premises to the same condition as when Permittee entered upon the Licensed Premises unless DCTA consents to Permittee leaving the Licensed Premises in a different condition.

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5. **Performance of Work - Generally:** Permittee and/or its contractor shall use reasonable care, to avoid damaging any existing buildings, equipment and vegetation on or about the Licensed Premises and any adjacent property owned by or under the control of DCTA, DART, or Railroad. If the failure to use reasonable care by Licensee and/or its contractor results in damage to the Licensed Premises or such adjacent property, Permittee and/or its contractor shall immediately make appropriate replacement or repair the damage at no cost or expense to DCTA, DART and/or Railroad. If Permittee or its contractor fails or refuses to make such replacement, DCTA shall have the right, but not the obligation, to make or affect any such repair or replacement at the sole cost and expense of Permittee, which cost and expense Permittee agrees to pay to DCTA upon demand. Permittee shall require that the work and activities associated with the Permitted Purpose shall be conducted in such a manner and at such times to not endanger or interfere with DCTA's or Railroad's operations, and in accordance with the regulations and instructions of DCTA and the Railroad.
6. **DCTA to Review Plans:** Prior to the commencement of any work on the Licensed Premises by Permittee or its contractor, Permittee shall submit to DCTA for review and approval Permittee's plans and specifications for the portion of Permittee's project to be constructed within the DCTA Corridor. Permittee, its employees, contractors, and subcontractors shall perform that portion of the Work located in the DCTA Corridor strictly in accordance with the plans and specifications approved by DCTA. Permittee shall further submit to DCTA, for approval, all construction details, falsework and other incidentals not detailed in plans, insofar as they are located within the DCTA Corridor or otherwise may reasonably affect DCTA or its property and/or operations. Not later than sixty (60) days following completion of Permittee's work within the DCTA Corridor, Permittee shall deliver to DCTA a full set of as-built drawings showing all improvements made by or on behalf of Permittee within the DCTA Corridor including, but not limited to, all materials, equipment, and other personal property,
7. **Operational Safety Matters:** Permittee, its contractors and subcontractors, and the employees of any of the foregoing, shall at all times comply with the following operational safety measures while present in the DCTA Corridor:
- a. Flagger(s), who are representatives of DCTA engaged to protect DCTA's interest while in the DCTA Corridor and who have been determined by DCTA to be knowledgeable and qualified to perform flagging duties within the DCTA Corridor in accordance with DCTA's operating and safety rules must be present and on-duty.
 - b. No work or other activity shall be conducted less than twenty-five feet (25.0') from the closest rail of any DCTA track (also referred to as "the Foul Zone") or perform any work in which a catastrophic event could cause equipment, people or materials to enter into the Foul Zone unless the above mentioned flaggers are present.
 - c. Every person working under the control of Permittee or otherwise under authority of Permittee pursuant to this Permit who are engaged in any activity that requires flagger(s), as described in Section 7.b., above, shall have received within the 365 day period prior to the date the work is to be performed, attended a creditable

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Roadway Worker Protection course and have successfully passed all required examinations associated with that course. Permittee, Permittee's contractor, or the employee working within the DCTA Corridor will provide proof of course completion upon request from DCTA or its representatives. Whether or not the above mentioned Roadway Worker Protection course is creditable shall be determined at the sole discretion of DCTA.

- d. All equipment, tools and materials must be stored not less than twenty-five (25) feet from the closest rail of any operable track unless otherwise approved in writing by DCTA. Explosives or other highly flammable substances or any hazardous materials regulated pursuant to federal or state regulation shall not be stored on DCTA property, including, but not limited to, the DCTA Corridor, without the prior written approval of DCTA.
 - e. Permittee shall remove or have removed all tools, equipment and materials from the DCTA Corridor promptly upon completion of work, but in no case later than ten (10) unless a longer period is authorized in writing by DCTA.
 - f. Permittee shall reimburse DCTA for all costs and expense incurred by DCTA in connection with the provision of any services or work in relation to the Permittee's work as described in Exhibit "A", including without limitation the expense of furnishing such inspectors, watchmen and flagmen as DCTA deems reasonably necessary or which are otherwise requested by Permittee, the installation and removal of falsework beneath tracks which DCTA is required to do in order for Permittee to construct its work as described in Exhibit "A".
 - g. Permittee understands and acknowledges that flagging and safety rules will be administered by CTC, Inc. (CTC), through the CTC Roadway Worker Safety Training, conducted at 9601 Camp Bowie West, Fort Worth, Texas 76116.
8. **Required Notifications:** Prior to entering the Licensed Premises pursuant to this Permit, Permittee shall provide notification to DCTA as follows:
- a. No prior notification is required if a work schedule setting forth the specific dates and times during which Permittee and/or its contractor will be performing work within the DCTA Corridor is set forth in Exhibit "A", hereto, and entry into the Licensed Premises occurs within those dates and times.
 - b. If Permittee must enter the Licensed Premises in a situation constituting an Emergency Event (as defined below), Permittee shall notify DCTA by telephone not later than one hour prior to entry into the Licensed Premises at the following phone numbers:
 - i. Between the hours of 5:00 AM and 11:00 PM Central Time, contact Mr. Alex Ison, Signal Supervisor, at 817-471-7132 (cell)
 - ii. At anytime, contact Mr. Danny Bailey, DCTA Rail Operations, at (972) 966-5103 or (512) 848-7399 (cell).

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- c. In all other situations not described in Paragraphs a. or b. of this Section 8, Permittee shall notify DCTA not later than fifteen (15) days prior to entry into the Licensed Premises by providing written notice to DCTA in accordance with Section 14.a., below.
- d. Permittee shall notify DCTA that the work described in Exhibit "A" is completed not later than five (5) business days after the work is completed, such notification to be in accordance with Section 14.a., below.
- e. For purposes of Section 8.b., above, an "Emergency Event" shall mean an event in which Permittee requires access to the Licensed Premises to perform repairs, replacement, or maintenance to Permittee's leased or owned property or facilities located within the DCTA Corridor, which, if not performed within a short time after the discovery of the need for such repair, replacement, or maintenance, will reasonably:
 - i. result in personal injury or death or damage to or destruction of real or personal property;
 - ii. endanger the public health or safety; or
 - iii. result in an interruption of utility, communication, or data transmission services to the public or a governmental entity whose operations are dependent on such transmission.

9. Indemnification:

- a. **TO THE EXTENT ALLOWED BY LAW, PERMITTEE AGREES TO INDEMNIFY, DEFEND, AND HOLD HARMLESS, DCTA, DART, RAILROAD AND THEIR RESPECTIVE OFFICERS, AGENTS, AND EMPLOYEES FROM AND AGAINST ANY PENALTY, OR ANY DAMAGE, OR CHARGE, IMPOSED FOR ANY VIOLATION OF ANY LAW, ORDINANCE, RULE OR REGULATION ARISING OUT OF THE PERMITTED USE OF THE LICENSED PREMISES BY PERMITTEE, WHETHER OCCASIONED BY THE INTENTIONAL OR NEGLIGENT ACTS OR OMISSIONS OF PERMITTEE, ITS EMPLOYEES, OFFICERS, PARTNERS, SHAREHOLDERS, AGENTS, CONTRACTORS, INVITEES, OR GUESTS.**
- b. **TO THE EXTENT ALLOWED BY LAW, PERMITTEE SHALL AT ALL TIMES INDEMNIFY, DEFEND, AND HOLD HARMLESS DCTA, DART, RAILROAD, AND THEIR RESPECTIVE OFFICERS, AGENTS, AND EMPLOYEES AGAINST AND FROM ANY AND ALL LOSS, COST, DAMAGE, OR EXPENSE, INCLUDING REASONABLE ATTORNEY'S FEES, ARISING OUT OF OR FROM ANY ACCIDENT OR OTHER OCCURRENCE CAUSING PERSONAL INJURY, DEATH OR PROPERTY DAMAGE RESULTING FROM OR RELATED TO USE OF THE LICENSED PREMISES BY PERMITTEE, ITS AGENTS, EMPLOYEES, PARTNERS, SHAREHOLDERS, AGENTS, CONTRACTORS, INVITEES, OR GUESTS, WHETHER OCCASIONED BY THE INTENTIONAL OR NEGLIGENT**

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ACTS OR OMISSIONS OF LICENSEE, ITS EMPLOYEES, OFFICERS, PARTNERS, SHAREHOLDERS, AGENTS, CONTRACTORS, INVITEES, OR GUESTS. EXCEPT WHEN CAUSED BY THE WILLFUL MISCONDUCT OR GROSS NEGLIGENCE OF DCTA, DART, RAILROAD OR THEIR OFFICERS, EMPLOYEES AND/OR AGENTS, AND ONLY THEN TO THE EXTENT OF THE PROPORTION OF ANY FAULT DETERMINED AGAINST DCTA, DART, OR RAILROAD FOR THEIR WILLFUL MISCONDUCT OR GROSS NEGLIGENCE.

- c. If Permittee is a “governmental unit” as that term is defined in Tex. Civ. Prac. & Rem. Code §101.001, Permittee does not by agreement to and acceptance of this Permit waive its right to claim immunity to liability or suit or to invoke the limits of liability set forth in Chapter 101 of the Texas Civil Practices & Remedies Code, as amended, to the extent sovereign immunity has been waived by said statutes. DCTA and Permittee further acknowledge and agree that nothing in this Permit is intended to be for the benefit of any third parties except to the extent expressly provided in this Permit.
 - d. The provisions of this Section 9 shall survive the termination of this Permit, regardless of the means of termination.
- 10. Insurance:** Prior to occupancy of the Licensed Premises under this Permit, Permittee agrees to procure and maintain at its sole cost and expense the following types and amounts of insurance with an insurer or insurers and in form satisfactory to DCTA, which insurance shall be primary and non-contributory.
- a. Commercial General Liability with Contractual Liability Endorsement.
 - i. Combined single limit of not less than \$2,000,000.
 - ii. DCTA, DART, Railroad and all affiliated companies and organizations named as additional insureds without any qualification or restriction.
 - iii. DCTA must be provided 30 days notice of cancellation or modification.
 - b. Commercial Automobile Liability Policy
 - i. Combined single limit of not less than \$2,000,000.
 - ii. DCTA, DART, and Railroad named as additional insureds without any qualification or restriction.
 - iii. DCTA must be provided not less than 30 days notice of cancellation or modification.
 - c. Workers' Compensation Insurance
 - i. Providing Statutory Benefits under the Workers' Compensation Act of the State of Texas and/or any other State or Federal Law or Laws applicable to the Contractor's employees performing the work under this Permit.

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- ii. Employer's Liability Insurance with limits of liability of not less than \$500,000 each accident, \$500,000 each employee for disease and \$500,000 policy limit for disease.
 - iii. Endorsed with a Waiver of Subrogation Endorsement, waiving the carrier's right of recovery under subrogation or otherwise from DCTA, DART, and Railroad.
- d. Permittee agrees to furnish DCTA Certificates of Insurance and copies of Endorsements for Additional Insured, Waiver of Subrogation and Contractual Liability Railroads (or, as and when DCTA may direct, copies of the actual insurance policies) as evidence of the coverage's outlined in Paragraphs a, b, and c, above, and this Paragraph d. Approval will be expedited if all required coverage's and the following endorsements are included on the Certificates:
- i. Endorsement showing DCTA, DART, Railroad and their affiliate companies and organizations named as additional insureds in as required by Paragraphs a. and b., above and requiring that DCTA be given 30 days notice of cancellation or modification. The certificate must specify that the endorsement is applicable to the General Liability and Auto Liability Policies.
 - ii. Contractual liability endorsement.
 - iii. Endorsement removing exclusions from contractual liability coverage for operations within 50 feet of a railroad or the purchase of a Railroad Protective Liability Policy with limits of liability of no less than \$2,000,000 per occurrence and \$6,000,000 aggregate.
 - iv. Endorsement removing exclusions for XCU hazards.
 - v. Waiver of subrogation endorsement specific to Workers Compensation.
- e. All policies must contain a cross liability endorsement reading as follows:
- "It is agreed that the inclusion of more than one person, corporation, organization, firm or entity as insured under this policy shall not in any way affect the rights of any such person, corporation, organization, firm or entity with respect to any claim, demand, suit or judgment made, brought or recovered by or in favor of any other insured. This policy shall protect each person, corporation, organization, firm or entity in the same manner as though a separate policy had been issued to each; provided that this endorsement shall not operate to increase the company's limits of liability as set forth elsewhere in this policy."
- f. Unless Permittee's insurance covers the operations of Permittee's contractors and subcontractors, Permittee shall require all contractors and subcontractors engaged by Permittee to perform work within the Licensed Premises pursuant to this Permit to comply with the provisions of this Section 8 in the same manner as

PERMIT NO.XXXXX
Mile Post: XXX.XX

Permittee.

11. **Removal from Licensed Premises:** At the request of DCTA or Railroad, Permittee shall remove from the DCTA Corridor any employee of Permittee, or Permittee's contractor or subcontractor who fails to comply with DCTA and/or Railroad's operating and safety rules and any right of Permittee to enter upon the DCTA Corridor shall be suspended until compliance with such rules is obtained. To the extent allowed by law, Permittee shall indemnify DCTA and the Railroad against any claim arising from the removal of any such employee from the DCTA Corridor.
12. **Identification:** Company-issued photo identification is required of all Permittee's employees, contractors, and subcontractors working on the Licensed Premises which clearly identifies the person as someone authorized to be on the Licensed Premises pursuant to this Permit.
13. **Termination:** The Permit shall terminate on the earliest of:
- a. The date set forth in Section 2, above, as the end of the Term; or
 - b. The date established by mutual written agreement of the Parties; or
 - c. The date Permittee has completed all work and/or other activities related to the Permitted Purpose and has completed restoration of the Licensed Premises as required by Section 4, above; or
 - d. 5:00 p.m., Central Time on the fifth (5th) day following DCTA;s delivery of notice to Permittee of Permittee's non-compliance with the provisions of this Permit if Permittee has failed to cure such non-compliance by that time; provided, however, if the non-compliance is the failure to comply with a DCTA and/or Railroad operating and safety rule pursuant to Section 11, above, termination shall be at 5:00 p.m. Central Time on the second (2nd) day after delivery of the notice to Permittee if Permittee remains out of compliance with such operating or safety rule unless the notice of non-compliance expressly provides a longer period for Permittee to come into compliance; or
 - e. The date any of the insurance coverage required to be provided by Permittee and/or its contractors or subcontractors pursuant to Section 9, above, expires without being renewed.
14. **Miscellaneous.**
- a. **Notice.** When written notice is permitted or required by this Permit, it shall be deemed delivered when delivered in person or when placed, postage prepaid, in the U.S. Mail, Certified, Return Receipt Requested, and addressed to the parties at the following addresses:

DCTA: Denton County Transportation Authority
1955 Lakeway, Suite 260
Lewisville, Texas 75067

**Limited Right-of-Entry
Denton County Transportation Authority**

PERMIT NO.XXXXX
Mile Post: XXX.XX

ATTN: Rail Development

With Copy to: Peter G. Smith, General Counsel
Nichols, Jackson, Dillard, Hager & Smith, LLP
500 N. Akard, Suite 1800
Dallas, Texas 75201

PERMITTEE: _____

Either party may change its address for notice by giving the other party notice thereof.

- b. **Parties Bound.** This Permit shall be binding upon and inure to the benefit of the executing parties.
- c. **Entirety and Amendments.** This Permit embodies the entire agreement between the parties and supersedes all prior agreements and understandings, if any, relating to the Licensed Premises and the matters addressed herein, and may be amended or supplemented only by a written instrument executed by the party against whom enforcement is sought.
- d. **Governing Law; Venue.** This Permit shall be construed under and in accordance with the laws of the State of Texas. Venue for any dispute between the parties to this Permit arising from or related to this Permit shall be in a state court in Denton County, Texas, the personal jurisdiction to which the parties hereto agree to submit.
- e. **Number and Gender.** Words of any gender used in this Permit shall be held and construed to include any other gender; and words in the singular shall include the plural and vice versa, unless the text clearly requires otherwise.
- f. **Assignment.** This Permit is not assignable.
- g. **No Joint Enterprise.** The parties do not intend this Permit to be construed as finding that the parties have formed a joint enterprise. The purposes for which each party has entered into this Permit are separate and distinct. It is not the intent of any of the parties that a joint enterprise relationship is being entered into and the parties hereto specifically disclaim such relationship. This Permit does not constitute a joint enterprise, as there are no common pecuniary interests, no common purpose and no equal right of control among the parties hereto.
- h. **Counterparts.** This Permit may be executed in any number of counterparts with the same effect as if all signatory parties had signed the same document. All counterparts will be construed together and will constitute one and the same

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instrument.

- i. **Waiver of Default.** It is not a waiver of or consent to default if the non-defaulting party fails to declare immediately a default or delays in taking any action. Pursuit of any remedies set forth in this agreement does not preclude pursuit of other remedies in this agreement or provided by law.
- j. **No Property Conveyance.** Permittee understands, acknowledges, and agrees that this Permit is solely contractual and does not constitute a conveyance of an interest in real property.
- k. **Effective Date.** This Permit shall become effective on the date it is signed by the authorized representatives of DCTA and Permittee.
- l. **DART as Third Party Beneficiary.** Permittee understands, acknowledges, and agrees that to the extent any right of indemnification or other obligation stated herein is expressly made in favor of DART, DART constitutes a third party beneficiary of this Permit with the right to enforce said provisions in this Permit without the necessity of DART acknowledging its rights as a third party beneficiary hereto.

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SIGNED AND AGREED this ____ day of _____, 2019.

DENTON COUNTY TRANSPORTATION
AUTHORITY

BY: _____
Raymond Suarez, CEO

SIGNED AND AGREED this ____ day of _____, 2019.

PERMITTEE

BY: _____

Printed Name: _____

Title: _____

PERMIT NO.XXXXX
Mile Post: XXX.XX

EXHIBIT "A"
DESCRIPTION OF PERMITTED PURPOSE

ALL BIDDERS ARE NOTIFIED THAT THE FOLLOWING QUALIFICATION STATEMENT MUST BE COMPLETED AND SUBMITTED WITH THE BID PROPOSAL.

Contractor's Qualifications

The contractor shall show that he has experience with similar projects that require working in confined areas in close proximity to many physical features (fences, utility poles, gas lines, gas lines and meters, sewer manholes and cleanouts, etc.) which requires the contractor to plan work efforts and equipment needs with these limitations in mind. The contractor shall submit a list of Public Works Projects successfully completed within the last three (3) years. This list shall include the names of supervisors and type of equipment used to perform this work.

BIDDER'S QUALIFICATION STATEMENT

Project:

Contractor:

Indicate One: Sole Proprietor Partnership Other
 Corporation Joint Venture

Name:

Title:

Address:

City:

State & Zip:

Phone:

State and Date of Incorporation, Partnership, Ownership, Etc.

Location of Principal Office:

Contact and Phone at Principal Office:

Liability Insurance Provided and Limits of Coverage:

Workers Compensation Insurance Provider:

Surety Bonding Company (Performance & Payment):

Insurance Agency Name:

Insurance Agency Address:

Contact Person:

Phone Number:

Total Number of Employees to be Associated with this Job:

Managerial Administrative Professional
 Skilled Semi-Skilled Other

Percentage of Work to be Done by Bidder's Employees (Based on Dollars Bid):

Type(s) of Work to be Done by Bidder's Employees (Examples: Concrete Paving, Structural Concrete, Water Lines, Sanitary Sewer Lines, Storm Pipe, Storm Inlets, Excavation, Lime, Bridge Fencing, etc.)

| | |
|--|---|
| | 5 |
| | 6 |

Access to Tools and Equipment:

Percent Owned Percent Rented

Number of Years in Business as a Contractor on Above Types of Work:

Type(s) of Work to be Done by Sub-Contractors:

Include Name, Address, and Phone Number of Sub-Contractor. (Use Additional Sheets, if needed.)

Type of Work

Sub-Contractor

| | |
|----------------------|----------------------|
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |

List your most current completed projects, with information, similar to the type of work bid. (Use Additional Sheets, if necessary.)

Project:

Project Description:

Owner/Agency:

Year Built:

Contract Price:

Contact Person:

Phone:

Project:

Project Description:

Owner/Agency:

Year Built:

Contract Price:

Contact Person:

Phone:

Project:

Project Description:

Owner/Agency:

Year Built:

Contract Price:

Contact Person:

Phone:

Project:

Project Description:

Owner/Agency:

Year Built:

Contract Price:

Contact Person:

Phone:

Project:

Project Description:

Owner/Agency:

Year Built:

Contract Price:

Contact Person:

Phone:

Project:

Project Description:

Owner/Agency:

Year Built:

Contract Price:

Contact Person:

Phone:

Trade References (List Company, Address, Contact Person, and Phone):

| | |
|--|---|
| | 5 |
| | 6 |

Bank References (List Institution, Address, Contact Person, and Phone):

| | |
|--|---|
| | 5 |
| | 6 |

Claims and Suits (If the answer to any of the questions is yes, please attach details):

Has your organization ever failed to complete any work awarded to it?

| | |
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| | 6 |

Are there any judgments, claims, arbitration proceedings, or suits pending or outstanding against your organization or its officers?

| | |
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| | 5 |
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Has your organization filed any lawsuits or requested arbitration with regard to construction contracts within the last five years?

| |
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Within the last five years, has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a construction contract?

| |
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FEDERAL REQUIREMENTS ATTACHMENT

Bidders may direct any questions concerning the following sections to Jamey Kirby, Community Development Block Grants, Grants Coordinator, at 972-219-3780. Technical assistance will also be available at the pre-bid conference. The assorted exhibits and forms attached to this bid invitation are included to acquaint prospective bidders with federal requirements for projects using Community Development Block Grant funds. **The attached forms do not have to be returned with sealed bids. The successful bidder will complete necessary documents with technical assistance from the Grants Coordinator before a pre-construction conference.** The following topics will be covered:

PROJECT NAME, LOCATION:

**City of Lewisville, Department of Public Services –
2019 CDBG Morningside Sanitary Sewer Line Replacement Project,
Morningside Ave., Lewisville TX 75057**

FEDERAL LABOR REQUIREMENTS

This project is subject to Federal Labor Standards including the Davis-Bacon Act (DBA), Copeland Act, Contract Work Hours Safety Standards Act (CWHSSA), and the Fair Labor Standards Act (FLSA).

Davis Bacon Act – Specifies prevailing wages that must be paid to various classes of laborers and mechanics employed on the project. DBA provisions will be in effect on construction contracts in excess of \$2,000. Documentation requirements include:

- HUD Form 4010 (Attached) describing federal labor standards
 - Form 4010 and the Wage Decision, must also be inserted in all sub-contractor agreements
- Certificate Appointing Officer or Employee to Supervise Payment of Employees
- Payroll Reports (Contractor and Subcontractors) – Weekly
- Statement of Compliance - Weekly Attached to Payroll Reports
- Payroll Deduction Authorizations – Once for each affected employee
- Contractor’s Certification Concerning Labor Standards and Prevailing Wage Requirements
- Subcontractor’s Certification Concerning Labor Standards and Prevailing Wage Requirements

Grants office staff will be available to assist contractors unfamiliar with DBA requirements. The documents above as well as the “Contractors Guide” to DBA will be provided to the successful bidder as well as to any prospective bidders that desire more detailed information. Bidders should refer to the wage decision announced in this bid invitation to assess whether the DBA prevailing wages will affect project pricing. The following paragraphs outline the DBA process:

The **Fair Labor Standards Act (FLSA)** sets out requirements for payment of minimum wages, overtime wages at 1½ pay rate, child labor standards and prohibits wage discrimination on the basis of sex. **Contract Work Hours Safety Standards Act (CWHSSA)** sets a uniform standard for a 40-hour work week with time and a half the basic rate of pay for all work in excess of 40-

hours per week. Failure to comply with the labor standards requirements can result in the escrow of funds and/or withholding of insurance advances.

The Contractor should inform his foreman and subcontractors that this project is subject to periodic employee wage interview visits by City staff and/or federal agencies, such as the Department of Housing and Urban Development (HUD) or the Department of Labor (DOL), to insure compliance with the aforementioned regulations. These federal officers or City staff may not be prevented from conducting such interviews.

The Contractor and their Sub-contractors will be required to submit payroll forms using the City's subscription to LCP Tracker. Payrolls must be submitted to the Community Grants Division within seven days after a pay period ends. A pay period is seven (7) consecutive days. Payrolls and Statements of Compliance must be original and must be an original ink signature. It is suggested that blue ink be used. Electronic submissions of scanned reports can be used to meet the 7-day deadline, however original signatures must still be received before any requests for payment can be considered. The certification dates must cover the seven (7) day period.

The form "A Certification from Contractor Appointing Officer or Employee to Supervise Payment of Employees" must be submitted before start of construction.

The payrolls and basic payroll records of the contractor and each subcontractor covering all laborers and mechanics employed upon the work covered by this contract are to be maintained during the course of work and preserved for a period of three (3) years thereafter.

Liquidated damages will be assessed for failure to pay overtime. The assessment amount is \$10 per day per violation. Overtime begins on this project after 40 hours per week. Additionally, wage restitution must be paid to any employee who is underpaid whether the underpayment is due to failure to pay overtime or failure to apply the prescribed hourly rate of pay.

Employees must be classified and paid according to the classifications and rates prescribed by the applicable wage decision. **The decision which is applicable to this project is TX 190018 dated 01/04/2019 for Heavy Construction/ Water and Sewer.** The decision is attached to this document and at the web-site <http://www.wdol.gov/dba.aspx>. The Wage Decision is subject to change up to the day bids are due. Please visit the website, search by state and county to find Denton County then validate that this decision number is still in effect. **The wage decision must be posted at the construction site along with required posters for the duration of construction activity.** Any classification needed which does not appear on the wage decision must be requested and approved by the U. S. Department of Labor prior to the use of that classification on the project. If you anticipate requesting additional classifications because those attached do not cover all the types of work to be accomplished on this job, please contact the Grants Coordinator as early as possible.

In instances where the owner of a company performs work on the project, that owner must show himself/herself on the payroll and must show the hours worked each day and total hours for the week. All persons who perform work on the project must be shown on the payroll. The address and a 4-digit identifier for each employee must be included the first time that employee appears on the payroll and any time their address changes.

Apprentices may be employed on the project, however, they must be certified by the Bureau of Apprenticeship & Training and the allowable ratio of apprentices to journeymen must not be exceeded.

The first payroll furnished must show "INITIAL" in the payroll number block. Likewise, the last payroll must show "FINAL". Subsequent payrolls following the initial payroll must be numbered sequentially beginning with week number 2. Payrolls are still required for weeks in which no work is performed and should include the statement "NO WORK PERFORMED".

Any person who is employed on a piece-work basis must be shown on the payroll. The hours worked each day and total hours for the week must be shown. The hourly rate of the piece worker must equal or exceed the prescribed hourly rate for the particular work classification.

Dual work classifications within the same payroll period are acceptable provided that a signed verification of the dual work classification is furnished from the employee. When dual work classifications are used, submit the form "Employees Statement of Work Verification".

Deduction authorizations, signed by employees, must be provided for any deduction with the exceptions of FICA and federal tax.

Unless otherwise specified by the applicable wage decision, the classification of "helper" is unacceptable. Employees must be classified and paid based on the work they perform; e.g., if a person performs the duties of or uses the tools of a plumber, that person must be classified as a plumber, not as a plumber's helper (the plumber classification is used as an example only). Likewise, the classification "laborer" is only used for workers performing unskilled duties and that are not using the tools or performing duties associated with another classification.

The general contractor will be required to certify that all laborers and mechanics employed on the project (including those employed by subcontractors) have been paid hourly rates as prescribed by the applicable laws.

OTHER FEDERAL AND CDBG PROGRAM REQUIREMENTS

This project is subject to Section 3 of the Housing and Urban Development Act of 1968, Executive Order 11246 providing for Equal Opportunity Employment, the Copeland Anti-Kickback Act, approval of contractors through the Excluded Parties/ De-barred database, and Lobbying Restrictions.

Section 3 and Executive Order 11246

Written affirmative action plans must be submitted by contractors and subcontractors having contracts over the amount of \$50,000 and employing more than 25 non-construction employees. The plans should address the contractor's intent to hire and train minorities and females on an equal basis as any other group. (Contractors without existing plans may complete attachment C of the City of Lewisville's Affirmative Action Plan included as an exhibit to this bid invitation.)

Purpose of Section 3:

- 1) To encourage the use of small, local and/or minority businesses as suppliers of goods and services, and
- 2) To encourage the use of local, minority and low income persons as trainees and employees.

Section 3 requires that a “good faith effort” be made to achieve these goals. Section 3 forms must be completed by contractors and subcontractors having contracts over the amount of \$10,000.

Contractors must post an EEO poster and a Notice to all Employees at the project site. Both are available from City staff.

Attachments to be completed by the successful bidder before start of construction include:

- Self-Certification Form
 - Socially or Economically Disadvantaged
 - Non-Profit Organization
- Affirmative Action Plan
- Statement of Release
- Preliminary Statement of Work Force Needs
- Statement of Policy on Equal Employment Opportunity

These forms are included in the exhibit “Affirmative Action Plan under Section 3” for information purposes but do not have to be submitted with sealed bids. The winning bidder will submit the above forms, except that some may not be needed depending on whether the Affirmative Action Plan/ Section 3 Plan is required.

Copeland Anti-kickback Act: The Copeland Act prohibits kickbacks being paid by the employee to the employer and requires the weekly submission of payrolls. Contractors must certify that they do not and will not accept kick-backs as conditions for employment.

Debarred Contractors: Contractors must certify that they have not been debarred or declared ineligible for work on federal projects. All sub-contractors must be cleared by the City on a debarred data base before beginning work.

Lobbying: Contractors must complete a certification regarding lobbying restrictions and disclosure.

The staff person who will monitor this project for compliance with federal requirements is Jamey Kirby. Any questions concerning labor requirements should be directed to him at (972)219-3780. Questions from sub-contractors should be directed though the general contractor who is ultimately responsible for the fulfillment of these obligations.

Contact Persons:

Community Development Block Grant
 Jamey Kirby
 Grants Coordinator
 Neighborhood and Inspection Services Dept.

Departmental Project Manager:
 David Evans
 ULM Operations Supervisor
 Public Services Department

151 W. Church St.
Lewisville, TX 75057
Telephone: (972) 219-3780
Email: jkirby@cityoflewisville.com

1100 N. Kealy, Suite D
Lewisville, TX 75057
Telephone: (972) 219-3522
Email: devans@cityoflewisville.com

Exhibits:

City of Lewisville Affirmative Action Plan Under Section 3 of the Housing and Urban
Development Act of 1968 with Section 3 Attachments
Statement of Policy on Equal Employment Opportunity
Certification by Bidder
Certification Regarding Lobbying
Department of Housing and Urban Development Contract Requirements
HUD Form 4010
Current Wage Decision

City of Lewisville

Neighborhood Services Department

Community Grants Division

Affirmative Action Plan Under
Section 3 of The
Housing and Urban Development Act of 1968

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City of Lewisville
Neighborhood and Inspection Services Department
Community Grants Division

Affirmative Action Plan Under
Section 3 of the
Housing and Urban Development Act of 1968

PART I: PURPOSE AND BACKGROUND INFORMATION

1. Summary Explanation and Purpose:

Section 3 of the Housing and Urban Development Act of 1968, as amended, (“Section 3”) is binding upon the City of Lewisville, (“the City”) and its Contractor in all projects using Community Development Block Grant (CDBG) funds. Any Contractor of CDBG funds, from whatever source, is bound by Section 3.

The two primary purposes of Section 3 are (1) to encourage the use of small, local and minority businesses as suppliers of goods and services, and (2) to encourage the use of local, minority and lower income persons as trainees and employees. Section 3 requires that good faith efforts be made to achieve these purposes.

This plan sets forth the procedures which will be followed by the City of Lewisville’s Neighborhood and Inspection Services Department, Community Grants Division and all its CDBG Contractors to accomplish these purposes. Specific regulations governing Section 3 are set out in 24 CFR 135.

2. Geographical Applicability:

For the Community Development Block Grant Program, Section 3 is applicable to all activities taking place within the corporate limits of the City of Lewisville, Texas. Within this “Section 3 covered area”, the Target areas are considered priority areas. Attachment A, “Target Areas of Lewisville”, shows the location of these priority areas. The Target areas include the following 2010 census tracts/block group numbers:

021502.1, 021502.3, 021618.1, 021618.2, 021619.2, 021620.2, 021624.1, 021716.1, 021716.3, 021728.2, 021733.1, 021733.2, 021734.1, 021734.2, 021735.2, 021739.1, 021739.2, 021740.2, 021743.2, 021744.1, 021744.3, 021745.1, 021745.4

3. Applicability to Businesses:

Businesses which are at least fifty-one percent (51%) owned by socially or economically disadvantaged persons who reside in the Section 3 covered area and which qualify as

small businesses under the standards of the Small Business Administration are eligible for the benefits of Section 3.

4. Applicability to Individuals:

Any person who resides in the Section 3 covered area and whose family income does not exceed eighty percent (80%) of the median income in the Dallas-Fort Worth Standard Metropolitan Statistical Area may be designated as a “lower income person”. Section 3 is intended to benefit such individuals through employment and training opportunities.

PART II: SELECTION OF CONTRACTORS AND VENDORS

1. Procedures

All contractors will provide a completed copy of attachment C, “Affirmative Action Plan for Utilizing Eligible Businesses”, or Attachment D, “Statement of Release”, prior to signing any contract for a project using CDBG monies. Each Contractor selected will be bound by Section 3 requirements, including the submission of all relevant documentation required by this plan. Contractors will be held responsible for the Section 3 activities of their Contractors.

When competitive bids are solicited, the contractor will notify bidders of Section 3 requirements. Each contractor will make a good faith effort to issue invitations to bid to Section 3 covered businesses and to use local and minority media to advertise contractual opportunities. City of Lewisville staff will review proposed Contractors and vendors to ascertain their eligibility to receive CDBG funds, based on prior and future assured compliance with Section 3.

Contracts which are typically let on a negotiated basis in non-Section 3 covered areas will be let on a negotiated basis in Section 3 covered areas, if feasible.

2. Sources for Locating Section 3 Covered Businesses:

The City staff will assist in the location and certification of Section 3 covered business and to inform such businesses of bidding opportunities for City contracts.

Lists of Section 3 covered businesses are also available from the Fort Worth Regional HUD Office, the Small Business Administration and other similar agencies. Any business wishing to qualify as a Section 3 covered business will be given the opportunity to file a Self-Certification form (Attachment B) with the Grant Coordinator and all CDBG contractors are encouraged to seek the assistance of that office, should any question arise. The City will notify Section 3 covered businesses of pending contractual activities.

City of Lewisville*Affirmative Action Plan / 3*

3. Required Contract Clauses:

In the event a CDBG Contractor wishes to subcontract any portion of a project utilizing CDBG monies, the written prior approval of the City must be obtained. Furthermore, the following paragraphs must be included in each subcontract:

The work to be performed under this Contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that, to the greatest extent feasible, opportunities for training and employment are given lower-income residents of the project area and contracts for work in connection with the project are awarded to business concerns which are located in, or owned in substantial part by persons residing in, the area of the project.

The parties of this Contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development, as set forth in 24 CFR 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of this Contract. The parties to this Contract certify and agree that they are under no contractual or other disability which would prevent them from complying with these requirements.

The Contractor will send to each labor organization or representative of workers with which it has a collective bargaining agreement or other contract or understanding, if any, a notice advising the said labor organization or workers' representative of its commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.

The contractor will include this Section 3 clause in every subcontract for work in connection with the project and will, at the direction of the applicant for or recipient of Federal financial assistance, take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations and issued by the Secretary of Housing and Urban Development, 24 CFR 135. The Contractor will not subcontract with any sub-contractor where it has notice or knowledge that the latter has been found in violation of regulations under 24 CFR 135 and will not let any sub-contract unless the subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.

Compliance with the provisions of Section 3, regulations set forth in 24 CFR 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of the contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient for such assistance, its successors, and assigns. Failure to fulfill these requirements shall subject the applicant or recipient, its contractors and subcontractors, its successors, and assigns to those sanctions specified by the grant or loan agreement or contract through which Federal assistance is provided, and to such sanctions as are specified by 24 CFR 135.

PART III: HIRING TRAINEES AND EMPLOYEES1. Procedures:

All contractors will provide a completed copy of Attachment E, "Preliminary Statement Work Force Needs", prior to signing any contract for a project using CDBG monies. The Contractor will specify the maximum number of trainees which can reasonably be used on the CDBG project, unless the occupational category is subject to a ratio set by the Secretary of Labor. This information will be reviewed by the City staff to ascertain the current and projected use of Section 3 covered individuals.

Should the Contractor wish to hire trainees for a CDBG assisted project, lower income individuals will be used to the greatest extent feasible in the various training categories. All vacant trainee positions should be filled with lower income individuals, if at all possible. Only after a good faith effort to place lower income individuals in vacant trainee positions has been made will the Contractor use non-Section 3 covered individuals as trainees.

Should the Contractor need to hire already trained employees, similar preference will be given to qualified lower income individuals who apply for those positions.

For each occupational category in which vacancies exist, the contractor will set a realistic goal for the number of lower income individuals to be hired. The Contractor will make a good faith effort to see that such goals are met.

To the greatest extent feasible, the Contractor will use lower income individuals as CDBG project employees. (Any Contractor which fills vacant employment positions immediately prior to starting a CDBG project will be required to show that its actions were not an attempt to circumvent Section 3 requirements.)

When a lower income individual applies, either on their own initiative or on referral from any source, the Contractor will review his/her qualifications and hire the individual if his/her qualifications are satisfactory and the Contractor has an opening. If the Contractor does not have an opening, the individual will be listed for the first available opening.

If applicant qualifications are equal, lower income persons will be given preference in hiring. An exception will be made when a Section 3 covered project must also meet the requirements of Executive Order 11246. In this case, when qualifications are equal, minority persons will be given first preference in hiring. The City will require applicants claiming to be lower income to state their family income at the time of application.

2. Good Faith Efforts:

A Contractor may show good faith efforts to hire lower income individuals by:

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- (1) confirming with the Department of Housing and Urban Development's Regional Administrator, Area Office Director, or FHA Insuring Office Director, the geographical Section 3 covered area for the Contractor's specific project; and
- (2) using local media, project area community organizations, local public and private institutions, and/or signs placed at the proposed project site to recruit lower income applicants for training and employment positions with the project.

PART IV: COMPLIANCE AND CONSEQUENCES1. Monitoring of Requirements:

City staff will monitor the efforts of its contractors to achieve the purpose of Section 3 in two primary ways. First, the documentation required of CDBG Contractors will be examined to determine if good faith efforts are being made to comply with Section 3 requirements. Any obvious omissions or improper actions will be questioned and the manner in which compliance can be documented will be determined by City staff. Next, City staff will conduct on site reviews to assure that any estimates or projected figures for training and employment have been achieved to the best of the Contractor's ability. If a high percentage of the employees of, and subcontractors for, a program meet Section 3 standards, the good faith efforts of the Contractor will be assumed.

If compliance problems are discovered, City staff will encourage the Contractor to resolve them. If this informal persuasion should fail City staff may request that sanctions (as specified below) be applied.

2. Grievance Procedures:

Any person or business meeting the definitional standards of Section 3 may personally, or by representative, pursue the grievance procedures outlined here.

Informal complaints should be directed to City staff for investigation of its Contractor's compliance or to the City Contractors for investigation of their subcontractor's compliance. City Contractors will notify City staff of all informal complaints they receive. If the complaint is found to be valid, City staff will make an effort to secure Section 3 compliance through conferences, persuasion and/or mediation. A written notice specifying the exact nature of the non-compliance will be issued to the non-complying party. The notice will recommend specific action to correct the noncompliance and specify a time limit for doing so. Continued non-compliance may result in the application of the sanctions listed below.

If the complainant is not satisfied with the informal complaint procedure, or its outcome, a formal grievance may be filed.

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The grievance should be in writing and include: (1) the name and address of the grievant; (2) the name and address of the grievant's business, if applicable; (3) the name and address of the City, Contractor, or Subcontractor (hereafter called "respondent"); (4) a description of the acts or omissions giving rise to the grievance; and (5) the corrective action sought.

The grievance should be signed by the grievant and mailed to City of Lewisville, Neighborhood and Inspection Services Department, Community Grants Division, P.O. Box 299002, Lewisville, Texas 75029-9002; or Assistant Secretary for Equal Opportunity, Department of Housing and Urban Development, Washington, D.C. 20410.

A grievance must be filed not later than ninety (90) days from the date of the action (or omission) upon which it is based. The time for filing may be extended by the Secretary of Housing and Urban Development, if good cause is shown.

Upon receipt of a grievance by the Secretary, a copy of it will be furnished to the respondent. The Secretary will conduct an investigation and will give written notice to both the grievant and respondent as to the decision reached. The grievance may be dismissed or sanctions may be applied, as appropriate.

3. Sanctions:

Failure or refusal to comply with or give satisfactory assurances of future compliance with the requirements of Section 3 shall be the proper basis for applying sanctions. Any or all of the following actions may be taken, as appropriate: cancellation, termination, or suspension in whole or in part of the contract or agreement; determination of ineligibility or debarment from any further assistance or contracts under this program until satisfactory assurance of future compliance has been received; referral to the Department of Justice for appropriate legal proceedings.

Historically Underutilized Businesses Assistance

It is the policy of the City of Lewisville to involve Historically Underutilized Businesses in all phases of its procurement practices and to provide them equal opportunities to compete for contracts for construction, professional services, purchases of equipment and supplies, and provision of other services required by the City.

City staff will provide assistance in the location and certification of Section 3 covered businesses. A list of Historically Underutilized Businesses that have been certified by the State of Texas are available by commodity code at the internet address: www.texas-one.org under the Business Directory, then search by name or sic number, or will be provided to you upon request. If you need to secure services or supplies, please contact the City's staff office:

**CITY OF LEWISVILLE
NEIGHBORHOOD AND INSPECTION SERVICES DEPARTMENT
COMMUNITY GRANTS DIVISION
ATTN: GRANT COORDINATOR
P. O. BOX 299002
LEWISVILLE, TEXAS 75029-9002
(972) 219-3780**

City of Lewisville

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SECTION 3 ATTACHMENTS

To be Completed and Returned Within Seven (7) Days of Bid Award

City of Lewisville

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ATTACHMENT B

SELF-CERTIFICATION FORM

SOCIALLY OR ECONOMICALLY DISADVANTAGED

Business/Agency Name: _____

Address: _____

Zip Code: _____

I am a member of the following minority group: (Circle One)

| | | | | |
|-------|------------------------------------|----------------------------|----------------------|--------------------------|
| Black | American Indian/ Alaskan Native | Asian/ Pacific Islander | Spanish- Surnamed | Other (Specify) _____ |
|-------|------------------------------------|----------------------------|----------------------|--------------------------|

I own at least 51 percent of the above business:

Date: _____ Signature: _____

Title: _____

SELF-CERTIFICATION FORM

NON-PROFIT ORGANIZATION

This organization is a non-profit organization.

Business/Agency Name: _____

Address: _____

Zip Code: _____

Date: _____ Signature: _____

Title: _____

B-1

ATTACHMENT C

 (COMPANY NAME)

 (COMPANY ADDRESS)

 (COMPANY TELEPHONE & FAX NUMBERS)
AFFIRMATIVE ACTION PLAN

_____, in compliance with Executive Order 11246, and Section 3 of the Housing and Urban Development Act regarding Equal Employment Opportunity hereby gives notice that no person in the United States shall on the grounds of race, color, religion, sex, national origin, or disability be denied employment and further assurance is also given that _____ will immediately take any measures necessary to effectuate this policy will be placed in plain sight on the job this policy will be placed in plain sight on the job location for the benefit of interested parties and all subcontractors are so notified. All Equal Opportunity posters will be posted as required.

_____ has been appointed as the Equal Employment Opportunity Officer to coordinate company efforts, to advise and assist key personnel and staff, and officially serve as focal point for complaints, etc. Attachment E reflects present employment of the company and percentage goals for projected hiring and lower-income residents, minorities and women.

AFFIRMATIVE SUBCONTRACTING

In accordance with paragraph 135.20 of Section 3, Attachment E reflects anticipated subcontractors needs (by craft) for the duration of this project. _____ will use the HUD business registry, as far as possible in the project area and inform subcontractors of the need to be in the HUD registry. Specific efforts will be made to contact and use Historically Underutilized Businesses to the maximum extent feasible. Section 3 requires that each applicant, recipient, contractor, or subcontractor undertaking work on a Section 3 covered project area or business concerns owned in substantial part by persons residing in the Section 3 covered area and such language will be in each subcontract bid and/or proposal for work on this project. We will require Section 3 and Executive Order 11246 compliance by covered subcontractors and Section 3 programs from all subcontracts of \$10,000 or more.

UTILIZING LOWER INCOME RESIDENTS, MINORITIES AND WOMEN:

To the maximum extent feasible _____ and any subcontractors will use lower-income residents as trainees, apprentices, and workers (if qualified) to complete the work on this project. Special outreach efforts will be made to various public and private recruitment sources as follows:

TEXAS WORKFORCE COMMISSION:

Special emphasis will also be made to recruit minorities and women. _____ and all its subcontractors will determine by craft and/or position the approximate manpower needs to complete the project. The manpower needs will be made known to the recruitment resources named above. Attachment E shall be completed by _____ and each subcontractor to assure that reasonable goals and target dates are a formal part of any contract or subcontract. Attachment E indicates current work force and shows project work force needs and goals for lower-income residents, minorities and women and is for use in establishing goals as far as subcontracting is concerned.

PROMOTION, DEMOTION, PAY RATES, LAYOFFS, ETC.

All personnel actions of the company will be made on a nondiscriminatory basis without regard to race, color, religion, sex, national origin, or disability. We will inform each subcontractor of these affirmative action requirements and insure compliance.

REPORTS AND RECORDS

The company will submit all reports required in a timely fashion. The company shall also assure that all subcontractors shall submit required reports as needed in the same timely fashion.

(Name of Company)

By: _____
(Signature)

(Title)

ATTACHMENT D

Statement of Release

I will not subcontract any work in connection with this project unless I first receive the prior written approval of the Neighborhood and Inspection Services Department, Community Grants Division of the City of Lewisville.

Business/Agency Name: _____

Type of Business/Organization: _____

Address: _____

(Street)

(City)

(State)

(Zip)

Signature: _____

Title: _____

ATTACHMENT E

**PRELIMINARY STATEMENT
WORK FORCE NEEDS**

Contractor's Name: _____

Address: _____

Date: _____

| Employment Classification | OCCUPIED PERMANENT POSITIONS | | | | VACANT POSITIONS** | | | | *Minority - Black - Spanish-American - American Indian - Alaskan Native - Asian/Pacific Islander |
|---------------------------|------------------------------|--------|-----------|--------|--------------------|--------|-----------|--------|--|
| | TOTAL | | MINORITY* | | TOTAL | | MINORITY* | | |
| CONSTRUCTION: | Male | Female | Male | Female | Male | Female | Male | Female | **Show Section 3 goals for lower income, area residents <u>only</u> under the Grand Total lines. ***To be used by municipalities and service contractors, such as engineering consulting firms and other similar firms. |
| <u>Foremen</u> | | | | | | | | | |
| <u>Journeyman</u> | | | | | | | | | |
| <u>Apprentices</u> | | | | | | | | | |
| <u>Laborers</u> | | | | | | | | | |
| | | | | | | | | | |
| GRAND TOTAL | | | | | | | | | |
| | | | | | | | | | |
| NON-CONSTRUCTION:*** | | | | | | | | | |
| <u>Administrators</u> | | | | | | | | | |
| <u>Professionals</u> | | | | | | | | | |
| <u>Technicians</u> | | | | | | | | | |
| <u>Clerks</u> | | | | | | | | | |
| <u>Laborers</u> | | | | | | | | | |
| | | | | | | | | | |
| GRAND TOTAL | | | | | | | | | |

SUBMITTED BY _____ Title _____

**STATEMENT OF POLICY ON
EQUAL EMPLOYMENT OPPORTUNITY**

It will be the policy of this firm to not discriminate against any applicant for employment, or any employee, because of race, creed, color, age, sex, natural origin, or disability. This firm will insure that this policy is continually enforced with regard to employment, promotion, upgrading, demotion, transfer, recruitment, and recruitment advertising, lay off and termination, compensation, training, and working conditions. We will make it understood by all with whom we deal, and in all our employment opportunity announcements that the foregoing is our policy. All applicants and employees will be judged solely on the basis of their skill, devotion loyalty, reliability and integrity.

Company Name

Signature

**U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
CERTIFICATION OF BIDDER REGARDING
EQUAL EMPLOYMENT OPPORTUNITY**

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246 (30 CFR 1231925). The implementing rules and regulations provide that any bidder or prospective contractor, or any of their proposed subcontractors, shall state as an initial part of the bid or negotiations of the Contract whether they have participated in any previous contract or subcontract subject to the Equal Opportunity Clause; and, if so, whether they have filed all compliance reports due under applicable instructions.

Where the certification indicates that the bidder has not filed a compliance report due under applicable instructions, such bidder shall be required to submit a compliance report within seven calendar days after bid opening. No contract shall be awarded unless such report is submitted.

CERTIFICATION BY BIDDER

Bidder's Name: _____

Address and Zip Code: _____

- 1. Bidder has participated in a previous contract or subcontract subject to the Equal Opportunity Clause.

Yes No (If answer is yes, identify the most recent contract.)

- 2. Compliance reports were required to be filed in connection with such contract or subcontract.

Yes No

- 3. Bidder has filed all compliance reports due under applicable instructions, including SF-100.

Yes No

- 4. If answer to item 3 is "No," please explain in detail on reverse side of this certification.

Certification - The information above is true and complete to the best of my knowledge and belief.

Name and Title of Signer (Please Type)

Signature

Date

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attesting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan or cooperative agreement.

- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

Signature

Title

Date

U.S. DEPT. OF HOUSING AND URBAN DEVELOPMENT
CONTRACT REQUIREMENTS

I. Executive Order 11246, Equal Opportunity Clause, Section 202, (30 FR 12319-25)

During the performance of this contract the contractor agrees as follows:

1. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, national origin, or handicap. The contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, sex, age, national origin, or handicap. Such action shall include, but not be limited to the following: Employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, national origin, or handicap
3. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitment under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
5. The contractor will furnish all information and reports required by Executive Order 11246 and by rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Department and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
6. In the event of the contractor's noncompliance with the non-discrimination clauses of this contract or with any of the said rules, regulations or orders, this contract may be cancelled, terminated or suspended in whole or in part, and the contractor may be declared ineligible for further Government contracts in accordance with the procedures authorized in Executive Order 11246 or by rules, regulations or order of the Secretary of Labor or as otherwise provided by law.

7. The contractor will include the provisions of the sentence immediately preceding paragraph 1 and the provisions of paragraphs 1 through 7 in every subcontract or purchase order unless exempt by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the Department may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event a contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by the Department, the contractor may request the United States to enter into such litigation to protect the interest of the United States.

II. Section 3 Clause - 24 CFR, Part 135.20 and HUD Grant Agreement:

Every applicant, recipient, contracting party, contractor, and subcontractor shall incorporate, or cause to be incorporated, in all contracts for work in connection with a Section 3 covered project, the following clause (referred to as Section 3 clause):

- A. The work to be performed under this contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that to the greatest extent feasible, opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the area of the project.
- B. The parties to this contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development set forth in 24 CFR 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of this contract. The parties to this contract certify and agree that they are under no contractual or other disability which would prevent them from complying with these requirements.
- C. The contractor will send to each labor organization or representative of workers with which he has a collective bargaining agreement or other contract or understanding, if any, a notice advising the said labor organization or workers' representative of his commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.
- D. The contractor will include this Section 3 clause in every subcontract for work in connection with the project and will, at the direction of the applicant for recipient of Federal financial assistance, take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development, 24 CFR 135. The contractor will not subcontract with

any subcontractor where it has notice or knowledge that the latter has been found in violation of regulations under 24 CFR 135 and will not let any subcontract unless the subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.

- E. Compliance with the provisions of Section 3, the regulations set forth in 24 CFR 125, and applicable rules and orders of the Department issued thereunder prior to the execution of the contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient, its contractors and subcontractors, its successors, and assigns to those sanctions specified by the grant or loan agreement or contract through which Federal assistance is provided and to such sanctions as are specified by 24 CFR 135.

III. Copeland Anti-Kickback Act

In any contract involving construction or repair, Contractor agrees to comply, and shall require its subcontractors to comply, with the provisions of the Copeland “Anti-Kickback Act” (18 U.S.C. 874), as supplemented in Dept. of Labor regulations (29 CFR Part 3). This Act provides that each Contractor or sub-grantee shall be prohibited from inducing, by any means, any person employed in the construction, completion or repair of public work to give up any part of the compensation to which he or she is otherwise entitled; and, if found guilty of doing so, shall be fined not more than \$5,000 or imprisoned not more than five (5) years, or both.

IV. Lead-Based Paint Hazard

In all contracts for construction or rehabilitation of residential structures, the Contractor and all subcontractors shall comply with the Lead-Based Paint regulations found in 24 CFR 35 and shall comply with the provisions for the elimination of lead-based paint hazards under Sub-Part B thereof. Note that a major revision to these regulations has been published and took effect September 15, 2000. Direct questions to the City of Lewisville, CDBG Program Specialist.

V. Responsibility of Contractor Regarding Reports

Contractor will comply with the requirements of the City of Lewisville’s Neighborhood and Inspection Services Dept., Community Grants Division regarding the compiling and reporting of statistical information required by the Federal regulations outlined above. Contractor agrees to submit all completed reports according to the instructions and requirements of City staff, and Contractor understands the failure to do so may be cause for termination of this contract.

VI. Certification and Acknowledgement

I certify that I have read and understand the information regarding my obligations as a Contractor on a project funded by the U.S. Dept. of Housing and Urban Development, which is contained in the preceding Contract provisions. I understand that, should I have any questions regarding my obligations, I will, as soon as possible, contact the City of Lewisville's CDBG Program Specialist.

Contractor

By: _____

Title: _____

**Insert HUD Form 4010
Federal Labor Standards Provisions**

Federal Labor Standards Provisions

U.S. Department of Housing and Urban Development Office of Labor Relations

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section I(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been

communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who

is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be

awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

**Insert Most Recent
Wage Decision**

"General Decision Number: TX20190018 01/04/2019

Superseded General Decision Number: TX20180028

State: Texas

Construction Type: Heavy

Counties: Collin, Dallas, Denton, Ellis, Kaufman and Rockwall
Counties in Texas.

Water and Sewer Lines/Utilities (Including Related Tunneling
Where the Tunnel is 48" or Less in Diameter)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.60 for calendar year 2019 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.60 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2019. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or

""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the

classifications was union data. EXAMPLE: UAVG-OH-0010
08/29/2014. UAVG indicates that the rate is a weighted union
average rate. OH indicates the state. The next number, 0010 in
the example, is an internal number used in producing the wage
determination. 08/29/2014 indicates the survey completion date
for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of
each year, to reflect a weighted average of the current
negotiated/CBA rate of the union locals from which the rate is
based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can
be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on
a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests
for summaries of surveys, should be with the Wage and Hour
Regional Office for the area in which the survey was conducted
because those Regional Offices have responsibility for the
Davis-Bacon survey program. If the response from this initial
contact is not satisfactory, then the process described in 2.)
and 3.) should be followed.

With regard to any other matter not yet ripe for the formal
process described here, initial contact should be with the
Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division

U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

"

Federal Labor Standards Provisions

U.S. Department of Housing and Urban Development Office of Labor Relations

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section I(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part

of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been

communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who

is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by

the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be

awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

CITY OF LEWISVILLE PURCHASING DIVISION ADDITIONAL TERMS

ANTI-LOBBYING PROVISION

During the period between proposal / sealed bid submission date and the contract award, proposers, including their agents and representatives, shall not directly discuss or promote their proposal with any member of the City of Lewisville City Council or City staff except in the course of City-Sponsored inquiries, briefings, interviews, or presentations, unless requested by the City.

This provision is not meant to preclude offerors from discussing other matters with City Council members or City staff. This policy is intended to create a level playing field for all potential offerors, assure that contract decisions are made in public, and to protect the integrity of the RFP / Bid Evaluation process. Violation of this provision may result in rejection of the offeror's proposal.

LAWS AND ORDINANCES

Laws and Ordinances: The Contractor shall at all times observe and comply with all Federal, State and local laws, ordinances and regulations which in any manner affect the Contract or the work, and shall indemnify and save harmless the City against any claim arising from the violation of any such laws, ordinances and regulations whether by the Contractor or his employees.

PROTECTION OF RESIDENT WORKERS

Protection of Resident Workers: The City of Lewisville actively supports the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9). The Contractor and its Subcontractors shall establish appropriate procedures and controls so no services or products under the Contract Documents will be performed or manufactured by any worker who is not legally eligible to perform such services or employment. The City reserves the right to audit Contractor's or Subcontractor's employment records to verify the existence of a completed Employment Eligibility Verification Form (I-9) for every worker performing services or manufacturing products under the Contract Documents. The audit will be at the City's expense.

IMMIGRATION REFORM AND CONTROL ACT

Immigration Reform and Control Act (8 U.S.C. §1324a): The City of Lewisville supports the Immigration Reform and Control Act (IRCA) which is a comprehensive scheme prohibiting the employment of unauthorized aliens in the United States. The Contractor shall submit a declaration signed under penalty of perjury of the laws of the State of Texas stating that it has not been found in violation of IRCA by the United States Attorney General or Secretary of Homeland Security in the preceding five (5) years. The Contractor shall ensure that its Subcontractors submit a declaration signed under penalty of perjury of the

laws of the State of Texas stating that they have not been found in violation of IRCA by the United States Attorney General or Secretary of Homeland Security in the preceding five (5) years. The Contractor and its Subcontractors shall at all times during the term of the contract with the City comply with the requirements of IRCA and shall notify the City within fifteen (15) working days of receiving notice of a violation of IRCA. The City may terminate a contract with the Contractor if the City determines that (a) the Contractor or its Subcontractors have been untruthful regarding IRCA violations in the preceding five (5) years; (b) if the Contractor fails to ensure that its Subcontractors submit the aforementioned declaration; or (c) the Contractor or its Subcontractors fail to timely notify the City of an IRCA violation.

Contractor Name

Authorized Signature

Date

STATE RECIPROCAL REQUIREMENT

The City of Lewisville, as a governmental agency of the State of Texas, may not award a contract for general construction, improvements, services or public works projects or purchases of supplies, materials, or equipment to a non-resident bidder unless the non-resident's bid is lower than the lowest bid submitted by a responsible Texas resident bidder by the same amount that a Texas resident bidder would be required to underbid a non-resident bidder to obtain a comparable contract in the state in which the non-resident's principal place of business is located (Section 2252.002 of the Government Code). Bidder shall answer all the following questions by encircling the appropriate response or completing the blank provided.

1. Where is your principal place of business?

2. Only if your principal place of business is not in the state of Texas, please indicate:
 - A. In which state is your principal place of business located?

 - B. Does that state favor resident bidders (bidders in your state) by some dollar increment or percentage? YES NO

 - C. If "YES", what is that dollar increment or percentage?

NON-COLLUSION STATEMENT

The undersigned affirms that they are duly authorized to execute this contract, that this company, corporation, firms, partnership or individual has not prepared this bid in collusion with any other Bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employer or agent to any other person engaged in this type of business prior to the official opening of this bid.

| | |
|---|--|
| Vendor: | <input style="width: 95%; height: 15px;" type="text"/> |
| Address: | <input style="width: 95%; height: 15px;" type="text"/> |
| City, State, Zip: | <input style="width: 95%; height: 15px;" type="text"/> |
| Phone | <input style="width: 95%; height: 15px;" type="text"/> |
| Email Address: | <input style="width: 95%; height: 15px;" type="text"/> |
| Bidder (Print name) | <input style="width: 95%; height: 15px;" type="text"/> |
| Bidder Signature | <input style="width: 95%; height: 15px;" type="text"/> |
| Position with Company | <input style="width: 95%; height: 15px;" type="text"/> |
| Signature of company official authorizing this bid: | <input style="width: 95%; height: 15px;" type="text"/> |
| Company Official (Print name): | <input style="width: 95%; height: 15px;" type="text"/> |
| Position with company: | <input style="width: 95%; height: 15px;" type="text"/> |

**CITY OF LEWISVILLE
DISCLOSURE OF INTEREST**

Pursuant to Chapter 176 of the Texas Local Government Code, a person or agent of a person who contracts or seeks to contract with the City of Lewisville must complete a conflict of interest questionnaire if the person or agent has an affiliation or business relationship that might cause a conflict of interest with the City. The conflict of interest questionnaire, which is available online at ethics.state.tx.us, must be filed with the City Secretary of the City of Lewisville no later than the seventh (7th) business day after the person or agent begins contract discussions or negotiations with the City of Lewisville or submits to the City of Lewisville an application, response to a request for proposal or bid, correspondence, or another writing related to a potential agreement with the City of Lewisville. An updated Conflict of Interest Questionnaire must be filed in accordance with Chapter 176 of the Local Government Code.

Seller should consult with legal counsel if they have questions regarding its compliance with the requirements of Chapter 176. It is the responsibility of each person or agent who is contracting or seeking to contract with the City of Lewisville to comply with the filing requirements of Chapter 176.

EXHIBIT B

INSURANCE REQUIREMENTS **GENERAL CONTRACTS FOR SERVICES**

Service work, supplies requiring installation, Janitorial Services, Welding, Surveyors, Plumbing Contractors, Maintenance Agreements, Concessionaires, Tire Repairs, Tow Service, Painting, Electrical, Movers, Major street repairs and Waterline projects, etc.

Vendor shall procure and maintain for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the vendor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the vendor's bid.

A. MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

1. Insurance Services Office Commercial General Liability coverage "occurrence" form CG 00 01 (10 01). **"Claims Made" form is unacceptable.**
2. Workers' Compensation insurance as required by the Labor Code of the State of Texas, including Employers' Liability Insurance.
3. Automobile Liability – as required by the State of Texas, covering all owned, hired, or non-owned vehicles. Automobile Liability is only required if vehicle(s) will be used under this contract. Coverage not required for delivery services.

B. MINIMUM LIMITS OF INSURANCE

Vendor shall maintain limits throughout contract not less than:

1. Commercial General Liability: \$500,000 per occurrence/\$1,000,000 aggregate for bodily injury, personal injury and property damage. Policy will include coverage for:
 - a. Premises – Operations
 - b. Broad Form Contractual Liability
 - c. Products and Completed Operations
 - d. Personal Injury
 - e. Broad Form Property Damage
 - f. If applicable, Explosion Collapse and Underground (XCU) Coverage, Fire Damage, and Medical Expense.

NOTE: The aggregate loss limit applies to each project.

03/21/2018

2. Workers' Compensation and Employer's Liability: Workers' Compensation Statutory limits as required by the Labor Code of the State of Texas and Employer's Liability minimum limits of \$500,000 per injury, \$500,000 per occurrence, and \$500,000 per occupational disease.
3. Automobile Liability - \$500,000 Combined Single Limit. Limits can only be reduced if approved by the HR Director or designee.

C. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductible or self-insured retentions must be declared to and approved by the City.

D. OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain the following provisions:

1. General Liability and Automobile Liability Coverages
 - a. The City, its officers, officials, employees, Boards and Commissions and volunteers are to be added as "Additional Insured" as respects liability arising out of activities performed by or on behalf of the vendor, products and completed operations of the vendor, premises owned, occupied or used by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officers, officials, employees or volunteers. It is understood that the business auto policy under "Who is an Insured" automatically provides liability coverage in favor of the City. The coverage shall include defense of claims against the City as additional insured.
 - b. The vendor's insurance coverage shall be primary and non-contributory insurance as respects the City, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees or volunteers shall be excess of the vendor's insurance and shall not contribute with it.
 - c. Any failure to comply with reporting provisions of the policy shall not affect coverage provided to the City, its officers, officials, and employees, Boards and Commissions or volunteers.
 - d. The vendor's insurance shall apply separately to each insured against whose claim is made or suit is brought, except to the limits of the insured's liability.
2. Waiver of Subrogation – All Coverages

Each insurance policy required by this exhibit shall waive all rights of subrogation against the City, its officers, officials, employees, and volunteers for losses arising from work performed by the vendor for the City.
3. Notice of Cancellation - All Coverages

Each insurance policy required by this exhibit shall be endorsed to state that coverage shall not be suspended, voided, canceled or non-renewed by either party, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given the City, or ten (10) days prior written notice for non-payment of premium.

E. ACCEPTABILITY OF INSURERS

The City prefers that insurance be placed with insurers with an A.M. Best's rating of no less than **A-:VI, or, A or better** by Standard and Poors.

F. VERIFICATION OF COVERAGE

Contractor shall furnish the City with certificates of insurance affecting coverage required. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. Certificates of Insurance must be provided on forms approved by the Texas Department of Insurance. City will not accept Memorandums of Insurance or Binders as proof of insurance. The City reserves the right to require complete, certified copies of all required insurance policies at any time.

G. HOLD HARMLESS AND INDEMNIFICATION

THE CONSULTANT/CONTRACTOR AGREES TO DEFEND, INDEMNIFY AND HOLD THE CITY, ITS OFFICERS, AGENTS AND EMPLOYEES, HARMLESS AGAINST ANY AND ALL CLAIMS, LAWSUITS, JUDGMENTS, COSTS AND EXPENSES FOR PERSONAL INJURY (INCLUDING DEATH), PROPERTY DAMAGE OR OTHER HARM FOR WHICH RECOVERY OF DAMAGES IS SOUGHT, SUFFERED BY ANY PERSON OR PERSONS, THAT MAY ARISE OUT OF OR BE OCCASIONED BY CONSULTANT'S/CONTRACTOR'S BREACH OF ANY OF THESE TERMS AND CONDITIONS OR BY ANY NEGLIGENT OR STRICTLY LIABLE ACT OR OMISSION OR INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY, CONSULTANT/CONTRACTOR, ITS OFFICERS, AGENTS, EMPLOYEES OR SUBCONTRACTORS, IN THE PERFORMANCE OF THIS AGREEMENT; EXCEPT THAT THE INDEMNITY PROVIDED FOR IN THE PARAGRAPH SHALL NOT APPLY TO ANY LIABILITY RESULTING FROM THE SOLE NEGLIGENCE OR FAULT OF THE CITY, ITS OFFICERS, AGENTS, EMPLOYEES OR SEPARATE CONTRACTORS, AND IN THE EVENT OF JOINT AND CONCURRING NEGLIGENCE OR FAULT OF THE CONSULTANT/CONTRACTOR AND THE CITY, RESPONSIBILITY AND INDEMNITY, IF ANY, SHALL BE APPORTIONED IN ACCORDANCE WITH THE LAW OF THE STATE OF TEXAS, WITHOUT WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO THE CITY UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW AND THE CITY'S REASONABLE ATTORNEY'S FEES SHALL BE REIMBURSED IN PROPORTION TO THE CONSULTANT'S LIABILITY. THE PROVISIONS OF THIS PARAGRAPH 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.

03/21/2018

**PURCHASE ORDER
TERMS & CONDITIONS**

Seller and Buyer agree to comply with the following terms and conditions. These Terms and Conditions along with the purchase order shall constitute a contract between the Seller and Buyer upon the Seller issuing an invoice and/or providing any of the goods and services described in the purchase order. In the event of a conflict between these Terms and Conditions and a separate written agreement between the Seller and Buyer, the terms of the separate written agreement shall prevail.

1. **SELLER TO PACKAGE GOODS:** Seller will package goods in accordance with good commercial practice. Each shipping container shall be clearly and permanently packed as follows: (a) Seller's name and address; (b) Consignee's name, address and purchase order or purchase order release number and the supply agreement number if applicable; (c) Container number and total number of containers, e.g. box 1 of 4 boxes; and (d) the number of the container bearing the packing slip. Seller shall bear cost of packaging unless otherwise provided. Goods shall be suitably packed to secure lowest transportation costs and to conform with requirements of common carriers and any applicable specifications. Buyer's count or weight shall be final and conclusive on shipments not accompanied by packing lists.
2. **SHIPMENT UNDER RESERVATION PROHIBITED:** Seller is not authorized to ship the goods under reservation and no tender of a bill of lading will operate as a tender of goods.
3. **TITLE AND RISK OF LOSS:** The title and risk of loss of the goods shall not pass to Buyer until Buyer actually receives and takes possession of the goods at the point or points of delivery.
4. **DELIVERY TERMS AND TRANSPORTATION CHARGES:** F.O.B. Inside Delivery, Municipal Facility, Lewisville, Texas, and shall include all delivery and packaging costs. The Buyer assumes no liability for goods delivered in damaged or unacceptable condition. The Seller shall handle all claims with carriers, and in case of damaged goods, shall ship replacement goods immediately upon notification by Seller of damage.
5. **NO REPLACEMENT OF DEFECTIVE TENDER:** Every tender or delivery of goods must fully comply with all provisions of this contract as to time of delivery, quality and the like. If a tender is made which does not fully conform, this shall constitute a breach and Seller shall not have the right to substitute a conforming tender provided, where the time for performance has not yet expired, the Seller may notify Buyer of his intention to cure and may then make a conforming tender within the contract time but not afterward.
6. **PLACE OF DELIVERY:** The place of delivery shall be that set forth on the purchase order. Any change thereto shall be effected by modification as provided for in Clause 20, "Modifications", hereof. The terms of this contract are "no arrival, no sale".
7. **INVOICES AND PAYMENTS:** (a) Seller shall submit separate invoices on each purchase order after each delivery. Invoices shall indicate the purchase order number, shall be itemized and transportation charges, if any, shall be listed separately. A copy of the bill of lading, and the freight weigh bill when applicable, should be attached to the invoice. Mail to: City of Lewisville Accounts Payable, PO Box 299002 Lewisville, Texas 75029-9002. Payments shall be made thirty days after the goods are delivered to the Buyer, or a correct invoice is received, whichever is later. Suppliers should keep the Accounts Payable Office advised of any changes in remittance addresses. (b) Buyer's obligation is payable only and solely from funds available for the purpose of the purchase. Lack of funds shall render this contract null and void to the extent funds are not available and any delivered but unpaid for goods will be returned to Seller by Buyer. (c) Do not include Federal Excise, State or City Sales Tax. Buyer shall furnish tax exemption certificate, if required.
8. **GRATUITIES:** The Buyer may, by written notice to the Seller, cancel this contract without liability to Seller if it is determined by Buyer that gratuities, in the form of entertainment, gifts, or otherwise, were offered or given by the Seller, or any agent, or representative of the Seller, to any officer or employee of the City of Lewisville with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending or the making or any determinations with respect to the performing of such a contract. In the event this contract is cancelled by Buyer pursuant to this provision, Buyer shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by Seller in providing such gratuities.
9. **SPECIAL TOOLS AND TEST EQUIPMENT:** If the price stated on the face hereof includes the cost of any special tooling or special test equipment fabricated or required by Seller for the purpose of filling this order, such special tooling equipment and any process sheets related thereto shall become the property of the Buyer and to the extent feasible shall be identified by the Seller as such.
10. **WARRANTY PRICE:** (a) The price to be paid by the Buyer shall be that contained in Seller's bid which Seller warrants to be no higher than Seller's current prices on orders by others for products of the kind and specification covered by this contract for similar quantities under similar or like conditions and methods of purchase. In the event Seller breaches this warranty, the prices of the items shall be reduced to the Seller's current prices on orders by others, or in the alternative, Buyer may cancel this contract without liability to Seller for breach or Seller's actual expense. (b) The Seller warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for commission, percentage, brokerage, or contingent fee excepting bona fide employees of bona fide established commercial or selling agencies maintained by the Seller for the purpose of securing business. For breach of violation of this warranty, the Buyer shall have the right in addition to any other right or rights to cancel this contract without liability and to deduct from the contract price, or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee.
11. **WARRANTY PRODUCTS:** Seller shall not limit or exclude any implied warranties and any attempt to do so shall render this contract voidable at the option of the Buyer. Seller warrants that the goods furnished will conform to the specifications, drawings and descriptions listed in the bid invitation and to the sample(s) furnished by Seller, if any. In the event of a conflict between the specifications, drawings and descriptions, the specifications shall govern.
12. **SAFETY WARRANTY:** Seller warrants that the product sold to Buyer shall conform to the standards promulgated by the U. S. Department of Labor under the Occupational Safety and Health Act of 1970. In the event the product does not conform to OSHA standards, Buyer may return the product for correction or replacement at the Seller's expense. In the event Seller fails to make the appropriate correction within a reasonable time, correction made by Buyer will be at Seller's expense.
13. **NO WARRANTY BY BUYER AGAINST INFRINGEMENTS:** As part of this contract for sale Seller agrees to ascertain whether goods manufactured in accordance with the specifications attached to this contract will give rise to the rightful claim of any third person by way of infringement or the like. Buyer makes no warranty that the production of goods according to the specification will not give rise to such a claim, and in no event shall Buyer be liable to Seller for indemnification in the event that Seller is sued on the grounds of infringement or the like. If seller is of the opinion that an infringement or the like will result, he will notify Buyer to this effect in writing within two weeks after the signing of this contract. If Buyer does not receive notice and is subsequently held liable for the infringement of the like, Seller will save Buyer harmless. If Seller in good faith ascertains that production of the goods in accordance with the specifications will result in infringement or the like, this contract shall be null and void except that Buyer will pay Seller the reasonable cost of his search as to infringements.
14. **RIGHT OF INSPECTION:** Buyer shall have the right to inspect the goods at delivery before accepting them.
15. **CANCELLATION:** Buyer shall have the right to cancel for default all or any part of the undelivered portion of this order if Seller breaches any of the terms hereof including warranties of Seller or if the Seller becomes insolvent or commits acts of bankruptcy. Such right of cancellation is in addition to and not in lieu of any other remedies which Buyer may have in law or equity.
16. **TERMINATION:** The performance of work under this order may be terminated in whole or in part by the Buyer in accordance with this provision. Termination of work hereunder shall be effected by the delivery to the Seller of a "Notice of Termination" specifying the extent to which performance of work under the order is terminated and the date upon which such termination becomes effective. Such right of termination is in addition to and not in lieu of rights of Buyer set forth in Clause 15, herein.
17. **FORCE MAJEURE:** If by reason of Force Majeure, either party hereto shall be rendered unable wholly or in part to carry out its obligations under this contract then such party shall give notice and full particulars of Force Majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied upon, and the obligation of the party giving such notice, so far as it is affected by such Force Majeure, shall be suspended during the continuance of the inability then claimed, except as hereinafter provided, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch. The term Force Majeure as employed herein, shall mean acts of God, strikes, lockouts, or other industrial disturbances, act of public enemy, orders of any kind of government of the United States or the State of Texas or any civil military authority, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, hurricanes, storms, floods, washouts, droughts, arrests, restraint of government and people, civil disturbances, explosions, breakage or accidents to machinery, pipelines or canals, or other causes not reasonably within the control of the party claiming such inability.

18. **ASSIGNMENT DELEGATION:** No right or interest in this contract shall be assigned or delegation of any obligation made by Seller without the written permission of the Buyer. Any attempted assignment or delegation by Seller shall be wholly void and totally ineffective for all purposes unless made in conformity with this paragraph.
19. **WAIVER:** No claim or right arising out of a breach of this contract can be discharged in whole or in part by a waiver or renunciation of the claim or right unless the waiver or renunciation is supported by consideration and is in writing signed by the aggrieved.
20. **MODIFICATIONS:** This contract may be modified or rescinded only by a writing signed by both of the parties or their duly authorized agents. This shall include any change orders.
21. **INTERPRETATION PAROLE EVIDENCE:** This writing is intended by the parties as a final expression of their agreement and is intended also as a complete and exclusive statement of the terms of their agreement. No course of prior dealings between the parties and no usage of the trade shall be relevant to supplement or explain any term used in this contract. Acceptance or acquiescence in a course of performance rendered under this contract shall not be relevant to determine the meaning of this contract even though the accepting or acquiescing party has knowledge of the performance and opportunity for objection. Whenever a term defined by the Uniform Commercial Code is used in this contract, the definition contained in the Code is to control.
22. **APPLICABLE LAW:** This contract shall be governed by the Uniform Commercial Code. Wherever the term "Uniform Commercial Code" is used, it shall be construed as meaning the Uniform Commercial Code as adopted in the State of Texas as effective and in force on the date of this contract.
23. **ADVERTISING:** Seller shall not advertise or publish, without Buyer's prior consent, the fact that Buyer has entered into this contract, except to the extent necessary to comply with proper requests for information from an authorized representative of the federal, state or local government.
24. **RIGHT TO ASSURANCE:** Whenever one party to this contract in good faith has reason to question the other party's intent to perform he may demand that the other party give written assurance of his intent to perform. In the event that a demand is made and no assurance is given within five (5) days, the demanding party may treat this failure as an anticipatory repudiation of the contract.
25. **VENUE:** Both parties agree that venue for any litigation arising from this contract shall lie in Denton County, Texas.

26. **DISCLOSURE:** Pursuant to Chapter 176 of the Texas Local Government Code, a person or agent of a person who contracts or seeks to contract with the City of Lewisville must complete a conflict of interest questionnaire if the person or agent has an affiliation or business relationship that might cause a conflict of interest with the City. The conflict of interest questionnaire, which is available online at ethics.state.tx.us, must be filed with the City Secretary of the City of Lewisville no later than the seventh business day after the person or agent begins contract discussions or negotiations with the City of Lewisville or submits to the City of Lewisville an application, response to a request for proposal or bid, correspondence, or another writing related to a potential agreement with the City of Lewisville. An updated conflict of interest questionnaire must be filed in accordance with Chapter 176 of the Local Government Code

Seller should consult with legal counsel if you have questions regarding its compliance with the requirements of Chapter 176. It is the responsibility of each person or agent who is contracting or seeking to contract with the City of Lewisville to comply with the filing requirements of Chapter 176.

27. **INDEPENDENT CONTRACTOR:** Seller shall be considered an independent contractor and not an agent, servant, employee, or representative of Buyer in the performance of the work. No term or provision herein or act of the Seller shall be construed as changing that status.
28. **TERMINATION FOR DEFAULT:** Buyer reserves the right to enforce the performance of any Purchase Order in any manner prescribed by law or deemed to be in the best interest of Buyer in the event of breach or default. The Buyer reserves the right to terminate any purchase order and/or agreement with the Seller in the event the Seller fails to: (a) meet delivery schedules, or (b) otherwise perform in accordance with these terms and conditions.

29. **PROTESTS:** All protests regarding the solicitation process must be submitted in written form to the Purchasing Manager within five (5) working days following the opening of bids/proposals. This includes all protests relating to legal advertisements, deadlines, bid/proposal openings, and all other related procedures under the Local Government Code

Post-award protests must be submitted in written form to the City Manager within five (5) working days after award. The protest must include, at a minimum, the name of protester, bid/proposal number or description of goods or services, and a statement of grounds for protest.

30. INDEMNIFICATION: SELLER AGREES TO DEFEND, INDEMNIFY AND HOLD BUYER, ITS OFFICERS, AGENTS AND EMPLOYEES, HARMLESS AGAINST ANY AND ALL CLAIMS, LAWSUITS, JUDGMENTS, COSTS AND EXPENSES FOR PERSONAL INJURY (INCLUDING DEATH), PROPERTY DAMAGE OR OTHER HARM FOR WHICH RECOVERY OF DAMAGES IS SOUGHT, SUFFERED BY ANY PERSON OR PERSONS, THAT MAY ARISE OUT OF OR BE OCCASIONED BY SELLER'S BREACH OF ANY OF THESE TERMS AND CONDITIONS OR BY ANY NEGLIGENT OR STRICTLY LIABLE ACT OR OMISSION, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY SELLER, ITS OFFICERS, AGENTS, EMPLOYEES OR SUBCONTRACTORS, IN THE PERFORMANCE OF THIS CONTRACT; EXCEPT THAT THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPH SHALL NOT APPLY TO ANY LIABILITY RESULTING FROM THE SOLE NEGLIGENCE OR FAULT OF BUYER, ITS OFFICERS, AGENTS, EMPLOYEES OR SEPARATE CONTRACTORS, AND IN THE EVENT OF JOINT AND CONCURRING NEGLIGENCE OR FAULT OF THE SELLER AND BUYER, RESPONSIBILITY AND INDEMNITY, IF ANY, SHALL BE APPORTIONED IN ACCORDANCE WITH THE LAW OF THE STATE OF TEXAS, WITHOUT WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO BUYER UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW. THE PROVISIONS OF THIS PARAGRAPH 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.

31. **SEVERABILITY:** In case any one or more of the provisions contained in these Terms and Conditions shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision thereof, and these Terms and Conditions shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

32. **IMMIGRATION REFORM AND CONTROL ACT (8 U.S.C 1324a):** The Buyer supports the Immigration Reform and Control Act (IRCA), which is a comprehensive scheme prohibiting the employment of unauthorized aliens in the United States. The Seller and its subcontractors shall at all times during the term of the contract with the Buyer comply with the requirements of IRCA and shall notify the Buyer within fifteen (15) working days of receiving notice of a violation of IRCA. The Seller also warrants that it has not had an IRCA violation within the last five (5) years. The Buyer may terminate a contract with the Seller if the Buyer determines that (a) the Seller or its subcontractors have been untruthful regarding IRCA violations in the preceding five (5) years or (b) the Seller or its subcontractors fail to timely notify the Buyer of an IRCA violation.

33. **ADA COMPLIANCE:** All goods and services provided to the Buyer must be compliant with the Americans with Disabilities Act and any amendments thereto (the "ADA") and all regulations promulgated pursuant to the ADA. Seller will be required to certify compliance, if required under the law or otherwise required by the Buyer.

34. **PROTECTION OF RESIDENT WORKERS:** The Buyer actively supports the Immigration and Nationality Act (INA), which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9). The Seller shall establish appropriate procedures and controls so no services under the contract will be performed by any worker who is not legally eligible to perform such services or employment. The Buyer reserves the right to audit Seller's employment records to verify the existence of a completed Employment Eligibility Verification Form (I-9) for every worker performing services under the contract. The audit will be at the Buyer's expense.

35. **NO BOYCOTT OF ISRAEL.** Pursuant to Texas Government Code Chapter 2270, the Seller agrees that acceptance of these Terms & Conditions serves as written verification that Contractor: (1) does not boycott Israel, as defined by Texas Government Code Section 808.001; and (2) will not boycott Israel during the term of the contract.

36. **COMPANIES ENGAGED IN BUSINESS WITH IRAN, SUDAN, OR FOREIGN TERRORIST ORGANIZATION.** Pursuant to Texas Government Code Chapter 2252, Subchapter F, Seller affirms that it is not identified on a list created by the Texas Comptroller of Public Accounts as a company known to have contracts with or provide supplies or services to a foreign terrorist organization.

BOND REQUIREMENTS and RETAINAGE

BONDS

The successful bidder will be required to furnish the following bonds from a surety licensed to do business in the State of Texas. These bonds, along with proper insurance papers, will be incorporated as part of the final contract documents and will remain in effect until the completion and acceptance of the project. Maintenance bonds shall be in effect based on their stated term after final acceptance of the project:

Project amount \$10,001 to \$24,999 – a payment bond at the project amount and a maintenance bond for one year from the date of final payment.

Project amount \$25,000 to \$99,999 – a payment bond at the project amount and a maintenance bond for two years from the date of the final payment.

Project amount \$100,000 and greater – **a bid bond equal to 5% of the project amount is to be included with the sealed bid;** a payment bond and performance bond at the project amount and a maintenance bond for two years from the date of the final payment.

RETAINAGE

Retainage will be based on the following: 15 percent retainage for contracts up to \$25,000; 10 percent retainage for contracts in excess of \$25,000 and less than \$400,000; 5 percent retainage for contracts in excess of \$400,000.

PERFORMANCE BOND

STATE OF TEXAS
COUNTY OF DENTON

KNOW ALL MEN BY THESE PRESENTS: That _____
of the City of _____, County of _____ and State of _____,
as Principal, and _____
authorized under the laws of the State of Texas to act as Surety on bonds for Principal, are held and
firmly bound unto the City of Lewisville (Owner), in the penal sum of
_____ Dollars (\$_____)
for the payment whereof, the said Principal and Surety bind themselves, and their heirs,
administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, the Principal has entered into a certain written contract (Contract) with the
Owner, dated the _____ day of _____, 2019 to construct:

CDBG MORNINGSIDE SANITARY SEWER MANHOLE AND MAIN LINE REPLACEMENT PROJECT BID NO. 19-46-C

which Contract is hereby referred to and made a part hereof as fully and to the same extent as if
copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if
the said Principal shall faithfully perform said Contract and shall in all respects duly and faithfully
observe and perform all and singular the covenants, conditions and agreements in and by said
Contract agreed and covenanted by the Principal to be observed and performed, and according to the
true intent and meaning of said Contract and the Plans and Specifications hereto annexed, then this
obligation shall be void; otherwise to remain in full force and effect;

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter
2253 of the Texas Government Code as amended and all liabilities on this bond shall be determined
in accordance with the provisions of said Chapter to the same extent as if it were copied at length
herein.

Surety, for value received, stipulates and agrees that no change, extension of time, alteration
or addition to the terms of the contract, or to the work performed thereunder, or the plans,
specifications, or drawings accompanying the same, shall in anyway affect its obligation on this
bond, and it does hereby waive notice of any such change, extension of time, alteration or addition
to the terms of the contract, or to the work to be performed thereunder.

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IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 2019.

Principal

Surety

By:

By

Title:

Title

Address:
Address:

Address:

The name and address of the Resident Agent of Surety is:

PAYMENT BOND

**STATE OF TEXAS
COUNTY OF DENTON**

KNOW ALL MEN BY THESE PRESENTS: That _____ of the City of _____, County of _____, and State of _____, as Principal, and _____ authorized under the laws of the State of Texas to act as Surety on bonds for Principal, are held and firmly bound unto the City of Lewisville (Owner), in the penal sum of _____ Dollars (\$_____) for the payment whereof, the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, the Principal has entered into a certain written contract (Contract) with the Owner, dated the _____ day of _____, 2019 to construct:

**CDBG MORNINGSIDE SANITARY SEWER MANHOLE AND MAIN LINE
REPLACEMENT PROJECT
BID NO. 19-46-C**

which Contract is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall pay all claimants supplying labor and material to him or a subcontractor in the prosecution of the work provided for in said Contract, then, this obligation shall be void; otherwise to remain in full force and effect;

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code as amended and all liabilities on this bond shall be determined in accordance with the provisions of said Chapter to the same extent as if it were copied at length herein.

Surety, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract, or to the work performed thereunder, or the plans, specifications or drawings accompanying the same, shall in anyway affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract, or to the work to be performed thereunder.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 2019

Principal

Surety

By:

By

Title:

Title

Address:
Address:

Address:

The name and address of the Resident Agent of Surety is:

MAINTENANCE BOND

Bond No. _____

KNOW ALL MEN BY THESE PRESENTS:

That we, _____
 (hereinafter called **Principal**), and _____,
 a corporation organized under the laws of the State of _____
 and authorized to do a surety business in the State of Texas, (hereinafter called **Surety**), are held
 and firmly bound unto the City of Lewisville, Texas (hereinafter called the **City**) in the full and just
 sum of _____ (\$ _____),
 lawful money of the United States of America, for the payment of which sum, well and truly to be
 made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and
 severally, firmly by these presents.

WHEREAS, said **Principal** has performed _____
 improvements, which have been or are about to be completed and accepted by the **City** for the
 project known as CDBG MORNINGSIDE SANITARY SEWER MANHOLE AND MAIN
 LINE REPLACEMENT PROJECT
 located at _____.

AND WHEREAS, it is required that the **Principal** should guarantee the project from defects caused
 by faulty or defective materials, or workmanship for a period of two years from and after the date of
 acceptance of the completed project by the **City**.

NOW, THEREFORE, if the **Principal** shall for a period of two years from and after the date of
 acceptance of the completed project by the **City** replace any and all defects arising in said work whether
 resulting from faulty or defective materials, or workmanship, then the above obligation shall be null and
 void; otherwise the obligation shall remain in full force and effect for two years from the date of acceptance
 of the completed project by the **City**.

The **City** shall notify the **Principal** in writing of any defects for which the **Principal** is responsible
 and shall specify in said notice a reasonable time within which the **Principal** shall have to correct said
 defects. If the **Principal** fails to correct said defects within the time specified in said notice, the **City**, in its
 discretion, may permit the **Surety** to correct said defects. If the **City** allows the **Surety** to correct said
 defects, the **Surety** shall have sixty (60) days thereafter within which to take such action as it deems
 necessary to insure performance of the **Principal's** obligation.

If such defects are not corrected after the time period specified in the notice or after the expiration of the sixty (60) day time period, whichever is applicable, the **City** shall have the right to correct the defects, and the **Principal** and **Surety**, jointly and severally, shall pay all costs and expenses incurred by the **City** in correcting the defects, including, but not limited to, the engineer, legal and other costs, together with any damages either direct or consequential, which the **City** sustains, or may sustain, on account of the **Principal's** failure to correct the defects. In addition, the **City** shall have the right to contract for the correction of said defects and, upon acceptance of a bid in accordance with the **City's** normal bidding process, the **Principal** and **Surety** shall become immediately liable for the amount of the bid. In the event that the **City** commences legal proceedings for the collection thereof, interest shall accrue on said amount at the rate of six (6) percent per annum, beginning at the commencement of said legal proceedings.

If the City commences suit for collection of any sums due hereunder, the **Principal** and **Surety**, jointly and severally, agree to pay all costs and expenses incurred by the **City**, including, but not limited to, attorney's fees.

IN WITNESS WHEREOF, the parties have caused this instrument to be signed and sealed by their respective authorized officers this _____ day of _____ 20__.

Principal: _____

Surety: _____

By: _____

By: _____

Address: _____

_____, Attorney-in-Fact

Address: _____

Witness as to Principal

CITY OF LEWISVILLE, TEXAS

CONSTRUCTION AGREEMENT

Project: CDBG Morningside Sanitary Sewer Manhole and Main Line Replacement Project, Bid No. 19-46-C (the “Project”).

This Construction Agreement (the “Agreement”) is made on this date, [MONTH] ____, 201____, between the **City of Lewisville** (the “City”) and _____ (the “Contractor”).

1. Services. The Contractor shall commence and complete the CDBG Morningside Sanitary Sewer Manhole and Main Line Replacement Project (the “Services”), and all extra work in connection with the Services, under the terms as stated in the Specifications and Contract Documents for the CDBG Morningside Sanitary Sewer Manhole and Main Line Replacement Project (the “Specifications”), attached hereto as **Exhibit A**, the CDBG Morningside Sanitary Sewer Manhole and Main Line Replacement Project Drawings (the “Plans”), attached hereto as **Exhibit B**, and this Agreement, and at the Contractor’s own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance, and other accessories and services necessary to complete the Services, in accordance with the conditions and prices stated in the Contractor’s Proposal (the “Proposal”) attached hereto as **Exhibit C**, and in accordance with the Specifications (**Exhibit A**) and Plans (**Exhibit B**), as prepared by the City and attached hereto. The Contractor will perform all Services in a good and professional manner and in accordance with industry standards. The Contractor is responsible for constructing a final product that is fully functional and fit for its intended purposes, and meets all requirements set forth in the Agreement, the Specifications (**Exhibit A**), and the Plans (**Exhibit B**). The City will be the sole judge of the acceptability of all work and Services performed under this Agreement.

The City shall perform such services as outlined in the Specifications (**Exhibit A**), if any.

2. Completion of Services. The Contractor hereby agrees to commence work within ten (10) calendar days after the date of the written notice to commence work and to fully complete the Services within Two Hundred and Twenty (220) consecutive calendar days after the date of the written notice to commence work, subject to such extensions of time as are provided by the Specifications (**Exhibit A**).

The Services shall be performed only during the hours outlined in Section 1.1 (Scope of Work) of the Specifications (**Exhibit A**).

3. Agreement Documents. The Agreement shall include the following documents, and this Agreement does hereby expressly incorporate same herein as if set forth verbatim in this Agreement:
 - A. This Agreement

- B. The Specifications (**Exhibit A**) and the Plans (**Exhibit B**)
- C. The Proposal (**Exhibit C**)

To the extent that any exhibit is in conflict with provisions of this Agreement or each other, the provisions of this Agreement, then the provisions of **Exhibit A** and **Exhibit B** jointly, then **Exhibit C** shall prevail in the order.

4. Confidential Information. To the extent allowed by law, the City will safeguard and keep from release any documents marked “proprietary” or information not generally available to the public. However, the City will, if required, comply with all requirements of the Texas Public Information Act with regard to any documents in its possession at the time of a request made under that Act.
5. Pricing. The City agrees to pay the Contractor in current funds the price or prices shown in the Proposal (**Exhibit C**).
6. Payment. Payments will be subject to the terms outlined in the Specifications (**Exhibit A**). The City shall remit payment within thirty (30) days after receipt of an invoice, in accordance with the Texas Prompt Payment Act (Tex. Gov’t Code Ch. 2251). All original invoices are to be sent to the City of Lewisville, Attention: AP Division, 151 West Church Street, Lewisville, Texas 75057 or P.O. Box 299002, 75029-9002.
7. Change Orders. Any changes to the Services that change the Agreement price or the Agreement time, as specified herein, must be authorized by the City in writing PRIOR to commencement of said work. Any work performed without the City’s prior written consent will be at the sole expense of the Contractor.
8. Subcontractors. If subcontractors are used, the subcontractor will be directed and supervised solely by the Contractor. The Contractor shall require the subcontractor to hold the same insurance as required of the Contractor under this Agreement.
9. Right of Inspection and Required Repairs. The City shall have the right to observe and check all ongoing work in sufficient detail to determine if the Services are proceeding satisfactorily. The City shall have the right to inspect all Services completed before accepting them and making payments in accordance with this Agreement. Should any portion of the completed Services fail to meet the requirements of the City, the Contractor shall repair or replace items failing to meet requirement until items can be demonstrated to comply.
10. Termination. This Agreement may be terminated by the City under the terms outlined in the Specifications (**Exhibit A**).

11. Insurance. During the period of this Agreement, the Contractor will maintain, at its expense, insurance with limits not less than those prescribed in the Specifications (**Exhibit D**). All insurance must be reviewed and approved by the City **prior to commencement of work**.
12. Bonds. The Contractor shall provide bonds as required by the Specifications (**Exhibit A**) **prior to commencement of work**.
13. Worker's Compensation. The Contractor shall abide by the workers compensation requirements outlined in the Specifications (**Exhibit A**).
14. Independent Contractor. Contractor shall be considered an independent contractor and not an agent, servant, employee, or representative of the City in the performance of the work and Services. No term or provision herein or act of the City shall be construed as changing that status.
15. Compliance with Laws. The Contractor shall comply with all applicable federal, state, and local statutes, regulations, ordinances, and other laws, including, but not limited to the Immigration Reform and Control Act (IRCA).
16. Governing Law and Venue. Venue and governing law shall be as provided for in the Specifications (**Exhibit A**).
17. Arbitration. In the event of a dispute which may arise under this Agreement, the City does not agree to arbitration.
18. Tax Exempt Status. The City is exempt from and shall not pay state and local sales and use taxes on labor and materials incorporated into the Project. If necessary, it is the responsibility of the Contractor to obtain from the State Comptroller's Office a sales tax permit, resale certificate, and exemption certificate that will enable the Contractor to buy any materials for the Services and then resell the aforementioned materials to the City without paying the tax on the materials at the time of purchase.
19. Entire Agreement. This Agreement and its exhibits contain the entire agreement of the parties with respect to the matter contained herein. All provisions of this Agreement shall be strictly complied with and conformed to by the Contractor, and no amendment to the Agreement shall be made except upon the written agreement of the parties, which shall not be construed to release either party from any obligation of the Agreement except as specifically provided for in such amendment.
20. Assignment. This Agreement may not be assigned except as provided for in the Specifications (**Exhibit A**).

21. Governmental Immunity. Unless otherwise required under the law, the Parties agree that the City has not waived its governmental immunity by entering into and performing their obligations under this Agreement.

22. Notice. Any notice provided or permitted to be given under this Agreement must be in writing and may be served by depositing same in the United States mail, addressed to the party to be notified, postage pre-paid and registered or certified with return receipt requested, or by delivering the same in person to such party via a hand-delivery service, Federal Express or any courier service that provides a return receipt showing the date of actual delivery of same, to the address thereof. Notice given in accordance herewith shall be effective upon receipt at the address of the addressee. For purposes of notification, the addresses of the parties shall be as follows:

If to Contractor, to: _____

If to City, to: City of Lewisville
Attn: Todd White, C.P.M.
151 W. Church Street
Lewisville, Texas 75057

23. Severability. In case any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision thereof, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein.

24. Representations. Each signatory represents this Agreement has been read by the party for which this Agreement is executed and that such party has had an opportunity to confer with its counsel.

25. Miscellaneous Drafting Provisions. This Agreement shall be deemed drafted equally by all parties hereto. The language of all parts of this Agreement shall be construed as a whole according to its fair meaning, and any presumption or principle that the language herein is to be construed against any party shall not apply. Headings in this Agreement are for the convenience of the parties and are not intended to be used in construing this document.

26. Force Majeure. If by reason of Force Majeure, either party hereto shall be rendered unable wholly or in part to carry out its obligations under this Agreement then such party shall give notice and full particulars of Force Majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied upon, and the obligation of the party giving such notice, so far as it is affected by such Force Majeure, shall be suspended during the continuance

of the inability then claimed, except as hereinafter provided, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch. The term Force Majeure as employed herein, shall mean acts of God, strikes, lockouts, or other industrial disturbances, act of public enemy, order of any kind of government of the United States or the State of Texas or any civil military authority, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, hurricanes, storms, floods, washouts, droughts, arrests, restraint of government and people, civil disturbances, explosions, breakage or accidents to machinery, pipelines or canals, or other causes not reasonably within the control of the party claiming such inability.

27. Waiver. No claim or right arising out of a breach of this Agreement can be discharged in whole or in part by a waiver or renunciation of the claim or right unless the waiver or renunciation is supported by consideration and is in writing signed by the aggrieved.
28. **INDEMNIFICATION**. CONTRACTOR AGREES TO DEFEND, INDEMNIFY AND HOLD THE CITY, ITS OFFICERS, AGENTS AND EMPLOYEES, HARMLESS AGAINST ANY AND ALL CLAIMS, LAWSUITS, JUDGMENTS, COSTS AND EXPENSES FOR PERSONAL INJURY (INCLUDING DEATH), PROPERTY DAMAGE OR OTHER HARM FOR WHICH RECOVERY OF DAMAGES IS SOUGHT, SUFFERED BY ANY PERSON OR PERSONS, THAT MAY ARISE OUT OF OR BE OCCASIONED BY CONTRACTOR'S BREACH OF ANY OF THESE TERMS AND CONDITIONS OR BY ANY NEGLIGENT OR STRICTLY LIABLE ACT OR OMISSION, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY CONTRACTOR, ITS OFFICERS, AGENTS, EMPLOYEES OR SUBCONTRACTORS, IN THE PERFORMANCE OF THIS AGREEMENT; EXCEPT THAT THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPH SHALL NOT APPLY TO ANY LIABILITY RESULTING FROM THE SOLE NEGLIGENCE OR FAULT OF THE CITY, ITS OFFICERS, AGENTS, EMPLOYEES OR SEPARATE CONTRACTORS, AND IN THE EVENT OF JOINT AND CONCURRING NEGLIGENCE OR FAULT OF THE CONTRACTOR AND THE CITY, RESPONSIBILITY AND INDEMNITY, IF ANY, SHALL BE APPORTIONED IN ACCORDANCE WITH THE LAW OF THE STATE OF TEXAS, WITHOUT WAIVING ANY GOVERNMENTAL IMMUNITY AVAILABLE TO THE CITY UNDER TEXAS LAW AND WITHOUT WAIVING ANY DEFENSES OF THE PARTIES UNDER TEXAS LAW AND THE CITY'S REASONABLE ATTORNEY'S FEES SHALL BE REIMBURSED IN PROPORTION TO THE CONTRACTOR'S LIABILITY. THE PROVISIONS OF THIS PARAGRAPH ARE SOLELY FOR THE BENEFIT OF THE PARTIES HERETO AND NOT INTENDED TO CREATE OR GRANT ANY RIGHTS, CONTRACTUAL OR OTHERWISE, TO ANY PERSON OR ENTITY. ANY INDEMNIFICATION AGREED TO BY THE CITY IS ONLY TO THE EXTENT ALLOWED BY LAW.

29. Immigration Reform and Control Act (8 U.S.C. 1324a). The City of Lewisville supports the Immigration Reform and Control Act (IRCA) which is a comprehensive scheme prohibiting the employment of unauthorized aliens in the United States. The Contractor shall submit a declaration signed under penalty of perjury of the laws of the State of Texas stating that it has not been found in violation of IRCA by the United States Attorney General or Secretary of Homeland Security in the preceding five (5) years. The Contractor shall ensure that its Subcontractors submit a declaration signed under penalty of perjury of the laws of the State of Texas stating that they have not been found in violation of IRCA by the United States Attorney General or Secretary of Homeland Security in the preceding five (5) years. The Contractor and its Subcontractors shall at all times during the term of the contract with the City comply with the requirements of IRCA and shall notify the City within fifteen (15) working days of receiving notice of a violation of IRCA. The City may terminate a contract with the Contractor if the City determines that (a) the Contractor or its Subcontractors have been untruthful regarding IRCA violations in the preceding five (5) years; (b) if the Contractor fails to ensure that its Subcontractors submit the aforementioned declaration; or (c) the Contractor or its Subcontractors fail to timely notify the City of an IRCA violation.
30. ADA Compliance. All goods and services provided to the City must be compliant with the Americans with Disabilities Act and any amendments thereto (the “ADA”) and all regulations promulgated pursuant to the ADA. Contractor will be required to certify compliance, if required under the law or otherwise required by the City.
31. Protection of Resident Workers. The City actively supports the Immigration and Nationality Act (INA), which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9) for every worker performing services under the Agreement. The Contractor and its Subcontractors shall establish appropriate procedures and controls so no services or products under the Contract Documents will be performed or manufactured by any worker who is not legally eligible to perform such services or employment. The City reserves the right to audit Contractor’s or Subcontractor’s employment records to verify the existence of a completed Employment Eligibility Verification Form (I-9) for every worker performing services or manufacturing products under the Contract Documents. The audit will be at the City’s expense.
32. Advertising. Contractor shall not advertise or publish, without the City’s prior consent, the fact that the Contractor has entered into this Agreement, except to the extent necessary to comply with proper requests for information from an authorized representative of the federal, state or local government.

33. Disclosure. Pursuant to Chapter 176 of the Texas Local Government Code, a person or agent of a person who contracts or seeks to contract with the City of Lewisville must complete a conflict of interest questionnaire if the person or agent has an affiliation or business relationship that might cause a conflict of interest with the City. The conflict of interest questionnaire, which is available online at ethics.state.tx.us, must be filed with the City Secretary of the City of Lewisville no later than the seventh business day after the person or agent begins contract discussions or negotiations with the City of Lewisville or submits to the City of Lewisville an application, response to a request for proposal or bid, correspondence, or another writing related to a potential agreement with the City of Lewisville. An updated conflict of interest questionnaire must be filed in accordance with Chapter 176 of the Local Government Code. An offense under Chapter 176 is a Class C misdemeanor.

Contractor should consult with legal counsel if you have questions regarding its compliance with the requirements of Chapter 176. It is the responsibility of each person or agent who is contracting or seeking to contract with the City of Lewisville to comply with the filing requirement of Chapter 176.

34. Texas Government Code Chapter 2271. Pursuant to Texas Government Code Chapter 2271, Contractor affirms that execution of this Agreement serves as written verification that Contractor: (1) does not boycott Israel, as defined by Texas Government Code Section 808.001; and (2) will not boycott Israel during the term of the Agreement.
35. Texas Government Code Chapter 2252. Pursuant to Texas Government Code Chapter 2252, Subchapter F, Contractor affirms, by entering into this Agreement that is it not identified on a list created by the Texas Comptroller of Public Accounts as a company known to have contracts with or provide supplies or services to Iran, Sudan, or a foreign terrorist organization.

(SIGNATURES ON FOLLOWING PAGE)

IN WITNESS, WHEREOF, we, the contracting parties, by our duly authorized agents, hereto affix our signatures as of the date listed above.

CITY OF LEWISVILLE, TEXAS
Approved by the Lewisville City
Council _____

CONTRACTOR:
RANGER BUILDERS LLC

By: _____
Donna Barron, City Manager

By: _____
Patrick Boaz, President

Date: _____

Date: _____

[ADDRESS]

Telephone Number

E-mail Address

Federal Tax ID Number

Attest: _____
Julie Worster

Attest: _____

CITY OF LEWISVILLE
151 West Church Street
Lewisville, Texas 75057

APPROVED AS TO FORM:

Lizbeth Plaster, City Attorney