NOTICE TO CONTRACTORS

The City of Texarkana, Texas, on behalf of Texarkana Renewal Properties, LLC, will receive sealed bids from qualified licensed asbestos abatement contractors until October 20, 2020, by 2:00 p.m. as part of an EPA Brownfields Revolving Loan Fund. Envelopes should be plainly marked in lower left-hand corner "Asbestos Abatement Bid – Former Bank Building, Parking Garage and Key Shop 2020".

Bids shall be submitted to:

Physical Address:
City of Texarkana, Texas
Planning & Community Development
220 Texas Blvd.
Texarkana, Texas 75501
Attn: Daphnea Ryan

Mailing Address:
City of Texarkana, Texas
Planning & Community Development
P.O. Box 1967
Texarkana, Texas 75504
Attn: Daphnea Ryan

Contractors submitting bids must hold a valid asbestos abatement contractors license with the State of Texas. Bids will be opened and read aloud immediately after the specified closing time at City of Texarkana, Texas, City Council Chambers located at 220 Texas Blvd, Texarkana, Texas, on the 2nd floor.

A Cashier's Check or an acceptable Surety Proposal Bond, in an amount of not less than five percent (5%) of the largest possible total cost, must accompany each bid. A mandatory pre-bid walk-through conference will be held for contractors on September 30, 2020, at 10:00 a.m. at the former bank building located at 100 West Broad Street in Texarkana, Texas.

Bid information, specifications, and other documents constituting the bidding documents may be obtained at the time of the pre-bid walk-through conference or at the following address:

Brady Environmental Services Inc.
Stacy@bradyenvironmental.com
PO Box 2623, Lindale, Texas 75771
903.882.6865

Printed copies of specifications are available upon a non-refundable payment to Brady Environmental of $100 per set. MBE/DBEs are encouraged to submit bids for this federally funded project.

The deadline for questions is October 15, 2020.

Until final award of the contract, Texarkana Renewal Properties, LLC, reserves the right to reject any or all bids in part or in whole, to waive irregularities, to re-advertise, or – when in the best interest of the City, Owner, and Developer – otherwise proceed to the work.

COVID-19 Restrictions: For both the September 30 mandatory pre-bid walk through conference and the October 20 bid opening, the wearing of CDC-recommended cloth face coverings or masks will be required at all times. In addition, for the October 20 bid opening, temperature checks will also be required as a condition for entry into City Hall, and attendance must be scheduled in advance by contacting Daphnea Ryan at 903-798-3934 or at dryan@txkusa.org prior to bid opening.

TECHNICAL SPECIFICATIONS
ASBESTOS ABATEMENT

of the

Former Bank Building
Parking Garage and Key Shop
100 West Broad Street
Texarkana, Texas

Prepared for:

Texarkana Renewal Properties, LLC
105 Olive Street
Texarkana, AR 71854

Prepared by

J. Mark Swinnea, P.E.
TDSHS License No. 10-5066
Expiration 1/31/2020

September 15, 2020

TECHNICAL SPECIFICATIONS
ASBESTOS AND LEAD HAZARD ABATEMENT

100 West Broad Street
Texarkana, Texas

INFORMATION FOR CONTRACTORS

GENERAL These instructions apply to proposals for the asbestos abatement services for 100 West Broad Street in Texarkana, Texas.

CONTRACT DOCUMENTS The contract documents for the work proposed will include:

1. The specifications and documents including the drawings and attachments included in this request for proposal, together with changes, if any, based on the contractor's proposal or other submittals to the extent incorporated in this document prior to its execution.
2. All engineering information and other data submitted by the contractor and reviewed by owner.
3. Contractor's proposal.
4. The owner's purchase orders and other supplemental written documents which may be issued as amendments to the contract.

These documents collectively shall form the contract between the owner and the successful contractor for the contract duration.

DOCUMENTS FOR PROPOSAL Prospective contractors invited to make a direct proposal to owner will be furnished one copy of the contract documents.

Site Location	Main Bank Building, Parking Garage and Key Shop 100 West Broad Street Texarkana, Texas
Owner of Record	Texarkana Renewal Properties, LLC 105 Olive Street Texarkana, AR 71854
Owner's Representative	Mr. David Peavy david@1894citymarket.com
Consultant of Record/ Consulting Agency	Brady Environmental Services, Inc. Mr. J. Mark Swinnea, P.E. P.O. Box 2623 Lindale, Texas 75771 Office: 903-882-6865 Fax: 903-882-6867 Email: mark@bradyenvironmental.com

PROPOSALS Contractors shall prepare and submit two (2) identical proposals. Each proposal shall contain a complete bound copy of the required supplemental data. Proposals which are not prepared and submitted in accordance with these instructions will be considered irregular and may be rejected at the discretion of the owner.

1. Preparation - Each proposal shall be carefully prepared using identical proposal forms bound herewith. Entries on the proposal forms shall be typed or legibly written in black ink. All prices shall be stated in words and figures except where the forms provide figures only.

   The contractor shall bind, with each proposal copy submitted, a signed copy of each addendum issued for the contract documents during the proposal period. The contractor shall assemble all supplementary information required and shall attach such information to the proposal.

2. Signatures - Contractor shall sign each proposal with contractor's usual signature and shall give contractor's full business address. Proposals by partnerships shall be signed with the partnership name followed by the signature and designation of one of the partners or other authorized representative.

   Proposals by a corporation shall be signed in the name of the corporation followed by the signature and designation of the president, secretary, or other person authorized to offer a proposal for the corporation. The names of all persons signing should also be typed or printed below the signature.

   When requested, satisfactory evidence of the authority of the officer signing on behalf of the corporation shall be furnished. Proposing corporations shall designate the state in which they are incorporated and the address of their principal office.

3. Submittal - Proposals shall be submitted in sealed envelopes each endorsed on the outside with the contractor's name, the owner's contract number, and the title of the project.

   Contractor's two (2) signed identical proposals, complete with two (2) copies of all required supplemental information, shall be submitted at the time and place named in these contract documents. These proposals shall be addressed to Owner of Record, at the address as indicated.

4. Firm Proposal - Each proposal shall be firm, not subject to escalation. Proposals may not be withdrawn for ninety (90) days after the date of submission.

TAXES The owner may qualify as exempt from federal, state and municipal sales taxes. Upon request, the successful contractor will be furnished the certification necessary to obtain the tax exemption.

TIME OF COMPLETION The contractor understands that the work under this Agreement shall be performed as directed by owner. The time set for completion of the work scope is a critical element of the project. The contractor shall do everything within his power to complete the work within the agreed time period. It will be necessary that the contractor satisfy owner of contractor's ability to complete the work within the stipulated time.

INTERPRETATION OF CONTRACT DOCUMENTS If any prospective contractor is in doubt as to the true meaning of any part of the proposed contract documents, contractor may submit to owner a written request for an interpretation thereof. The person submitting the request will be responsible for its prompt delivery, and all requests must be received by owner at least five (5) working days before the due date. Any interpretation of the contract documents will be made only by addendum duly issued, and a copy of such addendum will be mailed or delivered to each person receiving a set of the contract documents. The owner will not be responsible for any other explanations or interpretations of the proposed documents.

It shall be the responsibility of the contractor to advise the owner of conflicting requirements or omissions of information which are necessary for a clear understanding of the work, before the date set for opening proposals. Those questions not resolved by addenda shall be listed in the contractor's proposal, together with statements of the basis upon which the proposal is made as affected by each question.

PERFORMANCE AND PAYMENT BONDS The contractor may be required to furnish good and sufficient Performance and Payment Bonds prior to performance of services. A cost line item on the contractor's proposal documents shall indicate bonding costs. All provisions of the bonds shall be complete and in full accordance with statutory requirements including Vernon's Texas Government Code Title 10, Chapter 2253. The bonds shall be executed with the proper sureties through a company or companies licensed and qualified to operate in the State of Texas and acceptable to the owner. The cost of the bonds shall be included on the proposal.

ACCEPTANCE AND REJECTION OF PROPOSALS The owner reserves the right to accept the proposal which, in its judgment, is the evaluated best proposal, to reject any and all proposals, and to waive irregularities and informalities in any proposal that is submitted. It is agreed that the contract between the owner and the successful contractor shall not come into existence until the actual signing of the contract.

OWNERSHIP OF DRAWINGS AND SPECIFICATIONS Title to all Specifications and other contract documents are here with the consultant and owner. All contractors and the successful contractor awarded the contract agree that these documents and/or materials will not be used in any manner other than for the preparation of proposals and for the services covered by the contract documents. Documents referred to other firms for proposals on subcontracts will be subject to the same provisions.

STREET CLOSINGS

The contractor shall coordinate all requests for street closings with the City in writing 14 days prior to date of requested outage.

PRECONSTRUCTION CONFERENCE

After award of the contract but prior to commencement of any work at the site, meet with the Consultant of Record and Texarkana Renewal Properties representative to discuss and develop a mutual understanding relative to the administration of the value engineering and safety program, preparation of the schedule of prices or earned value report, shop drawings, and other submittals, scheduling programming, prosecution of the work. Major subcontractors who will engage in the work must also attend.

WEEKLY PROGRESS MEETINGS

Conduct a weekly meeting with the Consultant and Owner's representative for the purpose of jointly reviewing the actual progress of the project as compared to the as planned progress and to review planned activities for the upcoming two weeks. At the weekly progress meeting, address the status of RFIs, RFPs and Submittals.

REQUESTS FOR TIME EXTENSIONS

Provide a justification of delay to the consultant and owner's representative for approval within 10 days of a delay occurring. Also prepare a time impact analysis for each request to justify time extensions. Actual delays that are found to be caused by the contractor's own actions, which result in a calculated schedule delay will not be a cause for an extension to the performance period, completion date, or any interim milestone date.

HUB PARTICIPATION

HUB participation for this project is encouraged. All prospective proposers that qualify under the HUB guidelines as a MBE/WBE /MWBE or DBE should include their HUB Certifications with their proposals along with all entity contact information for consideration. If the proposer is a non-HUB certified entity but will be sub-contracting to MBE.WBE/ MWBE or DBE entities during the completion of the project, they should include, with their bid, all contact information and certifications for the proposed sub-contracted entity for consideration.

DAVIS-BACON ACT

Davis-Bacon Act Wage Decision TX20200232, Building Construction Projects, will be applicable to the construction, alteration, painting or repair of buildings, installations within buildings, appurtenances to buildings, foundations for buildings, excavation and fill for buildings, and utilities within five feet of buildings for those construction activities as performed in TX, Bowie County.

ASBESTOS ABATEMENT PROPOSAL FORM
FORMER BANK BUILDING, PARKING GARAGE AND KEY SHOP
TEXARKANA, TEXAS

To: Texarkana Renewal Properties, LLC
105 Olive Street
Texarkana, AR 71854

The undersigned contractor proposes to furnish all labor, material and other items for the project, "**Asbestos Abatement – Former Bank Building, Parking Garage and Key Shop 2020"** located at 100 West Broad Street, Texarkana, Texas in accordance with the specifications and drawings as prepared by Brady Environmental Services, Inc., consultant for the project.

Item #1 – Bank Building

- **Remove all exterior transite panels listed as ACM.**
- **Remove windows that are installed in the transite framework that are listed as ACM in the glazing.**

_____Dollars

($_____)

Work to be completed in _____ calendar days.

Item #2 – Garage Building

- **Remove all transite panels listed as ACM.**

_____Dollars

($_____)

Work to be completed in _____ calendar days.

Item #3 – Bank Mezzanine, 1st and 8th Floors

- **Remove all ceilings, walls that are listed as ACM.**
- **Remove all TSI from fan coil units and piping listed as ACM.**
- **Remove mechanical insulation and chase materials listed as ACM.**
- **Remove all flooring listed as ACM where historic tile floor is required to be exposed.**
- **Remove floor tile in stairwells listed as ACM. Remove carpet and tack strip where floor below is listed as ACM.**

_____Dollars

($_____)

Work to be completed in _____ calendar days.

Contractor:_____ Dated:_____

Item #4 – Bank 6th and 7th Floors

- **Remove all ceilings, walls that are listed as ACM**
- **Remove all TSI from fan coil units and piping listed as ACM.**
- **Remove mechanical insulation and chase materials listed as ACM**
- **Remove all flooring listed as ACM where historic tile floor is required to be exposed.**
- **Remove floor tile in stairwells listed as ACM.**
- **Remove carpet and tack strip where floor below is listed as ACM.**

_____Dollars

($_____)

Work to be completed in _____ calendar days.

Item #5 – Bank 2nd and 5th Floors

- **Remove all ceilings, walls that are listed as ACM**
- **Remove all TSI from fan coil units and piping listed as ACM.**
- **Remove mechanical insulation and chase materials listed as ACM**
- **Remove all flooring listed as ACM where historic tile floor is required to be exposed.**
- **Remove floor tile in stairwells listed as ACM.**
- **Remove carpet and tack strip where floor below is listed as ACM.**

_____Dollars

($_____)

Work to be completed in _____ calendar days.

Item #6 – Bank Basement

- **Remove all ceilings, walls that are listed as ACM**
- **Remove all TSI from fan coil units and piping listed as ACM.**
- **Remove mechanical insulation and chase materials listed as ACM**
- **Remove all flooring listed as ACM where historic tile floor is required to be exposed.**
- **Remove floor tile in stairwells listed as ACM.**
- **Remove carpet and tack strip where floor below is listed as ACM.**
- **Remove all TSI duct insulation listed as ACM.**

_____Dollars

($_____)

Work to be completed in _____ calendar days.

Contractor:_____ Dated:_____

Item #7 – Garage

- **Remove remaining listed ACM, excluding transite panels.**

_____Dollars

($_____)

Work to be completed in _____ calendar days.

Item #8 – Bank

- **Encapsulate exterior stucco listed as ACM.**
- **Encapsulate window glazing listed as ACM.**
- **Use specified coating over the existing surfaces to encapsulate.**

_____Dollars

($_____)

Work to be completed in _____ calendar days.

Item #9 – Bank

- **Remove all loose and/or damaged roofing materials 5th and 8th floor roofs.**
- **Encapsulate remaining roof materials with waterproof spray materials or other new roofing materials.**

_____Dollars

($_____)

Work to be completed in _____ calendar days.

A bid bond or cashier's check in the amount of the highest possible bid is attached. This bid bond shall serve as an indication of the contractor's intent to promptly enter into a contract with the owner upon given notice to proceed.

Contractor:_____ Dated:_____

Unit Pricing for additions and reductions:

ACM MATERIAL		ADD COST	DEDUCT COST
Floor Mastic Only	Cost per Square Foot		
Floor Tile and Mastic	Cost per Square Foot		
Floor Linoleum	Cost per Square Foot		
Sheetrock Walls	Cost per Square Foot		
Sheetrock Ceilings	Cost per Square Foot		
Ceiling/Wall Tile Button Mastic	Cost per Square Foot		
TSI Piping Insulation	Cost per Fitting		
TSI Piping Insulation	Cost per Linear Foot		
HVAC Duct Insulation	Cost per Square Foot		

Additional Mobilization Cost: $_____

Cost to provide payment bond: $ _____

Cost to provide performance bond: $ _____

_____ _____

Contractor Address

_____ _____

Authorized Signature/Title Telephone Number

_____ _____

Fax Number E-Mail Address

Contractor:_____ Dated:_____

CONTRACTOR QUALIFICATIONS AND SUBMITTALS

GENERAL Each contractor shall submit with its proposal, information for owner's use in evaluating the contractor's proposal and its ability to satisfactorily perform the work. Contractors not meeting the minimum qualifications are subject to rejection of proposal.

The information submitted with the contractor's proposal will become part of the contract documents if the contractor's proposal is accepted. Any changes or substitutions shall be made only with the written acceptance of the owner, and such change or substitution shall not be cause for additional financial compensation nor shall they invalidate the contract in any way.

QUALIFICATIONS The minimum qualifications necessary for eligibility to perform services under this contract are stated within the following information to be submitted.

INFORMATION TO BE SUBMITTED The following information shall be submitted:

a.) Licenses - The number and description of any licenses for asbestos abatement-related work (including Texas Department of State Health Services) held by the firm, any subcontractor to the firm, or any employee of the firm, or of a subcontractor who shall perform services under this contract. The firm must hold all necessary licenses and training for asbestos related work (including Texas Department of State Health Services) as well as subcontractors to the firm and employees of a subcontractor who shall perform abatement-related work under this contract.

b.) Experience - The firm must have performed asbestos abatement work for a minimum of five (5) years on large- and small-scale projects including city/county/school/commercial/retail/office facilities. Similar project references with contract names and man hours worked shall be listed. Company management and job supervisory personnel must show abatement experience of at least five (5) years with two (2) of the years in a supervisory capacity with contractor and must meet the state licensing requirements. Organizational charts showing corporate and intended jobsite supervisory personnel shall be submitted with resumes of each individual.

c.) Citations/Terminations - The Contractor and all subcontractors shall submit a statement, signed by an officer of the company, containing a record of any citations issued by Federal, State or local regulatory agencies relating to asbestos and lead activities (including projects, dates, and resolutions); a list of penalties incurred through non-compliance with asbestos and/or lead project specifications, including liquidated damages, overruns in scheduled time limitations and resolutions; and situations in which an asbestos/lead-related contract has been terminated (including projects, dates, and reasons

for terminations). If there are none, a negative declaration signed by an officer of the company shall be provided. The firm must be free of any active claims or civil citations, notices of violations, legal proceedings, and project terminations from any federal, state, or local regulatory agency or department issued to or served upon the firm.

d.) Subcontractors – A list of all proposed Subcontractors anticipated.

e.) Organization Report - The Contractor shall submit a qualification and organization report. The report shall describe the qualifications of the certified supervisor, and certified abatement workers. Include in the report an organization chart showing the Contractor's personnel by name and title and project specific responsibilities and authorities. The report shall be signed by the Contractor and the certified abatement supervisor to indicate that all personnel comply with certification and experience requirements of this section and that project personnel have been given the authority to complete the tasks assigned to them.

f.) Safety Record and Program - The contractor shall supply Workman's Compensation modification ratings for the last three (3) years and a log of accident reports showing any injuries occurring on all jobs in the last three (3) years. Proposals must also include detailed descriptions of safety and safety training programs. A well-established safety program and clean safety record are required to be considered an acceptable contractor for this contract. The contractor must have an effective, well established safety program and clean safety record.

g.) Drug Screening Program - The contractor shall have an established drug screening program for all workers to be employed on the former bank building job site. Description and evidence of this program shall be included in the proposal.

ADDITIONAL INFORMATION TO BE SUBMITTED

a.) Surety – A letter of certification from a surety company to confirm that the contractor is qualified to execute a valid performance bond and a valid payment bond for the project, should it be requested.

b.) Exceptions – Any exception to the specifications, requirements or the terms and conditions of this contract must be clearly acknowledged and explained on a separate page and must accompany the proposal.

REJECTION OF PROPOSAL Failure to submit information detailed in this section under Qualifications, Information to be submitted, and Additional Information to be submitted may be cause for rejection of contractor's proposal. Contractor's submittals will be used, at the sole discretion of the owner, in determining whether the contractor's proposal is accepted or rejected.

METHOD OF EVALUATION

In addition to cost considerations, award of the contract to perform this work will be based upon the owner's evaluation of the following:

a.) Contractor's ability to prove strict compliance to contract specifications.

b.) Previous asbestos abatement/installation experience of the contractor and its employees.

c.) The number, seriousness and resolution of any citations/terminations issued to contractor or its personnel.

d.) Experience specific to redevelopment of historical structures.

e.) Experience specific to façade preservation of deteriorated structures.

f.) Experience specific to federally funded or state environmental cleanups.

g.) References

h.) Demonstrated ability to adhere to project timelines.

i.) Total project cost.

In the event of a tie score, the owner or general contractor may choose to conduct interviews with any proposers to further evaluate their experience and qualifications.

PROJECT ADMINISTRATION

The abatement contractor shall be identified in these documents as "Contractor". The contractor is responsible for assuring that all site personnel under their authority adhere to the Contractor's Project Safety & Health Programs, job specifications and all local, state and federal rules, regulations and procedures.

All work site personnel, including owner's representatives, contractor's project superintendent, environmental consultant's personnel, contractor competent person and subcontractors, will familiarize themselves with these specifications, and the contractor's Accident Prevention Plan.

The contractor and all lower tier subcontractors shall take all necessary precautions to protect all on-site personnel from any hazards involving safety & health arising from the scope of work and/or in the course of completing the scope of work.

The contractor shall hold subcontractors responsible and accountable for safety compliance on the project site with the Project Safety & Health Program.

The contractor shall assure all onsite personnel have in the possession at the job site, the necessary safety equipment such as fall protection safety harnesses and lanyards, hard hats, respirators, safety glasses, safety shoes and other safety equipment and require their use as needed.

For compliance with applicable state and federal regulatory requirements, a state notification should be filed with the Texas Department of State Health Services. This notification should be filed at least ten working days prior to commencement of abatement. Contractor shall be responsible for filing amendments with the State of Texas as may be required throughout the total duration of work.

JOB SITE FACILITIES

The abatement contractor shall set up a temporary job site office space within the building for the project duration.

Utilities, including electricity and water shall be provided by owner. The contractor shall arrange for additional services not currently on site at his expense and pay for the use. The contractor shall set up GFCI distribution panels to provide distribution for the project.

KEY PERSONNEL

The term "contractor" as referred to in these contract documents and specifications shall apply to the abatement contractor, and/or any and all subcontractors in the performance of their scope of services. The contractor shall hold subcontractors accountable and responsible for compliance with the project specifications and regulatory standards as may be applicable to the subcontractor's scope of services.

The project superintendent is the on-site coordinator and overseer of contractor's operations. It is the duty of the project superintendent to see to the maintenance of site security, the coordination of activities by all subcontractors, and to verify that all activities are performed in a safe manner. The project superintendent is responsible for adherence to the plans and specification and the safety & health practices and conditions on site.

The project superintendent's responsibilities shall also include the following:

1. The project superintendent shall ensure all personnel of subcontractors are in compliance with safe work practices and attend all safety meetings.

2. Give on-going input into necessary changes to the Project Safety & Health Program.

3. Hold subcontractors responsible and accountable for compliance with project specifications as well as their own Project Specific Safety & Health Program.

4. Require submittal of a written plan from all subcontractors regarding how work processes will be safely performed.

5. Maintain copies of all safety data sheets (SDS) and start job specific files for SDS' and provide access of such to all subcontractors.

6. Take immediate action to correct unsatisfactory conditions and work practices personally observed or brought to his attention arising from subcontractor activities. Immediately discontinue work around the unsafe area until concerns are properly addressed.

7. Assure that all injuries are reported and treated.

8. Assure that OSHA recordkeeping requirements are maintained.

9. Complete weekly job safety walk-through assessments.

Job site employees of the abatement contractor as well as subcontractors shall have Stop Work Authority. Any person on site may shut down a work operation that poses imminent danger or a situation arises which in immediately dangerous to life or health on site. When such precautions must be immediately taken, the project superintendent and / or competent persons shall be immediately notified and actions to correct the situation shall be implemented.

The project consultant as referred to in the specifications refers to Brady Environmental Services, Inc. as retained by the owner to provide oversight and testing services. Brady Environmental Services will designate licensed project managers and air monitoring technicians (AMT) to provide daily monitoring of contractor's abatement activities. These individuals are referred to in these documents as project manager and/or AMT.

SUB-CONTRACTORS

Subcontractors are responsible for the training of workers, safety inspections, necessary safety documentation and coordinating of work for safe means through the abatement contractor. All subcontractors to the abatement contractor are responsible for administering project orientation training for their workers. Safety is the responsibility of everyone on site, requiring everyone to work together to achieve a safe workplace.

PROGRESS PAYMENTS

INVOICES All invoices shall be submitted to the consultant for approval and forwarded to the owner. All invoices shall include any supporting documentation necessary to verify the charges billed. Payment date for amount due contractor shall be construed as the date check is deposited in the United States mail.

MONTHLY PROGRESS PAYMENTS

Contractor shall submit to the owner monthly applications for payment by the 3rd of the subsequent month for which payment is requested and/or upon completion of work as approved and accepted by the owner. Payments are made on the owner's and/or consultant's evaluation of work performed by the contractor, considering the schedule submitted by the contractor of values of the various parts of the work, aggregating the total sum of the project. In applying for payment, the contractor shall submit a statement based upon this schedule. Application for payment made on account of materials not incorporated in the work, but delivered and suitably stored at the site shall include evidence of payment from suppliers and shall be in accordance with the terms and conditions of the contract documents. Applications for payment submitted by the 3rd of each month shall be processed by the owner. Contingent upon owner's evaluation of the amount of work completed, payments for such applications shall be due after the expiration of the statutory period in which a laborer, material, men or subcontractor of the contractor must provide notice of a claim to statutorily perfect a valid lien or bond claim. The owner may pre-pay any payment without waiving any of owner's rights under this agreement. Completed lien waivers shall accompany applications for payment, release of claims and/or bills paid affidavit forms as may be required by owner.

Retainage of 10 percent (10%) of the sums due hereunder shall be withheld until completion and acceptance of all work to be performed under the contract.

In the event the owner believes any of the conditions listed below warrant such action, the owner may withhold from monthly progress payments due hereunder sums deemed necessary to protect the owner from any losses on account of: (i) Defective work not remedied, (ii) Failure of the contractor to pay bills for labor and/or materials furnished in connection with the contract work, (iii) Inability of contractor to complete the contract work for the unpaid contract balance; (iv) Failure of the contractor to diligently prosecute the contract work such that damages for delay are likely, (v) Damages to another subcontractor, or (vi) Breach by the contractor of any provision or obligation of this agreement.

The contractor agrees that any joint check payments to the contractor and any of contractor's material men or subcontractors shall constitute payment for the full amount of such joint check to the contractor made in this agreement.

In the event owner or consultant receives notice of a lien claim or bond claim by contractor's material men, subcontractors or laborer, owner may, at owner's option, directly pay any such claimant. Any such direct payment to a claimant and any expenses in process such claim and payment shall be deducted from the contract price and from any payments due to contractor. Contractor further agrees that the owner will occur substantial additional costs and expenses in administration of claims when a notice is received, that such costs would be difficult to ascertain, that the sum of $100.00 would be a reasonable and just compensation to owner for each notice received, and that $100.00 for each notice should be deducted from the contract Price and from any payments due to contractor, as liquidated damages for such administration.

REQUIRED SUPPORTING DOCUMENTATION All invoices for costs incurred in the performance of the work completed, including materials, equipment and machinery used, shall include supporting documentation to verify charges billed. Separate invoices shall be prepared for all extra or additional work authorized by the owner and shall include any supporting documentation necessary to verify the charges billed.

PAYMENTS If work to be performed under a particular purchase order exceeds forty-five (45) days to complete, the contractor shall submit an invoice once a month for work performed the previous month. The owner shall pay contractor ninety percent (90%) of the properly approved month invoice within thirty (30) days from receipt of said month invoice.

However, if work to be performed under a particular purchase order is to be completed in forty-five (45) days or less, the contractor shall submit for work associated with that purchase order, an invoice for all work completed and accepted in writing by the owner.

The owner shall pay contractor ninety percent (90%) of the properly approved invoice within thirty (30) days after receipt of said invoice.

RETAINAGE For each project the remaining ten percent (10%) of the amount earned for work performed by the contractor will be retained by the owner pending acceptance in accordance with these GENERAL CONDITIONS.

WITHHOLDING PAYMENTS The owner may withhold payments due the contractor to the extent necessary to protect itself against loss, including but not limited to the following:

a.) Defective work not remedied.

b.) Claims filed or reasonable evidence indicating probable filing of claims.

c.) Failure of the contractor to make payments properly to subcontractors for materials and labor.

d.) Damage to another contractor.

e.) Any other violation or failure to comply with the provisions of this contract.

When the above conditions are removed, payment shall be made for the amount withheld because of the specific conditions.

ACCEPTANCE OF THE WORK AND FINAL PAYMENT Acceptance of the work and final payment will be made separately for each particular project/purchase order and shall be subject to the requirements stated herein.

Final Payment – The owner's obligation to make final payment to contractor is specifically contingent upon the following conditions, which are conditions precedent to final payment: (a) Submittal by the contractor or of a notarized affidavit that all payrolls, bills for material and equipment and other indebtedness connected with the contractor's work, have been paid or otherwise satisfied; (b). Submittal by the contractor of lien waivers, or bond claim waivers on bonded projects, indicating that all of the contractor's material men, laborers, and subcontractors have been fully
paid and are waiving all statutory lien rights and releasing a bond claims; (c) consent of Surety to final payment, if required, (d) approval by the owner of the contractor's work; and (e) receipt by the owner of all payments related to the contractor's work, including any retainage withheld by the owner from the contractor.

Contractor's acceptance of final payment shall constitute a waiver by the contractor relating to the contractor's work or to the work under the prime contract, but shall in no way relieve the contractor of liability for the obligations for replacing defective work appearing after final payment, and/or damages created as a result of contractor's activities.

The contractor and its subcontractors are subject to all existing federal and/or state minimum wage laws.

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

29 CFR 1910.134	Respiratory Protection
29 CFR 1926.1101	Asbestos
29 CFR 1926.62	Lead Construction Standard
40 CFR 61	National Emission Standards for Hazardous Air Pollutants
40 CFR 763	Asbestos
TAHPA	Texas Asbestos Health Protection Act

SECTION I – SAFETY

1.1 Safety Management

The contractor shall be required to provide, maintain, and implement various safety related requirement including submittal of a site-specific Accident Prevention Plan (APP) that will be utilized for all abatement related activities at the former bank building. This plan shall include all contractor personnel, as well as subcontractors and subcontractor personnel under his direction. The APP shall be in accordance with the format and requirements of all applicable OSHA standards for the anticipated job site hazards.

Activity Hazard Analyses

AHAs for each major phase of work, shall be submitted and updated during the project. The analysis shall define the activities to be performed for a major phase of work, identify the sequence of work, the specific hazard anticipated, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level. Work shall not proceed on that phase until the AHA has been accepted and a preparatory meeting has been conducted by the contractor to discuss its contents with everyone engaged in the activities, including the onsite owner's representatives. The AHAs shall be continuously reviewed and, when appropriate, modified to address changing site conditions or operations.

1.2 Job Site Safety and Environmental Requirements

The contractor will be solely and completely responsible for conditions on the job site, including safety of all persons and property during performance of contractor's work. This requirement will apply continuously and not be limited to normal working hours.

The owner may hire a third-party safety audit of the job site and work in progress at any time and on as many occasions as deemed necessary by the owner. Any deficiencies discovered may subject the contractor to a work shut down until such matters are properly addressed and corrected. The owner shall not be responsible for effects and financial impact to the contractor of safety related shut downs.

The contractor shall maintain an adequately stocked first aid kit in a convenient and accessible location at the premises.

1.3 Emergency Response

In the event of a jobsite EMERGENCY the contractor's competent person will call 911 and give the details of an EMERGENCY and provide assistance as needed to Emergency Responders.

EMERGENCY SERVICES NOTIFICATION
It will be the competent person responsibility to notify by telephone the local fire department, emergency medical service (or ambulance company), and police department prior to start of construction / abatement activities at the former bank building project.

The responsibility of the contractor's competent person during emergency and/or potential emergency situations shall include the following:

a) Assessing the situation and determining whether an emergency exists that requires activating the emergency procedures.
b) Directing the efforts in the area including personnel to minimize injury and property loss.
c) Ensuring that outside emergency services such as medical aid and local fire departments are called in when necessary.
d) Directing the shutdown of operations and building evaluation when necessary.

1.4 Unsafe and Hazardous Conditions, Housekeeping

The contractor shall instruct each employee in the recognition and avoidance of unsafe conditions and the regulations applicable to his work environment to control or eliminate any hazards or other exposure to illness or injury

1.4.1 During the course of construction, alteration, or repairs, debris, glass and lumber with protruding nails shall be kept cleared from work areas, passageways, and stairs. 29 CFR 1926.25 (a).

1.4.2 Construction areas, aisles, stairs, ramps, runways, corridors, offices, shops, and storage areas where work is in progress shall be lighted with either natural or artificial illumination. The minimum illumination requirements for work areas shall meet or exceed the OSHA construction Industry Standards. 29 CFR 1926.56 (a) Table D-3.

1.4.3 Good housekeeping is essential for creating a safe work place and is the responsibility of each person on the construction site. Removal of trash slipping, and tripping hazards will be on-going throughout each day. Materials will be disposed of in their designated receptacles places throughout the construction site. Electrical cords, hoses, tools and supplies will be placed so as not to create a tripping or overhead hazard. 29 CFR 1926.25

1.5 Personal Protective Equipment – 29 CFR 1926 Subpart E

The contractor is responsible for requiring the wearing of appropriate personal protective equipment in all operations where there is an exposure to hazardous conditions.

1.6 Signs and Barricades

Signs and symbols for the project shall be visible at all times when work is being performed, and shall be removed or covered promptly when the hazards no longer exist.

1.6.1 Signs

a) Danger signs shall be used only where an immediate hazard exists.
b) Danger signs shall have red as the predominating color for the upper panel; black outline on the borders; and a white lower panel for additional sign wording.
c) Caution signs shall be used only to warn against potential hazards or to caution against unsafe practices.
d) Caution signs shall have yellow as the predominating color; black upper panel and borders, yellow lettering of "caution" on the black panel; and the lower yellow panel for additional sign wording. Black lettering shall be used for additional wording.

1.6.2 Barricades

a) Barricades must be erected to prevent or limit access to an area where a temporary hazard exists or to warn personnel of a temporary hazard in an area.
b) Barricades must be located at all points of possible entry into the area in which the hazard exists for as long as the hazard exists.
c) Warning tags shall be attached to the barricade material and must be visible for all normal approaches to the protected area.
d) All personnel must identify the hazard and ensure safety before passing through a “caution” barricade.

1.7 Material Handling, Wastes and Disposal 29 CFR 1926.250

Whenever materials are dropped more than 20 feet to any point lying outside the exterior walls of the building, an enclosed chute of wood, or equivalent material, shall be used. For the purpose of these specifications, an enclosed chute is a slide, closed in on all sides, through which material is moved from a high place to a lower one.

When debris is dropped through holes in the floor without the use of chutes, the area onto which the material is dropped shall be completely enclosed with barricades not less than 42 inches high and not less than 6 feet back from the projected edge of the opening above. Signs warning of the hazard of falling materials shall be posted at each level. Removal shall not be permitted in this lower area until debris handling ceases above.

All scrap lumber, waste material, and rubbish shall be removed from the immediate work area as the work progresses.

Asbestos containing materials shall be placed in air tight disposal containers and properly labeled as per the specific requirements of sections 2 and 3 of these Specifications. At no time shall these waste containers be allowed to free fall.

1.8 Hand and Power Tools

All hand and power tools and similar equipment, whether furnished by the Contractor or the employee, shall be maintained in a safe condition. All hand and power tools shall be operated in accordance with the manufacturer's precautions and directions. Use of guards, shields and electrical safety equipment shall be utilized as appropriate. Contractor shall review all applicable OSHA Stands of 29 CFR 1926 Subpart I.

a) All power tools and associated cords or hoses must be inspected prior to each use and removed from service if found to be defective.
b) All portable powered tools must be used for their intended purpose only.
c) Portable powered tools cannot be modified in any way.
d) Users of all tools must maintain positive control of the tool at all times and must assume a safe working position so as not to cause an injury to themselves or a co-worker.

1.9 Welding and Cutting

Where welding or torch-cutting operations are utilized the contractor shall incorporate a hot works permit system. Contractor shall follow all safety precautions and procedures and conform with all provisions of Subpart J of the OSHA Construction Standards. 29 CFR 1926

1.10 Scaffolding and Platforms

Scaffolding shall comply with Subpart L of the OSHA Construction Standard. Make shift platforms, such as stacked materials, boxes, drums, etc. shall not be allowed.

1.10.1 Rolling platforms shall be utilized according to the manufacturer's recommendations, not altered in any way and not ridden while being moved.

1.10.2 Scaffolds must be inspected by the user prior to each use. Inspections for contractor personnel must be conducted and documented on the scaffold tag by a competent person prior to use for each shift the scaffold is used.

1.10.3 Rolling tower scaffolds must be free material and equipment before being moved. Caster brakes on rolling tower scaffold must be locked while in use.

1.11 Fall Protection 29 CFR 1926 Subpart M

This subpart sets forth requirements and criteria for fall protection in construction workplaces covered under 29 CFR part 1926. Exception: The provisions of this subpart do not apply when employees are making an inspection, investigation, or assessment of workplace conditions prior to the actual start of construction work or after all construction work has been completed.

1.11.1 Fall protection must be used for elevated work and must be used 100% of the time when there is danger of employees falling from a distance of 6 feet or greater. The distance is based on the elevation where the person is standing or sitting. In order to achieve the 100% tie-off requirement, double lanyards must be used.

1.12 Heat Injury and Illness Prevention Plan

In areas where heat stress may impact employees' health and safety, acclimatization and heat stress shall be assessed to establish proper work / rest regimens and fluid replacement. Heat Stress and heat strain are conditions resulting from environmental factors including temperature, relative humidity, radiant heat transfer, and air movement, as they are affected by clothing.

Body Fluid Replacement

When heat stress is determined to be a concern, water will be made available at the Site for employee fluid replacement. Balanced, electrolyte solutions to replace fluid and electrolyte loss may be present but should not be substitute for water. Employees will be provided with replacement fluids at a minimum rate of 8 ounces each half hour per person.

SECTION II - ASBESTOS

2.1 General

These specifications cover the requirements for removal, encapsulation, enclosure encasement, and/or repair of friable and non-friable asbestos-containing material (ACM) which will be encountered during the demolition, alteration, renovation of the former bank building, parking garage and key shop. These specifications include transportation, disposal, storage, containment of; and housekeeping activities on the site at which these activities are performed.

This specification includes asbestos abatement activities and requirements in accordance with 40 CFR Part 61, Subpart M (USEPA); Class I, Class II, Class III, and Class IV abatement operations per 29 CFR 1926.1101 (OSHA); training requirements in accordance with OSHA 29 CFR 1926.1101; licensing and registration requirements in accordance with the TAHPA 295.31-295.71.

Asbestos abatement work tasks shall be performed following all applicable OSHA and TDSHS asbestos industry standards. Use the engineering controls and work practices required in 29 CFR 1926.1101(g) in all operations regardless of the levels of exposure. Personnel shall wear and utilize protective clothing and equipment. Do not permit eating, smoking, drinking, chewing or applying cosmetics in the regulated area. Personnel of other trades, shall not be exposed at any time to airborne concentrations of asbestos unless all the administrative and personal protective provisions of the Contractor's APP are complied with. Power to the regulated area shall be locked-out and tagged in accordance with 29 CFR 1910.147, and temporary electrical service with ground fault circuit interrupters shall be provided as needed. Temporary electrical service shall be disconnected when necessary for wet removal. Stop abatement work in the regulated area immediately when the airborne total fiber concentration: (1) equals or exceeds 0.01 f/cc, or the pre-abatement concentration, whichever is greater, outside the regulated area; or (2) equals or exceeds 1.0 f/cc inside the regulated area. Correct the condition to the satisfaction of the consultant’s project manager, including visual inspection and air sampling. Work shall resume only upon notification by the project manager. All such corrective actions shall be documented.

2.2 Definitions

Abatement: Procedures to control fiber release from asbestos-containing materials, i.e., removal, encapsulation, or enclosure.

Aerosol: A system consisting of particles, solid or liquid, suspended in air.

Air Cell: Insulation normally used on pipes and duct work that is comprised of corrugated cardboard which is frequently made of asbestos combined with cellulose or refractory binders.

Air Lock: A system for permitting ingress and egress without permitting air movement between a contaminated area or an uncontaminated area, typically consisting of two contained doorways at least 6 feet (2 meters) apart.

Air Monitoring: The process of measuring the fiber content of a specific volume of air in a stated period of time. Phase-contrast microscopy in accordance with NIOSH method No. 7400 is the prescribed method of sampling and analysis.

Air Sampling Technician: A person trained and experienced in air sampling techniques and schemes who performs air sampling under the direction of the asbestos project manager or certified industrial hygienist.

Amended Water: Water to which a surfactant has been added.

Asbestos: The asbestiform varieties of serpentinite (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite. For purposes of determining respiratory and worker protection both the asbestiform and non-materials that have been chemically treated and/or altered shall be considered as asbestos.

Asbestos-containing Material (ACM): Any material containing more than 1% by weight of asbestos of any type or mixture of types.

Asbestos-containing Waste Material: Any material which is or is suspected of being or any material contaminated with an asbestos-containing material which is to be removed from a work area for disposal.

Asbestos Project Manager: An individual qualified by virtue of experience and education, designated, as the Owner's representative and responsible for supervising the air sampling technician and helping to ensure compliance with the job specifications.

Authorized Person: Any person authorized by the contractor and required by work duties to be present in the regulated areas.

Authorized Visitor: The building owner or his representatives, air sampling technician, asbestos project manager, consultant, or a representative of any regulatory or other agency having jurisdiction over the project.

Barrier: Plastic sheeting and/or other materials used along with the floors, ceilings, and walls of a structure to form an isolated work environment that separates the contaminated work area from the uncontaminated area.

Breathing Zone: A hemisphere forward of the shoulders with a radius of approximately 6 to 9 inches.

Building Inspector: Individual who inspects buildings for asbestos and has EPA Model Accreditation Plan (MAP) "Building Inspector" training; accreditation required by 40 CFR 763, Subpart E, Appendix C, has EPA/State certification/license as a "Building Inspector".

Building Owner: The owner or his authorized representative.

Ceiling Concentration: The concentration of an airborne substance that shall not be exceeded.

Certified Industrial Hygienist (C.I.H.): Project/task management and technical support relating to building related services and programs focused on indoor air quality, asbestos, lead paint, hazardous materials, and H&S programs. This position also entails serving as Corporate H&S officer with assistance from experienced support staff located at the regional offices.

Class I Asbestos Work: Activities defined by OSHA involving the removal of thermal system insulation (TSI) and surfacing ACM.

Class II Asbestos Work: Activities defined by OSHA involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of asbestos - containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastic. Certain "incidental" roofing materials such as mastic, flashing and cements, when they are still intact, are excluded from Class II asbestos work. Removal of small amounts of these materials which would fit into a glovebag may be classified as a Class III job.

Class III Asbestos Work: Activities defined by OSHA that involve repair and maintenance operations, where ACM, including TSI and surfacing ACM, is likely to be disturbed. Operations may include drilling, abrading, cutting a hole, cable pulling, crawling through tunnels or attics and spaces above the ceiling, where asbestos is actively disturbed or asbestos-containing debris is actively disturbed.

Class IV Asbestos Work: Maintenance and custodial construction activities during which employees contact but do not disturb ACM and activities to clean-up dust, waste and debris resulting from Class I, II, and III activities. This may include dusting surfaces where ACM waste and debris and accompanying dust exists and cleaning up loose ACM debris from TSI or surfacing ACM following construction.

Clean Room: An uncontaminated area or room that is part of the worker's decontamination enclosure system, with provisions for storage of worker's street clothes and protective equipment.

Competent Person: A contractor's employee by virtue of his education and experience who is capable of operating an asbestos hazard abatement project in accordance with current EPA, OSHA, and NIOSH regulations, and standard work practices established for asbestos removal. Duties of the competent person are as defined in OSHA Regulations 29 CFR 1926.58(b) (www.osha.gov/complinks.html).

Contractor/Supervisor: Individual who supervises asbestos abatement work and has EPA Model Accreditation Plan "Contractor/Supervisor" training; has EPA/State certification as a "Contractor/Supervisor".

Consultant: A certified industrial hygienist (C.I.H.), the designated asbestos project manager, or an industrial hygiene technician under the supervision of the C.I.H. or the asbestos project manager.

Contaminated: Containing or coated with asbestos.

Curtained Doorway: A device to permit ingress or egress from one room to another while minimizing air movement between the rooms, typically constructed by placing two overlapping sheets of plastic over an existing or temporarily formed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway, and securing the vertical edge of the other sheet along the opposite vertical side of the doorway. Two curtained doorways spaced a minimum of 6 feet apart from the airlock.

Decontamination Enclosure System: A series of connected rooms, with curtained doorways between any two adjacent rooms, for the decontamination of workers or of materials and equipment. A decontamination enclosure system always contains at least one airlock.

Demolition: The wrecking or taking out of any structural materials of a facility together with any related handling operations.

Disposal bag: 6 mil thick leak-tight plastic bags used for transporting asbestos waste from work and to disposal site. Each is labeled as follows:

DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATH DUST
AVOID CREATING DUST

Disturbance: Activities that disrupt the matrix of ACM, crumble or pulverize ACM, or generate visible debris from ACM. Disturbance includes cutting away small amounts of ACM, no greater than the amount which can be contained in 1 standard sized glovebag or waste bag, not larger than 1.5 m 60 inches in length and width in order to access a building component.

Encapsulant: A liquid material that can be applied to asbestos containing materials or cleaned substrates following the removal of asbestos containing materials to control the possible release of residual asbestos fibers from the material by creating a membrane over the surface or by penetrating into the material and binding its components together.

Encapsulation: The application of an encapsulant to asbestos-containing materials to control the release of asbestos fibers into the air.

Bridging Encapsulant: an encapsulant that forms a discrete layer on the surface of an asbestos matrix.

Penetrating Encapsulant: an encapsulant that is absorbed by the asbestos matrix without leaving a discrete surface layer.

Removal Encapsulant: a penetrating encapsulant specifically designed for removal of asbestos-containing materials rather than for in situ encapsulation.

Enclosure: The construction of an airtight impermeable, permanent barrier around asbestos-containing material to control the release of asbestos fibers into the air.

EPA: United States Environmental Protection Agency, 40l M Street, S.W., Washington, D.C. 20460.

Equipment Decontamination Enclosure System: That portion of a decontamination enclosure system designed for controlled transfer of materials and equipment into or out of the work area, typically consisting of a washroom and holding area.

Equipment Room: A contaminated area or room that is part of the worker decontamination enclosure system, with provisions for storage of contaminated clothing and equipment.

Facility: Any institutional, commercial, or industrial structure, installation or building.

Facility Component: Any pipe, duct, boiler, tank, fan, engines, or furnace at or in a facility, or any structural member of a facility.

Filter: A media component used in respirators to remove solid or liquid particles from the inspired air.

Fixed Object: A piece of equipment or furniture in the work area that cannot be removed from the work area.

Friable Asbestos Material: Material that contains more than 1.0 % asbestos by weight and that can be crumbled, pulverized, or reduced to powder by hand pressure when dry.

Glove-bag Technique: A method with limited applications for removing small amounts of asbestos containing material from HVAC ducts, piping runs, valves, joints, elbows, and other non-planar surfaces in an uncontaminated (plasticized) work area. The glove-bag assembly is a manufactured or fabricated device consisting of a glove-bag (typically constructed of 6-mil transparent plastic), two inward projecting, long sleeves, rubber gloves; one inward-projecting water wand sleeve; an internal tool pouch; and an attached-labeled receptacle for asbestos waste. The glove-bag is constructed and installed in such a manner that it surrounds the object or area to be decontaminated and contains all asbestos fibers released during the removal process. All workers, who are permitted to use the glove-bag technique, must be highly trained, experienced, and skilled in this method.

HVAC: Heating, ventilation, and air conditioning systems.

HEPA Filter: A high efficiency particulate air filter capable of removing particles greater than 0.3 microns in diameter with 99.97% efficiency.

HEPA Filter Vacuum Collection Equipment: High efficiency particulate air (absolute) filtered vacuum collection equipment with a filter system capable of collecting and retaining asbestos fibers of 0.3 microns or larger.

HEPA Vacuum: A vacuum system equipped with HEPA filtration.

High-Efficiency Filter: A filter which removes from air 99.97 % or more of monodisperse dioctyl phthalate (DOP) particles having a mean particle diameter of 0.3 microns.

Holding Area: A chamber between the washroom and an uncontaminated area in the equipment decontamination enclosure system. The holding area comprises an air lock.

Intact: ACM which has not crumbled, been pulverized, or otherwise deteriorated so that the asbestos is no longer likely to be bound with its matrix. Removal of "intact" asphaltic, resinous, cementitious products does not render the ACM non-intact simply by being separated into smaller pieces.

Model Accreditation Plan (MAP): USEPA training accreditation requirements for persons who work with asbestos as specified in 40 CFR 763

Movable Object: A piece of equipment or furniture in the work area which can be removed from the work area.

Negative Initial Exposure Assessment: A demonstration by the contractor to show that employee exposure during an operation is expected to be consistently below the OSHA Permissible Exposure Limits (PELs).

Negative Pressure: A pressure lower than surrounding areas, generally caused by exhausting air from a sealed space (work area).

Negative Pressure Respirator: A respirator in which the air pressure inside the respiratory-inlet covering is positive during exhalation in relation to the air pressure of the outside atmosphere and negative during inhalation in relation to the air pressure of the outside atmosphere.

Negative-Pressure Ventilation System: A local exhaust system capable of maintaining a detectable pressure differential across containment barriers relative to adjacent unsealed areas.

NESHAPS: The National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)

NIOSH: The National Institute for Occupational Safety and Health.

Nonfriable ACM: A NESHAP term defined in 40 CFR 61, Subpart M and EPA 340/1-90/018 meaning any material containing more than 1 percent asbestos that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.

Nonfriable ACM (Category I): A NESHAP term defined in 40 CFR 61, Subpart E and EPA 340/1-90/018 meaning asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos.

Nonfriable ACM (Category II): A NESHAP term defined in 40 CFR 61, Subpart E and EPA 340/1-90/018 meaning any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos.

OSHA: Occupational Safety and Health Administration.

Outside Air: The air outside buildings and structures.

Penetrating Encapsulant: A liquid designed to saturate the material, thereby binding asbestos fibers to one another and to substances in the material.

Permissible Exposure Limits (PELs)

PEL-Time Weighted Average (TWA): Concentration of asbestos not in excess of 0.1 fibers per cubic centimeter of air (f/cc) as an 8-hour time weighted average (TWA).

PEL-Excursion Limit: An airborne concentration of asbestos not in excess of 1.0 f/cc of air as averaged over a sampling period of 30 minutes

Personal Monitoring: Sampling of the asbestos fiber concentrations within the breathing zone of an employee.

Plasticize: To cover floors, walls, etc., with plastic sheets as herein specified.

Protection Factor: The ratio of the ambient concentration of an airborne substance to the concentration of the substance inside the respiration at the breathing zone of the wearer. The protection factor is a measure of the degree of protection provided by a respirator to the wearer.

Regulated Area: An OSHA term defined in 29 CFR 1926.1101 meaning an area established by the Contractor to demarcate areas where Class I, II, and III asbestos work is conducted; also, any adjoining area where debris and waste from such asbestos work accumulates; and an area within which airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the permissible exposure limit.

Removal: All herein specified procedures necessary to strip or clean up asbestos containing materials from designated areas and to dispose of these materials at an acceptable disposal site.

Repair: Overhauling, rebuilding, reconstructing, or reconditioning of structures or substrates, including encapsulation or other repair of ACM attached to structures or substrates.

Respirator: A device designed to protect the wearer from the inhalation of harmful atmospheres.

Shower Room: A room between the clean room and the equipment room in the worker decontamination enclosure system, with hot and cold or warm running water and suitably arranged for complete showering during decontamination. The shower room comprises an airlock between contaminated and clean areas.

Staging Area: Either the holding area or an area near the waste transfer airlock where containerized asbestos waste has been placed prior to removal from the work area.

Stripping: All herein specified procedures necessary to remove asbestos containing materials or asbestos contaminated materials from their substrate or from any component of the facility.

Substrate: The underlying surface or material to which asbestos-containing material has been applied.

Surfacing ACM: Asbestos-containing material which contains more than 1 percent asbestos and is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.

Surfactant: A chemical wetting agent added to water to improve penetration.

Time Weighted Average (TWA): The average concentration of a contaminant in air during a specific time period.

Thermal Insulation: Insulation used to prevent heat loss from pipes, boilers, tanks, breaching, heat exchangers, etc.

Visible Emissions: Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments.

Washroom: A room between the work area and the holding area in the equipment decontamination enclosure system. A washroom comprises an air lock.

Wet Cleaning: The process of eliminating asbestos contamination from building surfaces and objects by using cloths, mops, or other cleaning tools that have been dampened with water and the disposing of these cleaning tools as asbestos contaminated waste.

Work Area: Designated rooms, spaces, or areas of the project in which asbestos abatement actions to be undertaken or which may be contaminated as a result of such abatement actions. A contained work area is one that has been sealed, plasticized and equipped with a decontamination enclosure system. An isolated work area is a controlled-access work area that has been isolated by plastic curtains and in which the openings to the outside are sealed with plastic sheeting. An isolated work area is not an airtight containment area and is not equipped with a decontamination enclosure system.

Worker: Individual (not designated as the Competent Person or a supervisor) who performs asbestos work and has completed asbestos worker training required by 29 CFR 1926.1101, to include EPA Model Accreditation Plan (MAP) "Worker" training; accreditation if required by the OSHA Class of work to be performed or by the state where the work is to be performed.

2.3 System Description

This section covers all operations in which asbestos-containing materials (ACM) are encountered. These procedures and equipment are required to protect workers and building occupants from airborne asbestos fibers and ACM dust and debris. Activities include OSHA [Class I] [Class II] [Class III] [Class IV] work operations. This section also includes containment, storage, transportation and disposal of the generated ACM wastes.

2.4 Hygiene

2.4.1 3-Stage Decontamination Area

A temporary negative pressure decontamination unit that is adjacent and attached in a leak-tight manner to the regulated area shall be provided for each regulated area. Each decontamination unit shall have an equipment room and a clean room separated by a

shower that complies with 29 CFR 1910.141, unless the contractor can demonstrate that such facilities are not feasible. Equipment and surfaces of containers filled with ACM shall be cleaned prior to removing them from the equipment room or area. Two separate lockers shall be provided for each asbestos worker, one in the equipment room and one in the clean room. Provide the appropriate number of showers based on crew size. Wastewater shall be collected and filtered to remove asbestos contamination.

Filters and residue shall be disposed of as asbestos contaminated material. Filtered water shall be discharged to the sanitary sewer system. Wastewater filters shall be installed in series with the first stage pore size of 20 microns and the second stage pore size of 5 microns. The floor of the decontamination unit's clean room shall be kept dry and clean at all times. Proper housekeeping and hygiene requirements shall be maintained. Soap and towels shall be provided for showering, washing and drying. Any cloth towels provided shall be disposed of as ACM waste or shall be laundered in accordance with 29 CFR 1926.1101.

2.4.2 Load-Out Unit

A temporary load-out unit that is adjacent and connected to all regulated areas. Each load-out unit shall be attached in a leak-tight manner to each regulated area.

2.4.3 Decontamination Area Exit Procedures

Ensure that the following procedures are followed:

a) Before leaving the regulated area, remove all gross contamination and debris from work clothing using a HEPA vacuum.
b) Employees shall remove their protective clothing in the equipment room and deposit the clothing in labeled impermeable bags or containers for disposal and/or laundering.
c) Employees shall not remove their respirators until showering.
d) Employees shall shower prior to entering the clean room. If a shower has not been located between the equipment room and the clean room or the work is performed outdoors, ensure that employees engaged in Class I asbestos jobs:

    1. Remove asbestos contamination from their work suits in the equipment room or decontamination area using a HEPA vacuum before proceeding to a shower that is not adjacent to the work area; or
    2. Remove their contaminated work suits in the equipment room, without cleaning work suits, and proceed to a shower that is not adjacent to the work area.

2.4.4 Smoking

Smoking shall only be permitted in designated areas outside the building.

2.5 Expendable Supplies

2.5.1 Leak-tight Wrapping

Two layers of 0.15 mm 6 mil minimum thick polyethylene sheet stock shall be used for the containment of removed asbestos-containing components or materials such as large tanks, boilers, insulated pipe segments and other materials too large to be placed in disposal bags. Upon placement of the ACM component or material, each layer shall be individually leak-tight sealed with duct tape.

2.5.2 Viewing Inspection Window

Where feasible, a minimum of 1 clear, 1/8-inch-thick (minimum thickness), acrylic sheet, 12 by 18 inches, shall be installed as a viewing inspection window at eye level on a wall in each containment enclosure. The windows shall be sealed leak-tight with industrial grade duct tape.

2.5.3 Wetting Agents

Removal encapsulant (a penetrating encapsulant) shall be provided when conducting debris removal and abatement activities that require a longer removal time or are subject to rapid evaporation of amended water. The removal encapsulant shall be capable of wetting the ACM and retarding fiber release during disturbance of the ACM greater than or equal to that provided by amended water.

2.6 Equipment

2.6.1 Tools

Power tools shall not be used to remove ACM unless the tool is equipped with effective, integral HEPA filtered exhaust ventilation capture and collection system. All reusable hand tools shall be thoroughly decontaminated prior to being removed from regulated areas.

2.6.2 Vacuums

Vacuums shall be equipped with HEPA filters, of sufficient capacity and necessary capture velocity at the nozzle or nozzle attachment to efficiently collect, transport and retain the ACM waste material.

2.6.3 Negative Air Machines

Negative air units with new HEPA filters which are delivered to the job site in original packages shall be used. The installation of the HEPA and pre-filters shall be observed by the consultant's project manager. Sufficient negative air units shall be installed to

provide at least one air change every ten (10) minutes within each containment. Differential pressure level shall be maintained to at least -0.02" water column inside each containment throughout the removal phase of the project, and until final clearance is achieved. All units shall be de-rated by at least 25% for the purpose of calculations.

2.7 Protection of Adjacent Work or Areas to Remain

Perform asbestos abatement without damage to or contamination of adjacent work or area. Where such work or area is damaged or contaminated, it shall be restored to its original condition or decontaminated at no expense to the owner. When spills occur, work shall stop in all affected areas immediately and the spill shall be cleaned. When satisfactory visual inspection and air sampling analysis results are obtained, and have been evaluated by the consultant's project manager, work shall proceed.

2.8 Objects

2.8.1 Removal of Mobile Objects

All furnishings and debris within the building are considered contaminated with asbestos fibers and lead based paints. Large non-porous furnishings shall be precleaned using HEPA filtered vacuum followed by wet wiping. These objects shall be removed to an area outside the building for disposal as general wastes. Carpets, draperies, and other items shall be disposed of as asbestos contaminated material.

2.8.2 Stationary Objects

Stationary objects and equipment where designated by owners shall remain in place and shall be precleaned using HEPA vacuum followed by adequate wet wiping. Stationary objects shall be covered with 2 layers of polyethylene and edges sealed with duct tape.

2.9 Ventilation Systems and Critical Barriers

Building ventilation system supply and return air ducts (not scheduled for disposal) shall be isolated by airtight seals to prevent the spread of contamination throughout the system.

2.10 Pre-Cleaning

Building components not affected by asbestos or lead removal shall be precleaned. Surfaces shall be cleaned by HEPA vacuum and adequately wet wiped, prior to establishment of containment.

2.11 Methods of Compliance

2.11.1 Mandated Practices

Use the following engineering controls and work practices in all operations, regardless of the levels of exposure:

a) Vacuum cleaners equipped with HEPA filters.
b) Wet methods or wetting agents except where it can be demonstrated that the use of wet methods is unfeasible due to the creation of electrical hazards, equipment malfunction, and in roofing.
c) Prompt clean-up and disposal.
d) Inspection and repair of polyethylene.
e) Cleaning of equipment and surfaces of containers prior to removing them from the equipment room or area.

2.11.2 Control Methods

Use the following control methods:

a) Local exhaust ventilation equipped with HEPA filter;
b) Enclosure or isolation of processes producing asbestos dust;
c) Where the feasible engineering and work practice controls are not sufficient to reduce employee exposure to or below the PELs, use them to reduce employee exposure to the lowest levels attainable and shall supplement them by the use of respiratory protection.

2.11.3 Unacceptable Practices

The following work practices shall not be used:

a) High-speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filtered exhaust air.
b) Compressed air used to remove asbestos containing materials, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air.
c) Dry sweeping, shoveling, or other dry clean up.
d) Employee rotation as a means of reducing employee exposure to asbestos.

2.12 Final Cleaning and Visual Inspection

After completion of all asbestos removal work and the gross amounts of asbestos have been removed from every surface, any remaining visible accumulations of asbestos shall be collected. For all classes of indoor asbestos abatement projects, a final cleaning shall be performed using HEPA vacuum and wet cleaning of all exposed surfaces and objects in the regulated area. Upon completion of the cleaning, conduct a visual pre-inspection of the cleaned area in preparation for a final inspection before final air clearance monitoring. The

contractor and the project manager shall conduct a final visual inspection of the cleaned regulated area and document the results on the final cleaning and visual inspection. If the project manager rejects the clean regulated area as not meeting final cleaning requirements, reclean as necessary and have a follow-up inspection conducted with the project manager. Recleaning and follow-up re-inspection shall be at the contractor's expense.

Exterior – A final visual inspection shall include a thorough evaluation of the building exterior. Removal of visible debris, contamination and visible residue shall be performed as requested by the licensed project manager.

2.13 Exposure Assessment and Air Monitoring

2.13.1 General Requirements

a) Exposure assessment, air monitoring and analysis of airborne concentration of asbestos fibers shall be performed in accordance with 29 CFR 1926.1101, and the contractor's air monitoring plan. Results of breathing zone samples shall be posted at the job site and made available to the project manager. Submit all documentation regarding initial exposure assessments, negative exposure assessments, and air-monitoring results.

b) Worker Exposure

1) The contractor's designated AMT shall collect personal samples representative of the exposure of each employee who is assigned to work within a regulated area. Breathing zone samples shall be taken for at least 20 percent of the workers in each shift.
2) The contractor will contract directly with an independent testing laboratory with qualified analysts and appropriate equipment to conduct sample analyses of air samples using the methods prescribed in 29 CFR 1926.1101, to include NIOSH Method 7400.
3) Workers shall not be exposed to an airborne fiber concentration in excess of 1.0 f/cc, as averaged over a sampling period of 30 minutes. Should a personal excursion concentration of 1.0 f/cc expressed as a 30-minute sample occur inside a regulated work area, stop work immediately, notify the consultant’s project manager, and implement additional engineering controls and work practice controls to reduce airborne fiber levels below prescribed limits in the work area. Do not restart work until authorized by the project manager.

c) Environmental Exposure

1) All environmental air monitoring shall be performed by Brady Environmental Services’ personnel.

2) Environmental and final clearance air monitoring shall be performed using NIOSH Method 7400 (PCM) with optional confirmation of results by EPA AHERA TEM.
3) For environmental and final clearance, air monitoring shall be conducted at a sufficient velocity and duration to establish the limit of detection of the method used at 0.005 f/cc.
4) When confirming asbestos fiber concentrations (asbestos f/cc) from environmental and final clearance samples, consultant may use TEM in accordance with NIOSH Method 7402. When such confirmation is conducted, it shall be from the same sample filter used for the NIOSH Method 7400 PCM analysis. All confirmation of asbestos fiber concentrations, using NIOSH Method 7402, shall be at the contractor's expense.
5) Maintain a fiber concentration inside a regulated area less than or equal to 0.1 f/cc expressed as an 8-hour, time-weighted average (TWA) during the conduct of the asbestos abatement.
6) At the discretion of the consultant's project manager, fiber concentration may exceed 0.1 f/cc but shall not exceed 1.0 f/cc expressed as an 8-hour TWA. Should an environmental concentration of 1.0 f/cc expressed as an 8-hour TWA occur inside a regulated work area, stop work immediately, and implement additional engineering controls and work practice controls to reduce airborne fiber levels below prescribed limits in the work area. Work shall not restart until authorized by the project manager.

2.13.2 Pre-abatement Environmental Air Monitoring

Pre-abatement environmental air monitoring shall be established (baseline) prior to the masking and sealing operations for each regulated area to determine background concentrations before abatement work begins. As a minimum, pre-abatement air samples shall be collected using NIOSH NMAM Method 7400, PCM. At least 3 samples shall be collected inside the building for each floor.

2.13.3 Environmental Air Monitoring During Abatement

Environmental air monitoring shall be conducted at locations and frequencies that will accurately characterize any evolving airborne asbestos fiber concentrations. The monitoring shall be at least once per shift at locations including, but not limited to, close to the work inside a regulated area; pre-abatement sampling locations; outside entrances to a regulated area; close to glovebag operations; representative locations outside of the perimeter of a regulated area; inside clean room; and at the exhaust discharge point of local exhaust system ducted to the outside of a containment. If the sampling outside regulated area shows airborne fiber levels have exceeded background or 0.01 f/cc, whichever is greater, work shall be stopped immediately, and the consultant notified. The condition causing the increase shall be corrected. Work shall not restart until authorized by the consultant's project manager.

2.13.4 Final Clearance Air Monitoring

The consultant's project manager and/or air monitoring technician (AMT) shall perform clearance testing for each enclosed area. Final air clearance will be conducted using aggressive air sampling techniques as defined in 40 CFR 763, Subpart E,

Appendix A, for all indoor asbestos abatement. Clearance air monitoring is not required for outside work.

2.13.4.1 Final Clearance Requirements
NIOSH PCM Method for PCM sampling and analysis using NIOSH NMAM Method 7400, the fiber concentration inside the abated regulated area, for each airborne sample, shall be less than 0.01 f/cc. The abatement inside the regulated area is considered complete when every PCM final clearance sample is below the clearance limit. If any confirmation sample result is greater than 0.01 f/cc, abatement is incomplete and cleaning shall be repeated. Upon completion of any required recleaning, re-sampling with results to meet the above clearance criteria shall be done.

2.13.4.2 Air Clearance Failure
Where clearance sampling results fail to meet the final clearance requirements, the contractor shall incur all costs associated with the required recleaning, resampling, and analysis, until final clearance requirements are met.

2.13.5 OSHA Personal Air-Monitoring Results and Documentation

Air sample fiber counting shall be completed and results provided within 24 hours after completion of a sampling period. The project manager shall be notified immediately of any airborne levels of asbestos fibers in excess of established requirements. Written sampling results shall be provided within 5 working days of the date of collection. The written results shall be signed by testing laboratory analyst, testing laboratory. The air sampling results shall be documented on a contractor's daily air monitoring log.

The daily air monitoring log shall contain the following information for each sample:

a) Sampling and analytical method used;
b) Date sample collected;
c) Sample number;
d) Location/activity/name where sample collected;
e) Sampling pump beginning flow rate, end flow rate, average flow rate (L/min);
f) Calibration date, time, method, location, name of calibrator, signature;
g) Sample period (start time, stop time, elapsed time (minutes);
h) Total air volume sampled (liters);
i) Sample results (f/cc and S/mm square) if EPA methods are required for final clearance;
j) Laboratory name, location, analytical method, analyst.

2.14 Clearance Certification

When asbestos abatement is complete, ACM waste is removed from the regulated areas, and final clean-up is completed, the project manager will allow the warning signs and boundary warning tape to be removed. After final clean-up and acceptable airborne concentrations are attained, but before the HEPA unit is turned off and the containment removed, the contractor shall remove all pre-filters on the building HVAC system and provide new pre-filters. Dispose of such filters as asbestos contaminated materials. HVAC, mechanical, and electrical systems shall be re-established in proper working order. The contractor and the project manager shall visually inspect all surfaces within the containment for residual material or accumulated debris. Reclean all areas showing dust or residual materials. The project manager will certify in writing that the area is safe before unrestricted entry is permitted.

SECTION III – ASBESTOS ABATEMENT SCOPE OF WORK

3.1 Project Description

3.1.1 The asbestos abatement project at the former bank building located at 100 West Broad Street in Texarkana, Texas shall be performed to accommodate the renovation plans of Texarkana Renewal Properties, LLC.

This project design covers the removal and disposal of asbestos-containing materials identified by the drawings and summarized as follows:

Bank Building Exterior

- Remove all exterior transite panels (Exterior Aggregate Panels) and associated caulk.
- Remove windows that are installed in the transite framework.
- Encapsulate remaining window glazing listed as ACM.
- Remove all asbestos-containing TSI materials from roof top mechanical room.
- ACM Asphaltic Roofing - Remove all loose and/or damaged roofing materials.
- Coordinate work with roofing contractor.

Garage Building Exterior

- Remove all transite panels (Exterior Aggregate Panels).

Bank Mezzanine, 1st and 8th Floors

- Remove all ceilings, walls that are listed as ACM.
- Remove all TSI from fan coil units and piping listed as ACM.
- Remove mechanical insulation and chase materials listed as ACM.
- Remove all flooring listed as ACM where historic tile floor is required to be exposed.
- Remove floor tile in stairwells listed as ACM.
- Remove ACM flooring where carpet and/or tack strips are present.

Bank 6th and 7th Floors

- Remove all ceilings, walls that are listed as ACM
- Remove all TSI from fan coil units and piping listed as ACM.

- Remove mechanical insulation and chase materials listed as ACM
- Remove all flooring listed as ACM where historic tile floor is required to be exposed.
- Remove floor tile in stairwells listed as ACM.
- Remove ACM flooring where carpet and/or tack strips are present.

Bank Floors 2nd through 5th

- Remove all ceilings, walls that are listed as ACM
- Remove all ceiling tile button mastic.
- Remove all TSI from fan coil units and piping listed as ACM.
- Remove mechanical insulation and chase materials listed as ACM
- Remove all flooring listed as ACM where historic tile floor is required to be exposed.
- Remove floor tile in stairwells listed as ACM.
- Remove ACM flooring where carpet and/or tack strips are present.

Bank Basement

- Remove all ceilings, walls that are listed as ACM
- Remove all TSI from fan coil units and piping listed as ACM.
- Remove all TSI listed as ACM from mechanical equipment.
- Remove all flooring listed as ACM where historic tile floor is required to be exposed.
- Remove floor tile in stairwells listed as ACM.
- Remove all TSI duct insulation listed as ACM.

Garage Building

- Remove interior aggregate cement panels and associated caulk.
- Remove TSI from piping listed as ACM.
- Remove all ACM flooring.
- Remove all ceiling tile button mastic listed as ACM.

3.1.2 Limited demolition shall be required by abatement contractor to access all areas where asbestos is present. Where demolition is required, the owner shall approve the extent of demolition work and maintain all salvage rights unless otherwise specifically agreed to in writing.

3.2 Supplies

3.2.1 The contractor shall supply all supervision, labor, materials, services, insurance, licenses, patents and equipment necessary to carry out the work described herein.

3.3 Insurance

3.3.1 Prior to beginning work, the contractor shall provide the owner with a completed Certificate of Insurance providing at a minimum those coverages as required by the Texas Asbestos Health Protection Act and Texarkana Renewal Properties, LLC contract agreement.

3.4 Site Conditions

3.4.1 Contractor shall be responsible for coordination and establishment of site-specific services to necessitate these specifications. These shall include but not be limited to, fire, police, medical emergency, waste disposal/dumpster placement, power distributing, water supply and waste water disposal.

3.5 Abatement

3.5.1 Flooring

Removal of the vinyl sheet flooring, floor tile and mastic shall be performed using wet methods. Mechanical chipping machines shall be allowed. All mastic removers incorporated during the project shall have flash points in excess of 150°F. The contractor shall comply with additional respiratory protection as recommended by the manufacturer's Safety Data Sheet (SDS) for the solvent/mastic remover being employed.

3.5.2 Lay-in Ceiling Tile

The lay-in ceiling material shall be removed by manual methods and in a manner which keeps the material reasonably intact. Excessive breakage shall not be allowed. Materials shall be wetted before removal, during removal, and after placement into disposal containers. All insulation materials exposed following removal of ceiling tile shall also be bagged and disposed of as ACM.

The ceiling tile grid system shall be removed and disposed of as asbestos contaminated waste.

3.5.3 Sheetrock Wall and Ceiling Material All asbestos containing sheetrock wall and ceiling materials shall be removed by manual methods and in a manner which keeps the material reasonably intact. Excessive breakage shall not be allowed. Materials shall be wetted before removal, during removal, and after placement into disposal containers. All insulation materials exposed following removal of sheetrock and showing visible signs of contamination shall also be bagged and disposed of as ACM.

3.5.4 Spray-on Acoustical Plaster
Asbestos-containing ceiling plaster shall be scraped by manual means. Acoustical plaster shall be removed in its entirety down to the scratch coat. The scratch coat substrate shall be brushed clean. Careful attention to edge angels must be made to assure complete removal of the asbestos containing material. Materials shall be wetted before removal, during removal, and after placement into disposal containers.

3.5.5 Caulking and Glaze
Window glaze shall be wetted before, during and after placement into disposal containers to avoid visible emissions. A 6-mil poly drop cloth extending a minimum of ten (10) feet from the affected area shall be installed prior to removal activities.

Window frames shall be removed by the abatement contractor as needed to complete the removal of asbestos containing materials. All frames shall be disposed of by the abatement contractor as part of this project where needed to ensure the removal of all window glazing.

Where frames are removed whole, all glazing and / or caulk shall be covered and sealed using spray glue and duct tape to prevent damage or release of the caulk and / or glazing compounds.

3.5.6 Exterior Transite Panels

All exterior transite materials shall be removed by manual methods and in a manner which keeps the material reasonably intact. Excessive breakage shall not be allowed. Materials shall be wetted before removal, during removal and wrapped in two layers of 6-mil poly before leaving containment area. All felts and/or insulation materials exposed having visible contamination following removal of transite shall also be bagged and disposed of as ACM. Select demolition shall be performed as needed to access and remove all transite materials.

3.5.7 Thermal Piping Insulation

Following the construction of the regulated area and establishment of differential pressure, all activities involving the disturbance of intact asbestos-containing piping insulation materials shall be performed using negative pressure glovebag techniques as defined by 29 CFR 1926.1101 (2)(5)(iii). Select demolition shall be performed as needed to access and remove all asbestos-containing materials. Use of glovebags shall not be required where work is done under full containment in combination with the removal of other asbestos materials.

3.5.8 Exterior Encapsulation Bank

3.5.8.1 Exterior stucco located on the west exterior of floors 6,7,8 shall be encapsulated using a primer and paint equal to Architectural Acrylic Exterior Loxon XP Flat by Sherwin Williams.

3.5.8.2 All remaining asbestos containing window glazing shall be encapsulated utilizing same as above.

3.5.9 **Asphaltic Roofing**

3.5.9.1 Top surface layers of Asphaltic roofing, roof flashing and sealants (including insulation) found to be loose, and in poor condition shall be removed and disposed of as asbestos containing. Work shall be performed to prepare roof system for new overlay.

3.5.9.2 Loose gravel may be removed by broom as non-asbestos prior to roofing abatement.

3.5.9.3 Removal of asbestos-containing roofing material shall be performed using wet methods. Materials shall be wetted before, during and after placement into disposal containers to avoid visible emissions. A drop cloth extending a minimum of ten (10) feet away from the side of the building shall be installed prior to removal activities. Materials shall be gently lowered to the ground to avoid visible emissions. All such areas shall be isolated using "DANGER – ASBESTOS" barricade tape.

3.5.9.4 Roofing top coat.

3.6 Regulated Areas / Work Progress

3.6.1 All work requiring the disturbance of asbestos containing materials shall be conducted within the established boundaries of a regulated area. Each regulated area shall have access controlled by an OSHA trained competent person. Each area shall be marked using barricade tape and signs in accordance with 29 CFR 1926.1101(k).

3.7 Security

3.7.1 The contractor shall be responsible for 24-hour site security through his employees and/or a contract security service for all regulated areas and other areas affected by contractor's work. Containments shall be constructed so as to allow for the proper securing of the building after work hours.

3.8 Containment and Decontamination Unit

3.8.1 Negative air units with new HEPA filters which are delivered to the job site in original packages shall be used. The installation of the HEPA and pre-filters shall be observed by the consultant's project manager. Sufficient negative air units shall be installed to provide at least one air change every ten (10) minutes within each containment. Differential pressure level shall be maintained to at least -0.02" water column inside each containment throughout the removal phase of the project, and until final clearance is achieved. All units shall be de-rated by at least 25% for the purpose of calculations.

3.8.2 Critical barriers consisting of one layer of 6 mil poly shall be provided to separate interior containment work from adjacent areas including, but not limited to, electrical panels, windows, vents, doors, entrances, drains, HVAC components, chasses, and all other penetrations that could permit air infiltration to or from the regulated area. Critical barriers shall not include designated entry and exit points for the regulated areas of the project.

3.8.3 Each full differential pressure containment shall be constructed using one layer of 4 mil polyethylene on the unaffected walls. One layer of 6 mil polyethylene shall be used for all unaffected flooring and shall extend up each wall a minimum of 18" under the wall poly. A 6-mil poly drop cloth shall be used throughout containment areas to provide a second layer of poly and aid in cleanup.

3.8.4 The containments shall be constructed to provide laminar air movement across the work area with HEPA filtration used to provide makeup air.

3.8.5 The project manager will conduct ventilation smoke testing and shall approve the containments, decontamination facility, bag-out and the differential pressure level prior to any removal activities.

3.8.6 At least one observation window shall be used for each containment. Observation windows shall be placed in strategic locations to allow multiple viewing angles and locations. The consultant's representative shall indicate those areas where observation windows shall be installed.

3.9 Final Cleaning

3.9.1 A final visual inspection shall be performed for each containment at the contractor's request prior to clearance sampling. The final visual inspection shall be performed by the consultant's project manager.

3.9.2 Exterior – A final visual inspection shall include a thorough evaluation of the building exterior. Removal of visible debris, contamination and visible residue shall be performed as requested by the licensed project manager.

3.10 Disposal

3.10.1 All asbestos-containing material and suspected asbestos-containing material, including **all polyethylene**, will be double- bagged in 6-mil polyethylene bags with the required "DANGER" label.

Bulk materials shall be wrapped in two or more layers of 6-mil poly and properly labeled. All waste shall be labeled with the name of the owner, the location of the facility, and the name of the contractor in one-half inch high letters with the label attached to the inside layer so it can be read through the outside.

All waste containers shall be wet wiped or washed. Disposal shall be at a Type I Municipal Solid Waste Disposal site as permitted by the Texas Commission on Environment Quality (TCEQ/Texas Department of State Health Services). All material shall be disposed of on waste shipment records as specified in the NESHAP regulations or on a TCEQ Hazardous Waste Manifest.

The owner's address shall be shown as follows:

Texarkana Renewal Properties, LLC
105 Olive Street
Texarkana, AR 71854

and will be signed by an authorized representative of the owner. All D.O.T. regulations shall be complied with in regard to the transporting of the asbestos-containing materials.

3.10.2 Twenty-four (24) hours' notice shall be given prior to the hauling of asbestos-containing materials to the landfill. Brady Environmental Services, Inc. reserves the right to follow all asbestos-containing material to the landfill.

3.10.3 The transportation of asbestos-containing waste materials to the landfill shall be conducted only by companies licensed by the State of Texas as an asbestos transporter. The consultant and owner shall be furnished a copy of the asbestos transporter's license prior to transportation of the waste material.

3.10.4 All asbestos-containing waste materials shall be removed from the site at or before the time of final acceptance and properly disposed of within ten (10) days of project completion.

3.11 Re-establishment of Work Area

3.11.1 Upon passing clearance testing in accordance with Section 2.13, the contractor shall dismantle each containment and re-establish each work area (see 2.14 for additional detail). All polyethylene sheeting used during the project shall be bagged and disposed of as asbestos-contaminated waste materials.

3.12 Personal Protection

3.12.1 The contractor's workers shall, at a minimum, be required to wear disposable clothing and MSHA/NIOSH approved Half-face Air Purifying Respirators. The contractor bears all responsibility for providing the maximum amount of respiratory protection and other personal protective equipment that he deems necessary to adequately protect his workers.