

CONSTRUCTION & ENVIRONMENTAL CONSULTANTS, INC.

ASBESTOS/LEAD BASE PAINT CONSULTING • ENVIRONMENTAL SITE ASSESMENTS • PHASE I & II • MOLD • INDOOR/OUTDOOR AIR TESTING

WORK PROCEDURES FOR THE **REMOVAL OF ASBESTOS-CONTAINING MATERIALS**

AT **Ascarate Park** 6900 Delta El Paso, TX 79905

PREPARED FOR: El Paso County Commissioner's Court Mr. Pete Vasquez 500 East San Antonio Street El Paso, TX 79901

PREPARED BY: CONSTRUCTION AND ENVIRONMENTAL CONSULTANTS 140 N. COTTON El PASO, TX 79901-1517

TDSHS License No. 10-0247

December 7, 2007

Consultant Signature Like L

TDSHS Lic. No.: 10-5494 Expiration Date:04-24-2009

> 79901 140 N. COTTON ST. • EL PASO, TX

Ph. (915) 544-1985

(915) 533-1147

Fax (915) 533-9348

TABLE OF CONTENTS

WORK PROCEDURES

SECTION 1.0	Contract Objective	1
SECTION 2.0	Summary of Work	2
SECTION 3.0	Definitions	3
SECTION 4.0	Applicable Documents	7
SECTION 5.0	Submittals	9
SECTION 6.0	Air Monitoring Laboratory Services	10
SECTION 7.0	Worker Protection	11
SECTION 8.0	Temporary Differential Air Pressure	12
SECTION 9.0	Site Familiarization	13
SECTION 10.0	Work Area Preparation	14
SECTION 11.0	Decontamination Unit	16
SECTION 12.0	Removal of ACM Materials	17
SECTION 13.0	Work Area Decontamination	18
SECTION 14.0	Disposal of Asbestos-Containing Waste Material	19

SECTION 1.0 CONTRACT OBJECTIVE

- 1.1 The Work described shall be accomplished by an Asbestos Abatement Contractor. The Contractor shall have a current Texas Department of State Health Services (TDSHS) Contractor license.
- 1.2 The Contractor shall perform the clean-up, removal and disposal of identified Asbestos-Containing Materials as indicated herein. The selected Contractor shall be responsible for providing security for the Asbestos work area(s).
- 1.3 Contractor shall comply with all applicable Federal regulatory laws, including but not limited to OSHA, EPA/NESHAP and EPA/AHERA, in addition to State and Local regulations.
- 1.4 The Contractor shall assume full responsibility and liability for the compliance with all applicable federal, state, and local regulations pertaining to work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site.
- 1.5 The Contractor shall restore the cleanliness of the work/removal area and any other areas contaminated with Asbestos-Containing Materials as a result of the work specified herein. All visible contamination shall be removed. Contaminated surfaces shall be thoroughly cleaned.
- 1.6 Contractor shall ensure that no individual is exposed to Asbestos fibers in excess of levels shown in these specifications. Contractor shall also ensure that no Asbestos contamination occurs outside the work area.
- 1.7 The Contractor shall not hold the owner and owner's consultant liable for any negligent acts on the part of himself, his employees, or his subcontractors.

End of Section 1.0

SECTION 2.0 SUMMARY OF WORK

- 2.1 The Work consists of the removal and disposal of abatement Asbestos of approximately 2112 square feet of drywall/joint compound texture walls, approximately 837 square feet of drywall/joint compound texture ceilings, approximately 2192 square feet of roofing materials, approximately 320 square feet of ceiling plaster, approximately 1840 square feet of 12" x 12" floortile/mastic, approximately 148 sq. ft. of sheet vinyl and 150 linear feet of window glaze. These asbestos quantities are located within buildings #2, 3, 4, 14, 17, 19, 20, and 24 as indicted in the attached drawings. The contractor shall complete abatement in accordance with the following:
- 2.2 Scheduled date to perform will be per the direction of the Owner.
- 2.3 The contractor shall furnish all labor, materials, services, equipment, and incidentals necessary to carry out the work in accordance with all applicable federal, state, and local regulations. Contractor shall also follow the procedures stated in these Technical Specifications.
- 2.4 Contractor is responsible for the payment of all permits, insurance and taxes as required. The owner will be responsible for the State Notification fees.
- 2.5 Contractor shall prepare Project Submittals as specified in these Work Procedures.
- 2.6 The Contractor is responsible for daily (OSHA) air monitoring for the safety of its' employees in accordance with OSHA requirements which will be provided as agreed by CECI. Daily area air monitoring shall be conducted by the Owner's Asbestos Consultant.
- Disposal and transportation procedures shall comply with all Federal, State and Local 2.7 regulatory requirements including but not limited to EPA/NESHAP, OSHA, DOT and TDSHS.
- 2.8 Asbestos Project Manager, as delegated by the Asbestos Consultant, shall observe the status and progress of the work for completeness and general compliance with the requirements of the work procedures.

End of Section 2.0

SECTION 3.0 **DEFINITIONS**

- 3.1 Relative to Asbestos abatement, the following definitions apply:
 - 1. Abatement: Procedures to decrease or eliminate the source of fiber release from Asbestos Containing Building Materials.
 - 2. Air Monitoring: The process of measuring the fiber content of a specific volume of air in a stated period of time.
 - 3. Air Lock: A system for ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, consisting of two curtained doorways separated by a dead air space of at least six feet.
 - 4. Amended Water: Water to which a surfactant has been added to decrease the surface tension.
 - 5. Asbestos: The Asbestiform varieties of Chrysotile, Amosite, Crocidolite, Tremolite Asbestos, Anthophyllite Asbestos, Actinolite Asbestos, and any of these minerals that has been chemically treated and/or altered.
 - 6. Asbestos-Containing Material: Any material containing greater than one percent (1%) by weight of Asbestos, of any type or mixture of types.
 - 7. Authorized Persons: Persons including, subcontractor, supervisors, workers, the owner, or their designated representative, or any representative of a regulatory or other agency having jurisdiction over the project whose job responsibilities require their presence at the site. Only authorized persons meeting the training and medical surveillance requirements of the specification and/or all applicable laws and regulations will be allowed into a work area during abatement.
 - 8. Clean Room: An uncontaminated area with provisions for storage of worker's street clothes and equipment.
 - 9. Contractor: Asbestos abatement contractor
 - 10. Licensed Asbestos Supervisor: A person licensed to contract/supervise Asbestos abatement projects by all applicable federal, state and local agencies. The person shall 1) possess a valid license from the Texas Department of Health, 2) EPA approved 40 hour training requirement, 3) Physician's Written Statement Medical Surveillance for Asbestos Exposure, and a fit test dated within the last 12 months.

- 11. Registered Asbestos Worker: A person registered to remove or abate Asbestos by all applicable federal, state, and local agencies. The person shall 1) possess a valid registration from the Texas Department of Health, 2) EPA approved 32 hour training requirement, 3) Physician's Written Statement Medical Surveillance for Asbestos Exposure, and a fit test dated within the last 12 months...
- 12. <u>Critical Barrier</u>: A barrier, typically constructed of one or more sheets of 6 mil plastic, designed to physically separate and restrict airflow between a work area and an uncontaminated area. Critical barriers shall be of sufficient integrity and properly marked to assure that unauthorized personnel will not inadvertently enter the work area.
- 13. Curtained Doorway: An entrance/exit from a work area which restricts air movement constructed by placing two over-lapping sheets of four (4) mil plastic over an existing or temporarily framed doorway, securing each along the top of the doorway, securing the vertical edge of one sheet along one vertical side of the doorway, securing the vertical edge of the other sheet along the appositive vertical side of the doorway.
- 14. <u>Decontamination Enclosure:</u> An enclosed series of connected spaces for the decontamination of workers and of materials and equipment. The spaces should be connected with a work area by at least one air lock. The connected spaces should include an equipment room, a shower, and a clean room with curtained doorways between any two adjacent spaces.
- 15. <u>Demolition:</u> The wrecking, removing, razing, or stripping of any building component.
- 16. Encapsulation: The application of an Asbestos commercial encapsulant sealer designed to lockdown any residual asbestos fibers and inhibit their dispersal in to the air.
- 17. Equipment Decontamination Enclosure: An enclosed space in the work area for controlled transfer of materials and equipment between the work area and uncontaminated areas, typically consisting of a washroom and a holding area.
- 18. Equipment Room: An area or room in the work area with provisions for storage of contaminated clothing and equipment.
- 19. Fixed Object: Equipment for other objects in the work area which cannot be removed from the work area during abatement.

- 20. Glove bag Technique: A method with limited applications for removing small amounts of Asbestos-Containing Materials from ducts, short piping runs, valves, joints, elbows, and other non-planar surfaces. The glove bag consists of a 6-mil transparent plastic bag constructed with two inward projecting long sleeve rubber gloves, one inward projecting water-wand sleeve, and internal tool pouch, and an attached and labeled receptacle for Asbestos waste. The glove bag is installed in such a manner that it surrounds an object or portion of the object 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.
- 21. HEPA Filter: A High Efficiency Particulate Air (HEPA) filter cable of trapping and retaining at least 99.97 % of all monodispersed particles with a mean aerodynamic equivalent diameter equal to or greater than 0.3 micrometers.
- 22. HEPA Vacuum Equipment: Vacuuming equipment that has a HEPA filter system.
- 23. Holding Area: A portion of the equipment decontamination enclosure located between the washroom and an uncontaminated area constructed with curtained doorways. The holding area acts as an air lock.
- 24. Movable Object: Equipment or other objects in the work area which can be removed from the work area during abatement.
- 25. Negative Air Pressure Unit: A portable local exhaust system equipped with HEPA filtration and capable of maintaining a constant, low velocity air flow into contaminated areas from adjacent uncontaminated area.
- 26. Removal: All herein specified procedures necessary to abate, remove, strip, or in any way disturb Asbestos-containing or contaminated materials from the project site.
- 27. Shower Room: A room between the clean room and the equipment room in the worker decontamination unit with hot and cold or warm running water and suitably arranged for complete showering during decontamination.
- 28. Surfactant: A chemical wetting agent added to water to improve penetration.
- 29. Washroom: A room between the work area and the holding area in the equipment decontamination area.
- 30. Wet Cleaning: The process of eliminating Asbestos-contamination from building surfaces and objects by using cloths, mops, or other cleaning tools which have been dampened with water, and by afterwards disposing of these cleaning tools as Asbestoscontaminated waste.

31. Work Area: Any room, space, or portion of the project site in which Asbestos-containing or contaminated materials will be abated, removed, stripped, or in any way disturbed. A contained work area is one which has been isolated and all openings sealed, separated from other areas by critical barriers, is under negative pressure, and is accessible to authorized persons only through a decontamination enclosure system.

End of Section 3.0

TDSHS Lic. No.: <u>10-5494</u>

SECTION 4.0 APPLICABLE DOCUMENTS

- Federal requirements which govern Asbestos abatement work or hauling and disposal of 4.1 Asbestos waste materials include but are not limited to the following:
 - A. U.S Department of Labor, Occupational Safety and Health Administration, (OSHA):
 - 1. 29 CFR §1926.1101, titled, "Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite", October 11, 1994.
 - 2. 29 CFR §1910.134, titled, "Occupational Health Standards for A Respiratory Protection Program", April 8, 1998.
 - 3. Access to Employee Exposure and Medical Records Title 29, Part 1910, Section 145 of the Code of Federal Regulations.
 - 4. Hazard Communication Title 29, Part 1910, Section 1200 of the code of Federal Regulations.
 - 5. Specifications for Accident Prevention Signs and Tags Title 29, Part 1910, Section 145 of the Code of Federal Regulations.
 - B. U.S. Environmental Protection Agency (EPA):
 - 1. 40 CFR Part 61, Subpart M, titled, "National Emissions Standards for Hazardous Air Pollutants" (NESHAP), November 20, 1990;
 - 2. 40 CFR Part 763, Subpart G, §§763. 120-763.126, and Appendices A, C, and E, titled, "Asbestos Abatement Project: Worker Protection Rule", February 25, 1987;
 - 3. 40 CFR part 763, Subpart E, §§763.80-763.99, and Appendices A and B, titled "Asbestos-Containing Materials in Schools" (AHERA rules), July 1, 1992;
 - 4. 40 CFR Part 763, Subpart E, Appendix C, titled, "Model Accreditation Plan", February 3, 1994;
 - 5. 40 CFR Part 763, Subpart E, Appendix B, titled, "Work Practices and Engineering Controls for Small-Scale, Short-Durations Operations Maintenance and Repair (O&M) Activities Involving ACM", July 1, 1992;
 - 6. 40 CFR Part 763, Subpart E, Appendix D, titled, "Transport and Disposal of Asbestos Waste", July 1, 1992;

- 7. 40 CFR Part 763, Subpart F, Appendix A, Section 1, titled, "Polarized Light Microscopy", July 1, 1992;
- 8. 40 CFR Part 763, Subpart E, Appendix A, titled, "Transmission Electron Microscopy Analytical Methods", July 1, 1992;
- C. Federal Department of Transportation (DOT)
 - 1. 49 CFR Chapter 1, Part 172, Appendix A, Subchapter C, October 1, 1992; and
 - 2. 49 CFR Chapter 1, Part 172, Appendix A, Subpart H, October 1, 1992.
- D. Texas Department of State Health Services (TDSHS):
 - 1. Texas Health Protection Rules §295
 - 2. All other federal, state, county, city laws, codes and regulations and ordinances as applicable.

End of Section 4.0

SECTION 5.0 SUBMITTALS

Asbestos Abatement Contractor shall provide proof of Occurrence insurance type without a 5.1 sunset clause and shall have statements of coverage for Asbestos abatement contractors. The insurance shall be procured and maintained during the entire period of performance under this contract. The minimum amounts are as follows:

Asbestos

- 1. \$1,000,000 General Aggregate
- 2. \$1,000,000 Personal Injury (Occurrence)
- 5.2 Contractor shall be responsible for submitting information regarding waste transported information, disposal site information, worker training certification, licenses, medical and respiratory clearance, respirator training form and material safety data sheets.
- 5.3 Contractor shall furnish Owner's Asbestos Consultant, upon completion of work, field notes and logs, copies of daily sign in/out log, copies of waste logs, copies of Asbestos waste manifests and employee air monitoring results.
- 5.4 Detailed work plan to include location of Work Area decontamination units, proposed route of exhaust for diminished air filtration system, and transport of waste material from the Work Area.

End of Section 5.0

SECTION 6.0 AIR MONITORING LABORATORIES SERVICES

- 6.1 Contractor OSHA personnel air monitoring is required by the contractor during abatement activities. Daily area air monitoring shall be conducted by owner's Asbestos consultant.
- 6.2 The Owner has retained the services of Construction and Environmental Consultants, Inc. (CECI) as his Asbestos consultant, and to provide inspections and air sampling at the areas being abated throughout the course of the project.
- 6.3 Contractor will be required to maintain an average airborne count in the work area that will ensure that workers will not be exposed to the OSHA PEL of 0.1 f/cc during an eight hour work shift. The goal is to provide a level of no higher than 0.01 f/cc inside the minimum respirator required. If the fiber counts rise above this figure for any personnel sample obtained, revise work practices to lower fiber counts or change respiratory protection.
- 6.4 All OSHA air samples shall be posted within the vicinity of the decontamination unit within 24-hours of collection.
- 6.5 If any air sample taken outside of the work area exceeds the baseline established, all work shall stop immediately. Work shall not recommence until authorized in writing by the Asbestos consultant.
- 6.6 The Project Manager may perform final visual inspection, as delegated by the Asbestos consultant, in general accordance with the "Standard Practice for Visual Inspection of Asbestos Abatement Projects."
- 6.7 Baseline, during abatement, and final clearance air samples will be collected, using at a minimum, protocols as specified in the Texas Asbestos Health Protection Rules.
- 6.8 A) All Final Air Clearance testing shall be performed in general accordance with the Texas Health Protection Rules. The final clearance standard of 0.01 f/cc for PCM shall be utilized.
 - B) Sampling and analysis shall be performed in accordance with the National Institute for Occupational Safety and Health (NIOSH) 7400 method and will follow the guidelines regarding detection limits.
 - C) The Owner will pay for the initial Final Air Clearance testing; payment for retesting or additional testing will be the responsibility of the Contractor.

End of Section 6.0

SECTION 7.0 WORKER PROTECTION

- 7.1 Prior to the commencement of work, the contractor shall assign only properly trained and licensed personnel for this project. Ensure that workers are knowledgeable in these procedures. From the time of start of removal to final clearance is achieved, personnel protection equipment (PPE) shall be used at all times. The contractor supervisor and assigned abatement workers, shall have valid licenses and certifications as required by TDSHS and shall be current on the appropriate training and medical certification.
- 7.2 Contractor shall acknowledge and agree to sole responsibility for enforcing worker protection requirements at least equal to those specified in the OSHA regulations.
- 7.3 Remove street clothes and put on a new disposable coverall (breathable or equivalent), new head cover, a clean respirator and work boots in the changing area each time the work area is accessed.
- 7.4 The minimum acceptable respiratory protection used for this project is a Purified Air Powered Respirators (PAPR) for the removal of ceiling over spray-on and TSI fittings. A half face respirator is acceptable for the removal of wood and metal doors, flooring materials and their associated mastics. Respirators must meet NIOSH standards.
- 7.5 Contractor shall provide all required personal protective equipment (PPE) to include respirators, suits, work boots, gloves and respirator filters to employees, owner's consultant, and the Project Manager.
- 7.6 Where respirators with disposable filters are used, provide sufficient filters for replacement as necessary.
- 7.7 Prior to the commencement of any work, any material that according to MSDS requires personal protective equipment, the equipment must be provided and used at all times during the handling of the in-particular product.

End of Section 7.0

SECTION 8.0 TEMPORARY DIFFERENTIAL AIR PRESSURE

- 8.1 The Abatement Contractor (AC) will monitor and record the pressure differential between the work area and the building outside of the work area with a monitoring device prior to the start of the removal. The device shall be equipped with an alarm that sounds if the pressure is greater than -0.02 inches of water gage.
- 8.2 Supply the required number of HEPA-filtered fan units to the site in accordance with these specifications.
- 8.3 Continuously maintain the work area at an air pressure that is lower than that in any surrounding space in the building, or at any location in the immediate proximity outside of the building envelope. This pressure differential when measured across any physical or critical barrier must be no greater than (-0.02) inches of water gauge.
- 8.4 Air circulation in the work area is a minimum requirement intended to help maintain airborne fiber counts at a level that does not significantly challenge the work area isolation measures. Provide a fully operational air circulation system supplying a minimum of 4 air changes per hour. Add one additional unit as a backup in case of equipment failure or machine shutdown for filter changing.
- 8.5 Exhaust all units from the work area to meet air circulation requirements of this section. The units shall exhaust filtered air to the outside of the building.
- 8.6 Arrange work area and decontamination units (DCU's) so that the majority of makeup air comes through the decontamination unit.
- 8.7 Loss of negative pressure and/or air handling units shall immediately require sealing of the containment. Determination of the cause shall be corrected.

End of Section 8.0

TDSHS Lic. No.: 10-5494

12

SECTION 9.0 SITE FAMILIARIZATION

- 9.1 A Pre-Construction meeting is to be scheduled prior to beginning work. The contractor shall complete a walk-through of the work area with the Asbestos Consultant and/or Owner.
- 9.2 Contractor shall familiarize to complete a pre-damage survey of the work area and adjacent areas to include transportation routes to be utilized by the contractor.
- 9.3 The contractor is to record all observations resulting from the survey to include photographic documentation if necessary of existing conditions.
- 9.4 All damage to existing building and items not noted within the pre-damage survey will be the responsibility of the contractor. The contractor will be held liable for any damages caused to the facility during the Asbestos abatement activities.
- 9.5 Coordinate with and verify that the maintenance personnel will shut down HVAC service to each of the work areas. The contractor must provide electrical panel to be equipped with Ground Fault Circuit Interrupters (GFCI's). Licensed electrical personnel will make connections to existing power. Contractor will provide temporary lighting to the work area.
- 9.6 The Owner will NOT provide water and power. The contractor, with the owner or owners' Asbestos Consultant approval is to provide utility connections.
- 9.7 Access to the site will be provided on designated locations of the building. Contractor employees shall be limited to these designated areas only. Contractor will be permitted to use the parking area south of the east wing.
- 9.8 The contractor shall provide a secured temporary storage for Asbestos-containing waste generated during the abatement project, and a separate secured temporary storage unit for the staging of a remote decontamination unit.

End of Section 9.0

SECTION 10.0 WORK AREA PREPARATION

- 10.1 No movable objects remain to hinder work progress. Furnishing and other fixed materials indicated by the owner shall be pre-cleaned and removed from the work area by the contractor prior to the commencement of preparation of the work area..
- 10.2 Completely separate the work area from other portions of the building, and the outside with the use of appropriate barrier tape to restrict access into the area. Make sure that HVAC is shut down in the Work Area.
- 10.3 Clean all surfaces in the work area by HEPA vacuum and wet-wiping prior to the installation of critical barriers. Barriers shall consist of a minimum of two 6-mil polyethylene sheeting, at all entrances and openings to the work area to include doorways, windows vents, drills, etc.
- 10.4 Provide and post warning signs in accordance with OSHA 29 CFR 1926.1101 at all entrances to the regulated areas and to the outside of critical barriers. Signs shall be displayed in both the Spanish and English languages.
- 10.5 Contractor shall be required to remove the furnishings and other fixed items indicated by the owner before the abatement of the proposed ACM materials.

Preparation of the Work Area (Full Containment if required)

- 10.6 Cover walls at the perimeter of containment, using a minimum of 2 layers of 4-mil thickness polyethylene sheeting. No seams shall be located at wall-to-wall joints. Polyethylene sheeting shall extend up to the ceiling. Where a fire hazard exists, all plastic sheeting will be certified by the Underwriters Laboratory as being fire retardant. Install critical barriers consisting of 6-mil thick poly sheeting over all objects remaining in the work area, if applicable. Plastic sheeting shall be mechanically supported with duct tape.
- 10.7 Where removal of flooring material is not foreseen, cover the floors, within the containment, using a minimum of two layers of 6-mil plastic sheeting or at least a dart impact of 270 grams and tear resistance of machine direction (M. D.) 512 grams and transverse direction (T. D.) of 2067 grams.

Preparation of the Work Area (Mini-Containment)

If feasible, a viewing window will be included in the plastic sheeting wall. The window shall 10.8 be constructed of plexiglass which measures approximately 18 inches by 18 inches.

- 10.9 Place al least one fire extinguisher just outside the Work Area and one inside the Work Area for every 2000 square feet.
- 10.10 Fire evacuation routes shall be marked for containment workers. Evacuation routes inside containment shall be identified by painted (or duct tape) arrows on the plastic sheeting.
- 10.11 Project Manager, with Contractor Supervisor, are to perform a visual inspection to determine completeness of the work area preparation. Do not start removal until authorized in writing by the Project Manger.
- 10.12 Mini-Enclosure shall be prepared utilizing two layers of 6-mil poly, and a negative pressure generator (such as small HEPA Ventilator ≤ 600 CFM, or large HEPA Vacuum).

End of Section 10.0

TDSHS Lic. No.: <u>10-5494</u>

SECTION 11.0 DECONTAMINATION UNIT

- Provide decontamination unit, per containment and as per OSHA requirements. 11.1 Decontamination unit shall consist of a clean room, shower room, and equipment room, each separated from the other and from the Work Area by airlocks. The decontamination unit shall also be constructed of rigid materials to withstand impact from abatement operations.
- 11.2 Construct airtight walls and ceilings consisting of polyethylene sheeting, 6-mil thick opaque finish. Attach to existing building components or a temporary frame work.
- 11.3 Use two layers (minimum) of six-mil thick polyethylene sheeting with opaque finish to cover the floors in all areas.
- 11.4 Rooms of the decontamination unit shall be separated by airlocks constructed of 'Z-Flap' plastic sheeting.
- 11.5 Provide temporary extensions of existing hot and cold water and drainage as necessary for a complete and operable shower.
- 11.6 Provide a continuously adequate supply of soap, shampoo, and disposable bath towels.
- 11.7 Provide 20 micron and 5 micron waste water filters in line to drain. Change filters daily or more often if necessary.
- 11.8 Clean debris and residue from the inside of the decontamination unit twice daily. Wet wipe all surfaces after each shift change. Clean debris from shower pans on a daily basis.
- All personnel must exit the work area through the decontamination unit. 11.9

End of Section 11.0

TDSHS Lic. No.: 10-5494

16

SECTION 12.0

REMOVAL OF ASBESTOS-CONTAINING AND CONTAMINATED MATERIALS

- 12.1 Remove and properly dispose of all asbestos-containing and contaminated materials in accordance with OSHA regulations 29 CFR 1926.1101, NESHAP, and TDSHS rules section 295.60, and as more stringently specified herein.
- 12.2 Provide general clean-up of work areas using wet methods and HEPA vacuum concurrent with the removal of all Asbestos-containing and contaminated materials.
- 12.3 Spray areas of Asbestos-containing/contaminated materials to be removed with amended water using spray equipment capable of providing a "mist" application to reduce the release of fibers. Maintain a continuously wet condition.
- 12.4 Remove the Asbestos-Containing Material in a manner as to minimize airborne particulate matter. Do not permit accumulations of debris in the Work Area.
- 12.5 Place Asbestos containing and contaminated materials in regulated ACM disposal bags as per OSHA and NESHAP regulations. At minimum, wastes are to be double-bagged with 6mil thickness or tear resistance of M.D. 300 grams, T.D. 2,068 grams, and dart impact of 216 grams (documentation from the manufacturer shall be on site), appropriate labeled and transported per the requirements of federal, state and local regulations. The contractor is to take adequate precautions (i.e. burlap bags, etc.) to prevent leaks from tears resulting from sharp objects. The use of Large Consolidated Waste Containment Systems will be prohibited.
- 12.6 When double-bagging Asbestos-containing and contaminated material, the inner bag shall be no more than half full and excess air shall be squeezed out. Twist closed the top ACM bags, fold over, sealed with duct tape (goose necked) and rinse off bags before leaving the work area.
- 12.12 At the completion of the removal activities, define herein, the contractor in conjunction with the Project Manager will perform a work area visual inspection to determine completeness of removal. Once visual inspection is completed the Contractor will proceed with clean-up procedures of all surfaces in the work areas.

End of Section 12.0

TDSHS Lic. No.: 10-5494

17

SECTION 13.0 WORK AREA DECONTAMINATION

- 13.1 Negative air pressure system shall remain operational throughout the Work Area until final clearance is achieved.
- 13.2 Remove all products, materials and asbestos waste from the Work Area. Leave only cleaning items in the Work Area, such as buckets, spraying equipment, HEPA vacuums and disposable towels and rags. Under no circumstances, dry cleaning or sweeping shall be allowed.
- 10.3 A two phase cleaning sequence is required to consist of an initial cleaning followed by visual observation of the Work Area by the Project Manager, and then finally a second cleaning.
- 10.4 Clean all remaining items such as walls, vents, air ducts, wood framing etc., using wet wipe and HEPA vacuum methods. The Work Area is considered visually clean when there is no evidence of dust or debris on any surface.
- 13.5 Notify Project Manager for observation of the work area to identify completeness of cleaning activities.
- 13.6 If visual clearance results indicate work area is still contaminated, repeat decontamination sequence.
- 13.7 After the work area is found to be visually clean, the Project Manager, as delegated by the Asbestos Consultant, shall conduct a final visual clearance in general accordance with ASTM E1368-90.
- 13.8 Encapsulation of the work surfaces shall proceed at upon final visual clearance by the Project Manager and completion of identified deficiencies by the Contractor.
- 13.9 Encapsulant shall be applied using only airless spraying equipment. Do not allow surfaces to become soaked with encapsulant.
- 13.10 Upon completion of the encapsulation, Contractor shall notify Project Manager for final clearance testing in accordance with Section 6.0 of these specifications. At least one hour waiting period shall be imposed before running final clearance testing.

End of Section 13.0

18

SECTION 14.0 DISPOSAL OF ASBESTOS-CONTAINING WASTE MATERIAL

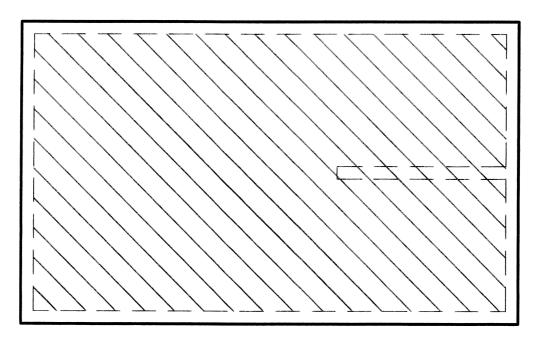
- 14.1 Remove sealed and labeled containers of contaminated material and wastes, and dispose of accordingly in a sanitary landfill approved by the appropriate regulatory agencies.
- 14.2 Notify Owner's Representative prior to the proposed time of removal and delivery of contaminated waste to landfill. The Project Manager may elect to observe this operation.
- 14.3 Use only enclosed or covered trucks lined with plastic sheeting to haul impermeable containers to prevent loss or damage containers enroute to the sanitary landfill.
- 14.4 Allow only sealed plastic bags to be deposited in the landfill. If bags become unsealed, place inside another 6-mil thick plastic bag that is appropriately labeled. Contractor is to take adequate precautions to prevent sharp edges associated with waste material to penetrate plastic bags.
- 14.5 Ensure that ACM is kept wet and placed in sealed polyethylene bags.
- Ensure that no visible emissions are released to the outside air from site where materials and 14.6 wastes are deposited.
- 14.7 Final disposal of Asbestos-containing waste material shall be within 30 days of project completion or when receiving container is full, whichever is sooner.
- 14.8 Provide completed copies of all waste manifests to Project Manager.

End of Section 14.0

END OF WORK PROCEDURE

TDSHS Lic. No.: 10-5494

19



NORTH -N

Homogeneous Areas

Asbestos

Drywall/JC Walls

Drywall/JC Ceiling

PROJECT ADDRESS:

Ascarate Park
Buiding 2
Braso, Texas 79905

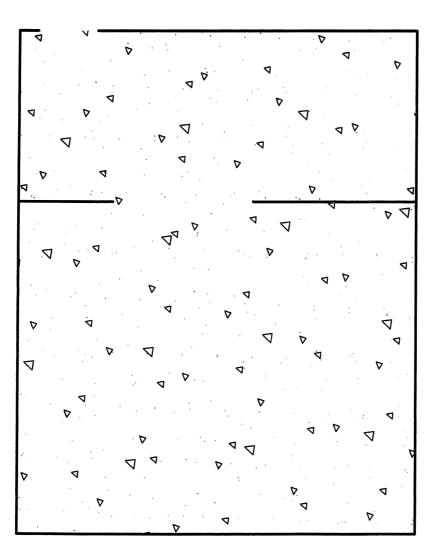
CECI 140 N. COTTON EL PASO, TX 79901 PH. (915) 533-1147 FAX (915) 533-9348

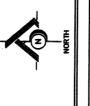
DATE: SHEET

11/05/2007 1 0

NOT TO SCALE

FLOOR PLAN





Homogeneous

Areas

Asbestos

Roofing Material

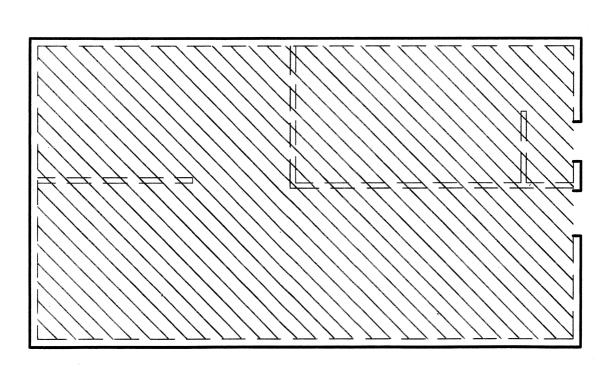
ASCATATE PATK
Buiding 3
El Paso, Texas 79905

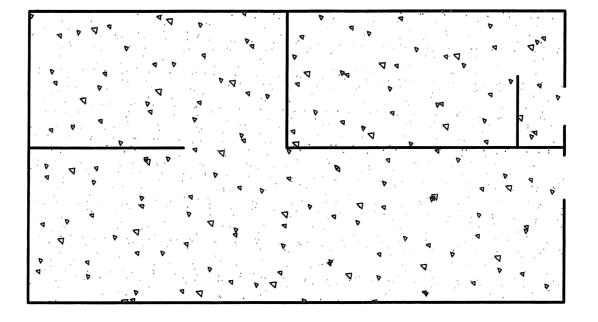
DRAWN BY: AGA

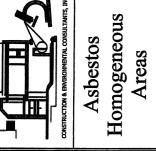
CECI
140 N. COTTON
EL PASO, TX 79901

PH. (915) 533-1147 FAX (915) 533-9348

FLOOR PLAN NOT TO SCALE

















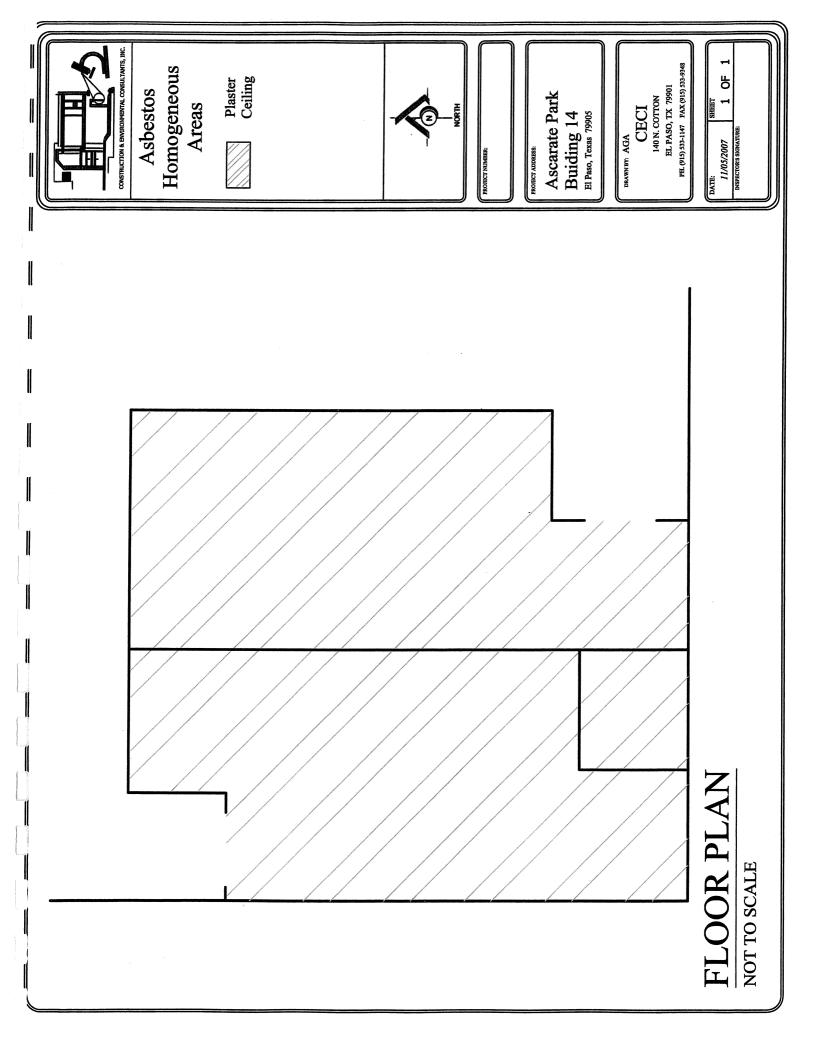


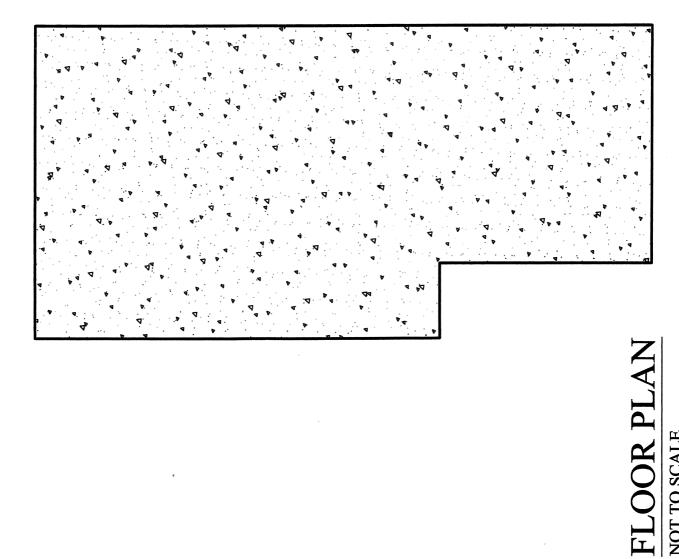
Ascarate Park Buiding 4
El Paso, Texas 79905

CECI 140 N. COTTON EL PASO, TX 79901 PH. (915) 333-1147 FAX (915) 333-9348

11/05/2007 INSPECTOR'S SIGNATU

FLOOR PLAN NOT TO SCALE





Homogeneous Areas Asbestos

4 y

Roofing Material

Ascarate Park Buiding 17 El Paso, Texas 79905

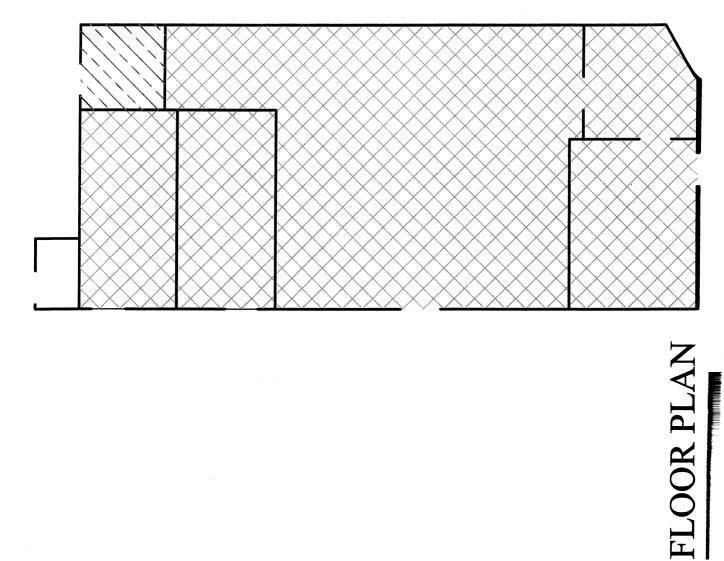
DRAWNBY: AGA

CECI 140 N. COTTON BL PASO, TX 79901

PH. (915) 533-1147 FAX (915) 533-9348

11/05/2007

NOT TO SCALE



Homogeneous Asbestos Areas CONSTRUCTION & ENVIRON

Floor Tile/ Mastic

Sheet Vinyl Flooring

Exterior Window Glaze



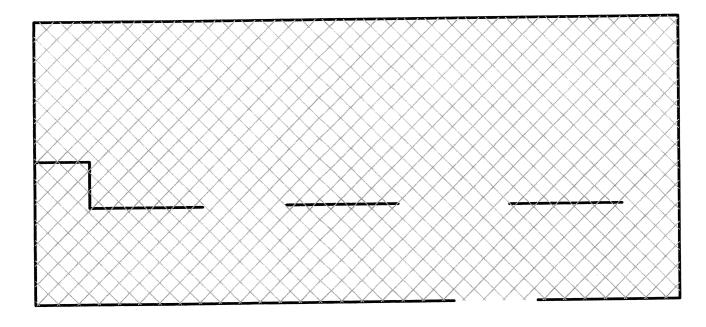
Ascarate Park ROJECT ADDRESS:

Buiding 19 El Paso, Texas 79905

140 N. COTTON EL PASO, TX 79901 PH. (915) 533-5147 FAX (915) 533-9348 CECI DRAWNBY: AGA

INSPECTOR'S SIGNATURE: 11/05/2007

NOT TO SCALE



Asbestos
Homogeneous
Areas
Floor Tile/
Mastic

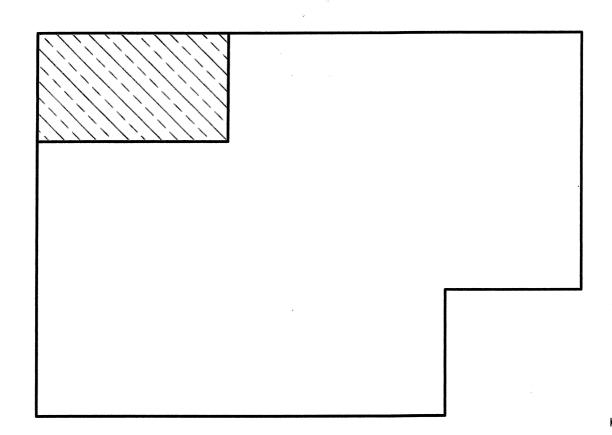
Ascarate Park
Buiding 20
El Paso, Texas 79905

DRAWN BY: AGA

CECI
140 N. COTTON
EL PASO, TX 79901
PH.(915) 533-1147 FAX (915) 533-3348

FLOOR PLAN

NOT TO SCALE



Homogeneous Areas Sheet Vinyl Flooring Asbestos

Ascarate Park Buiding 24 El Paso, Texas 79905

CECI 140 N. COTTON BL PASO, TX 79901 DRAWNBY: AGA

PH. (915) 533-1147 FAX (915) 533-9348

11/05/2007
INSPECTOR'S SIGNATURE

FLOOR PLAN NOT TO SCALE