



Administrative Services
Purchasing Division

CITY OF FORT COLLINS
INVITATION TO BID

BID #5810

LEAD ABATEMENT AT POLICE FIRING RANGE

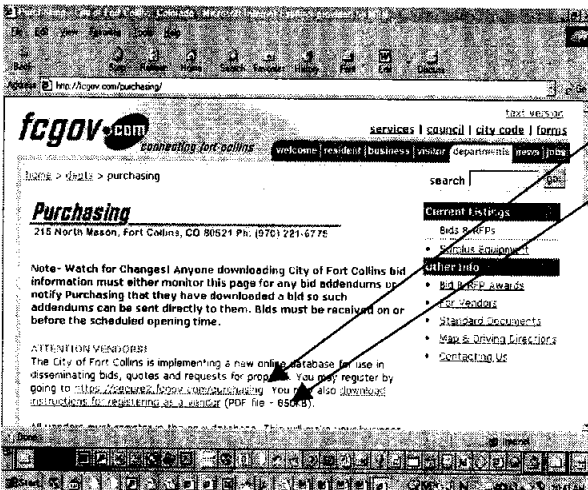
Sealed bids will be received and publicly opened at the office of the Director Of Purchasing and Risk Management, 215 North Mason St., 2nd floor, Fort Collins, Colorado 80524, at the time and date noted on the bid proposal and/or contract documents. If delivered, they are to be delivered to 215 North Mason Street, 2nd Floor, Fort Collins, Colorado 80524. If mailed, the address is P.O. Box 580, Fort Collins, 80522-0580.

Bids must be received at the Purchasing Office prior to 3:00p.m. (our clock), September 23, 2003.

A copy of the Bid may be obtained as follows:

1. Download the Bid from the Purchasing Webpage, Current Bids page, at: www.fcgov.com/purchasing.
2. Registration: The City of Fort Collins Purchasing Division has implemented an on-line vendor registration system. This system allows vendors to register, view and update their business information and commodities. In the future, vendors will also be able to receive Requests for Proposals (RFP's) through the on-line system. All vendors doing business with the City of Fort Collins are requested to register.

The vendor registration system is accessible through the City of Fort Collins Purchasing Department internet webpage at www.fcgov.com/purchasing.



The vendor registration form is located by clicking <https://secure2.fcgov.com/bs0/login.jsp>

Note the printable instruction pages link.

If you have any difficulty completing the registration process, please call the Purchasing Division at (970)221-6775 for assistance.

3. Come by Purchasing at 215 North Mason St., 2nd floor., Fort Collins, and request a copy of the Bid.

Special Instructions

All bids must be properly signed by an authorized representative of the company with the legal capacity to bind the company to the agreement. Bids may be withdrawn up to the date and hour set for closing. Once bids have been accepted by the City and closing has occurred, failure to enter into contract or honor the purchase order will be cause for removal of supplier's name from the City of Fort Collins' bidders list for a period of twelve months from the date of the opening. The City may also pursue any remedies available at law or in equity. Bid prices must be held firm for a period of forty-five (45) days after bid openings.

Submission of a bid is deemed as acceptance of all terms, conditions and specifications contained in the City's specifications initially provided to the bidder. Any proposed modification must be accepted in writing by the City prior to award of the bid.

Only bids properly received by the Purchasing Office will be accepted. All bids should be clearly identified by the bid number and bid name contained in the bid proposal.

No proposal will be accepted from, or any purchase order awarded, to any person, firm or corporation in default on any obligation to the City.

Bids must be furnished exclusive of any federal excise tax, wherever applicable.

Bidders must be properly licensed and secure necessary permits wherever applicable.

Bidders not responding to this bid will be removed from our automated vendor listing for the subject commodities.

The City may elect where applicable, to award bids on an individual item/group basis or on a total bid basis, whichever is most beneficial to the City. The City reserves the right to accept or reject any and all bids, and to waive any irregularities or informalities.

Sales prohibited/conflict of interest: no officer, employee, or member of City Council, shall have a financial interest in the sale to the City of any real or personal property, equipment, material, supplies or services where such officer or employee exercises directly or indirectly any decision-making authority concerning such sale or any supervisory authority over the services to be rendered. This rule also applies to subcontracts with the City. Soliciting or accepting any gift, gratuity, favor, entertainment, kickback or any items of monetary value from any person who has or is seeking to do business with the City of Fort Collins is prohibited.

Freight terms: unless otherwise noted, all freight is F.O.B. Destination, Freight Prepaid. All freight charges must be included in prices submitted on proposal.


Discounts: any discounts allowed for prompt payment, etc., must be reflected in bid figures and not entered as separate pricing on the proposal form.

Purchasing restrictions: your authorized signature of this bid assures your firm's compliance with the City's purchasing restrictions. A copy of the resolutions are available for review in the Purchasing Office or the City Clerk's Office. Request Resolution 91-121 for cement restrictions.

Collusive or sham bids: any bid deemed to be collusive or a sham bid will be rejected and reported to authorities as such. Your authorized signature of this bid assures that such bid is genuine and is not a collusive or sham bid.

Bid results: for information regarding results for individual bids send a self-addressed, self-stamped envelope and a bid tally will be mailed to you. Bid results will be posted in our office 7 days after the bid opening.

Sincerely,



James B. O'Neill II, CPPO, FNIGP
Director of Purchasing and Risk Management

BID #5810

LEAD ABATEMENT AT POLICE FIRING RANGE

BID OPENING: SEPTEMBER 23, 2003, 3:00p.m., (our clock)

WE HEREBY ENTER OUR BID FOR THE CITY OF FORT COLLINS' REQUIREMENTS FOR **LEAD ABATEMENT AT POLICE FIRING RANGE** PER THE BID INVITATION AND ANY REFERENCED SPECIFICATIONS AND DRAWINGS:

The City of Fort Collins' is requesting bids for the removal and decontamination of lead contamination at the Police Firing Range located at 2554 Midpoint Drive, Ft Collins Colorado. Lead-containing materials must be removed in accordance with applicable Federal, State and local requirements, and Contract Documents.

Project must be completed within 30 days or as approved by the Project Manager. Contractor must enter into the attached Service Agreement and name the City of Fort Collins as an additional insured per Exhibit "B".

A pre-bid meeting will be held September 16, at 10:00 a.m. at the site.

If questions on these specifications, please call Joel Tower, Project Manager at 970-221-6832. Purchasing questions should be referred to John Stephen, CPPO, CPPB, Senior Buyer at 970-221-6775.

POLICE FIRING RANGE LEAD ABATEMENT

BID SCHEDULE

Our firm will remove lead containing materials by competent persons trained, knowledgeable and qualified in the techniques of lead abatement. This includes the handling and disposal of lead-containing and lead-contaminated materials and the subsequent cleaning of contaminated areas. The Contractor must comply with all applicable federal, state, and local regulations and be capable of performing the work specified in this Contract.

Lump Sum \$ _____

FIRM NAME _____
Are you a Corporation, Partnership, DBA, LLC, or PC

SIGNATURE _____

ADDRESS _____

PHONE/FAX # _____

SERVICES AGREEMENT

THIS AGREEMENT made and entered into the day and year set forth below by and between THE CITY OF FORT COLLINS, COLORADO, a Municipal Corporation, hereinafter referred to as the "City" and _____, hereinafter referred to as "Service Provider".

WITNESSETH:

In consideration of the mutual covenants and obligations herein expressed, it is agreed by and between the parties hereto as follows:

1. Scope of Services. The Service Provider agrees to provide services in accordance with the scope of services attached hereto as Exhibit "A", consisting of ____ (____) page[s], and incorporated herein by this reference.

2. The Work Schedule. [Optional] The services to be performed pursuant to this Agreement shall be performed in accordance with the Work Schedule attached hereto as Exhibit "B", consisting of ____ (____) page[s], and incorporated herein by this reference.

3. Time of Commencement and Completion of Services. The services to be performed pursuant to this Agreement shall be initiated within _____ (____) days following execution of this Agreement. Services shall be completed no later than _____. Time is of the essence. Any extensions of the time limit set forth above must be agreed upon in a writing signed by the parties.

4. Contract Period. [Option 1] This Agreement shall commence upon the date of execution shown on the signature page of this Agreement and shall continue in full force and effect for one (1) year, unless sooner terminated as herein provided. In addition, at the option of the City, the Agreement may be extended for an additional period of one (1) year at the rates provided with written notice to the Professional mailed no later than ninety (90) days prior to contract end.

4. Contract Period. [Option 2] This Agreement shall commence _____, 200_, and shall continue in full force and effect until _____, 200_, unless sooner terminated as herein provided. In addition, at the option of the City, the Agreement may be extended for additional one year periods not to exceed ___ () additional one year periods. Pricing changes shall be negotiated by and agreed to by both parties and may not exceed the Denver - Boulder CPI-U as published by the Colorado State Planning and Budget Office. Written notice of renewal shall be provided to the Service Provider and mailed no later than ninety (90) days prior to contract end.

5. Delay. If either party is prevented in whole or in part from performing its obligations by unforeseeable causes beyond its reasonable control and without its fault or negligence, then the party so prevented shall be excused from whatever performance is prevented by such cause. To the extent that the performance is actually prevented, the Service Provider must provide written notice to the City of such condition within fifteen (15) days from the onset of such condition.

[Early Termination clause here as an option.

6. Early Termination by City/Notice. Notwithstanding the time periods contained herein, the City may terminate this Agreement at any time without cause by providing written notice of termination to the Service Provider. Such notice shall be delivered at least fifteen (15) days prior to the termination date contained in said notice unless otherwise agreed in writing by the parties. All notices provided under this Agreement shall be effective when mailed, postage prepaid and sent to the following addresses:

City:

Service Provider:

In the event of early termination by the City, the Service Provider shall be paid for services rendered to the date of termination, subject only to the satisfactory performance of the Service Provider's obligations under this Agreement. Such payment shall be the Service Provider's sole right and remedy for such termination.

7. Contract Sum. The City shall pay the Service provider for the performance of this Contract, subject to additions and deletions provided herein, the sum of _____ Dollars (\$_____) [Option Cost Breakdown is attached Exhibit "C"]

8. City Representative. The City will designate, prior to commencement of the work, its representative who shall make, within the scope of his or her authority, all necessary and proper decisions with reference to the services provided under this agreement. All requests concerning this agreement shall be directed to the City Representative.

9. Independent Service provider. The services to be performed by Service Provider are those of an independent service provider and not of an employee of the City of Fort Collins. The City shall not be responsible for withholding any portion of Service Provider's compensation hereunder for the payment of FICA, Workmen's Compensation or other taxes or benefits or for any other purpose.

10. Personal Services. It is understood that the City enters into the Agreement based on the special abilities of the Service Provider and that this Agreement shall be considered as an agreement for personal services. Accordingly, the Service Provider shall neither assign any responsibilities nor delegate any duties arising under the Agreement without the prior written consent of the City.

11. Acceptance Not Waiver. The City's approval or acceptance of, or payment for any of the services shall not be construed to operate as a waiver of any rights or benefits provided to the City under this Agreement or cause of action arising out of performance of this Agreement.

12. Warranty.

- (a) Service Provider warrants that all work performed hereunder shall be performed with the highest degree of competence and care in accordance with accepted standards for work of a similar nature.
- (b) Unless otherwise provided in the Agreement, all materials and equipment incorporated into any work shall be new and, where not specified, of the most suitable grade of their respective kinds for their intended use, and all workmanship shall be acceptable to City.
- (c) Service Provider warrants all equipment, materials, labor and other work, provided under this Agreement, except City-furnished materials, equipment and labor, against defects and nonconformances in design, materials and workmanship/workwomanship for a period beginning with the start of the work and ending twelve (12) months from and after final acceptance under the Agreement, regardless whether the same were furnished or performed by Service Provider or by any of its subcontractors of any tier. Upon receipt of written notice from City of any such defect or nonconformances, the affected item or part thereof shall be redesigned, repaired or replaced by Service Provider in a manner and at a time acceptable to City.

13. Default. Each and every term and condition hereof shall be deemed to be a material element of this Agreement. In the event either party should fail or refuse to perform according to the terms of this agreement, such party may be declared in default thereof.

14. Remedies. In the event a party has been declared in default, such defaulting party shall be allowed a period of ten (10) days within which to cure said default. In the event the default remains uncorrected, the party declaring default may elect to (a) terminate the Agreement and seek damages; (b) treat the Agreement as continuing and require specific performance; or (c) avail himself of any other remedy at law or equity. If the non-defaulting party commences legal or equitable actions against the defaulting party, the defaulting party shall be liable to the non-defaulting party for the non-defaulting party's reasonable attorney fees and costs incurred because of the default.

15. Binding Effect. This writing, together with the exhibits hereto, constitutes the entire agreement between the parties and shall be binding upon said parties, their officers,

employees, agents and assigns and shall inure to the benefit of the respective survivors, heirs, personal representatives, successors and assigns of said parties.

16. Indemnity/Insurance. a. The Service Provider agrees to indemnify and save harmless the City, its officers, agents and employees against and from any and all actions, suits, claims, demands or liability of any character whatsoever brought or asserted for injuries to or death of any person or persons, or damages to property arising out of, result from or occurring in connection with the performance of any service hereunder.

b. The Service Provider shall take all necessary precautions in performing the work hereunder to prevent injury to persons and property.

c. Without limiting any of the Service Provider's obligations hereunder, the Service Provider shall provide and maintain insurance coverage naming the City as an additional insured under this Agreement of the type and with the limits specified within Exhibit ____, consisting of _____ (____) pages[s], attached hereto and incorporated herein by this reference. The Service Provider before commencing services hereunder, shall deliver to the City's Director of Purchasing and Risk Management, P. O. Box 580 Fort Collins, Colorado 80522 one copy of a certificate evidencing the insurance coverage required from an insurance company acceptable to the City.

17. Entire Agreement. This Agreement, along with all Exhibits and other documents incorporated herein, shall constitute the entire Agreement of the parties. Covenants or representations not contained in this Agreement shall not be binding on the parties.

18. Law/Severability. The laws of the State of Colorado shall govern the construction interpretation, execution and enforcement of this Agreement. In the event any provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provision of this Agreement.

19. Special Provisions. [Optional] Special provisions or conditions relating to the services to be performed pursuant to this Agreement are set forth in Exhibit ____, consisting of ____ (____) page[s], attached hereto and incorporated herein by this reference.

CITY OF FORT COLLINS, COLORADO
a municipal corporation

By: _____
John F. Fischbach
City Manager

By: _____
James B. O'Neill II, CPPO, FNIGP
Director of Purchasing and Risk Management

Date: _____

ATTEST:

City Clerk

APPROVED AS TO FORM:

Assistant City Attorney

[Insert Corporation's name] or
[Insert Partnership name] or
[Insert individual's name]
Doing business as ____ [insert name of business]
By: _____

PRINT NAME

CORPORATE PRESIDENT OR VICE PRESIDENT

Date: _____
(Corporate Seal)

ATTEST:

CORPORATE SECRETARY

EXHIBIT B

INSURANCE REQUIREMENTS

1. The Service Provider will provide, from insurance companies acceptable to the City, the insurance coverage designated hereinafter and pay all costs. Before commencing work under this bid, the Service Provider shall furnish the City with certificates of insurance showing the type, amount, class of operations covered, effective dates and date of expiration of policies, and containing substantially the following statement:

"The insurance evidenced by this Certificate will not be cancelled or materially altered, except after ten (10) days written notice has been received by the City of Fort Collins."

In case of the breach of any provision of the Insurance Requirements, the City, at its option, may take out and maintain, at the expense of the Service Provider, such insurance as the City may deem proper and may deduct the cost of such insurance from any monies which may be due or become due the Service Provider under this Agreement. The City, its officers, agents and employees shall be named as additional insureds on the Service Provider's general liability and automobile liability insurance policies for any claims arising out of work performed under this Agreement.

2. Insurance coverages shall be as follows:
 - A. Workers' Compensation & Employer's Liability. The Service Provider shall maintain during the life of this Agreement for all of the Service Provider's employees engaged in work performed under this agreement:
 1. Workers' Compensation insurance with statutory limits as required by Colorado law.
 2. Employer's Liability insurance with limits of \$100,000 per accident, \$500,000 disease aggregate, and \$100,000 disease each employee.
 - B. Commercial General & Vehicle Liability. The Service Provider shall maintain during the life of this Agreement such commercial general liability and automobile liability insurance as will provide coverage for damage claims of personal injury, including accidental death, as well as for claims for property damage, which may arise directly or indirectly from the performance of work under this Agreement. Coverage for property damage shall be on a "broad form" basis. The amount of insurance for each coverage, Commercial General and Vehicle, shall not be less than \$500,000 combined single limits for bodily injury and property damage.

In the event any work is performed by a subcontractor, the Service Provider shall be responsible for any liability directly or indirectly arising out of the work performed under this Agreement by a subcontractor, which liability is not covered by the subcontractor's insurance.

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Figure 4: Second Floor Decontamination and Removal Areas

LIST OF ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulations
DOT	United States Department of Transportation
HEPA	High Efficiency Particulate Air
HUD	United States Department of Housing and Urban Development
HVAC	Heating, Ventilation, and Air Conditioning
ICPMS	Inductively Coupled Argon Plasma/Mass Spectrometry
OSHA	United States Occupational Safety and Health Administration
PELs	Permissible Exposure Limits
SOW	Scope of Work
USEPA	United States Environmental Protection Agency
WALSH	Walsh Environmental Scientists and Engineers, LLC
$\mu\text{g}/\text{ft}^2$	micrograms per square foot
$\mu\text{g}/\text{m}^3$	micrograms per cubic meter

Scope of Work for the Decontamination and Removal of Lead Contaminated Materials City of Fort Collins, Police Firing Range Fort Collins, Colorado

1 PROJECT SUMMARY

Walsh Environmental Scientists and Engineers, LLC (WALSH) was contracted by the City of Fort Collins to performed wipe and bulk sampling to characterize the extent of the contamination within the Police Firing Range in anticipation of a planned renovation (WALSH, 2003). Sampling efforts were focused on the shooting range portion of the building and in the ceiling space located directly above and adjacent to the range. The table of results for the wipe and bulk sampling can be found in Appendix A. Drawings indicating sampling locations, as well as decontamination and removal areas can be found in Appendix B.

This Scope of Work (SOW) specifies the materials to be removed and the materials to be decontaminated. Following decontamination, WALSH will perform wipe sampling for clearance purposes as described in Section 4. The contractor performing this project must comply with all applicable federal, state, and local regulations.

2 SCOPE OF WORK

The work specified herein shall be the removal and decontamination of lead contamination from the City of Fort Collins Police Firing Range, located at 2554 Midpoint Drive in Fort Collins, Colorado. The work should be performed by persons trained, knowledgeable, and qualified in the techniques of lead decontamination and removal. The materials to be removed and materials and locations requiring decontaminated are described in the section below and shown on drawings located in Appendix B. The contractor is responsible for determining exact quantities of materials to be removed and quantities of areas to be decontaminated.

2.1 Materials to be Removed

- In the firing range portion of the building where decontamination is to take place, all the 2' x 4' lay-in ceiling tiles, carpet, and fiberglass insulation above the ceiling are to be removed and properly disposed. These materials have been tested and will require management and disposal as hazardous waste. The contractor is responsible for proper material containerization, labeling, manifesting, and transportation functions related to disposal.
- Remove and properly dispose of all HVAC air filters in conjunction with the decontamination and removal of lead contaminated materials.

2.2 Locations to be Cleaned and Decontaminated

- Ductwork (interior and exterior), floor, walls, ceilings and all horizontal surfaces in the firing range (ground level and second floor ceiling space) portion of the building will be cleaned and decontaminated. All horizontal surfaces include those areas where dust has accumulated including, but not limited to, tops of lights, ducts, pipes, trusses, and range equipment.
- Clean and decontaminate ductwork (interior) of HVAC equipment located in the mechanical room on the east side of the building.
- Please note that the City has decided to leave the backstop in place following the decontamination process. The metal plates and open areas behind the backstop must be cleaned but this immediate area will not be compared to the clearance wipe sampling protocol described below in Section 4.

2.3 Recommended Removal and Decontamination Techniques

- Setup a functional decontamination area or unit.
- Establish a controlled work area using critical and physical barriers and install negative air machines equipped with High Efficiency Particulate Air (HEPA) filters to prevent the spread of lead dust.
- Wet materials to be removed to minimize dust generation during removal activities.
- Vacuum all surfaces using HEPA equipped vacuums, starting on the ceiling, working down and ending with the floors.
- Wet wash all surfaces with a lead specific cleaning agent (mixed according to the manufactures instructions) and rinse with clean water. Wash no more than 1,000 square feet of surfaces per five (5) gallons of mixture.
- After drying, HEPA vacuum all surfaces a final time.

2.4 Special Considerations

- The contractor is required to submit a Health and Safety Plan to City of Fort Collins as described in Section 3.
- 115/220 Volt electricity is available in the building. The contractor is responsible for providing any rework wiring required. Any rework wiring required must be done by a qualified and licensed electrician.
- Water and sewer service is available in the building. All waste water will be collected, filtered, and disposed of in accordance with local wastewater facility requirements.
- Cleaning methods should be chosen to minimize the generation of dust (e.g. critical barriers, wet methods and/or High Efficiency Particulate Air [HEPA] vacuum).
- Contractors shall take steps to prevent the transport of dust and/or contamination to adjacent portions of the firing range. This may include setting up barriers to keep dust out of those areas.
- The contractor shall perform required testing to determine if the waste generated during the cleaning and decontamination process should be disposed of as non-hazardous waste, or as hazardous waste. The contractor is responsible for the proper disposal of these materials, including all associated waste testing and disposal costs.

- The building owner and/or owner's representative will provide final visual inspection for all work areas. Clearance protocols for lead will include a visual inspection to determine that each specified area is free of visible dust and debris and final wipe sampling. Any subsequent costs associated from subsequent wipe sampling will be borne by the contractor. Clearance criteria can be found in Section 4.0.
- The contractor is responsible for access to the inside of all ductwork and HVAC systems. Any holes cut for access must be repaired by a professional HVAC contractor at no additional expense to the owner.
- The contractor is responsible for removing any/all fixtures, fixed objects and other items that may be required to facilitate removal and decontamination of impacted materials. The contractor is responsible for reinstalling any removed items following decontamination unless the item is noted for removal and disposal. Light fixtures are to remain in place.
- Surfaces that cannot be properly decontaminated (porous surfaces) must be removed and properly disposed of.

3 WORKER PROTECTION

3.1 Health and Safety Manual

The contractor is responsible for providing a site-specific Health and Safety Plan for the project. The Plan must be submitted and approved by the owner and/or the owner's representative prior to the start of any work. After the Health and Safety Plan is approved, a copy must be kept at the job site through the duration of project.

3.2 Lead Worker Health and Safety Regulations

The U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) regulates worker exposure to lead under regulations promulgated at 29 CFR 1926.62. This standard applies to all construction work where employees may be exposed to lead, including renovation and remodeling activities. During the lead decontamination and removal functions the contractor must follow the requirements outlined in 29 CFR 1926.62. Briefly summarized, the standard requires the following:

- An Action Level of 30 micrograms of lead per cubic meter of air ($\mu\text{g}/\text{m}^3$) averaged over an 8-hour day.
- A Permissible Exposure Limit (PEL) of $50 \mu\text{g}/\text{m}^3$ for an 8-hour period.
- A preliminary exposure assessment (air monitoring) to determine that the airborne lead concentration has not exceeded the Action Level or the PEL.
- Protection of employees during the preliminary exposure assessment.
- Engineering and administrative controls or respiratory protection for workers exposed above the PEL.
- A written compliance program to control workers' lead exposure to below the PEL.
- Protective clothing for workers exposed above the PEL or when there is a potential for eye and skin irritation.

- Hygiene facilities and procedures where workers are exposed above the PEL without regard to the use of respirators.
- Biological testing consisting of blood sampling and analysis for lead at the beginning and at the end of the project.
- Medical removal protection for workers overexposed to lead.
- Information and training for employees who may be exposed to lead.
- Warning signs where workers are exposed above the PEL.
- Record keeping by employers of lead monitoring information and medical examinations.

3.3 Additional Codes and Regulations

All federal, state, and local regulations should be followed during the decontamination and removal of lead contaminated materials. Additional regulations include, but are not limited to the following:

U.S. Department of Labor, Occupational Safety and Health Administration (OSHA):

- 29 CFR 1910.134 -Respiratory Protection
- 29 CFR 1926.20 -General Safety and Health Provisions
- 29 CFR 1926.21 -Safety Training and Education
- 29 CFR 1926.23 -First Aid
- 29 CFR 1926.24 -Fire Protection
- 29 CFR 1926.25 -Housekeeping
- 29 CFR 1926.28 -Personal Protective Equipment
- 29 CFR 1926.59 -Hazard Communication
- 29 CFR 1926.103 -Respiratory Protection
- 29 CFR 1926.451 -Scaffolding
- 29 CFR 1926.500 -Fall Protection

U.S. Department of Transportation (DOT), including but not limited to:
49 CFR 171 and 172 -Hazardous Substances

U.S. Environmental Protection Agency (USEPA), including but not limited to:

- 40 CFR 260, 261, 262, 263, and 264 -Resource Conservation and Recovery Act (RCRA)

U.S. Department of Housing and Urban Development (HUD):

- 24 CFR 35, 905, 941, 965, and 968 -Lead Based Paint Hazard Elimination; Interim Rule

4 CLEARANCE WIPE SAMPLES

Following cleaning and decontamination, the owner or owner's representative will perform a thorough visual inspection and post-decontamination wipe samples from one hundred square centimeter areas in accordance with HUD wipe sample clearance criteria to ensure that remaining lead levels are below applicable criteria as described below. Wipe samples will be done in similar locations to initial sampling following completion of lead removal and decontamination. Additional samples may also be collected, if deemed necessary.

All samples will be collected using "Ghost Wipes" to wipe measured areas of selected surfaces. Each wipe sample may represent a composite of multiple randomly selected surfaces in each area. Each sample will be collected by wiping the 100 square centimeter area with vertical and horizontal strokes. After wiping, the samples will be submitted for laboratory analysis to Reservoirs Environmental, Inc. in Denver, Colorado. Wipe samples will be analyzed for total lead using EPA Method 3050/7420 by atomic absorption (AA) methodologies.

In determining whether an employer has maintained surfaces of hygiene facilities free from contamination, OSHA adopted a clean-up level of $200 \mu\text{g}/\text{ft}^2$ (OSHA, 1993). This standard is applicable to the evaluation of the cleanliness of change areas, storage facilities, and lunchroom/eating areas on construction sites. This level was based on the EPA/HUD standard in force at the time, and has not been updated by OSHA. **The lead concentration on all surfaces including but not limited to floors, walls, ceilings, fixtures, plenum surfaces and inside ductwork following decontamination and removal should be below to $200 \mu\text{g}/\text{ft}^2$ level.**

Any areas which exceed these criteria will require additional cleaning and wipe testing by the owner/owner's representative at contractor's expense. HUD protocols will be used for all additional wipe samples collected. The estimated cost for the owner/owner's representative to perform additional wipe sampling, reporting and site visits, which will be borne by the contractor, will be \$375 per visit plus \$45 per wipe sample collected.

5 REFERENCES

Code of Federal Regulations (CFR), Titles 24, 29, 40, and 49. U.S. Government Printing Office, 2001.

WALSH, 2003. Pre-renovation Building Inspection for Asbestos-Containing Building Materials, Lead Wipe, and Lead Waste Characterization Sampling, Police Firing Range, Fort Collins, Colorado. WALSH Project No. 5331-010

APPENDIX A

TABLES

Table 1: Wipe (Lead) Sampling Information and Analytical Results					
City of Fort Collins - Police Firing Range, 2554 Midpoint Drive, Fort Collins, Colorado					
Date	Room ID	Sample Number	Surface Type	Sampling Location	Analytical Result - Lead (µg/ft²)
5/16/03	W Range	PBW-01	Painted Concrete	W wall, 85' N of S, @ 3.5' height	3950
5/16/03	W Range	PBW-02	Painted Concrete	W wall, 65' N of S, @ 3.5' height	4059
5/16/03	W Range	PBW-03	Painted Concrete	W wall, 45' N of S, @ 6' height	805
5/16/03	W Range	PBW-04	Concrete	W wall, 75' N of S, @ 12' height	4573
5/16/03	E Range	PBW-05	Metal	75' N of S, 26' E of W	9545
5/16/03	E Range	PBW-06	Metal	37' N of S, 23' W of E	12409
5/16/03	E Range	PBW-07	Painted Concrete	E wall, 75' N of S @ 4' height	2955
5/16/03	E Range	PBW-08	Painted Concrete	E wall, 55' N of S @ 4' height	2782
5/16/03	E Range	PBW-09	Metal	E wall duct, 55' N of S @ 12' height	6273
5/16/03	E Range	PBW-10	Plastic	Partition Wall, 25' N of S, 23' W of E @ 12' height	6182
5/16/03	Field Blank	PBW-11	N/A	N/A	132
5/16/03	E Range	PBW-12	Metal	Top of Booth 4, 16' N of S, 24' W of E	4532
5/16/03	E Range	PBW-13	Metal	1' N of S, 5' W of E (Duct)	10227
5/16/03	E Range	PBW-14	Metal	0.5' N of S, 6' W of E @ 9' height (Duct)	3045
5/16/03	E Range	PBW-15	Metal	1' N of S, 15' E of W (Duct)	3386
5/16/03	E Range	PBW-16	Metal	0.5' N of S, 15' E of W @ 8' height (Duct)	3341
5/16/03	E Range	PBW-17	Metal	1' N of S, 12' E of W (Duct)	3136
5/16/03	Ceiling Storage	PBW-18	Concrete	W wall, 22' N of S @ 4' height	3659
5/16/03	Ceiling Storage	PBW-19	Metal	Floor, 26' N of S, 25' E of W	8409
5/16/03	Ceiling Storage	PBW-20	Metal	Floor, 15' N of S, 8' W of E	5553
5/16/03	Ceiling Storage	PBW-21	Metal	23' N of S, 4' W of E (Duct)	8182
5/16/03	Exterior HVAC	PBW-22	Metal	12' height	477
5/16/03	Exterior HVAC	PBW-23	Metal	11' height	7727
5/16/03	E Range	PBW-24	Concrete	Floor, 75' N of S, 28' E of W	3100

Table 1: Wipe (Lead) Sampling Information and Analytical Results					
City of Fort Collins - Police Firing Range, 2554 Midpoint Drive, Fort Collins, Colorado					
Date	Room ID	Sample Number	Surface Type	Sampling Location	Analytical Result - Lead ($\mu\text{g}/\text{Ft}^2$)
5/16/03	E Range	PBW-25	Metal	Top of Carriage 3, 32' N of S, 28' W of E	10455
5/16/03	E Range	PBW-26	Concrete	Floor, 45' N of S, 25' E of W	2814
5/16/03	Equip. Blank	PBW-27	Plastic	N/A - Sample Template	BDL
5/16/03	Field Blank	PBW-28	N/A	N/A	BDL
EPA Standard for residential floors					40
EPA Standard for residential window sills					250

Note: All sample numbers contain a prefix of "5331-010-"

Analytical results highlighted in **BOLD** typeface exceed regulatory values

$\mu\text{g}/\text{Ft}^2$ = micrograms per square foot

Table 2: TCLP (Lead) Sampling Information and Analytical Results						
City of Fort Collins - Police Firing Range, 2554 Midpoint Drive, Fort Collins, Colorado						
Date	Room ID	Sample Number	Material	Sampling Location	Analytical Result (mg/L)	Regulatory Limit (mg/L)
5/16/03	E/W Range	TCLP-01	White acoustical panels	Various locations, partition wall btwn E/W range and loose panels	BDL	5.0
5/16/03	E/W Range	TCLP-02	White 2' x 4' lay-in ceiling panels	Various locations, along C/L from booths to trap and rear E/W sides	56.3	5.0
5/16/03	E/W Range	TCLP-03	Orange/Red carpet	Various locations, behind shooting booths E/W sides	235.0	5.0
5/16/03	Storage Area Above Ceiling	TCLP-04	Pink fiberglass insulation	Various locations, along metal panel/drop ceiling interface	265.0	5.0

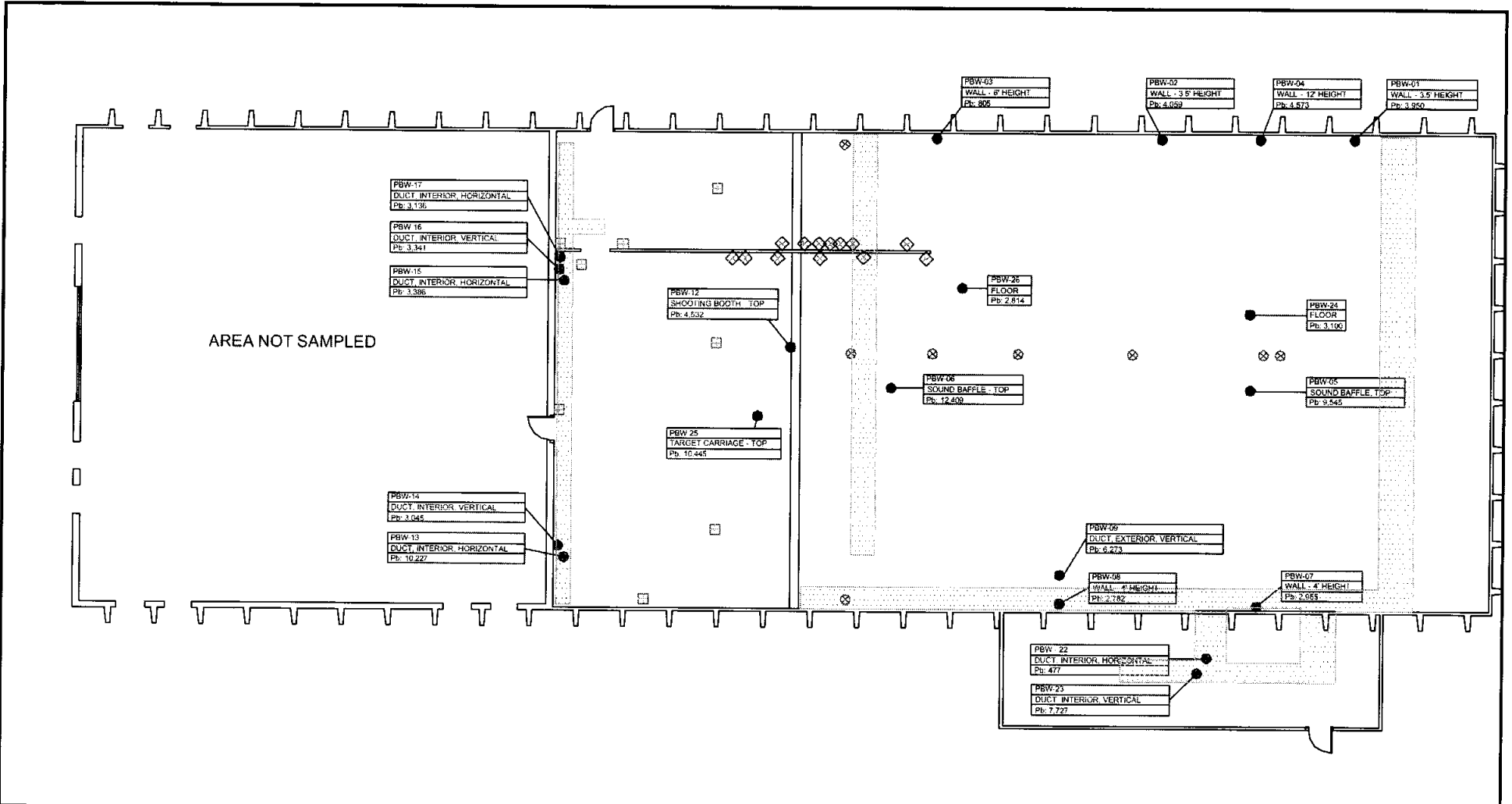
Note: All sample numbers contain a prefix of "5331-010-"
Analytical results highlighted in **BOLD** typeface exceed regulatory values



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APPENDIX B

DRAWINGS



LEGEND

- LEAD WIPE SAMPLE ID LOCATIONS, AND RESULTS (ug/FT²)
- ⋯ HVAC DUCTWORK (LOCATION APPROXIMATE)

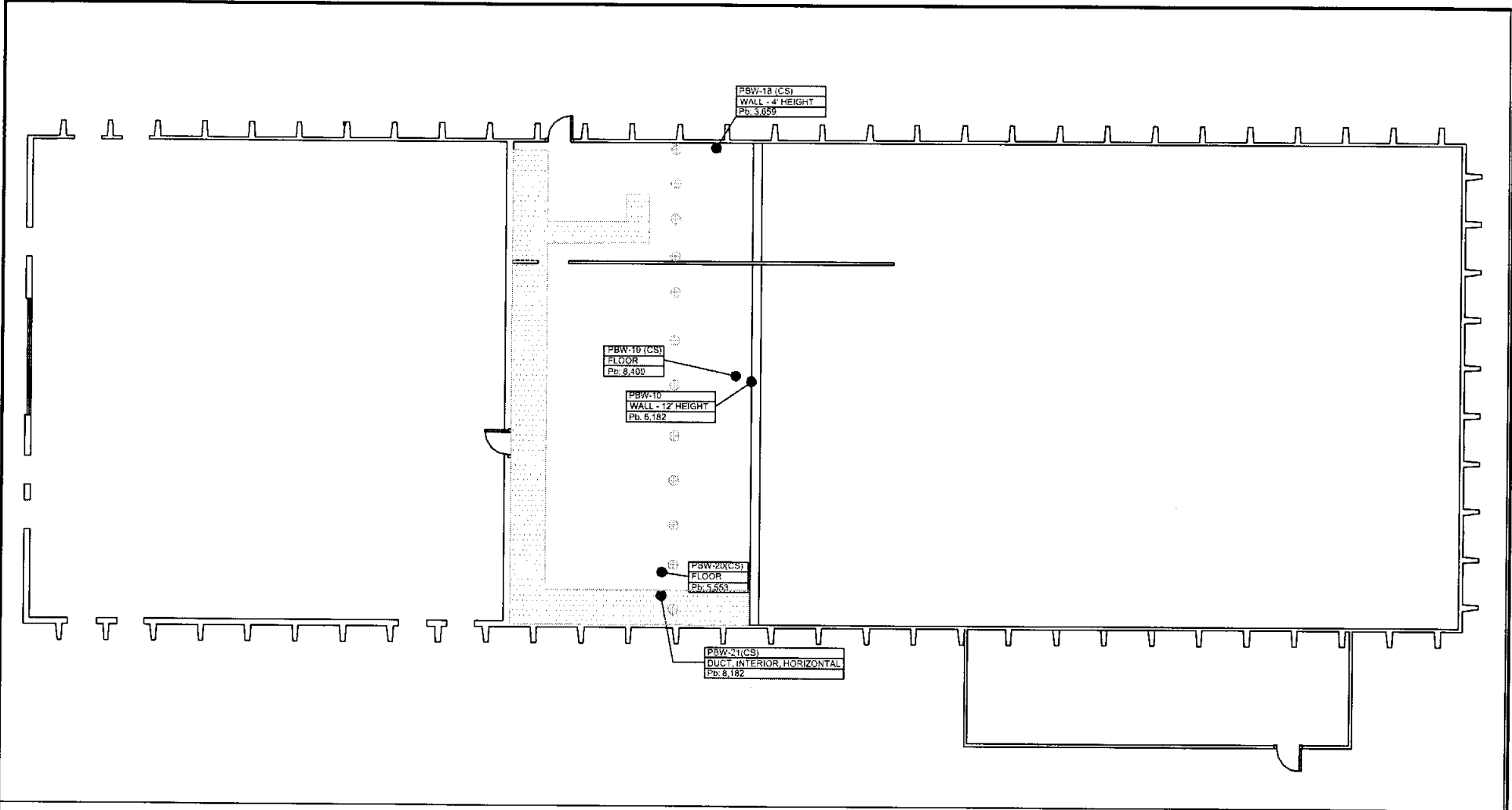
- ◇ TCLP-01
Below Detection Limit
13 point comp.
- ⊗ TCLP-02
56.3 mg/L
8 point comp.

- TCLP-03
235.0 mg/L
8 point comp.

SAMPLE LOCATIONS AND RESULTS

No.	Revisions	Date	By
#1		803	RW
#2			
#3			
#4			

Date: 803	Drawn By: J. Marck
Project No. 5331-020	Checked By: T. Sanders
Figure: 1	Sheet 1 of 4



LEGEND

● LEAD WIPE SAMPLE ID LOCATIONS, AND RESULTS (ug/FT²)

CS CEILING SPACE

▨ HVAC DUCTWORK (LOCATION APPROXIMATE)

⊕ TCLP-04
265.0 mg/L
12 point comp.



SAMPLE LOCATIONS AND RESULTS

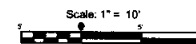
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#1			
#2			
#3			
#4			

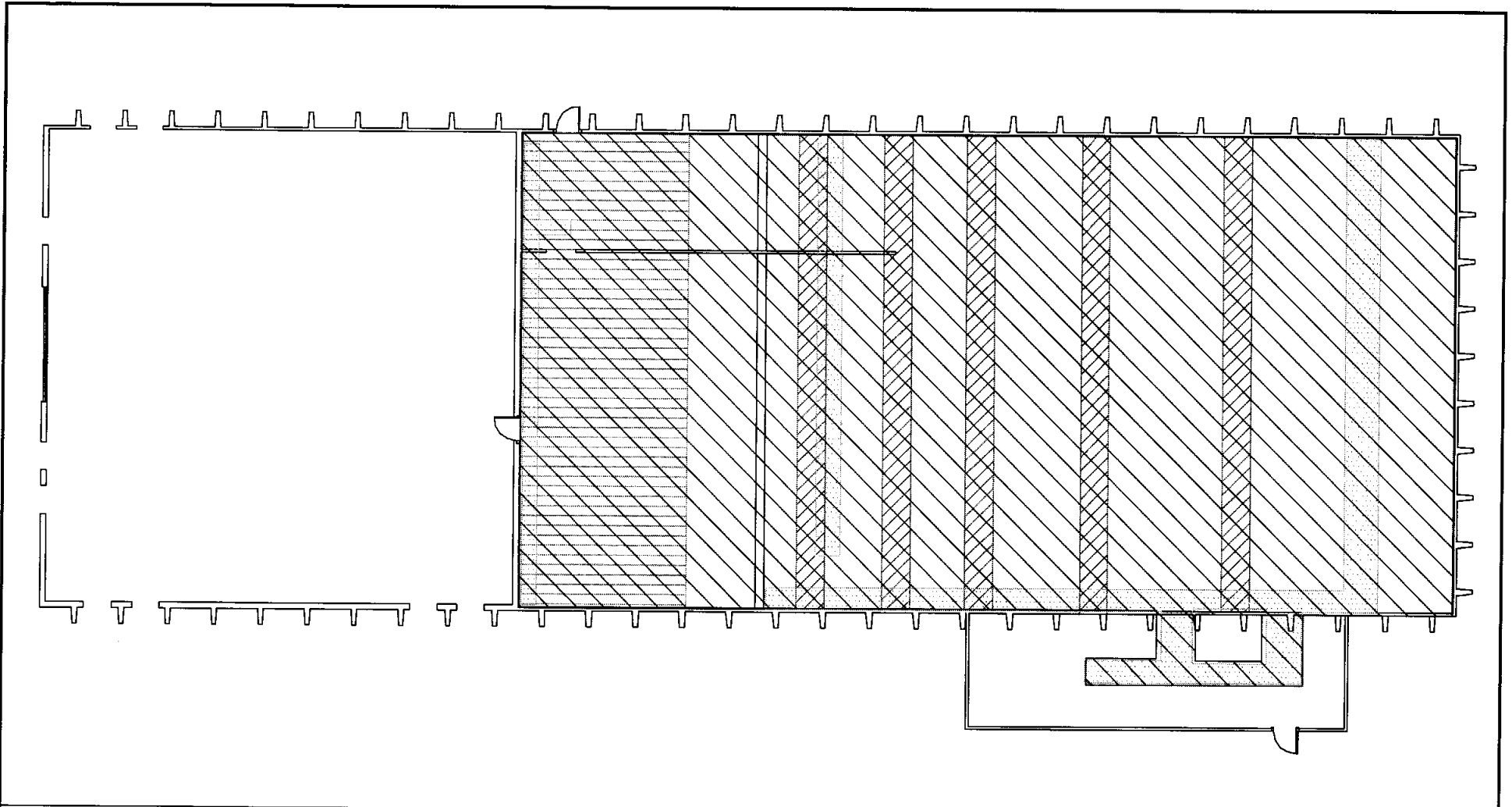
Date: 8/03	Drawn By: RW
Project No. 5331-020	Checked By: T. Sanders
Figure: 2	Sheet 2 of 4

Walsh
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

CITY OF FORT COLLINS - FIRING RANGE SECOND FLOOR





LEGEND

-  LEAD - CONTAMINATED CARPET
235.0 mg/L
-  HVAC DUCTWORK (LOCATION APPROXIMATE)

-  LEAD - CONTAMINATED LAY-IN-CEILING TILES (2'x4')
56.3 mg/L
-  DECONTAMINATION AREAS

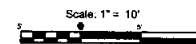
DECONTAMINATION AND REMOVAL AREAS

No.	Revisions	Date	By
#1			
#2			
#3			
#4			

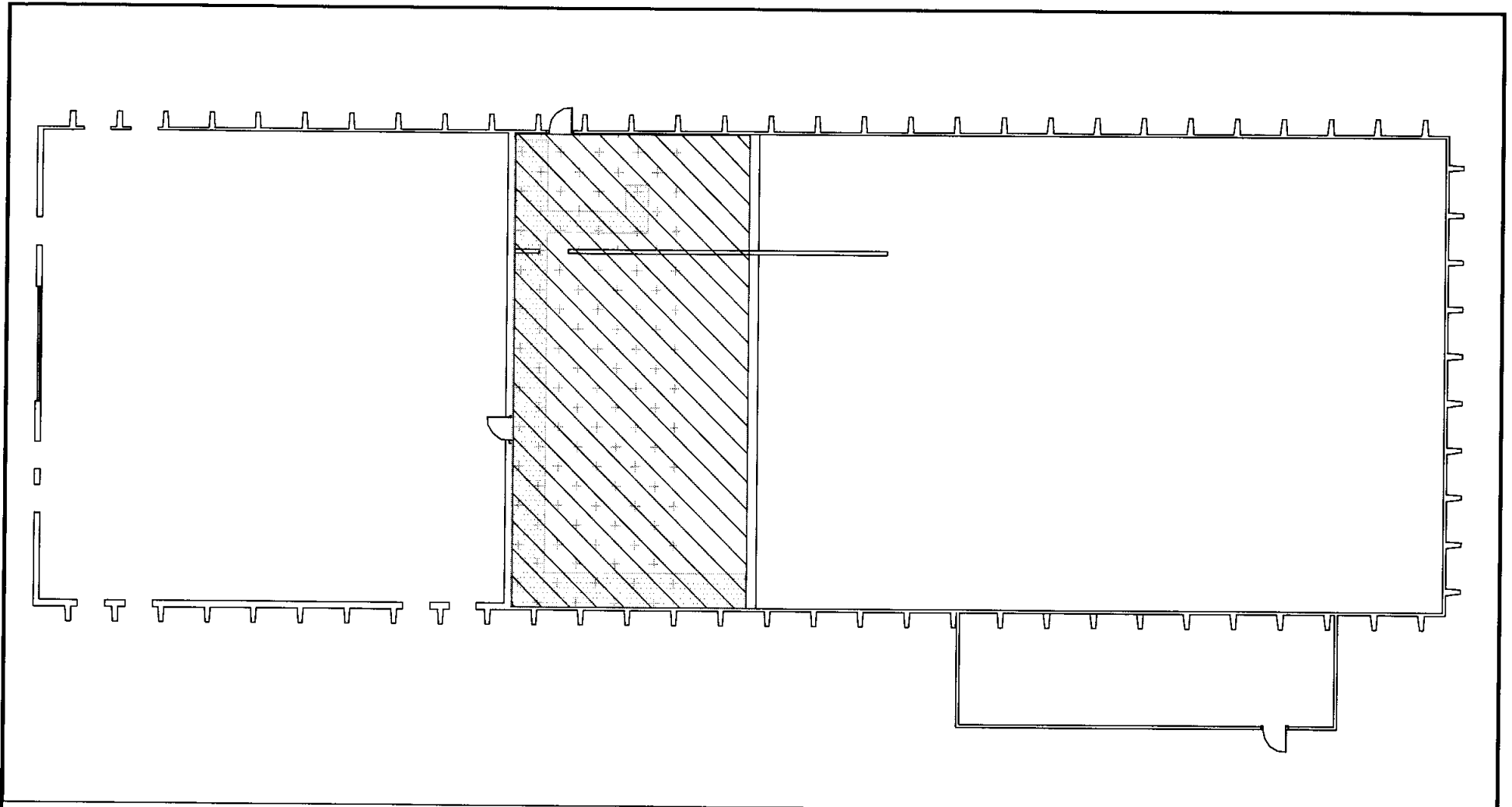
Walsh
Environmental Scientists and Engineers, LLC

CITY OF FORT COLLINS - FIRING RANGE GROUND LEVEL

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Date: 8/03	Drawn By: J. Marck
Project No. 5331-020	Checked By: T. Sanders
Figure: 3	Sheet 3 of 4



LEGEND



LEAD - CONTAMINATED FIBERGLASS INSULATION
265.0 mg/L



DECONTAMINATION AREAS



HVAC DUCTWORK (LOCATION APPROXIMATE)



**DECONTAMINATION AND
REMOVAL AREAS**

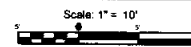
No.	Revisions	Date	By
#1			
#2			
#3			
#4			



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CITY OF FORT COLLINS - FIRING RANGE SECOND FLOOR

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Date: 8/03	Drawn By: RW
Project No. 5331-020	Checked By: T. Sanders
Figure: 4	Sheet 4 of 4