The City of Caldwell Kansas

14 W Central Ave.

Caldwell, KS 67022

620.845.6514

BID FOR: 416 N Ewing, Caldwell KS

The undersigned hereby agrees to rehabilitate 416 N Ewing, Caldwell, Kansas according to the specifications listed and price shown. Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.

Bids are to be returned to the City Hall, 14 W Central Ave., Caldwell, Kansas 67022, in a sealed envelope marked "416 N Ewing" no later than **11:00 am** on the 1st day of November, 2022. Sending bids by delivery service is not recommended due to non-consistent delivery service. Bids may be hand delivered to bid opening.

Bids will be opened and read in the Caldwell Chamber Room at 113 S Main St, Caldwell, KS.

11am, November 1, 2022

Address all questions to:

City of Caldwell	**Ranson Financial (Grant Administrators)**
Leah Sommerhoff	Crystal Hinnen
Kristen Sandoval	Rose Mary Saunders
620.845.6514	316.264.3400

Name of Bidding Company: _____

Authorized Signature & Title: _____

Business Address: _____

_____

Connie Eckerman
416 N. Ewin
Caldwell, Kansas

Description	Cost written in numbers
Exterior: Install vinyl siding over deteriorated siding, including porch ceiling. Wrap all fascia, soffit, and trim.	
Cost written in word:	$
Exterior: Install new insulated pre-hung steel door with self-storing storm door on front and back doors. Install new self-storing storm door to utility room.	
Cost written in word:	$
Exterior: Install new guttering with downspouts and concrete splash blocks.	
Cost written in word:	$
Exterior: LSWP Replace deteriorated wood windows on the house with single-hung double pane vinyl replacements. Including basement windows.	
Cost written in word:	$
Interior Electrical: Raise mast head so wires are 10' above back porch landing. Secure any loose fixtures or recepts. Make sure all recepts, lights and switches are working as designed and have covers. All Recepts within six feet of water source must have GFCI protection. Install a new outlet in the hallway bathroom. Any 3 prong outlets that have an open ground need to be switched back to 2 prong or be GFCI protected. Install smoke detectors in accordance with local codes. Add switch to bathroom ceiling fan. Eliminate any wiring hazards.	
Cost written in word:	$
Total of Part 1	$
Cost written in word:	
Part 2 Lead Activities	
Costs for using lead safe work practices.	
Cost written in word:	$
Cost for preparing for clearance.	
Cost written in word:	$
Total of Part 2	$
Cost written in word:	
Total of Part 1 and 2	$
Cost written in word:	

Company Name:
Company Address:
Contact Name:
Contact Phone:
Contact Email

Authorized Signature: **Date:**

Authorized Printed Name:

Continuous Radon Monitor

Model Number: 1028
Calibration Date: 12/08/2021
Monitor Time: 9/16/2022 8:49

Serial Number: 208445009
CF: 2.60

Inspection Company

Brett Boswell
Boswell Home Improvement
1903 Tumbleweed
Hutchinson, Kansas-67502
Phone Number: 620-728-9595
License Number: KS-MS-0396

Billing Information

Mick & Connie Eckerman
416 N. Ewing
Caldwell, Kansas-67022
Phone: 620-845-1748

Site Information

Mick & Connie Eckerman
416 N. Ewing
Caldwell, Kansas-67022
Phone: 620-845-1748

Site & Condition

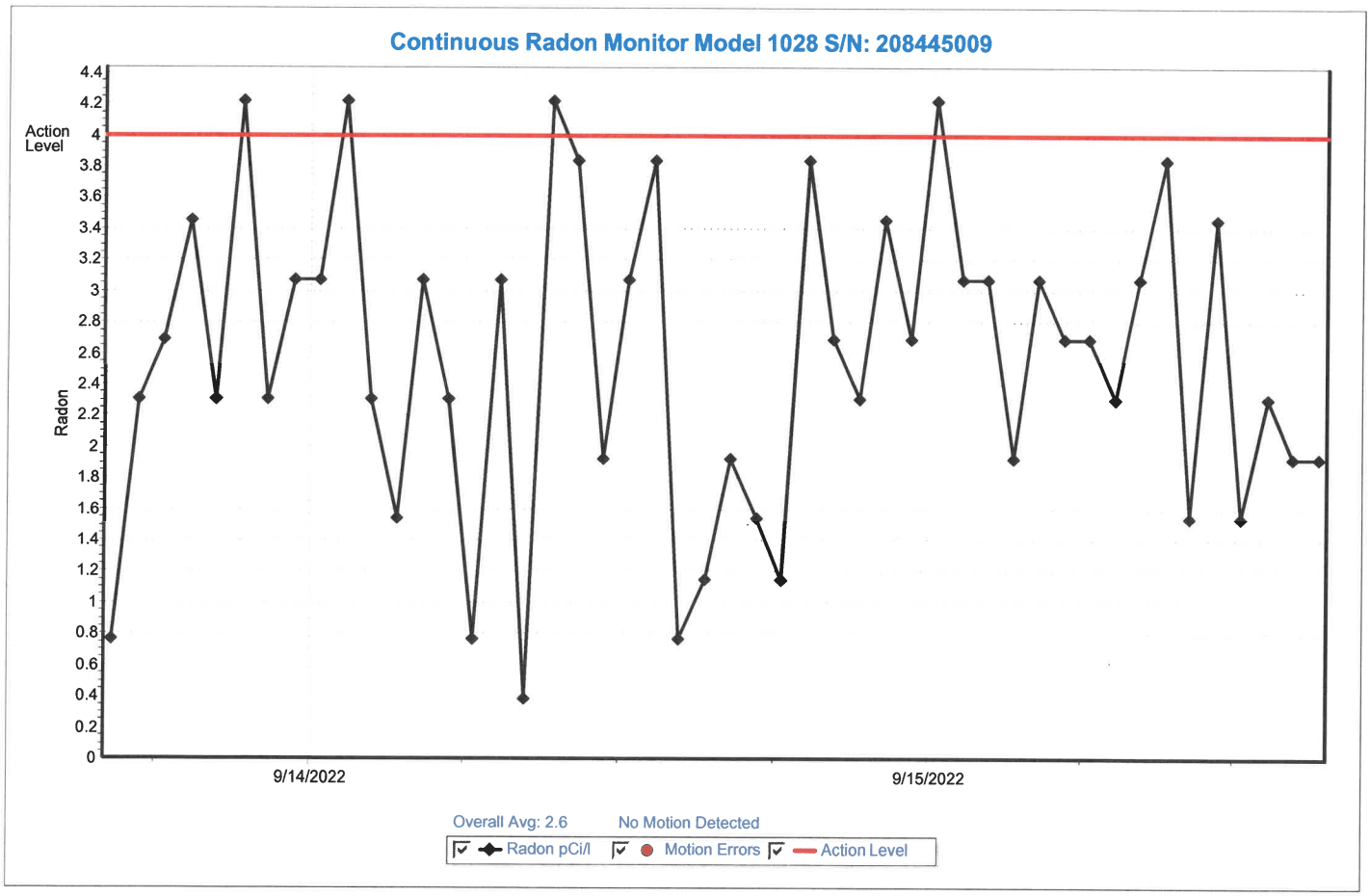
Wind: NA
Year Built: NA
Mitigation System: Not Installed
SqFt: NA

Atmospheric Condition: NA
Structure Type: NA
Monitor Location: NA

Test Summary

Start Time: 09/13/2022 15:21
End Time: 09/15/2022 15:21
Measurement Interval(hr): 1.0
Exposure Time: 2 Days 0 hrs

Overall Avg: 2.6 pCi/l
EPA Avg: 2.6 pCi/l



******* 09/13/2022 *******

Time	Counts pCi/l	Flags
16:21	0.8	
17:21	2.3	
18:21	2.7	
19:21	3.5	
20:21	2.3	
21:21	4.2	
22:21	2.3	
23:21	3.1	

******* 09/14/2022 *******

Time	Counts pCi/l	Flags
00:21	3.1	
01:21	4.2	
02:21	2.3	
03:21	1.5	
04:21	3.1	
05:21	2.3	
06:21	0.8	
07:21	3.1	
08:21	0.4	
09:21	4.2	
10:21	3.8	
11:21	1.9	
12:21	3.1	
13:21	3.8	
14:21	0.8	
15:21	1.2	
16:21	1.9	
17:21	1.5	
18:21	1.2	
19:21	3.8	
20:21	2.7	
21:21	2.3	
22:21	3.5	
23:21	2.7	

******* 09/15/2022 *******

Time	Counts pCi/l	Flags
00:21	4.2	
01:21	3.1	
02:21	3.1	
03:21	1.9	
04:21	3.1	
05:21	2.7	

******* 09/15/2022 *******

Time	Counts pCi/l	Flags
06:21	2.7	
07:21	2.3	
08:21	3.1	
09:21	3.8	
10:21	1.5	
11:21	3.5	
12:21	1.5	
13:21	2.3	
14:21	1.9	
15:21	1.9	

Error Flags:
M Motion:

Inspector Signature _____

PC Software Version: 2.2.0
Embedded Software Version: 109

Radon Risk Information

Radon is the second leading cause of lung cancer, after smoking. The US EPA and Surgeon General strongly recommend taking further action when a homes radon test results are 4.0 pCi/l or greater. The concentration of radon in the home is measured in picocuries per liter of air (pCi/l). Radon levels less than 4.0 pCi/l still pose some risk and in many cases may be reduced. If the radon level in the home is between 2.0 and 4.0 pCi/l, the EPA still recommends that you consider fixing the home. The average indoor radon level is estimated to be about 1.3 pCi/l; roughly 0.4 pCi/l of radon is normally found in the outside air. The higher the home radon level, the greater the health risk. Even homes with very high radon levels can be reduced to below 4.0 pCi/l and many homes can be reduced to 2.0 pCi/l or less.

Lead-Based Paint Hazard Risk Assessment Report

For The Dwelling Located At:
416 N. Ewing
Caldwell, Ks

Prepared For Owner(s):
Mick & Connie Eckerman
416 N. Ewing
Caldwell, KS
(620)8451748

Report Prepared By: Jeremy Bullins, Kansas Certified Risk Assessor

Risk Assessor Signature

SCKEDD
9730 East 50th Street North
Bel Aire, Kansas 67226
Ph 316-262-7035
Fax 316-262-7062

Kansas Risk Assessor Certification #: KS19-14629
Kansas Lead Activity Firm License #: KS01-1050

REPORT DATE:-08-29-2022

Table of -Contents

SINGLE FAMILY LEAD HAZARD EVALUATION NOTICE

To: Mick & Connie Eckerman
416 N Ewing
Caldwell, Ks

Type of Evaluation Completed: Risk Assessment

Date of On-Site Lead Hazard Risk Assessment: August 23, 2022

Date of Lead Hazard Risk Assessment Report: August 29, 2022

Summary of Results:

Lead-based paint hazards above the de-minimus were found.

De minimis Levels– the following levels which are used to determine whether deteriorated paint is a hazard that must be addressed:

- 20 square feet (2 square meters) on exterior surfaces
- 2 square feet (0.2 square meters) in any one interior room or space; or
- 10 percent of the total surface area on an interior or exterior type of component with a small surface area. e.g. window sills, baseboards, and trim

Lead-based paint means paint or other surface coatings that contain lead equal to or exceeding 1.0 milligram per square centimeter or 0.5 percent by weight or 5,000 parts per million (ppm) by weight.

Lead-based paint hazard means any condition that causes exposure to lead from dust-lead hazards, soil-lead hazards, or lead-based paint that is deteriorated or present in chewable surfaces, friction surfaces, or impact surfaces, and that would result in adverse human health effects.

Lead-contaminated Dust- means surface dust in residential dwellings or child-occupied facilities that contain an area or mass concentration of lead at, or in excess 10 µg/sq.ft. on an interior floor, 100 µg/sq.ft. on an interior windowsill, and 400 g/sq. ft. on an interior window trough. Lead dust forms when lead-based paint is dry scraped, dry sanded, or heated (vapor). Dust also forms when painted surfaces bump or rub together. Lead chips and dust can get on surfaces and objects that people touch. Settled lead dust can re-enter the air when people vacuum, sweep, or walk through it.

Lead-contaminated Soil- means bare soil on residential real property and on the property of a child-occupied facility that contains lead at, or in excess of 400 ppm for play areas and 1200 ppm for all other areas.

Summary of severity, types, and locations of lead-based paint hazards. List the dust-lead locations, and/or building components (including type of room or space and the material underneath the paint), and types of lead-based paint hazards found:

Lead Dust Location	Identified Hazards
Floors: No	Lead in dust levels at/or exceeding 10 µg/sq.ft. on interior floor
Sills: Yes- main bed sill	Lead in dust levels at/or exceeding 100 µg/sq.ft. on interior window sill

Identified Lead Hazards –

Location	Component	Substrate	Color	Condition	Hazard
Exterior					
Interior					

Lead based paint was not identified to be present

The condition of the paint is fair and therefore does not pose a hazard at this time. ***Lead safe work practices should be used if any of the above listed components are disturbed. Monitoring for paint deterioration should be performed frequently on the above components by the property owner(s).***

Contact person for more information about the risk assessment:
Printed name: Jeremy Bullins
Signature: _____
Kansas Risk Assessor Certification #: KS19-14629
Date of Report: August 29, 2022
Organization: South Central Kansas Economic Development District (SCKEDD)
Kansas Lead Activity Firm License #: KS01-1050
Street: 9730 East 50th Street North
City & State: Bel Aire, Kansas
Zip: 67226
Phone #: 316-262-7035

Identifying Information

A lead-based paint hazard risk assessment (risk assessment) was conducted on August 23 2022,of the single family detached home located at 416 N ewing, Caldwell Ks, to evaluate the presence of lead-based paint hazards inside and outside of the residence prior to a planned rehabilitation project. The assessment was conducted by Jeremy Bullins, a Certified Risk Assessor, Kansas Department of Health and Environment certification number KS19-14629.

The general scope of the risk assessment involved a visual survey of the site, exterior and interior of the structure, dust wipe sampling was performed on a variety of interior surfaces. Painted and varnished surfaces were tested using an X-ray Fluorescence Analyzer (XRF). Surfaces tested through the use of the XRF include friction and impact surfaces and surfaces showing deterioration along with surfaces to be disturbed by the planned renovation. Soil samples are collected and analyzed when bare soil is identified.

No known lead inspection or risk assessment has been conducted at this residence prior to this risk assessment.

1. Summary of Visual Inspection Results

The structure was built in or around 1910 based on information provided by the Sumner County Appraiser website. The dwelling was found to be in structurally sound condition. The house has wood siding. The doors and windows are deteriorated and should be replaced. The XRF testing results showed that lead-based paint hazards (as defined in Title X of the 1992 Housing and Community Development Act) exist in the following locations: None

2. Identified Hazards

A. Priority 1 - Dust Hazards

Leaded dust at or above HUD limits of: 10 $\mu g/ft^2$ for floors, 100 $\mu g/ft^2$ for interior windowsills and 400 $\mu g/ft^2$ for exterior window troughs are considered hazardous. Using these criteria the analysis showed dust **hazards** were found in the following area(s):

Room	Location	Surface	Reading
Master bed room	sill	wood	149 $\mu g/ft^2$

All other areas that were tested for leaded dust were found to be below the HUD/EPA/KDHE limit.

B. Priority 2 – Interior Paint Hazards / Priority 3 – Exterior Paint Hazards
Lead-Based Paint is any paint or other surface coatings that contains lead equal to or exceeding 1.0 milligram per square centimeter or 0.5 percent by weight or 5,000 parts per million (ppm) by weight.

Location	Component	Substrate	Color	Condition	Hazard
Exterior					
Interior					

Lead safe work practices should be used if any of the above listed components are disturbed. Monitoring for paint deterioration should be performed frequently on the above components by the property owner(s).

B. Priority 4 - Soil Hazards
Current KDHE, EPA and HUD Guidance for soil are 400 ppm for bare play area and 1,200 ppm for other areas. ***In an effort to be more protective of children, SCKEDD has adopted a soil lead standard of 400 ppm for all areas of the property.*** Lab results which detail soil lead levels over 5,000 ppm must be abated.

3. **Recommendations**

A. Hazard Reduction

Acceptable Interim Control Specifications
The following hazard reduction treatments selected from the National Center for Lead-Safe Housing's Library of Specifications are acceptable ways to address the identified hazards. The number refers to the spec number of the scope of work in the NCLSH data base.

General Requirements:

9030 – Clearance Report
9057 – Worker Training
9122 – Ground Containment
9640-Enclose Barrier/vinyl siding
9129 – Final Clean - All floors, walls, window sills and troughs
9532-Ext door replacement rehung
9455- Vinyl DH, DG, Low-e window

B. Relocation

1. No lead-based paint hazards will be addressed as part of the interior renovation of this dwelling, therefore relocation is not required. Clearance will have to be achieved at the completion of all work activity.

Resident Questionnaire

1. (a) Do children live in your home? **no**
   (b) If yes, how many? Ages?
   (c) Record blood lead levels, if known: no
   (d) Does a pregnant woman live in your home? **NO**

IF NO CHILDREN, SKIP TO Q5

2. Locate the rooms / areas where each child under the age of 72 months sleeps, eats and plays.

Name of child	Location of Bedroom	Location of all rooms where child eats	Primary location where child plays indoors	Primary location where child plays - outdoors

3. Where are toys stored / kept? **N/A**
4. Is there any visible evidence of chewed or peeling paint on the woodwork, furniture, or toys? **No**

Family Use Patterns

5. Which entrances are used most frequently? Both
6. Which windows are opened most frequently? None
7. Is there a window A/C? No If yes, where?
8. Is there a household garden? No If yes, where?
9. Are any landscaping activities planned? No If yes, where?
10. How often is the house cleaned? Weekly
11. What cleaning methods are used? Dust mop/wet mop/vacuum/dusting
12. Were there any building renovation completed recently? No If yes, where?
13. Where was the building debris stored? N/A
13. Are building renovations planned for this residence? Yes If yes see work-write-up attached.
14. Do any of the household work in a lead-related industry? No
If yes – where are dirty clothes placed & cleaned?

Form 5.1

Building Condition Visual Observation Form

Condition	Yes	No
Roof missing parts of surfaces (tiles, boards, shakes, etc.)		X
Roof has holes or large cracks (evidence of leaks)		X
Gutter or downspouts broken or missing		X
Chimney masonry cracked, bricks loose or missing, obviously out of plumb		X
Exterior or interior wall have obvious large cracks or holes, requiring more than routine painting		X
Exterior siding has missing boards or shingles		X
Water stains on interior walls or ceilings		X
Plaster walls or ceilings deteriorated		X
Two or more windows or doors broken, missing, or boarded up		X
Porch or steps have major elements broken, missing or boarded up		X
Foundation has major cracks, missing material, structural leans, or visibly unsound		X
Total Number	0	

If "yes" column has 2 or more checks, the dwelling is considered to be in poor condition. Less than 2 checks in the "yes" column means that the dwelling appears to be well maintained and the Standard Reevaluation Schedule does not need to be revised. Only buildings in "good" condition are eligible for the Lead Hazard Screen.

Resident Notification:
A copy of this lead assessment is being provided to the property owner. After the rehabilitation work is completed and clearance established a combination Clearance and Notice of Lead Hazard Reduction will be sent to the property owner.

SCKEDD will provide a copy of the EPA pamphlet, entitled "Protect Your Family from Lead in Your Home". The renovator hired by the City or County will provide the owner, and tenants (if applicable) a copy of the EPA pamphlet "The Lead-Safe Certified Guide to Renovate Right" in person prior to the start of work, or by mail at least seven days prior to work. This pamphlet will be provided no more than 60 days prior to the start of work.

These documents meet the Resident Notification requirements of KDHE/EPA/HUD.

Re- evaluation and Monitoring Schedule – The resident should visually monitor the condition of the paint annually. The normal re-evaluation schedule for paint film stabilization is 12 months. The residence should be professionally re-evaluated 12 months from the completion of the rehabilitation project.

Conditions and Limitations
Sampling and testing results are limited in that they represent existing concentration of lead in soil, paint and dust at the time of collection only. Changes in ventilation, occupancy, equipment, sources, and products used and other conditions may cause variations in anticipated concentrations.

Future Remodeling Precautions
The lead paint assessment of this property tested a limited number of areas for the presence of lead based paint (LBP). All LBP, dust and soil hazards *that were identified* are addressed in this report. However, LBP, dust lead hazards and/or soil lead hazards may be present at other locations of the property. For additional guidance, prior to any repairing or remodeling that will disturb painted surfaces, lead containing materials or soil, obtain a copy of the HUD publication entitled: **"Lead Paint Safety –a Field Guide for Painting, Home Maintenance, and Renovation Work"** (1999) by calling HUD @ 1-800-424-5323 and request the booklet or download the booklet from the HUD website @ www.hud/gov/offices/lead/communityinformation

Disclosure Regulations
A copy of this complete report must be made available to new tenants (lessees) and/or must be provided to purchasers of this property under Federal laws before they become obligated under a lease or sales contract (24 CFR part 35 and 40 CFR Part 745). Landlords (lessors) and /or sellers are also required to distribute an educational pamphlet approved by the U.S. Environmental Protection Agency and include standard warning language in their leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint.

Signatures (Owner and Risk Assessor and Renter)

Owner _____ Date _____

Kansas Certified Risk Assessor _____ Date 08/25/2022

Appendix -

Dust Wipe Analytical Results
Lead Based Paint Testing (XRF) Results
Floor Plan and Sample Map
Preliminary Rehabilitation work write-up
Certifications

SCKEDD Lead Activity Firm License
SCKEDD Radioactivity Material License
Risk Assessor Certification for Kansas
Risk Assessor XRF Training Certificate
NLLAP Laboratory Accreditation

XRF Performance Characteristic Sheet Data
Library of Specifications from the National Center for Healthy Housing

Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer SCKEDD (2767)
Address 9730 E. 50th St. N.
Wichita, KS 67226

Order #: 485967

Matrix Wipe
Received 08/24/22
Analyzed 08/25/22
Reported 08/25/22

Project EcKerman
Location 416 Ewling Caldwell
Number Caldwell

PO Number Caldwell

Sample ID / Parameter	Cust. Sample ID	Location / Method	Sample Date / Area	Total	Conc.	RL*
485967-001	LR F	Living Room Floor	08/23/22			
Lead		EPA 7000B	1.00 ft2	<5.00 µg/wipe	**<5.00 µg/ft2**	5.00 µg/ft2
485967-002	LR W	Living Room Window	08/23/22			
Lead		EPA 7000B	0.250 ft2	<5.00 µg/wipe	**<20.0 µg/ft2**	20.0 µg/ft2
485967-003	K F	Kitchen Floor	08/23/22			
Lead		EPA 7000B	1.00 ft2	<5.00 µg/wipe	**<5.00 µg/ft2**	5.00 µg/ft2
485967-004	K W	Kitchen Window	08/23/22			
Lead		EPA 7000B	0.250 ft2	<5.00 µg/wipe	**<20.0 µg/ft2**	20.0 µg/ft2
485967-005	U F	Utility Floor	08/23/22			
Lead		EPA 7000B	1.00 ft2	9.16 µg/wipe	**9.16 µg/ft2**	5.00 µg/ft2
485967-006	U W	Utility Window	08/23/22			
Lead		EPA 7000B	0.250 ft2	<5.00 µg/wipe	**<20.0 µg/ft2**	20.0 µg/ft2
485967-007	A F	Addition Floor	08/23/22			
Lead		EPA 7000B	1.00 ft2	<5.00 µg/wipe	**<5.00 µg/ft2**	5.00 µg/ft2
485967-008	A W	Addition Window	08/23/22			
Lead		EPA 7000B	0.250 ft2	<5.00 µg/wipe	**<20.0 µg/ft2**	20.0 µg/ft2
485967-009	B2 F	Bedroom 2 Floor	08/23/22			
Lead		EPA 7000B	1.00 ft2	<5.00 µg/wipe	**<5.00 µg/ft2**	5.00 µg/ft2
485967-010	B2 W	Bedroom 2 Window	08/23/22			
Lead		EPA 7000B	0.250 ft2	<5.00 µg/wipe	**<20.0 µg/ft2**	20.0 µg/ft2
485967-011	BA F	Bath Floor	08/23/22			
Lead		EPA 7000B	1.00 ft2	<5.00 µg/wipe	**<5.00 µg/ft2**	5.00 µg/ft2
485967-012	BA W	Bath Window	08/23/22			
Lead		EPA 7000B	0.250 ft2	<5.00 µg/wipe	**<20.0 µg/ft2**	20.0 µg/ft2
485967-013	B1 F	Bedroom 1 Floor	08/23/22			
Lead		EPA 7000B	1.00 ft2	<5.00 µg/wipe	**<5.00 µg/ft2**	5.00 µg/ft2
485967-014	B1 W	Bedroom 1 Window	08/23/22			
Lead		EPA 7000B	0.250 ft2	37.2 µg/wipe	**149 µg/ft2**	20.0 µg/ft2
485967-015	F F	Furnace Floor	08/23/22			

Minimum Total Reporting Limit: 5.0 µg/wipe. All internal QC parameters were met. Unusual sample conditions, if any, are described. Do not reproduce this report except in full. Concentration and *Reporting Limit (RL) based on areas provided by client. Values are reported to three significant figures. The test results apply to the sample as received. AIHA-LAP, LLC accredited for Lead (Lab ID 100527).

Analysis Report

Schneider Laboratories Global, Inc

2512 W. Cary Street • Richmond, Virginia • 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475

Customer SCKEDD (2767)
Address 9730 E. 50th St. N.
Wichita, KS 67226

Order #: 485967

Matrix Wipe
Received 08/24/22
Analyzed 08/25/22
Reported 08/25/22

Project EcKerman
Location 416 Ewling Caldwell
Number Caldwell

PO Number Caldwell

Sample ID / Parameter	Cust. Sample ID / Method	Location / Area	Sample Date / Total	Conc.	RL*
Lead	EPA 7000B	1.00 ft2	<5.00 µg/wipe	<5.00 µg/ft2	5.00 µg/ft2

Analyst SA
485967-08/25/22 05:27 PM

Reviewed By **Ben Wood**
Laboratory Director

EPA Lead Clearance

Location	Level	Unit
Floors	< 10.0	µg/ft2
Interior Window Sills	< 100	µg/ft2
Window Troughs	< 400	µg/ft2

HUD Lead Clearance

Location	Level	Unit
Interior Floors	< 10.0	µg/ft2
Porch Floors	< 40.0	µg/ft2
Interior Window Sills	< 100	µg/ft2
Window Troughs	< 100	µg/ft2

Minimum Total Reporting Limit: 5.0 µg/wipe. All internal QC parameters were met. Unusual sample conditions, if any, are described. Do not reproduce this report except in full. Concentration and *Reporting Limit (RL) based on areas provided by client. Values are reported to three significant figures. The test results apply to the sample as received. AIHA-LAP, LLC accredited for Lead (Lab ID 100527).

SCHNEIDER LABORATORIES GLOBAL, INC.
2512 West Cary Street, Richmond, Virginia 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475
www.slabinc.com • info@slabinc.com

	SCREEN		Kansas		☑ YES ☐ NO
			2767	Phone	316 833 1445
		Email	jbullins@schedd.org		
Project Name	Eckerman	PO #	Caldwell		
Project Location	416 Ewing	Special Instructions:			
Project Number	Caldwell				
Collected By	Jeremy Bullins				

☐ 2 Hour *	☐ Air	**Asbestos in Bulk**	**Metals Total**	**TCLP**	**Microbiology**
☐ Same day *	☐ Paint	☐ PLM	☑ Lead	☑ Lead	☐ BACT (MPN/PA)
☑ 1 business day	☐ Soil	☐ PLM Qualitative	☐ RCRA 8 Metals	☐ RCRA 8 Metals	☐ Mold Direct Exam
☐ 2 business days	☑ Wipe	☐ 400 Point Count	☐ Chromium VI	☐ Full TCLP (w/ organics 10 Day)	☐ Allergens
☐ 3 business days	☐ Bulk	☐ 1000 Point Count	☐ Mercury		**Sub-Contract**
☐ 5 business days	☐ Waste Water	☐ Gravimetric Prep	☐ _____		☐ TEM Chatfield
* not available for all tests	☐ Ground Water	**Asbestos in Air**	**Gravimetric**	**Miscellaneous**	☐ TEM AHERA
** past 3 PM the TAT will begin next business day	☐ Drinking Water	☐ PCM	☐ Total Dust NIOSH 0500	☐ Silica FTIR (7602)	☐ TEM 7402
Please schedule rush tests in advance	☐ TSP / PM10	☐ PCM-B Rules	☐ Resp. Dust NIOSH 0600	☐ _____	☐ Silica XRD (7500)
	☐ _____				

			Sample Identification (Employee, Bldg,Material, Type[1])							Total Air[4]
[redacted]										
DA F	8/23/22	9:00	Bath Floor	1.0 sqft						
DA W			11 Window	0.25 sqft						
B1 F			Bedroom Floor	1.0 sqft						
B1 W			11 Window	0.25 sqft						
FF			Furnace Floor	1.0 sqft						

For Aqueous and Solid samples ensure enough sample is sent for duplicate and spike analysis

[1]Type: A=Area, B=Blank, P=Personal, E=Excursion [2]Beginning/End of Sample Period [3]Liters/Minute [4]Volume in Liters [time in min × flow in L/min]

Relinquished By: _____ Signature: _____ Date/Time _____

Chain-of-Custody documentation continued internally

SCHNEIDER LABORATORIES GLOBAL, INC.
2512 West Cary Street, Richmond, Virginia 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475
www.slabinc.com • info@slabinc.com

S 15

485967
V:\485\485967
kfinnemore 8/24/2022 9:57:18 AM
UPS 1Z631Y1E2310000325

	SCKEDD		Kansas		☑ YES ☐ NO
			2767	Phone	316 833 1445
		Email	jbullins@sckedd.org		
Project Name	Eckleman	PO #	Caldwell		
Project Location	416 Ewing Caldwell	Special Instructions:			
Project Number	Caldwell				
Collected By	Jeremy Bullins				

		Asbestos in Bulk	Metals Total	TCLP	Microbiology
☐ 2 Hour *	☐ Air	☐ PLM	☑ Lead	☑ Lead	☐ BACT (MPN/PA)
☐ Same day *	☐ Paint	☐ PLM Qualitative	☐ RCRA 8 Metals	☐ RCRA 8 Metals	☐ Mold Direct Exam
☑ 1 business day	☐ Soil	☐ 400 Point Count	☐ Chromium VI	☐ Full TCLP (w/ organics 10 Day)	☐ Allergens
☐ 2 business days	☑ Wipe	☐ 1000 Point Count	☐ Mercury		**Sub-Contract**
☐ 3 business days	☐ Bulk	☐ Gravimetric Prep	☐ ______		☐ TEM Chatfield
☐ 5 business days	☐ Waste Water	**Asbestos in Air**	**Gravimetric**	**Miscellaneous**	☐ TEM AHERA
* not available for all tests	☐ Ground Water	☐ PCM	☐ Total Dust NIOSH 0500	☐ Silica FTIR (7602)	☐ TEM 7402
** past 3 PM the TAT will begin next business day	☐ Drinking Water	☐ PCM-B Rules	☐ Resp. Dust NIOSH 0600	☐ ______	☐ Silica XRD (7500)
Please schedule rush tests in advance	☐ TSP / PM10				
	☐ ______				

			Sample Identification (Employee, Bldg, Material, Type[1])						Total Air[4]
LR F	8/23/22	9:00	Living Room Floor	1.0 Sqft					
LR W	↓	↓	Living Room Window	0.25 Sqft					
K F			Kitchen Floor	1.0 Sqft					
K W			" Window	0.25 Sqft					
U F			Utility Floor	1.0 Sqft					
U W			" Window	0.25 Sqft					
A F			Addition Floor	1.00 Sqft					
A W			" Window	0.25 Sqft					
B2 F			Bedroom 2 Floor	1.0 Sqft					
B2 W	↓	↓	" Window	0.25 Sqft					

For Aqueous and Solid samples ensure enough sample is sent for duplicate and spike analysis.

[1]Type: A=Area, B=Blank, P=Personal, E=Excursion [2]Beginning/End of Sample Period [3]Liters/Minute [4]Volume in Liters (time in min × flow in L/min)

Relinquished By: ______________ Signature: ______________ Date/Time ______________

Chain-of-Custody documentation continued internally

SCHNEIDER LABORATORIES GLOBAL, INC.
2512 West Cary Street, Richmond, Virginia 23220-5117
804-353-6778 • 800-785-LABS (5227) • Fax 804-359-1475
www.slabinc.com • info@slabinc.com

	SCREDD		Kansas	☑ YES	☐ NO
			2767	Phone	316 833 1445
		Email	jbullins@scredd.org		
Project Name	Eckerman	PO #	Caldwell		
Project Location	4/C Ewing, Caldwell	Special Instructions:			
Project Number	Caldwell				
Collected By	Jeremy Bullins				

☐ 2 Hour *	☐ Air	**Asbestos in Bulk**	**Metals Total**	**TCLP**	**Microbiology**
☐ Same day *	☐ Paint	☐ PLM	☑ Lead	☑ Lead	☐ BACT (MPN/PA)
☑ 1 business day	☐ Soil	☐ PLM Qualitative	☐ RCRA 8 Metals	☐ RCRA 8 Metals	☐ Mold Direct Exam
☐ 2 business days	☑ Wipe	☐ 400 Point Count	☐ Chromium VI	☐ Full TCLP (w/ organics 10 Day)	☐ Allergens
☐ 3 business days	☐ Bulk	☐ 1000 Point Count	☐ Mercury		**Sub-Contract**
☐ 5 business days	☐ Waste Water	☐ Gravimetric Prep	☐ _____		☐ TEM Chatfield
* not available for all tests	☐ Ground Water	**Asbestos in Air**	**Gravimetric**	**Miscellaneous**	☐ TEM AHERA
** past 3 PM the TAT will begin next business day	☐ Drinking Water	☐ PCM	☐ Total Dust NIOSH 0500	☐ Silica FTIR (7602)	☐ TEM 7402
Please schedule rush tests in advance	☐ TSP / PM10	☐ PCM-B Rules	☐ Resp. Dust NIOSH 0600	☐ _____	☐ Silica XRD (7500)
	☐ _____				

			Sample Identification (Employee, Bldg, Material, Type[1])							Total Air[4]
LRF	8/23/22	9:00	Living Room Floor	1.0 Sq/ft						
LRW			Living Room Window	0.25 Sq/ft						
KF			Kitchen Floor	1.0 Sq/ft						
KW			" Window	0.25 Sq/ft						
UF			Utility Floor	1.0 Sq/ft						
UW			" Window	0.25 Sq/ft						
AF			Addition Floor	1.00 Sq/ft						
AW			" Window	0.25 Sq/ft						
B2F			Bedroom 2 Floor	1.0 Sq/ft						
B2W			" Window	0.25 Sq/ft						

For Aqueous and Solid samples ensure enough sample is sent for duplicate and spike analysis
[1]Type: A=Area, B=Blank, P=Personal, E=Excursion [2]Beginning/End of Sample Period [3]Liters/Minute [4]Volume in Liters [time in min × flow in L/min]

Relinquished By: _____ Signature: _____ Date/Time _____

Chain-of-Custody documentation continued internally

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www.slabinc.com • info@slabinc.com

	SCREEN		Kansas		☑ YES ☐ NO
			2767	Phone	316 833 1445
		Email	jbullins@schedd.org		
Project Name	Eckerman	PO #	Caldwell		
Project Location	416 Ewing	Special Instructions:			
Project Number	Caldwell				
Collected By	Jeremy Bullins				

☐ 2 Hour *	☐ Air	**Asbestos in Bulk**	**Metals Total**	**TCLP**	**Microbiology**
☐ Same day *	☐ Paint	☐ PLM	☑ Lead	☑ Lead	☐ BACT (MPN/PA)
☑ 1 business day	☐ Soil	☐ PLM Qualitative	☐ RCRA 8 Metals	☐ RCRA 8 Metals	☐ Mold Direct Exam
☐ 2 business days	☑ Wipe	☐ 400 Point Count	☐ Chromium VI	☐ Full TCLP (w/ organics 10 Day)	☐ Allergens
☐ 3 business days	☐ Bulk	☐ 1000 Point Count	☐ Mercury		**Sub-Contract**
☐ 5 business days	☐ Waste Water	☐ Gravimetric Prep	☐ _____		☐ TEM Chatfield
* not available for all tests	☐ Ground Water	**Asbestos in Air**	**Gravimetric**	**Miscellaneous**	☐ TEM AHERA
** past 3 PM the TAT will begin next business day	☐ Drinking Water	☐ PCM	☐ Total Dust NIOSH 0500	☐ Silica FTIR (7602)	☐ TEM 7402
Please schedule rush tests in advance	☐ TSP / PM10	☐ PCM-B Rules	☐ Resp. Dust NIOSH 0600	☐ _____	☐ Silica XRD (7500)
	☐ _____				

			Sample Identification (Employee, Bldg,Material, Type[1])						Total Air[4]
[redacted]									
DA F	8/23/22	9:00	Bath Floor	1.0 sqft					
DA W			11 Window	0.255qft					
B1 F			Bedroom 1 Floor	1.0 Sqft					
B1 W			11 Window	0.255qft					
FF	↓	↓	Furnace Floor	1.0 Sqft					

For Aqueous and Solid samples ensure enough sample is sent for duplicate and spike analysis

[1]Type: A=Area, B=Blank, P=Personal, E=Excursion [2]Beginning/End of Sample Period [3]Liters/Minute [4]Volume in Liters [time in min x flow in L/min]

Relinquished By: _____ Signature: _____ Date/Time _____

Chain-of-Custody documentation continued internally

416 Ewing Caldwell ks

Reading N	Units	Component	Substrate	Condition	Color	Results	Action Lev	PbC Error	PbL Error	PbK Error	
79	cps							0	0	0	
80	mg / cm ^2	Calibration	Card	good	white	Negative	1	0.03	0.03	3.72	Calibration
81	mg / cm ^2	Calibration	Card	good	Yellow	Positive	1	1.7	1.7	16.2	
82	mg / cm ^2	Calibration	CArd	good	Red	Positive	1	0.1	0.1	0.97	
83	mg / cm ^2	Exterior Door front Jam	Wood	good	White	Negative	1	0.58	0.58	3.75	Exterior
84	mg / cm ^2	Exterior Door front Threshold	Wood	fair	white	Negative	1	0.58	0.58	3.23	
85	mg / cm ^2	Exterior Front Door Trim	wood	fair	white	Negative	1	0.98	0.2	0.98	
86	mg / cm ^2	Exterior Front Door	Wood	fair	blue	Negative	1	0.08	0.08	3.09	
87	mg / cm ^2	Porch Ceiling	Wood	fair	white	Negative	1	1.49	0.39	1.49	
88	mg / cm ^2	Porch Sofit	wood	fiar	white	Negative	1	2.03	0.17	2.03	
89	mg / cm ^2	Porch Facia	wood	fair	white	Negative	1	0.43	0.43	1.92	
90	mg / cm ^2	Porch Roof runners	wood	fair	white	Negative	1	0.46	0.46	2.91	
91	mg / cm ^2	Porch Roof runners	wood	fair	white	Negative	1	1.94	0.58	1.94	
92	mg / cm ^2	Exterior windows living	wood	det	white	Negative	1	0.2	0.2	2.62	
93	mg / cm ^2	Exterior Bed 1	wood	det	white	Negative	1	0.6	0.6	2.4	
94	mg / cm ^2	Bath room window trough	wood	det	white	Negative	1	0.6	0.6	1.5	
95	mg / cm ^2	Kitchen room window trough	wood	det	white	Negative	1	0.06	0.06	2.77	
96	mg / cm ^2	Siding	wood	fair	beige	Negative	1	0.03	0.03	2.99	
97	mg / cm ^2	Window trim	wood	fair	white	Negative	1	0.11	0.11	2.76	
98	mg / cm ^2	Window trim	wood	fair	white	Negative	1	0.03	0.03	3.02	
99	mg / cm ^2	Window sash	vinyl	good	white	Negative	1	0.03	0.03	2.16	
100	mg / cm ^2	Window trim	wood	fair	white	Negative	1	0.6	0.6	3.01	
101	mg / cm ^2	window sill	wood	fair	white	Negative	1	0.04	0.04	3.13	
102	mg / cm ^2	Window trim	wood	fair	white	Negative	1	0.07	0.07	2.37	
103	mg / cm ^2	Window sill	wood	fair	white	Negative	1	0.07	0.07	2.61	
104	mg / cm ^2	Window trim	wood	fair	white	Negative	1	0.53	0.53	2.42	
105	mg / cm ^2	window sill	wood	fair	white	Negative	1	0.17	0.17	3.09	
106	mg / cm ^2	Window trim	wood	fair	white	Negative	1	0.27	0.27	3.02	
107	mg / cm ^2	window sill	wood	fair	white	Negative	1	0.04	0.04	3.08	
108	mg / cm ^2	Window trim	wood	fair	white	Negative	1	0.03	0.03	3	
109	mg / cm ^2	window sill	wood	fair	white	Negative	1	0.03	0.03	2.54	
110	mg / cm ^2	window Sash	wood	fair	white	Negative	1	0.03	0.03	2.99	
111	mg / cm ^2	window sash	wood	fair	white	Negative	1	0.03	0.03	2.49	
112	mg / cm ^2	siding	wood	fair	beige	Negative	1	0.03	0.03	3.01	
113	mg / cm ^2	Window trim	wood	fair	white	Negative	1	0.03	0.03	2.99	
114	mg / cm ^2	window sill	wood	fair	white	Negative	1	0.03	0.03	2.84	
115	mg / cm ^2	window sash	wood	fair	white	Negative	1	0.03	0.03	3	
116	mg / cm ^2	Exterior Front Door Jamb	wood	fair	stain	Negative	1	0.11	0.11	3.18	Interior
117	mg / cm ^2	Exterior fd Trim	wood	fair	stain	Negative	1	0.08	0.08	3.3	
118	mg / cm ^2	Wood panaling	wood	fair	red	Negative	1	0.47	0.47	3.35	
119	mg / cm ^2	Wood panaling	wood	fair	white	Negative	1	0.13	0.13	3.77	
120	mg / cm ^2	Wood mullion	wood	fair	stain	Negative	1	0.09	0.09	2.49	
121	mg / cm ^2	wall kitchen	sheetrock	fair	beige	Negative	1	0.03	0.03	2.8	
122	mg / cm ^2	wooden sill	wood	fair	white	Negative	1	0.09	0.09	2.4	
123	mg / cm ^2	Trim utillity Door	wood	fair	white	Negative	1	0.17	0.17	2.91	
124	mg / cm ^2	Jam utillity door	wood	fair	white	Negative	1	0.12	0.12	3.06	
125	mg / cm ^2	Wood panaling	wood	fair	grey	Negative	1	0.12	0.12	3.3	
126	mg / cm ^2	utillity cabnets	wood	fair	grey	Negative	1	0.03	0.03	2.68	
127	mg / cm ^2	utillity room floor	concrete	poor	bule/grey	Negative	1	0.08	0.08	3.34	
128	mg / cm ^2	utillity cabnet	wood	fair	pink	Negative	1	0.03	0.03	3.91	
129	mg / cm ^2	kitchen upper cabnets	wood	fair	red	Negative	1	0.09	0.09	2.82	
130	mg / cm ^2	Kitchen uppler cabnet	wood	fair	white	Negative	1	0.04	0.04	2.96	
131	mg / cm ^2	Kitchen lower cabnets	wood	fair	red	Negative	1	0.13	0.13	2.55	
132	mg / cm ^2	Kitchen lower cabnets	wood	fair	white	Negative	1	0.03	0.03	2.79	
133	mg / cm ^2	Addition trim Door	wood	fair	white	Negative	1	0.03	0.03	2.7	
134	mg / cm ^2	Addition Jam	wood	fair	stain	Negative	1	0.03	0.03	2.7	
135	mg / cm ^2	Addition trim Door	wood	fair	stain	Negative	1	0.04	0.04	2.53	
136	mg / cm ^2	Back door	wood	fair	red	Negative	1	0.03	0.03	2.89	
137	mg / cm ^2	Back door jam	wood	fair	white	Negative	1	0.03	0.03	3	
138	mg / cm ^2	Back door jam	wood	fair	stain	Negative	1	0.03	0.03	2.58	
139	mg / cm ^2	addition ceiling	sheetrock	fair	white	Negative	1	0.03	0.03	2.49	
140	mg / cm ^2	Window sash	wood	fair	white	Negative	1	0.03	0.03	2.37	
141	mg / cm ^2	folding door	wood	fair	white	Negative	1	0.03	0.03	3.29	
142	mg / cm ^2	folding door	wood	fair	green	Negative	1	0.03	0.03	2.88	
143	mg / cm ^2	Folding door jam	wood	fair	white	Negative	1	0.05	0.05	3.01	
144	mg / cm ^2	folding door trim	wood	fair	stain	Negative	1	0.09	0.09	2.61	
145	mg / cm ^2	Wall	sheetrock	fair	green	Negative	1	0.45	0.45	1.59	
146	mg / cm ^2	Closet	wood	fair	stain	Negative	1	0.07	0.07	2.53	
147	mg / cm ^2	Bath Door	wood	fair	stain	Negative	1	0.05	0.05	2.63	
148	mg / cm ^2	Bath Door	wood	fair	stain	Negative	1	0.04	0.04	3.15	
149	mg / cm ^2	Bath Door trim	wood	fair	stain	Negative	1	0.09	0.09	2.84	

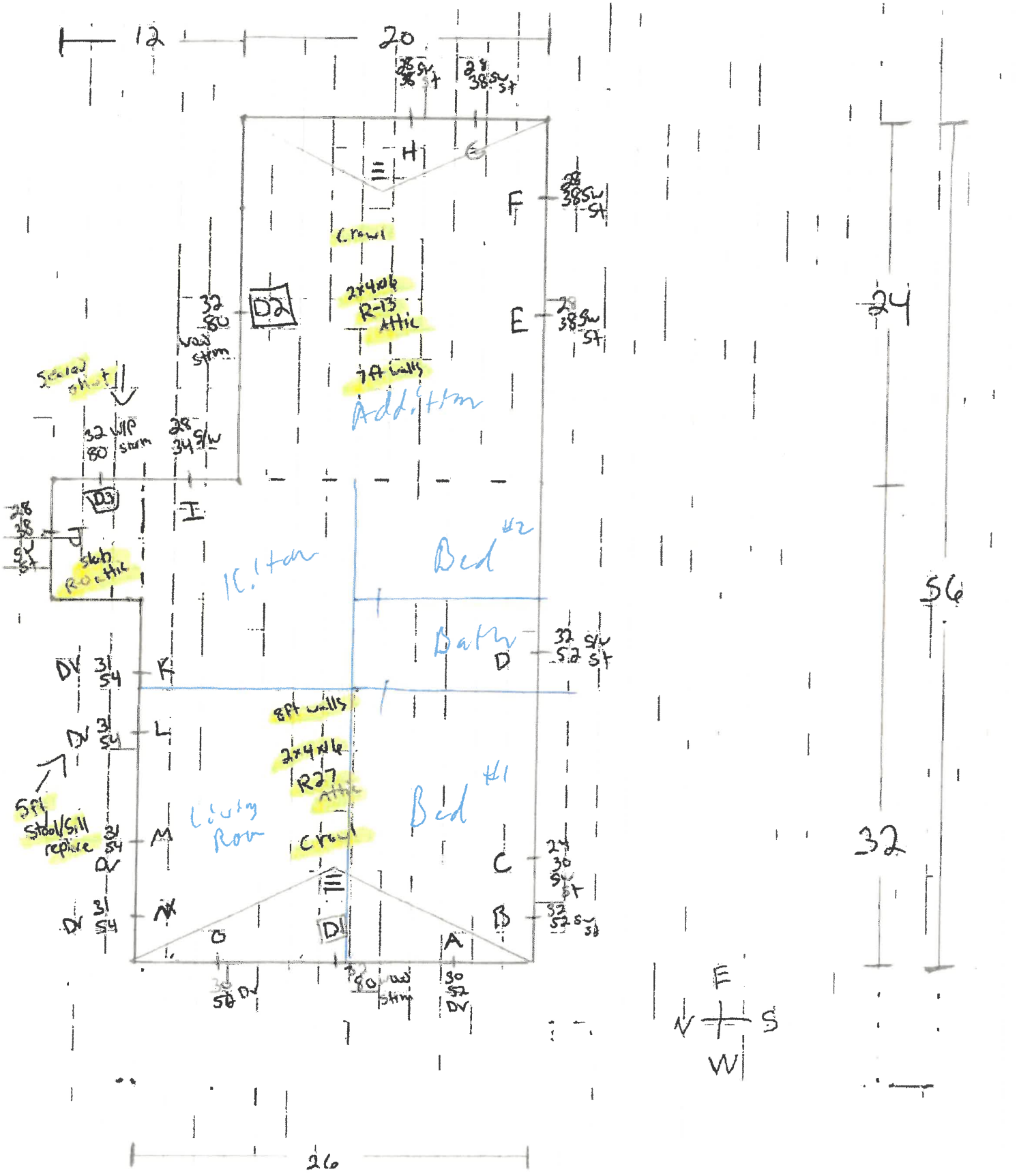
416 Ewing Caldwell ks

150	mg / cm ^2	Na	wood	fair	stain	Null	1	0.1	0.1	4.49	
151	mg / cm ^2	Bath Door Jam	wood	fair	stain	Negative	1	0.09	0.09	2.85	
152	mg / cm ^2	Bath Door Jam	wood	fair	stain	Negative	1	0.13	0.13	3	
153	mg / cm ^2	Bath heater	metel	fair	white	Negative	1	0.06	0.06	3.98	
154	mg / cm ^2	bath cabnet	wood	fair	stain	Negative	1	0.07	0.07	2.45	
155	mg / cm ^2	Closet Door	wood	fair	stain	Negative	1	0.03	0.03	1.79	
156	mg / cm ^2	Closet Door Jam	wood	fair	stain	Negative	1	0.05	0.05	2.43	
157	mg / cm ^2	Closet Door Cabnet	wood	fair	stain	Negative	1	0.04	0.04	2.32	
158	mg / cm ^2	Closet Door Trim	wood	fair	stain	Negative	1	0.05	0.05	1.87	
159	mg / cm ^2	Bed Door	wood	fair	stain	Negative	1	0.08	0.08	2.54	
160	mg / cm ^2	bed Door Jam	wood	fair	stain	Negative	1	0.19	0.19	3.33	
161	mg / cm ^2	Bed room Door trim	wood	fiar	stain	Negative	1	0.08	0.08	2.9	
162	mg / cm ^2	Calibration	card	good	white	Negative	1	0.03	0.03	3.47	Calibration
163	mg / cm ^2	Calibration	Card	good	Yellow	Positive	1	2.2	2.2	15.75	
164	mg / cm ^2	Calibration	Card	good	red	Negative	1	0.1	0.1	1.15	

Connie Eckerman 2Bed 1Bath
4He N Ewing
620-845-1748

	Main	Addition	Total
Area	880 ft²	576 ft²	= 1456 ft²
Vol	7040 ft³	4032 ft³	= 11072 ft³

176 perimeter



Property Detail Information

LGIS v5 Aumentum TECHNOLOGIES

SUMNER COUNTY KANSAS

Generated: 8/18/2022 2:32:24 PM

Report for Parcel No. 096-321-02-0-20-12-003.00-0 (Quick Ref. ID R16999)

Property Physical (Situs) Address
416 N EWING ST, Caldwell, KS 67022

Tract (Legal) Description
NEW CALDWELL,BLK 110-131, S02, T35, R03W, BLOCK 115, Lot 28,30,32

Owner(s)	Owner Mailing Address
ECKERMANN, MICHAEL LEE & CONSTANCE DEE - (P)	416 N EWING ST CALDWELL, KS 67022

Property Factors	
Topography	Level - 1
Utilities	All Public - 1
Access	Paved Road - 1 Alley - 7
Fronting	Residential Street - 4
Location	Neighborhood or Spot - 6
Parking Type	On and Off Street - 3
Parking Quantitiy	Adequate - 2
Parking Proximity	On Site - 3
Covered Parking	Not Available
Uncovered Parking	Not Available

Land-Based Classification	
Function	Single family residence (detached)
Activity	Household activities
Ownership	Private-fee simple
Site	Developed site - with buildings

General Property Information	
Property Class	Residential - R
Living Units	1
Zoning	Not Available
Neighborhood	170
Tax Unit Group	003

Appraisal Information

Tax Year 2022

Tax Year 2021

Property Detail Information

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SUMNER COUNTY KANSAS

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Class	Land	Building	Total
R	5,780	33,990	**39,770**

Class	Land	Building	Total
R	5,570	33,340	**38,910**

Deed Information

Book 1	Page 1	Book 2	Page 2	Book 3	Page 3	Book 4	Page 4
0994	0114	0994	0113	0748	0096	0223	0036

Market Land Information

Method	Type	AC/SF	Eff FF	Depth	DFact	Inf 1	Fact 1	Inf 2	Fact 2	Ovrd	Class	Value Est.
Sqft	Primary Site - 1	10589.00										5,780

Dwelling Information

Dwelling No. 1

General Information			
Res Type	Single-family Residence	Main Flr. Living	1,376
Quality	FR+	Upper Flr. Living	
Year Built	1910	CDU	FR
Eff. Year		Phys/Func/Econ	FR/
MS Style	One Story	Ovr Pct. Gd./RCN	/132,022

Comp. Sales	
Arch Style	Bungalow
Bsmnt. Type	Crawl - 2
Tot. Rooms	5
Bedrooms	2
Family Rooms	1

Property Detail Information

LGIS v5

Aumentum TECHNOLOGIES

SUMNER COUNTY KANSAS

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LBCS Struct.	Detached SFR unit	Remodel		Full Baths	1
No. of Units		Percent Complete		Half Baths	0
Tot. Living Area		Assessment Class		Garage Cap	0
Calc. Area	1,376	MU Cls/Pct.		Foundation	Block - 3

Dwelling 1 Components Info.

Code	Units	Pct.	Quality	Year
Raised Slab Porch (SF) with Roof	98			
Frame, Siding/Shingle		60		
Composition Shingle		100		
Raised Subfloor (% or SF)	1,337			
Warmed & Cooled Air		100		
Plumbing Fixtures (#)	5			
Plumbing Rough-ins (#)	1			
Automatic Floor Cover Allowance				
Open Slab Porch (SF)	240		2	1910
Raised Slab Porch (SF)	70		3	1910
Wood Deck (SF)	20			
Frame, Cement Fiber Sheet		40		

Dwelling 1 / Building Improvements Info.

ID	Occupancy	MSCls	Rank	Qty	Yr Blt	Eff Yr	LBCS	Area	Perim	Hgt	Dim.	Stories	Phys	Funct	Econ	OVR	Rsn	Cls	RCN	%Gd	Value
61	Farm Implement Building	P	2.00	1	1980			720	108	10	30 X 24	1	2	3					11,657	22	2,560
62	Residential Garage - Detached	D	1.00	1	1910			322	74	8	23 X 14	1	2	3					8,852	19	1,680
32	Prefabricated Storage Shed	D	2.00	1	1910			80	36	6	10 X 8	1	3	3					1,783	40	710

Connie Eckerman
416 N. Ewin
Caldwell, Kansas

Description	Estimated Cost	Estimated KWAP Cost
Exterior: LSWP Install vinyl siding over deteriorated siding, including porch ceiling. Wrap all fascia, soffit, and trim.	$8,000.00	
Exterior: Install insulated new pre-hung steel door with self storing storm door on front and back doors. Install new self storing storm door to utility room.	$2,500.00	
Exterior: LSWP Install new guttering with downspouts and concrete splash blocks.	$2,000.00	
Exterior: LSWP Replace deteriorated wood windows on the house with single hung double pane vinyl replacements. Including basement windows.	$4,500.00	
Interior Electrical: Raise mast head so wires are 10' above back porch landing. Secure any loose fixtures or recepts. Make sure all recepts, lights and switches are working as designed and have covers. All Recepts within six feet of water source must have GFCI protection. Install a new outlet in the hallway bathroom. Any 3 prong outlets that have an open ground need to be switched back to 2 prong or be GFCI protected. Install smoke detectors in accordance with local codes. Add switch to bathroom ceiling fan. Eliminate any wiring hazards.	$3,500.00	
Total of Part 1	$20,500.00	
Part 2 Lead Activities		
Costs for using lead safe work practices.	$1,025.00	
Cost for preparing for clearance.	$1,025.00	
Total of Part 2	$ 2,050.00	
Total of part 1 and 2	$ 22,550.00	
Company		
Contact		
Signature		
Date		

Kansas Department of Health and Environment
State of Kansas

Expires on July 26, 2023

Be it known, that having filed an application with the Kansas Department of Health and Environment,

SOUTH CENTRAL KANSAS ECONOMIC DEVELOPMENT DISTRICT

is hereby licensed as a

LEAD ACTIVITY FIRM

Issued on July 26, 2021

Name

SOUTH CENTRAL KANSAS ECONOMIC DEVELOPMENT DISTRICT

License Number

KS01-1050

Secretary of the Kansas Department of Health and Environment

Lee A. Norman, M.D.

State of Kansas

Radioactive Materials License

Supplementary Sheet License Number: 22-B827 Amendment No. 9

12. Radioactive material listed in Item 6 above is authorized for use by individuals for the materials and uses described as follows:

    Radioactive material shall be used by, or under the supervision and in the physical presence of an individual listed below or an individual who has completed training provided by a person specifically authorized by the department, USNRC or another Agreement State to provide such training and approved by the radiation safety officer.

    Mike Shivers Subitem(s) A

13. The licensee shall perform testing for leakage or contamination of sealed sources in accordance with K.A.R. 28-35-216a.

14. Sealed sources containing radioactive material shall not be opened or removed from their respective source holders by the licensee.

15. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for two years from the date of the inventory for inspection by the department, and shall include the quantities and kinds of radioactive material, location of sealed sources and the date of the inventory.

16. The licensee may transport radioactive material or deliver radioactive material to a carrier for transport, in accordance with the provisions of K.A.R. 28-35-196a, "Preparation of Radioactive Material for Transport".

17. The licensee shall comply with the provisions of Kansas Radiation Protection Regulations, Part 4, "Standards for Protection Against Radiation" and Part 10, "Notices, Instructions and Reports to Workers; Inspections."

18. The licensee shall possess and use radioactive material described in Items 6, 7 and 8 of this license according to the most restrictive of; the Kansas Radiation Protection Regulations, this license or statements, representations, and procedures contained in the following documents.

    a. The application received December 12, 2016, signed by Micheal Shivers, with attachments.

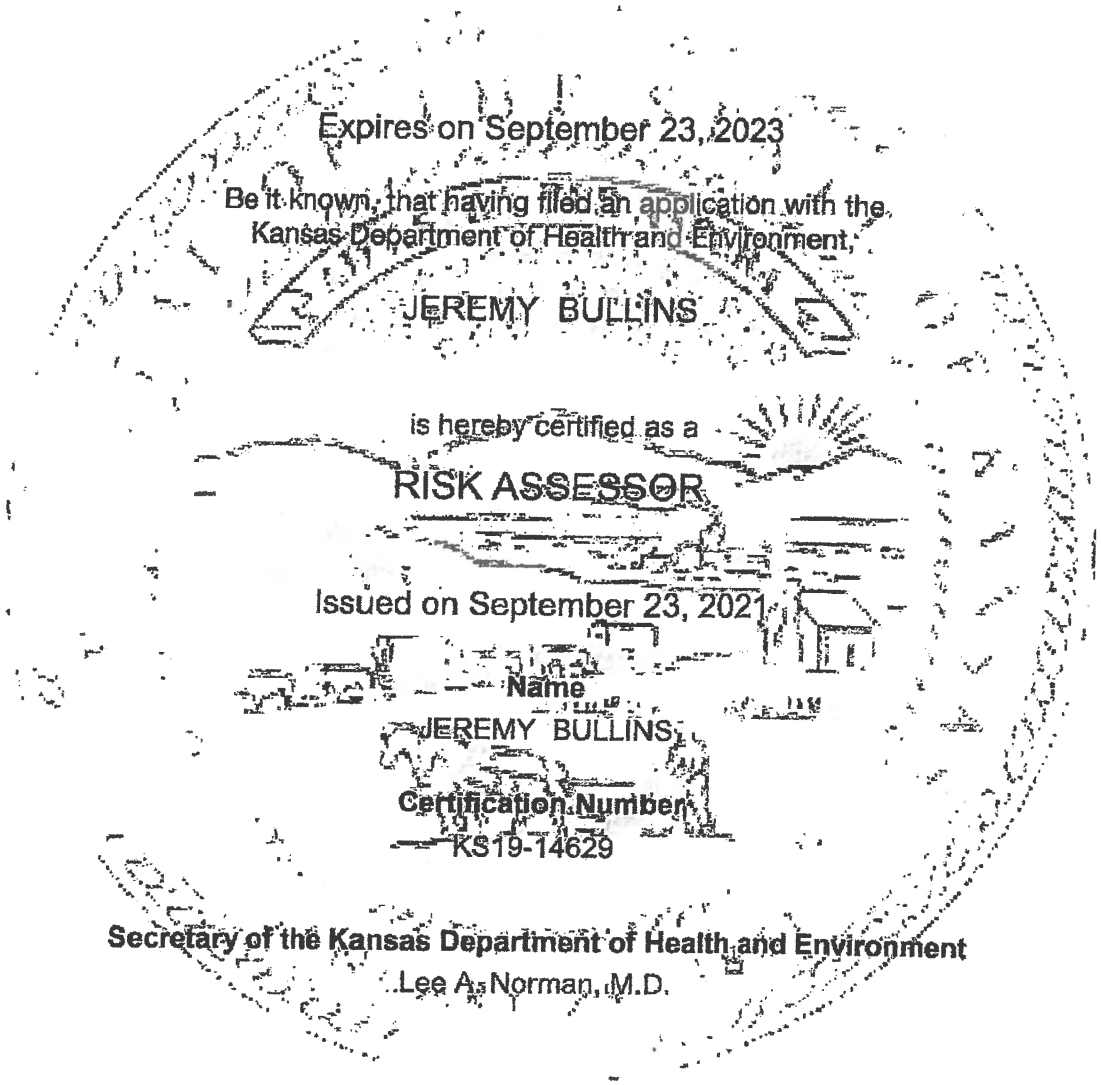
FOR THE STATE DEPARTMENT OF HEALTH AND ENVIRONMENT

Date February 8, 2017

By:

Jason Barney, RRPT
Radiation Control Program

Kansas Department of Health and Environment
State of Kansas



Expires on September 23, 2023

Be it known, that having filed an application with the Kansas Department of Health and Environment,

JEREMY BULLINS

is hereby certified as a

RISK ASSESSOR

Issued on September 23, 2021

Name

JEREMY BULLINS

Certification Number

KS19-14629

Secretary of the Kansas Department of Health and Environment

Lee A. Norman, M.D.

Thermo SCIENTIFIC

Performance Characteristic Sheet

EFFECTIVE DATE: September 24, 2004 **EDITION NO.:** 1

MANUFACTURER AND MODEL:

Make: *Nilon LLC*
Tested Model: *XLp 300*
Source: ^{109}Cd
Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A.
XLp 300A, XLp 301A, XLp 302A and XLp 303A.
XLi 700A, XLi 701A, XLi 702A and XLi 703A.
XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-In-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly elected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)

	All Data			Median for laboratory-measured lead levels (mg/cm^2)		
Substrate	25th Percentile	Median	75th Percentile	Pb < 0.25	0.25 ≤ Pb<1.0	1.0≤Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

AIHA

Laboratory Accreditation Programs, LLC

AIHA Laboratory Accreditation Programs, LLC

acknowledges that

Schneider Laboratories Global

2512 West Cary Street, Richmond, VA 23220-5117

Laboratory ID: LAP-100527

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2017 international standard, General Requirements for the Competence of Testing and Calibration Laboratories in the following:

LABORATORY ACCREDITATION PROGRAMS

☑	INDUSTRIAL HYGIENE	Accreditation Expires: July 01, 2023
☑	ENVIRONMENTAL LEAD	Accreditation Expires: July 01, 2023
☑	ENVIRONMENTAL MICROBIOLOGY	Accreditation Expires: July 01, 2023
☐	FOOD	Accreditation Expires:
☐	UNIQUE SCOPES	Accreditation Expires:

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached Scope of Accreditation. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2017 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached Scope of Accreditation. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Cheryl O. Marton

Cheryl O Marton
Managing Director, AIHA Laboratory Accreditation Programs, LLC

Revision19: 09/01/2021

Date Issued 07/01/2021

Addendum 8 to Chapter 4

Library Specifications
National Center for Healthy Housing
(Formerly National Center for Lead-Safe Housing)

Spec Number: 9001
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: LEAD GENERAL REQUIREMENTS
Spec:

Spec Number: 9002
Unit of Measure: DU
Total Unit Cost: 0.00
Spec Title: LEAD HAZARD DEFINITIONS
Spec:
Adhesion: the ability of an encapsulant to attach to or remain fixed on a surface without blistering, flaking, cracking or being removed by tape.

CFR – The Code of Federal Regulations: The basic component of the Federal Register publication system. The CFR is a codification of the regulations of the various Federal Agencies.
HEPA – High Efficiency Particulate Air: A filter capable of filtering out particles of 0.3 microns or greater from a body of air at 99.97% efficiency or greater;
µg – Micrograms: The prefix "micro" means "1/1,000,000 of" (one millionth of). A microgram is 1/1,000,000 of a gram;
Work Area: The area where lead-based paint abatement or related work is performed which is defined and/or isolated to prevent the spread of lead dust or debris and entry by unauthorized personnel.

Spec Number: 9003
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: LEAD ABATEMENT STANDARDS & GUIDELINES
Spec:
The execution of this work shall comply with all applicable state, federal and local laws, rules regulations and guidelines for lead dust environments. Some of these standards include: OSHA 29 CFR 1926-Construction Industry Standards, 29 CFR 1926.62 Construction Industry Lead Standard, 29 CFR 1910. 1200-Hazard Communication, 40 CFR Part 261-EPA Regulations, HUD Title X parts 1012-1013.

Spec Number: 9004
Unit of Measure: EA
Total Unit Cost: 0.00
Spec Title: S.W.P. - PROHIBITED TECHNIQUES
Spec:
The following paint removal techniques are prohibited on all HUD-funded projects:
- Open flame/high heat paint removal;
- Power sanding or grinding without HEPA dust collections;
- Uncontained water or abrasive blasting;
- Dry scraping or dry sanding in excess of 2 sq. ft per room.

Spec Number: 9005
Unit of Measure: AL
Total Unit Cost: 0.00
Spec Title: HISTORIC STRUCTURE

Spec: This structure must be addressed in strict conformance to the "Guidelines for Rehabilitating Buildings." Lead hazard reduction techniques that damage, replace or enclose historic features are not permitted.

Spec Number: 9006
Unit of Measure: AL
Total Unit Cost: 0.00
Spec Title: REQUIRED SUBMITTALS
Spec: Provide the following Contractor Submittals prior to the Preconstruction Conference:

1. Copies of individual approved lead training certifications for workers and supervisors (Both EPA required training and OSHA required training);
2. Copies of the State Lead Hazard Remediation Program Registration for individuals and company;
3. Copy of the written Occupant Protection Plan as required by 40 CFR Part 745 Subpart ;
4. Employee medical surveillance information;
5. List of subcontractors;
6. Site specific General Liability and Lead Liability insurance certificates with the property owners listed as the certificate holder and the Agency names as Additionally Insured;
7. Worker's Compensation insurance certificate;
8. 100% Labor and Materials Payment Bond and Performance Bond (optional dependent on size of project);
9. Any applicable permits (including construction permits for window/door replacements), licenses, etc.;
10. Any product data for materials or equipment to be used on the project.
11. Copy of valid Builder's License.

Spec Number: 9007
Unit of Measure: DU
Total Unit Cost: 0.00
Spec Title: FINAL ACCEPTANCE
Spec: Prior to final acceptance of the lead hazard reduction work, the property shall be visually inspected and if acceptable, random dust wipe testing performed on floors, window sills and exterior window troughs. The contractor shall re-clean all components and pay for all additional clearance testing if test results exceed the thresholds of 40µg/SF for floors;250 µg/SF for sills and 800 µg/SF for troughs.

Spec Number: 9009
Unit of Measure: AL
Total Unit Cost: 0.00
Spec Title: OWNER'S RESPONSIBILITIES
Spec: The owner shall provide:

1. Utilities and sanitary facilities;
2. All packing of breakable and valuable items;
3. Fire insurance.

Spec Number: 9010
Unit of Measure: EA
Total Unit Cost: 25.00
Spec Title: FLOOR PLAN REQUIREMENT
Spec: Provide the owner and this agency with the original and 4 copies of a 1/4" to 1 foot scale floor plan sketch using standard architectural symbols identifying all lead painted areas and components encapsulated or enclosed during this intervention.

Spec Number: 9011
Unit of Measure: EA

Total Unit Cost: 0.00
Spec Title: LEAD FINES
Spec: The contractor agrees to incur and pay within 30 days the cost of all fines and work requirements resulting from regulatory noncompliance as issued by federal, state and local agencies.

Spec Number: 9012
Unit of Measure: EA
Total Unit Cost: 0.00
Spec Title: HAZARD EVALUATION - LEAD
Spec:

Spec Number: 9015
Unit of Measure: EA
Total Unit Cost: 375.00
Spec Title: XRF TESTING - < $5,000
Spec: Field evaluate all painted components to be disturbed during the maintenance or renovation work. Provide the owner with tests results and a "Notice of Lead Hazard Evaluation" in accordance with the 1012-1013 Regulation Addenda. XRF must not require substrate correction.

Spec Number: 9024
Unit of Measure: DU
Total Unit Cost: 500.00
Spec Title: TEST AND RISK ASSESSMENT
Spec: XRF evaluate all deteriorated paint areas and painted components to be disturbed during the renovation work. Randomly select 2 floors, 2 sills, 2 troughs and 1 other location to dust wipe test per HUD Guidelines. Collect composite soil samples from bare soil at building perimeter and children's play area. Submit a dust wipe blank and other samples to a NLLAP approved lab. Prepare a risk assessment report including both interim control and abatement options for each hazard and a "Notice of Lead Hazard Evaluation" per the 1012-1013 Regulation Addenda.

Spec Number: 9030
Unit of Measure: EA
Total Unit Cost: 275.00
Spec Title: CLEARANCE REPORT
Spec: After completion of all renovation that disturbs lead surfaces, visually inspect all interior and exterior work to verify all work is completed and no lead, chips, visual dust or debris remains on site. Randomly select 2 floors, 2 sills, 2 troughs and 1 other location to dust wipe test per the HUD Guidelines. Submit a field blank and tests to a NLLAP-approved lab. Prepare a clearance report per the 1012-1013 Appendix.

Spec Number: 9041
Unit of Measure:
Total Unit Cost: 0.09
Spec Title: PERFORMANCE GUARANTEES - LEAD
Spec:

Spec Number: 9043
Unit of Measure: K
Total Unit Cost: 90.00
Spec Title: HAZMAT LIABILITY INSURANCE
Spec: Purchase and provide owner with certificates of specialized liability insurance for lead hazard reduction in an amount of at least $1 million per occurrence, and $5 million annual maximum.

Spec Number: 9044
Unit of Measure: M
Total Unit Cost: 150.00
Spec Title: PAYMENT AND PERFORMANCE BONDS
Spec: Purchase from an U.S. Surety approved by the Treasury Department performance and payment bonds using the ABC or AIA form in an amount of 100 % of the contract sum.

Spec Number: 9045
Unit of Measure: AL
Total Unit Cost: 0.00
Spec Title: ABATEMENT CERTIFICATION
Spec: All contractors performing abatement on work over $25,000 per unit hard cost shall provide a copy of their EPA certification and state license for the designated abatement supervisor and all abatement workers prior to commencement of work.

Spec Number: 9051
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: WORKER PROTECTION - LEAD
Spec:

Spec Number: 9053
Unit of Measure: DU
Total Unit Cost: 275.00
Spec Title: LEAD WORKER - PROTECTION
Spec: Persons carrying out lead hazard control activities must comply with all applicable federal, state, local laws and regulations related to safety in the workplace including respiratory protection program, personal protection found in the OSHA Construction Standard (29 CFR 1926.62).

Spec Number: 9054
Unit of Measure: EA
Total Unit Cost: 25.00
Spec Title: EYE WASH REQUIREMENT
Spec: During all operations using caustic or volatile paint removal products, an emergency eye wash station meeting ANSI 2358.1-1990 standard rated at 15 minutes of flow must be placed on this work site.

Spec Number: 9055
Unit of Measure: AL
Total Unit Cost: 0.00
Spec Title: S.W.P. - PROHIBITED ACTIVITIES
Spec: To minimize the potential for worker exposure to lead dust, the following activities are never permitted in any lead work area:

1. No eating
2. No drinking
3. No chewing gum, tobacco
4. No smoking
5. No applying cosmetics
6. Post an OSHA compliance notice to workers as follows: Warning Lead Work Area – Poison – No Smoking or Eating

Spec Number: 9056
Unit of Measure: EA
Total Unit Cost: 8.00
Spec Title: PROTECTIVE CLOTHING

Spec: Each worker shall be provided with disposable, hooded, footed overalls during demolition, surface preparation, and paint removal activities. Impervious rubber boots, gloves, face shield, and chemical resistant overalls must be provided when dangerous chemicals are used.

Spec Number: 9057
Unit of Measure: AL
Total Unit Cost: 45.00
Spec Title: WORKER TRAINING – INTERIM CONTROLS
Spec: All persons carrying out lead hazard reduction activities must either be supervised by an EPA abatement supervisor or provide proof of completion of HUD-approved worker training course in lead hazard awareness, self protection and safe work practices prior to commencement of work.

Spec Number: 9059
Unit of Measure: EA
Total Unit Cost: 0.00
Spec Title: S.W.P. - GROUND FAULT REQUIRED
Spec: Due to the requirement to work "wet," all electric circuits and extension cords in use must be protected by GFCI with integral test buttons.

Spec Number: 9062
Unit of Measure: WK
Total Unit Cost: 22.00
Spec Title: RESPIRATOR PROGRAM
Spec: All employees shall be fit tested and provided with personal respirators and filters as appropriate to task under a respirator program in accordance with 29 CFR 1910.134 and 29 CFR 1926.62.

Spec Number: 9063
Unit of Measure: DY
Total Unit Cost: 400.00
Spec Title: LEAD EXPOSURE MONITORING
Spec: Whenever Class I Tasks (manual demolition, manual scraping or sanding, using heat gun or power tool with HEPA filter) are specified, contractor must provide full worker protection or exposure monitoring data. Contractors shall hire an outside firm to perform a determination of worker exposures using personal air sampling at a nominal flow rate of 2 liters per minute and a sampling train consisting of a 0.8u pore size filter housed in a closed-face 37mm cassette. Alternately, contractors may use data from previous jobs that are similar in objective data, as specified in the OSHA standard to establish the personal protective equipment requirement.

Spec Number: 9075
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: OCCUPANT EDUCATION - LEAD
Spec:

Spec Number: 9076
Unit of Measure: EA
Total Unit Cost: 35.00
Spec Title: OCCUPANT MAINTENANCE KIT
Spec: Provide occupant with: cleaning equipment, places to purchase refills and instructions in the use of the following equipment to combat lead dust hazards: 2.5 gallon, 2-sided bucket, sponge mop with 2 replacement heads, 3 packs of disposable sponges, liquid detergent, 2 sets of gloves and one vacuum cleaner exhaust filter.

Spec Number: 9077
Unit of Measure: DU
Total Unit Cost: 21.00
Spec Title: NUTRITIONAL PACKET AND VITAMINS
Spec: Instruct occupant in nutritional practices to alleviate lead poisoning, e.g., avoid fatty foods and seek high calcium sources like milk and figs. Provide a 60 day starter supply of chewable, juvenile, multiple vitamins containing calcium and Vitamin C for each child under 12.

Spec Number: 9078
Unit of Measure: EA
Total Unit Cost: 60.00
Spec Title: OCCUPANT TRAINING - ON SITE
Spec: Schedule and deliver a 1.5 hour training session for both adult and child occupants covering the dangers of lead paint, blood testing opportunities, nutritional defenses and cleaning protocols.

Spec Number: 9079
Unit of Measure: EA
Total Unit Cost: 25.00
Spec Title: OCCUPANT TRAINING - CLASSROOM
Spec: Schedule and deliver a 2 hour group training session for both adult and juvenile occupants. Materials should cover the dangers of lead paint, dust, soil, blood testing opportunities, nutritional defenses and cleaning protocols.

Spec Number: 9082
Unit of Measure: EA
Total Unit Cost: 22.00
Spec Title: CHILD EDUCATION PACKET
Spec: Provide each child under age 10 with a lead activity packet appropriate to their age that might include: coloring books, stickers, pacifiers, pacifier clips and calenders.

Spec Number: 9083
Unit of Measure: EA
Total Unit Cost: 15.00
Spec Title: OWNER'S EDUCATION KIT
Spec: Provide the property owner of rental stock with an information packet that includes: current city, state, federal statutes, a discussion of owner's liability, options to meet the HUD requirements and financing sources for lead hazard reduction.

Spec Number: 9088
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: WORK SITE PREPARATION
Spec:

Spec Number: 9089
Unit of Measure: DY
Total Unit Cost: 65.00
Spec Title: DAILY RELOCATION
Spec: All occupants and pets must leave the dwelling each day prior to the start of work and only return after a thorough HEPA vacuum of all areas involving work or worker entrance.

Spec Number: 9090
Unit of Measure: DY

Total Unit Cost: 145.00
Spec Title: TEMPORARY RELOCATION
Spec: All occupants must be out of the work area while lead hazard reduction is underway. Children and pregnant women are specifically prohibited from entering the dwelling at any time during the reduction process, including times when work is not in progress. Provide moving and packing services to and from temporary housing unit. Pay all utility hookup fees for both moves as well as daily rental costs.

Spec Number: 9103
Unit of Measure: AL
Total Unit Cost: 0.00
Spec Title: SECURE SITE
Spec: After the relocation of the occupants, the contractor shall assume responsibility for securing the site against theft, vandalism, fire and other dangers.

Spec Number: 9104
Unit of Measure: RM
Total Unit Cost: 235.00
Spec Title: STORE FURNITURE
Spec: After owner removes and packs all valuable and breakable items, contractor shall pay for and arrange the removal and safe storage of all furnishings, decorations and furniture for duration of job in a bonded warehouse. After clearance, replace furniture in original position.

Spec Number: 9114
Unit of Measure: EA
Total Unit Cost: 106.00
Spec Title: MINI CONTAINMENT
Spec: Construct a dust-tight space surrounding the work area with 6 mil. polyethylene and 2" tape. HEPA vacuum all visible work and containment surfaces after work is completed. Create 5' x 6' walk off mat at the work site exit with 2 layers of 6 mil. plastic.

Spec Number: 9115
Unit of Measure: RM
Total Unit Cost: 45.00
Spec Title: SET UP INTERIOR CONTAINMENT
Spec: Make applicable notifications to state or local agencies, post job site signage and secure lead hazard reduction sites. Pre-clean floors, window sills, troughs and other areas of dust buildup with a HEPA vacuum. Seal all floors with two continuous layers of 6 mil. polyethylene taped to baseboard and 4' beyond door openings with 2" wide, easy release masking tape. Close and seal HVAC registers. Wrap all built-in furniture, cabinetry and fixed appliances with polyethylene and tape to create an airtight seal.

Spec Number: 9118
Unit of Measure: EA
Total Unit Cost: 600.00
Spec Title: ENTRANCE WITH WATER
Spec: Construct a dust-tight, 8 x 8 x 8, job entrance structure containing: a bench, first aid kit, HEPA vacuum, disposable personal cleaning cloths, disposable shoe covers, respirator storage, electrolytic drinks, a container for contaminated clothing and a shower with filtered waste water.

Spec Number: 9120
Unit of Measure: EL
Total Unit Cost: 400.00
Spec Title: EXTERIOR VERTICAL CONTAINMENT

Spec:

After installation of ground containment, hang a disposable reinforced plastic sheet from 3' above the highest proposed workstation on metal tube scaffolding secured to withstand a 40 mph gust. Maintain containment until clearance inspection approval. Create an outer barrier of flags or plastic tape 3' on center, 20' from work site. Close and lock all windows and doors on work site elevation. Remove and replace daily.

Spec Number: 9122
Unit of Measure: DA
Total Unit Cost: 250.00
Spec Title: GROUND CONTAINMENT
Spec:

Attach two layers of 12' wide 6 mil polyethylene to the building perimeter with staples or furring strips extending 10' past work station. Construction a work site perimeter curb of 4 x 4 timbers wrapped under the containment. Create an outer barrier of flags or plastic tape 3' on center, 20' from work site. Close and lock all windows and doors on work site elevation. Remove and replace daily.

Spec Number: 9123
Unit of Measure: EA
Total Unit Cost: 150.00
Spec Title: CONTAINMENT ENTRANCE/EXIT
Spec:

Create an 8' x 8' sealed off space adjacent to work area containing: a bench, first aid kit, HEPA vacuum, disposable personal cleaning cloths, disposable shoe covers, respirator storage, electrolytic drinks and a container for contaminated clothing. All access to job shall be through this area.

Spec Number: 9125
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: HYDROBLASTING CONTAINMENT
Spec:

After installation of ground containment, hang a disposable reinforced plastic sheet from 3' above the highest proposed workstation to the ground on scaffolding secured to withstand a 40 mph gust. Maintain containment until clearance inspection approval. Collect water and paint chips in plastic prior to filtering chips with landscape cloth. Dispose of water per local requirements.

Spec Number: 9129
Unit of Measure: SF
Total Unit Cost: .75
Spec Title: FINAL CLEAN
Spec:

After completion of all lead hazard reduction, fold, remove and wet mist all containment plastic, floors last. HEPA vacuum all visible surfaces including clothing, furniture, walls, floors and ceilings from the top down. Detergent scrub all horizontal surfaces in small sections using a 3 bucket system changing rinse water every 250 sq. ft. Completely rinse with clean water and new equipment. After surface is dry, HEPA vacuum all visible surfaces except ceiling.

Spec Number: 9134
Unit of Measure: RM
Total Unit Cost: 65.00
Spec Title: STEAM CLEAN CARPET
Spec:

Pre-clean carpet with a HEPA vacuum using a beater bar at 4 min. per 10 sq. ft. Using a truck mounted steam generator, clean carpet using the steam extraction method. HEPA vacuum after carpet dries at 1 minute per 10 sq. ft.

Spec Number: 9138
Unit of Measure: PR
Total Unit Cost: 45.00

Spec Title: COMMERCIAL CLEAN CURTAINS
Spec: Remove, package and send curtains to cleaning plant for removal of all surface dirt and dust. Reinstall after clearance approval.

Spec Number: 9139
Unit of Measure: EA
Total Unit Cost: 20.00
Spec Title: FURNACE FILTER - REPLACE
Spec: Dispose of filter. HEPA vacuum return grill and housing and visible dust. Replace with high efficiency filter after completion of all lead reduction work.

Spec Number: 9143
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: LEAD WASTE DISPOSAL
Spec:

Spec Number: 9144
Unit of Measure: EA
Total Unit Cost: 75.00
Spec Title: TCLP TEST
Spec: Conduct a TCLP test on a sample of waste as per EPA protocol. The contractor and the owner are jointly responsible for ensuring that all waste classified as hazardous (greater than 5 ppm) is transported, manifested and delivered by licensed transporters to licensed treatment, storage and disposal facilities.

Spec Number: 9147
Unit of Measure: DU
Total Unit Cost: 200.00
Spec Title: LEAD WASTE DISPOSAL
Spec: Wrap all architectural components in plastic to prevent dust release during transport. Separate Category I and nonhazardous waste. Ensure that all waste both hazardous and nonhazardous is managed in accordance with state regulation. The contractor and the owner are jointly responsible for ensuring waste classified as hazardous is transported, manifested and delivered by licensed transporters.

Spec Number: 9149
Unit of Measure: CY
Total Unit Cost: 400.00
Spec Title: SOLID WASTE DISPOSAL - HAZMAT
Spec: Dispose of all Category I waste (paint chips, stripping sludge, HEPA debris and water filtrate) in compliance with state regulations. Store and secure waste in 6 mil bags or 55 gallon drums marked "Contains Lead -- Systemic Poison." Provide owner with a completed manifest verifying final waste disposition by a licensed hazardous material waste hauler. The contractor and the owner are jointly responsible for ensuring that any waste classified as hazardous is transported, manifested and delivered by licensed transporters to licensed treatment, storage and disposal facilities.

Spec Number: 9150
Unit of Measure: DU
Total Unit Cost: 0.00
Spec Title: DAILY CLEAN-UP
Spec: At the end of each work shift, remove all large debris to the designated storage area. Mist small debris and sweep to disposal bags. Mist and fold exterior ground containment prior to storage or disposal.

Spec Number: 9154

Unit of Measure:
Total Unit Cost: 0.00
Spec Title: WALL & CEILING TREATMENTS
Spec:

Spec Number: 9155
Unit of Measure: SF
Total Unit Cost: .35
Spec Title: REPAIR PAINT
Spec: After establishing any required floor containment, wet scrape all defective paint and apply a coat of acrylic latex paint per manufacturer's most current instructions.

Spec Number: 9160
Unit of Measure: SF
Total Unit Cost: 1.20
Spec Title: STABILIZATION -- LIMITED SURFACE
Spec: Mist defective paint with cleaning solution to the point of saturation without dripping on floor. Aggressively scrape all loose paint, wallpaper and plaster with a draw scraper. Feather edges with a 100 grit sponge sanding block. Thoroughly rinse and allow to dry. HEPA vacuum. Spot prime and apply a premium acrylic latex top coat per manufacturer's instructions.

Spec Number: 9161
Unit of Measure: SF
Total Unit Cost: 0.50
Spec Title: STABILIZE WALL AND TRIM
Spec: Aggressively wet scrape all loose paint, wallpaper and plaster with a draw scraper. Feather edges with a 100 grit sponge sanding block. Detergent wash, rinse and HEPA vacuum all visible chips and dust. Allow surface to dry, spot prime and dry coat with premium acrylic latex paint per manufacturer's instructions.

Spec Number: 9163
Unit of Measure: SF
Total Unit Cost: 0.60
Spec Title: STABILIZE CEILING
Spec: Aggressively wet scrape all loose paint, wallpaper and plaster with a draw scraper. Feather edges with a 100 grit sponge sanding block. Detergent wash, rinse and HEPA vacuum all visible chips and dust. Allow surface to dry, spot prime and dry coat with premium acrylic latex paint per manufacturer's instructions.

Spec Number: 9177
Unit of Measure: EA
Total Unit Cost: 20.00
Spec Title: TEST PATCH ENCAPSULANT
Spec: Prepare surface, degrease and de-gloss; apply any recommended primer and encapsulate a 6" x 6" surface in accordance with manufacturer's specifications. After the recommended curing period, test adhesion by cutting an "X" and attempting to lift, peel or tear surface. If more than a 1/2" x 1/2" section is removed, the component must not be treated with the encapsulant. Request alternative treatment from owner/designer.

Spec Number: 9178
Unit of Measure: SF
Total Unit Cost: 0.97
Spec Title: ELASTOMERIC ENCAPSULANT
Spec: Prepare surface; degrease and de-gloss; apply any recommended primer and encapsulate surface to create a continuous seal over the surface in accordance with manufacturer's

specifications. Use the required number of coats and coverage rate of Elastomeric to guarantee a minimum 20 year manufacturer's warranty.

Spec Number: 9179
Unit of Measure: SF
Total Unit Cost: 2.25
Spec Title: REINFORCED ELASTOMERIC
Spec: Prepare surface; apply base coat with a 3/4" nap roller. Embed a reinforcing mesh in base coat, trim seams and edges. Apply the top coat in accordance with manufacturer's specifications. Use a Fibermesh® reinforced elastomeric.

Spec Number: 9180
Unit of Measure: SF
Total Unit Cost: 1.95
Spec Title: EPOXY ENCAPSULANT
Spec: Prepare surface, degrease and de-gloss. Apply any recommended primer and encapsulate surface to create a continuous seal over the surface in accordance with the manufacturer's specifications. Use the number of coats and coverage rates of polyamide epoxy to guarantee a minimum 20 year manufacturer's warranty.

Spec Number: 9181
Unit of Measure: SF
Total Unit Cost: 2.26
Spec Title: CEMENTITIOUS PLASTER
Spec: Prepare surface; apply recommended primer and encapsulate surface in accordance with manufacturer's specifications. Use a cementitious plaster.

Spec Number: 9190
Unit of Measure: SF
Total Unit Cost: 1.10
Spec Title: VINYL WALLPAPER
Spec: Wet scrape all loose paint, plaster and wallpaper. HEPA vacuum all visible chips. Mark or stencil "Lead Paint" at 4' intervals. Spot patch irregularities. Install a Type I or II vinyl wallpaper with manufacturer's recommended premixed adhesive. Color and pattern choice by owner from in-stock selections with a $20 per double roll allowance.

Spec Number: 9191
Unit of Measure: SF
Total Unit Cost: 0.90
Spec Title: WALL MAT -- GYPSUM BASED
Spec: Wet scrape surface by continuously misting surface while scraping all loose paint, plaster and wall covering. HEPA vacuum all visible chips. Mark or stencil "Lead Paint" at 4' intervals. Spot patch irregularities and feather edges by wet sanding. Apply gypsum-backed canvas or burlap in accordance with manufacturer's specifications.

Spec Number: 9195
Unit of Measure:
Total Unit Cost:
Spec Title: ENCLOSURES
Spec:

Spec Number: 9197
Unit of Measure: EA
Total Unit Cost: 1.10
Spec Title: LAMINATE 3/8" GREENBOARD
Spec: Stencil "Lead Paint" at 4" intervals. Hang, tape and skin coat plaster finish 3/8" greenboard over surface using screws 8" on center. Remove/reinstall all electrical

components as required. Seal all penetrations with siliconized acrylic caulk. Prime and top coat with alkyd enamel paint.

Spec Number: 9198
Unit of Measure: SF
Total Unit Cost: 1.00
Spec Title: LAMINATE 3/8" GYPSUM
Spec: Remove and dispose of lead-containing ranch or ogee base molding. Mark or stencil "Lead Paint" at 4' intervals. Hang, tape and 3-coat finish 3/8" gypsum over surface using screws 8" on center and 1/4" adhesive beads 16" on center. Run gypsum horizontal. Caulk all penetrations and butt seams at door and window casing and base molding with siliconized acrylic. Install 3/8" ogee at baseboard. Prime with gypsum primer and a premium acrylic latex topcoat.

Spec Number: 9199
Unit of Measure: SF
Total Unit Cost: 1.00
Spec Title: LAMINATE 1/2" GYPSUM
Spec: Hang, tape and 3-coat finish 1/2" gypsum over surface using screws 8" on center and adhesive beads 16" on center. Remove and dispose of lead-containing ranch or ogee base molding. Mark "Lead Paint" at 4' intervals on leaded surface. Run gypsum horizontal. Caulk all penetrations and butt seams at door and window casing and base molding with siliconized acrylic. Install 3/8" ogee at baseboard.

Spec Number: 9203
Unit of Measure: SF
Total Unit Cost: 1.95
Spec Title: FUR, HANG, TAPE, FINISH GYPSUM
Spec: Level surface with 1" x 3" wood or metal furring strips 16" on center. Hang, tape and 3-coat finish 1/2" gypsum using adhesive beads and screws 8" on center after clearly marking wall with "Lead Paint" every 4 feet. Extend switches, fixtures and outlets. Seal all penetrations in gypsum surface with siliconized acrylic or polyurethane foam sealant. Prime and top coat with acrylic latex.

Spec Number: 9205
Unit of Measure: SF
Total Unit Cost: 1.00
Spec Title: PLYWOOD WAINSCOT
Spec: Mark "Lead Paint" at 4' intervals. Hang 1/4" BCX plywood with finish screws and adhesive beads 16" on center. Remove and dispose of lead-containing ranch or ogee base molding. Run continuous 1/4" beads of adhesive at perimeter. Trim all top edges with chair rail, bottom with ogee and exterior corners with 1" corner.

Spec Number: 9206
Unit of Measure: SF
Total Unit Cost: 1.75
Spec Title: PANELING - FUR & HANG
Spec: Level surface with 1" x 3" wood or metal furring strips, 16" on center screwed to stud. Mark "Lead Paint" on wall every 4.' Hang 1/4" plywood or composition paneling using 1/4" adhesive beads at all panel edges and ring shank paneling brads. Extend switches, fixtures and outlets. Seal all penetrations with brown siliconized acrylic caulk. Apply corner, cove and base molding.

Spec Number: 9207
Unit of Measure: SF
Total Unit Cost: 2.00
Spec Title: LAMINATE MASONITE

Spec: Wet scrape deteriorated paint, plaster and/or wall covering. Repair damaged areas larger than 3" x 3". Mark walls every 4' "Lead Paint." Extend electrical switches, fixtures and outlets. Laminate mylar-faced masonite with a 1/4" bead of 12" O.C. adhesive and tins nails. Cover seams and edges with matching trim material.

Spec Number: 9212
Unit of Measure: SF
Total Unit Cost: 1.90
Spec Title: CEILING TILES - FIBERGLASS
Spec: Wet scrape to remove all loose and peeling paint, wallpaper and plaster. Mark "Lead Paint" at 4' intervals. Install a 2' x 2' T-bar suspended ceiling grid with main runners perpendicular to ceiling joists with hanger screws at least 24" on center. Install a 5/8" vinyl-faced fiberglass drip-in tile.

Spec Number: 9213
Unit of Measure: SF
Total Unit Cost: 3.40
Spec Title: CEILING TILES - GYPSUM
Spec: Wet scrape to remove all loose and peeling paint, wallpaper and plaster. Mark "Lead Paint" at 4' intervals. Install a 2' x 2' T-bar suspended ceiling grid with main runners perpendicular to ceiling joists with hanger screws at least 24" on center. Install a 1/2" type X, gypsum ceiling tile.

Spec Number: 9215
Unit of Measure: SF
Total Unit Cost: 2.10
Spec Title: CEILING FUR, HANG FINISH GYPSUM
Spec: Level surface with 1" x 3" wood or metal furring strips 16" on center. Hang, tape and 3-coat finish, 1/2" gypsum using adhesive beads and screws 8" on center after clearly marking "Lead Paint" every 4'. Extend or remount light fixtures with siliconized acrylic or polyurethane foam sealant. Prim and top coat with acrylic latex.

Spec Number: 9221
Unit of Measure: SF
Total Unit Cost: 1.00
Spec Title: REMOVE PAINT – HEAT GUN
Spec: Spread a non-flammable, disposable drop cloth over the floor or ground containment. Workers must wear at least a half face respirator with HEPA and organic filter cartridges. Use a heat gun with a 1,100° F max. temperature to soften paint. Draw scrape to bare substrate using sharpened tools. Package paint residue as hazardous waste. Wash surface with a detergent solution, rinse, allow to dry and prime and paint with acrylic latex.

Spec Number: 9222
Unit of Measure: SF
Total Unit Cost: 4.00
Spec Title: REMOVE PAINT - CAUSTIC
Spec: Workers must wear protective gloves, disposable full body protective clothing and face shield. Protect all areas not to be stripped. Apply caustic past and any recommended cover sheet in accordance with manufacturer's specifications. Collect residue and rinse water in 55 gal. plastic or plastic-lined drums compatible with caustic. Neutralize surface to below a P of 6.5 per a litmus paper test, following a wet detergent wash, rinse with clear water. Allow surface to dry and prime with acrylic latex.

Spec Number: 9223
Unit of Measure: SF
Total Unit Cost: 4.00
Spec Title: REMOVE PAINT – ORGANIC SOLVENTS

Spec: Submit product data and use manufacturer's instructions for each chemical stripping agent. Workers must wear protective gloves, disposable full bodysuits and face shields. Protect all adjacent areas not to be stripped. Apply any recommended cover sheet, detergent wash and rinse in accordance with manufacturer's specifications. Collect residue and rinse water in 55 gal drums. Apply acrylic latex primer and top coat.

Spec Number: 9226
Unit of Measure: SF
Total Unit Cost: 1.90
Spec Title: REMOVE PAINT – POWER SANDER
Spec: Remove paint from flat surfaces using a fully shrouded power sander with a HEPA vacuum attachment per manufacturer's most recent recommendations.

Spec Number: 9336
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: CONTAMINATE DISPOSAL
Spec:

Spec Number: 9337
Unit of Measure: SF
Total Unit Cost: 2.50
Spec Title: DISPOSE OF LEAD WALL/CEILING
Spec: Establish plastic lined walk to truck or dumpster. Remove wall or ceiling in as large as practical pieces while protecting floor containment with plywood. Mist small debris with water. Transport debris to dumpster in sealed container or by sealed chute to a covered dumpster.

Spec Number: 9341
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: FLOOR/TREATMENTS
Spec:

Spec Number: 9345
Unit of Measure: SF
Total Unit Cost: 2.50
Spec Title: VINYL TILE REPAIR
Spec: Remove all damaged floor tiles, clean adhesive from deck. Install replacement tiles using manufacturer's adhesive and specifications to create a cleanable surface. Match existing tile, size, color and style as closely as possible.

Spec Number: 9351
Unit of Measure: SF
Total Unit Cost: 0.75
Spec Title: DISPOSE OF CARPET
Spec: After occupant removes breakable personal items, move furniture. Wet carpet with detergent solution. Cut carpet into 6' x 6" sections. Roll and wrap each carpet section in 6 mil poly and remove. HEPA vacuum and wet mop bare floor.

Spec Number: 9355
Unit of Measure: SF
Total Unit Cost: 0.55
Spec Title: STABILIZE FLOOR ACRYLIC
Spec: Reseal all loose floor boards and fill holes. Wet scrape or wet buff the entire floor deck, including closet with 80 grit, nonwoven 16" floor buffer pads. HEPA vacuum, de-glaz

and mop with a detergent wash. Rinse, HEPA vacuum, and tack rag surface. Apply two coats of acrylic latex deck enamel per manufacturer's specifications.

Spec Number: 9357
Unit of Measure: SF
Total Unit Cost: 1.00
Spec Title: STABILIZE FLOOR – CLEAR VARNISH
Spec: Reniail all loose floorboards, fill holes. Wet scrape or wet floor buff the entire floor including closet with 80 grit, nonwoven, 16" floor buffer pads. HEPA vacuum and mop with a detergent solution. Rinse, HEPA vacuum and tack rage surface. Prime and apply 2 coats of high gloss polyurethane.

Spec Number: 9364
Unit of Measure: SF
Total Unit Cost: 1.25
Spec Title: ENCLOSE UNDERLAYMENT
Spec: Mark "Lead Paint" at 4' intervals. Remove, package and dispose of any finish flooring and shoe molding. Mark floor "Lead Paint" at 4' intervals. Screw or ring shank nail 8" on center 3/8" or 1/4" underlayment grade plywood using adhesive. Replace shoe molding to seal edges. Apply one coat of floor enamel.

Spec Number: 9365
Unit of Measure: SF
Total Unit Cost: 2.8
Spec Title: FLOOR ENCLOSURE - UNDERLAYMENT & VCT
Spec: Mark "Lead Paint" at 4' intervals. Install 3/8" underlayment grade plywood using adhesive and 7d screw shank or cement coated nails, 6" on center in all directions. Lay 12" x 12" x 1/8" vinyl composition tile, color group B as made by Armstrong or Azrac per manufacturer's specs. Install shoe molding around baseboard and metal edge strips at openings. Owner's choice of in-stock color/pattern.

Spec Number: 9366
Unit of Measure: SF
Total Unit Cost: 3.05
Spec Title: FLOOR ENCLOSURE - UNDERLAYMENT/SHEET GOODS
Spec: Mark "Lead Paint" at 4' intervals. Install 5/16" underlayment grade plywood, using adhesive and 7d screw shank or cement coated nails, 6" in all directions. Install .07" thick, backed vinyl sheet goods with minimum seams, per manufacturer's recommendations. Install metal edge strips in openings, shoe or vinyl base around perimeter. Owner's choice of in-stock color/pattern.

Spec Number: 9371
Unit of Measure: SY
Total Unit Cost: 21.00
Spec Title: FLOOR ENCLOSURE - UNDERLAYMENT, CARPET, PAD
Spec: Mark "Lead Paint" at 4' intervals. Install 5/16" underlayment grade plywood with 16" OC adhesive beads and 7d screw shank nails or screws, 6" on center in all directions. Butt seams tight to perimeter wall to contain future lead dust. Lay 25 oz. nylon, plush carpet over 5/16" rebond polyurethane pad. Owner's choice of in-stock color/pattern.

Spec Number: 9372
Unit of Measure: SF
Total Unit Cost: 8.25
Spec Title: FLOOR ENCLOSURE – OAK STRIP FLOOR
Spec: Remove all baseboards, shoe molding door jamb casings and trim at floor level. Store casings for reinstallation. Stencil "Lead Paint" at 4' intervals on floor. Install 3/8" underlayment with 7d screw shank nails or screws 6" OC in all directions. Install 2", #2

oak strip flooring per standard industry practices. Fill, sand and finish with 1 coat of sanding sealer and 2 coats of high gloss polyurethane varnish. Install pre-painted baseboard to match original. Reinstall casing and trim doors.

Spec Number: 9386
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: STAIRWELL TREATMENTS
Spec:

Spec Number: 9388
Unit of Measure: RI
Total Unit Cost: 20.00
Spec Title: STABILIZE STAIRCASE - URETHANE
Spec: Aggressively wet scrape all deteriorated paint with a draw scraper. Feather edges with a 100 grit sponge sanding block. De-gloss, rinse, HEPA vacuum and allow to dry. Prime and top coat with a premium polyurethane deck enamel from a single manufacturer.

Spec Number: 9393
Unit of Measure: EA
Total Unit Cost: 35.00
Spec Title: REPLACE TREAD
Spec: Remove, package in 6 mil. plastic and dispose of stair treads. Install 5/4" nosed fir treads. Seal with 2 coats clear urethane.

Spec Number: 9394
Unit of Measure: RI
Total Unit Cost: 8.00
Spec Title: ENCLOSE RISERS - PLYWOOD
Spec: Mark each riser "Lead Paint". Laminate riser with 1/4" BCX plywood attached with adhesive and finish nails. Paint or stain to cover.

Spec Number: 9395
Unit of Measure: EA
Total Unit Cost: 30.00
Spec Title: ENCLOSE TREADS AND RISERS - WOOD
Spec: Mark "Lead Paint" at 4' intervals. Chisel nose off treads and apply 5/4" pine stepping stock. Secure treads with a full coat of adhesive and 7d screw shank flooring nails or stainless steel finish screws. Laminate risers with 1/4" BCX plywood back caulked and nailed with ring shank brads. Stain surface walnut and apply 2 coats of high gloss urethane. Wet scrape, wash, rinse and allow stringer to dry. Prime and topcoat stringer with acrylic latex enamel.

Spec Number: 9397
Unit of Measure: RI
Total Unit Cost: 22.00
Spec Title: ENCLOSE STAIRWELL - CARPET
Spec: Mark "Lead Paint" at 4' intervals. Pretreat treads and risers by wet scraping and HEPA vacuuming. Install 25 oz. nylon plush carpet to enclose lead hazard.

Spec Number: 9401
Unit of Measure: LF
Total Unit Cost: 2.00
Spec Title: RAIL SYSTEM STABILIZE
Spec: Wet scrape deteriorated surface; feather edges with 100 grit wet sanding block; detergent wash and de-gloss remainder of surface; rinse; HEPA vacuum and spot prime bare substrate. Apply a single, acrylic latex top coat of paint to entire surface.

Spec Number: 9404
Unit of Measure: RI
Total Unit Cost: 40.00
Spec Title: STRIP STAIRWELL - HEAT GUN
Spec: Spread a disposable, nonflammable drop cloth. Workers must wear organic solvent filter cartridges. Use a heat gun with a 1,100 F max. temperature to soften paint. Scrape to bare substrate. Minor residue may be cleaned with paint remover. Package paint residue as hazardous waste. Detergent wash, rinse and allow to dry. Prime and topcoat with a premium acrylic latex enamel.

Spec Number: 9401
Unit of Measure: RI
Total Unit Cost: 40.00
Spec Title: STRIP STAIRWELL -- WET SCRAPE
Spec: Create a 6 mil plastic containment at top, sides and bottom of stairwell. While continuously misting surface, wet scrape all paint from all staircase components with sharpened draw scrapers. HEPA vacuum all visible dust and prime with acrylic latex deck enamel. Using sharpened, flat and curve matching draw scrapers, remove all paint while continuously misting the surface. Minimize dust generation by covering scraper head with moistened cloth. HEPA vacuum, detergent wash, rinse and allow to dry. Prime and topcoat with acrylic enamel.

Spec Number: 9405
Unit of Measure: RI
Total Unit Cost: 46.00
Spec Title: STRIP STAIRWELL - CAUSTIC
Spec: Workers must wear impervious protective gloves, disposable full body overalls and face shields. Protect all areas to be stripped. Apply caustic paste and any recommended coversheet in accordance with manufacturer's specs. Collect residue and rinse water in 55 gallon drums compatible with caustic. Neutralize to below PH of 6.5 per a litmus test and rinse surface in accordance with manufacturer's directions. Prime and topcoat with owner's choice of finish.

Spec Number: 9412
Unit of Measure: RI
Total Unit Cost: 22.00
Spec Title: REPLACE STAIRWELL - BASEMENT
Spec: Remove package and dispose of all LCM. Rebuild stairs to code, match existing trim and materials as closely as possible.

Spec Number: 9419
Unit of Measure: LF
Total Unit Cost: 56.00
Spec Title: REPLACE RAIL AND BALUSTERS
Spec: Remove, package and dispose of lead-containing railing system. Construct stairway railing system using stock Morgan newel posts, handrails and birch baluster to match existing as closely as possible. Prime and top coat or stain and 2 coats of polyurethane. Owner's choice of in-stock colors.

Spec Number: 9422
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: WINDOW TREATMENTS
Spec:

Spec Number: 9424

Unit of Measure: EA
Total Unit Cost: 32.00
Spec Title: STABILIZE WINDOW , ACRYLIC
Spec: Wet scrape all interior and exterior window components with curved draw scraper. Feather edges with 100 grit sponge sanding blocks. Re-glaze as required. Rinse, HEPA vacuum and allow to dry. Spot prime and top coat interior and exterior with premium acrylic latex.

Spec Number: 9434
Unit of Measure: EA
Total Unit Cost: 32.00
Spec Title: WINDOW – FIX CLOSED/STABILIZE
Spec: Screw the meeting rails together using two, #10, 2 1/2" screws. Caulk to eliminate all air infiltration with 10 year siliconized acrylic. Wet scrape, wet sand, rinse, HEPA vacuum and allow to dry interior window components. Prime and top coat interior with premium acrylic latex.

Spec Number: 9435
Unit of Measure: EA
Total Unit Cost: 60.00
Spec Title: WINDOW WRAP WELL AND STABILIZE
Spec: Wet scrape all interior and exterior window components. Feather edges with 100 grit sponge sanding block, detergent wash, rinse and allow to dry. HEPA vacuum all visible dust and chips. Spot prime bare wood with quick drying, water-based, clear sealant and top coat with white alkyd paint. Undercut parting bead and stool molding 1/4". Back caulk and nail .027 aluminum coil stock in window well area with ring shank brads. Drill two 3/8" weep holes in storm sash. Caulk perimeter of well with siliconized acrylic.

Spec Number: 9436
Unit of Measure: EA
Total Unit Cost: 135.00
Spec Title: WINDOW – STOOL, LINERS, STABILIZE
Spec: Remove, package in plastic and dispose of stool, stop and parting bead. Install PVC channels and spring clip window controls. Install stool, stop and parting bead and laminate sill with .027 aluminum coil stock. Wet scrape all interior and exterior window trim. HEPA vacuum all visible dust and chips. Clean with a lead-specific detergent. Prime bare wood. Top coat with premium acrylic latex.

Spec Number: 9437
Unit of Measure: EA
Total Unit Cost: 195.00
Spec Title: REPLACE LOWER SASH, STOOL, LINERS
Spec: Remove, package and dispose of lower sash, stool, parting beach and stop molding. Replace stool, single glazed wood sash and aluminum or vinyl sash guides. Laminate well with back-caulked .032 aluminum or vinyl coil stock. HEPA vacuum all visible dust and chips. Wet scrape, prime and top coat with alkyd paint.

Spec Number: 9450
Unit of Measure: EA
Total Unit Cost: 100.00
Spec Title: WINDOW – STRIP, OFFSITE, REINSTALL
Spec: Remove window and package in plastic and send window to off-site stripper. Remove, package in plastic and dispose of all interior trim. Retrim opening to match existing as closely as possible. Repair damage to walls. Reinstall stripped window sash. Prep for paint and prime entire window unit/trim with white acrylic latex.

Spec Number: 9451

Unit of Measure: EA
Total Unit Cost: 275.00
Spec Title: WOOD REPLACEMENT SASH - HISTORIC
Spec: Remove and dispose of sash, parting bead and interior stop. Strip jamb, interior sill and sash side of exterior stop with heat gun or chemicals. Wet scrape interior and exterior trim and sill. TSP, HEPA vacuum, TSP. Prime and paint. Install custom-made wood replacement sash with matching muntin pattern, double glazing, parting bead and interior stop. Repair and adjust window weights and hardware for smooth operation. Prime and paint. Clean glass.

Spec Number: 9453
Unit of Measure: EA
Total Unit Cost: 275.00
Spec Title: VINYL WINDOW WITH STORM
Spec: Remove, package in plastic and dispose of entire window unit and interior trim. Field measure and install a PVC, 1 over 1, double hung, single glazed, window with piggyback storm window and 1/2 screen. Wrap exterior jamb and sill with aluminum coil stock. Retrim opening with preprimed 1" x 6" casing, apron and pine stool. Top coat with acrylic latex and clean glass.

Spec Number: 9455
Unit of Measure: EA
Total Unit Cost: 340.00
Spec Title: VINYL DH, DG, LOW-E WINDOW
Spec: Remove package in plastic and dispose of entire window unit and interior trim. Field measure and install a PVC, 1 over 1, double hung, double glazed, argon filled window with at least a R-4 rating and 1/2 screen. Wrap exterior jamb and sill with aluminum coil stock back caulked and nailed 6" O.C. Retrim opening with 1" x 6" casing and apron and pine stool. Prep for paint, caulk edges and prime new wood. Clean glass.

Spec Number: 9456
Unit of Measure: EA
Total Unit Cost: 350.00
Spec Title: WINDOW – VINYL SLIDING/DUAL GLAZED
Spec: Remove existing wood window and parting bead and dispose. Wet scrape interior and exterior casing, sill, stool frame and associated trim. Prime sill and top quality oil based primer. Prime and paint all scraped areas, color as selected by owner. Field measure, fabricate and install a dual glazed, thermal break, vinyl sliding replacement window including all necessary painting, caulk, trim and screen. Manufacturer to be Louisiana-Pacific or approved.

Spec Number: 9459
Unit of Measure: EA
Total Unit Cost: 245.00
Spec Title: WINDOW – ALUMINUM SLIDING, DG
Spec: Remove, package and dispose of window unit. Field measure, fabricate and install a white, dual glazed, thermal break, enameled, sliding, aluminum replacement window including all necessary painting, caulk, trim and screen. Clean glass.

Spec Number: 9477
Unit of Measure: EA
Total Unit Cost: 225.00
Spec Title: BASEMENT WINDOW VINYL
Spec: Remove, package in plastic and dispose of basement window and jamb. Reframe opening with 2" x 8" and install an awning or slider type, single glazed window with a piggyback storm window. Retrim opening with 1" x 6". Prep and prime wood for top coat.

Spec Number: 9487
Unit of Measure: EA
Total Unit Cost: 345.00
Spec Title: WINDOW – REMOVE, PATCH ENVELOPE
Spec: Remove, package and dispose of all interior and exterior window components. Stud opening with 2" x 4" insulate to R-13 and install an interior and exterior finish matching the adjacent surface as closely as possible. Prime new material.

Spec Number: 9488
Unit of Measure: SF
Total Unit Cost: 45.00
Spec Title: WINDOW – REMOVE, GLASS BLOCK OPENING
Spec: Remove all wood window components. Install glass bock per manufacturer's spec, tool joints, install expansion spacers around perimeter and mortar to existing foundation or framing. Trim exterior and interior to match existing.

Spec Number: 9490
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: DOOR TREATMENTS
Spec:

Spec Number: 9491
Unit of Measure: EA
Total Unit Cost: 28.00
Spec Title: DOOR – STABILIZE
Spec: Wet scrape door, frame and trim with curved draw scrapers. Feather edges with a 100 grit sponge sanding block. HEPA vacuum, detergent wash, rinse and allow to dry. Spot prime and top coat with owner's choice of premium acrylic latex.

Spec Number: 9495
Unit of Measure: EA
Total Unit Cost: 60.00
Spec Title: DOOR – STABILIZE, PLANE, ADJUST
Spec: Remove door to a fully contained work site. Plane door edges and adjust the hasp and strike plate to minimize door/jamb friction and contact. Wet scrape door, jamb and trim. Clean and de-gloss door with detergent wash. Rinse to neutral, spot prime and top coat with acrylic latex.

Spec Number: 9502
Unit of Measure: EA
Total Unit Cost: 165.00
Spec Title: DOOR – STRIP, OFF-SITE, REHANG
Spec: Remove door at hinge pins, mark location at top edge and package in plastic. Package and dispose of stops. Place pins in plastic bag on jamb. Send packaged door to off-site stripper. Strip paint on door jamb with heat gun, caustic or chemical stripper. Neutralize all striped components and sand smooth. Prime and top coat jamb. Stain and polyurethane door. Install brass finish bedroom lockset.

Spec Number: 9508
Unit of Measure: EA
Total Unit Cost: 175.00
Spec Title: DOOR - REPLACE 6 PANEL
Spec: Remove, package and dispose of door, stop molding and hardware. Wet scrape jamb and trim. Install a pine or fir 6 panel 1-3/8" door on two 3" x 3" butt hinges. Provide bedroom lockset. Spot prime bare wood and top coat entire assembly with acrylic latex.

Spec Number: 9509
Unit of Measure: EA
Total Unit Cost: 60.00
Spec Title: DOOR -- REPLACE HOLLOW CORE
Spec: Remove, package and dispose of door, stop molding and hardware. Wet scrape jamb and trim. Install a hollow core, flush lusn door in two, 3" x 3" butt hinges. Provide bedroom lockset. Spot prime bare wood and top coat entire assembly with acrylic latex.

Spec Number: 9514
Unit of Measure: EA
Total Unit Cost: 42.00
Spec Title: DOOR -- REMOVE, PACKAGE AND DISPOSE
Spec: Remove, package and dispose of unnecessary door.

Spec Number: 9519
Unit of Measure: EA
Total Unit Cost: 165.00
Spec Title: DOOR -- PRE HUNG HOLLOW CORE
Spec: Remove, package and dispose of door, jamb and casing. Install a hollow core, preasd wood, 6 panel, prehung door including a bedroom lockset. Retrim opening with 1" x 6" pine. Prime and top coat with acrylic latex.

Spec Number: 9520
Unit of Measure: EA
Total Unit Cost: 275.00
Spec Title: DOOR -- PREHUNG 6 PANEL - WOOD
Spec: Remove, package and dispose of door jamb and casing. Install a pine or fir, 6 panel, 1-5/8" prehung door including a bedroom lockset. Prime and top coat with owner's choice of paint or stain.

Spec Number: 9522
Unit of Measure: EA
Total Unit Cost: 45.00
Spec Title: STABILIZE AND ADJUST EXTERIOR DOOR
Spec: Plane exterior door edges and adjust hasp and strike plate to minimize door/jamb friction. Wet scrape door jambs and trim. Clean and de-gloss with lead-specific detergent. Rinse to neutral, spot prime and top coat with acrylic latex.

Spec Number: 9527
Unit of Measure: EA
Total Unit Cost: 215.00
Spec Title: EXTERIOR DOOR -- REPLACE PANELED
Spec: Remove, package and dispose of door. Install a 1-5/8" pine or fir, paneled entrance door including spring bronze weather striping, peep site, dead bolt and entrance lockset on three 3" x 3" butt hinges. Prep, prime and top coat.

Spec Number: 9532
Unit of Measure: EA
Total Unit Cost: 360.00
Spec Title: EXTERIOR DOOR -- REPLACE METAL PREHUNG
Spec: Remove, package and dispose of door, frame and casing. Install a prehung, insulated 4 panel, metal skinned door including magnetic weather stripping, interlocking threshold, wide angle peep site, dead bolt and entrance locksets. Retrim opening with 1" x 6" casing and brick molding. Prime and prep all wood.

Spec Number: 9533
Unit of Measure: EA

Total Unit Cost: 290.00
Spec Title: EXTERIOR DOOR - REPLACE PREHUNG FLUSH
Spec: Remove, package and dispose of door, frame and casing. Install a prehung, flush door including magnetic weather stripping, interlocking threshold, wide angle peep site, dead bolt and entrance locksets. Retrim opening with 1" x 6" casing and brick molding. Prime and prep and top coat all wood.

Spec Number: 9537
Unit of Measure: EA
Total Unit Cost: 30.00
Spec Title: STRIP DOOR SILL
Spec: Remove paint from sill using wet scraping, heat gun or chemical stripper. Neutralize if required. Prime bare substrate with alkyd primer. Apply a minimum of 1 coat alkyd enamel finish coat to provide proper and/or adequate coverage.

Spec Number: 9545
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: TRIM TREATMENTS
Spec:

Spec Number: 9546
Unit of Measure: LF
Total Unit Cost: 1.25
Spec Title: TRIM PAINT REPAIR
Spec: Wet scrape deteriorated paint, spot prime and spot top coat.

Spec Number: 9547
Unit of Measure: LF
Total Unit Cost: 0.80
Spec Title: TRIM - STABILIZE AND PAINT ACRYLIC
Spec: Mist defective paint area with water. Lightly scrape all loose paint. Feather edges with a sponge sanding block saturated with deglossing agent. Rinse and HEPA vacuum small visible chips. Allow surface to dry, spot prime and top coat with premium acrylic latex paint from a single manufacturer.

Spec Number: 9567
Unit of Measure: LF
Total Unit Cost: 2.25
Spec Title: TRIM -- STRIP OFF-SITE
Spec: Remove decorative trim. Scribe opening number into back of trim, remove nails by pulling through the back of trim. After stripping, neutralize surface and fill all holes with vinyl spackle. Back prime with alkyd primer and reinstall on same opening. Prep, prime and top coat with acrylic latex.

Spec Number: 9579
Unit of Measure: LF
Total Unit Cost: 3.00
Spec Title: TRIM - REPLACE NEAREST AVAILABLE STOCK
Spec: Remove, package in 6 mil plastic and dispose of trim. Replace with nearest available stock trim components. Fully prime and apply a single top coat of paint or stain and polyurethane - color and sheen choice of owner.

Spec Number: 9586
Unit of Measure: EA
Total Unit Cost: 40.00
Spec Title: STABILIZE RADIATOR

Spec: Remove deteriorated paint by wet scraping. Spot prime bare metal with metal primer. Apply a minimum of 1 coat alkyd enamel/metal paint.

Spec Number: 9587
Unit of Measure: EA
Total Unit Cost: 45.00
Spec Title: STABILIZE FOOTED TUB
Spec: Remove deteriorated paint by wet scraping. Spot prime substrate with appropriate primer. Apply a minimum of 1 coat finish paint.

Spec Number: 9588
Unit of Measure: LF
Total Unit Cost: 26.00
Spec Title: STABILIZE CABINET
Spec: Remove deteriorated paint by wet scraping. Feather edges with 100 grit foam sanding block. Detergent wash, rinse and allow to dry. Rework doors and/or drawers and adjust hardware to reduce friction. HEPA vacuum. Spot prime bare wood with alkyd-based primer. Apply a minimum of 1 coat of enamel finish coat.

Spec Number: 9610
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: DISPOSAL
Spec:

Spec Number: 9611
Unit of Measure: EA
Total Unit Cost: 40.00
Spec Title: DISPOSAL OF CABINET
Spec: Remove, package and dispose of lead-containing cabinet.

Spec Number: 9612
Unit of Measure: EA
Total Unit Cost: 0.00
Spec Title: DISPOSE OF LEAD FURNITURE
Spec: Remove, package and dispose of contaminated household furniture.

Spec Number: 9613
Unit of Measure: EA
Total Unit Cost: 90.00
Spec Title: DISPOSE OF MANTLE/REPAIR WALL
Spec: Remove, package in 6 mil polyethylene and dispose of mantel. Frame fireplace opening with two-by-fours. Laminate wall with 1/2" drywall. Apply metal corner beads, 3 coat finish ready for paint. Install 6" high baseboard and shoe molding.

Spec Number: 9624
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: EXTERIOR TREATMENTS
Spec:

Spec Number: 9625
Unit of Measure:
Total Unit Cost: 0.36
Spec Title: EXTERIOR PAINT REPAIR

Spec: Wet scrape to remove loose paint. Wash, rinse and HEPA vacuum all visible chips and dust to prepare surface for painting. Spot prime and apply a premium acrylic latex top coat.

Spec Number: 9626
Unit of Measure: SF
Total Unit Cost: 0.75
Spec Title: EXTERIOR STABILIZATION – LTD SURFACE
Spec: Mist defective paint with water to the point of saturation. Aggressively wet scrape all loose paint. Feather edges with a 100 grit sponge sanding block. Rinse and allow to dry. HEPA vacuum all chips and dust. Spot prime and apply a premium acrylic latex top coat.

Spec Number: 9627
Unit of Measure: SF
Total Unit Cost: 0.55
Spec Title: EXTERIOR - STABILIZE AND PAINT ACRYLIC
Spec: Aggressive wet scrape all loose paint, caulking and glazing with curved and flat draw scrapers. Feather edges with a sponge sanding block saturated with de-glossing agent. Rinse and HEPA vacuum all visible chips and dust. Allow surface to dry, spot prime and top coat with premium acrylic latex.

Spec Number: 9635
Unit of Measure: SF
Total Unit Cost: 3.75
Spec Title: EXTERIOR - ENCAP CEMENTITIOUS PLASTER
Spec: After creation of an exterior containment, prep, prime and apply an approved cementitious plaster encapsulate in accordance with manufacturer's specifications.

Spec Number: 9640
Unit of Measure: SF
Total Unit Cost: 3.45
Spec Title: ENCLOSE BARRIER/VINYL SIDING
Spec: Mark or stencil siding with "Lead Paint" 4" in all directions. Apply a nonwoven vapor barrier with taped seams and opening flashing to enclose the lead paint or apply rigid or foilfold insulation as a paint barrier and substrate for siding materials. Protect enclosure with ASTMB-3679 vinyl siding. Enclose all lead containing trim with vinyl or aluminum ventilating soffit panels, coil stock and field fabricated trim accessories in accordance with manufacturer's specifications. Caulk all joints and seams of lead containing trim with 20 year white caulk. Owner's choice of siding pattern, color and embossing.

Spec Number: 9648
Unit of Measure: LF
Total Unit Cost: 1.20
Spec Title: EXTERIOR TRIM – REPAIR PAINT
Spec: Wet scrape all defective paint areas; rinse and allow to dry. HEPA vacuum all visible chips and dust; spot prime all bare substrate; apply single top coat of acrylic latex paint to entire surface.

Spec Number: 9649
Unit of Measure: LF
Total Unit Cost: 0.55
Spec Title: EXTERIOR TRIM - STABILIZE
Spec: Wet scrape all defective paint areas; feather edges; clean and de-gloss remainder with detergent and mesh pad. Rinse. Vacuum all visible chips and dust; spot prime bare substrate caulk with siliconized latex compound and apply single top coat of acrylic latex paint to entire surface.

Spec Number: 9657
Unit of Measure: LF
Total Unit Cost: 2.60
Spec Title: ENCLOSE TRIM - ALUMINUM
Spec: Mark "Lead Paint" every 10 linear feet. Enclose trim with .027 white aluminum breaker stock with tight joints and accurately fitted connections. Back caulk all seams with 20 year siliconized acrylic, flush head joints to create a weather tight installation.

Spec Number: 9658
Unit of Measure: LF
Total Unit Cost: 2.50
Spec Title: ENCLOSE SOFFIT/ALUM
Spec: Mark "Lead Paint" every 10 linear feet. Enclose trim with .027 aluminum non vented soffit panels, color by owner. Back caulk all seams with siliconized acrylic to create a weather tight seal.

Spec Number: 9665
Unit of Measure: SF
Total Unit Cost: 1.75
Spec Title: EXTERIOR – REMOVE PAINT - SCRAPERS
Spec: Spread 6 mil plastic from foundation to 6' out from foundation. Using sharpened, flat and curved matching draw scrapers, remove all paint after misting the surface. Minimize dust generation by covering scraper head with moistened cloth. Prep and prime ready for top coat.

Spec Number: 9666
Unit of Measure: SF
Total Unit Cost: 2.00
Spec Title: EXTERIOR – REMOVE PAINT – HEPA BLAST
Spec: Remove paint with compressed air and blasting media that is fully recaptured by a shroud equipped with a HEPA vacuum local exhaust system. Follow the manufacturer's instructions for exhaust airflow rate and length of exhaust hose. The pressure drop must not exceed manufacturer's specification. Dispose of blast media in accordance with state and EPA guidelines.

Spec Number: 9667
Unit of Measure: SF
Total Unit Cost: 1.75
Spec Title: EXTERIOR – REMOVE PAINT – NEEDLE GUN
Spec: After completing containment, remove paint with a compressed air driven, fully shrouded, needle gun following equipment manufacturer's instructions.

Spec Number: 9684
Unit of Measure: SF
Total Unit Cost: 1.40
Spec Title: PORCH – COMPLETE STABILIZE
Spec: Stabilize deteriorated paint by wet scraping all paint, caulking and glazing. HEPA vacuum all surfaces. Spot prime and apply a minimum of 1 coat of floor and deck enamel.

Spec Number: 9690
Unit of Measure: SF
Total Unit Cost: 1.65
Spec Title: ENCLOSE DECK – TREATED PLYWOOD
Spec: Stabilize by wet scraping. Mark "Lead Paint" at 4' intervals. Apply 1/2", tongue and groove, BCX marine grade, treated plywood with stainless steel screws or screw shank nails, 8" o.c. and adhesive to deck. Trim edge with preservative treated molding to cover.

Spec Number: 9691
Unit of Measure: SF
Total Unit Cost: 3.75
Spec Title: ENCLOSE DECK – T & G
Spec: Stabilize deck by wet scraping. Stencil "Lead Paint" at 4' intervals on painted floor. Staple down 30 lb. roofing felt. Install 3" or 4" tongue and grove, pine or fir strip flooring using screw shank nails or power activated staples. Install ogee molding at vertical walls. Prime and coat with exterior high gloss deck enamel.

Spec Number: 9693
Unit of Measure: SF
Total Unit Cost: 2.50
Spec Title: ENCLOSE PORCH CEILING - PLYWOOD
Spec: Stabilize ceiling by wet scraping. Mark ceiling "Lead Paint" 4' on center. Apply a 3/8" BCX plywood ceiling with 7d screw shank nails, 8" on center and B side exposed. Trim perimeter with 1/4 round and seams with 2" lattice. Prime and top coat with acrylic latex.

Spec Number: 9695
Unit of Measure: SF
Total Unit Cost: 1.90
Spec Title: ENCLOSE PORCH CEILING - GYPSUM
Spec: Install drop cloth to collect and dispose of lead paint chips. Mark ceiling "Lead Paint" 4" on center. Apply 1/2" exterior gypsum using adhesive and screw nails. Tape and finish seams with nylon tape. Trim with 1/4 round. Prime and top coat with acrylic latex.

Spec Number: 9697
Unit of Measure: LF
Total Unit Cost: 45.00
Spec Title: EXTERIOR – REPLACE RAILING SYSTEM
Spec: Remove, package and dispose of railing system. Install a 36" high wood railing with 1" x 1" pickets, 3" on center supported by preservative treated 4" x 4". Prep, prime and top coat with acrylic latex.

Spec Number: 9684
Unit of Measure: LF
Total Unit Cost: 65.00
Spec Title: RAILING WITH BALUSTERS 36"
Spec: Install a 2 x 4 beaded fir top rail, 2 x 4 fir bottom rail, 4 x 4 corner and intermediate posts and 1-1/3" fir balusters spaced 6" o.c. with hot-dipped galvanized nails. Prime and top coat acrylic latex or apply 2 coats of semi-transparent oil based stain preservative.

Spec Number: 9703
Unit of Measure: EA
Total Unit Cost: 65.00
Spec Title: REPLACE COLUMN 4" X 4"
Spec: Remove, package and dispose of lead-containing column. Install a preservative- treated 4 x 4 replacement column.

Spec Number: 9704
Unit of Measure: EA
Total Unit Cost: 270.00
Spec Title: REPLACE COLUMN TURNED
Spec: Remove, package and dispose of lead-containing column. Install a historically correct turned column. Prep, prime and top coat with acrylic latex.

Spec Number: 9705
Unit of Measure: EA
Total Unit Cost: 110.00
Spec Title: REPLACE COLUMN - DECORATIVE
Spec: Install 4" x 6" pressure-treated wood column. Install 2" pressure-treated pine column base and capital. Install 1" x 4" pine with 1-1/2" moldings around base and capital. Prime and top coat with acrylic latex.

Spec Number: 9708
Unit of Measure: SF
Total Unit Cost: 12.00
Spec Title: REPLACE LANDING
Spec: Remove, package and dispose of landing. Construct an entry platform using pressure-treated 4" x 6" support posts on 12 x 12 poured footers, 2" x 8" pressure-treated joists 16" o.c., #1 fir 1" x 4" square edge flooring and 1" x 8" d-select skirting. Install a 4"x4" support posts, 2" x 4" beaded top rail and 2" x 4" bottom rail with 1-1/2 square balusters 4" on center along the open staircase and landing perimeter.

Spec Number: 9709
Unit of Measure: LF
Total Unit Cost: 55.00
Spec Title: EXTERIOR – STAIR SYSTEM
Spec: Remove, package and dispose of risers, treads, stringers and railing system. Install 1"x 6" 40 lb. pressure-treated stringers, risers and treads. Install a 32" high pressure-treated wood railing system with 2" x 2" balusters 5" on center supported by pressure-treated 4" x 4". Prep, prime and top coat with acrylic latex to match existing as closely as possible.

Spec Number: 9749
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: SOIL TREATMENTS
Spec:

Spec Number: 9751
Unit of Measure: SF
Total Unit Cost: 0.45
Spec Title: SEED AND TACK
Spec: Mow lawn using a bagging mower and dispose of waste. Scratch surface with a steel rake, rototill established walking paths. Fertilize with starter blend and re-seed with K-31 tall fescue. Mulch with straw and water. Create a 3' high barrier with string, 1" x 1" stakes and marking tape. Water twice a week until 2" stand of grass is established.

Spec Number: 9753
Unit of Measure: SF
Total Unit Cost: 4.00
Spec Title: REGRADE AT FOUNDATION AND SOD
Spec: Mow yard 4' out from structure with a bagging mower as close to foundation as possible. Install 5" of topsoil at foundation graded out 4" from foundation to 1." Fertilize and sod area. Install 3' high barricade of string on 1" x 1" stakes to establish lawn.

Spec Number: 9755
Unit of Measure: SF
Total Unit Cost: 0.60
Spec Title: MULCH 4"
Spec: Install a 4' wide, UV resistant, landscape barrier with 6" landscape staples, 1' on center, after mowing lawn as low as practical. Overfill area with at least 4" of pine bark or shredded hardwood mulch.

Spec Number: 9756
Unit of Measure: SF
Total Unit Cost: 1.85
Spec Title: ENCAPSULATE PLAYGROUND WITH SAND
Spec: Install a heavy duty, nylon reinforced, landscape cloth between 4" x 4" perimeter fame. Cover with at least 4" of clean play sand to protect landscape fabric.

Spec Number: 9763
Unit of Measure: SF
Total Unit Cost: 4.00
Spec Title: SOIL REPLACEMENT
Spec: Dampen dry soil. Remove and dispose of the top 4" of soil in the areas indicated on the plan or noted below. Spread 1" of peat and manure and till into 4" depth. Bring in clean topsoil and spread evenly to replace all removed soil. Fertilize and sod area. Install 3' high barrier of marking tape or string on 1' x 1' stakes to establish lawn.

Spec Number: 9765
Unit of Measure: EA
Total Unit Cost: 45.00
Spec Title: FOUNDATION PLANTING
Spec: Create a barrier to soil access by planting evergreen bushes with defensive briars or needles to eliminate random access. Sir William Barberry, Chinese holly or pachysandra is typical.

Spec Number: 9768
Unit of Measure: EA
Total Unit Cost: 300.00
Spec Title: PLAY AREA
Spec: Remove vegetation, sterilize soil and level ground at play area. Install heart redwood perimeter frame with 2 x 8 sides supported by 4 x 4 posts. Secure with lag or carriage bolts countersunk without protrusions. Bevel top edge of post and embed at least 2' deep. Lay down filter fabric and 6" of tan bark. Dimensions as follows: 8 ft. x ft.

Spec Number: 9769
Unit of Measure: SF
Total Unit Cost: 2.50
Spec Title: DECOMPOSED GRANITE
Spec: Remove vegetation and till soil to 6" depth. Grade surface smooth and drain away from house. Wet down and compact soil. Install decomposed granite, 1/4" or less with fines, 3 layers of approximately 1-1/2" thickness each. Wet down and compact after each layer. 3" final minimum thickness. Fill in dips and cracks 3 – 7 days after installation. Color as selected by owner from standard available colors.

Spec Number: 9777
Unit of Measure:
Total Unit Cost: 0.00
Spec Title: OUTBUILDINGS
Spec:

Spec Number: 9778
Unit of Measure: EA
Total Unit Cost: 800.00
Spec Title: DISPOSE OF GARAGE/OUTBUILDINGS
Spec: Cover adjacent ground and path to dumpster to capture lead paint chips. Remove and package lead components in as large as practical pieces. Wet small debris with water. Transport debris to dumpster in sealed containers or by sealed chute to a sealed dumpster.

Spec Number: 9779
Unit of Measure: EA
Total Unit Cost: 900.00
Spec Title: EXTERIOR DOOR – OVERHEAD GARAGE DOOR
Spec: Install a 8' x 10' raised panel style, hot-dipped galvanized steel front overhead door with a polyurethane core insulation, U-shaped bottom seal, baked on 2 coat polyester finish paint, hot-dipped galvanized stiles, and an automatic garage door opener (1/3 H.P.), one piece rail construction with automatic safety reverse/door stop. All necessary hardware/framing included.

J. J. Keller's Training on Demand

Certificate of Completion

Jeremy Bullins

Has completed the online, interactive training course

Hazmat: Safety Training

And achieved a score of **90** **%** on the Final Exam.

Corporate Safety Compliance
Company Name

9335 W 53rd St N
Company Address

Maize, KS 67101
City, State, Zip

2/28/2022
Date of Completion

Note: It is the responsibility of the trainer and the trainer's company (named as Company, above) to determine and verify a student's competency. Course completion certificates do not state or imply competency on any given subject, only that the student has completed the online training.

J. J. Keller & Associates, Inc.®
Since 1953

J. J. Keller's Training on Demand

Certificate of Completion

Jeremy Bullins

Has completed the online, interactive training course

Hazmat: Security Awareness Training

And achieved a score of **100 %** on the Final Exam.

Corporate Safety Compliance
Company Name

9335 W 53rd St N
Company Address

Maize, KS 67101
City, State, Zip

2/28/2022
Date of Completion

Note: It is the responsibility of the trainer and the trainer's company (named as Company, above) to determine and verify a student's competency. Course completion certificates do not state or imply competency on any given subject, only that the student has completed the online training.

J. J. Keller & Associates, Inc.®
Since 1953

J. J. Keller's Training on Demand

Certificate of Completion

Jeremy Bullins

Has completed the online, interactive training course

Hazmat: Highway Transportation Driver Training

And achieved a score of **100 %** on the Final Exam.

Corporate Safety Compliance
Company Name

9335 W 53rd St N
Company Address

Maize, KS 67101
City, State, Zip

2/28/2022
Date of Completion

Note: It is the responsibility of the trainer and the trainer's company (named as Company, above) to determine and verify a student's competency. Course completion certificates do not state or imply competency on any given subject, only that the student has completed the online training.

J. J. Keller & Associates, Inc.®
Since 1953

J. J. Keller's Training on Demand

Certificate of Completion

Jeremy Bullins

Has completed the online, interactive training course

Hazmat: General Awareness Training

And achieved a score of **100 %** on the Final Exam.

Corporate Safety Compliance
Company Name

9335 W 53rd St N
Company Address

Maize, KS 67101
City, State, Zip

2/28/2022
Date of Completion

Note: It is the responsibility of the trainer and the trainer's company (named as Company, above) to determine and verify a student's competency. Course completion certificates do not state or imply competency on any given subject, only that the student has completed the online training.

J. J. Keller & Associates, Inc.®
Since 1953

ThermoFisher
SCIENTIFIC

CERTIFICATE

This Certifies that

Jeremy Bullins

Has successfully completed

Safety Training for
~ Transport of Radioactive Sealed Sources in XRF Analyzers ~

Supervisor Signature

2/14/2022
COMPLETION DATE

Jean Geslin
Jean Geslin, RSO
Thermo Fisher Scientific

ThermoFisher
SCIENTIFIC

CERTIFICATE

This Certifies that

Jeremy Bullins

Has successfully completed

Safety Training for
~ US Regulations for Handheld XRF Analyzers with Radioactive Sealed Sources ~

Supervisor Signature

2/14/2022
COMPLETION DATE

Jean Geslin
Jean Geslin, RSO
Thermo Fisher Scientific

ThermoFisher
SCIENTIFIC

CERTIFICATE

This Certifies that

Jeremy Bullins

Has successfully completed

Safety Training for
~ Sealed Source XRF - Radiation Safety~

Supervisor Signature

2/14/2022
COMPLETION DATE

Jean Geslin
Jean Geslin, RSO
Thermo Fisher Scientific

Kansas Department of Health and Environment

Be it known, that having properly filed application with the Kansas Department of Health and Environment,

Jeremy Bullins

is hereby certified as a

Certified Renovator

Certification Number : KS11-8637

Issue Date: September 3, 2020 Expiration Date: October 16, 2025

Lee A. Norman, M.D., Secretary
Kansas Department of Health and Environment

Kansas Department of Health and Environment

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

Amendment No. 10

RADIOACTIVE MATERIAL LICENSE

Pursuant to the Nuclear Development and Radiation Control Act (L. 1963, Ch. 290) and Kansas Annotated Regulations numbers 28-35-133 et. seq., and in reliance on statements and representations made to this agency by the licensee designated below, a license is hereby issued authorizing the licensee to transfer, receive, possess, and use the radioactive material or materials listed below; and to use such materials at the place or places listed below; and to use the material for the purpose or purposes listed below. This license is subject to all applicable rules, regulations, and orders now in effect or placed in effect by the Department of Health and Environment and any conditions specified below.

Licensee		
1. South Central Kansas Economic Development District (SCKEDD)		4. Expiration Date: March 31, 2027
2. 9730 E 50 St N Bel Aire, KS 67226-8804	3. License No.: 22-B827 is renewed in its entirety to read as follows:	5. Docket No.: 030-00395 Reference No.:

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license	9. Authorized use
A. Cadmium-109	A. Sealed Sources (Isotope Products Laboratories, Model XFB-3; QSA Global, Model CUC.D1; CUC.P1; SEE CO., Model XCd9.06)	A. 6 source(s). No single source to exceed 40 mCi.	A. To be used as components of Niton XLp series X-ray fluorescence analyzers for lead analysis of samples.

CONDITIONS

10. Radioactive materials shall only be used at the following location(s):
9730 E 50th Street North, Bel Aire, Kansas, 67226

Radioactive material may be used at temporary job sites of the licensee anywhere in the State of Kansas where the department maintains jurisdiction for regulating the use of radioactive material.

MATERIALS LICENSE SUPPLEMENTARY SHEET	License No.: 22-B827	Docket or Reference No.. 030-00395
	Amendment No. 10	

11. The following shall be responsible for the licensees radiation protection program:
Jeremy Bullins Radiation Safety Officer.

12. Radioactive material listed in Item 6 above is authorized for use by individuals for the materials and uses described as follows:
Radioactive material shall be used by or under the supervision of an individual listed below:

Authorized Users	Material and Use
Jeremy Bullins	Subitem(s) A

13. The licensee shall perform testing for leakage or contamination of sealed sources in accordance with K.A.R. 28-35-216a.

14. Sealed sources containing radioactive material shall not be opened or removed from their respective source holders by the licensee.

15. The licensee shall conduct a physical inventory every six (6) months to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for three years from the date of the inventory for inspection by the department, and shall include the quantities and kinds of radioactive material, location of sealed sources and the date of the inventory.

16. The licensee may transport radioactive material or deliver radioactive material to a carrier for transport, in accordance with the provisions of K.A.R. 28-35-196a, "Preparation of Radioactive Material for Transport".

17. The licensee shall comply with the provisions of Kansas Radiation Protection Regulations, Part 4, "Standards for Protection Against Radiation" and Part 10, "Notices, Instructions and Reports to Workers; Inspections."

18. The licensee shall possess and use radioactive material described in Items 6, 7 and 8 of this license according to the most restrictive of; the Kansas Radiation Protection Regulations, this license or statements, representations, and procedures contained in the following documents.

MATERIALS LICENSE SUPPLEMENTARY SHEET	License No.: 22-B827	Docket or Reference No.: 030-00395
	Amendment No. 10	

A. The letter received December 28, 2021, signed by Jeremy Bullins, with attachments.
B. The application dated February 24, 2022, signed by Jeremy Bullins, with attachments.

Date: March 23, 2022

FOR KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT

By: Kimberly Steves

Kimberly Steves
Director, Radiation Control Program

City of Caldwell 2022 Community Development Block Grant

Contractor Guidelines

(General, Sub, Independent, and Prime Contractors included)

In order to be eligible to work on houses in the Caldwell Housing Rehabilitation program contractors must meet the following program requirements.

I. Contractor Eligibility

A. Contractors are placed on the Bidders List through contact with the Caldwell City Hall.

B. All contractors must obtain a minimum of a local residential permit as defined by the Caldwell City Code through the City of Caldwell.

C. All plumbing, electrical, and mechanical subcontractors must be licensed and have qualifications information on file with the City and the Grant Administrators.

D. Contractors must provide work and credit references.

E. Contractors must have good references.

F. Contractors must be in good standing, which means they will not appear on the Department of Labor's debarment list.

II. Contractor Requirements

A. Contractors shall comply with all federal and state guidelines, rules, regulations, and orders issued by the U.S. Department of Housing & Urban Development, the U.S. Department of Labor, and the Kansas Department of Commerce governing the Caldwell Housing Rehabilitation program.

B. Contractors will not be awarded more than two (2) rehabilitation houses in the City at one time, unless the dollar value of a housing rehabilitation contract is less than $2,500; except under special exceptions granted by the City Commission. Contractors who have an open contract from a past round of houses can only have a total of three (3) contracts open. A rehabilitated house is deemed complete when a certificate of completion has been completed and issued by the City of Caldwell.

C. Contractors shall provide, and shall require any subcontractors to provide, certificates or other evidence of insurance prior to signing a contract certifying that, for the period covered by any contract, all contractors and subcontractors carry:

1. Workmen's Compensation Insurance for all owners, employees, and employees of subcontractors engaged in work on the premises, in accordance with the Kansas Workmen's Compensation Laws.
2. Manufacturers and Contractors Public Liability Insurance with limits of $100,000/$300,000, to protect the contractor, his subcontractors, and the owners, as their interest may appear, against claims for injury to, or death of, one or more person, due to accidents which may occur or result from operations under and contract; such insurance shall cover the use of all equipment, machinery, hoists, and motor vehicles used in the performance of work.
3. Property damage insurance in an amount not less than $25,000 pep to protect the contractor, his subcontractors and the owners, as their interests may appear, from claims for property damage that might arise from operations under any contract.
4. Any and all additional insurance required by the laws of the State of Kansas.
5. Lead-Based Paint Certification for themselves, all employees, and subcontractors, as applicable by laws.
6. Renovation Firm License through the Kansas Department of Health and Environment.
7. Kansas Roofing Contractor Registration Certificate through the Kansas Attorney General's Office

D. An invitation to bid will be sent to all contractors. Those contractors interested will be sent a bid package which will include:

1. Instructions to bidders, which will include bid tour date and bid opening.
2. The final bid specifications for each house.
3. A required Bid Proposal form for each house.
4. General and Material Specifications.
5. A notice of where lead hazards have been identified.
6. A copy of the Construction Contract (for informational purposes only).

E. Contractors should send sealed bids to the City Clerk, Kristin Hutsler, with the City of Caldwell at 14 W Central, Caldwell, Kansas 67022.

F. Bid selection will be determined by the following factors for each house:
    1. Lowest bid.
    2. Each contractor will only be allowed to have three (3) open CDBG housing contracts at one time.
    3. Low bid on individual line items that are selected for inclusion in the final contract document specifications.
    4. Quality of workmanship on previous projects.
    5. Performance on previous contracts with federal and state funds.
    6. References supplied by the contractor.

G. City Commission approves the best eligible.

H. Conference is held between the Grant Administrator and the contractor to finalize the contract specifications, contract terms and go over federal and state rules, regulations, and laws. Contract specifications may need to be revised due to a maximum allowable limit per house placed on grants to homeowners. The contract specifications will contain only the highest priority repairs on each house. Change orders must be approved by the inspector and city commissioner.

I. Conference is held between the Grant Administrator, the contractor, and the homeowner to sign the contract and issue the Notice to Proceed.

J. All contractors will be required to receive a City of Caldwell Building Permit prior to beginning any work on the project. Building permit fees shall be waived for all portions of the rehabilitation work funded with CDBG Funds. Contractors are required to receive all inspections that would otherwise be required.

K. CDBG Projects are eligible for Sales Tax Exemptions filed through the Kansas Department of Revenue. Ultimate exemption is determined by the State of Kansas. For it to be sent for consideration to the State of Kansas, the following information will be required to be provided to the City Clerk:
    1. Start date of the project.
    2. Expected end date of the project.
    3. Cost of the project.
    4. Company's official name and address.
    5. Address of project where work is occurring.
    6. Scope of the work being completed at the project.

7. Notification must be provided upon completion of the project and a date shall be provided for completion. Final completion notification shall be sent to the City Clerk.

L. In conjunction with signing a contract, the selected contractor is required to complete Part One of Lien Prevention Document.

M. Terms of payment must be met for payment to be made by the City.

1. At 100% of work completion, contractor will submit and invoice to city hall. Work must pass inspection for the payment to be received. Checks will be issued after approval and signed at the commission meeting.
2. Certificate of Completion must be signed and submitted prior to final payment is issued.
3. Part Two of the Lien Prevention Document must be completed and submitted prior to final payment being issued by the City of Caldwell.

City of Caldwell, Kansas.

APPROVED BY: _____ DATE: _____

Jamie York, Mayor

ATTEST: _____ DATE: _____

Kristin Hutsler, City Clerk

City of Caldwell 2022 Community Development Block Grant (CDBG) Housing Rehabilitation Plan

The United States Department of Housing & Urban Development (HUD) allocates funds used by the Kansas Department of Commerce for the Community Development Block Grant (CDBG) Housing Rehabilitation program. The City of Caldwell has been awarded a CDBG grant from Commerce for the purpose of housing rehabilitation within the target area. The maximum amount of CDBG federal grant funds to be spent on rehabilitation is $25,000 per unit. Private match is encouraged to fill the gap in financing if a rehabilitation will exceed this threshold (I.E. weatherization program). This program is designed to provide housing rehabilitation for low-to-moderate income individuals who own (or rent) a housing unit within the target area.

Applicants will be screened and rated in accordance with eligibility criteria as set out in this Housing Rehabilitation Plan.

- Total Area bounded by South Side of W. Ave. E, the West side of N. and S. Webb, the North side of W 1st Ave, and the East side of N. & S. Caldwell Blvd
    - South Side of W Ave. E bounded by the West side of N. Webb and the East side of N. Caldwell Blvd
    - West side of North & South Webb bounded by South Side of W Ave. E and North side of W. 1st Ave
    - North side of W. 1st Ave bounded by West side of South Webb and East side of South Caldwell Blvd
    - East side of North & South Caldwell Blvd bounded by the South side W. Ave E and North side of W. 1st Ave

APPLICATION SELECTION CRITERIA

First-Come/First-Served

A public meeting will be held to review and explain the application and grant program In Mid-June. **Housing Applications are due to the Caldwell City Hall by Friday, July 29, 2022, at 4pm**. Applications must be turned in to City Hall during business hours or by mail or will be taken at City Hall Monday through Friday between 9 a.m. – 12 p.m. and 1 p.m. - 4 p.m. Applications will be accepted on a first-come/first-served basis. Homeowners who turned in Pre-Applications will be contacted first. Applications received after this date will be processed only if

grant funds are still available and will be selected by time/date stamp of received. Individuals having received a Housing Rehabilitation grant in the past are not eligible.

ELIGIBILITY REQUIREMENTS

Only property located within the target area is eligible for rehabilitation. To qualify, total household income for all individuals 18 years or older living in the home must be less than the low-to-moderate income guidelines set by HUD for Sumner County, Kansas. The eligible home must be the primary residence of the applicant for owner-occupied units. For rental units, the renter must be income qualified. If the owner of the rental unit is income-qualified, the City will pay 85% of the rehabilitation and the Owner will be responsible for 15%. If the owner is above income guidelines, he/she must contribute 25% of the rehabilitation cost. The owner of the unit must also sign a rent-freeze agreement for a three-year period.

The total household income (income from all sources of family members over 18 years of age) must be less than the following income limitations:

No. In Household	LMI Income
1	$43,200
2	$49,400
3	$55,550
4	$61,700
5	$66,650
6	$71,600
7	$76,550
8	$81,450

Note: The LMI income limits will always use the most current income requirements as established by HUD.

1. The real property taxes and utilities must be current and up to date for all properties until project completion.
2. Hazard insurance naming the City as an additional insured in at least the amount of the rehabilitation contract will be required. If repairs are necessary to obtain the hazard insurance, then evidence is required showing that coverage will be provided upon

completion of the rehabilitation. If applicable, grant funds can be used to purchase required hazardous insurance. Expense will be deducted from maximum award per unit.

3. The applicant must have owned the unit prior to the grant award date.

VERIFICATION OF ELIGIBILITY

All income information will be kept confidential. Applicants must qualify as low-to-moderate income (LMI) prior to the time the inspection for rehabilitation is conducted. Re-verification will be required is a new income tax return has been filed prior to inspection. Also, re-verification will be required if 6 months has lapsed, and rehabilitation has not yet begun.

Adjusted Gross Income from the latest years IRS 1040 will be used for income verification. All income tax returns will need to be included for anyone in the household over 18 that are not attending school. The most recent tax return must be used – NO EXCEPTIONS.

TYPES OF FINANCIAL ASSISTANCE

1. Households who income-qualify will be awarded CDBG Housing Rehabilitation funds in the form of a soft or deferred loan for the full amount of the rehabilitation costs or the maximum allowed under CDBG guidelines, whichever is less, for a three-year period.
2. A soft loan may be forgiven and considered a grant if all contractual agreements are followed.
3. The homeowners are required under CDBG guidelines to enter into a contractual agreement with the City, which will place a lien against the rehabilitated property for a three-year period to meet the guidelines as set out by the Housing Rehabilitation Plan.
4. The agreement will also stipulate that the unit must be the homeowners' primary residence (unless a rental agreement has been signed), kept and maintained in a standard condition.
5. If within the three-year lien period the homeowner should move from the housing unit, it's allowable to sell to a low-to-moderate income person, who will occupy the unit as the primary residence and will assume the balance of the prorated lien. The City must verify the income of the person intending to purchase the home, or if the home is sold to someone other than a low-to-moderate income individual, the cost of the rehabilitation will be prorated and must be paid back into the City's Housing program by the homeowner. Proration example is shown below (6).

6. If a homeowner dies within the three-year lien period and has no spouse, the home may be sold or rented to a low-to-moderate income household. If sold or rented to a non-LMI family, the homeowner's estate must pay back the prorated amount on the lien. For example, if the home is sold in the 13th month following completion of the rehabilitation, then 12/36, or 1/3, of the loan would be forgiven and the homeowner's estate would repay 2/3 of the original amount.

STANDARDS FOR IMPROVEMENTS

This program does not consist or remodeling or cosmetic repairs. The goal of the Housing Rehabilitation program is to add twenty years to the useful life of the housing unit. Housing rehabilitation activities will include only the repairs necessary to meet the Housing Quality Standards (HQS) defined by the Housing Rehabilitation program as determined by the Housing Inspector. Housing units considered for rehabilitation must meet the definitions of a substandard unit and must be suitable for rehabilitation.

"Substandard" is defined as a housing unit that does not adequately meet Housing Quality Standards criteria set for the following: Building Exterior (roof, gutters, doors, windows, and insulation), Heating System, Plumbing System, Electrical Systems/Appliances, or Building Interior (ceilings, walls, floors, doors, ventilation, smoke detectors)

"Suitable for Rehabilitation" is defined as a substandard house for which it is technically and financially feasible to restore it to a standard condition, given the funding limits of the program. Emergency repairs and handicapped accessibility items may be addressed on a case-by-case basis at the discretion of the contractual consultants and City Commissioner following the CDBG guidelines. Emergency repairs must be verified by the City's Contracted Housing Inspector and must cause an immediate and overwhelming threat to the home's occupant. The emergency repair must be brought to code standards (2017 IBEC).

Only one grant per house may be awarded.

LIMITED/INELIGIBLE ACTIVITIES

The following activities are limited to the identified restrictions:

1. Mobile Homes.

   Mobile homes will not be considered for rehabilitation under this program.
2. Rental units are eligible if:
   a. Tenant is documented to be LMI.
   b. If homeowner is documented to be LMI, an 85% grant may be allowed.

c. If homeowner is documented to be non-LMI, homeowner must provide 15% matching funds.
d. The homeowner must sign an agreement that all tenants renting this property within the 3 years from the date of this agreement will have an income that does not exceed the most recently published Department of Housing and Urban Development (HUD) LMI guidelines.
e. The homeowner of the unit must also sign an agreement indicating that the monthly rental payment will not exceed the current amount, or the Fair Market Rents (FMR) as published annually by HUD for a three-year period after the rehabilitation is complete. Monthly rental amount can be adjusted for only cost of living adjustment (COLA).
f. The homeowner of any rental unit receiving CDBG grant funds for rehabilitation also agrees to allow the City of Caldwell or its appointed representative access to the property to perform an annual HQS inspection, for a minimum of the 3 years after the rehab work is finished. Any HQS deficiencies discovered during the annual inspection will need to be brough into compliance at the landlord's expense.

3. Self-Help
    a. The City will not allow self-help projects.
4. Living Trust
    b. Applicants meeting all other eligible criteria, and who currently reside on a property with a title held by a Living Trust, are eligible for a rehabilitation repayment agreement.
    c. Income eligibility is determined by the income of the person residing at the property.
    d. The holder of the deed will be required to sign all grant documents.
    e. A property held as a Living Trust must be considered as a tenant and handled as such.

The following activities are considered ineligible:

5. Homes located in a flood plain are not eligible.
6. Homes being purchased under a contract for deed are not eligible.
7. Homes held in life estates are not eligible.
8. Remodeling or work not required to meet CDBG standards.

"WALK-AWAY" POLICY

If the initial inspection and cost estimate for bringing the home up to Housing Quality Standards indicates that the cost of rehabilitation is expected to exceed the maximum allowable, the homeowner will be notified. The application will be considered a "walk away" until:

1. The homeowner has completed some of the repairs on their own and the estimate of the remaining work would be at or below the maximum allowable. The homeowner is responsible to notify the City when they have the work completed so the property can be re-inspected. All work must be approved by the contracted Housing Inspector.
2. If the homeowner is unable to make repairs, they may provide the necessary additional funds within 45 days after they are notified. If the funds have not been deposited at the City within the allotted time, the City will cancel the application, close the file, and "walk away" from the property.

If the original cost estimate is below the maximum allowable, the property will be included in the next bidding process. Homeowners will be notified within 15 days after the bid opening if the lowest contractor bid for their home exceeds the maximum allowable. In that event, the applicant will have the option to supply the additional funds. The applicant will be given 45 days to satisfy the requirements for all necessary additional funding. Additional funds must be received in full by the City prior to the execution of the construction contract. If the homeowner cannot provide the additional funds, the City shall "walk away" from that home. If the applicant does not respond in 30 days, the City will cancel the application, close the file, and "walk away" from the property.

Lead-based paint risk assessment inspections will be completed after the Housing Quality Standards inspection and if the estimated cost for repairs is below $25,000. If the lead-based paint risk assessment shows lead and repairs cannot be done with containment, which allows a family use of restroom, cooking, and sleeping facilities, and the family must relocate to a lead safe housing unit for the duration of the remediation and until the dwelling passes the clearance test. Refusal to relocate will be grounds to "walk away".

Children, age six or younger, will be required to relocate if lead activity is necessary, even if containment is possible. Refusal to relocate will be grounds to "walk away".

LEAD-BASED PAINT REQUIREMENTS

The homeowner, contractor, City, Grant Administrator, and contracted Housing Inspector will be required to follow all regulations of all state and federal regulations regarding lead-based paint hazards. The appropriate regulations are hereby made a part of this plan.

Participation in the Housing Rehabilitation program is voluntary for all parties. All property proposed for rehabilitation, and built prior to 1978, will be inspected for lead-based paint.

The City will require that children younger than 6 years of age living in a house built prior to 1978 be tested for an elevated blood lead level. If an applicant refuses to allow the child's blood to be tested, the City may elect not to rehabilitate the home (walk away policy).

The City is not required to pay any expenses for relocation of the household that may be required by lead-based paint activities during construction. However, the City recognizes that if relocation is required, it could produce a degree of hardship on the household. It will be the policy of the program and the approved city commissioner to provide the household with $150 per day relocation expense allowance for a household of two persons, plus $30.00 per day for each additional household member. This allowance will be paid for the actual days the members are required to be out of the home. If a family voluntarily relocates during rehabilitation, when relocations is not required, it will be the policy of the City to not pay any relocation expenses. Regardless of relocation status, the residents must relocate to a lead-safe housing unit built after 1978.

LEAD-BASED PAINT PRECAUTIONS

All occupants of property to be rehabilitated will be notified of the following:

1. All households will receive both the "Protect Your Family from Lead in Your Home" and "Renovation Right" brochures.
2. All households will receive a copy of the risk assessment report to sign within 15 days after the risk assessment is completed.
3. If lead-based paint is discovered in the assessment, households will receive a "Lead Hazard Reduction Notice" within 15 days after work is completed.
4. All households, which have been identified as having lead-based paint, will receive a copy of the "Lead Hazard Clearance Notice".
5. Require any individual 6 years of age or younger, residing in the home, to have a blood test for elevated levels of lead.
6. Homeowners may sign a waiver to remain in their home if no child 6 or under lives in the house and the repairs can be completed with self-containment; and restroom, cooking, and sleeping facilities are available.

7. Relocation costs to a lead-free dwelling may be paid to a homeowner or tenant when the risk assessment shows elevated levels or lead in areas where repairs will be done with or without containment and a restroom, cooking, and sleeping facilities are not available.
8. Participation in the Housing Rehabilitation program is voluntary; therefore, temporary relocation expenses are not required.

ROLES AND RESPONSIBILITIES

Homeowner/Tenant

The homeowner/tenant must agree to abide by all the rules and regulations of the Housing Rehabilitation program and allow the rehabilitation work to be performed on his/her home in accordance with the Housing and Lead Hazard Control Plans, the Material Application Manual, procurement requirements, and/or the CDBG Housing Standards guidelines.

The homeowner/tenant must:

1. Complete a Property Owners' Repayment Agreement.
2. Remove all obstacles from inside and outside of the house in order to view and subsequently work on the dwelling. This may include removing any stored items from areas and cutting any weeds or saplings that may obscure the foundation or hauling away items stacked in or around the house, or homeowner/tenant must agree to allow debris to be removed from the premises by the contractor or resident.
3. Grant access to the dwelling for additional inspections, pre-bid conference inspections, rehabilitation work, ongoing inspections of work, and state monitoring visit.
4. Provide utility access to the contractor at no cost.
5. Sign a waiver or liability for the property identified in the application.
6. Provide proof of property insurance and must keep the dwelling insured for the three-year repayment agreement period. The city will need to be listed as an additional insured on the homeowner policies for the three-year period. As additional insured, the City will receive official notification of any lapse or change in covered insurance.
7. Shall provide documentation of lead blood level for every child aged 6 and under if the home was constructed prior to 1978, prior to rehabilitation work proceeding.
8. Must agree to relocate should it become necessary in order to perform the lead hazard work.
9. Maintain the rehabilitated property in good condition and repair so it will not become a substandard property.

10. Must fill out an application and supply income documentation for the Weatherization program.
11. The homeowner will be required to attend the final inspection and sign the final inspection certificate. If the homeowner has questions or comments on any of the rehabilitation work, it should be mentioned at this time and resolution agreed upon, prior to signing the certificate of completion.
12. If requested, the homeowner must make the home available at a CDBG monitoring visit.

GRIEVANCE POLICY

All grievances or concerns regarding civil rights, fair housing, the City Commission, the Grant Administrator, City Administrator, the contracted Housing Inspector, the contractor(s), the contractor's workmanship, the bid procedure(s), the awarding of the contracts, etc. shall follow the grievance policy included in this application. All grievances and concerns should first be made in writing to the City Clerk. The City Clerk will then observe the following procedure:

Level 1

The City Administrator receives a written complaint.

The City Administrator contacts the Grant Administrator if the controversy is regarding workmanship, client treatment or contractor misunderstandings. The Grant Administrator will contact the contracted Housing Inspector and contractor to meet on site and address the client or contractor concerns. A written resolution will be made to the complainant and a copy of the resolution will be forwarded to the City Administrator.

The City Administrator will immediately advance the complaint to level 2 if the complaint is on fair housing, civil rights, procurement, or an environmental issue.

The complainant has the right to appeal the decision and must do so in writing to the City Administrator within five days from the date of the written resolution.

Level 2

The written complaint concerning fair housing, civil rights, procurement, the environment, or an appeal of a previous decision will be reviewed by the Mayor, City Administrator, and City Clerk, with the assistance of the Grant Administrator and the City Attorney. If the complaint is a fair housing or civil rights concern, the City may submit the complaint to the Kansas Human Rights Commission, 300 W. Douglas, Suite 220, Kansas, 67202, for investigation and resolution. After review, a written decision will be made to the complainant and the City Commission.

The complainant has the right to appeal the decision and must do so in writing to the City Administrator within five days from the date of the written resolution.

Level 3

The City Administrator receives a written appeal from the complainant.

The City Commission will review the appeal with assistance from the City Attorney and Grant Administrator. All written evidence will be made available to the City Commission for their deliberation.

The City Commission shall present a written resolution to the complainant within 15 days of the date the appeal was received.

All grievances/concerns regarding this project should first be made in writing. The letter must be submitted to the City Administrator. The City Administrator will then refer the complaint to the appropriate party(ies) to resolve the dispute.

Written notice will be given to the complainant within 15 days. If the grievance remains unsolved after this action, the Grant Administrator, contracted Housing Inspector, contractor, and the homeowner will review the situation. Subsequently, a written recommendation or resolution will be forwarded to the City Commission.

If this problem still cannot be resolved, the City Commission will make disposition of the complaint from documentation that the complainant, contracted Housing Inspector, contractor and/or Grant Administrator have submitted. Any of the involved parties may be called to appear before the City Commission for clarification of the matter.

The City Commission will then review the complaint at the next City Commission meeting. The City Commission will determine at that meeting if the decision is acceptable or unacceptable. If it is unacceptable, the City Commission has the right to overturn the decision. At that time the final disposition will be made in writing to the complainant.

Final responsibility for the Housing Rehabilitation program rests with the City. The City will be involved with the Housing Rehabilitation program, perform duties as necessary and will have the final decision in local matters involving this grant.

CONFLICT OF INTEREST POLICY

The City will follow the Kansas Department of Commerce's Conflict of Interest Policy. Persons covered under this policy include: a city employee, elected or appointed official, agent, consultant, officer or any immediate family member or business partner of the above, of the recipient, or any designated public agencies or sub-recipients, which are receiving funds from

the CDBG program. A copy of this policy has been adopted and is available for review from the City. Amendments of these policies and procedures may be made by the City and must be submitted to the Kansas Department of Commerce for approval. When changes in the CDBG guidelines would adversely affect Housing Rehabilitation program applications already under review, such application will be evaluated under the CDBG guidelines in effect at the time of application.

City of Caldwell, Kansas.

APPROVED BY: _____ DATE: 4-6-2022

Jamie York, Mayor

ATTEST: _____ DATE: 4-6-2022

Kristin Hutsler, City Clerk

HOUSING REHABILITATION MATERIAL APPLICATION STANDARDS

IMPORTANT

Please read material, application and performance standards carefully.

Contractor will obtain and pay for all necessary licenses, permits and privileges required in his work, and perform all work in strict accordance with the laws and ordinances in force in the State of Kansas, and in the locality in which this work is to be performed. Contractor will investigate what Federal, State or Municipal laws and requirements are applicable and comply with all in an approved manner.

Lead Safe Work Practices will be implemented on all homes built prior to 1978 that receive CDBG Housing Rehabilitation funds.

SHOULD THERE BE ANY CONFLICTS BETWEEN THESE SPECIFICATIONS AND THE WORK WRITE-UP, THE PROJECT INSPECTOR SHOULD BE CONTACTED FOR A FINAL DETERMINATION.

3/4/2020

CARPENTRY SPECIFICATIONS

A. Concrete Work

1. The concrete mix shall be 3,000 pounds transit mix or with a 5 1/2 sack mix for both interior and exposed concrete.
2. No concrete shall be poured on frozen ground.
3. All concrete flat work must be over a 2" layer of gravel/sand on compacted earth and be reinforced properly.
4. All flat work concrete must be a minimum of 4" thick with 1/2" pre-molded asphalt or non-bituminous fiber-filled material expansion joints at entrance platforms, steps, intersections with driveways or walks, and in long runs at least every 50'.
5. Control joints must be provided at no more than 5' intervals for sidewalks and 20' intervals for floors, concrete drives, and parking slabs.
6. Footings must be below the freeze line, 8" thick, and reinforced properly with rebar.
7. Foundation walls must be 8" wide and reinforced properly with rebar.

CONTRACTOR MUST CALL FOR A SITE INSPECTION AFTER SITE IS READY FOR CONCRETE AND 24 HOURS PRIOR TO POURING. AFTER 24 HOURS HAS ELAPSED CONTRACTOR MAY PROCEED. NOTIFY THE PROJECT INSPECTOR.

B. Masonry Work

1. No masonry work shall be done when the temperature of the surrounding air is likely to cause freezing.
2. All joints must be completely filled with mortar.
3. All brick, stone, or block used should match, if possible, adjacent work. The owner(s) must approve samples before starting the work, unless the work is to be painted or covered.
4. Soft salmon type brick shall not be allowed.
5. Tuck-pointing shall only be done after the joints have been raked out to a minimum depth of 1/2" and wetted.
6. All damaged, loose, or salmon brick, in area to be rebuilt, must be removed until sound brickwork is encountered.
7. New brick patches must be toothed into and match in the existing work in site, joints, and bond.
8. Veneer brickwork must be tied to frame wall with galvanized wall ties on every third course, 32" on center, and shall conform to above specifications.
9. All new retaining walls over 24" high must have #4 steel dowels placed every 2' and be imbedded at least 6" into the footings.
10. Retaining wall footings shall be three times the thickness of the wall in width and 8" deep, containing three (3) #4 steel rebar.
11. All retaining walls over 24" high shall have weep holes at grade level at 8' intervals.
12. All block replacement foundation walls shall have a galvanized steel bed reinforcement (8" mesh) in 2nd course and 5th course of block. Concrete block or poured wall may be used for all foundation walls.

C. Grade

Shall mean backfill along foundation with topsoil and provide sufficient slope in finish grade to provide drainage away from house.

D. Framing Lumber

1. Must be No. 3 Southern Pine, SB, SPF, standard grade, or better.
2. Studs must be Stud Grade.
3. Allowable spans for floor, roof, and ceiling joists no greater than 24" centers.
4. Bearing partition stud walls may not be less than 2" x 4" studs with dimension perpendicular to the wall, 16" on center.
5. Floor joist spacing may be no more than 16" on center when 25/32" flooring is to be applied directly to the joist; or, 16" on center when any lesser thickness of finish flooring is to be laid over a sub-floor.
6. Gutting of structural members shall not be done without the approval of the Project Inspector.

E. Sub-Flooring

1. Plywood shall be Southern Yellow Pine (SYP), 1/2" minimum where 25/32" finished flooring is to be laid or 5/8" where resilient flooring is to be laid and joists are not over 16" on center.
2. Nail plywood sub-floor to joint at each bearing with No.8 cemented or galvanized, or No. 6 threaded nails spaced 6" on center along all edges, and 10" on center along intermediate members.
3. Install plywood with outer piles at right angles to the joists and staggered so that the end joists in adjacent panels bear on different joists.
4. Common boards used as sub-flooring shall not be over 11" wide or less than 3/4" thick when laid on joist spaced 10" on center, and shall be laid diagonally if hard wood flooring is laid.
5. Nail boards with No. 8 box nails or No. 6b threaded nails, as follows:
   a. Two (2) nails in 3" boards.
   b. Two (2) nails in 4" boards.
   c. Three (3) nails in 6" boards.
   d. Four (4) nails in 8" boards.
   e. Five (5) nails in 12" boards.

F. Underlayment

1. Shall be 3/8" structural grade plywood or 1/4" underlayment.
2. Nail underlayment with cement coated, rosin coated, or ring shank nails placed on 4" centers on all edges and over the face of each piece.
3. Cement Board in high moisture area installed using Manufacturer Specifications

G. Finish Flooring

1. Strip Wood Flooring
   a. Material must be softwood with 25/32" minimum thickness.

b. Shall be 3 1/4" maximum width.
c. Nails shall be as recommended by flooring manufacturer. Blind nail tongue and groove flooring, driving nail at an approximate angle of 50 degrees. Space nails every 10" to 12" on center.

2. Sheet Vinyl Flooring:

a. Minimum 0.065" gauge overall thickness.
b. Shall be 0.025" gauge wear layer, 10' wide rolls.
c. The owner(s) shall be shown at least three (3) samples to select from a quality that will cost no more than $20 per yard including installation.
d. Mastic shall be as recommended by flooring manufacturer. (No gluing only along the edges will be allowed).
e. All joints and cracks in base shall be filled, smoothed, and leveled.
f. Where irregular floor conditions exist, install underlayment to receive vinyl flooring.
g. Layout to minimize joints in vinyl flooring. Small strips or patching will not be allowed.
h. Owner(s) shall sign color sample.

3. Carpeting and Padding:

a. The owner(s) will select from at least three (3) carpet samples.
b. Based on a specified allowance, not to exceed more than $20 per yard including installation.
c. Owner(s) shall sign color sample.
d. Where irregular floor conditions exist, install underlayment to receive carpet.
e. Carpet shall be stain and soil resistant treated, FHA approved, and installed in strict accordance with manufacturer's specifications.
f. Padding shall be, FHA approved, and installed according to manufacturer's specifications.

CARPET WILL NOT BE ALLOWED IN BATHROOMS, KITCHENS, AND UTILITY ROOMS.

H. Finish Lumber

1. Shall be free from tool marks and other objectionable defects.
2. *Solid lumber and miscellaneous trim for interior finish shall be vinyl or solid stock white pine, if stained. Finger joints, allowed if painted.*
3. All exterior solid lumber and trim shall be sealed against the weather. Exterior porches and all wood meeting the ground shall be treated lumber.
4. Porches shall have a top, intermediate, and bottom railing.

I. Exterior Doors

1. Doors:

a. Shall be new, wood flush, particle core, exterior grade, and standard entrance doors with window light. A pre-hung foam filled insulated steel door is preferred.
b. Shall conform to the thickness of the doorjamb and be hung on three (3) 3 1/2 x 3 1/2" butt hinges, flush mounted.
c. Shall have a glass window or peep hole (client to decide). If window is desired must be a minimum Low-E Argon gas filled, with a u-value of 0.32 or better as rated by NFRC, or approved equal.

d. Replacement shall include weather stripping, installation of door sweeps, locksets, and hinges.
e. After installation, doors are to be neat in appearance and operate smoothly to insure an airtight seal.
f. Replacement doors are to be finished as per painting specifications.

2. Weather Stripping:

a. All existing weather-stripping (W/S) is to be removed prior to the installation.
b. W/S shall be installed on both sides and top of doorjamb and shall be Q-lon (Vinyl clad foam) with aluminum back or equivalent.
c. The doorstop shall be caulked as needed to complete the airtight seal.
d. Adjust door as necessary to insure airtight seal with the W/S.
e. The installation is to be airtight, neat in appearance, without buckling or gaps, and installed in such a manner that it is considered permanent.

3. Sweeps:

a. Sweeps are to be a metal strip with a vinyl or neoprene insert installed according to the manufacturer's instructions.
b. Install on the inside of doors that open inward or on the exterior of doors that open outward, so as not to interfere with the smooth operation of the door.
c. Must be installed with mounting screws no further than two inches (2") from each end.
d. Bottom edge of the sweep is to touch the threshold for proper seal.

4. Locksets:

a. Locksets to be installed on exterior doors must be of a keyed type.
b. Install according to manufacturer's specifications.
c. Two (2) working keys are to be supplied to the client when the new lockset is installed.

5. Thresholds:

a. Shall saddle try type with door bottom.
b. Are to fit snuggly between the jambs and fasten with screws, and form an airtight seal between door and threshold.

6. Garage Door:

a. Must be a 25 gauge galvanized Door.
b. Must be insulated Door.

J. Storm Doors

1. Shall mean aluminum clad, solid core construction with baked-on finish, self-storing design to contain two glass panels and one, full-size screen panel. Similar in quality to the Cole Sewell "Solid Saver" Model 530.

2. Shall have closures and hardware including stop springs.

3. Adjust for proper tension and operation.

4. Shall have corner bracing for additional support.

K. Windows

1. Frames, sill, sash, trim, and hardware shall match existing work in design and dimension unless otherwise specified in the work write-up.
2. New windows shall be vinyl-wrapped single-hung Low-E Argon gas filled, with a u-value of 0.32 or better as rated by NFRC, or approved equal.
3. Positive locking devices ("cam action" sash locks) shall be provided on all windows, which are accessible from the exterior, and all existing interior finish hardware shall be made operative or replaced.
4. Finish per painting specifications.
5. Glass and Glazing (for glass replacement).
    a. Windows shall be glazed or re-glazed, where required, with single strength clear grade B glass.
    b. Window glazing shall be oil base and contain no asbestos or lead.
6. Putty shall consist of pure linseed oil, pure whiting, natural color, or standard commercial grade putty.
7. Prime all wood sashes before the placing of putty.
8. Glass shall be bedded in putty and secured in place with glazier points and face puttied. All excess putty shall be removed and all glass left clean.

L. Storm Windows

1. Are to be standard aluminum frames, self-storing, with removable sash and screen section similar in quality to the Columbia Series 400.
2. Adjust for proper tension and operation.
3. Shall have corner bracing for additional support.

M. Stucco

1. Mortar for all applications shall consist of one (1) part Portland cement to not less than three (3) or more than five (5) parts of damp loose aggregate by volume. Hydrate lime may be used but shall not exceed 10 percent by weight or more than 25 percent by volume of the cement used.
2. The temperature of the surrounding air shall not be less than 40 degrees F. during application and for at least 48 hours thereafter.
3. Surfaces to receive stucco shall be covered with 3.40 pounds per square yard metal lath lapped at end and sides a minimum of 1", and nailed 10" on center vertically and 6" on center horizontally.
4. Apply a minimum of two (2) or three (3) coats. The final coat shall not be applied sooner than seven (7) days after the preceding coat. Before applying the final coat, the surface shall be dampened evenly to obtain uniform suction.
5. Apply two (2) coats on masonry to a minimum thickness of 5/8".
6. Apply three (3) coats over wood surfaces to a minimum thickness of 7/8".
7. Prior to stucco being painted, it shall be washed down with 5 percent muriatic acid solution and rinsed clean with clear water.

8. Patching of stucco, when called for in the Work Write-Up, shall include the removal of all loose material encountered until sound construction is reached, including the removal of rotted or deteriorated lath.

N. Plastering

1. Gypsum plaster materials shall be standard commercial brands.
2. Mixing and application of gypsum plasters shall be in accordance with American Standard Specifications for Gypsum Plastering.
3. Apply plaster in three (3) coats and in two (2) coats double up work-minimum thickness 1/2".
4. Gypsum lath shall be applied with long dimension across supports and with end joints staggered.
5. Nail gypsum lath with 12 or 13 gauge lathing nails having approximately 3/8" heads spaced not more than 4" on center with a minimum of four (4) nails in each lath. Use six (6) nails for 24" wide lath. Length of nail shall be that which shall provide at least 1" penetration in horizontal supports and 3/4" penetration in vertical supports.
6. Gypsum lath shall not be used as a base for Portland cement plaster.
7. Wood lath shall be securely nailed and wetted down prior to applying plaster.
8. Metal lath shall be applied according to manufacturer's directions whether used for patching or new work.
9. Patching of plaster, when called for in the Work Write-Up, shall include the removal of all loose material encountered until sound construction is reached, including the removal of rotted or deteriorated lath. Crack repair in plaster walls shall be cut out to a depth of not less than 1/4" and a width of 1/4". All areas are to be wetted thoroughly before applying plaster filler.

O. Wallboard (Screws are the preferred method)

1. Shall be tape joint gypsum board, carefully fitted and sized prior to nailing in place. Minimum thickness is to be 1/2".
2. Water resistant gypsum board is to be installed on bathroom walls, or any high moisture area.
3. All joints are to be staggered.
4. Nails or sheetrock screws shall be driven with their shanks perpendicular to the face of the board and seated below the surface of the board without breaking the paper, in accordance with the following:

Thickness	Ceiling	Side Walls	Type of Nail
1/2"	5" O.C.	7" O.C.	No. 4 glue coated
5/8"	6" O.C.	7" O.C.	1-7/8 6d cement coated

5. Perforated Tape Mix:

   a. Shall comply with the recommendation of the manufacturer. A minimum temperature of 55 degrees F. shall be maintained in the room where the work is done until the cement is completely dry. Follow manufacturer's directions for application.

b. Over joints, the tape shall be embedded in cement and covered with a thin layer of cement. A second and third coat shall be applied. Each coat shall be dry before applying the next coat. Each coat shall be feather-edged and extended beyond the previous coat, approximately 2". The finish coat shall be sanded lightly and imperfections filled in prior to any painting or decorating.

c. Check to see that all nails have been driven so that their heads are below the surface without breaking the paper. Cover nails with three (3) applications of cement, allowing time to dry between each coat painted or other decoration.

d. The final coat shall be sanded lightly before application of inside corners and shall be reinforced with tape imbedded in cement and finished the same as b. over joints.

e. Outside wood molding, metal molding, or metal corner reinforcement shall protect corners. Metal corner re-enforcement shall be finished with two (2) coats of cement, as specified.

f. Provide metal edge trim where wallboard edge abuts dissimilar material.

6. Finish to match existing texture.

P. Ceilings

1. Acoustical tile or 2' x 4' drop grid ceilings may be used.

2. Furring strips, when called for, shall be a minimum of 3/4" x 2" and attached with #8 nails driven through to ceiling joists at 10" intervals.

3. Suspended Ceilings

a. Exposed T-Bar, as specified, installed in strict accordance with manufacturer's recommendations.

b. Unexposed T-Bar, as specified, installed in strict accordance with manufacturer's recommendations.

5. Plaster/Drywall

a. Use a heavy textured spray finish, when required, to repair cracked plaster and/or cracks in ceiling board.

Q. Siding Repairs/Replacement

1. Repairs of siding shall match material of existing siding.

2. Installation of siding shall be 12" lap hard board and/or Smart Siding, unless otherwise noted on the Work Write-Up. Paint as called for in the painting specifications.

3. Remove siding only when called for in Work Write-Up.

4. Vinyl Siding:

a. Shall be 46 mills (.046") thick or better.

b. Colored completely through.

c. Siding shall be installed over a minimum ¼" fan fold foam core, and all seams must be sealed per manufactures specifications.

d. Shall carry a lifetime warranty for defects in material and color fading.

e. Warranty shall be placed in the owner(s) name and the contractor shall send all documentation to the company with a copy to the client.

f. Installation shall include wrapping all windows, soffit, fascia, porch ceiling, and pillars, et al.

g. Any exterior painted surfaces (including window sash) not wrapped shall be painted according to the painting specifications.

h. Owner(s) shall pick one siding color and one trim color from samples of siding and a complimentary trim color.
i. Owner(s) shall sign sample of color choice. No bright or "hot" colors allowed.
j. Install according to vinyl siding institute. www.vinylsiding.org

R. Caulking

1. Caulk shall be appropriate for materials being sealed. All caulk shall have a material life of at least 15 years.
2. Fully caulk around the following areas:
   a. Window and door frames - all sides.
   b. Where different materials meet.
   c. Inside and outside corner trim boards.
   d. Between foundation and wall plates or siding.
   e. Around vents, fans, and window air conditioners.

S. Interior Doors

1. Shall be 1-3/8" hollow core.
2. Must be stained or painted to owner's option.
3. Complete with hardware and latch set.

T. Wallpapering - Not Allowed

U. Water Resistant Paneling

1. Install FRP paneling, per manufacturing specifications for high moisture areas.
2. Secure to sound backing using adhesive as recommended by manufacturer.
3. Owner(s) to select color and pattern from manufacturer's standard items. Owner(s) to sign sample selection.

V. Wood Paneling

1. Shall be 3/32" minimum thickness.
2. APA A-D interior paneling.
3. Furnish and install wood trim as required for a complete installation. Stain trim to match paneling.
4. Paneling to be selected by owner(s) based on specified allowance.
5. Owner(s) to sign sample of selection.

W. Kitchen Cabinets

1. Job Built:
   a. Shall be 3/4" fir or birch plywood with solid wood band on all exposed edges.
   b. Stain a minimum of two (2) coats of lacquer (selected by owner(s)).
2. Factory Built:
   a. Residential grade, standard construction for wood cabinets.
   b. Standard stain finish (selected by owner(s)).
   c. Laminated (heat and stain resistant) counter top and edge trim with back splash.

3. Upper Cabinets:

   a. Two (2) adjustable shelves.
   b. Doors complete with hardware.

4. Base Cabinets:

   a. Continuous drawers with standard glides across top section of all cabinets except sink area.
   b. One (1) adjustable shelf behind doors - all areas below drawer sections.
   c. Laminated (heat and stain resistant) counter top and edge trim with back splash.
   d. Cabinets complete with hardware.

X. Insulation - All insulation material shall be cellulose, unless otherwise specified in the Work Write-Up. All attics must be insulated to an R-38, where possible.

1. Insulation Barrier:

   a. Install insulation barriers specifically manufactured for use with the type of insulation installed.
   b. Installation is to be in accordance with manufacturer's recommendations.
   c. All chimneys, flues, recessed lights, and heat producing sources are to have insulation barriers around them.

2. Gable Vents:

   a. Openings are to be cut with close tolerance to insure a watertight fit.
   b. Vent is to be nailed or screwed into the frame.
   c. All damaged siding is to be repaired or replaced. Siding without sheeting behind it is to have the vent framed in and mounted on the frame to insure a tight fit.
   d. Ventilation ratio shall be not less than 1/300.

3. Roof Vents:

   a. Roof vents are to be prepared and cut to close tolerance to insure a watertight fit.
   b. The hole in the roof shall be no smaller than the throat site of the vent being installed so as not to restrict airflow.
   c. Discarded materials are not to be dropped into the attic area. The Contractor shall remove discarded materials from the work site.
   d. Vents (galvanized or aluminum NAS) are to be sealed and nailed with galvanized or aluminum nails.
   e. If the high/low method is used in installing roof vents, 50 percent of the vents must be located in the upper portion to be ventilated at least 3' above lower vents, with the remaining 50 percent of the required ventilation provided by ease, soffit, or roof vents.
   f. In the case of the high/low method of ventilation, a ratio shall not use less than 1\150.
   g. Vents are to appear evenly spaced from the ground and be neat in appearance.

4. Soffit Vents:

   a. Vents are to be installed to insure free ventilation space to the attic area.
   b. Vents are to be evenly spaced and a uniform distance from the sidewall.
   c. Vents are to be screwed to the soffit.

5. Attic Access:

   a. R-19 batt insulation is to be stapled or nailed to the top of the door.

b. Insulated manufactured doors may also be used. Insulation dams are to be constructed from 1" x 10" or better and are to be used to hold back attic insulation.
c. All attic accesses are to be weather-stripped using foam, tubular, or metal flap weather strip, nailed, or placed on the jamb.
d. When rebuilding an attic access, use 1" x 4" for the jamb and doorstop to form the flange. The door itself can be made of 3/4" plywood and insulated with R-19 batt insulation. 1" x 4", or smaller, is to be used as casing. The door and surrounding area is to be airtight. Damaged ceiling area is to be repaired with like materials, all wood installed is to be sealed against moisture.

6. Floor Insulation:

a. R-13 batt insulation is to be installed between floor joists, unless otherwise specified.
b. Insulation is to be secured with nails, staples, or wire.
c. The vapor barrier shall be towards the conditioned side.

7. Duct Insulation:

a. All loose joints on hot air ducts (also air conditioning ducts in attics) shall be sealed to prevent air leakage.
b. The ducts are to be wrapped using a standard R-5 or better vinyl wrapped fiberglass batt or standard duct wrap.
c. Cellulose can be blown against the ductwork to hold the insulation.
d. Duct insulation installed in a basement or crawl space is to have a vapor barrier installed to the outside.

8. Wall Insulation:

a. Walls shall be insulated to a minimum of R-13.
b. Building codes shall be considered regarding knob and tube wiring situations.
c. All exterior walls are to be insulated.
d. Siding is to be removed and replaced.
e. Damaged siding is to be replaced.
f. All sidewall insulation shall be densely packed cellulose.

9. Perimeter Insulation:

a. R-13 faced fiberglass is to be securely fastened to the underside of the floor, extending down the boxing area, unless otherwise specified.
b. Covers the inside foundation wall and then out into the crawlspace at least 2'.
c. Vapor barrier, shall be 6 mil plastic with 2' overlapped seams.

10. Insulation Material (Mineral):

a. Fiber Material or Product:

(1) Blanket batt conformance to F.5. HH-1-521E and ASTM C665-70.
(2) Board conformance to F.5. HH-1-526C and ASTM C612-70 or C726-72.
(3) Duct Material Conformance to F.5. HH-1-558B.

11. Insulation Material (Organic Fiber):

a. Cellulose conformance to HH-1-515D dated April 1988.
b. Block and Board conformance to F.S. LLL-12-525A and ASTM C208-72 and fire safety requirements.

12. Water Heater Blanket:

    a. Specifically manufactured for the purpose.
    b. Minimum R-5.
    c. Capable of meeting a flame spread classification not to exceed 150 (per ASTM E-84).

PLUMBING AND HEATING SPECIFICATIONS

A. Water Piping

1. Above ground shall be type L copper tubing with copper solder joint fittings made up with 95-5 solder as recommended by manufacturer or PEX.
2. Connections to valves shall be made with N.P.T. to solder adapters.
3. Schedule 40 PVC cold plastic water pipe may also be used for water piping and Schedule 40 CPVC for hot plastic water piping.
4. All plastic water pipe shall be supported every 4'.
5. The site of new pipes shall be in conformance with the Uniform Plumbing Code. Valves shall be 150# brass with ends similar to fittings. Valves shall be provided at each piece of equipment to permit removal without shutting off service. Unions will be provided to permit removal of equipment without cutting pipe.
6. Supply lines to faucets shall be flex lines or copper tubing.
7. Shut-offs is required on all supply lines.

B. Plumbing Fixtures

1. Trim shall be chrome plated and supplies to each water closet shall be provided with stop valves to permit removal without shutting off service.
2. All plumbing fixtures and trim called for in the Work Write-Up shall be of standard grade equal to American Standard, Crane, or Kohler.
3. Shower shall have a rod and shower curtain installed, at minimum.
4. Bath Fans

    a. Maximum sone rating of 1.5.
    b. Fans to be installed according to manufactures specs.
    c. Ductwork shall be insulated. Short straight runs if possible.
    d. Use hard duct elbows, sealed and insulated, if turns are 90 degree or greater.
    e. All connections on ductwork shall be mechanically fasten and sealed.
    f. Fans must vent to exterior through roof or wall cap with termination to keep animals out.

C. Kitchen Equipment

1. Sink shall be double compartment stainless steel or enameled steel with self-sealing edge.
2. Refrigerator shall be a minimum 18 cu. ft., self-defrosting, 2-door unit appliance. Must be energy star rated.
3. White, Black or Almond (major brand mid priced model).
4. Ranges shall be electric or gas, with oven and oven light, and timer. White, Black, or Almond (major brand mid-priced range).
5. Gas ranges shall be attached to the gas supply with a steel flex gas line and shut off.

D. Heating Systems and Air Conditioners (AC)

1. Every heater that is existing or installed must be equipped with the following:
   a. One hundred percent safety.
   b. Code approved, metalbestos vent.
   c. Proper gas piping and stops, installed in accordance with recommendations of the Uniform Plumbing Code.
   d. Shut-off valves.
   e. All transite vents are to be removed.
   f. Blower.
   g. New Thermostat.
2. If no local codes, must meet National Gas Code (NGC).
3. All new heating and AC units shall be sized and installed to provide sufficient heating and proper distribution for the size using manual J or equivalent sizing procedure requirements of the individual house. HVAC systems shall not be oversized by more than 15 percent.
4. New furnaces shall be a minimum of 92 or better percent efficient, sealed combustion. Must have five year warranty of parts and lifetime heat exchanger warranties.
5. No outside units or attic units shall be installed or units in crawl space unless specified in the Work Write-Up.
6. No flexible ductwork is allowed unless approved by inspector at the bid conference.
7. No open return air is allowed. All ductwork is to be included in bid.
8. All ductwork shall be sealed using mastic (example RCD #6).
9. All ductwork in unconditioned spaces shall be insulated.
10. Furnace and/or air conditioner shall be on separate circuits.
11. All appliances must be installed in accordance with manufacturer's specifications.
12. Must have easy access to filter.
13. If furnace is in basement, it must be raised a minimum of 2".
14. Plenum must be installed to receive future A-coil, if not doing AC.
15. AC must be 14 seer with matching A-coil, cased.

NOTE: Installer must be Master Mechanical Certified and for AC must have EPA Approved Certification.

E. Water Heaters

1. Water heaters, existing or installed, shall have the following:
   a. Pressure and temperature relief valve.
   b. Proper vent, gas piping, and shut off.
   c. All transite vents to be replaced with code approved vent.
   d. Must have Energy Factor (EF) of .62 or greater.
2. Pressure and temperature relief valves shall be extended within 2' of the floor, but no closer than 6".

NOTE: All cutting of walls, floors, ceilings, partitions, etc., for the purpose of rehabilitation work and the air sealing of openings around same, including the removal of all debris caused thereby, shall

be performed by the contractor performing the work. Repairs shall match existing materials, be finished to a smooth condition, and painted. (Refer to applicable Specifications for details.)

ALL EQUIPMENT REPLACED WITH NEW MATERIALS MUST BE REMOVED FROM THE PROPERTY AND DISPOSED OF PROPERLY.

SHOULD THERE BE ANY CONFLICTS BETWEEN THESE SPECIFICATIONS AND THE WORK WRITE-UP, THE PROJECT INSPECTOR SHOULD BE CONTACTED FOR A FINAL DETERMINATION.

ELECTRICAL SPECIFICATIONS

All electrical work shall be in conformance with the National Electrical Code (NEC)

If work write-up includes; change breaker box, service entrance, re-wire house or electrical components exceed $1,000 –ALL electrical work must be performed by licensed electrician.

A. Wiring Devices

1. Single pole room lighting switches and three-way and four-way switches shall be UL approved.
2. Plug-ins shall be standard grounded receptacles except for plug-ins within 6' from water source and shall be GFI.
3. Plates for all switches and receptacles shall be non-conducting type (including screws) and UL approved.
4. Dryer shall have separate 220 circuit.
5. Furnace, air conditioner, refrigerator, dishwasher, and stove shall have separate circuit.
6. Garbage disposal shall have separate circuit(s) and wall switched receptacle.

B. Lighting Fixtures

1. Contractor shall provide all lighting fixtures complete with lamps, glassware, mounting hardware, frames and trim, stems, ballasts, sockets, etc., to provide a complete operating UL approved fixture at each location, as called for in the Work Write-Up. Energy efficient compact fluorescents bulb(s) are required in all replaced fixtures.
2. Porcelain lamp-holders are prohibited unless approved by the Project Inspector.

C. Panel Boards

1. Shall be UL approved, with the minimum components as listed:
   a. NEMA 1 enclosure for indoor and NEMA 3R for exterior use.
   b. 200A mains (minimum) unless noted otherwise.
   c. 200A 2-pole main breaker (minimum) unless otherwise noted.
   d. Seven (7) 1-pole branch breakers (minimum).
   e. 2-pole breakers as required.
   f. Separate/Neutral.
   g. Separate ground bar.
   h. Additional equipment as required meeting the National Electrical Code (NEC).

* Unless specified differently by inspector.

D. Wire

1. Wire and cables shall be copper.

2. All wire and cable shall comply with the standardization rules of the AIEE as to conductivity and shall be free from kinks, splices, and defects when installed. Conductors shall be in accordance with the requirements of IPCEA Publication's latest edition.

3. All wire used in this project shall be new and shall be identified by type and by manufacturer.

4. Branch circuit wiring shall be non-metallic sheath Type NM.

5. Service conductors shall be Type XHHW.

6. All wiring shall be concealed in wall, ceiling, or floor cavities. Wiring required to be exposed shall, be installed in intermediate grade metal conduct.

7. All receptacles and other electrical equipment, except light fixtures, shall have a separate equipment ground conductor bonded to their metal cases, frames, etc. (except as noted).

E. Lightning Arresters

1. 175 v., 2-pole lightning arresters shall be installed per NEC.

2. Rewiring of house shall meet NEC.

F. Smoke Alarms

1. Install a 10-year sealed Lithium battery smoke alarms unless rewiring house.

2. If rewiring, install hardwired smoke alarms.

Note: All cutting of walls, floors, ceilings, partitions, etc., for the purpose of rehabilitation work and the air sealing of openings around same, including the removal of all debris caused thereby, shall be performed by the contractor performing the work. Repairs shall match existing materials, be finished to a smooth condition and painted. (Refer to applicable Specifications for details.)

ALL EQUIPMENT REPLACED WITH NEW MATERIALS MUST BE REMOVED FROM THE PROPERTY AND DISPOSED UP PROPERLY.

PAINTING AND VARNISHING SPECIFICATIONS

Preparation and painting of all surfaces containing Lead Base Paint shall be completed in accordance with HUD's "Safe Work Practices".

A. Preparation of Surface

1. Exterior:

a. Wood surfaces to be painted or varnished shall be prepared in accordance with HUD's Safe Work Practices in the removal of loose, chipping and peeling paint, rough spots, and any obvious oil and/or grease that may be covering existing wood or paint.

b. All paint chips and residue from the preparation must be REMOVED from the site.

c. Where previous coats have chipped and peeled, the edge shall be wet scraped and puttied to obtain a smooth surface before new paint is applied.

d. Exterior painting shall include painting all doors and windows, removing all storm windows, repairing windows, replacing all broken or cracked glass, and re-glazing and caulking all joints and seams with paintable caulk. Clean and reinstall all storm windows upon completion.

e. All nail holes shall be puttied and all defects in the surface shall be eliminated by the repair or complete replacement of the defective part, this includes siding, sills, casings, etc.

2. Interior:

a. Wood surfaces to be painted or varnished shall be prepared in accordance with HUD's Safe Work Practices in the removal of loose, chipping and peeling paint, rough spots, and any obvious oil and/or grease that may be covering existing wood or a paint.

b. Plaster or wallboard surfaces shall be sound, smooth, and free from holes, cracks, or irregularities.

c. All old wallpaper shall be entirely removed or covered with sheetrock, taped, then painted.

d. No paint or varnish shall be applied until all nail holes have been puttied and all defects in woodwork have been eliminated by the insertion of dutchmen or complete replacement of the damaged part.

B. Materials – Lead based paint is in violation of HUD Lead-Based Paint Regulations and shall not be used.

1. Exterior:

a. All exterior paint must meet or exceed Sherwin Williams 15 year # A-100 and shall be delivered to site in manufacturer's sealed containers.

b. Each container shall be labeled giving type of paint color and application specification.

c. Before proceeding with exterior painting, samples of colors shall be shown to the owner(s) for selection. The owner(s) is limited to one (1) base color and one (1) trim color. Owner(s) shall sign the chosen color sample. Color options will be in a neutral color rage, no bright or "hot colors" are allowed.

d. The primer coat shall be Alkyd oil tinted to match topcoat, produced by the same manufacturer as the finish coat.

2. Interior:

a. Interior paint shall meet or exceed Sherwin William's Classic #99 for flat, semi-gloss, or satin gloss, and shall be delivered to the site in the manufacturer's sealed containers.

b. Primer for new sheetrock shall meet or exceed Sherwin William's Pro-Mar #400 latex primer.

c. Before proceeding with painting or varnishing, color samples shall be shown to the owner(s) for selection. The owner(s) is limited to one (1) base color and one (1) trim color. Owner(s) shall sign the chosen color sample.

d. Texture finish sample shall be submitted to the owner(s) for approval before application. Owner(s) shall sign sample choice.

e. The finish coat in kitchens and bathrooms shall be semi-gloss enamel and provide a durable and washable surface.

f. The primer shall be tinted to match topcoat, produced by the same manufacturer as the finished coat.

g. Varnish shall be polyurethane varnish.

2. Application:

a. Exterior:

(1) All paint, unless specifically approved otherwise, shall be applied by brush or roller.

(2) Apply each material at manufacturer's recommended spreading rate.

(3) Do not apply exterior paint when temperature is 50° F. and falling, or when temperature is below 40° F. and steady, or in rainy, damp, or frosty weather until surface is thoroughly dry. Contact the Project Inspector if considering the Sherwin Williams product "Low Temp 35".

(4) The Contractor shall be responsible for protecting all areas and surfaces that are not to receive paint and shall clean and repair or replace any such areas, surfaces, or items so damaged.

(5) Finish work shall be uniform, of approved color, smooth, and free from runs, sags, and defective brushing and rolling. Edges of paint adjoining other materials or colors shall be sharp and clean.

b. Interior:

(1) New paint applied on walls that are painted with a glossy paint or has a shine must be first prepared to remove glossy surface and cleaned prior to painting.

(2) The Contractor shall be responsible for protecting all areas and surfaces that are not to receive paint and shall clean and repair or replace any such areas, surfaces, or items so damaged.

(3) Finish work shall be uniform, of approved color, smooth, and free from runs, sags, and defective brushing and rolling. Edges of paint adjoining other materials or colors shall be sharp and clean.

(4) Ceiling paint will be allowed when applying to ceilings.

c. Required Coatings:

(1) Exterior wood, etc. (previously painted).

i. One (1) coat of exterior wood primer, tinted same as topcoat.
ii. Two (2) coats exterior latex house paint.
iii. Warranty is void if not followed.

(2) Exterior wood and hardboard (bare):

i. One (1) coat exterior wood primer; tinted same as topcoat.
ii. Two (2) coats exterior latex house paint.
iii. Warranty is void if not followed.

(3) Interior drywall:

i. Two (2) coats latex satin-gloss enamel wall paint.
ii. New drywall (1) coat of latex primer, (2) coats of satin-gloss enamel wall paint.

(4) Wood porch floors and wood steps:

i. Two (2) coats porch floor enamel.
ii. Redwood and CCA does not need to be painted.

(5) Spray textured drywall ceilings:

i. One (1) coat latex flat wall paint.
ii. One (1) coat spray texture.

SHOULD THERE BE ANY CONFLICTS BETWEEN THESE SPECIFICATIONS AND THE WORK WRITE-UP, THE PROJECT INSPECTOR SHOULD BE CONTACTED FOR A FINAL DETERMINATION.

ROOFING SPECIFICATIONS

Replacement of roof, when called for on the Work Write-Up, shall be defined as removing all existing shingles, flashings, valley tin, drip edge, and felt; then providing all new felt, valley tin, flashing, metal drip edge, and shingles, et al. Damaged sheathing or areas without solid sheathing shall have 15/32" construction grade plywood or 7/16" OSB Louisiana Pacific Interseal installed for sheathing.

A. Sheathing

1. Shall be 15/32" construction (CDX) grade plywood or 7/16" OSB Louisiana Pacific Interseal, APA Exposure #1 criteria or equal (THIS PRODUCT IS NOT "NORBOARD").
2. Nail sheathing with cement coated, rosin coated, or ring shank nails placed on 4" centers on all edges and over the face of each piece.

B. Underlayment

1. Shall be asphalt saturated felt, minimum 30#, which has low vapor resistance. Coated felts or laminated waterproof papers, which act as vapor barriers, should not be used.
2. Underlayment should be applied over the entire roof as soon as the roof sheathing has been completed.
3. Underlayment should be lapped 1' from both sides over all hips and ridges.
4. Only sufficient fasteners are to be used to hold the underlayment securely in place until shingles are applied.
5. Shingles are not to be applied over wet underlayment.

C. Shingles

1. Shall be new Heritage (equal to or better than 30-year), asphalt shingle squares, (nominal) weight, installed according to manufacturer's specifications, using nails only.
3. Cut shingles at valleys (2" each side of valley center to expose a minimum of 4"). Woven valleys are not allowed.
4. Owner(s) to select shingle color by signing a sample of the chosen shingle. Contractor is to keep signed shingle until final completion certificate is signed.

D. Metal Roofing

1. Shall be 29 gauge painted metal roofing equal to or better than Metal Sales Pro Panel II.
2. All metal roofing shall be attached with the proper length metal to wood screws with seal washers.
3. Owners shall sign sample of color choice. Color options will be a neutral color range, no bright or "hot colors" are allowed.

E. Flashing

Shall be 30 nominal gauge galvanized steel securely fastened and tarred to watertight and water-shedding condition.

F. Gutters/Downspouts/Splash Blocks

1. Standard, 5" Ogee, galvanized, white, steel, or 26 gauge aluminum gutters, securely fastened at 4' maximum intervals. Owner(s) to choose color to compliment house.
2. Downspouts may be round or square, corrugated and anchored at top and bottom.
3. All joints are to be watertight.
4. Install 3' splash blocks at all downspout locations. If not concrete, the splash blocks shall be anchored. 3' gutter extensions, can be used.
5. Install blocking and/or fascia board where necessary between gutter and eaves to properly align gutter to receive run-off from roof.
6. Owner(s) shall sign sample of color choice. No bright or "hot" colors allowed.

NOTE: SHOULD THERE BE ANY CONFLICTS BETWEEN THESE SPECIFICATIONS AND THE WORK WRITE-UP. THE PROJECT INSPECTOR SHOULD BE CONTACTED FOR A FINAL DETERMINATION.

DEMOLITION SPECIFICATIONS

A. Structures, Trees, and Site Clearance

1. The removal and proper disposal of the dilapidated structure(s). Check with the landfill operator prior to beginning demolition for instructions on "proper disposal".
2. Cap off all sewer and waterlines.
3. The complete removal of all concrete, cement or blocks, back-fill any basement to grade. Level site to be mowed. Seeding is the responsibility of the property owner.
4. Only remove trees that are within 6' of structure to be demolished.

B. Abandoned Septic Systems

1. Remove all liquid contents and the top of the tank. If the pit begins to fill with water, puncture the floor.
2. Fill the cavity with earth, sand, or gravel. Pack the fill to 5' below the surface, knock down sides 2' below grade, and then complete the fill with subsoil, packing as fill is being installed. The structure is now ready for the plug.
3. A minimum of a 6" of bentonite clay or 24" reinforced cement plug is to be applied. The plug must extend beyond the lining of the original diameter of the hole.

C. Abandoned Wells

1. Remove any pumping equipment.
2. Disinfect the water prior to filling by adding 1 gallon of chlorine bleach for every 10' of water.
3. Fill the well with sand and gravel mix to the water level.
4. Fill the remainder of the well above the water level with natural clay material (subsoil low in organic matter) compacted to form a solid column.
5. Six feet from top of casing, pour a 3' plug of cement or neat cement or sodium bentonite clay.
6. Excavate around the casing to the top of the plug, cut off casing, and backfill the excavation with compacted earth material.

Note: Contractor may be instructed to cut the casing at 4' below grade to allow the plug to extend beyond the edge of the casing. This mushroom plug will help provide extra protection from water movement along either side of the casing.

SAFE WORK PRACTICES

All work must be conducted in a lead safe work practice manner according to HUD Approved Lead Safe Work Practices Training by someone who has received HUD Approved Lead Safe Work Practices Training, is a Kansas Department of Health &Environment certified Lead Based Paint Worker, or is supervised by a Kansas Department of Health & Environment Lead Based Paint Supervisor.

Reference **Lead Paint Safety, A Field Guide for Painting, Home Maintenance, and Renovation Work,** U.S. Department of Housing & Urban Development Office of Healthy Homes and Lead Hazard Control.

A. Prohibited Methods of Lead Based Paint Removal

1. Open flame burning or torching.
2. Machine sanding or grinding without a high-efficiency particulate air (HEPA) local exhaust control.
3. Abrasive blasting or sandblasting without a HEPA local exhaust control.
4. Heat guns operating above 1100° F. or charring the paint.
5. Dry sanding or dry scraping, except dry scraping in conjunction with heat guns or within 1' of electrical outlets.
6. Paint stripping in a poorly ventilated space using a volatile stripper that is a hazardous substance in accordance with regulations of the Consumer Product Safety Commission.

B. Occupant Protection and Worksite Preparation

1. Occupants and their belongings shall be protected.
2. The worksite must be prepared according to safe work practice standards.

C. Cleaning for Clearance

After rehabilitation/hazard reduction activities have been completed, the worksite shall be cleaned using cleaning methods, products, and devices that are successful in cleaning up dust-lead hazards, such as a HEPA vacuum or other method of equivalent efficacy, and lead specific detergents or equivalent.

D. Safe Work Practices Are Not Required

1. On a home built after 1978.
2. On housing exclusively for the elderly (62 years of age or older) or people with disabilities unless a child under six is expected to reside there.
3. On zero-bedroom dwellings.
4. On property that has been found to be free of lead-based paint by a certified lead-based paint inspector/risk assessor.
5. On property where all lead-based paint has been removed.
6. On unoccupied housing that will remain vacant until it is demolished.
7. On non-residential property.
8 On any rehabilitation or housing improvement that does not disturb a painted surface.

Glossary of Housing Terms

Air-Dried Lumber: Lumber that has been piled in yards or sheds for any length of time. For the United States as a whole, the minimum moisture content of thoroughly air-dried lumber is 12 to 15 percent and the average is somewhat higher. In the South, air-dried lumber may be no lower than 19 percent.

Airway: A space between roof insulation and roof boards for movement of air.

Alligatoring: Coarse checking pattern characterized by a slipping of the new paint coating over the old coating to the extent that the old coating can be seen through the fissures.

Anchor Bolts: Bolts to secure a wooden sill plate to concrete or masonry floor or wall.

Apron: The flat member of the inside trim of a window placed against the wall immediately beneath the stool.

Areaway: An open subsurface space adjacent to a building used to admit light or air or as a means of access to a basement.

Asphalt: Most native asphalt is a residue from evaporated petroleum. It is insoluble in water but soluble in gasoline and melts when heated. Used widely in building for waterproofing roof coverings of many types, exterior wall coverings, flooring tile, and the like.

Astragal: A molding attached to one of a pair of swinging doors, against which the other door strikes.

Attic Ventilators: In houses, screened openings provided to ventilate an attic space. They are located in the soffit area as inlet ventilators and in the gable end or along the ridge as outlet ventilators. They can also consist of power-driven fans used as an exhaust system. (See also Louver.)

Backbands: A simple molding sometimes used around the outer edge of plain rectangular casing as a decorative feature.

Backfill: The replacement of excavated earth into a trench around and against a basement foundation.

Balusters: Usually small vertical members in a railing used between a top rail and the stair treads or a bottom rail.

Balustrade: A railing made up of balusters, top rail, and sometimes bottom rail, used on the edge of stairs, balconies, and porches.

Barge Board: A decorative board covering the projecting rafter (fly rafter) of the gable end. At the cornice, this member is a facia board.

Base or Baseboard: A board placed against the wall around a room next to the floor to finish properly between floor and plaster.

Base Molding: Molding used to trim the upper edge of interior baseboard.

Base Shoe: Molding used next to the floor on interior baseboard. Sometimes called a carpet strip.

Batten: Narrow strips of wood used to cover joints or as decorative vertical members over plywood or wide boards.

Batter Board: One of a pair of horizontal boards nailed to posts set at the corners of an excavation, used to indicate the desired level, also as a fastening for stretched strings to indicate outlines of foundation walls.

Bay Window: Any window space projecting outward from the walls of a building, either square or polygonal in plan.

Beam: A structural member transversely supporting a load.

Bearing Partition: A partition that supports any vertical load in addition to its own weight.

Bearing Wall: A wall that supports any vertical load in addition to its own weight.

Bed Molding: A molding in an angle, as between the overhanging cornice, or eaves, of a building and the sidewalls.

Blind Nailing: Nailing in such a way that the nailheads are not visible on the face of the work - usually at the tongue of matched boards.

Blind Stop: A rectangular molding, usually 3/4 by 1-3/8 inches or more in width, used in the assembly of a window frame. Serves as a stop for storm and screen or combination windows and to resist air infiltration.

Blue Stain: A bluish or grayish discoloration of the sapwood caused by the growth of certain moldlike fungi on the surface and in the interior of a piece, made possible by the same conditions that favor the growth of other fungi.

Bodied Linseed Oil: Linseed oil that has been thickened in viscosity by suitable processing with heat or chemicals. Bodied oils are obtainable in a great range in viscosity from a little greater than that of raw oil to just short of a jellied condition.

Boiled Linseed Oil: Linseed oil in which enough lead, manganese, or cobalt salts have been incorporated to make the oil harden more rapidly when spread in thin coatings.

Bolster: A short horizontal timber or steel beam on top of a column to support and decrease the span of beams or girders.

Boston Ridge: A method of applying asphalt or wood shingles at the ridge or at the hips of a roof as a finish.

Brace: An inclined piece of framing lumber applied to wall or floor to stiffen the structure. Often used on walls as temporary bracing until framing has been completed.

Brick Veneer: A facing of brick laid against and fastened to sheathing of a frame wall of tile wall construction.

Bridging: Small wood or metal members that are inserted in a diagonal position between the floor joists at midspan to act both as tension and compression members for the purpose of bracing the joists and spreading the action of loads.

Buck: Often used in reference to rough frame opening members. Door bucks used in reference to metal door frame.

Built Up Roof: Roofing composed of three to five layers of asphalt felt laminated with coal tar, pitch, or asphalt. The top is finished with crushed slag or gravel. Generally used on flat or low-pitched roofs.

Butt Joint: The junction where the ends of two timbers or other members meet in a square-cut joint.

Cant Strip: A triangular-shaped piece of lumber used at the junction of a flat deck and a wall to prevent cracking of the roofing that is applied over it.

Cap: The upper member of a column, pilaster, door cornice, molding, and the like.

Casement Frames and Sash: Frames of wood or metal enclosing part or all of the sash, which may be opened by means of hinges affixed to the vertical edge.

Casing: Molding of various widths and thicknesses used to trim door and window openings at the jambs.

Cement, Keene's: A white finish plaster that produces an extremely durable wall. Because of its density, it excels for use in bathrooms and kitchens and is also used extensively for the finish coat in auditoriums, public buildings, and other places where walls may be subjected to unusually hard wear or abuse.

Checking: Fissures that appear with age in many exterior paint coatings at first superficial, but which in time may penetrate entirely through the coating.

Checkrails: Meeting rails sufficiently thicker than a window to fill the opening between the top and bottom sash made by the parting stop in the frame of double-hung windows. They are usually beveled.

Collar Beams: Nominal 1- or 2-inch thick members connecting opposite roof rafters. They serve to stiffen the roof structure.

Column: In architecture: A perpendicular supporting member, circular or rectangular in section, usually consisting of a base, shaft, and capital. In engineering, a vertical structural compression member that supports loads acting in the direction of its longitudinal axis.

Combination Doors or Windows: Combination doors or windows used over regular openings. They provide winter insulation and summer protection and often have self-storing or removable glass and screen inserts. This eliminates the need for handling a different unit each season.

Concrete Plain: Concrete either without reinforcement, or reinforced only for shrinkage or temperature changes.

Condensation: In a building: Beads or drops of water (and frequently frost in extremely cold weather) that accumulate on the inside of the exterior covering of a building when warm, moisture-laden air from the interior reaches a point where the temperature no longer permits the air to sustain the moisture it holds. Use of louvers or attic ventilators will reduce moisture condensation in attics. A vapor barrier under the gypsum lath or dry wall on exposed walls will reduce condensation in them.

Conduit, Electrical: A pipe, usually metal, in which wire is installed.

Construction Dry-Wall: A type of construction in which the interior wall finish is applied in a dry condition, generally in the form of sheet materials or wood paneling, as contrasted to plaster.

Construction Frame: A type of construction in which the structural parts are wood or depend upon a wood frame for support. In codes, if masonry veneer is applied to the exterior walls, the classification of this type of construction is usually unchanged.

Coped Joint: See Scribing.

Corbel Out: To build out one or more courses of brick or stone from the face of a wall to form a support of timbers.

Corner Bead: A strip of formed sheet metal, sometimes combined with a strip of metal lath, placed on corners before plastering to reinforce them. Also, a strip of wood finish three-quarters-round or angular placed over a plastered corner for protection.

Corner Boards: Used as trim for the external corners of a house or other frame structure against which the ends of the siding are finished.

Corner Braces: Diagonal braces at the corners of frame structure to stiffen and strengthen the wall.

Cut-in Brace: Nominal 2-inch inch members, usually 2 by 4's, cut in between each stud diagonally.

Cornerite: Metal-mesh lath cut into strips and bent to a right angle. Used in interior corners of walls and ceilings on lath to prevent cracks in plastering.

Cornice: Overhang of a pitched roof at the eave line, usually consisting of a facia board, a soffit for a closed cornice, and appropriate moldings.

Cornice Return: That portion of the cornice that returns on the gable end of a house.

Counterflashing: A flashing usually used on chimneys at the roofline to cover shingle flashing and to prevent moisture entry.

Cove Molding: A molding with a concave face used as trim or to finish interior corners.

Crawl Space: A shallow space below the living quarters of a basementless house, normally enclosed by the foundation wall.

Cricket: A small drainage-diverting roof structure of single or double slope placed at the junction of larger surfaces that meet at an angle, such as above a chimney.

Cross-Bridging: Diagonal bracing between adjacent floor joists, placed near the center of the joist span to prevent joists from twisting.

Crown Molding: A molding used on cornice or wherever an interior angle is to be covered.

D: See Penny.

Dado: A rectangular groove across the width of a board or plank. In interior decoration; a special type of wall treatment.

Decay: Disintegration of wood or other substances through the action of fungi.

Deck paint: An enamel with a high degree of resistance to mechanical wear designed for use on such surfaces as porch floors.

Density: The mass of substance in a unit volume. When expressed in the metric system, it is numerically equal to the specific gravity of the same substance.

Dewpoint: Temperature at which a vapor begins to deposit as a liquid. Applies especially to water in the atmosphere.

Dimensions: See Lumber dimension.

Direct Nailing: To nail perpendicular to the initial surface or to the junction of the pieces joined. Also termed face nailing.

Doorjamb Interior: The surrounding case into which and out of which a door closes and opens. It consists of two upright pieces, called side jambs, and a horizontal head jamb.

Dormer: An opening in a sloping roof, the framing of which projects out to form a vertical wall suitable for windows or other openings.

Downspout: A pipe, usually of metal, for carrying rainwater from roof gutters.

Dressed and Matched (Tongued and Grooved): Boards or planks machined in such a manner that there is a groove on one edge and a corresponding tongue on the other.

Drier Paint: Usually, oil-soluble soaps of such metals as lead, manganese, or cobalt, which, in small proportions, hasten the oxidation and hardening (drying) of the drying oils in paints.

Drip: (a) A member of a cornice or other horizontal exterior finish course that has a projection beyond the other parts for throwing off water. (b) A groove in the underside of a sill or drip cap to cause water to drop off on the outer edge instead of drawing back and running down the face of the building.

Drip Cap: A molding placed on the exterior top side of a door or window frame to cause water to drip beyond the outside of the frame.

Dry-Wall: Interior covering material, such as gypsum board or plywood, which is applied in large sheets or panels.

Ducts: In a house, usually round or rectangular metal pipes for distributing warm air from the heating plant to rooms, or air from a conditioning device or as cold air returns. Ducts are also made of asbestos and composition materials.

Eaves: The margin or lower part of a roof projecting over the wall.

Expansion Joint: A bituminous fiber strip used to separate blocks or units of concrete to prevent cracking due to expansion as a result of temperature changes. Also used on concrete slabs.

Facia or Fascia: A flat board, band, or face, used sometimes by itself but usually in combination with moldings, often located at the outer face of the cornice.

Filler (Wood): A heavily pigmented preparation used for filling and leveling off the pores in open-pored woods.

Fire-Resistive: In the absence of a specific ruling by the authority having jurisdiction, applies to materials for construction not combustible in the temperatures of ordinary fires and that will withstand such fires without serious impairment of their usefulness for at least 1 hour.

Fire-Retardant Chemical: A chemical or preparation of chemicals used to reduce flammability or to retard spread of flame.

Fire Stop: A solid, tight closure of a concealed space, placed to prevent the spread of fire and smoke through such a space. In a frame wall, this will usually consist of 2 by 4 cross blocking between studs.

Fishplate: A wood or plywood pieces used to fasten the ends of two members together at a butt joint with nails or bolts. Sometimes used at the junction of opposite rafters near the ridge line.

Flagstone (Flagging or Flags): Flat stones from 1 to 4 inches thick, used for rustic walks, steps, floors, and the like.

Flashing: Sheet metal or other material used in roof and wall construction to protect a building from water seepage.

Flat Paint: An interior paint that contains a high proportion of pigment and dries to a flat or lusterless finish.

Flue: The space or passage in a chimney through which smoke, gas, or fumes ascend. Each passage is called a flue, which together with any others and the surrounding masonry make up the chimney.

Flue Lining: Fire clay or terra-cotta pipe, round or square, usually made in all ordinary flue sizes and in 2-foot lengths, used for the inner lining of chimneys with the brick or masonry work around the outside. Flue lining in chimneys runs from about a foot below the flue connection to the top of the chimney.

Fly Rafters: End rafters of the gable overhang supported by roof sheathing and lookouts.

Footing: A masonry section, usually concrete, in a rectangular form wider than the bottom of the foundation wall or pier it supports.

Foundation: The supporting portion of a structure below the first-floor construction, or below grade, including the footings.

Framing, Balloon: A system of framing a building in which all vertical structural elements of the bearing walls and partitions consist of single pieces extending from the top of the foundation sill plate to the roof plate and to which all floor joists are fastened.

Framing, Platform: A system of framing a building in which floor joists of each story rest on the top plates of the story below or on the foundation sill for the first story, and the bearing walls and partitions rest on the subfloor of each story.

Frieze: In house construction; a horizontal member connecting the top of the siding with the soffit of the cornice.

Frost Line: The depth of frost penetration in soil. This depth varies in different parts of the country. Footings should be placed below this depth to prevent movement.

Fungi Wood: Microscopic plants that live in damp wood and cause mold, stain, and decay.

Fungicide: A chemical that is poisonous to fungi.

Furring: Strips of wood or metal applied to a wall or other surface to even it and normally to serve as a fastening base for finish material.

Gable: In house construction; the portion of the roof above the eaveline of a double-sloped roof.

Gable End: An end wall having a gable.

Girder: A large or principal beam of wood or steel used to support concentrated loads at isolated points along its length.

Gloss Enamel: A finishing material made of varnish and sufficient pigments to provide opacity and color, but little or no pigment of low opacity. Such an enamel forms a hard coating with maximum smoothness of surface and a high degree of gloss.

Gloss (Paint or Enamel): A paint or enamel that contains a relatively low proportion of pigment and dries to a sheen or luster.

Grain: The direction, size, arrangement, appearance, or quality of the fibers in wood.

Grain, Edge (Vertical): Edge-grain lumber has been sawed parallel to the pith of the log and approximately at right angles to the growth rings, i.e., the rings form an angle of 45 degrees or more with the surface of the piece.

Grain, Flat: Flat-grain lumber has been sawed parallel to the pith of the log and approximately tangent to the growth rings, i.e., the rings form an angle of less than 45 degrees with the surface of the piece.

Grain, Quartersawn: Another term for edge grain.

Grounds: Guides used around openings and at the floorline to strike off plaster. They can consist of narrow strips of wood or of wide subjambs at interior doorways. They provide a level plaster line for installation of casing and other trim.

Grout: Mortar made of such consistency (by adding water) that it will just flow into the joints and cavities of the masonry work and fill them solid.

Gusset: A flat wood, plywood, or similar type member used to provide a connection at intersection of wood members. Most commonly used at joints of wood trusses. They are fastened by, nails, screws, bolts, or adhesives.

Gutter or Eave Trough: A shallow channel or conduit of metal or wood set below and along the eaves of a house to catch and carry off rainwater from the roof.

Gypsum Plaster: Gypsum formulated to be used with the addition of sand and water for base-coat plaster.

Header: (a) A beam placed perpendicular to joists and to which joists are nailed in framing for chimney, stairway, or other opening. (b) A wood lintel.

Hearth: The inner or outer floor of a fireplace, usually made of brick, tile, or stone.

Heartwood: The wood extending from the pith to the sapwood, the cells of which no longer participate in the life processes of the tree.

Hip: The external angle formed by the meeting of two sloping sides of a roof.

Hip Roof: A roof that rises by inclined planes from all four sides of a building.

Humidifier: A device designed to increase the humidity within a room or a house by means of the discharge of water vapor. They may consist of individual room-size units or larger units attached to the heating plant to condition the entire house.

I-Beam: A steel beam with a cross section resembling the letter "I". It is used for long spans as basement beams or over wide wall opening, such as a double garage door, when wall and roof loads are imposed on the opening.

IIC: A new system utilized in the Federal Housing Administration recommended criteria for impact sound insulation.

INR (Impact Noise Rating): A single figure rating which provides an estimate of the impact sound-insulation performance of a floor-ceiling assembly.

Insulation Board, Rigid: A structural building board made of coarse wood or cane fiber in 1/2 and 25/32-inch thicknesses. It can be obtained in various size sheets, in various densities, and with several treatments.

Insulation, Thermal: Any material high in resistance to heat transmission that, when placed in the walls, ceiling, or floors of a structure, will reduce the rate of heat flow.

Interior Finish: Material used to cover the interior framed areas, or material of walls and ceilings.

Jack Rafter: A rafter that spans the distance from the wallplate to a hip, or from a valley to a ridge.

Jamb: The side and head lining of a doorway, window, or other opening.

Joint: The space between the adjacent surfaces of two members or components joined and held together by nails, glue, cement, mortar, or other means.

Joint Cement: A powder that is usually mixed with water and used for joint treatment in gypsum-wallboard finish. Often called "spackle".

Joist: One of a series of parallel beams, usually 2 inches in thickness, used to support floor and ceiling loads, and supported in turn by larger beams, girders, or bearing walls.

Kiln Dried Lumber: Lumber that has been kiln dried often to a moisture content of 6 to 12 percent. Common varieties of softwood lumber, such as framing lumber are dried to a somewhat higher moisture content.

Knot: In lumber, the portion of a branch or limb of a tree that appears on the edge or face of the piece.

Landing: A platform between flights of stairs or at the termination of a flight of stairs.

Lath: A building material of wood, metal, gypsum, or insulation board that is fastened to the frame of a building to act as a plaster base.

Lattice: A framework of crossed wood or metal strips.

Leader: See Downspout.

Ledger Strip: A strip of lumber nailed along the bottom of the side of a girder on which joists rest.

Let-in Brace: Nominal 1-inch thick boards applied into notched studs diagonally.

Light: Space in a window sash for a single pane of glass: Also, a pane of glass.

Lintel: A horizontal structural member that supports the load over an opening such as a door or window.

Lookout: A short wood bracket or cantilever to support an overhang portion of a roof or the like, usually concealed from view.

Louver: An opening with a series of horizontal slats so arranged as to permit ventilation but to exclude rain, sunlight, or vision. See also Attic ventilators.

Lumber: Lumber is the product of the sawmill and planing mill not further manufactured other than by sawing, resawing, and passing lengthwise through a standard planing machine, crosscutting to length, and matching.

Lumber Boards: Yard lumber less than 2 inches thick and 2 or more inches wide.

Lumber, Dimension: Yard lumber from 2 inches to, but not including, 5 inches thick and 2 or more inches wide. Includes joists, rafters, studs, plank, and small timbers.

Lumber, Dressed Size: The dimension of lumber after shrinking from green dimension and after matching to size or pattern.

Lumber, Matched: Lumber that is dressed and shaped on one edge in a grooved pattern and on the other in a tongued pattern.

Lumber, Shiplap: Lumber that is edge dressed to make a close rabbeted or lapped joint.

Lumber, Timbers: Yard lumber 5 or more inches in least dimension. Includes beams, stringers, posts, caps, sills, girders, and purlins.

Lumber, Yard: Lumber of those grades, sizes, and patterns, which are generally intended for ordinary construction, such as framework and rough coverage of houses.

Mantel: The shelf above a fireplace. Also used in referring to the decorative trim around a fireplace opening.

Masonry: Stone, brick, concrete, hollow-tile, concrete-block, gypsum-block, or other similar building units or material or a combination of the same, bonded together with mortar to form a wall, pier, buttress, or similar mass.

Mastic: A pasty material used as a cement (as for setting tile) or a protective coating (as for thermal insulation or waterproofing).

Metal Lath: Sheets of metal that are slit and drawn out to form openings. Used as a plaster base for walls and ceilings and as reinforcing over other forms of plaster base.

Millwork: Generally all building materials made of finished wood and manufactured in millwork plants and planing mills are included under the term "millwork." It includes such items as inside and outside doors, window and doorframes, blinds, porchwork, mantels, panelwork, stairways, moldings, and interior trim. It normally does not include flooring, ceiling, or siding.

Miter Joint: The joint of two pieces at an angle that bisects the joining angle. For example, the miter joint at the side and head casing at a door opening is made at a 45° angle.

Moisture Content of Wood: Weight of the water contained in the wood, usually expressed as a percentage of the weight of the ovendry wood.

Moldings: A wood strip having a curved or projecting surface used for decorative purposes.

Mortise: A slot cut into a board, plank, or timber, usually edgewise, to receive tenon of another board, plank, or timber to form a joint.

Mullion: A vertical bar or divider in the frame between windows, doors, or other openings.

Muntin: A small member that divides the glass or openings of sash or doors.

Natural Finish: A transparent finish that does not seriously alter the original color or grain of the natural wood. Natural finishes are usually provided by sealers, oils, varnishes, water-repellent preservatives, and other similar materials.

Newel: A post to which the end of a stair railing or balustrade is fastened. Also, any post to which a railing balustrade is fastened.

Nonbearing Wall: A wall supporting no load other than its own weight.

Nosing: The projecting edge of a molding drip. Usually applied to the projecting molding on the edge of a stair tread.

Notch: A crosswise rabbet at the end of a board.

O.C. on Center: The measurement of spacing for studs, rafters, joists, and the like in a building from the center of one member to the center of the next.

O.G. or Ogee: A molding with a profile in the form of a letter "S", having the outline of a reversed curve.

Outrigger: An extension of a rafter beyond the wall line. Usually a smaller member nailed to a larger rafter to form a cornice or roof overhang.

Paint: A combination of pigments with suitable thinners or oils to provide decorative and protective coatings.

Panel: In house construction, a thin flat piece of wood, plywood, or similar material, framed by stiles and rails as in a door or fitted into grooves of thicker material with molded edges for decorative wall treatment.

Paper Building: A general term for papers, felts, and similar sheet materials used in buildings without reference to their properties or uses.

Paper Sheathing: A building material, generally paper or felt, used in wall and roof construction as a protection against the passage of air and sometimes moisture.

Parting Stop or Strip: A small wood piece used in the side and head jambs of double-hung windows to separate upper and lower sash.

Partition: A wall that subdivides spaces within any story of a building.

Penny: As applied to nails, it originally indicated the price per hundred. The term now serves as a measure of nail length and is abbreviated by the letter "d".

Perm: A measure of water vapor movement through a material (grains per square foot per inch of mercury difference in vapor pressure).

Pier: A column of masonry, usually rectangular in horizontal cross section, used to support other structural members.

Pigment: A powdered solid in suitable degree of subdivision for use in paint or enamel.

Pitch: The incline slope of a roof or the ratio of the total rise to the total width of a house, i.e., an 8-foot rise and 24-foot width is a one-third pitch roof. Roof slope is expressed in the inches of rise per foot of run.

Pitch Pocket: An opening extending parallel to the annual rings of growth that usually contains, or has contained, either solid or liquid pitch.

Pith: The small, soft core at the original center of a tree around which wood formation takes place.

Plaster Grounds: Strips of wood used as guides or strike-off edges around window and door openings and at base of walls.

Plate: Sill plate: A horizontal member anchored to a masonry wall. Sole plate: bottom horizontal member of a frame wall. Top plate: Top horizontal member of a frame wall supporting ceiling joists, rafters, or other members.

Plough: To cut a lengthwise groove in a board or plank.

Plumb: Exactly perpendicular; vertical.

Ply: A term to denote the number of thicknesses or layers of roofing felt, veneer in plywood, or layers in built-up materials, in any finished piece of such material.

Plywood: A piece of wood made of three or more layers of veneer joined with glue, and usually laid with the grain or adjoining plies at right angles. Almost always an odd number of plies are used to provide balanced construction.

Pores: Wood cells of comparatively large diameter that have open ends and are set one above the other to form continuous tubes. The openings of the vessels on the surface of a piece of wood are referred to as pores.

Preservative: Any substance that, for a reasonable length of time, will prevent the action of wood-destroying fungi, borers of various kinds, and similar destructive agents when the wood has been properly coated or impregnated with it.

Primer: The first coat of paint in a paint job that consists of two or more coats; also the paint used for such a first coat.

Putty: A type of cement usually made of whiting and boiled linseed oil, beaten or kneaded to the consistency of dough, and used in sealing glass in sash, filling small holes and crevices in wood, and for similar purposes.

Quarter Round: A small molding that has the cross section of a quarter circle.

Rabbet: A rectangular longitudinal groove cut in the corner edge of a board or plank.

Radiant Heating: A method of heating, usually consisting of a forced hot water system with pipes placed in the floor, wall, or ceiling; or with electrically heated panels.

Rafter: One of a series of structural members of a roof designed to support roof loads. The rafters of a flat roof are sometimes called roof joists.

Rafter, Hip: A rafter that forms the intersection of an external roof angle.

Rafter Valley: A rafter that forms the intersection of an internal roof angle. The valley rafter is normally made of double 2-inch thick members.

Rail: Cross members of panel doors or of a sash. Also, the upper and lower members of a balustrade or staircase extending from one vertical support, such as a post, to another.

Rake: Trim members that run parallel to the roof slope and form the finish between the wall and a gable roof extension.

Raw Linseed Oil: The crude product processed from flaxseed and usually without much subsequent treatment.

Reflective Insulation: Sheet material with one or both surfaces of comparatively low heat emissivity, such as aluminum foil. When used in building construction the surfaces face air spaces, reducing the radiation across the air space.

Reinforcing: Steel rods or metal fabric placed in concrete slabs, beams, or columns to increase their strength.

Relative Humidity: The amount of water vapor in the atmosphere, expressed as a percentage of the maximum quantity that could be present at a given temperature. (The actual amount of water vapor that can be held in space increases with the temperature.)

Resorcinol Glue: A glue that is high in both wet and dry strength and resistant to high temperatures. It is used for gluing lumber or assembly joints that must withstand severe service conditions.

Ribbon (Girt): Normally a 1- by 4-inch board let into the studs horizontally to support ceiling or second-floor joists.

Ridge: The horizontal line at the junction of the top edges of two sloping roof surfaces.

Ridge Board: The board placed on edge at the ridge of the roof into which the upper ends of the rafters are fastened.

Rise: In stairs, the vertical height of a step or flight of stairs.

Riser: Each of the vertical boards closing the spaces between the treads of stairways.

Roll Roofing: Roofing material, composed of fiber and saturated with asphalt that is supplied in 36-inch wide rolls with 108 square feet of material. Weights are generally 45 to 90 pounds per roll.

Roof Sheathing: The boards or sheet material fastened to the roof rafters on which the shingle or other roof covering is laid.

Rubber-Emulsion Paint: Paint, the vehicle of which consists of rubber or synthetic rubber dispersed in fine droplets in water.

Run: In stairs, the net width of a step or the horizontal distance covered by a flight of stairs.

Saddle: Two sloping surfaces meeting in a horizontal ridge, used between the back side of a chimney, or other vertical surface, and a sloping roof.

Sand Float Finish: Lime mixed with sand, resulting in a textured finish.

Sapwood: The outer zone of wood, next to the bark. In the living tree it contains some living cells (the heartwood contains none), as well as dead and dying cells. In most species, it is lighter colored than the heartwood. In all species, it is lacking in decay resistance.

Sash: A single light frame containing one or more lights of glass.

Sash Balance: A device, usually operated by a spring or tensioned weather-stripping designed to counterbalance double-hung window sash.

Saturated Felt: A felt that is impregnated with tar or asphalt.

Scratch Coat: The first coat of plaster, which is scratched to form a bond for the second coat.

Screed: A small strip of wood, usually the thickness of the plaster coat, used as a guide for plastering.

Scribing: Fitting woodwork to an irregular surface. In moldings, cutting the end of one piece to fit the molded face of the other at an interior angle to replace a miter joint.

Sealer: A finishing material, either clear or pigmented, that is usually applied directly over uncoated wood for the purpose of sealing the surface.

Seasoning: Removing moisture from green wood in order to improve its serviceability.

Semigloss Paint or Enamel: A paint or enamel made with a slight insufficiency of nonvolatile vehicle so that its coating, when dry, has some luster but is not very glossy.

Shake: A thick handsplit shingle, resawed to form two shakes; usually edge-grained.

Sheathing: The structural covering, usually wood boards or plywood, used over studs or rafters of a structure. Structural building board is normally used only as wall sheathing.

Sheathing Paper: See Paper, sheathing.

Sheet Metal Work: All components of a house employing sheet metal, such as lashing, gutters and downspouts.

Shellac: A transparent coating made by dissolving lac, a resinous secretion of the lac bug (a scale insect that thrives in tropical countries, especially India), in alcohol.

Shingles: Roof covering of asphalt, asbestos, wood, tile, slate, or other material cut to stock lengths, widths, and thicknesses.

Shingles Siding: Various kinds of shingles, such as wood shingles or shakes and nonwood shingles that are used over sheathing for exterior sidewall covering of a structure.

Shiplap: See Lumber, shiplap.

Shutter: Usually lightweight louvered or flush wood or nonwood frames in the form of doors located at each side of a window. Some are made to close over the window for protection and others are fastened to the wall as a decorative device.

Siding: The finish covering of the outside wall of a frame building, whether made of horizontal weatherboards, vertical boards with battens, shingles, or other material.

Siding, Bevel (Lap Siding): Wedge-shaped boards used as horizontal siding in a lapped pattern. This siding varies in butt thickness from 1/2 to 3/4 inch and in widths up to 12 inches. Normally used over some type of sheathing.

Siding, Dolly Varden: Beveled wood siding that is rabbeted on the bottom edge.

Siding, Drop: Usually 3/4 inch thick and 6 and 8 inches wide with tongued-and-grooved or shiplap edges. Often used as siding without sheathing in secondary buildings.

Sill: The lowest member of the frame of a structure, resting on the foundation and supporting the floor joists or the uprights of the wall. The member forming the lower side of an opening, as a door sill, window sill, etc.

Sleeper: Usually, a wood member embedded in concrete, as in a floor, that serves to support and to fasten subfloor or flooring.

Soffit: Usually the underside of an overhanging cornice.

Soil Cover (Ground Cover): A light covering of plastic film, roll roofing, or similar material used over the soil in crawl spaces of buildings to minimize moisture permeation of the area.

Soil Stack: A general term for the vertical main of a system of soil, waste, or vent piping.

Sole or Sole Plate: See Plate.

Solid Ridging: A solid member placed between adjacent floor joists near the center of the span to prevent joists from twisting.

Span: The distance between structural supports such as walls, columns, piers, beams, girders, and trusses.

Splash Block: A small masonry block laid with the top close to the ground surface to receive roof drainage from downspouts and to carry it away from the building.

Square: A unit of measure--100 square feet--usually applied to roofing material. Sidewall coverings are sometimes packed to cover 100 square feet and are sold on that basis.

Stain Shingle: A form of oil paint, very thin in consistency, intended for coloring wood with rough surfaces, such as shingles, without forming a coating of significant thickness or gloss.

Stair Carriage: Supporting member for stair treads. Usually 2-inch plank notched to receive the treads, sometimes called a "rough horse."

Stair Landing: See Landing.

Stair Rise: See Rise.

STC (Sound Transmission Class): A measure of sound stopping of ordinary noise.

Stile: An upright framing member in a panel door.

Stool: A flat molding fitted over the window sill between jambs and contacting the bottom rail of the lower sash.

Storm Sash or Storm Window: An extra window usually placed on the outside of an existing one as additional protection against cold weather.

Story: That part of a building between any floor and the floor or roof next above.

Strip Flooring: Wood flooring consisting of narrow, matched strips.

String, Stringer: A timber or other support for cross members in door or ceilings. In stairs; the support on which the stair treads rest also, stringboard.

Stucco: Most commonly refers to an outside plaster made with Portland cement as its base.

Stud: One of a series of slender wood or metal vertical structural members placed as supporting elements in walls and partitions. (Plural: studs or studding.)

Subfloor: Boards of plywood laid on joists over which a finish floor is to be laid.

Suspended Ceiling: A ceiling system supported by hanging it from the overhead structural framing.

Tail Beam: A relatively short beam or joist supported in a wall on one end and by a header at the other.

Termites: Insects that superficially resemble ants in size, general appearance, and habit of living in colonies; hence, they are frequently call "white ants." Subterranean termites establish themselves in buildings not by being carried in with lumber, but by entering from ground nests after the building has been constructed. If unmolested, they eat out the woodwork, leaving a shell of sound wood to conceal their activities, and damage may proceed so far as to cause collapse of parts of a structure before discovery. There are about 56 species of termites known in the United States; but the two major ones, classified by the manner in which they attack wood, are ground-inhabiting or subterranean termites (the most common) and dry-wood termites, which are found almost exclusively along the extreme southern border and the Gulf of Mexico in the United States.

Termite Shield: A shield, usually of noncorrodible metal, placed in or on a foundation wall or other mass of masonry or around pipes to prevent passage of termites.

Terneplate: Sheet iron or steel coated with an alloy of lead and tin.

Threshold: A strip of wood or metal with beveled edges used over the finished floor and the sill of exterior doors.

Toenailing: To drive a nail at a slant with the initial surface in order to permit it to penetrate into a second member.

Tongued and Grooved: See Dressed and matched.

Tread: The horizontal board in a stairway on which the foot is placed.

Trim: The finish materials in a building, such as moldings, applied around openings (window trim, door trim) or at the floor and ceiling of rooms (baseboard, cornice, and other moldings).

Trimmer: A beam or joist to which a header is nailed in framing for a chimney, stairway, or other opening.

Truss: A frame or jointed structure designed to act as a beam of long span, while each member is usually subjected to longitudinal stress only, either tension or compression.

Turpentine: A volatile oil used as a thinner in paints and as a solvent in varnishes. Chemically, it is a mixture of terpenes.

Undercoat: A coating applied prior to the finishing or top coats of a paint job. It may be the first of two or the second of three coats. In some usage of the word it may become synonymous with priming coat.

Under Layment: A material placed under finished coverings, such as flooring, or shingles, to provide a smooth, even surface for applying the finish.

Valley: The internal angle formed by the junction of two sloping sides of a roof.

Vapor Barrier: Material used to retard the movement of water vapor into walls and prevent condensation in them. Usually considered as having a perm value of less than 1.0. Applied separately over the warm side of exposed walls or as a part of batt or blanket insulation.

Varnish: A thickened preparation of drying oil or drying oil and resin suitable for spreading on surfaces to form continuous, transparent coatings, or for mixing with pigments to make enamels.

Vehicle: The liquid portion of a finishing material; it consists of the binder (nonvolatile) and volatile thinners.

Veneer: Thin sheets of wood made by rotary cutting or slicing of a log.

Vent: A pipe or duct that allows flow of air as an inlet or outlet.

Vermiculite: A mineral closely related to mica, with the faculty of expanding on heating to form lightweight material with insulation quality. Used as bulk insulation and also as aggregate in insulating and acoustical plaster and in insulation concrete floors.

Volatile Thinner: A liquid that evaporates readily and is used to thin or reduce the consistency of finishes without altering the relative volumes of pigments and nonvolatile vehicles.

Wane: Bark, or lack of wood from any cause, on edge or corner of a piece of wood.

Water-Repellent Preservative: A liquid designed to penetrate into wood and impart water repellency and a moderate preservative protection. It is used for millwork, such as sash and frames, and is usually applied by dripping.

Weather-Strip: Narrow or jamb-width sections of thin material or other metal to prevent infiltration of air and moisture around windows and doors. Compression weather stripping prevents air infiltration, provides tension, and acts as a counter balance.

Wood Rays: Strips of cells extending radially within a tree and varying in height from a few cells in some species to 4 inches or more in oak. The rays serve primarily to store food and to transport it horizontally in the tree.

Attachment 15

SAMPLE
BID TABULATION

Name: _____
Address: _____
Phone: _____

1.	Kitchen: Install (2) GFCI in outlets.	
2.	Kitchen: Prepare and paint interior of window and trim on (2) doors.	
3.	Bathroom: Install GFCI outlet.	
4.	Bathroom: Prepare and paint interior of window.	
5.	Bathroom: Install new toilet.	
6.	SW Bedroom: Install smoke detector in hall.	
7.	NW Bedroom: Repair and finish holes in floor.	
8.	NW Bedroom: Install new door and finish.	
9.	SE Storage Room: Repair and finish ceiling.	
10.	SE Storage Room: Install entry door and storm door.	
11.	SE Storage Room: Install (4) storm windows.	
12.	SE Storage Room: Repair and finish walls.	
13.	Heating Equipment: Install forces air furnace and ductwork.	
14.	Hot Water Heater: Install drop leg on T & P Valve.	
15.	Basement Utility Room: Install cover on open junction box.	
16.	Building Exterior: Install vinyl siding to specifications.	
17.	Building Exterior: Install gutters on entire house.	
18.	Attic: Insulate all attics to R-38, including east storage.	
19.	Electric: Rewire house to specifications.	
	SUB – TOTAL:	
	Cost of LSWP and Clearance	
	TOTAL:	

Attachment 16

CDBG Housing Quality Standards

I. Introduction

These physical guidelines for the rehabilitation of existing residential properties have been developed to provide minimum design and construction criteria on a statewide basis. The provisions are extended to serve as an important aid in carrying out the objectives of state and local programs for neglected and run-down properties. These objectives seek the large-scale physical, social and economic regeneration of neighborhoods, which have, in general, seriously deteriorated. These Housing Quality Standards are divided into three parts: a) minor rehabilitation (health and safety standards/weatherization), b) Moderate/Substantial Rehabilitation (livability standards), and c) abatement. The first outlines minimal basic standards to address health and safety issues, which includes weatherization for the residents of the unit. The goal of the moderate/substantial rehabilitation standards is to add 20 years to useful life to the housing unit, addressing issues beyond those considered a health or safety threat. All housing units receiving CDBG assistance must comply with the minimum standards.

The purpose and intent of the guidelines are threefold:

- To assure improved housing that is livable, healthful, safe and physically sound, and at the same time is low enough in cost for present neighborhood residents to afford.
- To provide an acceptable minimum level for residential rehabilitation based on performance, which has maximum flexibility to meet local conditions.
- To encourage innovation and improved technology, which give the promise of reduced construction costs.

A. Contrast with New Construction Standards

These guidelines for rehabilitation are significantly different from standards for new construction. These deteriorating buildings were built many years ago by standards quite different from those practiced today. Former patterns of living and the use of space are now likely to be considered inefficient or inconvenient. Properties, in many cases, will have become substandard because of overcrowding, lack of sanitary conditions and general neglect.

B. Other Codes and Regulations

These guidelines, while setting forth basic objectives and provisions specifically related to rehabilitation, shall not be construed as relieving the property owner, project sponsor or their builder of his/her responsibility for compliance with local ordinances, codes and regulations, including established requirements of health officers or other authority having jurisdiction.

1. Local Codes - Where a local code, regulation or requirement is incomplete or does not fulfill the purpose and intent of these guidelines, this document or local standards derived from these guidelines shall apply.

2. Fire Administration Authorization Act of 1992 - This Act requires all dwelling units to be equipped with either hard-wired or battery-operated smoke detectors. Refer to this Act for additional guidelines for all housing other than single family dwellings.

II. CDBG Standards

A. Minor Rehabilitation

These Standards were developed to provide guidelines for the general well-being of the individuals residing in the home.

1. Utilities: Utilities shall be provided for each property or project, including water sewer, and electrical utilities. Approvable utilities include:

   a. State approved city/Rural Water District (RWD) or county supplied water, sewer, electrical and gas utilities.

   b. Privately owned water, sewer, electrical and gas utilities that have been approved by the state and local public institutions for use for residential dwellings.

   c. For structures connected to an on-site water well, water must be tested and meet water quality standards for drinking water as required by the Kansas Department of Health & Environment (KDHE) for public water supplies; or water supply must be connected to an on-site package disinfecting facility and water must not contain toxic substances determined, in the concentrations present, to be harmful to human health by the KDHE or the Environmental Protection Agency.

   d. For structures connected to existing on-site septic systems, the design of the system shall ensure that effluent from the septic system and disposal field is not discharging into public and private drinking water supplies, stagnating in pools on the surface or backing up into the residences. For septic systems installed, grantees are required to obtain a permit from the applicable state agency involved. Construction specifications shall follow guidelines established by the applicable state agency.

   e. For structures connected to on-site propane tanks, propane lines connecting the tank to the building shall conform to Building Officials and Code Administrators (BOCA) codes.

   f. Structures connected to gas, propane, water, electrical or sewer shall be connected with piping or conduit that is not corroded, does not leak, or is otherwise not allowed by these standards. Bare steel gas lines must be inspected for safety by a local gas company and repaired, if necessary. The inspection report must be in each file.

2. Structural: All floors, stairs, ceilings or other load bearing structural members shall be free of hazards that would indicate a potential for the building or individual members of the building to collapse.

3. Roofs: Roofs shall be repaired or replaced if they have serious defects indicating the potential for structural collapse or if they allow the infiltration of significant amounts of water or air. If repaired, all critical joints in exterior roof construction shall be protected by appropriately installed sheet metal, flashing material or rubberized roofing membrane.

4. Weatherization: All water piping in non-insulated spaces shall be insulated so as to keep them from freezing. All foundation and mobile home crawl spaces shall be enclosed to prevent pipes from freezing in the winter. Pipes shall not be insulated with asbestos material. All asbestos insulating material shall be replaced with non-asbestos material or encapsulated with high-temperature paint or other Environmental Protection Agency (EPA) approved material.

5. Lead-Based Paint: The issue of lead-based paint must be addressed in **every** house built prior to 1978 receiving rehabilitation assistance in all HUD programs. See Attachment 20 herein for the regulations. These lead-based paint regulations are a part of the health and safety CDBG housing standards and are applicable as to the amount of dollars spent on the housing rehabilitations activity.

6. Heating Appliances: All mechanical equipment shall be inspected for faulty operation, fire and other hazards. Repairs and replacement shall be made as needed and necessary to eliminate the hazard. Heating facilities shall be provided for each living unit. All new installations of heating appliances shall comply with the manufacturer's recommendations for installation and placement. All gas, propane, liquid and solid fuel burning appliances must be vented to the outer air.

   Existing masonry chimneys or metal flues shall not have cracks or holes that permit smoke or fumes to be discharged. Deteriorated pipes or chimneys that have been determined by the inspector or the grantee to constitute a potential threat to the safety of the occupant shall be replaced. Existing unlined masonry chimneys which permit flames or fumes to be discharged should be removed and replaced with corrosion-resistant pipe, or, if not replaced, shall be lined with corrosion-resistant pipe one inch less in diameter than the interior of the chimney, or shall be lined with terra cotta. Vent pipes shall slope upward not less than 1/4" per foot.

   Any asbestos-containing materials wrapped around vent pipes shall be removed or encapsulated with high temperature paint. Asbestos removal procedures shall conform to EPA regulations.

   All heating applications shall be located in unconfined spaces that will provide adequate combustion air as recommended by the manufacturer of the appliances.

Located in a confined space, adequate ventilation between the confined area and unconfined space shall be provided to allow adequate combustion air to enter the confined space.

7. Solid Fuel Burning Appliances: All existing chimneys and vents for solid fuel burning appliances shall be cleaned as part of the rehabilitation process. All chimneys and vents for solid fuel burning appliances shall terminate at least two feet above any part of the roof located horizontally with ten feet of the chimney or vent.

   a. Metal Flues: (1) Solid fuel burning appliances (wood, coal, etc.) shall be vented so that single walled pipe shall have at least 16" clearance from combustible material; (2) double walled pipe shall have at least 8" clearance from combustible material; and (3) triple walled pipe shall have at least 2" clearance from combustible material. Double walled insulated stainless steel pipe shall have at least 3" clearance from combustible material. All pipe-venting solid fuel-burning appliances shall have been approved by Underwriters Laboratories to withstand heat of 1,500 degrees or more for three hours. All galvanized pipe shall be of #10 thickness or of superior fire resistance.

   b. Masonry Chimneys: Existing masonry chimneys being used to vent solid fuel burning appliances shall be constructed of at least 8" of solid masonry around the vent below the roof line and 4" of solid masonry around the vent above the roof line. Combustible material above the roofline shall have at least a 2" clearance from a flue built of less than 8" of solid masonry. All such chimneys shall be lined with terra cotta or firebrick.

   c. Placement: Solid fuel burning heaters shall not be placed within 36" of any unprotected walls or within 18" of an unprotected floor. Protection of walls and floors may be provided with or without ventilated spaces between the protection and the wall. Ventilated spaces shall consist of one-inch space between a listed noncombustible material and the wall. Spacers and ties between the material and the wall shall be noncombustible and shall be resistant to heat conduction. Spacers shall not be placed between the appliance and the wall. With wall protection and ventilated space, clearance between the appliance and the wall may not be less than 12". With wall protection and no ventilated space, clearance between the appliance and wall may not be less than 24" unless more than 4" of solid masonry is used as the protection.

8. Plumbing: Plumbing systems shall operate free of clogging and shall not have cross connections that permit contamination of water supplies or back siphoning between fixtures.

   a. Water and sewer lines shall be free of major leaks that cause serious and persistent levels of rust or contamination of the water, or which damage

other elements of the building. All water lines in unheated areas shall be insulated so as to keep them from freezing.

b. All natural and liquid propane gas piping shall be free of leaks. Pipes feeding each individual gas fueled appliance shall have a shut-off valve. Gas lines shall be free of corrosion that potentially could cause a gas leak soft copper piping and other non-rigid piping shall not be used in replacing and installing natural gas lines. Soft copper piping used in installing or replacing propane gas lines shall not be located in areas where it is accessible to tampering by children or located in passageways where it can be potentially kicked, stepped on or bent, so as to cause leakage of gas around flange connections.

9. Electrical: Existing wiring and electrical equipment, where its continued service is contemplated, shall not be a potential source of electrical hazard or ignition of combustible materials. Wherever potential hazards are determined to be present, replacement of existing wiring or equipment shall be made. Existing facilities that are inadequate to meet anticipated demand shall be replaced to meet that demand. Inadequate facilities include the use of power strips if more than two appliances are used regularly by that outlet. Hazards such as broken wiring, non-insulated wiring, frayed wiring, a light fixture hanging from an electrical wire without other visible means of support, missing cover plates on switches, outlets and junction boxes exposed to the occupants of the dwelling or which are covered with combustible material, knob and tube, aluminum or obsolete wiring systems, badly corroded outlets, exposed fuse box connections, and overloaded circuits evidenced by frequently blown fuses, shall be eliminated.

a. New electrical work shall be installed using the appropriate provisions of the National Electrical Code as it has existed within the last ten years. Not less than two general lighting circuits (15 amp.) and one appliance circuit (20 amp.) shall be provided.

10. Bathroom: Commode: Bathrooms must have a working commode for the exclusive use of the occupant. The commode must be connected to a water supply and sewer. The commode must not leak, have clogged water lines or have a sewer line that is clogged or backs up.

a. Lavatory: Bathrooms must have a fixed wash basin or lavatory that is permanently and securely fastened to the wall. The lavatory must be equipped with hot and cold running water and have a working drain with a gas trap.

b. Bathtubs and Showers: Bathrooms must be equipped with a working tub or shower with hot and cold running water and have a working drain with a gas trap.

11. Termite Treatment: Chemicals applied as a termite treatment shall only be applied to a house by a person that is a licensed commercial applicator. Persons who are licensed shall not assign persons who are not licensed responsibility for

treating a house. Grantees shall keep documentation showing that the person chosen to undertake termite treatment is a licensed applicator. EPA has banned use of chlordane; therefore it is also not allowed on CDBG-funded rehabilitation projects.

12. Materials: All materials shall be installed in locations and for purposes that are recommended by the manufacturer of the materials.

13. Smoke Detectors: All units shall be equipped with at least one hard-wired operating smoke detector (if the unit is being rewired) or a battery-operated smoke detector located near the sleeping quarters, and on each level of the house, including basement.

14. Weatherization: All houses shall be equipped with the following weatherizing improvements:

    a. Windows: All windows shall be equipped with two layers of glass (storm windows count as one layer) and glass panes shall be intact. Windows shall not allow the significant entry of air or water into the structure from around the windows, sashes, or window casings. Window casings that are replaced shall be filled with insulation.

    b. Doors: All exterior doors shall be weather-stripped. Weather-stripped doors that allow the significant entry of air or water into the structure shall be replaced or repaired to eliminate this problem.

    c. Ceiling Insulation: Ceiling insulation shall be provided over all habitable areas. Combustible materials, such as beadboard or styrofoam, shall not be used for attic insulation. All ceilings shall be insulated to at least R-30 or as can be determined for a particular structure using HUD's Cost Effective Energy Conservation Standards for Rehabilitation Projects.

    d. Side Wall Insulation: All side walls shall be insulated to R-11 or better or as can be determined for a particular structure using HUD's Cost Effective Energy Conservation Standards for Rehabilitation Projects. Walls in spaces heated with solid fuel-burning heating appliances are exempt from this requirement. Sidewall insulation shall not be installed using beadboard, styrofoam or other combustible materials. When exterior walls are repaired by, removing existing sheathing or interior wall covering, insulation shall be provided to the exposed portion of the wall cavity; a vapor barrier shall be provided on the warm side of the cavity or furring when insulation is added.

B. Moderate/Substantial Rehabilitation

The following standards apply to the units in the funded project awarded to this level. These standards include all of the provisions listed as "minor standards" and all of the provisions listed under this section.

1. Access to the Unit

   a. Where access to the structure is outdoors and more than 12" above grade, steps shall be provided for all-weather access to the building and constructed so as to provide safety and reasonable durability.

   b. Where access to the unit is on the interior of the structure, each unit shall not have its only access through another unit.

   c. A primary entrance readily accessible to the handicapped in accordance with the provisions on ANSI A117.1 shall be provided to any residential structure intended for occupancy by the physically handicapped.

2. Dilapidated Elements: All dilapidated portions of existing properties which are not economically repairable or which are not of historic significance and which pose safety hazards to the occupants of the dwelling shall be removed from the building.

3. Dirt and Debris: Properties that are rehabilitated shall be free of dirt, debris or other unsightly elements that are the result of the rehabilitation process.

4. Space Standards: Each living unit shall be provided with space necessary for suitable sleeping, cooking, dining, storage and sanitary facilities and provide space of such size and dimensions so as to permit placement of furniture and essential equipment. There shall be at least one bedroom for every two residents, a kitchen, living room and bathroom. Minimum sizes for these rooms are as follows:

Room Dimension	Space
Living Room	120 sq. ft.
Bedroom	70 sq. ft.
Bathroom	24 sq. ft.
Kitchen	30 sq. ft.

Total area required:

400 sq. ft. Minimum average ceiling height for all rooms: 7' 2 "

5. Light and Ventilation

   a. Ventilation: Natural ventilation of spaces such as attics, enclosed basements and crawl spaces, shall be provided by openings of sufficient sizes to overcome dampness and minimize the effect of conditions to

decay and deterioration of the structure, and prevent excess heat in attics. Exterior openings shall be effectively screened where needed.

b. Ventilation of utility spaces: Utility spaces which contain solid, liquid or gas-burning heat-producing or air conditioning equipment shall be ventilated to allow adequate combustion air.

c. Windows: There shall be at least one operable window in the living room and bedrooms. Kitchens and bathrooms not having an operable window shall have a working ventilation system.

6. Doors and Access Openings

a. Exterior Doors: Exterior doors installed with the use of CDBG funds shall have safety locks.

b. Stairways: All stairways shall provide for safety of ascent and descent and shall be equipped with handrails at an appropriate height for the owner of the residence. Risers shall not be more than 12" in height and not less than 10" in width, unless conditions make the installation of risers less than 12" in height impossible.

7. Structural Components: All structural components of the building shall be in sound condition and considered serviceable for the expected full life of the rehabilitated buildings. Individual structural members in seriously deteriorated condition shall be replaced.

a. Ceilings: Ceilings shall not have large cracks or holes that allow significant entry of air into the unit. Ceilings shall not buckle or bulge, have missing parts or have loose surface materials other than paper.

b. Interior Wall Conditions: Interior walls shall not have loose structural members, large holes (over 1" X 1" in size), or allow the significant infiltration of air or water into the structure.

c. Floor Conditions: Floors shall not have threats to safety (e.g. tripping) or large cracks or holes that allow substantial drafts to enter the structure. Floors shall not significantly move under walking stress and shall not have damaged or missing parts such as: floor joists, band joists, plates and sub-flooring.

d. Foundations: Foundations shall provide for the adequate support of structural members and loads placed upon them. Foundations shall prevent the entrance of water or excessive moisture. Serious defects shall be repaired and cracks effectively sealed. Foundation walls shall not allow the significant entry of ground water. "Significant" means that the majority of the basement floor or crawl space area is covered with ground water. Any new footings installed shall provide for subsurface drainage away from the foundation.

e. Drainage: Any deficiencies in proper grading, guttering or paving adjacent to the building shall be corrected to assure surface drainage away from the basement or crawl space.

f. Exterior Walls: Exterior walls shall provide safe and adequate support for all loads placed upon them and shall prevent the excessive infiltration of air or moisture. Serious defects shall be repaired and cracks effectively sealed.

g. Roofs: All roofs shall have suitable watertight and reasonably durable covering free of holes, cracks, excessively worn surfaces or other defects that would indicate the potential for significant infiltration of air, water or excessive moisture. Repairs to roofs shall be completed in accordance with new construction standards unless the area to be repaired is less than 1/10 of the surface of the roof. If gutters, soffits, fascia or other elements allow the significant entry of water or air into the structure, they shall be replaced to eliminate this problem. Roofs should not need replacement for at least a five-year period.

8. Kitchens and Baths

a. Kitchens: Kitchens must be supplied with a sink that has hot and cold running water. Sinks should have a working drain with a gas trap and must be securely fastened to the wall. Kitchens must have a stove or a range with an oven. Top burners and oven must be operable. A refrigerator must be present and working, and it must maintain a temperature low enough so that food does not spoil over a reasonable period of time.

b. Bathrooms: Bathtub and shower bases shall be appropriately sealed to prevent water from damaging the floor. Bathroom floors shall be covered with a waterproof covering. Showers or tubs installed in housing for the elderly and handicapped shall be provided with two grab bars installed to sustain a dead weight of 250 pounds for five minutes. Tub or shower bottom surfaces shall be slip resistant. Shower enclosure areas shall be tiled or covered with a waterproof surface from the floor to five feet above the floor. Barriers shall exist between all drains and water supplies on bathroom fixtures to ensure that wastewater does not flood water supply systems.

9. Plumbing

a. Domestic Hot Water Heating and Storage: Each building or unit within the building shall have domestic hot water in quantities sufficient for the needs of the occupants. Existing water heating and storage equipment shall be in good serviceable condition. Water heaters shall not be installed in rooms designed and used for sleeping purposes. All fuel-burning water heaters shall be connected to a vent leading to the exterior of the building. As required for venting of heating equipment, vents

shall not have cracks or holes that allow fumes to be discharged. All water heaters shall have a shutoff valve on the water supply line close to the heater. All water heaters shall have a temperature/pressure relief valve and discharge pipe.

b. Water and Sewer Lines: All water and sewer lines that have the potential for major leaks that could cause serious and persistent levels of rust or contamination of the water, or which potentially could damage other elements of the building, should be replaced. Sewer lines servicing a building shall be equipped with a clean-out screw. Building wastewater shall be appropriately vented to the outside air to prevent the buildup of gases in the sewer lines. When using CDBG funding, all water supply lines feeding toilets, sinks, showers, lavatories, hot water heaters and other plumbing fixtures shall be installed with shutoff valves. All lead water and waste disposal lines shall be replaced with non-lead material. Lead-based solder shall not be used to connect copper water supply lines. Gas traps will be provided for washing machine waste disposal lines unless airtight connections have been made.

10. Mechanical: Heating facilities shall be provided for each living unit, which are safe to operate, economical to operate and are free from objectionable drafts. Flue connections shall not allow exhaust gases to enter the living areas. Fuel tanks shall not be in close proximity to heat sources (at least 10 feet, or the standard recommended by the manufacturer or regulating code). Combustible materials shall not be stored in close proximity to heat sources and flues.

11. Electrical: All habitable rooms and other spaces requiring electrical service shall be provided with a system of wiring, wiring devices, and equipment to safely provide electrical energy for proper illumination, appliances, resident security and other electrical equipment. There shall be at least two working outlets or one working outlet and one light switch in kitchens, corridors, bathrooms, bedrooms, utility rooms and living rooms. At least 100 amp. service shall be provided for houses that have 220-volt receptacles.

Attachment 20

LEAD SAFE HOUSING RULE

LICENSING KANSAS LEAD PROFESSIONALS - The Renovation, Repair and Painting Rule (RRP)

The U.S. Department of Housing and Urban Development's Lead Safe Housing Rule (HUD's LSHR, which is found in HUD's regulations at 24 CFR Part 35, Subparts B through M), generally applies to work performed in target housing units receiving HUD housing assistance, such as rehabilitation.

The grantee who accepts HUD funds becomes responsible for compliance with the LSHR and becomes the designated party (or DP). The rule requires renovation firms (contractors) to be licensed by the Kansas Department of Health and Environment (KDHE), workers to be trained and certified and requires the use of lead safe work practices on the job. The term "rehabilitation" is used by HUD to describe residential renovation work.

Common renovation activities like sanding, cutting and removal can create hazardous lead dust and chips by disturbing lead-based paint, which can be harmful to adults and children.

On April 22, 2008, the Environmental Protection Agency (EPA) issued a rule requiring the use of lead safe practices and other actions aimed at preventing lead poisoning. Under the rule, beginning in April 2010, contractors performing renovation, repair and painting projects that disturb lead-based paint in homes, childcare facilities and schools built before 1978 must be certified and must follow specific work practices to prevent lead contamination.

There are some differences between the EPA/KDHE, RRP Rule and the HUD Lead Safe Housing Rule. A major difference is that the LSHR requires clearance examinations. All housing receiving federal assistance must still comply with the LSHR and KDHE.

All renovators should follow these three simple procedures:

- Contain the work area.
- Minimize dust.
- Clean up thoroughly.

From December 2008, the rule has required that contractors performing renovation, repair and painting projects that disturb lead-based paint provide to owners and occupants of child care facilities and to parents and guardians of children under age six that attend child care facilities built prior to 1978 the lead hazard information pamphlet **Renovate Right: Important Lead Hazard Information for Families, Child Care Providers, and Schools**. Starting on April 22, 2010, the rule will affect paid renovators who work in pre-1978 housing and child-occupied facilities, including:

- Renovation contractors.
- Maintenance workers in multi-family housing.
- Painters and other specialty trades.

Under the rule, child-occupied facilities are defined as residential, public or commercial buildings where children under age six are present on a regular basis. The requirements apply to renovation, repair or painting activities. The rule does not apply to minor maintenance or repair activities where less than two square feet of lead-based paint is disturbed in a room or where less than 20 square feet of lead-based paint is disturbed on the exterior. Window replacement is not minor maintenance or repair.

Exemptions under the LSHR are residential structures built after January 1, 1978, emergency action activities, rehabilitation that does not disturb paint, unoccupied units that will be demolished and elderly and disabled housing that are for the sole use of such persons.

The major types of requirements under the LSHR are identification and notification of defective paint surfaces, treatment of defective paint surfaces, response to Elevated Blood Level (EBL) in children and other lead-based paint requirements, such as: Occupant Protection, Worker Protection, Work Area Containment and Document Maintenance/Clearance.

NOTE: CDBG does not allow any owner, whether an owner-occupant or landlord, to opt out of the use of lead safe work practices at any time.

In order to comply with HUD and KDHE, the CDBG program is implementing the following instructions to assist the implementation of the RRP rule.

Notifications

Four types of notifications are required in the CDBG program. These notifications are to be given to both the occupants and landlords, when applicable.

1. Two brochures require distribution to all units built before 1978 and before starting renovation work. The required brochures are found as attachments and titled: "Protect Your Family From Lead In Your Home" and "Renovate Right: Important Lead Hazard Information for Families, Child Care Providers, and Schools". The family occupying the property and in the case of a rental unit both the landlord and renter must be provided the brochures. The documentation of this action must be present in the file.

2. RISK ASSESSMENT/NOTICE OF EVALUATION. This notice informs the occupants that paint has been evaluated to determine if it is LBP. After the CDBG/HQS inspection and the work write up have been completed, the Lead Hazard Risk Assessor will perform this task. Only a certified risk assessor may test to determine whether LBP is present. Test kits cannot be used to identify LBP. The risk assessor must notify the homeowner/occupant within 15 calendar days of receiving the evaluation report. The summary of this report should be provided to all contractors bidding on this property. At a minimum, the notice of evaluation results must include a) the date of the notice;

b) a summary of the nature and scope of the evaluation; c) a contact name, address and phone number for more information; d) the results of the evaluation; and e) a contact name, address and phone number to obtain the actual report.

3. NOTICE OF CLEARANCE. This notice informs the homeowner/tenant that clearance has been achieved and it is safe for them to reoccupy the construction area. This should be given as soon as clearance has been achieved. If the first clearance testing fails, it will be the contractor's responsibility to pay for all additional clearance testing until a passing clearance can be obtained.

   The unit, or, where the work is contained, (the work area and an area just outside the containment) must pass clearance, and must not have any remaining lead hazards. If clearance fails at either the visual assessment step or the dust-testing step, cleaning has to be redone. The failed part of the work area is the specific area that was tested, as well as any areas that were not tested, and any other areas that are being represented by the sampled areas. For example: just one bedroom was tested because it was to represent all bedrooms in the housing unit; it failed. Therefore, all of the bedrooms in the unit have to be re-cleaned and re-cleared.

4. NOTICE OF LEAD HAZARD REDUCTION/CLEARANCE REPORT. This notice describes the hazard reduction work completed and gives the contact information for occupants to get more information. The risk assessor must notify the homeowner/occupant within 15 calendar days of completion of the lead hazard reduction work or activities. At a minimum, this report must include: a) a summary of the nature, scope and results of the hazard reduction activities, including the clearance results; b) a contact name, address and phone number for more information; and c) available information on the location of remaining lead-based paint on a surface-by-surface basis.

   NOTE: The homeowner should be educated that if they decide to sell or rent the home, disclosure of lead presence must be provided at the time of sell/rental.

Required notifications at renovation site

1. Describe the nature, locations and dates of the renovation;
2. Be posted where they will be seen;
3. Be in the primary language of the occupants.

Occupant Protection

When a child is known to have an environmental intervention blood lead level present, the designated party must take additional steps to assess the situation and respond to potential lead hazards. An environmental intervention blood lead level is a reading in a child under six years old of 20 micrograms per deciliter of blood (20 ug/dL), or two reading of 15 to 19 ug/dL at least 3 months apart. All persons participating in such work should have appropriate training and qualifications.

Appropriate actions must be taken to protect occupants from lead-based paint hazards associated with lead hazard reduction activities.

- Occupants may not enter the worksite during lead hazard reduction activities. Reentry is permitted only after lead hazard reduction activities are completed and the dwelling has passed a clearance examination.
- Occupants of the unit must be temporarily relocated to a suitable unit that is decent, safe, sanitary and free of lead-based paint hazards during lead hazard reduction activities. Relocation must be done before lead hazard reduction activities begin.
- Property owners must protect occupants' belongings from lead contamination during lead hazard reduction activities by relocating or covering and sealing them and ensure that the worksite is secured against entry during non-working hours until the unit passes a clearance examination.

Under certain conditions, occupant relocation is not required. These conditions are:

1. Treatment will not disturb lead-based paint or lead contaminated dust.
2. Treatment of the interior will be completed within one period in eight daytime hours, the site will be contained and the work will not create other safety, health or environmental hazards.
3. Only the building's exterior is treated; the windows, doors, ventilation intakes and other openings near the worksite are sealed during hazard reduction activities and cleaned afterward; and a lead-free entry is provided.
4. Treatment will be completed within five calendar days; the work area is sealed; at the end of each day, the area within 10 feet of the containment area is cleared of debris; at the end of each day, occupants have safe access to sleeping areas, bathrooms and kitchen facilities; treatment does not create other safety, health or environmental hazards.

Worker Protection/Work Area Containment

The worksite for lead hazard reduction activities must be prepared to prevent the release of leaded dust and debris.

- Workers must use safe work practices that minimize the spread of leaded dust, paint chips, soil and debris.
- Warning signs are required at each entry to a room where lead hazard reduction activities are conducted when occupants are present; at the main and secondary entryways to a building from which occupants have been relocated; and at exterior worksites at a size and type readable from 20 feet (six meters) from the edge of the worksite. Signs need to be in the occupants' primary language to the extent practicable.

Training, Certification and Work Practice Requirements

1. Rehabilitation work can only be awarded to KDHE Licensed Renovation Firms. Construction firms can visit the KDHE website at http://www.kdheks.gov/lead/index.html to obtain certification.
2. All workers and supervisors on the job site must have completed an approved LSWP training and received a certification confirming completion.
3. Lead safe work practices must be followed. Examples of these practices include:
    a. Work-area containment to prevent dust and debris from leaving the work area.
    b. Prohibition of stated work practices.
    c. Thorough clean up followed by a clearance report.
4. A Certified Risk Assessor, not the renovation firm, must conduct clearance.

Additional HUD Requirements for the Renovator:

1. Training is required for workers and supervisors performing interim controls.
   a. If the supervisor (in HUD terms) or Certified Renovator (in EPA terms) is certified as a lead-based paint abatement supervisor or has successfully completed an accredited abatement supervision or abatement workers course, that person must complete a 4-hour RRP refresher course.
   b. Workers must successfully complete either a one-day RRP course, or another lead safe work practices course approved by HUD and EPA. HUD/EPA has approved the one-day Renovation, Remodeling and Repair course.
   c. The 4-hour RRP refresher course is not sufficient on its own to meet either the EPA or HUD training requirement.

2. The certified renovation firm and the certified renovator must take additional precautions to protect residents from lead poisoning beyond those in EPA's RRP Rule. Depending on type and amount of CDBG assistance, it is required that lead hazards be treated using "interim controls" or "ongoing lead-based paint maintenance."
   a. Renovators must use lead safe work practices in work exempt from the RRP Rule that:
      - Disturbs between 2 and 6 ft^2 of paint per room, the LSHR's *de minimus* threshold and the RRP's minor repair and maintenance activities threshold, respectively. NOTE: Window replacement, window sash replacement and removal of painted surface areas are always considered to disturb more paint than the LSHR's *de minimus* threshold.
      - Disturbs more than 10 percent of a component type with a small surface area (such as windowsills, baseboards and trim) or 2 sq. ft. per room. NOTE: The square foot and percent thresholds above apply to all work performed within in a thirty-day period.
   b. Prohibited Methods of Paint Removal:
      - Heat guns operating above 1,000 degrees Fahrenheit or those that operate high enough to char the paint.
      - Dry sanding or dry scraping.
      - Paint stripping in a poorly ventilated space using a volatile stripper that is a hazardous substance in accordance with regulations of the Consumer Product Safety Commission at 16 CFR 1500.3, and/or a hazardous chemical in accordance with the Occupational Safety and Health Administration at 29 CFR 1010.1200 or 1926.59, as applicable to the work. NOTE: Methylene chloride paint strippers may cause cancer and should be avoided. Use of these strippers is prohibited by some jurisdictions.
      - Open flame burning or torching.
      - Machine removal without HEPA vacuum attachment.

Worksite Cleanup

Worksite cleanup removes dust and debris from the work area. Good cleanup is critical to passing clearance and leaving the unit safe for habitation. Worksite cleanup must be done using methods, products and devices that are successful in cleaning lead contaminated dust, such as vacuum cleaners

with HEPA filters or equivalent equipment, and household or lead specific detergents or equivalent products.

Exemptions

Safe work practices are not required:

- If paint has been tested and found to be lead-free; or
- If maintenance or lead hazard reduction activities disturb a total surface area that is less than the following standards:
    - 20 ft. square (2 m square) on exterior surfaces;
    - 2 ft. square (0.2 m square) on any one interior room or space; or
    - 10 percent of the total surface areas on an interior or exterior type of component with a small surface area like windowsills, baseboards and trim.

Clearance is not required:

- If maintenance or a lead hazard reduction activity at a worksite does not disturb painted surfaces; or
- If the total area disturbed does not exceed the footage listed above under exemptions to safe work practices.

When HUD funds pay for renovation, funding often flows from HUD to states, to cities, and addressing lead-based painted surfaces becomes a routine part of the job. "CDBG requirements" are identified as those rehabilitation projects costing between $5,000 and $25,000. However, should a grantee expend federal monies below or above those amounts on any one housing rehabilitation project, the requirements of the activities for those amounts would be applicable.

1) Up to $5,000 per unit: "Do no harm" approach. Lead safety requirements cover only the surfaces being disturbed. Program participants can either test these surfaces to determine if they contain lead-based paint or presume they contain lead-based paint. Work which disturbs painted surfaces known or presumed to contain lead-based paint is done using lead safe work practices, and clearance of the worksite is performed at the end of the job (unless it is a very small "de minimis" scale project) to ensure that no lead dust hazards remain in the work area. Training that meets the EPA's RRP Rule requirements is sufficient for this work.

2) Greater than $5,000 and up to $25,000 per unit: Identify and control lead hazards. Identify all lead hazards at the affected units and common areas servicing those units by performing a lead-based paint risk assessment. Control the hazards using interim controls. Training that meets the EPA's RRP Rule requirements and HUD/EPA RRP curriculum is required for renovators and workers.

3) Greater than $25,000 per unit: Identify and abate lead hazards. Identify all lead hazards at the property by performing a risk assessment and then abate all the hazards. This approach requires certified abatement contractors perform the abatement part of the job.

Depending on the type and amount of housing assistance provided, HUD generally requires that identified LBP hazards be treated. Treatments may include LBP hazard abatement, interim controls or ongoing LBP maintenance. Interim controls include the following activities which are required if the

amount of work is above HUD's *de minimis* threshold; for work below the *de minimis* threshold, any deteriorated paint must be repaired. Although strongly encouraged, the work need not be done using lead safe work practices.

1. Deteriorated LBP must be stabilized. This means that physical defects in the substrate of a paint surface or component that is causing the deterioration of the surface or component must also be repaired.
2. Friction surfaces that are abraded must be treated if there are lead dust hazards nearby.
3. Friction points must be either eliminated or treated so the LBP is not subject to abrasion.
4. Impact surfaces must be treated if the paint on an impact surface is damaged or otherwise deteriorated and damage is caused by impact from a related building component (such as a doorknob that knocks the wall or door that rubs against its doorframe).
5. LBP must be protected from impact.
6. Chewable LBP surfaces must be made inaccessible for chewing by children of less than six years of age if there is evidence that such a child has chewed on the painted surface.
7. Horizontal surfaces that are rough, pitted or porous must be covered with a smooth, cleanable covering or coating.

Attachment 20-1

"LEAD SPEAK" A BRIEF GLOSSARY

COMMON LEAD-BASED PAINT TERMS

Lead-Based Paint: Paint that contains at least 1 milligram per centimeter square (mg/cm) of lead. Also measured as greater than 0.5 percent lead or has 5,000 parts per million (ppm) lead by dry weight.

Lead-Based Paint Hazards: Housing conditions that cause human exposure to unsafe levels of lead from paint. These conditions include deteriorated lead-based paint; friction, impact or chewable painted surfaces; lead contaminated dust; or lead contaminated soil.

Lead Hazard Evaluation

Visual Assessment: A visual evaluation of interior and exterior painted surfaces to identify specific conditions that contributes to lead-based paint hazards. A certified risk assessor or Housing Quality Standards (HQS) inspector trained in visual assessment performs the assessment.

Paint Testing: Testing of specific surfaces, by XRF (x-ray fluorescence) or lab analysis, to determine the lead content of these surfaces, performed by a certified lead-based paint inspector or certified risk assessor.

Risk Assessment: A comprehensive evaluation for lead-based paint hazards that includes paint testing, dust and soil sampling and a visual evaluation. The risk assessment report identifies lead hazards and appropriate lead hazard reduction methods. A certified risk assessor must conduct the assessment.

Lead Hazard Screen: A limited risk assessment activity that can be performed instead of a risk assessment in units that meet certain criteria (e.g. good condition). A certified risk assessor must perform the screen. If the unit fails the lead hazard screen, a full risk assessment must be performed.

Clearance Examination: Clearance is performed after hazard reduction, rehabilitation or maintenance *activities to determine if a unit is safe for occupancy. It involves a visual assessment analysis of dust and soil samples, and preparation of a report. A certified risk assessor, paint inspector or clearance technician (independent from entity/individual conducting paint stabilization or hazard reduction) conducts clearance.

Lead Hazard Reduction

Paint Stabilization: An interim control method that stabilizes painted surfaces and addresses the underlying cause of deterioration. Steps include repairing defective surfaces, removing loose paint and applying paint.

Interim Controls: Set of measures to temporarily control lead-based paint hazards. Qualified workers using safe work practices must complete interim control methods. Follow-up monitoring is needed.

Visual Assessment: A visual assessment for deteriorated paint consists of a visual search for cracking, scaling, peeling or chipping paint. Visual assessments must be conducted by persons trained to identify deteriorated paint.

Paint Testing: Paint testing entails testing painted surfaces to determine if it contains lead-based paint using methods such as an XRF analyzer or laboratory analysis. Paint testing differs from a lead-based paint inspection, which is a surface-by-surface investigation to determine the presence of lead-based paint. Typically, the XRF analyzer is used for an inspection. It is presumed in the Kansas CDBG program at this stage that laboratory analysis will be more prevalent due partially to the cost of the XRF analyzer. Because an inspection evaluates all painted surfaces, it is more comprehensive than lead-based paint testing. Certified paint inspectors or risk assessors must conduct paint testing.

Risk Assessment: A risk assessment is a comprehensive investigation of a dwelling to identify lead-based paint hazards that includes paint testing, dust and soil sampling, and a visual evaluation. Risk assessment results are summarized in a written report with recommendations for action.

Lead Hazard Screen: A lead hazard screen is similar to a risk assessment. The sampling is less extensive, but the requirements are more stringent.

Treatment of Defective Paint Surfaces

There are four approaches to implementing lead hazard evaluation and reduction:

Approach 1 - Do No Harm: This approach is intended to allow low-cost repairs and other work to proceed without costly lead-based paint requirements yet, at the same time, to prevent lead-based paint hazards from being created while that work is being done. It does not determine if a whole dwelling unit or property is "lead safe" because clearance is conducted only for the worksite.

Approach 2 - Identify and Stabilize Deteriorated Paint: This approach provides assurance that lead-based paint has been stabilized and the unit is "lead safe" because clearance is conducted for the whole unit. However, it does not prevent the reappearance of lead-based paint hazards. Thus, ongoing maintenance is required when there is an ongoing relationship with HUD. (This is usually related to multi-unit housing receiving ongoing funding from a HUD program such as Section 8 subsidy.)

Approach 3 - Identify and Control Lead-Based Paint Hazards: This approach provides assurance that lead-based paint hazards have been eliminated. As in Approach 2, clearance is conducted for the whole unit. Ongoing maintenance is still required when there is an ongoing relationship with HUD because interim controls are not permanent.

Approach 4 - Identify and Abate Lead-Based Paint Hazards: This approach is used when Federal funds are used to make a substantial investment in the property. Long-term hazards control measures (abatement) are implemented to help ensure that the unit remains lead safe.

You will note that Approach 3 is the applicable approach to the majority of CDBG projects.

According to the Approach required, there are four reduction methods for lead-based paint:
Method 1 - Paint Stabilization: This lead hazard reduction method reduces exposure to lead-based paint by addressing deteriorated paint on exterior and interior surfaces through repairs, safe paint removal and repainting or abatement.

Method 2 - Interim Controls: Interim controls temporarily reduce exposure to lead-based paint hazards through repairs, painting, maintenance, special cleaning, occupant protection measures, clearance and education programs. Interim control methods require safe practices and include:

- Paint Stabilization: All deteriorated paint on exterior and interior surfaces must be stabilized through repairs, safe paint removal and repainting.
- Treatment for Friction and Impact Surfaces: If lead-based paint is found and exceeds acceptable levels or is presumed, the conditions creating friction or impact with surfaces with lead-based paint such as those that rub, bind or crush must be corrected. Examples of this work include re-hanging binding doors, installing doorstops or reworking windows.
- Treatment for Chewable Surfaces: If a child under age six has chewed surfaces known to contain lead-based paint or if lead-based paint is presumed, these surfaces must be enclosed or coated so they are impenetrable.
- Lead Contaminated Dust Control: All horizontal surfaces that are rough, pitted or porous such as bare floors, stairs, window sills and window troughs must be covered with a smooth, cleanable covering or coating such as metal coil stock, plastic, polyurethane or linoleum. Carpeting must be vacuumed or rugs must be removed and vacuumed on both sides. Vacuuming must be done using HEPA vacuums.
- Lead Contaminated Soil Control: If soil is lead contaminated, interim controls that may be used include permanent surface coverings such as gravel, bark and sod as well as land use controls such as fencing, landscaping and warning signs.

Method 3 - Standard Treatments: In some cases, standard treatments may be conducted in lieu of interim controls on all applicable surfaces, including soil, to control lead-based paint hazards that may be present. All standard treatment methods must follow the same safe work practice and clearance requirements that apply to interim control activities. These methods include:

- Paint Stabilization: All deteriorated paint on exterior and interior surfaces must be stabilized through repairs, safe paint removal and repainting or abatement.
- Smooth and Cleanable Horizontal Surfaces: All horizontal surfaces that are rough, pitted or porous such as bare floors, stairs, window sills and window troughs must be covered with a smooth, cleanable covering or coating such as metal coil stock, plastic, polyurethane or linoleum.
- Correcting Dust Generating Conditions: All conditions that generate lead contaminated dust such as those that rub, bind or crush surfaces with lead-based paint must be corrected. Examples include re-hanging doors, installing doorstops or reworking windows.
- Bare Residential Soil: Soil is addressed using interim control methods including impermanent surface coverings such as gravel, bark and sod as well as land use controls such as fencing, landscaping and warning signs.

Method 4 - Abatement: Abatement permanently removes lead-based paint and lead-based paint hazards by removing lead-based paint and its dust, or permanently encapsulating or enclosing the lead-based paint, replacing components with lead-based paint, and removing or permanently covering lead contaminated soil. Encapsulation and enclosure require ongoing maintenance to check their effectiveness.

Interim Controls is the applicable method to the majority of CDBG projects.

Clearance Standards

If the test results equal or exceed the designated standards, the dwelling unit, worksite or common area fails the clearance examination. The clearance standards are:

	Floors, (ug/ft.sq.)	Interior Window Sills, (ug/ft. sq.)	Window Troughs, (ug/ft. sq.)
Lead in Dust (as measured by a dust wipe sample)	40	250	400

Report

The clearance examiner must prepare a clearance report. If lead hazard reduction activities other than abatement are performed, a clearance report must be prepared as described in the table below. If abatement is conducted, a certified supervisor or project designer must prepare an abatement report as described below.

Clearance Report	Abatement Report
Property address:	Property address:
- Date of clearance examination. - Name, address and signature of each person performing the clearance examination including certification number. - Visual assessment results. - Dust sample analysis, in ug/sq.ft., by location. - Name and address of each laboratory that conducted the dust sample analysis, including their identification number.	- Date of clearance testing. - Name, address and signature of each certified risk assessor or inspector conducting clearance sampling. - Clearance testing results and all soil analyses (if applicable) and the name of each recognized laboratory that conducted the analyses.
Hazard reduction or maintenance information: - Start and completion dates of hazard reduction of maintenance activity. -Name and address of each firm or organization conducting the hazard reduction or maintenance activity, and the name of each supervisor assigned. - A detailed, written description of the hazard reduction or maintenance activity, to include: Methods used: locations of exterior surfaces or soil; interior rooms, common areas; and/or components where the hazard reduction activity occurred, and any suggested monitoring of encapsulates or enclosures.	Abatement information: - Start and completion dates of abatement. - Name and address of each certified firm conducting the abatement, and the name of each supervisor assigned to the abatement project. - Occupant protection plan. - A detailed, written description of the abatement, to include: Methods used: locations of rooms; and/or components where abatement occurred, the reason for selecting particular abatements methods for each component and any suggested monitoring of encapsulates or enclosures.

Unit Fails Clearance

If a unit fails a clearance examination, the unit must be re-cleaned and re-tested until clearance v is achieved.

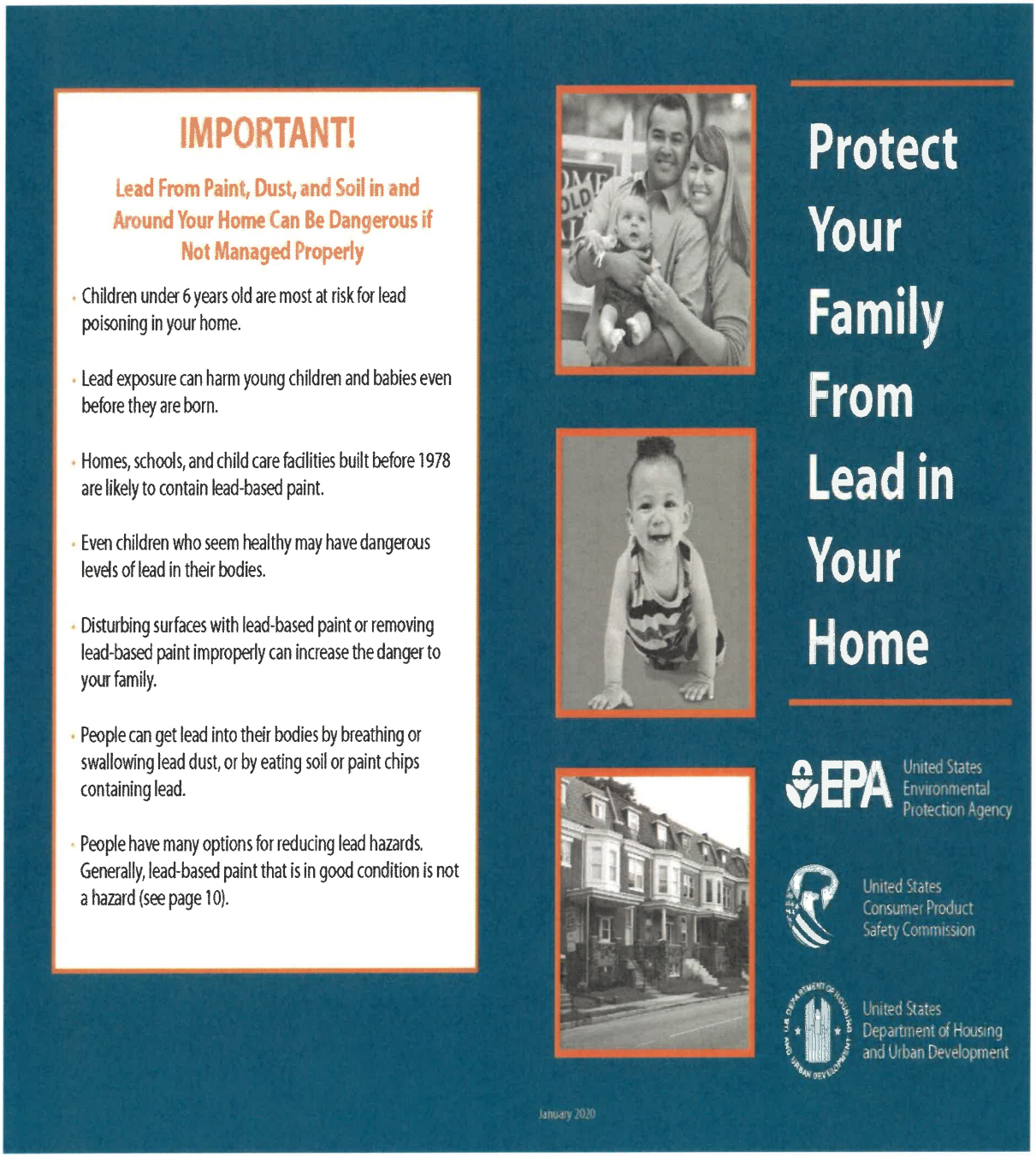
Attachment 20-3

	<$5,000	$5,000 - $25,000	>$25,000
Approach to Lead Hazard Evaluation and Reduction	1. Do no harm	2. Identify and control lead hazards	3. Identify and abate lead hazards
Notification	Yes	Yes	Yes
Lead Hazard Evaluation	• Paint testing of surfaces to be distributed by rehabilitation	• Paint testing of surfaces to be distributed by rehabilitation • Risk assessment	• Paint testing of surfaces to be distributed by rehabilitation • Risk assessment
Lead Hazard Reduction	• Repair surfaces distributed during rehabilitation • Safe work practices • Clearance of work site	• Interim controls • Safe work practices • Clearance of unit	• Abatement • Safe work practices • Clearance of unit
Ongoing Maintenance	For HOME rental properties only	For HOME rental properties only	For HOME rental properties only
EIBLL	No	No	No
Options	• Presume lead-based paint • Use safe work practices on all surfaces	• Presume lead-based paint and/or hazards • Use standards treatments	• Presume lead-based paint and/or hazards • Abate all applicable surfaces

Attachment 20-4

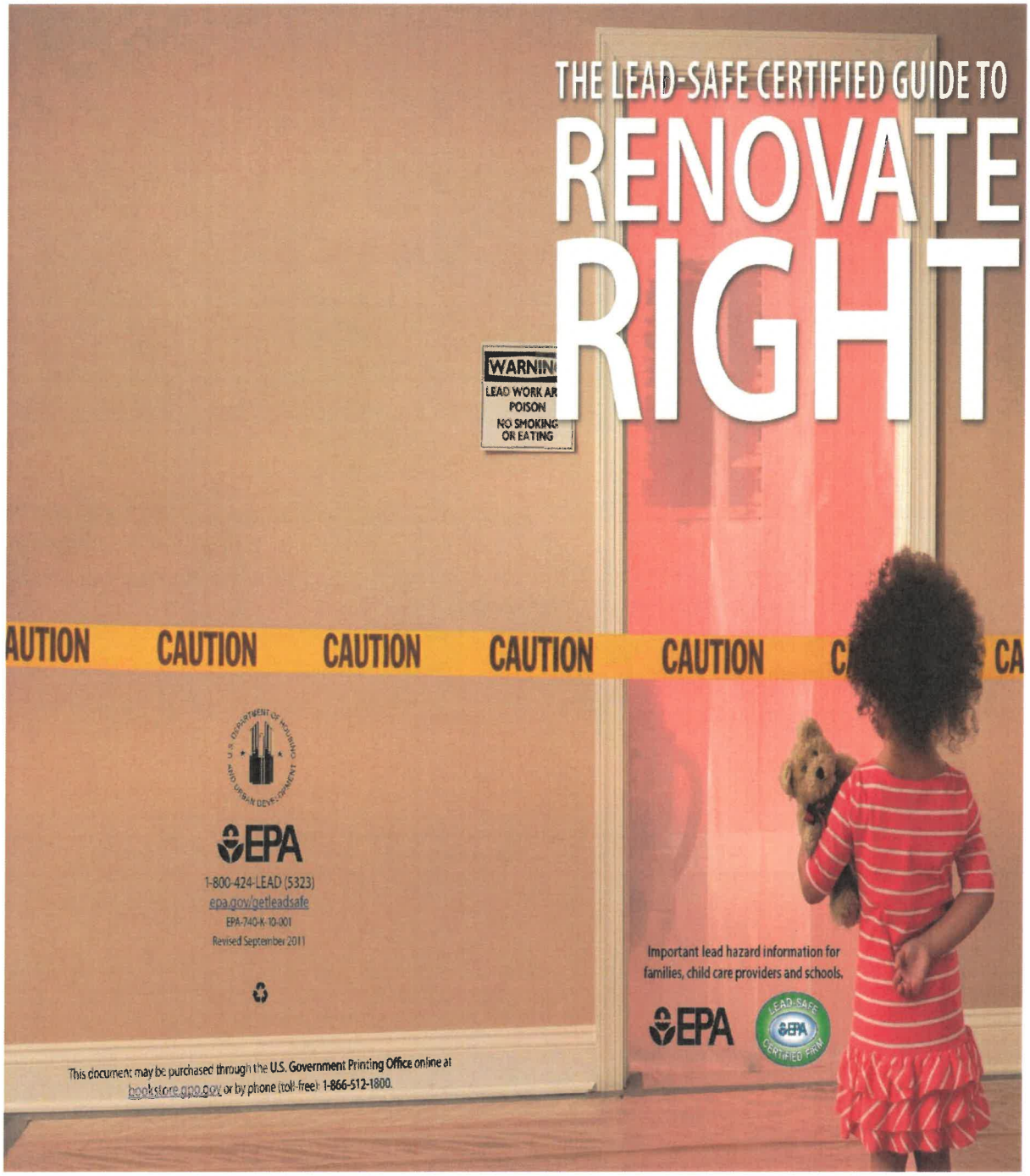
FOUR APPROACHES TO IMPLEMENTING LEAD HAZARD EVALUATION AND REDUCTION

APPROACH 1. DO NO HARM		
Lead Hazard Evaluation	**Lead Hazard Reduction**	**Options**
Paint testing performed on surfaces to be disturbed.	Repair surfaces disturbed during work. Safe work practices used when working on areas identified as lead-based paint. Clearance performed on work site.	Presume lead-based paint is present and use safe work practices on all surfaces being disturbed.
APPROACH 2. IDENTIFY AND STABILIZE DETERIORATED PAINT		
Lead Hazard Evaluation	**Lead Hazard Reduction**	**Options**
Visual assessment performed to identify deteriorated paint.	Paint stabilization of identified deteriorated paint. **Safe work practices used.** **Clearance performed unit-wide.**	Perform paint testing on deteriorated paint. Safe work practice requirements only apply to lead-based paint.
APPROACH 3. IDENTIFY AND CONTROL LEAD HAZARDS		
Lead Hazard Evaluation	**Lead Hazard Reduction**	**Options**
Paint testing performed on surfaces to be disturbed. Risk assessment performed on entire dwelling.	Interim controls performed on identified hazards. Safe work practices used. Clearance performed unit-wide.	Presume lead-based paint and/or lead-based paint hazards are present and perform standard treatments.
APPROACH 4. IDENTIFY AND ABATE LEAD HAZARDS		
Lead Hazard Evaluation	**Lead Hazard Reduction**	**Options**
Paint testing performed on surfaces to be disturbed. Risk Assessment performed on entire dwelling.	Abatement performed on identified hazards. Interim controls performed on identified hazards on the exterior that are not disturbed by rehabilitation. Safe work practices used. Clearance performed unit-wide.	Presume lead-based paint and/or lead-based paint hazards are present and perform abatement on all applicable surfaces. Deteriorated, impact, friction, chewable surfaces and surfaces to be disturbed.



For the complete brochure click here: [Protect Your Family From Lead In Your Home Brochure]

Attachment 20-6



For the complete brochure click here: [Renovate Right Brochure]

RRP WORK PRACTICES STANDARDS CERTIFICATION

I certify hat KDHE RRP Work Practice Standards were utilized while performing renovation work activities at the address listed below. I also certify that copies of our Lead Renovation Firm and Certified Renovator licenses/certificates were on site and signs were posted at entrance to work area warning occupants and other persons not involved in renovation activities to remain outside of the work area. Signs were posted before beginning the renovation and remained in place until the renovation is completed.

Client Name: _____
Street Address: _____
City: _____
State: _____
Zip Code: _____

How many workers on site? _____

_____
Renovation Firm Name | Firm License Number

_____
Printed Name of Certified Renovator | Certification Number

_____
Signature of Certified Renovator | Date