State of Utah

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

Department of Administrative Services
KIMBERLY K. HOOD
Executive Director

Division of Facilities Construction and Management
DAVID G. BUXTON
Director

ADDENDUM #1

Date: September 30, 2008

To: Contractors

From: Matt Boyer, Project Manager, DFCM

Reference: Developmental Center Auditorium Re-roof
State Developmental Center – American Fork, Utah
DFCM Project No. 08196410

Subject: **Addendum No. 1**

Pages		
	Addendum	1 page
	Revised Schedule	1 page
	Revised Bid Form	2 pages
	FFKR Addendum	4 pages
	Asbestos Report	12 pages
	Total	20 pages

Note: This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to Disqualification.

While we contend that SB220 should only be potentially applicable to a contract issued after the effective date of said bill, this is to clarify that for purposes of this contract, regardless of the execution or effective dates of this contract, the status of Utah Law and remedies available to the State of Utah and DFCM, as it relates to any matter referred to or affected by said SB220, shall be the Utah law in effect at the time of the issuance of this Addendum.

1.1 **SCHEDULE CHANGES – There are changes to the project schedule.**
Substantial Completion Date – **April 30, 2009 by 5:00 PM**

1.2 **GENERAL –** This project is tax exempt. The successful bidding contractor will receive a copy of the agency's tax exempt certificate at the preconstruction meeting.

Utah!
Where ideas connect

STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

Division of Facilities Construction and Management

DFCM

REVISED – PROJECT SCHEDULE
AS PER ADDENDUM NO. 1 DATED – September 30, 2008

PROJECT NAME: Developmental Center Auditorium Re-roof
State Developmental Center – American Fork, Utah
DFCM PROJECT #: 08196410

Event	Day	Date	Time	Place
Stage II Bidding Documents Available	Thursday	September 18, 2008	2:30 PM	DFCM 4110 State Office Building SLC, UT and the DFCM web site*
Mandatory Pre-bid Site Meeting	Thursday	September 25, 2008	9:00 AM	Developmental Center Auditorium Main Doors 895 N. 900 E. American Fork
Deadline for Submitting Questions	Monday	September 29, 2008	9:00 AM	Matt Boyer Project Manager – DFCM E-mail: mboyer@utah.gov Fax (801)-538-3267
Addendum Deadline (exception for bid delays)	Tuesday	September 30, 2008	2:00 PM	DFCM web site*
Prime Contractors Turn in Bid and Bid Bond	Wednesday	October 1, 2008	2:30 PM	DFCM 4110 State Office Building SLC, UT
Subcontractors List Due	Thursday	October 2, 2008	2:30 PM	DFCM 4110 State Office Building SLC, UT Fax 801-538-3677
Substantial Completion Date		**April 30, 2009**	5:00 PM	TBD

REVISED BID FORM

PER ADDENDUM NO. 1 DATED September 30, 2008

NAME OF BIDDER _____ DATE _____

To the Division of Facilities Construction and Management
4110 State Office Building
Salt Lake City, Utah 84114

The undersigned, responsive to the "Invitation to Bid" and in accordance with the Request for Bids for the **DEVELOPMENTAL CENTER AUDITORIUM RE-ROOF – STATE DEVELOPMENTAL CENTER – AMERICAN FORK, UTAH - DFCM PROJECT NO. 08196410** and having examined the Contract Documents and the site of the proposed Work and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of labor, hereby proposes to furnish all labor, materials and supplies as required for the Work in accordance with the Contract Documents as specified and within the time set forth and at the price stated below. This price is to cover all expenses incurred in performing the Work required under the Contract Documents of which this bid is a part:

I/We acknowledge receipt of the following Addenda: _____

For all work shown on the Drawings and described in the Specifications and Contract Documents, I/we agree to perform for the sum of:

_____ DOLLARS ($_____)
(In case of discrepancy, written amount shall govern)

I/We guarantee that the Work will be Substantially Complete by Thursday, April 30, 2009, should I/we be the successful bidder, and agree to pay liquidated damages in the amount of **$500.00** per day for each day after expiration of the Contract Time as stated in Article 3 of the Contractor's Agreement.

This bid shall be good for 45 days after bid opening.

Enclosed is a 5% bid bond, as required, in the sum of _____

The undersigned Contractor's License Number for Utah is _____.

Upon receipt of notice of award of this bid, the undersigned agrees to execute the contract within ten (10) days, unless a shorter time is specified in Contract Documents, and deliver acceptable Performance and Payment bonds in the prescribed form in the amount of 100% of the Contract Sum for faithful performance of the contract. The Bid Bond attached, in the amount not less than five percent (5%) of the above bid sum, shall become the property of the Division of Facilities Construction and Management as liquidated damages for delay and additional expense caused thereby in the event that the contract is not executed and/or acceptable l00% Performance and Payment bonds are not delivered within time set forth.

Type of Organization: _____
(Corporation, Partnership, Individual, etc.)

Any request and information related to Utah Preference Laws:

_____

Respectfully submitted,

_____
Name of Bidder

ADDRESS:

_____

_____

_____
Authorized Signature

UTAH STATE DEVELOPMENTAL CENTER
AUDITORIUM REROOF
895 N. 900 E.
American Fork, Utah 84003

ADDENDA #1

CHANGES TO PROJECT SCHEDULE:

A. See Revised Project Schedule. (By DFCM)

CHANGES TO BID FORM:

A. See Revised Bid form for Project completion options. (By DFCM)

Clarification of Bid form and Contractors Agreement:

Substantial completion time:

If the Roofing Contractor elects to delay the Substantial Completion date passed the December 31, 2008 completion date the Contractor agrees to the following:

1. Contractor agrees to maintain the roof in a watertight condition through the winter and spring through the time of completion.
2. The contractor shall check for potential leaks upon award of bid and repair shall be made within 7 days of bid award.
3. Contractor shall be responsible for all damage caused by leaks and shall repair and replace as new and match existing materials as required.
4. Contractor shall make periodic checks of roof to insure that the roof stays water tight as possible during time of delay of start of roof work.

CHANGES TO DRAWINGS:

DRAWING A-101 – ROOF PLAN

- Add roof crickets at smoke hatches over stage area. (2) Locations. See revised plan A-101 attached to addenda.

DRAWING PL-101 – ROOF PLUMBING PLAN

- Revise location of secondary drain line drop approximately 8'ft north on east exterior wall and drain pipe to penetrate east wall at bottom of drain pipe drop. Verify exact location with Architect on jobsite in existing corridor. See attached drawing PL-101.

UTAH STATE DEVELOPMENTAL CENTER
AUDITORIUM REROOF
895 N. 900 E.
American Fork, Utah 84003

CHANGES TO SPECIFICTIONS:

SUMMARY – 01 1000 -2

1.4 - B. ACCESS TO SITE

3. Contractor to keep heavy weight of vehicle, equipment or material off of Concrete steam tunnel on south side of building. Steam tunnel runs under existing sidewalk, east and west on south side of Auditorium and under sidewalk on southeast corner of building at bottom of ramp.

ROOFING SPECIALTIES – 07 7100 –3

Add the following Warranty Sign for the Roof (Contractor to provide):

Roof Signs: *Warranty Sign – Contractor to provide & install a metal sign with vinyl lettering containing the following information and similar format* ***for all roofs****:*

Caution

This roof is under warranty until (insert year) with (insert manufacturer). All access is to be restricted without facilities manager's permission & log entry. Repair work if necessary should be performed only by an authorized applicator. For leak repairs, contact (insert manufacturer) @ (insert manufacturer warranty claim department phone number) and provide them with warranty number. Questions regarding this roof or any potential work pertaining to this roof, please contact DFCM @ 801-538-3018.

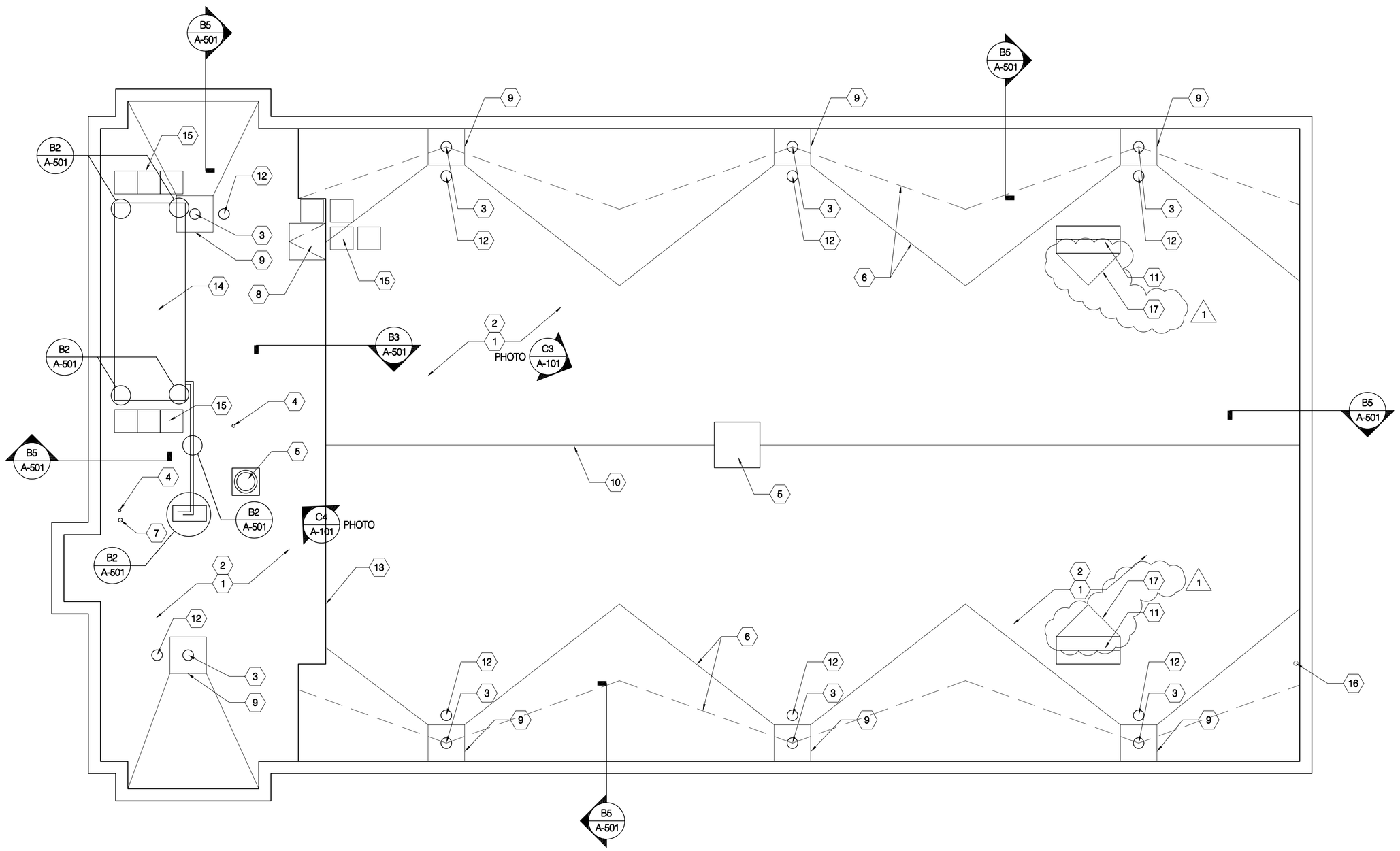
Warranty #:	Roofing Contractor:
Warranty Type:	Contractor Telephone #:
Installation Date:	Contractor Address:
Manufacturer's Address:	Roof Membrane Type:

These signs are to be installed next to all roof access points inside a building as permit able, preferably next to the roof hatch ladder. Signs are to have rounded corners and with no sharp protrusions or edges. Signs are to be a minimum thickness of 20 gauge or greater, and no larger than 10" X 14" landscape setting.

- Submit a sample of sign as a roofing submittal for approval by the Owner and Architect.

C3 PHOTO 1

C4 PHOTO 2



A2 ROOF PLAN

1/8" = 1'-0"

0 8' 16'

REFERENCE NOTES

1. EXISTING BUR WITH GRAVEL, INSULATION AND WALL/CURB CANTS TO BE REMOVED - SEE NEW VS EXISTING DETAIL A4/A-501
2. NEW ADHERED SINGLE PLY EPDM MEMBRANE SYSTEM - SEE DETAIL A4/A-501
3. EXISTING PRIMARY ROOF DRAIN SYSTEM TO REMAIN - SEE DETAIL C4/A-501
4. EXISTING PLUMBING VENT PIPE (SHOWN AS SOLID CIRCLE TYP) TO REMAIN - PROVIDE EXTENSIONS FOR PIPE AS REQUIRED TO GIVE A MIN. OF 12" FROM TOP OF PIPE TO NEW ROOFING SURFACE - REFER TO DETAIL C2/A-501
5. EXISTING MECHANICAL EQUIPMENT - TEMPORARILY REMOVE AND SET ASIDE FOR REINSTALLATION - RAISE CURB AS REQUIRED TO ACHIEVE 8" MIN. DIM. FROM TOP OF CURB TO SURFACE OF NEW ROOFING.- REINSTALL UNIT - REMOVAL AND REINSTALLATION OF POWERED UNITS SHALL BE DONE BY QUALIFIED LICENSED MECHANICS ONLY
6. EXISTING CRICKETS TO BE REMOVED AND REPLACED W/ NEW FACTORY TAPERED CRICKET SYSTEM - NEW CRICKET VALLEY TO ACHIEVE 1/8" PER FOOT SLOPE MIN.
7. EXISTING FLUE TO REMAIN - FLASH PER DETAIL C5/A-501 - FLASH IF REQUIRED
8. EXISTING ROOF ACCESS HATCH TO REMAIN
9. 4'x4' DRAIN SUMP (NEW)
10. RIDGE LINE
11. EXISTING SMOKE HATCH - TEMPORARILY REMOVE AND SET ASIDE FOR REINSTALLATION - RAISE CURB AS REQUIRED TO ACHIEVE 8" MIN. DIM. FROM TOP OF CURB TO SURFACE OF NEW ROOFING.- REINSTALL UNIT
12. NEW SECONDARY ROOF DRAIN - TYP.
13. HIGHER ROOF TO LOW ROOF LINE
14. EXISTING A/C UNIT TO REMAIN IN PLACE
15. PROVIDE 30"x30" WALKPADS AS SHOWN
16. SECONDARY ROOF DRAIN DROP - SEE MECH & ARCH DETAIL A2/A-501
17. NEW CRICKET - SLOPE 1/4" PER FOOT & 1/8" MIN. SLOPE IN VALLEY

1

GENERAL NOTES

1. EXISTING SLOPE IS IN THE EXISTING STRUCTURE
2. ALL NEW WOOD OR PLYWOOD THAT COMES IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESERVATIVE TREATED
3. IT IS THE CONTRACTORS RESPONSIBILITY TO MEET ALL OF THE REQUIREMENTS OF THE ROOFING SYSTEM MANUFACTURERER FOR THE 20 YEAR WARRANTY - AS PER DFCM REQUIREMENTS - SEE DFCM WEBSITE
4. THE CONTRACTOR IS TO PROVIDE A PROPOSAL FOR THE LOCATION OF THE STAGING AREAS WHICH IS TO BE APPROVED BY THE OWNER AND ARCHITECT - CONTRACTOR STAGING AREA IS TO BE PROVIDED WITH A SECURE, LOCKED 6'-0" TALL TEMPORARY CHAIN LINK FENCE. ALL GAPS IN FENCE TO BE MAINTAINED LESS THAN 4". REMOVE AND SECURE ALL LADDERS AT THE END OF EACH DAY. DUMPSTER MUST BE KEPT IN LOCKED FENCED AREA
5. PROTECT ALL EXISTING IMPROVEMENTS INCLUDING LANDSCAPING, SPRINKLING SYSTEMS, SIDEWALKS, PARKING AREAS, SURROUNDING ROOS ETC. - ANY DAMAGE TO EXISTING IMPROVEMENTS SHALL BE REPAIRED TO ORIGINAL OR BETTER THAN ORIGINAL CONDITION (TO THE SATISFACTION OF THE OWNER AND ARCHITECT)

FFKR ARCHITECTS
bogue building
730 pacific avenue
salt lake city
Utah 84104
o 801-521-6186
f 801-539-1916
ffkr.com

UTAH STATE DEVELOPMENTAL CENTER
AUDITORIUM REROOF

SEAL

DATE	STATUS
09/30/2008	ADDENDA 1

PROJECT NUMBER	08052
CAD DWG FILE	
DRAWN BY	DK
CHECKED BY	BL, RJ
SCALE	AS NOTED

ROOF PLAN

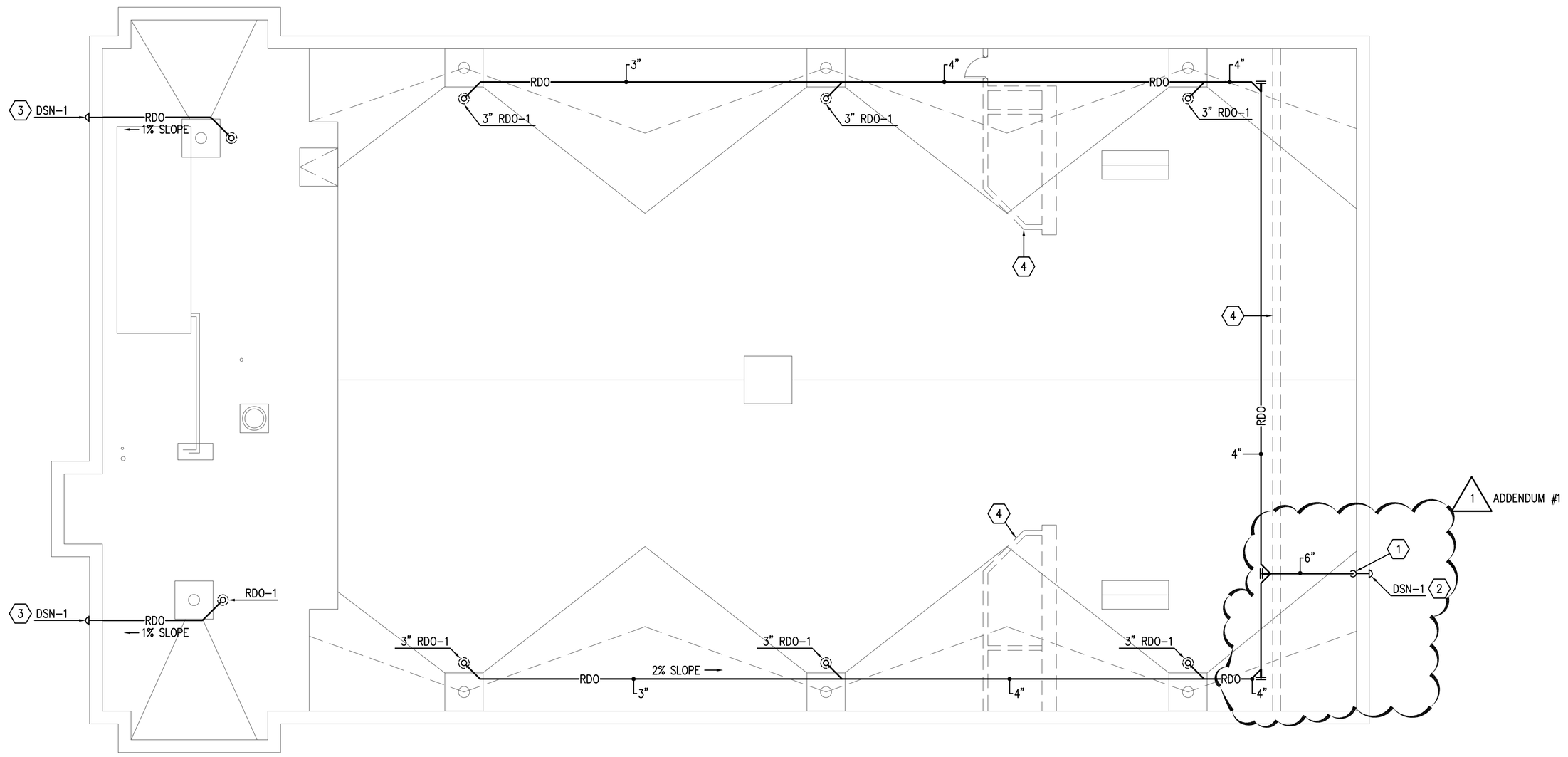
A-101

PLUMBING FIXTURE SCHEDULE

ID	FIXTURE	CW (IN)	HW (IN)	W (IN)	V (IN)	NOTES	DESCRIPTION
DSN-1	DOWNSPOUT NOZZLE					SEE PLANS	DOWNSPOUT NOZZLE: SMITCH FIGURE 1770 DOWNSPOUT NOZZLE, CAST BRONZE BODY AND FLANGE
RDO-1	ROOF DRAIN OVERFLOW					SEE PLANS	OVERFLOW ROOF DRAIN: SMITH FIGURE 1010-ERC CAST IRON BODY WITH FLASHING CLAMP, GRAVEL STOP, CAST IRON DOME, 2" HIGH WATER COLLAR, EXTENSION, SUMP RECEIVER AND UNDERDECK CLAMP.

LEGEND

RDO	ROOF DRAIN OVERFLOW
	RISER – DOWN (ELBOW)
	ROOF DRAIN
	DOWNSPOUT NOZZLE
	CLEAN–OUT



A2 ROOF PLUMBING PLAN
1/8" = 1'-0"
0 8' 16'

KEY NOTES

1. DROP ROOF DRAIN OVERFLOW DOWN IN CORNER OF CORRIDOR. FIELD DETERMINE EXACT LOCATION OF DROP. COORDINATE WITH EXISTING CONDITIONS AND NEW FURRING.
2. INSTALL DOWNSPOUT NOZZLE APPROXIMATLY 12"–16" INCHES ABOVE GRADE. FIELD DETERMINE.
3. INSTALL DOWNSPOUT NOZZLE UP HIGH.
4. EXISTING MASONRY WALLS.

GENERAL NOTES

1. SLEEVE PIPING THRU WALLS/FOUNDATIONS WHERE REQUIRED.
2. PLUMBING DRAWINGS ARE SCHEMATIC IN NATURE. FIELD VERIFY EXACT ROUTING & COORDINATE WITH ALL OTHER TRADES.
3. NO PIPING TO RUN OVER ELECTRICAL PANELS, VFD'S, OR MCC'S.
4. SLEEVE/CONFIGURE CMU WALLS FOR EMBEDDED PIPING AND PIPE PENETRATIONS AS REQUIRED.

FFKR ARCHITECTS
bogue building
730 pacific avenue
salt lake city
Utah 84104
o 801-521-6186
f 801-539-1916
ffkr.com

UTAH STATE DEVELOPMENTAL CENTER AUDITORIUM REROOF

SEAL

DATE	STATUS
09-11-08	
09-30-08	ADDENDUM #1

PROJECT NUMBER 08280
CAD DWG FILE
DRAWN BY EL
CHECKED BY SR
SCALE 1/8" = 1'-0"

ROOF PLUMBING PLAN

PL-101

VAN BOERUM & FRANK ASSOCIATES INC. CONSULTING ENGINEERS
WWW.VBFA.COM
Salt Lake City · Logan · St. George · Tempe · Pocatello
330 South 300 East 801.530.3148 T
Salt Lake City, UT 84111 801.530.3150 F
VBFA Project Number:8280_

UTAH STATE DEVELOPMENTAL CENTER
AMERICAN FORK, UTAH

ASBESTOS CONTAINING MATERIALS (ACMs) FINDINGS AND RECOMMENDATIONS REPORT FOR *AUDITORIUM ROOF*

Prepared for:
Robert Anderson, HAZMAT Manager
Division of Facilities Construction & Management
State Office Building Room 4110
Salt Lake City, Utah 84114

Prepared by:
ROWLAND CONSULTING, INC.
7301 South Paddington Road
West Jordan, Utah 84084
OFFICE 801.255.2800 FAX 801.569.2501

ROWLAND CONSULTING, INC.
ASBESTOS LEAD PAINT ENVIRONMENTAL
PROFESSIONAL EXPERIENCED

September 27, 2008

Bob Anderson, HAZMAT MANAGER
Department of Administrative Services
DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
State Office Building Room 4110
Salt Lake City, Utah 84114

RE: **FINDINGS AND RECOMMENDATIONS** from the bulk sampling for Asbestos Containing Materials (ACMs) at: ***UTAH STATE DEVELOPMENTAL CENTER – AUDITORIUM ROOF.***

Dear Bob,

At your request, **ROWLAND CONSULTING, INC.** performed additional bulk sampling for ACMs, on September 25, 2008.

FINDINGS

Auditorium Roof

Four (4) core samples of the built-up roof were taken from the upper and lower roof areas. In addition to the roof core samples, included in this report are the three (3) roof perimeter/flashing samples taken on August 28, 2007 (Batch #75732 row 6076-6078). The results are as follows:

ID#	MATERIAL	LOCATION	RESULT
16	*Roof flashing (w/silver tar sealant)*	*Roof perimeter/parapet (sampled 8/28/07)*	*55% C*
17		*(sampled 8/28/07*	*55% C*
18		*(sampled 8/28/07)*	*55% C*
01	Roof (core)	Upper roof, northeast	ND
02	Roof (core)	Upper roof, southeast	ND
03	Roof (core)	Lower roof, northwest	ND
04	Roof (core)	Lower roof, southwest	ND

RECOMMENDATIONS

The main areas of the upper and lower roofs are NONE DETECTED for asbestos. However, the perimeter/parapet flashing with the silver tar sealant is **ASBESTOS CONTAINING.**

Thank you for the opportunity to serve as your asbestos consultant. If you have any questions, please do not hesitate to call me.

Sincerely,

Jeff Rowland, President
ROWLAND CONSULTING, INC.
attachments

7301 SOUTH PADDINGTON ROAD WEST JORDAN, UT 84084
OFFICE 801.255.2800 FAX 801.569.2501

ROWLAND CONSULTING, INC.

Asbestos - Lead-Based Paint

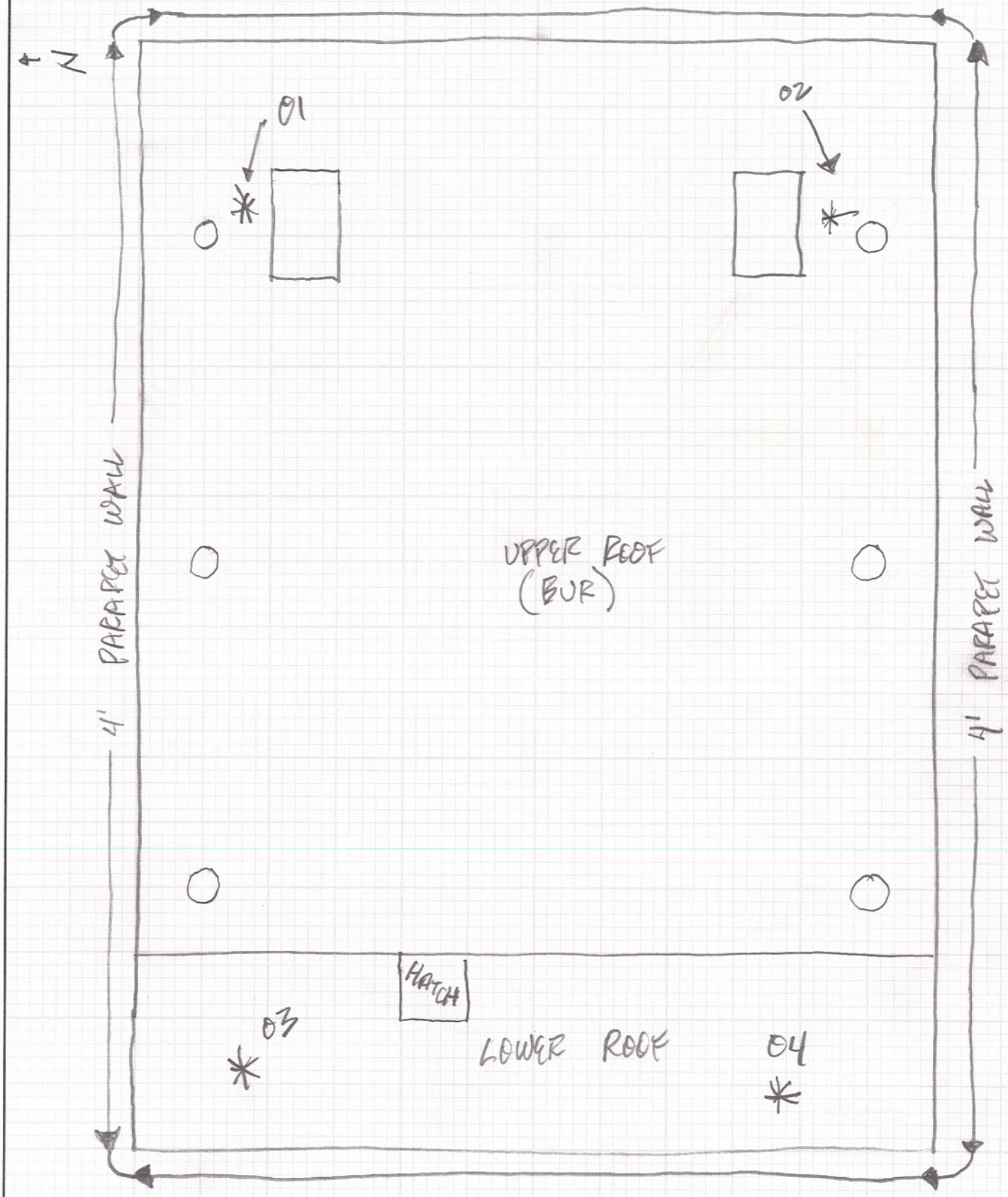
PHONE 801-541-6915 • FAX 801-569-2501

PROJECT USTC AUDITORIUM ROOF

BY JEFF R. DATE 9/25/08

CHK'D BY _____ DATE _____

SHEET NO. _____ OF _____



DIXON INFORMATION INC.
MICROSCOPY, ASBESTOS ANALYSIS & CONSULTING
A.I.H.A. ACCREDITED LABORATORY # 101579
NVLAP LAB CODE 101012-0

September 26, 2008

Jeff Rowland
Rowland Consulting, Inc.
7301 Paddington Road
West Jordan, UT 84084

Ref: Batch # 81340, Lab # ROW7763 - ROW7766
Received September 25, 2008
Test report
USDC-Auditorium Roof, American Fork, UT
Sampled by Jeff Rowland, 9/25/08

Dear Mr. Rowland:

Samples ROW7763 through ROW7766 have been analyzed by visual estimation based on EPA-600/M4-82-020 December 1982, and EPA/600/R-93/116 July 1993 optical microscopy test methods. Appendix "A" contains statements which an accredited laboratory must make to meet the requirements of accrediting agencies. It also contains additional information about the method of analysis. This analysis is accredited by NVLAP. Appendix "A" must be included as an essential part of this test report. The data for this report is accredited by NVLAP for laboratory number 101012-0. It does not contain data or calibrations for tests performed under the AIHA program under lab code 101579.

This report may be reproduced but all reproduction must be in full unless written approval is received from the laboratory for partial reproduction. The results of analysis are as follows:

Lab ROW7763, Field 01 Roof (Upper, NE)
This sample contains three types of material: The first type is shinny black tar with sand and fiberglass; the second type is 40% plant fiber in black tar felts; the third type is 95% glasswool coated with yellow resin. This sample is non-homogeneous. **Asbestos is none detected.**

The first type is 65% of the sample. The second type is 20% of the sample. The third type is 15% of the sample.

Lab ROW7764, Field 02 Roof (Upper, SE)
This sample contains four types of material: The first type is black tar with pea gravel and sand; the second type is 40% plant fiber in black tar felts; the third type is 15% fiberglass in black tar felts; the fourth type is 95% glasswool coated with yellow resin. This sample is non-homogeneous. **Asbestos is none detected.**

The first type is 35% of the sample. The second type is 30% of the sample. The third type is 10% of the sample. The fourth type is 25% of the sample.

78 WEST 2400 SOUTH • SOUTH SALT LAKE, UTAH 84115-3013
PHONE 801-486-0800 • FAX 801-486-0849 • RES. 801-571-7695

Batch # 81340
Lab # ROW7763 - ROW7766

Lab ROW7765, Field 03 Roof (Lower, NW)
This sample contains three types of material: The first type is black tar with sand and rocks; the second type is 40% plant fiber in black tar felts; the third type is 95% glasswool with a thin coating of yellow resin. This sample is non-homogeneous. **Asbestos is none detected.**

The first type is 60% of the sample. The second type is 15% of the sample. The third type is 25% of the sample.

Lab ROW7766, Field 04 Roof (Lower, SW)
This sample contains three types of material: The first type is black tar, sand and rocks; the second type is 40% plant fiber in black tar felts; the third type is 95% glasswool coated with yellow resin. This sample is non-homogeneous. **Asbestos is none detected.**

The first type is 60% of the sample. The second type is 15% of the sample. The third type is 25% of the sample.

In order to be sure reagents and tools used for analysis are not contaminated with asbestos, blanks are tested. Asbestos was none detected in the blanks tested with this bulk sample set.

Very truly yours,

Steve H. Dixon, President

Analyst: Bruce P. Thorne Bruce P. Thorne Date Analyzed: 9/26/08

DIXON INFORMATION INC.
MICROSCOPY, ASBESTOS ANALYSIS & CONSULTING
A.I.H.A. ACCREDITED LABORATORY # 101579
NVLAP LAB CODE 101012-0

August 30, 2007

Jeff Rowland
Rowland Consulting, Inc.
7301 Paddington Road
West Jordan, UT 84084

Ref: Batch # 75732, Lab # ROW6061 - ROW6084
Received August 29, 2007
Test report
Utah State Developmental Center (USDC) Auditorium
American Fork, Utah
Sampled by Jeff Rowland, 8/28/07

Dear Mr. Rowland:

Samples ROW6061 through ROW6084 have been analyzed by visual estimation based on EPA-600/M4-82-020 December 1982 optical microscopy test method. Appendix "A" contains statements which an accredited laboratory must make to meet the requirements of accrediting agencies. It also contains additional information about the method of analysis. This analysis is accredited by NVLAP. Appendix "A" must be included as an essential part of this test report.

This report may be reproduced but all reproduction must be in full unless written approval is received from the laboratory for partial reproduction. The results of analysis are as follows:

Lab ROW6061, Field 01 2nd Floor-M001-12" floor tile (tan w/brown Streaks)-yellow mastic-Costume Storage
This is **greater than 1% chrysotile asbestos** in a tan and off-white plastic and limestone tile.

Note: No mastic.

Note: The morphology of the fibers in the plastic and limestone tile are consistent with chrysotile asbestos. Fiber size is too small for confirmation by dispersion staining. Transmission Electron Microscopy (TEM) is recommended for final confirmation that this is chrysotile asbestos.

78 WEST 2400 SOUTH • SOUTH SALT LAKE, UTAH 84115-3013
PHONE 801-486-0800 • FAX 801-486-0849 • RES. 801-571-7695

Lab ROW6062, Field 02 2nd Floor-M001-12" floor tile (tan w/brown Streaks)-yellow mastic-Hallway
This is **greater than 1% chrysotile asbestos** in a tan and off-white plastic and limestone tile.

Note: No mastic.

Note: The morphology of the fibers in the plastic and limestone tile are consistent with chrysotile asbestos. Fiber size is too small for confirmation by dispersion staining. Transmission Electron Microscopy (TEM) is recommended for final confirmation that this is chrysotile asbestos.

Lab ROW6063, Field 03 2nd Floor-M001-12" floor tile (tan w/brown Streaks)-yellow mastic-Stair landing
This is **greater than 1% chrysotile asbestos** in a tan and off-white plastic and limestone tile.

Note: No mastic.

Note: The morphology of the fibers in the plastic and limestone tile are consistent with chrysotile asbestos. Fiber size is too small for confirmation by dispersion staining. Transmission Electron Microscopy (TEM) is recommended for final confirmation that this is chrysotile asbestos.

Lab ROW6064, Field 04 2nd Floor-M002-Plaster-Costume Storage
This sample contains four types of material: The first type is white paint; the second type is white gypsum plaster with perlite; the third type is white plaster with sand ; the fourth type is less than 1% organic fiber in off-white plaster with sand and a trace of mica. This sample is non-homogeneous.
Asbestos is none detected.

The first type is 1% of the sample. The second type is 3% of the sample. The third type is 10% of the sample. The fourth type is 86% of the sample.

Lab ROW6065, Field 05 2nd Floor-M002-Plaster-Costume Storage
This sample contains four types of material: The first type is white paint; the second type is white gypsum plaster with perlite; the third type is white plaster with sand; the fourth type is less than 1% organic fiber in off-white plaster with sand and a trace of mica. This sample is non-homogeneous.
Asbestos is none detected.

The first type is 1% of the sample. The second type is 1% of the sample. The third type is 10% of the sample. The fourth type is 88% of the sample.

Lab ROW6066, Field 06 2nd Floor-M002-Plaster-Costume Storage
This sample contains three types of material: The first type is off-white paint; the second type is white plaster with sand; the third type is off-white plaster with sand, less than 1% organic fiber, and a trace of vermiculite. This sample is non-homogeneous. **Asbestos is none detected.**

The first type is 1% of the sample. The second type is 10% of the sample. The third type is 89% of the sample.

Lab ROW6067, Field 07 Main Floor, East Corridor (runs north/south)-M003-12" Ceiling Tile (heavy texture pattern) w/brown mastic-East corridor
This sample contains two types of material: The first type is 70% mineral wool and 10% plant fiber in gray binder with a white coating on one side; the second type is brown resin mastic with white paint. This sample is non-homogeneous. **Asbestos is none detected.**

The first type is 65% of the sample. The second type is 35% of the sample.

Lab ROW6068, Field 08 Main Floor, East Corridor (runs north/south)-M003-12" Ceiling Tile (heavy texture pattern) w/brown mastic-East corridor
This sample contains two types of material: The first type is 70% mineral wool and 10% plant fiber in resin binder with a white coating on one side; the second type is brown resin mastic with white paint. This sample is non-homogeneous. **Asbestos is none detected.**

The first type is 65% of the sample. The second type is 35% of the sample.

Lab ROW6069, Field 09 Main Floor, East Corridor (runs north/south)-M003-12" Ceiling Tile (heavy texture pattern) w/brown mastic-East corridor
This sample contains two types of material: The first type is 70% mineral wool and 10% plant fiber in binder with a white coating on one side; the second type is brown resin with white paint. This sample is non-homogeneous. **Asbestos is none detected.**

The first type is 70% of the sample. The second type is 30% of the sample.

Lab ROW6070, Field 10 Main Floor, East Corridor (runs north/south)-M004-Wallboard w/joint compound (above M003)
This sample contains white paint, tan plant fiber paper, and white gypsum plaster with 2% fiberglass.. This sample is non-homogeneous. **Asbestos is none detected.**

The paint is 1% of the sample. The plant fiber paper is 5% of the sample. The white gypsum plaster is 94% of the sample.

Lab ROW6071, Field 11 Main Floor, East Corridor (runs north/south)-M004-Wallboard w/joint compound (above M003)
This sample contains white paint, white micaceous limestone joint compound, tan and white plant fiber paper, and white gypsum plaster with 1% fiberglass. This sample is non-homogeneous. **Asbestos is none detected.**

The paint is 1% of the sample. The joint compound is 1% of the sample. The plant fiber paper is 5% of the sample. The white gypsum plaster is 93% of the sample.

Lab ROW6072, Field 12 Main Floor, East Corridor (runs north/south)-M004-Wallboard w/joint compound (above M003)
This sample contains white paint, tan plant fiber paper, and white gypsum plaster with 1% fiberglass. This sample is non-homogeneous. **Asbestos is none detected.**

The paint is 1% of the sample. The plant fiber paper is 5% of the sample. The white gypsum plaster is 94% of the sample.

Lab ROW6073, Field 13 Roof (Built Up Roof-BUR, core samples) M005-Southwest roof drain
This sample contains three types of material: The first type is 50% plant fiber in black tar felt layers; the second type is black tar layers with 5% fiberglass; the third type is 95% fiberglass in yellow resin. This sample is non-homogeneous. **Asbestos is none detected.**

The first type is 39% of the sample. The second type is 60% of the sample. The third type is 1% of the sample.

Lab ROW6074, Field 14 Roof (Built Up Roof-BUR, core samples) M005-North roof drain
This sample contains three types of material: The first type is 50% plant fiber in black tar felt layers; the second type is black tar layers with 2% fiberglass; the third type is 95% fiberglass in yellow resin. This sample is non-homogeneous. **Asbestos is none detected.**

The first type is 40% of the sample. The second type is 58% of the sample. The third type is 2% of the sample.

Lab ROW6075, Field 15 Roof(Built Up Roof-BUR, core samples) M005-Northeast roof drain
This sample contains four types of material: The first type is 50% plant fiber in black tar felt; the second type is 2% fiberglass in black tar layers; the third type is pea gravel; the fourth type is 95% fiberglass in yellow resin. This sample is non-homogeneous. **Asbestos is none detected.**

The first type is 30% of the sample. The second type is 55% of the sample. The third type is 13% of the sample. The fourth type is 2% of the sample.

Lab ROW6076, Field 16 Roof M006-Flashing w/silver paint
This sample contains two types of material: The first type is silver colored sealant; the second type is **55% chrysotile asbestos**, 1% fiberglass and 5% plant fiber in black tar felt. This sample is non-homogeneous.

The first type is 5% of the sample. The second type is 95% of the sample.

Note: There is no separate analysis of the silver colored sealant due to the contact with the asbestos containing layer.

Lab ROW6077, Field 17 Roof M006-Flashing w/silver paint
This sample contains two types of material: The first type is silver colored sealant; the second type is **55% chrysotile asbestos**, 1% fiberglass and 5% plant fiber in black tar felt. This sample is non-homogeneous.

The first type is 2% of the sample. The second type is 98% of the sample.

Note: There is no separate analysis of the silver colored sealant due to the contact with the asbestos containing layer.

Lab ROW6078, Field 18 Roof M006-Flashing w/silver paint
This sample contains two types of material: The first type is silver colored sealant; the second type is **55% chrysotile asbestos**, 1% fiberglass and 5% plant fiber in black tar felt. This sample is non-homogeneous.

The first type is 2% of the sample. The second type is 98% of the sample.

Note: There is no separate analysis of the silver colored sealant due to the contact with the asbestos containing layer.

Lab ROW6079, Field 19 Auditorium M007-Ceiling Panels
This is 65% tan wood fiber in white binder. **Asbestos is none detected.**

Lab ROW6080, Field 20 Auditorium M007-Ceiling Panels
This is 65% tan wood fiber in white binder. **Asbestos is none detected.**

Lab ROW6081, Field 21 Auditorium M007-Ceiling Panels
This is 65% tan wood fiber in white binder. **Asbestos is none detected.**

Lab ROW6082, Field 22 Main Floor, East Corridor (runs north/south) M008-12" floor tile (white/black) no mastic
This sample contains three types of material: The first type is **greater than 1% chrysotile asbestos** in white plastic and limestone tile; the second type is **greater than 1% chrysotile asbestos** in black plastic and limestone tile; the third type is yellow resin mastic. This sample is non-homogeneous.

The first type is 50% of the sample. The second type is 49% of the sample. The third type is 1% of the sample.

Note: The morphology of the fibers in the plastic and limestone tile are consistent with chrysotile asbestos. Fiber size is too small for confirmation by dispersion staining. Transmission Electron Microscopy (TEM) is recommended for final confirmation that this is chrysotile asbestos.

Lab ROW6083, Field 23 Main Floor, East Corridor (runs north/south) M008-12" floor tile (white/black) no mastic
This sample contains three types of material: The first type is **greater than 1% chrysotile asbestos** in white plastic and limestone tile; the second type is **greater than 1% chrysotile asbestos** in black plastic and limestone tile; the third type is yellow resin mastic. This sample is non-homogeneous.

The first type is 60% of the sample. The second type is 39% of the sample. The third type is 1% of the sample.

Note: The morphology of the fibers in the plastic and limestone tile are consistent with chrysotile asbestos. Fiber size is too small for confirmation by dispersion staining. Transmission Electron Microscopy (TEM) is recommended for final confirmation that this is chrysotile asbestos.

Lab ROW6084, Field 24 Main Floor, East Corridor (runs north/south) M008-12" floor tile (white/black) no mastic
This sample contains three types of material: The first type is **greater than 1% chrysotile asbestos** in white plastic and limestone tile; the second type is **greater than 1% chrysotile asbestos** in black plastic and limestone tile; the third type is yellow resin mastic. This sample is non-homogeneous.

The first type is 49% of the sample. The second type is 50% of the sample. The third type is 1% of the sample.

In order to be sure reagents and tools used for analysis are not contaminated with asbestos, blanks are tested. Asbestos was none detected in the blanks tested with this bulk sample set.

Very truly yours,

Steve H. Dixon, President

Analyst: Steve H. Dixon Date Analyzed: 8/30/07