

ADDENDUM NUMBER 1

Addendum Date: June 28, 2013

Addendum to Contract Documents dated June 21, 2013 entitled:

MINNESOTA STATE CAPITOL REPAIRS, RESTORATION & PRESERVATION
WORK PACKAGE NO. 1 (WP-1)
ST. PAUL, MINNESOTA

Hammel, Green and Abrahamson, Inc.
420 5th Street North, Suite 100, Minneapolis, Minnesota 55401-2338
HGA Commission Number: 0476-061-00
MSC Project #SCB-02CB0015

This Addendum forms a part of and modifies previously issued Contract Documents as indicated below or by attachments. Acknowledge receipt of this Addendum in space provided on Bid Form. Failure to do so may subject Bidder to disqualification. Items listed or attached are to be posted to Contract Documents and included in Bids submitted and Work performed. Drawing and Specification references made below are a general guide only. Bidder and Contractor must determine for themselves Work affected by Addendum items.

PROCUREMENT AND CONTRACTING REQUIREMENTS

- C1 Section Issued:
 - A. The following Sections are issued and attached as a part of this Addendum:
 1. Section 000110 - Table of Contents - Revised
 2. Section 001116 - Invitation to Bid - Revised
 3. Section 002413 - Scopes of Work; Scope of Work 01 - Swing Parking - Issued
 4. Section 004123 - Bid Proposal Form - Swing Parking - Revised

SPECIFICATIONS

- S1 Section Issued:
 - A. The following Section is issued and attached as a part of this Addendum:
 1. Appendix 2 - Photographic Log - Issued
 2. Appendix 3 - Non-Destructive Asbestos & Lead Paint Inspection Report - Issued

DRAWINGS

- G2 Drawings Issued:
 - A. The following drawings are hereby issued as a part of this Addendum and attached:
 - LI100 (for information only)
 - LI101 (for information only)
 - C200
 - C300
 - C301
 - C302
 - C401
 - C402
 - C900

ACKNOWLEDGE RECEIPT OF THIS ADDENDUM #1 ON BID FORM

**SECTION 000110
TABLE OF CONTENTS**

Revised, Addendum No. 1, 06/28/2013

KEY	ISS: ISSUED;	WP-1	TBD	TBD	TBD	TBD
REP: REPRINTED;						
REV: REVISED;						
REI: REISSUED (LESS EDITS);						
DEL: DELETED;						
FRO: FOR REFERENCE ONLY						
DIVISION 00 PROCUREMENT AND CONTRACTING REQUIREMENTS						
000105	Certifications Page	ISS	----	----	----	----
000110	Table of Contents	ISS	----	----	----	----
000120	Project Directory	ISS	----	----	----	----
001116	Invitation to Bid <u>ADD-1</u>	ISS/ <u>REV</u>	----	----	----	----
002113	Instructions to Bidders	ISS	----	----	----	----
002413	Scopes of Work (To be issued by addendum) <u>ADD-1</u>	ISS/ <u>REV</u>	----	----	----	----
003000	Site Access Plan	ISS	----	----	----	----
003113	Milestone Schedule of Construction (To be issued by addendum)	ISS	----	----	----	----
004123	Bid Proposal Form <u>ADD-1</u>	ISS/ <u>REV</u>	----	----	----	----
005200	Contract Between Contractor and Subcontractor	ISS	----	----	----	----
005201	Material and Equipment Agreement	ISS	----	----	----	----
006113	Performance and payment Bond Form	ISS	----	----	----	----
006200	Subcontractor and Supplier Partial Waiver and Affidavit	ISS	----	----	----	----
006201	Bill of Sale	ISS	----	----	----	----
006202	Non-Negotiable Bailment Receipt	ISS	----	----	----	----
006276	Application and Certificate for Payment (AIA Documents G702 and G703)	ISS	----	----	----	----
006500	Subcontractor and supplier Final Waiver and Affidavit	ISS	----	----	----	----
007200	General Conditions	ISS	----	----	----	----
007300	Specific Project Requirements	ISS	----	----	----	----
007316	Insurance program - Dunn Controlled Insurance (DCIP) Manual	ISS	----	----	----	----
007336	Equal Opportunity & Project Labor Goals	ISS	----	----	----	----
007343	Prevailing Wage Requirements	ISS	----	----	----	----
DIVISION 01 GENERAL REQUIREMENTS				----	----	----
011100	Summary of Work	ISS	----	----	----	----
012200	Unit Prices	ISS	----	----	----	----
013300	Submittal Procedures	ISS	----	----	----	----

013310 Submittal Transmittal
 014200 References
 016210 Product Options and Substitution Requirements
 016211 Substitution Request Form
 017329 Cutting and Patching
 017420 Construction Waste Disposal and Recycling
 017700 Closeout Procedures
 017800 Closeout Submittals

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DIVISION 02 EXISTING CONDITIONS

024113 Selective Site Demolition

 024119 Selective Demolition

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DIVISION 03 THROUGH 20 NOT USED

KEY ISS: ISSUED; REP: REPRINTED; REV: REVISED; REI: REISSUED (LESS EDITS); DEL: DELETED; FRO: FOR REFERENCE ONLY	WP-1	TBD	TBD	TBD	TBD
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DIVISIONS 21 FIRE SUPPRESSION

210500 Common Work Results for Plumbing
 211313 Wet-Pipe Sprinkler Systems

ISS	----	----	----	----
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DIVISIONS 22 PLUMBING

220500 Common Work Results for Plumbing
 220523 General-Duty Valves For Plumbing Piping
 220529 Hangers and Supports for Plumbing Piping and Equipment
 220719 Plumbing Piping Insulation
 221116 Domestic Water Piping
 221316 Sanitary Waste and Vent Piping
 221413 Facility Storm Drainage Piping

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DIVISIONS 23 HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)

230500 Common Work Results For HVAC
 230523 General-Duty Valves for HVAC Piping
 230713 Duct Insulation
 230719 HVAC Piping Insulation
 232113 Hydronic Piping
 233113 Metal Ducts

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DIVISION 24 THROUGH 25 NOT USED

DIVISION 26 ELECTRICAL

260500 Common Work Results for Electrical

DIVISIONS 27 COMMUNICATIONS

270500 Common Work Results for Communications Systems

DIVISIONS 28 ELECTRONIC SAFETY AND SECURITY

280500 Common Work Results for Electronic Safety and Security
 280513 Conductors and Cables for Electronic Safety and Security
 280526 Grounding and Bonding for Electronic Safety and Security
 280528 Pathways for Electronic Safety and Security
 281300 Access Control
 282350 IP (Network) Video Surveillance System
 283111 Fire Alarm System
 283123 Intercom System

DIVISION 29 THROUGH 30 NOT USED

DIVISION 31 EARTHWORK

310000 Earthwork
 312500 Storm Water Pollution Prevention

DIVISION 32 EXTERIOR IMPROVEMENTS

320190 Tree Preservation and Protection
 321216 Asphalt Paving
 321723 Pavement Markings and Traffic Control

APPENDIX

Soil Borings
 Photo Sheets **ADD-1**

Non-Destructive Asbestos & Lead Paint Inspection Report
ADD-1

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END OF SECTION



Minnesota State Capitol – Repairs, Restoration and Preservation (WP-1)

SECTION 00 11 16
INVITATION TO BID

REVISED June 26, 2013

Re: Minnesota State Capitol – Repairs, Restoration and Preservation
75 Rev. Martin Luther King Jr. Blvd. St. Paul, MN 55115

Ladies and Gentlemen:

J.E. Dunn Construction Company, hereafter referred as the Contractor, has issued bid documents for the project described below and requests your bid proposal on the Scopes of Work identified in this Front End.

The following list highlights information associated with the Project that may be helpful in your bidding process. Bidders should review the Bidding Documents in their entirety for a complete discussion of the items highlighted below.

PROJECT NAME Minnesota State Capitol – Repairs, Restoration and Preservation (WP-1)

PROJECT DESCRIPTION Work Package No. 01: Grading and paving for (2) temporary parking lots to the south of the State Capitol and interior demolition at the Terrace Level within the Capitol.

PRE-BID CONFERENCE A Pre-bid Conference for the Swing Parking scope will be held at JE Dunn’s jobsite trailer located at the SE corner of Cedar St. & Sherburne Ave. in St. Paul at 3:00 PM on July 9th for the purpose of answering any questions from prospective Bidders regarding the Scopes of Work on the Project. Attendance is mandatory. A Pre-Bid Conference for the Demolition scope will be held at JE Dunn’s jobsite trailer at 1:00 PM on July 18th.

BIDDING DOCUMENTS Bidding Documents are available for viewing at JE Dunn’s office located at 9855 W. 78th St, Suite 270 Eden Prairie, MN 55344. Bidding Documents may also be viewed and/or obtained electronically at www.smartbidnet.com.

BID PROPOSAL [Use the Bid Proposal Form in Section 00 41 23.

BID DUE DATE Bids for Scope of Work #01 (Swing Parking) will be received until 2:00 PM on July 12th. Scope of Work #02 (Demolition) will be received until 2:00 PM on July 26, 2013.

Bids are only to be submitted in a signed and sealed envelope, on the bid form included in the front end, to the attention of Rik Myhre at JE Dunn’s office at 9855 W. 78th St. Suite 270, Eden Prairie, MN 55344.

LENGTH OF VALIDITY OF BID All Bids shall be valid for acceptance by the Contractor for a period of Sixty (60) calendar days after submission of the Bid(s).

INTERPRETATION AND ADDENDA Requests for interpretations, clarifications, corrections or changes of the Bidding Documents must be made in writing at least seven (7) calendar days prior to the date for receipt of Bids. No Addenda will be issued later than one (1) business



Minnesota State Capitol – Repairs, Restoration and Preservation (WP-1)

days prior to the date for receipt of Bids except for the limited situations set forth in the Instructions to Bidders.

SUBSTITUTIONS Substitutions will be allowed as provided in the Instructions to Bidders and pursuant to Division 01.]

INSURANCE REQUIREMENTS Insurance requirements are included in the Controlled Insurance Manual included herein. Subcontractors will not be allowed on site until they have fully complied with the insurance requirements.

PREVAILING WAGES [Prevailing wages are required on this Project.]

MBE/WBE GOALS [MBE/WBE goals are required on this Project. Section 00 73 36 identifies the specific project labor goals.

TAXES/EXEMPTIONS This Project is not exempt from state sales and use tax.

OTHER SPECIAL REQUIREMENTS **All parking lot work is to be completed by August 28, 2013.**

QUESTIONS All questions regarding this Division 00 should be directed to the Contractor.

Please refer to the Instructions to Bidders for further information. All Bids are to be in strict accordance with the Bidding Documents and all related Bidding Requirements and Subcontract Documents.

BID DOCUMENTS:

Available at www.smartbidnet.com

Contractor reserves the right to reject any or all bids, waive any irregularities or award the work to someone other than the low Bidder.

We look forward to receiving your Bid(s). If you have any questions or require further assistance, please contact the undersigned.

Sincerely,

Jim Rinner
J.E. Dunn Construction Company

cc: File



SCOPE OF WORK 01 - SWING PARKING

SCOPE OF WORK

The Subcontractor shall execute the following portion of the Work described in the Contract Documents, including all labor, materials, equipment, services, superintendence, and other items required to complete such portion of the work:

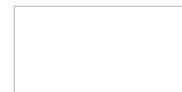
SWING PARKING - Including but not limited to, Specification Sections:

- Division 00 Procurement and Contracting Requirements
- Division 01 General Requirements
- 02 41 13 Selective Site Demolition
- 31 00 00 Earthwork
- 31 25 00 Storm Water Pollution Prevention
- 32 01 90 Tree Preservation and Protection
- 32 12 16 Asphalt Paving
- 32 17 23 Pavement Markings and Traffic Control

This work specifically includes, but is not limited to:

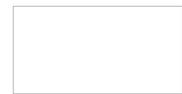
1. All work required to provide (2) complete parking lots, including but not limited to, site demo/clearing, excavation, filling, grading, compacting, saw-cutting, sub-base, asphalt paving, striping, signage, irrigation modifications and seeding/landscaping.
2. All work required to provide a contractor staging area/lot, including but not limited to, site demo/clearing, grading, saw-cutting, sub-base, asphalt paving, irrigation modifications, fencing and seeding/landsacing as required to complete the contractor staging area. The intent is to keep grading to a minimum to match existing contours/elevations.
3. All work associated with the (2) parking lots shall be completed no later than Wednesday August 28, 2013. This Subcontractor shall include all premium time as required to meet this completion date including but not limited to overtime, weekends and nights. Liquidated damages of \$750 per day will be assessed to the Subcontractor for each calender day the project goes beyond August 28, 2013.
4. All median modifications at Martin Luther King Jr. Blvd including, but not limited to, saw cutting and demo of existing paving, sub-base, paving, and asphalt nosings.
5. Remove, salvage, and provide new storm cast at north parking lot entrance.
6. All removed and unused topsoil is to be saved on site and spread out to create grass burms along/near the parking lots and staging area so it can be re-used at a later date.
7. Cap and modify existing irrigation system(s) to accommodate new parking lots and contractor staging area. Provide as-builts to Owner. Ensure all remaining grass and landscaping areas are sprinkled and can receive propoer coverage. Existing irrigation system can not shut down for modifcations any longer then 48 hours.
8. Clearing and grubbing of trees and vegetation only as necessary for new temporary parking lots and contractor staging area. Remove cleared vegetation and trees from the site.
9. Protection all trees and other vegetation that are to remain.
10. All layout and survey work required for the completion of this schope of work from benchmarks and control points, which will be provided by others. This subcontractor will be responsible for maintaining all benchmarks and control points throughout

Initial: _____
Date: _____



- construction.
11. This Subcontractor is responsible for all necessary permits associated with scope of work (except for building permit), including the MPCA general storm water permit.
 12. Dust control including, but not limited to, watering or chemical suppression as determined by necessity based on direction from the Construction Manager.
 13. Replace/re-spread topsoil prior to landscaping operations at all areas disturbed by construction operations, including up to edges of new paving.
 14. Perform utility locates prior to starting work.
 15. All sub-base (aggregate and granular) and asphalt paving at required thickness and design mix.
 16. Proof rolling of all sub-grades prior to start of asphalt work.
 17. New to existing pavement transitions Trim/saw cut existing paving to ensure smooth and clean transition from existing paving to new paving.
 18. All distributed vegetation areas outside of the paved areas (parking lots and staging area), including new topsoil burms, are to receive grass seed and hydromulch after all grading and paving work is complete. Erosion control blankets are required if any areas, in particular burms, have a slope greater than 4:1.
 19. All pavement markings at parking lots, to be applied per manufacturer requirements. Utilize templates and stencils professionally made to industry standards. Clean pavement prior to applying any markings per manufacturer requirements.
 20. Protect adjacent curbs, walks, fences and other items from receiving paint. Barricade marked areas during installation and until the marking paint is dried and ready for traffic.
 21. Off-site disposal of all paint, containers, paint thinners and other hazardous material generated by this scope of work. Disposal to be in accordance with all federal, state and local laws/regulations.
 22. Disposal of excess materials from this scope of work are to be disposed of by this Subcontractor off site.
 23. All site signage, including signs, posts (break away posts and channel supports) and concrete footings. This subcontractor responsible to obtain and pay for required sign collars from the City of St. Paul.
 24. Street sweeping for debris "drag out" generated under this scope of work.
 25. Soil stabilization (lime screenings, fly ash, etc.) as required to achieve required compaction at parking lots.
 26. It is the Subcontractor's responsibility to contact the testing agency directly to request all necessary and required testing including, but not limited to, moisture, compaction, proof rolls, asphalt thicknesses, etc.
 27. All required grading, including cuts and fills as well as import and export of materials for mass over-lot grading to meet contours and elevations. All final grades to be per those shown on drawings.
 28. All backfill and soil compaction, including any hand labor, to comply with density and moisture content testing as required.
 29. Scarify native sub-grade material prior to placement of fill material.
 30. Installation and maintenance of erosion control devices during construction including, but not limited to, silt fencing, hay bales, catch basin/inlet filters, rock construction entrance/exit, and tree protection fencing. Follow all requirements on drawings, specifications and project specific SWPPP.
 31. All dewatering necessary for completion of this scope of work. Maintain the project site, excavations, and construction free of water to maintain progress of the work. Comply with requirements of authorities having jurisdiction.
 32. Meter and associated fees for construction water from available hydrant by this

Initial: _____
Date: _____



Subcontractor.

- 33. Access and egress to and from the site is under the control and direction of Contractor. All Subcontractors will be responsible for advising Contractor of their delivery schedules and will coordinate the work of various Subcontractors as to minimize delays.
- 34. Coordinate electrical rough-in for site lighting with electrical subcontractor. Ensure necessary rough-in is in place prior to paving.
- 35. All traffic control required in order to complete this scope of work.
- 36. Protect all roads, walks, curbs, utilities, plant materials, etc as necessary during construction. If damage to any existing, or to remain, items occurs, this Subcontractor will be responsible to restore or repair the damaged item to a condition equal to or better than the pre-construction condition, or as required by the Owner.

The following work is excluded:

- 1. Benchmarks and control points.
- 2. Site lighting.
- 3. Removal or maintenance of parking lots and contractor staging area after installation is complete.
- 4. Un-identified utility relocations or modifications, other than irrigation or included above.
- 5. Concrete curbs.
- 6. New trees and shrubs.

WP-1 Swing Parking Schedule

Activity Name	Activity ID	Planned Duration	Start	Finish	... 2013												2014												2015											
					Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
Prequalify Swing Parking Contractors	BA1-100	12.0d	06-Jun-13 ...	21-Jun-13 05:...	Prequalify Swing Parking Contractors																																			
Bid Swing Parking Scope	BA1-110	9.0d	24-Jun-13 ...	12-Jul-13 05:0...	Bid Swing Parking Scope																																			
Develop / Approve GMP Swing Parking	BA1-120	5.0d	16-Jul-13 ...	22-Jul-13 05:0...	Develop / Approve GMP Swing Parking																																			
Notice to Proceed - Swing Parking	BA1-130	0.0d	22-Jul-13 ...	22-Jul-13 03:0...	Notice to Proceed - Swing Parking																																			
Mobilize/Utility Locate/Cap Irrigation	WPI-SP-...	4.0d	23-Jul-13 ...	26-Jul-13 01:3...	Mobilize/Utility Locate/Cap Irrigation																																			
Strip Topsoil & Stockpile On-Site	WPI-SP-1...	2.0d	29-Jul-13 ...	30-Jul-13 07:0...	Strip Topsoil & Stockpile On-Site																																			
Grading & Subgrade Prep	WPI-SP-1...	3.0d	31-Jul-13 ...	02-Aug-13 08:...	Grading & Subgrade Prep																																			
Lighting Electrical Conduit	WPI-SP-1...	5.0d	05-Aug-13 ...	09-Aug-13 02:...	Lighting Electrical Conduit																																			
Rock Base & AC Paving	WPI-SP-1...	5.0d	12-Aug-13 ...	16-Aug-13 04:...	Rock Base & AC Paving																																			
Signage & Lighting	WPI-SP-1...	5.0d	19-Aug-13 ...	23-Aug-13 11:...	Signage & Lighting																																			
Pavement Marking & Seeding	WPI-SP-1...	3.0d	26-Aug-13 ...	27-Aug-13 04:...	Pavement Marking & Seeding																																			
WLM Parking Available for Use	WPI-SP-1...	0.0d	28-Aug-13 ...	28-Aug-13 08:...	WLM Parking Available for Use																																			



SECTION 00 41 23
BID PROPOSAL FORM

Minnesota State Capitol – Repairs, Restoration, and Preservation
Work Package No. 01 – Swing Parking
MSC Project #02CB0015

BID FOR LUMP SUM CONTRACT

Date: _____

BID OF (Company name) _____

Phone Number: _____

Main Contact: _____

TO: JE Dunn Construction
Attn. **Rik Myhre**
9855 West 78th Street
Suite 270
Eden Prairie, MN 55344

1. Bidder, in compliance with invitation for bids for construction work in accordance with Drawings and Specifications prepared by Hammel, Green, and Abrahamson, Inc., for the above mentioned project, dated **June 21, 2013**. having examined Contract Documents and site of proposed work, and being familiar with all conditions pertaining to construction of proposed project, including availability of materials and labor, hereby proposes to furnish all labor, materials and supplies to construct project in accordance with Contract Documents, within time set forth herein at prices stated below. Prices shall cover all expenses, including all taxes incurred in performing work required under Contract documents, of which this Bid is a part.

Bidder acknowledges receipt of following addenda:

Addendum No. _____	Dated _____

2. In following Bid(s), amount(s) shall be written in both words and figures. In case of discrepancy between words and figures, words shall govern.

3. BID PRICING

a. Bid for Work Scope No. (refer to 00 24 13) _____

b. Base Bid: The Bidder agrees to furnish all labor, materials, tools, and equipment required; all as indicated on the Drawings and described in these Specifications for sum of: _____ DOLLARS (\$ _____).

c. **Base Bid Breakout (This is for accounting purposes only. Breakouts add together should equal base bid.):**

1. All work associated with the Parking Lots only: \$ _____
2. All work associated with the Contractor Staging Area only: \$ _____

4. **ALTERNATES:**

a. **Alternate No. 01: Provide precast concrete wheel stops for each perimeter parking stall. Attached wheel stops to asphalt paving. ADD \$ _____.**

5. **UNIT PRICES:**

- a. For changing specified quantities of work from those indicated by Contract Drawings and Specifications, upon written instructions of Owner, the following Unit Prices shall prevail in accordance with General Conditions.
- b. The following Unit Prices include all labor, overhead and profit, materials, equipment, appliances, bailing, shoring, shoring removal, etc., to cover all work.
- c. The following Unit Prices are required where applicable to particular Base Bid and/or Alternate being submitted.
- d. Only a single Unit Price shall be given and it shall apply for either MORE or LESS work than that indicated on Drawings and called for in Specifications as indicated to be included in Base Bid and/or Alternates. In the event that more or less units than so indicated is actually furnished, Change Orders will be issued for increased or decreased amounts as approved by the Owner.
- e. Bidder understands that the Owner will not be liable for any Unit Price or any amount in excess of Base Bid and any Alternate(s) accepted at time of award of Contract, except as expressed in written Change Orders duly executed and delivered by Owner's Representative.

f. **Unit Prices**

1. (No. 01) Unsuitable Material: Remove Unsuitable Material (off-site disposal): Provide a price per cubic yard (in place) for removal of unsuitable material and properly disposing of the material off-site as indicated in Section 310000.

\$ _____ / _____ Unit \$ _____ Add / Deduct

2. (No. 02) Select Granular Material (borrow): Provide a price per cubic yard (in place) for importing and placing "Select Granular Material" in accordance with the specified requirements for Primary Fill to replace Unsuitable Material as indicated in Section 310000.

\$ _____ / _____ Unit \$ _____ Add / Deduct

3. (No. 03) **Stabilization Geotextile: Provide a unit price per square yard (installed) to furnish and place a stabilization geotextile on sub-grade as indicated in Section 310000.**

\$ _____ / _____ Unit \$ _____ Add / Deduct

4. (No. 04) **Stabilization Aggregate: Provide a price per cubic yard (in place) for importing and placing "Stabilization Aggregate" in accordance with the Specifications with the specified requirements for "primary fill" as indicated in Section 310000.**

\$ _____ / _____ Unit \$ _____ Add / Deduct

5. (No. 05) **Boulders: Base bid includes removing from the site boulders up to 1 cubic yard. Provide a unit price per cubic yard for removing boulders larger than 1 cubic yard and properly disposing off-site as indicated in Section 310000.**

\$ _____ / _____ Unit \$ _____ Add / Deduct

6. (No. 06) **Aggregate Base Material: Provide a price per cubic yard (in place) for importing and placing Aggregate Base Material in accordance with the specified requirements in Section 321216 – Asphalt Paving.**

\$ _____ / _____ Unit \$ _____ Add / Deduct

5. PROJECT LABOR GOALS

- a. **Targeted Group Business (TGB) goals are 11%. List below the name of subcontractors and/or supplier you are using to meet or exceed this goal.**

<u>Sub/Supplier Name</u>	<u>Work Value</u>	<u>Description of Work</u>
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

- b. **The work force goals are 32% Minority Labor and 6% Female Labor. Your company either commits to meeting or exceeding these goals or agrees to provide good faith efforts whenever requested.**

6. BIDDER'S ACKNOWLEDGMENTS

- a. Bidder declares that he has had an opportunity to examine the site of the work and he has examined Contract Documents therefore; that he has carefully prepared his bid upon the basis thereof; that he has carefully examined and checked bid, materials, equipment and labor required thereunder, cost thereof, and his figures therefore. Bidder hereby states that amount, or amounts, set forth in bid is, or are, correct and that no mistake or error has occurred in bid or in Bidder's computations upon which this bid is based. Bidder agrees that he will make no claim for reformation, modifications, revisions or correction of bid after scheduled closing time for receipt of bids.
- b. Bidder understands that Owner reserves right to reject any or all bids and to waive any informalities in bidding.

7. BIDDER'S CERTIFICATE

Bidder hereby certifies:

- a. The bid is genuine and is not made in interest of or on behalf of any undisclosed person, firm or corporation, and is not submitted in conformity with any agreement or rules of any group, association or corporation.
- b. Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid.
- c. Bidder has not solicited or induced any person, firm or corporation to refrain from bidding.
- d. Bidder has not sought by collusion or otherwise to obtain any advantage over any other Bidder or over Owner.
- e. Bidder will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin in connection with performance of work.

7. BIDDER'S SIGNATURE

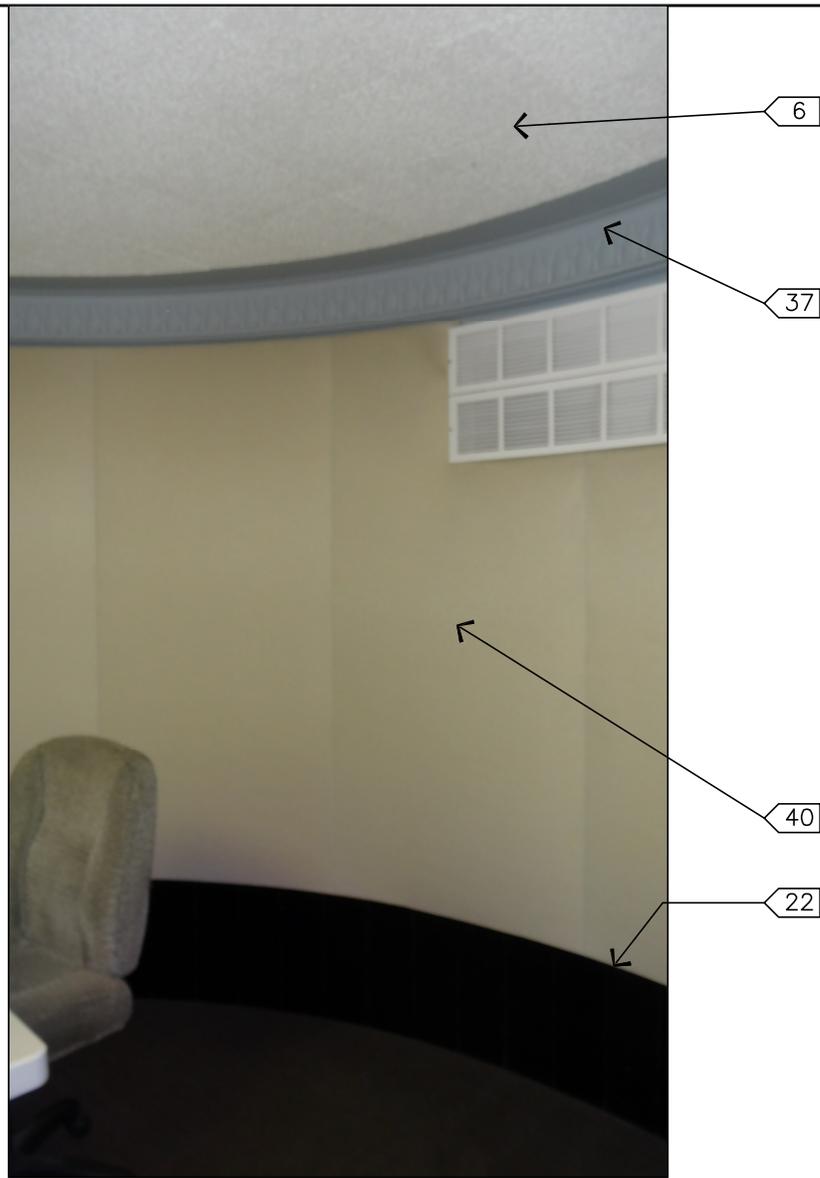
Note: All signatures shall be original; not copies, photocopies, stamped, etc.

Authorized Signature	Date
Printed Name	Title
Company Name	
Mailing Address	

City, State, Zip	
Phone No.	Federal Employer ID No.
Fax No.	E-Mail Address
Circle one: Individual Partnership Corporation Joint Venture	
If a corporation, incorporated under the laws of the State of _____	
Subcontractors are to be registered with the MN Dept. of Labor and Industry and are required to have a registration No. prior to receiving an award.	
Building Construction Contractor Registration No. _____	
Or License No.: _____ Type of License: _____	

(Each Bidder shall complete bid form by manually signing on the proper signature line above and supplying required information called for in connection with the signature. Information is necessary for proper preparation of the Contract, Performance Bond and Payment Bond.)

END OF SECTION



DEMOLITION PLAN KEYNOTES <###

37. ARCHITECT AND OWNER TO REVIEW THIS SPACE WITH CONTRACTOR PRIOR TO DEMOLITION. SPECIFIC ITEMS TO BE PROTECTED AND SALVAGED WILL BE IDENTIFIED. PROTECT ALL PLASTER WALLS, CEILING, AND CROWN MOLDING, INCLUDING WHERE COVERED BY FINISHES TO BE REMOVED. DO NOT REMOVE PAINT FROM PLASTER FINISHES.

22. REMOVE AND SALVAGE EXISTING STONE BASE IN THIS ROOM.

40. REMOVE SHEET PANELING AND ACOUSTICAL PANELS, INCLUDING ANY GLUE, BLOCKING, AND CONNECTING DEVICES CONCEALED BY THE PANELS.

DEMOLITION CEILING PLAN KEYNOTES <###

6. REMOVE ALL ACOUSTIC TILE ATTACHED TO PLASTER CEILINGS UNLESS NOTED OTHERWISE, INCLUDING ANY GLUE, BLOCKING, AND CONNECTING DEVICES CONCEALED BY THE TILE.

CONSTRUCTION DOCUMENTS



June 28, 2013



capitol restoration collaborative

COMM. NO.
0476-061-00

SCALE

DATE
5/31/13

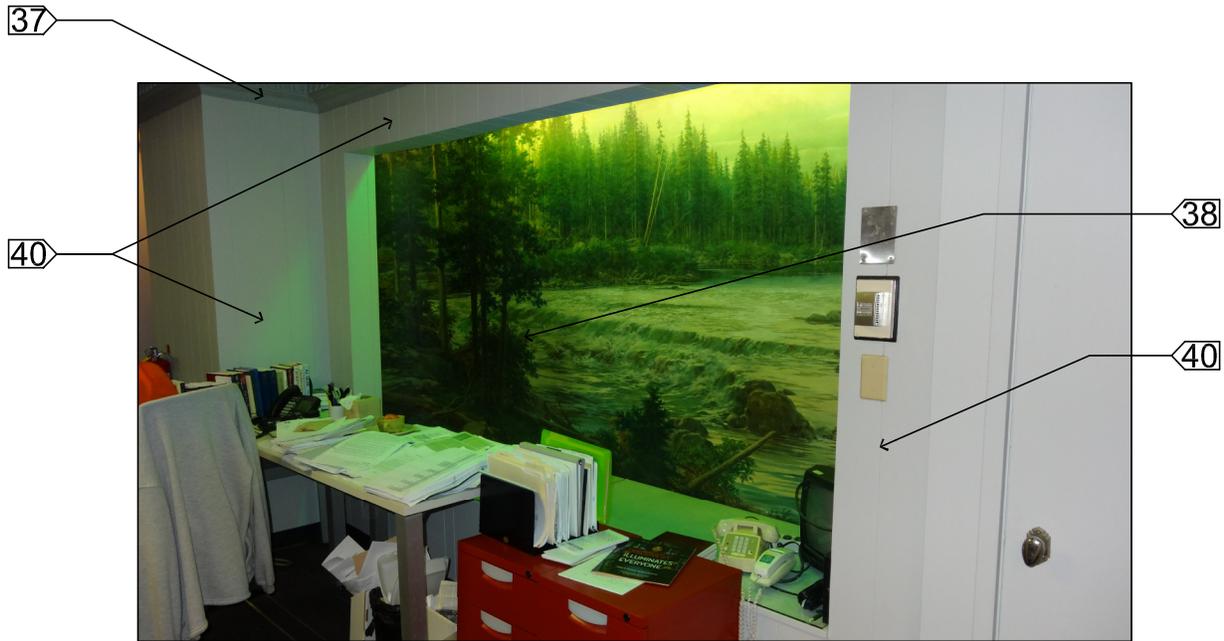
DRAWN
KMONSON



**MINNESOTA STATE
CAPITOL**
REPAIRS, RESTORATION AND
PRESERVATION

1

024119



DEMOLITION PLAN KEYNOTES

- 37. ARCHITECT AND OWNER TO REVIEW THIS SPACE WITH CONTRACTOR PRIOR TO DEMOLITION. SPECIFIC ITEMS TO BE PROTECTED AND SALVAGED WILL BE IDENTIFIED. PROTECT ALL PLASTER WALLS, CEILING, AND CROWN MOLDING, INCLUDING WHERE COVERED BY FINISHES TO BE REMOVED. DO NOT REMOVE PAINT FROM PLASTER FINISHES.
- 38. PROTECT MURAL.
- 40. REMOVE SHEET PANELING AND ACOUSTICAL PANELS, INCLUDING ANY GLUE, BLOCKING, AND CONNECTING DEVICES CONCEALED BY THE PANELS.

CONSTRUCTION DOCUMENTS



June 28, 2013



COMM. NO.
0476-061-00
SCALE
DATE
5/31/13
DRAWN
KMONSON



**MINNESOTA STATE
CAPITOL**
REPAIRS, RESTORATION AND
PRESERVATION

02
24119



39 39 4 AT TWO(2) SIMILAR FIXTURES IN THIS ROOM

DEMOLITION PLAN KEYNOTES

39. ARCHITECT AND OWNER TO REVIEW THIS SPACE WITH CONTRACTOR PRIOR TO DEMOLITION. SPECIFIC ITEMS TO BE PROTECTED AND SALVAGED WILL BE IDENTIFIED. PROTECT ALL PLASTER WALLS, CEILINGS, AND CROWN MOLDING. DO NOT REMOVE PAINT FROM PLASTER FINISHES. PROTECT MURAL AT NORTH WALL OF ROOM AND MILLWORK ON EAST WALL OF ROOM.

DEMOLITION CEILING PLAN KEYNOTES

4. REMOVE AND DISPOSE OF LIGHT FIXTURE.

CONSTRUCTION DOCUMENTS



June 28, 2013



COMM. NO.
0476-061-00
SCALE
DATE
5/31/13
DRAWN



**MINNESOTA STATE
CAPITOL**
REPAIRS, RESTORATION AND
PRESERVATION

03

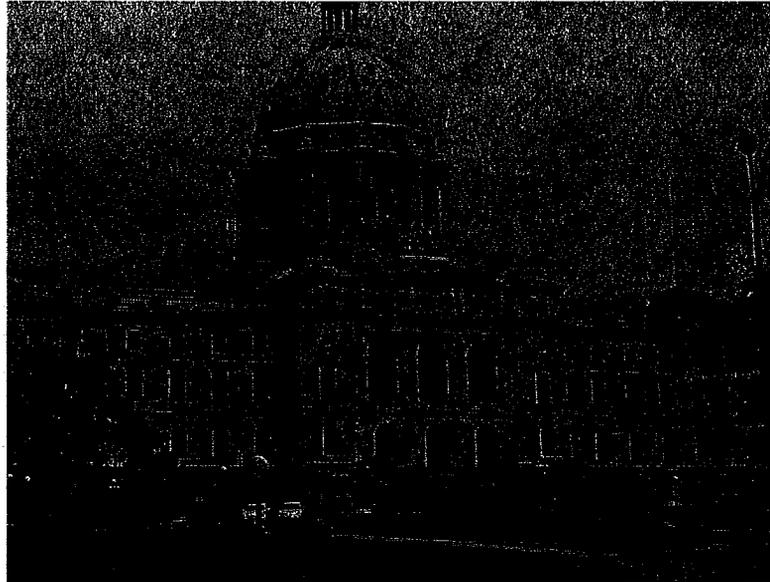
24119

NON-DESTRUCTIVE ASBESTOS & LEAD PAINT INSPECTION REPORT

**State Capitol Building,
Basic Services:
Attic & Basement Areas**

75 Rev. Dr. Martin Luther
King Blvd.

St. Paul, MN



Angstrom No.13-06-20

Prepared by:



**Angstrom Analytical &
Environmental Services**

Angstrom Analytical Inc.
5001 Cedar Lake Road
St. Louis Park
MN 55416
(952) 252-0405

June 20, 2013

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- 3.2 Deferred Action Consideration

4.0 Asbestos Building Survey Remarks

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NON-DESTRUCTIVE ASBESTOS and LEAD IN PAINT INSPECTION REPORT

State Capitol Building, Basic Services: Attic & Basement
75 Rev. Dr. Martin Luther King Blvd.
St. Paul, MN

1.0 Introduction

1.1 Purpose

Angstrom Analytical Inc. (Angstrom) was contracted to perform a non-destructive testing survey for asbestos-containing materials (ACM) and lead based paint at the State Capitol Building, Attic & Basement, 75 Rev. Dr. Martin Luther King Blvd., St. Paul, Minnesota. These areas are described in the contract as "Basic Services". The purpose of the survey was to identify accessible materials that contain asbestos so as to provide a general overview and inventory of ACM to facilitate renovation projects. Gordon Christopherson of Real Estate and Construction Services (RECS), Department of Administration, of the State of Minnesota, requested Angstrom's services. **Please note this report is not a scope of work or a bidding document.** It is incumbent upon the contractor to verify quantities. Quantification of materials identified in this inspection report are approximations and based on observed quantities. Additional amounts of material may be present under floors, above ceilings and inside wall cavities and not fully quantified. For example, thermal system insulation identified in the basement may also exist inside wall cavities.

1.2 Scope of Work

From June 1 to June 19, 2013 Kevin Hagen (AI2652) and Charles Tye (AD395) MN licensed asbestos inspectors and representatives of Angstrom Analytical, Inc. conducted sampling for the identification and assessment of suspect ACM at 75 Rev. Dr. Martin Luther King Blvd.

To date, the following work has been completed.

- ✓ A walk-through of the building's interior spaces, with observations of accessible suspect ACM and assessment of potential hazards from suspect ACM.
- ✓ Suspect ACM bulk sample collection from representative areas and material types.
- ✓ Analysis of bulk samples by polarized light microscopy using U.S. Environmental Protection Agency (EPA) Method 600/M4-82-020.
- ✓ Preparation of this building survey report, including sample analysis results.
- ✓ Compilation of an inventory of the identified ACM, by floor.

2.0 Project Results

2.1 Area of Investigation

The project consisted of 1 structure, which is described in this report as follows:

- ❖ **State Capitol Building, Attic & Basement**, – A multi-office, State Capitol building consisting of 3 stories, a basement and attic spaces. The structure is located at 75 Rev. Dr. Martin Luther King Blvd., St. Paul, Minnesota. No other structures are included within the scope of this survey.

The name of this building / structure was designated or taken from verbal and written information Angstrom personnel received from Gordy Specht, of the State of Minnesota and Susan Campbell Jones, CPMI. Building materials were identified and assessed in all areas requested by these individuals.

These materials were then grouped into homogenous systems and sampled, as explained in section 4.0 "Asbestos Building Survey Remarks."

2.2 Response Action Ratings and Alternatives

There are four recognized alternative courses of action to control ACMs in buildings: (1) removal and disposal; (2) enclosure; (3) encapsulation; and (4) no action, with implementation of an operations and maintenance (O & M) / continued surveillance program. The selection of any particular alternative should be based on intended use of the building, exposure potential, construction or demolition activity, cost, and current regulations.

Each Assessment Table includes a response action based on factors such as friability, accessibility, potential for disturbance, etc. Definitions for the response ratings are listed below:

- 0 = Material does not contain detectable amounts of asbestos and requires no asbestos related abatement action.
- 1 = Material contains asbestos, was non-friable, and requires no abatement action unless sanded, abraded, drilled, or otherwise disturbed. We recommend periodic reassessment of condition.
- 2 = Material contains asbestos and was friable. Damage was not observed; no immediate abatement action is required. We recommend periodic inspections for confirmation of the condition of the material.
- 3 = Material contains asbestos, was friable, and shows signs of localized damage with a potential for disturbance. Repair or removal is recommended to reduce the potential for fiber release. Periodic inspections are highly recommended.
- 4 = Material contains asbestos, was significantly damaged, and immediate removal is recommended.

2.3 Results Summary - Asbestos

75 Rev. Dr. Martin Luther King Blvd., St. Paul, MN

- ❖ **State Capitol Building, Attic & Basement**, – A multi-office, state capitol building consisting of 3 stories, a basement and attic space. The structure is located at 75 Rev. Dr. Martin Luther King Blvd., St. Paul, Minnesota. No other structures are included within the scope of this survey.

Representative bulk samples of suspect ACM were acquired from the building. Materials considered suspect and subsequently sampled included:

- Floor Tile & Mastic
- Foam on Ducts
- Adhesives
- Caulking Compounds/Putty's/ Sealants
- Roofing
- Glazing
- Vibration Dampeners
- Various Debris
- Thermal System Insulation-TSI
- Plaster
- Ceiling Tiles
- Tile / Mortar / Grout
- Fireproofing
- Flooring
- Sheetrock/Tape/Compound

Of the materials sampled, the following were found to be asbestos containing (pursuant to EPA definitions):

- **9x9 Floor Tile & Floor Tile Mastic**
- **Thermal System Insulation – TSI on Pipes, Pipe Fitting Residue and Duct Insulation**
- **Roofing Materials**
- **Vibration Dampener**
- **Debris**
- **Window Glazing Compound (Putty)**

Asbestos containing materials were found in the following areas:

Thermal System Insulation – TSI

1. Approximately 10-12 linear feet of asbestos containing pipe insulation above the plaster ceiling in the B12a corridor.
2. Approximately 2-3 linear feet of asbestos containing pipe insulation in room B8.
3. Approximately 2-3 linear feet of asbestos containing pipe insulation in the B43b corridor.
4. Approximately 4-6 pipe fittings with asbestos containing residue in room B6.
5. Approximately 550-600 linear feet of asbestos containing pipe insulation in the southeast attic.
6. Approximately 450-500 linear feet of asbestos containing pipe insulation in the northeast attic.

7. Approximately 900-1000 square feet of asbestos containing duct insulation in the southeast attic.
8. Approximately 1000-1100 square feet of asbestos containing duct insulation debris in the southeast attic.
9. Approximately 900-1000 square feet of asbestos containing duct insulation in the northeast attic.
10. Approximately 1000-1100 square feet of asbestos containing duct insulation debris in the northeast attic.
11. Approximately 2-4 chases with asbestos containing Thermal System Insulation – TSI debris in the northeast and southeast attic space.
12. Approximately 1 chase under northeast small skylight.

Vibration Dampeners

13. Approximately 2 asbestos containing vibration dampeners in room B25.
14. Approximately 2 asbestos containing vibration dampeners in room B31.
15. Approximately 2 asbestos containing vibration dampeners in room B42.
16. Approximately 2 asbestos containing vibration dampeners in room B55.

Miscellaneous Friable Material

17. Approximately 25-30 square feet of asbestos containing debris in bathroom chase of room B25.

Category I, Non-friable Materials

18. Approximately 1800-1900 square feet of asbestos containing 9x9 floor tile and mastic in room B6.
19. Approximately 75-80 square feet of asbestos containing mastic under 12x12 floor tile in room B25.
20. Approximately 750-800 square feet of asbestos containing 9x9 floor tile and mastic in room B34.
21. Approximately 20-25 square feet of asbestos containing mastic residue in room B71a.
22. Approximately 20-25 square feet of asbestos containing flashing / tarpaper in the B34 tunnel.
23. All the asbestos containing built-up roofing, under the pavers.

Category II, Non-friable Materials

24. Approximately 2 large skylights with asbestos containing glazing compound located on the east and west wing roof.

(Refer to the material identification tables for additional details, contractors to verify all quantities).

2.4 Results Summary – Lead in Paint

Based on our inspection findings, the following surfaces tested positive for lead based paint.

Attic area

1. The original black painted metal large ducting straps throughout the attic area.
2. The original black painted metal beams throughout the attic area.
3. The original red painted metal beams throughout the attic area.
4. The white painted metal exterior of the North entrance to the roof.

Basement area

1. The orange painted concrete walls in the East tunnel area.
2. The beige painted concrete walls in B71 a.
3. The white painted concrete walls in B69.
4. The white painted concrete walls in B69b.
5. The beige painted plaster walls in B63.
6. The white painted block walls in B62.
7. The brown painted metal door in B61.
8. The yellow painted concrete walls in B45.
9. The beige painted granite walls/columns in B38.
10. The blue painted granite walls/columns in B37.
11. The blue painted concrete walls in B37.
12. The white painted metal columns in B34.
13. The beige painted column base in B34.
14. The black painted concrete ceiling in B32.
15. The multi colored painted print in in B27.
16. The white painted plaster ceiling in B27.
17. The red/gold painted plaster walls in B27.
18. The brown painted wood door components in B27 bathroom.
19. The white painted plaster ceiling in B22.
20. The gray painted wood walls in B22.
21. The green painted plaster walls in B20.
22. The yellow painted brick walls in the café corridor.
23. The tan painted granite walls in the café corridor.
24. The white painted brick walls in B12.
25. The beige painted block ceiling in b13.
26. The beige painted granite walls in B10.
27. The beige painted granite foundation walls in the main corridor.
28. The white painted granite foundation walls in the main corridor.
29. The white painted granite foundation walls in B10.
30. The white painted granite foundation walls in B9.
31. The green painted granite foundation walls in B9.
32. The white painted granite walls in B46d.
33. The brown painted granite walls in B46d.
34. The beige painted granite walls in B58.
35. The yellow painted concrete walls throughout the main corridor.
36. The white painted ceiling plaster in the west end of the main corridor.
37. The yellow painted plaster walls in the west end of the main corridor.
38. The black painted metal stair components throughout the main corridor.
39. The black painted wood door frames throughout the main corridor.
40. The yellow painted brick walls throughout the main corridor.
41. The beige painted granite walls throughout the main corridor.

42. The tan painted granite walls throughout the main corridor.
43. The yellow painted plaster walls throughout the main corridor.

Please refer to the Lead Based Paint Testing Report for specific locations and conditions. Only surfaces in fair to poor condition need to be stabilized. Intact lead based paint surfaces are not considered a hazard. However they do need to be maintained in an intact condition and periodically monitored. Specific surfaces not identified in this testing report should be treated as lead based unless testing proves otherwise.

2.5 Abatement Cost Estimates

Basement Asbestos:

We suggest that the identified asbestos in the basement can be abated using the existing State of Minnesota RECS Master Contract in that the actual asbestos abatement will be less than \$50,000.00 including the partial to total removal of the hard plaster ceiling in the West half of the basement corridor. I.H. Monitoring and oversight will be additional.

Attic Asbestos:

Our estimate of the costs associated with the NE & SE attic space abatement actions including cleanup of contaminated chases and companionways is in the \$150,000.00 to \$200,000.00 range, plus I.H. Monitoring and oversight.

Basement Lead Based Paint Abatement:

Based on the estimate of 100,000-120,000 square feet of lead painted structural walls, columns and other supports that will remain after the CMU, Clay Tile and other interstitial walls and room partitions have been demolished (and debris removed), LBP abatement can be completed at a cost of \$10.00 to \$12.00 per square foot. Angstrom needs advising of exactly where, in the basement, the LBP has necessarily to be removed, in order to satisfy the requirements of the Architect, Designer, specifications and scope of work documents. Increased cost estimate accuracy can then be achieved.

Abbreviation Code List

DAMAGE POTENTIAL - damage potential of the material

PSD - potential for significant damage
PD - potential for damage

COND - condition of material

N - little or no damage
D - moderate damage
SD - significant damage

UNITS - units of measurement

LF - linear foot
SF - square foot
EA - fitting

MATERIAL

CP - ceiling panel
CT - ceiling tile
CTA - ceiling tile adhesive
FT - floor tile
FTA - floor tile adhesive
BBA - baseboard adhesive

PI - pipe insulation
PFI - pipe fitting insulation
FG - fiberglass
corr - corrugated paper
BB - baseboard

TYPE OF ASBESTOS

ANTH - Anthophyllite
CHR - Chrysotile
AM - Amosite

CROC - Crocidolite
ACT - Actinolite
TREM - Tremolite

* These samples were not analyzed. These results were inferred as consistent with the analyzed samples in the homogeneous set.

ND - No asbestos was detected in the sample submitted for analysis.

NS - Material not sampled.

NAC - Material not accessible.

< - less than the value specified.

3.0 RECOMMENDATIONS

3.1 Long-Term Response Actions

Please note that any asbestos-containing building materials that may become friable during demolition must be removed prior to that time, pursuant to EPA National Emissions Standards for Hazardous Air Pollutants regulations.

3.2 Deferred Action Consideration

The EPA has indicated that there are no longer grounds for completely deferring action once asbestos is identified in a building. Under ideal conditions (minimum access by occupants, no mechanical vibrations, no physical or water damage, no excessive airstream exposure, etc.), the minimum corrective action should be implementation of an O&M program and periodic surveillance of the material. An O&M program would require the identification of all accessible asbestos in the building and establishment of guidelines for proper safety precautions, cleaning methods, etc., that should be undertaken when emergency or routine maintenance work may disturb asbestos.

Please note that recommendations in this report to defer action regarding certain materials are accompanied by a recommendation to implement an O&M program. A recommendation to defer action means that, in our opinion, the condition of the particular material at the time of observation was such that release of airborne fibers appeared relatively low, and that other response actions did not appear to be warranted at the time. Any changes in the condition of the material may warrant corrective actions at a later date. The effective management of these particular situations is, therefore, crucial.

4.0 Asbestos Building Survey Remarks

Prior to the collection of bulk material samples, suspect ACM was categorized into homogeneous material types and areas. A homogeneous material type is defined as friable or non-friable suspect ACM that has the same visual appearance (color, texture, pattern), that was either applied or constructed during the same general time period. Material composition appeared to be consistent within a defined type and area. Friable materials are those that can be crushed, pulverized, or reduced to powder by hand-pressure when dry.

The samples were collected at random locations from the predetermined homogeneous sampling areas to provide analytical data to document and evaluate current site conditions. Data were obtained from discrete sample locations, and no guarantee is given that the inferred conditions currently exist. Materials were wetted prior to sampling to minimize potential fiber release; the samples were then sealed in polyethylene bags.

Bulk samples were analyzed according to EPA Method 600/M4-82-020, utilizing polarized light microscopy and dispersion staining techniques. The lower detection limit for verification of bulk asbestos fibers is 1 percent asbestos by volume. The method cited above provides the percentage of asbestos present and distinguishes the following types of asbestos: chrysotile, amosite, crocidolite, tremolite, actinolite, and anthophyllite. The portions of the samples that were not consumed in the analysis will be retained by Angstrom for a period of 30 days from the

date of this report. The samples will be disposed of if Angstrom does not receive written notification prior to the 30th day.

The sets of samples from each homogeneous area were analyzed until positive. That is, under the EPA guidelines, once a sample in a set from a homogeneous material is found to contain greater than one percent asbestos by volume, the homogeneous material area is assumed to contain asbestos and additional sample analysis is terminated. This information is used only to determine whether a material is ACM and the appropriate response actions that should be taken.

Any discussion or recommendations contained in this report represent our professional opinions. These opinions are based on currently available information and are arrived at in accordance with currently accepted industrial hygiene practices at this time and location. Other than this, no guarantee is implied or intended.

Recommendations contained in this report represent our professional opinions. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

This survey is not intended to be used as a scope-of work or a bidding document. Hence, should the aforementioned be the ultimate use of this report, the end user is responsible for field verifying all quantities.

This report was prepared by **Angstrom Analytical, Inc.**



Charles Tye, (AI395) Angstrom Analytical, Inc.

Date 6-20-13



Kevin Hagen, (AI2652) Angstrom Analytical, Inc.

Date 6-20-13

5.0 Bulk Analysis Results





**Angstrom Analytical &
Environmental Services**

Material Identification Table

5001 Cedar Lake Road Project #: On-site
St. Louis Park, MN 55416 Date: June 10, 2013
952-252-0405

Client: State of Minnesota RECS
Address: 309 Admin Bldg.
 50 Sherburne Ave. St Paul, MN 55155
Phone: 651-201-2550
Email: gordy.specht@state.mn.us

Project: Commercial
Address: 75 Rev. Dr. MLK Blvd
 St. Paul, MN
Contact: Gordy Spech
Phone: 651-201-2328

N = no damage
 D = moderate damage
 SD = significant damage
 SF = square feet
 LF = linear feet

ND = none detected
 NS = Not Sampled
 NAC = not accessible
 EA = each
 NT = Not Tested

PD = potential damage
 PSD = potential for significant damage
 NS = Not Suspect
 NT = Not Tested

Sample #	Location	Material	Description	Asbestos / %	Quantity / Unit	Condition	Damage Potential	Rating
1-3	B3	TSI pipe insulation	FG	ND	90-100/LF	N	PD	0
4-6	B5	TSI pipe insulation	gray fibrous	ND	2-3/LF	N	PD	0
7-9	w. corridor B12a	TSI pipe insulation	gray fibrous	CHR 15-20%	10-12/LF	N	PD	3
10-12	B6	TSI fitting residue	white fibrous	CHR 6-8%	4-6/EA	N	PD	3
13-15	B6	9x9 floor tile	beige	CHR 3-4%	1800-1900/SF	N	PD	1
16-18	B6	mastic for 13-15	black	CHR 2-3%	1800-1900/SF	N	PD	1
19-21	B8	TSI pipe insulation	gray fibrous	CHR 15-20%	2-3/LF	N	PD	3
22-24	B9	duct vibration damper	black	ND	1/EA	N	PD	0
25-27	B9	ducting debris	gray fibrous	ND	4-6/SF	N	PD	0
28-30	B10	ducting seam putty	tan pliable	ND	70-75/LF	N	PD	0
31-33	B10	TSI pipe insulation	FG	ND	550-600/LF	N	PD	0
34-36	B10	ducting insulation	FG	ND	250-300/SF	N	PD	0
37-39	B11	ceiling clay tile	red	ND	220-250/SF	N	PD	0
40-42	B13	TSI fittings	FG	ND	10-12/EA	N	PD	0
43-45	B17	TSI fittings	gray granular	ND	6-8/EA	N	PD	0
46-48	B19	TSI fittings	gray fibrous	ND	8-10/EA	N	PD	0
49-51	B20	TSI fittings	white granular	ND	8-10/EA	N	PD	0
52-54	B25	duct vibration damper	gray fibrous	CHR 90%	2/EA	N	PD	3
55-57	B25 bath chase	debris	gray fibrous	CHR 5-6%	25-30/SF	N	PD	3
58-60	B25 bath chase	TSI fittings	white granular	ND	3-4/EA	N	PD	0
61-63	B25	duct insulation covering	tan	ND	950-1100/SF	N	PD	0

CHR-Chrysothile
 AM-Amosite
 TREM-Tremolite
 CROC-Crocidolite
 ACT-Actinolite
 ANTH-Anthophyllite
 B-basement
 K-kitchen
 BR-bedroom
 BA-bath
 H-hall
 M-mech.
 DR-dining rm
 LR-living rm
 FR-family rm
 G-garage
 U-utility
 CL-closet
 ST-stairway



Angstrom Analytical & Environmental Services

Material Identification Table

5001 Cedar Lake Road Project #: On-site
St. Louis Park, MN 55416 Date: June 10, 2013
952-252-0405

Client: State of Minnesota RECS
 Address: 309 Admin Bldg.
 50 Sherburne Ave. St Paul, MN 55155
 Phone: 651-201-2550
 Fax: gordy.specht@state.mn.us

Project: Commercial
 Address: 75 Rev. Dr. MLK Blvd
 St. Paul, MN
 Contact: Gordy Spech
 Phone: 651-201-2328

N = no damage
 D = moderate damage
 SD = significant damage
 SF = square feet
 LF = linear feet

ND = none detected
 NS = Not Sampled
 NAC = not accessible
 EA = each
 NT = Not Tested

PD = potential damage
 PSD = potential for significant damage
 NS-Not Suspect
 NT-Not Tested

Sample #	Location	Material	Description	Asbestos / %	Quantity / Unit	Condition	Damage Potential	Rating
64-66	B25 bathroom	12x12 floor tile	beige	ND	75-80/SF	N	PD	0
67-69	B25 bathroom	mastic for 64-66	black	CHR 2-3%	75-80/SF	N	PD	1
70-72	B31	TSI large fittings	gray granular	ND	8-10/EA	N	PD	0
73-75	B31	ducting vibration damper	gray fibrous	CHR 90%	2/EA	N	PD	3
76-78	B32	12x12 floor tile	white terrazzo type	ND	250-300/SF	N	PD	0
79-81	B32	adhesive for 76-78	black	ND	250-300/SF	N	PD	0
82-84	B34	TSI fittings	tan	ND	6-8/EA	N	PD	0
85-87	B34	9x9 floor tile	black	CHR 3-4%	750-800/SF	N	PD	1
88-90	B34	mastic for 82-84	black	CHR 2-3%	750-800/SF	N	PD	1
91-93	B34 tunnel	flashing tar/tarpaper	black	CHR 2-3%	20-25/SF	N	PD	1
94-96	B43B corridor	TSI pipe insulation	white fibrous	CHR 10-12%	8-10/LF	N	PD	3
97-99	B42	ducting vibration damper	gray fibrous	CHR 90%	2/EA	N	PD	3
100-102	B47	TSI pipe insulation	FG	ND	10-15/LF	N	PD	0
103-105	B47	ducting insulation	FG	ND	250-300/SF	N	PD	0
106-108	B55	ducting vibration damper	gray fibrous	CHR 90%	2/EA	N	PD	3
109-111	B56B	interior duct insulation	white fibrous	ND	90-100/SF observed	N	PD	0
112-114	B49/B53	tile,mortar,grout	cementitious	ND	350-400/SF each	N	PD	0
115-117	B70	2x4 ceiling tile	white w/holes	ND	1000-1100/SF	N	PD	0
118-120	B70 R/R's	tile,mortar,grout	cementitious	ND	350-400/SF each	N	PD	0
121-123	B71A	mastic residue	black	CHR 2-3%	200-250/SF	N	PD	1
124-126	B59B	TSI pipe insulation	FG	ND	70-80/LF	N	PD	0

CHR-Chrysotile
 AM-Amosite

ACT-Actinolite
 ANTH-Anthophyllite
 B-basement
 K-kitchen
 BR-bedroom
 BA-bath
 M-mech.
 LR-living rm
 DR-dining rm
 FR-family rm
 G-garage
 U-utility
 ST-stairway
 C-corridor
 CL-closet



**Angstrom Analytical &
Environmental Services**

Material Identification Table

5001 Cedar Lake Road Project #: On-site
St. Louis Park, MN 55416 Date: June 10, 2013
952-252-0405

Client: State of Minnesota RECS
Address: 309 Admin Bldg.
 50 Sherburne Ave. St Paul, MN 55155
Phone: 651-201-2550
Fax: gordy.specht@state.mn.us

Project: Commercial N = no damage ND = none detected PD = potential damage
Address: 75 Rev. Dr. MLK Blvd D = moderate damage NS = Not Sampled PSD = potential for
 St. Paul, MN SD = significant damage NAC = not accessible significant damage
Contact: Gordy Spech SF = square feet EA = each NS-Not Suspect
Phone: 651-201-2328 LF = linear feet NT-Not Tested

Sample #	Location	Material	Description	Asbestos / %	Quantity / Unit	Condition	Damage Potential	Rating
190-192	SE attic	wire insulation	black fibrous	ND	throughout	N	PD	0
193-195	SE attic	fireproofing	gray fibrous	ND	throughout	N	PD	0
196-198	SE attic	plaster	cementitious	ND	throughout	N	PD	0
199-201	SE attic	TSI pipe covering	FG	ND	throughout	N	PD	0
202-204	SE attic	ducting insulation	gray fibrous	CHR 10-12%	900-1000/SF	N	PD	3
205-207	SE attic	TSI pipe covering	white fibrous	CHR 6-8%	550-600/LF	N	PD	3
208-210	SE attic	duct insul. Floor debris	gray fibrous	CHR 10-12%	1000-1100/SF	N	PD	3
211-213	NE attic	TSI pipe covering	white fibrous	CHR 6-8%	450-500/LF	N	PD	3
214-216	NE attic	TSI pipe covering	FG	ND	throughout	N	PD	0
217-219	NE attic	duct insul. Floor debris	gray fibrous	CHR 10-12%	throughout	N	PD	3
220-222	NE attic	sky lite glazing debris	gray hard	ND	20-25/SF	N	PD	0
223-225	NE attic	caulking	clear pliable	ND	150-200/LF	N	PD	0
226-228	NE attic	old sky lite area plaster	cementitious	ND	350-400/SF	N	PD	0
229-231	NE attic	wire insulation	black fibrous	ND	throughout	N	PD	0
232-234	Throughout	large sky lite glazing	gray hard	CHR 1-2%	8-10/EA	N	PD	1
235-237	NE attic	TSI floor debris	white fibrous	CHR 10-15%	throughout	N	PD	3
238-240	NE attic	ducting insulation	gray fibrous	CHR 10-12%	900-1000/SF	N	PD	3
241-243	NW attic	ducting insulation	FG	ND	throughout	N	PD	0
244-246	NW attic	TSI pipe covering	FG	ND	throughout	N	PD	0
247-249	NW attic	sheetrock,joint,tape	white granular	ND	throughout	N	PD	0
250-252	NW attic	plaster	cementitious	ND	throughout	N	PD	0

CHR-Chrysotile
 AM-Amosite
 TREM-Tremolite
 CROC-Crocidolite
 ACT-Actinolite
 ANTH-Anthophyllite
 B-basement
 K-kitchen
 BR-bedroom
 BA-bath
 M-mech.
 LR-living rm
 DR-dining rm
 H-hall
 FR-family rm
 G-garage
 U-utility
 C-corridor
 CL-closet
 ST-stairway



**Angstrom Analytical &
Environmental Services**

Material Identification Table

5001 Cedar Lake Road Project #: On-site
St. Louis Park, MN 55416 Date: June 10, 2013
952-252-0405

Client: State of Minnesota RECS
Address: 309 Admin Bldg.
 50 Sherburne Ave. St Paul, MN 55155
Phone: 651-201-2550
Fax: gordy.specht@state.mn.us

Project: Commercial ND = none detected PD = potential damage
Address: 75 Rev. Dr. MLK Blvd D = moderate damage NS = Not Sampled PSD = potential for
 St. Paul, MN SD = significant damage NAC = not accessible significant damage
Contact: Gordy Spech EA = each NS-Not Suspect
Phone: 651-201-2328 LF = linear feet NT-Not Tested

Sample #	Location	Material	Description	Asbestos / %	Quantity / Unit	Condition	Damage Potential	Rating
127-129	B69	2x4 ceiling tile	fissures/holes	ND	750-800/SF	N	PD	0
130-132	B4	2x4 ceiling tile	white smooth	ND	550-600/SF	N	PD	0
133-135	B4	TSI pipe covering	FG	ND	100-110/LF	N	PD	0
136-138	B4	cork flooring	tan	ND	750-800/SF	N	PD	0
139-141	B45A corridor	TSI fittings	gray fibrous	ND	15-20/EA	N	PD	0
142-144	Sup. Court dome	fireproofing	gray fibrous	ND	1800-2000/SF	N	PD	0
145-147	Sup. Court dome	fireproofing	white fibrous	ND	850-900/SF	N	PD	0
148-150	Sup. Court dome	plaster	cementitious	ND	throughout	N	PD	0
151-153	Sup. Court dome	window glaze debris	brown hard	ND	3-5/SF	N	PD	0
154-156	311 crows nest	fireproofing	gray fibrous	ND	6-10/SF	N	PD	0
157-159	senate dome	ceiling plaster	cementitious	ND	3500-4000/SF	N	PD	0
160-162	senate dome	fireproofing on ducting	gray fibrous	ND	1200-1500/SF	N	PD	0
163-165	senate dome	foam on ducting	yellow	ND	200-250/SF	N	PD	0
166-168	senate dome	TSI pipe covering	FG	ND	450-500/LF	N	PD	0
169-171	senate dome	sheetrock, joint, tape	white granular	ND	750-800/SF	N	PD	0
172-174	SW attic	TSI pipe covering	FG	ND	1800-2000/LF	N	PD	0
175-177	SW attic	fireproofing	gray fibrous	ND	4500-5000/SF	N	PD	0
178-180	SW attic	plaster	cementitious	ND	throughout	N	PD	0
181-183	SW attic	sheetrock, joint, tape	white granular	ND	throughout	N	PD	0
184-186	SW attic	ducting insulation	yellow FG	ND	throughout	N	PD	0
187-189	SE attic	ducting insulation	brown fibrous	ND	throughout	N	PD	0

CHR-Chrysoile ACT-Actinolite B-baseament BR-bedroom H-hall DR-dining rm FR-family rm C-corridor CL-closet
 AM-Amosite ANTH-Anthophyllite K-kitchen BA-bath M-mech. LR-living rm G-garage U-utility ST-stairway



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Environmental Services**

Material Identification Table

5001 Cedar Lake Road Project #: On-site
St. Louis Park, MN 55416 Date: June 10, 2013
952-252-0405

Client: State of Minnesota RECS Project: Commercial ND = none detected PD = potential damage
 Address: 309 Admin Bldg. Address: 75 Rev. Dr. MLK Blvd D = moderate damage NS = Not Sampled PSD = potential for
 50 Sherburne Ave. St Paul, MN 55155 St. Paul, MN SD = significant damage NAC = not accessible significant damage
 Phone: 651-201-2550 Contact: Gordy Spech SF = square feet EA = each NS-Not Suspect
 Email: gordy.specht@state.mn.us Phone: 651-201-2328 LF = linear feet NT-Not Tested

Sample #	Location	Material	Description	Asbestos / %	Quantity / Unit	Condition	Damage Potential	Rating
253-255	NW attic	floor debris	white/gray granular	ND	throughout	N	PD	0
256-258	NW attic	caulking	brown pliable	ND	250-300/LF	N	PD	0
259-261	Main roof	roofing under tiles	black	CHR 3-4%	throughout	N	PD	1

CHR-Chrysotile	TREM-Tremolite	ACT-Actinolite	B-basement	BR-bedroom	H-hall	DR-dining rm	FR-family rm	C-corridor	CL-closet
AM-Amosite	CROC-Crocidolite	ANTH-Anthophyllite	K-kitchen	BA-bath	M-mech.	LR-living rm	G-garage	U-utility	ST-stairway

6.0 Appendix 1
Analyst Worksheets





**Angstrom Analytical &
Environmental Services**

Asbestos Bulk Sample Chain of Custody

5001 Cedar Lake Road Project # On-site
St. Louis Park, MN 55416 Received: 6/10/2013 Analyzed: 6/14/2013
952-252-0405

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Phone: 651-201-2550
Fax: gordy.specht@state.mn.us

Project: Commercial
Address: 75 Rev. Dr. MLK Blvd
 St. Paul, MN
Contact: Gordy Spech
Phone: 651-201-2328

Sample Location	Material	Description	Asbestos
1	B3	TSI pipe insulation	FG ND
2	B3	TSI pipe insulation	FG ND
3	B3	TSI pipe insulation	FG ND
4	B5	TSI pipe insulation	gray fibrous CHR 10-12%
5	B5	TSI pipe insulation	gray fibrous CHR 10-12%
6	B5	TSI pipe insulation	gray fibrous CHR 10-12%
7	w. corridor B12a	TSI pipe insulation	gray fibrous CHR 10-12%
8	w. corridor B12a	TSI pipe insulation	gray fibrous CHR 10-12%
9	w. corridor B12a	TSI pipe insulation	gray fibrous CHR 10-12%
10	B6	TSI fitting residue	white fibrous CHR 6-8%
11	B6	TSI fitting residue	white fibrous CHR 6-8%
12	B6	TSI fitting residue	white fibrous CHR 6-8%
13	B6	9x9 floor tile	beige CHR 3-4%
14	B6	9x9 floor tile	beige CHR 3-4%
15	B6	9x9 floor tile	beige CHR 3-4%
16	B6	mastic for 13-15	black CHR 2-3%
17	B6	mastic for 13-15	black CHR 2-3%
18	B6	mastic for 13-15	black CHR 2-3%
19	B8	TSI pipe insulation	gray fibrous CHR 10-12%
20	B8	TSI pipe insulation	gray fibrous CHR 10-12%
21	B8	TSI pipe insulation	gray fibrous CHR 10-12%

CHR-Chrysotile	ACT-Actinolite	NS-Not Suspect	ND-None Detected
AM-Amosite	ANTH-Anthophyllite	NT-Not Tested	
	TREM-Tremolite		
	CROC-Crocidolite		



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Contact: Gordy Spech
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Sample Location	Asbestos
22 B9	duct vibration damper black ND
23 B9	duct vibration damper black ND
24 B9	duct vibration damper black ND
25 B9	ducting debris gray fibrous ND
26 B9	ducting debris gray fibrous ND
27 B9	ducting debris gray fibrous ND
28 B10	ducting seam putty tan pliable ND
29 B10	ducting seam putty tan pliable ND
30 B10	ducting seam putty tan pliable ND
31 B10	TSI pipe insulation FG ND
32 B10	TSI pipe insulation FG ND
33 B10	TSI pipe insulation FG ND
34 B10	ducting insulation FG ND
35 B10	ducting insulation FG ND
36 B10	ducting insulation FG ND
37 B11	ceiling clay tile red ND
38 B11	ceiling clay tile red ND
39 B11	ceiling clay tile red ND
40 B13	TSI fittings FG ND
41 B13	TSI fittings FG ND
42 B13	TSI fittings FG ND

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ACT-Actinolite
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Phone: 651-201-2550 Contact: Gordy Spech
Fax: gordy.specht@state.mn.us Phone: 651-201-2328

Sample #	Location	Material	Description	Asbestos
43	B17	TSI fittings	gray granular	ND
44	B17	TSI fittings	gray granular	ND
45	B17	TSI fittings	gray granular	ND
46	B19	TSI fittings	gray fibrous	ND
47	B19	TSI fittings	gray fibrous	ND
48	B19	TSI fittings	gray fibrous	ND
49	B20	TSI fittings	white granular	ND
50	B20	duct vibration damper	white granular	ND
51	B20	TSI fittings	white granular	ND
52	B25	duct vibration damper	gray fibrous	CHR 90%
53	B25	duct vibration damper	gray fibrous	CHR 90%
54	B25	duct vibration damper	gray fibrous	CHR 90%
55	B25 bath chase	debris	gray fibrous	CHR 5-6%
56	B25 bath chase	debris	gray fibrous	CHR 5-6%
57	B25 bath chase	debris	gray fibrous	CHR 5-6%
58	B25 bath chase	TSI fittings	white granular	ND
59	B25 bath chase	TSI fittings	tan	ND
60	B25 bath chase	TSI fittings	white granular	ND
61	B25	duct insulation covering	tan	ND
62	B25	duct insulation covering	tan	ND
63	B25	duct insulation covering	tan	ND

CHR-Chrysotile TREM-Tremolite ACT-Actinolite NS-Not Suspect ND-None Detected
AM-Amosite CROC-Crocidolite ANTH-Anthophyllite NT-Not Tested



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Sample ID	Location	Material	Color	Asbestos Type
64	B25 bathroom	12x12 floor tile	beige	ND
65	B25 bathroom	12x12 floor tile	beige	ND
66	B25 bathroom	12x12 floor tile	beige	ND
67	B25 bathroom	mastic for 64-66	black	CHR 2-3%
68	B25 bathroom	mastic for 64-66	black	CHR 2-3%
69	B25 bathroom	mastic for 64-66	black	CHR 2-3%
70	B31	TSI large fittings	gray granular	ND
71	B31	TSI large fittings	gray granular	ND
72	B31	TSI large fittings	gray granular	ND
73	B31	ducting vibration damper	gray fibrous	CHR 90%
74	B31	ducting vibration damper	gray fibrous	CHR 90%
75	B31	ducting vibration damper	gray fibrous	CHR 90%
76	B32	12x12 floor tile	white terrazzo type	ND
77	B32	12x12 floor tile	white terrazzo type	ND
78	B32	12x12 floor tile	white terrazzo type	ND
79	B32	adhesive for 76-78	black	ND
80	B32	adhesive for 76-78	black	ND
81	B32	adhesive for 76-78	black	ND
82	B34	TSI fittings	tan	ND
83	B34	TSI fittings	tan	ND
84	B34	TSI fittings	tan	ND

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Sample #	Location	Material	Description	Asbestos
85	B34	9x9 floor tile	black	CHR 3-4%
86	B34	9x9 floor tile	black	CHR 3-4%
87	B34	9x9 floor tile	black	CHR 3-4%
88	B34	mastic for 82-84	black	CHR 2-3%
89	B34	mastic for 82-84	black	CHR 2-3%
90	B34	mastic for 82-84	black	CHR 2-3%
91	B34 tunnel	flashing tar/tarpaper	black	CHR 2-3%
92	B34 tunnel	flashing tar/tarpaper	black	CHR 2-3%
93	B34 tunnel	flashing tar/tarpaper	black	CHR 2-3%
94	B43B corridor	TSI pipe insulation	white fibrous	CHR 6-8%
95	B43B corridor	TSI pipe insulation	white fibrous	CHR 6-8%
96	B43B corridor	TSI pipe insulation	white fibrous	CHR 6-8%
97	B42	ducting vibration damper	gray fibrous	CHR 90%
98	B42	ducting vibration damper	gray fibrous	CHR 90%
99	B42	ducting vibration damper	gray fibrous	CHR 90%
100	B47	TSI pipe insulation	FG	ND
101	B47	TSI pipe insulation	FG	ND
102	B47	TSI pipe insulation	FG	ND
103	B47	ducting insulation	FG	ND
104	B47	ducting insulation	FG	ND
105	B47	ducting insulation	FG	ND

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Sample	Location	Material	Description	Analysis
106	B55	ducting vibration damper	gray fibrous	CHR 90%
107	B55	ducting vibration damper	gray fibrous	CHR 90%
108	B55	ducting vibration damper	gray fibrous	CHR 90%
109	B56B	interior duct insulation	white fibrous	ND
110	B56B	interior duct insulation	white fibrous	ND
111	B56B	interior duct insulation	white fibrous	ND
112	B49/B53	tile,mortar,grout	cementitious	ND
113	B49/B53	tile,mortar,grout	cementitious	ND
114	B49/B53	tile,mortar,grout	cementitious	ND
115	B70	2x4 ceiling tile	white w/holes	ND
116	B70	2x4 ceiling tile	white w/holes	ND
117	B70	2x4 ceiling tile	white w/holes	ND
118	B70 R/R's	tile,mortar,grout	cementitious	ND
119	B70 R/R's	tile,mortar,grout	cementitious	ND
120	B70 R/R's	tile,mortar,grout	cementitious	ND
121	B71A	mastic residue	black	CHR 2-3%
122	B71A	mastic residue	black	CHR 2-3%
123	B71A	mastic residue	black	CHR 2-3%
124	B59B	TSI pipe insulation	FG	ND
125	B59B	TSI pipe insulation	FG	ND
126	B59B	TSI pipe insulation	FG	ND

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127	B69	2x4 ceiling tile	fissures/holes	ND
128	B69	2x4 ceiling tile	fissures/holes	ND
129	B69	2x4 ceiling tile	fissures/holes	ND
130	B4	2x4 ceiling tile	white smooth	ND
131	B4	2x4 ceiling tile	white smooth	ND
132	B4	2x4 ceiling tile	white smooth	ND
133	B4	TSI pipe covering	FG	ND
134	B4	TSI pipe covering	FG	ND
135	B4	TSI pipe covering	FG	ND
136	B4	cork flooring	tan	ND
137	B4	cork flooring	tan	ND
138	B4	cork flooring	tan	ND
139	B45A	corridor	gray fibrous	ND
140	B45A	corridor	gray fibrous	ND
141	B45A	corridor	gray fibrous	ND
142	Sup. Court dome	fireproofing	gray fibrous	ND
143	Sup. Court dome	fireproofing	gray fibrous	ND
144	Sup. Court dome	fireproofing	gray fibrous	ND
145	Sup. Court dome	fireproofing	white fibrous	ND
146	Sup. Court dome	fireproofing	white fibrous	ND
147	Sup. Court dome	fireproofing	white fibrous	ND

CHR-Chrysotile TREM-Tremolite ACT-Actinolite NS-Not Suspect ND-None Detected
AM-Amosite CROC-Crocidolite ANTH-Anthophyllite NT-Not Tested



Angstrom Analytical & Environmental Services

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Sample Location Material Description

148	Sup. Court dome	plaster	cementitious	ND
149	Sup. Court dome	plaster	cementitious	ND
150	Sup. Court dome	plaster	cementitious	ND
151	Sup. Court dome	window glaze debris	brown hard	ND
152	Sup. Court dome	window glaze debris	brown hard	ND
153	Sup. Court dome	window glaze debris	brown hard	ND
154	311 crows nest	fireproofing	gray fibrous	ND
155	311 crows nest	fireproofing	gray fibrous	ND
156	311 crows nest	fireproofing	gray fibrous	ND
157	senate dome	ceiling plaster	cementitious	ND
158	senate dome	ceiling plaster	cementitious	ND
159	senate dome	ceiling plaster	cementitious	ND
160	senate dome	fireproofing on ducting	gray fibrous	ND
161	senate dome	fireproofing on ducting	gray fibrous	ND
162	senate dome	fireproofing on ducting	gray fibrous	ND
163	senate dome	foam on ducting	yellow	ND
164	senate dome	foam on ducting	yellow	ND
165	senate dome	foam on ducting	yellow	ND
166	senate dome	TSI pipe covering	FG	ND
167	senate dome	TSI pipe covering	FG	ND
168	senate dome	TSI pipe covering	FG	ND

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Sample ID	Location	Description	Asbestos Type	Result
169	senate dome	sheetrock,joint,tape	white granular	ND
170	senate dome	sheetrock,joint,tape	white granular	ND
171	senate dome	sheetrock,joint,tape	white granular	ND
172	SW attic	TSI pipe covering	FG	ND
173	SW attic	TSI pipe covering	FG	ND
174	SW attic	TSI pipe covering	FG	ND
175	SW attic	fireproofing	gray fibrous	ND
176	SW attic	fireproofing	gray fibrous	ND
177	SW attic	fireproofing	gray fibrous	ND
178	SW attic	plaster	cementitious	ND
179	SW attic	plaster	cementitious	ND
180	SW attic	plaster	cementitious	ND
181	SW attic	sheetrock,joint,tape	white granular	ND
182	SW attic	sheetrock,joint,tape	white granular	ND
183	SW attic	sheetrock,joint,tape	white granular	ND
184	SW attic	ducting insulation	yellow FG	ND
185	SW attic	ducting insulation	yellow FG	ND
186	SW attic	ducting insulation	yellow FG	ND
187	SE attic	ducting insulation	brown fibrous	ND
188	SE attic	ducting insulation	brown fibrous	ND
189	SE attic	ducting insulation	brown fibrous	ND

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190	SE attic	wire insulation	black fibrous	ND
191	SE attic	wire insulation	black fibrous	ND
192	SE attic	wire insulation	black fibrous	ND
193	SE attic	fireproofing	gray fibrous	ND
194	SE attic	fireproofing	gray fibrous	ND
195	SE attic	fireproofing	gray fibrous	ND
196	SE attic	plaster	cementitious	ND
197	SE attic	plaster	cementitious	ND
198	SE attic	plaster	cementitious	ND
199	SE attic	TSI pipe covering	FG	ND
200	SE attic	TSI pipe covering	FG	ND
201	SE attic	TSI pipe covering	FG	ND
202	SE attic	ducting insulation	gray fibrous	CHR 10-12%
203	SE attic	ducting insulation	gray fibrous	CHR 10-12%
204	SE attic	ducting insulation	0	CHR 10-12%
205	SE attic	TSI pipe covering	white fibrous	CHR 6-8%
206	SE attic	TSI pipe covering	white fibrous	CHR 6-8%
207	SE attic	TSI pipe covering	white fibrous	CHR 6-8%
208	SE attic	duct insul. Floor debris	gray fibrous	CHR 10-12%
209	SE attic	duct insul. Floor debris	gray fibrous	CHR 10-12%
210	SE attic	duct insul. Floor debris	gray fibrous	CHR 10-12%

CHR-Chrysotile
AM-Amosite

TREM-Tremolite
CROC-Crocidolite

ACT-Actinolite
ANTH-Anthophyllite

NS-Not Suspect
NT-Not Tested

ND-None Detected



Angstrom Analytical & Environmental Services

Asbestos Bulk Sample Chain of Custody

5001 Cedar Lake Road Project # On-site
 St. Louis Park, MN 55416 Received: 6/10/2013 Analyzed: 6/14/2013
 952-252-0405

Client: State of Minnesota RECS
 Address: 309 Admin Bldg.
 50 Sherburne Ave. St Paul, MN 55155
 Phone: 651-201-2550
 Fax: gordy.specht@state.mn.us

Project: Commercial
 Address: 75 Rev. Dr. MLK Blvd
 St. Paul, MN
 Contact: Gordy Spech
 Phone: 651-201-2328

Sample Location Name / Description / Asbestos /

211	NE attic	TSI pipe covering	white fibrous	CHR 6-8%
212	NE attic	TSI pipe covering	white fibrous	CHR 6-8%
213	NE attic	TSI pipe covering	white fibrous	CHR 6-8%
214	NE attic	TSI pipe covering	FG	ND
215	NE attic	TSI pipe covering	FG	ND
216	NE attic	TSI pipe covering	FG	ND
217	NE attic	duct insul. Floor debris	gray fibrous	CHR 10-12%
218	NE attic	duct insul. Floor debris	gray fibrous	CHR 10-12%
219	NE attic	duct insul. Floor debris	gray fibrous	CHR 10-12%
220	NE attic	sky lite glazing debris	gray hard	ND
221	NE attic	sky lite glazing debris	gray hard	ND
222	NE attic	sky lite glazing debris	gray hard	ND
223	NE attic	caulking	clear pliable	ND
224	NE attic	caulking	clear pliable	ND
225	NE attic	caulking	clear pliable	ND
226	NE attic	old sky lite area plaster	cementitious	ND
227	NE attic	old sky lite area plaster	cementitious	ND
228	NE attic	old sky lite area plaster	cementitious	ND
229	NE attic	wire insulation	black fibrous	ND
230	NE attic	wire insulation	black fibrous	ND
231	NE attic	wire insulation	black fibrous	ND

CHR-Chrysotile
 AM-Amosite
 TREM-Tremolite
 CROC-Crocidolite
 ACT-Actinolite
 ANTH-Anthophyllite
 NS-Not Suspect
 NT-Not Tested
 ND-None Detected



**Angstrom Analytical &
Environmental Services**

Asbestos Bulk Sample Chain of Custody

5001 Cedar Lake Road Project # On-site
St. Louis Park, MN 55416 Received: 6/10/2013 Analyzed: 6/14/2013
952-252-0405

Client: State of Minnesota RECS Project: Commercial
Address: 309 Admin Bldg. Address: 75 Rev. Dr. MLK Blvd
50 Sherburne Ave. St Paul, MN 55155 St. Paul, MN
Phone: 651-201-2550 Contact: Gordy Spech
Fax: gordy.specht@state.mn.us Phone: 651-201-2328

Sample ID **Matrix** **Description** **Asbestos**

232	Throughout	large sky lite glazing	gray hard	CHR 1-2%
233	Throughout	large sky lite glazing	gray hard	CHR 1-2%
234	Throughout	large sky lite glazing	gray hard	CHR 1-2%
235	NE attic	TSI floor debris	white fibrous	CHR 10-15%
236	NE attic	TSI floor debris	white fibrous	CHR 10-15%
237	NE attic	TSI floor debris	white fibrous	CHR 10-15%
238	NE attic	ducting insulation	gray fibrous	ND
239	NE attic	ducting insulation	gray fibrous	ND
240	NE attic	ducting insulation	gray fibrous	ND
241	NW attic	ducting insulation	FG	ND
242	NW attic	ducting insulation	FG	ND
243	NW attic	ducting insulation	FG	ND
244	NW attic	TSI pipe covering	FG	ND
245	NW attic	TSI pipe covering	FG	ND
246	NW attic	TSI pipe covering	FG	ND
247	NW attic	sheetrock,joint,tape	white granular	ND
248	NW attic	sheetrock,joint,tape	white granular	ND
249	NW attic	sheetrock,joint,tape	white granular	ND
250	NW attic	plaster	cementitious	ND
251	NW attic	plaster	cementitious	ND
252	NW attic	plaster	cementitious	ND

CHR-Chrysotile
AM-Amosite
TREM-Tremolite
CROC-Crocidolite
ACT-Actinolite
ANTH-Anthophyllite
NS-Not Suspect.
NT-Not Tested
ND-None Detected



**Angstrom Analytical &
Environmental Services**

Asbestos Bulk Sample Chain of Custody

5001 Cedar Lake Road Project # On-site
St. Louis Park, MN 55416 Received: 6/10/2013 Analyzed: 6/14/2013
952-252-0405

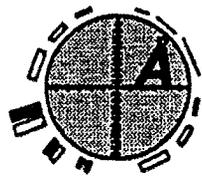
Client: State of Minnesota RECS Project: Commercial
Address: 309 Admin Bldg. Address: 75 Rev. Dr. MLK Blvd
50 Sherburne Ave. St Paul, MN 55155 St. Paul, MN
Phone: 651-201-2550 Contact: Gordy Spech
Fax: gordy.specht@state.mn.us Phone: 651-201-2328



253	NW attic	floor debris	white/gray granular	ND
254	NW attic	floor debris	white/gray granular	ND
255	NW attic	floor debris	white/gray granular	ND
256	NW attic	caulking	brown pliable	ND
257	NW attic	caulking	brown pliable	ND
258	NW attic	caulking	brown pliable	ND
259	Main roof	roofing under tiles	black	CHR 3-4%
260	Main roof	roofing under tiles	black	CHR 3-4%
261	Main roof	roofing under tiles	black	CHR 3-4%

CHR-Chrysotile	TREM-Tremolite	ACT-Actinolite	NS-Not Suspect	ND-None Detected
AM-Amosite	CROC-Crocidolite	ANTH-Anthophyllite	NT-Not Tested	

7.0 Appendix 2
Lead in Paint Testing



**Angstrom Analytical &
Environmental Services**



Angstrom Analytical &
Environmental Services

5001 Cedar Lake Road * St. Louis Park, MN 55416
952-252-0405 952-252-0407 fax

June 20th, 2013

Real Estate and Construction Services
309 Administration Building
50 Sherburne Ave.
St. Paul, MN 55155

Lead-Based Paint testing
State Capitol

This report provides the results of lead-based paint testing conducted in May & June, 2013. The property the state Capitol and is located at 75 Rev. Dr. Martin Luther King Blvd. The inspection was conducted by Kevin Hagen (MN Lic. No. LR2036). Angstrom Analytical, Inc. was authorized by you to conduct a lead-based paint inspection using a field portable x-ray fluorescence (XRF) analyzer. The purpose of this inspection was to determine if lead based paint exist at the above referenced property.

The property consists of a 3 level building with a basement terrace level. For sample location purposes, side A of the dwelling is the side facing MLK Blvd. and are lettered clockwise around the building. The exteriors consist of a granite block. The windows are uniform in style. On the exterior the windows were of metal with some wood window/doors. Building foundation is concrete, granite and brick.

Results

Results of XRF analysis are summarized in the following report (see Appendix A), which utilize Department of Housing and Urban Development (HUD) thresholds (see remarks) for lead-based paint. Painted surfaces are rated on condition as Intact, Fair or Poor. Intact surfaces are free of visual damage/deterioration. Fair or poor rating indicates the paint is damaged and is deteriorated. Any condition listed as fair or poor is a deteriorated condition. The inspection was conducted using HUD "Guidelines for the Evaluation and Control of Lead Based Paint in Housing" using the October 1997 revised Chapter 7 protocols. The sampling criteria used are found in the HUD Standards 24 CFR Part 35 et al. Also included is an evaluation for lead dust hazards and exposed (bare) soil hazards. Results of the dust wipe analysis are summarized using US Environmental Protection Agency USEPA / HUD and Minnesota Dept. of Health (MDH) thresholds for lead in dust / soil (see remarks).

Methodology

Testing was accomplished using a Niton XL 300 series. This instrument is a portable, non-destructive, in-site testing and measurement instrument that renders an average precision of +/-

0.3 milligrams per square centimeter (mg/cm^2) depending upon the length of time the sample point is tested. The XRF uses a source of Cd-109. Specific precision limits are established by the National Institute of Standards and Technology (NIST). The XRF instrument was checked using the NIST Standard Reference for calibration checks. The instrument's operational mode is standard paint mode. This instrument is operated by Minnesota Department of Health licensed lead inspectors. Where conclusive results were not obtained by XRF testing, confirmatory paint chip samples were or can be collected for laboratory analysis. The XRF instrument was calibrated, using a known lead paint film at the beginning, every four hours and at the end of each day. All calibrations were within known variation standards established by the Performance Characteristic Sheet.

Remarks

The Lead-Based Paint Poisoning Prevention Act (LBPPA) has established an action level for public housing. Under the statute, lead-based paint hazards equal to or greater than $1.0 \text{ mg}/\text{cm}^2$ or 0.5 percent by weight must be abated. It is important to keep in mind that the testing results of a component also apply to any similar component not tested. For example, if a white, painted baseboard tests positive then the entire white painted baseboard in that room is also considered positive.

The USEPA, HUD and the State of Minnesota have established action levels for lead in dust. Results exceeding these standards are considered a lead hazard. The USEPA/HUD/MN action levels are summarized as follows:

Floors	$40 \mu\text{g}/\text{ft}^2$
Window Sill	$250 \mu\text{g}/\text{ft}^2$
Window Wells	$400 \mu\text{g}/\text{ft}^2$

The Minnesota Department of Health (MDH) has established an action level for lead in soil that is stricter than federal standards. Bare soils exceeding $100 \text{ mg}/\text{Kg}$ (ppm) are considered hazardous and need to be addressed. See appendix b for analytical results.

All sampling was conducted by representatives of Angstrom Analytical, Inc. Standards for private or commercial housing may vary by locality.

Results

The results of the portable x-ray fluorescence (XRF) analysis of the representative building components are listed in appendix A. All paint testing was conducted using the XRF unit. The XRF was calibrated and the beginning of each days inspection, during the inspection and at the end of each days inspection. Calibration was conducted on known lead paint films provided by the manufacturer. The results of the calibrations are within acceptable limits of the Performance Characteristic Sheet for the instrument. XRF results are expressed in units of milligrams per square centimeter (mg/cm^2) (see Remarks for action levels). XRF results are classified as

positive or negative. A component that tests positive indicates lead is present at or above the standard (see Remarks).

Discussion

Painted building components were assessed visually for condition. The building's painted surfaces are generally in intact condition. Paint is rated on its condition as intact, fair and poor. Intact means good condition, Fair means less than two square feet of damage to a large interior surface or less than 10 square feet to a large exterior surface or less than 10% damage to a small surface area. Poor condition means greater than 2 square feet of damage on large interior surface, more than 10 square feet on a large exterior surface or more than 10% damage to a small surface area. Painted surfaces listed as in fair or poor condition are considered deteriorated.

Based on our inspection findings, the following surfaces tested positive for lead based paint.

Attic area

1. The original black painted metal large ducting straps throughout the attic area.
2. The original black painted metal beams throughout the attic area.
3. The original red painted metal beams throughout the attic area.
4. The white painted metal exterior of the North entrance to the roof.

Basement area

1. The orange painted concrete walls in the East tunnel area.
2. The beige painted concrete walls in B71a.
3. The white painted concrete walls in B69.
4. The white painted concrete walls in B69b.
5. The beige painted plaster walls in B63.
6. The white painted block walls in B62.
7. The brown painted metal door in B61.
8. The yellow painted concrete walls in B45.
9. The beige painted granite walls/columns in B38.
10. The blue painted granite walls/columns in B37.
11. The blue painted concrete walls in B37.
12. The white painted metal columns in B34.
13. The beige painted column base in B34.
14. The black painted concrete ceiling in B32.
15. The multi colored painted print in in B27.
16. The white painted plaster ceiling in B27.
17. The red/gold painted plaster walls in B27.
18. The brown painted wood door components in B27 bathroom.
19. The white painted plaster ceiling in B22.
20. The gray painted wood walls in B22.
21. The green painted plaster walls in B20.
22. The yellow painted brick walls in the café corridor.
23. The tan painted granite walls in the café corridor.
24. The white painted brick walls in B12.
25. The beige painted block ceiling in b13.
26. The beige painted granite walls in B10.

27. The beige painted granite foundation walls in the main corridor.
28. The white painted granite foundation walls in the main corridor.
29. The white painted granite foundation walls in B10.
30. The white painted granite foundation walls in B9.
31. The green painted granite foundation walls in B9.
32. The white painted granite walls in B46d.
33. The brown painted granite walls in B46d.
34. The beige painted granite walls in B58.
35. The yellow painted concrete walls throughout the main corridor.
36. The white painted ceiling plaster in the west end of the main corridor.
37. The yellow painted plaster walls in the west end of the main corridor.
38. The black painted metal stair components throughout the main corridor.
39. The black painted wood door frames throughout the main corridor.
40. The yellow painted brick walls throughout the main corridor.
41. The beige painted granite walls throughout the main corridor.
42. The tan painted granite walls throughout the main corridor.
43. The yellow painted plaster walls throughout the main corridor.

Please refer to the Lead Based Paint Testing Report for specific locations and conditions. Only surfaces in fair to poor condition need to be stabilized. Intact lead based paint surfaces are not considered a hazard. However they do need to be maintained in an intact condition and periodically monitored. Specific surfaces not identified in this testing report should be treated as lead based unless testing proves otherwise.

Recommendations

The presence of lead in paint does not necessarily constitute a lead hazard. It is when lead based paints become damaged or deteriorated they can create a hazard. Lead based paint hazards need to be addressed as soon as possible. Unless replacement/enclosure work is completed in a timely manner, interim controls should to be utilized to prevent further paint deterioration. Dwellings occupied by children under 7 years of age are to be given priority in for lead remediation work.

After stabilization/cleaning work has been completed clearance dust sampling should be performed. Property maintenance practices will have to be performed in a manner as to not to disturb surfaces with lead based paint. Once stabilization work has been completed and re-tested, normal re-evaluation for interim control measures should be performed every two years, providing replacement has not been completed. If lead base paint remains in the property, after renovation/stabilization work is completed, then it should be re-evaluated every two years.

Angstrom Analytical recommends that lead related work be performed by trained individuals and follow all applicable regulations regarding lead and lead hazards. If you are using federal funding you are required to use qualified firms, knowledgeable in hazards associated with lead and are certified / licensed to perform lead remediation services. A copy of this report must be

provided to purchasers/lessees on this property under Federal law, 24 CFR part 35 and 40 CFR part 745.

If you have any questions or need further assistance, please call us at the number above.

Sincerely,

A handwritten signature in black ink, appearing to be 'KH' with a stylized flourish extending to the right.

Kevin Hagen
Angstrom Analytical, Inc.

89	5/20/2013	18:41	COLUMN	CONCRETE	A	INTACT	WHITE	capitol	BASEMENT	B70	Negative	< LOD	0.04
90	5/20/2013	18:42	DOOR frame	METAL	D	INTACT	BEIGE	capitol	BASEMENT	B70	Negative	< LOD	0.4
91	5/20/2013	18:43	DOOR frame	METAL	C	INTACT	BROWN	capitol	BASEMENT	B71a	Negative	< LOD	0.14
92	5/20/2013	18:43	WALL	CONCRETE	A	INTACT	YELLOW	capitol	BASEMENT	B71a	Negative	< LOD	0.03
93	5/20/2013	18:44	COLUMN	CONCRETE	A	INTACT	YELLOW	capitol	BASEMENT	B71a	Negative	< LOD	0.03
94	5/20/2013	18:45	CEILING	CONCRETE	B	PEELING	BEIGE	capitol	BASEMENT	B71a	Negative	< LOD	0.03
95	5/20/2013	18:47	WALL	CONCRETE	C	PEELING	BEIGE	capitol	BASEMENT	B71a	Positive	1.4	0.4
96	5/20/2013	18:48	WALL	CONCRETE	D	PEELING	BEIGE	capitol	BASEMENT	B71a	Negative	0.05	0.02
97	5/20/2013	18:50	WALL	CONCRETE	D	PEELING	gray	capitol	BASEMENT	B69	Positive	3.9	2.3
98	5/20/2013	18:51	WALL	CONCRETE	D	INTACT	WHITE	capitol	BASEMENT	B69	Negative	< LOD	0.08
99	5/20/2013	18:51	WALL	CONCRETE	D	INTACT	WHITE	capitol	BASEMENT	B69	Positive	1.5	0.5
100	5/20/2013	18:53	WALL	CONCRETE	A	INTACT	TAN	capitol	BASEMENT	B69a	Negative	0.13	0.03
101	5/20/2013	18:53	WALL	CONCRETE	A	INTACT	TAN	capitol	BASEMENT	B69a	Negative	< LOD	1.05
102	5/20/2013	18:54	WALL	CONCRETE	A	INTACT	TAN	capitol	BASEMENT	B69a	Null	0.22	0.04
103	5/20/2013	18:55	WALL	CONCRETE	D	INTACT	WHITE	capitol	BASEMENT	B69b	Positive	2.5	1.2
104	5/20/2013	18:57	WALL	CONCRETE	A	INTACT	WHITE	capitol	BASEMENT	B67	Negative	< LOD	0.05
105	5/20/2013	18:58	CEILING	CONCRETE	A	INTACT	WHITE	capitol	BASEMENT	B67	Negative	< LOD	0.03
106	5/20/2013	18:59	WINDOW	METAL clad	A	INTACT	black	capitol	BASEMENT	B67	Negative	< LOD	0.03
107	5/20/2013	19:01	WALL	PLASTER	B	INTACT	BEIGE	capitol	BASEMENT	B63	Positive	< LOD	5.7
108	5/20/2013	19:02	WALL	brick	C	INTACT	BEIGE	capitol	BASEMENT	B63	Negative	< LOD	0.03
109	5/20/2013	19:05	WALL	block	C	INTACT	WHITE	capitol	BASEMENT	B62	Positive	1.6	0.6
110	5/20/2013	19:05	WALL	block	C	INTACT	WHITE	capitol	BASEMENT	B62	Positive	1.7	0.7
111	5/20/2013	19:06	WALL	block	A	INTACT	WHITE	capitol	BASEMENT	B62	Negative	< LOD	0.03
112	5/20/2013	19:06	WALL	block	D	INTACT	WHITE	capitol	BASEMENT	B62	Negative	< LOD	0.04
113	5/20/2013	19:08	WALL	block	B	INTACT	WHITE	capitol	BASEMENT	B61	Negative	< LOD	0.04
114	5/20/2013	19:08	CEILING	block	B	PEELING	WHITE	capitol	BASEMENT	B61	Negative	< LOD	0.04
115	5/20/2013	19:09	DOOR	METAL	A	INTACT	BROWN	capitol	BASEMENT	B61	Positive	1.6	0.5
116	5/20/2013	19:09	DOOR	METAL	A	INTACT	BROWN	capitol	BASEMENT	B60	Negative	< LOD	0.06
117	5/20/2013	19:11	WALL	CONCRETE	D	PEELING	purple	capitol	BASEMENT	B60	Negative	< LOD	0.03
118	5/20/2013	19:12	WALL	CONCRETE	D	PEELING	WHITE	capitol	BASEMENT	B60	Negative	< LOD	0.03
119	5/20/2013	19:14	CEILING	CONCRETE	D	INTACT	YELLOW	capitol	BASEMENT	B59	Negative	< LOD	0.03
120	5/20/2013	19:14	WALL	CONCRETE	A	INTACT	TAN	capitol	BASEMENT	B59	Negative	< LOD	0.03
121	5/20/2013	19:15	WALL	CONCRETE	A	INTACT	BEIGE	capitol	BASEMENT	B57	Negative	< LOD	0.03
122	5/20/2013	19:16	WALL	CONCRETE	C	INTACT	YELLOW	capitol	BASEMENT	B57	Negative	0.14	0.05

123	5/20/2013	19:17	WALL	CONCRETE	C	INTACT	purple	capitol	BASEMENT B55	Negative	< LOD	0.03
124	5/20/2013	19:17	WALL	CONCRETE	C	INTACT	WHITE	capitol	BASEMENT B55	Negative	< LOD	0.03
125	5/20/2013	19:19	DOOR	METAL	C	INTACT	BROWN	capitol	BASEMENT B56	Negative	< LOD	0.07
126	5/20/2013	19:19	WALL	CONCRETE	A	INTACT	WHITE	capitol	BASEMENT B54	Negative	< LOD	0.03
127	5/20/2013	19:20	CEILING	CONCRETE	A	INTACT	WHITE	capitol	BASEMENT B54	Negative	< LOD	0.03
128	5/20/2013	19:21	WALL	CONCRETE	B	INTACT	WHITE	capitol	BASEMENT B46	Negative	< LOD	0.03
129	5/20/2013	19:22	WALL	CONCRETE	C	INTACT	WHITE	capitol	BASEMENT B46	Negative	< LOD	0.03
130	5/20/2013	19:23	WALL	CONCRETE	C	INTACT	WHITE	capitol	BASEMENT B46E	Negative	0.29	0.11
131	5/20/2013	19:24	WALL	block	C	INTACT	WHITE	capitol	BASEMENT B46	Negative	< LOD	0.08
132	5/20/2013	19:26	WALL	CONCRETE	C	INTACT	WHITE	capitol	BASEMENT B47	Negative	< LOD	0.05
133	5/20/2013	19:26	WALL	CONCRETE	A	INTACT	WHITE	capitol	BASEMENT B47	Negative	< LOD	0.06
134	5/20/2013	19:27	WALL	CONCRETE	A	INTACT	YELLOW	capitol	BASEMENT B45	Positive	2	0.7
135	5/20/2013	19:28	WALL	CONCRETE	A	INTACT	YELLOW	capitol	BASEMENT B45	Negative	< LOD	0.03
136	5/20/2013	19:29	CEILING	CONCRETE	A	INTACT	YELLOW	capitol	BASEMENT B45	Negative	< LOD	0.03
137	5/20/2013	19:30	DOOR	METAL	D	INTACT	TAN	capitol	BASEMENT B45	Negative	< LOD	0.05
138	5/20/2013	19:30	DOOR frame	METAL	D	INTACT	BROWN	capitol	BASEMENT B45	Negative	< LOD	0.08
139	5/20/2013	19:32	WALL	CONCRETE	A	INTACT	WHITE	capitol	BASEMENT B42	Negative	< LOD	0.03
140	5/20/2013	19:32	CEILING	CONCRETE	A	INTACT	WHITE	capitol	BASEMENT B42	Negative	< LOD	0.03
141	5/20/2013	19:34	CEILING	CONCRETE	A	INTACT	WHITE	capitol	BASEMENT B38	Negative	< LOD	0.05
142	5/20/2013	19:35	WALL	CONCRETE	C	INTACT	BEIGE	capitol	BASEMENT B38	Negative	< LOD	0.07
143	5/20/2013	19:35	WALL	g	C	INTACT	BEIGE	capitol	BASEMENT B38	Positive	1.9	0.9
144	5/20/2013	19:36	WALL	g	C	INTACT	BLUE	capitol	BASEMENT B37	Positive	1.5	0.5
145	5/20/2013	19:37	WALL	g	C	INTACT	BLUE	capitol	BASEMENT B37	Null	< LOD	1.2
146	5/20/2013	19:37	WALL	g	C	INTACT	BLUE	capitol	BASEMENT B37	Null	< LOD	0.03
147	5/20/2013	19:37	WALL	CONCRETE	C	INTACT	BLUE	capitol	BASEMENT B37	Positive	1.5	0.5
148	5/20/2013	19:38	WALL	CONCRETE	A	INTACT	BLUE	capitol	BASEMENT B37	Negative	< LOD	0.03
149	5/20/2013	19:38	WALL	CONCRETE	C	INTACT	BLUE	capitol	BASEMENT B37	Negative	< LOD	0.1
150	5/20/2013	19:39	CEILING	CONCRETE	C	INTACT	WHITE	capitol	BASEMENT B37	Null	< LOD	0.05
151	5/20/2013	19:39	CEILING	CONCRETE	C	INTACT	WHITE	capitol	BASEMENT B37	Null	< LOD	0.03
152	5/20/2013	19:40	CEILING	CONCRETE	C	INTACT	WHITE	capitol	BASEMENT B37	Null	< LOD	0.03
153	5/20/2013	19:43	WALL	CONCRETE	A	INTACT	WHITE	capitol	BASEMENT B34	Negative	0.11	0.04
154	5/20/2013	19:43	COLUMN	METAL	C	INTACT	WHITE	capitol	BASEMENT B34	Positive	< LOD	19.35
155	5/20/2013	19:44	COLUMN base	CONCRETE	C	INTACT	WHITE	capitol	BASEMENT B34	Positive	< LOD	5.55
156	5/20/2013	19:44	CEILING	CONCRETE	C	INTACT	WHITE	capitol	BASEMENT B34	Negative	< LOD	0.03

157	5/20/2013	19:46	CEILING	CONCRETE	C	INTACT	black	capitol	BASEMENT	B32	Positive	1.6	0.5
158	5/20/2013	19:46	WALL	CONCRETE	C	INTACT	BLUE	capitol	BASEMENT	B32	Negative	< LOD	0.03
159	5/20/2013	19:49	WALL	CONCRETE	C	INTACT	BEIGE	capitol	BASEMENT	B31	Negative	< LOD	0.07
160	5/20/2013	19:54	cal-out					capitol			Positive	1.4	0.3
161	5/20/2013	19:54	cal-out					capitol			Positive	1.3	0.3
162	5/20/2013	19:55	cal-out					capitol			Positive	1.1	0.1

34	5/21/2013	18:39	WALL	PLASTER	C	INTACT	TAN	Capitol	BASEMENT	cafe	Negative	< LOD	0.03
35	5/21/2013	18:41	WALL	brick	D	INTACT	YELLOW	Capitol	BASEMENT	cafe corridor	Positive	2.4	1.2
36	5/21/2013	18:42	WALL	Granite	D	INTACT	TAN	Capitol	BASEMENT	cafe corridor	Positive	< LOD	4.2
37	5/21/2013	18:43	WALL	DRYWALL	A	INTACT	WHITE	Capitol	BASEMENT	B14	Negative	< LOD	0.03
38	5/21/2013	18:44	WALL	PLASTER	C	INTACT	WHITE	Capitol	BASEMENT	B14	Negative	< LOD	0.03
39	5/21/2013	18:45	WALL	CONCRETE	A	INTACT	WHITE	Capitol	BASEMENT	brad schrade	Negative	< LOD	0.04
40	5/21/2013	18:45	WALL	DRYWALL	D	INTACT	BEIGE	Capitol	BASEMENT	brad schrade	Negative	< LOD	0.03
41	5/21/2013	18:47	WALL	brick	C	INTACT	WHITE	Capitol	BASEMENT	B12	Positive	1.3	0.3
42	5/21/2013	18:47	WALL	CONCRETE	D	INTACT	WHITE	Capitol	BASEMENT	B12	Negative	< LOD	0.03
43	5/21/2013	18:48	WALL	CONCRETE	B	INTACT	BLUE	Capitol	BASEMENT	B12	Negative	0.6	0.1
44	5/21/2013	18:48	WALL	PLASTER	C	INTACT	WHITE	Capitol	BASEMENT	B12	Negative	< LOD	0.03
45	5/21/2013	18:49	WALL	DRYWALL	B	INTACT	WHITE	Capitol	BASEMENT	B12	Negative	< LOD	0.03
46	5/21/2013	18:51	WALL	Granite	D	INTACT	GREEN	Capitol	BASEMENT	B13	Negative	< LOD	0.03
47	5/21/2013	18:53	CEILING	block	D	INTACT	BEIGE	Capitol	BASEMENT	B13	Positive	1.5	0.5
48	5/21/2013	18:54	WALL	brick	D	INTACT	BEIGE	Capitol	BASEMENT	B11	Negative	< LOD	0.04
49	5/21/2013	18:55	WALL	WOOD	A	INTACT	WHITE	Capitol	BASEMENT	B11	Negative	< LOD	0.03
50	5/21/2013	18:56	DOOR frame	METAL	D	INTACT	RED	Capitol	BASEMENT	B10	Negative	< LOD	0.03
51	5/21/2013	18:56	DOOR frame	METAL	B	INTACT	BROWN	Capitol	BASEMENT	B10	Negative	< LOD	0.16
52	5/21/2013	18:56	WALL	Granite	B	INTACT	BEIGE	Capitol	BASEMENT	B10	Positive	2.1	0.8
53	5/21/2013	18:58	WALL	brick	B	INTACT	BEIGE	Capitol	BASEMENT	B10	Negative	< LOD	0.09
54	5/21/2013	18:59	WALL	Granite	B	INTACT	BEIGE	Capitol	BASEMENT	B9	Negative	< LOD	0.06
55	5/21/2013	19:00	WALL	Granite	D	INTACT	WHITE	Capitol	BASEMENT	B9	Negative	< LOD	0.03
56	5/21/2013	19:01	WALL	brick	B	INTACT	WHITE	Capitol	BASEMENT	B8	Negative	< LOD	0.05
57	5/21/2013	19:02	WALL	block	C	INTACT	WHITE	Capitol	BASEMENT	B8	Negative	< LOD	0.04
58	5/21/2013	19:04	WALL	CONCRETE	A	INTACT	WHITE	Capitol	BASEMENT	B6	Negative	< LOD	0.03
59	5/21/2013	19:05	WALL	CONCRETE	D	INTACT	TAN	Capitol	BASEMENT	cap security	Negative	< LOD	0.03
60	5/21/2013	19:06	CEILING	PLASTER	D	INTACT	gray	Capitol	BASEMENT	cap security	Negative	< LOD	0.03
61	5/21/2013	19:06	CEILING	PLASTER	D	INTACT	WHITE	Capitol	BASEMENT	cap security	Negative	< LOD	0.03
62	5/21/2013	19:07	WALL	DRYWALL	C	INTACT	YELLOW	Capitol	BASEMENT	cap security	Negative	< LOD	0.03
63	5/21/2013	19:08	WALL	CONCRETE	B	INTACT	gray	Capitol	BASEMENT	cap security	Negative	< LOD	0.03
64	5/21/2013	19:08	WALL	DRYWALL	A	INTACT	GREEN	Capitol	BASEMENT	cap security	Negative	< LOD	0.03
65	5/21/2013	19:09	CEILING	DRYWALL	A	INTACT	rust	Capitol	BASEMENT	cap security	Negative	< LOD	0.03
66	5/21/2013	19:10	WALL	CONCRETE	B	INTACT	YELLOW	Capitol	BASEMENT	cap security	Negative	< LOD	0.03
67	5/21/2013	19:11	WALL	CONCRETE	A	INTACT	YELLOW	Capitol	BASEMENT	cap security	Negative	< LOD	0.03

68	5/21/2013	19:12	COLUMN	CONCRETE	A	INTACT	gray	Capitol	BASEMENT	cap security	Negative	< LOD	0.03
69	5/21/2013	19:15	WALL	CONCRETE	C	INTACT	YELLOW	Capitol	BASEMENT	B5j	Negative	< LOD	0.1
70	5/21/2013	19:18	WALL	CONCRETE	B	INTACT	WHITE	Capitol	BASEMENT	B3a	Negative	< LOD	0.03
71	5/21/2013	19:20	CEILING	PLASTER		INTACT	WHITE	Capitol	BASEMENT	main corridor	Negative	0.4	0.1
72	5/21/2013	19:20	FLOOR	CONCRETE		INTACT	gray	Capitol	BASEMENT	main corridor	Negative	< LOD	0.03
73	5/21/2013	19:21	FLOOR	CONCRETE		INTACT	gray	Capitol	BASEMENT	main corridor	Negative	< LOD	0.03
74	5/21/2013	19:21	DOOR frame	METAL	A	INTACT	BROWN	Capitol	BASEMENT	main corridor	Negative	< LOD	0.21
75	5/21/2013	19:22	WALL	CONCRETE	A	INTACT	YELLOW	Capitol	BASEMENT	main corridor	Positive	< LOD	12.75
76	5/21/2013	19:22	WALL	CONCRETE	A	INTACT	TAN	Capitol	BASEMENT	main corridor	Negative	< LOD	0.07
77	5/21/2013	19:22	WALL	CONCRETE	A	INTACT	YELLOW	Capitol	BASEMENT	main corridor	Positive	< LOD	6
78	5/21/2013	19:23	WALL	CONCRETE	A	INTACT	gray	Capitol	BASEMENT	main corridor	Negative	0.1	0.03
79	5/21/2013	19:24	CEILING	PLASTER		INTACT	WHITE	Capitol	BASEMENT	main corridor	Positive	2.4	1.1
80	5/21/2013	19:24	WALL	PLASTER	D	INTACT	TAN	Capitol	BASEMENT	main corridor	Negative	< LOD	0.03
81	5/21/2013	19:25	WALL	PLASTER	A	INTACT	YELLOW	Capitol	BASEMENT	main corridor	Positive	7.7	4.6
82	5/21/2013	19:26	stair rail	METAL	C	INTACT	black	Capitol	BASEMENT	main corridor	Positive	1.5	0.5
83	5/21/2013	19:27	DOOR frame	WOOD	D	INTACT	BROWN	Capitol	BASEMENT	main corridor	Positive	< LOD	7.05
84	5/21/2013	19:28	WALL	brick	C	INTACT	YELLOW	Capitol	BASEMENT	main corridor	Positive	1.4	0.3
85	5/21/2013	19:29	WALL	CONCRETE	A	INTACT	TAN	Capitol	BASEMENT	main corridor	Negative	0.04	0.03
86	5/21/2013	19:30	CEILING	block	A	INTACT	WHITE	Capitol	BASEMENT	main corridor	Negative	< LOD	0.03
87	5/21/2013	19:30	WALL	Granite	C	INTACT	BEIGE	Capitol	BASEMENT	main corridor	Positive	1.7	0.7
88	5/21/2013	19:31	WALL	brick	C	INTACT	YELLOW	Capitol	BASEMENT	main corridor	Positive	1.3	0.3
89	5/21/2013	19:32	WALL	brick	C	INTACT	YELLOW	Capitol	BASEMENT	main corridor	Positive	2.2	1.1
90	5/21/2013	19:33	WALL	CONCRETE	A	INTACT	TAN	Capitol	BASEMENT	main corridor	Negative	< LOD	0.03
91	5/21/2013	19:33	FLOOR	CONCRETE	A	INTACT	gray	Capitol	BASEMENT	main corridor	Negative	< LOD	0.03
92	5/21/2013	19:34	WALL	Granite	C	INTACT	TAN	Capitol	BASEMENT	main corridor	Positive	< LOD	4.05
93	5/21/2013	19:35	WALL	block	C	INTACT	YELLOW	Capitol	BASEMENT	main corridor	Negative	< LOD	0.03
94	5/21/2013	19:36	CEILING	brick	C	INTACT	WHITE	Capitol	BASEMENT	main corridor	Negative	< LOD	0.03
95	5/21/2013	19:36	WALL	PLASTER	A	INTACT	YELLOW	Capitol	BASEMENT	main corridor	Positive	3.7	2.2
96	5/21/2013	19:37	WALL	CONCRETE	C	INTACT	YELLOW	Capitol	BASEMENT	main corridor	Negative	0.2	0.06
97	5/21/2013	19:38	CEILING	CONCRETE	C	INTACT	WHITE	Capitol	BASEMENT	main corridor	Negative	0.27	0.12
98	5/21/2013	19:39	FLOOR	CONCRETE	C	INTACT	gray	Capitol	BASEMENT	main corridor	Negative	< LOD	0.09
99	5/21/2013	19:40	DOOR	METAL	A	INTACT	BROWN	Capitol	BASEMENT	main corridor	Negative	< LOD	0.03
100	5/21/2013	19:40	DOOR frame	METAL	A	INTACT	BROWN	Capitol	BASEMENT	main corridor	Negative	< LOD	0.03
101	5/21/2013	19:48	cal-out					Capitol			Positive	1.3	0.3

102 5/21/2013 19:48 cal-out
103 5/21/2013 19:49 cal-out

Capitol
Capitol

Positive
Positive

1.3 0.3
1.2 0.1

8.0 Appendix 3

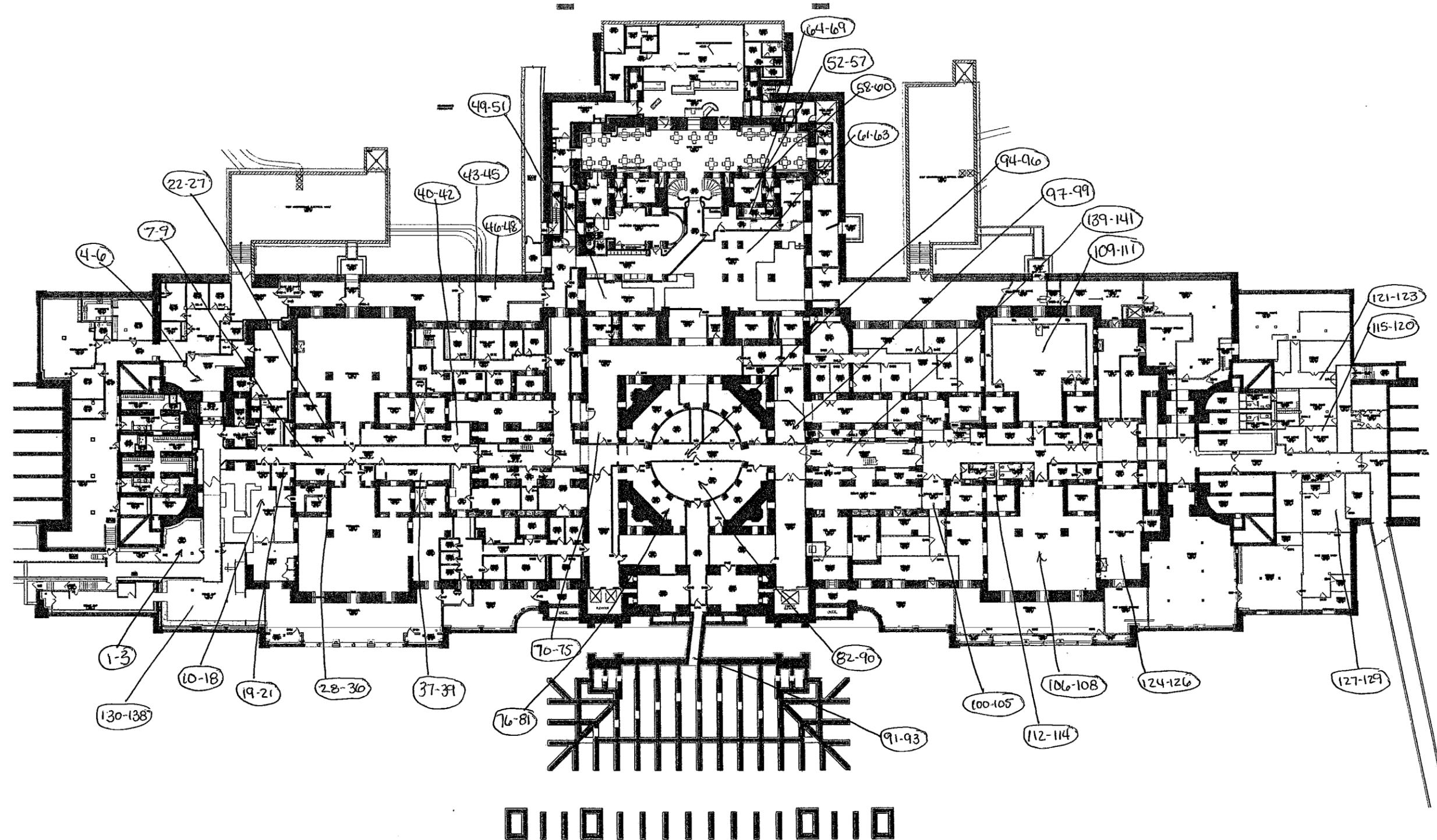
Floor Plans & Sample Locations



**Angstrom Analytical &
Environmental Services**

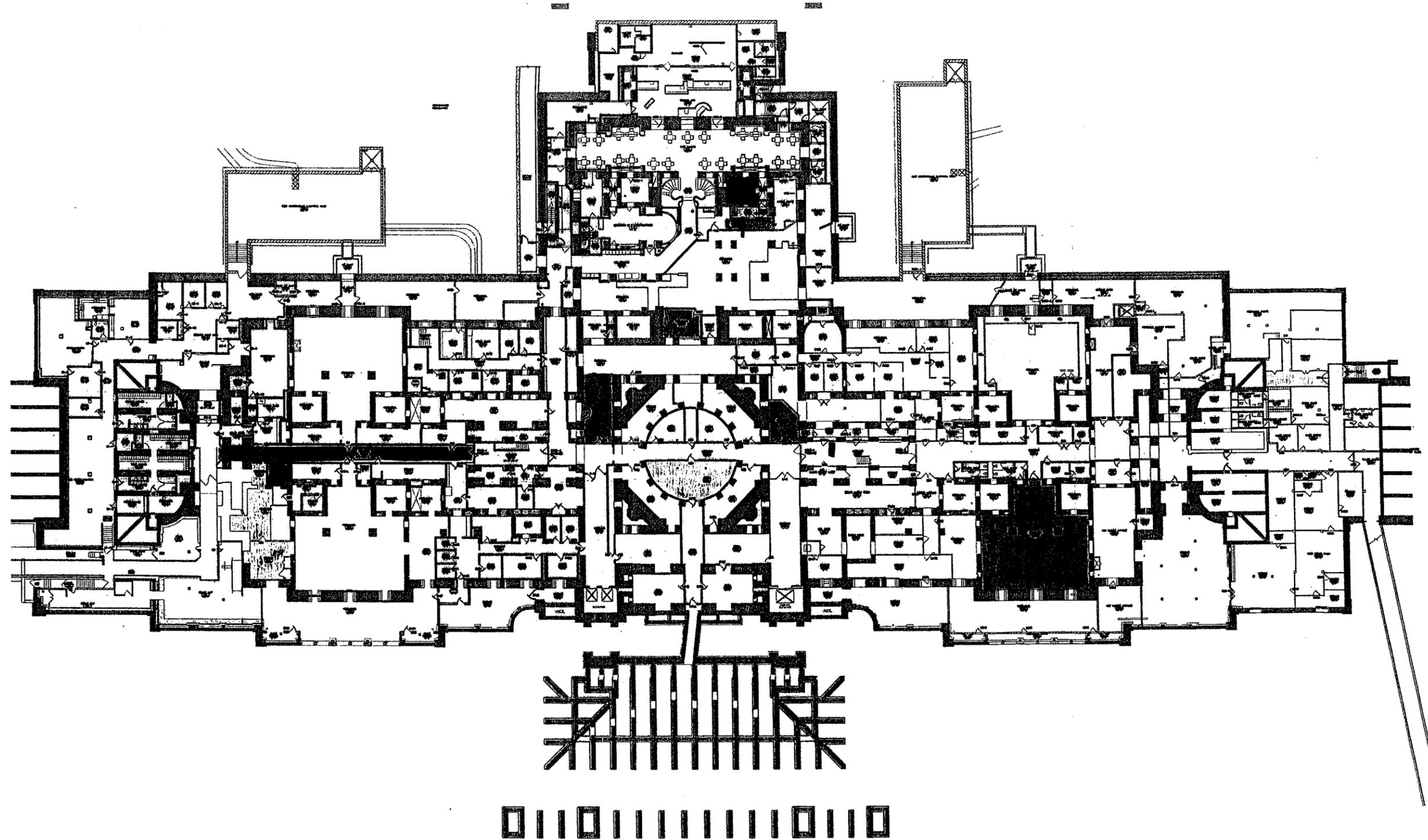
○ Sample Locations

Terrace Level



- TSI General Locations
- ▨ 9x9 Tile & Mastic General Locations
- ▨ ACM Mastic only
- Vibration dampers

Terrace Level



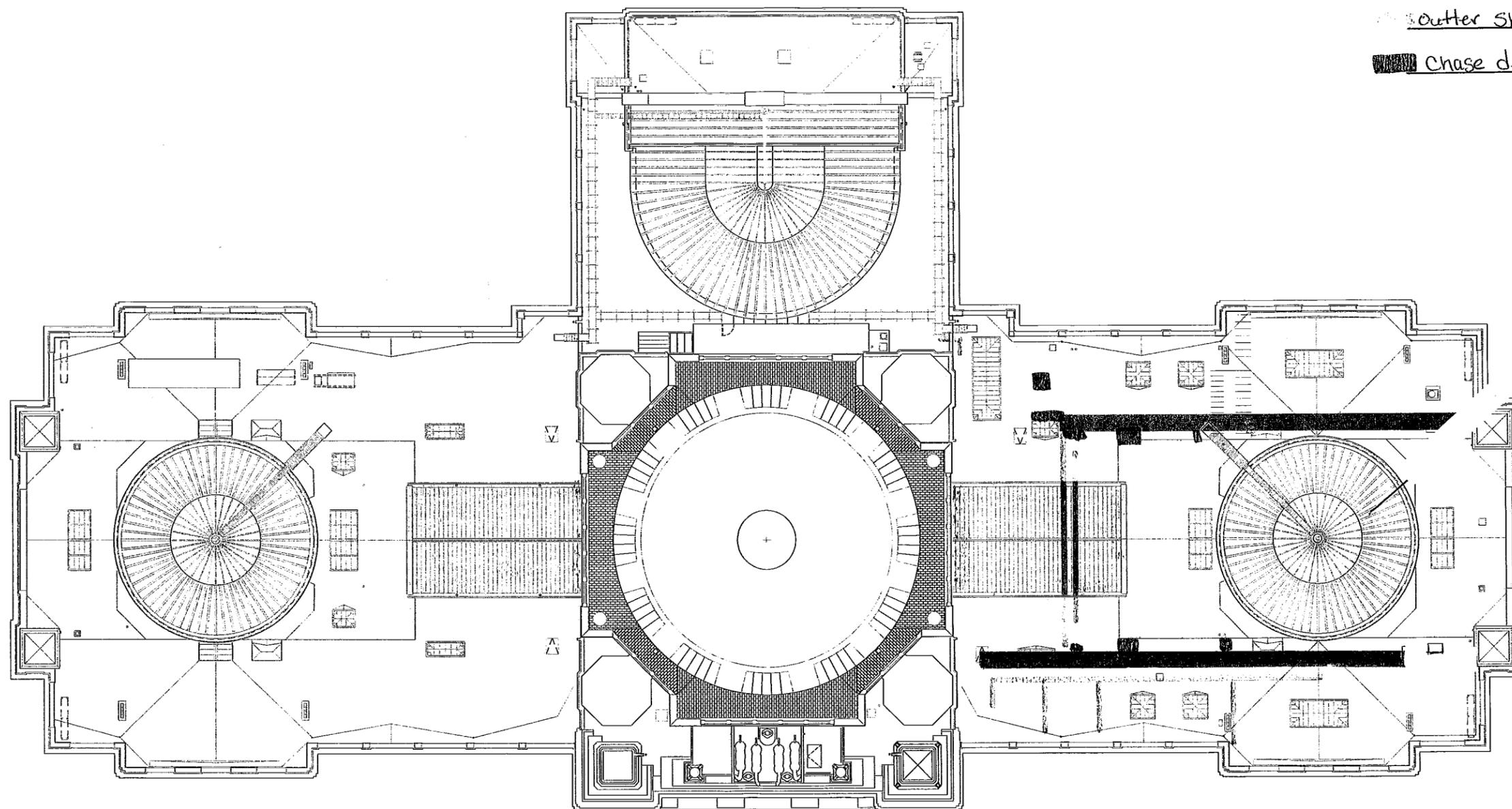
ATTIC

■ Duct insulation & Debris

▨ TSI pipe insulation

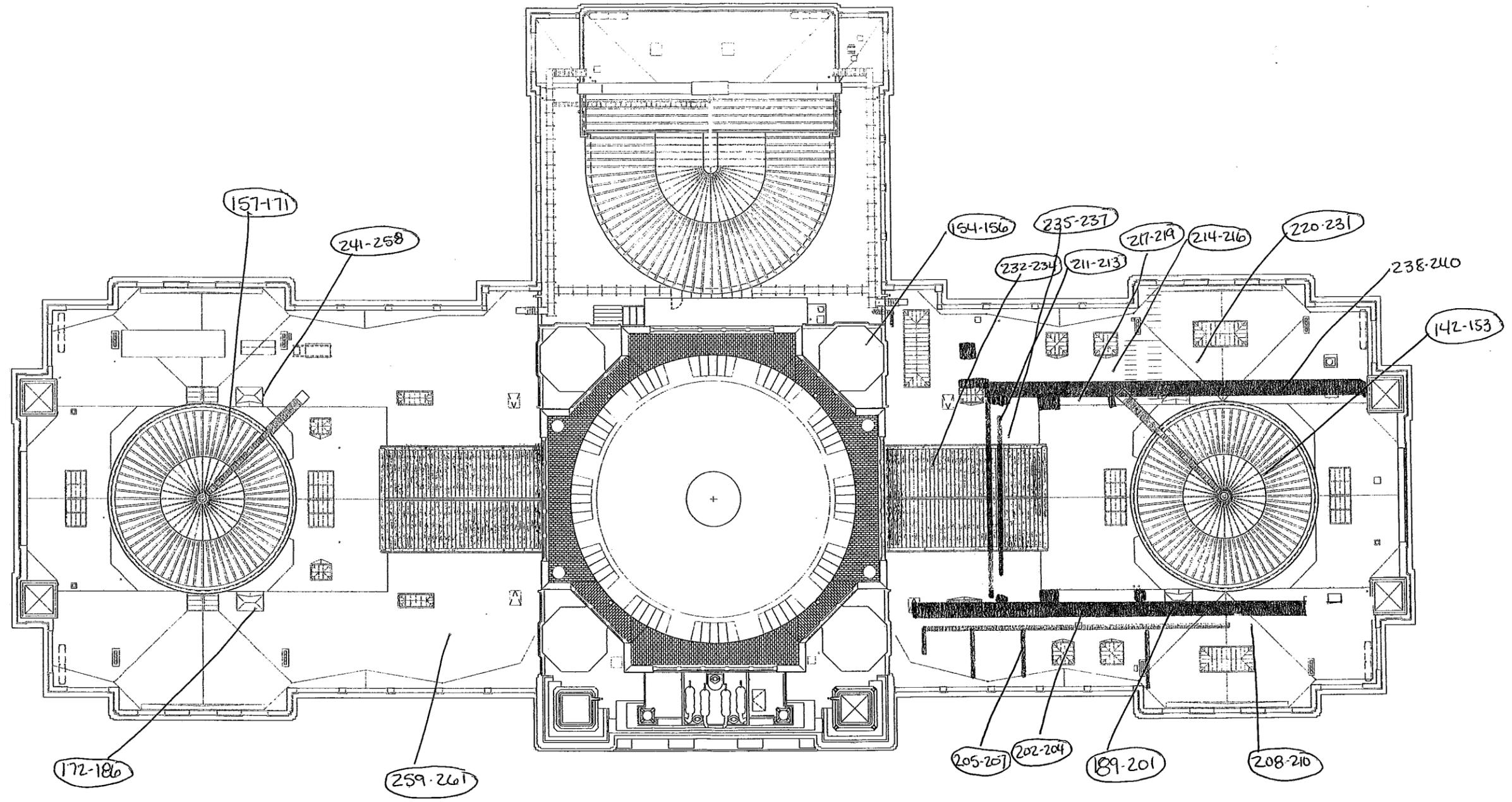
▨ Outer skylight glazing

■ Chase debris TSI



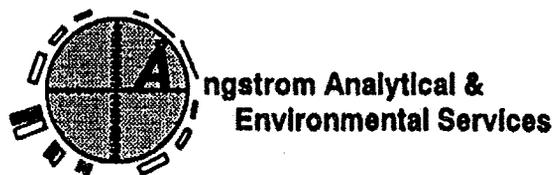
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○ Sample Locations

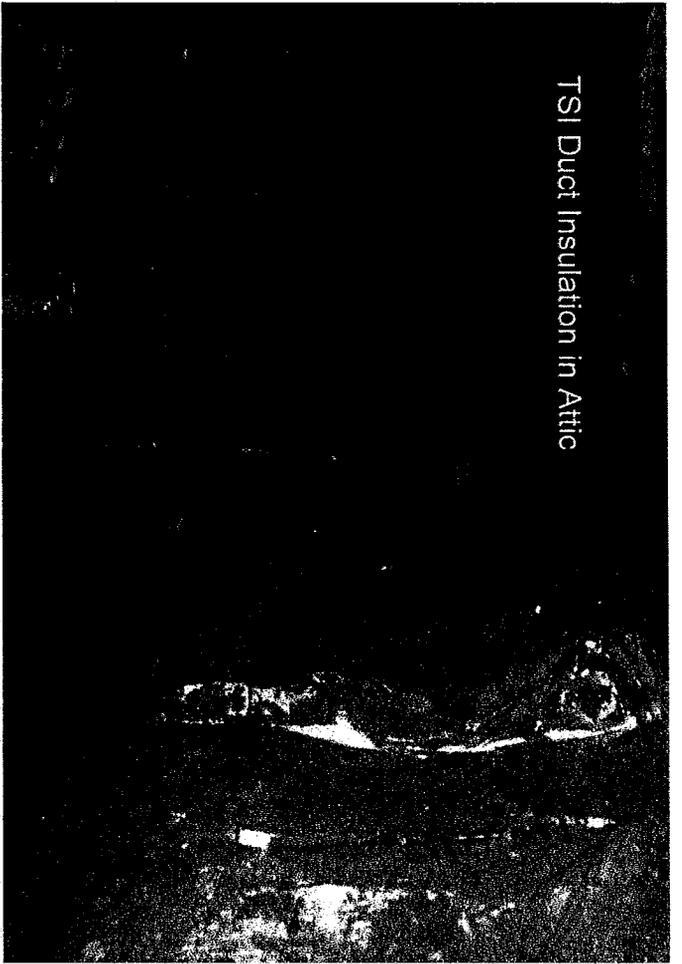


9.0 Appendix 4

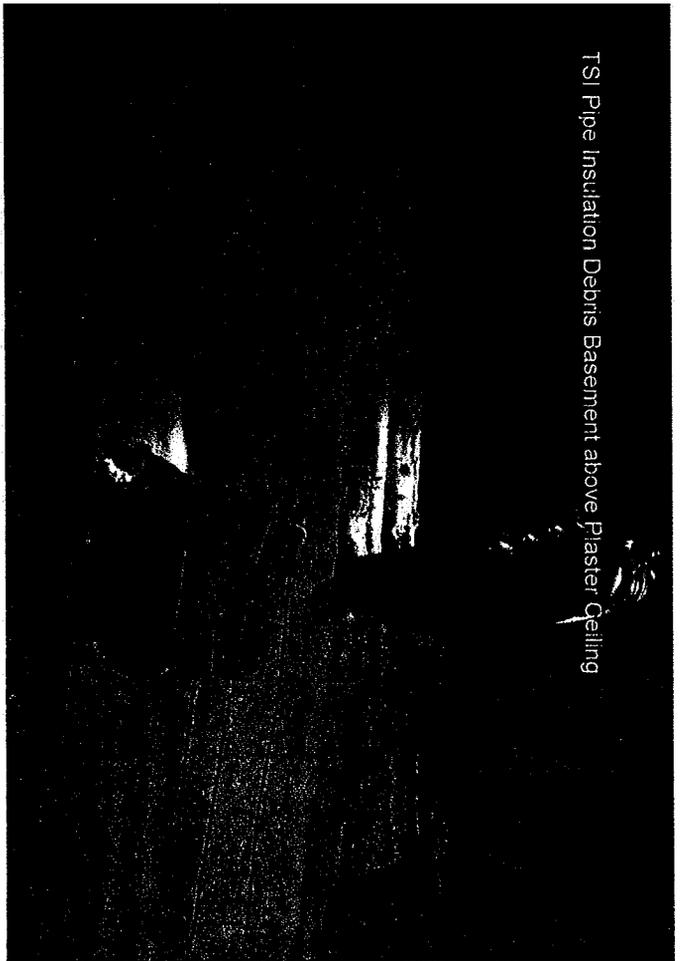
Photography



TSI Duct Insulation in Attic



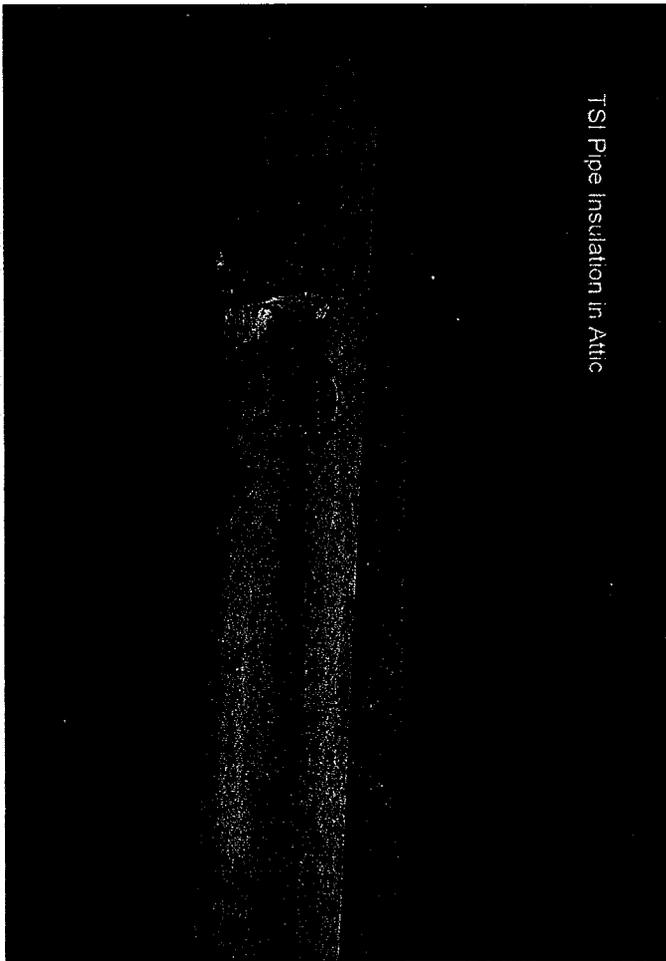
TSI Pipe Insulation Debris Basement above Plaster Ceiling



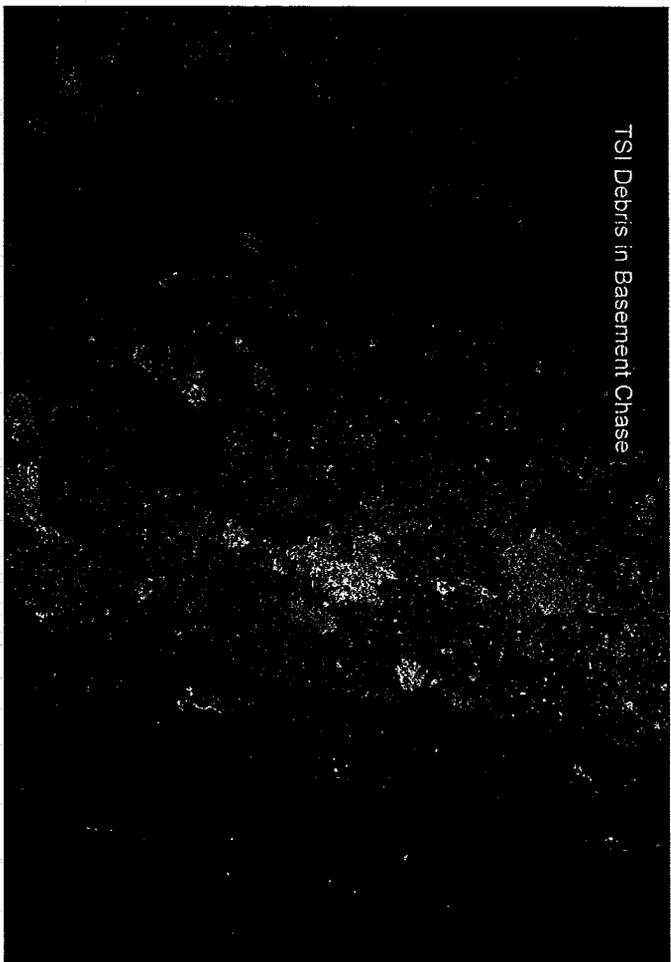
Vibration Damper in Basement



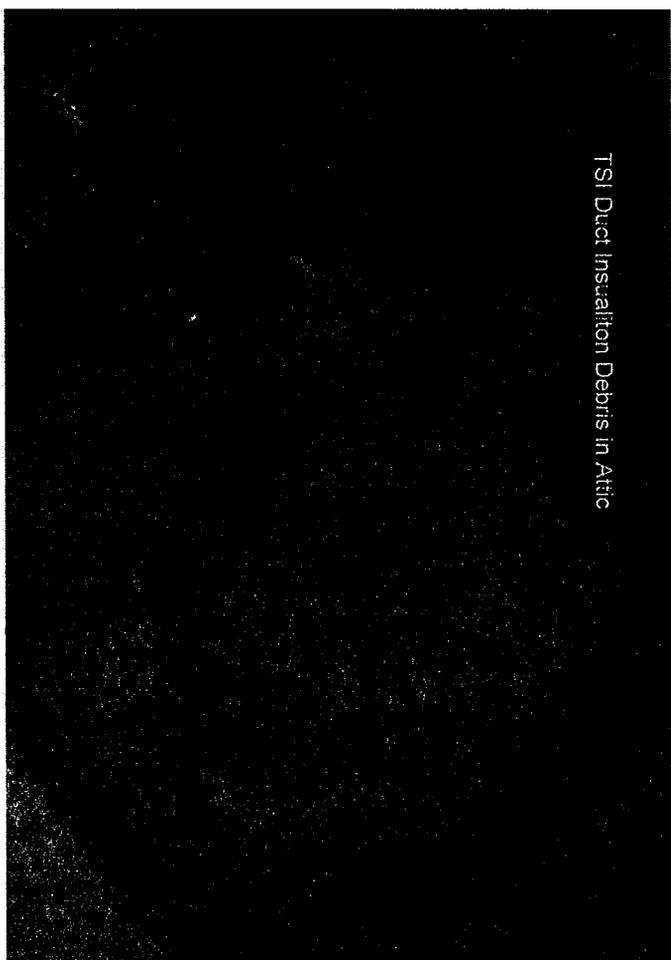
TSI Pipe Insulation in Attic



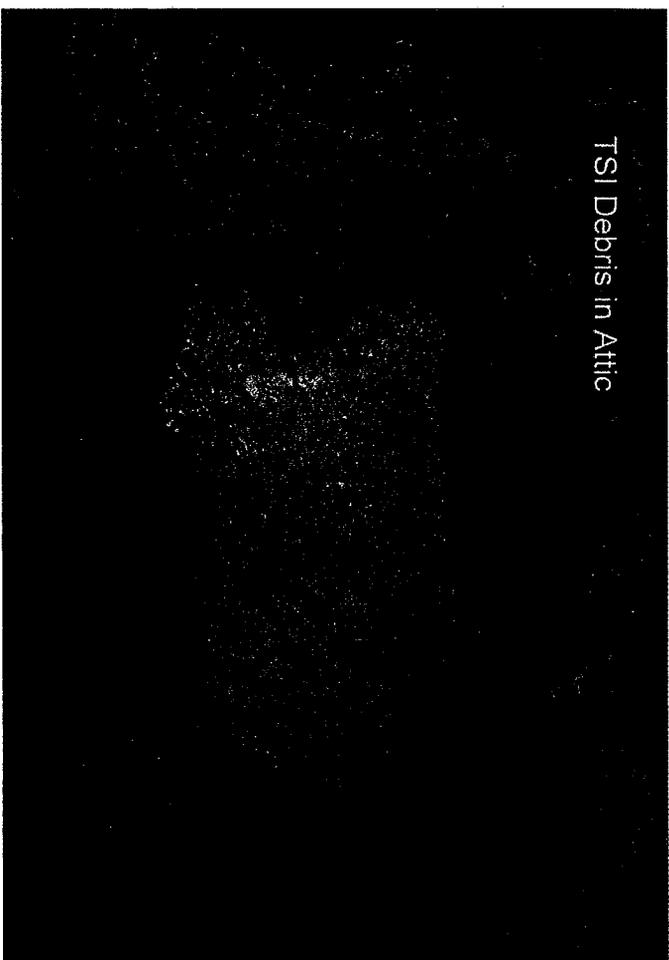
TSI Debris in Basement Chase



TSI Duct Insulation Debris in Attic



TSI Debris in Attic



10.0 Appendix 5
Certifications



Minnesota Department of Health

Asbestos Contractor License

License Number: AC413

Issued on: December 13, 2012

To:

Angstrom Analytical, Inc.

5001 Cedar Lake Rd S

St Louis Park, Minnesota 55416

Responsible Individual: Charles . Iye

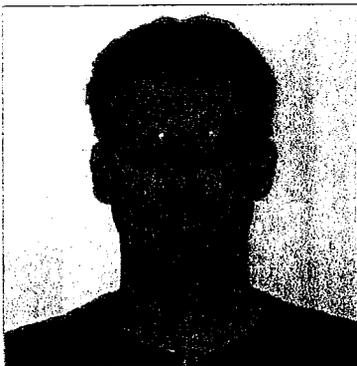
This license is valid from December 13, 2012 to December 12, 2013.

Pursuant to Minnesota Statutes, section 144.99, this license may be suspended or revoked for failure to conduct asbestos-related work in compliance with applicable regulations.

Asbestos-related work must be conducted according to Minnesota Statutes, sections 326.70 to 326.81 and Minnesota Rules, parts 4620.000 to 4620.3724.



Linda B. Bruemmer, Director
Division of Environmental Health



Linda S. Buschner
Director, Env. Health Div.



**ASBESTOS
INSPECTOR**

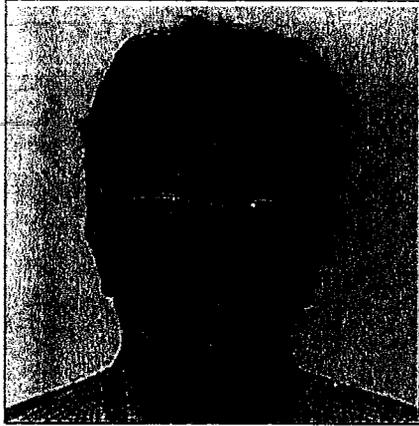
Certified by:
State of Minnesota
Department of Health

Expires: **04/11/2014**

Kevin P Hagen
7038 Upper 36th St N
Oakdale, MN 55128

No. A12652

Issued: 04/17/2013



**ASBESTOS
PROJECT
DESIGNER**

Certified by:
State of Minnesota
Department of Health

Expires: 11/07/2013

Charles Eye
4345 N Shore Dr
Orono, MN 55364



Linda S. Bremer
Director, Env. Health Div.

No. AD395

Issued: 11/16/2012

Minnesota Department of Health

has authorized

Angstrom Analytical, Inc.
5001 Cedar Lake Rd S
St Louis Park, Minnesota 55416

in accordance with Minnesota Statutes, section 144.9505 and Minnesota Rules, part 4761.2200,
to practice in the State of Minnesota as a

Certified Lead Firm

License No: LF127
Expires 12/08/2013

This certificate is nontransferable.


Linda B. Bruemmer, Director
Division of Environmental Health

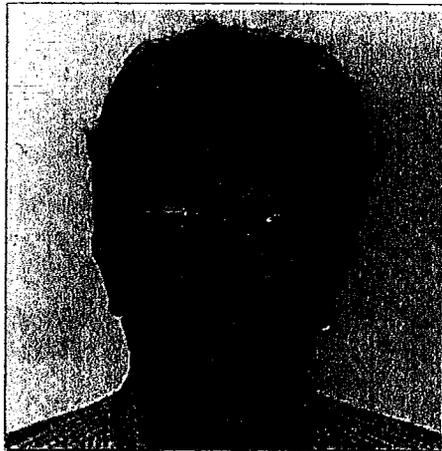


LEAD
Risk Assessor

Licensed by:
State of Minnesota
Department of Health
License No. LR2036
Expires 09/20/2013

Kevin P Hagen
7038 Upper 36th St N
Oakdale, MN 55128

Lynnda S. Buschner
Director, Env. Health Div.



Trudis S. Bremer
Director, Env. Health Div.



**LEAD
Project Designer**

Licensed by:
State of Minnesota
Department of Health

License No. LD317
Expires 11/16/2013

Charles Tye
4345 N Shore Dr
Orono, MN 55364