SECTION 905 -- PROPOSAL (CONTINUED)

I (We) further propose to execute the attached contract agreement (Section 902) as soon as the work is awarded to me (us), and to begin and complete the work within the time limit(s) provided for in the Specifications and Advertisement. I (We) also propose to execute the attached contract bond (Section 903) in an amount not less than one hundred (100) percent of the total of my (our) part, but also to guarantee the excellence of both workmanship and materials until the work is finally accepted.

I (We) enclose a certified check, cashier's check or bid bond for **five percent (5%) of total bid** and hereby agree that in case of my (our) failure to execute the contract and furnish bond within Ten (10) days after notice of award, the amount of this check (bid bond) will be forfeited to the State of Mississippi as liquidated damages arising out of my (our) failure to execute the contract as proposed. It is understood that in case I am (we are) not awarded the work, the check will be returned as provided in the Specifications.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO.	1	DATED	5/20/2015	ADDENDUM NO.		DATED	
ADDENDUM NO		DATED		ADDENDUM NO.		DATED	

Number	Description
1	Replace Sections 00 91 013, 00 01 10, 00 01 15, 02 26 23 & 07 54 00 with same; Replace Plan Sheets 2, 6, & 10 with same; Added Plan Sheet 12; Amendment EBS Download Required.

TOTAL ADDENDA: 1
(Must agree with total addenda issued prior to opening of bids)

Respectfully Submitted,

DATE _____

_____
Contractor

BY _____
Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

President	Address
Secretary	Address
Treasurer	Address

The following is my (our) itemized proposal.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM NUMBER ONE
SECTION 00 91 13 (A)

DATE: **MAY 14, 2015**

PROJECT: **REPLACE HAIL-DAMAGED ROOFS**
JACKSON, HINDS COUNTY, MISSISSIPPI

PROJECT NUMBER: **MEP-5000-25(080) 502884**
MEP-5000-25(088) 502884

PART 1- GENERAL

1.01 DESCRIPTION

A. Bidders are hereby advised that the following changes are to be made to this Contract. Addendum Number One contains 2 pages plus attached 44 pages for a total of 46 pages and attached 2 Drawings as listed below.

1.02 PRE-BID MEETING MINUTES

A. Minutes: See attached Pre-Bid Minutes (4 pages).

B. Sign-In-List for Contractors: See attached Contractor Sign-In List (1 page).

C. Sign-In-List for Other Attendees: See attached Attendee Sign-In List (1 page.

1.03 SPECIFICATIONS

A. SECTION 00 01 10 - TABLE OF CONTENTS; Delete and replace with attached Table of Contents with Revision No.1 dated 05-14-15 (3 pages).

1. Adds Section 02 26 23 – ASBESTOS TEST REPORTS to Table of Contents.

2. Changes number of pages in Section 07 54 00 – Thermoplastic Membrane Roofing from 7 to 8.

B. SECTION 00 01 15 – LIST OF DRAWING SHEETS; Delete and replace with attached List of drawing Sheets with Revision No.1 dated 05-14-15 (1 page).

C. SECTION 07 54 00 – THERMOPLASTIC MEMBRANE ROOFING; Delete and replace with attached Section 07 54 00 Thermoplastic Membrane Roofing with Revision No. 1 dated 05-14-15 (8 pages).

D. SECTION 02 26 23 - ASBESTOS TEST REPORTS; Attach Asbestos Test Report (26 pages).

1.04 DRAWINGS

A. Make the following changes(s) to Sheet Number 2, Working Number DI-1.

1. Delete Sheet Number 2, Working Number DI-1 and replace with attached Sheet Number 2, Working Number DI-1, Revision No.1 Dated 5-14-15.

B. Make the following change(s) to Sheet Number 6, Working Number A1.6-ML:

1. Delete Sheet Number 6, Working Number A1.6-ML and replace with attached Sheet Number 6, Working Number A1.3-AD, Revision No.1 Dated 5-14-15.

C. Make the following change(s) to Sheet Number 10, Working Number A1.6-ML:

1. Delete Sheet Number 10, Working Number A1.6-ML and replace with attached Sheet Number 10, Working Number A1.6-ML, Revision No.1 Dated 5-14-15.

D. Add Sheet Number 12, Working Number A3.3-ML and replace with attached Sheet Number 12, Working Number 3.3-ML, Revision No.1 Dated 5-14-15.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

Pre-Bid Meeting Minutes

Remove and Replace the Roof Systems at the MDOT Materials Lab and Administration Building in Jackson known as State Project Nos. MEP-5000-25(080) & MEP-5000-25(088) / 502884 - 301 & 302 in Hinds County

Meeting Time: May 7, 2015, 9:00 a.m. local time.
Meeting Location: MDOT Administration Building, 1st Floor Commission Meeting Room, 401 N. West Street, Jackson, Mississippi.

Attendees were asked to sign in.

Jim Vinson stated that attendance of Prime Bidders at the pre-bid meeting is mandatory and that bids will only be accepted from prime bidders represented on the pre-bid meeting sign-in sheet.

Jim Vinson handed out a revised roof specification section that will be included in the Addendum. Pointed out that the main difference is that the revised specification requires the product manufacturer to attend a pre-installation meeting, make a site visit during construction, and perform a final inspection.

Bids will be opened on Wednesday, May 27, 2015.

Jim Vinson reviewed the following topics:

Advertisement for Bids: Refer to Section 901 Advertisement.

Instructions to Bidders: Refer to 00 21 13 for Instructions to Bidders & 00 22 13 for Supplementary Instructions to Bidders.

Bidder Qualifications: Refer to Mississippi Standard Specifications for Road and Bridge Construction 2004 Edition Section 102 Bidding Requirements and Conditions, Article 102.01 Prequalification of Bidders. Attendance of Pre-Bid Meeting is mandatory to be able to bid on this Project.

Bonding: Refer to AIA A201, Article 11 for Bonds. Execute Section 903 Performance and Payment Bonds and Bid Bond.

Insurance: Refer to AIA A201, Article 11 for Insurance requirements.

Bid Security: Refer to Bid Bond and execute with 5% of Bid.

Billy Owen reviewed the bid submittal process:

Everyone who purchased a Bid Proposal should have received a Bid Proposal, an envelope to return it in, and another envelope containing a flash drive. All of this must be returned to MDOT in its entirety.

Certificate of Responsibility number must be filled in on the bid envelope before returning. If this is not filled in, the bid cannot be opened.

Billy demonstrated how to install and use the ExpediteBid software contained on the flash drive:

- Install ExpediteBid
- Tools → Options → fill in company information

- Agency: MSDOT
- ID: (9 digit tax ID number without dash)
- Go to www.mdot.ms.gov → 5/27/2015 Letting
- Download Call 01 EBS file to flash drive (leave file name the same)
- Once Addendum has been posted you will need to download the EBS Amendment file
- In ExpediteBid, click File → Open Proposal → select project
- Fill out Schedule of Items
- DBE Goal: select "Project does not have a goal" from dropdown
- After you are complete, click yellow checkmark in toolbar and save
- Print pages and insert into Bid Proposal

The flash drive also contains several help files that you can reference.

The rest of the sheets that need to be filled out start with Section 905 in the Proposal.

Make sure to sign the Certificate acknowledging the State Board of Contractors regulations regarding subcontracts.

If you do not use MDOT's Bid Bond form, make sure that the form used contains all of the same information as MDOT's form.

Make sure that the agent who signs the Bid Bond is licensed by the Mississippi Insurance Department and that the agent has the appointment to represent the surety company.

For any questions regarding the bid process contact 601-359-7700 (ask for Billy Owen or Neal Dougherty)

Q: How do I order a Bid Proposal and plans?
A: Proposal and plans must be ordered through www.mdot.ms.gov → 5/27/2015 Letting → Call 01

Q: Are both roofing projects being awarded to one contractor.
A: Yes.

Jim Vinson reviewed the following topics:

Bidder's Requests for Information: Submit questions at www.mdot.ms.gov → 5/27/2015 Letting → Call 01. Questions and answers will be posted here so that everyone will have access to them.

Bidder's Substitution Request / Prior Approval Request: Refer to 01 25 00 Substitution Procedures. Prior approval is not allowed. Bidders shall base prices on materials specified.

Addenda: Refer to 00 91 13 Addenda. Pre-Bid Meeting Minutes, Sign-In Lists, and Asbestos Reports will be included in Addendum #1. Addendum #1 will also include revised Section 07 54 00, 1.06 F. This revision requires manufacturer's technical representative to make minimum of three (3) trips to each site before and during construction. Copies of this section were handed out to attendees.

Agreement: Refer to Section 905 Proposal and execute as part of Bid.

The General Conditions: Refer to 00 72 00 AIA Document A201 – 2007.

Other Owner requirements: Execute both copies of Certificate found in back of Proposal.

Scopes of Work: Refer to 01 10 00 in Summary. First order of Work shall be to complete work on the Administration Building, from tenth floor roof, then down to other floor roofs. Work on the Materials Lab roof can be done simultaneously, but the Administration Building is the first priority. Dimensions for Marley Cooling Tower with Serial Number 27751-21102-92 to be removed from Administration Building tenth floor roof are 12' x 12' x 8' high. Operating weight for this unit is listed to be 10,530 pounds with dry weight of 4,415 pounds.

Temporary Facilities: Refer to 01 50 00 for Temporary Facilities and Controls.

Use of Site: Refer to 01 10 00 in Summary.

Work Restrictions: Refer to 01 10 00 in Summary.

Substitutions following award: Refer to 01 25 00 for Substitution Procedures.

Project Schedule: Refer to 01 32 00 for requirements of Construction Progress Documentation.

Contract Time: It is anticipated that the Notice to Award will be issued by not later than June 9, 2015 and the date for Notice to Proceed and Beginning of Contract Time will be July 1, 2015. The calendar date for completion of this Contract shall be February 29, 2016 which date or extended date as provided in Article 8 – TIME shall be the end of Contract Time.

Liquidated Damages: Refer to 00 72 00 AIA Document A201 – 2007, 9.11 for Table per calendar day based on Contract Sum.

Other Bidder Questions: Refer to 00 21 13 Instructions to Bidders.

Site / facility visits and walkthroughs: Site visits to both buildings will happen the day of the Pre-Bid Meeting.

Post-Meeting Addendum: Addendum 01 will be issued covering Pre-Bid Meeting Minutes and any questions that are asked during this meeting.

The floor is opened for questions

Q: Is there a master label on the exiting lightning protection system?
A: We are unsure. Please check when we go to the roof. (None could be found. MDOT does want LPS to be reinstalled based on approved shop drawings prepared by Lightning Protection Certified Master Designer as specified in Section 26 41 14.)

Q: It appears that the specifications call for the insulation to be mechanically attached to the concrete deck. Is that an absolute?
A: Low rise foam adhesive will work, but the roof has to be mechanically secured at the perimeter and at penetrations.

There is a freight elevator in the Administration building that can be used. Operation requires the use of an access card. It can be taken to the 9th floor and then stairs must be taken to the roof.

Q: Is there a designated set-up area for a crane?
A: We show a staging area in the plans, but if this area will not work for a crane, you will need to make a request to the Project Engineer.

Q: Can we come back and look at the building at any time?
A: You will need to notify Wes Carter in Central Services and Jim Vinson in Architectural Services before you come.

The Administration building has several roofs that will be replaced:

- 1st floor roof between the main building and the parking garage
- Roofs over both the north and east entrances
- 2nd floor breezeway roof (copper)
- 4th floor roof
- 10th floor roof
- Penthouse roof
- Three (3) stairwell roofs in the parking garage

Q: Has an asbestos survey been performed?
A: Yes asbestos surveys have been performed. There was no asbestos found. The asbestos reports will be part of the Addendum. The contractor must contact MDEQ 10 business days before starting work.

Q: What are the allowable working hours?
A: Follow the Red Book. If you need to work beyond regular working hours you will need written approval from the Project Engineer.

Whenever any non-MDOT personnel is on the roof they must be accompanied by an MDOT employee.

After removing the rooftop chiller, all associated equipment stands and penetrations must be removed also.

Q: When removing the existing roof, would it be acceptable to adhere a base sheet down, in order to get the roof removal out of the way, and then come back and build the new roof assembly?
A: No. You need to only remove what you can replace in a day.

Attendees were reminded again to sign the sign-in sheet.

Meeting adjourned and attendees inspected the
Administration building roofs and the Material Lab roofs.

Attachments:

- Two (2) Sign-in Sheets

Contractor

Pre-Bid Meeting Sign In

Remove and Replace the Roof Systems at the MDOT Materials Lab and Administration Building in Jackson
Known as State Project Nos. MEP-5000-25(080) & MEP-5000-25(088) / 502884 - 301 & 302 in Hinds County

Name	Company	Email	Phone
TOM CLARKE	MDOT	TCLARKE@MDOT.MS.GOV	
Thomas Mayberry	Pillar Bldg Solutions	thomas@pillar-sales.com	901-484-2001
Chuck Womack	Eagle Const	CUZUSM@aol.com	601 940 5411
Joe NAQUIN	Ind. Roofing	jnaquin@roofing.ms	601-922-4301
DAVID SAUL	M&S Roofing	NOBSSAUL@BELLSOUTH.NET	601-932-3913
Leland Hinton	M&S Roofing	Leland.Hinton@gmail.com	601-932-3913
DAVID HARTSHORN	CEMENT RFG SYSTEMS	david@cementroofing.com	870-935-4901
CHRIS CRISWELL	E. Cornell MALONE CORP	chris@ecmdone.com	601.352.5940
Jeff Church	N.E. Daniels Rfg	jeff@danielsroofing.com	601-482-3911
Chris Strawbridge	Advantage Roofing	JCstraw1974@aol.com	318-278-4011
BRANDON COURSON	Industrial Roofing & Constr.	56177@aol.com	318-982-5075
		brandon@ind-roofing.com	318-665-0483

Attendee

Pre-Bid Meeting Sign In

Remove and Replace the Roof Systems at the MDOT Materials Lab and Administration Building in Jackson
Known as State Project Nos. MEP-5000-25(080) & MEP-5000-25(088) / 502884 - 301 & 302 in Hinds County

Name	Company	Email	Phone
Seth Winchester	MDOT	swinchester@mdot.ms.gov	601.359.7537
WES CARTER	"	WCARTER@MDOT.MS.GOV	601.359.9724
Richard Chisolm	"	rchisolm@mdot.ms.gov	601-359-7301
Earl Glenn	"	eglenn@mdot.ms.gov	601-359-7301
DENNIS WALTERS	CBC	dwalterscbc@yahoo.com	601-278-7705
Bradley Williams	MDOT	bgwilliams@mdot.ms.gov	601-359-7111
Mike Hughes	Carlisle SynTec	mike.hughes@carlislesyntec.com	901-849-3305
Billy Owen	MDOT	bowen@mdot.ms.gov	601-359-7730

SECTION 00 01 10 TABLE OF CONTENTS

PROJECT: REPLACE HAIL-DAMAGED ROOFS IN JACKSON, HINDS COUNTY, MISSISSIPPI

PROJECT NUMBER: MEP-5000-25(080) 502884
MEP-5000-25(088) 502884

DATE: 02-03-15

DESCRIPTION A: This Work shall consist of demolition of existing roof and construction work necessary to install single-ply roof system at MDOT Materials Lab in Jackson, Hinds County, Mississippi, Project No. MEP-5000-25(080) 502884, in accordance with these Specifications and conforming to the Drawings.

DESCRIPTION B: This Work shall consist of demolition of existing roof and construction work necessary to install single-ply roof system at MDOT Administration Building in Jackson, Hinds County, Mississippi, Project No. MEP-5000-25(088) 502884, in accordance with these Specifications and conforming to the Drawings.

It is the intention of these Specifications to provide the necessary information for a complete re-roofing including all code compliance. Omission of information necessary or considered standard good practice for the proper installation and construction of the roofs shall not relieve the Contractor of furnishing and installing such items and conforming to the building codes having jurisdiction.

(REVISIONS TO THE ABOVE WILL BE INDICATED ON THE SECOND SHEET OF SECTION 905 AS ADDENDA)

END OF TABLE OF CONTENTS

SECTION 00 01 15 LIST OF DRAWING SHEETS

PART 1 - GENERAL

1.01 LIST OF DRAWINGS

A. List of Drawings: Drawings consist of the following Contract Drawings and other drawings of type indicated:

WORKING NUMBER	**SHEET NUMBER**	**DESCRIPTION**
-----	1	TITLE SHEET
DI-1	2	DETAILED INDEX (Revised 5-14-15)
GN-1	3	GENERAL NOTES
A1.1-AD	4	SITE AND FENCING PLANS – ADMINISTRATION BUILDING
A1.2-AD	5	DEMOLITION ROOF PLAN – ADMINISTRATION BUILDING
A1.3-AD	6	ROOF PLAN – ADMINISTRATION BUILDING
A3.1-AD	7	SECTION DETAILS – ADMINISTRATION BUILDING
A1.4-ML	8	SITE AND FENCING PLANS – MATERIALS LAB
A1.5-ML	9	DEMOLITION ROOF PLAN – MATERIALS LAB
A1.6-ML	10	ROOF PLAN – MATERIALS LAB (Revised 5-14-15)
A3.2-ML	11	SECTION DETAILS – MATERIALS LAB
A3.3-ML	12	SECTION DETAILS – MATERIALS LAB (Added Drawing)

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 02 26 23 ASBESTOS REPORTS

PART 1- GENERAL

1.01 DESCRIPTION.

A. EarthCon Consultants, Inc. prepared the following Asbestos Material Survey Reports for the MDOT Materials Lab located at 412 East Woodrow Wilson Avenue and the MDOT Administration Building located at 401 North West Street.

B. All persons intending to provide goods or services in connection with this Work are required to read and understand the referenced documents prior to proceeding.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

EARTHCON®
Environmental Challenges
BUSINESS SOLUTIONS ®

EarthCon Consultants, Inc.
P.O. Box 1246
Madison, Mississippi 39130

Phone: 601-853-2134
Fax: 601-856-3978
Toll-Free: 877-389-6476
www.earthcon.com

March 18, 2015

Mr. John Murray
Property Management 84-01
Mississippi Department of Transportation
Post Office Box 1850
Jackson, Mississippi 39215-1850

Re: Asbestos Material Survey Report
Original Building
412 East Woodrow Wilson Avenue
Hinds County, Mississippi
EarthCon Project No. 02.20150052.55

Dear Mr. Murray:

On February 13, 2015, EarthCon Consultants, Inc. (EarthCon) conducted an asbestos material survey of the Mississippi Department of Transportation (MDOT) original building located at 412 East Woodrow Wilson Avenue, Jackson, Mississippi. The survey was conducted by Mr. Hal Moore and Mr. Ryan Clarke, Asbestos Hazard Emergency Response Act (AHERA)-accredited and State of Mississippi certified asbestos inspectors, to evaluate the specified structures for the presence of asbestos-containing materials (ACMs) prior to scheduled renovation.

During the survey, the roof of the aforementioned building was inspected. Six (6) representative samples of suspect ACMs were collected for laboratory analysis from the roof of the subject building. The samples were submitted to International Asbestos Testing Laboratories for analysis by the Environmental Protection Agency (EPA) recommended Polarized Light Microscopy (PLM) and Dispersion Staining Method.

The suspect materials identified during the survey consisted of the following homogeneous building component materials:

Miscellaneous

- Roofing materials
- Kool seal

None of the tested materials were found to contain asbestos minerals in quantities greater than one (1) percent. Refer to the enclosed Laboratory Results for sample results.

Based on the tasks undertaken for the asbestos material survey and existing building conditions at the time of the survey, EarthCon has developed the following conclusions and recommendations:

1. As a result of the survey, no ACMs were identified in/on the roof of structure.
2. No asbestos abatement response actions are required prior to renovation.
3. The renovation contractor or owner is required to notify the Mississippi Department of Environmental Quality (MDEQ) of planned renovation activities at least ten (10) working days prior to the scheduled start of these activities, as required by EPA 40 CFR Part 61.145 (b).

Limitations

This report was prepared for the sole and exclusive use and reliance of the Mississippi Department of Transportation and presents conclusions based solely upon the agreed scope of work outlined in this report. No other parties may rely on this report, in whole or in part, without the express written authorization of EarthCon, such authorization to be evidenced by a secondary client agreement executed by EarthCon and the secondary client. EarthCon makes no warranties or guarantees as to the accuracy or completeness of information, if any, provided or compiled by individuals or entities other than EarthCon. It is possible that, as a result of the limitations imposed on the scope of work, there exists relevant information that was not considered in the conclusions rendered in this report. Additional information, which was not found or available to EarthCon at the time of writing this report, may result in modification of the conclusions presented herein. This report is not intended to be and is not a legal opinion. The services performed by EarthCon have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing at the same time under similar conditions. No other warranty, expressed or implied, is made.

Laboratory results and the inspector certification are provided as attachments. Should you have any questions concerning the contents of this report, please contact Hal Moore at your convenience at (601) 853-2134. EarthCon Consultants, Inc. appreciates the opportunity to provide the Mississippi Department of Transportation with environmental consulting services.

EarthCon Consultants, Inc.
Post Office Box 1246
110 Weisenberger Road
Madison, Mississippi 39130
Phone: 601-853-2134
Fax: 601-856-3978
Toll-Free: 877-389-6476
www.earthcon.com

Sincerely,
EarthCon Consultants, Inc.

W. Hal Moore
Senior Project Manager

Norman D. Kennel R.P.G.
(TN, SC, GA, MS, TX, WA, MO)
Principal Geologist

Attachments

EarthCon Consultants, Inc.
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Fax: 601-856-3978
Toll-Free: 877-389-6476
www.earthcon.com

ATTACHMENTS

LABORATORY RESULTS

IATL **International Asbestos Testing Laboratories**

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: EarthCon Site Services, Inc.
PO Box 1246
Madison MS 39130

Report Date: 2/23/2015
Report No.: 356542
Project: MDOT-Original Bldg.
Project No.: 02.20150052.55

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5552851 **Description / Location:** Tan Insulation
Client No.: 01 Rm-First Location (Roof)

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	100	Cellulose	None Detected

Lab No.: 5552851 **Description / Location:** Yellow Foam **Layer No.:** 2
Client No.: 01 Rm-First Location (Roof)

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5552851 **Description / Location:** Grey Insulation **Layer No.:** 3
Client No.: 01 Rm-First Location (Roof)

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	97	Cellulose	None Detected
		3	Fibrous Glass	

Lab No.: 5552852 **Description / Location:** Tan Insulation
Client No.: 02 Rm-First Location (Roof)

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	99	Cellulose	1

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analysis Performed By: E. Smith

Approved By: Frank E. Ehrenfeld, III
Laboratory Director

Date: 2/23/2015

IATL **International Asbestos Testing Laboratories**

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: EarthCon Site Services, Inc.
PO Box 1246
Madison MS 39130

Report Date: 2/23/2015
Report No.: 356542
Project: MDOT-Original Bldg.
Project No.: 02.20150052.55

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5552853 **Description / Location:** Silver/Brown Non-Fibrous
Client No.: 03 Kool Seal

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5552854 **Description / Location:** Silver/Brown Non-Fibrous
Client No.: 04 Kool Seal

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Lab No.: 5552855 **Description / Location:** Grey Insulation
Client No.: 05 Rm-Atrium

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	95	Cellulose	None Detected
		5	Fibrous Glass	

Lab No.: 5552855 **Description / Location:** Yellow Foam **Layer No.:** 2
Client No.: 05 Rm-Atrium

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analysis Performed By: E. Smith

Date: 2/23/2015

IATL **International Asbestos Testing Laboratories**

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: EarthCon Site Services, Inc.
PO Box 1246
Madison MS 39130

Report Date: 2/23/2015
Report No.: 356542
Project: MDOT-Original Bldg.
Project No.: 02.20150052.55

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5552856 **Description / Location:** Grey Insulation
Client No.: 06 Rm-Atrium

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	95	Cellulose	None Detected
		5	Fibrous Glass	

Lab No.: 5552856 **Description / Location:** Yellow Foam **Layer No.:** 2
Client No.: 06 Rm-Atrium

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	None Detected	None Detected	100

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analysis Performed By: E. Smith

Date: 2/23/2015

iATL INTERNATIONAL
Asbestos Testing Laboratories

9000 Commerce Parkway, Suite B • Mount Laurel, NJ 08054
Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

Chain of Custody

Contact Information

Client Company: EarthCon Consultants, Inc.
Office Address: Post Office Box 1246
City, State, Zip: Madison, MS 39130
Fax Number: (601) 856-3978
Email Address: hmoore@earthcon.com; rclarke@earthcon.com; nmatthys@earthcon.com

Project Number: 02.20150052.55
Project Name: MDOT - Original Bldg
Primary Contact: Hal Moore / Ryan Clarke / Nikki Matthys
Office Phone: (601) 853-2134 / (877) 389-6476
Cell Phone: (601) 951-8121 Hal / (601) 813-8228 Ryan

Matrix:

Air ☐ Soil ☐ Bulk ☒ Other ☐ _____
Water ☐ Paint ☐ Surface Dust / Wipe ☐

Analysis Method:

☐ PCM: NIOSH 7400
☐ PCM: OSHA
☐ PCM: TWA

☐ Total Dust: NIOSH 0500
☐ Total Dust: NIOSH 0600

☐ AAS: Lead in Air
☐ AAS: Lead in Water
☐ AAS: Lead in Paint
☐ AAS: Lead Dust/Wipe[1]
☐ AAS: Lead in Soil
☐ AAS: TCLP
☐ AAS: Metals [Cd, Zn, Cr-circle]

PLM Use Bulk Asbestos Sample Log

☒ PLM: Bulk Asbestos EPA 600
☐ PLM: Point Counting 198.1
☐ PLM: NOB via 198.6 (PLM only)
☐ If <1% by PLM, to TEM via 198.4 [2]

IAQ Use Mold Sample Log

☐ IAQ: I Bioaersol Fungal Spore Trap[3]
☐ IAQ: II Bioaersol Fungal Spore
☐ IAQ: Tape, Bulk, Misc. Qualitative[3]
☐ IAQ: Tape, Bulk, Misc. Quantitative[3]
☐ IAQ: Other Culturable ID[2]

☐ TEM: AHERA
☐ TEM: NIOSH 7402
☐ TEM: ISO 10312
☐ TEM: ISO 13794
☐ TEM: Wipe ASTM 6480
☐ TEM: Microvac ASTM D5755
☐ TEM: Microvac ASTM D5756
☐ TEM: NOB 198.4
☐ TEM: Bulk Analysis
☐ TEM: Potable Water
☐ TEM: Non-Potable Water
☐ TEM: Other _____
☐ Soil: Call for Available Methods

1- Requires ASTM acceptable material 2- Call to confirm TAT 3- Non-culturable 4- With Non-Fungal Microscopic Exam

Special Instructions: EMAILED 2/12/15

Turnaround Time

Preliminary Results Requested Date: ASAP (Specific date / time)

☒ Verbal ☒ Email ☐ Fax

☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day* ☐ 12 Hour** ☐ 6 Hour** ☐ RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Shipping Method

☒ FedEx ☐ UPS ☐ USPS ☐ Other _____

Chain of Custody

Relinquished (Name/Organization): JC / EarthCon — Date: 2/16/15 — Time: 5:00
Received (Name / iATL): _____ — Date: _____ — Time: _____
Sample Login (Name / iATL): _____ — Date: 2/17/15 — Time: FEB 17 2015
Analyst (Name(s) / iATL): _____ — Date: _____ — Time: _____
QA/QC Review (Name / iATL): _____ — Date: 2/23/2015 — Time: _____
Archived / Released: _____ QA/QC InterLAB Use: _____ — Date: _____ — Time: _____

RECEIVED FEB 17 2015 BY

EARTHCON®

Environmental Challenges
BUSINESS SOLUTIONS®

EARTHCON CONSULTANTS, INC.
110 Weisenberger Road
Madison, Mississippi 39110
Telephone: (601) 853-2134 Fax: (601) 856-3978
Email: mail@earthcon.com

Lab Name:	
Cooler No.:	
FedEx No.:	

CHAIN-OF-CUSTODY

Client Name:
EarthCon Consultants, Inc.
110 Weisenberger Road
Madison, Mississippi 39110

Project Name/Location: MDOT - Original Bldg / Jackson, MS

Project No.: 02.20150052.55

Sampler (print/signature): Ryan Clarke / Ryan Clarke

H/M/S (lab use):

Item No.	Field No.	Sample Description	Collection Date	Collection Time	Analysis Required	Lab No. (for lab use only)
1	01	RM - First Location (Roof)	2/13		PLM	5552851
2	02	↓	↓		600	5552852
3	03	Kool Seal			↓	5552853
4	04	↓				5552854
5	05	RM - [redacted] Atrium				5552855
6	06	↓				5552856
7						
8						
9						
10						
11						
12						
13						
14						

Relinquished By:	Date/Time:	Accepted By:	Date/Time:	Relinquished By:	Date/Time:	Accepted By:	Date/Time:
[signature]	2/16/15 5:00						
[signature]							

INSPECTOR CERTIFICATIONS

State of Mississippi

Department of Environmental Quality

Office of Pollution Control

Certificate of Licensure

In accordance with the Asbestos Abatement Accreditation and Certification Act,
Enacted as 1989 Mississippi Law, Chapter 505

Be it known that

W. Hal Moore

Having submitted acceptable evidence of qualifications and
training and other appropriate information, is hereby granted this

Asbestos Inspector

Certification

Chief, Asbestos & Lead Certification Branch

Certificate No.: ABI-00002284
Expiration Date: Jan 17th, 2015
Training Expires on Jan 17th, 2015

40533 LIC20140001

State of Mississippi

Department of Environmental Quality

Office of Pollution Control

Certificate of Licensure

In accordance with the Asbestos Abatement Accreditation and Certification Act,
Enacted as 1989 Mississippi Law, Chapter 505

Be it known that

James R Clarke

Having submitted acceptable evidence of qualifications and
training and other appropriate information, is hereby granted this

Asbestos Inspector

Certification

Certificate No.: ABI-00003456
Expiration Date: Nov 12th, 2015
Training Expires on Nov 12th, 2015

Chief, Asbestos & Lead Certification Branch

54812 LIC20140001

EARTHCON®
Environmental Challenges
BUSINESS SOLUTIONS ®

EarthCon Consultants, Inc.
P.O. Box 1246
Madison, Mississippi 39130

Phone: 601-853-2134
Fax: 601-856-3978
Toll-Free: 877-389-6476
www.earthcon.com

March 18, 2015

Mr. John Murray
Property Management 84-01
Mississippi Department of Transportation
Post Office Box 1850
Jackson, Mississippi 39215-1850

Re: Asbestos Material Survey Report
Administrative Building
401 North West Street
Hinds County, Mississippi
EarthCon Project No. 02.20150052.55

Dear Mr. Murray:

On February 13, 2015, EarthCon Consultants, Inc. (EarthCon) conducted an asbestos material survey of the Mississippi Department of Transportation (MDOT) administrative building located at 401 North West Street, Jackson, Mississippi. The survey was conducted by Mr. Hal Moore and Mr. Ryan Clarke, Asbestos Hazard Emergency Response Act (AHERA)-accredited and State of Mississippi certified asbestos inspectors, to evaluate the specified structures for the presence of asbestos-containing materials (ACMs) prior to scheduled renovation.

During the survey, the roof of the aforementioned building was inspected. Four (4) representative samples of suspect ACMs were collected for laboratory analysis from the roof of the subject building. The samples were submitted to International Asbestos Testing Laboratories for analysis by the Environmental Protection Agency (EPA) recommended Polarized Light Microscopy (PLM) and Dispersion Staining Method.

The suspect materials identified during the survey consisted of the following homogeneous building component materials:

Miscellaneous

- Roofing materials
- Roof flashing

None of the tested materials were found to contain asbestos minerals in quantities greater than one (1) percent. Refer to the enclosed Laboratory Results for sample results.

Based on the tasks undertaken for the asbestos material survey and existing building conditions at the time of the survey, EarthCon has developed the following conclusions and recommendations:

1. As a result of the survey, no ACMs were identified in/on the roof of structure.
2. No asbestos abatement response actions are required prior to renovation.
3. The renovation contractor or owner is required to notify the Mississippi Department of Environmental Quality (MDEQ) of planned renovation activities at least ten (10) working days prior to the scheduled start of these activities, as required by EPA 40 CFR Part 61.145 (b).

Limitations

This report was prepared for the sole and exclusive use and reliance of the Mississippi Department of Transportation and presents conclusions based solely upon the agreed scope of work outlined in this report. No other parties may rely on this report, in whole or in part, without the express written authorization of EarthCon, such authorization to be evidenced by a secondary client agreement executed by EarthCon and the secondary client. EarthCon makes no warranties or guarantees as to the accuracy or completeness of information, if any, provided or compiled by individuals or entities other than EarthCon. It is possible that, as a result of the limitations imposed on the scope of work, there exists relevant information that was not considered in the conclusions rendered in this report. Additional information, which was not found or available to EarthCon at the time of writing this report, may result in modification of the conclusions presented herein. This report is not intended to be and is not a legal opinion. The services performed by EarthCon have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing at the same time under similar conditions. No other warranty, expressed or implied, is made.

Laboratory results and the inspector certification are provided as attachments. Should you have any questions concerning the contents of this report, please contact Hal Moore at your convenience at (601) 853-2134. EarthCon Consultants, Inc. appreciates the opportunity to provide the Mississippi Department of Transportation with environmental consulting services.

EarthCon Consultants, Inc.
Post Office Box 1246
110 Weisenberger Road
Madison, Mississippi 39130
Phone: 601-853-2134
Fax: 601-856-3978
Toll-Free: 877-389-6476
www.earthcon.com

Sincerely,
EarthCon Consultants, Inc.

W. Hal Moore
Senior Project Manager

Norman D. Kennel R.P.G.
(TN, SC, GA, MS, TX, WA, MO)
Principal Geologist

Attachments

EarthCon Consultants, Inc.
Post Office Box 1246
110 Weisenberger Road
Madison, Mississippi 39130

Phone: 601-853-2134
Fax: 601-856-3978
Toll-Free: 877-389-6476
www.earthcon.com

ATTACHMENTS

LABORATORY RESULTS

IATL **International Asbestos Testing Laboratories**

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: EarthCon Site Services, Inc.
PO Box 1246
Madison MS 39130

Report Date: 2/23/2015
Report No.: 356543
Project: MDOT-Admin Bldg.
Project No.: 02.20150052.55

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5552857 **Description / Location:** Silver/Black Tar
Client No.: 01 Rm-Admin.Bldg.

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	3	Cellulose	92
		5	Fibrous Glass	

Lab No.: 5552857 **Description / Location:** Black Insulation **Layer No.:** 2
Client No.: 01 Rm-Admin.Bldg.

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	60	Fibrous Glass	40

Lab No.: 5552858 **Description / Location:** Black Tar
Client No.: 02 Rm-Admin.Bldg.

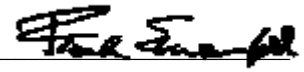
% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	20	Fibrous Glass	80

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analysis Performed By: E. Smith

Approved By: 

Date: 2/23/2015

Frank E. Ehrenfeld, III
Laboratory Director

IATL **International Asbestos Testing Laboratories**

9000 Commerce Parkway Suite B Mt. Laurel, NJ 08054
Telephone: 856-231-9449 Fax: 856-231-9818

CERTIFICATE OF ANALYSIS

Client: EarthCon Site Services, Inc.
PO Box 1246
Madison MS 39130

Report Date: 2/23/2015
Report No.: 356543
Project: MDOT-Admin Bldg.
Project No.: 02.20150052.55

BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 5552859 **Description / Location:** Silver/Black Tar
Client No.: 03 RF-Admin.Bldg.

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	5	Cellulose	95
		5	Fibrous Glass	

Lab No.: 5552859 **Description / Location:** Black Insulation **Layer No.:** 2
Client No.: 03 RF-Admin.Bldg.

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	80	Fibrous Glass	20

Lab No.: 5552860 **Description / Location:** Silver/Black Tar
Client No.: 04 RF-Admin.Bldg.

% Asbestos	Type	% Non-Asbestos Fibrous Material	Type	% Non-Fibrous Material
None Detected	None Detected	10	Fibrous Glass	90

Accreditations: **NIST-NVLAP No. 101165-0** **NY-DOH No. 11021** **AIHA-LAP, LLC No. 100188**

Analytical Method: US EPA 600/R-93/116 by Polarized Light Microscopy, (ELAP 198.1 where applicable)

Comments: Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analysis Performed By: E. Smith

Date: 2/23/2015

iATL INTERNATIONAL
9000 Commerce Parkway, Suite B • Mount Laurel, NJ 08054
Phone: 877-428-4285/856-231-9449 • Fax: 856-231-9818

Chain of Custody

Contact Information

Client Company: EarthCon Consultants, Inc.
Office Address: Post Office Box 1246
City, State, Zip: Madison, MS 39130
Fax Number: (601) 856-3978
Email Address: hmoore@earthcon.com; rclarke@earthcon.com; nmatthys@earthcon.com

Project Number: 02.20150052.55
Project Name: MDOT - Admin Bldg
Primary Contact: Hal Moore / Ryan Clarke / Nikki Matthys
Office Phone: (601) 853-2134 / (877) 389-6476
Cell Phone: (601) 951-8121 Hal / (601) 813-8228 Ryan

Matrix:

Air ☐ Water ☐ Soil ☐ Paint ☐ Bulk ☒ Surface Dust / Wipe ☐ Other ☐ _____

Analysis Method:

☐ PCM: NIOSH 7400
☐ PCM: OSHA
☐ PCM: TWA

☐ Total Dust: NIOSH 0500
☐ Total Dust: NIOSH 0600

☐ AAS: Lead in Air
☐ AAS: Lead in Water
☐ AAS: Lead in Paint
☐ AAS: Lead Dust/Wipe[1]
☐ AAS: Lead in Soil
☐ AAS: TCLP
☐ AAS: Metals [Cd, Zn, Cr-circle]

PLM Use Bulk Asbestos Sample Log

☒ PLM: Bulk Asbestos EPA 600
☐ PLM: Point Counting 198.1
☐ PLM: NOB via 198.6 (PLM only)
☐ If <1% by PLM, to TEM via 198.4 [2]

IAQ Use Mold Sample Log

☐ IAQ: I Bioaersol Fungal Spore Trap[3]
☐ IAQ: II Bioaersol Fungal Spore
☐ IAQ: Tape, Bulk, Misc. Qualitative[3]
☐ IAQ: Tape, Bulk, Misc. Quantitative[3]
☐ IAQ: Other Culturable ID[2]

☐ TEM: AHERA
☐ TEM: NIOSH 7402
☐ TEM: ISO 10312
☐ TEM: ISO 13794
☐ TEM: Wipe ASTM 6480
☐ TEM: Microvac ASTM D5755
☐ TEM: Microvac ASTM D5756
☐ TEM: NOB 198.4
☐ TEM: Bulk Analysis
☐ TEM: Potable Water
☐ TEM: Non-Potable Water
☐ TEM: Other_____
☐ Soil: Call for Available Methods

1- Requires ASTM acceptable material 2- Call to confirm TAT 3- Non-culturable 4- With Non-fungal Microscopic Exam

Special Instructions: E-MAILED 2/16/15

Turnaround Time

Preliminary Results Requested Date: ASAP (Specific date / time)

☐ Verbal ☒ Email ☐ Fax

☐ 10 Day ☒ 5 Day ☐ 3 Day ☐ 2 Day ☐ 1 Day* ☐ 12 Hour** ☐ 6 Hour** ☐ RUSH**

* End of next business day unless otherwise specified. ** Matrix Dependent. ***Please notify the lab before shipping***

Shipping Method

☒ FedEx ☐ UPS ☐ USPS ☐ Other _____

Chain of Custody

Relinquished (Name/Organization): RC / EarthCon — Date: 2/16/15 — Time: 5:00
Received (Name / iATL): _____ — Date: _____ — Time: _____
Sample Login (Name / iATL): _____ — Date: 2/17/15 — Time: _____
Analyst (Name(s) / iATL): _____ — Date: 2/18/15 — Time: _____
QA/QC Review (Name / iATL): _____ — Date: _____ — Time: _____
Archived / Released: _____ QA/QC InterLAB Use: _____ — Date: _____ — Time: _____

RECEIVED FEB 17 2015 iATL - By _____

EARTHCON®

Environmental Challenges
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EARTHCON CONSULTANTS, INC.
110 Weisenberger Road
Madison, Mississippi 39110
Telephone: (601) 853-2134 Fax: (601) 856-3978
Email: mail@earthcon.com

Lab Name:	
Cooler No.:	
FedEx No.:	

CHAIN-OF-CUSTODY

Client Name: EarthCon Consultants, Inc. 110 Weisenberger Road Madison, Mississippi 39110	Project Name/Location: MDOT - Admin Bldg / Jackson, MS	Project No.: 02.20150052.55
	Sampler (print/signature): Ryan Clarke / Ryan Clarke	H/M/S (lab use):

Item No.	Field No.	Sample Description	Collection Date	Collection Time	Analysis Required	Lab No. (for lab use only)
1	01	RM - Admin Bldg	2/13		PLM	5552857
2	02	↓	↓		600	5552858
3	03	RF - Admin Bldg			↓	5552859
4	04	↓				5552860
5	—					
6	—					
7						
8						
9						
10						
11						
12						
13						
14						

Relinquished By:	Date/Time:	Accepted By:	Date/Time:	Relinquished By:	Date/Time:	Accepted By:	Date/Time:
RC	2/16/15 5:00						
Relinquished By:	Date/Time:	Accepted By:	Date/Time:				

INSPECTOR CERTIFICATIONS

State of Mississippi

Department of Environmental Quality

Office of Pollution Control

Certificate of Licensure

In accordance with the Asbestos Abatement Accreditation and Certification Act,
Enacted as 1989 Mississippi Law, Chapter 505

Be it known that

W. Hal Moore

Having submitted acceptable evidence of qualifications and
training and other appropriate information, is hereby granted this

Asbestos Inspector

Certification

Chief, Asbestos & Lead Certification Branch

Certificate No.: ABI-00002284
Expiration Date: Jan 17th, 2015
Training Expires on Jan 17th, 2015

40533 LIC20140001

State of Mississippi

Department of Environmental Quality

Office of Pollution Control

Certificate of Licensure

In accordance with the Asbestos Abatement Accreditation and Certification Act,
Enacted as 1989 Mississippi Law, Chapter 505

Be it known that

James R Clarke

Having submitted acceptable evidence of qualifications and
training and other appropriate information, is hereby granted this

Asbestos Inspector

Certification

Certificate No.: ABI-00003456
Expiration Date: Nov 12th, 2015
Training Expires on Nov 12th, 2015

Chief, Asbestos & Lead Certification Branch

54812 LIC20140001

SECTION 07 54 00 THERMOPLASTIC MEMBRANE ROOFING

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes: Fully adhered roofing system utilizing a polyester reinforced, hot air welded thermoplastic KEE (Ketone Ethylene Ester) single ply membrane with a polyester felt backing, related accessories, miscellaneous flashing and attaching devices as indicated and / or required for a complete waterproof single ply roofing system.

B. Related Sections:

1. Section 02 26 23 - Selective Roof Demolition.
2. Section 26 41 14 - Lightning Protection System During Reroofing.

1.02 PERFORMANCE REQUIREMENTS

A. Solar Reflectance Index: Not less than 78 when calculated according to ASTM E 1980, based on testing identical products by a qualified testing agency.

B. Energy Performance: Provide roofing system that is listed on the DOE's ENERGY STAR "Roof Products Qualified Product List" for low-slope roof products.

1.03 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: For roofing system. Include plans, elevations, sections, details, and attachments to other work.

C. Warranties: Include sample copies of the Weathertightness Warranty prior to installation for MDOT Architect’s approval. DO NOT start roofing installation without MDOT Architect’s approval of Warranty. Refer to Division 00 Sections for State of Mississippi requirements.

1.04 INFORMATIONAL SUBMITTALS

A. Manufacturer Certificates: Signed by roofing manufacturer certifying that roofing system complies with requirements specified in "Performance Requirements" Article.

1. Submit evidence of compliance with performance requirements.

B. Research/evaluation reports.

C. Field quality-control reports.

1.05 CLOSEOUT SUBMITTALS

A. Maintenance data.

B. Executed Warranty.

1.06 QUALITY ASSURANCE

A. Manufacturer: Company specializing in single ply roofing Products with 10 years minimum experience.

B. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by membrane roofing system manufacturer to install manufacturer's product.

1. Company with 5 years minimum experience, who has completed work similar to that indicated for this project and with a record of successful in-service performance.
2. Submit identification of at least 3 projects of similar scope and complexity along with name, address, and telephone number of the Architect, Owner and General Contractor.

C. Source Limitations: Obtain components including roof insulation, fasteners and accessories for membrane roofing system approved by membrane roofing manufacturer and included in warranty.

D. Exterior Fire-Test Exposure: ASTM E 108, Class A; for application and roof slopes indicated, as determined by testing identical membrane roofing materials by a qualified testing agency. Materials shall be identified with appropriate markings of applicable testing agency.

E. Preinstallation Roofing Conference: Conduct conference at Project site.

F. Manufacturer’s Technical Representative:

1. At start of roofing installation the manufacturer’s technical representative shall verify that installer is complying with manufacture’s written installation instructions.
2. At midway of roofing installation the manufacturer’s technical representative shall inspect the work and verify that installer is complying with manufacture’s written installation instructions.
3. Upon completion of the work, the roofing system shall be inspected by the manufacturer’s technical representative to verify that the roofing system has been installed according to manufacturer’s written installation instructions and details and that roofing work is approved for warranty submission.

1.07 DELIVERY, STORAGE AND HANDLING

A. Deliver materials with manufacturer’s labels intact and legible.

B. Upon receipt of materials, examine shipment for damage and completeness.

C. Store roofing insulation, membrane and all other moisture sensitive materials indoors, or on raised platforms covered with suitable waterproof protective covering. Sealants and adhesives shall be stored to maintain a minimum temperature of 45 degrees F.

1.08 WARRANTY

A. Special Warranty: Manufacturer's standard or customized form, without monetary limitation, in which manufacturer agrees to repair or replace components of membrane roofing system that fail in materials or workmanship within specified warranty period.

1. Warranty Period: 20 years from date of Completion.

PART 2 - PRODUCTS

2.01 KEE MEMBRANE ROOFING

A. KEE Elvaloy® Sheet Roofing: ASTM D 6754-02, fabric reinforced and fabric backed. Equal to 60 mil FiberTite-SM-FB “fleece back” adhered flexible sheet roofing system.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
   a. Carlisle Syntec Systems.
   b. Ecology Roof Systems.
   c. Seaman Corporation. (Basis-of-Design)
2. Thickness: ASTM D751, 60 mils, nominal.
3. Exposed Face Color: Standard Off-White.
4. Breaking Strength: ASTM D751; 350 lbs.
5. Factory Seam Strength: ASTM D751, > Fabric Break.
6. Elongation at Break: ASTM D751; 18 percent
7. Heat Aging: ASTM D3045; 90 percent by 90 percent.
8. Tear Strength: ASTM D751; 100 lbs.
9. Dynamic Puncture Resistance (J): ASTM D5635; > 25.
10. Tensile Strength: ASTM D882; 8500 psi.
11. Linear Dimensional Change: ASTM D1204; 0.63 percent.
12. Hydrostatic Resistance: ASTM D751; 800 psi.
13. Energy Star: Yes
14. Solar Reflectivity: ASTM E903; 79 percent.
15. Solar Reflective Index (SRI): ASTM E1980; 98.54
16. Solar Emissivity: ASTM 1371; 85 percent.
17. Underwriters Laboratories: UL Class A.
18. Factory Mutual: FM Class I-90.

2.02 AUXILIARY MEMBRANE ROOFING MATERIALS

A. General: Auxiliary membrane roofing materials recommended by roofing system manufacturer for intended use, and compatible with membrane roofing.

1. Liquid-type auxiliary materials shall comply with VOC limits of authorities having jurisdiction.

B. Sheet Flashing: Manufacturer's standard sheet flashing of same material, type, reinforcement (if applicable), thickness, and color as KEE sheet membrane.

C. Bonding Adhesive: Manufacturer's standard.

D. Metal Termination Bars: Manufacturer's standard, predrilled stainless-steel or aluminum bars, approximately 1 by 1/8 inch thick; with anchors.

E. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening membrane to substrate, and acceptable to membrane roofing system manufacturer.

F. Miscellaneous Accessories: Membrane manufacturer's standard accessories shall be used to form a complete roofing system. Only those accessories that are supplied or otherwise approved by membrane manufacturer are acceptable. Accessories include, but are not limited to, the following:

1. Fasteners
2. Plates
3. Termination Bars
4. Trim and Flashing
5. Flashing adhesive
6. Coated Metal
7. Pre-Formed Flashings – boots for pipe penetrations, inside & outside corners
8. Pipe banding
9. Sealants
10. Walkway Pads

2.03 SUBSTRATE BOARDS

A. Substrate Board: Equal to G-P Gypsum Corp. 1/4 inch thick Dens-Deck Roof Board. Securely attach to roof deck per manufacturer's recommendations.

B. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening substrate board to roof deck.

2.04 ROOF INSULATION

A. General Roof Insulation Requirements:

1. Factory Mutual Class 1, I-90 Approved.
2. Meet applicable code requirements.
3. Approved by insulation manufacturer for use in fully adhered roofing installations of the nature specified herein.
4. Compatible with membrane and adhesive.
5. Board size and thickness shall be as listed in the most current Factory Mutual Approval Guide.

B. Approved Insulation Type: Polyisocyanurate meeting the requirements of ASTM C1289, Standard Specification for Faced Rigid Cellular Polyiscocyanurate Thermal Insulation Board. Tapered as indicated on Drawings.

C. Mechanical Attachment: Per manufacturer's recommendations using fasteners and plates or insulation adhesive approved by roofing system manufacturer and appropriate for existing roof deck.

2.05 INSULATION ACCESSORIES

A. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals 4470, designed for fastening roof insulation and cover boards to substrate, and acceptable to roofing system manufacturer.

B. Insulation Adhesive: Insulation manufacturer's recommended ribbon foam adhesive formulated to attach roof insulation to substrate or to another insulation layer.

2.06 WALKWAYS

A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway pads or rolls, approximately 3/16 inch thick, and acceptable to membrane roofing system manufacturer.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Inspect roof structure to verify deck is clean, dry and smooth with no excessive surface roughness, free of depressions, waves or projections.

B. Verify lightning protection system, roof openings, curbs, pipes, sleeves, ducts or vents through roof are solidly set, cant strips and reglets in place, and nailing strips located.

1. Adjust curb height to provide minimum 8 inches above finished roof surface.
2. Maintain lightning protection system.

C. Installer shall examine substrate and conditions under which Work is to be performed and must notify Contractor and Project Engineer in writing of unsatisfactory conditions. Do not proceed with installation until unsatisfactory conditions have been corrected in manner acceptable to Installer.

3.02 SUBSTRATE BOARD

A. Install substrate board with long joints in continuous straight lines, perpendicular to roof slopes with end joints staggered between rows. Tightly butt substrate boards together.

1. Fasten substrate board to deck to resist uplift pressure at corners, perimeter, and field of roof according to membrane roofing system manufacturers' written instructions.

3.03 INSTALLATION OF WOOD NAILERS AND BLOCKING

A. Install using methods recommended by manufacturer in accordance with local building code.

B. Nailers shall be anchored to resist a minimum force of 175 pounds per lineal foot in any direction.

1. Fastener spacing shall be a maximum of 3 feet on center.
2. Fasteners shall be installed within 6 inches of each end.
3. Spacing and fastener embedment shall conform to Factory Mutual Loss Prevention Data Sheet 1-49.
4. Stagger fasteners to provide stable anchorage.

C. Thickness shall be as required to match substrate or insulation height, with a maximum allowable variance of plus or minus 1/4 inch.

3.04 INSULATION INSTALLATION

A. Coordinate installing membrane roofing system components so insulation is not exposed to precipitation or left exposed at the end of the workday.

B. Comply with membrane roofing system and insulation manufacturer's written instructions for installing roof insulation.

C. Insulation shall be neatly cut to fit snugly around penetrations and projections.

D. Install tapered insulation under area of roofing to conform to slopes indicated.

E. Install insulation under area of roofing to achieve required thickness. Where overall insulation thickness is 2.7 inches or greater, install 2 or more layers with joints of each succeeding layer staggered from joints of previous layer a minimum of 6 inches in each direction.

F. Mechanically Fastened Insulation: Install each layer of insulation and secure to deck using mechanical fasteners specifically designed and sized for fastening specified board-type roof insulation to deck type.

1. Fasten insulation to resist uplift pressure at corners, perimeter, and .at penetrations.

G. Adhered Insulation and Substrate Boards: Install each layer of insulation and secure to deck using adhesive specifically designed for securing specified board-type roof insulation to deck type.

1. Urethane or Polyurethane:
   a. Adhesive shall be applied only to properly prepared and pre-approved substrates, free of debris, dirt, grease, oil or moisture.
   b. Minimum 70 deg F. product temperature at time of application.
   c. Adhesives shall not be applied when surface or ambient temperatures are below 40 deg F. or above 110 deg. F.
   d. Insulation shall be fully bonded to substrate with maximum board size of 4 feet by 4 feet.
   e. Insulation shall be set into continuous 1/2 inch bead of adhesive at minimum rate of one linear foot of adhesive for every one square foot of insulation board.
   f. Adhesive rates are to be increased according to specific project requirements and manufacturer’s design recommendations.
   g. Place boards onto adhesive and walk on boards, spreading adhesive for maximum contact.
   h. Second walking required after ten minutes to ensure maximum contact and bond strength.

3.05 ADHERED MEMBRANE ROOFING INSTALLATION

A. Adhere membrane roofing over area to receive roofing and install according to membrane roofing system manufacturer's written instructions.

B. Accurately align membrane roofing and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.

C. Bonding Adhesive: Apply to locations and at rate recommended by manufacturer and allow to partially dry before installing membrane roofing. Do not apply to splice area of membrane roofing.

D. In addition to adhering, mechanically fasten membrane roofing securely at terminations, penetrations, and perimeter of roofing.

E. Apply membrane roofing with side laps shingled with slope of roof deck where possible.

F. Seams: Clean seam areas, overlap membrane roofing, and hot-air weld side and end laps of membrane roofing and sheet flashings according to manufacturer's written instructions to ensure a watertight seam installation.

1. Test lap edges with probe to verify seam weld continuity.
2. Verify field strength of seams a minimum of twice daily and repair seam sample areas.
3. Repair tears, voids, and lapped seams in roofing that does not comply with requirements.

3.06 BASE FLASHING INSTALLATION

A. Install sheet flashings and preformed flashing accessories and adhere to substrates according to membrane roofing system manufacturer's written instructions.

B. Apply bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply to seam area of flashing.

C. Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.

D. Clean seam areas, overlap, and firmly roll sheet flashings into the adhesive. Hot-air weld side and end laps to ensure a watertight seam installation.

E. Terminate and seal top of sheet flashings and mechanically anchor to substrate through termination bars.

3.07 WALKWAY INSTALLATION

A. Flexible Walkways: Install walkway products in locations indicated. Heat weld to substrate or adhere walkway products to substrate with compatible adhesive according to roofing system manufacturer's written instructions. Install walkway pads at locations of concentrated roof traffic, around roof top mechanical units and access points.

3.08 FIELD QUALITY CONTROL

A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.

B. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion.

C. Repair or remove and replace components of membrane roofing system where inspections indicate that they do not comply with specified requirements.

3.09 CLEANING AND PROTECTION

A. Cleaning: Clean exposed surfaces, removing substances that may cause corrosion of metal or deterioration of the membrane.

Protection: Installer shall advise Contractor of required procedures for surveillance and protection of flashings, sheet metal work, membrane and accessories during construction, to ensure that Work will be without damage or deterioration until acceptance by the Owner.

END OF SECTION

FMS CON: 502884/301000,302000

ADDENDUM

STATE	PROJECT NO.
MISS.	MEP-5000-25(088)
MISS.	MEP-5000-25(080)

DESCRIPTION OF SHEET	WKG. NO.	SH. NO.
TITLE SHEET	——	1
DETAILED INDEX	DI-1	2
GENERAL NOTES	GN-1	3
SITE PLAN - ADMINISTRATION BUILDING	A1.1-AD	4
DEMOLITION ROOF PLAN - ADMINISTRATION BUILDING	A1.2-AD	5
ROOF PLAN - ADMINISTRATION BUILDING	A1.3-AD	6
SECTION DETAILS - ADMINISTRATION BUILDING	A3.1-AD	7
SITE PLAN - MATERIALS LAB	A1.4-ML	8
DEMOLITION ROOF PLAN - MATERIALS LAB	A1.5-ML	9
ROOF PLAN - MATERIALS LAB	A1.6-ML	10
SECTION DETAILS - MATERIALS LAB	A3.2-ML	11
SECTION DETAILS - MATERIALS LAB	A3.3-ML	12

1

PS & E PLANS–DATE. 2/03/15		
FMS CON. #502884 /301000, 302000		
REVISIONS		
DATE	SHEET NO.	BY
5/14/15	2, 6, 10, 12	DSW

1 DSW BY

ADD SHEET TO INDEX REVISION

5/14/15 DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

REPLACE HAIL-DAMAGED ROOFS

DETAILED INDEX

JACKSON, MS

COUNTY: HINDS

PROJ. NUM.: MEP-5000-25(088)

WORKING NUMBER DI-1

FILENAME: DI-1.DGN

DESIGN TEAM ASU CHECKED JWV DATE 02/03/15

SHEET NUMBER 2

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

XMODXYY 08: 08 AMPM DGNFILENAME

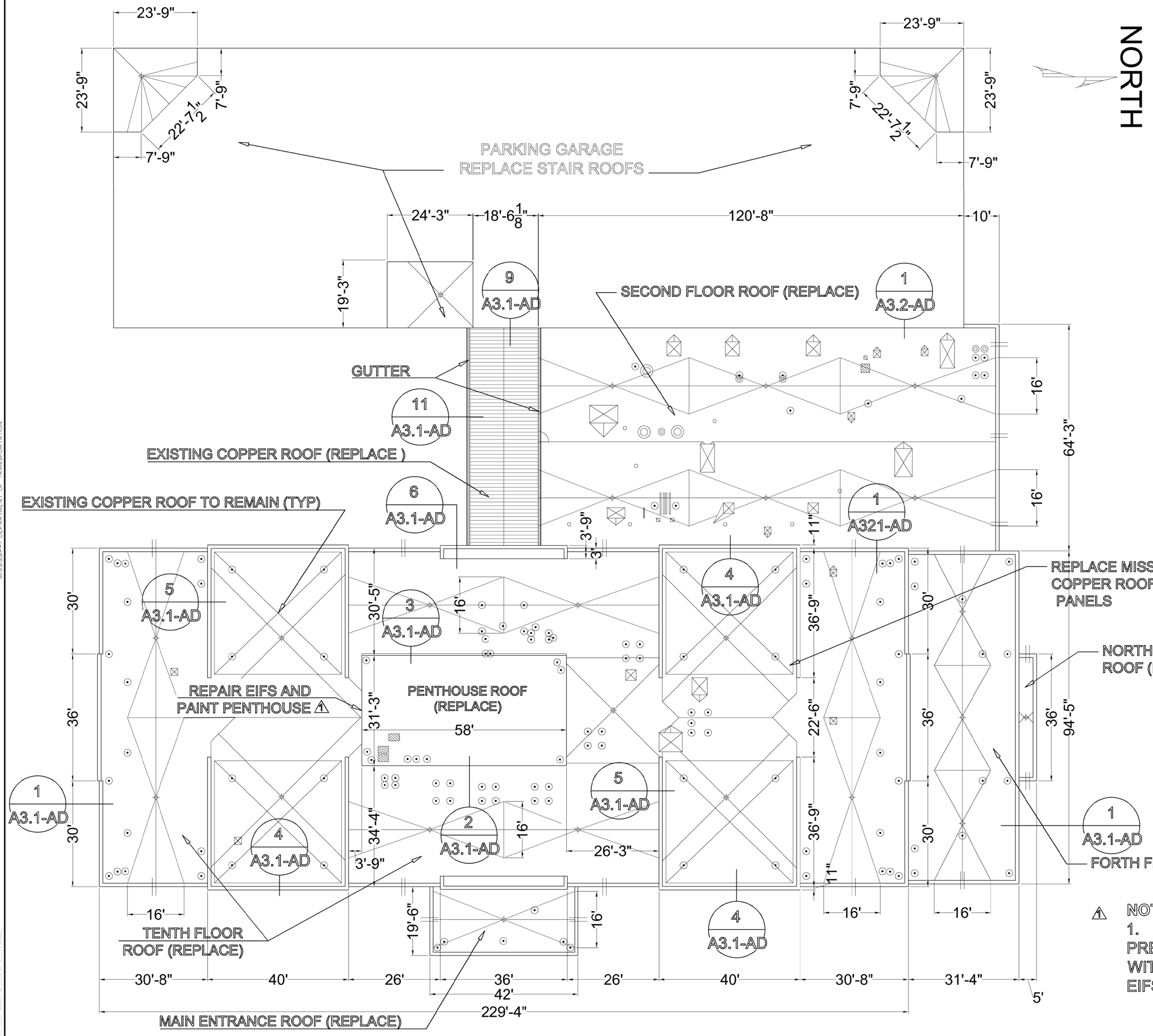
FMS CON:

ADDENDUM

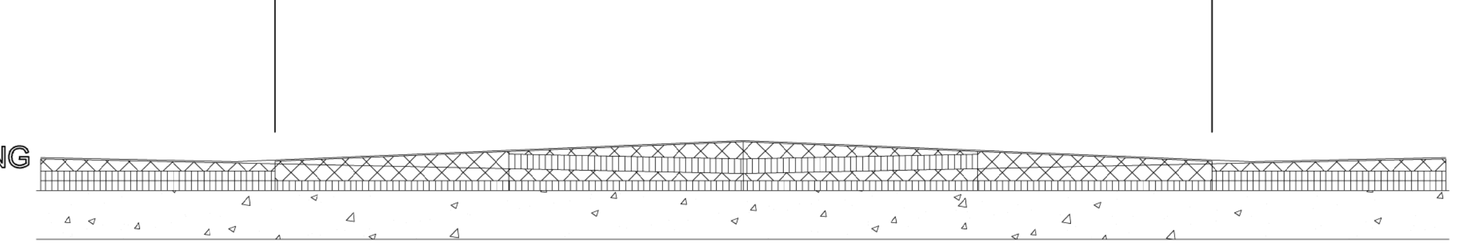
STATE	PROJECT NO.
MISS.	MEP-5000-25(088)

PENETRATION LEDGEND

- ROOF DRAIN (5/A3.2-ML)
- VTR (2/A3.2-ML)
- HEATER VENT (13/A3.1-AD)
- PIPE WRAP (12/A3.1-AD)
- ROOF CURB (3/A3.2-ML)
- SCUPPER (6/A3.2-ML)



1 A1.3-AD ROOF PLAN
SCALE: 1/16" = 1' - 0"



2 A1.3-AD TYP TAPERED INSUL
SCALE: ½" = 1' - 0"

NOTE: NEW INSULATION TO SLOPE ¼" PER FOOT, 3 ½" MIN

1" 0" ½" 1" 2"
GRAPHIC SCALE

⚠1 NOTE:
1. REPAIR EIFS WALL DEFICIENCIES, PREPARE AND PAINT THE PENTHOUSE WITH PAINT RECOMMENDED BY A MAJOR EIFS MANUFACTURER.

DATE	REVISION	BY
5/14/15	ADD NOTE	DSW

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
REPLACE HAIL-DAMAGED ROOFS
ADMINISTRATION BUILDING
JACKSON, MS
COUNTY: HINDS
PROJ. NUM.: MEP-5000-25(088)
FILENAME: 14–1065 MDOT ADMIN 100814.DWG
DESIGN TEAM ASU CHECKED DATE 2/3/2015

WORKING NUMBER
A1.3-AD
SHEET NUMBER
6

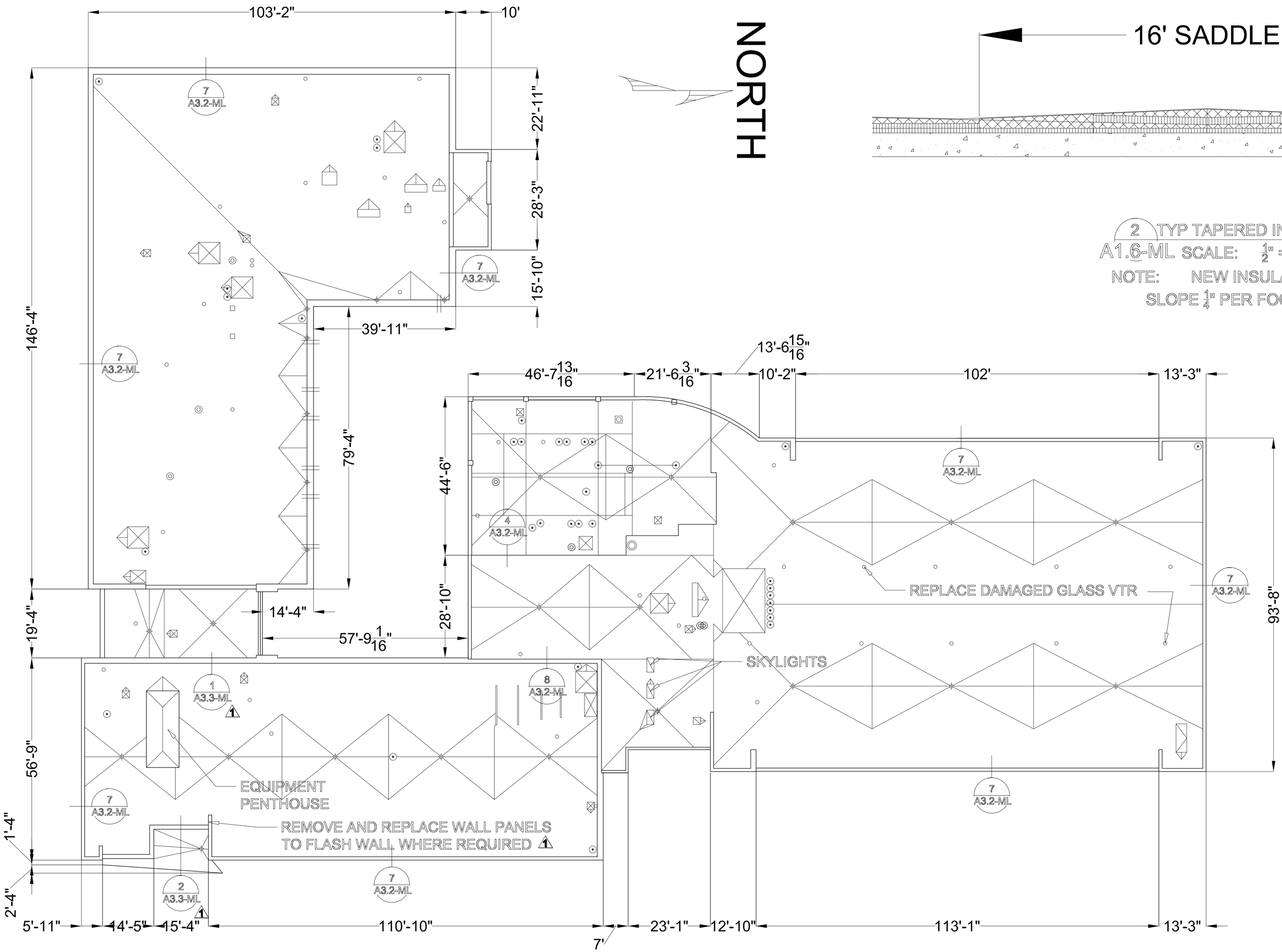
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DO NOT SCALE DRAWINGS

FMS CON:

ADDENDUM

STATE	PROJECT NO.
MISS.	MEP-5000-25(080)

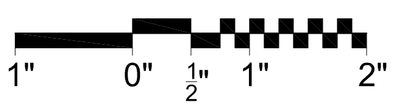


1 / A1.6-ML ROOF PLAN
SCALE: 1/16" = 1' - 0"

2 / A1.6-ML TYP TAPERED INSUL
SCALE: 1/2" = 1' - 0"
NOTE: NEW INSULATION TO SLOPE 1/4" PER FOOT, 3 1/2" MIN

PENETRATION LEDGEND

- ROOF DRAIN (5/A3.2-ML)
- VTR (2/A3.2-ML)
- HEATER VENT (13/A3.1-AD)
- PIPE WRAP (12/A3.1-AD)
- ROOF CURB (3/A3.2-ML)
- SCUPPER (6/A3.2-ML)



GRAPHIC SCALE

BY	DATE	REVISION
DBW	1	
		ADD DETAIL AND NOTE
	9/14/15	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

REPLACE HAIL-DAMAGED ROOFS

MATERIALS LAB BUILDING

JACKSON, MS

COUNTY: HINDS

PROJ. NUM.: MEP-5000-25(080)

FILENAME: 14-1065 MDOT LAB 100114.DWG

DESIGN TEAM ASU CHECKED DATE 2/3/2015

WORKING NUMBER A1.6-ML

SHEET NUMBER 10

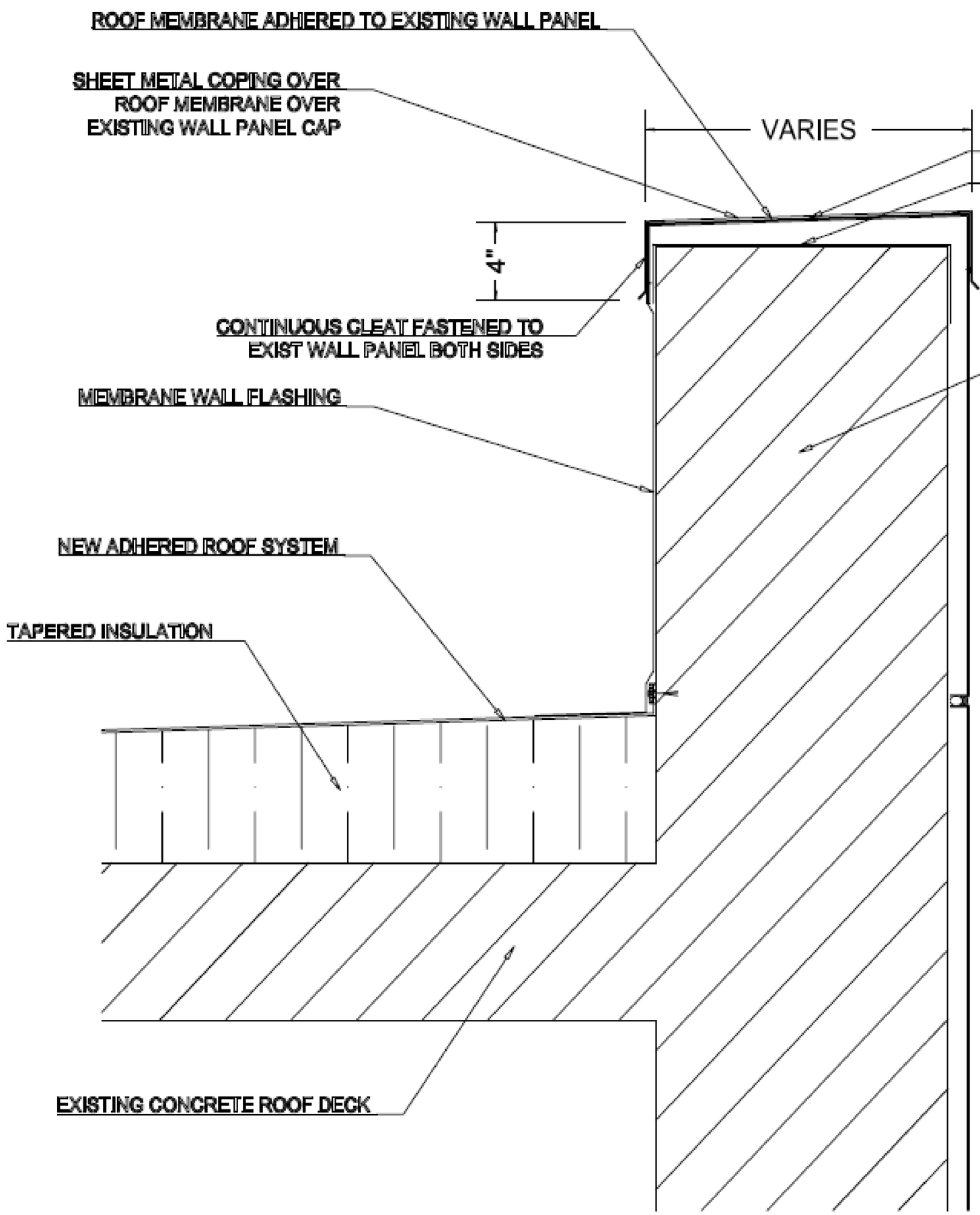
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MMDDYY 00:00 AMPM DGNFILENAME

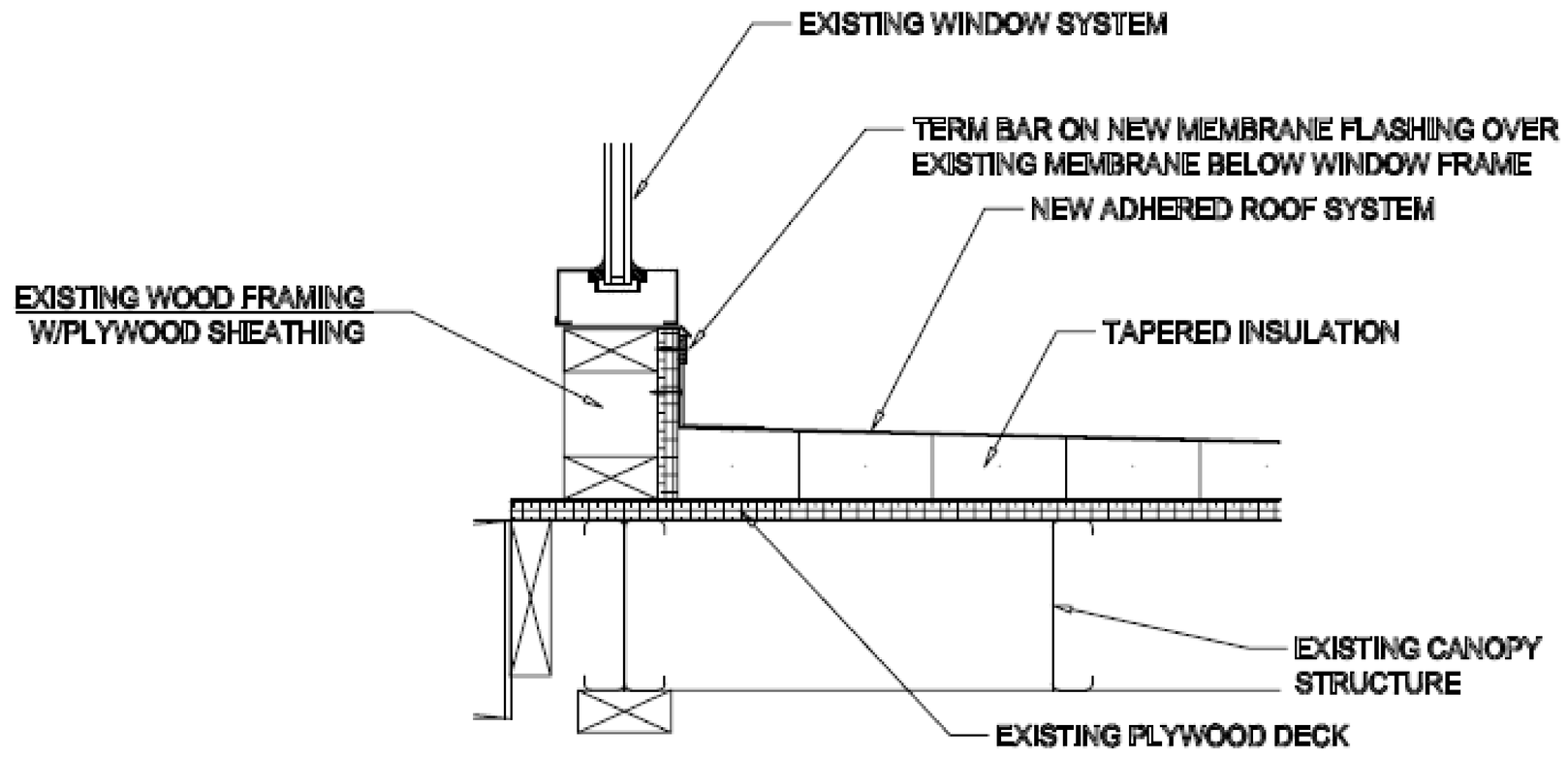
FMS CON:

STATE	PROJECT NO.
MISS.	MEP-5000-25(080)

ADDENDUM



1 / A3.3ML — CLAD PARAPET
SCALE: 3" = 1'-0"



2 / A3.3-ML — CANOPY/WINDOW
SCALE: 3" = 1'-0"

1" 0" ½" 1" 2"
GRAPHIC SCALE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

REPLACE HAIL-DAMAGED ROOFS

MATERIALS LAB BUILDING

JACKSON, MS

COUNTY: **HINDS**

PROJ. NUM.: **MEP-5000-25(080)**

WORKING NUMBER: **A3.3-ML**

SHEET NUMBER: **12**

FILENAME: 4-1065 MDOT LAB 100114.DWG

DESIGN TEAM ASZ CHECKED DATE 2/3/2015

MM/DD/YY 00:00 AM/PM DGN FILENAME