

White River Apartments Diaz, AR

August 6, 2016

#### Addendum #2

Contract Documents for the above referenced project are hereby amended by the following items. These items shall have full force and effect and shall take precedence over the original contract documents as provided herein. All items not changed by the addendum shall remain in effect. Contractors may download the referenced revised documents form the Dropbox link set up for this project.

- 1. Specification Appendix B Asbestos Report and Abatement Protocol attached.
- 2. Specification Appendix D Radon Report attached.
- 3. Specification Appendix F Mold and Roach Feces Protocol attached.
- 4. Specification Sections 031100, 032000, 033000, 051200, 053100, 055000 and 061000 Revisions attached.
- 5. Specification Section 099100 Clarification Refer to Part 2.1 for approved manufacturers.
- 6. Specification Section 099656 Epoxy Flooring Duraguard 120 has been discontinued. Provide and install Sikafloor 216 per manufacturer's instructions. Color selected by Owner.
- 7. Refer to Sheet SD-1 Note that there are three (3) large rocks within each of the center islands of the two parking lots. These six (6) rocks shall be removed and disposed of by GC.
- 8. Refer to Sheet SD-2 Detail 8 Replace with 8/SD-2 attached.
- 9. Refer to Sheets A1.0, A1.1, A1.2, A1.3, A1.4 "General Note" Clarification The Property was constructed in 1981, after the 1978 ban on Lead Based Paint therefore LBP is not suspected to be present.
- Refer to Sheets A1.0, A1.1 Typical Units Note 21 Change to read as follows: Remove all carpet, seamless vinyl and/or peal and stick vinyl flooring down to existing subfloor, concrete or VCT w/ asbestos mastic to remain. Remove wall base. Prep floors and install new vinyl plank flooring through-out entire apartment (See Specification Section 096513-3.2). Provide and install new vinyl wall base. Patch and repair walls, apply orange peel texture and paint. Patch and repair ceiling (re-texture as required) and paint.
- 11. Refer to Sheets A1.0, A1.1 Typical Units Note 22 Change to read as follows: Remove all seamless vinyl and/or peal and stick vinyl flooring down to existing subfloor, concrete or VCT w/ asbestos mastic to remain. Remove wall base. Prep floors, install ¼ cement board underlayment and install new porcelain tile flooring. Provide and install new vinyl wall base. Patch and repair walls to smooth finish and paint. Patch and repair ceiling to smooth finish and paint.
- 12. Refer to Sheets A1.2, A1.3, A1.4 Accessible Units Note 21 Change to read as follows: Remove all flooring layers and abate asbestos containing materials per protocol. Prep concrete floors and install new vinyl plank flooring through-out entire apartment (See Specification Section 096513-3.2). Provide and install new vinyl wall base. Patch and repair walls, apply orange peel texture and paint. Patch and repair ceiling (retexture as required) and paint.
- 13. Refer to Sheets A1.2, A1.3, A1.4 Accessible Units Note 22 Change to read as follows: Remove all flooring layers and abate asbestos containing materials per protocol. Prep concrete floors and install new porcelain tile flooring. Provide and install new vinyl wall base. Patch and repair walls to smooth finish and paint. Patch and repair ceiling to smooth finish and paint.
- 14. Refer to Sheet A1.5 Provide and install recessed Medicine Cabinet (ASI #8340) on the perpendicular wall adjacent to all lavatories.

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#### Page 2 of 2

- 15. Refer to Sheet A1.7 Details 12 and 13 Where 2x2 dropped ceiling wood members span greater than 4ft provide and install 1" wide, 20 gauge galvanized steel strapping secured to floor/roof structure above and to 2x2 member with #6 wood screws such that the maximum span of the 2x2 member is 4ft.
- 16. Refer to Sheets A3.0 and A3.1 Change downspout size to 3x4.
- 17. Refer to Sheet A4.0 Elevation 1/A4.0 Omit reference to CT Wall backsplash.

End of Addendum #2

## APPENDIX 'B'

ACM ABATEMENT PROTOCOL



August 2, 2016



### ASBESTOS ABATEMENT PROTOCOL WHITE RIVER APARTMENTS 2900 MARION DRIVE DIAZ, ARKANSAS

Planned renovation of White River Apartments located at 2900 Marion Drive, Diaz, Arkansas can potentially disturb asbestos-containing building materials (ACMs). An asbestos inspection by Impact Environmental, (June 13-14, 2016) identified confirmed asbestos-containing materials (ACMs) in the form of thin beige vinyl floor tile, thin red vinyl floor tile, thin brown vinyl floor tile, and thin beige-brown vinyl floor tile in the bottom layer of kitchens, kitchen closets, utility rooms, utility closets, and restrooms of the apartment buildings, according to data provided in the report. The ACMs are Category 1, non-friable. The exception is building 8, which was remodeled after a fire; the report states that no ACMs were identified in building 8.

During renovations, contractors will potentially be in contact with or be in areas with asbestoscontaining materials (ACMs). Because ACMs have been identified in these areas, each worker in the area is required by OSHA to have at least a two-hour asbestos information and awareness training. Because of contact and potential disturbance of ACMs, the workers must receive and be competent in Class III and Class IV asbestos work in order to be in compliance with OSHA Construction Standard and Housekeeping Work under the General Industry Standard. After this training, each will be allowed to conduct their scope of work providing that the following protocols for Class III and Class IV work in the area of ACMs.

#### **SCOPE OF WORK SEQUENCE**

- Asbestos-containing materials will be abated and area clearance confirmed by postabatement air monitoring
- After clearance, renovation can be conducted in these areas.

#### ASBESTOS ABATEMENT PROTOCOL

Because the abatement of asbestos-containing materials (ACMs) will impact greater than 160 ft<sup>2</sup>, a 10-day notification is required to be filed with the Arkansas Department of Environmental Quality.

Only ADEQ-accredited asbestos abatement workers and abatement companies can conduct this abatement work on the ACMs – no other contractors can conduct this work without proper training and accreditation as asbestos abatement workers. OSHA regulations require air purifying respirators when working with materials that have a trace (<1%) asbestos or with ACMs (>1%).

### ALL NON-AUTHORIZED PERSONNEL WILL BE VACATED PRIOR TO ANY WORK TO BE CONDUCTED IN THESE RESPECTIVE WORK AREAS.

### SUMMARY





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The ACM abatement work is OSHA Class I and Class II work. The ACM vinyl tile is reported to be in good condition. Where the ACM vinyl tile will be disturbed by renovation, ACMs will be abated by gross removal.

The total square footage for confirmed asbestos tile is not provided in the report by Impact Environmental. All areas and square footages of those areas to be abated must be confirmed by the contractors bidding on the asbestos abatement.

The abatement contractor is required to have at least one copy of the required documents on site during the abatement (ADEQ Regulation 21.701.

Where ACMs will be abated, OSHA standards require air purifying respirators and appropriate personal protective equipment (PPE) be used in these areas.

Air clearance monitoring must be conducted after ACM abatement in each regulated containment area. Negative exposure assessments may be used to evaluate potential exposure in areas of minor ACM disturbance, as provided below in this document. If the negative exposure assessments are successful, the same working condition methods (e.g., wet methods) will be used during similar renovation activities without having to use asbestos abatement contractors or containment space.

### ABATEMENT BY GROSS REMOVAL

The following methods will be used for the asbestos abatement:

- Isolate each work area in the units (e.g., kitchens, utility rooms, restrooms) from the adjacent areas using temporary plastic containment barriers. Six-mil poly sheeting containment systems will be erected to separate the abatement work areas (i.e., regulated area) from the non-abatement areas. Negative air systems with HEPA filters will be used inside the containment area(s) and make-up air provided. Construction of the containment systems shall meet the ADEQ, EPA, and OSHA standards, including egress and ingress and decontamination areas, if necessary.
- Non-abatement persons in the regulated areas must be vacated prior to any abatement work to be conducted in those respective regulated areas.
- Mark the entry ways with warning tape and OSHA Asbestos Health Hazard signage to prevent accidental entry to the area until abatement work areas have been cleared for reoccupation (i.e., meet the EPA/ADEQ clearance criteria of 0.01 fibers/cm<sup>3</sup>).
- Compliance procedures for air emissions control according to ADEQ Regulation No. 21 *et. seq.* for ACMs (negative air pressure with HEPA filters during all abatement operations) until air clearance is successful.
- Abatement work will only be conducted by asbestos abatement contractors trained and approved to conduct Class I and Class II asbestos work according to OSHA/TOSHA regulations.
- Turn off HVAC systems and seal HVAC vents with double poly sheeting (OSHA required).
- Abatement workers will don appropriate disposable protective clothing and half-face or full-face air purifying respirators prior to entering the work areas as required by OSHA.
- Water and liquid soap mixture (i.e., amended water) will be sprayed on the ACMs prior to any disturbance of vinyl flooring. The ACMs must be wet to the touch. If the ACMs still





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create potential airborne dust, additional amended water spray will be applied to keep the materials wet and minimize airborne fibers: wet scraping and other state of the art techniques.

- Removed ACMs will be placed in double 6 mil poly bags or plastic sheeting, <u>wetted with</u> <u>amended water</u>, goose necked and taped with duct tape, and staged within the containment work area. At the end of a work shift or when work is completed in one area within the containment, ACM wastes will be transported to a <u>poly-lined trailer</u>, <u>poly-lined dumpster</u>, <u>or enclosed truck</u> for staging on the property for later off-site disposal. ALL BAGS MUST BE LABLED "ASBESTOS WASTE (EPA/ADEQ regulation). In addition, the trailer or dumpster must be labeled as "ASBESTOS WASTE". The trailer or dumpster will be located in an isolated area away from high foot-traffic areas in order minimize potential exposure. The trailer or dumpster will be isolated by caution tape or other tape to restrict access. If bagged wastes are placed in an enclosed truck or van, the vehicle must be locked.
- After ACM abatement, each containment or regulated work areas will be HEPA vacuumed and wet wiped using an application of amended water and other state of the art techniques to minimize asbestos fiber release. Used disposable protective clothing will be disposed in double 6 mil poly bags and goose neck taped, sealed and labeled as "ASBESTOS WASTE".
- After abatement of an area, a third party ADEQ-accredited AHERA building inspector will inspect the cleaned area prior to the poly containment being removed.
- Air clearance monitoring will be conducted by a third party ADEQ-accredited air monitoring technician after ACM abatement is completed in a containment work area. The poly containment system can be removed only after air clearance monitoring shows that the work areas meet the EPA/ADEQ clearance criteria (<0.01 f/cc).
- ACM wastes must be disposed in a ADEQ-approved landfill accepting asbestos wastes, using asbestos waste manifests, and have a <u>certificate of disposal for each load</u> of asbestos wastes.
- The abatement contractor will prepare a report of abatement procedures, waste manifests, waste disposal certificates, medical records, and personnel training records/accreditations (i.e., close-out report).

#### **NEGATIVE EXPOSURE ASSESSMENTS**

Negative exposure assessments can be conducted for select minor renovation/abatement activities in individual units and in common areas (e.g., anchors, floor penetrations). During the negative exposure assessments for individual units, workers performing the activities will wear appropriate respiratory protection and personal protective clothing. The area of the work will be isolated with six-mil poly sheeting (i.e., regulated containment area) and furniture/appliances/countertops covered with poly sheeting, as necessary. Negative air systems with HEPA filters will be used inside the containment area(s) using make-up air. A third party will conduct the personnel air monitoring for the workers and area air monitoring. Abatement and ACM handling disturbance activities in the units could include: floor penetrations of ACM flooring. Wet methods will be used to minimize dust exposure and drilled materials will be collected in containers with surfactant or shaving cream. If the negative exposure assessments are successful (i.e., within OSHA Permissible Exposure Limit (PEL) and Excursion Limit (EL), the same working condition methods (e.g., wet methods) shall be used during these renovation activities without the need of using asbestos abatement contractor.





For common areas, negative exposure assessments may be conducted for drilling holes into flooring. All residents in the common area will be evacuated prior to ACM disturbance. The impacted common area will be isolated with poly sheeting and appropriate warning signs posted and poly sheeting on the floors. Negative air systems with HEPA filters will be used inside the containment area(s) using make-up air. A third party will conduct the personnel air monitoring for the workers and area air monitoring. Abatement and ACM handling disturbance activities in the units will include: drilling small holes through ACM flooring/mastic. If the negative exposure assessments are successful, the same working condition methods (e.g., wet methods) shall be used during these renovation activities without the need of using asbestos abatement contractor.

### ABATEMENT CONTRACTOR DOCUMENTATION

The following information must be provided to the owner within **35 days** after asbestos waste disposal (**EPA/ADEQ requirement**).

- Asbestos abatement firm accreditation and individual worker/supervisor certification and ADEQ accreditation.
- Individual medical exam certificates for wearing personal respiratory protection equipment and successful respirator fit test.
- Completed and signed 10-day notification to ADEQ.
- Asbestos abatement methods and disposal methods used.
- Completed site inspection and clean up form for each work area (plus photo documentation preferred).
- Waste chain of custody and disposal manifests.

### PROHIBITIONS

The following work practices and engineering controls shall <u>not</u> be used for work related to asbestos or for work which disturbs ACM or Presumed ACM, regardless of measured levels of asbestos exposure or the results of initial exposure assessments:

- Compressed air: Compressed air used to remove asbestos, dust or materials containing asbestos, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air.
- Dry sweeping: Dry sweeping, shoveling or other dry clean-up of dust and debris containing ACM and Presumed ACM.
- Repairing or removing damaged textured wall surfacing.

## **ASBESTOS INSPECTION REPORT**

White River Apartments *located at* 2900 Marion Drive Diaz, Arkansas 72112



Report date: June 22, 2016 Revised July 27, 2016

Prepared for: Dominion Due Diligence 4121 Cox Road, Suite 200 Glen Allen, Virginia 23060

Project # 160531-458



IMPACT Environmental, Inc.

P.O. Box 1130 Conway, Arkansas 72033 501-428-2100

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### **1.0 EXECUTIVE SUMMARY**

Impact Environmental, Inc. was retained by Dominion Due Diligence to perform an inspection for asbestos-containing materials (ACM) in the White River Apartments located at 2900 Marion Drive in Diaz, Arkansas. Philip Zabel of Impact Environmental, Inc. performed the asbestos inspection on June 13 and 14, 2016.

The inspection of the facility identified numerous suspect ACMs. Samples were collected and analyzed to determine the asbestos content. Asbestos was identified in the bottom layer flooring materials in several of the buildings. The asbestos flooring included red floor tile, thin beige floor tile, thin brown floor tile and thin beige-brown floor tile. The inspection did not include roof sampling. Therefore, the roofing materials should be assumed to contain asbestos until sampled.

Thin beige floor tile was identified and sampled in all apartment buildings except building 8. Building 8 was remodeled following a fire. Some of the thin beige floor tile was negative for asbestos by PLM analysis. Based on the positive results of similar floor tile, the negative floor tile should be analyzed by transmission electron microscopy (TEM) or assumed to contain asbestos.

The thin beige floor tile was identified as the bottom layer of floor tile in the kitchen, kitchen closet, utility room, utility closet and restrooms. Many of the apartments units had three to four layers of floor tile.

All of the ACMs were found to be in good condition at the time of the inspection. It is recommended that ACMs in good condition be maintained in place with an O&M Plan. Damaged ACMs or ACMs that will be disturbed should be removed or repaired according to state and federal regulations.



## 2.0 INTRODUCTION

Impact Environmental, Inc. was retained by Dominion Due Diligence to perform an inspection for asbestos-containing materials (ACM) in the White River Apartments building located at 2900 Marion Drive in Diaz, Arkansas. The inspection was performed according to the Arkansas Department of Environmental Quality (ADEQ) and the EPA National Emissions Standards for Hazardous Air Pollutants (NESHAP) requirements. However, the inspection did not include roof sampling.

Philip Zabel of Impact Environmental, Inc. performed the asbestos inspection on June 13 and 14, 2016. Mr. Zabel is an ADEQ certified asbestos inspector (#010876). Impact Environmental, Inc. is an ADEQ licensed asbestos consultant (#000423).

## 3.0 BUILDING DESCRIPTION

The White River Apartments consist of eight two-story apartment buildings which total approximately 57,768 square feet and 64 units. The property also includes a one-story shop/laundry building. The apartments are wood frame construction with a slab-on-grade foundation and pitched shingle roofs. The exterior of the buildings are finished with a combination of vinyl siding over painted wood siding and brick veneer with aluminum windows. The interior of the buildings are finished with floor tile, linoleum, carpet, and gypsum board walls. The attic of the buildings generally were not accessible at the time of the inspection due to obstructions of the access portal or excessive insulation or wiring over the portal opening. The buildings were originally constructed in 1981.

## 4.0 PURPOSE OF STUDY

The purpose of the inspection was to identify suspect ACMs, collect bulk samples of the suspect materials for laboratory analysis, identify the location and condition of the ACMs and provide response action recommendations, if needed.

## 5.0 METHODOLOGY

Inspection procedures were followed in accordance to the US EPA Asbestos Hazard and Emergency Response Act (AHERA) or 40 CFR Part 763. Suspect materials were categorized as surfacing, thermal system insulation and miscellaneous. Homogeneous areas were identified and sampled according to AHERA sampling protocol. Homogeneous materials are those building materials that, by visual and manual inspection, are similar in texture, color, composition and use in the building, and are deemed to be the same material.

The condition of each suspect material was assessed in the field by the inspector. The condition of the materials were classified as *good*, *damaged* and *significantly damaged*.



Federal and state regulatory agencies define an ACM as any material that contains greater than 1% asbestos. The percentage of asbestos and the determination if a material contains asbestos can only be determined by laboratory analysis.

Asbestos samples were sent to AmeriSci Richmond in Midlothian, Virginia. AmeriSci participates in the National Institute for Standards and Testing (NIST) National Voluntary Laboratory Accreditation Program proficiency testing program (NVLAP #200784-0) as well as inter- and intra-laboratory exchange programs. Samples were analyzed via Polarized Light Microscopy (PLM) by EPA method 600/R/R-93/116. All percentages reported for composition are based on visual estimation or gravimetric determinations. Please refer to the Appendix for copies of the laboratory reports.

## 6.0 FINDINGS

The ADEQ regulates certain types and quantities of ACMs. These regulated ACMs (RACM) include friable materials and some non-friable materials. An asbestos design by an ADEQ licensed designer is required on projects involving the disturbance of more than three square feet of RACM. This design identifies the regulatory compliance requirements based on the project's individual characteristics.

## 6.1 Friable Asbestos-Containing Materials

Friable ACM is identified as any material containing more than one percent asbestos that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Friable ACMs must be removed prior to any demolition or renovation activities which may disturb them.

No friable ACM was identified in the facility.

## 6.2 Non-friable Asbestos-Containing Materials

Non-friable ACMs are divided into two categories.

**Category I non-friable ACMs** are defined as asbestos-containing resilient floor covering, roofing products, packings and gasket materials. Category I non-friable ACMs in good condition can be left in buildings being demolished. If these materials are in poor condition or if they will be subjected to breaking, sanding, grinding, cutting, or abrading they are considered RACM and must be removed prior to demolition or renovation by a licensed asbestos abatement contractor. Note that flooring adhesive is considered to be a non-friable category II material by the ADEQ. To avoid confusion, if present, the adhesive is listed with it's associated floor tile.



Sample Number	Туре	Description	* Location	Condition
1-05-01	М	Red Floor Tile and Brown Adhesive	Building 1 - Unit 101 (Bottom Layer)	Good
1-12-01 1-12-02	М	Thin Beige Floor Tile and Yellow Adhesive	Building 1 - Unit 106, 107 (Bottom Layer)	Good
2-09-01	М	Thin Beige Floor Tile and Brown Adhesive	Building 2 - Unit 207 (Bottom Layer)	Good
2-11-01	М	12x12 Thin Brown Floor Tile and Yellow Adhesive	Building 2 - Unit 208 (Bottom Layer)	Good
3-03-01 3-03-02	М	Thin Beige Floor Tile and Brown Adhesive	Building 3 - Unit 301, 302, 304, 307 (Bottom Layer)	Good
3-10-01 3-10-02	М	12x12 Beige-Brown Floor Tile and Brown Adhesive	Building 3 - Unit 306	Good
6-04-01 6-04-02	М	Thin Beige Floor Tile and Yellow Adhesive	Building 6 - Unit 602, 604 (Bottom Layer)	Good

Seven non-friable category I ACMs were identified in the buildings.

Material Type: M – Miscellaneous, S – Surfacing, TSI – Thermal System Insulation

\* The flooring materials were verified to be located in the listed units. However, underlying layers of flooring were not verified in every room or every unit of the building. It should be assumed that the bottom layer of flooring contains asbestos in the kitchen, kitchen closet, utility room, utility closet and restrooms of each unit.

**Category II non-friable ACMs** are defined as all other non-friable ACMs (excluding category I non-friable ACMs). Category II non-friable ACMs that have a high probability of becoming or have become friable by the forces expected to act on them in the course of demolition or renovation operations are considered RACM and must be removed by a licensed asbestos abatement contractor.

No non-friable category II ACM was identified in the facility.

## 6.3 Non-Asbestos Containing Materials

The following table is a summary of those materials which were sampled but did not contain asbestos in quantities greater than 1%.

Sample Number	Туре	Material Description	Material Location
SH-01-01 SH-01-02	М	Insulation Backing	Shop Walls and Ceiling
L-01-01 L-01-02 L-01-03	S	Texture Paint	Laundry Room Walls





Sample Number	Туре	Material Description	Material Location
L-02-01 L-02-02	М	Gypsum Wallboard and Joint Compound	Laundry Room Walls
L-03-01 L-03-02	М	Ceramic Tile Grout	Laundry Room Floor

Sample Number	Туре	Material Description	Material Location
1-01-01 1-01-02 1-01-03 1-01-04 1-01-05 1-01-06 1-01-07	S	Texture Ceiling	Throughout Building
1-02-01 1-02-02	М	12x12 Light Gray Floor Tile and Yellow Adhesive	Unit 101, 105, 106, 107
1-03-01 1-03-02	М	12x12 White Floor Tile and Yellow Adhesive	Unit 103
1-04-01 1-04-02	М	12x12 White Floor Tile Peel and Stick	Unit 101, 103, 107, 108
1-06-01 1-06-02	М	Gypsum Wallboard and Joint Compound	Throughout Building
1-07-01	М	Ceramic Tile Pattern Linoleum	Unit 102
1-08-01	М	Gray Floor Tile Peel and Stick	Unit 102
1-09-01 1-09-02	М	12x12 Light Brown Floor Tile and Brown Adhesive	Unit 102, 103, 104
1-10-01	М	12x12 Red Floor Tile Peel and Stick	Unit 104
1-11-01	М	Yellow Linoleum	Unit 107 (2 <sup>nd</sup> Layer)

Sample Number	Туре	Material Description	Material Location
2-01-01 2-01-02 2-01-03 2-01-04 2-01-05 2-01-06 2-01-07	S	Texture Ceiling	Throughout Building
2-02-01 2-02-02	М	Gypsum Wallboard and Joint Compound	Throughout Building
2-03-01 2-03-02	М	12x12 White Floor Tile and Yellow Adhesive	Unit 204, 206, 207
2-04-01 2-04-02	М	12x12 White Floor Tile Peel and Stick	Unit 201, 208



Sample Number	Туре	Material Description	Material Location
2-05-01 2-05-02	М	White Floor Tile and Brown Adhesive	Unit 201, 206
2-06-01 2-06-02	М	12x12 Red Floor Tile Peel and Stick	Unit 207, 208
2-07-01	М	12x12 Gray Floor Tile and Brown Adhesive	Unit 207
2-08-01	М	12x12 Faux Wood Floor Tile Peel and Stick	Unit 207
2-10-01 2-10-02	М	12x12 Cream Slate Floor Tile Peel and Stick	Unit 208

Sample Number	Туре	Material Description	Material Location
3-01-01 3-01-02 3-01-03 3-01-04 3-01-05 3-01-06 3-01-07	S	Texture Ceiling	Throughout Building
3-02-01 3-02-02	М	12x12 White Floor Tile Peel and Stick	Unit 302, 303, 304
3-04-01 3-04-02	М	12x12 Green Floor Tile Peel and Stick	Unit 301
3-05-01 3-05-02	М	Off-White Linoleum	Unit 301 (2 <sup>nd</sup> Layer)
3-06-01	М	12x12 Brown Floor Tile Peel and Stick	Unit 301
3-07-01	М	12x12 Gray Floor Tile Peel and Stick	Unit 301
3-08-01 3-08-02	М	Gypsum Wallboard and Joint Compound	Throughout Building
3-09-01 3-09-02	М	12x12 Light Brown Floor Tile and Brown Adhesive	Unit 303, 304, 305, 307, 308

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Sample Number	Туре	Material Description	Material Location
4-01-01 4-01-02 4-01-03 4-01-04 4-01-05 4-01-06 4-01-07	S	Texture Ceiling	Throughout Building
4-02-01	М	12x12 Light Gray Floor Tile and	Unit 404



Sample Number	Туре	Material Description	Material Location
		Brown Adhesive	
4-03-01 4-03-02	М	White Floor Tile and Brown Adhesive	Unit 401, 402, 403, 404
4-04-01 4-04-02	М	Thin Beige Floor Tile and Yellow Adhesive	Unit 403, 404 (Bottom Layer)
4-05-01	М	12x12 Dark Gray Floor Tile and Yellow Adhesive	Unit 403
4-06-01 4-06-02	М	12x12 Light Brown Floor Tile and Yellow Adhesive	Unit 401, 405, 406, 407, 408
4-07-01 4-07-02	М	Gypsum Wallboard and Joint Compound	Throughout Building
4-08-01	М	Ceramic Tile Pattern Linoleum	Unit 407
4-09-01	М	12x12 White Floor Tile Peel and Stick	Unit 407

Sample Number	Туре	Material Description	Material Location
5-01-01 5-01-02 5-01-03 5-01-04 5-01-05 5-01-06 5-01-07	S	Texture Ceiling	Throughout Building
5-02-01 5-02-02	М	12x12 Brown Floor Tile and Yellow Adhesive	Unit 501, 503
5-03-01 5-03-02	М	Thin Beige Floor Tile and Yellow Adhesive	Unit 503, 504 (Bottom Layer)
5-04-01 5-04-02	М	Gypsum Wallboard and Joint Compound	Throughout Building
5-05-01 5-05-02	М	12x12 Light Brown Floor Tile and Brown Adhesive	Unit 504, 505, 506
5-06-01	М	White Floor Tile Peel and Stick	Unit 504
5-07-01	М	White Floor Tile and Brown Adhesive	Unit 504
5-08-01	М	12x12 Faux Wood Floor Tile Peel and Stick	Unit 504
5-09-01 5-09-02	М	12x12 White Floor Tile Peel and Stick	Unit 501, 502, 505
5-10-01	М	Light Brown Linoleum	Unit 502
5-11-01	М	Off-White Floor Tile and Brown Adhesive	Unit 502
5-12-01	М	12x12 Red Floor Tile Peel and Stick	Unit 502
5-13-01	М	12x12 Gray Floor Tile and Yellow Adhesive	Unit 507



Sample Number	Туре	Material Description	Material Location
5-14-01	М	Light Brown Ceramic Tile	Unit 507, 508
5-14-02	IVI	Pattern Linoleum	onit 307, 300
5-15-01	М	Yellow Linoleum	Unit 508 (3 <sup>rd</sup> Layer)

Sample Number	Туре	Material Description	Material Location
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-	
6-01-01			
6-01-02			
6-01-03	0		
6-01-04	S	Texture Ceiling	Throughout Building
6-01-05			
6-01-06			
6-01-07			
6-02-01	М	12x12 Faux Wood Floor Tile	Unit 604
		Peel and Stick	
6-03-01	М	White Floor Tile and Yellow	Unit 604, 605
6-03-02		Adhesive	
6-05-01	М	Gray Ceramic Tile Pattern Linoleum	Unit 604
6-06-01	М	12x12 Gray Floor Tile with Black Backing and Yellow Adhesive	Unit 603
6-07-01		12x12 Light Brown Floor Tile	
6-07-02	М	and Brown Adhesive	Unit 603, 605, 607, 608
6-08-01		12x12 White Floor Tile Peel and	
6-08-02	M	Stick	Unit 602, 603, 605
6-09-01		12x12 White Floor Tile and	
6-09-02	M	Brown Adhesive	Unit 602, 606, 607, 608
6-10-01	М	12x12 Slate Floor Tile Peel and Stick	Unit 602
6-11-01		Gypsum Wallboard and Joint	
6-11-02	M	Compound	Throughout Building

Sample Number	Туре	Material Description	Material Location
7-01-01 7-01-02 7-01-03 7-01-04 7-01-05 7-01-06 7-01-07	S	Texture Ceiling	Throughout Building
7-02-01 7-02-02	М	Tile Pattern Linoleum	Unit 703, 706
7-03-01	М	Gray Linoleum	Unit 703
7-04-01	М	Green Linoleum	Unit 703



Sample Number	Туре	Material Description	Material Location
7-05-01 7-05-02	М	Yellow Linoleum	Unit 703, 706
7-06-01 7-06-02	М	Gypsum Wallboard and Joint Compound	Throughout Building
7-07-01	М	Tan 18x18 Floor Tile Peel and Stick	Unit 703
7-08-01 7-08-02	м	White Floor Tile Peel and Stick	Unit 704, 708
7-09-01 7-09-02	М	Beige Floor Tile and Yellow Adhesive	Unit 704, 708
7-10-01	м	Thin Beige Floor Tile and Yellow Adhesive	Unit 704 (Bottom Layer)
7-11-01 7-11-02	м	12x12 Tan Floor Tile Peel and Stick	Unit 704, 706
7-12-01 7-12-02	М	Pink Floor Tile and Adhesive	Unit 704, 706
7-13-01 7-13-02	М	Off-White Floor Tile with Black Backing and Yellow Adhesive	Unit 702, 704
7-14-01	М	Thin Off-White Floor Tile and Black Adhesive	Unit 702
7-15-01	М	Off-White Floor Tile and Brown Adhesive	Unit 707

**Building 8** 

Sample Number	Туре	Material Description	Material Location	
8-01-01 8-01-02 8-01-03 8-01-04 8-01-05 8-01-06 8-01-07	S	Texture Ceiling	Throughout Building	
8-02-01 8-02-02 8-02-03 8-02-04 8-02-05 8-02-06 8-02-07	S	Texture Painted Walls	Throughout Building	
8-03-01 8-03-02	М	Gypsum Wallboard and Joint Compound	Throughout Building	
8-04-01 8-04-02	М	12x12 White Floor Tile and Brown Adhesive	Unit 802, 803, 804, 806	
8-05-01 8-05-02	М	12x12 Light Brown Floor Tile and Brown Adhesive	Unit 801, 802, 803, 804, 805, 806, 807, 808	
8-06-01	М	White Floor Tile and Brown Adhesive	Unit 801	



Sample Number	Туре	Material Description	Material Location
8-07-01	М	12x12 Gray Floor Tile and Brown Adhesive	Unit 806

Material Type: M – Miscellaneous, S – Surfacing, TSI – Thermal System Insulation

## 7.0 RECOMMENDATIONS

The inspection of the facility identified numerous suspect ACMs. Samples were collected and analyzed to determine the asbestos content. Asbestos was identified in the bottom layer flooring materials in several of the buildings. The inspection did not include roof sampling. Therefore, the roofing materials should be assumed to contain asbestos until sampled.

Thin beige floor tile was identified and sampled in all apartment buildings except building 8. Building 8 was remodeled following a fire. Some of the thin beige floor tile was negative for asbestos by PLM analysis. Based on the positive results of similar floor tile, the negative floor tile should be analyzed by transmission electron microscopy (TEM) or assumed to contain asbestos.

The thin beige floor tile was identified as the bottom layer of floor tile in the kitchen, kitchen closet, utility room, utility closet and restrooms. Many of the apartments units had three to four layers of floor tile.

All of the ACMs were found to be in good condition at the time of the inspection. It is recommended that ACMs in good condition be maintained in place with an O&M Plan. Damaged ACMs or ACMs that will be disturbed should be removed or repaired according to state and federal regulations.

According to the Arkansas Department of Environmental Quality (ADEQ) Regulation 21, a notice of intent must be submitted to the ADEQ ten days prior to demolition of a facility or facility component regardless of whether ACM was identified.

ACMs are commonly found in inaccessible building spaces (i.e., crawl spaces, between walls, under floors, behind other building materials, etc.) Impact Environmental, Inc. recommends a copy of the asbestos inspection be given to the general contractor responsible for any building renovation. The general contractor should be asked to exercise caution when uncovering primarily inaccessible spaces to prevent disturbance of or damage to unidentified ACMs. If a suspect material is uncovered, the contractor should stop work and notify the building owner's representative of the locations of the suspect material. The building owner's representative should then contact Impact Environmental to sample the suspect material.



### 8.0 LIMITATIONS

Laboratory analysis was performed by AmeriSci Richmond in Midlothian, Virginia. AmeriSci Richmond is solely responsible for all analytical results contained in or referred to in this report.

Impact Environmental, Inc. performed this service in a manner consistent with the level of care and expertise exercised by members of the asbestos consulting profession. Impact Environmental, Inc. does not imply or guarantee that every material on the property, or in the property building, which may potentially have asbestos as a component has been identified and/or sampled. The inspection is intended to identify accessible materials most likely to contain asbestos in quantities subject to regulation.

All conclusions regarding this project represent the professional opinions of the Impact Environmental, Inc. personnel involved and the results of this report should not be considered a legal interpretation of existing environmental regulations. Impact Environmental, Inc. assumes no responsibility or liability for errors in data utilized from sources outside of Impact Environmental, Inc. or developments resulting from situations outside the scope of this project.

This Report was Prepared by:

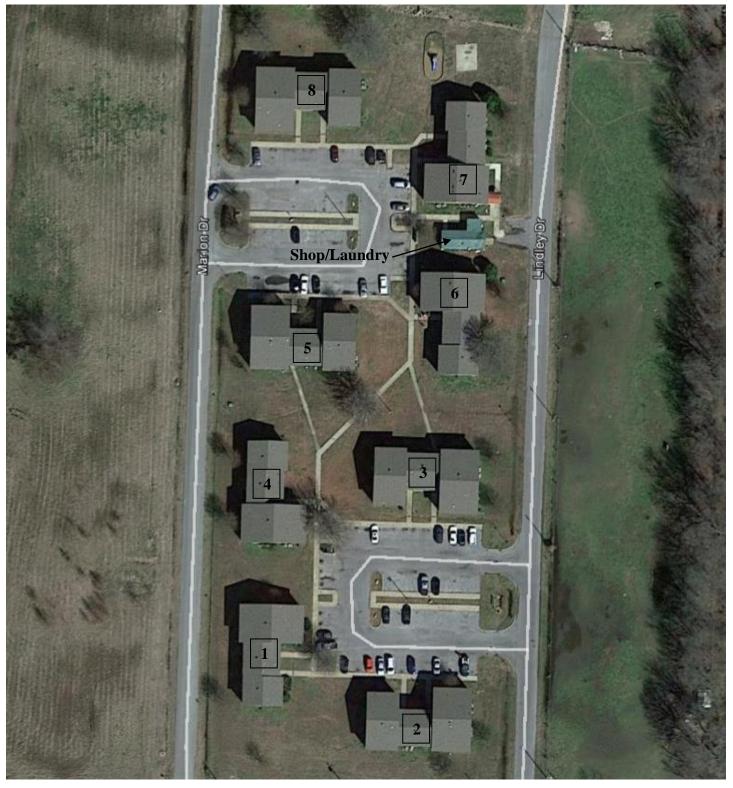
Sul

Philip Zabel, P.G. President



# APPENDICES

A. BUILDING LOCATION PLAN



Impact Environmental, Inc. PO Box 1130 Conway, Arkansas 72033 Ph: 501-428-2100 Project #: 160531-458

# **Building Location Plan**

NŤ

White River Apartments 2900 Marion Drive Diaz, Arkansas 72112

NOT TO SCALE

# **B. LABORATORY ANALYSIS REPORTS**

Please Reply To:



AmeriSci Richmond

13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800

#### FACSIMILE TELECOPY TRANSMISSION

To:	Kim Dingledine	From:	Jean L. Mayes
	Dominion Due Diligence Group	AmeriSci Job #:	116061823
Fax #:	<u> </u>	Subject:	PLM 3 day Results
1 44 171		<b>Client Project:</b>	White River Apartments - #2016-1014; 2900 Marion Drive,
Email:	k.dingledine@d3g.biz,hazmat@d3g.biz		Diaz, Arkansas; Buildin

 Date:
 Sunday, June 19, 2016

 Time:
 15:54:44

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Number of Pages:

(including cover sheet)

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## **PLM Bulk Asbestos Report**

Dominion Due Diligence Group
Attn: Kim Dingledine
4121 Cox Road
Suite 200
Glen Allen, VA 23060

 Date Received
 06/16/16
 AmeriSci Job #
 116061823

 Date Examined
 06/19/16
 P.O. #
 Page
 1
 of
 7

 RE: White River Apartments - #2016-1014;
 2900 Marion Drive, Diaz, Arkansas;
 Building
 1

Client No. / H	IGA Lab	No.	Asbestos Present	<b>Total % Asbestos</b>
1-01-01	116061 Location: Texture Ceiling; Through	out Building	Νο	NAD (by CVES) by Jean L. Mayes on 06/19/16
Asbestos	r <b>iption:</b> White, Heterogeneous, Non-Fib <b>5 Types:</b> <b>Iaterial:</b> Non-fibrous 100 %	rous, Bulk Mate	rial	
1-01-02	116061	823-02	No	NAD
	Location: Texture Ceiling; Through	nout Building		(by CVES) by Jean L. Mayes on 06/19/16
Asbestos	ription: White, Heterogeneous, Non-Fib s Types: laterial: Synthetic fibers 3 %, Non-fibror		rial	
1-01-03	116061		No	NAD
	Location: Texture Ceiling; Throug	nout Building		(by CVES) by Jean L. Mayes on 06/19/16
Asbesto	c <b>ription:</b> White, Heterogeneous, Non-Fit <b>s Types:</b> <b>/laterial:</b> Non-fibrous 100 %	prous, Bulk Mate	erial	
1-01-04	116061	823-04	No	NAD
	Location: Texture Ceiling; Throug	hout Building		(by CVES) by Jean L. Mayes on 06/19/16
Asbesto	c <b>ription:</b> White, Heterogeneous, Non-Fil <b>s Types:</b> <b>Material:</b> Non-fibrous 100 %	prous, Bulk Mate	erial	
1-01-05		823-05	No	NAD
	Location: Texture Ceiling; Throug	hout Building		(by CVES) by Jean L. Mayes on 06/19/16
Asbesto	cription: White, Heterogeneous, Non-Fi s Types:	brous, Bulk Mate	erial	
Other	Material: Non-fibrous 100 %			

Client No. / HGA	Lab No.	Asbestos Present	<b>Total % Asbestos</b>
	116061823-06 tion: Texture Ceiling; Throughout Building	No	NAD (by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: W Asbestos Types: Other Material: N	/hite, Heterogeneous, Non-Fibrous, Bulk Mat on-fibrous 100 %	enal	
1-01-07	116061823-07	No	NAD
	tion: Texture Ceiling; Throughout Building		(by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: W Asbestos Types: Other Material: N	/hite, Heterogeneous, Non-Fibrous, Bulk Mat on-fibrous 100 %	erial	
1-02-01	116061823-08L1	No	NAD
	tion: 12x12 Light Gray Floor Tile And Yellow	/ Adhesive; Unit 101, 105, 106, 107	(by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: G Asbestos Types: Other Material: N	iray, Heterogeneous, Non-Fibrous, Floor Tile		
1-02-01 Loca	116061823-08L2 tion: 12x12 Light Gray Floor Tile And Yellow	<b>No</b> v Adhesive; Unit 101, 105, 106, 107	NAD (by CVES) by Jean L. Mayes on 06/19/16
Asbestos Types:	ellow, Heterogeneous, Non-Fibrous, Mastic Cellulose 2 %, Non-fibrous 98 %		
1-02-02	116061823-09L1	No	NAD
Loca	ition: 12x12 Light Gray Floor Tile And Yellov	v Adhesive; Unit 101, 105, 106, 107	(by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: ( Asbestos Types: Other Material: N	Gray, Heterogeneous, Non-Fibrous, Floor Tile Ion-fibrous 100 %		
1-02-02 Loca	116061823-09L2 ation: 12x12 Light Gray Floor Tile And Yellov	<b>No</b> w Adhesive; Unit 101, 105, 106, 107	NAD (by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: \ Asbestos Types:	ellow, Heterogeneous, Non-Fibrous, Mastic		

Client No. / HGA	Lab No.	<b>Asbestos Present</b>	<b>Total % Asbestos</b>
	116061823-10L1 2x12 White Floor Tile And Yellow A		NAD (by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: White, H Asbestos Types: Other Material: Non-fibr	leterogeneous, Non-Fibrous, Floor T ous 100 %	Γile	
1-03-01 Location: 1	116061823-10L2 I2x12 White Floor Tile And Yellow A	<b>No</b> dhesive; Unit 103	NAD (by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: Yellow, Asbestos Types: Other Material: Non-fibr	Heterogeneous, Non-Fibrous, Mastic ous 100 %	c	
1-03-02 Location:	116061823-11L1 12x12 White Floor Tile And Yellow A	<b>No</b> Adhesive; Unit 103	NAD (by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: White, H Asbestos Types: Other Material: Non-fibr	Heterogeneous, Non-Fibrous, Floor 1 rous 100 %	Tile	
1-03-02 Location:	116061823-11L2 12x12 White Floor Tile And Yellow A	<b>No</b> Adhesive; Unit 103	NAD (by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: Yellow, Asbestos Types: Other Material: Non-fibr	Heterogeneous, Non-Fibrous, Masti rous 100 %	c	
1-04-01 Location:	116061823-12 12x12 White Floor Tile Peel And Stic	<b>No</b> ck ; Unit 101, 103, 107, 108	NAD (by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: White, I Asbestos Types: Other Material: Non-fib	Heterogeneous, Non-Fibrous, Bulk N rous 100 %	<b>A</b> aterial	
1-04-02 Location:	116061823-13 12x12 White Floor Tile Peel And Stie	<b>No</b> ck ; Unit 101, 103, 107, 108	NAD (by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: White, I Asbestos Types: Other Material: Non-fib	Heterogeneous, Non-Fibrous, Bulk N rous 100 %	Material	

Client No. / HGA	Lab No.	<b>Asbestos Present</b>	<b>Total % Asbestos</b>
1-05-01	116061823-14L1	Yes	2 %
	n: Red Floor Tile And Brown Adhesive; L	Unit 101 (Bottom Layer)	(by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: Red Asbestos Types: Chr Other Material: Non			
1-05-01	116061823-14L2		NA
Locatio	on: Red Floor Tile And Brown Adhesive; I	Unit 101 (Bottom Layer)	
Analyst Description: Mas Asbestos Types: Other Material:			
Comment: Qua	Intity Insufficient For Analysis		
1-06-01 Locatio	116061823-15.1 on: *Gypsum Wallboard And Joint Compo	<b>No</b> ound; Throughout Building	NAD (by CVES) by Jean L. Mayes on 06/19/16
Asbestos Types:	ite/Brown, Heterogeneous, Non-Fibrous, lulose 10 %, Non-fibrous 90 %	Wall Board	
1-06-01	116061823-15.2	No	NAD
Locatio	on: *Gypsum Wallboard And Joint Comp	ound; Throughout Building	(by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: Wh Asbestos Types: Other Material: Nor	ite, Heterogeneous, Non-Fibrous, Joint C n-fibrous 100 %	ompound	
	116061823-16.1	No	NAD
1-06-02			(by CVES)
1-06-02 Locatio	on: *Gypsum Wallboard And Joint Comp	ound; Throughout Building	by Jean L. Mayes on 06/19/16

White River Apartments - #2016-1014; 2900 Marion Drive,

Diaz, Arkansas; Building 1

Client No. / HGA	Lab No.	Asbestos Present	<b>Total % Asbestos</b>
1-06-02 L	116061823-16.2 ocation: *Gypsum Wallboard And Joint Compo	<b>No</b> bund; Throughout Building	NAD (by CVES) by Jean L. Mayes on 06/19/16
Asbestos Type	n: White, Heterogeneous, Non-Fibrous, Joint Co <b>s:</b> II: Non-fibrous 100 %	ompound	
1-07-01 L	116061823-17 ocation: Ceramic Tile Pattern Linoleum; Unit 10	<b>No</b> 02	NAD (by CVES) by Jean L. Mayes on 06/19/16
Asbestos Type	n: Gray, Heterogeneous, Non-Fibrous, Bulk Mat <b>s:</b> I: Non-fibrous 100 %	erial	
1-08-01 L	116061823-18 ocation: Gray Floor Tile Peel And Stick; Unit 10	<b>No</b> 02	NAD (by CVES) by Jean L. Mayes on 06/19/16
Asbestos Type	n: Gray, Heterogeneous, Non-Fibrous, Bulk Mate s: I: Synthetic fibers 5 %, Non-fibrous 95 %	erial	
1-09-01 L	116061823-19L1 ocation: 12x12 Light Brown Floor Tile And Brow	<b>No</b> wn Adhesive; Unit 102, 103, 104	NAD (by CVES) by Jean L. Mayes on 06/19/16
Asbestos Type	n: Brown, Heterogeneous, Non-Fibrous, Floor Ti <b>s:</b> I: Non-fibrous 100 %		
1-09-01 L	116061823-19L2 ocation: 12x12 Light Brown Floor Tile And Brow	<b>No</b> wn Adhesive; Unit 102, 103, 104	NAD (by CVES) by Jean L. Mayes on 06/19/16
Asbestos Type	n: Yellow, Heterogeneous, Non-Fibrous, Mastic s: I: Non-fibrous 100 %		
	116061823-20L1 ocation: 12x12 Light Brown Floor Tile And Brow		NAD (by CVES) by Jean L. Mayes on 06/19/16
Asbestos Type	n: Brown, Heterogeneous, Non-Fibrous, Floor Ti <b>s:</b> I: Non-fibrous 100 %		

Client No. / H	IGA	Lab No.	Asbestos Present	<b>Total % Asbestos</b>
1-09-02			<b>No</b> wn Adhesive; Unit 102, 103, 104	NAD (by CVES) by Jean L. Mayes on 06/19/16
Asbestos	ription: Yellow, Heterogene <b>Types:</b> Iaterial: Non-fibrous 100 %	ous, Non-Fibrous, Mastic		
1-10-01	Lesstion, 12v12 Pod I	116061823-21 Floor Tile Peel And Stick;	No Lipit 104	NAD (by CVES)
	Locauon: 12X12 Neu 1	Tool The Feel And Slick,		by Jean L. Mayes on 06/19/16
Asbestos	r <b>iption:</b> Brown, Heterogene a <b>Types:</b> <b>laterial:</b> Non-fibrous 100 %	ous, Non-Fibrous, Bulk M	aterial	
1-11-01		116061823-22	No	NAD
	Location: Yellow Linol	eum; Unit 107 (2nd Laye	)	(by CVES) by Jean L. Mayes on 06/19/16
Asbestos	<b>ription:</b> Yellow, Heterogene <b>3 Types:</b> <b>faterial:</b> Cellulose 25 %, No		laterial	
1-12-01		116061823-23L1	No	NAD
	Location: Thin Beige I	Floor Tile And Yellow Adh	esive; Unit 106, 107 (Bottom Layer)	(by CVES) by Jean L. Mayes on 06/19/16
Asbesto	c <mark>ription:</mark> Beige, Heterogened s Types: faterial: Non-fibrous 100 %	ous, Non-Fibrous, Floor T	ile	
1-12-01		116061823-23L2		NA
	Location: Thin Beige	Floor Tile And Yellow Adh	esive; Unit 106, 107 (Bottom Layer)	
Asbesto	cription: Mastic s Types: faterial:			
Co	mment: Quantity Insufficien	t For Analysis		

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 1

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
1-12-02	116061823-24L1 n: Thin Beige Floor Tile And Yellow Adhe	<b>Yes</b> esive; Unit 106, 107 (Bottom Layer)	2 % (by CVES) by Jean L. Mayes on 06/19/16
Analyst Description: Beig Asbestos Types: Chr Other Material: Nor		e	
Other Material: Nor	- 10 rous 90 %		
	116061823-24L2	No	NAD
1-12-02			NAD (by CVES) by Jean L. Mayes on 06/19/16
1-12-02 Locatio	116061823-24L2 on: Thin Beige Floor Tile And Yellow Adhe	esive; Unit 106, 107 (Bottom Layer)	(by CVES) by Jean L. Mayes
1-12-02 Locatio	116061823-24L2	esive; Unit 106, 107 (Bottom Layer)	(by CVES) by Jean L. Mayes

**Reporting Notes:** 

\*NAD = no asbestos detected, Detection Limit <1% Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must net be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested. Reviewed By:

Date

	Asbestos Inspection Chain of Custody	116	<b>06182</b> 6-14-16	3
Project	White River Apartments – #2016-1014	Date	6-14-16	╹.
Address	2900 Marion Drive, Diaz, Arkansas	TAT	3-day	
Client	Dominion Due Diligence Group (804) 358-2020 4121 Cox Road, Suite 200, Glen Allen, Virginia 23060	Method	PLM	
	4121 Cox Road, Suite 200, Glen Allen, Virginia 23060			j

Building 1				
Seconda Manifest	type	Witnesdor Description	Netecter Location	
1-01-01 1-01-02 1-01-03 1-01-04 1-01-05 1-01-06 1-01-07	S	Texture Ceiling	Throughout Building	
1-02-01 1-02-02	Maria	12x12 Light Gray Floor Tile and Yellow Adhesive	Unit 101, 105, <del>106</del> , 107	
1-03-01 1-03-02	м	12x12 White Floor Tile and Yellow Adhesive	Unit 103	
1-04-01 1-04-02	м	12x12 White Floor Tile Peel and Stick	Unit 101, 103, 107, 108	
1-05-01	м	Red Floor Tile and Brown Adhesive	Unit 101 (Bottom Layer)	
1-06-01 1-06-02	м	* Gypsum Wallboard and Joint Compound	Throughout Building	
1-07-01	M	Ceramic Tile Pattern Linoleum	Unit 102	
1-08-01	M	Gray Floor Tile Peel and Stick	Unit 102	
1-09-01 1-09-02	М	12x12 Light Brown Floor Tile and Brown Adhesive	Unit 102, 103, 104	
1-10-01	М	12x12 Red Floor Tile Peel and Stick	Unit 104	
1-11-01	M	Yellow Linoleum	Unit 107 (2 <sup>nd</sup> Layer)	
1-12-01 1-12-02	M	Thin Beige Floor Tile and Yellow Adhesive	Unit 106, 107 (Bottom Layer)	

\* Composite analysis of wallboard and joint compound requested if joint compound contains asbestos.

Material Type: M - Miscellaneous, S - Surfacing, TSI - Thermal System Insulation

		JUN <b>1 6 2016</b>
		By T
Submitted by: Philip Zabel	Date: 6-15-16	Signature: Alin Sanl
Recieved by:	 Date:	Signature:

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Please Reply To:



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To:	Kim Dingledine	From:	David W. Ralbovsky
	Dominion Due Diligence Group	AmeriSci Job #:	116061824
Fax #:		Subject:	PLM 3 day Results
		<b>Client Project:</b>	White River Apartments -
<b>-</b> -	1. dia -1. dia - @ d2 - 1. i= h@ d2 - 1. i=		#2016-1014; 2900 Marion Drive,
Email:	k.dingledine@d3g.biz,hazmat@d3g.biz		Diaz, Arkansas; Buildin

Date: Monday, June 20, 2016 Time: 14:58:38 Comments: Number of Pages:

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## **PLM Bulk Asbestos Report**

Dominion Due Diligence Group Attn: Kim Dingledine 4121 Cox Road Suite 200 Glen Allen, VA 23060 Date Received 06/16/16 AmeriSci Job # 116061824 Date Examined 06/19/16 P.O. # Page 1 of 6 RE: White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 2

	HGA	Lab No.	<b>Asbestos Present</b>	Total % Asbestos
2-01-01	Location: Textu	116061824-01 re Ceiling; Throughout Building	Νο	NAD (by CVES) by David W. Ralbovsky on 06/19/16
Asbesto	•	ogeneous, Non-Fibrous, Bulk Ma 00 %	iterial	
2-01-02		116061824-02	No	NAD
	Location: Textu	re Ceiling; Throughout Building		(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto		ogeneous, Non-Fibrous, Bulk Ma	nterial	
2-01-03		116061824-03	No	NAD
	Location: Textu	re Ceiling; Throughout Building		(by CVES)
				by David W. Ralbovsky on 06/20/16
Asbesto	s Types:	ogeneous, Non-Fibrous, Bulk Ma ce, Non-fibrous 100 %	nterial	•
Asbesto	s Types:	-	nterial <b>No</b>	•
Asbesto Other M	s Types: Material: Cellulose Tra	ce, Non-fibrous 100 %		on 06/20/16
Asbesto Other I 2-01-04 Analyst Desc Asbesto	s Types: Material: Cellulose Tra Location: Textu cription: Beige, Hetero	ce, Non-fibrous 100 % 116061824-04 re Ceiling; Throughout Building ogeneous, Non-Fibrous, Bulk Ma	Νο	on 06/20/16 NAD (by CVES) by David W. Ralbovsky
Asbesto Other I 2-01-04 Analyst Des Asbesto Other I	s Types: Material: Cellulose Tra Location: Textu cription: Beige, Hetero s Types:	ce, Non-fibrous 100 % 116061824-04 re Ceiling; Throughout Building ogeneous, Non-Fibrous, Bulk Ma	Νο	on 06/20/16 NAD (by CVES) by David W. Ralbovsky
Asbesto Other I 2-01-04 Analyst Desc Asbesto	s Types: Material: Cellulose Tra Location: Textu cription: Beige, Hetero s Types: Material: Non-fibrous 1	ce, Non-fibrous 100 % 116061824-04 re Ceiling; Throughout Building ogeneous, Non-Fibrous, Bulk Ma	<b>No</b> aterial	on 06/20/16 NAD (by CVES) by David W. Ralbovsky on 06/20/16

#### Page 2 of 6

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## **PLM Bulk Asbestos Report**

Client No. / HGA	Lab No.	<b>Asbestos Present</b>	<b>Total % Asbestos</b>
2-01-06 L	116061824-06 .ocation: Texture Ceiling; Throughout Building	Νο	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type		terial	
Other Materia	al: Cellulose Trace, Non-fibrous 100 %		
2-01-07 L	116061824-07 .ocation: Texture Ceiling; Throughout Building	Νο	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Beige, Heterogeneous, Non-Fibrous, Bulk Mai s: al: Non-fibrous 100 %	terial	
2-02-01	116061824-08.1	No	NAD
L	.ocation: *Gypsum Wallboard And Joint Compo	und; Throughout Building	(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Brown/White, Heterogeneous, Fibrous, Wall B s: al: Cellulose 5 %, Non-fibrous 95 %	Board	
2-02-01 L	116061824-08.2 .ocation: *Gypsum Wallboard And Joint Compo	<b>No</b> und; Throughout Building	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: White, Heterogeneous, Non-Fibrous, Joint Co s: al: Non-fibrous 100 %	mpound	
2-02-02	116061824-09.1	No	NAD
L	.ocation: *Gypsum Wallboard And Joint Compo	und; Throughout Building	(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Brown/White, Heterogeneous, Fibrous, Wall B s: al: Cellulose 5 %, Non-fibrous 95 %	Board	
2-02-02 L	116061824-09.2 .ocation: *Gypsum Wallboard And Joint Compo	<b>No</b> und; Throughout Building	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: White, Heterogeneous, Non-Fibrous, Joint Co s: al: Non-fibrous 100 %	mpound	

Client No. / HGA	Lab No.	<b>Asbestos Present</b>	<b>Total % Asbestos</b>
2-03-01 Lo	116061824-10L1 cation: 12x12 White Floor Tile And Yellow A	<b>No</b> dhesive; Unit 204, 206, 207	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Types	: White, Heterogeneous, Non-Fibrous, Floor T : : Non-fibrous 100 %	<b>File</b>	
2-03-01 Lo	116061824-10L2 cation: 12x12 White Floor Tile And Yellow A	<b>No</b> dhesive; Unit 204, 206, 207	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Types	: Yellow, Heterogeneous, Non-Fibrous, Adhes : : Cellulose Trace, Non-fibrous 100 %	sive	
2-03-02 La	116061824-11L1 Cation: 12x12 White Floor Tile And Yellow A	<b>No</b> dhesive; Unit 204, 206, 207	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Types	: White, Heterogeneous, Non-Fibrous, Floor T : : Non-fibrous 100 %	<b>Tile</b>	
2-03-02 Lo	116061824-11L2 cation: 12x12 White Floor Tile And Yellow A	<b>No</b> dhesive; Unit 204, 206, 207	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Types	: Yellow, Heterogeneous, Non-Fibrous, Adhes :: : Non-fibrous 100 %	sive	
2-04-01 Lo	116061824-12 cation: 12x12 White Floor Tile Peel And Stic	<b>No</b> :k; Unit 201, 208	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Types	: White, Heterogeneous, Non-Fibrous, Stick-o :: : Non-fibrous 100 %	n Tile	01100/20/10
2-04-02 Lo	116061824-13 cation: 12x12 White Floor Tile Peel And Stic	<b>No</b> :k; Unit 201, 208	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Types	: White, Heterogeneous, Non-Fibrous, Stick-o :: : Non-fibrous 100 %	on Tile	

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos		
2-05-01	116061824-14L1 Location: White Floor Tile And Brown Adhesive;	<b>No</b> : Unit 201, 206	NAD (by CVES) by David W. Ralbovsky on 06/20/16		
Asbestos Typ	on: White, Heterogeneous, Non-Fibrous, Floor Ti pes: ial: Non-fibrous 100 %	le			
2-05-01	116061824-14L2 Location: White Floor Tile And Brown Adhesive;	116061824-14L2 <b>No</b> on: White Floor Tile And Brown Adhesive; Unit 201, 206			
Asbestos Typ	on: Tan/Yellow, Heterogeneous, Non-Fibrous, Ad pes: ial: Cellulose Trace, Non-fibrous 100 %	hesive			
2-05-02	116061824-15L1 Location: White Floor Tile And Brown Adhesive;	<b>No</b> Unit 201, 206	NAD (by CVES) by David W. Ralbovsky on 06/20/16		
Asbestos Typ	on: White, Heterogeneous, Non-Fibrous, Floor Ti pes: ial: Non-fibrous 100 %	le			
2-05-02	116061824-15L2 Location: White Floor Tile And Brown Adhesive;	<b>No</b> ; Unit 201, 206	NAD (by CVES) by David W. Ralbovsky on 06/20/16		
Asbestos Typ	on: Tan/Yellow, Heterogeneous, Non-Fibrous, Ad pes: rial: Cellulose Trace, Non-fibrous 100 %	hesive			
2-06-01	116061824-16 Location: 12x12 Red Floor Tile Peel And Stick;	<b>No</b> Unit 207, 208	NAD (by CVES) by David W. Ralbovsky on 06/20/16		
Asbestos Typ	on: Reddish-Brown, Heterogeneous, Non-Fibrous pes: ial: Non-fibrous 100 %	s, Stick-on Tile			
2-06-02	116061824-17 Location: 12x12 Red Floor Tile Peel And Stick;	<b>No</b> Unit 207, 208	NAD (by CVES) by David W. Ralbovsky on 06/20/16		
Asbestos Typ	on: Reddish-Brown, Heterogeneous, Non-Fibrous pes: ial: Non-fibrous 100 %	s, Stick-on Tile			

Client No. /	HGA Lab No.	Asbestos Present	<b>Total % Asbestos</b>
2-07-01	116061824-	18 <b>No</b>	NAD
	Location: 12x12 Gray Floor Tile And Bro	wn Adhesive; Unit 207	(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	<b>scription</b> : Gray/White/Black, Heterogeneous, N os Types: Material: Non-fibrous 100 %	on-Fibrous, Bulk Material	
C	omment: No adhesive.		
2-08-01	116061824-	19 <b>No</b>	NAD
	Location: 12x12 Faux Wood Floor Tile F	eel And Stick; Unit 207	(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	<b>scription:</b> Lt. Brown, Heterogeneous, Non-Fibro os Types: Material: Non-fibrous 100 %	us, Stick-on Tile	
2-09-01	116061824-20	)L1 Yes	2 %
	Location: Thin Beige Floor Tile And Brow		(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	scription: Beige, Heterogeneous, Non-Fibrous, os Types: Chrysotile 2.0 % Material: Non-fibrous 98 %	Floor Tile	
2-09-01	116061824-20	DL2 <b>No</b>	NAD
	Location: Thin Beige Floor Tile And Brow	wn Adhesive; Unit 207 (Bottom Layer)	(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	scription: Tan/Yellow, Heterogeneous, Non-Fib os Types: Material: Non-fibrous 100 %	rous, Adhesive	
2-10-01	116061824-2	21 <b>No</b>	NAD
	Location: 12x12 Cream Slate Floor Tile		(by CVES) by David W. Ralbovsky on 06/20/16
	scription: Cream, Heterogeneous, Non-Fibrous	Stick-on Tile	

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 2

Client No. / HGA	Lab No.	<b>Asbestos Present</b>	<b>Total % Asbestos</b>
2-10-02	116061824-22	No	NAD
Locat	tion: 12x12 Cream Slate Floor Tile Peel A	nd Stick; Unit 208	(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Types:	ream, Heterogeneous, Non-Fibrous, Stick- ynthetic fibers 2 %, Non-fibrous 98 %	on Tile	
2-11-01	116061824-23	Yes	2 %
Locat	tion: 12x12 Thin Brown Floor Tile And Yel	low Adhesive; Unit 208	(by CVES) by David W. Ralbovsky on 06/20/16
Analyst Description: Lt Asbestos Types: C Other Material: N	•	or Tile	000.20.10
Comment: In:	sufficient adhesive foe analysis.		

**Reporting Notes:** 

Analyzed by: David W. Ralbovsky Date

\*NAD = no asbestos detected, Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt Cr = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not the reproduce except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested. **Reviewed By:** 

**Asbestos Inspection Chain of Custody** 

116061824

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RECEIVED

JUN 1 6 2016

Project	White River Apartments - #2016-1014	Date	6-14-16
Address	2900 Marion Drive, Diaz, Arkansas	TAT	3-day
Client	Dominion Due Diligence Group (804) 358-2020 4121 Cox Road, Suite 200, Glen Allen, Virginia 23060	Method	PLM

Building 2				
	Type	Ratecial Decorption	Material Location	
2-01-01 2-01-02 2-01-03 2-01-04 2-01-05 2-01-06 2-01-07	S	Texture Ceiling	Throughout Building	
2-02-01 2-02-02	м	* Gypsum Wallboard and Joint Compound	Throughout Building	
2-03-01 2-03-02	M	12x12 White Floor Tile and Yellow Adhesive	Unit 204, 206, 207	
2-04-01 2-04-02	м	12x12 White Floor Tile Peel and Stick	Unit 201, 208	
2-05-01 2-05-02	м	White Floor Tile and Brown Adhesive	Unit 201, 206	
2-06-01 2-06-02	м	12x12 Red Floor Tile Peel and Stick	Unit 207, 208	
2-07-01	м	12x12 Gray Floor Tile and Brown Adhesive	Unit 207	
2-08-01	M	12x12 Faux Wood Floor Tile Peel and Stick	Unit 207	
2-09-01	М	Thin Beige Floor Tile and Brown Adhesive	Unit 207 (Bottom Layer)	
2-10-01 2-10-02	м	12x12 Cream Slate Floor Tile Peel and Stick	Unit 208	
2-11-01	м	12x12 Thin Brown Floor Tile and Yellow Adhesive	Unit 208	

\* Composite analysis of wallboard and joint compound requested if joint compound contains asbestos.

Material Type: M – Miscellaneous, S – Surfacing, TSI – Thermal System Insulation

Submitted by: Philip Zabel	Date: 6-15-16	Signature: Ring Suc	8y
Recieved by:	Date:	Signature:	

Please Reply To:



#### AmeriSci Richmond 13635 GENITO ROAD MIDI OTHIAN VIRGINIA 23112

MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800

### FACSIMILE TELECOPY TRANSMISSION

To:	Kim Dingledine	From:	David W. Ralbovsky
	Dominion Due Diligence Group	AmeriSci Job #:	116061825
Fax #:		Subject:	PLM 3 day Results
		<b>Client Project:</b>	White River Apartments -
	le dia ala dia a @d2 a bia baamat@d2 a bia		#2016-1014; 2900 Marion Drive,
Email:	k.dingledine@d3g.biz,hazmat@d3g.biz		Diaz, Arkansas; Buildin

Date: Monday, June 20, 2016 Time: 11:29:25 Comments: Number of Pages: (including cover sheet)

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# **PLM Bulk Asbestos Report**

Dominion Due Diligence Group<br/>Attn: Kim DingledineDate Received<br/>Date Examined4121 Cox RoadDate ExaminedSuite 200RE: White River<br/>Diaz, Arkan

Date Received 06/16/16 AmeriSci Job # 116061825 Date Examined 06/20/16 P.O. # Page 1 of 6 RE: White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 3

Client No. /	HGA	Lab No.	<b>Asbestos Present</b>	<b>Total % Asbestos</b>
3-01-01		116061825-01	No	NAD
	(by CVES) by David W. Ralbovsky on 06/20/16			
Asbesto	cription: Beige, Heter s Types: Material: Non-fibrous	ogeneous, Non-Fibrous, Bulk M 98 %, Perlite 2 %	aterial	
3-01-02		116061825-02	No	NAD
	Location: Textu	re Ceiling; Throughout Building		(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	cription: Beige, Heter s Types: Material: Non-fibrous	ogeneous, Non-Fibrous, Bulk M 98 %, Perlite 2 %	aterial	011 00/20/10
3-01-03		116061825-03	No	NAD
	Location: Textu	re Ceiling; Throughout Building		(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	c <b>ription</b> : Beige, Heter <b>s Types:</b> Material: Non-fibrous	ogeneous, Non-Fibrous, Bulk M 98 %, Perlite 2 %	aterial	
3-01-04		116061825-04	No	NAD
	Location: Textu	re Ceiling; Throughout Building		(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	cription: Beige, Heter s Types: Material: Non-fibrous	ogeneous, Non-Fibrous, Bulk M 98 %, Perlite 2 %	aterial	
3-01-05		116061825-05	Νο	NAD
0 01 00	Location: Text	re Ceiling; Throughout Building		(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	os Types:	ogeneous, Non-Fibrous, Bulk M	aterial	
Other	Material: Non-fibrous	98 %, Perlite 2 %		

<b>Client No. / HGA</b>	Lab No.	Asbestos Present	<b>Total % Asbestos</b>
3-01-06	116061825-06 Location: Texture Ceiling; Throughout Building	No	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	on: Beige, Heterogeneous, Non-Fibrous, Bulk Ma es: ial: Non-fibrous 98 %, Perlite 2 %	aterial	
	116061825-07	Νο	NAD
	Location: Texture Ceiling; Throughout Building		(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	<b>on:</b> Beige, Heterogeneous, Non-Fibrous, Bulk Ma <b>es:</b> i <b>al:</b> Non-fibrous 100 %	aterial	
3-02-01	116061825-08	No	NAD
	k; Unit 302, 303, 304	(by CVES) by David W. Ralbovsky on 06/20/16	
Asbestos Typ	on: White, Heterogeneous, Non-Fibrous, Stick-or es: ial: Non-fibrous 100 %	n Tile	
3-02-02	116061825-09	No	NAD
	Location: 12x12 White Floor Tile Peel And Sticl	k; Unit 302, 303, 304	(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	on: White, Heterogeneous, Non-Fibrous, Stick-o es: ial: Non-fibrous 100 %	n Tile	
3-03-01	116061825-10L1	Yes	2 %
	Location: Thin Beige Floor Tile And Brown Adh	esive; Unit 301, 302, 304, 307	(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	on: Beige, Heterogeneous, Non-Fibrous, Floor T es: Chrysotile 2.0 % ial: Non-fibrous 98 %	ïle	
3-03-01	116061825-10L2 Location: Thin Beige Floor Tile And Brown Adh	<b>No</b> esive; Unit 301, 302, 304, 307	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Analyst Descripti Asbestos Typ	on: Brown, Heterogeneous, Non-Fibrous, Adhes es:	ive	

Client No. / HGA	Lab No.	Asbestos Present	<b>Total % Asbestos</b>
3-03-02	116061825-11L1 Location: Thin Beige Floor Tile And Brown Adhe	<b>Yes</b> esive; Unit 301, 302, 304, 307	2 % (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	on: Beige, Heterogeneous, Non-Fibrous, Floor Ti es: Chrysotile 2.0 % ial: Non-fibrous 98 %	ile	
	116061825-11L2 Location: Thin Beige Floor Tile And Brown Adh		NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	on: Tan/Yellow, Heterogeneous, Non-Fibrous, Ac es: ial: Cellulose Trace, Non-fibrous 100 %	dhesive	
3-04-01	116061825-12	No	NAD
	Location: 12x12 Green Floor Tile Peel And Stic		(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	on: Green, Heterogeneous, Non-Fibrous, Stick-o es: ial: Cellulose Trace, Synthetic fibers Trace, Nor		
3-04-02	116061825-13L1 Location: 12x12 Green Floor Tile Peel And Stic	<b>No</b> k; Unit 301	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	<b>on</b> : Green, Heterogeneous, Non-Fibrous, Self-St <b>es:</b> <b>ial:</b> Non-fibrous 100 %	ick Floor Tile	
3-04-02	116061825-13L2 Location: 12x12 Green Floor Tile Peel And Stic	<b>No</b> k; Unit 301	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	on: Brown, Heterogeneous, Non-Fibrous, Mastic ves: ial: Cellulose Trace, Non-fibrous 100 %		
3-05-01	116061825-14L1 Location: Off-White Linoleum; Unit 301 (2nd La	No ayer)	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Analyst Descripti Asbestos Typ	on: Off White, Heterogeneous, Fibrous, Linoleun	n	
	ial: Cellulose 22 %, Fibrous glass 3 %, Non-fibr	rous 75 %	

### Page 4 of 6

# **PLM Bulk Asbestos Report**

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 3

Client No. / HG/	A Lab No.	Asbestos Present	Total % Asbestos	
3-05-01	5-01 116061825-14L2 No Location: Off-White Linoleum; Unit 301 (2nd Layer)			
Asbestos Typ	ion: Lt. Grey, Heterogeneous, Non-Fibrous, Floor 1 pes: rial: Non-fibrous 100 %	Γile (		
3-05-02	116061825-15L1 Location: Off-White Linoleum; Unit 301 (2nd Lay	<b>No</b> er)	NAD (by CVES) by David W. Ralbovsky on 06/20/16	
Asbestos Typ	ion: Off White, Heterogeneous, Fibrous, Linoleum pes: rial: Cellulose 22 %, Fibrous glass 3 %, Non-fibro	us 75 %		
3-05-02	116061825-15L2 Location: Off-White Linoleum; Unit 301 (2nd Lay	No er)	NAD (by CVES) by David W. Ralbovsky on 06/20/16	
Asbestos Typ	<b>ion:</b> Lt. Grey, Heterogeneous, Non-Fibrous, Floor 1 <b>bes:</b> r <b>ial:</b> Non-fibrous 100 %	<b>File</b>		
3-06-01	116061825-16 Location: 12x12 Brown Floor Tile Peel And Stick	<b>No</b> ; Unit 301	NAD (by CVES) by David W. Ralbovsky on 06/20/16	
Asbestos Typ	ion: Brown, Heterogeneous, Non-Fibrous, Self-Stic bes: rial: Non-fibrous 100 %	k Floor Tile		
3-07-01	116061825-17 Location: 12x12 Gray Floor Tile Peel And Stick; I	<b>No</b> Unit 301	NAD (by CVES) by David W. Ralbovsky on 06/20/16	
Asbestos Typ	ion: Grey, Heterogeneous, Non-Fibrous, Stick-on T bes: rial: Non-fibrous 100 %	<b>File</b>		
3-08-01	116061825-18.1 Location: *Gypsum Wallboard And Joint Compo	<b>No</b> und; Throughout Building	NAD (by CVES) by David W. Ralbovsky on 06/20/16	
Asbestos Typ	ion: Brown/White, Heterogeneous, Fibrous, Wall B bes: rial: Cellulose 5 %, Non-fibrous 95 %	Board		

See Reporting notes on last page

116061825-18.2 on: *Gypsum Wallboard And Joint Comp nite, Heterogeneous, Non-Fibrous, Joint C n-fibrous 100 % 116061825-19.1 on: *Gypsum Wallboard And Joint Comp own/White, Heterogeneous, Fibrous, Wall pwn/White, Heterogeneous, Fibrous, Wall llulose 5 %, Fibrous glass Trace, Non-fib 116061825-19.2 on: *Gypsum Wallboard And Joint Comp	No pound; Throughout Building I Board brous 95 % No	NAD (by CVES) by David W. Ralbovsky on 06/20/16 NAD (by CVES) by David W. Ralbovsky on 06/20/16 NAD
n-fibrous 100 % 116061825-19.1 on: *Gypsum Wallboard And Joint Comp own/White, Heterogeneous, Fibrous, Wall llulose 5 %, Fibrous glass Trace, Non-fib 116061825-19.2 on: *Gypsum Wallboard And Joint Comp	<b>No</b> bound; Throughout Building I Board brous 95 % <b>No</b>	(by CVES) by David W. Ralbovsky on 06/20/16 NAD
on: *Gypsum Wallboard And Joint Comp own/White, Heterogeneous, Fibrous, Wall Ilulose 5 %, Fibrous glass Trace, Non-fib 116061825-19.2 on: *Gypsum Wallboard And Joint Comp	bound; Throughout Building I Board brous 95 % <b>No</b>	(by CVES) by David W. Ralbovsky on 06/20/16 NAD
llulose 5 %, Fibrous glass Trace, Non-fib 116061825-19.2 on: *Gypsum Wallboard And Joint Comp	brous 95 % <b>No</b>	
on: *Gypsum Wallboard And Joint Comp		
		(by CVES) by David W. Ralbovsky on 06/20/16
nite, Heterogeneous, Non-Fibrous, Joint C n-fibrous 100 %	Compound	
116061825-20L1 on: 12x12 Light Brown Floor Tile And Bro 308	<b>No</b> own Adhesive; Unit 303, 304, 305, 307,	NAD (by CVES) by David W. Ralbovsky on 06/20/16
White, Heterogeneous, Fibrous, Floor Til		
116061825-20L2 on: 12x12 Light Brown Floor Tile And Bro 308	<b>No</b> own Adhesive; Unit 303, 304, 305, 307,	NAD (by CVES) by David W. Ralbovsky on 06/20/16
-		
116061825-21L1 on: 12x12 Light Brown Floor Tile And Bro 308	<b>No</b> own Adhesive; Unit 303, 304, 305, 307,	NAD (by CVES) by David W. Ralbovsky on 06/20/16
111	Yellow, Heterogeneous, Non-Fibrous, A ulose Trace, Synthetic fibers Trace, No 116061825-21L1 n: 12x12 Light Brown Floor Tile And Br 308	Yellow, Heterogeneous, Non-Fibrous, Adhesive ulose Trace, Synthetic fibers Trace, Non-fibrous 100 % 116061825-21L1 <i>No</i> n: 12x12 Light Brown Floor Tile And Brown Adhesive; Unit 303, 304, 305, 307,

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 3

Client No. / H	GA	Lab No.	Asbestos Present	Total % Asbestos
3-09-02		116061825-21L2	No	NAD
	Location: 12x12 308	Light Brown Floor Tile And Brov	n Adhesive; Unit 303, 304, 305, 307,	(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos 1	Types:	geneous, Non-Fibrous, Adhesiv e, Non-fibrous 100 %	e	
3-10-01		116061825-22L1	Yes	2 %
	Location: 12x12	Beige-Brown Floor Tile And Bro	wn Adhesive; Unit 306	(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos 1	i <b>ption:</b> Beige/Brown, <b>Types:</b> Chrysotile 2.0 I <b>terial:</b> Non-fibrous 98		loor Tile	
3-10-01		116061825-22L2	No	NAD
	Location: 12x12	Beige-Brown Floor Tile And Bro	wn Adhesive; Unit 306	(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos 1	•	geneous, Non-Fibrous, Adhesiv )0 %	e	
3-10-02		116061825-23L1	Yes	2 %
	Location: 12x12	Beige-Brown Floor Tile And Bro	wn Adhesive; Unit 306	(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos 1	iption: Beige/Brown, Types: Chrysotile 2.0 Iterial: Non-fibrous 98		loor Tile	
Com	ment: No mastic.			

#### **Reporting Notes:**

Analyzed by: David W. Ralbovsky Date

\*NAD = no asbestos detected, Detection Limit <1%, Reporting Limits; EVES = 1%, 400 Pt Qt = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis/NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any verniculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate ot be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested. that this report m ω. <u>TALLAH A</u> Reviewed By:

### **Asbestos Inspection Chain of Custody**

Project	White River Apartments – #2016-1014	Date	6-14-16
Address	2900 Marion Drive, Diaz, Arkansas	TAT	3-day
Client	Dominion Due Diligence Group (804) 358-2020 4121 Cox Road, Suite 200, Glen Allen, Virginia 23060	Method	PLM
	4121 COX Road, Suite 200, Glen Allen, Virginia 2000		

Building 3				
Sample. Nember	Tipes.	Material Description	Material Location	
3-01-01 3-01-02 3-01-03 3-01-04 3-01-05 3-01-06 3-01-07	S	Texture Ceiling	Throughout Building	
3-02-01 3-02-02	м	12x12 White Floor Tile Peel and Stick	Unit 302, 303, 304	
3-03-01 3-03-02	м	Thin Beige Floor Tile and Brown Adhesive	Unit 301, 302, 304, 307	
3-04-01 3-04-02	м	12x12 Green Floor Tile Peel and Stick	Unit 301	
3-05-01 3-05-02	M	Off-White Linoleum	Unit 301 (2 <sup>nd</sup> Layer)	
3-06-01	м	12x12 Brown Floor Tile Peel and Stick	Unit 301	
3-07-01	М	12x12 Gray Floor Tile Peel and Stick	Unit 301	
3-08-01 3-08-02	м	* Gypsum Wallboard and Joint Compound	Throughout Building	
3-09-01 3-09-02	м	12x12 Light Brown Floor Tile and Brown Adhesive	Unit 303, 304, 305, 307, 308	
3-10-01 3-10-02	м	12x12 Beige-Brown Floor Tile and Brown Adhesive	Unit 306	

\* Composite analysis of wallboard and joint compound requested if joint compound contains asbestos.

Material Type: M – Miscellaneous, S – Surfacing, TSI – Thermal System Insulation

### RECEIVED

116061825

JUN 1 6 2016

		<i>ЛЛ</i>	By And
Submitted by: Philip Zabel	_ Date: <u>645-16</u>	_ Signature: Millin Suu	<u>C</u>
Recieved by:	_ Date:	Signature:	

Please Reply To:



AmeriSci Richmond

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### FACSIMILE TELECOPY TRANSMISSION

To:	Kim Dingledine	From:	David W. Ralbovsky
	Dominion Due Diligence Group	AmeriSci Job #:	116061826
Fax #:		Subject:	PLM 3 day Results
		<b>Client Project:</b>	White River Apartments -
	1. dia ata dia a @ 42 a 1 ia 1 a amat@ 42 a 1 ia		#2016-1014; 2900 Marion Drive,
Email:	k.dingledine@d3g.biz,hazmat@d3g.biz		Diaz, Arkansas; Buildin

Date: Monday, June 20, 2016 Time: 07:45:07 Comments: Number of Pages:

(including cover sheet)

8

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# **PLM Bulk Asbestos Report**

Dominion Due Diligence Group Attn: Kim Dingledine 4121 Cox Road Suite 200 Glen Allen, VA 23060 Date Received06/16/16AmeriSci Job #116061826Date Examined06/20/16P.O. #Page 1 of 6RE: White River Apartments - #2016-1014; 2900 Marion Drive,<br/>Diaz, Arkansas; Building 4

	HGA	Lab No.	<b>Asbestos Present</b>	<b>Total % Asbestos</b>
4-01-01		116061826-01	No	NAD
	Location: Textur	e Ceiling; Throughout Building		(by CVES) by David W. Ralbovsky on 06/20/16
Analyst Description: Beige, Heterogeneous, Fibrous, Asbestos Types:				
Other I	Material: Cellulose 7 %	, Non-fibrous 93 %		
4-01-02		116061826-02	No	NAD
	Location: Textur	e Ceiling; Throughout Building		(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	••	-		
Other I	Material: Cellulose 7 %	, Non-fibrous 93 %		·
4-01-03		116061826-03	No	NAD
	Location: Textur	e Ceiling; Throughout Building		(by CVES)
				by David W. Ralbovsky on 06/20/16
	<b>cription</b> : Beige, Hetero	geneous, Fibrous,		•
Asbesto		-		•
Asbesto Other M	s Types:	-	Νο	•
Asbesto Other M	s Types: Material: Cellulose 7 %	, Non-fibrous 93 %	No	on 06/20/16 NAD (by CVES) by David W. Ralbovsky
Asbestor Other I 4-01-04 Analyst Desc	s Types: Material: Cellulose 7 % Location: Textur cription: Beige, Hetero	, Non-fibrous 93 % 116061826-04 e Ceiling; Throughout Building	No	on 06/20/16 NAD (by CVES)
Asbesto Other I 4-01-04 Analyst Des Asbesto	s Types: Material: Cellulose 7 % Location: Textur cription: Beige, Hetero	, Non-fibrous 93 % 116061826-04 e Ceiling; Throughout Building geneous, Fibrous,	No	on 06/20/16 NAD (by CVES) by David W. Ralbovsky
Asbesto Other I 4-01-04 Analyst Des Asbesto	s Types: Material: Cellulose 7 % Location: Textur cription: Beige, Hetero s Types:	, Non-fibrous 93 % 116061826-04 e Ceiling; Throughout Building geneous, Fibrous, , Non-fibrous 93 %		on 06/20/16 NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbesto Other I 4-01-04 Analyst Des Asbesto Other I	s Types: Material: Cellulose 7 % Location: Textur cription: Beige, Hetero s Types: Material: Cellulose 7 %	, Non-fibrous 93 % 116061826-04 e Ceiling; Throughout Building geneous, Fibrous,	No	on 06/20/16 NAD (by CVES) by David W. Ralbovsky

See Reporting notes on last page

	HGA L	ab No.	Asbestos Present	Total % Asbestos
4-01-06	116	061826-06	No	NAD
	Location: Texture Ceiling; Thr	oughout Building		(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	cription: Beige, Heterogeneous, Nor s Types: Material: Cellulose Trace, Non-fibro	·	0/	
4-01-07	116( Location: Texture Ceiling; Thr	061826-07 oughout Building	Νο	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	c <b>ription</b> : Beige, Heterogeneous, Nor <b>s Types</b> : Material: Non-fibrous 98 %, Perlite 2			
4-02-01	1160	061826-08	No	NAD
	Leastion, 49,49 Light One, El	<b>T</b> 1 <b>A A</b>		(h 0) (50)
	<b>Location:</b> 12x12 Light Gray Fl	oor The And Brow	n Adhesive; Unit 404	(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	cription: Lt. Grey, Heterogeneous, Nos Types: Material: Non-fibrous 100 %			
Asbesto Other	cription: Lt. Grey, Heterogeneous, N	lon-Fibrous, Floor		by David W. Ralbovsky
Asbesto Other Co	cription: Lt. Grey, Heterogeneous, N s Types: Material: Non-fibrous 100 % comment: Insufficient adhesive for ana	lon-Fibrous, Floor		by David W. Ralbovsky
Asbesto Other Co	cription: Lt. Grey, Heterogeneous, N s Types: Material: Non-fibrous 100 % comment: Insufficient adhesive for ana	lon-Fibrous, Floor alysis. 61826-09L1	Tile <b>No</b>	by David W. Ralbovsky on 06/20/16 NAD (by CVES) by David W. Ralbovsky
Asbesto Other Co 4-03-01 Analyst Des Asbesto	cription: Lt. Grey, Heterogeneous, Nos Types: Material: Non-fibrous 100 % Comment: Insufficient adhesive for ana 11600	lon-Fibrous, Floor alysis. 61826-09L1 d Brown Adhesive	Tile <b>No</b> ; Unit 401, 402, 403, 404	by David W. Ralbovsky on 06/20/16 NAD (by CVES)
Asbesto Other Co 4-03-01 Analyst Des Asbesto Other	cription: Lt. Grey, Heterogeneous, Nos Types: Material: Non-fibrous 100 % omment: Insufficient adhesive for ana 1160 Location: White Floor Tile And cription: White, Heterogeneous, Nor s Types: Material: Non-fibrous 100 %	lon-Fibrous, Floor alysis. 61826-09L1 d Brown Adhesive	Tile <b>No</b> ; Unit 401, 402, 403, 404	by David W. Ralbovsky on 06/20/16 NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbesto Other Co 4-03-01 Analyst Des Asbesto	cription: Lt. Grey, Heterogeneous, Nos Types: Material: Non-fibrous 100 % omment: Insufficient adhesive for ana 1160 Location: White Floor Tile And cription: White, Heterogeneous, Nor s Types: Material: Non-fibrous 100 %	lon-Fibrous, Floor alysis. 61826-09L1 d Brown Adhesive h-Fibrous, Floor Ti 61826-09L2	Tile <b>No</b> ; Unit 401, 402, 403, 404 le <b>No</b>	by David W. Ralbovsky on 06/20/16 NAD (by CVES) by David W. Ralbovsky

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
4-03-02 L	116061826-10L1 .ocation: White Floor Tile And Brown Adhesive	<b>No</b> ; Unit 401, 402, 403, 404	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	<b>n:</b> White, Heterogeneous, Non-Fibrous, Floor Ti s: al: Non-fibrous 100 %	ile	
4-03-02 L	116061826-10L2 .ocation: White Floor Tile And Brown Adhesive	<b>No</b> ; Unit 401, 402, 403, 404	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Yellow, Heterogeneous, Non-Fibrous, Adhesi s: al: Animal hair Trace, Cellulose Trace, Non-fib		
4-04-01	116061826-11L1	Νο	NAD
	ocation: Thin Beige Floor Tile And Yellow Adh		(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Lt. Brown, Heterogeneous, Non-Fibrous, Floo s: al: Non-fibrous 100 %	or Tile	
4-04-01 L	116061826-11L2 .ocation: Thin Beige Floor Tile And Yellow Adh	<b>No</b> esive; Unit 403, 404 (Bottom Layer)	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Tan/Yellow, Heterogeneous, Non-Fibrous, Ad s: al: Animal hair Trace, Non-fibrous 100 %	dhesive	
4-04-02	116061826-12L1	No	NAD
L	ocation: Thin Beige Floor Tile And Yellow Adh	esive; Unit 403, 404 (Bottom Layer)	(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Lt. Brown, Heterogeneous, Non-Fibrous, Floo s: al: Non-fibrous 100 %	or Tile	
4-04-02 L	116061826-12L2 .ocation: Thin Beige Floor Tile And Yellow Adh	<b>No</b> esive; Unit 403, 404 (Bottom Layer)	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Tan/Yellow, Heterogeneous, Non-Fibrous, Ad s: al: Cellulose Trace, Non-fibrous 100 %	dhesive	

#### Page 4 of 6

# **PLM Bulk Asbestos Report**

Client No. / HG/	4	Lab No.	Asbestos Present	Total % Asbesto
4-05-01	11 Location: 12x12 Dark Gra	16061826-13L1 In Floor Tile And Yellow	<b>No</b> v Adhesive; Unit 403	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Ty	ion: Dark Gray, Heterogene pes: rial: Non-fibrous 100 %	ous, Non-Fibrous, Floo	or Tile	
4-05-01	11 Location: 12x12 Dark Gra	16061826-13L2 Iy Floor Tile And Yellov	<b>No</b> v Adhesive; Unit 403	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Ty	ion: Yellow, Heterogeneous pes: rial: Cellulose Trace, Non-f		/e	
4-06-01		16061826-14 <b>L1</b> wn Floor Tile And Yello	<b>No</b> ow Adhesive; Unit 401, 405, 406, 407,	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Ty	ion: Off White/LtBrown, Het pes: rial: Non-fibrous 100 %	erogeneous, Non-Fibro	ous, Floor Tile	
4-06-01	Location: 12x12 Light Bro 408		<b>No</b> ow Adhesive; Unit 401, 405, 406, 407,	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Ty	ion: Pale Yellow, Heterogen pes: rial: Cellulose Trace, Non-f		Ihesive	
4-06-02		16061826-15L1 wn Floor Tile And Yello	<b>No</b> ow Adhesive; Unit 401, 405, 406, 407,	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Ty	ion: Off White/LtBrown, Het pes: rial: Non-fibrous 100 %	erogeneous, Non-Fibro	ous, Floor Tile	
4-06-02		16061826-15L2 wn Floor Tile And Yelk	<b>No</b> ow Adhesive; Unit 401, 405, 406, 407,	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Ty	ion: Tan/Yellow, Heterogen pes: rial: Non-fibrous 100 %	eous, Non-Fibrous, Ad	hesive	

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 4

	Lab No.	<b>Asbestos Present</b>	<b>Total % Asbestos</b>
4-07-01	116061826-16.1 Location: *Gypsum Wallboard And Joint Comp	<b>No</b> ound; Throughout Building	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	on: Brown/White, Heterogeneous, Fibrous, Wall es: al: Fibrous glass Trace, Non-fibrous 100 %	Board	
	116061826-16.2 Location: *Gypsum Wallboard And Joint Comp		NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	on: White, Heterogeneous, Non-Fibrous, Joint C es: al: Non-fibrous 100 %	ompound	
4-07-02	116061826-17.1 Location: *Gypsum Wallboard And Joint Comp	No ound: Throughout Building	NAD (by CVES)
	Location. Cypsum Wailboard And Some Comp		by David W. Ralbovsky on 06/20/16
Asbestos Type	on: Brown/White, Heterogeneous, Fibrous, Wall es: al: Cellulose 5 %, Fibrous glass Trace, Non-fib		0.1 00.20.10
4-07-02	116061826-17.2 Location: *Gypsum Wallboard And Joint Comp	<b>No</b> ound; Throughout Building	NAD (by CVES)
Asbestos Type	on: White, Heterogeneous, Non-Fibrous, Joint C es: al: Non-fibrous 100 %	ompound	by David W. Ralbovsky on 06/20/16
	116061826-18	No	NAD
4-08-01	110001020-10		NAD
4-08-01	Location: Ceramic Tile Pattern Linoleum; Unit 4	407	(by CVES) by David W. Ralbovsky
Analyst Description	Location: Ceramic Tile Pattern Linoleum; Unit 4	407	(by CVES)
Analyst Descriptio Asbestos Typ Other Materi 4-09-01	Location: Ceramic Tile Pattern Linoleum; Unit 4 on: White, Heterogeneous, Non-Fibrous, es: al: Fibrous glass 3 %, Non-fibrous 97 % 116061826-19	No	(by CVES) by David W. Ralbovsky on 06/20/16 NAD
Analyst Descriptio Asbestos Typ Other Materi 4-09-01	Location: Ceramic Tile Pattern Linoleum; Unit 4 on: White, Heterogeneous, Non-Fibrous, es: al: Fibrous glass 3 %, Non-fibrous 97 %	No	(by CVES) by David W. Ralbovsky on 06/20/16

.

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 4

**Reporting Notes:** 

Analyzed by: David W. Ralbovsky

\*NAD = no asbestos detected, Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt/Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested. Reviewed By

Date 🖌

Asbestos Inspection Chain of Custody 116061826

	Abbeetee mopeetien ename.		
Project	White River Apartments – #2016-1014	Date	6-14-16
Address	2900 Marion Drive, Diaz, Arkansas	TAT	3-day
Client	Dominion Due Diligence Group (804) 358-2020	Method	PLM
	4121 Cox Road, Suite 200, Glen Allen, Virginia 23060		

		Building 4	
	<b></b>	Material Description	Material Location
4-01-01 4-01-02 4-01-03 4-01-04 4-01-05 4-01-06 4-01-07	S	Texture Ceiling	Throughout Building
4-02-01	м	12x12 Light Gray Floor Tile and Brown Adhesive	Unit 404
4-03-01 4-03-02	м	White Floor Tile and Brown Adhesive	Unit 401, 402, 403, 404
4-04-01 4-04-02	м	Thin Beige Floor Tile and Yellow Adhesive	Unit 403, 404 (Bottom Layer)
4-05-01	м	12x12 Dark Gray Floor Tile and Yellow Adhesive	Unit 403
4-06-01 4-06-02	M	12x12 Light Brown Floor Tile and Yellow Adhesive	Unit 401, 405, 406, 407, 408
4-07-01 4-07-02	м	* Gypsum Wallboard and Joint Compound	Throughout Building
4-08-01	M	Ceramic Tile Pattern Linoleum	Unit 407
4-09-01	м	12x12 White Floor Tile Peel and Stick	Unit 407

\* Composite analysis of wallboard and joint compound requested if joint compound contains asbestos.

Material Type: M – Miscellaneous, S – Surfacing, TSI – Thermal System Insulation

### RECEIVED

JUN 1 6 2016

By \_\_\_\_

Submitted by: Philip Zabel Date: 6-15-16 Signature: Signature: \_\_\_\_\_ Date: \_\_\_\_\_\_ Signature: Recieved by:\_\_\_

# 116061826

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Analysis Type:	PLM	TAT:	US Mail Other
Sample/COC Discrepance	cies:	<u>y</u>	
Resolution:			·····
		<u>.</u>	
Job Created:	-	Sample	es Entered:
Prep Tech(s):			
Prep Data Entry:		QC Da	ta Entry:
Filtered Date:	Time:	QC Re	viewed According to SOP:
			By:Prior To Release
Analyst 1:		Review	ved By 1:
Analyst Data Entry:			Reviewed By 2:
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<b>On-Going Job Notes:</b>			

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### FACSIMILE TELECOPY TRANSMISSION

To:	Kim Dingledine	From:	J. Samuel Baird
	Dominion Due Diligence Group	AmeriSci Job #:	116061827
Fax #:		Subject:	PLM 3 day Results
		<b>Client Project:</b>	White River Apartments -
			#2016-1014; 2900 Marion Drive,
Email:	k.dingledine@d3g.biz,hazmat@d3g.biz		Diaz, Arkansas; Buildin

,

Date: Monday, June 20, 2016 Time: 12:12:27 Comments:

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# **PLM Bulk Asbestos Report**

**Dominion Due Diligence Group Date Received** AmeriSci Job # 06/16/16 116061827 Attn: Kim Dingledine Date Examined 06/20/16 P.O. # 4121 Cox Road Page 1 of 7 RE: White River Apartments - #2016-1014; 2900 Marion Drive, Suite 200 Diaz, Arkansas; Building 5 Glen Allen, VA 23060

Client No. / I	IGA	Lab No.	Asbestos Present	Total % Asbestos
5-01-01 116061827-01 Location: Texture Ceiling; Throughout Building			Νο	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbesto	c <b>ription:</b> White, Heterogened s <b>Types:</b> <b>/aterial:</b> Synthetic fibers 2 %		1 Ceiling	
5-01-02		116061827-02	No	NAD
		ling; Throughout Building		(by CVES) by J. Samuel Baird on 06/20/16
Asbesto	c <b>ription</b> : White, Heterogened s <b>Types:</b> <b>/aterial:</b> Non-fibrous 100 %	ous, Non-Fibrous, Textured	1 Ceiling	
5-01-03		116061827-03	No	NAD
	Location: Texture Ceil	ling; Throughout Building		(by CVES) by J. Samuel Baird on 06/20/16
Asbesto	cription: White, Heterogened		t Ceiling	by J. Samuel Baird
Asbesto Other M	c <b>ription</b> : White, Heterogened s Types:		t Ceiling <b>No</b>	by J. Samuel Baird
Asbesto Other M	cription: White, Heterogeneo s Types: Material: Non-fibrous 100 %	ous, Non-Fibrous, Textured		by J. Samuel Baird on 06/20/16
Asbesto Other I 5-01-04 Analyst Des Asbesto	cription: White, Heterogener s Types: Material: Non-fibrous 100 % Location: Texture Ceil cription: White, Heterogener	ous, Non-Fibrous, Textured 116061827-04 ling; Throughout Building ous, Non-Fibrous, Textured	Νο	by J. Samuel Baird on 06/20/16 NAD (by CVES) by J. Samuel Baird
Asbesto Other I 5-01-04 Analyst Des Asbesto	cription: White, Heterogened s Types: Material: Non-fibrous 100 % Location: Texture Ceil cription: White, Heterogened s Types:	ous, Non-Fibrous, Textured 116061827-04 ling; Throughout Building ous, Non-Fibrous, Textured	Νο	by J. Samuel Baird on 06/20/16 NAD (by CVES) by J. Samuel Baird
Asbesto Other I 5-01-04 Analyst Des Asbesto Other I	cription: White, Heterogener s Types: Material: Non-fibrous 100 % Location: Texture Ceil cription: White, Heterogener s Types: Material: Synthetic fibers 2 %	ous, Non-Fibrous, Textured 116061827-04 ling; Throughout Building ous, Non-Fibrous, Textured 6, Non-fibrous 98 %	<b>No</b> d Ceiling	by J. Samuel Baird on 06/20/16 NAD (by CVES) by J. Samuel Baird on 06/20/16

Client No. / HGA	Lab No.	<b>Asbestos Present</b>	Total % Asbestos
5-01-06 La	116061827-06 cation: Texture Ceiling; Throughout Building	Νο	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Types	: White, Heterogeneous, Non-Fibrous, Textureo : : Non-fibrous 100 %	d Ceiling	
5-01-07 Lo	116061827-07 cation: Texture Ceiling; Throughout Building	Νο	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Types	: White, Heterogeneous, Non-Fibrous, Textured : : Synthetic fibers Trace, Non-fibrous 100 %	d Ceiling	
5-02-01 Lo	116061827-08L1 ccation: 12x12 Brown Floor Tile And Yellow Ad	<b>No</b> Ihesive; Unit 501, 503	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Types	a: Brown, Heterogeneous, Non-Fibrous, Floor Ti s: l: Non-fibrous 100 %	le	
5-02-01 La	116061827-08L2 ocation: 12x12 Brown Floor Tile And Yellow Ad	<b>No</b> Ihesive; Unit 501, 503	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Types	a: Yellow, Heterogeneous, Non-Fibrous, Mastic s: l: Non-fibrous 100 %		
5-02-02 Lo	116061827-09L1 ocation: 12x12 Brown Floor Tile And Yellow Ad	<b>No</b> Ihesive; Unit 501, 503	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Types	n: Brown, Heterogeneous, Non-Fibrous, Floor Ti s: I: Non-fibrous 100 %	ile	
5-02-02 L	116061827-09L2 ocation: 12x12 Brown Floor Tile And Yellow Ac	<b>No</b> Ihesive; Unit 501, 503	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	n: Yellow, Heterogeneous, Non-Fibrous, Mastic s: I: Non-fibrous 100 %		

Client No. / HGA	Lab No.	Asbestos Present	<b>Total % Asbestos</b>
5-03-01 Lo	116061827-10L1 cation: Thin Beige Floor Tile And Yellow Adh	<b>No</b> esive; Unit 503, 504 (Bottom Layer)	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Types	: Beige, Heterogeneous, Non-Fibrous, Floor Ti :: : Non-fibrous 100 %	le	
5-03-01 Lo	116061827-10L2 cation: Thin Beige Floor Tile And Yellow Adh	<b>No</b> esive; Unit 503, 504 (Bottom Layer)	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Types	: White, Heterogeneous, Non-Fibrous, Mastic : : Non-fibrous 100 %		
5-03-02 Lo	116061827-11L1 cation: Thin Beige Floor Tile And Yellow Adh	<b>No</b> esive; Unit 503, 504 (Bottom Layer)	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Types	n: Beige, Heterogeneous, Non-Fibrous, Floor Ti a: I: Non-fibrous 100 %	ile	
5-03-02 Lo	116061827-11L2 cation: Thin Beige Floor Tile And Yellow Adh	<b>No</b> esive; Unit 503, 504 (Bottom Layer)	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Types	a: Yellow, Heterogeneous, Non-Fibrous, Mastic a: l: Non-fibrous 100 %		
5-04-01 Lo	116061827-12.1 ccation: *Gypsum Wallboard And Joint Compo	<b>No</b> bund; Throughout Building	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Types	: White, Heterogeneous, Non-Fibrous, Wall Bo : : Cellulose 5 %, Fibrous glass 2 %, Non-fibro		
	116061827-12.2 ocation: *Gypsum Wallboard And Joint Compo		NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Types	n: White, Heterogeneous, Non-Fibrous, Joint C 3: I: Non-fibrous 100 %	ompound	

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
5-04-02	116061827-13.1 Location: *Gypsum Wallboard And Joint Comp	<b>No</b> ound; Throughout Building	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Typ	on: White, Heterogeneous, Non-Fibrous, Wall Be es: ial: Cellulose 5 %, Fibrous glass 2 %, Non-fibro		
5-04-02	116061827-13.2 Location: *Gypsum Wallboard And Joint Comp	<b>No</b> ound; Throughout Building	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Typ	<b>on:</b> White, Heterogeneous, Non-Fibrous, Joint C <b>es:</b> i <b>al:</b> Non-fibrous 100 %	ompound	
5-05-01	116061827-14L1 Location: 12x12 Light Brown Floor Tile And Bro	<b>No</b> own Adhesive; Unit 504, 505, 506	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Typ	on: Lt. Brown, Heterogeneous, Non-Fibrous, Flo es: ial: Non-fibrous 100 %	or Tile	
5-05-01	116061827-14L2 Location: 12x12 Light Brown Floor Tile And Bro	<b>No</b> own Adhesive; Unit 504, 505, 506	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Typ	on: Yellow, Heterogeneous, Non-Fibrous, Mastic ies: ial: Non-fibrous 100 %		
5-05-02	116061827-15L1 Location: 12x12 Light Brown Floor Tile And Bro	<b>No</b> own Adhesive; Unit 504, 505, 506	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Typ	on: Tan, Heterogeneous, Non-Fibrous, Floor Tile es: ial: Non-fibrous 100 %	9	
5-05-02	116061827-15L2 Location: 12x12 Light Brown Floor Tile And Bro		NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Typ	on: Yellow, Heterogeneous, Non-Fibrous, Mastic ees: ial: Non-fibrous 100 %	5	

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
5-06-01	116061827-16 Location: White Floor Tile Peel And Stick; Unit 50	<b>No</b> )4	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Typ	on: White, Heterogeneous, Non-Fibrous, Floor Tile es: al: Non-fibrous 100 %		
5-07-01	116061827-17L1 Location: White Floor Tile And Brown Adhesive; U	<b>No</b> Unit 504	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Typ	on: White, Heterogeneous, Non-Fibrous, Floor Tile es: ial: Non-fibrous 100 %	3	
5-07-01	116061827-17L2 Location: White Floor Tile And Brown Adhesive; I	<b>No</b> Unit 504	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Typ	on: Yellow, Heterogeneous, Non-Fibrous, Mastic es: ial: Non-fibrous 100 %		
5-08-01	116061827-18 Location: 12x12 Faux Wood Floor Tile Peel And S	<b>No</b> Stick; Unit 504	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Typ	on: Brown, Heterogeneous, Non-Fibrous, Floor Tile es: ial: Non-fibrous 100 %	e	
5-09-01	116061827-19 Location: 12x12 White Floor Tile Peel And Stick;	<b>No</b> Unit 501, 502, 505	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Typ	<b>on:</b> White, Heterogeneous, Non-Fibrous, Floor Tile <b>es:</b> ial: Non-fibrous 100 %	•	1
5-09-02	116061827-20 Location: 12x12 White Floor Tile Peel And Stick;	<b>No</b> Unit 501, 502, 505	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Typ	on: White, Heterogeneous, Non-Fibrous, Floor Tile es: ial: Non-fibrous 100 %	<del>)</del>	

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
5-10-01 L	116061827-21 ocation: Light Brown Linoleum; Unit 502	Νο	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	n: Lt. Brown, Heterogeneous, Non-Fibrous, Linoleur s: I: Fibrous glass 10 %, Non-fibrous 90 %	n	
	116061827-22L1 ocation: Off-White Floor Tile And Brown Adhesive;		NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	n: Off White, Heterogeneous, Non-Fibrous, Floor Til s: I: Non-fibrous 100 %	le	
5-11-01 L	116061827-22L2 ocation: Off-White Floor Tile And Brown Adhesive	<b>No</b> ; Unit 502	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	n: Yellow, Heterogeneous, Non-Fibrous, Mastic s: I: Non-fibrous 100 %		
5-12-01 L	116061827-23 ocation: 12x12 Red Floor Tile Peel And Stick; Unit	<b>No</b> 502	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	n: Red, Heterogeneous, Non-Fibrous, Floor Tile <b>s:</b> II: Non-fibrous 100 %		
5-13-01 L	116061827-24L1 ocation: 12x12 Gray Floor Tile And Yellow Adhesiv	<b>No</b> ve; Unit 507	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	n: Gray, Heterogeneous, Non-Fibrous, Floor Tile <b>s:</b> II: Non-fibrous 100 %		
5-13-01 L	116061827-24L2 ocation: 12x12 Gray Floor Tile And Yellow Adhesi	<b>No</b> ve; Unit 507	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	n: Yellow, Heterogeneous, Non-Fibrous, Mastic <b>s:</b> II: Non-fibrous 100 %		

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 5

<b>Client No. / HGA</b>	Lab No.	<b>Asbestos Present</b>	Total % Asbestos
5-14-01	116061827-25	No	NAD
I	Location: Light Brown Ceramic Tile Pattern Lir	noleum; Unit 507, 508	(by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	on: Lt. Brown, Heterogeneous, Non-Fibrous, Lir es: al: Non-fibrous 100 %	noleum	
5-14-02	116061827-26	No	NAD
I	Location: Light Brown Ceramic Tile Pattern Lir	noleum; Unit 507, 508	(by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	on: Lt. Brown, Heterogeneous, Non-Fibrous, Lir es: al: Non-fibrous 100 %	noleum	
5-15-01	116061827-27	Νο	NAD
I	Location: Yellow Linoleum; Unit 508 (3rd Laye	r)	(by CVES) by J. Samuel Baird on 06/20/16
Analyst Descriptio Asbestos Type	on: Yellow, Heterogeneous, Non-Fibrous, Linok es:	eum	
Other Materi	al: Cellulose 40 %, Fibrous glass 10 %, Non-f	ibrous 50 %	

**Reporting Notes:** 

Analyzed by: J. Samuel Baird

Date

\*NAD = no asbestos detected, betection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested. Reviewed By:

# 116061827

RECEIVED

### **Asbestos Inspection Chain of Custody**

Project	White River Apartments – #2016-1014	Date	6-14-16
Address	2900 Marion Drive, Diaz, Arkansas	TAT	3-day
Client	Dominion Due Diligence Group (804) 358-2020 4121 Cox Road, Suite 200, Glen Allen, Virginia 23060	Method	PLM

#### Building 5

	فيستنم سيناب مساور ويرا	Duilding o	
5-01-01			
5-01-02			
5-01-03			
5-01-04	S	Texture Ceiling	Throughout Building
5-01-05		-	
5-01-06			
5-01-07			
5-02-01	м	12x12 Brown Floor Tile and	Unit 501, 503
5-02-02	IVI	Yellow Adhesive	
5-03-01	м	Thin Beige Floor Tile and Yellow	Unit 503, 504 (Bottom Layer)
5-03-02	101	Adhesive	
5-04-01	м	* Gypsum Wallboard and Joint	Throughout Building
5-04-02	101	Compound	
5-05-01	м	12x12 Light Brown Floor Tile	Unit 504, 505, 506
5-05-02	141	and Brown Adhesive	
5-06-01	м	White Floor Tile Peel and Stick	Unit 504
5-07-01	M	White Floor Tile and Brown Adhesive	Unit 504
5-08-01	м	12x12 Faux Wood Floor Tile Peel and Stick	Unit 504
5-09-01 5-09-02	м	12x12 White Floor Tile Peel and Stick	Unit 501, 502, 505
5-10-01	M	Light Brown Linoleum	Unit 502
5-11-01	M	Off-White Floor Tile and Brown Adhesive	Unit 502
5-12-01	м	12x12 Red Floor Tile Peel and Stick	Unit 502
5-13-01	м	12x12 Gray Floor Tile and Yellow Adhesive	Unit 507
5-14-01	м	Light Brown Ceramic Tile	Unit 507, 508
5-14-02		Pattern Linoleum	
5-15-01	М	Yellow Linoleum	Unit 508 (3 <sup>rd</sup> Layer)

\* Composite analysis of wallboard and joint compound requested if joint compound contains asbestos.

Material Type: M - Miscellaneous, S - Surfacing, TSI - Thermal System Insulation

			JUN 1 6 2016
Submitted by: Philip Zabel	Date: 6-15-16	_ Signature: Alin Soul	By
Recieved by:	Date:	_ Signature:	

Please Reply To:

### AmeriSci Richmond

13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800

### FACSIMILE TELECOPY TRANSMISSION

To: Kim Dingledine Dominion Due Diligence Group

Fax #:

Ameri Sci

Email: k.dingledine@d3g.biz,hazmat@d3g.biz

From: J. AmeriSci Job #: 1 Subject: Pi Client Project: W

J. Samuel Baird 116061828 PLM 3 day Results White River Apartments -#2016-1014; 2900 Marion Drive, Diaz, Arkansas; Buildin

Date: Monday, June 20, 2016 Time: 15:43:45 Comments: Number of Pages:

(including cover sheet)

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# **PLM Bulk Asbestos Report**

Dominion Due Diligence Group	Date Received 06/16/16	AmeriSci Job #	<b>#</b> 116061828
Attn: Kim Dingledine	Date Examined 06/20/16	P.O. #	
4121 Cox Road		Page 1 c	of 7
Suite 200 Glen Allen, VA 23060	RE: White River Apartments - Diaz, Arkansas; Building (		) Marion Drive,

	HGA	Lab No.	<b>Asbestos Present</b>	<b>Total % Asbestos</b>
6-01-01	Location: Textur	116061828-01 ed Ceiling; Throughout Building	No	NAD (by CVES)
Asbesto	•	geneous, Non-Fibrous, Texture 00 %	d Ceiling	by J. Samuel Baird on 06/20/16
6-01-02		116061828-02	No	NAD
	Location: Textur	ed Ceiling; Throughout Building	)	(by CVES) by J. Samuel Baird on 06/20/16
Asbesto	•	geneous, Non-Fibrous, Texture 00 %	d Ceiling	
6-01-03		116061828-03	No	NAD
	Location: Textur	ed Ceiling; Throughout Building	)	(by CVES) by J. Samuel Baird
				on 06/20/16
Asbesto	· · · ·	geneous, Non-Fibrous, Texture 00 %	d Ceiling	on 06/20/16
Asbesto: Other M	s Types:	-	d Ceiling No	on 06/20/16 NAD
Asbesto: Other M	s Types: Material: Non-fibrous 10	00 %	No	NAD (by CVES) by J. Samuel Baird
Asbesto Other M 6-01-04 Analyst Desc Asbesto	s Types: Material: Non-fibrous 10 Location: Textur cription: White, Hetero	00 % 116061828-04 ed Ceiling; Throughout Building geneous, Non-Fibrous, Texture	No	NAD (by CVES)
Asbesto Other M 6-01-04 Analyst Desc Asbesto Other M	s Types: Material: Non-fibrous 10 Location: Textur cription: White, Hetero s Types:	00 % 116061828-04 ed Ceiling; Throughout Building geneous, Non-Fibrous, Texture	No	NAD (by CVES) by J. Samuel Baird
Asbesto Other M 6-01-04 Analyst Desc Asbesto	s Types: Material: Non-fibrous 10 Location: Textur cription: White, Hetero s Types: Material: Non-fibrous 10	00 % 116061828-04 ed Ceiling; Throughout Building geneous, Non-Fibrous, Texture 00 %	No od Ceiling No	NAD (by CVES) by J. Samuel Baird on 06/20/16

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
6-01-06 I	116061828-06 Location: Textured Ceiling; Throughout Building	Νο	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	on: White, Heterogeneous, Non-Fibrous, Textured es: al: Non-fibrous 100 %	Ceiling	
6-01-07	116061828-07	No	NAD
	Location: Textured Ceiling; Throughout Building	NO	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	on: White, Heterogeneous, Non-Fibrous, Textured es: al: Non-fibrous 100 %	Ceiling	
6-02-01	116061828-08	No	NAD
	(by CVES) by J. Samuel Baird on 06/20/16		
Asbestos Type	on: Brown, Heterogeneous, Non-Fibrous, Floor Tile as: al: Non-fibrous 100 %	9	011 00/20/10
6-03-01	116061828-09L1	No	NAD
I	Location: White Floor Tile And Yellow Adhesive;	Unit 604, 605	(by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	n: White, Heterogeneous, Non-Fibrous, Floor Tile es: al: Non-fibrous 100 %	•	
6-03-01	116061828-09L2	No	NAD
l	Location: White Floor Tile And Yellow Adhesive;	Unit 604, 605	(by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	n: Yellow, Heterogeneous, Non-Fibrous, Mastic es: al: Non-fibrous 100 %		
6-03-02	116061828-10L1	No	NAD
	<b>.ocation:</b> White Floor Tile And Yellow Adhesive; I		(by CVES) by J. Samuel Baird on 06/20/16
Asbestos Type	n: White, Heterogeneous, Non-Fibrous, Floor Tile es: al: Non-fibrous 100 %		

	A		La	ab No.		Asbesto	os Present	t	<b>Total % Asbesto</b>
ion: V	Location:	White Flo		31828-10L2 I Yellow Adhe			No		NAD (by CVES) by J. Samuel Baird on 06/20/16
	tion: Yellow ypes: erial: Non-fil			n-Fibrous, Ma	astic				
ion: 1	Location:	Thin Beig		31828-11L And Yellow			<b>Yes</b> , 604 (Bottom	Layer)	2 % (by CVES) by J. Samuel Baird on 06/20/16
rysoti	<b>ition:</b> Beige, ypes: Chryso erial: Non-fil	otile 2.0 %	þ	-Fibrous, Flo	oor Tile				
ion: 1	Location:	: Thin Beig		51828-11L And Yellow	_		<b>No</b> , 604 (Bottom	Layer)	NAD (by CVES) by J. Samuel Baird on 06/20/16
	otion: Yellow ypes: erial: Non-fil	-		n-Fibrous, M	astic				
ion: ٦	Location:	: Thin Beiç		61828-12L e And Yellow			<b>No</b> , 604 (Bottom	Layer)	NAD (by CVES) by J. Samuel Baird on 06/20/16
	otion: Beige, ypes: erial: Non-fi			n-Fibrous, Flo	oor Tile				
ion: 1	Location	: Thin Beig		51828-12L e And Yellow	_		<b>No</b> , 604 (Bottom	Layer)	NAD (by CVES) by J. Samuel Baird on 06/20/16
	otion: Yellow ypes: erial: Non-fi			n-Fibrous, M	lastic				
		-	ramic Tile F	061828-13 Pattern Linole	eum; Unit	604	No		NAD (by CVES) by J. Samuel Baird on 06/20/16
	otion: White ypes: terial: Non-fi			s, Non-Fibrou	us, Linole	um			

Client No. / HG/	4	Lab No.	Asbestos Present	Total % Asbestos
6-06-01		6061828-14L1 Tile With Black Back	<b>No</b> king And Yellow Adhesive; Unit 603	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Typ	ion: Gray, Heterogeneous, N bes: rial: Non-fibrous 100 %	on-Fibrous, Floor Tile		
6-06-01		6061828-14L2 Tile With Black Back	<b>No</b> king And Yellow Adhesive; Unit 603	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Ty	ion: Yellow, Heterogeneous, pes: rial: Non-fibrous 100 %	Non-Fibrous, Mastic		
6-07-01		6061828-15L1 In Floor Tile And Brov	<b>No</b> vn Adhesive; Unit 603, 605, 607, 608	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Ty	ion: Lt. Brown, Heterogeneou bes: rial: Non-fibrous 100 %	us, Non-Fibrous, Floo	r Tile	
6-07-01		6061828-15L2 In Floor Tile And Brov	<b>No</b> vn Adhesive; Unit 603, 605, 607, 608	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Ty	ion: Amber, Heterogeneous, pes: rial: Non-fibrous 100 %	Non-Fibrous, Mastic		
6-07-02		6061828-16L1 /n Floor Tile And Brov	<b>No</b> vn Adhesive; Unit 603, 605, 607, 608	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Ty	ion: Lt. Brown, Heterogeneou pes: rial: Non-fibrous 100 %	us, Non-Fibrous, Floo	r Tile	
6-07-02		6061828-16L2 /n Floor Tile And Brov	<b>No</b> wn Adhesive; Unit 603, 605, 607, 608	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbestos Ty	ion: Yellow, Heterogeneous, pes: rial: Non-fibrous 100 %	Non-Fibrous, Mastic		

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 6

Client No. / HG	A Lab No.	Asbestos Present	<b>Total % Asbestos</b>
6-08-01	116061828-17	No	NAD
	Location: 12x12 White Floor Tile Peel And S	2x12 White Floor Tile Peel And Stick; Unit 602, 603, 605	
Analyst Descript Asbestos Ty Other Mate			
6-08-02	116061828-18	No	NAD
	Location: 12x12 White Floor Tile Peel And S		(by CVES) by J. Samuel Baird on 06/20/16
Asbestos Ty	ti <b>on:</b> White, Heterogeneous, Non-Fibrous, Floo <b>pes:</b> i <b>rial:</b> Non-fibrous 100 %	r Tile	
6-09-01	116061828-19	No	NAD
	Location: 12x12 White Floor Tile And Brown	Adhesive; Unit 602, 606, 607, 608	(by CVES) by J. Samuel Baird on 06/20/16
Asbestos Ty	t <b>ion</b> : White/Brown, Heterogeneous, Non-Fibrou <b>pes:</b> i <b>rial:</b> Non-fibrous 100 %	ıs, Floor Tile	
Comm	ent: insufficient mastic present for analysis		
6-09-02	116061828-20L1	No	NAD
	Location: 12x12 White Floor Tile And Brown	Adhesive; Unit 602, 606, 607, 608	(by CVES) by J. Samuel Baird on 06/20/16
Asbestos Ty	t <b>ion:</b> White/Brown, Heterogeneous, Non-Fibrou <b>pes:</b> : <b>rial:</b> Non-fibrous 100 %	ıs, Floor Tile	
6-09-02	116061828-20L2	No	NAD
0 00 02	Location: 12x12 White Floor Tile And Brown		(by CVES) by J. Samuel Baird on 06/20/16
Asbestos Ty	tion: Yellow, Heterogeneous, Non-Fibrous, Ma pes: prial: Non-fibrous 100 %	stic	

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 6

	iA Lab No.	Asbestos Present	Total % Asbestos
6-10-01	116061828-21	No	NAD
	Location: 12x12 Slate Floor Tile Peel And Stick	k; Unit 602	(by CVES) by J. Samuel Baird on 06/20/16
Asbestos T	o <mark>tion:</mark> Gray, Heterogeneous, Non-Fibrous, Floor Ti <b>ypes:</b> <b>erial:</b> Non-fibrous 100 %	ie	
6-11-01	116061828-22.1	No	NAD
	Location: *Gypsum Wallboard And Joint Comp		(by CVES) by J. Samuel Baird on 06/20/16
Asbestos T	<b>btion:</b> White, Heterogeneous, Non-Fibrous, Wall B <b>ypes:</b> <b>erial:</b> Cellulose 5 %, Fibrous glass 2 %, Non-fibro		
6-11-01	116061828-22.2	No	NAD
	Location: *Gypsum Wallboard And Joint Comp	oound; Throughout Building	(by CVES)
			by J. Samuel Baird on 06/20/16
Asbestos T	<b>otion:</b> White, Heterogeneous, Non-Fibrous, Joint C <b>ypes:</b> <b>erial:</b> Non-fibrous 100 %	Compound	•
Asbestos T Other Ma	ypes:	Compound <b>No</b>	•
Asbestos T Other Ma	ypes: erial: Non-fibrous 100 %	No	on 06/20/16
Asbestos T Other Mat 6-11-02 Analyst Descri Asbestos T	ypes: erial: Non-fibrous 100 % 116061828-23.1 Location: *Gypsum Wallboard And Joint Comp otion: White, Heterogeneous, Non-Fibrous, Wall B ypes:	<b>No</b> bound; Throughout Building Board	on 06/20/16 NAD (by CVES) by J. Samuel Baird
Asbestos T Other Mat 6-11-02 Analyst Descri Asbestos T	ypes: erial: Non-fibrous 100 % 116061828-23.1 Location: *Gypsum Wallboard And Joint Comp otion: White, Heterogeneous, Non-Fibrous, Wall B	<b>No</b> bound; Throughout Building Board	on 06/20/16 NAD (by CVES) by J. Samuel Baird
Asbestos T Other Mat 6-11-02 Analyst Descri Asbestos T Other Mat	ypes: erial: Non-fibrous 100 % 116061828-23.1 Location: *Gypsum Wallboard And Joint Comp otion: White, Heterogeneous, Non-Fibrous, Wall B ypes: erial: Cellulose 5 %, Fibrous glass 2 %, Non-fibro 116061828-23.2	<b>No</b> bound; Throughout Building Board ous 93 % <b>No</b>	on 06/20/16 NAD (by CVES) by J. Samuel Baird on 06/20/16 NAD
Asbestos T Other Mat 6-11-02 Analyst Descri Asbestos T	ypes: erial: Non-fibrous 100 % 116061828-23.1 Location: *Gypsum Wallboard And Joint Comp otion: White, Heterogeneous, Non-Fibrous, Wall B ypes: erial: Cellulose 5 %, Fibrous glass 2 %, Non-fibro	<b>No</b> bound; Throughout Building Board ous 93 % <b>No</b>	on 06/20/16 NAD (by CVES) by J. Samuel Baird on 06/20/16

•

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 6

**Reporting Notes:** 

Analyzed by: J. Samuel Baird

Date

\*NAD = no asbestos detected, Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt Qt = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested. Reviewed By:

### 116061828

### **Asbestos Inspection Chain of Custody**

Project	White River Apartments – #2016-1014	Date	6-14-16
Address	2900 Marion Drive, Diaz, Arkansas	TAT	3-day
Client	Dominion Due Diligence Group (804) 358-2020 4121 Cox Road, Suite 200, Glen Allen, Virginia 23060	Method	PLM

Building 6				
		Material Description	Material Execution	
6-01-01 6-01-02 6-01-03 6-01-04 6-01-05 6-01-06 6-01-07	s	Texture Ceiling	Throughout Building	
6-02-01	м	12x12 Faux Wood Floor Tile Peel and Stick	Unit 604	
6-03-01 6-03-02	м	White Floor Tile and Yellow Adhesive	Unit 604, 605	
6-04-01 6-04-02	м	Thin Beige Floor Tile and Yellow Adhesive	Unit 602, 604 (Bottom Layer)	
6-05-01	м	Gray Ceramic Tile Pattern Linoleum	Unit 604	
6-06-01	М	12x12 Gray Floor Tile with Black Backing and Yellow Adhesive	Unit 603	
6-07-01 6-07-02	M	12x12 Light Brown Floor Tile and Brown Adhesive	Unit 603, 605, 607, 608	
6-08-01 6-08-02	M	12x12 White Floor Tile Peel and Stick	Unit 602, 603, 605	
6-09-01 6-09-02	м	12x12 White Floor Tile and Brown Adhesive	Unit 602, 606, 607, 608	
6-10-01	М	12x12 Slate Floor Tile Peel and Stick	Unit 602	
6-11-01 6-11-02	М	* Gypsum Wallboard and Joint Compound	Throughout Building	

\* Composite analysis of wallboard and joint compound requested if joint compound contains asbestos.

Material Type: M - Miscellaneous, S - Surfacing, TSI - Thermal System Insulation

RECEIVED

JUN 1 6 2016

By \_

Submitted by: Philip Zabel Date: 6-15-16 Signature:

mil

Recieved by:\_

Date: \_

Signature:

Please Reply To:



AmeriSci Richmond

13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800

### FACSIMILE TELECOPY TRANSMISSION

To: Kim Dingledine Dominion Due Diligence Group

Fax #:

**Email:** 

AmeriSci Job #: Subject: Client Project:

From:

J. Samuel Baird 116061829 PLM 3 day Results White River Apartments -#2016-1014; 2900 Marion Drive, Diaz, Arkansas; Buildin

k.dingledine@d3g.biz,hazmat@d3g.biz

Date: Tuesday, June 21, 2016 Time: 10:40:24 Comments:

Number of Pages:

(including cover sheet)

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### **PLM Bulk Asbestos Report**

Dominion Due Diligence Group Attn: Kim Dingledine 4121 Cox Road Suite 200 Glen Allen, VA 23060 Date Received06/16/16AmeriSci Job #116061829Date Examined06/20/16P.O. #Page1of8RE: White River Apartments - #2016-1014; 2900 Marion Drive,<br/>Diaz, Arkansas; Building 7

Client No. /	HGA	Lab No.	Asbestos Present	<b>Total % Asbestos</b>
7-01-01	Location: Textu	116061829-01 ire Ceiling; Throughout Building	No	NAD (by CVES) by J. Samuel Baird on 06/20/16
Asbesto	cription: White, Heter s Types: Material: Non-fibrous	ogeneous, Non-Fibrous, Texture 100 %	ed Ceiling	
7-01-02		116061829-02	No	NAD
		ire Ceiling; Throughout Building		(by CVES) by J. Samuel Baird on 06/20/16
Asbesto	scription: White, Heter os Types: Material: Non-fibrous	ogeneous, Non-Fibrous, Texture	ed Ceiling	
7-01-03		116061829-03	No	NAD
	Location: Text	ure Ceiling; Throughout Building		(by CVES) by J. Samuel Baird on 06/20/16
Asbesto	scription: White, Heter os Types: Material: Non-fibrous	rogeneous, Non-Fibrous, Textur 100 %	ed Ceiling	
7-01-04		116061829-04	No	NAD
	Location: Text	ure Ceiling; Throughout Building		(by CVES) by J. Samuel Baird on 06/20/16
Asbesto	scription: White, Heter os Types: Material: Non-fibrous	rogeneous, Non-Fibrous, Textur 100 %	ed Ceiling	
7-01-05		116061829-05	No	NAD
	Location: Text	ure Ceiling; Throughout Building		(by CVES) by J. Samuel Baird on 06/20/16
Asbesto	os Types:	rogeneous, Non-Fibrous, Textur	ed Ceiling	
Uther	Material: Non-fibrous	100 %		

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 7

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
7-01-06 Location:	116061829-06 Texture Ceiling; Throughout Building	No	NAD (by CVES) by J. Samuel Baird on 06/20/16
Analyst Description: White, Asbestos Types: Other Material: Non-fib	Heterogeneous, Non-Fibrous, Textured	Ceiling	
7-01-07 Location:	116061829-07 Texture Ceiling; Throughout Building	No	NAD (by CVES) by J. Samuel Baird on 06/20/16
Analyst Description: White, Asbestos Types: Other Material: Non-fib	Heterogeneous, Non-Fibrous, Textured	Ceiling	
7-02-01 Location:	116061829-08 Tile Pattern Linoleum; Unit 703, 706	No	NAD (by CVES) by J. Samuel Baird on 06/20/16
Analyst Description: Gray, H Asbestos Types: Other Material: Non-fib	leterogeneous, Non-Fibrous, Linoleum rous 100 %		
7-02-02 Location:	116061829-09 Tile Pattern Linoleum; Unit 703, 706	Νο	NAD (by CVES) by J. Samuel Baird on 06/20/16
Analyst Description: Gray, H Asbestos Types: Other Material: Non-fib	leterogeneous, Non-Fibrous, Linoleum rous 100 %		
7-03-01 Location:	116061829-10 Gray Linoleum; Unit 703	Νο	NAD (by CVES) by J. Samuel Baird on 06/20/16
Analyst Description: Gray, H Asbestos Types: Other Material: Non-fib	leterogeneous, Non-Fibrous, Linoleum vrous 100 %		
	116061829-11	No	NAD

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 7

116061829-12 Location: Yellow Linoleum; Unit 703, 706 on: Yellow, Heterogeneous, Non-Fibrous, Linoleu es: ial: Cellulose 60 %, Fibrous glass 10 %, Non-fibr 116061829-13 Location: Yellow Linoleum; Unit 703, 706 ion: Yellow, Heterogeneous, Non-Fibrous, Linoleu es: ial: Non-fibrous 100 %	rous 30 % <b>No</b>	NAD (by CVES) by J. Samuel Baird on 06/21/16 NAD (by CVES) by J. Samuel Baird on 06/21/16
ial: Cellulose 60 %, Fibrous glass 10 %, Non-fib 116061829-13 Location: Yellow Linoleum; Unit 703, 706 ion: Yellow, Heterogeneous, Non-Fibrous, Linoleu bes:	rous 30 % <b>No</b>	(by CVES) by J. Samuel Baird
116061829-13 Location: Yellow Linoleum; Unit 703, 706 ion: Yellow, Heterogeneous, Non-Fibrous, Linoleu pes:	Νο	(by CVES) by J. Samuel Baird
Location: Yellow Linoleum; Unit 703, 706 ion: Yellow, Heterogeneous, Non-Fibrous, Linoleu		(by CVES) by J. Samuel Baird
Des:	IM	
116061829-14.1	No	NAD
		(by CVES) by J. Samuel Baird on 06/21/16
Des:	pard	
116061829-14.2 Location: * Gypsum Wallboard And Joint Comp	<b>No</b> ound; Unit Throughout Building	NAD (by CVES) by J. Samuel Baird on 06/21/16
pes:	ompound	
116061829-15.1 Location: * Gypsum Wallboard And Joint Comp	<b>No</b> ound; Unit Throughout Building	NAD (by CVES) by J. Samuel Baird on 06/21/16
pes:	bard	
		NAD (by CVES) by J. Samuel Baird on 06/21/16
	ion: White, Heterogeneous, Non-Fibrous, Wall Bo pes: rial: Cellulose 5 %, Non-fibrous 95 % 116061829-14.2 Location: * Gypsum Wallboard And Joint Comp ion: White, Heterogeneous, Non-Fibrous, Joint Co pes: rial: Non-fibrous 100 % 116061829-15.1 Location: * Gypsum Wallboard And Joint Comp tion: White, Heterogeneous, Non-Fibrous, Wall Bo pes: rial: Cellulose 5 %, Non-fibrous 95 % 116061829-15.2 Location: * Gypsum Wallboard And Joint Comp	rial: Cellulose 5 %, Non-fibrous 95 %          116061829-14.2       No         Location: * Gypsum Wallboard And Joint Compound; Unit Throughout Building         ion: White, Heterogeneous, Non-Fibrous, Joint Compound         pes:         rial: Non-fibrous 100 %         116061829-15.1       No         Location: * Gypsum Wallboard And Joint Compound; Unit Throughout Building         tion: White, Heterogeneous, Non-Fibrous, Wall Board         pes:         rial: Cellulose 5 %, Non-fibrous 95 %         116061829-15.2       No         Location: * Gypsum Wallboard And Joint Compound; Unit Throughout Building         tion: White, Heterogeneous, Non-Fibrous, Wall Board         pes:       rial: Cellulose 5 %, Non-fibrous 95 %         116061829-15.2       No         Location: * Gypsum Wallboard And Joint Compound; Unit Throughout Building         tion: White, Heterogeneous, Non-Fibrous, Joint Compound; Unit Throughout Building         tion: White, Heterogeneous, Non-Fibrous, Joint Compound         tion: White, Heterogeneous, Non-Fibrous, Joint Compound         tion: White, Heterogeneous, Non-Fibrous, Joint Compound         pes:

See Reporting notes on last page

### Page 4 of 8

### **PLM Bulk Asbestos Report**

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 7

Client No. / HG/	Lab No.	<b>Asbestos Present</b>	Total % Asbestos
7-07-01	116061829-16 Location: Tan 18x18 Floor Tile Peel And Stick; L	No Jnit 703	NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Typ	ion: Tan, Heterogeneous, Non-Fibrous, Floor Tile bes: rial: Non-fibrous 100 %		
7-08-01	116061829-17 Location: White Floor Tile Peel And Stick; Unit 7	<b>No</b> 704, 708	NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Typ	i <b>on:</b> White, Heterogeneous, Non-Fibrous, Floor Til <b>bes:</b> rial: Non-fibrous 100 %	le	
7-08-02	116061829-18 Location: White Floor Tile Peel And Stick; Unit 7	<b>No</b> 704, 708	NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Typ	ion: White, Heterogeneous, Non-Fibrous, Floor Til bes: rial: Non-fibrous 100 %	le	011 00/2 1/10
7-09-01	116061829-19L1 Location: Beige Floor Tile And Yellow Adhesive;	<b>No</b> Unit 704, 708	NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Typ	on: Beige, Heterogeneous, Non-Fibrous, Floor Til bes: rial: Non-fibrous 100 %	e	
7-09-01	116061829-19L2 Location: Beige Floor Tile And Yellow Adhesive;	<b>No</b> Unit 704, 708	NAD (by CVES) by J. Samuel Baird
Asbestos Typ	on: Yellow, Heterogeneous, Non-Fibrous, Mastic bes: ial: Non-fibrous 100 %		on 06/21/16
7-09-02	116061829-20L1 Location: Beige Floor Tile And Yellow Adhesive;		NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Typ	ion: Beige, Heterogeneous, Non-Fibrous, Floor Til pes: rial: Non-fibrous 100 %	e	

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 7

<b>Client No. / HGA</b>	Lab No.	Asbestos Present	<b>Total % Asbestos</b>
7-09-02	116061829-20L2	No	NAD
L	ocation: Beige Floor Tile And Yellow Adhesive; Ur	nt 704, 708	(by CVES) by J. Samuel Baird on 06/21/16
Asbestos Type	n: Yellow, Heterogeneous, Non-Fibrous, Mastic s: al: Non-fibrous 100 %		
	116061829-21L1 .ocation: Thin Beige Floor Tile And Yellow Adhesiv	<b>No</b> re; Unit 704 (Bottom Layer)	NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Type	n: Beige, Heterogeneous, Non-Fibrous, Floor Tile s: al: Non-fibrous 100 %		
7-10-01	116061829-21L2	No	NAD
	ocation: Thin Beige Floor Tile And Yellow Adhesiv	ve; Unit 704 (Bottom Layer)	(by CVES) by J. Samuel Baird on 06/21/16
Asbestos Type	n: Yellow, Heterogeneous, Non-Fibrous, Mastic es: al: Non-fibrous 100 %		
7-11-01 I	116061829-22 Location: 12x12 Tan Floor Tile Peel And Stick; Uni	<b>No</b> t 704, 706	NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Type	n: Tan, Heterogeneous, Non-Fibrous, Floor Tile es: al: Non-fibrous 100 %		
7-11-02	116061829-23	No	NAD
	Location: 12x12 Tan Floor Tile Peel And Stick; Uni	t 704, 706	(by CVES) by J. Samuel Baird on 06/21/16
Asbestos Type	on: Tan, Heterogeneous, Non-Fibrous, Floor Tile es: al: Non-fibrous 100 %		
7-12-01	116061829-24L1 Location: Pink Floor Tile And Adhesive; Unit 704, 1	<b>No</b> 706	NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Type	on: Gray, Heterogeneous, Non-Fibrous, Floor Tile es: al: Non-fibrous 100 %		

See Reporting notes on last page

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 7

Client No. / HG/	A Lab No.	Asbestos Present	<b>Total % Asbestos</b>
7-12-01	116061829-24L2 Location: Pink Floor Tile And Adhesive; Unit 704,	<b>No</b> 706	NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Ty	ion: Clear, Heterogeneous, Non-Fibrous, Mastic pes: rial: Non-fibrous 100 %		
7-12-02	116061829-25L1 Location: Pink Floor Tile And Adhesive; Unit 704,	<b>No</b> 706	NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Ty	<b>ion:</b> Pink, Heterogeneous, Non-Fibrous, Floor Tile <b>bes:</b> r <b>ial:</b> Non-fibrous 100 %		
7-12-02	116061829-25L2 Location: Pink Floor Tile And Adhesive; Unit 704,	<b>No</b> 706	NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Typ	i <b>on:</b> Yellow, Heterogeneous, Non-Fibrous, Mastic <b>bes:</b> r <b>ial:</b> Non-fibrous 100 %		
7-13-01	116061829-26L1 Location: Off-White Floor Tile With Black Back An	<b>No</b> d Yellow Adhesive; Unit 702, 704	NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Typ	<b>ion:</b> Off White, Heterogeneous, Non-Fibrous, Floor T <b>bes:</b> r <b>ial:</b> Non-fibrous 100 %	ïle	
7-13-01	116061829-26L2 Location: Off-White Floor Tile With Black Back An	<b>No</b> d Yellow Adhesive; Unit 702, 704	NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Ty	<b>ion:</b> Transparent Yellow, Heterogeneous, Non-Fibro <b>bes:</b> r <b>ial:</b> Non-fibrous 100 %	us, Mastic	
7-13-02	116061829-27L1 Location: Off-White Floor Tile With Black Back An		NAD (by CVES) by J. Samuel Baird on 06/21/16
Asbestos Ty	i <b>on:</b> Off White, Heterogeneous, Non-Fibrous, Floor 1 <b>bes:</b> ri <b>al:</b> Non-fibrous 100 %	ile	

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 7

	HGA	Lab No.	<b>Asbestos Present</b>	<b>Total % Asbesto</b>
7-13-02		116061829-27L2	<b>No</b> And Yellow Adhesive; Unit 702, 704	NAD (by CVES)
				by J. Samuel Baird on 06/21/16
Asbesto	cription: Transparent Yel os Types: Material: Non-fibrous 100	low, Heterogeneous, Non-Fi %	brous, Mastic	
7-14-01		116061829-28L1	No	NAD
7-14-01	Location: Thin Off-	White Floor Tile And Black /		(by CVES) by J. Samuel Baird on 06/21/16
Asbesto	scription: Beige/White, He os Types: Material: Non-fibrous 100	eterogeneous, Non-Fibrous, 1	Floor Tile	
7-14-01		116061829-28L2	No	NAD
	Location: Thin Off-	White Floor Tile And Black /	Adhesive; Unit 702	(by CVES) by J. Samuel Baird on 06/21/16
	scription: Black, Heteroge	White Floor Tile And Black / neous, Non-Fibrous, Mastic	Adhesive; Unit 702	by J. Samuel Baird
Asbest		neous, Non-Fibrous, Mastic	Adhesive; Unit 702	by J. Samuel Baird
Asbeste Other	scription: Black, Heteroge os Types:	neous, Non-Fibrous, Mastic		by J. Samuel Baird
Asbeste Other	scription: Black, Heteroge os Types: Material: Non-fibrous 100	neous, Non-Fibrous, Mastic	No	by J. Samuel Baird on 06/21/16
Asbesto Other 7-15-01 Analyst Des	scription: Black, Heteroge os Types: Material: Non-fibrous 100 Location: Off-Whit scription: Beige/White, He	neous, Non-Fibrous, Mastic % 116061829-29L1	<b>No</b> esive; Unit 707	by J. Samuel Baird on 06/21/16 NAD (by CVES) by J. Samuel Baird
Asbesto Other 7-15-01 Analyst Dec Asbesto	scription: Black, Heteroge os Types: Material: Non-fibrous 100 Location: Off-Whit	neous, Non-Fibrous, Mastic % 116061829-29L1 e Floor Tile And Brown Adhe eterogeneous, Non-Fibrous,	<b>No</b> esive; Unit 707	by J. Samuel Baird on 06/21/16 NAD (by CVES) by J. Samuel Baird
Asbesto Other 7-15-01 Analyst Dec Asbesto	scription: Black, Heteroge os Types: Material: Non-fibrous 100 Location: Off-Whit scription: Beige/White, He os Types:	neous, Non-Fibrous, Mastic % 116061829-29L1 e Floor Tile And Brown Adhe eterogeneous, Non-Fibrous,	<b>No</b> esive; Unit 707	by J. Samuel Baird on 06/21/16 NAD (by CVES) by J. Samuel Baird
Asbest Other 7-15-01 Analyst De Asbest Other	scription: Black, Heteroge DS Types: Material: Non-fibrous 100 Location: Off-Whit scription: Beige/White, He DS Types: Material: Non-fibrous 100	neous, Non-Fibrous, Mastic % 116061829-29L1 e Floor Tile And Brown Adhe eterogeneous, Non-Fibrous,	<b>No</b> esive; Unit 707 Floor Tile <b>No</b>	by J. Samuel Baird on 06/21/16 NAD (by CVES) by J. Samuel Baird on 06/21/16

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 7

### **Reporting Notes:**

Analyzed by: J. Samuel Baird

Date

\*NAD = no asbestos detected. Detection Limit  $\frac{19\%}{100}$ , Reporting Limits: CVES =  $\frac{10\%}{400}$  Pt Ct  $\frac{4}{0.25\%}$ , 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested. Reviewed By:

### 116061829

### **Asbestos Inspection Chain of Custody**

Project	White River Apartments – #2016-1014	Date	6-14-16
Address	2900 Marion Drive, Diaz, Arkansas	TAT	3-day
Client	Dominion Due Diligence Group (804) 358-2020	Method	PLM
	4121 Cox Road, Suite 200, Glen Allen, Virginia 23060		

Building 7				
		Material Description		
a secondare de la				
7-01-01				
7-01-02				
7-01-03				
7-01-04	S	Texture Ceiling	Throughout Building	
7-01-05				
7-01-06	ļ.			
7-01-07				
7-02-01 7-02-02	м	Tile Pattern Linoleum	Unit 703, 706	
7-03-01	M	Gray Linoleum	Unit 703	
7-04-01	M	Green Linoleum	Unit 703	
7-05-01				
7-05-02	М	Yellow Linoleum	Unit 703, 706	
7-06-01		* Gypsum Wallboard and Joint	Throughout Building	
7-06-02	М	Compound	Throughout Building	
7-07-01	М	Tan 18x18 Floor Tile Peel and Stick	Unit 703	
7-08-01 7-08-02	M	White Floor Tile Peel and Stick	Unit 704, 708	
7-09-01 7-09-02	M	Beige Floor Tile and Yellow Adhesive	Unit 704, 708	
7-10-01	M	Thin Beige Floor Tile and Yellow Adhesive	Unit 704 (Bottom Layer)	
7-11-01	М	12x12 Tan Floor Tile Peel and	Unit 704, 706	
7-11-02	IVI	Stick		
7-12-01	м	Pink Floor Tile and Adhesive	Unit 704, 706	
7-12-02	IVI			
7-13-01	М	Off-White Floor Tile with Black	Unit 702, 704	
7-13-02		Backing and Yellow Adhesive		
7-14-01	м	Thin Off-White Floor Tile and Black Adhesive	Unit 702	
7-15-01	м	Off-White Floor Tile and Brown Adhesive	Unit 707	

\* Composite analysis of wallboard and joint compound requested if joint compound contains asbestos.

Material Type: M - Miscellaneous, S - Surfacing, TSI - Thermal System Insulation

RECEIVED

JUN 1 6 2016

Ву\_\_\_\_

Submitted by: Milip Zabel	_Date: <u>6-15-16</u>	Signature: Sleer Sund
Recieved by:	Date:	Signature:

Please Reply To:



### AmeriSci Richmond

13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800

### FACSIMILE TELECOPY TRANSMISSION

To:	Kim Dingledine	From:	David W. Ralbovsky
	Dominion Due Diligence Group	AmeriSci Job #:	116061830
Fax #:		Subject:	PLM 3 day Results
		<b>Client Project:</b>	White River Apartments -
<b>F U</b>	h dia ala dia a @ 42 a h :- h a a @ 42 a h :-	-	#2016-1014; 2900 Marion Drive,
Email:	k.dingledine@d3g.biz,hazmat@d3g.biz		Diaz. Arkansas: Buildin

Date: Monday, June 20, 2016 Time: 09:06:32 Comments: Number of Pages:

(including cover sheet)

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AmeriSci Richmond



13635 GENITO ROAD MIDLOTHIAN, VIRGINIA 23112 TEL: (804) 763-1200 • FAX: (804) 763-1800

### **PLM Bulk Asbestos Report**

Dominion Due Diligence Group Attn: Kim Dingledine 4121 Cox Road Suite 200 Glen Allen, VA 23060 Date Received06/16/16AmeriSci Job #116061830Date Examined06/20/16P.O. #Page 1 of 6RE: White River Apartments - #2016-1014; 2900 Marion Drive,<br/>Diaz, Arkansas; Building 8

	HGA	Lab No.	Asbestos Present	Total % Asbesto
8-01-01		116061830-01	No	NAD
		e Ceiling; Throughout Building		(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	<b>cription:</b> White, Heterog <b>s Types:</b> <b>Material:</b> Cellulose Trac	geneous, Non-Fibrous, Bulk Ma e, Non-fibrous 100 %	aterial	
8-01-02		116061830-02	No	NAD
	Location: Texture	e Ceiling; Throughout Building		(by CVES) by David W. Ralbovsky on 06/20/16
Asbesto	s <b>cription:</b> White, Heterog <b>s Types:</b> Material: Non-fibrous 10	geneous, Non-Fibrous, Bulk Ma 10 %	aterial	
8-01-03		116061830-03	No	NAD
	Location: Texture	e Ceiling; Throughout Building		(by CVES)
Analyst Des	cription: White, Heteroo	aeneous. Non-Fibrous. Bulk Ma	aterial	by David W. Ralbovsky on 06/20/16
Asbesto	s <b>cription</b> : White, Heterog <b>s Types:</b> Material: Non-fibrous 10	geneous, Non-Fibrous, Bulk Ma 10 %	aterial	
Asbesto Other	s Types:		aterial <b>No</b>	
Asbesto	os Types: Material: Non-fibrous 10	0 %		on 06/20/16 NAD (by CVES) by David W. Ralbovsky
Asbesto Other 8-01-04 Analyst Des Asbesto	bs Types: Material: Non-fibrous 10 Location: Texture	0 % 116061830-04 e Ceiling; Throughout Building geneous, Non-Fibrous, Bulk Ma	Νο	NAD
Asbesto Other 8-01-04 Analyst Des Asbesto Other	<b>STypes:</b> Material: Non-fibrous 10 Location: Texture cription: White, Heterog	0 % 116061830-04 e Ceiling; Throughout Building geneous, Non-Fibrous, Bulk Ma	Νο	on 06/20/16 NAD (by CVES) by David W. Ralbovsky
Asbesto Other 8-01-04 Analyst Des Asbesto	<b>Societa Structure</b> <b>Location:</b> Texture <b>Location:</b> Texture <b>Cription:</b> White, Heterogram <b>Societa Structure</b> <b>Societa Structure</b>	0 % 116061830-04 e Ceiling; Throughout Building geneous, Non-Fibrous, Bulk Ma 0 %	<b>No</b> aterial	on 06/20/16 NAD (by CVES) by David W. Ralbovsky on 06/20/16

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 8

Client No. / HGA	Lab No.	<b>Asbestos Present</b>	<b>Total % Asbestos</b>
8-01-06 I	116061830-06 Location: Texture Ceiling; Throughout Building	Νο	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	on: White, Heterogeneous, Non-Fibrous, Bulk Mat es: al: Non-fibrous 100 %	erial	
8-01-07 I	116061830-07 Location: Texture Ceiling; Throughout Building	Νο	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	on: White, Heterogeneous, Non-Fibrous, Bulk Mat es: al: Non-fibrous 100 %	erial	
8-02-01 I	116061830-08 Location: Texture Painted Walls; Throughout Bui	<b>No</b> Iding	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Beige, Heterogeneous, Fibrous, Bulk Material es: al: Cellulose 5 %, Non-fibrous 95 %		
8-02-02 I	116061830-09 Location: Texture Painted Walls; Throughout Bui	<b>No</b> Iding	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	on: Beige, Heterogeneous, Non-Fibrous, Bulk Mate es: al: Non-fibrous 100 %	erial	
8-02-03 I	116061830-10 Location: Texture Painted Walls; Throughout Bui	<b>No</b> Iding	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	on: Beige, Heterogeneous, Non-Fibrous, Bulk Mate es: al: Non-fibrous 100 %	erial	01100/20/10
8-02-04 I	116061830-11 Location: Texture Painted Walls; Throughout Bui	<b>No</b> Iding	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Beige, Heterogeneous, Non-Fibrous, Bulk Mate es: al: Non-fibrous 100 %	erial	

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 8

Client No. / HGA	Lab No.	<b>Asbestos Present</b>	<b>Total % Asbestos</b>
8-02-05 L	116061830-12 ocation: Texture Painted Walls; Throughout Bu	NAD (by CVES) by David W. Ralbovsky on 06/20/16	
Asbestos Type	n: Beige, Heterogeneous, Non-Fibrous, Bulk Mai s: II: Non-fibrous 100 %	terial	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
8-02-06 L	116061830-13 ocation: Texture Painted Walls; Throughout Bu	<b>No</b> ilding	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Beige, Heterogeneous, Non-Fibrous, Bulk Mal <b>s:</b> II: Non-fibrous 100 %	terial	
8-02-07 L	116061830-14 ocation: Texture Painted Walls; Throughout Bu	<b>No</b> iilding	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Beige, Heterogeneous, Non-Fibrous, Bulk Mat s: I: Non-fibrous 100 %	terial	
8-03-01 L	116061830-15.1 ocation: * Gypsum Wallboard And Joint Compo	<b>No</b> bund; Throughout Building	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Brown/White, Heterogeneous, Fibrous, Wall B <b>s:</b> I: Cellulose 5 %, Fibrous glass Trace, Non-fibro		
8-03-01 L	116061830-15.2 ocation: * Gypsum Wallboard And Joint Compo	<b>No</b> bund; Throughout Building	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: White, Heterogeneous, Non-Fibrous, Joint Co s: I: Non-fibrous 100 %	mpound	
8-03-02 L	116061830-16.1 ocation: * Gypsum Wallboard And Joint Compo	<b>No</b> bund; Throughout Building	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Type	n: Brown/Pink, Heterogeneous, Fibrous, Wall Bo s: I: Cellulose 5 %, Non-fibrous 95 %	bard	

Other Material: Cellulose 5 %, Non-fibrous 95 %

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 8

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
8-03-02	116061830-16.2 Location: * Gypsum Wallboard And Joint Com	NAD (by CVES) by David W. Ralbovsky on 06/20/16	
Asbestos Typ	on: White, Heterogeneous, Non-Fibrous, Joint ( es: ial: Cellulose Trace, Non-fibrous 100 %	Compound	
8-04-01	116061830-17L1 Location: 12x12 White Floor Tile And Brown A		NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	on: White, Heterogeneous, Non-Fibrous, Floor es: ial: Non-fibrous 100 %	Tile	
8-04-01	116061830-17L2 Location: 12x12 White Floor Tile And Brown A	<b>No</b> Adhesvie; Unit 802, 803, 804, 806	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	on: Tan/Yellow, Heterogeneous, Non-Fibrous, A es: ial: Cellulose Trace, Non-fibrous 100 %	Adhesive	
8-04-02	116061830-18L1 Location: 12x12 White Floor Tile And Brown A	<b></b>	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	on: White, Heterogeneous, Non-Fibrous, Floor es: ial: Non-fibrous 100 %	Tile	
8-04-02	116061830-18L2 Location: 12x12 White Floor Tile And Brown A	<b>No</b> Adhesvie; Unit 802, 803, 804, 806	NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	on: Tan/Yellow, Heterogeneous, Non-Fibrous, A pes: ial: Cellulose Trace, Non-fibrous 100 %	Adhesive	
8-05-01	116061830-19L1 Location: 12x12 Light Brown Floor Tile; Unit 8		NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Typ	on: Lt. Brown, Heterogeneous, Non-Fibrous, Fle bes: rial: Non-fibrous 100 %	oor Tile	01 00/20/10

See Reporting notes on last page

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 8

Client No. / HG	A Lab No	o. Asbes	tos Present	Total % Asbestos
8-05-01	116061830- Location: 12x12 Light Brown Floor Til	NAD (by CVES) by David W. Ralbovsky on 06/20/16		
Asbestos Ty	t <b>ion:</b> Tan/Yellow, Heterogeneous, Non-F <b>pes:</b> • <b>rial:</b> Non-fibrous 100 %	ibrous, Adhesive		
8-05-02	116061830-	201.1	No	
0-00-02	Location: 12x12 Light Brown Floor Til			NAD (by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Ty	ti <b>on:</b> Lt. Brown, Heterogeneous, Non-Fit <b>pes:</b> <b>rial:</b> Non-fibrous 100 %	orous, Floor Tile		
8-05-02	116061830-	-20L2	No	NAD
	Location: 12x12 Light Brown Floor Til	e; Unit 801, 802, 803, 8	804, 805, 806, 807, 808	(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Ty	t <b>ion:</b> Tan/Yellow, Heterogeneous, Non-F <b>pes:</b> rial: Non-fibrous 100 %	ibrous, Adhesive		
8-06-01	116061830-		No	NAD
	Location: White Floor Tile And Brown	Adhesive; Unit 801		(by CVES) by David W. Ralbovsky on 06/20/16
Analyst Descrip Asbestos Ty	ion: White, Heterogeneous, Non-Fibrou	s, Floor Tile		011 00,20,10
•	rial: Non-fibrous 100 %			
8-06-01	116061830-	-21L2	No	NAD
	Location: White Floor Tile And Brown	Adhesive; Unit 801		(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Ty	<b>ion:</b> Tan/Yellow, Heterogeneous, Non-F <b>pes:</b> <b>rial:</b> Non-fibrous 100 %	ibrous, Adhesive		
8-07-01	116061830	)-22	No	NAD
	Location: 12x12 Gray Floor Tile And E	Brown Adhesive; Unit 8	06	(by CVES) by David W. Ralbovsky on 06/20/16
Asbestos Ty	<b>ion:</b> Grey, Heterogeneous, Non-Fibrous p <b>es:</b> rial: Non-fibrous 100 %	, Floor Tile		

See Reporting notes on last page

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Building 8

**Reporting Notes:** 

Analyzed by: David W. Ralbovsky Date

\*NAD = no asbestos detected, Detection Limit <1%, Reporting Limits: CVES = 1%, 400 Pt Ct = 0.25%, 1000 Pt Ct = 0.1%; "Present" or NVA = "No Visible Asbestos" are observations made during a qualitative analysis; NA = not analyzed; NA/PS = not analyzed / positive stop; PLM Bulk Asbestos Analysis by EPA 600/R-93/116 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples which includes quantitation of any vermiculite observed (198.6 for NOB samples) or EPA 400 pt ct by EPA 600/M4-82-020 (NYSDOH ELAP Lab # 10984); CA ELAP Lab # 2508; Note: PLM is not consistently reliable in detecting asbestos in floor coverings and similar NOB materials. NAD or Trace results by PLM are inconclusive, TEM is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos-containing in New York State (also see EPA Advisory for floor tile, FR 59, 146, 38970, 8/1/94). NIST Accreditation requirements mandate that this report must not be reproduced except in full without the approval of the laboratory. This PLM report relates ONLY to the items tested. **Reviewed By:** / D. X

### 116061830

### **Asbestos Inspection Chain of Custody**

Project	White River Apartments – #2016-1014	Date	6-14-16
Address	2900 Marion Drive, Diaz, Arkansas	TAT	3-day
	Dominion Due Diligence Group (804) 358-2020	Method	PLM
	4121 Cox Road, Suite 200, Glen Allen, Virginia 23060		

		Building 8	
	Tree	Alleterial Description	Manata Location
8-01-01 8-01-02 8-01-03 8-01-04 8-01-05 8-01-06 8-01-07	S	Texture Ceiling	Throughout Building
8-02-01 8-02-02 8-02-03 8-02-04 8-02-05 8-02-06 8-02-07	s	Texture Painted Walls	Throughout Building
8-03-01 8-03-02	м	* Gypsum Wallboard and Joint Compound	Throughout Building
8-04-01 8-04-02	м	12x12 White Floor Tile and Brown Adhesive	Unit 802, 803, 804, 806
8-05-01 8-05-02	м	12x12 Light Brown Floor Tile and Brown Adhesive	Unit 801, 802, 803, 804, 805, 806, 807, 808
8-06-01	M	White Floor Tile and Brown Adhesive	Unit 801
8-07-01	м	12x12 Gray Floor Tile and Brown Adhesive	Unit 806

\* Composite analysis of wallboard and joint compound requested if joint compound contains asbestos.

Material Type: M – Miscellaneous, S – Surfacing, TSI – Thermal System Insulation

RECEIVED

JUN 1 6 2016 By A

Submitted by: Philip Zabel	Date: <u>675-16</u>	_ Signature:	in Gul
Recieved by:	_ Date:	_ Signature:	

Please Reply To:



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### FACSIMILE TELECOPY TRANSMISSION

To:	Kim Dingledine	From:	Donna M. Blackwell
	Dominion Due Diligence Group	AmeriSci Job #:	116061831
Fax #:	· · ·	Subject:	PLM 3 day Results
		<b>Client Project:</b>	White River Apartments -
Email:	k.dingledine@d3g.biz,hazmat@d3g.biz		#2016-1014; 2900 Marion Drive, Diaz, Arkansas; Shop/La

Date: Sunday, June 19, 2016 Time: 19:36:08 Comments: Number of Pages:

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### **PLM Bulk Asbestos Report**

Dominion Due Diligence Group Attn: Kim Dingledine 4121 Cox Road Suite 200 Glen Allen, VA 23060 Date Received06/16/16AmeriSci Job #116061831Date Examined06/19/16P.O. #Page1of3RE: White River Apartments - #2016-1014; 2900 Marion Drive,<br/>Diaz, Arkansas; Shop/Laundry Building

Client No. / HGA	Lab No.	<b>Asbestos Present</b>	<b>Total % Asbestos</b>	
SH-01-01	116061831-01 cation: Insulation Backing; Shop Walls And C	<b>No</b> eiling	NAD (by CVES) by Donna M. Blackwell on 06/19/16	
Asbestos Types	n: Black/Brown, Homogeneous, Fibrous, Bulk M s: l: Cellulose 50 %, Fibrous glass 12 %, Non-fib			
 SH-01-02	116061831-02	No	NAD	
L	ocation: Insulation Backing; Shop Walls And C	eiling	(by CVES) by Donna M. Blackwell on 06/19/16	
Asbestos Type	n: Black/Brown, Heterogeneous, Fibrous, Bulk M s: I: Cellulose 50 %, Fibrous glass 12 %, Non-fit			
L-01-01	116061831-03	No	NAD	
	ocation: Texture Paint; Laundry Room Walls		(by CVES) by Donna M. Blackwell on 06/19/16	
Asbestos Type	n: White, Homogeneous, Non-Fibrous, Bulk Ma s: al: Non-fibrous 100 %	terial		
L-01-02	116061831-04	No	NAD	
L-01-02	<b>.ocation:</b> Texture Paint; Laundry Room Walls		(by CVES) by Donna M. Blackwell on 06/19/16	
Asbestos Type	n: White, Homogeneous, Non-Fibrous, Bulk Ma es: al: Non-fibrous 100 %	aterial		
 L-01-03	116061831-05	No	NAD	
	Location: Texture Paint; Laundry Room Walls		(by CVES) by Donna M. Blackwell on 06/19/16	
Asbestos Typ	on: White, Heterogeneous, Non-Fibrous, Bulk M es: al: Non-fibrous 100 %	laterial		

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Shop/Laundry Building

Client No. / HG/	Lab No.	Asbestos Present	<b>Total % Asbestos</b>	
02-01	116061831-06.1			
Asbestos Ty	ion: Pink/Brown, Heterogeneous, Fibrous, Wall B pes: rial: Cellulose 12 %, Non-fibrous 88 %	oard		
L-02-01	116061831-06.2 Location: *Gypsum Wallboard And Joint Comp	116061831-06.2 <b>No</b> ion: *Gypsum Wallboard And Joint Compound; Laundry Room Walls		
Asbestos Ty	t <b>ion:</b> White, Homogeneous, Non-Fibrous, Joint Co <b>pes:</b> rial: Non-fibrous 100 %	ompound		
L-02-02	116061831-07.1 Location: *Gypsum Wallboard And Joint Comp	<b>No</b> bound; Laundry Room Walls	NAD (by CVES) by Donna M. Blackwell on 06/19/16	
Asbestos Ty	tion: Pink/Brown, Heterogeneous, Fibrous, Wall E /pes: erial: Cellulose 12 %, Non-fibrous 88 %	Board		
L-02-02	116061831-07.2 Location: *Gypsum Wallboard And Joint Comp	<b>No</b> pound; Laundry Room Walls	NAD (by CVES) by Donna M. Blackwell on 06/19/16	
Asbestos T	otion: White, Heterogeneous, Fibrous, Bulk Mater ypes: erial: Non-fibrous 100 %	ial		
L-03-01	116061831-08 Location: Ceramic Tile Grout; Laundry Room	<b>No</b> Floor	NAD (by CVES) by Donna M. Blackwell on 06/19/16	
Asbestos T	ption: Gray, Homogeneous, Non-Fibrous, Cemen <sup>-</sup> ypes: terial: Non-fibrous 100 %	titious, Bulk Material	NAD	
L-03-02	116061831-09 Location: Ceramic Tile Grout; Laundry Room	116061831-09       No         Location: Ceramic Tile Grout; Laundry Room Floor		
Asbestos	i <b>ption</b> : Gray, Homogeneous, Non-Fibrous, Cemer <b>Types:</b> Iterial: Non-fibrous 100 %	ntitious, Bulk Material		

White River Apartments - #2016-1014; 2900 Marion Drive, Diaz, Arkansas; Shop/Laundry Building

**Reporting Notes:** 

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### Asbestos Inspection Chain of Custody

116061831

Project	White River Apartments – #2016-1014	Date	6-14-16
Address	2900 Marion Drive, Diaz, Arkansas	TAT	3-day
Client	Dominion Due Diligence Group (804) 358-2020 4121 Cox Road, Suite 200, Glen Allen, Virginia 23060	Method	PLM

### Shop/Laundry Building

a an da an sain Sa tao			
SH-01-01 SH-01-02	М	Insulation Backing	Shop Walls and Ceiling
L-01-01 L-01-02 L-01-03	S	Texture Paint	Laundry Room Walls
L-02-01 L-02-02	М	* Gypsum Wallboard and Joint Compound	Laundry Room Walls
L-03-01 L-03-02	M	Ceramic Tile Grout	Laundry Room Floor

\* Composite analysis of wallboard and joint compound requested if joint compound contains asbestos.

Material Type: M - Miscellaneous, S - Surfacing, TSI - Thermal System Insulation

	RECEIVED
	JUN <b>1 6 2018</b>
	By An
	ALL PATTO
Submitted by: Philip Zabel Date: 6	-1)-16 Signature: July Jule
Recieved by: Date:	Signature:

**C. ASBESTOS LICENSES** 

## Arkansas Department of Environmental Quality

### 010876 PHILIP ZABEL

and the Arkansas Pollution Control and Ecology Commission's Regulation 21 and is hereby certified in the having satisfied the requirements necessary to meet the provisions of AHERA/ASHARA under TSCA Title II State of Arkansas in the discipline(s) of Asbestos

Air Monitor 1/31/2017 Inspector 1/31/2017 Project Designer 4/30/2017



Issue Date:25-Apr-2016

Becky W. Keogh ADEQ Director peog

# Arkansas Department of Environmental Quality

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### IMPACT ENVIRONMENTAL, INC.

is a licensed

**Asbestos Abatement Consultant** 

Control and Ecology Commission's Regulation 21 pursuant to Arkansas Code Annotated §20-27-1001 et having qualified as required by law in accordance with the regulations adopted by the Arkansas Pollution seq., relative to abatement of asbestos-containing material within the state of Arkansas.



License Number: 000423 Issue Date: 2016 January 19 Expire Date: 2017 January 19

Dee ADEQ Director )eo-

### APPENDIX 'D'

### **RADON REPORT**



Radon Assessment Report

> Project location: White River 2900 Marion Drive Diaz, AR

Prepared by: Kyle Hoylman Protect Environmental

Report Date: July 1, 2016



Prepared by:

Kyle Hoylman Protect Environmental 9822 Bluegrass Parkway Louisville, KY 40299 Phone: 502-410-5000 Email: Kyle@ProtectEnv.com

Preparation Date: July 1, 2016

This report was developed specifically for the radon assessment conducted at White River, 2900 Marion Drive, Diaz, AR. This assessment was conducted in accordance with the American National Standards Institute (ANSI) document *Protocol for Conducting Radon and Radon Decay Product Measurements in Multifamily Buildings (ANSI/AARST MAMF-2012)* by Stephen Berger, a radon measurement professional credentialed by the National Radon Proficiency Program (NRPP).

Kyhe Hogh

Kyle Hoylman Project Manager NRPP Measurement Certification #104371RT



### Contents

- 1.0 Introduction and Summary
- 2.0 Scope of Work
- 3.0 Measurement Protocol and Quality Assurance
- 4.0 Measurement Devices
- 5.0 Measurement Conditions
- 6.0 Findings and Recommendations

### Appendices

- 1.0 Appendix A: Analytical Laboratory Report
- 2.0 Appendix B: Device Placement Log
- 3.0 Appendix C: Credential Documentation
- 4.0 Appendix D: EPA Radon Zone Map
- 5.0 Appendix E: Notification Documentation





### Section 1.0 – Introduction and Summary

Protect Environmental was engaged to conduct a radon assessment of the multifamily property located at White River, 2900 Marion Drive, Diaz, AR. The assessment was requested as part of a due diligence project being conducted by the client. The property is located within an EPA Zone 3 county, which indicates a low potential for radon.

The assessment was conducted between June 22, 2016 and June 24, 2016. A total of 17 measurement devices deployed in 16 residential units and 1 non-residential area were included in the measurement and quality assurance project plan. For quality assurance purposes, 2 duplicate measurement devices and 1 field blank measurement device were deployed. All devices were sent under appropriate chain of custody to a qualified analytical laboratory for analysis.

Based upon the analytical lab results, none of the residential units or the non-residential area contain radon concentrations above the EPA action level of  $\geq$  4.0 pCi/L. One device deployed in 1 residential unit was invalid. Once device deployed in 1 residential unit for QA purposes was invalid. The overall quality assurance plan for the project was determined to be within normal tolerances. Additional action is not recommended.

As part of a long-term monitoring plan, a follow up assessment is recommended every 5 years, or whenever significant changes to a building's structure or HVAC system occurs, to verify radon concentrations remain below the action level.

### Section 2.0 – Scope of Work

The assessment included the following scope of work components:

- 1. Conducting an initial planning meeting with the client to review the project scope, information necessary to build the measurement and quality assurance project plan, required conditions and on-site logistics.
- 2. Preparing and implementing a measurement and quality assurance project plan for the assessment in accordance with the required measurement protocol.



- 3. Placing and retrieving the measurement devices, preparation of chain of custody documentation and shipping of the devices to a qualified analytical laboratory for analysis, and interpretation of the analytical laboratory data.
- 4. Providing the client with a written report of the assessment findings and recommendations.

### Section 3.0 – Measurement Protocol and Quality Assurance

The assessment was conducted in accordance with the American National Standards Institute (ANSI) document *Protocol for Conducting Radon and Radon Decay Product Measurements in Multifamily Buildings (ANSI/AARST MAMF-2012)* by Stephen Berger, a radon measurement professional credentialed by the National Radon Proficiency Program (NRPP). Quality assurance measures included deployment of a minimum of 10% duplicate devices and 5% field blank devices, and spiking of a minimum of 3% of the device batch utilized for the assessment.

### Section 4.0 – Measurement Devices

Activated charcoal adsorption measurement devices manufactured and analyzed by Air Chek, Inc. were utilized for the assessment. All devices were forwarded under appropriate chain of custody for analysis by Air Chek, an analytical laboratory credentialed by the NRPP (#101138). Each device was deployed in accordance with the instructions provided by the manufacturer.

### Section 5.0 – Measurement Conditions

Compliance with the measurement conditions and non-interference controls contained within the measurement protocol was verified by the field professional placing and retrieving the measurement devices. At the time of the assessment, violations of the required measurement conditions or evidence of device tampering were not observed by the field professional, unless noted within this report. Modifications to the measurement and quality assurance project plan were not made by the field professional, unless noted within this report.

### Section 6.0 – Findings and Recommendations

The sole purpose of this assessment is to provide the client with information regarding the radon concentrations at the property at the time of the assessment. An uncertainty with any



test result due to statistical variations and other factors, such as daily and seasonal variations in radon concentrations, does exist. Variations may occur due to changes in weather conditions, building usage or possible unobserved interference with the required measurement conditions. The findings and recommendations contained within this report are derived from information obtained from the client and property management, the on-site activities and analytical services provided under the scope of work performed. This assessment report was prepared solely for the use of the client. Use of this report by any party other than the client is prohibited without prior written consent from Protect Environmental.

The assessment was conducted between June 22, 2016 and June 24, 2016. A total of 17 measurement devices deployed in 16 residential units and 1 non-residential area were included in the measurement and quality assurance project plan. For quality assurance purposes, 2 duplicate measurement devices and 1 field blank measurement device were deployed. All devices were sent under appropriate chain of custody to a qualified analytical laboratory for analysis.

Based upon the analytical lab results, none of the residential units or the non-residential area contain radon concentrations above the EPA action level of  $\geq$  4.0 pCi/L. One device deployed in 1 residential unit was invalid. Once device deployed in 1 residential unit for QA purposes was invalid. The overall quality assurance plan for the project was determined to be within normal tolerances. Additional action is not recommended.

As part of a long-term monitoring plan, a follow up assessment is recommended every 5 years, or whenever significant changes to a building's structure or HVAC system occurs, to verify radon concentrations remain below the action level.



# Appendix A

Analytical Laboratory Report

June 28,\*\* LABORATORY ANALYSIS REPORT \*\* 2016

# P5179 / KYLE HOYLMAN / PROTECT ENVIRONMENTAL

Kit Number	Start Date	Start Time	End Date	End Time	Temp. Facility	Facility	Building	Room	Project ID		Floor Result
7744519	2016-06-22	11:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 8</b>	806		2	< 0.3
1744520	2016-06-22	11:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 6</b>	602		1	< 0.3
7744521	2016-06-22	11:00 am	2016-06-24	1:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 6</b>	606		2	< 0.3
1744522	2016-06-22	11:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 2</b>	207		2	< 0.3
7744523	2016-06-22	11:00 am	2016-06-24	1:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 3</b>	303		1	< 0.3
7744524	2016-06-22	11:00 am	2016-06-24	1:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 3</b>	305		2	< 0.3
7744527	2016-06-22	11:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 8</b>	804		1	< 0.3
7744530	2016-06-22	11:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 4</b>	403		1	< 0.3
7744532	2016-06-22	11:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 4</b>	405		2	< 0.3
7744534	2016-06-22	10:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 7</b>	708		2	0.5
7744535	2016-06-22	10:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 7</b>	708		2	< 0.3
7744543	2016-06-22	11:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 6</b>	602		1	< 0.3
7744544	2016-06-22	10:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 7</b>	OFFICE		1	0.6
7744545	2016-06-22	11:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 5</b>	507		2	< 0.3
7744546	2016-06-22	11:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 5</b>	501		1	< 0.3
7744547	2016-06-22	11:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 1</b>	105		2	< 0.3
7744548	2016-06-22	11:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 1</b>	104		1	1.4
7744549	2016-06-22	11:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 2</b>	201		1	0.7
7744561	2016-06-22	10:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 7</b>	701		1	0.6
7744564	2016-06-22	10:00 am	2016-06-24	12:00 pm	70	WHITE RIVER APARTMENTS	<b>BUILDING 7</b>	701		1	0.6

Air Chek, Inc. 1936 Butler Bridge Rd, Mills River, NC 28759-3892 Phone: (828) 684-0893 Fax: (828) 684-8498



# Appendix B

**Device Placement Log** 

Facility:	White River Apartments	Apartments				RES Devices:	16	Placem	Placement Arrival:	10:00 AM
Address:	2900 Marion	2900 Marion Drive, Diaz, AR 72112	\R 72112			NR Devices:	-	Placement Departure:	Departure:	11:00 AM
Contact:	Property Mar	Property Manager: 870-523-3744	3-3744			Duplicate Devices:	2	Retrie	Retrieval Arrival:	12:00 PM
Placement Day/Type/Pro:	6/22/2016	ST	Berger, Stephen	Stephen		Blank Devices:	-	Retrieval	Retrieval Departure:	12:30 PM
Retrieval Day/Type/Pro:	6/24/2016	ST	Berger, Stephen	Stephen		Total Devices:	20	Ship Info:	20	6/24/2016
Kit Number	Start Date	Start Time	End Date	End Time	Temp	Building	Room	Floor	Notes	es
7744544	6/22/2016	10:00 AM	6/24/2016	12:00 PM	70	Building 7	Office	-		
7744561	6/22/2016	10:00 AM	6/24/2016	12:00 PM	70	Building 7	701	1	0.6 pCi/L AVG = 0.6 pCi/L	Ci/L 6 pCi/L
7744564	6/22/2016	10:00 AM	6/24/2016	12:00 PM	70	Building 7	701 DUPLICATE	1	0.6 pCi/L RPD = NA	Ci/L = NA
7744534	6/22/2016	10:00 AM	6/24/2016	12:00 PM	70	Building 7	708	N	CBC: window	wopu
7744535	6/22/2016	10:00 AM	6/24/2016	12:00 PM	20	Building 7	708 DUPLICATE	7	CBC: window	wopu
7744520	6/22/2016	11:00 AM	6/24/2016	12:00 PM	20	Building 6	602	1		
7744543	6/22/2016	11:00 AM	6/24/2016	12:00 PM	20	Building 6	602 FIELD BLANK	1	< 0.3 pCi/L	DCI/L
7744521	6/22/2016	11:00 AM	6/24/2016	1:00 PM	70	Building 6	606	N		
7744523	6/22/2016	11:00 AM	6/24/2016	1:00 PM	70	Building 3	303	۲		
7744524	6/22/2016	11:00 AM	6/24/2016	1:00 PM	70	Building 3	305	2		

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-	2	L	2	L	2	~	N	L	2
201	207	104	105	403	405	501	507	804	806
Building 2	Building 2	Building 1	Building 1	Building 4	Building 4	Building 5	Building 5	Building 8	Building 8
70	02	70	70	70	70	70	70	70	70
12:00 PM									
6/24/2016	6/24/2016	6/24/2016	6/24/2016	6/24/2016	6/24/2016	6/24/2016	6/24/2016	6/24/2016	6/24/2016
11:00 AM									
6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016	6/22/2016
7744549	7744522	7744548	7744547	7744530	7744532	7744546	7744545	7744527	7744519

Device Placement Log



# Appendix C

**Credential Documentation** 



AARST Professional Member ID 2364 NRPP Measurement ID: RT-104371 valid thru 2017-08-31 NRPP Mitigation ID: RMT-104372 valid thru 2017-08-31



Protect Environmental Louisville, KY 40299-1906

kyle@protectenvironmental.com

(502) 410-5000 Fax: (502) 410-4990

http://www.protectenvironmental.com

This individual is AARST-NRPP certified to provide Analytical Services using the following device(s):

Sun Nuclear 1023/1026/1027 At Ease Digital Data Logger



AARST Associate Member ID 4803 NRPP Measurement ID: RT-107650 valid thru 2016-06-30 NRPP Mitigation ID: RMT-108562 valid thru 2018-03-31



**Stephen Berger** 

Protect Environmental Atlanta, GA 30360-3197

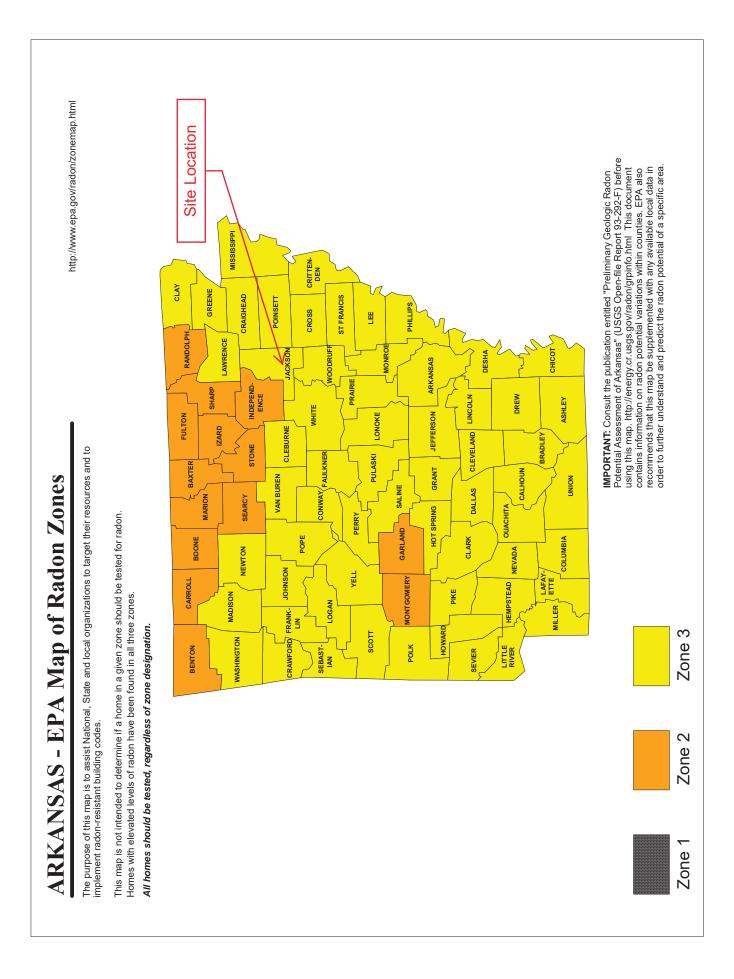
stephenb@protectenv.com

(404) 944-3553

http://www.protectenvironmental.com



# Appendix D EPA Radon Zone Map





# Appendix E Notification Documentation



# Radon Measurement - Resident Notification (ST)

We will be conducting a radon assessment in your community. Your residence may be selected for placement of a measurement device. Access to your residence for purposes of placing and retrieving the measurement device may be necessary on the following dates:

Device Placement: Wednesday, June 22, 2016

Device Retrieval: Friday, June 24, 2016

During the measurement period, <u>regardless of whether or not a measurement device is placed in your residence</u>, you are required to maintain the following conditions to ensure a valid measurement:

- All windows must be kept closed. All exterior doors must be kept closed, except for normal entry and exit.
   Windows and doors must be kept closed for a period of 12 hours prior to the device placement date and remain closed effect until the devices are retrieved.
- Whole house fans must not be operated. Window air conditioning units may only be operated in recirculation mode. Portable window fans must be removed from the window or sealed in place.
- Fireplaces or combustion appliances, other than water heaters and cooking appliances, must not be operated unless they are your primary heat source.
- Ceiling fans, portable air filters, portable de-humidifiers, portable humidifiers or window air conditioning units operating in recirculation mode must not be operated within 20' of the measurement device.
- If a device is placed in your unit, the measurement device must not be touched, tampered with, covered, removed or altered, and the location of the device must not be changed. Your HVAC system must be operated in the normal range your thermostat should not be adjusted drastically and your fan should be set in normal mode.

The technician placing and retrieving the devices is required to report any failure to maintain closed-building conditions. Failure to maintain these conditions could result in an invalid measurement and require the measurement to be repeated.

Your assistance in helping to ensure a valid measurement in greatly appreciated! Contact your management office with questions regarding this notification.

Thank you.



# Radon Measurement - Responsible Party Notification (ST)

Date: June 14, 2016 Measurement Location: White River Apartments 2900 Marion Drive, Diaz, AR Measurement Period: 6/22/2016 through 6/24/2016

During the measurement period, <u>the following conditions must be maintained in each residence (regardless of whether</u> <u>or not the unit contains a measurement device) and all common areas in the building</u> to ensure a valid measurement:

- All windows must be kept closed. All exterior doors must be kept closed, except for normal entry and exit.
   Windows and doors must be kept closed for a minimum period of 12 hours prior to device placement and remain closed until device retrieval.
- Whole house fans must not be operated. Window air conditioning units may only be operated in recirculation mode. Portable window fans must be removed from the window or sealed in place.
- Fireplaces or combustion appliances, other than water heaters and cooking appliances, must not be operated unless they are the primary heat source.
- Ceiling fans, portable air filters, portable de-humidifiers, portable humidifiers or window air conditioning units operating in recirculation mode must not be operated within 20' measurement devices.
- The measurement device must not be touched, tampered with, covered, removed or altered, and the location of the device must not be changed. HVAC systems must be operated in the normal range – thermostats should not be adjusted drastically and air handlers should be set in normal mode.
- Unusual occurrences that could affect the measurement, such as power outages or extreme weather conditions, must be reported to Protect Environmental.

The technician placing and retrieving the devices is required to report any failure to maintain measurement conditions. Failure to maintain measurement conditions may result in an invalid measurement and require the measurement to be repeated.

As the responsible party for the measurement location listed above, I hereby acknowledge receipt of this Measurement Conditions Notification and agree to make reasonable efforts to ensure the conditions outlined herein are maintained throughout the measurement period.

<u>Site contact did not sign: Lisa Lopp, PM</u> Responsible Party

Measurement Responsible Party Notification – NRPP RDN ST V1.2 Last Revised: 06.24.2014

# APPENDIX 'F'

# MOLD AND ROACH FECES PROTOCOL



# LWH PROCEDURE FOR MOLD REMEDIATION

First: When you and your staff notice a water leak or excessive moisture issue, the water leak or source of moisture must be repaired.

Second: If there is evidence of damage to a ceiling, wall, floor, or floor covering, the damage must be repaired.

### **Remediation Protocol:**

- Repair the lea or source of moisture or leak.
- If the water damage is to sheet rock and <u>the sheet rock is solid</u>, apply fungicide to the sheet rock, wipe clean, and apply second coating of fungicide and let it soak into the sheet rock. This kills any mold that might be growing in or on the sheet rock. When the sheet rock dries, apply Kilz to the sheet rock, let it dry, and apply touch-up paint.
- If the water damage is to sheet rock and <u>the sheet rock is soft, crumbling, etc.</u>, cut out the bad sheet rock (at least 6 to 12 inches beyond the damaged area, bag removed sheet rock wastes in a plastic bag, seal, and remove to dumpster), spray fungicide in area behind the sheet rock, replace with new sheet rock, finish the surface, and paint to match the room. Note: Use a fungicide to kill mold and remove mold from impacted substrates; follow up with <u>non-chlorine</u> disinfectant or fungicide to clean and penetrate the porous surfaces; never mix chlorine bleach and cleaning solutions that contain ammonia because this mixture can produce toxic vapors and create a work hazard. Many fungicides contain quaternary ammonium.
- If the water damage is to floor vinyl or tile is wet apply fungicide and wipe clean. If the floor is wood, apply additional fungicide after cleaning wood surface and allow it to penetrate the wood until thoroughly dry. Repair vinyl or tile.
- If the water damage is to carpet, clean the carpet with carpet cleaning machine using water and fungicide (or contract to a reputable cleaning service). If the wood floor beneath is wet, apply fungicide and wipe clean, then apply fungicide to work and allow it to penetrate the wood and thoroughly dry. Note: Use a fungicide to kill mold and remove mold from impacted substrates; follow up with non-chlorine disinfectant or fungicide to clean and penetrate the porous surfaces; never mix chlorine bleach and cleaning solutions that



contain ammonia because this mixture can produce toxic vapors and create a work hazard. Many fungicides contain quaternary ammonium.

- Be sure that the carpet, pad, and floor are dry before assuming the job is finished. Every LWH property should have at least on floor fan for the purpose of drying out wet carpet or floors. An industrial dehumidifier will also aid in drying the carpet, pad, and floor more thoroughly. Let it run at least 24 hours.
- A water leak will not be considered repaired until the resulting damage is repaired as well.



# **ROACH FECES REMOVAL PROTOCOL**

# Background

During renovation of multifamily apartments, visual evidence of roach feces or egg casings is apparent when kitchen are being demolished when cabinets, counter tops, refrigerators, sinks, and stoves are being removed. The roach feces and/or egg casings are reddish brown to black in color, small cylindrical pellets the size of a coffee ground (small cockroaches) or grain of rice (large cockroaches). They are common on drywall behind the kitchen cabinets and countertops. This condition is compounded if both mold and roach feces are identified on drywall behind the counters.

Roach bodies, feces, and egg casings can cause allergic reactions in humans (e.g., asthma). In addition, they carry bacteria which can trigger harmful diseases (e.g., salmonella, E. coli). Therefore, it is important to remove or isolate these from human contact when possible.

# Protocol

The contractor for LHP Development must be knowledgeable about the about roach feces and be able to determine if roach feces are present in a unit being renovated. LHP Development contractor will inspect the apartments being renovated for the presence of mold and roach feces. If roach feces are present, the contractor will contact the maintenance staff of the LHP facility so that staff members can inspect the unit for roach feces and take the appropriate corrective action to remove the roach feces.

# If both mold and roach feces/egg casings are identified on the drywall, it is imperative to remove the roach feces/egg cases first before remediating the mold.

The following steps must be conducted to remove roach feces <u>before</u> mold remediation and before placing the new cabinets in place. Use appropriate personal protective equipment, such as vinyl or neoprene gloves, dust mask).

1 - **Do not wet.** Use a shop vacuum with a HEPA filter to remove the feces from the walls and floors. Start high and work down the wall and then the floor. Vacuum the cracks and crevices in these areas, because this is an ideal hiding locating for roaches. If necessary, use a dry brush or cloth to remove the feces from the walls and floor. This will remove most of the roach feces/egg casings.

2 - Clean the surfaces with baking soda and soapy water to remove the remaining feces residue. Wipe with clean wet cloth or sponge to remove the proteins in the feces/egg casings that cause allergies from the drywall surface. Use clean water and change it often. Dispose of the waste cleaning water appropriately.

3-After the drywall dries, spray disinfectant cleaner on the affected wall and floor. This helps remove allergens left by roaches.

Then proceed with mold remediation.



After the cleaning and mold remediation, any remnants of feces/egg casings can be sprayed with Kilns to <u>encapsulate</u> the remnants to keep them isolated and not in contact with residents. Caulk must be used along seams after the installation of cabinets, counter tops, back splash, and caulk to <u>enclose</u> any remnant feces/egg casings.

These last two approaches will isolate the residual roach feces/egg casings. These need to be done well to ensure isolation.

### SECTION 03 11 00 - CONCRETE FORMWORK

PART 1 – GENERAL

### 1.1 RELATED SECTIONS

- A. Section 03 20 00 Concrete Reinforcement.
- B. Section 03 30 00 Cast-in-Place Concrete.

### 1.2 WORK INSTALLED BUT FURNISHED BY OTHERS

A. Build in anchors, inserts, bolts, hangers, sleeves, ferrules, waterstops and other accessories.

### 1.3 DESIGN REQUIREMENTS

A. Design, construct and erect formwork per ACI 347R, Guide to Formwork for Concrete.

### 1.4 ALLOWABLE TOLERANCES

A. In accordance with ACI-301 as listed in Table 4.3.1-Tolerances for Formed Surfaces.

### PART 2 – PRODUCTS

### 2.1 MATERIALS

- A. Concealed concrete: No. 2 Common Southern Pine, S4S, or better.
- B. Exposed Concrete: B-B Plyform, Class I or II, EXT-APA, Metal or Fiberglass forms may be used.
- C. Construction joint forms for slabs-on-grade: Key-type steel formers, Vulcan Screed Joints, Burke Keyed Kold Joint Form, Dayton Sure-Grip G-20.
- D. Expansion joint filler: Asphalt impregnated, premolded fiberboard by full thickness of slab or joint, ASTM D994.
- E. Form-coating: Non-staining mineral oil.
- F. Form ties: Snap-off type which will break off at least <sup>1</sup>/<sub>2</sub>" below surface of concrete. For sanitary structures, the form ties shall be of surface leaving an opening no larger than the tie diameter, without cones. Wall ties for structures containing or to retain liquids shall have integral water stops.

### 2.2 EARTH FORMS

A. Where soil is firm enough to permit cutting to true size, concrete may be placed without forms.

### PART 3 - EXECUTION

- 3.1 ERECTING
  - A. Erect forms to obtain shapes, designs and dimensions indicated. Make forms sufficiently tight to prevent leakage. Brace, shore and tie forms together to maintain position without sagging or bulging.

### **CONCRETE FORMWORK**

- B. Provide <sup>3</sup>/<sub>4</sub>" chamfering at corners (exposed or unexposed).
- C. Prepare insides of forms so that concrete will have a smooth, uniform finish, free from fins, stone pockets, voids and other surface defects.
- D. For slabs-on-grade, provide construction joint forms where concrete placement terminates at the end of a day or because of other reasons.
- E. For structural members, provide bulkheads, with reinforcing steel penetrating bulkheads, where concrete placement stops at the end of day or for other reasons.
- F. Where soil conditions are such that concrete cannot be placed without forms, and where other conditions cause trenches to be opened wider than footing or slab widths, erect forms for footing or slabs.

### 3.2 PREPARING

- A. Prepare insides of forms so that concrete will have a smooth, uniform finish free of surface defects.
- B. Coat forms before reinforcement steel is placed. Where mill-oiled forming material is used, follow manufacturer's instructions for recoating. Where forming material is not mill-oiled, coat forms before each use.
- C. Before reusing forms, thoroughly clean them and remove projecting nails or similar devices.

### 3.3 FORM REMOVAL

A. Remove forms in such a manner and such time as to insure safety of structure and to avoid chipping and spalling of concrete. Refer to Section 6.2 of ACI 318, Section 6.2 of the Commentary to ACI 318, and Section 3.7 of ACI 347R for form removal requirements.

### END OF SECTION

### SECTION 03 20 00 - CONCRETE REINFORCEMENT

PART 1 – GENERAL

- 1.1 RELATED SECTIONS
  - A. Section 03 10 00 Concrete Formwork.
  - B. Section 03 30 00 Cast-in-Place Concrete.

### PART 2 – PRODUCTS

- 2.1 REINFORCEMENT STEEL
  - A. ASTM A615, Grade 60.
- 2.2 REINFORCEMENT WIRE
  - A. Welded steel wire fabric, ASTM A185.

### 2.3 BAR SUPPORTS

A. Bar supports and spacing of same shall be as per recommendations set forth by Chapter 3 of the CRSI Manual of Standard Practice, Current Edition.

### 2.4 OTHER SUPPORTS

A. Concrete brick may be used to support reinforcement to obtain proper clearance from earth and rigidity of reinforcement under concreting operations.

### 2.5 TIE WIRE

- A. Wire shall be 16-1/2 gauge or heavier, black-annealed.
- 2.6 FABRICATING
  - A. In accordance with CRSI Manual of Standard Practice, Current Edition.

### PART 3 – EXECUTION

### 3.1 CONDITION OF SURFACES

- A. Maintain reinforcement surfaces free of mud, oil or other coatings which might impair bond as described in Section 7.4 of ACI 318. Rust or mill scale is acceptable provided the minimum dimensions are not less than applicable ASTM Standards. Loose rust scale to be removed with wire brush.
- 3.2 INSTALLING REINFORCING STEEL
  - A. Handle, place and tie reinforcement steel in accordance with "Building Code Requirements for Reinforced Concrete," ACI 318-95 and CRSI publication "Placing Reinforcing Bars," Current Edition.

### 3.3 INSTALLING WELDED WIRE FABRIC

- A. For Slabs-on-Grade:
  - 1. Install welded wire fabric after vapor barrier (or under floor waterproofing, if applicable) has been placed.
  - 2. Locate welded wire fabric in center third of slabs.
- B. For Slabs on Composite Deck:
  - 1. Locate welded wire fabric at mid-depth of slab measured between top of slab and top of metal form.
- C. Lap side one full mesh plus 2 inches. Lap end two full meshes. Offset end laps in adjacent width to prevent continuous laps.

### 3.4 CONCRETE PROTECTION FOR REINFORCEMENT

- A. Protect reinforcing by thickness of concrete indicated on Contract Drawings.
- B. Variation from clear cover shall conform to section 7.5 of ACI 318.

### END OF SECTION

### SECTION 0330 00 - CAST-IN-PLACE CONCRETE

PART 1 – GENERAL

### 1.1 RELATED SECTIONS

- A. Section 0311 00 Concrete Formwork.
- B. Section 0320 00 Concrete Reinforcement.

### PART 2 – PRODUCTS

### 2.1 READYMIX CONCRETE

- A. In accord with ASTM C94, option A and the criteria given in these specifications and on the Structural Drawings.
- B. Strength at 28 days: As specified on the Structural Drawings.
- C. Air Content: Provide entrained air in accordance with ACI 302-1R, Table 5.2.7a within tolerances specified. Concrete subject to freezing and thawing and/or deicers shall be categorized as "severe exposure," except concrete with a specified strength of 6000 psi shall be categorized as "moderate exposure." All other concrete shall be categorized as "moderate exposure."
- D. Water-Cement Ratio: All concrete exposed to freezing and thawing shall have a maximum watercement ratio of 0.50. All concrete subjected to deicers and/or \* required to be watertight shall have a maximum water-cement ratio of 0.45 (4500 psi or more at 28 days.) All reinforced concrete subjected to brackish water, salt spray or deicers shall have a maximum water/cement ratio of 0.40 (5000 psi or more at 28 days).
- E. Slump: All concrete containing the high-range water-reducing admixture (superplasticizer) shall have a maximum slump of 9" unless otherwise approved by the Architect. The concrete shall arrive at the job site at a slump of 2" to 3", which shall be verified, then the high-range water-reducing admixture added to increase the slump to the approved level. All other concrete shall have a maximum slump of 3 inches for slabs and 4 inches for other concrete.
- F. Maximum water soluble chloride ion concentrations in hardened concrete at an age of 28 days contributed from the ingredients including water, aggregates, cementitious materials and admixtures shall not exceed the limits established in Table 4.3.1 of ACI 318.
- G. Admixtures: All concrete shall contain the specified water-reducing admixture or high range water-reducing admixture (superplasticizer). At the Contractor's option, both water-reducing admixtures may be included in the concrete mix. All concrete slabs placed at air temperatures below 50 degrees Fahrenheit shall contain the specified Non-Chloride, Non-Corrosive accelerator. All concrete required to be air entrained shall contain the approved air entraining admixture. All pumped concrete, architectural concrete, and concrete with a water-cement ratio below 0.50 shall contain the specified high range water reducing admixture (superplasticizer).

### 2.7 VAPOR RETARDER

A. 10 mil polyethylene sheeting comforming to ASTM E154.

### PART 3 – EXECUTION

### 3.1 FIELD QUALITY CONTROL

- A. As concrete is delivered, the Testing Laboratory will make cylinders as specified in this specification. In addition, the Testing Laboratory will take small batches of the same concrete used for making cylinders for making slump tests and air entrainment tests. Assist the Laboratory in taking samples and furnish concrete required for making the test.
- B. The Testing Laboratory shall observe baseplate grouting and curing procedures.

### 3.2 PLACING CONCRETE

- A. Prepare place of deposit and equipment. Convey and place concrete in accordance with ACI 301, Chapter 8, Paragraphs 8.1 through 8.3. Certain parts of those paragraphs are modified below, and where modifications conflict with those paragraphs or additional instructions they should take precedence over the printed paragraphs of ACI 301.
- B. Variation from clear cover and depth of members shall conform to section 7.5 of ACI 318.
- C. Deposit concrete within 1-1/2 hours after water is added to dry batching, or use retarding admixture.
- D. Convey concrete promptly to point of use in manner which will prevent separation of ingredients and loss of water. Deposit concrete near its final position to avoid rehandling.
- E. Consolidate concrete, including floor slabs, in accordance with ACI 309R, "Recommended Practice for Consolidation of Concrete". All concrete shall be vibrated. Maintain at least one vibrator as a stand-by. Lower frequency vibrators may be used with "flowing" concrete.
- F. Do not use vibrators to cause concrete to flow.

### 3.3 FINISHING

- A. After placing concrete, screed to levels and slopes indicated. Do not use tamping tools to force aggregate away from surface.
- B. When the water sheen has disappeared, use a wood float as indicated.
- C. Where troweled finish is required, the surface shall initially receive a float finish. The surface shall then be troweled, at least twice, to a smooth dense finish. Remove small imperfections left by troweling machine and bring to a smooth, dense, polished finish.
- D. Broomed finish (at all ramps). The surface shall be given a coarse transverse scored texture by drawing a broom or burlap belt across the surface. This operation shall follow immediately after floating. Texture shall be as approved by the Architect from sample panels.
- E. Do not use dry materials, such as sand and cement, on surfaces during finishing.
- F. Do not use any procedures, such as the addition of water to the concrete surface, that produces a layer of weak material with an increased water-cement ratio at the slab surface.
- G. Grinding or the specified underlayment or repair topping shall be used where surfaces do not achieve their specified tolerances.

### CAST-IN-PLACE CONCRETE

H. Where floors are to be covered with thin set tile, trowel as specified above and then broom surfaces to form a "tooth".

### 3.4 CURING

- A. As finished work is completed, begin curing. Curing may be accomplished by either of the methods described below, except for items specifically designated for a particular method.
- B. Waterproof paper or plastic film curing: Cover damp surfaces with film or paper and lap at edges at least 4 inches. Apply weights to prevent displacement. Repair tears and punctures as they occur.
- C. All exposed interior slabs and troweled slabs receiving mastic applied adhesives or metallic or mineral aggregate hardeners shall be cured with curing and sealing compounds compatible with the adhesives or hardeners. Exterior slabs, sidewalks, curbs, architectural concrete and any concrete where total resistance to yellowing from ultra-violet light and water exposure is required shall be cured with the specified clear, non-yellowing curing and sealing compound. Use waterproof paper or plastic film where any topping or applied material is not compatible with curing and sealing compounds.
- D. Do not use curing and sealing compounds on surfaces receiving applied finishes other than resilient tile or carpet.
- E. Where forms are left in place, keep forms damp by spraying at frequent intervals for at least 8 days. Do not allow forms to dry out.

### 3.5 **PROTECTION**

- A. Protect concrete for at least 48 hours after finishing is complete. Erect barriers as necessary to protect uncured areas. Provide wood covers to protect uncured areas. Provide wood covers to protect concrete step-ups.
- B. Protect concrete from paint and other stains, and from abrasive traffic.

END OF SECTION

### SECTION 05 12 00 - STRUCTURAL STEEL

### PART 1 - GENERAL

### 1.01 RELATED SECTIONS

A. Grouting under base and bearing plates: Section 03 30 00 - Cast-in-Place Concrete.

### 1.02 PRODUCTS FURNISHED BUT NOT INSTALLED UNDER THIS SECTION

- A. Anchor rods and setting templates:
  - 1. Section 03 30 00 Cast-in-Place Concrete.
  - 2. Section 03 11 00 Concrete Formwork.

### 1.03 SCOPE

This is a Performance specification. Work under this section includes, but is not limited to, a complete resolution of the geometry of the Structural Steel members and their joints, connection design and detailing when not fully detailed on the contract documents, producing shop drawings which accurately reflect the geometry of the members and joints, fabricating and erecting of the structural steel to achieve a finished structural frame. The fabricator and erector shall include in their bid the expense of making any field corrections required to achieve a workable structure.

### 1.04 SUBMITTALS

- A. Steel fabricator and erector to supply a list of five previous projects similar in size and complexity to this project to establish that they are capable to perform the work for this project. List shall include the name and location of each project with the name and phone number of the Contractor and Architect for which the previous projects were performed. Architect may reject any steel fabricator or erector that, in his opinion, fails to appear capable of performing the required work. Steel fabricator shall be approved by the Architect prior to the production of shop drawings.
- B. Shop drawings prepared by the fabricator. Connections not detailed on the design drawings shall be designed by the fabricator. Structural design drawings are for design intent only. It is the responsibility of the fabricator to ensure that the shop drawings reflect all necessary information required for fabrication and erection. Reproduction of structural design drawings for the shop drawing submittal will not be permitted nor will they be reviewed.
- C. Prequalified welding procedures, prepared by the steel fabricator and erector, as a written procedure specification to Engineer. Prepare these procedures in accordance with Appendix E of the AWS "Structural Welding Code," AWS D1.1. Obtain Architect's approval before erecting steel.
- D. Submit mill certification that steel supplied meets requirements of specifications.
- E. Submit electrode manufacturer's certification that the electrode and flux combination the requirements of the particular classification or grade of electrodes.
- F. Submit the number of copies required by Division 01 of each report from the Testing Laboratory to the Architect. See Field Quality Control section this specification for inspections and test required of the Testing Laboratory.

G. Submittals shall include the following note completed and signed by the Contractor: The data submitted does not contain material deviation from requirements of contract documents except as follows:

### 1.05 QUALITY ASSURANCE

- A. Structural steel: Meet requirements of the AISC Steel Construction Manual, Fourteenth Edition, Allowable Stress Design for types of steel specified.
- B. Fabrication and erection: Meet requirements of Specification for Structural Steel Buildings, June 22, 2010, and all subsequent modifications or addendums (referred to below as Structural Steel for Buildings) as indicated.
- C. Welding: In accordance with requirements of American Welding Society "Structural Welding Code," AWS D1.1.
- D. Testing Agency Personnel performing tests and inspection will be certified by American Society for Non-Destructive Testing, for Level II.
- E. Included in the responsibilities for structural steel testing and inspection are the following:
  - 1. Observe the AWS qualifications of all welders.
  - 2. Visually inspect all bolted connections and test a representative sampling of a minimum of 10% of the high strength bolts for proper installation and tensioning.
  - 3. Verify that electrodes are compatible with the base metals joined.
  - 4. Ultrasonically test all complete penetration welds and visually inspect all fillet welds.
  - 5. Visually verify size, spacing, location and quantity of welded headed shear studs and test a representative sampling in accordance with AWS recommendations and procedures using the bend test method or approved equal.

### 1.06 QUALIFICATIONS

- A. Steel fabricator: Certified by American Institute of Steel Construction Fabrication Certification Program, Category STD. If steel fabricator is not so certified, he shall have an Independent Testing Laboratory, approved by Architect, certify that the fabrication procedures used in this Work are fabricated in accordance with these specifications. The purpose of this inspection is to enable the Testing Agency to verify, in general, that the steel is being fabricated in accordance with these specifications. A minimum of one trip per week is recommended.
- B. Welders, tackers, and welding operators: Qualified in accordance with Structural Welding Code Steel, AWS D1.1 to perform the type of work required.

### 1.07 PRODUCT HANDLING

A. Deliver materials, such as anchor rods and other anchor devices to be embedded in concrete and masonry construction, to project site in time to be installed in proper sequence with concrete and masonry work. Provide setting drawings, templates and directions for installation of anchor rods and other devices.

- B. Deliver steel to project site and stack in designated areas.
- C. Stack and store steel above ground on platforms, studs or other supports. Protect steel from corrosion and damage. Keep materials clean.
- D. Store other materials in a weathertight, dry place until ready for use.
- E. Store packaged materials in their original, unbroken package or container.

### PART 2 - PRODUCTS

- 2.01 STRUCTURAL STEEL
  - A. ASTM A36, Standard Specification for Structural Steel for plates, channels and angles.
  - B. ASTM A992, Standard Specification for Structural Steel Shapes or ASTM A572, Grade 50, High Strength, Low Alloy Columbian-Vanadium Steels of Structural Quality for all other rolled shapes.
- 2.02 STEEL PIPE
  - A. ASTM A53, Grade B, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless.
- 2.03 STEEL TUBING
  - A. ASTM A500, Grade B, Standard Specification for Cold-Formed Welded and Seamless Carbon Structural Tubing.
- 2.04 WELDING ELECTRODES
  - A. Electrodes having low hydrogen covering shall be purchased in hermetically-sealed containers.
  - B. For fabricating plant use: E70 electrodes, AWS A5.1, A5.5, A5.17 or A5.20.
  - C. For shear studs, in accordance with AWS Structural Welding Code AWS D1.1, Part F. Provide heat-resistant arc shields with studs.
- 2.05 BOLTS
  - A. High strength bolts, nuts and washer: Type 1 or 2, ASTM A325, Standard Specification for High-Strength Bolts for Structural Joints, Including Suitable Nuts and Plain Hardened Washers. Provide 3/4" diameter bolts unless noted otherwise or approved by the engineer.
  - B. High strength bolts in slip critical connections or in connections where bolts are specified or noted as fully tensioned shall be load-indicator bolts. Provide load-indicator bolts as manufactured by Bethlehem, Le Juene, or approved substitute. Load-indicator bolts shall be installed using equipment specifically manufactured for this use. Load-indicator bolts in tension shall have rounded heads that cannot accept the application of a wrench.
  - C. Unfinished bolts: ASTM A307, Standard Specification for Carbon Steel and Externally Threaded Standard Fasteners.

- D. Expansion (wedge) anchors: As specified on Structural Drawings.
- E. Anchor Rods: ASTM F1554, grade 36, unless noted otherwise.

### 2.06 SHOP COATING

- A. A high grade rust-inhibiting primer. Use red oxide primer unless otherwise noted.
- B. Paint shall be VOC compliant, lead and chromate free and shall be compatible with products specified in Division 9 specifications.

### PART 3 - EXECUTION

### 3.01 FABRICATING

- A. Fabricate in accordance with applicable requirements of M2 of "Specification For Structural Steel Buildings" by AISC.
- B. Design all connections, except for those fully detailed on the Structural Drawings.

### 3.02 SHOP COATING

- A. Before steel leaves fabricator's shop, remove loose mill scale, rust, weld slag and flux deposit, dirt, foreign matter and oil and grease. Prepare surface as recommended by paint manufacturer for the intended exposure. Do not sandblast, flame clean, or pickle material.
- B. Thoroughly and evenly apply one coat of shop paint to cleaned surfaces. Thickness of shop paint coat shall be applied to a minimum dry film thickness of 1 mil or as required by surface preparation.
- C. Do not paint steel to be encased in concrete, plaster and sprayed-on-fireproofing. Mask steel at locations to be field welded and at the faying surfaces of slip-critical bolted connections.

### 3.03 ERECTING

- A. Before commencing erecting work, notify Architect in writing at least 48 hours in advance.
- B. Erect steel in accordance with requirements of Section M4 of "Specification For Structural Steel Buildings" by AISC, except paragraph M4.6 is hereby modified to make field painting a part of the work on this section.
- C. Use specified high-strength bolts for bolted connections, except where unfinished bolts and welded connections are allowed below. Use a minimum of 2 bolts at each bolted connection. Use hardened washers under bolt or nut, whichever is the element turned in tightening. Prior to tightening the bolts of a connection to final tension, there shall first be enough bolts brought to a "snug tight" condition to insure that the parts of the joint are brought into good contact with each other.
- D. Bolts in bearing type conditions which are not subject to fatigue or load fluctuations need only to be tightened to a snug-tight condition. Bolts in tension shall be tightened to full tension values. Refer to Drawings for location of bolts required to be fully tightened.
- E. Use unfinished bolts in places indicated.
- F. Install expansion anchors per manufacturer's instructions.

- G. Provide headed stud anchors in quantity and spacing required by the Structural Drawings. Studs shall be arc welded to the steel member using automatically timed stud welding equipment in accordance with AWS D1.1.
- H. Weld connections where indicated. Do not peen welds unless authorized in writing by Architect. Any shop paint on surfaces adjacent to joints to be field welded shall be wire brushed to reduce the paint film to a minimum.
- I. Field painting: For shop coated steel, touch up welds and scarred and damaged shop coat.
- J. Protect all structural steel below grade by encasing in concrete or painting with bitumastic paint.
- K. Do not field cut or alter structural members without approval of Architect/Engineer.

### 3.04 FIELD QUALITY CONTROL

- A. Shop and field welding will be tested and inspected in accordance with AWS Structural Welding Code. Welds will be visually or ultrasonically tested, depending on types of welded joints. All full or partial penetration welds shall be ultrasonically tested or tested using other non-destructive testing methods approved by the Engineer. All other welds shall be visually inspected by the Testing Laboratory for compliance with the design drawings and shop drawings. If suspect welds are observed during the visual inspection, ultrasonic or other approved non-destructive testing shall be performed to determine the acceptability of such welds. If defects are found, then a random sampling of at least 10 percent of the other welds similar to the defective weld shall be tested by ultrasonic or other approved non-destructive testing methods to evaluate the extent of the defective welds. The Testing Laboratory as directed by the Architect shall perform any additional inspections and testing of welds Additional testing as a result of non-conformances will be at the expense of the Contractor.
- B. The Testing Laboratory shall inspect and test a minimum representative sampling of 10 percent of all bolted connections. Additional inspections and testing of bolted connections shall be performed by the Testing Laboratory as directed by the Architect. Additional testing as a result of non-conformances will be at the expense of the Contractor.
- C. The steel fabricator shall be fully responsible for insuring that all steel fabrication and erection is in accordance with the Contract Documents. Failure of Architect, Engineer or Testing Laboratory to detect defective work, workmanship, materials, or erection shall in no way prevent rejection of the work and does not release the steel fabricator from his responsibility for providing approved corrective action when such defects are discovered. The Architect/Engineer or the Testing Laboratory shall not, thereby, be obligated to make a final acceptance.
- D. Submit all reports to the Architect in accordance with the requirements of Division 01.

# END OF SECTION

### SECTION 05 31 00 - STEEL DECKING

PART 1 - GENERAL

- 1.01 RELATED REQUIREMENTS
  - A. Section 05 12 00 Structural Steel Framing.
- 1.02 SUBMITTALS
  - A. Submit steel deck shop drawings prepared by the fabricator.
  - B. Metal deck or form supplier shall submit section properties and load tables for the supplied product. This information shall be submitted with deck or form layout shop drawings.
  - C. Indicate sizes and location of deck units. Indicate welding and screw patterns.
  - D. Indicate sizes and location of holes to be cut in shop.
  - E. Submittals shall include the following note completed and signed by the Contractor: The data submitted does not contain material deviation from requirements of contract documents except as follow:

### 1.04 COORDINATION

A. Coordinate with other trades to preclude delays and interferences.

### 1.05 QUALIFICATIONS

- A. Welders, tackers, and welding operation: Qualified in accordance with Code for Welding in Building Construction, AWS D1.3-89 to perform type of work required.
- B. Workers performing fastening deck to light gage framing by screws or powder actuated fasteners shall be experienced in this type of work.
- 1.06 PRODUCT HANDLING
  - A. Deliver materials, in manufacturer's bundles, to project site and store in designated areas.
  - B. Store decking above ground on platforms or other supports. Protect from corrosion. Keep materials clean.
  - C. Store other materials in a weathertight, dry place until ready for use.
- 1.07 QUALITY ASSURANCE
  - A. Included in the responsibilities for steel decking inspection are the following:
    - 1. Inspect the welding of metal deck to supports.
    - 2. Inspect deck sidelap fasteners.
    - 3. Observe the AWS qualifications of all welders.

### PART 2 - PRODUCTS

### 2.01 GENERAL

- A. Section properties shall conform to all applicable provisions of the latest edition of the Specification for the Design of Cold-Formed Steel Structural Members as published by the American Iron and Steel Institute.
- B. For painted deck, a phosphatized type cleaner shall be used to remove all grease, oil and other foreign matter to prepare the steel surface for further treatment. A stabilized vinyl wash primer shall then be applied to phosphatize the surface and provide a chemically bonded chromated pigmented vinyl coating. After this initial prime coating has been heat-dried, a light gray flexible, thermosetting, rust inhibiting prime paint shall then be roller applied and cured in a catenary oven at temperatures in excess of 400 degrees Fahrenheit before forming.
- C. Galvanized deck shall be roll-formed from steel sheet (hot dip galvanized) conforming to ASTM Designation A653-95, and ASTM A924-95a or Fed, Spec. QQ-S-775e.
- D. For galvanized and painted deck, the steel shall be galvanized by the hot dip method followed by an organic chromate finish, then further treated with a clear vinyl epoxy preparation. A light gray thermosetting, rust inhibiting prime paint shall then be roller coated and cured in a catenary oven at temperatures in excess of 400 degrees Fahrenheit before forming.
- E. Placement drawings shall be prepared and submitted for approval. The drawings shall show deck type, finish, decimal thickness of steel, the location and length of the sheets, field cutting, the method of fastening and other information as required for a thorough review and installation.
- F. The deck manufacturer shall certify that all materials will be in full compliance with this specification. The Letter of Certification shall accompany the design computations when submitting placement drawings for approval. When completed, 3 copies of certified mill reports shall be furnished to the Architect.
- G. For the gage of deck as shown or referenced to on the drawings, the minimum uncoated steel thickness as delivered to the job site shall not at any location be less than the following decimal thicknesses:

GAGE	Thickness (Inches)
18	0.0474

- 1. All decking shall have nested side laps. Button punchable side laps will not be accepted.
- H. Composite metal deck:
  - 1. Composite metal deck shall be manufactured to conform to the following provisions:
    - a. The steel shall be ASTM A653-95, Grade A (for hot-dip galvanized deck and accessories).
    - b. The manufacturer shall submit certification that the deck deformations provided composite interaction between the metal deck and the concrete.
  - 2. The minimum section properties per foot of width shall be at follow:

a. 1.5 inch composite deck:

GAGE	Ip(in <sup>4</sup> )/ft	In(in <sup>4</sup> )/ft	Sp(in <sup>3</sup> )/ft	Sn(in <sup>3</sup> )/ft
18	0.282	0.295	0.315	0.327

b. The sheet width shall be 24 or 36 inches.

### 2.02 METHODS OF ATTACHMENT

A. Composite metal deck: Provide 5/8" diameter welds or shear studs welded through the metal deck such that connections of the deck to the supports does not exceed 12 inches on center at all supports. Side laps shall be welded or screwed at 36 inches on center. Button-punched side laps are not permitted.

### 2.03 FABRICATING

- A. Do not use a cutting torch for cutting deck or holes in deck. Cutting torch may be used for cutting holes in sump pans provided that cuts are cleaned and painted with a zinc base paint.
- B. Cut holes for openings in deck indicated on Structural Drawings. Locations of other holes will be furnished by trades requiring them.

### PART 3 - EXECUTION

- 3.01 GENERAL
  - A. All deck is to be installed in accordance with manufacturer's recommendations and this specification.

### 3.02 CUTTING

- A. Cut required openings or lengths neatly with sheet metal tools. No cutting with welding equipment will be allowed.
- B. Where the deck warps up at edges, and cutting is the only way to correct the warping, the underside of the deck may be cut to facilitate bending. Cutting should be centered over supports and should not extend up to the bottom of the top part of the flute. If necessary to maintain structural integrity, the Contractor shall provide for additional strength where deck is cut. Weld to support along each side of cut and paint over cut area.

### 3.03 FIELD QUALITY CONTROL

A. After installation is completed, carefully inspect it for loose fasteners or broken welds and re-fasten deck to supports where attachments are not tight. Where burn-through of deck or form occurs, 16 ga. welding washers shall be placed over openings and rewelded. If burn-through damages the supporting structural member, notify Engineer for repair instructions.

### 3.04 CLEAN-UP AND TOUCH-UP

- A. After inspection, remove debris, welding spelter, and other foreign matter.
- B. Use zinc base paint for touching up welds and damage to galvanized coating. Use rust-inhibiting paint to touch up wherever painted metal is scratched, scarred, abraded or welded.

C. Leave surfaces clean and ready for application of surfacing material.

END OF SECTION

### SECTION 05 50 00 - MISCELLANEOUS STEEL

### PART 1 GENERAL

### 1.1 SECTION INCLUDES

A. Steel handrails and supports.

### 1.2 DESIGN REQUIREMENTS

- A. Handrails shall be designed in accordance with the referenced building code. Handrails and guardrails shall be designed and detailed to comply with all applicable OSHA Standards.
- B. Provide railing capable of withstanding a uniform load of 50 lbs/ft and a concentrated load of 200 lb applied to handrail and top rails of guards in any direction. Uniform and concentrated loads need not be assumed to act concurrently.
- C. Provide railing infill capable of withstanding a concentrated load of 50 lbf applied horizontally on an area of 1 sq ft. Infill load and other railing loads need not be assumed to act concurrently.

### PART 2 – PRODUCTS

### 2.1 MATERIALS

- A. Steel Sections: ASTM A 36/A 36 M. Wide flange shapes ASTM A572.50 (50ksi)
- B. Steel Tubing: ASTM A500, Grade B or Hot rolled ASTM A 501.
- C. Steel Plates: ASTM A283.
- D. Bolts, Nuts, and Washers: ASTM A 325 (ASTM A325M) galvanized to ASTM A 153/A 153M for galvanized components.
- E. Exposed Mechanical Fastenings: Flush countersunk screws or bolts.
- F. Welding Materials: AWS D1.1; type required for materials being welded.
- G. Shop and Touch-up Primer: SSPC Paint 15, Type I Red Oxide.

### PART 3 – EXECUTION

### 3.1 INSTALLATION

- A. Install components plumb and level, accurately fitted, free from distortion or defects.
- B. Provide anchors, plates, angles, hangers, and struts required for connecting to structure.
- C. Field weld components indicated on drawings. Perform field welding in accordance with AWS D1.1
- D. Field bolt and weld to match shop bolting and welding. Conceal bolts and screws whenever possible. Where not concealed, use flush countersunk fastenings.
- E. Mechanically fasten joints butted tight, flush and hairline. Grind welds smooth and flush.

### MISCELLANEOUS STEEL

- F. Obtain approval prior to site cutting or creating adjustments not scheduled.
- G. After erection, prime welds, abrasions, and surfaces not shop primed, except surfaces to be in contact with concrete.

### **END OF SECTION**

### SECTION 06 10 00 - ROUGH CARPENTRY

### PART 1 - GENERAL

### 1.01 SCOPE

A. This section covers wood framing of completed buildings, including all materials, labor services and equipment necessary to complete this work. Work includes but is not limited to wood frame stud walls, floors, ceilings, roofs, prefabricated wood trusses, wood furring, blocking, fasteners and replacement of damaged wood as specified on contract drawings.

### 1.02 COORDINATION

A. Coordinate the location and sequence of this work with other trades for proper execution to fulfill design requirements. Time delivery and erection of wood to avoid extended on-site storage.

### **1.03 PRODUCT HANDLING**

- A. Store all materials off the ground in such a manner as to ensure proper ventilation and drainage and to protect against damage and the weather.
- B. Remove all damaged material promptly from site to prevent its inadvertent use.

### 1.04 SUBMITTALS

- A. Pressure treated wood: Submit certification by treating plant stating chemicals and process used, net amount of salts retained, and conformance to applicable standards.
- B. Preservation treated wood: Submit certification for waterborne preservative that moisture content was reduced to moisture content specified elsewhere in this Section.
- C. Fire retardant treated wood: Submit certification by treating plant stating that chemicals and process used produce wood which conforms to all requirements of fire retardant treated wood.
- D. Wood Trusses: Shop drawings shall indicate species, sizes, and stress grades of lumber to be used; pitch, span, camber, configuration and spacing for each type of truss required; type, size, material, finish, anchorage details. Shop drawings shall include roof framing plans indicating placement and spacing of all trusses. A letter of certification from the truss manufacturer shall also accompany the truss shop drawing confirming the capacity of the metal gusset plate used in fabrication of the trusses. Shop drawings shall also specify all special requirements of the truss manufacturer where trusses support conventional framing above.
- E. Provide shop drawings which have been signed and stamped by a structural engineer licensed to practice in the state where trusses are to be erected. Plans that accompany truss drawing submittals shall also be signed and stamped by the Structural Engineer who designs the individual truss components..
- F. Submittals shall include the following note completed and signed by the Contractor: The data submitted does not contain material deviation from requirements of contract documents except as follow:
- G. Submit delegated engineer component certification letter appended to this section.

### 06 10 00 - 1 ROUGH CARPENTRY

### **PART 2 - PRODUCTS**

### 2.01 NAILERS, BLOCKING AND FRAMING

- A. Except as specified below, all wood shall be No. 2 air-dried Southern Yellow Pine at maximum moisture content of 19 percent.
- B. Wood Floor joist shall be no. 2 kiln-dried Southern Yellow Pine at a maximum moisture content of 15 percent.
- C. All lumber in contact with roofing, steel, masonry or concrete, or embedded in or in contact with the ground, floor framing members 18 inches or closer to the ground, wood framing closer than 12 inches to exposed ground within periphery of the building over crawl space or unexcavated areas, sills on exterior walls, or continuous foundations and less than 8 inches from exposed earth, shall be pressure treated complying with American Wood Preserving Institute Standards. Do not use oil-based preservative where wood may contact roofing materials. All nails, bolts or any other metal connector used with pressure treated lumber shall be galvanized.
- D. Specified lumber dimensions are nominal. Actual dimensions conform to industry standards established by the American Lumber Standards Committee and the rules writing agencies.
- E. Provide fire retardant treated wood where indicated on drawings. All fire retardant treated wood shall bear an identification mark showing the flame spread index thereof issued by an approved agency having a re-examination service. Wood noted to be fire-retardant shall be pressure treated in accordance with AWPA C-20 for lumber and AWPA C-27 for plywood.

### 2.02 PLYWOOD

- A. Each plywood panel shall be identified with the appropriate grade trademark of the American Plywood Association, and shall meet the requirements of the U.S. Product Standard PS 1-74.
- B. All plywood which has an edge or surface permanently exposed to the weather shall be exterior type.
- C. Provide thickness indicated on the Drawings. Grade of plywood panel shall be as specified on the Drawings, or in accordance with the recommendations of the American Plywood Association.

### 2.03 PREFABRICATED WOOD TRUSSES

- A. All wood used in prefabricated wood trusses shall be graded lumber conforming to stress requirements and grades indicated on shop drawings.
- B. Allowable design stresses shall be in accordance with the Design Values for Wood Construction Supplement to the National Design Specification for Wood Construction Produced by the National Forest Products Association.

### 2.04 FASTENERS

A. Nails: Common wire nails, finishing nails, and cement coated nails in accordance with Fed. Spec. FF-N-105. Use coated nails for exterior nailing. Use galvanized nails where nails are in contact with pressure treated wood.

> 06 10 00 - 2 ROUGH CARPENTRY

- B. Bolts, washers and nuts: Commercial quality steel. Galvanized where used on exterior or in contact with pressure treated lumber.
- C. Anchor bolts: Shall be in accordance with Fed. Spec. FF-B-517 and FF-B-575. Sizes shall be as indicated on Drawings. Bolts shall be galvanized where used on exterior or in contact with pressure treated lumber.
- D. Screws: Shall be in accordance with Fed. Spec. FF-S-111, galvanized.
- E. Expansion bolts: Shall be in accordance with Fed. Spec. FF-S-325, with expansion shields. Sizes shall be as indicated on Drawings. Bolts shall be galvanized where used on exterior or in contact with pressure treated lumber.

### 2.05 METAL GUSSET PLATES

- A. Provide gusset plates manufactured by a firm which is a member of TPI and which complies with TPI quality control procedures for manufacture of connector plates published in TPI "Quality Control Manual."
- B. Indicate recommended values for load as established by the manufacturer on the shop drawings. Plates shall be galvanized or otherwise protected from corrosion.

### **PART 3 - EXECUTION**

### 3.01 FRAMING

- A. Reject members not suitably straight or having blemishes or defects that would impair the strength of the member.
- B. Install framing members in such a manner as to provide a true, even, straight plane to receive finishes or flooring. Fit wood square, plumb, and true without gaps, cracks, or open joints.
- C. Cutting shall be accomplished using necessary tools to produce square cuts, holes and notches. Do not notch, bore or cut members for pipes, ducts, conduits or other reasons except as shown on the Drawings or as specifically approved by the Architect. Apply two brush coats of preservative used in original treatment to all sawed and cut surfaces of treated lumber.
- D. Provide spacing or blocking as required to place member into alignment.

### 3.02 FASTENING

- A. Nailing: Use number and size of nails to achieve a rigid and solid connection. Space and size nails to prevent splitting or prebore wood as required. Replace all split members. Nailing shall conform to applicable building codes.
- B. Bolting: Drill holes 1/16" larger in diameter than bolt to be installed. Drill straight and true from one side only. Provide plates or washers between bolt head or nut and wood surface.
- C. Screws: Prebore holes same diameter as root of thread. Enlarge holes to shank diameter for length of shank.
- D. Make wood-to-wood fastenings with proper size cement coated nails.

### 3.03 PLYWOOD

### 06 10 00 - 3 ROUGH CARPENTRY

A. Install plywood panels to be continuous over two or more spans. Installation shall conform to recommended practice of the American Plywood Association and to the applicable building code.

### 3.04 ANCHORING

- A. Anchor wood nailers to angles by bolting to steel at 4'-0" using washers and lock washers. Bore and counter-bore to keep surfaces free from projections.
- B. Anchor wood nailers to concrete or masonry with anchor bolts spaced not more than 4'-0".

### 3.05 PREFABRICATED WOOD TRUSSES

- A. Design trusses for the dead and live loads shown on the Structural Drawings and in accordance with the defined allowable stresses.
- B. Fabrication: Cut truss members to accurate lengths, angles, and sizes to produce close fitting joints with wood-to-wood bearing in assembled units. Assemble truss members in design configuration using jigs or other means to ensure uniformity and accuracy of assembly with close fitting joints.
- C. Erect and brace trusses to comply with recommendations of manufacturer and the Truss Plate Institute.
- D. Erect trusses with plane of truss webs vertical (plumb) and parallel to each other, located accurately at design spacing indicated.
- E. Hoist units in place by means of lifting equipment suited to sizes and types of trusses required, applied at designated lift points as recommended by fabricator, exercising care not to damage truss members or joints by out-of-plane bending of other causes.
- F. Provide temporary bracing as required to maintain trusses plumb, parallel and in location indicated, until permanent bracing is installed.
- G. Anchor trusses securely at all bearing points to comply with methods and details indicated on shop drawings.
- H. Install permanent bracing and related components to enable trusses to maintain design spacing.
- I. Do not cut or remove truss members.

### 3.06 METAL GUSSET PLATES

- A. Press plates into members to obtain full penetration without crushing outer surface of wood.
- B. A stress increase for the value of a connector for duration of loading or other factors will not be allowed in any case.
- C. Increase metal gusset plates, except for scissor trusses, 25 percent in capacity over and above that which is required for calculated stresses and balance on joint as forces require. Minimum bite of 2-1/2" on tension member.
- D. Dimension exact location of each connector in joint.

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- E. Splices in bottom or top chords shall occur at a joint.
- F. Where more than one member meets at a joint, only one gusset plate per side of truss is allowed.
- G. Job applied pressed metal plates shall be installed with the same pressure used in shop application.

### 3.07 CLEAN-UP

A. Clean up debris and excess materials from this work and remove from site. Leave area broom clean.

### **END OF SECTION**

### 06 10 00 - 6 ROUGH CARPENTRY

