July 26, 2019

Historic Structures Report
The Crawford Woolen Mill Conversion
into
The Berkeley County Judicial Center Annex
for
Berkeley County Council, Martinsburg, WV

CRA Project No. 3242

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The Crawford Building – Berkeley County Judicial Center Annex

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Section 1: Introduction July 26, 2019

This Facilities Condition Assessment and Historic Structures Report for 315 West Stephen Street, Martinsburg, WV also known as the "Crawford Building" is prepared for the County Council of Berkeley County, West Virginia.

This project is partially funded through grant funding from the West Virginia State Historic Preservation Office and is required to meet all US Secretary of the Interior Standards for the Rehabilitation of Historic Buildings.

The existing Berkeley County Judicial Center located at 380 West South Street in Martinsburg, West Virginia was completed in 2007. The center began as a 72,206 square foot brick structure. With renovations and a new 50,400 square foot addition, the 122,600 sf Berkeley County Judicial Center now houses nine court rooms and seven hearing rooms for the Magistrate, Circuit, and Family Courts.

The "West Virginia Circuit Judge Workload Study" dated September 2, 2014 (1) indicated that Berkeley County had the 5th highest workload per judge in the state with a "Current Workload per Judge" of 1.47.

Two fundamental pieces of information are necessary to determine the number of judges required to handle the total workload demand within the West Virginia Courts. They are:

- *Workload.* Workload is generated from two data elements, (1) the case weights, which are the average time spent on case processing as determined by the time study; and (2) the annual number of cases filed. Multiplying these two values produces the workload estimate.
- *Judge Need Assessment.* The assessment of judge need is computed by dividing the expected workload by the judge year value (the number of minutes a judge is available to work in a year). This calculation results in the number of judges needed in each circuit.

There are currently 70 circuit judges allocated within the states 31 judicial courts. In 2014 the model indicated the need for 89 circuit judges. The model indicated a deficit need of 19 additional circuit judges.

Partly because of its close proximity to Washington, D. C., Berkeley County is the fastest growing county in the State of West Virginia and among the fastest growing in the entire country. The 23rd Circuit Court comprises the Counties of Berkeley, Jefferson, and Morgan. The 23rd Circuit Court had 4,732 cases filed in 2014, the 2nd highest caseload in the state.

There is a demonstrated need for one addition circuit court judge and two magistrates to meet this increased caseload.

Located just 30 feet north of the existing Judicial Center is the vacant historic structure known as the "Crawford Woolen Mill" which is listed on the National Register of Historic Places as a contributing structure in the "Boomtown Historic District" in Martinsburg. It is a three story brick and stone mill building with sufficient space and adjacency to allow for conversion into a Judicial Center Annex. This report is a complete analysis of the adaptive reuse of this old mill building into a modern judicial facility to support the growing needs of Berkeley County.

(1) All data and analysis related to the need for additional Circuit Judges is taken from the "West Virginia Circuit Judge Workload Study – Final Report, dated September 2, 2014 as prepared by the National Center for State Courts, Court Consulting Services, 707 Seventeenth Street, Suite 2900, Denver Colorado 80202

Section 2: Acknowledgements

July 26, 2019

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Section 3: Executive Summary

July 26, 2019

The purpose of this report is to assess the potential to develop The Crawford Building into a judicial center annex to address the need for additional court facilities for Berkeley County.

To avoid confusion and for the purpose of clarity this report will identify all floor levels of the Crawford Building as the same connected level to the current Berkeley County Judicial Center – 1st floor, 2nd floor, and 3rd floor.

The current judicial center is a four story structure of 122,600 sf and the proposed conversion of the Crawford Building into a judicial center annex will increase the judicial center by 38,900 sf for a total of 161,500 sf. The floor levels of the Crawford building are in close alignment with that of the existing judicial center making the connection a simple process.

It is proposed that the building be restored on the exterior in its current arrangement and style and that the interior be completely renovated to meet the needs of the judiciary including all new architectural finishes, and HVAC, plumbing, electrical, and fire protection systems. The security and fire alarm systems shall be all new and integrated into that of the existing judicial center.

Key to the success of the project is the design and layout of the plan to provide separation of the judiciary administration and staff from the public and detainees. Judges, magistrates, and court staff will have secure parking and a secure entrance into the building. Additional secure parking areas are proposed on both the east and west sides of the judicial center annex.

Secure corridors within the building will allow movement of judicial staff without conflict with the public or detainees. The other critical component is to transport and move detainees from the vehicle sallyport to holding cells and ultimately to the courtrooms within a secure corridor system which is without conflict with other functions of the judiciary or the public corridor system. An expanded vehicle sallyport is proposed which will allow for transport vehicles to move detainees within a secure environment.

SECTION 4: HISTORICAL NARRATIVE July 26, 2019

The Crawford Woolen Mill

315 West Stephen Street, Martinsburg, WV

1.0 Historical Background

Martinsburg, settled in the early eighteenth century, benefitted greatly from the coming of the Baltimore and Ohio Railroad in 1844 and the Martinsburg and Potomac in 1871. These important transportation connections enabled Martinsburg to develop its industrial interests. But, between the Civil War and the first decade of the twentieth century Martinsburg was the only West Virginia municipality which failed to triple in population. (1)

By 1880, Berkeley County had 104 manufacturing establishments employing 227 men, 1 woman, and 3 children. Twenty years later, the number of manufacturing establishments had increased to 150, employing 682 men, 442 women, and 57 children. Martinsburg flourished because of the county's efforts to industrialize, but more importantly, its growth was a direct result of electricity furnished in 1889 as part of a franchise granted to the United Edison Manufacturing Company of New York. (1)

1.1 WH Crawford

In 1891, W. H. Crawford established the Crawford Woolen Company and employed fifteen workers who produced approximately seven hundred yards of cloth a week. Crawford, a native of New Rochelle, New York, also held interests in the Shenandoah Pants Company and the Martinsburg Worsted and Cassimere Company, also established in the 1890's. (1)

W. H. Crawford built two new residences during his tenure in Martinsburg. The Crawford-Silver House at 501 S. Queen Street was built ca. 1895 by W. H. Crawford who resided here before building 505 S. Queen Street in 1905. This residence is described as one of the finest architectural 20th century buildings in Martinsburg. The Neo-Classical Revival brick residence has Corinthian columns of a monumental order on stone pedestals. The balcony balustrade is turned with urn topped posts. The house is superior, palatial, flaunting of what money can buy in

architecture. (2) The 505 S. Queen Street residence was sold after the 1914 bankruptcy of the Crawford Woolen Mill and made into apartments. (3)

In less than fifteen years, Crawford's textile interest failed primarily because of antiquated machinery and insufficient capital. During the same period, a number of modern electric powered mills transformed Martinsburg into an important textile center. Other textile factories established during the first two decades of the twentieth century also closed. From the financial ruins of Crawford Woolen and the Worsted and Cassimere Company other businessmen established two new companies, Berkeley Woolen and Dunn Woolen. During the same period, John Poland, Sr. established the Perfection Garment Company which manufactured textiles. (1)

1.2 The Berkeley Woolen Company

The Berkeley Woolen Company was the successor to the Crawford Woolen Mill, taking over buildings, employees and all in December, 1914. (3)

Union activity at other Martinsburg companies spread to the Berkeley Woolen Mills in the early 1930's. Berkeley Woolen Mill workers, on August 14, 1933, aroused the interest of other city textile employees when 228 of 335 workers went out on strike after the company fired several suspected union organizers. After mediation conducted by the National Labor Relations Board (NLRB) as a test case on the application of the National Recovery Act, the strike was resolved on September 20th. Employees returned to the mill, which now recognized their representation by the United Textile Workers. (1)

The mill thrived during World War II but was unable to compete with other local textile factories, increased national and international competition, and the introduction of synthetic fibers into the industry in the postwar period. Berkeley Woolen closed in 1949. Local businessman, John Poland Jr., faulted organized labor for the decline of Martinsburg's textile industry. Wilbur Johnston, local historian of other Shenandoah Valley mills, in *"Weaving a Common Thread"*, convincingly argues that labor and management both contributed to the decline. (1)

1.3 Blue Ridge Outlet Center

The Crawford Building was again transformed to a new use in the early 1980's following a national trend for outlet stores. The Blue Ridge Outlet Center opened in 1984 with four stores and grew to include about 58 stores in 1995 including Anne Klein, Arrow/Gold Toe, Boston Traders, Carter's Childrenswear, Dan River, Dansk Factory Store, Donna Karan, Fuller Brush Outlet, Jones New York, Nautica, Polo/Ralph Lauren, West Virginia Glass, Woolrich, and more. The Blue Ridge Outlet Center closed in 2000.

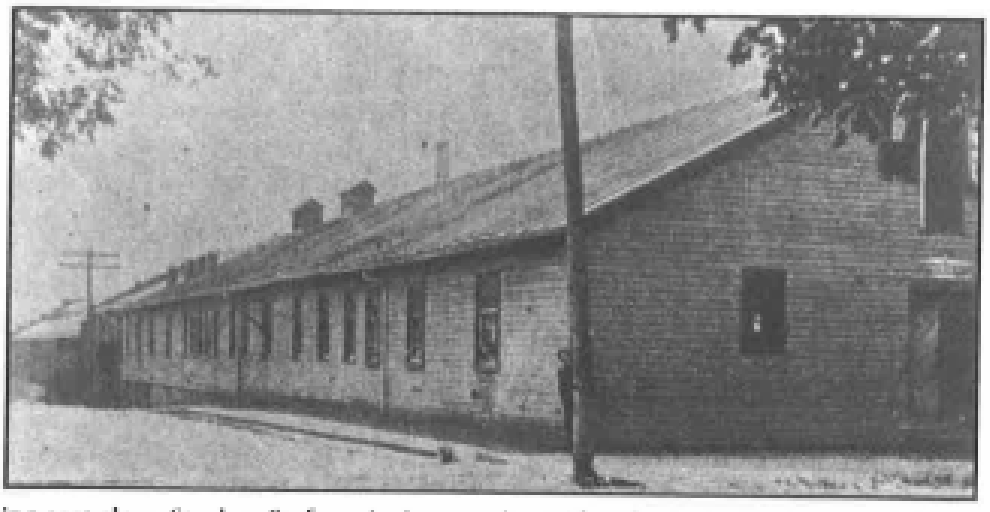
1.4 Blue Ridge Technical and Community College

In 2000, Martinsburg City Council contacted college officials about the possibility of bringing the Community and Technical College to Martinsburg. The City Council offered a grant for the college to relocate and offered to help the college find a suitable location. The site selected was the former Blue Ridge Outlet buildings. The City Council's offer, along with the location of the building, was presented to the West Virginia Higher Education Policy Commission in the fall of 2000 and the move to Martinsburg was approved. The renovation of the Crawford Building of the former Blue Ridge Outlet complex began in June 2001 and classes began at the Community and Technical College on August 20, 2001. In May 2002, the Berkeley County Commissioners finalized the purchase of the Blue Ridge Outlet complex and negotiations resulted in the May 2003 relocation of the CTC Shepherd to the newly renovated Dunn Building.

2.0 The Crawford Building – Architecture History

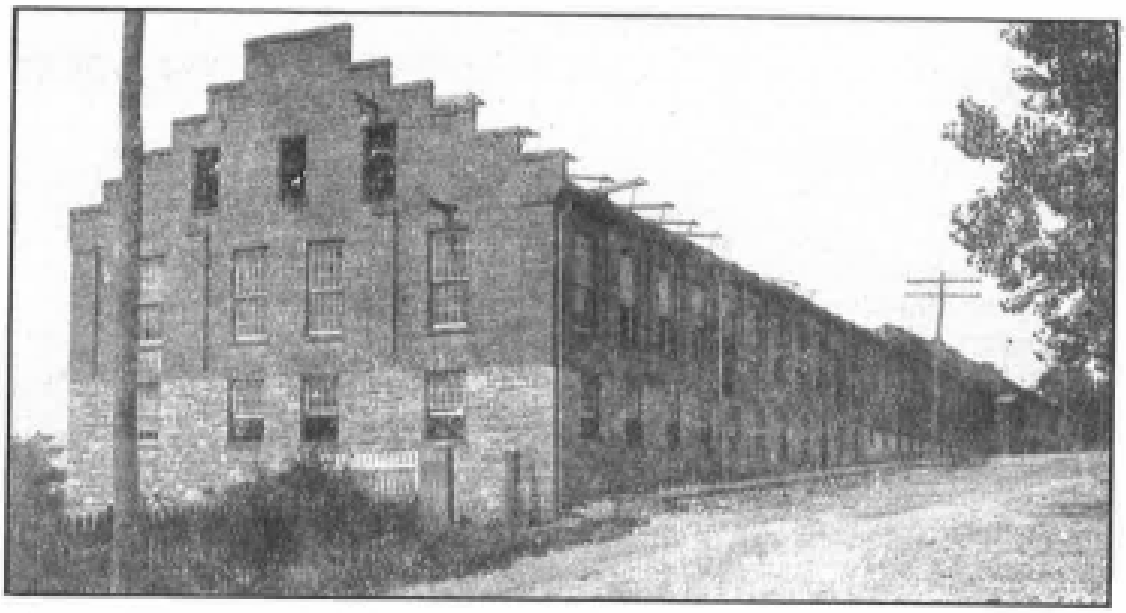
The original 1891 Crawford Woolen factory was a wood frame building at the intersection of Raleigh and Stephen Streets. A brick addition was added in 1901 and in 1905-07 the brick portion of the building was later doubled as seen in the photo below. (4)

CRAWFORD WOOLEN COMPANY



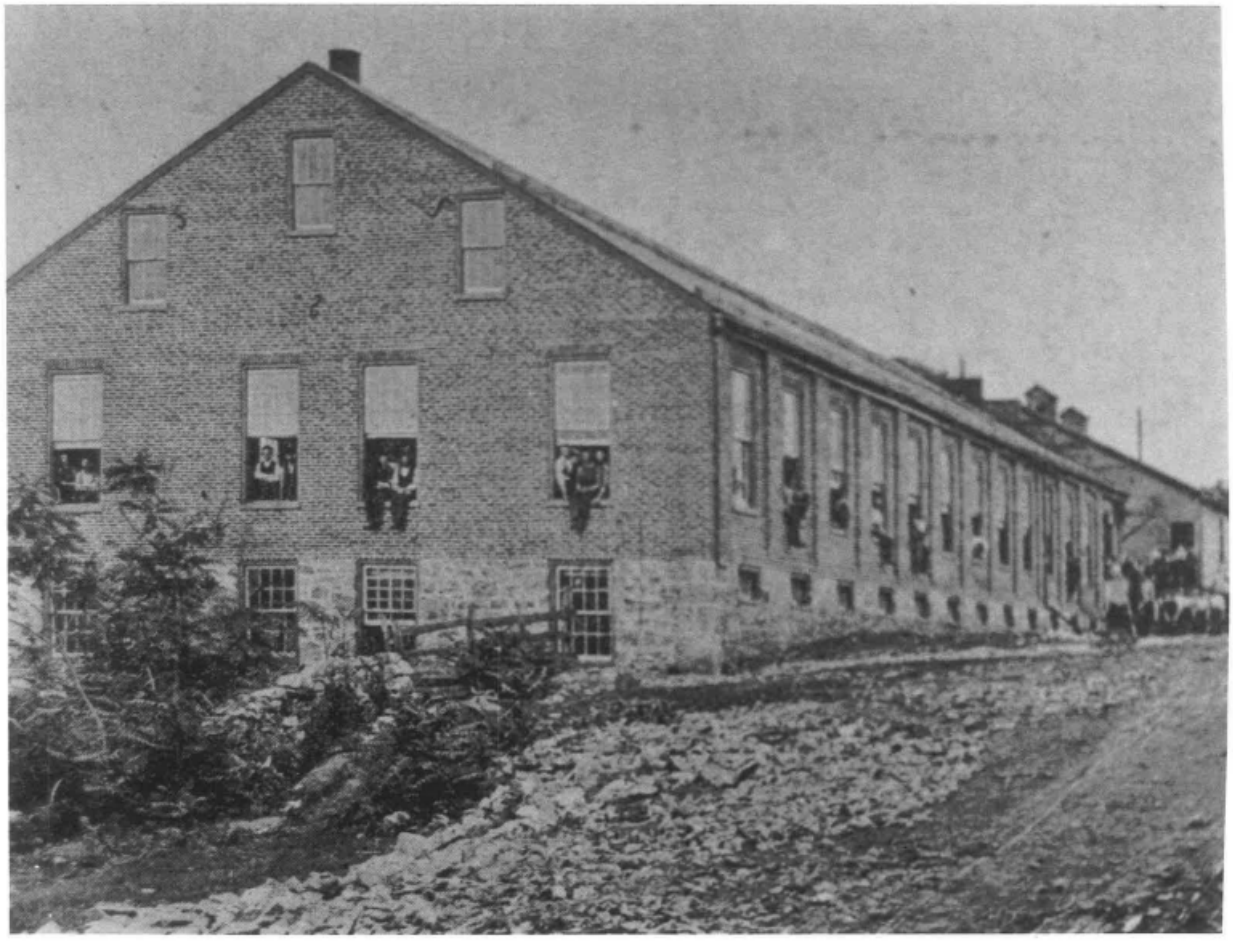
Looking east along Stephen St. from its intersection with Raleigh St., this frame building was the original 1891 Crawford Woolen factory. Later razed, it is now a parking lot. The brick addition at left was added about 1901. In the 1905-1907 period this portion was doubled, as seen in photo below.

(Source: Statesman)

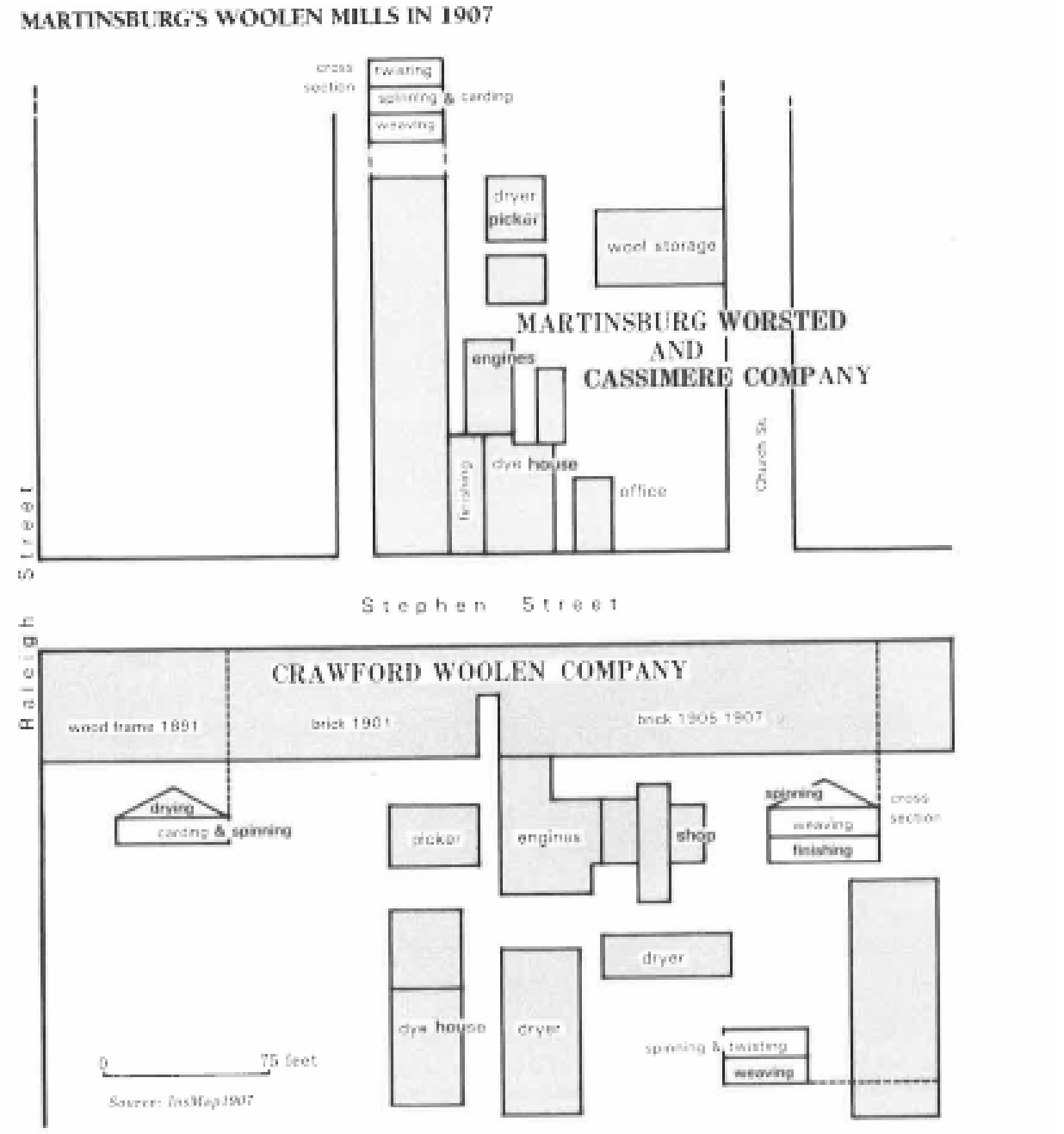


This pre-1907 view reveals the east end of the newly enlarged brick mill with the original frame structure at right rear. A reverse direction of the photo above, this view looks west.

(Source: Hoffheins)



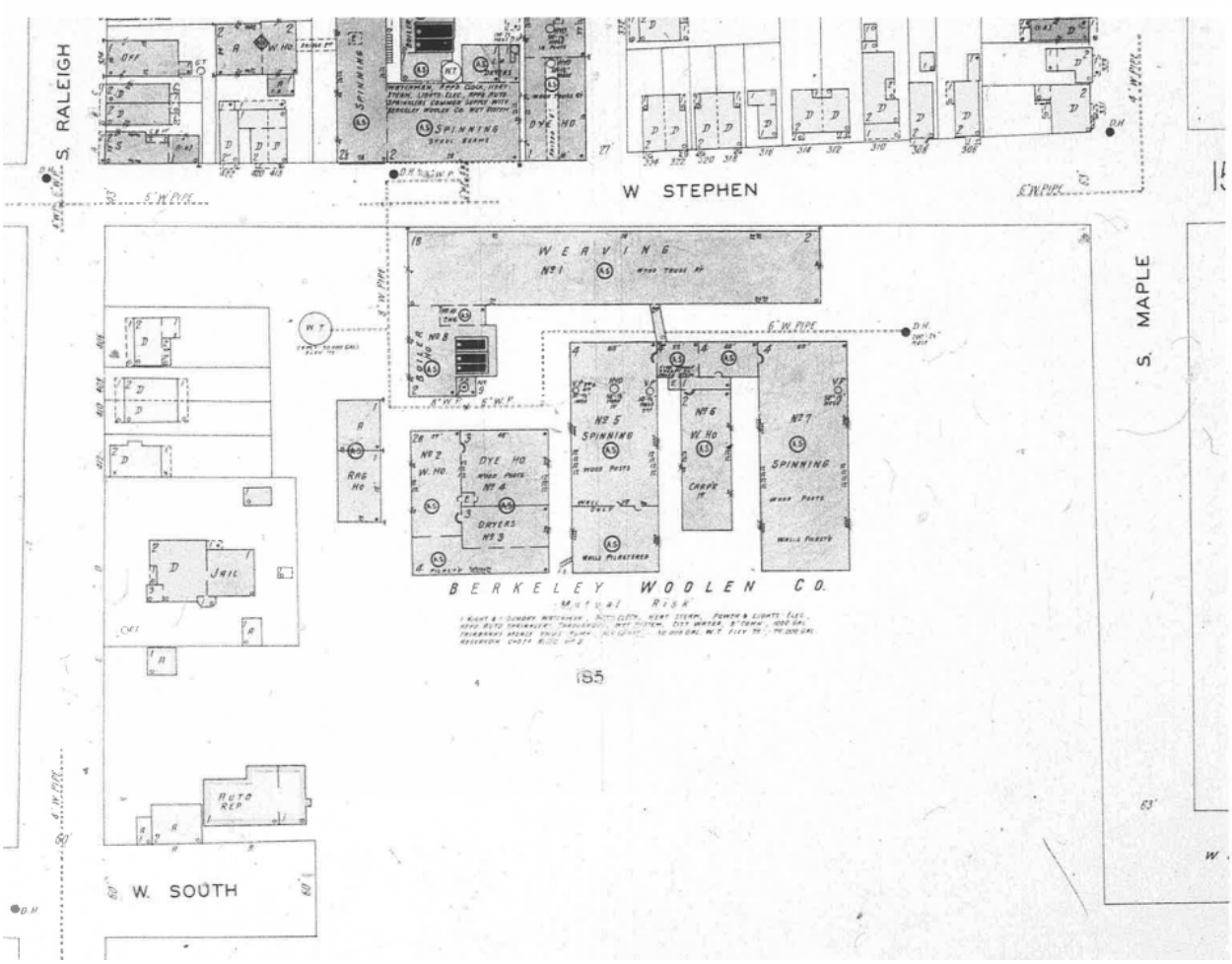
The photograph above shows the 1891 wooden structure to the right and the 1901 masonry structure both of which were demolished around 1922 and now form the west parking lot adjacent to the Crawford Building.



By 1931, as is evidenced in the January 1931 Sanborn Maps of Martinsburg which follows shows that the building configuration which now exists in 2019 was in place. The wood frame building has been demolished as well as the 1901 section of the brick building. The Brick 1905-07 Main Building, the Connector Building, and the South Building (shown above as the “engines”) remain. The rest of the 1907 buildings were replaced by the newer mill buildings of the Berkeley Woolen Company, which have been transformed into the Berkeley County Judicial Center.

Illustration from the January 1931 Sanborn Map Company (below)

Six bays were added to the 1907 wing on or between 1913 and 1922 following the takeover by the Berkeley Woolen Mill Co. Note the elongated building plan.



3.0 Architecture: Existing Conditions in year 2019

The Crawford Building consists of three distinct components – the Main Building, the South Wing, and the Connector Building between the two.

The Main Building is a two story brick structure with a partial basement. Its construction is of typical mill building construction with heavy timber framing and masonry bearing walls. The base of the building at the ground floor is constructed with rusticated stone on the east and west facades while the second floor is constructed with brick pilasters with inset brick panels. The east façade is entirely of brick construction. The west façade was reconstructed at the time the south wing was connected to the main building, on or around 1931. It is of brick construction with broad segmental arches, and a decorative corbeled cornice.

The north, east, and south elevations have wood windows while the west elevation has steel windows. Wood windows on the first floor are 8/8 whereas the second floor windows are 12/12. The wood windows have wood sills whereas the steel windows have cast stone sills. The steel windows of the west façade are 25 pane steel windows with top and bottom ventilators.

The Main Building second floor framing is constructed with heavy timber columns and beams with heavy timber wood framed floor panels. The first floor framing above the basement space is similar. The remainder of the first floor has a concrete slab on grade. The roof structure consists of 30 bays of heavy timber wood trusses bearing on the masonry pilasters with infill wood framing between the trusses to support the wood roof deck.

The roof consists of an asphalt shingle roof sloped to roof drains with downspouts. Eight galvanized steel roof ventilators provide ventilation of the second floor.

2.2 The South Wing

The South Wing of the Crawford Building constructed on or around 1931 is a three story masonry bearing wall structure. The steel framed interior with a mezzanine at the second floor is of more recent construction the date of which is unknown. The floor panel, mezzanine, and roof structure are all framed with steel beams, bar joists, and metal decking. The exterior masonry is similar to the Main Building however the ground floor is of brick construction and the sills are of

cast stone. Windows are 25 pane steel framed windows with top and bottom ventilator sections. Two windows on the south façade third floor are wood 6/6 single glazed double hung windows.

2.3 The Connector & West Facade

A three story Connector Building connects the South Wing to the Main Building and is constructed with steel beams, bar joists, and metal decking. An entirely new west façade was constructed at the time the South Wing was built so as to provide a unified and monolithic façade. The date of this new South Wing and west façade construction is 1905.

2.4 380 West South Street

The existing Berkeley County Judicial Center located at 380 West South Street is housed in the 1931 era four story mill building. This structure has brick paneled walls, broad segmental arches and a decorative corbeled brick cornice. When this building was constructed the South Wing, Connector Building, and west façade were also completed to provide a unified architectural building composition.

(1) From “West Virginia History” – a copyrighted publication of the West Virginia Archives and History.
(2) From Don C. Wood, Boydville Historic District, Martinsburg, WV nomination document, 1980, National Park Service, National Register of Historic Places, Washington, D.C.
(3) From “Stewart Bell Jr. Archives, Handley Regional Library
(4) From “Weaving a Common Thread” by Wilbur S Johnston “A History of the Local Woolen Industry in the Top of the Shenandoah Valley. “

This document has been financed with Federal funds from the National Park Service, US Department of the Interior and administered by the WV Department of Arts, Cultural, & History. Regulations of the US Department of the Interior strictly prohibit unlawful discrimination in departmental Federally Assisted Programs on the basis of race, color, national origin, age or handicap. Any person who believes he or she has been discriminated against in any program, activity, or facility operated by a recipient of Federal assistance should write to: Director, Equal Opportunity Program, US Department of the Interior, National Park Service, 1849 C Street NW, Washington DC, 20240.

1. Site / Civil

A. Site Aerial

The Crawford building is located parallel to West Stephen Street and separated from the Berkeley County Judicial Center by a 30 foot brick courtyard plaza. A vehicle sallyport is located between the 4 story Judicial Center and the south wing of the Crawford building. Parking surrounds the complex with secured parking for judicial staff located on the west side of the Judicial Center

1. Site / Civil

B. West Parking Lot Bituminous Pavement

The west parking lot is in fair condition with some pavement cracking. Pavement at the vehicle sallyport is in good condition with positive drainage to a trench drain.

Paving at handicap parking space (above)
Pavement of west parking lot

Pavement of vehicle sallyport

1. Site / Civil

C. Concrete Curbs and Sidewalks: Numerous concrete curbs are cracked and in need of replacement on the west side of the building. The sidewalk along the north side of the building on West Stephen Street is in good condition as is the retaining wall that supports the galvanized steel guardrail.

Concrete curb out of alignment at W Stephen St,

Concrete walk along W Stephen St.

Concrete curb cracked and displaced at west lot

1. Site / Civil

D. Brick Paving: The brick paving in the courtyard and on the east plaza are both in poor condition. There has been significant settling and cracking making the pavement unsafe for walking. The mortar joints are severely deteriorated.

Cracked courtyard brick pavement (above)
Plaza brick pavement (below)

Courtyard brick pavement— note settlement and uneven paving (below)

1. Site / Civil

E. Retaining Walls: The concrete steps at the east entrance have deteriorated and the brick retaining walls have failed. The brick face of the retaining wall at the steps has spalled which suggests water infiltration and freezing.

South retaining wall is failing at the east plaza

Failed brick retaining wall @ east plaza

Deteriorated brick in retaining wall @ east steps

1. Site / Civil

F. Site Utilities

Primary electric service is from West Stephen Street

Street lighting: Street lighting is via utility poles along West Stephen Street

Stormwater: Stormwater is collected from the roof via a gutter and downspout system and connected to an underground stormwater collection system. The courtyard pavement has yard drains at both the east and west ends of the courtyard.

Rainwater conductors connected to stormwater boot (above and below)
Electrical Service to building at north façade (below)

Electrial Service pole mounted transformers along W. Stephen Street

1. Site / Civil

G. Metal Railings

The existing metal railing system is a galvanized steel 4 pipe horizontal railing system at 42 inches in height. Primary members are 2 inch diameter and the secondary horizontal members are 1.5 inches. Spacing between the rails is approximately 9 inches. The railing system at the areaways does not meet current code which requires that spacing between guardrails is no more than 4 inches for any area that is 30 inches or more above grade.

Steel railings at steps of west facade

Steel railings along handicap ramp in courtyard

Steel railing along W Stephen St. (above)
Steel railing at areaway of judicial center (below)

1. Site / Civil

H. Landscaping: The only landscaping adjacent to the Crawford Building are the 4 deciduous trees on the west side of the building, and one ornamental tree on the east side. There are also 8 major trees that will be displaced to accommodate the secure parking lot on the east side of the existing judicial center. There is a full bed of ivy surrounding the east brick plaza. The ivy has also taken over the ornamental tree within its planting bed

4 major trees at the west façade (above)
Ornamental tree at the northeast corner of the building. (below)

8 major trees east of the existing judicial center.

2. Exterior Envelope

A. Stone Foundation Walls:

The stone foundation walls are constructed of limestone and layed up in an uncoursed roughly squared pattern. The stone is in good condition however the scintled mortar joints are severely deteriorated and in need of repointing. Some areas of infill have occurred in the past using a different type, shape, and color of stone.

Newer stone infil of façade along W Stephen St (above)
W Stephen St. façade (below)

Stone foundation wall of south façade within the courtyard (below)

2. Exterior Envelope

B. Brick Masonry:

The exterior brick is a clay fired brick layed in common bond with the sixth course headers. The brick is in fair to good condition. The flushed and rodded masonry mortar is severely deteriorated in many areas of the building and is in need of a complete repointing.

East Façade—Note stone has been removed and a new brick façade erected.
Postcard of the Crawford Woolen Mill (below)

Detail of south façade with newer brick foundation

2. Exterior Envelope

B. Brick Masonry: (continued)

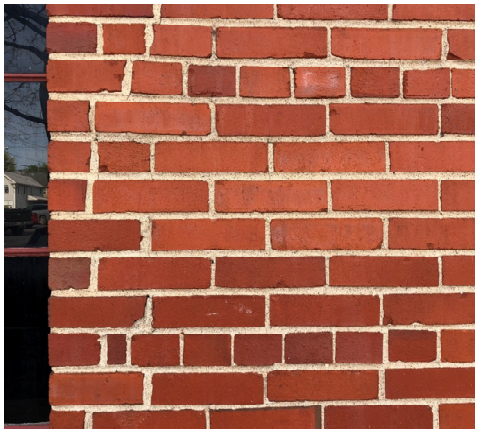
Six bays were added to the east end of the original brick building between 1913 and 1922. See the change in bay and window size below. The roofline also shows evidence of a change in structure. The windows on the third floor are 12/12 vs the 1907 building where they are 15/15. The second floor windows remain 8/8 however the proportions of the windows have changed . Note that the center section of the building at the bridge connector appears to be of different construction than that to the west. The brick and stone are different and the windows in the center section of the building are 15/15 glass paned wood double hung windows whereas the windows on both the east and west end of the building are 12/12 wood double hung windows.

1913-22 Addition

2. Exterior Envelope

B. Brick Masonry (continued)

The exterior brick is a clay fired brick layed in common bond with the sixth course headers. The brick is in fair to good condition. The flushed and rodded masonry mortar is severely deteriorated in many areas of the building and is in need of a complete repointing.



Brick detail West facade (above)

West façade with corbeled cornice (below)

South Façade—note original brick and wood windows at southwest corner (below)

B. Brick Masonry (continued)

The newer west brick façade and south building was built in a different architectural style than the main building. The stepped parapet is unique to the northwest corner of the building. The window openings have segmental brick arches above simple flat arched window and door openings. The west façade brick is laid in a common bond with a sixth header course. Full height brick pilasters frame the window openings and they terminate at a highly detailed corbeled brick cornice. The masonry of this facade is in good condition. The mortar is flush and rodded and in fair condition. A new corner entrance was also developed at this time.

Northwest Corner showing reconstruction of the West Facade

South Wing—South and West facades

West Facade

2. Exterior Envelope

C. Wood Windows:

The north, east, and south elevations of the main building all have wood windows. The wood windows on the ground and attic levels are an 8/8 single pane double hung wood window. Numerous windows have missing glass panes allowing water infiltration into the building.

Most of the wood windows on the second level north, east, and south facades are a 12/12 single pane double hung wood window. The center portion of the building has wood windows in a 15-15 configuration. The windows have a wood sill and all are in a state of severe deterioration and in need of replacement.

Wood Window @ North Facade

Wood Windows at North Facade

Wood Windows at East Facade

2. Exterior Envelope

C. Wood Windows:

The south elevation of the three story south wing has two double hung wood windows at the second floor with single pane glass in a 6/6 pattern. These windows are also in poor condition.

Wood Window @ South Façade Center Section

Wood Windows at South Façade Main Building

Interior Window at South Wing South Facade

2. Exterior Envelope

D. Steel Windows:

The south wing and the west façade have single pane painted steel framed windows in a (5 x 5) 25 pane fixed window with a 3 x 2 pane operable section in the middle. The windows on the east elevation of this building have two operable sections. These windows are in fair condition. Most cast stone window sills for these windows are in good condition however several are severely deteriorated and in need of replacement.

Typical Steel Window

Steel Windows at East Façade—South Bldg

Aluminum windows of existing Judiciary Building

2. Exterior Envelope

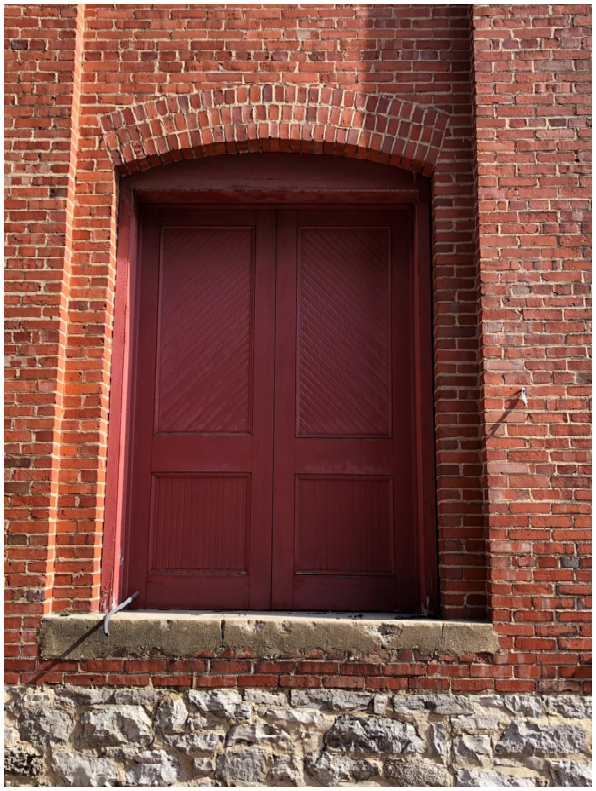
E. Wood Doors:

The main building has wood doors at the south and east facades that are in fair to poor condition. Doors are of stile and rail construction with inset wood and glass panels. Frames are of wood and are in fair condition.

Wood doors @ south facade

Wood doors @ east facade

Wood dock doors at courtyard—south east corner



2. Exterior Envelope

F. Aluminum Doors:

The south wing, connector, south façade, and the west façade all have commercial aluminum doors and framing. It is apparent that door openings have recently been modified from the original openings. These doors are in fair condition.

Aluminum doors at west entrance 3rd floor

Aluminum doors at connector east entrance 2nd floor

Alum. doors at south facada main building 2nd floor

2. Exterior Envelope

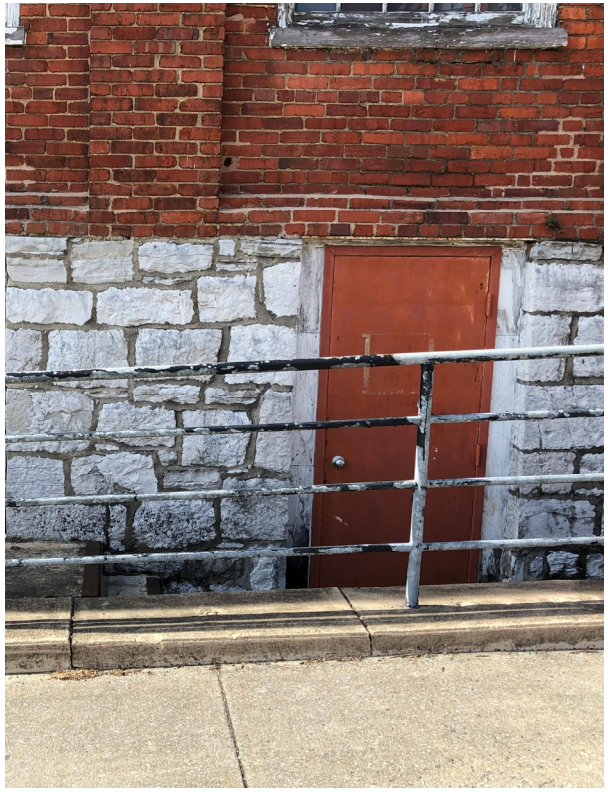
G. Hollow Metal Doors:

Both the main building and the south building have service doors with frames of hollow metal construction. These doors and frames are in poor condition.

Hollow metal service doors at boiler room

Hollow metal doors at West facade

Hollow metal exit door at north façade areaway



2. Exterior Envelope

H. Roof:

The main building was reroofed with an asphalt shingle roof in 2017. The metal roof ventilators were repaired, painted and reinstalled. The connector and south building have an EPDM roofing system that is in poor condition. The connector and east façade have a terra cotta coping cap that is in poor condition with some broken segments. The asphalt shingle roof has a perimeter metal gutter and downspout system which is in poor condition and in need of replacement. The south wing and connector roof utilize roof drains with internal cast iron piping for stormwater.

Asphalt shingle roof (2017) over main building

EPDM roofing with terra cotta coping cap at connector bldg. (below)

2. Exterior Envelope

I. Glass Enclosed Walkway Connector

A glass and steel enclosed walkway connects the third floor of the Crawford Building to the existing Judicial Center fire stair. The structure is painted steel which is in fair condition with insulated glass wall and roof panels. The structure appears to be in good condition. The floor and underside of the floor are of reinforced concrete and are in good condition.

Glass Enclosed Walkway Connector at the 3rd Floor

3. Interior Shell

A. Exterior Walls

The interior finish of exterior walls of the main building is painted brick or stone masonry. The walls are solid masonry construction with no insulation. In numerous locations throughout the building walls were furred out with slatwall for retail display. Some areas of the walls are finished with gypsum wallboard and mirrors.

Exposed painted stone foundation wall at 2nd floor (above)

Exposed painted brick and gypsum board panels at second floor

Second floor north wall covered with display panel (below)

3. Interior Shell

A. Exterior Walls (continued)

The interior finish of exterior walls of the south building is exposed brick masonry. The walls are solid masonry construction with no insulation. There is evidence of numerous additions and renovations as the brick varies in color and texture.

Exposed brink on the interior of the west facade

Exposed brick at southwest corner of south wing

Exposed brick perimeter walls at mezzanine—south wing

3. Interior Shell

B. Interior Partitions

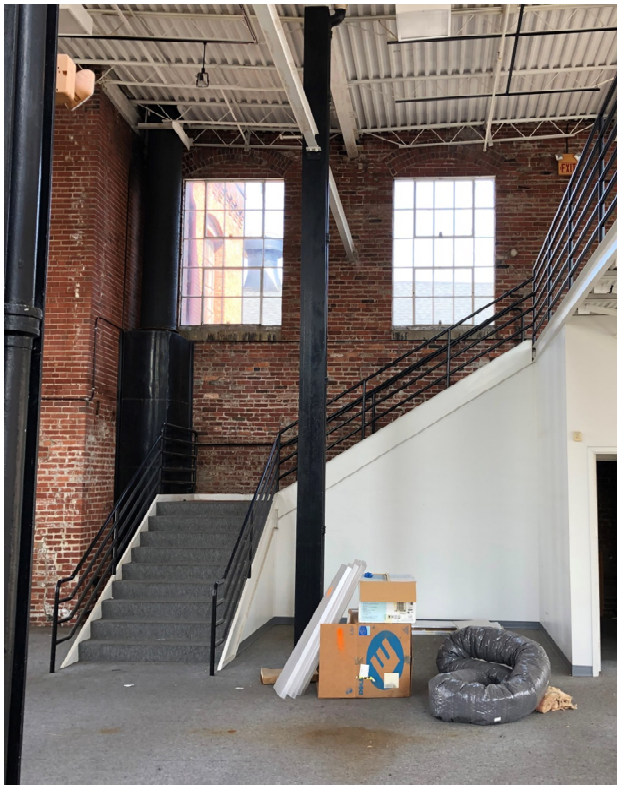
Interior partitions are constructed of wood stud framing with a painted gypsum board wall finish. A more recent concrete masonry wall has been constructed in the south building ground floor boiler room.

3. Interior Shell

C. Interior Stairs

Interior stairs in the 2nd floor entrance lobby are of wood frame construction with steel pipe rails. Treads and risers of are of oak construction and are in poor condition. The lobby stair at the connector building is a steel metal pan stair with steel pipe rails and quarry tile risers and treads. The mezzanine stair in the south building is a steel metal pan stair with steel pipe rails and carpeted treads and risers. The mezzanine stair is in good condition. A concrete stair with steel pipe rails provides exiting from the 2nd floor to the street. (right)

Mezzanine stair at South building third floor.



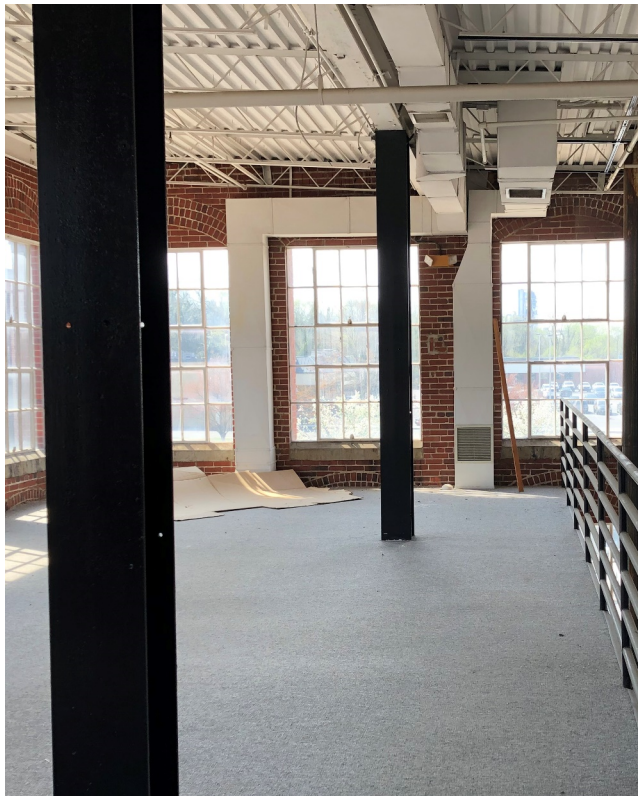
Second floor entrance lobby stair .

Lobby stair at connector building

3. Interior Shell

D. Interior floor finishes.

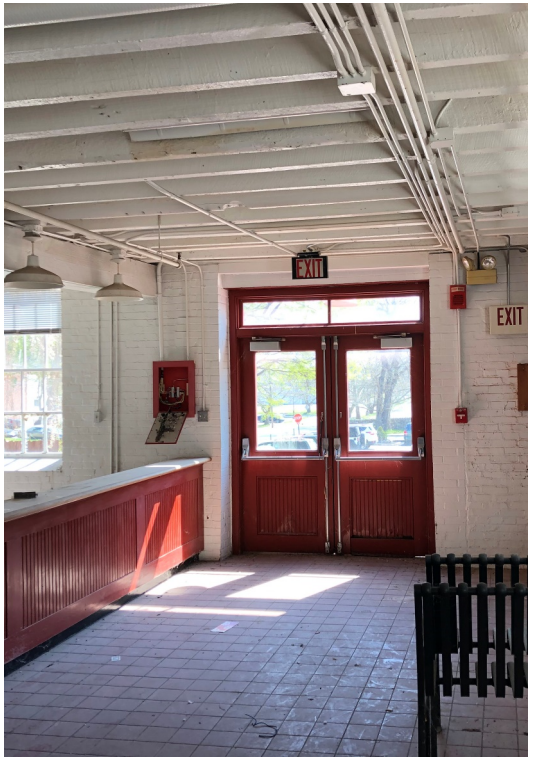
Interior floor finishes vary widely. The second floor of the Crawford building has carpet over concrete. The third and fourth floor of the South building has carpet over concrete. The second floor entrance lobby has quarry tile over wood subfloor supported by wood floor joists. This floor system is severely deteriorated and in need of replacement. Second floor restrooms have 1x1 ceramic tile over wood substrate.

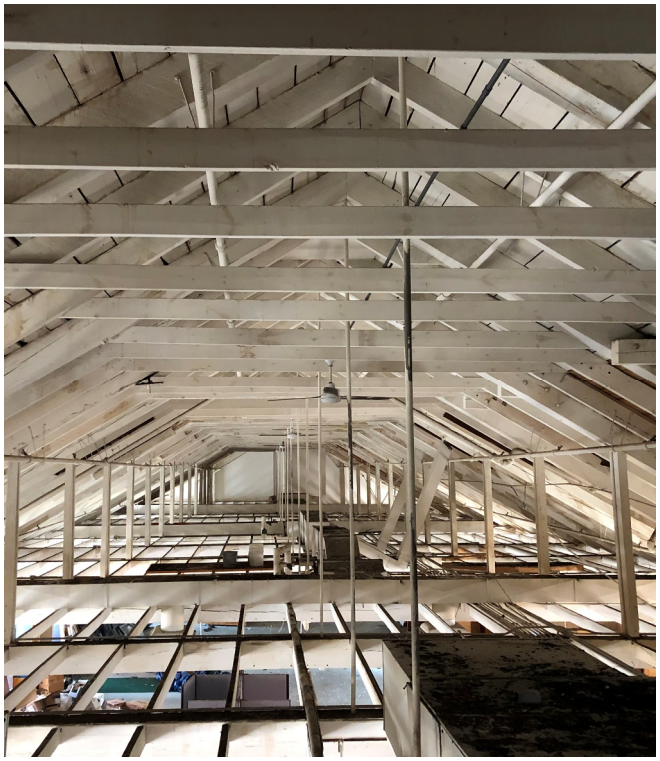


3. Interior Shell

E. Interior ceiling finishes:

Interior ceilings of the main building are of painted wood exposed structure. The second floor has exposed heavy timber framing with heavy timber beams and wood joist framing. The third floor has heavy timber trusses with lateral wood framing at the lower cord and sloped wood joist framing between the heavy timber frames. Each timber frame is carried on a masonry pier between the exterior windows. 3/4 inch wood decking spans over the joist framing system. Some areas of wood decking were recently replaced as part of the 2017 reroofing project and have been left unfinished.

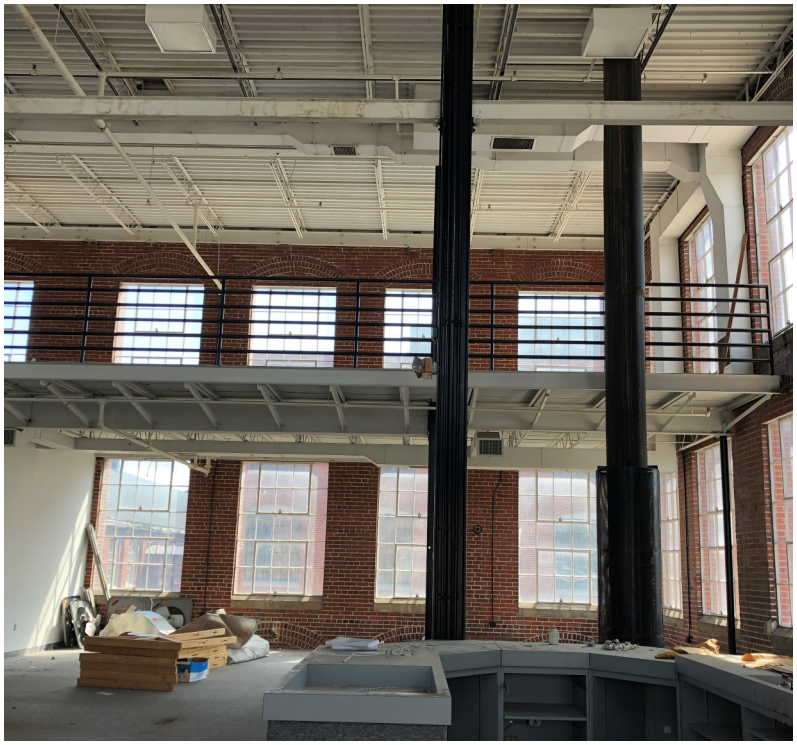




3. Interior Shell

E. Interior ceiling finishes: (continued)

Interior ceilings of the south building are of exposed steel bar joists with steel decking. It is unfinished in the boiler room and painted on the third floor and mezzanine. The ceiling in the connector is of a metal deck supported by a heavy timber. This framing and decking system has failed and is being temporarily supported by a wood post and wood plate—see below.



4. Mechanical, Electrical, Plumbing, and Fire Protection Systems

The existing systems (HVAC, Plumbing and Fire Protection) are all beyond their useful life and in poor condition. It is not recommended to reuse this equipment or piping. All existing HVAC units, controls, ductwork, GRDS, condensing units, rooftop units, unit heaters and fans shall be completely removed. All existing steam piping, refrigerant piping, and condensate piping shall be completely removed. All domestic water piping, fixtures, sanitary and vent piping shall be removed complete back to utility entry points for the building. All Fire Protection piping, valves and heads shall be removed complete back to the utility entry point for the building.

Berkeley County Judicial Center
Crawford Building

STRUCTURAL ASSESSMENT OF EXISTING CONDITIONS

Structural Engineer:

KCI Technologies, Inc
Contact – Allan Mitchell, PE
936 Ridgebrook Road
Sparks, MD 21152

KCI Project No: 271903778

JULY 2019

INTRODUCTION

ISO 9001:2015 CERTIFIED
ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS
936 Ridgebrook Road • Sparks, MD 21152 • Phone 410-316-7800 • Fax 410-316-7817

KCI Project No 271903778
Berkeley County Judicial Center – Crawford Building
380 W. South St., Martinsburg, WV 25401

July 8, 2019

KCI Technologies, Inc. ("KCI") was requested to go on site and conduct a conditions assessment on the Crawford Building at the Berkeley County Judicial Center on 380 W. South St., Martinsburg, WV.

Limitations to site observations:

KCI was unable to access the roof of the Crawford Building. Therefore KCI was only able to assess the portions of the roof that were visible from grade. KCI did not have access to the room above Hallway B, therefore could not fully assess the room.

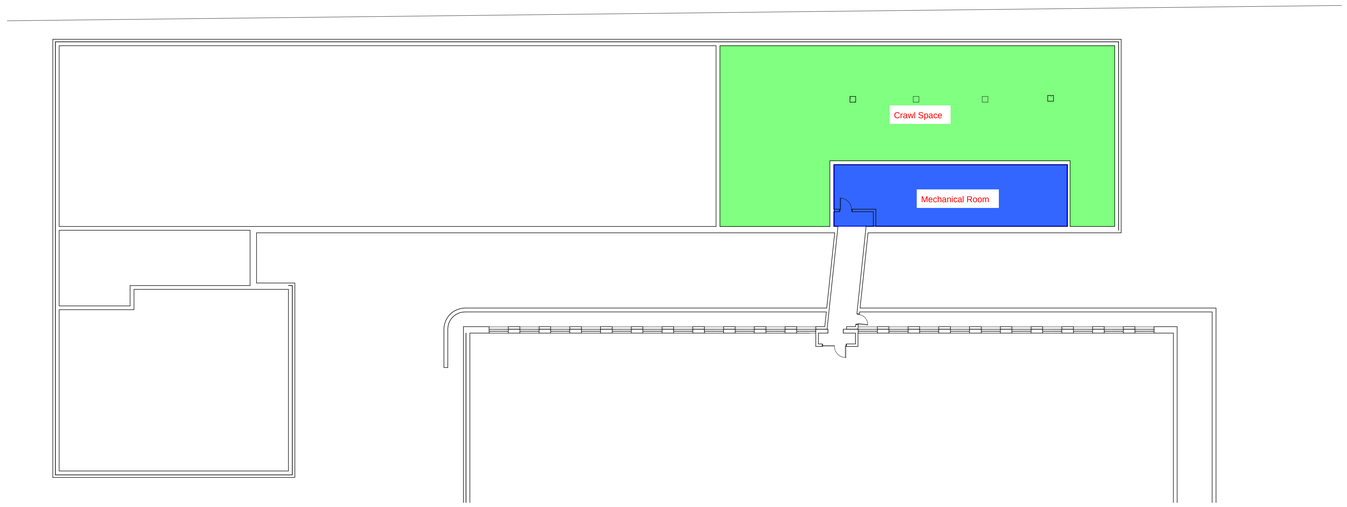
KCI was unable to assess any structural elements that were covered by architectural components. The foundations and walls below grade could not be evaluated by KCI.

Observations and discussions:

KCI visited the site, 380 W. South St., on June 21, 2019. The structure of concern is a two-story "L-Shaped" building, with a basement. The exterior walls of the building are constructed primarily of brick and stone masonry. The majority of the building interior was constructed of wooden framing, with the exception of the southwest portion of the building, which was constructed of steel framing, metal decking and wood framing. The bottom floors of the building are constructed of slabs-on-grade. KCI was able to see that the walls below grade and the foundations in a few locations are constructed with stone masonry. KCI is under the assumption that all the foundations and walls below grade are comprised of stone masonry construction. Overall the building was observed to be in poor condition as many of the interior building elements can no longer be relied on as structural components.

Refer to the following pages for pictures and a detailed description of damages to the building.

ROOM DESIGNATIONS



1 E1.1 Overall Existing First Floor Plan
1/16" = 1'-0"

1ST FLOOR 4105 SF

Plan North

0' 8' 16' 32'

CRABTREE ROHRBAUGH & ASSOCIATES - ARCHITECTS
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ADAPTIVE REUSE
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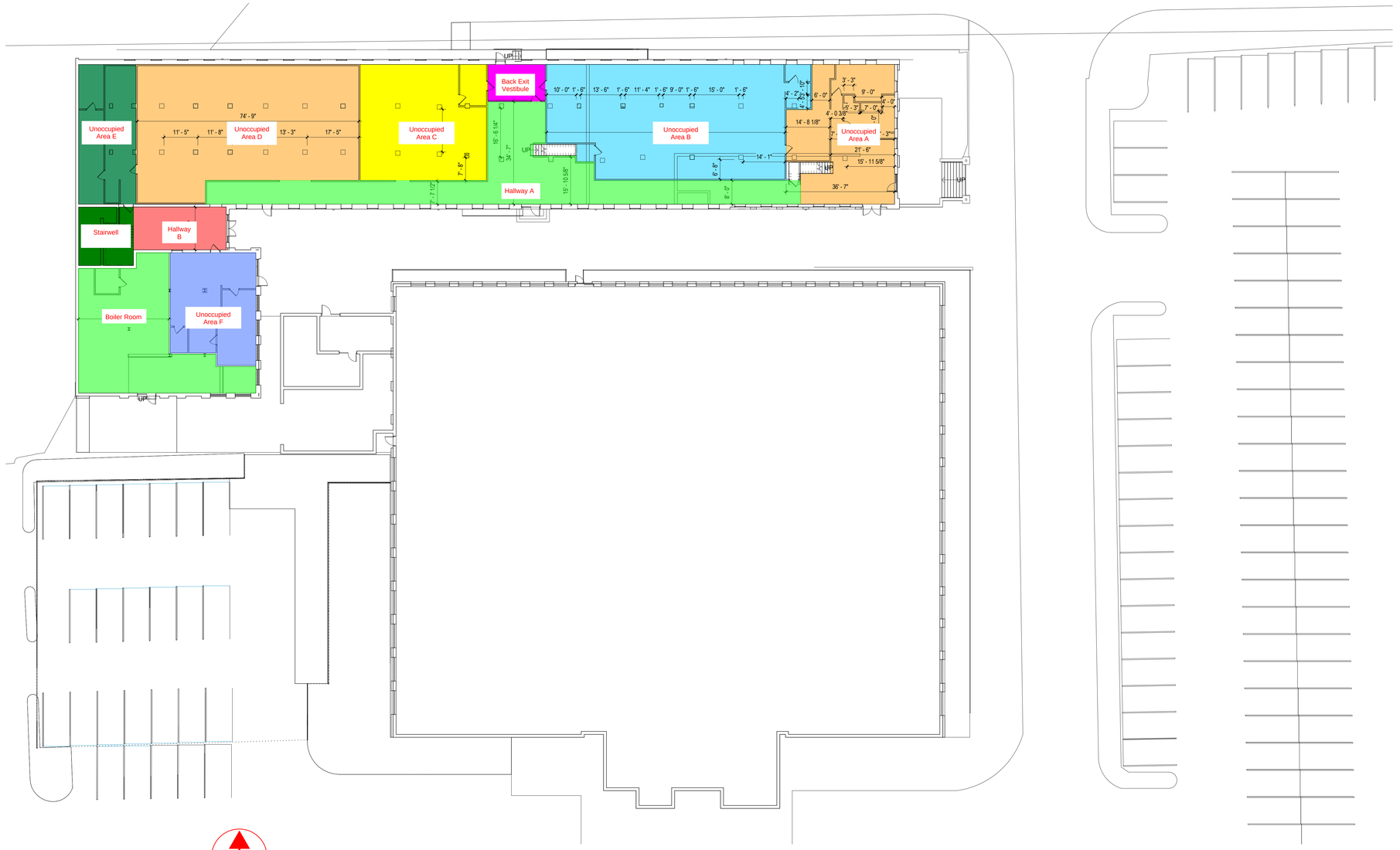
380 W SOUTH ST, MARTINSBURG, WV 25401

E1.1



1 / E1.2 E1.2 - Overall Existing Second Floor Plan
1/16" = 1'-0"

Plan North

2ND FLOOR 19387 SF

0' 8' 16' 32'

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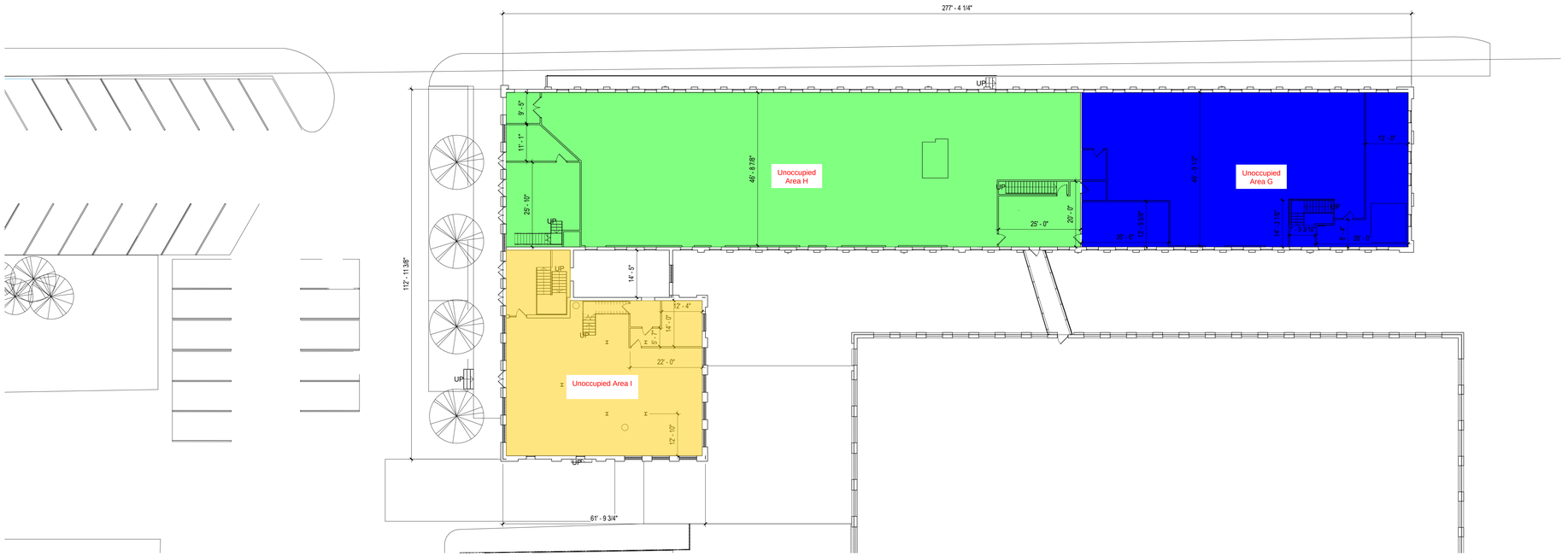
E1.2



1 E1.3 - Overall Existing Third Floor Plan
1/16" = 1'-0"

3RD FLOOR 17430 SF

Plan North

0' 8' 16' 32'

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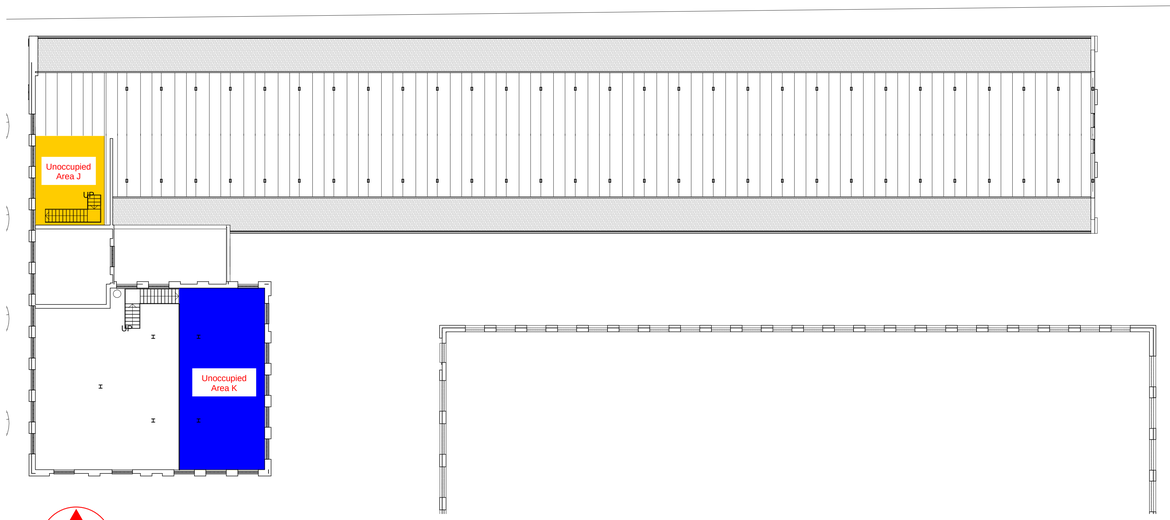
E1.3



1 E1.4 - Overall Existing Fourth Floor Plan
1/16" = 1'-0"

Plan North

MEZZANINE FLOOR 5033 SF

0' 8' 16' 32'

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E1.4

DAMAGE ASSESSMENT PHOTOGRAPHS

Bricks are missing in two locations in the west wall of the First Floor Mechanical Room. Missing bricks decrease the section properties of the wall, decreasing the strength of the member.

P1: Missing Bricks in Wall

P2: Missing Mortar in Wall

Mortar is loose and missing between the stone for the majority of the walls in the basement. Missing mortar decreases the strength of the wall.

The wooden floor above the Mechanical Room is water damaged and has deteriorated. The floor can no longer be relied on structurally.

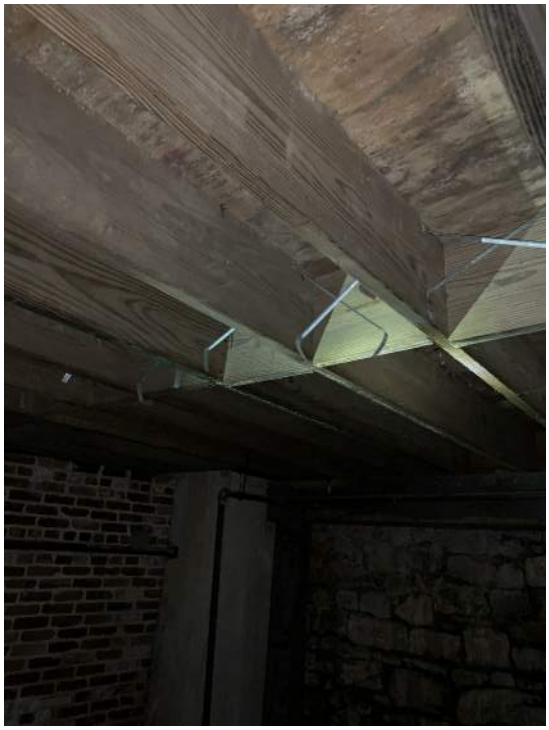
P3: Water Damage and Deteriorated Floor

P4: Moisture Build-Up on Wooden Frame

Moisture build up is present on the second floor framing above the Crawl Space area in several areas. Moisture can lead to water damage in wooden members, eventually leading to section loss. Section loss decreases the strength of the member. Further investigation is necessary to determine the source of the moisture.

The bridging for the joists supporting the second floor have become detached in the west portion of the Crawl Space. These members no longer provide support to the joists.

Moisture build up is present on the second floor framing in this area. Moisture can lead to water damage in wooden members, eventually leading to section loss. Section loss decreases the strength of the member. Further investigation is necessary to determine the source of the moisture.



P5: Detached Bridging

P6: Holes in Sub-Floor

Holes are present in the sub-floor of the Crawl Space. These holes are located in the west portion of the Crawl Space.

Several wooden members supporting the second floor in the Crawl Space are water damaged and showing signs of section loss. Section loss decreases the strength of the member.

Moisture build up is present on the second floor framing in this area. Moisture can lead to water damage in wooden members, eventually leading to section loss. Further investigation is necessary to determine the source of the moisture.

P7: Water Damaged Members

P8: Water Damaged Members

Several wooden members supporting the second floor in the Crawl Space are water damaged and showing signs of section loss. Section loss decreases the strength of the member.

Moisture build up is present on the second floor framing in this area. Moisture can lead to water damage in wooden members, eventually leading to section loss. Further investigation is necessary to determine the source of the moisture.

Wooden columns supporting the second floor in the east portion of the Crawl Space appear to be unstable.

Moisture build up is present on the second floor framing in this area. Moisture can lead to water damage in wooden members, eventually leading to section loss. Further investigation is necessary to determine the source of the moisture.

Several wooden members supporting the second floor in the Crawl Space are water damaged and showing signs of section loss. Section loss decreases the strength of the member.

P9: Unstable Wooden Support Columns and Water Damaged Members

P10: Unstable Wooden Support Columns

Wooden columns supporting the second floor in the east portion of the Crawl Space appear to be unstable.

A portion of the brick wall in the Boiler Room on the Second Floor has separated approximately 1" from the remainder of the wall. Further investigation is necessary to determine the source of the issue.

P11: Separation in Brick Wall

P12: Missing Bricks and Mortar in Brick Wall

Bricks are missing in the Boiler Room on both sides of the doorway to Hallway B. Missing bricks reduce the section properties of the wall, decreasing the strength.

Mortar is missing in the bottom of the brick wall to the right of the aforementioned doorway. Missing mortar decreases the strength of the wall.

Cracks are present in the Boiler Room, in the brick above the lintel at the doorway to Hallway B. Cracks in brick can allow for water infiltration, which can lead to erosion.

The aforementioned lintel is corroded. Corrosion in steel can lead to section loss which decreases the strength of the member.

P13: Cracks in Brick and Corroded Lintel

P14: Missing Bricks in Brick Wall

Bricks are missing at the bottom of the wall in the Boiler Room to the left of the doorway to Hallway B. Missing bricks reduce the section properties of the wall, decreasing the strength.

A section of the brick wall in the Northwest portion of the Boiler Room has been removed.

The stone foundations of the walls are exposed in this location.

P15: Removed Section of Brick Wall and Exposed Foundations

P16: Missing Bricks in Wall

Bricks are missing in the west wall of the area revealed from the cut out section of wall in the Boiler Room. Missing bricks reduce the section properties of the wall, decreasing the strength.

The masonry foundation is damaged in the Boiler Room at the bottom of the west wall, adjacent to the cut out section of wall. Damaged masonry reduces the section properties of the wall, decreasing the strength.

The masonry foundation is exposed in the southwest portion of the Boiler Room where the slab is recessed.

P17: Damaged Masonry and Exposed Foundation

P18: Exposed Masonry Foundation

The masonry foundation is exposed in the southwest portion of the Boiler Room where the slab is recessed.

The masonry foundation is exposed in the southwest portion of the Boiler Room where the slab is recessed.

Water is present to the right of the exterior entrance to the Boiler Room. Water presence can lead to spalling of concrete and masonry, as well as corrosion of steel.

Mortar is missing in the Boiler Room at the bottom of the brick wall to the right of the exterior entrance. Missing mortar decreases the strength of the wall.

P19: Exposed Foundation, Missing Mortar and Presence of Water

P20: Missing Mortar, Loose Brick and Crack in Slab

Bricks are displaced and mortar is missing in the Boiler Room in the bottom of the brick wall to the left of the exterior entrance. Displaced brick and missing mortar decreases the strength of the wall.

Cracks are present throughout the slab in the Boiler Room. Cracks in concrete make the slab susceptible to water infilation. Water infiltration in concrete can lead to corrosion of the rebar and eventual spalling.

Hairline cracks are present throughout the slab in the Boiler Room. Cracks in concrete make the slab susceptible to water infilation. Water infiltration in concrete can lead to corrosion of the rebar and eventual spalling.

P21: Typical Cracks in Boiler Room

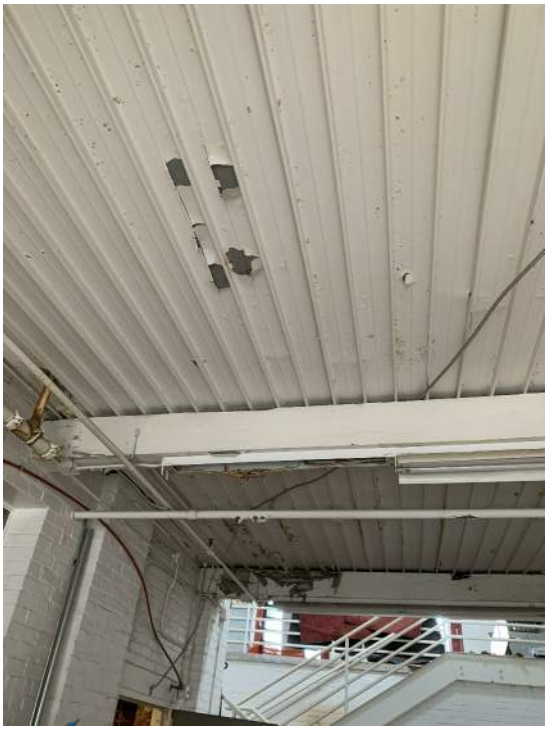
P22: Typical Damaged Grating in Boiler Room

The majority of the grating in the Boiler Room has been damaged. The grating can no longer be relied on as a structural component.

The coating on the underside of the third floor decking in Hallway B is peeling off in several places. Corrosion is also present along the underside of the decking. Missing coatings can make the decking susceptible to corrosion. Corrosion can lead to section loss, decreases the strength of the member.

The coatings on the wooden beams, supporting the third floor are peeling. Missing coatings can make the beam susceptible to water damage. Water damage can lead to section loss, decreasing the strength of the beam.

A section of the west wooden beam is missing in the top of the beam. The section is located at approximately mid span of the beam. Section loss decreases the strength of the beam.



P23: Peeling Coatings, Corrosion of Floor Decking and Section Loss of Wooden Beam

P24: Third Floor Decking Deflecting

The third floor decking, in the east span above Hallway B, is deflecting approximately 6 inches. It appears that an attempt was made to resolve the issue in this location.

The coating on the underside of the third floor decking in Hallway B is peeling off in several places. Corrosion is also present along the underside of the decking. Missing coatings can make the decking susceptible to corrosion. Corrosion can lead to section loss, decreases the strength of the member.

The third floor decking, in the east span above Hallway B, is deflecting approximately 6 inches. It appears that an attempt was made to resolve the issue in this location.

The two beams supporting the decking in this location have been displaced and no longer bear on the wall. These beams can no longer be relied on as structural members.

The coatings on the wooden beams, supporting the third floor are peeling. Missing coatings can make the beam susceptible to water damage. Water damage can lead to section loss, decreasing the strength of the beam.

P25: Decking Corroded and Deflecting, Peeling Coating, Displaced Beams and Previous Repairs

P26: Displaced Beam and Bearing Issue

Close up view of one of the displaced beams that no longer bears on the wall.

The wooden floor boards in Unoccupied Area F have been water damaged in several places. Water damage can lead to section loss, decreasing the strength of the member.

P27: Typical Water Damage in Floor Boards

The wooden floor boards in the Unoccupied Area F have been water damaged in several places. Water damage can lead to section loss, decreasing the strength of the member.

P28: Typical Water Damage in Floor Boards

The coating on the underside of the third floor wooden decking is loose or missing in many locations in Unoccupied Area D. Missing coatings can make the beam susceptible to water damage. Water damage can lead to section loss, decreasing the strength of the member.

P29: Typical Missing Coating on Underside of Third Floor Decking

The northwest column in Unoccupied Area D is crooked and is not centered on the baseplate.

P30: Column Not Centered on Baseplate

A section of the slab in the northeast portion of Unoccupied Area D has been cut out. Missing portions of the slab decrease the strength of the concrete.

P31: Cut Out Section of Slab

P32: Typical Missing Coating on Underside of Third Floor Decking

The coating on the underside of the third floor wooden decking is loose or missing in many locations in Unoccupied Area B. Missing coatings can make the wood susceptible to water damage. Water damage can lead to section loss, decreasing the strength of the member.

The south girder in Unoccupied Area B, as well as the beams and decking in this area, are water damaged. Water damage can lead to section loss, decreasing the strength of the members.

P33: Water Damaged Decking and Beams

P34: Water Damaged Decking and Beams

The third floor wooden decking and beams in Unoccupied Area B to the left of the doorway to Hallway A are water damaged and showing signs of section loss. Water damage can lead to continued section loss. Section loss decreasing the strength of the members.

The third floor wooden decking and beams in Hallway A, to the right of the Unoccupied Area B doorway, are water damaged and showing signs of section loss. Water damage can lead to continued section loss. Section loss decreasing the strength of the members.

P35: Water Damaged Decking and Beams

P36: Typical Water Damage and Missing Coating on Underside of Third Floor Decking

The coating on the underside of the third floor wooden decking is loose or missing in many locations in Hallway A and Unoccupied Area A. Missing coatings can make the decking susceptible to water damage.

Several of the beams supporting the third floor in Hallway A and Unoccupied Area A are water damaged. Water damage can lead to section loss, decreasing the strength of the members.

A hole is located in the second floor, in the east portion of Hallway A. Holes decrease the section properties of the wood, decreasing the strength of the members.

P37: Hole in Second Floor

P38: Typical Damaged Architectural Paneling

Architectural components has been damaged throughout the building. Further investigation is required to determine if there are structural issues in these locations.

The coating on the underside of the roof decking is loose or missing in many locations. Missing coatings can make the decking susceptible to water damage.

The roof decking is water damaged in many locations. Water damage can lead to section loss, decreasing the strength of the members.

The roof has been replaced in many locations.

P39: Typical Replaced Roof and Missing Coating on Underside of Roof Decking.

P40: Typical Replaced Bridging and Missing Coating on Underside of Roof Decking.

The coating on the underside of the roof decking is loose or missing in many locations. Missing coatings can make the decking susceptible to water damage.

The roof decking is water damaged in many locations. Water damage can lead to section loss, decreasing the strength of the members.

Several bridging members for the roof truss have been replaced.

The coating on the underside of the roof decking is loose or missing in many locations. Missing coatings can make the decking susceptible to water damage.

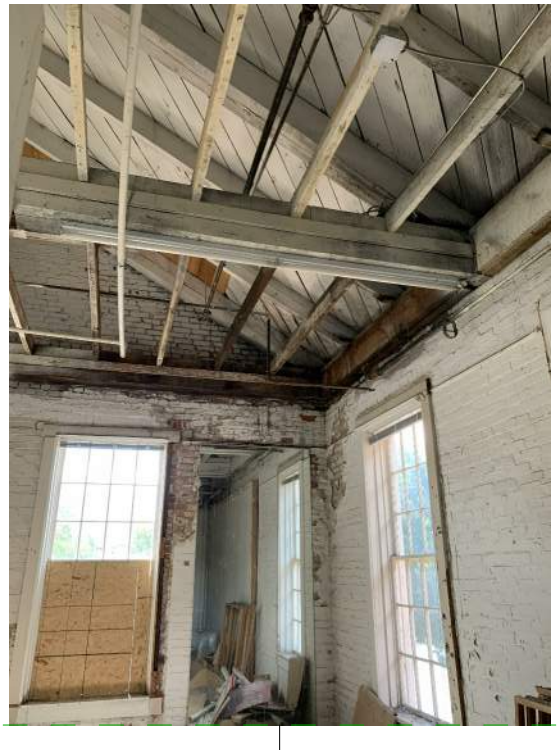
The roof decking is water damaged in many locations. Water damage can lead to section loss, decreasing the strength of the members.

The roof has been replaced in many locations.

P41: Typical Replaced Roof and Missing Coating on Underside of Roof Decking.

The roof members in the southeast portion of Unoccupied Area G are water damaged. Water damage can lead to section loss, decreasing the strength of the members.

The roof has been replaced in many locations.

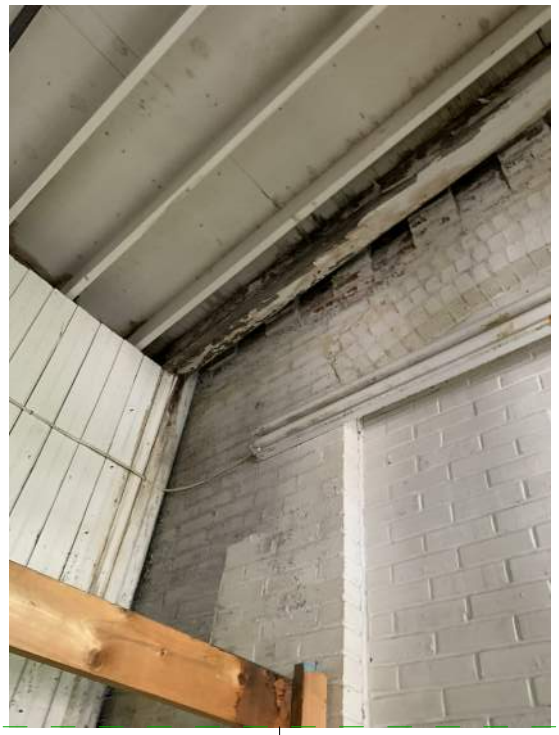


P42: Typical Replaced Roof and Water Damaged Roof Members

The roof decking and framing in the south portion of Unoccupied Area J is water damaged. Water damage can lead to section loss, decreasing the strength of the members.

The coating on the underside of the roof decking is loose or missing in many locations. Missing coatings can make the decking susceptible to water damage.

The roof has been replaced in many locations.



P43: Typical Replaced Roof, Missing Coating and Water Damaged Roof Decking.

P44: Typical Replaced Roof, Water Damage and Missing Coating

The coating on the underside of the roof decking is loose or missing in many locations. Missing coatings can make the decking susceptible to water damage.

The roof decking in this area is water damaged. Water damage can lead to section loss, decreasing the strength of the members.

The roof has been replaced in many locations.

The wooden beam along the south wall of the Stairwell has section loss. Section loss in beams decrease the strength of the beam.

P45: Damaged Wooden Beam

P46: Missing Coating on Wall and Beams

The coatings on the east brick wall and the wooden beams in the Stairwell are missing in several locations. Missing coatings can make the wood and brick susceptible to water damage.

The coating on the south steel roof beam in Unoccupied Area I is loose and missing in several locations. The steel beam is corroded. Missing coatings can make the steel beam susceptible to further corrosion, which can lead to section loss. Section loss in steel decreases the strength of the member.

P47: Corrosion and Missing Coating on Beam

P48: Missing Coating on Decking

The coating on the underside of the metal roof decking in Unoccupied Area I is loose and missing in several locations. Missing coatings can make the steel susceptible to corrosion, which can lead to section loss. Section loss in steel decreases the strength of the member.

The steel nosing is missing on the exterior concrete stairs, leading to Hallway A.

Concrete is spalling in this location. Spalling decreases the strength of the concrete and can lead to water infiltration.

P49: Missing Steel Stair Nosing and Spalling

P50: Leaning Retaining Wall

The south retaining wall at the southeast entrance to Unoccupied Area A is leaning and has separated from the remainder of the wall. Further investigation is necessary to determine the cause of the issue.

A concrete window sill beneath one of the exterior windows is damaged. The window sill of concern is at the south-most window on the west side of the building. The window sill appears to have been previously repaired and has several cracks that run through it.

P51: Damaged Concrete Window Sill

P52: Holes in Exterior Brick Wall

Two holes are located in the west exterior wall at the southwest corner of the building. Holes in brick decrease the section properties of the wall, decreasing the strength of the brick.

CONCLUSION AND RECOMMENDATIONS

Conclusion:

Overall the building is in poor condition; the majority of the structure is unreliable and will need extensive repair. The exterior masonry walls appear to be in good condition. However, renovations are required to restore the majority of the interior framing and unforeseen damages could occur as the architectural components of the building are removed. Please see the following for KCI's recommendations:

- *Brick and Stone Masonry Walls:*

  For areas where bricks are missing in the walls or holes are present, clear the void of debris, position new bricks in the wall and grout the void areas around the brick. Remove damaged bricks, clear the void area of debris, position new bricks in the wall and grout the void areas around the brick. Reposition all loose and displaced bricks in the wall, clear the void areas of debris and grout the void areas around the brick. For areas where mortar is loose or missing, remove loose mortar, clear the area of debris and repoint. Remove all loose protective coatings on the brick walls, clean the wall and replace coatings in-kind.

  Where the exterior retaining wall and the brick wall in the Boiler Room are separating from the remainder of the walls, further investigation is required.

- *Concrete Structures:*

  For areas where the concrete slab has been cut out or has a hole in it, clear the area of debris, replace the concrete in-kind and dowel into the existing concrete. Where cracks are present in the slabs, clear the crack of debris and fill void with grout. Where spalling occurs, clear the area of debris and fill the void with grout. Replace the damaged concrete window sill in-kind.

- *Steel Members and Metal Decking:*

  Where steel members are corroded, clear the steel of corrosion, clean the steel and recoat. Where protective coatings are missing or loose, clear the area of debris, clean the steel and apply a new protective coating.

  Above Hallway B, where the decking is deflecting, replace all defective decking in the area in-kind. In the Boiler Room replace all damaged steel grating in-kind.

- *Wooden Framing:*

  For all areas where the wooden framing has been water damaged, is showing signs of section loss or no longer bears on the supporting wall, replace the members in-kind. Where protective coatings are missing or loose, clear the area of debris, clean the wood and apply a new protective coating. Reattach the detached bridging to their respective members. In Unoccupied Area D, reposition the crooked column on its baseplate. Where the wooden support columns in the Crawl Space are unstable, remove the members, provide a level base for the columns to bear and re-install.

- *Miscellaneous:*

  Install new steel stair nosings on the exterior concrete stairs, where missing. The pipe along the south wall of the Boiler Room is leaking and should be repaired. Further investigation is required to determine the source of water in the Crawl Space. Further investigation is necessary to determine if additional damages are present behind architectural components.

These professional services and conclusions have been provided in accordance with all applicable structural engineering principles, practices, and codes. The possibility always exists that the conditions at the site may vary from these design values and assumptions. KCI cannot be held responsible for unforeseen or unknown conditions.

It should be noted that the information included in this report is an assessment of conditions only and does not constitute an analysis of existing or proposed structures. Additionally, the recommendations included herein are not to be construed as structural certification or construction documents.

Please contact KCI with any questions or for additional information. We look forward to being of further service to you in this as well as any future matters.

Very truly yours,

KCI TECHNOLOGIES, INC.

Prepared by:

Connor Kroneberger, E.I.T.
Engineer-in-Training
KCI Building Structures

Reviewed by:

Allan Mitchell, P.E.
Project Engineer
KCI Building Structures

COST ESTIMATE

Cost Estimate Report

Date: 07/05/2019

Berkeley County Judicial Center

380 West South Street

Martinsburg, West Virginia, 25401

Crawford Building

Year 2019 Quarter 2

Unit Summary Report

Prepared By: Susan Wilson KCI Technologies

Division	Description		Total
Division 02	Existing Conditions		**$511.25**
Division 03	Concrete		**$4,329.18**
Division 04	Masonry		**$10,822.25**
Division 05	Metals		**$10,089.45**
Division 06	Wood, Plastics, and Composites		**$51,798.35**
Division 09	Finishes		**$19,636.50**
Division 32	Exterior Improvements		**$35.35**
Subtotal			**$97,222.33**
General Contractor's Markup on Subs		50.00%	$0.00
Subtotal			**$97,222.33**
General Conditions		25.00%	$24,305.58
Subtotal			**$121,527.91**
General Contractor's Overhead and Profit		20.00%	$24,305.58
Grand Total			**$145,833.49**

Cost Estimate Report

Berkeley County Judicial Center

Martinsburg, West Virginia, 25401

380 West South Street

Date: 07/05/2019

Crawford Building

Year 2019 Quarter 2

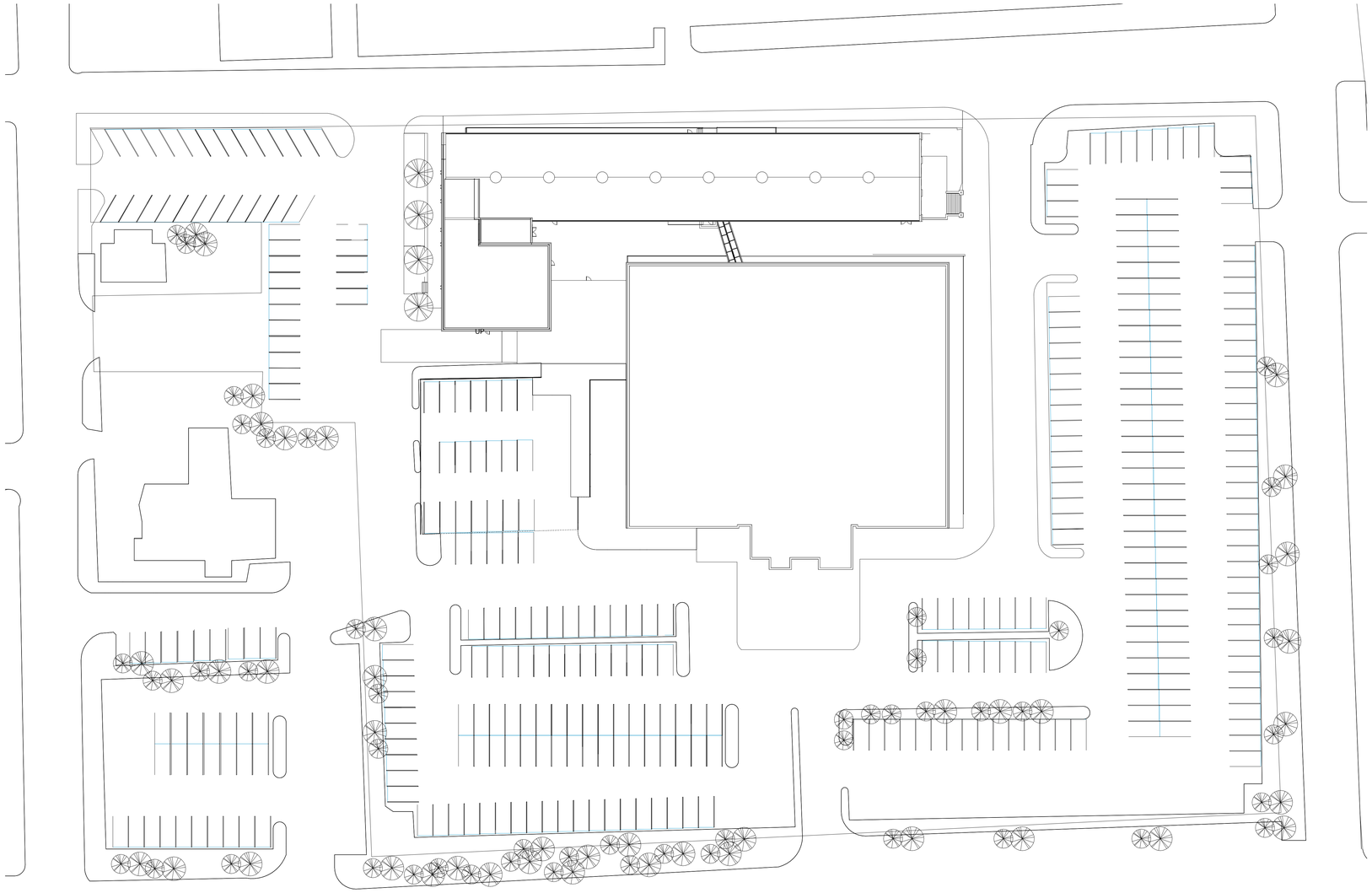
Unit Detail Report

Prepared By: Susan Wilson KCI Technologies

LineNumber		Description	Quantity	Unit	Total Incl. O&P	Ext. Total Incl. O&P
Division 02	**Existing Conditions**					
024113301200		Minor site demolition, masonry walls, brick, solid, excludes hauling	125.00	C.F.	$4.09	$511.25
Division 02	**Existing Conditions Subtotal**					**$511.25**
Division 03	**Concrete**					
031113450020		C.I.P. concrete forms, footing, continuous wall, plywood, 1 use, includes erecting, bracing, stripping and cleaning	125.00	SFCA	$10.70	$1,337.50
031505850110		Stair tread nosing insert, cast aluminum, abrasive surface, 3" wide x 3' long, pre-drilled, includes concrete screws	5.00	Ea.	$66.13	$330.65
032105101200		High chairs, for reinforcing steel, individual (HC), plain steel, 3" high, includes material only	15.00	C	$71.90	$1,078.50
032111500700		Reinforcing steel, cut, bent and delivered, A615, grade 60, material only	0.20	Ton	$1,146.20	$229.24
033113300100		Concrete, mixed on-site in volumetric truck, 3000 psi, 1 CY mixed and discharged, includes local aggregate, sand, Portland cement (Type I) and water, excludes all additives and treatments	1.50	C.Y.	$260.54	$390.81
033113300130		Concrete, mixed on-site in volumetric truck, 3000 psi, 4 CY mixed and discharged, includes local aggregate, sand, Portland cement (Type I) and water, excludes all additives and treatments	4.00	C.Y.	$150.14	$600.56
034843900600		Precast window sill, concrete, 4" tapers to 3", 9" wide	6.00	L.F.	$34.67	$208.02
038216100500		Concrete impact drilling, for anchors, up to 4" D, 3/4" dia, in concrete or brick walls and floors, includes bit cost, layout and set up time, excl anchor	15.00	Ea.	$10.26	$153.90
Division 03	**Concrete Subtotal**					**$4,329.18**
Division 04	**Masonry**					
040120200300		Pointing masonry, tuck, cut and re-point, hard mortar, running bond	1,100.00	S.F.	$5.86	$6,446.00

LineNumber		Description	Quantity	Unit	Total Incl. O&P	Ext. Total Incl. O&P
042710301000		Brick walls, alternate method of estimating by square foot, common brick, 20.25 brick per square foot, 12" thick wall, incl mortar, 3% brick waste and 25% mortar waste, excl scaffolding, horizontal reinforcing, vertical reinforcing and grout	125.00	S.F.	$35.01	$4,376.25
Division 04	**Masonry Subtotal**					**$10,822.25**
Division 05	**Metals**					
050110516180		Metal cleaning, steel surface treatment, 500 - 900 SF/Day, wire brush, power tool (SSPC-SP3)	1,750.00	S.F.	$0.81	$1,417.50
050505100500		Selective metals demolition, steel roof decking, uncovered, bare, excl shoring, bracing, cutting, hauling, dumping	600.00	S.F.	$0.43	$258.00
050519208300		Wedge anchor, carbon steel, 1/2" dia x 7" L, in concrete, brick or stone, excl layout & drilling	15.00	Ea.	$6.43	$96.45
053113505100		Metal floor decking, steel, non-cellular, composite, galvanized, 1-1/2" D, 16 gauge	600.00	S.F.	$5.80	$3,480.00
055313700300		Floor grating, steel, platforms, rectangular, to 12' high, field fabricated from panels	1,125.00	Lb.	$4.30	$4,837.50
Division 05	**Metals Subtotal**					**$10,089.45**
Division 06	**Wood, Plastics, and Composites**					
060505102958		Selective demolition, wood framing, beams, 2" x 6"	75.00	L.F.	$0.59	$44.25
060505102965		Selective demolition, wood framing, beams, 2" x 10"	420.00	L.F.	$0.98	$411.60
060505102975		Selective demolition, wood framing, beams, 4" x 8"	50.00	L.F.	$2.41	$120.50
060505102980		Selective demolition, wood framing, beams, 4" x 10"	125.00	L.F.	$3.02	$377.50
060505106158		Selective demolition, wood framing, subfloor/ roof deck, boards, from floors	6,000.00	S.F.	$0.29	$1,740.00
061110101000		Beam and girder framing, single, 2" x 6"	100.00	L.F.	$1.70	$170.00
061110101040		Beam and girder framing, single, 2" x 10"	425.00	L.F.	$2.44	$1,037.00
061110101080		Beam and girder framing, single, 2" x 14"	75.00	L.F.	$3.35	$251.25
061110101220		Beam and girder framing, single, 4" x 12"	125.00	L.F.	$6.77	$846.25
061516100800		Wood roof decking, douglas fir, 4" thick	6,000.00	S.F.	$7.80	$46,800.00
Division 06	**Wood, Plastics, and Composites Subtotal**					**$51,798.35**
Division 09	**Finishes**					
099113620310		Paints & coatings, siding, misc., rough wood(shingles, shakes, or rough sawn siding), primer, brushwork	25,000.00	S.F.	$0.73	$18,250.00
099713236100		Paints and protective coatings, cold galvanizing in field, brush	1,750.00	S.F.	$0.59	$1,032.50
099713236100		Paints and protective coatings, cold galvanizing in field, brush	600.00	S.F.	$0.59	$354.00

LineNumber	Description	Quantity	Unit	Total Incl. O&P	Ext. Total Incl. O&P
Division 09 Finishes Subtotal					**$19,636.50**
Division 32 Exterior Improvements					
321123230370	Base course drainage layers, aggregate base course for roadways and large paved areas, bank run gravel, spread and compacted, 6" deep	7.00	S.Y.	$5.05	$35.35
Division 32 Exterior Improvements Subtotal					**$35.35**
Subtotal					**$97,222.33**
General Contractor's Markup on Subs				**50.00%**	**$0.00**
Subtotal					**$97,222.33**
General Conditions				**25.00%**	**$24,305.58**
Subtotal					**$121,527.91**
General Contractor's Overhead and Profit				**20.00%**	**$24,305.58**
Grand Total					**$145,833.49**



1 E1.0 - Overall Existing Site Plan
1" = 30'-0"

0' 15' 30' 60'

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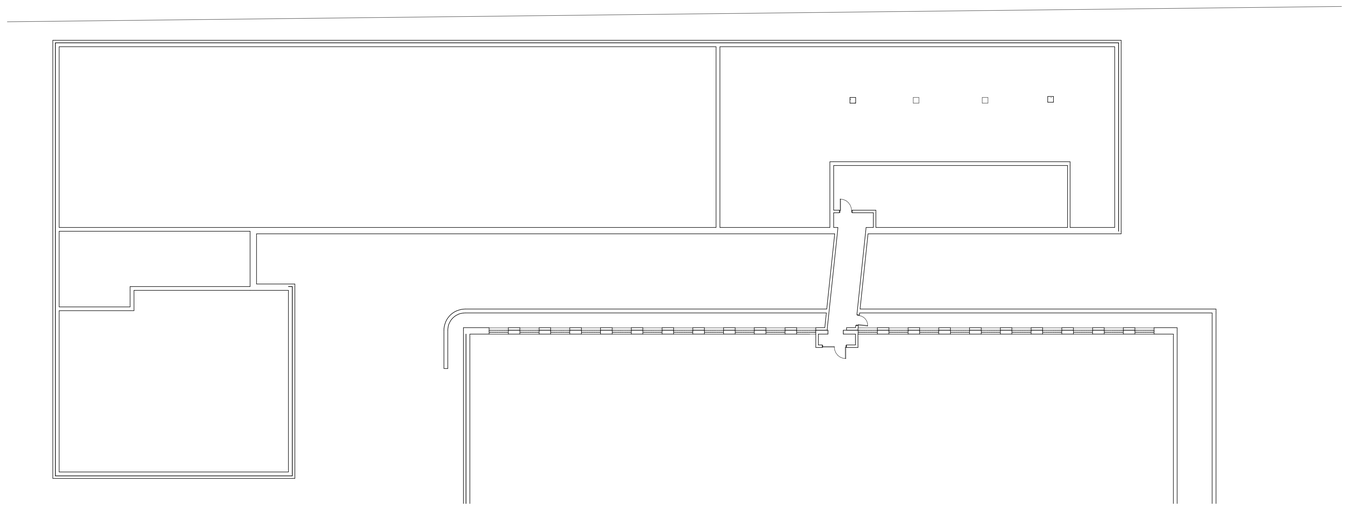
E1.0



1 E1.1 Overall Existing First Floor Plan
E1.1 1/16" = 1'-0"

1ST FLOOR 4105 SF

0' 8' 16' 32'

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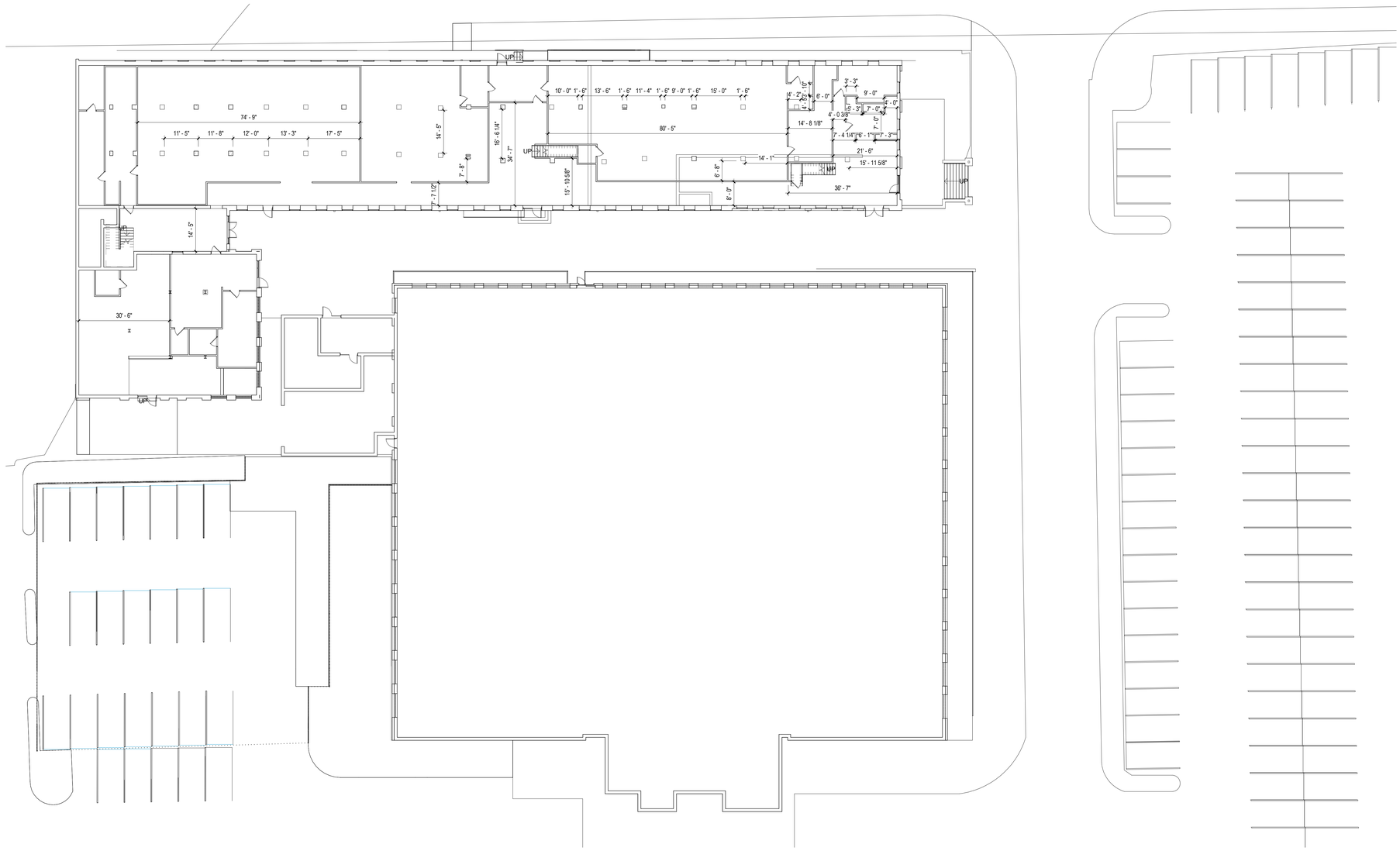
E1.1



1 E1.2 - Overall Existing Second Floor Plan
E1.2 1/16" = 1'-0"

2ND FLOOR 19387 SF

0' 8' 16' 32'

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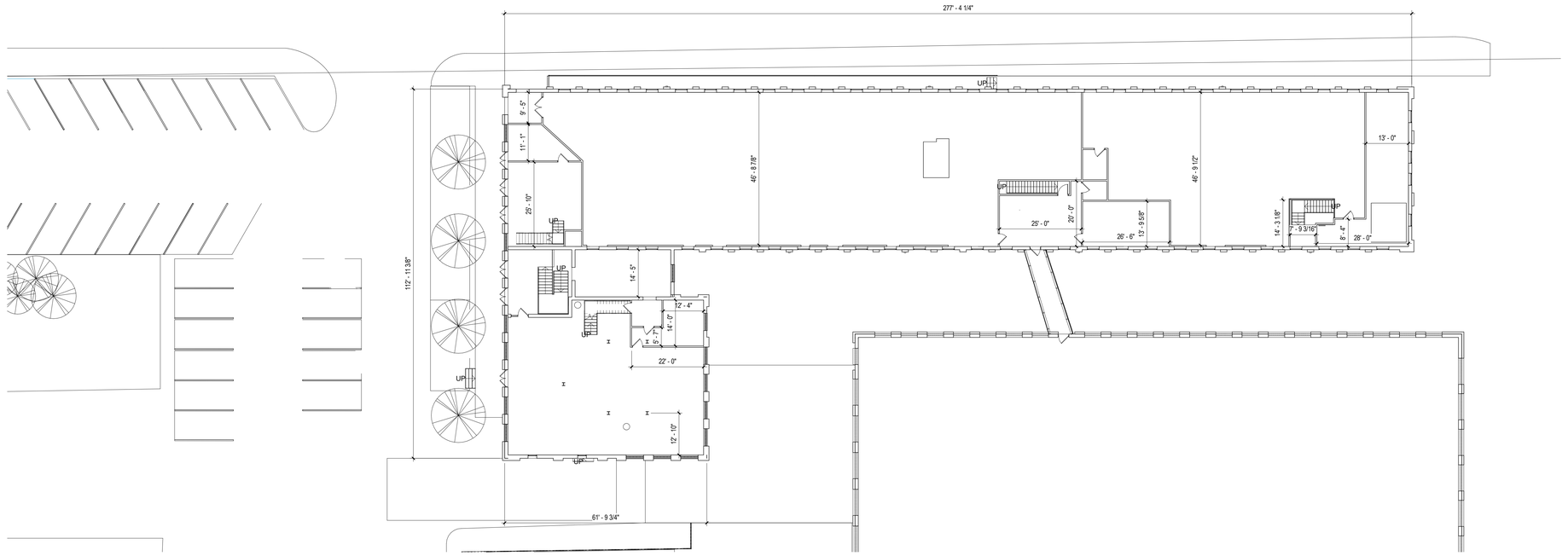
E1.2



1 E1.3 - Overall Existing Third Floor Plan
1/16" = 1'-0"

3RD FLOOR 17430 SF

0' 8' 16' 32'

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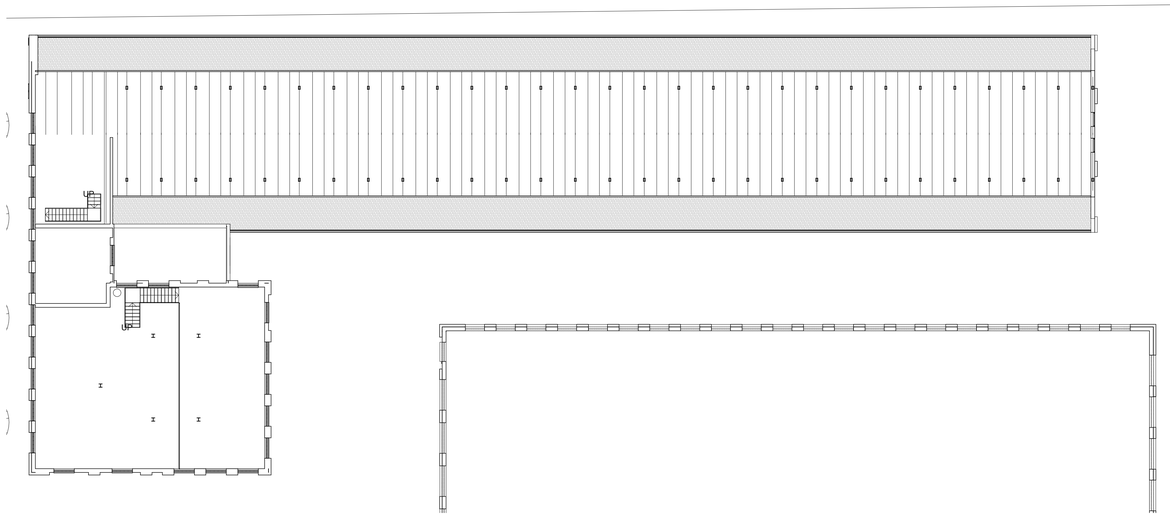
E1.3



1 E1.4 - Overall Existing Fourth Floor Plan
1/16" = 1'-0"

MEZZANINE FLOOR 5033 SF

0' 8' 16' 32'

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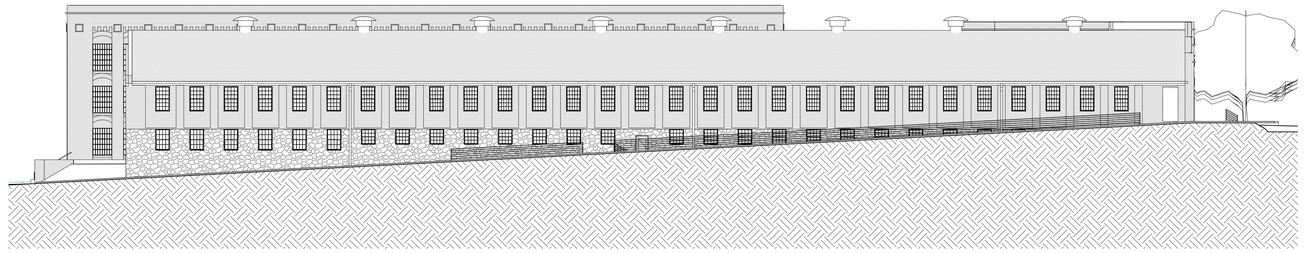
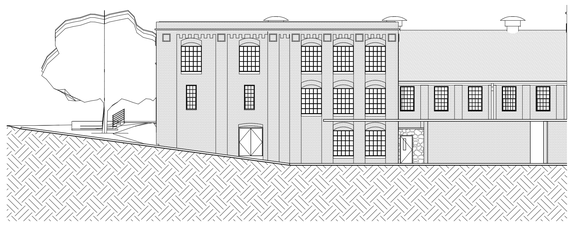
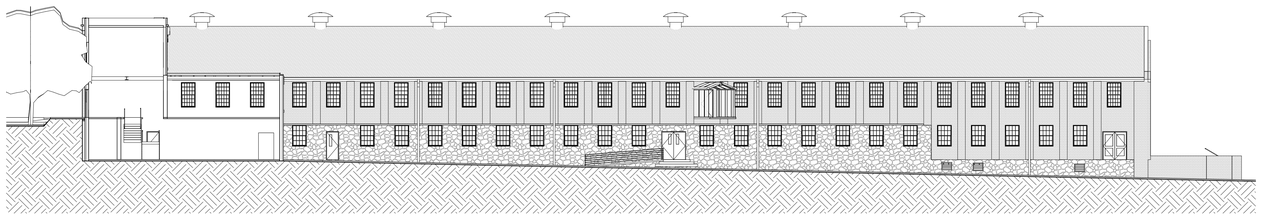
E1.4



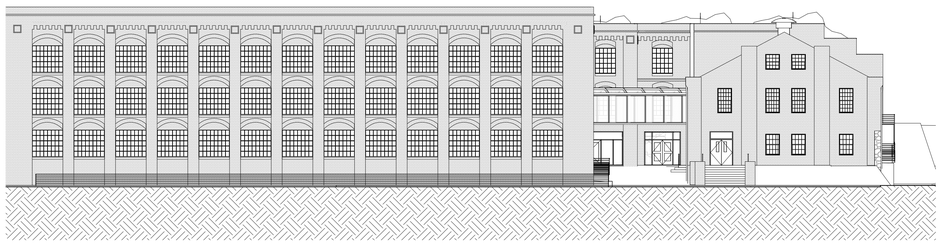
1 E2.1 AE01 Overall Existing Exterior Elevation - North
1/16" = 1'-0"



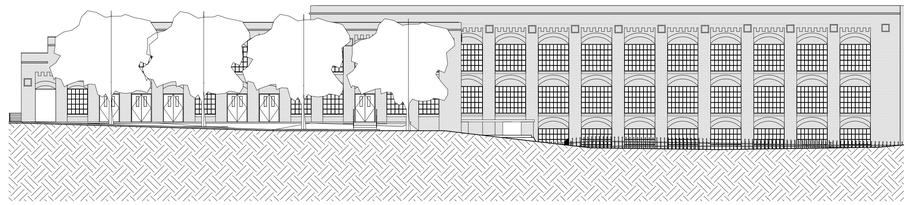
5 E2.1 AE05 Overall Exterior Elevation - Existing South Facade
1/16" = 1'-0"



3 E2.1 AE03 Overall Existing Exterior Elevation - South
1/16" = 1'-0"



4 E2.1 AE04 Overall Existing Exterior Elevation - West
1/16" = 1'-0"



2 E2.1 AE02 Overall Existing Exterior Elevation - East
1/16" = 1'-0"

CR
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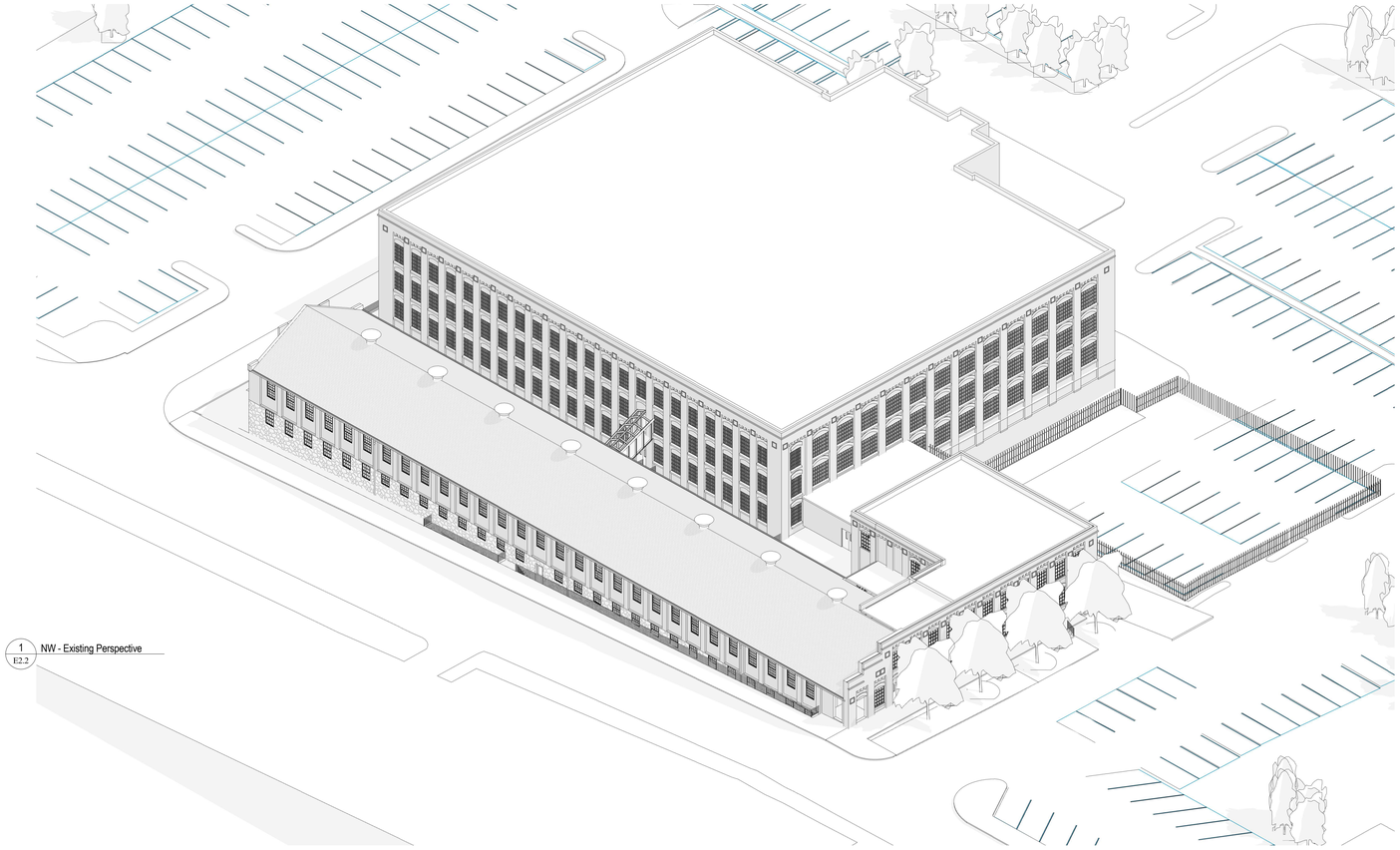
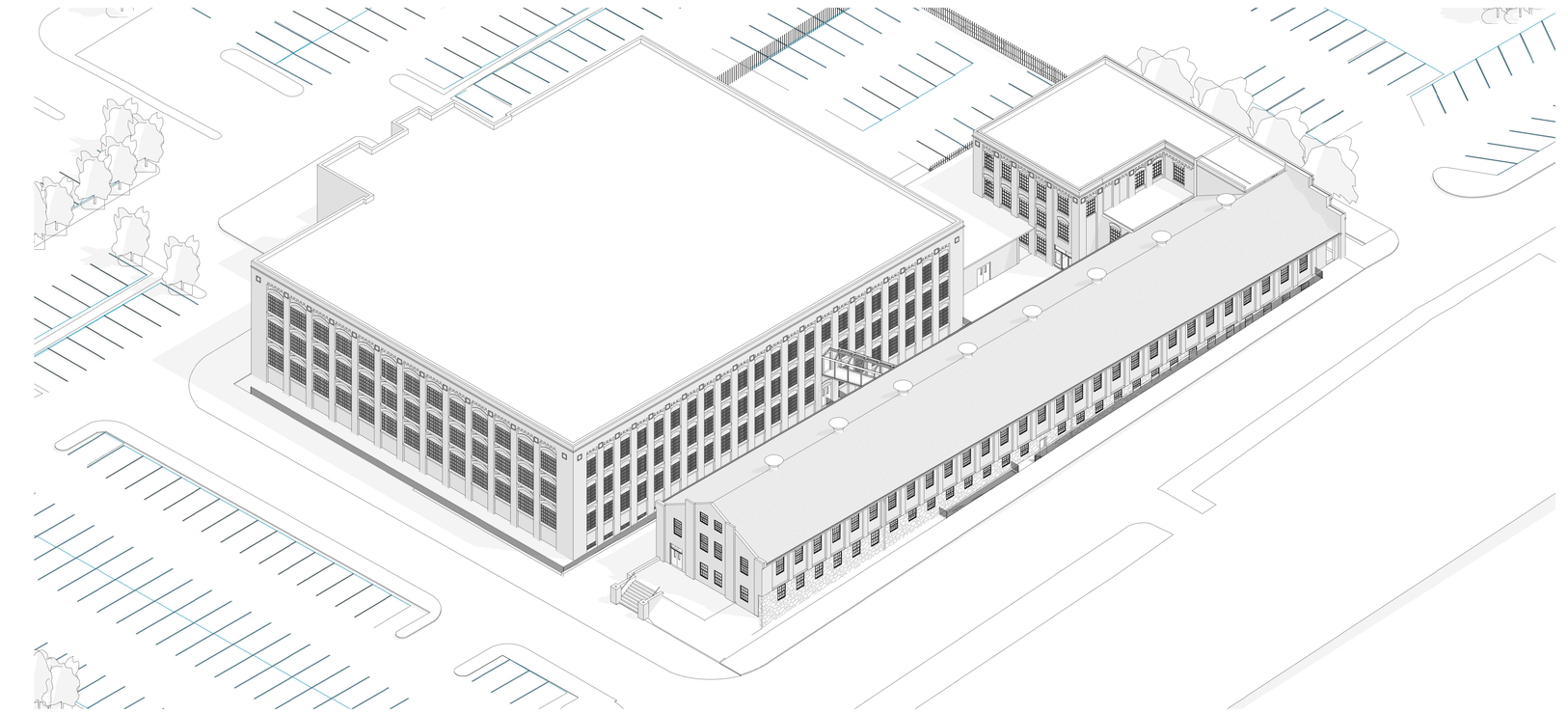
E2.1



1 E2.2 NW - Existing Perspective

3 E2.2 Existing Front Entrance



2 E2.2 NE - Existing Perspective

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E2.2

September 22, 2011

Berkeley County Council
Mr. Alan J. Davis, Deputy County Administrator
400 W. Stephen Street; Suite 201
Martinsburg, WV 25401

Ref: Asbestos Inspection: Crawford Building in Martinsburg, WV

Dear Mr. Davis:

On September 15, 2011, at your request, Mr. Ryan Rose of WECI an EPA accredited and WV licensed asbestos inspector conducted an asbestos inspection of the roofing material according to NESHAP guidelines at the aforementioned address. The inspection was requested due to anticipated renovation activities.

Materials tested included shingles with backing and tar flashing. Samples were properly labeled and sent to a certified lab for analysis. The samples were tested using PLM method.

None of the material tested positive for asbestos

Attached are the sample log, lab analysis, and the chain of custody.

Sincerely,

Ryan Rose

Ryan Rose
Project Manager
WV Asbestos Inspector License # AI006296

104 W. Cork St ♦ Winchester, VA 22601
(540) 877 9420 ♦ (540) 877 9495 fax
www.weci.biz ♦ info@weci.biz

Winchester Environmental Consultants, Inc.

104 W. Cork Street, Winchester, VA 22601
540-877-9420 Business 540-877-9495 Fax
info@weci.biz e-mail

SAMPLE LOG

Ref: Crawford Building, Martinsburg, WV
Sample Date: September 15, 2011

Sample ID	Location Description	Asbestos Results Positive/Negative	Friable/ Non Friable
MM-1	Green/Black shingle over entire roof	Negative	NA
MM-2	Black tar flashing	Negative	NA
MM-2	Black tar flashing with styrofoam	Negative	NA

Positive asbestos material is defined by the CVES method when there is 1% or greater volume of asbestos, by weight; in the sample. Prior to any renovation or demolition occurring at the site, which would disturb any positively identified material, abatement should occur utilizing a licensed abatement contractor. Upon removal of the material, a manifest of disposal should be provided in the final report.

Under state and federal regulations, you are not required to remove the positive material unless it has the potential to be disturbed and subsequently pose potential health problems or prior to renovation or demolition activities in the areas with the asbestos materials.

A total of 3-lab analyses were conducted on the suspected material samples. The lab reports and chain of custody are attached.

Please Reply To:

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

FACSIMILE TELECOPY TRANSMISSION

To: Ryan Rose
Winchester Environmental Consultants, Inc.
Fax #:

Email: labresults@weci.biz

From: C. David Mintz
AmeriSci Job #: 111091513
Subject: PLM 48 hour Results
Client Project: Crawford Building; Stopler St

Date: Friday, September 16, 2011
Time: 16:46:36
Comments:

Number of Pages: 3
(including cover sheet)

CONFIDENTIALITY NOTICE: Unless otherwise indicated, the information contained in this communication is confidential information intended for use of the individual named above. If the reader of this communication is not the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is prohibited. If you have received this communication in error, please immediately notify the sender by telephone and return the original message to the above address via the US Postal Service at our expense. Preliminary data reported here will be verified before final report is issued. Samples are disposed of in 60 days or unless otherwise instructed by the protocol or special instructions in writing. Thank you.

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

PLM Bulk Asbestos Report

Winchester Environmental Consultants,
Attn: Ryan Rose
104 West Cork Street

Winchester, VA 22601

Date Received 09/16/11
Date Examined 09/16/11

AmeriSci Job # 111091513
P.O. #
Page 1 **of** 1

RE: Crawford Building; Stopler St

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-1	111091513-01	*No*	NAD (by CVES) by C. David Mintz on 09/16/11
Location: Roof Entire; Black/Green Shingles			
Analyst Description: Green/Black, Heterogeneous, Fibrous, Shingle **Asbestos Types:** **Other Material:** Fibrous glass 4 %, Non-fibrous 96 %			
MM-2	111091513-02.1	*No*	NAD (by CVES) by C. David Mintz on 09/16/11
Location: Flashing Throughout Roof; Black Tar Flashing			
Analyst Description: Black, Homogeneous, Non-Fibrous, Tar Like Material **Asbestos Types:** **Other Material:** Wollastonite 1 %, Non-fibrous 99 %			
MM-2	111091513-02.2	*No*	NAD (by CVES) by C. David Mintz on 09/16/11
Location: Flashing Throughout Roof; Black Tar Flashing			
Analyst Description: Off White, Homogeneous, Non-Fibrous, Styrofoam **Asbestos Types:** **Other Material:** Non-fibrous 100 %			

Reporting Notes:
Analyzed by: C. David Mintz C David Mintz Date 9/16/11
*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/M4-82-020 per 40 CFR 763 (NVLAP Lab Code 101904-0) and ELAP PLM Analysis Protocol 198.1 for New York friable samples (198.6 for NOB samples)(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:_____

Relinquished By: Ryan Ron Date/Time: 9/15/2011

Received By: _____ Date/Time: _____

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

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BULK CHAIN OF CUSTODY

AMERISCI RICHMOND
13635 GENITO ROAD
MIDLOTHIAN, VA 23112
TOLL FREE: (800) 476-5227
PHONE: (804) 763-1200
FAX: (804) 763-1800

Company: Winchester Environmental Consultants

Street Address: 104 West Cork St.

City: Winchester State: VA Zip: 22601

Phone: 540-877-9420 Fax: 540-877-9495

Cell: Fax:

E-mail labresults@weci.biz Verbal Results: Y / N

Results to: WECI

Special Instructions or Comments:

Project: Crawford Building

Proj Mgr: Ryan Ron

Proj Address: Stephen St.

AMERISCI #: 11109151 3

Proj #:

Proj State: VA

Analysis: ✓ PLM; __ Positive Stop; __ TEM; __ NY ELAP PLM/TEM w/ NOB Prep.

ASTM Dust __ (Microvac) __ (Wipe) __ Qualitative; __ Other (describe in comments)

Turnaround Time: 2 day

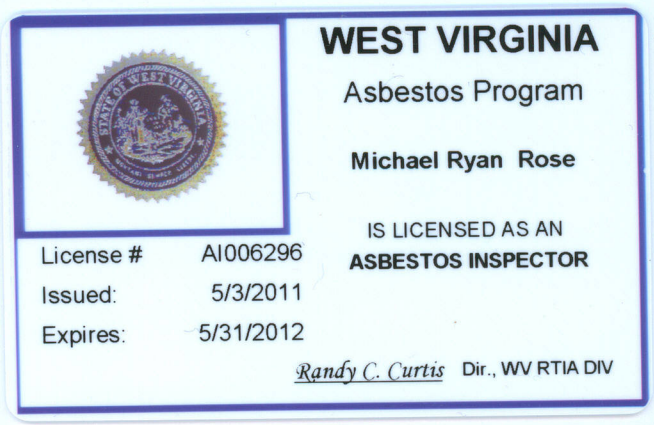
Material Type: ✓ Bulk __ Dust __ Water

Sampled By: Ryan Ron

Date Sampled: 9/15/2011

Lab ID	Field ID	Location	Sample Description (dust area)	Homogenous Area
	MM-1	Roof Entire	black/green shingles	1
	MM-2	Flashing throughout roof	black tar flashing	2

RECEIVED
SEP 16 2011
By JL



WEST VIRGINIA

Asbestos Program

Michael Ryan Rose

IS LICENSED AS AN

ASBESTOS INSPECTOR

License # AI006296

Issued: 5/3/2011

Expires: 5/31/2012

Randy C. Curtis Dir., WV RTIA DIV

Indoor Air Quality Testing Executive Summary

September 21, 2011

Berkeley County Council
Mr. Alan J. Davis, Deputy County Administrator
400 W. Stephen Street; Suite 201
Martinsburg, WV 25401

Ref: IAQ (Indoor Air Quality) Mold Sampling
Crawford Building

Dear Mr. Davis:

On September 15, 2011 as per your request, Mr. James Sigurdson and Mr. Ryan Rose of Winchester Environmental Consultants (WECI) conducted IAQ mold sampling throughout the aforementioned property. This testing was conducted due to numerous water intrusion issues and visible molds in various areas.

5 Spore trap samples were taken using an allegro rotary vane pump calibrated with a secondary standard rotameter, which was last calibrated in December of 2010, using primary standard dry cal Bios Defender. There were 3 tape lift samples collected using a manufactured tape slide that comes pre prepped by the manufacturer.

WECI's testing found that there were very high levels of airborne mold spores and wet drywall inside the building at the time samples were taken. WECI's tape lift sample testing found that there were heavy levels of mold growth on the drywall in different areas of the building.

It is important to note that there are currently no "safe" or "standard" levels for mold or mildew set forth by state or federal law, although nearby VA state law does regulate the licensing and duties of a mold inspector. WECI utilizes Industrial Hygienist practices derived from federal, state, and recognized organizations standards and guidelines reflecting indoor air quality and mold discipline in accordance with VA law. WECI bases its results on recommendations from the Environmental Protection Agency (EPA), Institute of Inspection, Cleaning, and Restoration Certification (IICRC), National Allergy Bureau, AIHA (American Industrial Hygiene Association), ASTM (American Society for Testing and Materials), and ACGIH (American Conference of Government Industrial Hygienists) of which WECI is actively members of. Winchester Environmental Consultants, Inc. conforms to 18VAC15-60-330 and 18VAC15-60-340 in regards to our obligation mandated by the state of Virginia to the public.

Further details on the findings are discussed below.

Sincerely

James Sigurdson
Vice President

104 W. Cork St ♦ Winchester, VA 22601
(540) 877 9420 ♦ (540) 877 9495 (fax

Sampling Results:

Spore Trap Sampling (source and direct):

Five interior spore traps samples were obtained from the property. The sample locations were on the 2nd floor; 2 samples were taken from the front and rear of the green carpeted area, on the 1st floor; 1 sample was taken from the front and 1 sample as taken from the rear. Additionally, a spore trap was sampled from the corner room on the 2nd floor to give a comparison of what molds were occurring in areas of the building not exposed to significant water damage.

The detection limits that are utilized are the standard 300-field count maximum prescribed by AIHA. The spore trap samples were sent to an ISO/ IEC 17011 accredited laboratory to be analyzed.

The following spore trap results were obtained:

Location	2nd floor front of green carpeted area (8924)		2nd floor rear of green carpeted area (8936)		1st floor front of building (8891)		2nd floor rear of building (8895)	
Fungal Identification	**Results**	**Rank**	**Results**	**Rank**	**Results**	Rank	**Results**	Rank
Alternaria sp.	40	6	13	6	ND	--	ND	--
Ascospores	1027	2	747	2	293	4	827	3
Aspergillus/Penicillium	333	4	200	4	3733	1	3667	1
Basidiospores	3733	1	4160	1	1133	2	2533	2
Chaetomium sp.	27	7	27	5	160	5	13	5
Cladosporium sp.	747	3	533	3	ND	--	ND	--
Epicoccum sp.	13	8	13	6	ND	--	ND	--
Fusarium sp.	40	6	ND	--	ND	--	ND	--
Pithomyces sp.	13	8	ND	--	13	6	ND	--
Rusts	ND	--	ND	--	13	6	ND	--
Smuts / myxomycetes	107	5	13	6	360	3	93	4
Torula sp.	13	8	ND	--	ND	--	ND	--

Location	Baseline-2nd floor corner room	
Fungal Identification	**Results**	**Rank**
Alternaria sp.	27	6
Ascospores	427	4
Aspergillus/Penicillium	840	1
Basidiospores	747	2
Chaetomium sp	ND	--
Cladosporium sp.	147	5
Epicoccum sp.	ND	--
Fusarium sp	ND	--
Pithomyces sp.	ND	--
Rusts	ND	--
Smuts / myxomycetes	640	3
Torula sp.	ND	--

Aspergillius / Penicillium sp. and Basidiospores were observed at high levels throughout the building

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(540) 877 9420 ♦ (540) 877 9495 (fax

Source Sampling: (Tape Lift Sample)

There were three surface tape lift samples acquired from the building. Samples were taken of visible mold growing on the drywall in the middle and last room on the basement floor towards the boiler of the basement and a sample was taken from the 1st floor room adjacent to the stairs to the basement in the rear. Samples taken from the building showed heavy levels of mold.

The following generalized tape lift results were obtained:

Sample Type: Tape Lift Source Sample			
Location	Middle room in basement toward the boiler room (101617)	Last room in basement toward the boiler room (103485)	Room adjacent to the stairs to the basement on the 1st floor (103488)
Fungal Identification	**Results**		
Acremonium	--	Light	--
Aspergillus/Penicillium	Moderate	--	Light
Basidiospores	--	--	Rare
Chaetomium	Heavy	Heavy	--
Penicillium	--	Moderate	--
Pithomyces	--	--	Rare
Stachybotrys	Heavy	--	Moderate
Ulocladium	Rare	--	--

Surface testing for the property indicates that there is a surface mold issue occurring in multiple areas with the Crawford building.

Sampling Procedures:

Samples were taken to determine what kinds and relative concentrations of mold were present in the air of the building at the time of testing.

The spore trap sampling media was an allergencoD disposable spore trap air-monitoring cassette from lot number 20110501 and have an expiration date of may 2012. The samples were collected using an allegro rotary vane pump, which was calibrated with a secondary rotameter to the spore trap manufacturer's standard of 15 liters per minute (lpm). The samples were run for 5 minutes on the interior of the property which is the manufacturer's recommended sampling interval for an indoor space.

Tape lift samples were collected from areas of visible mold growth. A pre manufactured tape slide was used which had an expiration date of July 2012. The sample was collected according to industry standards, placed in the manufacturer's provided case and sent to the laboratory for analysis.

Findings:

The building has major water intrusion issues on all levels. On the top two floors, the roof leaks in numerous spots are allowing water into the building and in the basement; it appears that water backs up into the area during times of heavy flooding causing major mold issues. Mold was visible in various locations with the most evident being the drywall in two rooms of the basement. The drywall was completely covered with mold in areas up to 3 feet from the floor and around a majority of the border. Upon surface testing, Stachybotrys sp. was identified which can only thrive during prolonged periods of moisture. Stachybotrys is also the mold that is most associated with 'black mold' with certain genus' being documented to cause health issues. The spore trap sampling suggests that the building has a high level of Aspergillius / Penicillium and Basidiopores spores in the air, which are likely being released by the same mold growing on the drywall and in numerous other places in the building. 50% of tape lift samples showed moderate to heavy levels of mold growth when tested in areas of noticeable discoloration.

Recommendations:

Due to the high sampled levels of airborne spores and heavy visible growth of mold in the test areas, it is the recommendation of Mr. James Sigurdson and Mr. Ryan Rose of Winchester Environmental Consultants that a qualified mold remediation company clean and/or remove the majority of the drywall located in basement and any other location that has water staining or discoloration. The building materials that must stay such as load bearing members or studs should be cleaned with an approved biocide for the genera of molds discovered and HEPA vacuumed prior to new drywall being installed. Remediation should only be done after the water intrusion issues have been alleviated in the roof, the basement, and any other location where moisture is clearly infiltrating the building.

This summary is based on the results of both visual investigations IAQ mold sampling obtained by Mr. James Sigurdson and Mr. Ryan Rose during a site visit to the aforementioned property. The tests performed are designed to give an immediate occurrence "snapshot" only. Conditions may change in the future and WECI guarantees no further issue than those investigated at the time of the survey and listed within this report. This report was designed by WECI utilizes Industrial Hygienist practices derived from federal, state, and recognized organizations standards and guidelines reflecting indoor air quality and mold discipline. WECI bases its results on recommendations from the Environmental Protection Agency (EPA), Institute of Inspection, Cleaning, and Restoration Certification (IICRC), National Allergy Bureau, AIHA (American Industrial Hygiene Association), ASTM (American Society for Testing and Materials), and ACGIH (American Conference of Government Industrial Hygienists) of which WECI is actively members of. Winchester Environmental Consultants, Inc. conforms to 18VAC15-60-330 and 18VAC15-60-340 in regards to our obligation mandated by the state of Virginia to the public.
Attached are the lab results and chain-of-custody.

SanAir Technologies Laboratory

Analysis Report

prepared for

Winchester Environmental Consultants, Inc.

Report Date: 9/20/2011
Project Name: Berkeley County Council
Project #: Crawford Building
SanAir ID#: 11014534

NVLAP LAB CODE 200870-0

AIHA LAP, LLC ACCREDITED LABORATORY ENVIRONMENTAL MICROBIOLOGY ISO/IEC 17025:2005 www.aihaaccreditedlabs.org LAB #162952

Virginia SBE Certification # 652931

Texas Licensed Mold Analysis Laboratory License # LAB0166

SanAir Technologies Laboratory

804.897.1177 www.sanair.com

SanAir Technologies Laboratory, Inc.

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804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
Web: http://www.sanair.com E-mail: iaq@sanair.com

Winchester Environmental Consultants, Inc.
104 W Cork Street
Winchester, VA 22601

September 20, 2011

SanAir ID # 11014534
Project Name: Berkeley County Council
Project Number: Crawford Building

Dear Ryan Rose,

We at SanAir would like to thank you for the work you recently submitted. The 8 sample(s) were received on Friday, September 16, 2011 via FedEx. The final report(s) is enclosed for the following sample(s): 8924, 8936, 8891, 8895, 8897, 101617, 103485, 103488.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

L. Claire Macdonald
Microbiology Laboratory Manager
SanAir Technologies Laboratory

Final Report Includes:
- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

sample conditions:
8 sample(s) in Good condition

SanAir Technologies Laboratory, Inc.

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804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
Web: http://www.sanair.com E-mail: iaq@sanair.com

SanAir ID Number

11014534

FINAL REPORT

Name: Winchester Environmental Consultants, Inc.
Address: 104 W Cork Street
Winchester, VA 22601

Project Number: Crawford Building
P.O. Number:
Project Name: Berkeley County Council

Collected Date: 9/15/2011
Received Date: 9/16/2011 9:30:00 AM
Report Date: 9/20/2011 8:51:16 AM
Analyst: Zhang, Ph.D, Richard

Air Cassette Analysis

ND = None Detected

SanAir ID Number	11014534-001			11014534-002			11014534-003			11014534-004		
Analysis Using STL:	105C			105C			105C			105C		
Sample Number	8924			8936			8891			8895		
Sample Identification	Green Carpet Area Front 2F			Green Carpet Area Back 2F			1F Front			2F Rear		
Sample Type	Air Cassette - Allergenco-D			Air Cassette - Allergenco-D			Air Cassette - Allergenco-D			Air Cassette - Allergenco-D		
Volume	75 Liters			75 Liters			75 Liters			75 Liters		
Analytical Sensitivity	13 Count/M³			13 Count/M³			13 Count/M³			13 Count/M³		
Background Density	2+			2+			3			2		
Other	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%
Mycelial Fragments	1	13	n/a	2	27	n/a	10	133	n/a	1	13	n/a
Fungal Identification	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%	Raw Count	Count/M³	%
Alternaria species	3	40	< 1	1	13	< 1						
Ascospores	77	1027	17	56	747	13	22	293	5	62	827	12
Aspergillus/Penicillium	25	333	5	15	200	3	280	3733	65	275	3667	51
Basidiospores	280	3733	61	312	4160	71	85	1133	20	190	2533	36
Chaetomium species	2	27	< 1	2	27	< 1	12	160	3	1	13	< 1
Cladosporium species	56	747	12	40	533	9						
Epicoccum species	1	13	< 1	1	13	< 1						
Fusarium species	3	40	< 1									
Pithomyces species	1	13	< 1				1	13	< 1			
Rusts							1	13	< 1			
Smuts/Myxomycetes	8	107	2	12	160	3	27	360	6	7	93	1
Torula species	1	13	< 1									
Total	**457**	**6093**		**439**	**5853**		**428**	**5707**		**535**	**7133**	

Signature: Date: 9/20/2011 Reviewed: Date: 9/20/2011

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SanAir ID Number

11014534

FINAL REPORT

Name: Winchester Environmental Consultants, Inc.
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Winchester, VA 22601

Project Number: Crawford Building
P.O. Number:
Project Name: Berkeley County Council

Collected Date: 9/15/2011
Received Date: 9/16/2011 9:30:00 AM
Report Date: 9/20/2011 8:51:16 AM
Analyst: Zhang, Ph.D, Richard

Air Cassette Analysis

ND = None Detected

SanAir ID Number	11014534-008		
Analysis Using STL:	105C		
Sample Number	8897		
Sample Identification	2F Corner Room		
Sample Type	Air Cassette - Allergenco-D		
Volume	75 Liters		
Analytical Sensitivity	13 Count/M^3		
Background Density	2		
Other	**Raw Count**	**Count/M^3**	**%**
Mycelial Fragments			
Fungal Identification	**Raw Count**	**Count/M^3**	**%**
Alternaria species	2	27	< 1
Ascospores	32	427	15
Aspergillus/Penicillium	63	840	30
Basidiospores	56	747	26
Chaetomium species			
Cladosporium species	11	147	5
Epicoccum species			
Fusarium species			
Pithomyces species			
Rusts			
Smuts/Myxomycetes	48	640	23
Torula species			
Total	**212**	**2827**	

Signature: Date: 9/20/2011 Reviewed: Date: 9/20/2011

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SanAir ID Number

11014534

FINAL REPORT

Name: Winchester Environmental Consultants, Inc.
Address: 104 W Cork Street
Winchester, VA 22601

Project Number: Crawford Building
P.O. Number:
Project Name: Berkeley County Council

Collected Date: 9/15/2011
Received Date: 9/16/2011 9:30:00 AM
Report Date: 9/20/2011 8:51:16 AM
Analyst: Goodwin, Aaron M.

Direct Identification Analysis

SanAir ID: 11014534-005 Sample #: 101617 ID: Basement, Middle Room Toward Boiler Room

D1-Direct ID Analysis on Tape using STL 104
Direct ID of Mold

Fungi	Estimated Amount
Aspergillus/Penicillium	Moderate
Chaetomium species	Heavy
Stachybotrys species	Heavy
Ulocladium species	Rare

Tape was heavily covered with debris which might have occluded fungi.

SanAir ID: 11014534-006 Sample #: 103485 ID: Basement, Last Room Toward Boiler Room

D1-Direct ID Analysis on Tape using STL 104
Direct ID of Mold

Fungi	Estimated Amount
Acremonium species	Light
Chaetomium species	Heavy
Penicillium species	Moderate

Tape was moderately covered with debris which might have occluded fungi.

SanAir ID: 11014534-007 Sample #: 103488 ID: 1st Floor Rear Over Stairs To Basement

D1-Direct ID Analysis on Tape using STL 104
Direct ID of Mold

Fungi	Estimated Amount
Aspergillus/Penicillium	Light
Basidiospores	Rare
Pithomyces species	Rare
Stachybotrys species	Moderate

Tape was heavily covered with debris which might have occluded fungi.

Certification

Signature: Date: 9/19/2011

Reviewed: Date: 9/20/2011

SanAir Technologies Laboratory, Inc.

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SanAir ID Number

11014534

FINAL REPORT

Name: Winchester Environmental Consultants, Inc.
Address: 104 W Cork Street
Winchester, VA 22601

Project Number: Crawford Building
P.O. Number:
Project Name: Berkeley County Council

Collected Date: 9/15/2011
Received Date: 9/16/2011 9:30:00 AM
Report Date: 9/20/2011 8:51:16 AM

ORGANISM DESCRIPTIONS

The descriptions of the organisms presented are derived from various reference materials. The laboratory report is based on the data derived from the samples submitted and no interpretation of the data, as to potential, or actual, health effects resulting from exposure to the numbers of organisms found, can be made by laboratory personnel. Any interpretation of the potential health effects of the presence of this organism must be made by qualified professional personnel with first hand knowledge of the sample site, and the problems associated with that site.

MYCELIAL FRAGMENTS - A mycelium (plural = mycelia) is the "body" of a fungus. It is a collective term for hyphae (singular = hypha), which are the tubular units of the mycelium usually composed of chitin. The terms hyphae and mycelial fragments are used interchangeably. [This information was referenced from the mycology text "The Fifth Kingdom"]

ACREMONIUM SPECIES - Acremonium species are found growing in plant-decaying matter, plant debris, soils, and decaying organic matter. Some species are found indoors. *Health Effects:* Reported to be allergenic. Common type I and III allergen. It can produce mycetomas, infections of the nails, onychomycosis, corneal ulcers, eumycotic mycetoma, endophthalmitis, meningitis, and endocarditis.
References: De Hoog, G.S., J. Guarro, J. Gene, and M.J. Figueras. Atlas of Clinical Fungi, 2nd Edition. The Netherlands: CBS, 2000.

ALTERNARIA SPECIES - This genus compromises a large number of saprobes and plant pathogens. It is one of the predominate airborne fungal spores indoor and outdoor. Outdoors it may be isolated from samples of soil, seeds, and plants. It is one of the more common fungi found in nature, extremely widespread and ubiquitous. Conidia are easily carried by the wind, with peak concentrations in the summer and early fall. It is commonly found in outdoor samples. It is often found in indoor environments, on drywall, ceiling tiles, in house dust, carpets, textiles, and on horizontal surfaces in building interiors. Often found on window frames. *Health Effects:* In humans, it is recognized to cause type I and III allergic responses. Because of the large size of the spores, it can be deposited in the nose, mouth and upper respiratory tract, causing nasal septum infections. It has been known to cause Baker's asthma, farmer's lung, and hay fever. It has been associated with hypersensitivity pneumoniti, sinusitis, deratomycosis, onychomycosis, subcutaneous phaeohyphomycosis, and invasive infection. Common cause of extrinsic asthma (immediate-type hypersensitivity: type I). Acute symptoms include edema and bronchiospasms, chronic cases may develop pulmonary emphysema.
References: Flannigan, Brian, Robert A. Samson, and J. David Miller, eds. Microorganisms in Home and Indoor Work Environments: Diversity, Health Impacts, Investigation, and Control. London and New York: Taylor & Francis, 2001.

ASCOSPORES - From the fungal Subphylum Ascomycotina. Ascospores are ubiquitous in nature and are commonly found in the outdoor environment. This class contains the "sac fungi" and yeasts. Some ascospores can be identified by spore morphology, however; some care should be excercised with regard to specific identification. They are identified on tape lifts and non-viable analysis by the fact that they have no attachment scars and are sometimes enclosed in sheaths with or without sacs. Ascomycetes may develop both sexual and asexual stages. Rain and high humidity may help asci to release, and dispurse ascospores, which is why during these weather conditions there is a great increase in counts. *Health Effects:* This group contains possible allergens.

ASPERGILLUS/PENICILLIUM - These spores are easily aerosolized. Only through the visualization of reproductive structures can the genera be distinguished. Also included in this group are the spores of the genera Acremonium, Phialophora, Verticillium, Paecilomyces, etc. Small, round spores of this group lack the necessary distinguishing characteristics when seen on non-viable examination. *Health Effects:* Can cause a variety of symptoms including allergic reactions. Most symptoms occur if the individual is immunocompromised in some way (HIV, cancer, etc). Both Penicillium and Aspergillus spores share similar morphology on non-viable analysis and therefore are lumped together into the same group.

BASIDIOSPORES - From the Subphylum Basidiomycotina which contains the mushrooms, shelf fungi, and a variety of other macrofungi. They are saprophytes, ectomycorrhizal fungi or agents of wood rot, which may destroy the structure wood of buildings. It is extremely difficult to identify a specific genera of mushrooms by using standard culture plate techniques. Some basidiomycete spores can be identified by spore morphology; however, some care should be exercised with regard to specific identification. The release of basidiospores is dependant upon moisture, and they are dispersed by wind. *Health Effects:* Many have the potential to produce a variety of toxins. Members of this group may trigger Type I and III fungal hypersensitivity reactions. Rarely reported as opportunistic pathogens.

CHAETOMIUM SPECIES - It is an ascomycete. It is found on a variety of substrates containing cellulose including paper

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Report Date: 9/20/2011 8:51:16 AM

ORGANISM DESCRIPTIONS

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and plant compost. It can be found on the damp or water damaged paper in sheetrock after a long term water damage. Several species have been reported to play a major role in decomposition of cellulose made materials. These fungi are able to dissolve the cellulose fibers in cotton and paper, and thus cause these materials to disintegrate. The process is especially rapid under moist conditions. *Health Effects:* Chaetomium can produce type I fungal hypersensitivity and has caused onychomycosis (nail infections).
References: Flannigan, Brian, Robert A. Samson, and J. David Miller, eds. Microorganisms in Home and Indoor Work Environments: Diversity, Health Impacts, Investigation, and Control. London and New York: Taylor & Francis, 2001.

CLADOSPORIUM SPECIES - The most commonly identified outdoor fungus. The outdoor numbers are reduced in the winter and are often high in the summer. Often found indoors in numbers less than outdoor numbers. It is commonly found on the surface of fiberglass duct liner in the interior of supply ducts. A wide variety of plants are food sources for this fungus. It is found on dead plants, woody plants, food, straw, soil, paint and textiles. Often found in dirty refrigerators and especially in reservoirs where condensation is collected, on moist window frames it can easily be seen covering the whole painted area with a velvety olive green layer. *Health Effects:* It is a common allergen. It can cause mycosis. Common cause of extrinsic asthma (immediate-type hypersensitivity: type I). Acute symptoms include edema and bronchiospasms, chronic cases may develop pulmonary emphysema. Illnesses caused by this genus can include phaeohyphomycosis, chromoblastomycosis, hay fever and common allergies.
References: Flannigan, Brian, Robert A. Samson, and J. David Miller, eds. Microorganisms in Home and Indoor Work Environments: Diversity, Health Impacts, Investigation, and Control. London and New York: Taylor & Francis, 2001.

EPICOCCUM SPECIES - It is found in plants, soil, grains, textiles, and paper products. Frequently isolated from air and occasionally occurs in house dust. Is a saprophyte and considered a weakly parasitic secondary invader of plants, moldy paper and textiles. Epicoccum is usually isolated with either Cladosporium species or Aureobasidium species. *Health Effects:* A common allergen. It also has the potential to produce type I fungal hypersensitivity reactions.
References: Flannigan, Brian, Robert A. Samson, and J. David Miller, eds. Microorganisms in Home and Indoor Work Environments: Diversity, Health Impacts, Investigation, and Control. London and New York: Taylor & Francis, 2001.

FUSARIUM SPECIES - A common soil fungus and plant pathogen. Fusarium is frequently isolated from plants and grains. It is often found in humidifiers and requires wet conditions to grow. *Health Effects:* A type I allergen. Frequently involved in eye, skin and nail infections. Fusarium is the most common cause of mycotic keratitis and has been isolated from patients with a variety of infections. Some species produce mycotoxin. Food safety issues are related to some species of this genus.
References: Flannigan, Brian, Robert A. Samson, and J. David Miller, eds. Microorganisms in Home and Indoor Work Environments: Diversity, Health Impacts, Investigation, and Control. London and New York: Taylor & Francis, 2001.

PENICILLIUM SPECIES - Penicillium spores are ubiquitous in the environment. A wide number of organisms have been placed in this genus. Identification to species is difficult. Often found in aerosol samples. Commonly found in soil, food, cellulose, and grains. It is also found in paint and compost piles. Commonly found in carpet, wallpaper, and in interior fiberglass duct insulation. Both Penicillium and Aspergillus spores share similar morphology on non-viable analysis and therefore are lumped together into the same group. Only through the visualization of reproductive structures can the genera be distinguished. *Health Effects:* It may cause hypersensitivity pneumonitis and allergic alveolitis in susceptible individuals. It is reported to be allergenic (skin). Common cause of extrinsic asthma (immediate-type hypersensitivity: type I). Acute symptoms include edema and bronchiospasms, chronic cases may develop pulmonary emphysema.
References: De Hoog, G.S., J. Guarro, J. Gene, and M.J. Figueras. Atlas of Clinical Fungi, 2nd Edition. The Netherlands: CBS, 2000.

PITHOMYCES SPECIES - Grows on dead grass in pastures and decaying plant material. *Health Effects:* Causes facial eczema in ruminants.
References: St-Germain, Guy, and Richard Summerbell. Identifying Filamentous Fungi: A Clinical Laboratory Handbook. California: Star Publishing Co., 1996.

SanAir Technologies Laboratory, Inc.

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SanAir ID Number

11014534

FINAL REPORT

Name: Winchester Environmental Consultants, Inc.
Address: 104 W Cork Street
Winchester, VA 22601

Project Number: Crawford Building
P.O. Number:
Project Name: Berkeley County Council

Collected Date: 9/15/2011
Received Date: 9/16/2011 9:30:00 AM
Report Date: 9/20/2011 8:51:16 AM

ORGANISM DESCRIPTIONS

The descriptions of the organisms presented are derived from various reference materials. The laboratory report is based on the data derived from the samples submitted and no interpretation of the data, as to potential, or actual, health effects resulting from exposure to the numbers of organisms found, can be made by laboratory personnel. Any interpretation of the potential health effects of the presence of this organism must be made by qualified professional personnel with first hand knowledge of the sample site, and the problems associated with that site.

RUSTS - From the group Uredinales, called Rusts due to the color of the spores, which are known for causing disease in plants.

SMUTS/MYXOMYCETES - Smuts and Myxomycetes are parasitic plant pathogens. They are typically grouped together due to their association with plants, the outdoors and because they share similar microscopic morphology. *Health Effects:* Can produce type I fungal hypersensitivity reactions.
References: Martin, G.W., C.J. Alexopoulos, and M.L. Farr. The Genera of Myxomycetes. Iowa City, Iowa: University of Iowa Press, 1983.

STACHYBOTRYS SPECIES - This organism is rarely found in outdoor samples. It is usually difficult to find in indoor air samples unless it is physically disturbed because the spores are in a gelatinous mass. Grows well on wet media, preferably containing cellulose. It proliferates in the indoor environment with long term water damage, growing on wallpaper, gypsum board, and textiles. As a general rule, air cultures for Stachybotrys yields unpredictable results, mainly due to the fact that this fungus is usually accompanied by other fungi such as Aspergillus and Penicillium that normally are better aerosolized than Stachybotrys. This is a slow growing fungus on media. It does not compete well with other rapidly growing fungi. The black fungi grow on building material with high cellulose content and low nitrogen content. Appropriate media for the growth of this organism will have high cellulose content and low nitrogen content. *Health Effects:* It has worldwide distribution and has been reported to cause dermatitis, cough, rhinitis, and headache, although no definitive reports of human infections have been verified. It has the ability to cause type I hypersensitivity. It is a documented mycotoxin producer.
References: Flannigan, Brian, Robert A. Samson, and J. David Miller, eds. Microorganisms in Home and Indoor Work Environments: Diversity, Health Impacts, Investigation, and Control. London and New York: Taylor & Francis, 2001.

TORULA SPECIES - Torula is a saprophyte and therefore often found on plant material. It may be found on wood-containing products/materials. *Health Effects:* Reported to produce type I fungal hypersensitivity.
References: Ellis, Martin B., Ellis, Pamela, Microfungi on Land Plants: An Identification Handbook. England, The Richmond Publishing Co. Ltd., 1997.

ULOCLADIUM SPECIES - Isolated from soil, dead plants and cellulose materials. Found on textiles. It can be found on many types of materials, but mostly found on decaying materials. Has a greater water activity need for growth and is therefore considered a water indicator organism. *Health Effects:* Reported to be a major allergen. Rarely causes subcutaneous infections in humans. It has a high water requirement.
References: De Hoog, G.S., J. Guarro, J. Gene, and M.J. Figueras. Atlas of Clinical Fungi, 2nd Edition. The Netherlands: CBS, 2000.

Additional Information

Air Cassette Analyses

Air cassette reports indicate the genus and concentration of viable (living) and non-viable mold spores detected on the slide (A2 Analysis). Whether or not these spores are viable cannot be determined using this type of analysis. However, keep in mind that spores can remain allergenic even after cellular death. Other possible allergens include dander, pollen and fibers which are included in air cassette reports for the A1 Analysis. A1 and A2 analyses are performed on several types of air cassettes. Light microscopy at a 400 to 1000x magnification is used for air cassette sample analysis. SanAir always analyzes 100% of the impacted slide.

Explanation of Background Densities

The background density of an air cassette aids in the overall interpretation of results as it indicates the level of background debris present (e.g. dander, pollen, fibers, insect parts, soot, fly ash, etc.). Excessive background debris may mask the presence of fungal spores thereby reducing the accuracy of the count. It may also serve as an alert that the volume of air pulled was too high or too low. The following table explains background densities.

Air Cassette Density	Amount of Particulate on Slide	Explanation
1	Insignificant	Should not skew any counts
1+	Low	Should not skew any counts
2	Low to Moderate	Should not skew any counts
2+	Moderate to High	May cause occlusion of small spores
3	High	May cause occlusion of small to medium spores
3+	Very High	Will cause occlusion of spores
4	Overloaded	Level of particulate too high to perform analysis

A Note About the Fungal Spores

In some instances certain groups of fungi cannot be identified due to a lack of distinguishing characteristics. These fungi will be categorized as “unknown spores” on the final report.

The genera *Aspergillus* and *Penicillium* are typically composed of small, round spores that are difficult to distinguish from each other; therefore, they are grouped into the category *Aspergillus* / *Penicillium*. Other fungi that produce spores of similar characteristics may also be placed into this category, including *Paecilomyces*, *Gliocladium*, and *Trichoderma*, among others.

Stachybotrys and *Memnoniella* spores are coated with a sticky “slime” layer that may inhibit aerosolization.

Any genus of fungi detected on an air cassette with a high raw count (i.e. exceeding 500 spores) may be estimated. Any estimate higher than 12,000 spores will be reported as >12,000.

Understanding the Air Cassette Report

Each sample has 3 columns of information provided. The left is the raw count which is the number of spores for that fungal type detected on the trace. The middle column is the count per cubic meter (Count/m^3) which is the raw count converted based on the total volume pulled for that sample. It represents the number of spores that should be expected in a cubic meter of air from the location in question *if* the spores were distributed evenly throughout the air. This column is helpful for interpreting results when the samples were pulled at different total volumes. In other words, the raw count of a cassette pulled at 75 liters should not be compared to the raw count of a cassette pulled at 150 liters because there may be higher counts associated with the higher volume. By comparing the “Count/m^3” columns the difference in volumes are accounted for.

The limit of detection is the lowest spore count detectable with reasonable certainty, and it is calculated this way using a raw count of one. Keep in mind there are 1,000 liters in a cubic meter.

1 x (1,000 / Total Volume in Liters)

How to calculate the count per cubic meter:

Raw Count x (1,000 / Total Volume in Liters)

The last column on the right shows the percentage for which each spore type comprised the total spore count.

Understanding the Air Cassette Graph

The graph is a visual representation of the baseline sample (usually the outdoor air sample) compared individually against each indoor sample. Each spore type found on the indoor sample is compared to what was found outdoors per cubic meter.

The graph shows the percentile representation of each indoor spore count derived by dividing the indoor Count/m^3 by the outdoor Count/m^3. If the percentage is below 50% of the outside count, then the bar is below 50 on the chart, which corresponds to "No evidence of mold amplification." If the percentage is between 50 and 100%, then the bar on the chart will stop between 50 and 100, which corresponds to "Possible mold amplification." If the percentage is greater than 100%, then the bar will be above 100 on the chart, which corresponds to "Probable mold amplification."

Each organism is given a threshold level for the Count/m^3. If this threshold level is not met in an inside sample, then the organism will not be graphed on the chart. This is used to prevent the graph from showing every spore type that is commonly found outside and doesn't typically indicate a possible moisture problem inside. For example, most common outdoor spores (e.g. ascospores, basidiospores, and *Cladosporium*) have a threshold level of 100. Therefore, in order to show up on the chart, the inside Count/m^3 must be above 100. On the other hand, fungi that may indicate water damage (e.g. *Stachybotrys*, *Ulocladium*, *Chaetomium*, *Memnoniella*, etc.) are given lower threshold levels. These fungi have a higher water activity value and therefore require more moisture to grow. *Stachybotrys* and *Chaetomium* have threshold values of 14 and 30, respectively, as even a low count of those types of spores may indicate an issue with excess moisture.

Keep in mind that this graph is to be used only as a tool in the inspection of a building. Visual examination and knowledge of water damage, past remediation, and weather conditions, among other elements, is essential in the decision regarding the indoor air quality of a building.

Assistance with Remediation Projects

more information pertaining to interpretation of results is available on our website www.sanair.com

For assistance in a remediation project you may consult the Institute of Inspection, Cleaning and Restoration Certification's (IICRC) S500 and S520 protocols. The S500 is a reference guide for water-damage restoration and the S520 pertains specifically to mold remediation. Other standards and guidelines regarding Indoor Air Quality that may assist in remediation projects:

AIHA (Recognition, Evaluation, and Control of Indoor Mold)
AIHA (The Facts About Mold)
NADCA (ACR 2006)
IESO (Standards of Practice for the Assessment of Indoor Air Quality)
EPA (Mold Remediation in Schools and Commercial Buildings)
New York City Department of Health and Mental Hygiene (Guidelines on Assessment and Remediation of Fungi in Indoor Environments)

Disclaimer

This report is the sole property of the client named on the SanAir Technologies Laboratory chain-of-custody. Neither results nor reports will be discussed with or released to any third party without our client's written permission. The information provided in this report applies only to the samples submitted and is relevant only for the date, time and location of sampling. ***SanAir will not provide any opinion on the safety of a building as visual inspection and knowledge of water damage, past remediation and weather conditions during sampling, among other elements, is essential in this decision.*** *SanAir is accredited by AIHA in the EMLAP program for Direct Examination of air samples.*

This report does not constitute endorsement by AIHA/NVLAP and/or any other U.S. governmental agencies; and may not be certified by every local, state and federal regulatory agencies.

Additional Information

Direct Identification Analyses

Direct identification analyses can be performed on tape, bulk, dust and swab samples. Direct identification reports indicate the evidence of possible active growth for each genus of fungi present. Whether or not these spores are viable or nonviable cannot be determined using this type of analysis; the sample would have to be cultured in order to determine viability. Keep in mind that this report can only be inferred for the exact spot in which the sample was taken. Light microscopy at a 400 to 1000x magnification is used for direct identification analysis.

It is encouraged to include a blank tape sample in order to check for contamination during sampling or shipment. Be sure to check the expiration date of any tape. It is recommended not to use expired tapes as the gel on the slide deteriorates thereby losing the tackiness necessary to retain fungi.

The genera *Aspergillus* and *Penicillium* are typically composed of small, round spores that are difficult to distinguish from each other without the presence of intact conidiophores (structures from which spores are formed and released). In this case, they are grouped into the category *Aspergillus* / *Penicillium*. Other fungi that produce spores of similar characteristics to *Aspergillus* and *Penicillium* may also be placed into this combined category in the absence of intact conidiophores (e.g. *Paecilomyces*, *Gliocladium*, *Trichoderma*, etc.).

D1 Analysis: Fungal Identification with "Evidence of Growth" Description

Results for the direct identification analysis describe the amount of evidence indicating possible fungal growth. The presence of associated mycelial fragments and conidiophores help the analyst to determine which description to use: rare, light, moderate, or heavy. Please refer to the following table for interpretation of direct identification results.

Estimated Amount	Indication of Growth	Evidence of Mycelial Fragments / Conidiophores
Rare	Not Likely	None
Light	Possible	Some, 10 to 25% of Tape Covered
Moderate	Probable	Abundant, 25 to 50% of Tape Covered
Heavy	Significant	Throughout, 50 to 100% of Tape Covered

NOTE: Swabs are not the best media to use for direct analyses as all organisms may not be recovered intact, if at all, when analyzed.

NOTE: Tapes should not be overloaded with debris as that may occlude fungi.

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This report does not constitute endorsement by AIHA/NVLAP and/or any other U.S. governmental agencies; and may not be certified by every local, state and federal regulatory agencies.

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Microbiology Chain of Custody

SanAir ID Number: 11014534

Company: Winchester Environmental	Project Number: Berkeley County Council	Phone #: (540) 877-9420
Address: 104 W. Cork St.	Project Name: Crawford Building	Phone #:
City, State, Zip: Winchester, VA, 22611	Date Collected: 9/15/2011	Fax #: (540) 877-9495
Samples Collected By:	P.O. Number:	Email: labresults@weci.biz

Sample Types		Analysis Types	Turn Around Time
AC	Air Cassette	A1 - Identification and Enumeration of Fungal spores, plus total dander, fiber, and pollen count	Hours 3/6/24/48-Std
		A2 - Identification and Enumeration of Fungal spores only	Hours 3/6/24/48-Std
T B S*	Tape Bulk Swab*	D1 - Direct Identification of Fungi	Hours 3/6/24/48-Std
		D2 - Direct Identification of Mites, Insects, Pollen, etc.	Hours 3/6/24/48-Std
AP	Air Plate	C1 - Culture Identification and Enumeration of Fungi only	5-10 Days
B	Bulk	C2 - Culture Identification and Enumeration of Bacteria only	2-4 Days
S	Swab	C3 - Culture Identification and Enumeration of Fungi and Bacteria	5-10 Days
		C4 - Culture Identification and Enumeration of Thermophilic Bacteria with C2 or C3 analysis	2-4 or 5-10 Days
W	Water	L1 – Culture Identification and Enumeration of *Legionella sp.*	7-10 Days
D	Dust	M1 – Dust Mite Allergen Test	Hours 3/6/24/48-Std
SanAir Technologies Laboratory offers speciation by PCR. Please call for details and pricing.			

Sample #	Sample Identification	Sample Type	Analysis Type(s)	Turn Around Time	Total Volume (L) or Area (in^2)	Time Start	Time Stop
8924	Green carpet, front 2F	AC	A2	Std	75L	740	745
8936	Green carpet area back 2F	AC	"	"	"	740	745
8891	1F front	AC	"	"	"	800	805
8895	2F rear	AC	"	"	"	800	805
101617	basement, middle room toward boiler room	T	D1	"	NA	—	—
103485	basement, last room toward boiler room	T	D1	"	"	—	—
103488	1st floor room over stairs to basement	T	D1	"	"	—	—
8897	2F corner room	AC	A2	"	75L	815	820

Special Instructions

Relinquished by	Date	Time	Received by	Date	Time
Ryan Rose	9/15/2011			SEP 16 2011	930A

Unless scheduled, the turn around time for all samples received after 3 pm Friday will begin at 8 am Monday morning. Weekend or Holiday work must be scheduled ahead of time and is charged 150% of analytical rate.

*Although we allow Direct Identification from a swab sample, best results are received from tape samples.

July 17th, 2019

Mr. Alan J. Davis
Berkeley County Administrator
400 W. Stephen Street. #201
Martinsburg, WV 25401

Limited Asbestos Inspection: The Crawford Building
315 W. Stephen St., Martinsburg, WV 25401

Dear Mr. Davis:

On July 10th, 2019, at your request, Mr. Ryan Rose of WECI, Inc. conducted a limited asbestos inspection according to National Emission Standards for Hazardous Air Pollutants (NESHAP) guidelines at the aforementioned address. The inspection was requested due to anticipated renovations to the interior of the Crawford Building.

Materials tested included floor tiles, mastics, sheet flooring, ceiling tiles, pipe insulation, window glazing, drywall, joint compound, and heat shields. Samples were properly labeled and sent to a certified lab for analysis. The samples were collected using a random grab technique then tested using Polarized Light Microscopy (PLM) method.

The following materials tested positive for containing asbestos fibers. Materials that contained asbestos were located in the basement of the building, accessed via adjoining Judicial Center. All quantities are approximations:

- ***2* linear feet of pipe insulation on a cement column in the basement.***
- ***300** square feet of heat shield above the boiler pad in the basement.***

**It is likely that more than 2 linear feet of asbestos is in the basement area under debris.*
***300 square feet are based upon amount of initial (parts missing) heat shield and potential debris in the basement.*

Due to the friable asbestos containing pipe insulation and heat shield being in the state of significantly damaged, the entire basement area should be considered contaminated with asbestos. Proper OSHA asbestos signage should be installed at the entry point(s) and access limited into the space.

199-1 Sulky Drive ♦ Winchester, VA 22602
(540) 877 9420 ♦ (540) 877 9495
www.thinkweci.com

If any material is discovered during the renovation that is not addressed in this report, then the material should be assumed positive for containing asbestos until such a time that it can be sampled.

Attached are the sample log, lab analysis, and the chain of custody please feel to contact me with any questions, thank you.

Sincerely,
WECI, Inc.

Ryan Rose
Vice President

199-1 Sulky Drive ♦ Winchester, VA 22602
(540) 877 9420 ♦ (540) 877 9495
www.thinkweci.com

Asbestos Containing Materials in Basement

Damaged heat shield in basement old boiler room

Damaged heat shield in basement old boiler room

Asbestos pipe insulation on column

Asbestos pipe insulation on column

Asbestos pipe insulation on column

Asbestos pipe insulation on column

Asbestos Containing Materials in Basement

Potentially asbestos contaminated debris

Potentially asbestos contaminated debris

Potentially asbestos contaminated debris

WECI, Inc.

199-1 Sulky Ct, Winchester, VA 22602
540-877-9420

SAMPLE LOG

Reference: 315 W. Stephen St., Martinsburg, WV 25401
Sample Date: July 11th, 2019

Sample ID	Location Description	Asbestos Results Positive/Negative	Y/N Friable	Amount (Ft)	Condition	Homogenous Area
MM-1	White window glazing on metal frame windows – South building – ~46 windows	Negative	NA	NA	NA	NA
MM-2	White window glazing on metal frame windows – South building – ~46 windows	Negative	NA	NA	NA	NA
MM-3	White window glazing on metal frame windows – South building – ~46 windows	Negative	NA	NA	NA	NA
MM-4	White window glazing on wooden frame windows – Main building - ~127 windows	Negative	NA	NA	NA	NA
MM-5	White window glazing on wooden frame windows – Main building - ~127 windows	Negative	NA	NA	NA	NA
MM-6	White window glazing on wooden frame windows – Main building - ~127 windows	Negative	NA	NA	NA	NA
TSI-1	**Loose pipe insulation on the East side of the basement area**	**Positive 80%**	**Y**	**~2 ln.ft.***	**Sig. Dam.**	**1**
TSI-2	**Loose pipe insulation on the East side of the basement area**	**Positive 80%**	**Y**	**~2 ln.ft.***	**Sig. Dam.**	**1**
TSI-3	**Loose pipe insulation on the East side of the basement area**	**Positive 85%**	**Y**	**~2 ln.ft.***	**Sig. Dam.**	**1**
MM-7	Drywall walling in top level of main building	Negative	NA	NA	NA	NA
MM-7	Drywall joint compound in top level of main building	Negative	NA	NA	NA	NA
MM-8	Drywall walling in top level of main building	Negative	NA	NA	NA	NA
MM-8	Drywall joint compound in top level of main building	Negative	NA	NA	NA	NA
MM-9	Drywall walling in top level of main building	Negative	NA	NA	NA	NA
MM-9	Drywall joint compound in top level of main building	Negative	NA	NA	NA	NA
TSI-4	**Heat shield above boiler pad in basement**	**Positive 75%**	**Y**	**~300 sq.ft.***	**Sig. Dam.**	**2**

Sample ID	Location Description	Asbestos Results Positive/Negative	Y/N Friable	Amount (Ft)	Condition	Homogenous Area
TSI-5	**Heat shield above boiler pad in basement**	**Positive 75%**	**Y**	**~300 sq.ft.***	**Sig. Dam.**	**2**
MM-10	Drywall walling throughout lower level of main building	Negative	NA	NA	NA	NA
MM-10	Drywall joint compound throughout lower level of main building	Negative	NA	NA	NA	NA
MM-11	Drywall walling throughout lower level of main building	Negative	NA	NA	NA	NA
MM-11	Drywall joint compound throughout lower level of main building	Negative	NA	NA	NA	NA
MM-12	Drywall walling throughout lower level of main building	Negative	NA	NA	NA	NA
MM-12	Drywall joint compound throughout lower level of main building	Negative	NA	NA	NA	NA
MM-13	Ceiling tile in front office area of main building – top level	Negative	NA	NA	NA	NA
MM-14	Ceiling tile in front office area of main building – top level	Negative	NA	NA	NA	NA
MM-15	Blue pebbled sheet flooring in front office area of main building – top level	Negative	NA	NA	NA	NA
MM-16	Blue pebbled sheet flooring in front office area of main building – top level	Negative	NA	NA	NA	NA
MM-17	12”x12” white floor tile in front office area of main building – top level	Negative	NA	NA	NA	NA
MM-17	12”x12” white floor tile (yellow mastic) in front office area of main building – top level	Negative	NA	NA	NA	NA
MM-18	12”x12” white floor tile in front office area of main building – top level	Negative	NA	NA	NA	NA
MM-18	12”x12” white floor tile (yellow mastic) in front office area of main building – top level	Negative	NA	NA	NA	NA
MM-19	12”x12” gray floor tile – main building – center section / rear lobby / stairs – upper level	Negative	NA	NA	NA	NA
MM-19	12”x12” gray floor tile (yellow & black mastic) – main building – center section / rear lobby / stairs – upper level	Negative	NA	NA	NA	NA

Sample ID	Location Description	Asbestos Results Positive/Negative	Y/N Friable	Amount (Ft)	Condition	Homogenous Area
MM-20	12”x12” gray floor tile – main building – center section / rear lobby / stairs – upper level	Negative	NA	NA	NA	NA
MM-20	12”x12” gray floor tile (yellow & black mastic) – main building – center section / rear lobby / stairs – upper level	Negative	NA	NA	NA	NA
MM-21	12”x12” black floor tile – main building – rear stairs – upper level	Negative	NA	NA	NA	NA
MM-21	12”x12” black floor tile (yellow mastic)– main building – rear stairs – upper level	Negative	NA	NA	NA	NA
MM-22	12”x12” black floor tile – main building – rear stairs – upper level	Negative	NA	NA	NA	NA
MM-22	12”x12” black floor tile (yellow mastic)– main building – rear stairs – upper level	Negative	NA	NA	NA	NA
MM-23	12”x12” white floor tile – main building – rear stairs – upper level	Negative	NA	NA	NA	NA
MM-23	12”x12” white floor tile (yellow mastic)– main building – rear stairs – upper level	Negative	NA	NA	NA	NA
MM-24	12”x12” white floor tile – main building – rear stairs – upper level	Negative	NA	NA	NA	NA
MM-24	12”x12” white floor tile (yellow mastic)– main building – rear stairs – upper level	Negative	NA	NA	NA	NA
MM-25	Black flooring material under leveling compound throughout upper level	Negative	NA	NA	NA	NA
MM-26	Black flooring material under leveling compound throughout upper level	Negative	NA	NA	NA	NA
MM-27	Red 12”x12” floor tile – main building – rear lobby – upper level	Negative	NA	NA	NA	NA
MM-27	Red 12”x12” floor tile (yellow mastic) – main building – rear lobby – upper level	Negative	NA	NA	NA	NA
MM-28	Red 12”x12” floor tile – main building – rear lobby – upper level	Negative	NA	NA	NA	NA

Sample ID	Location Description	Asbestos Results Positive/Negative	Y/N Friable	Amount (Ft)	Condition	Homogenous Area
MM-28	Red 12”x12” floor tile (yellow mastic) – main building – rear lobby – upper level	Negative	NA	NA	NA	NA
MM-29	Black cove base – main building – rear section – upper level	Negative	NA	NA	NA	NA
MM-29	Black cove base (cream mastic) – main building – rear section – upper level	Negative	NA	NA	NA	NA
MM-30	Black cove base – main building – rear section – upper level	Negative	NA	NA	NA	NA
MM-30	Black cove base (cream mastic) – main building – rear section – upper level	Negative	NA	NA	NA	NA
MM-31	12”x12” white floor tile – main building – lower level – front storage to stairway	Negative	NA	NA	NA	NA
MM-31	12”x12” white floor tile (yellow mastic) – main building – lower level – front storage to stairway	Negative	NA	NA	NA	NA
MM-32	12”x12” white floor tile – main building – lower level – front storage to stairway	Negative	NA	NA	NA	NA
MM-32	12”x12” white floor tile (yellow mastic) – main building – lower level – front storage to stairway	Negative	NA	NA	NA	NA
MM-33	Red floor tile strips – main building – lower level – front storage to stairway	Negative	NA	NA	NA	NA
MM-33	Red floor tile strips (yellow mastic) – main building – lower level – front storage to stairway	Negative	NA	NA	NA	NA
MM-34	Red floor tile strips – main building – lower level – front storage to stairway	Negative	NA	NA	NA	NA
MM-34	Red floor tile strips (yellow mastic) – main building – lower level – front storage to stairway	Negative	NA	NA	NA	NA
MM-35	12”x12” gray floor tiles – main building – lower level – front storage to stairway	Negative	NA	NA	NA	NA
MM-35	12”x12” gray floor tiles (yellow mastic) – main building – lower level – front storage to stairway	Negative	NA	NA	NA	NA
MM-36	Not Applicable	Negative	NA	NA	NA	NA

Sample ID	Location Description	Asbestos Results Positive/Negative	Y/N Friable	Amount (Ft)	Condition	Homogenous Area
MM-37	Cream cover base – main building – lower level - front	Negative	NA	NA	NA	NA
MM-37	Cream cover base (yellow mastic) – main building – lower level - front	Negative	NA	NA	NA	NA
MM-38	Cream cover base – main building – lower level - front	Negative	NA	NA	NA	NA
MM-38	Cream cover base (yellow mastic) – main building – lower level - front	Negative	NA	NA	NA	NA
MM-39	White floor tile (carpet mastic) – main building – lower level – front – below carpeting	Negative	NA	NA	NA	NA
MM-39	White floor tile – main building – lower level – front – below carpeting	Negative	NA	NA	NA	NA
MM-39	White floor tile (yellow mastic) – main building – lower level – front – below carpeting	Negative	NA	NA	NA	NA
MM-40	White floor tile (carpet mastic) – main building – lower level – front – below carpeting	Negative	NA	NA	NA	NA
MM-40	White floor tile – main building – lower level – front – below carpeting	Negative	NA	NA	NA	NA
MM-40	White floor tile (yellow mastic) – main building – lower level – front – below carpeting	Negative	NA	NA	NA	NA
MM-41	Black cove base – main building – lower level - center	Negative	NA	NA	NA	NA
MM-41	Black cove base (yellow mastic) – main building – lower level - center	Negative	NA	NA	NA	NA
MM-42	Black cove base – main building – lower level - center	Negative	NA	NA	NA	NA
MM-42	Black cove base (yellow mastic) – main building – lower level - center	Negative	NA	NA	NA	NA
MM-43	White 12”x12” floor tile – main building – lower level - center	Negative	NA	NA	NA	NA
MM-43	White 12”x12” floor tile (yellow mastic) – main building – lower level - center	Negative	NA	NA	NA	NA
MM-44	White 12”x12” floor tile – main building – lower level - center	Negative	NA	NA	NA	NA

Sample ID	Location Description	Asbestos Results Positive/Negative	Y/N Friable	Amount (Ft)	Condition	Homogenous Area
MM-44	White 12”x12” floor tile (yellow mastic) – main building – lower level - center	Negative	NA	NA	NA	NA
MM-45	Faux brick floor tile – main building – lower level – center	Negative	NA	NA	NA	NA
MM-45	Faux brick floor tile (yellow mastic) – main building – lower level – center	Negative	NA	NA	NA	NA
MM-46	Faux brick floor tile – main building – lower level – center	Negative	NA	NA	NA	NA
MM-46	Faux brick floor tile (yellow mastic) – main building – lower level – center	Negative	NA	NA	NA	NA

**It should be noted that pipe insulation inspected was laying loose on top of a brick structure. It is highly plausible that more material exists within the basement area. The basement area should be considered contaminated due to asbestos containing heat shield and pipe insulation. Access should be limited, and proper OSHA required asbestos signage should be installed to access point(s).*

Positive asbestos material is defined by the CVES method when there is 1% or greater volume of asbestos, by weight; in the sample. Prior to any renovation or demolition occurring at the site, which would disturb any positively identified material, abatement should occur utilizing a licensed abatement contractor. Upon removal of the material, a manifest of disposal should be provided in the final report.

Under state and federal regulations, you are not required to remove the positive material unless it has the potential to be disturbed and subsequently pose potential health problems or prior to renovation or demolition activities in the areas with the asbestos materials.

A total of 85 analyses were conducted on the suspected asbestos containing material. The samples were analyzed using Polarized Light Microscopy method. The lab reports and chain of custody are attached.

Please Reply To:

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

FACSIMILE TELECOPY TRANSMISSION

To: Ryan Rose
WECI Inc
Fax #:

Email: rrose@thinkweci.com,acook@thinkweci.com

From: Eric H. Ahles
AmeriSci Job #: 119071481
Subject: PLM 5 day Results
Client Project: Crawford Building; 315 W Stephen St MArtinsburg, WV

Date: Monday, July 15, 2019
Time: 15:00:20
Comments:

Number of Pages: 19 (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

WECI Inc
Attn: Ryan Rose
119-1 Sulky Drive

Winchester, VA 22602

Date Received 07/12/19 **AmeriSci Job #** 119071481
Date Examined 07/15/19 **P.O. #**
Page 1 **of** 15
RE: Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-1	119071481-01	*No*	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Metal Frame Windows - South Bldg (x46); Glazing			
Analyst Description: Gray, Homogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-2	119071481-02	*No*	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Metal Frame Windows - South Bldg (x46); Glazing			
Analyst Description: Gray, Homogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Fibrous Talc 4 %, Non-fibrous 96 %			
MM-3	119071481-03	*No*	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Metal Frame Windows - South Bldg (x46); Glazing			
Analyst Description: White, Homogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 2 %, Non-fibrous 98 %			
MM-4	119071481-04	*No*	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Wooden Frame Windows - Main Bldg (~127x); Glazing			
Analyst Description: Gray, Homogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-5	119071481-05	*No*	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Wooden Frame Windows - Main Bldg (~127x); Glazing			
Analyst Description: Gray, Homogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Fibrous Talc 3 %, Non-fibrous 97 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-6	119071481-06	*No*	NAD
Location: Wooden Frame Windows - Main Bldg (~127x); Glazing			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Gray, Homogeneous, Non-Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Fibrous Talc 2 %, Non-fibrous 98 %			
TSI-1	119071481-07	*Yes*	80 %
Location: Basement - East; Pipe Insulation (~2ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Gray, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types: Chrysotile 80.0 %			
Other Material: Non-fibrous 20 %			
TSI-2	119071481-08	*Yes*	80 %
Location: Basement - East; Pipe Insulation (~2ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Gray, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types: Chrysotile 80.0 %			
Other Material: Non-fibrous 20 %			
TSI-3	119071481-09	*Yes*	85 %
Location: Basement - East; Pipe Insulation (~2ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Gray, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types: Chrysotile 85.0 %			
Other Material: Non-fibrous 15 %			
MM-7	119071481-10.1	*No*	NAD
Location: Top Level - Main Bldg - Throughout; Drywall & Joint Compound			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White/Gray, Heterogeneous, Non-Fibrous, Drywall			
Asbestos Types:			
Other Material: Cellulose 5 %, Non-fibrous 95 %			
MM-7	119071481-10.2	*No*	NAD
Location: Top Level - Main Bldg - Throughout; Drywall & Joint Compound			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Joint Compound			
Asbestos Types:			
Other Material: Cellulose 3 %, Non-fibrous 97 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-8	119071481-11.1	***No***	NAD
Location: Top Level - Main Bldg - Throughout; Drywall & Joint Compound			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Drywall **Asbestos Types:** **Other Material:** Cellulose 3 %, Non-fibrous 97 %			
MM-8	119071481-11.2	***No***	NAD
Location: Top Level - Main Bldg - Throughout; Drywall & Joint Compound			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Joint Compound **Asbestos Types:** **Other Material:** Cellulose 2 %, Non-fibrous 98 %			
MM-9	119071481-12.1	***No***	NAD
Location: Top Level - Main Bldg - Throughout; Drywall & Joint Compound			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Drywall **Asbestos Types:** **Other Material:** Cellulose 3 %, Non-fibrous 97 %			
MM-9	119071481-12.2	***No***	NAD
Location: Top Level - Main Bldg - Throughout; Drywall & Joint Compound			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Joint Compound **Asbestos Types:** **Other Material:** Cellulose 2 %, Non-fibrous 98 %			
TSI-4	119071481-13	***Yes***	75 %
Location: Basement - Above Boiler Pad; Heat Shield (~300ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White/Black, Heterogeneous, Fibrous, Bulk Material **Asbestos Types:** Chrysotile 75.0 % **Other Material:** Non-fibrous 25 %			
TSI-5	119071481-14	***Yes***	75 %
Location: Basement - Above Boiler Pad; Heat Shield (~300ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White/Black, Heterogeneous, Fibrous, Bulk Material **Asbestos Types:** Chrysotile 75.0 % **Other Material:** Non-fibrous 25 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-10	119071481-15.1	***No***	NAD
Location: Lower Level Mai Bldg - Throughout; Drywall & Joint Compound			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Drywall **Asbestos Types:** **Other Material:** Cellulose 5 %, Non-fibrous 95 %			
MM-10	119071481-15.2	***No***	NAD
Location: Lower Level Mai Bldg - Throughout; Drywall & Joint Compound			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Joint Compound **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
MM-11	119071481-16.1	***No***	NAD
Location: Lower Level Mai Bldg - Throughout; Drywall & Joint Compound			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Drywall **Asbestos Types:** **Other Material:** Cellulose 3 %, Non-fibrous 97 %			
MM-11	119071481-16.2	***No***	NAD
Location: Lower Level Mai Bldg - Throughout; Drywall & Joint Compound			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Joint Compound **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
MM-12	119071481-17.1	***No***	NAD
Location: Lower Level Mai Bldg - Throughout; Drywall & Joint Compound			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Drywall **Asbestos Types:** **Other Material:** Cellulose 5 %, Non-fibrous 95 %			
MM-12	119071481-17.2	***No***	NAD
Location: Lower Level Mai Bldg - Throughout; Drywall & Joint Compound			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Joint Compound **Asbestos Types:** **Other Material:** Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-13	119071481-18	*No*	NAD
Location: Front Office Area - Main Bldg - Top Level; Ceiling Tile			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Brown, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 60 %, Fibrous glass 15 %, Non-fibrous 25 %			
MM-14	119071481-19	*No*	NAD
Location: Front Office Area - Main Bldg - Top Level; Ceiling Tile			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Brown, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 60 %, Fibrous glass 15 %, Non-fibrous 25 %			
MM-15	119071481-20	*No*	NAD
Location: Front Office Area - Main Bldg - Top Level (675ft); Blue Pebbled Sheet Floor			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Blue/Gray, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 15 %, Fibrous glass 5 %, Non-fibrous 80 %			
MM-16	119071481-21	*No*	NAD
Location: Front Office Area - Main Bldg - Top Level; Blue Pebbled Sheet Floor			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Blue/Gray, Heterogeneous, Fibrous, Bulk Material			
Asbestos Types:			
Other Material: Cellulose 15 %, Fibrous glass 5 %, Non-fibrous 80 %			
MM-17	119071481-22L1	*No*	NAD
Location: Front Office Area - Main Bldg - Top Level; 12" White Floor Tile			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-17	119071481-22L2	*No*	NAD
Location: Front Office Area - Main Bldg - Top Level; 12" White Floor Tile			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 2 %, Non-fibrous 98 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-18	119071481-23L1	*No*	NAD
Location: Front Office Area - Main Bldg - Top Level; 12" White Floor Tile			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-18	119071481-23L2	*No*	NAD
Location: Front Office Area - Main Bldg - Top Level; 12" White Floor Tile			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-19	119071481-24L1	*No*	NAD
Location: Main Bldg - Center Section & Rear Stair & Rear Lobby Top Level; 12" Gray Floor Tile (~525ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-19	119071481-24L2	*No*	NAD
Location: Main Bldg - Center Section & Rear Stair & Rear Lobby Top Level; 12" Gray Floor Tile (~525ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow/Black, Heterogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 5 %, Fibrous glass Trace, Non-fibrous 95 %			
MM-20	119071481-25L1	*No*	NAD
Location: Main Bldg - Center Section & Rear Stair & Rear Lobby Top Level; 12" Gray Floor Tile (~525ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-20	119071481-25L2	*No*	NAD
Location: Main Bldg - Center Section & Rear Stair & Rear Lobby Top Level; 12" Gray Floor Tile (~525ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow/Black, Heterogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 3 %, Non-fibrous 97 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-21	119071481-26L1	*No*	NAD
Location: Main Bldg - Rear Stair Top Level; 12" Black Floor Tile (~50ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Black, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-21	119071481-26L2	*No*	NAD
Location: Main Bldg - Rear Stair Top Level; 12" Black Floor Tile (~50ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Fibrous glass 2 %, Non-fibrous 98 %			
MM-22	119071481-27L1	*No*	NAD
Location: Main Bldg - Rear Stair Top Level; 12" Black Floor Tile (~50ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Black, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-22	119071481-27L2	*No*	NAD
Location: Main Bldg - Rear Stair Top Level; 12" Black Floor Tile (~50ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Heterogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 2 %, Non-fibrous 98 %			
MM-23	119071481-28L1	*No*	NAD
Location: Main Bldg - Rear Stair Top Level; 12" White Floor Tile (~10ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-23	119071481-28L2	*No*	NAD
Location: Main Bldg - Rear Stair Top Level; 12" White Floor Tile (~10ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-24	119071481-29L1	***No***	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Main Bldg - Rear Stair Top Level; 12" White Floor Tile (~10ft)			
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Floor Tile **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
MM-24	119071481-29L2	***No***	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Main Bldg - Rear Stair Top Level; 12" White Floor Tile (~10ft)			
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic **Asbestos Types:** **Other Material:** Cellulose 3 %, Non-fibrous 97 %			
MM-25	119071481-30	***No***	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Main Bldg - Throughout Under Leveling Compound; Black Floor Material			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Cellulose 7 %, Non-fibrous 93 %			
MM-26	119071481-31	***No***	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Main Bldg - Throughout Under Leveling Compound; Black Floor Material			
Analyst Description: Black, Heterogeneous, Non-Fibrous, Bulk Material **Asbestos Types:** **Other Material:** Cellulose 7 %, Non-fibrous 93 %			
MM-27	119071481-32.1	***No***	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Main Bldg - Top Level - Rear Lobby; Red 12" Floor Tile (330ft)			
Analyst Description: Red, Heterogeneous, Non-Fibrous, Floor Tile **Asbestos Types:** **Other Material:** Non-fibrous 100 %			
MM-27	119071481-32.2	***No***	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Main Bldg - Top Level - Rear Lobby; Red 12" Floor Tile (330ft)			
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic **Asbestos Types:** **Other Material:** Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-28	119071481-33L1	*No*	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Main Bldg - Top Level - Rear Lobby; Red 12" Floor Tile (330ft)			
Analyst Description: Red, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-28	119071481-33L2	*No*	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Main Bldg - Top Level - Rear Lobby; Red 12" Floor Tile (330ft)			
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 2 %, Non-fibrous 98 %			
MM-29	119071481-34L1	*No*	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Main Bldg - Top Level - Rear Half Of Bldg; Black Cove Base			
Analyst Description: Black, Homogeneous, Non-Fibrous, Cove Base			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-29	119071481-34L2	*No*	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Main Bldg - Top Level - Rear Half Of Bldg; Black Cove Base			
Analyst Description: Cream, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 5 %, Non-fibrous 95 %			
MM-30	119071481-35L1	*No*	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Main Bldg - Top Level - Rear Half Of Bldg; Black Cove Base			
Analyst Description: Black, Homogeneous, Non-Fibrous, Cove Base			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-30	119071481-35L2	*No*	NAD (by CVES) by Eric H. Ahles on 07/15/19
Location: Main Bldg - Top Level - Rear Half Of Bldg; Black Cove Base			
Analyst Description: Cream, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 5 %, Non-fibrous 95 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-31	119071481-36L1	***No***	NAD
Location: Main Bldg - Lower Level - Front Storage To Stairwell; 12" White Floor Tile (~500ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-31	119071481-36L2	***No***	NAD
Location: Main Bldg - Lower Level - Front Storage To Stairwell; 12" White Floor Tile (~500ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 2 %, Non-fibrous 98 %			
MM-32	119071481-37L1	***No***	NAD
Location: Main Bldg - Lower Level - Front Storage To Stairwell; 12" White Floor Tile (~500ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-32	119071481-37L2	***No***	NAD
Location: Main Bldg - Lower Level - Front Storage To Stairwell; 12" White Floor Tile (~500ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 3 %, Non-fibrous 97 %			
MM-33	119071481-38L1	***No***	NAD
Location: Main Bldg - Lower Level - Front Storage To Stairwell; Red Floor Tile Strips (3ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Red, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-33	119071481-38L2	***No***	NAD
Location: Main Bldg - Lower Level - Front Storage To Stairwell; Red Floor Tile Strips (3ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 5 %, Non-fibrous 95 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-34	119071481-39L1	*No*	NAD
Location: Main Bldg - Lower Level - Front Storage To Stairwell; Red Floor Tile Strips (3ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Red, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-34	119071481-39L2	*No*	NAD
Location: Main Bldg - Lower Level - Front Storage To Stairwell; Red Floor Tile Strips (3ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 5 %, Non-fibrous 95 %			
MM-35	119071481-40L1	*No*	NAD
Location: Main Bldg - Lower Level - Front Storage To Stairwell; 12" Gray Floor Tile (400ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Gray, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-35	119071481-40L2	*No*	NAD
Location: Main Bldg - Lower Level - Front Storage To Stairwell; 12" Gray Floor Tile (400ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Heterogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 3 %, Non-fibrous 97 %			
MM-36	119071481-41		NA [1]
Location: Main Bldg - Lower Level - Front Storage To Stairwell; 12" Gray Floor Tile (400ft)			
Analyst Description: Bulk Material			
Asbestos Types:			
Other Material:			
MM-37	119071481-42L1	*No*	NAD
Location: Main Bldg - Lower Level - Front Shop; Cream Cove Base			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Cream, Homogeneous, Non-Fibrous, Cove Base			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-37	119071481-42L2	*No*	NAD
Location: Main Bldg - Lower Level - Front Shop; Cream Cove Base			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-38	119071481-43L1	*No*	NAD
Location: Main Bldg - Lower Level - Front Shop; Cream Cove Base			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Cream, Homogeneous, Non-Fibrous, Cove Base			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-38	119071481-43L2	*No*	NAD
Location: Main Bldg - Lower Level - Front Shop; Cream Cove Base			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-39	119071481-44L1	*No*	NAD
Location: Main Bldg - Lower Level - Front Shop Below Carpet; White Floor Tile (~2500ft2)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Carpet Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-39	119071481-44L2	*No*	NAD
Location: Main Bldg - Lower Level - Front Shop Below Carpet; White Floor Tile (~2500ft2)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-39	119071481-44L3	*No*	NAD
Location: Main Bldg - Lower Level - Front Shop Below Carpet; White Floor Tile (~2500ft2)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 2 %, Non-fibrous 98 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-40	119071481-45L1	*No*	NAD
Location: Main Bldg - Lower Level - Front Shop Below Carpet; White Floor Tile (~2500ft2)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Carpet Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-40	119071481-45L2	*No*	NAD
Location: Main Bldg - Lower Level - Front Shop Below Carpet; White Floor Tile (~2500ft2)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-40	119071481-45L3	*No*	NAD
Location: Main Bldg - Lower Level - Front Shop Below Carpet; White Floor Tile (~2500ft2)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Cellulose 2 %, Non-fibrous 98 %			
MM-41	119071481-46L1	*No*	NAD
Location: Main Bldg - Lower Level - 2nd/Center Shop; - Black Cove Base			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Black, Homogeneous, Non-Fibrous, Cove Base			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-41	119071481-46L2	*No*	NAD
Location: Main Bldg - Lower Level - 2nd/Center Shop; - Black Cove Base			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Fibrous Talc 4 %, Non-fibrous 96 %			
MM-42	119071481-47L1	*No*	NAD
Location: Main Bldg - Lower Level - 2nd/Center Shop; - Black Cove Base			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Black, Homogeneous, Non-Fibrous, Cove Base			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-42	119071481-47L2	*No*	NAD
Location: Main Bldg - Lower Level - 2nd/Center Shop; - Black Cove Base			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Fibrous Talc 5 %, Non-fibrous 95 %			
MM-43	119071481-48L1	*No*	NAD
Location: Main Bldg - Lower Level - 2nd/Center Shop; 12" White Floor Tile (1100ft2)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-43	119071481-48L2	*No*	NAD
Location: Main Bldg - Lower Level - 2nd/Center Shop; 12" White Floor Tile (1100ft2)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-44	119071481-49L1	*No*	NAD
Location: Main Bldg - Lower Level - 2nd/Center Shop; 12" White Floor Tile (1100ft2)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: White, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-44	119071481-49L2	*No*	NAD
Location: Main Bldg - Lower Level - 2nd/Center Shop; 12" White Floor Tile (1100ft2)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-45	119071481-50L1	*No*	NAD
Location: Main Bldg - Lower Level - 2nd/Center Shop; Faux Brick Floor Tile (300ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Red/Gray, Homogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

See Reporting notes on last page

PLM Bulk Asbestos Report

Crawford Building; 315 W Stephen St MArtinsburg, WV

Client No. / HGA	Lab No.	Asbestos Present	Total % Asbestos
MM-45	119071481-50L2	***No***	NAD
Location: Main Bldg - Lower Level - 2nd/Center Shop; Faux Brick Floor Tile (300ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-46	119071481-51L1	***No***	NAD
Location: Main Bldg - Lower Level - 2nd/Center Shop; Faux Brick Floor Tile (300ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Red/Gray, Heterogeneous, Non-Fibrous, Floor Tile			
Asbestos Types:			
Other Material: Non-fibrous 100 %			
MM-46	119071481-51L2	***No***	NAD
Location: Main Bldg - Lower Level - 2nd/Center Shop; Faux Brick Floor Tile (300ft)			(by CVES) by Eric H. Ahles on 07/15/19
Analyst Description: Yellow, Homogeneous, Non-Fibrous, Mastic			
Asbestos Types:			
Other Material: Non-fibrous 100 %			

Reporting Notes:

(1) Insufficient material submitted for accurate quantitation during PLM analysis (no QC possible).

Analyzed by: Eric H. Ahles _____ Date: 7/15/2019 Reviewed by: _____

*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.

1190714 81

Relinquished By: Ryan Rose RECEIVED	Date/Time: 7-11-19
Received By:	Date/Time:
Relinquished By: JUL 12 2019	Date/Time:
Received By: By RRR	Date/Time:

AMERISCI

WWW.AMERISCI.COM

BULK CHAIN OF CUSTODY

AMERISCI RICHMOND
13635 GENITO ROAD
MIDLOTHIAN, VA 23112
TOLL FREE: (800) 476-5227
PHONE: (804) 763-1200
FAX: (804) 763-1800

Company: WECI, Inc

Street Address: 199-1 Sulky Drive

City: Winchester State: VA Zip: 22602

Phone: 540-877-9420 Cell: 540-686-5021

Fax Results? Y ☐ Fax #:

Email Results? Y ☑ Email: rrose@thinkweci.com

Results to: Ryan Rose

AmeriSci #:

Project: CRAWFORD Building

Proj Mgr: Ryan Rose Proj #:

Proj Address: 315 W. Stephen St. Martinsburg Proj State: WV

Analysis: ☒ PLM; ☐ Positive Stop; ☐ TEM; ☑ NY ELAP PLM/TEM w/ NOB Prep

ASTM Dust ☐ (Microvac) ☐ (Wipe); ☐ Qualitative; ☐ NY ELAP 198.8 Vermiculite

Turnaround Time: 5 day Material Type: ☑ Bulk ☐ Dust ☐ Water

Sampled By: A. Rose + A. Cook Date Sampled: 11 July 2019

Special Instructions or Comments: analyze mastic where applicable

Lab ID	Field ID	Location	Sample Description (dust area)	Homogenous Area
	MM-1	metal frame windows - ~~front~~ south Bldg. (x46)	glazing	1
	MM-2	" " "	"	1
	MM-3	" " "	"	1
	MM-4	wooden frame windows - main bldg. (~127x)	glazing	2
	MM-5	" " "	"	2
	MM-6	" " "	"	2
	TSI-1	basement - east	pipe insulation (~2 ft)	3
	TSI-2	" "	"	3
	TSI-3	" "	"	3
	MM-7	top level - main bldg - throughout	drywall + joint compound	4
	MM-8	" " "	" "	4
	MM-9	" " "	" "	4
	TSI-4	basement - above boiler pad	heat shield (~300 ft)	5
	TSI-5	" "	" "	5
	MM-10	lower level main bldg - throughout	drywall + joint compound	6
	MM-11	" " "	" "	6
	MM-12	" " "	" "	6

1190 71481

Relinquished By:	RECEIVED	Date/Time:	
Received By:	JUL 12 2019	Date/Time:	
Relinquished By:	By RRR	Date/Time:	
Received By:		Date/Time:	

AMERI SCI

WWW.AMERISCI.COM

BULK CHAIN OF CUSTODY

AMERISCI RICHMOND
13635 GENITO ROAD
MIDLOTHIAN, VA 23112
TOLL FREE: (800) 476-5227
PHONE: (804) 763-1200
FAX: (804) 763-1800

Company: WECI, Inc

Street Address: 199-1 Sulky Drive

City: Winchester State: VA Zip: 22602

Phone: 540-877-9420 Cell: 540-686-5021

Fax Results? Y ☐ Fax #:

Email Results? Y ☑ Email: rrose@thinkweci.com

Results to: Ryan Rose

Project: CRAWFORD Building AmeriSci #:

Proj Mgr: Proj #:

Proj Address: Proj State:

Analysis: ☑ PLM; ☐ Positive Stop; ☐ TEM; ☐ NY ELAP PLM/TEM w/ NOB Prep.

ASTM Dust ☐ (Microvac) ☐ (Wipe); ☐ Qualitative; ☐ NY ELAP 198.8 Vermiculite

Turnaround Time: 5 day Material Type: ☑ Bulk ☐ Dust ☐ Water

Sampled By: R. Rose + A. Cook Date Sampled: 11 July 2019

Special Instructions or Comments:

Lab ID	Field ID	Location	Sample Description (dust area)	Homogenous Area
	MM-13	front office area - main bldg - top level	ceiling tile	7
	MM-14	↓	↓	7
	MM-15	↓ (675 ft²)	blue pebbled sheet floor	8
	MM-16	↓	↓ ↓	8
	MM-17	↓	12" white floor tile	9
	MM-18	↓	↓ ↓	9
	MM-19	main bldg - center section + rear stair + rear lobby - top level	12" gray floor tile (~525 ft²)	10
	MM-20	↓ ↓ ↓	↓	10
	MM-21	main bldg - rear stair	12" black floor tile (~50 ft²)	11
	MM-22	↓	↓	11
	MM-23	↓	12" white floor tile (~10 ft²)	12
	MM-24	↓	↓	12
	MM-25	main bldg - throughout under leveling compound	black floor material	13
	MM-26	↓ ↓ ↓ ↓	↓	13
	MM-27	main bldg - top level - rear lobby	red 12" floor tile (330 ft²)	14
	MM-28	↓ ↓ ↓	↓ ↓	14
	MM-29	main bldg - top level - rear half of bldg	black cove base	15

119071481

RECEIVED
JUL 12 2019
By RRR

Relinquished By: _____ Date/Time: _____
Received By: _____ Date/Time: _____
Relinquished By: _____ Date/Time: _____
Received By: _____ Date/Time: _____

AMERISCI
WWW.AMERISCI.COM

BULK CHAIN OF CUSTODY

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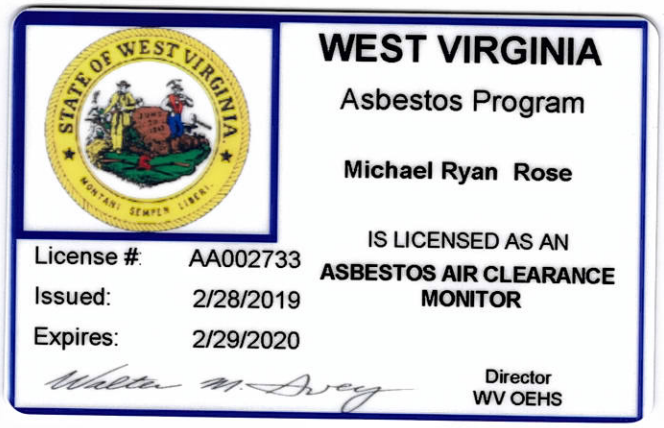
Results to: Ryan Rose

Project: CRAWFORD Building
AMERISCI #:
Proj Mgr: Proj #:
Proj Address: Proj State:
Analysis: ☑ PLM; ☐ Positive Stop; ☐ TEM; ☐ NY ELAP PLM/TEM w/ NOB Prep.
ASTM Dust ☐ (Microvac) ☐ (Wipe); ☐ Qualitative; ☐ NY ELAP 198.8 Vermiculite
Turnaround Time: 5day Material Type: ☑ Bulk ☐ Dust ☐ Water
Sampled By: A. Rose & A. Cook Date Sampled: 11 July 2019

Special Instructions or Comments: mm 41 + 42 also in rear shop

Lab ID	Field ID	Location	Sample Description (dust area)	Homogenous Area
	MM-30	main bldg - top level - rear half bldg	black cove base	15
	MM-31	- lower level - front storage to stair well	12" white floor tile (~500 ft²)	16
	MM-32		↓	16
	MM-33		red floor tile strips (3 ft²)	17
	MM-34		↓	17
	MM-35		12" gray floor tile (400 ft²)	18
	MM-36		↓	18
	MM-37	- front shop	cream cove base	19
	MM-38		↓	19
	MM-39	- below carpet	white floor tile (~2500 ft²)	20
	MM-40	↓	↓	20
	MM-41	- 2nd/center shop + ~~rear shop~~	- black cove base	21
	MM-42		↓	21
	MM-43		12" white floor tile (1100 ft²)	22
	MM-44		↓	22
	MM-45		faux brick floor tile (700 ft²)	23
	MM-46		↓	23



WEST VIRGINIA

Asbestos Program

Michael Ryan Rose

IS LICENSED AS AN

ASBESTOS AIR CLEARANCE MONITOR

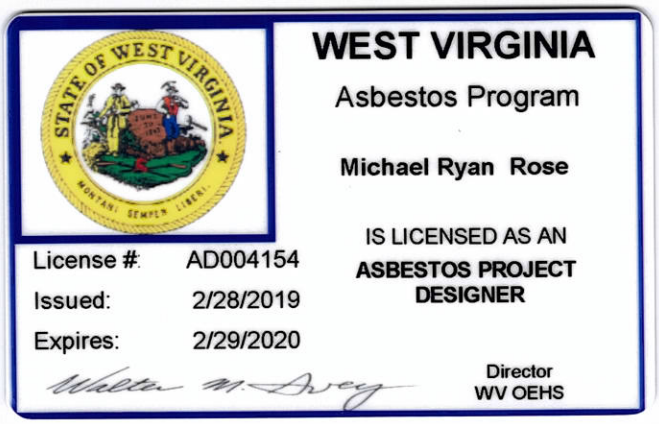
License #: AA002733

Issued: 2/28/2019

Expires: 2/29/2020

Walter M. Avey

Director
WV OEHS



WEST VIRGINIA

Asbestos Program

Michael Ryan Rose

IS LICENSED AS AN

ASBESTOS PROJECT DESIGNER

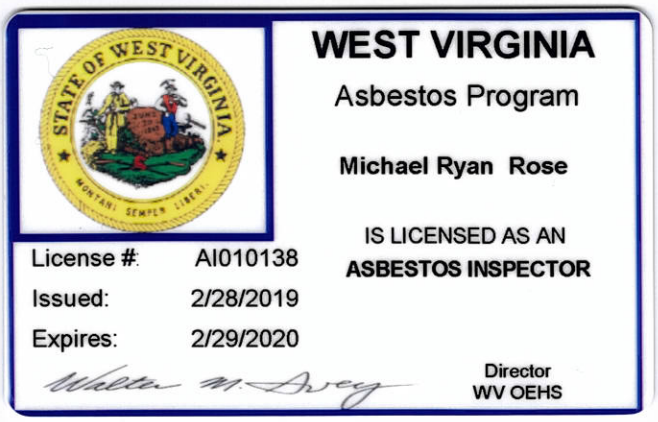
License #: AD004154

Issued: 2/28/2019

Expires: 2/29/2020

Walter M. Avey

Director
WV OEHS



WEST VIRGINIA

Asbestos Program

Michael Ryan Rose

IS LICENSED AS AN

ASBESTOS INSPECTOR

License #: AI010138

Issued: 2/28/2019

Expires: 2/29/2020

Walter M. Avey

Director
WV OEHS

The EI Group, Inc.

This certifies that

Michael Ryan Rose

Student Address: 511 Fairmont Avenue, Winchester, VA 22601

Has attended and satisfactorily passed an examination covering
the contents of an EPA/AHERA approved course titled

Asbestos Project Monitor Refresher (8-Hour) Training Course

71190200012
Certificate Number

T63-14-6827
Social Security Number

February 13, 2019
Course Date

February 13, 2019
Exam Date

February 13, 2020
Expiration Date

4186 Innslake Drive
Glen Allen, Virginia 23060
(804) 320-9300

EPA Approved Under
TSCA Title II

Glen Allen, VA
Location

Phillip Fincher, Training Program Manager

Michael Baum, Primary Instructor

Michael Baum, Exam Administrator

The EI Group, Inc.

This certifies that

Michael Ryan Rose

Student Address: 511 Fairmont Avenue, Winchester, VA 22601

Has attended and satisfactorily passed an examination covering
the contents of an EPA/AHERA approved course titled

Asbestos Project Designer Refresher (8-Hour) Training Course

7119020011
Certificate Number

T63-14-6827
Social Security Number

February 12, 2019
Course Date

February 12, 2019
Exam Date

February 12, 2020
Expiration Date

4186 Innslake Drive
Glen Allen, Virginia 23060
(804) 320-9300

EPA Approved Under
TSCA Title II

Glen Allen, VA
Location

Phillip Fincher, Training Program Manager

Michael Baum, Primary Instructor

Michael Baum, Exam Administrator

The EI Group, Inc.

This certifies that

Michael Ryan Rose

Student Address: 511 Fairmont Avenue, Winchester, VA 22601

Has attended and satisfactorily passed an examination covering
the contents of an EPA/AHERA approved course titled

Asbestos Inspector Refresher (4-Hour) Training Course

7119020047
Certificate Number

T63-14-6827
Social Security Number

February 25, 2019
Course Date

February 25, 2019
Exam Date

February 25, 2020
Expiration Date

4186 Innslake Drive
Glen Allen, Virginia 23060
(804) 320-9300

EPA Approved Under
TSCA Title II

Glen Allen, VA
Location

Phillip Fincher, Training Program Manager

Michael Baum, Primary Instructor

Michael Baum, Exam Administrator

The EI Group, Inc.

This certifies that

Michael Ryan Rose

Student Address: 511 Fairmont Avenue, Winchester, VA 22601

Has attended and satisfactorily passed an examination covering
the contents of an EPA/AHERA & West Virginia approved course titled

Asbestos WV Clearance Air Monitor (4-Hour) Refresher Training Course

7119020044
Certificate Number

T63-14-6827
Social Security Number

February 25, 2019
Course Date

February 25, 2019
Exam Date

February 25, 2020
Expiration Date

4186 Innslake Drive
Glen Allen, Virginia 23060
(804) 320-9300

EPA Approved Under
TSCA Title II

Glen Allen, VA
Location

Phillip Fincher, Training Program Manager

Michael Baum, Primary Instructor

Michael Baum, Exam Administrator

July 17th, 2019

Mr. Alan J. Davis
Berkeley County Administrator
400 W. Stephen Street. #201
Martinsburg, WV 25401

Limited Lead Based Paint Inspection: The Crawford Building
315 W. Stephen St., Martinsburg, WV 25401

Dear Mr. Davis:

On July 10th, 2019 at your request, Mr. Ryan Rose of WECI, Inc. conducted a limited lead-based paint inspection according to applicable WV and Federal lead paint guidelines at The Crawford Building, located at 315 West Stephen Street in Martinsburg, WV.

The inspection was requested due to anticipated renovations to the building. Samples were analyzed onsite through the use of a Thermo Scientific Niton XL2 GOLDD x-ray tube-based X-Ray Fluorescence (XRF) analyzer which had been properly calibrated prior to use.

The following materials did contain lead paint in The Crawford Building:

- **Exterior windowsills, casings, rails, framing, etc. on the wooden framed windows. All exterior window components should be considered lead containing based upon sampling and similarities in paint.**
- **Interior window casings on the wooden frame windows.**
  - *It is estimated that there are approximately 127 wooden windows throughout the building.*
- **5 black structural "I-Beam" columns in Southern portion of the building that includes the mezzanine.**

Results are based upon The U.S. Housing and Urban Development (HUD) and Environmental Protection Agency (EPA) lead guidelines. Paint $\geq$1.0 mg/cm^2 is considered Lead-based Paint (LBP).

Predicated on these results, all activities that will affect any part of the wooden windows on the exterior of the building or the casings on the interior portions of the wooden windows must be completed in accordance of OSHA and WV regulations.

It is recommended that any activities that affect any portion on the interior wooden windows be completed in accordance with OSHA and WV lead regulations.

The OSHA Lead Standard can be referenced below.

OSHA Standard 1910.1025 – Lead.
https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1025

Attached is the sample log, photographs of lead containing materials, and the WV lead inspectors license, please feel to contact me with any questions, thank you.

Sincerely,
WECI, Inc.

Ryan Rose
Vice President

199-1 Sulky Drive ♦ Winchester, VA 22602
(540) 877 9420
www.thinkweci.com

Lead Containing Materials

Wooden window exterior components

Wooden window exterior components

Wooden window exterior components

Wooden window exterior components

Wooden window exterior components

Wooden window exterior components

Lead Containing Material

Wooden interior window casing

Wooden interior window casing

Black structural columns in Southern portion

WECI, Inc.

199-1 Sulky Drive, Winchester, VA 22602
540-877-9420 Business 540-877-9495 Fax

Lead Sample Log

Sample #	Building	Location/Description	Side	Substrate	Color	Result (mg/cm^2)
1	Crawford Building	Main Area - Door	1	Metal	Red	Negative
2		Main Area - Door Frame	1	Metal	Red	Negative
3		Main Area - Wall	1	Drywall	White	Negative
4		Main Area - Window Frame 1	2	Wood	White	2.68
5		Main Area - Window Frame 1	2	Wood	White	1.45
6		Main Area - Window 1	2	Wood	White	Negative
7		Main Area - Window Sill 1	2	Wood	White	Negative
8		Main Area - Wall	2	Brick	White	Negative
9		Main Area - Window Frame 5	2	Wood	White	1.60
10		Main Area - Window Frame 5	2	Wood	White	1.19
11		Main Area - Changing Room Build Out - Wall	1	Drywall	Blue	Negative
12		Main Area - Changing Room Build Out - Wall	4	Drywall	Blue	Negative
13		Main Area - Wall	2	Brick	White	Negative
14		Main Area - Wall	2	Brick	White	Negative
15		Main Area - Wall	3	Drywall	Black	Negative
16		Main Area - Window Frame 9	2	Wood	White	2.47
17		Main Area - Wall by Roll Down Door	3	Drywall	White	Negative
18		Cat Walk Area - Wall	4	Brick	White	Negative
19		Cat Walk Area - Wall	4	Brick	White	Negative
20		Cat Walk Area - Door Frame	4	Metal	Red	Negative

WECI, Inc.

199-1 Sulky Drive, Winchester, VA 22602
540-877-9420 Business 540-877-9495 Fax

Lead Sample Log

Sample #	Building	Location/Description	Side	Substrate	Color	Result (mg/cm^2)
21		Cat Walk Area - Door	4	Metal	Red	Negative
22		Cat Walk Area - Header above Door	4	Metal	White	Negative
23		Cat Walk Area - Window Frame 1	4	Wood	White	Negative
24		Cat Walk Area - Door Frame	3	Metal	Red	Negative
25		Cat Walk Area - Roll Up Door Track	3	Metal	Red	Negative
26		Cat Walk Area - Wall	2	Drywall	White	Negative
27		Cat Walk Area - Wall	1	Drywall	White	Negative
28		Rear Main Area - Door Frame	1	Metal	White	Negative
29		Rear Main Area - Wall	1	Drywall	White	Negative
30		Rear Main Area - Wall	2	Drywall	White	Negative
31		Rear Main Area - Wall	3	Drywall	White	Negative
32		Rear Main Area - Wall	4	Drywall	White	Negative
33		Rear Main Area - Wall	4	Brick	White	Negative
34		Rear Main Area - Door to Lobby	4	Metal	White	Negative
35		Rear Main Area - Door Frame to Lobby	4	Metal	White	Negative
36		Rear Main Area - Hand Rail	4	Metal	White	Negative
37		Rear Main Area - Lobby - Vertical Pipe in Corner	4	Metal	White	Negative
38		Rear Main Area - Lobby - Wall	1	Drywall	White	Negative
39		Rear Main Area - Lobby - Wall	2	Brick	White	Negative
40		Rear Main Area - Lobby - Wall	3	Brick	White	Negative

WECI, Inc.

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Lead Sample Log

Sample #	Building	Location/Description	Side	Substrate	Color	Result (mg/cm^2)
41		Rear Main Area - Lobby - Wall	4	Brick	White	Negative
42		Main Area - Fire Suppression Line in Ceiling	1	Metal	White	Negative
43		Main Area - Exposed Truss in Ceiling	1	Wood	White	Negative
44		Main Area - HVAC Duct	1	Metal	White	Negative
45		Main Area - Front Office - Door	1	Metal	White	Negative
46		Main Area - Front Office - Door Frame	1	Metal	White	Negative
47		Main Area - Front Office - Wall	1	Brick	White	Negative
48		Main Area - Front Office - Wall	1	Brick	Blue	Negative
49		Main Area - Front Office - Steam Line	4	Metal	White	Negative
50		Main Area - Loft above Front Office - Roof Decking	N/A	Wood	White	Negative
51		Main Area - Loft above Front Office - Truss	N/A	Wood	White	Negative
52		Main Area - Loft above Front Office - Fire Suppression Line	N/A	Metal	White	Negative
53		Main Area - Loft above Front Office - HVAC Duct	N/A	Metal	White	Negative
54		Main Area - Front Office - Wall	4	Drywall	Blue	Negative
55		Exterior - Window	2	Wood	White	8.23
56		Exterior - Window Sill	2	Wood	White	4.80
57		Exterior - Window Frame	2	Wood	White	6.30
58		South Section - Metal Frame Window 3	1	Metal	White	Negative
59		South Section - Door	1	Metal	Red	Negative
60		South Section - Door Frame	1	Metal	Red	Negative

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Lead Sample Log

Sample #	Building	Location/Description	Side	Substrate	Color	Result (mg/cm^2)
61		South Section - Metal Frame Window 2	1	Metal	White	Negative
62		South Section - Fire Suppresion Line in Corner	4 & 1	Metal	White	Negative
63		South Section - Structural Steel Column	N/A	Metal	Black	2.42
64		South Section - Roof Drain	N/A	Metal	Black	Negative
65		South Section - Wall	2	Drywall	White	Negative
66		South Section - Office - Wall	1	Drywall	White	Negative
67		South Section - Office - Wall	4	Drywall	White	Negative
68		South Section - Office - Underside of Stairs	1	Metal	Brown	Negative
69		South Section - Office - Door	4	Metal	White	Negative
70		South Section - Office - Door Frame	4	Metal	White	Negative
71		South Section - Mezzanine - Metal Frame Window	2	Metal	White	Negative
72		South Section - Mezzanine - Metal Frame Window	3	Metal	White	Negative
73		South Section - Mezzanine - HVAC Duct	4	Metal	White	Negative
74		South Section - Mezzanine - HVAC Duct	4	Metal	White	Negative
75		South Section - Mezzanine - Fire Suppression Line	3	Metal	Black	Negative
76		Exterior - South Section - Metal Frame Window	1	Metal	Red	Negative
77		South Section - Boiler Vent Heat Sheilding	2	Metal	Black	Negative
78		South Section - Boiler Vent	4	Metal	Black	Negative
79		Exterior - South Section - Door to Boiler Room	4	Metal	Brown	Negative
80		Exterior - South Section - Door Frame to Boiler Room	4	Metal	Brown	Negative

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Lead Sample Log

Sample #	Building	Location/Description	Side	Substrate	Color	Result (mg/cm^2)
81		Exterior - South Section - Metal Frame Window	4	Metal	Red	Negative
82		South Section - Stair - Wall	4	Brick	White	Negative
83		South Section - Stair - Handrail	N/A	Metal	White	Negative
84		South Section - Stair - Stringer	N/A	Metal	White	Negative
85		South Section - Lower Wall	2	Brick	White	Negative
86		South Section - Lower Wall	3	Brick	White	Negative
87		South Section - Lower Wall	4	Brick	White	Negative
88		South Section - Lower Wall	1	Brick	White	Negative
89		South Section - Stair - Lintil over Window	4	Metal	White	Negative
90		Main Area - Lower Level - Window	4	Wood	White	2.71
91		Main Area - Lower Level - Fire Suppression	4	Metal	White	Negative
92		Main Area - Lower Level - Steam Line	4	Metal	White	Negative
93		Main Area - Lower Level - Wall	4	Brick	White	Negative
94		Lower Level - First Shop Area - Column	N/A	Wood	White	Negative
95		Lower Level - First Shop Area - Wall	1	Drywall	White	Negative
96		Lower Level - First Shop Area - Fire Suppression	N/A	Metal	White	Negative
97		Lower Level - First Shop Area - Wall	1	Drywall	White	Negative
98		Lower Level - First Shop Storage - Door	3	Metal	Cream	Negative
99		Lower Level - First Shop Storage - Door Frame	3	Metal	Cream	Negative
100		Lower Level - First Shop Storage - Door	1	Metal	Cream	Negative

WECI, Inc.

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Lead Sample Log

Sample #	Building	Location/Description	Side	Substrate	Color	Result (mg/cm^2)
101		Lower Level - First Shop Storage - Door Frame	1	Metal	Cream	Negative
102		Lower Level - First Shop Storage - Fire Suppression	N/A	Metal	White	Negative
103		Lower Level - First Shop Storage - Steam Line	N/A	Metal	White	Negative
104		Lower Level - First Shop Storage - Wall	4	Drywall	White	Negative
105		Lower Level - Hallway - Wainscotting	2	Wood	White	Negative
106		Lower Level - Hallway - Chair Rail	2	Wood	White	Negative
107		Lower Level - Hallway - Window Frame	2	Wood	White	Negative
108		Lower Level - Hallway - Window	2	Wood	White	Negative
109		Lower Level - Hallway - Wall	2	Drywall	White	Negative
110		Lower Level - 2nd Shop - Wall	1	Drywall	White	Negative
111		Lower Level - 2nd Shop - Wall	2	Stone	White	Negative
112		Lower Level - 2nd Shop - Wall	3	Drywall	White	Negative
113		Lower Level - 2nd Shop - Wall	4	Drywall	White	Negative
114		Lower Level - 2nd Shop - HVAC Duct	N/A	Metal	White	Negative
115		Lower Level - 2nd Shop - Column	N/A	Metal	White	Negative
116		Lower Level - 2nd Shop - Door to Office	3	Metal	White	Negative
117		Lower Level - 2nd Shop - Door Frame to Office	3	Metal	White	Negative
118		Lower Level - Central Area - Column	N/A	Wood	White	Negative
119		Lower Level - Central Area - Wall	1	Drywall	White	Negative
120		Lower Level - Central Area - Metal Frame Window	2	Metal	White	Negative

WECI, Inc.

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Lead Sample Log

Sample #	Building	Location/Description	Side	Substrate	Color	Result (mg/cm^2)
121		Lower Level - Central Area - Door	2	Metal	White	Negative
122		Lower Level - Central Area - Door Frame	2	Metal	White	Negative
123		Lower Level - Central Area - Wall	2	Drywall	White	Negative
124		Lower Level - Central Area - Wall	3	Drywall	White	Negative
125		Lower Level - Central Area - Wall	4	Stone	White	Negative
126		Lower Level - Central Area - Fire Suppression	N/A	Metal	White	Negative
127		Lower Level - Central Area - Hand Rail	N/A	Metal	White	Negative
128		Lower Level - Hallway - Roll up Door Housing/Cover	2	Metal	White	Negative
129		Lower Level - 3rd Shop - Wall	1	Drywall	White	Negative
130		Lower Level - 3rd Shop - Wall	2	Drywall	White	Negative
131		Lower Level - 3rd Shop - Wall	3	Drywall	White	Negative
132		Lower Level - 3rd Shop - Wall	4	Drywall	White	Negative
133		Lower Level - 3rd Shop - Column	N/A	Wood	White	Negative
134		Lower Level - 3rd Shop - Column	N/A	Metal	White	Negative
135		Lower Level - 3rd Shop - HVAC Duct	N/A	Metal	White	Negative
136		Lower Level - 3rd Shop - Fire Suppression	N/A	Metal	White	Negative
137		Lower Level - 3rd Shop - Conduit	N/A	Metal	White	Negative
138		Lower Level - 3rd Shop - Window	4	Wood	White	Negative
139		Lower Level - 3rd Shop - Window Frame	4	Wood	White	Negative
140		Lower Level - Lobby/Entrance - Door	3	Wood	Red	Negative

WECI, Inc.

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Lead Sample Log

Sample #	Building	Location/Description	Side	Substrate	Color	Result (mg/cm^2)
141		Lower Level - Lobby/Entrance - Door Frame	3	Wood	Red	Negative
142		Lower Level - Lobby/Entrance - Wall	3	Brick	White	Negative
143		Lower Level - Lobby/Entrance - Wall	4	Brick	White	Negative
144		Lower Level - Lobby/Entrance - Wall	1	Drywall	White	Negative
145		Lower Level - Lobby/Entrance - Wall	2	Drywall	White	Negative
146		Lower Level - Lobby/Entrance - Door	4	Wood	Red	Negative
147		Lower Level - Lobby/Entrance - Door Frame	4	Wood	Red	Negative
148		Lower Level - Lobby/Entrance - Counter	N/A	Wood	Red	Negative
149		Lower Level - Lobby/Entrance - Column	N/A	Wood	White	Negative
150		Lower Level - Men's Restroom - Wall	1	Drywall	White	Negative
151		Lower Level - Men's Restroom - Wall and Floor	N/A	Ceramic Tile	White	Negative
152		Lower Level - Women's Restroom - Wall	1	Drywall	White	Negative
153		Lower Level - Women's Restroom - Wall and Floor	N/A	Ceramic Tile	White	Negative

WEST VIRGINIA
Lead Program
Michael Ryan Rose
IS LICENSED AS AN
LEAD INSPECTOR
License #: PI000692
Issued: 4/23/2019
Expires: 4/30/2020
Director
WV OEHS

Executive Summary
July 17th, 2019

Mr. Alan J. Davis
Berkeley County Administrator
400 W. Stephen Street. #201
Martinsburg, WV 25401

Ref: IAQ (Indoor Air Quality) Mold Sampling; Crawford Building;
315 W. Stephen St., Martinsburg, WV 25401

Dear Mr. Davis:

On July 11, 2019, as per your request, Mr. Andrew Cook of WECI, Inc. conducted IAQ mold sampling at the above referenced location. This testing was conducted to investigate suspected mold within the building. Seven spore trap samples were acquired from within the property. In addition, a sample was acquired from the exterior to act as a baseline for comparison. Samples were acquired by using an allegro rotary vane pump calibrated with a secondary standard rotameter, which was last calibrated in January of 2019, using primary standard dry cal Bios Defender. Additionally, three tape lift samples were acquired.

At the time of inspection, there were visible signs of suspected mold growth on joists, drywall, carpeting, and stored items throughout the building. Spore trap samples indicated an elevation of the mold Genera Aspergillus/Penicillium on the bottom floor of the building and Stachybotrys on the top and bottom floors of the building, as well as, the South section of the building (mezzanine area). Stachybotrys is an indicator of prolonged moisture intrusion.

It is important to note that there are currently no "safe" or "standard" levels for mold or mildew set forth by WV, VA state or federal law. WECI utilizes Industrial Hygienist practices derived from federal, state, and recognized organizations standards and guidelines reflecting indoor air quality and mold discipline in accordance with former VA law. WECI bases its results on recommendations from the Environmental Protection Agency (EPA), Institute of Inspection, Cleaning, and Restoration Certification (IICRC), National Allergy Bureau, AIHA (American Industrial Hygiene Association), ASTM (American Society for Testing and Materials), and ACGIH (American Conference of Government Industrial Hygienists) of which WECI is actively a member. WECI, Inc. conforms to former 18VAC15-60-330 and 18VAC15-60-340 in regards to our obligation mandated by the state of Virginia to the public. Further details on the findings are discussed below.
WECI, Inc.

Andrew Cook

199-1 Sulky Drive ♦ Winchester, VA 22602
(540) 877 9420 ♦ (540) 877 9495 (fax)

Sampling Results:

Spore Trap Sampling (source and direct):

Seven spore trap samples were taken within the building. Sample locations included; top floor west side, top floor middle section, top floor east side, bottom floor west side, bottom floor middle section, bottom floor east side, and south section (mezzanine area). A sample was also acquired from the exterior to act as a baseline for comparison. The detection limits that are utilized are the standard 300-field count maximum prescribed by AIHA.

The following spore trap results were obtained in spores per cubic meter, further details of the mold genera detected can be referenced in the attached lab report:

Location	Top Floor West Side		Top Floor Middle Section		Top Floor East Side		Bottom Floor West Side	
Fungal Identification	**Results**	**Ranking**	**Results**	**Ranking**	**Results**	**Ranking**	**Results**	**Ranking**
Alternaria	--		--		--		13	5
Ascospores	1280	1	1920	1	640	1	1067	1
Aspergillus/Penicillium	--		67	3	--		480	2
Basidiospores	533	2	853	2	400	2	320	3
Bipolaris/Drechslera	--		--		--		--	
Cladosporium	13	3	--		--		13	5
Curvularia	--		--		27	4	--	
Epicoccum	--		--		--			
Myxomycetes	--		--		40	3	53	4
Pithomyces	--		--		--		--	
Stachybotrys	--		13	4	--		--	
Total	**1826**		**2853**		**1107**		**1946**	

Location	Bottom Floor Middle Section		Bottom Floor East Side		South Section (Mezzanine Area)		Exterior	
Fungal Identification	**Results**	**Ranking**	**Results**	**Ranking**	**Results**	**Ranking**	**Results**	**Ranking**
Alternaria	2987	1	--		--		93	4
Ascospores	53	5	2347	1	2027	1	10667	1
Aspergillus/Penicillium	1707	2	320	3	40	3	53	5
Basidiospores	--		2133	2	1707	2	7680	2
Bipolaris/Drechslera	--		--		--		--	
Cladosporium	93	3	27	4	13	4	853	3
Epicoccum	--		--		--		27	7
Fusarium	--						13	8
Myxomycetes	53	5	--		13	4	--	
Pithomyces	--		--		--		13	8
Stachybotrys	67	4	13	5	13	4	--	
Cercospora	--		--		--		40	6
Polythrincium	--		--		--		13	8
Total	**4960**		**4840**		**3813**		**19452**	

Spore trap samples indicated an elevation of the mold Genus Stachybotrys on the top and bottom floors of the building and an elevation of the mold Genus Aspergillus/Penicillium on the bottom floor of the building.

Tape Lift Samples (direct):

Three tape lift samples were taken from the property. Sample locations included; discolored drywall from the bottom floor, a joist from the bottom floor, and the interior side of the roof. The following tape lift sample results were obtained:

Sample Type: Tape Lift Source Sample	
Location: Bottom Floor	***T-1 Drywall***
Fungi Identification:	**Results: (spore / mycelial)**
Stachybotrys	Very Heavy/Many

Sample Type: Tape Lift Source Sample	
Location: Bottom Floor	***T-2 Joist***
Fungi Identification:	**Results: (spore / mycelial)**
Cladosporium	Very Heavy/Many

Sample Type: Tape Lift Source Sample	
Location: Top Floor	***T-3 Roof***
Fungi Identification:	**Results: (spore / mycelial)**
Aspergillus/Penicillium	Moderate/Trace

Spore Estimate		Percentages
ND	None Detected	0%
Rare	Less than 10 spores	< 1%
Light	10 - 99 spores	1-10%
Moderate	100 - 999 spores	11-25%
Heavy	1000 - 9999 spores	26-50%
Very Heavy	10000 or greater spores	51-100%

Mycelial Estimate		
ND	None Detected	No active growth at site
Trace	Very small amount of Mycelium	Probably no active growth at site
Few	Some Mycelium	Possible active growth at site
Many	Large amount of Mycelium	Probable active growth at site

Tape lift samples indicated very heavy amounts of surface mold present on drywall and joists on the bottom floor and moderate amounts of surface mold present on the interior side of the roof.

Sampling Procedures:

Samples were taken to determine what kinds and relative concentrations of mold were present within the building.

The spore trap sampling media was an allergencoD disposable spore trap air-monitoring cassette from lot number 20190601 and have an expiration date of June 2020. The samples were collected using an allegro rotary vane pump, which was calibrated with a secondary rotameter to the spore trap manufacturer's standard of 15 liters per minute (lpm). The samples were run for 5 minutes on the interior of the building, which is the manufactures recommended sampling interval for an area of this type.

Tape lift samples were taken using Environmental Monitoring System's pre-adhesive coated sampling slides, which were pressed firmly into direct contact with the areas of discoloration or areas of potential concern then immediately sealed in the manufacturer's provided case for analysis.

Findings:

During the time of inspection, there were visible signs of suspected mold growth on drywall, joists, carpeting, and stored items throughout the building. Overall spore counts were lower than that of the exterior baseline sample. However, spore trap samples indicated an elevation of the mold Genus Aspergillus/Penicillium on the west side of the bottom floor and east side of the bottom floor. Spore trap samples also indicated an elevation of the mold Genus Stachybotrys on the south section of the building (mezzanine area), middle section on the top floor, middle section of the bottom floor, and east side of the bottom floor.

The tape lift sample taken from discolored drywall on the bottom floor showed "Very Heavy" amounts of the mold Genus Stachybotrys with many mycelia detected.

The tape lift sample taken from a ceiling joist on the bottom floor showed "Very Heavy" amounts of the mold Genus Cladosporium with many mycelia detected.

The tape lift sample taken from the interior side of the roof showed "Moderate" amounts of the mold Genus Aspergillus/Penicillium with trace mycelia detected.

Tape lift samples taken from discolored drywall and ceiling joists on the bottom floor suggests active mold growth.

Areas of drywall on the bottom floor had a moisture content of up to 17%. All other surfaces tested had a moisture content of under 15%. Surface mold can generally grow on surfaces testing "Wet" at 15% moisture content or higher. Federal Emergency Management Agency (FEMA) considers flood damaged materials "Dry" when they have a moisture content of less than 15%.

Stachybotrys is an indicator of prolonged moisture intrusion.

Visible signs of moisture intrusion were identified on the interior side of the roof and on the foundation of the building on the bottom floor.

The top floor of the building had a temperature of 82°F with a relative humidity of 66%. The bottom floor of the building had a temperature of 81°F with a relative humidity of 68%. ASHRAE's recommendation for occupant comfort suggests relative humidity to be controlled to less than 65%. EPA recommendation for controlled interior space relative humidity is between 30-60% according to the Center for Disease Control (CDC).

Based on spore trap results, the slight elevation of Stachybotrys present within the south section of the building (mezzanine area) is likely due to Stachybotrys spores migrating from the bottom floor of the building.

(Sample locations referenced in photos below).

Recommendations:

It is the recommendation of Mr. Andrew Cook of WECI, Inc., that;

1. The roof of the building should be inspected to determine if there are any active leaks. If leaks are found, the roof should be repaired prior to remediation activities.
2. All discolored drywall within building should be removed. Underlying studs should be thoroughly scrubbed with an EPA approved biocide.
3. All joists throughout the building and the roof should be thoroughly scrubbed with an EPA approved biocide.
4. A penetrating encapsulant may be utilized on the roof, joists and studs (if remediation company deems necessary) at the end of the project to further deter future spore release.
5. The walls below ground level should be sealed with a moisture blocking paint to prevent further moisture intrusion.
6. All stored items within the building should be cleaned with an EPA approved biocide and HEPA vacuumed. Any porous material should be steam-cleaned or discarded.
7. Remediation company is to determine if items can be successfully cleaned or must be discarded.
8. All carpeting throughout the building should be replaced or professionally steam-cleaned.
9. The entire building should be fogged with an anti-microbial.
10. The HVAC unit and all associated ductwork should be commercially cleaned.
11. HEPA exhaust equipped air handlers should operate throughout the building during remediation.
12. All work practices should be conducted inside a negative pressure containment using HEPA filtration to avoid further migration of mold spores throughout the building.

It should be noted that mold affects everyone differently based upon one's immune system and susceptibility. Only your doctor can determine one's sensitivity to common mold and other allergens.

This summary is based on the results of both visual investigations IAQ mold sampling obtained by Mr. Andrew Cook during a site visit to the aforementioned property. The tests performed are designed to give an immediate occurrence "snapshot" only. Conditions may change in the future and WECI guarantees no further issue than those investigated at the time of the survey and listed within this report.

This report was designed by WECI utilizes Industrial Hygienist practices derived from federal, state, and recognized organizations standards and guidelines reflecting indoor air quality and mold discipline. WECI bases its results on recommendations from the Environmental Protection Agency (EPA), Institute of Inspection, Cleaning, and Restoration Certification (IICRC), National Allergy Bureau, AIHA (American Industrial Hygiene Association), ASTM (American Society for Testing and Materials), and ACGIH (American Conference of Government Industrial Hygienists) of which WECI is actively member. Winchester Environmental Consultants, Inc. conforms to former 18VAC15-60-330 and 18VAC15-60-340 in regards to our obligation mandated by the state of Virginia to the public.

Attached are the lab results and chain-of-custody.

Inspection Photographs

Top Floor West Side Sample

Top Floor Middle Section Sample

Top Floor East Side Sample

Bottom Floor West Side Sample

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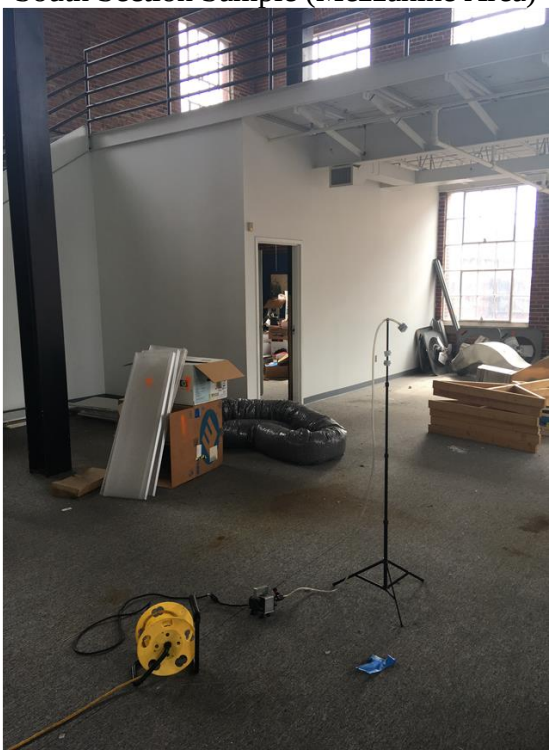
Bottom Floor Middle Section Sample

Bottom Floor East Side Sample

South Section Sample (Mezzanine Area)



Exterior Baseline Sample

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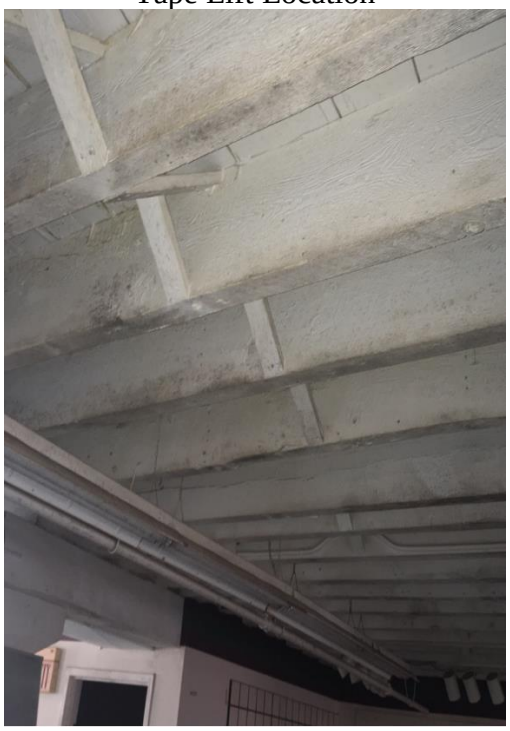
Tape Lift Location

Tape Lift Location



Tape Lift Location

Visible Signs of Surface Mold on Ducts

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Visible Signs of Moisture Intrusion

Visible Signs of Surface Mold on Drywall

Visible Signs of Surface Mold on Drywall

Visible Signs of Surface Mold on Drywall

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Visible Signs of Moisture Intrusion

Visible Signs of Surface Mold on Carpet

Visible Signs of Surface Mold on Stored Items

Visible Signs of Moisture Intrusion

199-1 Sulky Drive ♦ Winchester, VA 22602
(540) 877 9420 ♦ (540) 877 9495 (fax)

HAYES MICROBIAL CONSULTING

#19027252

Analysis Report prepared for

WECI, Inc.

199-1 Sulky Drive
Winchester, VA 22602

Phone: **(540) 877-9420**

Crawford Building

Collected: **July 11, 2019**
Received: **July 12, 2019**
Reported: **July 12, 2019**

We would like to thank you for trusting Hayes Microbial for your analytical needs!
We received 11 samples by FedEx in good condition for this project on July 12th, 2019.

The results in this analysis pertain only to this job, collected on the stated date, and should not be used in the interpretation of any other job. This report may not be duplicated, except in full, without the written consent of Hayes Microbial Consulting, LLC..

This laboratory bears no responsibility for sample collection activities, analytical method limitations, or your use of the test results. Interpretation and use of test results are your responsibility. Any reference to health effects or interpretation of mold levels is strictly the opinion of Hayes Microbial. In no event, shall Hayes Microbial or any of its employees be liable for lost profits or any special, incidental or consequential damages arising out of the use of these test results.

Steve Hayes, BSMT(ASCP)
Laboratory Director
Hayes Microbial Consulting, LLC.

EPA Laboratory ID: VA01419

Lab ID: #188863

NVLAP Lab Code: 500096-0

DPH License: #PH-0198

Ryan Rose
WECI, Inc.
199-1 Sulky Drive
Winchester, VA 22602
(540) 877-9420

Crawford Building

#19027252

Spore Trap
SOP - HMC#101

Sample Number	1	3042856		2	3042862		3	3042857		4	3042879	
Sample Name	**Top Floor West Side**			**Top Floor Middle**			**Top Floor East Side**			**Bottom Floor West Side**		
Sample Volume	75.00 liter			75.00 liter			75.00 liter			75.00 liter		
Reporting Limit	13 spores/m^3			13 spores/m^3			13 spores/m^3			13 spores/m^3		
Background	2			2			3			3		
Fragments	ND			13/m^3			ND			ND		
Organism	**Raw Count**	**Count / m^3**	**% of Total**	**Raw Count**	**Count / m^3**	**% of Total**	**Raw Count**	**Count / m^3**	**% of Total**	**Raw Count**	**Count / m^3**	**% of Total**
Alternaria										1	13	<1%
Ascospores	96	1280	70.1%	144	1920	67.3%	48	640	57.8%	80	1067	54.8%
Aspergillus|Penicillium				5	67	2.3%				36	480	24.7%
Basidiospores	40	533	29.2%	64	853	29.9%	30	400	36.1%	24	320	16.4%
Bipolaris|Drechslera												
Chaetomium												
Cladosporium	1	13	<1%							1	13	<1%
Curvularia							2	27	2.4%			
Epicoccum												
Fusarium												
Memnoniella												
Myxomycetes							3	40	3.6%	4	53	2.7%
Pithomyces												
Stachybotrys				1	13	<1%						
Stemphylium												
Torula												
Ulocladium												
Cercospora												
Polythrincium												
Total	137	1826	100%	214	2853	100%	83	1107	100%	146	1946	100%

Water Damage Indicator | Common Allergen | Slightly Higher than Baseline | Significantly Higher than Baseline | Ratio Abnormality

Collected: **Jul 11, 2019** Received: **Jul 12, 2019** Reported: **Jul 12, 2019**

HAYES MICROBIAL CONSULTING

Project Analyst: Ramesh Poluri, PhD — Date: **07 - 12 - 2019**

Reviewed By: Steve Hayes, BSMT — Date: **07 - 12 - 2019**

3005 East Boundary Terrace, Suite F. Midlothian, VA. 23112 (804) 562-3435 contact@hayesmicrobial.com

Ryan Rose
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Winchester, VA 22602
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Crawford Building

#19027252

Spore Trap
SOP - HMC#101

Sample Number	5	3042876		6	342859		7	3042860		8	3042878	
Sample Name	**Bottom Floor Middle**			**Bottom Floor East Side**			**South Section**			**Exterior**		
Sample Volume	75.00 liter			75.00 liter			75.00 liter			75.00 liter		
Reporting Limit	13 spores/m^3			13 spores/m^3			13 spores/m^3			13 spores/m^3		
Background	3			2			2			2		
Fragments	13/m^3			ND			13/m^3			27/m^3		
Organism	**Raw Count**	**Count / m^3**	**% of Total**	**Raw Count**	**Count / m^3**	**% of Total**	**Raw Count**	**Count / m^3**	**% of Total**	**Raw Count**	**Count / m^3**	**% of Total**
Alternaria										7	93	<1%
Ascospores	224	2987	60.2%	176	2347	48.5%	152	2027	53.1%	800	10667	54.8%
Aspergillus|Penicillium	4	53	1.1%	24	320	6.6%	3	40	1.0%	4	53	<1%
Basidiospores	128	1707	34.4%	160	2133	44.1%	128	1707	44.8%	576	7680	39.5%
Bipolaris|Drechslera												
Chaetomium												
Cladosporium	7	93	1.9%	2	27	<1%	1	13	<1%	64	853	4.4%
Curvularia												
Epicoccum										2	27	<1%
Fusarium										1	13	<1%
Memnoniella												
Myxomycetes	4	53	1.1%				1	13	<1%			
Pithomyces										1	13	<1%
Stachybotrys	5	67	1.3%	1	13	<1%	1	13	<1%			
Stemphylium												
Torula												
Ulocladium												
Cercospora										3	40	<1%
Polythrincium										1	13	<1%
Total	372	4960	100%	363	4840	100%	286	3813	100%	1459	19452	100%

Water Damage Indicator | Common Allergen | Slightly Higher than Baseline | Significantly Higher than Baseline | Ratio Abnormality

Collected: **Jul 11, 2019** Received: **Jul 12, 2019** Reported: **Jul 12, 2019**

Project Analyst: Ramesh Poluri, PhD P. Ramesh Date: **07 - 12 - 2019**

Reviewed By: Steve Hayes, BSMT Stephen N. Hayes Date: **07 - 12 - 2019**

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Crawford Building

#19027252

Direct Analysis
SOP - HMC#102

#9	Bio-Tape (1.00 in2)	Organism	Spore Estimate	Mycelial Estimate
	T-1 - Bottom Floor Drywall	Stachybotrys	Very Heavy	Many

#10	Bio-Tape (1.00 in2)	Organism	Spore Estimate	Mycelial Estimate
	T-2 - Bottom Floor Joist	Cladosporium	Very Heavy	Many

#11	Bio-Tape (1.00 in2)	Organism	Spore Estimate	Mycelial Estimate
	T-3 - Roof	Aspergillus|Penicillium	Moderate	Trace

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Crawford Building

#19027252

Spore Trap Information

Reporting Limit	The Reporting Limit is the lowest number of spores that can be detected based on the total volume of the sample collected and the percentage of the slide that is counted. At Hayes Microbial, 100% of the slide is read so the LOD is based solely on the total volume. Raw spore counts that exceed 500 spores will be estimated.
Blanks	Results have not been corrected for field or laboratory blanks.
Background	The Background is the amount of debris that is present in the sample. This debris consists of skin cells, dirt, dust, pollen, drywall dust and other organic and non-organic matter. As the background density increases, the likelihood of spores, especially small spores such as those of Aspergillus and Penicillium may be obscured. The background is rated on a scale of 1 to 5 and each level is determined as follows: **NBD:** No background detected due to possible pump or cassette malfunction. Recollect sample. (Field Blanks will display NBD) **1** : <5% of field occluded. No spores will be uncountable. **2** : 5-25% of field occluded. **3** : 25-75% of field occluded. **4** : 75-90% of field occluded. **5** : >90% of field occluded. Suggested recollection of sample.
Fragments	Fragments are small pieces of fungal mycelium or spores. They are not identifiable as to type and when present in very large numbers, may indicate the presence of mold amplification.
Control Comparisons	There are no national standards for the numbers of fungal spores that may be present in the indoor environment. As a general rule and guideline that is widely accepted in the indoor air quality field, the numbers and types of spores that are present in the indoor environment should not exceed those that are present outdoors at any given time. There will always be some mold spores present in "normal" indoor environments. The purpose of sampling and counting spores is to help determine whether an abnormal condition exists within the indoor environment and if it does, to help pinpoint the area of contamination. Spore counts should not be used as the sole determining factor of mold contamination. There are many factors that can cause anomalies in the comparison of indoor and outdoor samples due to the dynamic nature of both of those environments.
Water Damage Indicator Common Allergen Slightly Higher than Baseline Significantly Higher than Baseline Ratio Abnormality	**Blue:** These molds are commonly seen in conditions of prolonged water intrusion and usually indicate a problem. **Green:** Although all molds are potential allergens, these are the most common allergens that may be found indoors. **Orange:** The spore count is slightly higher than the outside count and may or may not indicate a source of contamination. **Red:** The spore count is significantly higher than the baseline count and probably indicates a source of contamination. **Violet:** The types of spores found indoors should be similar to the ones that were identified in the baseline sample. Significant increases (more than 25%) in the ratio of a particular spore type may indicate the presence of abnormal levels of mold, even if the total number of spores of that type is lower in the indoor environment than it was outdoors.
Color Coding	Fungi that are present in indoor samples at levels lower than 200 per cubic meter are not color coded on the report, unless they are one of the water damage indicators.

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Spore Estimate		Percentages
ND	None Detected	0%
Rare	Less than 10 spores	< 1%
Light	10 - 99 spores	1-10%
Moderate	100 - 999 spores	11-25%
Heavy	1000 - 9999 spores	26-50%
Very Heavy	10000 or greater spores	51-100%

Mycelial Estimate	
ND	None Detected No active growth at site.
Trace	Very small amount of Mycelium Probably no active growth at site.
Few	Some Mycelium Possible active growth at site.
Many	Large amount of Mycelium Probable active growth at site.

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Alternaria

Habitat: Commonly found outdoors in soil and decaying plants. Indoors, it is commonly found on window sills and other horizontal surfaces.

Effects: A common allergen and has been associated with hypersensitivity pneumonitis. Alternaria is capable of producing toxic metabolites which may be associated with disease in humans or animals. Occasionally an agent of onychomycosis, ulcerated cutaneous infection and chronic sinusitis, principally in the immunocompromised patient.

Ascospores

Habitat: A large group consisting of more than 3000 species of fungi. Common plant pathogens and outdoor numbers become very high following rain. Most of the genera are indistinguishable by spore trap analysis and are combined on the report.

Effects: Health affects are poorly studied, but many are likely to be allergenic.

Aspergillus|Penicillium

Habitat: The most common fungi isolated from the environment. Very common in soil and on decaying plant material. Are able to grow well indoors on a wide variety of substrates.

Effects: This group contains common allergens and many can cause hypersensitivity pneumonitis. They may cause extrinsic asthma, and many are opportunistic pathogens. Many species produce mycotoxins which may be associated with disease in humans and other animals. Toxin production is dependent on the species, the food source, competition with other organisms, and other environmental conditions.

Basidiospores

Habitat: A common group of Fungi that includes the mushrooms and bracket fungi. They are saprophytes and plant pathogens. In wet conditions they can cause structural damage to buildings.

Effects: Common allergens and are also associated with hypersensitivity pneumonitis.

Cercospora

Habitat: Found on wood and decaying plant matter.

Effects: Health effects are poorly studied.

Cladosporium

Habitat: One of the most common genera worldwide. Found in soil and plant debris and on the leaf surfaces of living plants. The outdoor numbers are lower in the winter and often relatively high in the summer, especially in high humidity. The outdoor numbers often spike in the late afternoon and evening. Indoors, it can be found growing on textiles, wood, sheetrock, moist window sills and in HVAC supply ducts.

Effects: A common allergen, producing more than 10 allergenic antigens and a common cause of hypersensitivity pneumonitis.

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Curvularia

Habitat: They exist in soil and plant debris, and are plant pathogens.

Effects: They are allergenic and a common cause of allergic fungal sinusitis. An occasional cause of human infection, including keratitis, sinusitis, onychomycosis, mycetoma, pneumonia, endocarditis and desseminated infection, primarily in the immunocompromised.

Epicoccum

Habitat: It is found in soil and plant litter and is a plant pathogen. It can grow indoors on a variety of substrates, including paper and textiles and is commonly found on wet drywall.

Effects: It is a common allergen. No cases of infection have been reported in humans.

Fusarium

Habitat: Commonly found in soil and plant debris and some species are plant pathogens. It is occasionally found indoors on a variety of substrates and in humidifiers, and requires very moist conditions.

Effects: Reported to be allergenic and several species may produce potent mycotoxins, including trichothecenes, fumonisin, and vomatoxin. It has a history of severe toxicoses with the ingestion of contaminated grains. An occasional cause of keratitis and mycetoma and can cause disseminated infection in immunocompromised patients.

Myxomycetes

Habitat: Found on decaying plant material and as a plant pathogen.

Effects: Some allergenic properties reported, but generally pose no health concerns to humans.

Pithomyces

Habitat: Common fungus isolated from soil, decaying plant material. Rarely found indoors.

Effects: Allergenic properties are poorly studied. No cases of infection in humans.

Polythrincium

Habitat: Found in soil and occasionally on plants.

Effects: No known health effects. Allergenic properties are poorly studied.

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Stachybotrys

Habitat: Commonly found in soil and on decaying plant material. It is cellulolytic, and can be found indoors on wet materials containing cellulose, such as wallboard, ceiling tile, and other paper-based materials. It is found outdoors on decaying plant material although it is rarely detected on outdoor air samples.

Effects: Allergenic properties are poorly studied and no cases of infection have been reported in humans. They do however produce potent tricothecene mycotoxins. The toxins produced by this fungus can suppress the immune system affecting the lymphoid tissue and the bone marrow. The mycotoxin is also reported to be a liver and kidney carcinogen.

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Company: WECI, Inc.
199-1 Sulky Drive
Winchester, VA 22602

N

SHIP: FEDEX - PAK SO
DATE: 07-12-2019

8136 1616 0326

MOLD
19027252

Job Number:	Job Name: Crawford Building	Collector: Ryan Rose	Email: rrose@thinkweci.com
Date Collected: 7/11/19		Notes:	
Mobile: 540-686-5021			

AD

Sample #	Sample Name	Analysis Type	Volume	TAT	Notes
3042856	Top Floor west side	S	75L	24hr	
3042862	Top Floor Middle	↓	↓	↓	
3042857	Top Floor East side	↓	↓	↓	
3042879	Bottom Floor west side	↓	↓	↓	
3042876	Bottom Floor Middle	↓	↓	↓	
3042859	Bottom Floor East side	↓	↓	↓	
3042860	South section	↓	↓	↓	
3042878	Exterior	↓	↓	↓	
T-1	Bottom Floor Drywall	D	1sq inch		
T-2	Bottom Floor Joist	↓	↓		
T-3	Roof	↓	↓	↓	

Tape

Analysis Type		Description	TAT	Acceptable Sample Types
Spore Trap	S	Identification & Enumeration of Fungal Spores	24 Hour	Spore Trap cassettes, Impact slides
	S+	I & E of Fungal Spores + total dander, fiber and pollen count	24 Hour	Spore Trap cassettes, Impact slides
Direct ID	D	ID and Semi-quantative enumeration of spores and mycelium	24 Hour	Tape, Bio-tape, swab, bulk, agar plate for ID only
	D+	ID and Enumeration with spores count	24 Hour	Tape, Bio-tape, swab, bulk, agar plate for ID only
Culture	C1	Identification & Enumeration of Mold only	7 Day	Anderson Air Plate, Swab, Bulk
	C2	Identification & Enumeration of Bacteria only	4 Day	Anderson Air Plate, Swab, Bulk
	C3	Identification & Enumeration of Mold and Bacteria	7 Day	Anderson Air Plate, Swab, Bulk
	C5	Coliform Screen for Sewage Bacteria	2 Day	Anderson Air Plate, Swab, Bulk
Dust Mite	A1	Semi-quantative analysis of dust mite allergen	24 Hour	Bulk Dust
Particle	P	Total Particulate Analysis	24 Hour	Spore Trap cassettes, Impact slides, Bio-Tape

Relinquished by: Andrew Cox	Date: 7/11/19	Rcvd By: AW	Date: 7/12/19	Time:

Building Program

Berkeley County Judicial Center Annex

at

The Crawford Woolen Mill
Berkeley County, Martinsburg, WV

CRA Project No. 3242

July 26, 2019

Crabtree, Rohrbaugh & Associates Architects
401 East Winding Hill Road
Mechanicsburg, Pennsylvania 17055
phone: (717) 458-0272 - fax: (717) 458-0047

Berkeley County, West Virginia

7/26/2019

Judicial Center Annex (The Crawford Building)

3242

Crabtree, Rohrbaugh & Associates

		2019 PROGRAM			
.01 Ground / First Floor		**Qty.**	**Net SF**	**Subtotal**	**Comments**
.01 Mechanical Room		1	600	600	
.02 Stairs		1	270	270	
.03 Crawl Space		1	3776	3776	
.04 Access Tunnel		1	156	156	
.05					
.06					
.07					
.08					
.09					
.10					
.11					
.12					
.13					
.14					
.15					
.16					
.17					
.18					
.19					
.20					
.21					
.22					
.23					
.24					
.25					
.26					
.27					
.28					
.29					
.30					
Net Program Area				**4,802**	
Grossing Factor				**158**	
Gross Floor Area				**4,960**	

Berkeley County, West Virginia

7/26/2019

Judicial Center Annex (The Crawford Building)

3242

Crabtree, Rohrbaugh & Associates

		2019 PROGRAM			
.02 Second Floor		**Qty.**	**Net SF**	**Subtotal**	**Comments**
.01 Magistrates Hearing Room		3	770	2310	
.02 Attorney Conference Rooms		6	100	600	
.03 Prisoner Holding Rooms		5	60	300	
.04 Prisoner Group Holding Room		2	150	300	
.05 Prisoner Toilet Room		2	60	120	
.06 Secure File Storage No. 1		1	698	698	
.07 File Storage No. 2		1	114	114	
.08 File Storage No. 3		1	500	500	
.09 Security Breakroom		1	552	552	
.10 Security Office		1	184	184	
.11 Men's Restroom		1	290	290	
.12 Women's Restroom		1	290	290	
.13 Security Checkpoint @ Lobby		1	520	520	
.14 Vestibule		1	165	165	
.15 Janitor Supply		1	373	373	
.16 Janitor Room		1	120	120	
.17 Elevator Equipment Room		4	60	240	
.18 Electrical Room		1	300	300	
.19 Mechanical / Boiler Room		1	2,079	2079	
.20 Mechanical Room		1	204	204	
.21 Stairs A		1	258	258	
.22 Stairs B		1	247	247	
.23 Stairs D		1	150	150	
.24 Vehicle Sallyport Extension		1	240	240	
Net Program Area				**11,154**	
Grossing Factor				**8,233**	
Gross Floor Area				**19,387**	

Berkeley County, West Virginia

7/26/2019

Judicial Center Annex (The Crawford Building)

3242

Crabtree, Rohrbaugh & Associates

		2019 PROGRAM			
.03 Third Floor		Qty.	Net SF	Subtotal	Comments
.01 Magistrates Courtroom		2	1200	2400	
.02 Attorney Conference Rooms		4	100	400	
.03 Jury Rooms		2	200	400	
.04 Jury Toilet Rooms		2	60	120	
.05 Magistrates Office		5	250	1250	
.06 Judicial Assistants Office		5	120	600	
.07 Conference Room		1	206	206	
.08 Workroom / Breakroom		1	150	150	
.09 File Storage		1	150	150	
.10 Mens Secure Restroom		2	60	120	
.11 Womens Secure Restroom		2	60	120	
.12 Clerk of Courts Office		1	240	240	
.13 Workroom		1	143	143	
.14 Conference Room		1	200	200	
.15 Workstations		6	48	288	
.16 File Room		1	128	128	
.17 Public Access File Room		1	192	192	
.18 Waiting Room		1	538	538	
.19 Cashier		1	60	60	
.20 Ticket Room		1	132	132	
.21 Women's Restroom		1	60	60	
.22 Men's Restroom		1	60	60	
.23 Mail Room		1	60	60	
.24 Elevators		4	80	320	
.25 New Bridge - Public		1	364	364	
.26 Existing Bridge - Secure		1	200	200	
.27 Stair A		1	258	258	
.29 Stair B		1	247	247	
.23 Stair C		1	325	325	
.24 Stair D		1	150	150	
Net Program Area				**9,881**	
Grossing Factor				**7,549**	
Gross Floor Area				**17,430**	

Berkeley County, West Virginia

7/26/2019

Judicial Center Annex (The Crawford Building)

3242

Crabtree, Rohrbaugh & Associates

		2019 PROGRAM			
.04 Fourth Floor		Qty.	Net SF	Subtotal	Comments
.01 Magistrates Office		4	250	1000	
.02 Judicial Assistants Office		4	120	480	
.03 File Storage		1	150	150	
.04 Workroom / Breakroom		1	150	150	
.05 Mens Secure Restroom		1	60	60	
.06 Womens Secure Restroom		1	60	60	
.07 File Room		1	300	300	
.08 File Room		1	417	417	
.09 Elevators		1	132	132	
.10 Stair C		1	242	242	
.11 Stair D		1	325	325	
.12					
.13					
.14					
.15					
.16					
.17					
.18					
.19					
.20					
.21					
.22					
.23					
.24					
.25					
.26					
.27					
.28					
.29					
.30					
Net Program Area				3,316	
Grossing Factor				1,716	
Gross Floor Area				5,032	

Berkeley County Judicial Center Annex
Program / Space Reqirements

CRA Project No. 3242

26-Jul-19

Berkeley County Judicial Center Annex
Program / Space Reqirements

CRA Project No. 3242

Department:

ROOM DESCRIPTION:
Magistrates Office

ROOM AREA:
250

ROOM CAPACITY:
5

NO. OF ROOMS:
9

TYPICAL CONFIGURATION:

FURNISHINGS:
Desk with Return
Desk Chair
Credenza
Visitor Chair
Small Conference Table w 4 Chairs
Bookshelf

EQUIPMENT:
TV Monitor
Bookshelf
Printer
Trach Receptacle

SPACIAL RELATIONSHIPS:
Magistrates Toilet Room
Judicial Assistants Work Area

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring:	Carpet
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	Phone / Video Conference Cable TV
Security:	Card Access

Notes:

Berkeley County Judicial Center Annex
Program / Space Reqirements

CRA Project No. 3242

Department:

ROOM DESCRIPTION:
Judicial Assistants Office

ROOM AREA:
120

ROOM CAPACITY:
1

NO. OF ROOMS:
9

TYPICAL CONFIGURATION:

FURNISHINGS:
Desk with Return
Desk Chair
Credenza
Visitor Chair
Bookshelf

EQUIPMENT:
Printer
Trash Receptacle

SPACIAL RELATIONSHIPS:
Magistrates Office

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring:	Carpet
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	Phone / Video Conference Cable TV
Security:	Card Access

Notes:

Berkeley County Judicial Center Annex
Program / Space Reqirements

CRA Project No. 3242

Department:

ROOM DESCRIPTION:
Judicial Assistants Work/Break

ROOM AREA:
150

ROOM CAPACITY:
1

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:
42 inch dia table and 4 chairs
kitchen base and wall cabinets

EQUIPMENT:
Copier
Fax Machine
Trash Receptacle
Refrigerator
Coffeemaker
Microwave

SPACIAL RELATIONSHIPS:
Judicial Assistants Offices

ENVIRONMENTAL CONSIDERATIONS:

FINISHES

Flooring:	Vinyl Tile
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	Sink w/ Disposal
HVAC:	Standard Exhaust Fan
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	Phone / Video Conference Cable TV
Security:	

Notes:

Berkeley County Judicial Center Annex
Program / Space Reqirements

CRA Project No. 3242

Department:

ROOM DESCRIPTION:
Magistrates Conference Room

ROOM AREA:
200

ROOM CAPACITY:
10

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:
Conference Table
10 Chairs
Credenza

EQUIPMENT:
TV Monitor
Trash Receptacle
Whiteboard

SPACIAL RELATIONSHIPS:
Magistrates Office

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring:	Carpet
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	Phone / Video Conference Cable TV
Security:	

Notes:

Department:

ROOM DESCRIPTION:
Magistrates Courtroom

ROOM AREA:
1200 SF

ROOM CAPACITY:
Seating for 40 in Gallery

NO. OF ROOMS:
2

TYPICAL CONFIGURATION:

FURNISHINGS:
Judges Bench w/ bulletproof front panel
Witness Stand
Prosecutors Desk & Chairs
Defense Attorney Desk and 2 Chairs
Fixed Gallery Seating

EQUIPMENT:
TV Monitor
Projection Screen

SPACIAL RELATIONSHIPS:
Magistrates Office
Judicial Assistants Work Area
Attorney Conference Room
Jury Deliberation Room

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring:	Carpet
Base:	Wood
Ceiling:	Gypsum Board
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	Sound Amplification System
Security:	Panic Alarm Card Access Security Camera

Notes:

Department:

ROOM DESCRIPTION:
Magistrates Hearing Room

ROOM AREA:
720 SF

ROOM CAPACITY:
Seating for 15 in Gallery

NO. OF ROOMS:
2

TYPICAL CONFIGURATION:

FURNISHINGS:
Judges Bench w/ bulletproof front panel
Witness Stand
Prosecutors Desk & Chairs
Defense Attorney Desk and 2 Chairs
Fixed Gallery Seating

EQUIPMENT:
TV Monitor
Projection Screen

SPACIAL RELATIONSHIPS:
Magistrates Office
Judicial Assistants Work Area
Attorney Conference Room
Jury Deliberation Room

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring:	Carpet
Base:	Wood
Ceiling:	Gypsum Board
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	Sound Amplification System
Security:	Panic Alarm Card Access Security Camera

Notes:

Department:

ROOM DESCRIPTION:
Attorney Conference Room

ROOM AREA:
100

ROOM CAPACITY:
3

NO. OF ROOMS:
10

TYPICAL CONFIGURATION:

FURNISHINGS:
Conference Table w/ 3 Chairs

EQUIPMENT:

SPACIAL RELATIONSHIPS:
Courtrooms & Hearing Rooms

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring:	Carpet
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	
Security:	

Notes:

Department:

ROOM DESCRIPTION:
Jury Deliberation Room

ROOM AREA:
200

ROOM CAPACITY:
6

NO. OF ROOMS:
2

TYPICAL CONFIGURATION:

FURNISHINGS:
Conference Table and 6 Chairs
Credenza

EQUIPMENT:
Phone

SPACIAL RELATIONSHIPS:
Magistrates Courtroom
Jury Toilet Room

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring:	Carpet
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	
Audio / Video:	
Security:	

Notes:

Department:

ROOM DESCRIPTION:
Jury Deliberation Toilet Room

ROOM AREA:
60

ROOM CAPACITY:
1

NO. OF ROOMS:
2

TYPICAL CONFIGURATION:

FURNISHINGS:

EQUIPMENT:
Handicap Grab Bars
Soap Dispenser
Towel Dispenser
Trash Container

SPACIAL RELATIONSHIPS:
Jury Deliberation Room

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring:	Ceramic Tile
Base:	Ceramic Tile
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	Toilet and Sink
HVAC:	Standard
Electrical:	Standard
Technology:	
Audio / Video:	
Security:	

Notes:

Department:

ROOM DESCRIPTION:
Prisoner Holding Room

ROOM AREA:
80 / 170 sf

ROOM CAPACITY:
1

NO. OF ROOMS:
8

TYPICAL CONFIGURATION:

FURNISHINGS:
Fixed Bench

EQUIPMENT:

SPACIAL RELATIONSHIPS:
Courtrooms and Hearing Rooms
Prisoner Toilet Room

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring:	Vinyl
Base:	Vinyl
Ceiling:	Abuse Resistant Gypsum Board
Walls:	Abuse Resistant Gypsum Board

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	
Audio / Video:	
Security:	Security Camera

Notes:

Department:

ROOM DESCRIPTION:
Prisoner Toilet Room

ROOM AREA:
60

ROOM CAPACITY:
1

NO. OF ROOMS:
2

TYPICAL CONFIGURATION:

FURNISHINGS:

EQUIPMENT:
Handicap Grab Bars
Soap Dispenser
Towel Dispenser
Trash Container
Toilet Paper Dispenser
Stainless Steel Mirror
Sanitary Napkin Dispenser
Sanitary Napkin Disposal Receptable

SPACIAL RELATIONSHIPS:
Prisoner Holding

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring:	Ceramic Tile
Base:	Ceramic Tile
Ceiling:	Abuse Resistant Gypsum Board
Walls:	Abuse Resistant Gypsum Board

SYSTEMS

Plumbing:	Toilet and Sink
HVAC:	Standard
Electrical:	Standard
Technology:	
Audio / Video:	
Security:	

Notes:

Department:

ROOM DESCRIPTION:
Security Office

ROOM AREA:
187

ROOM CAPACITY:
4

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:
Desk and Chair
Credenza
Conference Table

EQUIPMENT:

SPACIAL RELATIONSHIPS:
Security Checkpoint

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring:	Vinyl
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	Standard for Accessibility
HVAC:	Standard
Electrical:	Standard
Technology:	Internet / Cable TV
Audio / Video:	
Security:	Card Access TV Monitors for Security

Notes:

Department:

ROOM DESCRIPTION:
Court Security Break Room

ROOM AREA:
552

ROOM CAPACITY:
8

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:
2 Tables and 8 Chairs
Base and Wall Cabinet Storage

EQUIPMENT:
Refrigerator
Sink
Microwave
Coffeemaker
Trash Receptacle

SPACIAL RELATIONSHIPS:
Corridor

ENVIRONMENTAL CONSIDERATIONS:

FINISHES

Flooring:	Vinyl
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	Standard for Accessibility
HVAC:	Standard Provide exhaust for food odors
Electrical:	Standard
Technology:	
Audio / Video:	TV Monitor
Security:	Card Access

Notes:

Department:

ROOM DESCRIPTION:
Magistrates Court Inactive File Room

ROOM AREA:
Varies

ROOM CAPACITY:
1

NO. OF ROOMS:
5

TYPICAL CONFIGURATION:

FURNISHINGS:
Work Table and Chair

EQUIPMENT:
High Density Filing System???
Copy Machine???

SPACIAL RELATIONSHIPS:
Magistrates Office

ENVIRONMENTAL CONSIDERATIONS:

FINISHES

Flooring:	Carpet
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Abuse Resistant Gypsum Board

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	
Audio / Video:	
Security:	Card Access

Notes:

Department:

ROOM DESCRIPTION:
Magistrates Fire Rated File Room

ROOM AREA:
698

ROOM CAPACITY:
1

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:
Work Table and Chair

EQUIPMENT:
High Density Filing System???

SPACIAL RELATIONSHIPS:

ENVIRONMENTAL CONSIDERATIONS:
Windows

FINISHES

Flooring:	Carpet
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Fire Rated Abuse Resistant Gyp Bd

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	Phone / Video Conference Cable TV
Security:	Card Access

Notes:

Department:

ROOM DESCRIPTION:
Magistrates File Room

ROOM AREA:
147

ROOM CAPACITY:
1

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:

EQUIPMENT:
High Density Filing System???

SPACIAL RELATIONSHIPS:

ENVIRONMENTAL CONSIDERATIONS:

FINISHES

Flooring:	Vinyl
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Fire Rated Gyp Bd

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	
Audio / Video:	
Security:	Card Access

Notes:

Department:

ROOM DESCRIPTION:
Clerk of Courts Office

ROOM AREA:
263

ROOM CAPACITY:
5

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:
Desk with Return
Desk Chair
Credenza
Visitor Chair
Small Conference Table w 4 Chairs
Bookshelf

EQUIPMENT:
TV Monitor
Bookshelf
Printer
Trach Receptacle

SPACIAL RELATIONSHIPS:
Magistrates Offices
Waiting Room

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring:	Carpet
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	Phone / Video Conference Cable TV
Security:	Card Access

Notes:

Department:

ROOM DESCRIPTION:
Clerks Office Break / Workroom

ROOM AREA:
150

ROOM CAPACITY:
1

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:
42 inch dia table and 4 chairs
kitchen base and wall cabinets

EQUIPMENT:
Copier
Fax Machine
Trash Receptacle
Refrigerator
Coffeemaker
Microwave

SPACIAL RELATIONSHIPS:
Clerks Office Workstations

ENVIRONMENTAL CONSIDERATIONS:

FINISHES

Flooring:	Vinyl Tile
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	Sink w/ Disposal
HVAC:	Standard Exhaust Fan
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	Phone / Video Conference Cable TV
Security:	

Notes:

Department:

ROOM DESCRIPTION:
Clerks Cashier Room

ROOM AREA:
60

ROOM CAPACITY:
1

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:
Transaction Counter and Chair

EQUIPMENT:
Printer
Trash Receptacle

SPACIAL RELATIONSHIPS:
Waiting Room

ENVIRONMENTAL CONSIDERATIONS:

FINISHES

Flooring:	Vinyl Tile
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	
HVAC:	Standard
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	Phone
Security:	Card Access Panic Button

Notes:

Department:

ROOM DESCRIPTION:
Ticket Room

ROOM AREA:
132 sf

ROOM CAPACITY:
1

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:

EQUIPMENT:

SPACIAL RELATIONSHIPS:
Clerks Workstations

ENVIRONMENTAL CONSIDERATIONS:

FINISHES

Flooring:	Vinyl Tile
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	
HVAC:	Standard
Electrical:	Standard
Technology:	
Audio / Video:	Phone
Security:	Card Access

Notes:

Department:

ROOM DESCRIPTION:
Public Access File Room

ROOM AREA:
192

ROOM CAPACITY:
1

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:
Perimeter Counter w Computer Stations

EQUIPMENT:
Printer

Trash Receptacle

SPACIAL RELATIONSHIPS:
Waiting Room

ENVIRONMENTAL CONSIDERATIONS:

FINISHES

Flooring:	Vinyl Tile
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	
HVAC:	Standard
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	
Security:	Card Access

Notes:

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Department:

ROOM DESCRIPTION:
Clerks Office Waiting Room

ROOM AREA:
538

ROOM CAPACITY:
25

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:
Loose Seating

EQUIPMENT:

Trash Receptacle

SPACIAL RELATIONSHIPS:
Transaction Counter

ENVIRONMENTAL CONSIDERATIONS:

FINISHES

Flooring:	Vinyl Tile
Base:	Wood
Ceiling:	Suspended Acoustical
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	
HVAC:	Standard
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	
Security:	

Notes:

Department:

ROOM DESCRIPTION:
Staff Toilets

ROOM AREA:
60

ROOM CAPACITY:
1

NO. OF ROOMS:
6

TYPICAL CONFIGURATION:

FURNISHINGS:

EQUIPMENT:
Toilet Paper Dispenser
Soap Dispenser
Paper Towel Dispenser
Trash Receptable
Sanitary Napkin Dispenser
Sanitary Napkin Disposal Receptable
Mirror
Handicapped Grab Bars

SPACIAL RELATIONSHIPS:
Magistrates Office

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring: Ceramic Tile

Base: Ceramic Tile

Ceiling: Suspended Acoustical

Walls: Painted Gypsum Board

SYSTEMS

Plumbing: Standard for Accessibility

HVAC: Standard

Electrical: Standard

Technology:

Audio / Video:

Security:

Notes:

Department:

ROOM DESCRIPTION:
Public Restrooms

ROOM AREA:
290

ROOM CAPACITY:
6

NO. OF ROOMS:
2 - Mens and Womens

TYPICAL CONFIGURATION:

FURNISHINGS:
Solid Plastic Toilet Compartments

EQUIPMENT:
Toilet Paper Dispenser
Soap Dispenser
Paper Towel Dispenser
Trash Receptable
Feminine Napkin Dispenser
Feminine Napkin Disposal Receptacle
Stainless Steel Framed Mirror
Handicapped Grab Bars

SPACIAL RELATIONSHIPS:
Public Corridors

ENVIRONMENTAL CONSIDERATIONS:
Sound Isolation

FINISHES

Flooring:	Ceramic Tile
Base:	Ceramic Tile
Ceiling:	Suspended Acoustical
Walls:	Ceramic Tile Wainscott Painted Gypsum Board

SYSTEMS

Plumbing:	Standard for Accessibility
HVAC:	Standard Exhaust
Electrical:	Standard
Technology:	
Audio / Video:	
Security:	

Notes:

Department:

ROOM DESCRIPTION:
Elevator - Hydraulic

ROOM AREA:
48

ROOM CAPACITY:
8

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:
Stainless Steel Grab Bars

EQUIPMENT:
Stainless Steel Entrances

SPACIAL RELATIONSHIPS:
Public Corridors

ENVIRONMENTAL CONSIDERATIONS:

FINISHES

Flooring:	Ceramic Tile
Base:	Laminate
Ceiling:	Suspended Acoustical
Walls:	Plastic Laminate

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	
Audio / Video:	Not Required
Security:	Emergency Phone

Notes:

Department:

ROOM DESCRIPTION:
Stairs

ROOM AREA:
270

ROOM CAPACITY:

NO. OF ROOMS:
4

TYPICAL CONFIGURATION:

FURNISHINGS:
Concrete Filled Steel Pan Tread Stairs
Steel Railing Systems

EQUIPMENT:

SPACIAL RELATIONSHIPS:
Public Corridors

ENVIRONMENTAL CONSIDERATIONS:
Fire Rated Construction per Code

FINISHES

Flooring:	Vinyl w/ Vinyl Treads
Base:	Wood
Ceiling:	Painted Gypsum Board
Walls:	Painted Gypsum Board

SYSTEMS

Plumbing:	NA
HVAC:	Standard
Electrical:	Standard
Technology:	N/A
Audio / Video:	Not Required
Security:	Security Camera

Notes:

Department:

ROOM DESCRIPTION:
Mechanical Rooms

ROOM AREA:
204/300/2079 sf

ROOM CAPACITY:

NO. OF ROOMS:
3

TYPICAL CONFIGURATION:

FURNISHINGS:
Work Table and Chair

EQUIPMENT:

SPACIAL RELATIONSHIPS:

ENVIRONMENTAL CONSIDERATIONS:

FINISHES

Flooring:	Sealed Concrete
Base:	None
Ceiling:	Exposed Structure
Walls:	Concrete Masonry

SYSTEMS

Plumbing:	Hand Wash Sink
HVAC:	Standard
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	Phone
Security:	Card Access

Notes:

Department:

ROOM DESCRIPTION:
Vehicle Sallyport Extension

ROOM AREA:
469

ROOM CAPACITY:
1 Prisoner Transport Van

NO. OF ROOMS:
1

TYPICAL CONFIGURATION:

FURNISHINGS:

EQUIPMENT:

SPACIAL RELATIONSHIPS:

ENVIRONMENTAL CONSIDERATIONS:

FINISHES

Flooring:	Sealed Concrete
Base:	None
Ceiling:	Exposed Structure
Walls:	Concrete Masonry

SYSTEMS

Plumbing:	
HVAC:	Heating Only
Electrical:	Standard
Technology:	Wireless Internet
Audio / Video:	Phone
Security:	Card Access

Notes:

Section 10: Proposed Renovations Narratives

10. A Site / Civil

1. Demolition: The site demolition shall include deteriorated brick paving systems in the courtyard between the existing judicial center and the proposed annex as well as at the east raised plaza. Steel railing along areaways for both the existing judicial center as well as on Stephen Street shall be removed. Existing trees and curbs parallel to the existing judicial center shall be removed to accommodate the new secure parking lot on the east side. The east stair and plaza retaining wall shall be demolished and the site prepared for new construction. A new curb cut shall be completed along Stephen Street as per the drawings.

2. Paving and Roadways: New parking lot paving shall be provided for the new east and west secure parking lots.

3. Sidewalks and Pedestrian Plazas: A new brick plaza and courtyard paving shall be provided and installed with new drainage systems. A new brick faced reinforced concrete retaining wall shall be constructed at the east plaza adjacent the new concrete steps. A new handicap accessible reinforced concrete ramp with metal railings shall be installed to provide access to the plaza.

4. Landscape: Existing Trees shall remain at the secure parking area on the west lot. New trees shall be provided in the east secure parking lot.

5. Site Lighting: New site lighting shall be provided in both east and west secure parking lots and at building entrances.

6. Site Security: A new security camera system shall be installed to provide coverage for all perimeter areas of the building with emphasis on the building entrances and secure parking lots.

7. Secure Parking: New east and west secure parking lots shall be developed with access controlled gates, a concrete and metal perimeter fence, and site drainage systems.

8. Site Signage: Building identification and directional signage shall be provided at each entrance.

10. B Architectural

1. Selective Demolition:
   Building: The selective demolition shall include all windows and doors, interior partitions, finishes, membrane roofing system, gutters and downspouts, steel stairs, roof framing for new stairs, and all electrical, plumbing, HVAC, and fire protection systems.

2. Stone Foundation Walls: All exterior stone foundation walls shall be repointed. Interior stone foundation walls shall be furred with 2.5 inch metal stud framing and insulated with 2 inches of polyurethane spray foam insulation.

3. Brick Masonry Walls: All exterior brick masonry shall be repointed. Damaged or deteriorated masonry units shall be cut out and replaced with brick to match existing in material, color and texture. The interior face of brick masonry walls shall be furred with 2.5 inch steel stud framing and insulated with 2 inches of polyurethane spray foam insulation.

4. Cast Stone: New cast stone sills shall be provided to replace damaged and deteriorated cast stone sills on the south building.

5. Concrete: A new self-leveling concrete floor topping shall be installed over all concrete floors.

6. Structural Steel: New structural steel framing with steel beams, bar joists, and metal decking shall be provided for the new floor construction in the south building. A new structural steel framed enclosed pedestrian bridge shall be designed to connect the existing judicial center to the annex (Crawford Building).

7. Steel Stairs: New concrete filled pan stairs shall be provided with rubber treads and painted risers. A code compliant steel railing system shall be provided for all stairs.

8. Heavy Timber Framing: Existing heavy timber framing shall be stripped of all paint and shall be left exposed in the second floor hearing rooms and adjacent spaces.

9. Thermal and Moisture Protection: The perimeter masonry walls shall be insulated with 2 inches of spray foam insulation as described in the brick masonry section above. The third floor ceiling shall be insulated with 12 inches of mineral wool batt insulation with a vapor barrier.

10. Roof: The existing asphalt shingle roof installed in 2018 shall remain. New painted wood fascia and soffit shall be provided along with a new aluminum gutter and downspout system connected to cast iron boots and an underground stormwater system. A new EPDM roofing system shall be installed over polyisocyanurate rigid foam board insulation on the south building.

11. Windows: New aluminum clad wood windows shall be installed on the north building replacing the existing wood windows. New painted polymer window sills shall be installed to replace existing deteriorate wood window sills. New aluminum windows with 1 inch insulated glass and thermally broken frames shall be installed to replace all existing steel framed windows. New aluminum windows shall have an applied muntin system to match the existing size and spacing.

12. Exterior Doors and Frames: New aluminum doors with 5/8 inch thick insulating glass and thermally broken frames shall be installed at all entrances. Service doors shall be insulated, galvanized, and painted hollow metal doors and frames. A new electrically operating steel sallyport door shall be provided at the sallyport addition.

13. Interior Doors and Frames: All new solid core wood doors set in hollow metal frames shall be provided with card access systems for high security doors.

14. Floor Finishes: Interior finishes shall include carpet in all office spaces and court/hearing rooms with wood base. Public corridors shall be finished with large format porcelain tile and wood base. All restroom floors and wainscot shall be ceramic tile. Service areas, storage rooms, prisoner access corridors, prisoner holding rooms shall be finished with vinyl composition tile and vinyl base.

15. Wall Finishes: Interior walls shall be finished with ½ inch gypsum board with a painted finish. Interior walls in high abuse areas including public corridors, prisoner corridors and holding rooms, and public restrooms, shall be finished with ½ inch abuse resistant gypsum board with a painted finish.

16. Ceiling Finishes: Ceiling finishes shall be ½ inch suspended gypsum board with a painted finish.

17. Millwork: Judges bench, witness stand, and courtroom railing system shall be of red oak construction with a clear finish. Red oak wood paneling shall be provided behind the judges bench in all court/hearing rooms

18. Equipment: Residential appliances shall be provided in all kitchenette/break rooms including a refrigerator, microwave, coffeemaker, and garbage disposer.

19. Interior Signage: Interior room signage shall be a framed metal panel with adhesive pads meeting all ADA requirements. A building dedication plaque shall be provided in the lobby.

20. Toilet Partitions: Toilet partitions shall be solid plastic with stainless steel hardware.

21. Toilet Accessories: All toiletrooms shall be fitted with toilet accessories including the following: 1) Toilet paper dispensers, 2) Paper Towel Dispensers, 3) Stainless Steel Framed Mirrors, 4) Trash Receptacles, 5) Handicap Grab Bars, and 6) Soap Dispensers.

22. Elevators: Four new elevators shall be provides for accessibility, separation of, and secure movement for judicial staff, the public, and prisoners.

23. Furnishings: Furnishings shall include roller window shades, wood casework, solid surface countertops, and floor mats and frames.

10. C HVAC

1. Option #1: The HVAC system for this project consists of fan coil units for zone control and two dedicated outside air handling units with energy recovery. The zones will be sized for roughly 800 sq. ft. per zone (Refer to attached Preliminary Zone Plan). Flexible stainless-steel braided hoses shall be used at the connection of each unit. The hose kits shall include shut-off valves on each the supply and return and a strainer on the supply hose. The dedicated outside air handling unit will be an indoor type with double wall construction. The unit will consist of the following sections/components: stacked on top and in the direction of air flow will be a pre-filter, energy recovery wheel, and plenum type exhaust air fan, on the bottom will be a pre-filter, energy recovery wheel, access, plenum type supply air fan. The unit will be approximately 5,600 cfm in capacity. The exhaust fan shall be sized at 10% reduction in capacity, 5,040 cfm. The supply air distribution system will be low velocity with factory fabricated spiral ductwork for distribution of outside air to each fan coil unit. The return and exhaust air systems will be low velocity system. All controls are to be DDC with occupant setpoint adjustment on thermostats. Per ASHRAE standards this type of system has a typical 20 year life span.

   OA-1/OA-2 will each serve one half of the serve the second, third and fourth floors.

   The District Courtroom and the Circuit Courtroom will have two fan coil units that will serve these areas and be controlled by one central thermostat.

All general exhaust will be exhausted through the dedicated outside air system. Other miscellaneous exhaust fans will include:

a. Mechanical room ventilation.
b. Sally Port Ventilation

2. Option #2: The new HVAC system shall be served from four (4) new air handling units located in the mezzanine, first floor and rooftop of the building. The existing heating hot water boiler shall be utilized to serve the space directly. Two (2) new 1,000 cfm (each) exhaust fans with shall be installed in the mezzanine. Per ASHRAE standards this type of system has a typical 25-year life span.

   Air distribution shall be accomplished by a fully-ducted HVAC system for the. New ductwork mains for supply, return, and exhaust air shall be extended from the chases throughout the fourth-floor ceiling space to serve the project area. New VAV boxes and reheat coils shall be utilized for the space from the existing AHU's. Connect to existing 2-1/2" heating hot water mains stubbed into space. All existing HWS/R mains shall be removed for new layout. Approximately 25 gpm of heating hot water shall be circulated through the system.

   Provide new DDC controls for each new piece of equipment. All new thermostats/temperature controllers are to be compatible with the existing Siemens DDC control system. The new controls shall tie into the existing hospital digital automation system located within the second level of the maintenance office. The graphics should be updated to include the new systems within the renovated space.

   All HVAC systems shall be tested and balanced by a NEBB or AABC certified contractor.

3. Materials:
   HVAC Piping: 2" and Smaller: Schedule 40 black steel pipe with screwed fittings or Type "L" hard copper tubing with wrought copper fittings and 95/5 solder. 2½" and Larger: Schedule 40 black steel pipe with 125# welded or flanged joints. Weldolets may be used for branch line connections to pipe mains. Copper is allowable.

Pipe Insulation: Insulation shall be Owens-Corning model 25ASJ/SSL or approved equivalent fiberglass pipe insulation with an all service jacket. The following pipes shall be insulated with the thickness of insulation as noted.

Heating Hot Water	
Piping 1-1/2-inch and less:	1-inch thick insulation
Piping 2" and more:	2-inch thick insulation

Ductwork/Sheetmetal: All ductwork shall be galvanized steel constructed to SMACNA's standards. All ductwork joints shall have a sealer applied as dictated by system duct pressure. The low pressure ductwork (return, exhaust, and downstream of the terminal units) will be low velocity, 4-inch pressure class. Low pressure return, exhaust and supply ductwork will be low velocity, rectangular type. All ductwork upstream of terminal unit in VAV application shall be medium pressure. All ductwork shall be insulated with 2-inch fiberglass duct wrap, 0.75 pound per cubic foot density. Medium pressure ductwork (upstream of the terminal units and downstream of the air handling unit) shall be medium velocity, 6-inch pressure class.

Registers/Grilles/Diffusers : Supply air diffuser shall be aluminum construction with a 4-way throw plaque face, mounted in a 24-inch x 24-inch lay-in ceiling panel. Return and exhaust air grilles to be aluminum construction with a perforated face mounted in a 24-inch x 24-inch lay-in ceiling panel.

The existing boiler and new chiller will serve the building. Two new hydronic pumps shall be utilized to serve the Crawford Building under both options. New chilled water piping shall be piped into the building from the new chiller plant to serve the Crawford Building.

Other miscellaneous HVAC items:

The vestibules, basement areas and sally port will have additional wall mounted electric unit heaters (3 kw) for supplemental heating.

The enclosed stairwells will have a cabinet unit type hot water heater for temperature control.

Building schedules will be utilized to program occupied/unoccupied hours and areas that may be used after occupied hours will have an override switch available which will allow the HVAC in the respective areas to be energized for a preset number of hours.

10. D Plumbing Systems:

1. Plumbing fixtures (low flow) are located on the architectural drawings in the toilet rooms and break rooms. The fixtures in the holding area will be tamper resistant stainless steel. Hot water shall be stored in one 120 gallon insulated storage tank. Cold, 110°F, and 110°F recirculating water will be routed throughout the building. The 110°F water shall be mixed utilizing a thermostatic mixing valve. A reduced pressure backflow preventer, 3" in size, will be located at the main water entry in the first floor. A water pressure test will need to be performed to ensure that there is adequate city water pressure to feed the building.

2. Sanitary waste piping will discharge to the municipal system. All plumbing vents shall terminate a minimum of 10 feet from any outdoor air intake.

3. The roof will be externally drained with scuppers and downspouts from the Third-floor roof. All roof leader piping will terminate to the site storm water system. The first-floor roof will be drained to roof scuppers and downspouts.

10. E Fire Protection Systems:

1. A complete wet type fire protection system shall serve the building. Quick response sprinkler heads shall be used. In all areas with ceilings, sprinkler heads shall be fully recessed type with cover plate. The prisoner holding areas will have institutional type heads. All design criteria shall meet all FM Global requirements.

10. F Electrical Systems:

1. A new 1200A/277/480V/3-phase/4Wire electrical service will be provided. The new service will feed step down transformers and branch panels located throughout the facility.

2. Existing branch circuiting and wiring devices will be replaced throughout the facility. The circuiting will be provided from the new branch electrical panels.

10. G Telecommunications:

1. A new IDF room will be provided to house the telecommunication head end equipment. Level 6 cabling will be used to serve both data and voice outlets.

10. H Fire Alarm:

1. A new addressable fire alarm system will be provided to serve the building and devices located and installed per NFPA 72 requirements.

10. I Courtroom Audio Visual Systems:

1. A/V systems will be provided in each courtroom. These will consist of conduit/backbox rough-ins and cabling for courtroom assisted listening, audio/visual, recording and microphone systems. Device installations are provided by the owner.

10. J Closed Circuit "CCTV" Security Systems:

1. Security Cameras will be provided throughout the facility, both interior and exterior, and connected to a new CCTV head end.

10. K Building Code Information:

Applicable Building Code(s):

West Virginia State Building Code Title 87 Series 4
International Existing Building Code / 2015 (IEBC) – Chapters 5 Through 12
International Building Code / 2015 (IBC)
West Virginia State Fire Code title 87 Series 1
NFPA 101 Life Safety Code / 2015 – Building Rehabilitation
International Fuel Gas Code / 2015
International Mechanical Code / 2015
International Plumbing Code / 2015
ICC/ANSI A117.1 / 2009

Existing Crawford Building:

Building Construction Classification(s):

IBC:	Type V B
NFPA:	Type V (000)

Historic Classification: Listed on National Register of Historic Places

Existing Building Area:

First Floor:	4,105 square feet	(Basement Level)
Second Floor:	18,912 square feet	(1st Story Above Grade)
Third Floor:	17,430 square feet	(2nd Story Above Grade)
Mezzanine Level:	1,500 square feet	(Mezzanine)
Total Building Area:	41,947 square feet	

Existing Occupancy Classification(s):

IBC:	Group M
NFPA:	Existing Mercantile Occupancy

Existing Fire Protection Systems:

Automatic Sprinklers:	N/A
Standpipe System(s):	N/A
Emergency Ventilation:	N/A
Fire Alarm System:	N/A
Fire Extinguishers:	N/A

Existing Crawford Building Divided Into 3 Separate Buildings:

Building #2 Addition / Change of Occupancy Classification:

Building Construction Classification(s):

IBC:	Type II B
NFPA:	Type II (000)

Historic Classification: Building is Listed on National Register of Historic Places

Change of Occupancy Hazard Categories:

IEBC Table 1012.4:	Means of Egress Hazard Category – Lower
IEBC Table 1012.5:	Heights & Area Hazard Category – Equal
IEBC Table 1012.6:	Exposure of Exterior Wall Hazard Category – Equal
LSC Table 43.7.3	Occupancy Classification Hazard Category - Lower

Proposed Building Area:

First Floor:	0 square feet	(Basement Level)
Second Floor:	2,522 square feet	(1st Story Above Grade)
Third Floor:	0 square feet	(2nd Story Above Grade)
Mezzanine Level:	0 square feet	(3rd Story Above Grade)
Total Building Area:	2,522 square feet	

Occupancy Classification(s): IBC:

First Floor:	N/A
Second Floor:	Group(s) S-1
Third Floor:	N/A
Mezzanine Level:	N/A

Occupancy Classification(s): NFPA:

First Floor:	N/A
Second Floor:	Group(s) New Storage Occupancy
Third Floor:	N/A
Mezzanine Level:	N/A

Design Occupant Loads:

First Floor:	N/A

Second Floor: 9
Third Floor: N/A
Mezzanine Level: N/A
Total: 9

Height and Area:

IBC Table-504.3: Groups S-1 / 'S' = 75 feet in height
IBC Table-504.4: Group S-1 / 'S' = 3 Stories in height
IBC Table-506.2: Group S-1 / 'S1' = 70,000 square feet

Area Increases:

Historic Buildings – IEBC 1205.2 - 20% Increase
Group S-1 = 14,000 square feet

Allowable Building Area: Group S-1 = 84,000 square feet Per Floor

Proposed Fire Area without Automatic Sprinklers: 0 square feet

Required Number of Exits:

First Floor: N/A
Second Floor: 2
Third Floor: N/A
Mezzanine Level: N/A

Proposed Number of Exits:

First Floor: N/A
Second Floor: 2
Third Floor: N/A
Mezzanine Level: N/A

Proposed Egress Widths:	Door(s):	Stairway(s):
First Floor:	N/A	N/A
Second Floor:	66 inches	N/A
Third Floor:	N/A	N/A
Mezzanine Floor:	N/A	N/A

Exit Capacity (# Persons):

	Occupant Load:	Exit Door(s):	Stairway(s):	Total:
First Floor:	0			
Second Floor:	9	330	N/A	330
Third Floor:	0			
Mezzanine Floor:	0			

Proposed Fire Wall(s):

Between Existing Building #1 and Building #2: 3-Hour
Between Building #2 and Building #3: 2-Hour

Building #3 Alterations / Change of Occupancy Classification:

Building Construction Classification(s):

IBC:	Type II B	
NFPA:	Type II (000)	
Historic Classification:	Building is Listed on National Register of Historic Places	
Change of Occupancy Hazard Categories:		
IEBC Table 1012.4:	Means of Egress Hazard Category – Lower	
IEBC Table 1012.5:	Heights & Area Hazard Category – Lower	
IEBC Table 1012.6:	Exposure of Exterior Wall Hazard Category – Lower	
LSC Table 43.7.3	Occupancy Classification Hazard Category - Equal	
Proposed Building Area:		
First Floor:	0 square feet	(Basement Level)
Second Floor:	3,825 square feet	(1st Story Above Grade)
Third Floor:	3,825 square feet	(2nd Story Above Grade)
Mezzanine Level:	3,825 square feet	(3rd Story Above Grade)
Total Building Area:	11,475 square feet	
Occupancy Classification(s):	IBC:	
First Floor:	N/A	
Second Floor:	Group(s) B	
Third Floor:	Group(s) B	
Mezzanine Level:	Group(s) B	
Occupancy Classification(s):	NFPA:	
First Floor:	N/A	
Second Floor:	Group(s) New Business Occupancy	
Third Floor:	Group(s) New Business Occupancy	
Mezzanine Level:	Group(s) New Business Occupancy	
Design Occupant Loads:		
First Floor:	N/A	
Second Floor:	39	
Third Floor:	39	
Mezzanine Level:	39	
Total:	117	
Height and Area:		
IBC Table-504.3:	Groups B / ‘S’ = 75 feet in height	
IBC Table-504.4:	Group B / ‘S’ = 4 Stories in height	
IBC Table-506.2:	Group B / ‘SM’ = 69,000 square feet	
Area Increases:		
	Historic Buildings – IEBC 1205.2 - 20% Increase	
	Group B = 13,800 square feet	
Allowable Building Area:	Group B = 82,800 square feet Per Floor	

Proposed Fire Area without Automatic Sprinklers: 0 square feet

Required Number of Exits:

First Floor:	N/A
Second Floor:	2
Third Floor:	2
Mezzanine Level:	2

Proposed Number of Exits:

First Floor:	N/A
Second Floor:	2
Third Floor:	2
Mezzanine Level:	2

Proposed Egress Widths:	Door(s):	Stairway(s):
First Floor:	N/A	N/A
Second Floor:	66 inches	N/A
Third Floor:	66 inches	x inches
Mezzanine Floor:	66 inches	x inches

Exit Capacity (# Persons):

	Occupant Load:	Exit Door(s):	Stairway(s):	Total:
First Floor:	0			
Second Floor:	39	330	x	x
Third Floor:	39	330	x	x
Mezzanine Floor:	39	330	x	x

Proposed Fire Wall(s):

Between Building #2 and Building #3:	2-Hour
Between Building #3 and Building #4:	2-Hour

Building #4 Alterations / Change of Occupancy Classification:

Building Construction Classification(s):

IBC:	Type V B
NFPA:	Type V (000)
Historic Classification:	Building is Listed on National Register of Historic Places

Change of Occupancy Hazard Categories:

IEBC Table 1012.4:	Means of Egress Hazard Category – Equal or Lower
IEBC Table 1012.5:	Heights & Area Hazard Category – Higher
IEBC Table 1012.6:	Exposure of Exterior Wall Hazard Category – Lower
LSC Table 43.7.3	Occupancy Classification Hazard Category - Equal

Proposed Building Area:

First Floor:	4,105 square feet	(Basement Level)
Second Floor:	13,040 square feet	(1st Story Above Grade)
Third Floor:	13,040 square feet	(2nd Story Above Grade)
Total Building Area:	26,080 square feet	

Attic:	10,051 square feet	(Unoccupied)
Occupancy Classification(s):	IBC:	Mixed Occupancies – Nonseparated
First Floor:	Unoccupied - Mechanical Basement	
Second Floor:	Group(s) A-3 & B	
Third Floor:	Group(s) A-3 & B	
Mezzanine Level:	Unoccupied - Mechanical Attic	
Occupancy Classification(s):	NFPA:	Multiple Occupancies - Mixed
First Floor:	Unoccupied - Mechanical Basement	
Second Floor:	Group(s) New Business & Assembly (< 300) Occupancies	
	Assembly:	
3 Hearing Rooms =	37 Occupants Each	
Third Floor:	Group(s) New Business & Assembly (< 300) Occupancies	
	Assembly:	
	Waiting Room = 21 Occupants	
	2 Court Rooms = 84 Occupants Each	
Mezzanine Level:	Unoccupied - Mechanical Attic	
Design Occupant Loads:		
First Floor:	14	Unoccupied-Mechanical Basement
Second Floor:	219	Business = 108 / Assembly = 111
Third Floor:	289	Business = 100 / Assembly = 189
Mezzanine Level:	3	Unoccupied-Mechanical Attic
Total:	525	
Height and Area:		
IBC Table-504.3:	Groups A & B / 'S' = 60 feet in height	
IBC Table-504.4:	Group A-3 / 'S' = 2 Stories in height	
IBC Table-504.4:	Group B / 'S' = 3 Stories in height	
IBC Table-506.2:	Group A-3 / 'SM' = 18,000 square feet	
IBC Table-506.2:	Group B / 'SM' = 27,000 square feet	
Area Increases:		
	Historic Buildings – IEBC 1205.2 - 20% Increase	
	Group A-3 = 3,600 square feet	
	Group B = 5,400 square feet	
Allowable Building Area:	Group A-3 = 21,600 square feet Per Floor	
LSC Tables 12.1.6 & 13.1.6:	Type V (000) / Occupant Load 300 or Less = 2 Stories	
Proposed Fire Area without Automatic Sprinklers:		0 square feet
Required Number of Exits:		
First Floor:	1	
Second Floor:	2	
Third Floor:	2	
Mezzanine Level:	1	
Proposed Number of Exits:		

First Floor:	1			
Second Floor:	5			
Third Floor:	4			
Mezzanine Level:	1			
Proposed Egress Widths:	Door(s):	Stairway(s):		
First Floor:	33 inches	x inches		
Second Floor:	165 inches	x inches		
Third Floor:	132 inches	x inches		
Mezzanine Floor:	33 inches	x inches		
Exit Capacity (# Persons):				
	Occupant Load:	Exit Door(s):	Stairway(s):	Total:
First Floor:	14	49	49	49
Second Floor:	219	825	x	x
Third Floor:	289	660	x	x
Mezzanine Floor:	3	49	49	49

Proposed Fire Wall(s):

Between Building #3 and Building #4: 2-Hour

Typical Building Construction – Type V B / Type V (000):

Exterior Walls:	Fire Separation Less Than 10 Feet = 1-Hour Rated
	Fire Separation At Least 10 Feet = 0-Hour Rated
Floor / Ceilings:	0-Hour Rated Construction
Roof / Ceiling:	0-Hour Rated Construction
Fire Wall:	2-Hour Rated Construction At Building #3

Other Typical Construction:

2-Hour Rated Fire Barriers:	Horizontal Exits
1-Hour Rated Fire Barriers:	Shafts
	Exit Stair Enclosures
	Elevator Hoistway
	Fire Pump Room
	Electrical Rooms
1-Hour Rated Fire Partitions:	N/A

Typical Building Construction – Type II B / Type II (000):

Exterior Walls:	Fire Separation Less Than 10 Feet = 1-Hour Rated
	Fire Separation At Least 10 Feet = 0-Hour Rated

Floor / Ceilings: 0-Hour Rated Construction
Roof / Ceiling: 0-Hour Rated Construction
Fire Wall: 2-Hour Rated Construction At Buildings #2 and #4
3-Hour Rated Construction At Buildings #1

Other Typical Construction:

2-Hour Rated Fire Barriers: Horizontal Exits
1-Hour Rated Fire Barriers: Shafts
Exit Stair Enclosures
Elevator Hoistway
Fire Pump Room
Electrical Rooms
1-Hour Rated Fire Partitions: N/A

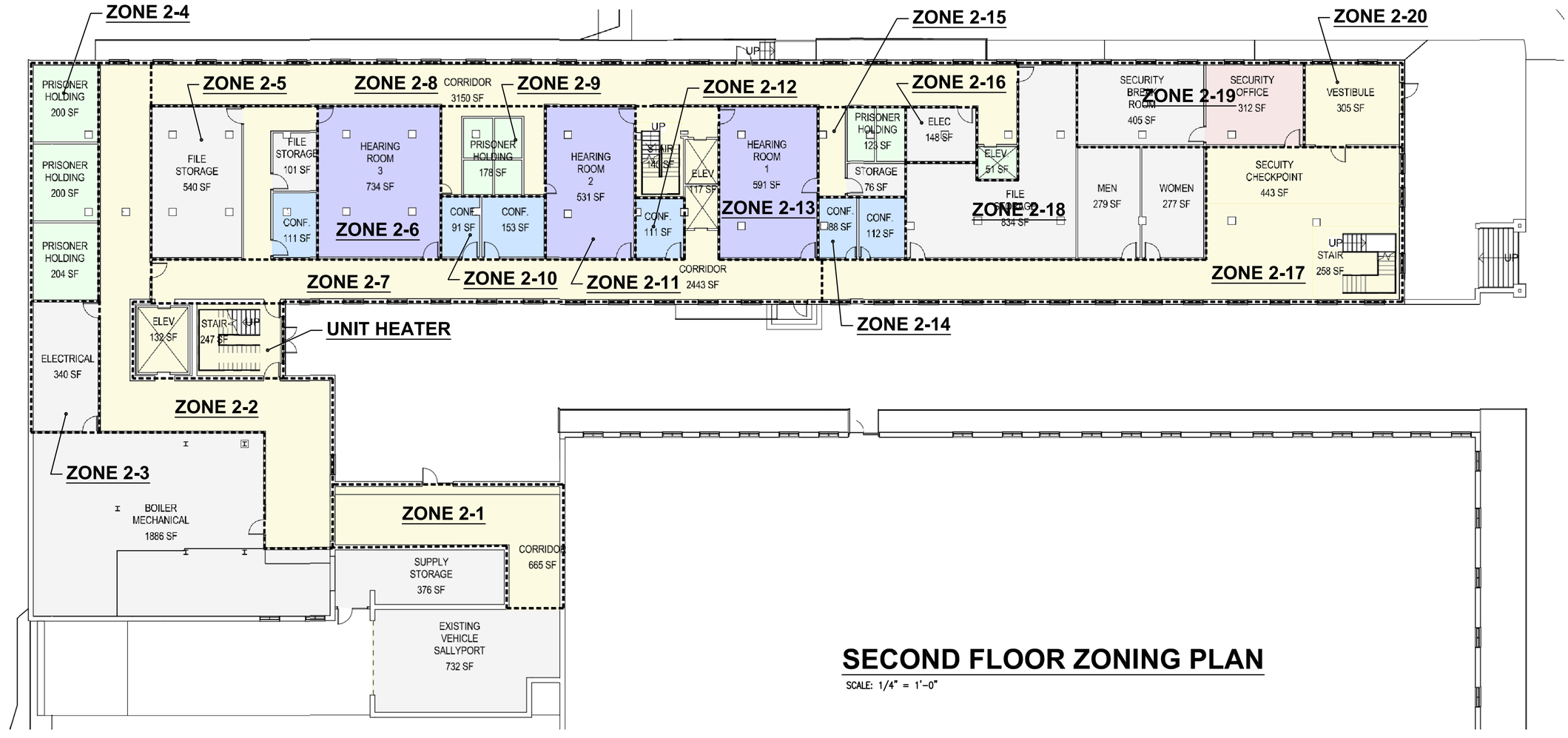
Proposed Fire Protection Systems:

Automatic Sprinklers: Throughout - Per NFPA-13
Standpipe System(s): N/A
Emergency Ventilation: N/A

Fire Alarm System: Per NFPA-72 – Manual Alarm
Fire Extinguishers: Per International Fire Code & NFPA-10

Maximum Travel Distances To Extinguishers (Where Extinguishers Are Needed):

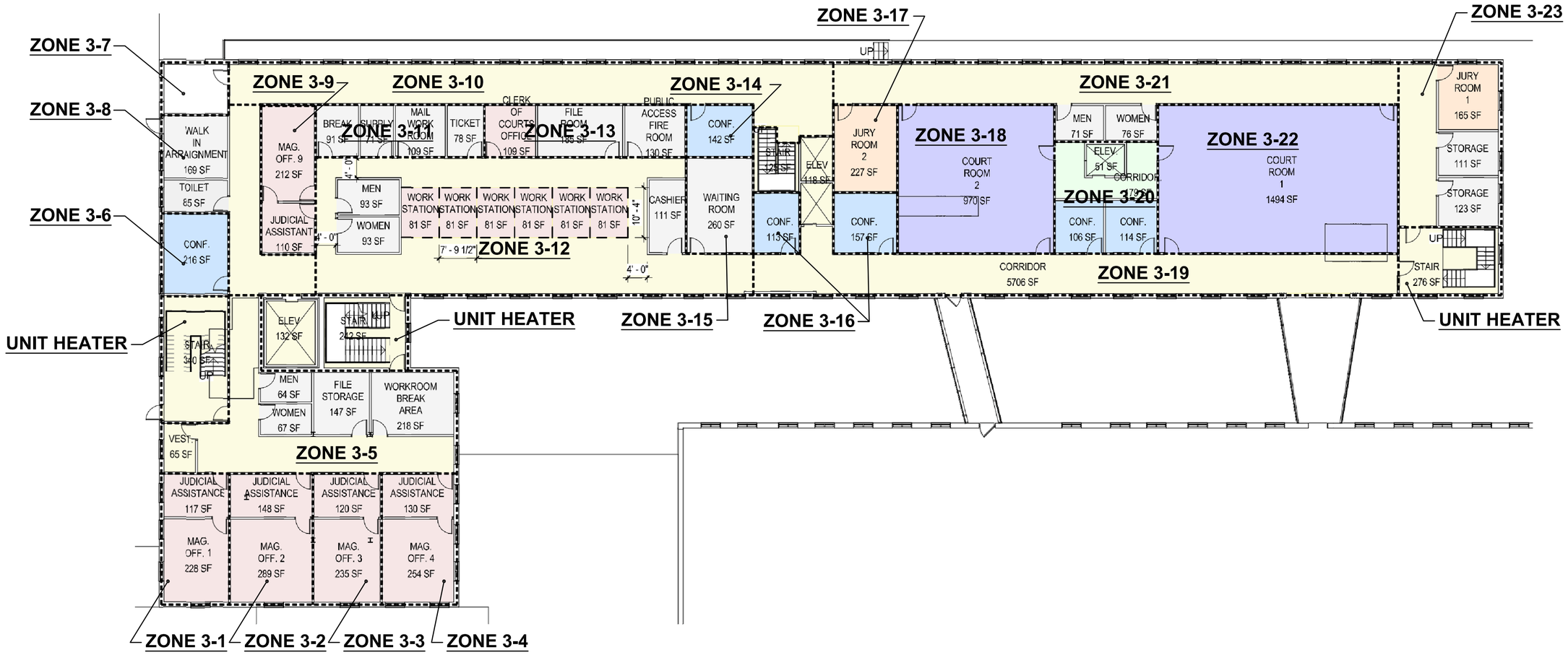
Class 'A' Hazards: 75 Feet
Class 'B' Hazards: 30 or 50 Feet
Type 'K': 30 Feet To Cooking Equipment



SECOND FLOOR ZONING PLAN

SCALE: 1/4" = 1'-0"

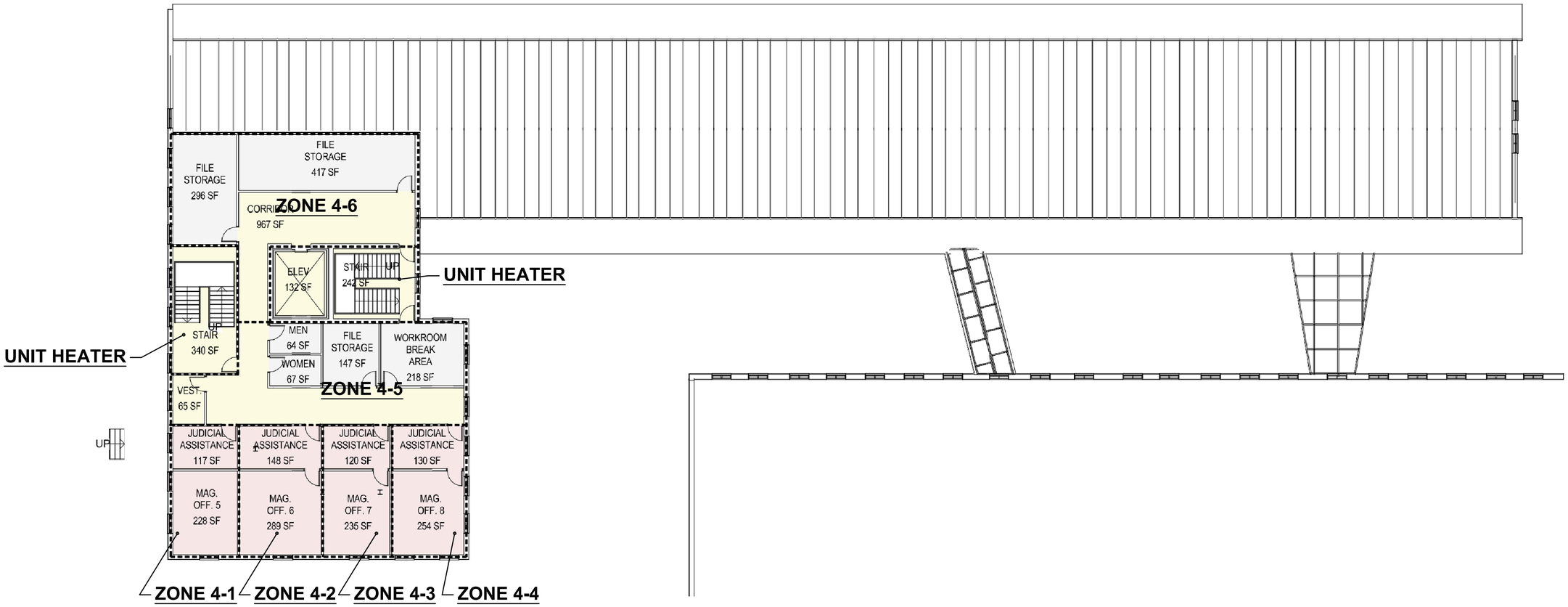
2ND FLOOR 19387.43 SF



THIRD FLOOR ZONING PLAN

SCALE: 1/4" = 1'-0"

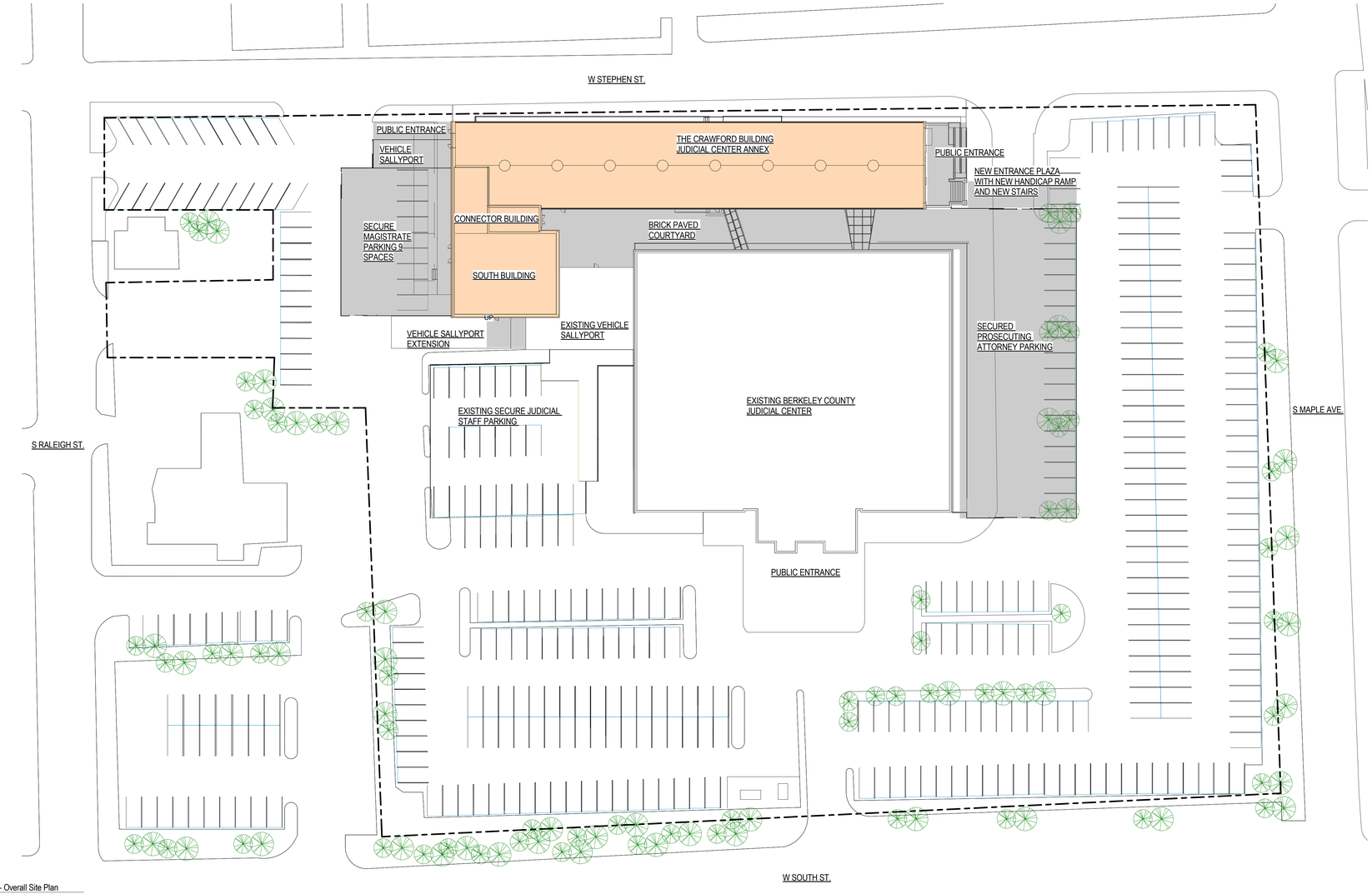
3RD FLOOR 17430.29 SF



4RD FLOOR 5032.76 SF

FOURTH FLOOR ZONING PLAN

SCALE: 1/4" = 1'-0"



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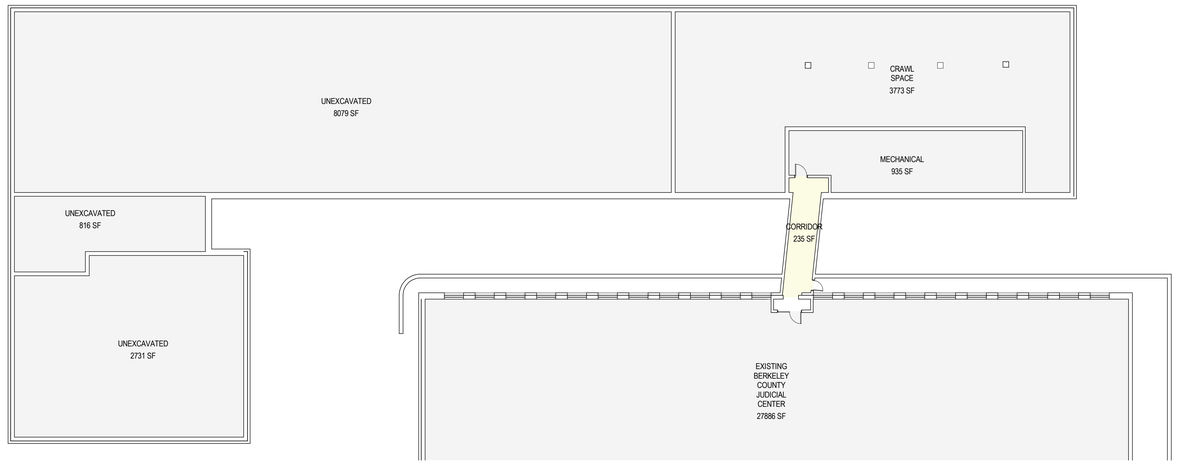
C1.0



1 A1.1 - Overall First Floor Plan
1/16" = 1'-0"

1ST FLOOR 4105 SF

SUBGRADE LEVEL

0' 8' 16' 32'

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A1.1

1 A1.2 - Overall Second Floor Plan
1/16" = 1'-0"

2ND FLOOR 19387 SF

0' 8' 16' 32'

EXISTING GROUND FLOOR LEVEL

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A1.2

1 / A1.3 A1.3 - Overall Third Floor Plan
1/16" = 1'-0"

3RD FLOOR 17430 SF

0' 8' 16' 32'

EXISTING SECOND FLOOR LEVEL

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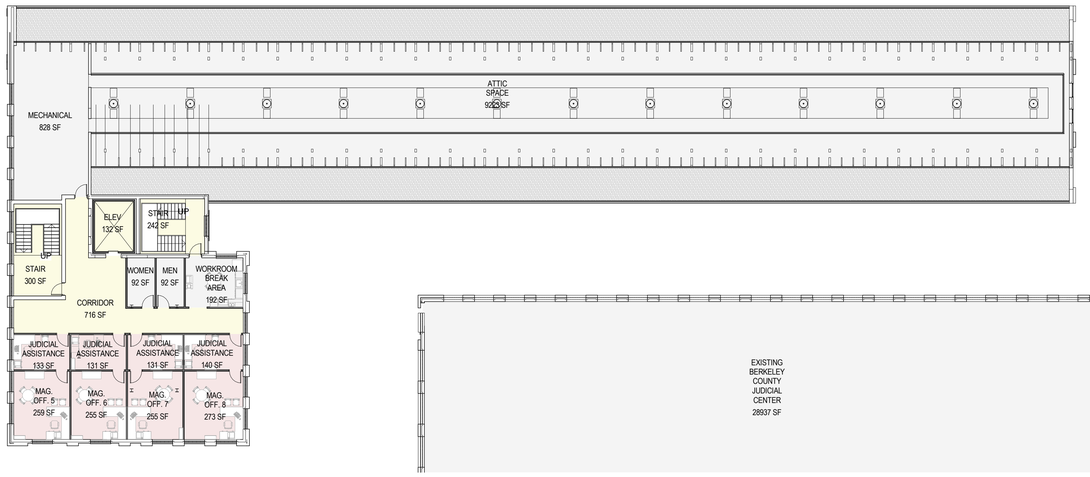
A1.3



1 A1.4 - Overall Fourth Floor Plan
A1.4 1/16" = 1'-0"

MEZZANINE FLOOR 5033 SF

0' 8' 16' 32'

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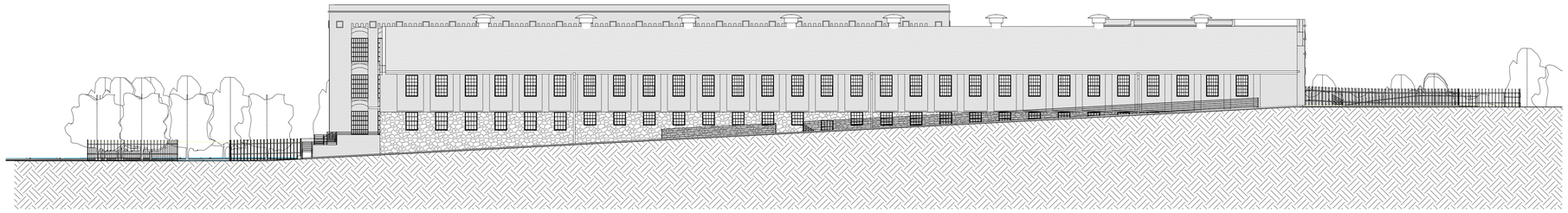
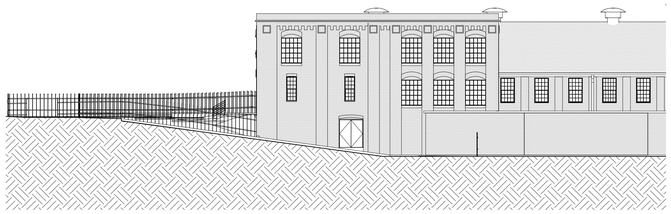
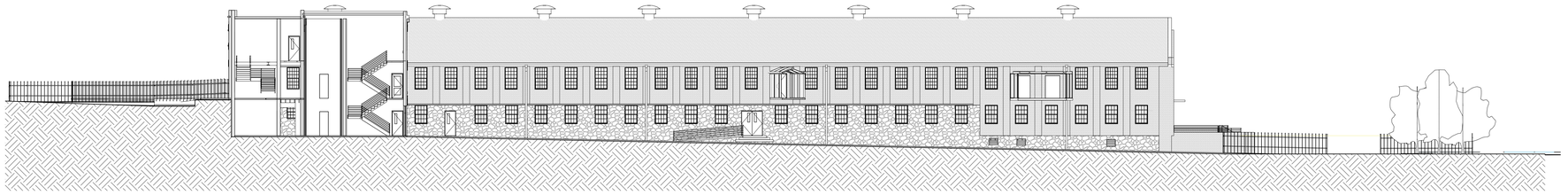
A1.4



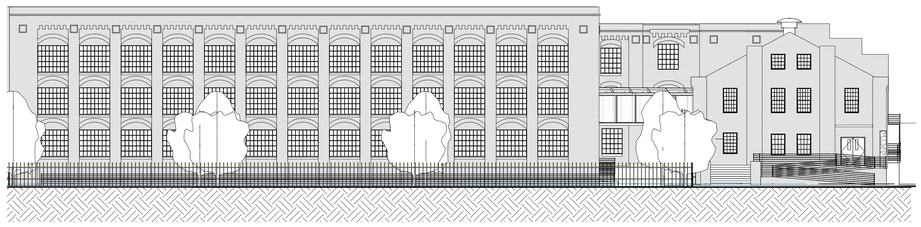
1 A2.1 AE01 - Overall Exterior Elevation - North
1/16" = 1'-0"



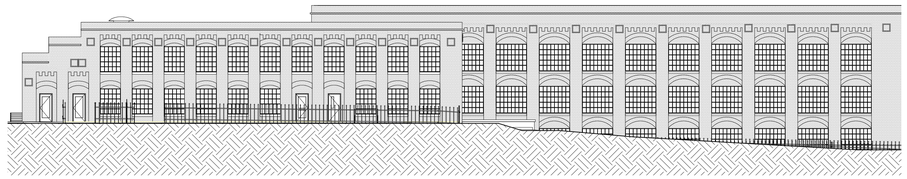
5 A2.1 AE05 Overall Exterior Elevation - South Facade
1/16" = 1'-0"



2 A2.1 AE03 - Overall Exterior Elevation - South
1/16" = 1'-0"



3 A2.1 AE02 - Overall Exterior Elevation - East
1/16" = 1'-0"



4 A2.1 AE04 - Overall Exterior Elevation - West
1/16" = 1'-0"

0' 8' 16' 32'

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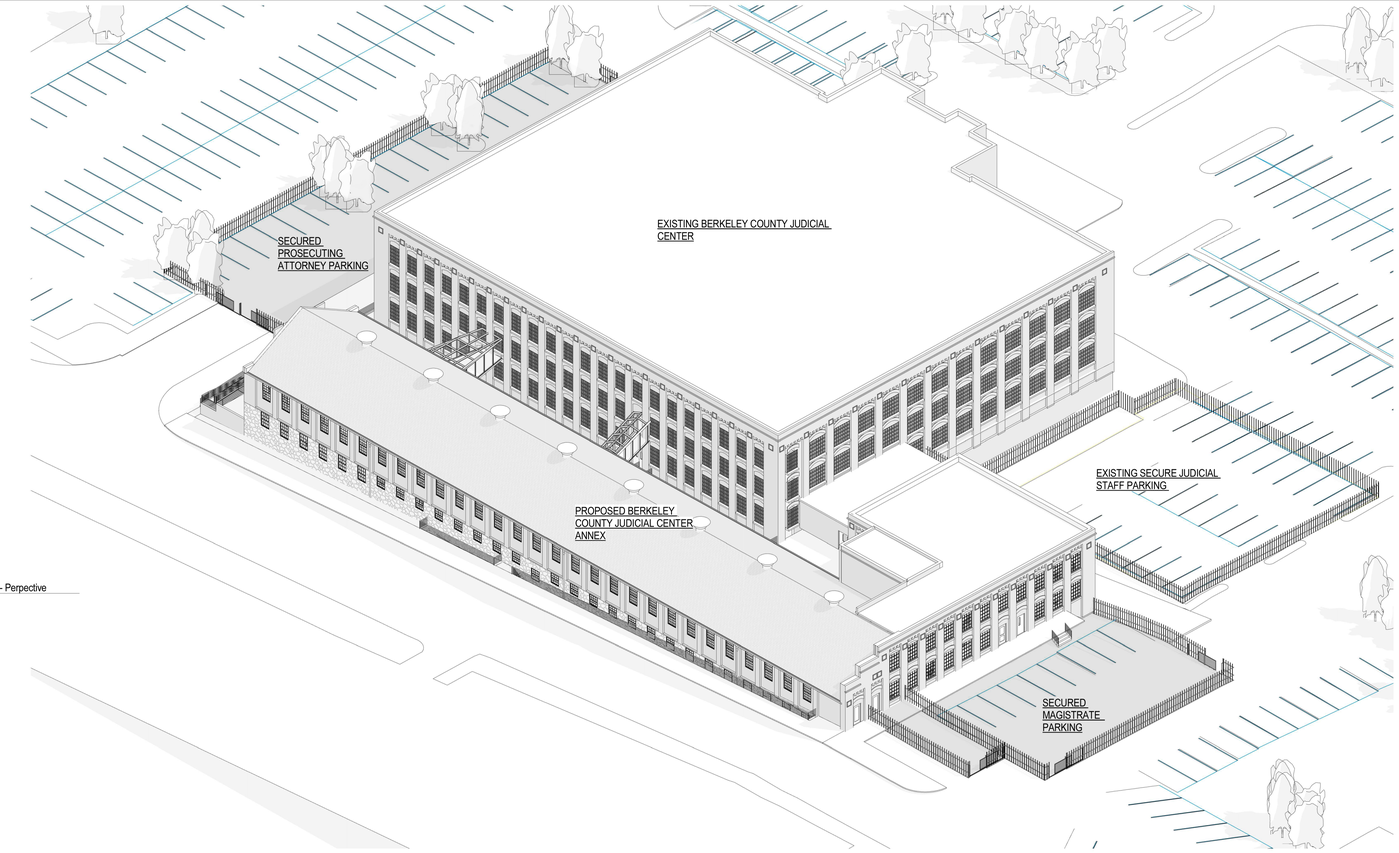
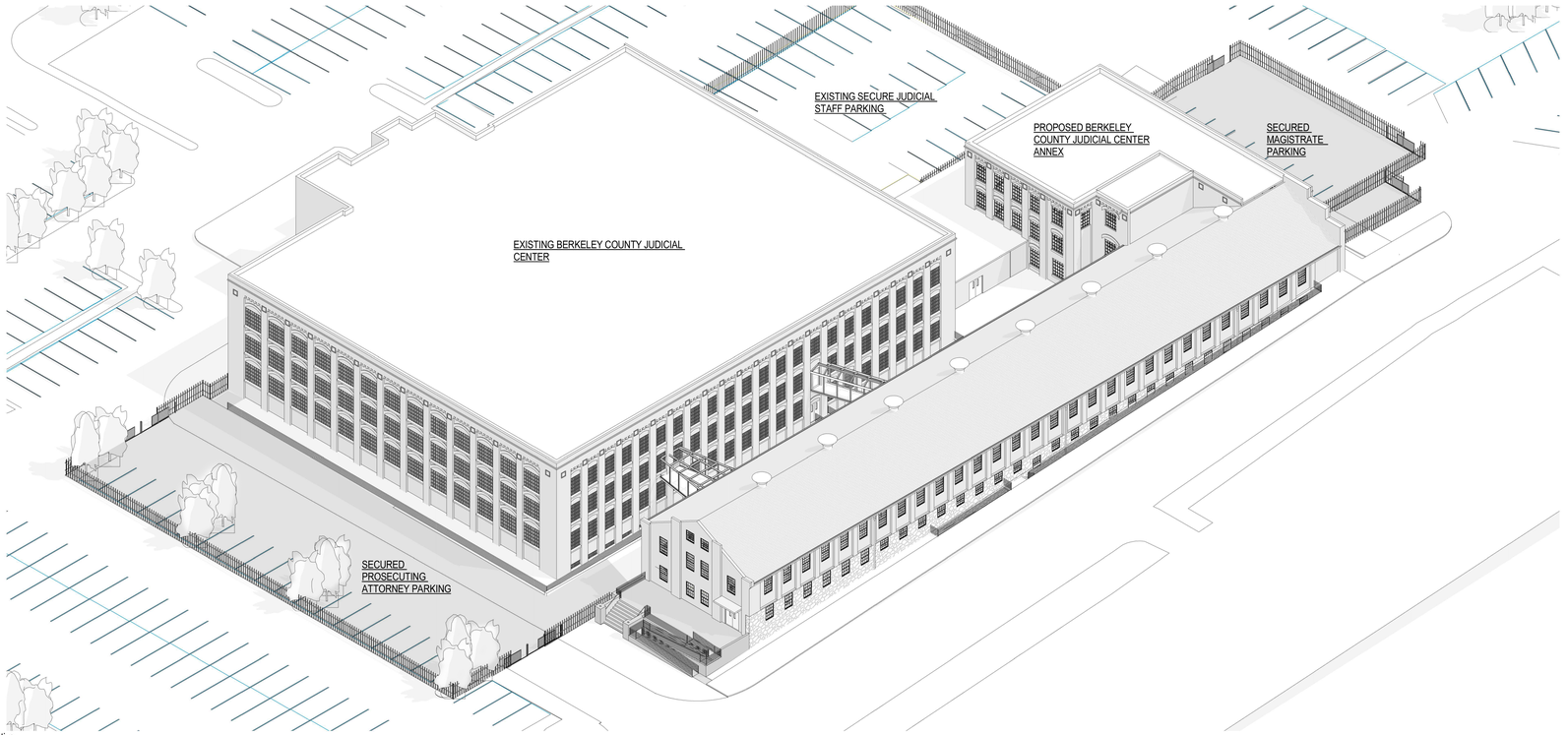
A2.1



1 A2.2 NW - Perpective

3 A2.2 Front Entrance and ramp



2 A2.2 NE - Perpective

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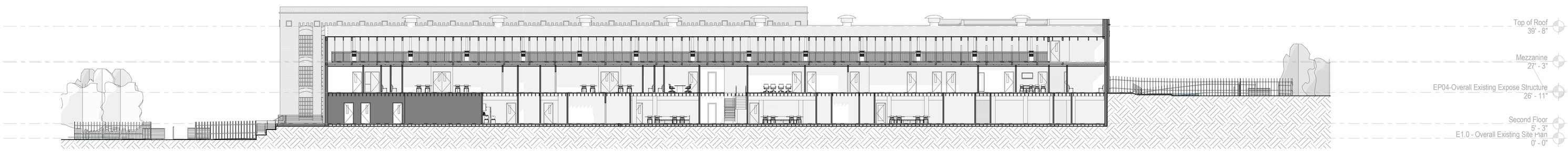
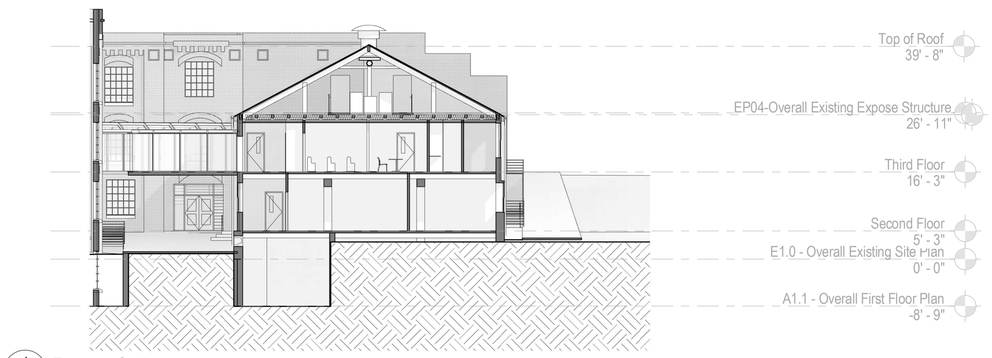
A2.2



2 A3.1 Longitudinal Section
1/16" = 1'-0"



1 A3.1 Transverse Section
1/16" = 1'-0"

0' 8' 16' 32'

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A3.1

BERKELEY COUNTY JUDICIAL CENTER ANNEX

Cost Estimate: Additions & Renovations — **CRA #3242**

Crabtree, Rohrbaugh & Associates — **July 26, 2019**

	Gross Area	Existing		New Sallyport/Elevator/Stairtower		
	First Floor (Basement Mechanical)	1,200	sf		sf	
	Second Floor	17,600	sf			
	Second Floor	1,840	sf	469	sf	Sallyport
	Third Floor	17,600	sf			
	Fourth Floor - South Building	3,152	sf	464	sf	Stairtower
	Fourth Floor - Attic Storage	908	sf			
	Gross Building Area	**42,300**	**sf**	**933**	**43,233**	**Total**

Division	Work Item / Description	Quantity	Unit	$ / Unit	Subtotal	Total
Division 1: General Requirements						
011200	**General Construction**					
004313	Bonds, Mobilization, & Supervision	39,260	sf	$4.75	$186,485	
015000	Temporary Facilities & Controls	39,260	sf	$3.00	$117,780	
015723	Temporary Storm Water Pollution Control	1	ea	$5,000	$5,000	
017419	Const. Waste Management & Disposal	39,260	sf	$1.00	$39,260	
017420	Final Cleaning	39,260	sf	$1.00	$39,260	
						$387,785
Division 2: Existing Conditions						
024119	Selective Structure Demolition	41,150	sf	$3.75	$154,313	
024119	Demo Curb and Sidewalk	2,503	sf	$5.00	$12,515	
024119	Demo Trees for New Parking	10	ea	$1,750	$17,500	
024119	Demo Brick Paving at Courtyard and Plaza	4,464	sf	$12.00	$53,568	
024119	Demo Exterior Railing Systems	490	lf	$7.50	$3,675	
024119	Demo Existing Membrane Roof- South Wing	3,840	sf	$1.50	$5,760	
003126	Hazardous Materials Abatement Allowance	39,260	ls	$7.00	$274,820	
						$522,151
Division 3: Concrete (also see Div. 32)						
033000	Cast In Place Concrete - Interior Slab on Grade	469	sf	$12.00	$5,628	
033000	Cast In Place Concrete - Exterior Pad/Frost Walls	1,215	sf	$39.50	$47,993	
033000	Concrete Floor Topping	13,000	sf	$4.00	$52,000	
						$105,621
Division 4: Masonry						
042000	Unit Masonry - New Interior CMU Walls	7,274	sf	$15.00	$109,110	
042000	Unit Masonry - New CMU Penthouse Walls	1,218	sf	$26.00	$31,668	
042000	New Openings in Existing CMU/Stone	10	ea	$3,500	$35,000	
040120	Cleaning & Repoint Existing Brick Veneer	12,385	sf	$10.85	$134,377	
040140	Cleaning & Repoint Existing Stone Veneer	3,356	sf	$11.12	$37,319	
047200	Replace Cast Stone Sills	96	ea	$450.00	$43,200	
						$390,674
Division 5: Metals						
051200	Structural Steel Framing - Sallyport Extension	469	sf	$52.00	$24,388	
054000	Light-Gauge Metal Rafters - New Roof @ Stair / Elev.	464	sf	$25.00	$11,600	
053100	Steel Roof Deck - Sallyport, Stairs & Elevator	494	sf	$12.00	$5,928	
055113	New Steel Stairs (cost per run w/ landing)	8	fl	$15,000	$120,000	

Division	Work Item / Description	Quantity	Unit	$ / Unit	Subtotal	Total
055000	New Bridge Connector	353	sf	$200.00	$70,600	
055000	Miscellaneous Steel Framing	1	ls	$95,000	$95,000	
						$327,516
Division 6: Wood, Plastics, & Composites						
061000	Wood Blocking	1	ls	$7,500	$7,500	
061000	Replace Wood Window Sills	500	lf	$30.00	$15,000	
061000	Raised Wood Floor - Sleepers and Plywood Subfloor	1,400	sf	$6.00	$8,400	
061000	Replace Framing Members - 2nd Floor above Bsmt	1,308	sf	$42.00	$54,936	
061300	Heavy Timber / Framing Restoration Allowance	1	ls	$70,000	$70,000	
062013	Exterior Finish Carpentry - Wood Fascia	495	lf	$4.25	$2,104	
062023	Interior Finish Carpentry - Wood Base	10,000	lf	$5.60	$56,000	
064023	Custom Millwork for Judges Bench	5	ea	$30,000	$150,000	
064113	Casework Allowance	50	lf	$300	$15,000	
064216	Flush Wood Paneling @ Courtrooms	5	ea	$10,000	$50,000	
						$428,940
Division 7: Thermal & Moisture Protection						
076200	New Copings / Flashings	792	lf	$26.00	$20,592	
076200	New Gutters and Downspouts	831	lf	$16.00	$13,296	
076200	Sheet Metal Flashing and Trim	531	lf	$12.95	$6,876	
072119	Foamed-In-Place Insulation - Walls	16,370	sf	$2.50	$40,925	
072119	Fiberglass Insulation - Third Floor Attic	13,000	sf	$2.75	$35,750	
072600	Vapor Retarders - Basement Crawl Space	3,773	sf	$2.80	$10,564	
074213	Formed Metal Wall Panels at Veh. Sallyport Extension	552	sf	$17.50	$9,660	
078413	Penetration Firestopping	1	ls	$2,500	$2,500	
079200	Joint Sealants	2	ls	$22,500	$45,000	
						$185,164
Division 8: Openings						
081416	New Single Wood Door and HM Frame (w/ Hardware)	89	ea	$655	$58,295	
081417	New Double Wood Door and HM Frame (w/ Hardware)	1	ea	$3,500	$3,500	
081113	New Single HM Door and HM Frame (w/ Hardware)	3	ea	$1,025	$3,075	
081114	New Double HM Door and HM Frame (w/ Hardware)	2	ea	$1,575	$3,150	
083463	Security HM Doors and Frames	9	ea	$3,150	$28,350	
084113	New Aluminum Entrances & Storefront	10	ea	$1,750	$17,500	
083613	Relocate Sectional Door at Sallyport	1	ea	$3,500	$3,500	
085113	Replace Metal Windows	43	ea	$2,700	$116,100	
085200	Replace Large Wood Windows	55	ea	$1,700	$93,500	
085200	Replace Small Wood Windows	57	ea	$900	$51,300	
088853	Fire Rated Glazing	640	sf	$200	$128,000	
089119	Louvers & Vents	1	ls	$1,500.00	$1,500	
						$507,770
Division 9: Finishes						
092216	Metal Stud & Gypsum Board Walls	14,508	sf	$7.21	$104,603	
092216	Metal Stud & Gypsum Board Ceilings	27,500	sf	$6.50	$178,750	
096513	Vinyl Composition Tile (VCT) Flooring & Vinyl Base	5,000	sf	$3.04	$15,200	
096514	Rubber Stair Treads	800	lf	$21.00	$16,800	
096813	Carpet Tile & Vinyl Base	24,810	sf	$5.75	$142,658	
096813	Entrance Mat - Main Entrance	165	sy	$8.00	$1,320	
093013	Quartz Floor Tile	4,190	sf	$15.00	$62,850	
093013	Ceramic Floor Tile & Base - Restrooms	1,291	sf	$10.00	$12,910	

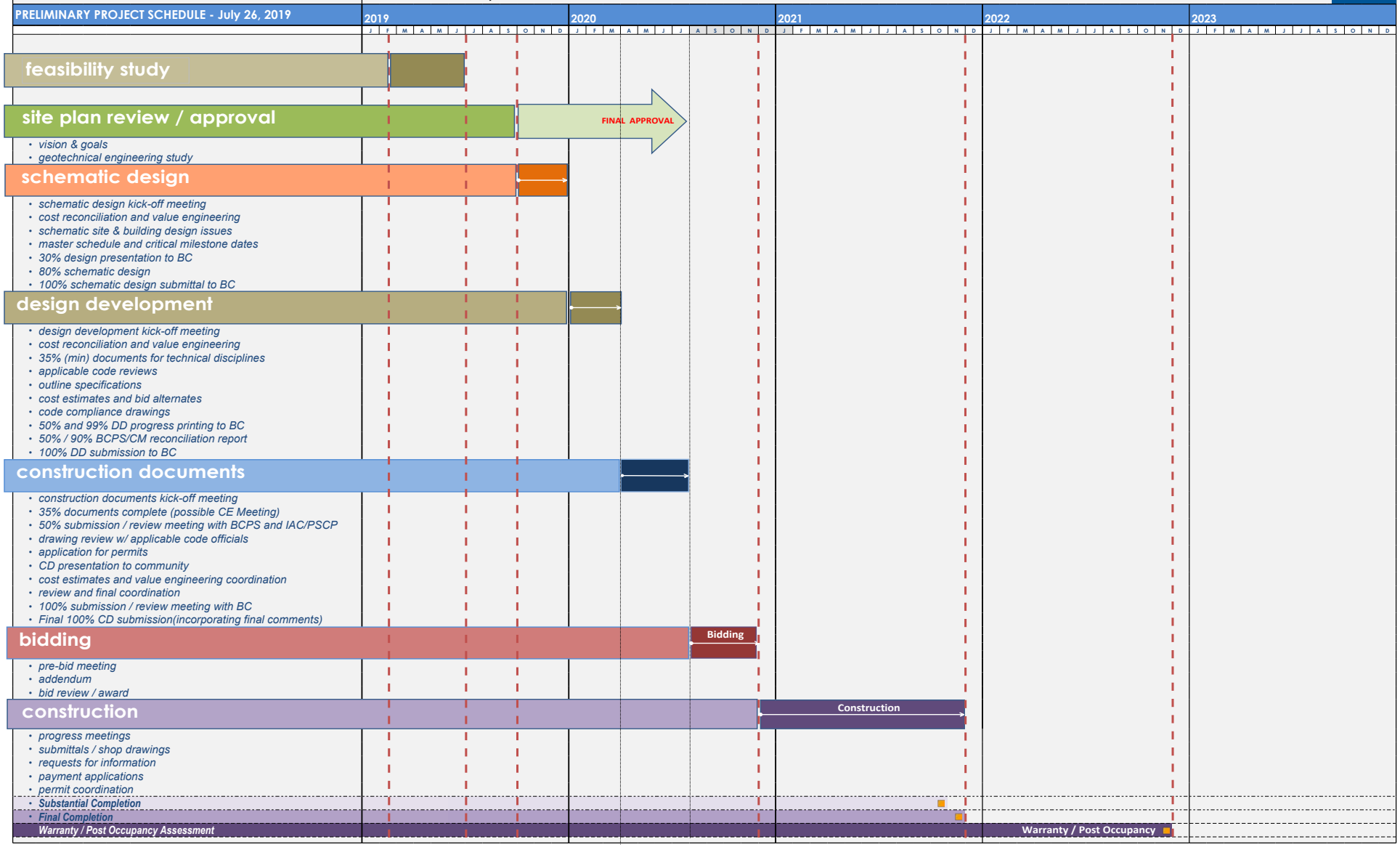
Division	Work Item / Description	Quantity	Unit	$ / Unit	Subtotal	Total
093013	Ceramic Wall Tile Wainscot - Restrooms	1,976	sf	$12.00	$23,712	
095113	Acoustical Panel Ceilings	5,000	sf	$3.00	$15,000	
099100	Exterior Painting	1	ls	$7,500	$7,500	
099100	Interior Painting	43,233	sf	$1.89	$81,710	
						$663,013
Division 10: Specialties						
101416	Plaques	1	ea	$1,500	$1,500	
101100	Markerboards and Tackboards	6	ls	$850	$5,100	
101300	Directories	2	ea	$500	$1,000	
101419	Dimensional Letters	1	ls	$1,500	$1,500	
101423	Panel Signage	1	ls	$1,750	$1,750	
102113	Plastic Toilet Compartments	8	ea	$900	$7,200	
102800	Toilet Accessories	1	ls	$2,500	$2,500	
102813	Detention Toilet Accessories	2	ls	$750	$1,500	
	Security Checkpoint Equipment (by Owner)					
104416	Fire Extinguishers / Cabinets	12	ea	$450	$5,400	
						$27,450
Division 11: Equipment						
113013	Residential Appliances	3	ls	$4,500	$13,500	
						$13,500
Division 12: Furnishings						
122413	Wood Window Blinds	155	ea	$250	$38,750	
123661	Solid Surface Countertops / Vanities	30	lf	$145	$4,350	
124813	Floor Matts and Frames	222	sf	$15	$3,330	
125500	Detention Furniture	9	ea	$1,200	$10,800	
						$57,230
Division 13: Special Construction - *Not Applicable*						
Division 14: Conveying Systems						
	New Elevators - 3 Stop	1	ea	$107,975	$107,975	
	New Elevators - 2 Stop	3	ea	$97,875	$293,625	
						$401,600
Division 21: Fire Suppression						
211313	Wet Pipe Sprinkler Systems	43,233	sf	$4.25	$183,740	
	Backflow preventer					
						$183,740
Division 22: Plumbing						
	Floor Trenching & Patching Concrete Floors	43,233	sf	$1.04	$44,962	
	Plumbing Fixtures					
	New Hot Water Heater with Recirculation Piping					
						$44,962
Division 23: HVAC						
	New HVAC System	43,233	sf	$39.00	$1,686,087	
	New Exhaust System					
	Replace Chiller					
	Replace Chilled Water Pumps & Related Items					
						$1,686,087
Division 26: Electrical						
	Lighting - Interior & Building-Mounted Exterior	43,233	sf	$29.85	$1,290,505	

Division	Work Item / Description	Quantity	Unit	$ / Unit	Subtotal	Total
	Electrical Service and Distribution					
	Power & Lighting Branch Wiring & Devices					
	Replace Emergency Generator					
	Electrical Service for Replaced Chiller & Pumps					
						$1,290,505
Division 27: Communications, Data, etc.		Included in Div. 26				
	Audio Video Systems					
	Data Network System					
	Telephone System (Devices by Owner)					
Division 28: Electrical Safety & Security		Included in Div. 26				
	Security System					
	Fire Alarm System					
Division 31: Earthwork - *Not Applicable*						
Division 32: Exterior Improvements						
	Site Prep & Earthwork					
321313	Concrete Sidewalk Replacement & Patching	960	sf	$12.00	$11,520	
321313	Concrete Curb Replacement	100	lf	$75	$7,500	
321313	Concrete Slab on Grade @ Vehicle Sally Port	200	sf	$12.00	$2,400	
321313	Concrete Ramp	1	ls	$35,000	$35,000	
321313	New Concrete Steps at East Plaza	1	ls	$22,500	$22,500	
323223	New Concrete Retaining Wall @ East Plaza	1	ls	$18,000	$18,000	
323119	6' High Architectural Metal Fencing	520	lf	$66.00	$34,320	
323119	Metal Sliding Security Gates	5	ea	$7,500	$37,500	
055213	New Metal Railing System at all Areaways	490	lf	$50.00	$24,500	
329300	Landscaping	1	ls	$65,000	$65,000	
021400	New Brick Paving at Courtyard and East Plaza	4,464	sf	$15.75	$70,308	
323300	Site Furnishing	1	ls	$7,500	$7,500	
321216	Bituminous Paving	17,000	sf	$8.00	$136,000	
221423	Cast Iron Boots and Storm Drainage	16	ea	$406	$6,496	
						$478,544
Division 33: Utilities						
Subtotal						**$7,702,251**
Estimating Contingency @ 5%						$385,113
Subtotal						**$8,087,363**
Escalation to Midpoint of Construction @ 4.5%						$202,184
Total	(Cost / SF excludes Site Work)			**$180.67**		**$8,289,547**
Additional Construction-Related Costs (including Alternates)						
Construction Contingency					5%	$414,477.37
Construction Testing & Inspections (3rd Party Agency, Required)					1.25%	$103,619
Regulatory Agency Fees, Permitting				Estimated		$0
Total Construction-Related Costs						**$518,097**
Total Estimated Cost of the Work						**$8,807,644**

Division	Work Item / Description	Quantity	Unit	$ / Unit	Subtotal	Total
Soft Costs						
	Architectural / Engineering Design Fees (Basic Services)				7%	$616,535
	Code Review			Estimated	0.40%	$35,231
	Furniture/Fixtures/AV Equipment Allowance			Estimated	4.00%	$100,000
	Reimbursable Expenses (printing, travel, etc.)			Estimated	0.40%	$35,231
	Construction Administration Software			Estimated		$8,000
Total Soft Costs						**$794,996**
Total Project Cost						**$9,602,640**

Berkeley County
West Virginia

The Crawford Building Adaptive Reuse - The Berkeley County Judicial Center Annex

CRABTREE, ROHRBAUGH & ASSOCIATES

PRELIMINARY PROJECT SCHEDULE - July 26, 2019