

DATE: APRIL 22, 2019

SUBJECT: **Addendum No. 1**
Caswell Enterprise Center
Yanceyville, NC

FROM: Ramsay Burgin Smith Architects, Inc.
225 North Main Street - Suite 501
Salisbury, NC 28144

General: Information contained in this Addendum and changes directed in Drawings and/or Project Manual supersede said Documents and become part of the Contract. Receipt of this addendum must be acknowledged on the bid "Form of Proposal".

The bid date is Thursday, May 9, 2019 at 2pm. Bids will be received on or before 2pm on the 2nd floor County Commissioner's Meeting Room located at 144 Court Square, Yanceyville NC 27379.

All Contractors, General and subcontractors should review all Addenda Items for work that pertains to or affects their trade.

Public Utilities serving this project are as follows:
Piedmont Electric Membership – Electric utility.
Town of Yanceyville Public Works – Water and Sewer Utility

BIDDING REQUIREMENTS:

ITEM #01: Reference Supplementary General Conditions, Summary of the Work Section 01011 and Form of Proposal

The "Duration" time for this project is 4 months from the date of the Notice to Proceed unless otherwise changed by future addendum.

ASBESTOS ABATEMENT: The General Contractor will be required to include in their proposal the cost to handle the proper removal of the asbestos containing materials that have been identified inside the two project site buildings. The report was prepared by Tyler Watkins (336-856-7150) of ECS Southeast, a Limited Hazardous Materials Assessment Survey dated April 16, 2019. This responsibility will require the General Contractor to hire and pay for a certified Asbestos Abatement Specification Designer to prepare an asbestos removal and air quality specifications prior AND engage and paying for a certified asbestos removal and demolition company to perform the abatement work as indicated in the specification design. An excerpt of this report is attached to this addendum. The full report including the full sample testing data findings will be made available to the bidders on the Ramsay Burgin Smith Website www.rbsarch.com under the Caswell County Enterprise Center tab for full disclosure of the entire survey document.

ARCHITECTURAL SPECIFICATION:

ITEM #02: Reference Specification "Table of Contents":

Add the following to the Table of Contents:

**Bidding Requirements Section - Add:
ECS Limited Hazardous Materials Assessment April 16, 2019
Division 7 - Add Section 07110 - Sheet Membrane Waterproofing.
Division 12 – Furnishings – is amended to read "Not Used"**

ITEM #03: Reference Specification Section 01020 – Allowances: Add the following:

A **\$3,000 Terrazzo Repair Allowance** will be added to the project for repairing the existing terrazzo floor. This allowance will clarify the General Contractors cost responsibility because the size and the nature of the terrazzo floor repair is difficult to quantify at this point.

A **400 sq. ft section of Brick Mortar Repointing Allowance** will be added to the project for repointing various areas of existing deteriorated brick mortar on the building's exterior. The Allowance cost/value shall be calculated by using the Contractor's Unit Price for Brick Repointing multiplied by 400 Sq. Ft.

ITEM #04: Reference Specification Section 01030 – Unit Prices:

Add the following Unit Price to the Unit Price Schedule:

Unit COST #2 – Brick Repointing Allowance, per square foot.

This Unit price includes the cost of scraping the loose mortar joint material and repointing the joint with new type "S" mortar matching the color of the existing aged mortar. Note the inclusion of the cost of 400 square feet of mortar repointing in the General Contractor's Base Bid Cost in Addenda Item # 3 above.

A "revised" Form of Proposal will be issued in the next addenda that includes a place for the General Contractor to include the unit price cost of brick mortar replacement per square foot.

ITEM #05: Reference Specification Section 01501 – Temporary Facilities:

Note that there is very little unbuilt site area for placement of a job trailer or on site material storage. We suggest using the building's interiors for a superintendent's office and for material storage. The area behind the rear retail building is narrow and overgrown.

ITEM #06: Reference Specification Section 06100 Rough Carpentry

There are no fire rated walls involved in the framing of new interior walls in this project therefore no fire treated lumber is required.

ITEM #07: Reference Specification Section 07110 – Sheet Membrane Waterproofing:

Section 07110 is added to the Table of Contents and to the body of the Specs. A copy of the spec section is attached to this addendum. (4 sheets)

ITEM #08: Reference Specification Section 09900 – Painting:

ADD the following paint type to the Exterior Paint Schedule:

Exterior Concrete Masonry Units: (2 coats over blockfiller)

S-W: Block Filler B-25 PrepRite Series (tinted to match the final coat)

A89 Series Superpaint Exterior Satin

Equals by PPG or Benjamin Moore

Remove the vines and vegetation on the walls and dirt or dust residue prior to painting the exposed CMU walls.

Note: This paint is being specified for the painting/waterproofing of all the exposed exterior CMU on the old drugstore building. This includes painting the CMU within the 24"-to 30" wide alley between the old Drugstore and the adjacent Watlington's building and the exposed CMU extending up approximately 11'-4" on the back side of the old Drugstore building.

ADD the following paint type to the Interior Paint Schedule:

Exposed Metal Ceiling Joists and Decking: (2 coats over primer matched to DryFall paint below.)

S-W: DryFall B42-W2 Eggshell waterbased, corrosion resistant

Equals by PPG or Benjamin Moore

Remove dust and rust prior to painting ceiling structure.

ARCHITECTURAL DRAWINGS:

ITEM #09: Reference Drawing Sheet 1/A2.1 DEMO FLOOR PLAN.

Note: Demolition of the existing concrete floor slab and walls between the front and rear buildings is required to accommodate the new poured concrete handicap ramp

ITEM #10: Reference Drawing Sheet 1/A2.1 DEMO FLOOR PLAN.

The Square marked HVAC located in the areaway yard behind the rear building is a condenser unit for one of the existing HVAC units that is being relocated by the mechanical and electrical subcontractors up onto the old drugstore roof.

ITEM #11: Reference Drawing Sheets A2.1 – FLOOR PLANS

ADD the following Addenda Bulletin Drawings associated with this plan sheet.

See attached Sheet ABD1.3 Section at Ramp and Sheet ABD1.4 Cross Section at Ramp, that details the new Handicap Accessible ramp configuration between the buildings negotiating the difference between the two finish floor elevations that is thought to be approximately 12”.

ITEM #12: Reference Drawing Sheets A2.2 –ROOF & GENERAL FLOOR PLANS

ADD the following Addenda Bulletin Drawings associated with this plan sheet.

See attached Sheet ABD1.1 Section at New Awning Canopy over the sidewalk entrance of the Retail store opening off of Main Street as shown dashed and noted on the plans.

See attached Sheet ADB1.2 Drainage Pit/Step Plan & Section detailing the exit areaway outside of Door 204B onto the rear areaway.

ITEM #13: Reference Drawing Sheets A2.2 –ROOM FINISH SCHEDULE.

ADD the following to the Room Finish Schedule: The “Wood Base” shall be further defined as a 1 x 6 running trim board with clear varnish finish. See Spec Section 06200 Finish Carpentry -Standing and Running Trim.

ITEM #14: Reference Drawing Sheets A4.1 –HEAD, JAMB, AND SILLS

Heads and Jambs H6, J6, H7 and J7: ADD the channel size C6x8.2 for the continuous steel channels indicated. Channels to be welded at intersection of head and jamb. Provide drilled holes for installation of flush head fasteners into wood backup at 16” o.c. Angles shown for the attachment of the overhead door rails to the channel frame shall be initially quoted as 3’x3” x ¼” then verified with the Overhead Door manufacturer for the required size. Provide and coordinate all door installation support requirements with Overhead Door installer.

Head H8: ADD the bottom welded plate dimensions of 1/4” thk. x 11” wide x the width of the window labeling to the lintel plate attached under the 3”x3” angles with 3/16” x 2” Spot welds at 12” o. c.

ELECTRICAL DRAWINGS:

ITEM #15: Reference Drawing Sheet E1.1:

In the “Note” section on the upper right side of the sheet, Note 4 indicates the kitchen range appliance is gas. It will be an electric stove (provided by the Owner/installed by the GC) served by a 220 volt power range receptacle.

ATTACHMENTS:

Addendum = 4 pages

Attachments: Waterproofing Spec Section 07110 – 4 shts)

Bulletin Drawing ABD1.1 - 1 sht.

Bulletin Drawing ABD1.2 - 1 sht.

Bulletin Drawing ABD1.3 - 1 sht.

Bulletin Drawing ABD1.4 - 1 sht

Excerpts from the ECS's Limited Hazardous Materials Assessment - 14 shts

Total Number of Sheets = 26

The Full ESC Limited Hazardous Materials Assessment Report can be viewed on the RBSA website www.rbsarch.com . (42 pages). **END OF ADDENDUM No. 1**

SECTION 07110 - SHEET MEMBRANE WATERPROOFING

PART 1 – GENERAL

RELATED DOCUMENTS:

Drawings, General Conditions and Supplementary General Conditions and other Division-1 Specification Sections, apply to this Section.

DESCRIPTION OF WORK

Extent of sheet waterproofing work is shown on drawings and this written section as waterproof membrane, and is hereby defined to include all sheet materials applied with sealed joints and flashings as needed to form concealed waterproof membranes.

Following applications of membrane waterproofing and related products:

- Vertical membranes for [below grade wall waterproofing](#).
- Protection board for membranes
- Trench Drains / Foundation Drainage pipe and fill are part of Division 2 work

QUALITY ASSURANCE

Manufacturers: Obtain primary waterproofing materials of each type required from a single manufacturer, to greatest extent possible. Provide secondary materials only as recommended by manufacturer of primary materials.

Installer: Firm with not less than 3 years of successful experience in installation of waterproofing similar to requirements for this project and which is acceptable to manufacturer of primary waterproofing materials.

Preinstallation Conference: Prior to installing waterproofing and associated work, meet at project site with the Installer of each component of associated work, General Contractor, Architect, and installers of waterproofing work. Review material selections and procedures to be followed in performing the work. Notify Architect at least 48 hours before conducting meeting.

SUBMITTALS

Manufacturer's Data: Submit test data from Manufacturer on proposed waterproofing system from independent testing facility. Include complete Manufacturer's data and installation procedures for all materials. Data shall indicate head of water system is designed to withstand.

- Waterproofing system and product sample.
- Protection Board product data and product sample.

JOB CONDITIONS

Proceed with work of this Section only after substrate construction, openings, and penetrating work has been completed and areas are free from sharp or ragged out-angles, honeycombing, rock pockets, depressions, and projections.

Installer must examine substrate and conditions under which waterproofing work is to be performed, and notify Contractor in writing of unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to installer.

Proceed with waterproofing and associated work only when existing and forecasted weather conditions will permit work to be performed in accordance with manufacturer's recommendations and warranty requirements.

SPECIAL PROJECT WARRANTY

Provide written warranty, agreeing to replace/repair defective materials and workmanship. Warranty includes responsibility for removal and replacement of other work which conceals sheet waterproofing. Furnish (3) copies of the Manufacturer's Warranty to the Architect. **Warranty period is 5 years after date of substantial completion.**

The warranty shall not deprive the Owner of other rights the Owner may have under other warranties made by the Contractor under requirements of the Contract Documents.

PART 2 - PRODUCTS

MATERIALS

General: Provide sheet waterproofing materials recognized to be of generic type indicated and tested to show compliance with indicated performances, or provide other similar materials certified in writing to be equal to or better than specified in every significant respect, and acceptable to Architect.

RUBBERIZED ASPHALT/POLYETHYLENE SHEET WATERPROOFING

Self-adhering membrane of rubberized asphalt integrally bonded to polyethylene sheeting, formed into uniform flexible sheets of thickness shown, or not less than 56 mils if no thickness is shown, complying with the following:

Tensile Strength (ASTM D412): 250 psi min.

Ultimate Elongation (ASTM D412): 300% minimum

Brittleness Temperature (ASTM D746): minus 25 degrees F; ASTM D746.

Hydrostatic Head Resistance: 150 ft. min.

Water Absorption (ASTM D570): Not more than 0.5% weight gain after 48 hours of immersion at 70 degrees F, ASTM D570.

Available Products: Subject to compliance with requirements, products that may be incorporated in the work include, but are not limited to, the following:

Bithuthene; W.R. Grace & Co.

MEL-ROL, W.R. Meadows, Inc.

Duramem 700-SM, Pecora Corporation

Miscellaneous Materials: Provide type of adhesive compound and type, primer, flashing materials, and protection course recommended by manufacture of waterproofing sheet membrane.

Miscellaneous Materials: Provide type of adhesive compound and type, primer, flashing materials, and protection course recommended by manufacture of waterproofing sheet membrane.

AUXILIARY MATERIALS

Adhesives and Joint Tape: Provide types of adhesive compound and tapes recommended by waterproofing sheet manufacturer for bonding to substrate(if required), for waterproofing seams in membrane, and for waterproofing joints between membrane and flashings, adjoining surfaces, and projections through membrane.

Primers: Provide type of concrete primer recommended of sheet waterproofing material for applications required.

Flashing Materials: Except as otherwise indicated, provide types of flexible sheet material for flashings as recommended by waterproofing sheet manufacturer.

Protection Board: TremDrain 6000 multicomposite Drainage and Protection Board by Tremco consisting of formed polypropylene core covered on one side with a high strength, spun-bound polypropylene filter fabric. or Carlisle MiraDrain 6000 or equals by other manufacturers.

PART 3 - EXECUTION

INSPECTION

Installer must examine substrate and conditions under which waterproofing work is to be performed and must notify Contractor in writing of unsatisfactory conditions until corrected in manner acceptable to installer.

PREPARATION AND INSTALLATION

Prior to installation of waterproofing request meeting with Architect and installers of work for purpose of reviewing material selections and procedures to be followed in performing work.

ASPHALT/POLYETHYLENE SHEET WATERPROOFING MEMBRANE

Temperature: Install system in temperatures above 40 degrees F.

Priming: Prime all concrete surfaces to receive membrane by method and with coverage as recommended by manufacturer. Prime only the area which will be covered with membrane in a working day. Areas not covered with membrane in 24 hours must be reprimed. Dry primed surface should be covered immediately where contaminants from the air are accumulating on the surface.

Membrane: Install membrane to provide complete waterproofing protection in extent shown on drawing and in strict accord with manufacturer's latest recommendation, including sheet lapping, edge and seam termination sealing . Seal to projections through membrane and at termination at waterstop seal membrane between split projection of same.

Protection course: Install protection course of type indicated over complete membrane, and within five (5) days after application. Protection course on vertical surface shall be installed in manufacturer's recommended adhesive at the rate of 250-150 sq. ft. per gal. and in accordance with their instructions.

Special precautions & protections: Care must be taken not to puncture or tear the membrane prior to covering. Careful inspection must be made prior to covering membrane and any holes or tears must be patched with new membrane. Misaligned or wrinkled seams should also be patched with new membrane.

Sheet membrane is incompatible with tars, pitches, and certain liquid waterproofing products and sealants. Care should be exercised to avoid direct contact of the adhesive layer with such systems. Consult manufacturer's recommendations.

Seal top Edge of Waterproofing as recommended by waterproofing manufacturer.

PERFORMANCE REQUIREMENTS

It is required that waterproof membranes be watertight and not deteriorate in excess of limitations published by manufacturer.

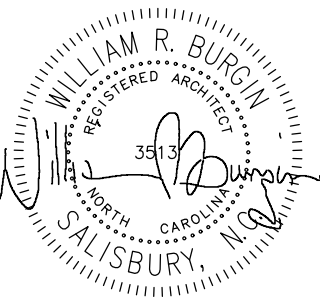
PROTECTION

Institute all required procedures for protecting of completed membrane during installation of work over membrane and throughout remainder of construction period. Do not allow traffic of any type on unprotected membrane.

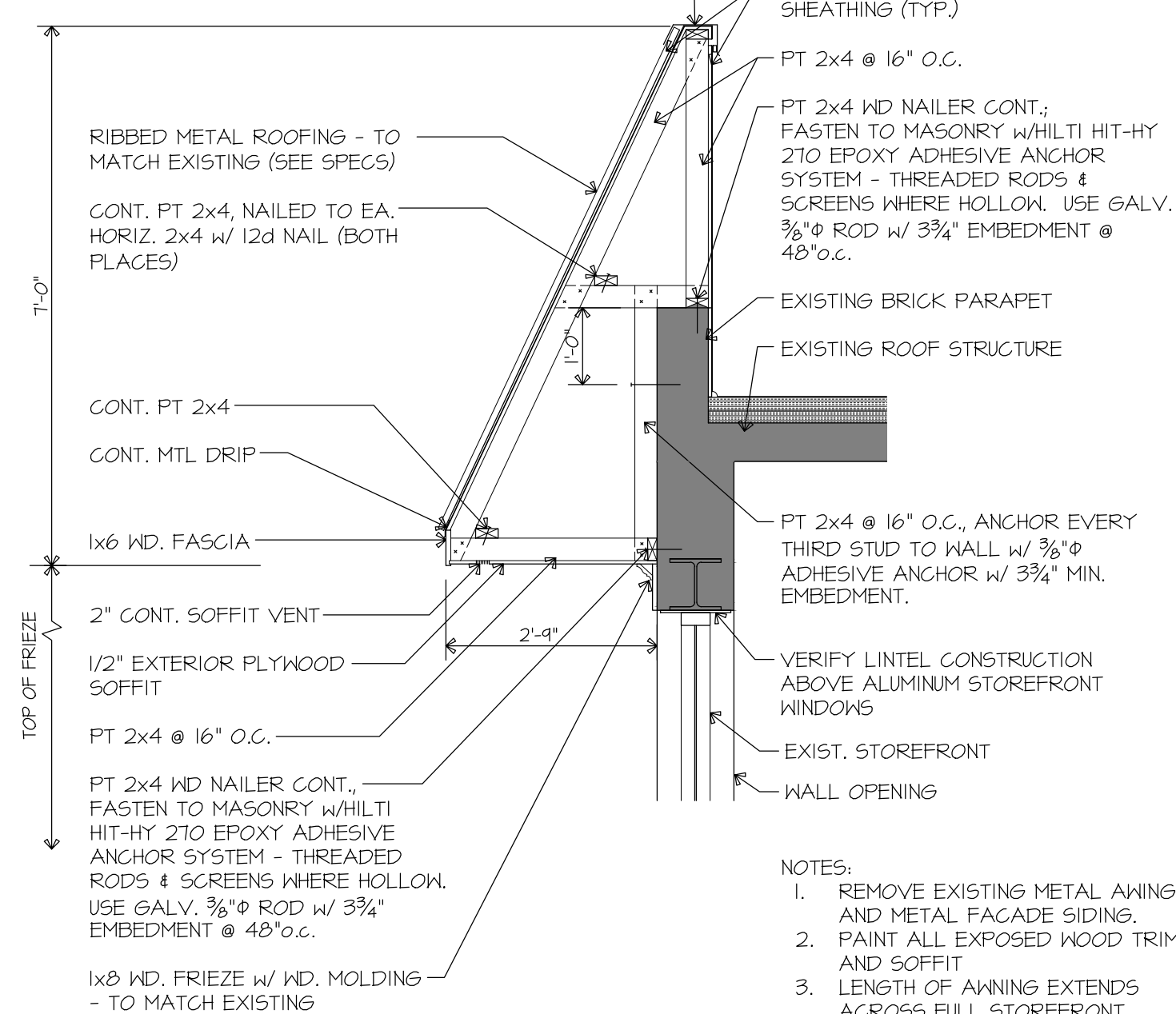
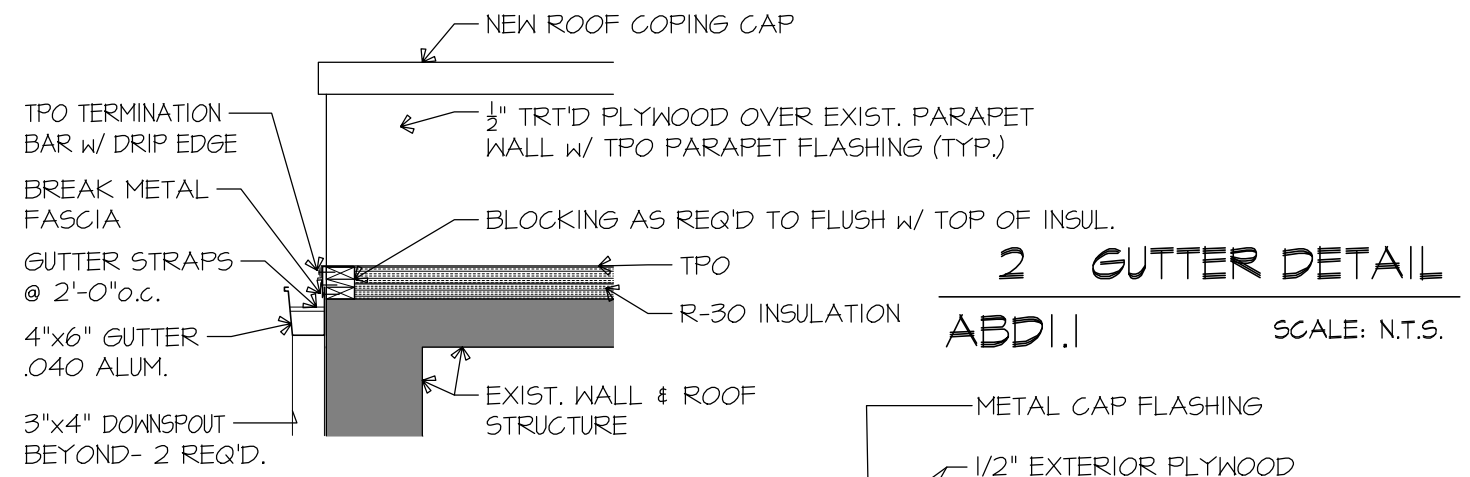
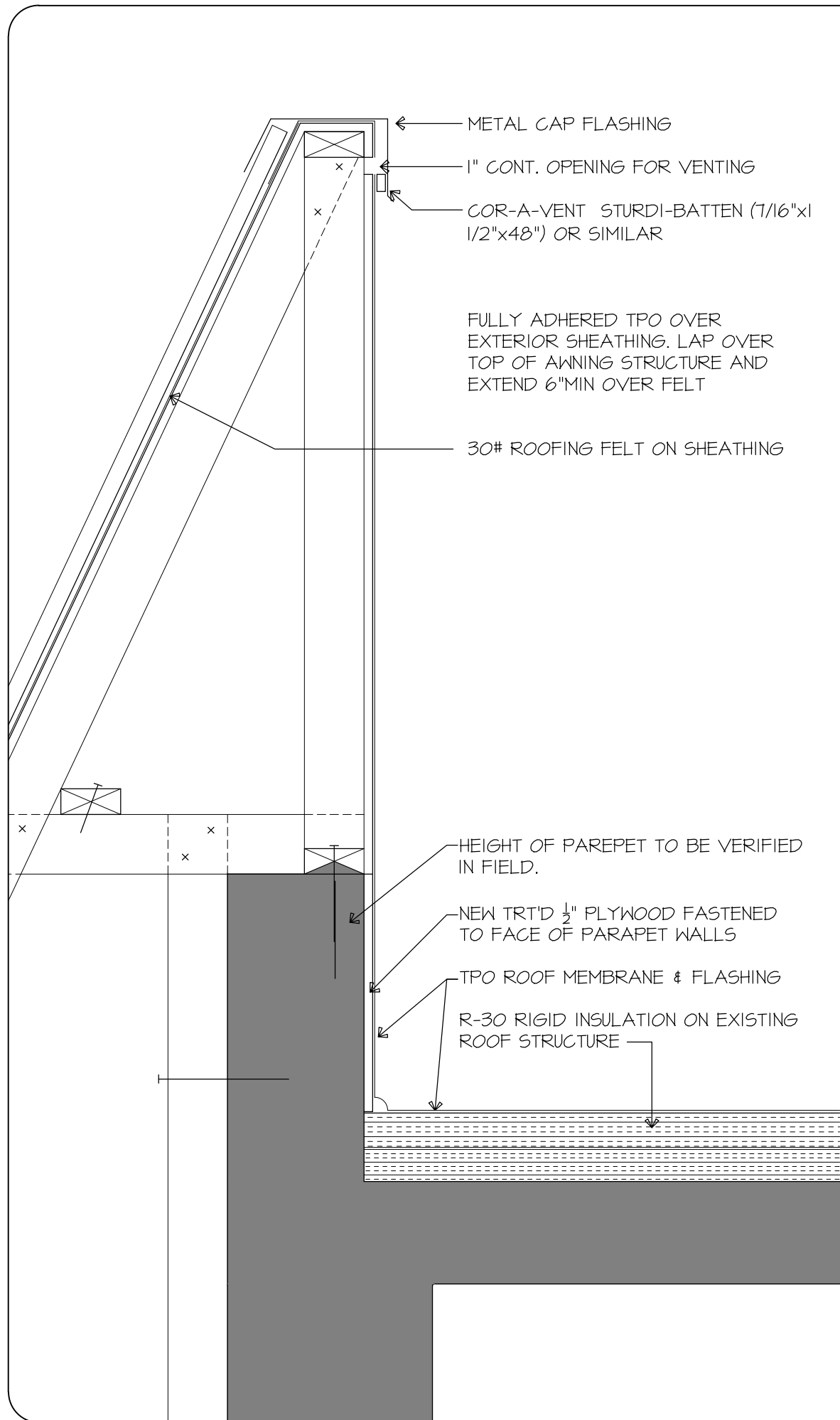
End of SECTION 07110

ADDENDUM No.1
**BULLETIN
DRAWING**

AWNING DETAIL

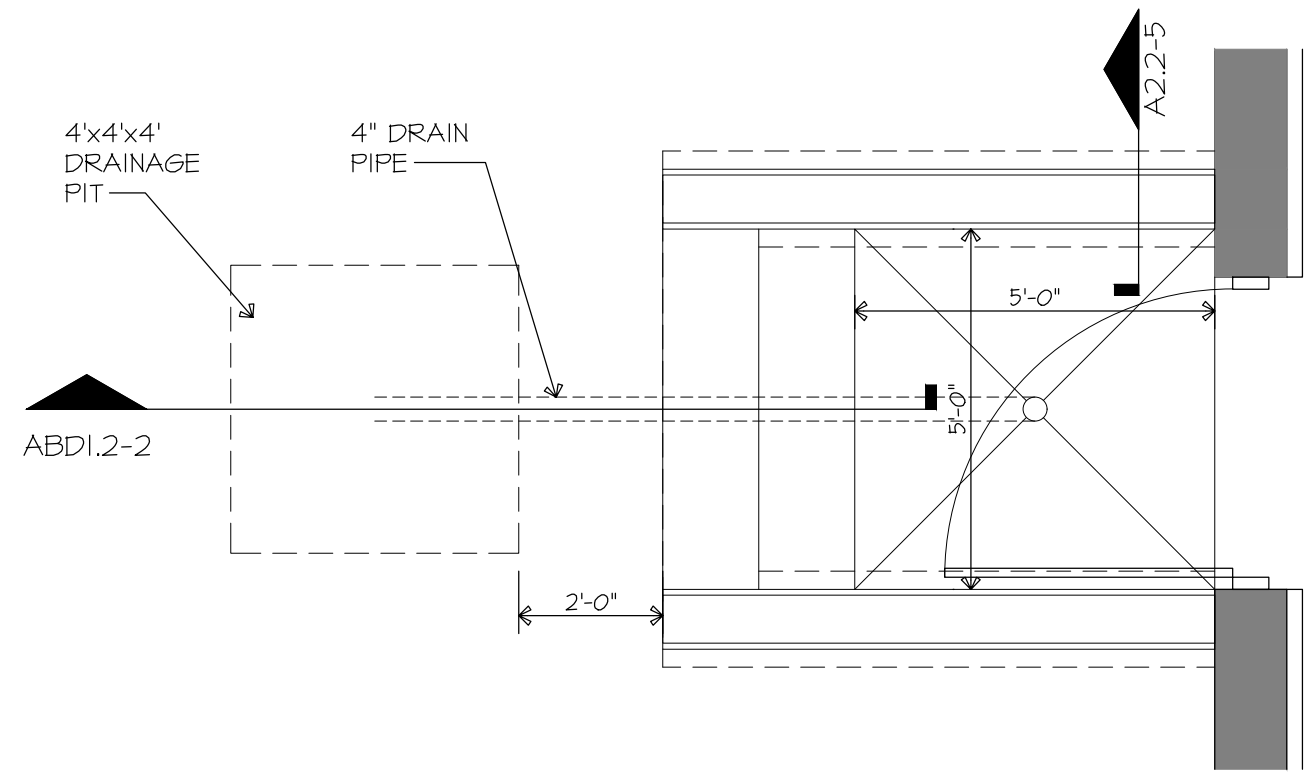


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106 COURT SQ
YANCEYVILLE, NC 27379

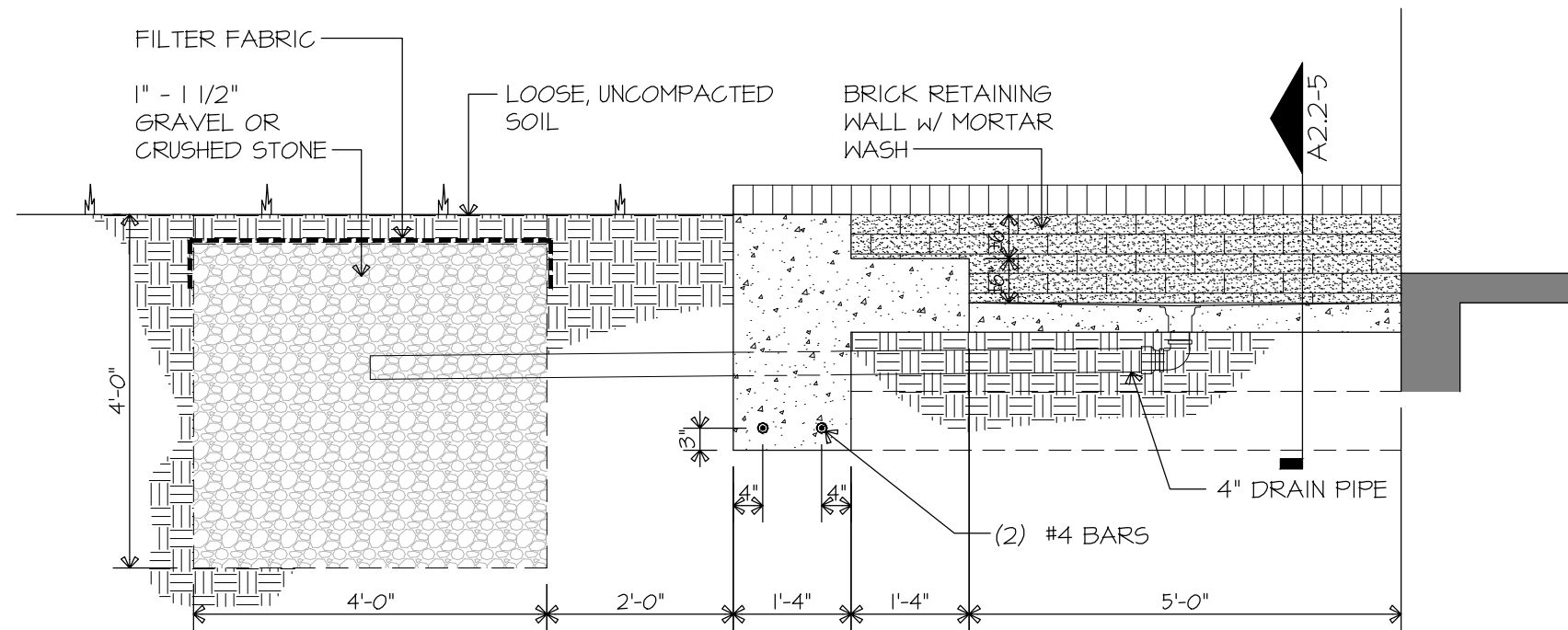


MAIN STREET
SECTION @ AWNING
ABD1.1 SCALE: N.T.S.

- NOTES:
1. REMOVE EXISTING METAL AWING AND METAL FACADE SIDING.
 2. PAINT ALL EXPOSED WOOD TRIM AND SOFFIT
 3. LENGTH OF AWNING EXTENDS ACROSS FULL STOREFRONT
 4. PROVIDE CANOPY END PANELS W/ RIBBED METAL SIDING OVER PLYWOOD.

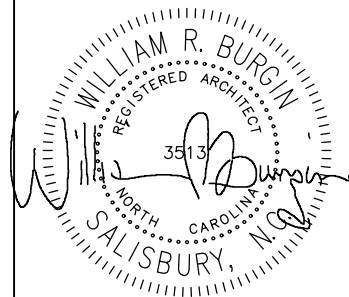


1
ABDI.2 **DRAINAGE PIT/STEP PLAN**
SCALE: 3/8"=1'-0"



2
ABDI.2 **DRAINAGE PIT/STEP SECTION**
SCALE: 1/2"=1'-0"

ADDENDUM No.1
**BULLETIN
DRAWING**
DRAINAGE PIT/STEP DETAILS



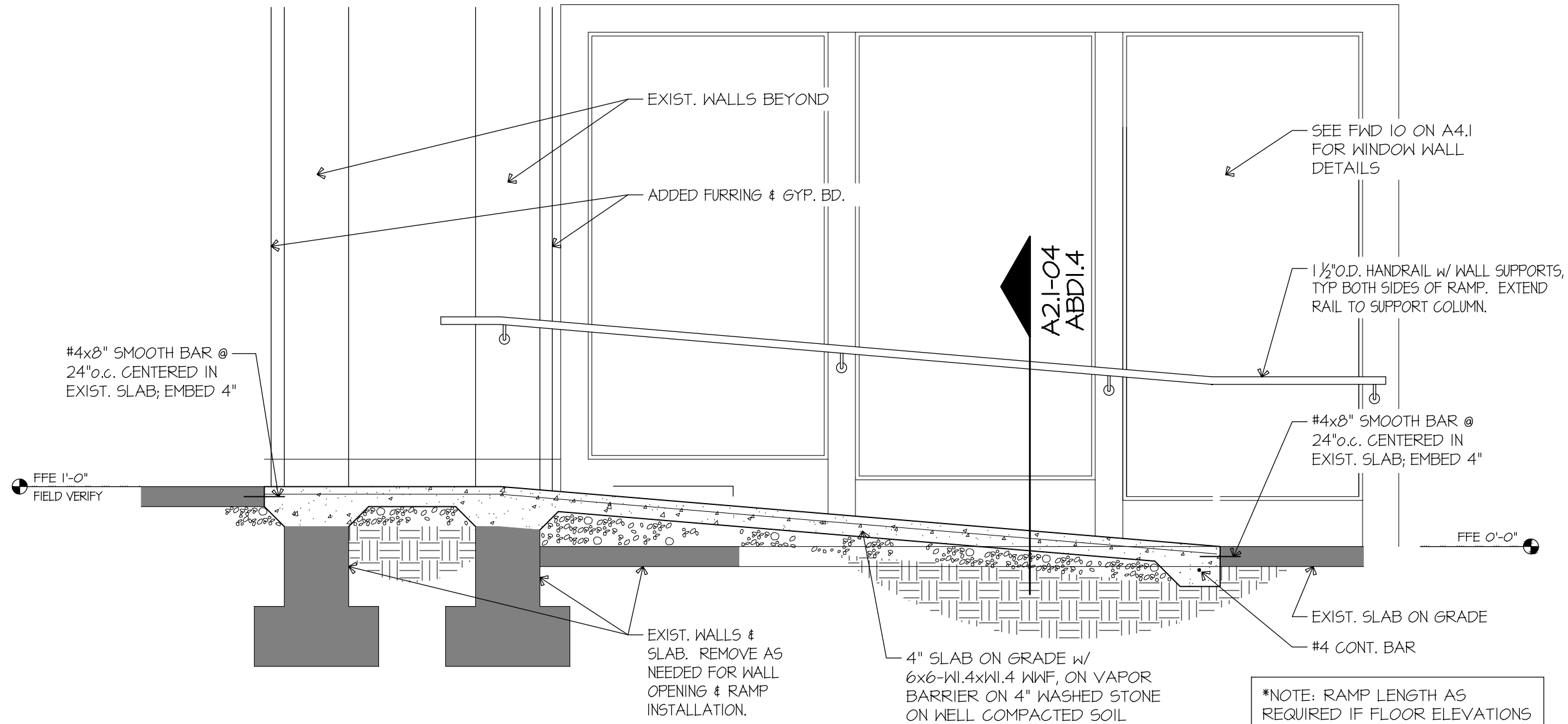
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DRAWN BY _____
CHECKED BY _____
DATE _____
CONS. NO. _____

SHEET NO.
ABDI.2
OF

ADDENDUM No.1
**BULLETIN
DRAWING**

SECTION @ RAMP



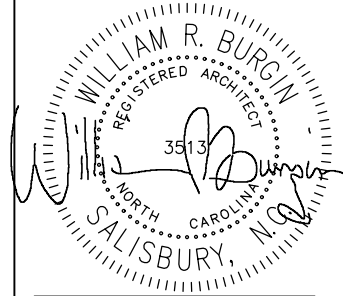
3
A2.1

SECTION @ RAMP

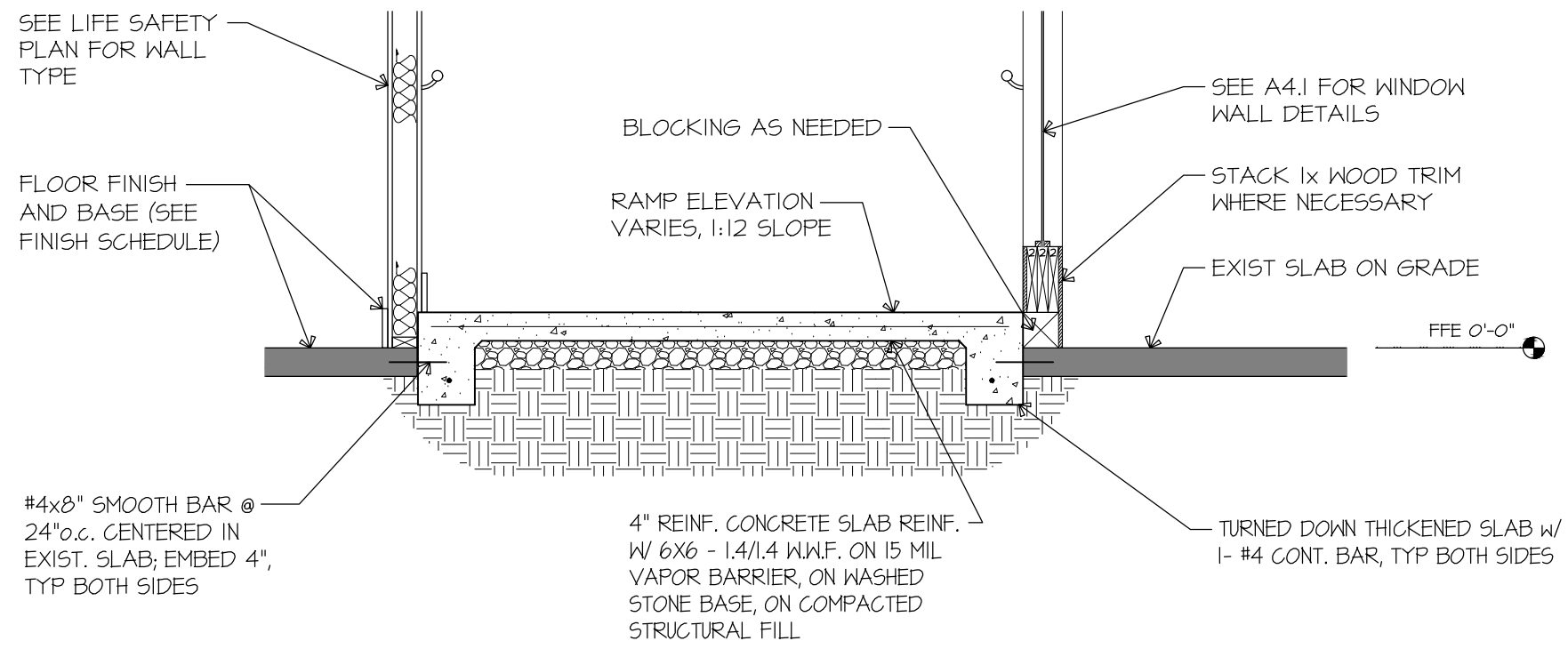
SCALE: 1/2" = 1'-0"

*NOTE: RAMP LENGTH AS
REQUIRED IF FLOOR ELEVATIONS
DIFFERENCE IS MORE THAN 12".

*NOTE: THE ADDENDA DRAWING REPLACES THE
LEFT SIDE UP TO THE WALL CORNER OF DETAIL
"FWD 10" W/ A REVISED SECTION OF THIS WALL
INCLUDING THE HC RAIL.



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SEE LIFE SAFETY
PLAN FOR WALL
TYPE

FLOOR FINISH
AND BASE (SEE
FINISH SCHEDULE)

#4x8" SMOOTH BAR @
24"o.c. CENTERED IN
EXIST. SLAB; EMBED 4",
TYP BOTH SIDES

BLOCKING AS NEEDED

RAMP ELEVATION
VARIES, 1:12 SLOPE

4" REINF. CONCRETE SLAB REINF.
W 6X6 - 1.4/1.4 W.W.F. ON 15 MIL
VAPOR BARRIER, ON WASHED
STONE BASE, ON COMPACTED
STRUCTURAL FILL

SEE A4.1 FOR WINDOW
WALL DETAILS

STACK 1x WOOD TRIM
WHERE NECESSARY

EXIST SLAB ON GRADE

FFE 0'-0"

TURNED DOWN THICKENED SLAB w/
1- #4 CONT. BAR, TYP BOTH SIDES

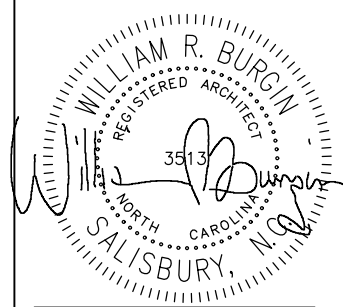
4
A2.1

SECTION @ RAMP

SCALE: 1/2" = 1'-0"

ADDENDUM No.1
**BULLETIN
DRAWING**

SECTION @ RAMP



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DRAWN BY	SHEET NO.
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DATE	
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LIMITED HAZARDOUS MATERIALS ASSESSMENT



CASWELL ENTERPRISE CENTER

106 COURT SQUARE
YANCEYVILLE, NORTH CAROLINA 27379

ECS PROJECT NO. 49:9130

FOR: CASWELL COUNTY

APRIL 16, 2019





"Setting the Standard for Service"

Geotechnical • Construction Materials • Environmental • Facilities

April 16, 2019

Mr. Bryan Miller
Caswell County
161 Main Street East
Yanceyville, North Carolina 27379

ECS Project No. 49:9130

Reference: Limited Hazardous Materials Assessment, Caswell Enterprise Center, 106 Court Square, Yanceyville, North Carolina

Dear Mr. Miller:

ECS Southeast, LLP (ECS) is pleased to provide Caswell County with the results of the above referenced Limited Hazardous Materials Assessment performed at Caswell Enterprise Center located at 106 Court Square in Yanceyville, North Carolina. This report summarizes our observations, analytical results, findings, and recommendations related to the work performed. The work described in this report was performed by ECS in general accordance with the Scope of Services described in ECS Proposal Number 49:13833-P and the terms and conditions of the agreement authorizing those services.

ECS appreciates this opportunity to provide Caswell County with our services. If we can be of further assistance to you, please do not hesitate to contact us.

Sincerely,

ECS Southeast, LLP

A handwritten signature in black ink, appearing to read 'Tyler Watkins'.

Tyler Watkins
Environmental Scientist
twatkins1@ecslimited.com
336-856-7150

A handwritten signature in blue ink, appearing to read 'Lindsey Lucas'.

Lindsey Lucas, REM
Environmental Principal
llucas1@ecslimited.com
864-987-1610

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EXECUTIVE SUMMARY

The subject property is located at 106 Court Square and 125 Main Street in Yanceyville, North Carolina. The subject property is developed with two, one-story, commercial buildings totaling an approximate 9,400 square feet and were built around 1973. The structures consist of brick exterior walls; brick, drywall, and concrete masonry unit (CMU) interior walls; concrete, vinyl composite tile (VCT), sheet vinyl, terrazzo, and carpet floors; and, ceiling tile ceilings. The exterior of the buildings were excluded from this assessment.

The purpose of the Limited Hazardous Materials Assessment was to identify asbestos-containing materials (ACMs) and lead-based paint (LBP) which may require special handling and/or disposal if removed during construction activities. The identification of ACMs may require trained labor, regulated work practices, and special disposal. The identification of LBP or other lead hazards may require disclosure to contractors and monitoring of lead exposure.

The asbestos survey was performed by Mr. Tyler Watkins (NC Asbestos Inspector No. 13103) on April 5, 2019. Samples of suspect ACMs were collected utilizing hand tools and placed into individual, labeled plastic bags. Unique bulk suspect ACM samples were submitted to Scientific Analytical Institute (SAI) in Greensboro, North Carolina for analysis via Polarized Light Microscopy (PLM) in accordance with current EPA-600 methodology. Materials consisting of additional layers were analyzed separately. SAI is listed as an accredited laboratory by the National Voluntary Laboratory Accreditation Plan (NVLAP) managed by the National Institute of Standards and Technology (NIST) for bulk sample analysis by currently approved EPA methodology by PLM.

In total, 34 bulk samples from 17 homogeneous areas were submitted to the laboratory of which 58 layers were analyzed. Eight of the bulk samples submitted for analysis were reported to contain asbestos in detectable concentrations. Based on the laboratory analysis of the suspect bulk samples collected during the survey, the following materials were reported to contain asbestos:

- Ceiling tile located in the 106 Court Square building
- VCT and mastic located in the 125 Main Street building

A trace amount of asbestos ($\leq 1\%$) was detected in the bulk sample(s) of the drywall/joint compound (106 Court Square) and the 12"x12" blue VCT mastic (125 Main Street) analyzed by the laboratory. Although materials that contain trace amounts of asbestos are not subject to U.S. EPA or North Carolina regulations for the handling and disposal of asbestos, OSHA still regulates any work which will disturb materials identified with trace amounts of asbestos (reference the November 24, 2003 OSHA Interpretation document - Compliance Requirements For Renovation Work Involving Materials Containing Less Than 1% Asbestos). Therefore, any Contractors disturbing these materials will need to comply with components of 29 CFR 1926.1101, as detailed in the 2003 OSHA Interpretation document.

The Lead-Based Paint (LBP) survey was performed using paint chip samples to identify lead concentrations in painted surfaces. The results of the lead-based paint survey did not identify detectable concentrations of lead in the surfaces analyzed by the laboratory.

The executive summary is an integral portion of this report, however, ECS recommends the report be

read in its entirety.



1.0 SITE DESCRIPTION

The subject property is located at 106 Court Square and 125 Main Street in Yanceyville, North Carolina. The subject property is developed with two, one-story, commercial buildings totaling an approximate 9,400 square feet and were built around 1973. The structures consist of brick exterior walls; brick, drywall, and concrete masonry unit (CMU) interior walls; concrete, vinyl composite tile (VCT), sheet vinyl, terrazzo, and carpet floors; and, ceiling tile ceilings. The exterior of the buildings were excluded from this assessment.

2.0 PURPOSE

The purpose of the Limited Hazardous Materials Assessment was to identify asbestos-containing materials (ACMs) and lead-based paint (LBP) which may require special handling and/or disposal if removed during construction activities. The identification of ACMs may require trained labor, regulated work practices, and special disposal. The identification of LBP or other lead hazards may require disclosure to contractors and monitoring of lead exposure.

3.0 METHODOLOGY

ECS performed the authorized Scope of Services in general accordance with our proposal, standard industry practice(s) and methods specified by regulation(s) for the identification of ACMs and LBP.

3.1 Asbestos-Containing Materials

The asbestos survey was performed by Mr. Tyler Watkins (NC Asbestos Inspector No. 13103) on April 5, 2019. Samples of suspect ACMs were collected utilizing hand tools and placed into individual, labeled plastic bags. Unique bulk suspect ACM samples were submitted to Scientific Analytical Institute (SAI) in Greensboro, North Carolina for analysis via Polarized Light Microscopy (PLM) in accordance with current EPA-600 methodology. Materials consisting of additional layers were analyzed separately. SAI is listed as an accredited laboratory by the National Voluntary Laboratory Accreditation Plan (NVLAP) managed by the National Institute of Standards and Technology (NIST) for bulk sample analysis by currently approved EPA methodology by PLM.

During the survey, ECS attempted to identify suspect ACMs in readily accessible areas. However, due to the destructive means required to identify some materials, certain areas were deemed inaccessible (i.e. behind walls or sub grade materials) and were not surveyed for suspect ACMs. Unidentified suspect ACMs may be located in these and/or other inaccessible areas.

Samples were collected in general accordance with EPA Standard 40 CFR 763 Subpart E, Asbestos Hazard Emergency Response Act (AHERA) and OSHA Standard 29 CFR 1926.1101 Inspection Protocol. Multiple samples of each unique material were submitted. Samples were analyzed using "Positive Stop" methodology. If one sample of a homogeneous material is reported to contain asbestos, the remaining samples of that material are not analyzed. EPA regulations stipulate that if one sample contains asbestos the entire quantity of that material contains asbestos, regardless of additional analysis.

3.2 Lead in Paint and Surface Coatings

The Lead-Based Paint (LBP) survey was performed by Mr. Tyler Watkins using paint chip samples to identify lead concentrations in painted surfaces.

The assessment was conducted utilizing the U.S. EPA definition of LBP. Under this definition, painted surfaces which contain lead in concentrations equal to or greater than 0.5% by weight (5,000 ppm) are classified as coated with LBP. Paints with concentrations of lead detectable by the paint chips are considered lead-containing paints. Activities which disturb lead-containing paints and glazing (while not lead-based paints by the U.S. EPA definition) are regulated by OSHA (29 CFR 1926.62).

Because the current or proposed use of the property is not residential or child-occupied, the scope of the LBP assessment was not conducted in accordance with HUD Chapter 7 requirements. This representative survey included taking paint chip samples from walls, windows, doors, and miscellaneous components.

4.0 RESULTS

The following is a summary of laboratory results, findings and observations.

4.1 Asbestos-Containing Materials

In total, 34 bulk samples from 17 homogeneous areas were submitted to the laboratory of which 58 layers were analyzed.

An Asbestos-Containing Material (ACM) is defined as any material containing more than one percent (>1%) asbestos as determined using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, PLM. Materials are categorized by the U.S. EPA in the following categories:

- Friable ACMs are defined as any ACM that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. Non-friable ACMs are defined as any ACM that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- Category I non-friable ACM are listed as following: packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than one percent (>1%) asbestos.
- Category II non-friable ACM are listed as any material, excluding Category I non-friable ACM, containing more than one percent (>1%) asbestos.

Regulated Asbestos Containing Materials (RACM) are friable ACM or non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading or has crumbled, been pulverized, or reduced to powder in the course of renovation and/or demolition operations.

SAI submitted a signed final laboratory report to ECS on April 8, 2019. Eight of the bulk samples submitted for analysis were reported to contain asbestos in detectable concentrations. These materials are summarized below. A complete list of the sampled materials submitted for analysis and sample locations are located in the Appendix of this report. Additional details regarding the overall locations of the materials identified as asbestos-containing are provided further in the report. Photographs of collected samples reported as asbestos-containing are also located in the Appendix of this report.

Summary of Asbestos-Containing Materials Identified

Sample ID	Location	Material Description	Analytical Results	Category	Estimated Quantity
1-1 1-2	106 Court Square building	2'x4' Pin and Fissure Ceiling Tile	3% Amosite 2% Chrysotile	Friable	5,500 square feet
4-1 4-2	106 Court Square building	Drywall/Joint Compound	Drywall - None Detect Joint Compound - 2% Chrysotile Composite - <1% Chrysotile	N/A	4,000 square feet
14-1 14-2	125 Main Street building	12"x12" Blue VCT	Tile - None Detect Mixed Mastic - <1% Chrysotile	N/A	150 square feet
15-1 15-2	125 Main Street building	12"x12" Beige, Grey VCT	Tile - 3% Chrysotile Mastic - 3% Chrysotile	Category I Non-Friable	100 square feet

A trace amount of asbestos ($\leq 1\%$) was detected in the bulk sample(s) of the drywall/joint compound (106 Court Square) and the 12"x12" blue VCT mastic (125 Main Street) analyzed by the laboratory. Although materials that contain trace amounts of asbestos are not subject to U.S. EPA or North Carolina regulations for the handling and disposal of asbestos, OSHA still regulates any work which will disturb materials identified with trace amounts of asbestos (reference the November 24, 2003 OSHA Interpretation document - Compliance Requirements For Renovation Work Involving Materials Containing Less Than 1% Asbestos). Therefore, any Contractors disturbing these materials will need to comply with components of 29 CFR 1926.1101, as detailed in the 2003 OSHA Interpretation document.

4.2 Suspect or Assumed Asbestos-Containing Materials

Due to the inaccessibility or the destructive means that asbestos sampling requires, additional suspect ACMs may remain within the building hidden behind inaccessible areas that include, but are not limited to, sub-grade walls, structural members, topping slabs, sub-grade sealants, flooring located below underlayments, areas behind exterior walls, pipe trenches, and subsurface utilities, etc. These areas were deemed inaccessible and were not assessed.

If these materials are discovered during construction activities, they should be presumed to contain asbestos and be treated as ACMs or be sampled immediately upon discovery and prior to disturbance for asbestos content by a certified asbestos inspector in accordance with 29 CFR 1926.1101.

4.3 Lead in Paint and Surface Coatings

Paint and surface coatings which contain detectable concentrations of lead considered "lead-containing paints". Since OSHA has no specific action level for lead in paint, all paint on the site found to have a measurable concentration of lead should be assumed to be lead containing. Work performed which may disturb lead-containing paint is regulated under OSHA as referenced under 29 CFR 1926.62. A total of 16 paint chip samples were collected during the assessment. The samples collected during the assessment are summarized in the table below and photographs of lead-based paint identified are located in the Appendix.

Sample ID	Description	Result (% by Weight)
L-1	White CMU Wall	<0.0077%
L-2	Light Blue Drywall Wall	0.0090%
L-3	White Drywall Wall	0.0071%
L-4	Blue Wood Window Frame	0.0054%
L-5	Blue Wood Door	0.0061%
L-6	Yellow Wood Wall	<0.0063%
L-7	Grey Drywall Wall	<0.0050%
L-8	Green Drywall Wall	<0.0060%
L-9	Light Blue CMU Wall	<0.0063%
L-10	White Drywall Wall	<0.0065%
L-11	Red Metal Column	0.47%
L-12	Pink Drywall Wall	<0.0057%
L-13	Grey Drywall Wall	<0.0072%
L-14	Black Drywall Wall	<0.0072%
L-15	White Wood Door Frame	<0.0063%
L-16	White Wood Door	0.0047%

Items Highlighted in **BOLD** in the above table are considered Lead Based Paints

Lead-based paint is defined by the U.S. EPA and North Carolina as any paint or other surface coatings that contain lead equal to or greater than 0.5% by weight (5,000 ppm).

5.0 RECOMMENDATIONS AND REGULATORY REQUIREMENTS

Based on our understanding of the purpose of the Limited Hazardous Materials Assessment, the results of laboratory analysis, and our findings and observations, ECS presents the following recommendations.

5.1 Asbestos-Containing Materials

ECS recommends where a material type has been identified as asbestos containing that other materials with similar color, texture, age and size throughout the building's interior and exterior be assumed to contain asbestos. Please refer to Section 4.1 for a complete list of building materials that were reported positive for asbestos and to Section 4.2 for materials that were assumed to contain asbestos.



Follow OSHA asbestos regulations during demolition and/or renovation activities at the subject property of the subject property. You should be aware that stringent requirements are imposed upon anyone renovating or demolishing a structure in which ACM will be disturbed. This work must be performed in accordance with OSHA asbestos regulations, 29 CFR 1910 & 1926, and NESHAP asbestos regulations 40 CFR 61, subpart M. North Carolina regulations require the accreditation of personnel who work in the asbestos field and notification and permitting fees for asbestos removal projects. There is a 10 working day notification period required prior to abatement of asbestos in a facility. Failure to take proper precautions and actions to protect human health and the environment can result in penalties, danger to personnel, and construction delays.

If ACMs are to be removed, it is recommended that an industrial hygienist monitor the project. This involves collecting air samples from within and outside abatement work areas to monitor the asbestos abatement contractor's work practices over the course of the project. The industrial hygienist should evaluate if the asbestos abatement work is in accordance with project specifications, U.S. EPA regulation 40 CFR Part 61-National Emission Standards for Hazardous Air Pollutants Subpart M: National Emission Standard for Asbestos, and U.S. Occupational Safety and Health Administration (OSHA) regulation 29 CFR 1926.1101 - Asbestos in Construction. The industrial hygienist should assess each work area to monitor the removal of ACMs. Only after the industrial hygienist has determined the identified ACMs have been removed should final clearance air samples be collected (if necessary).

Suspect ACMs not observed due to inaccessibility or not sampled due to the destructive means that sampling would require may also be encountered during construction activities. At the time of the survey, only limited destructive means were used to locate or sample suspect ACMs; therefore, additional suspect ACMs may remain within inaccessible areas that include, but are not limited to, [sub-grade walls, structural members, topping slabs, exterior areas, sub-grade sealants, flooring located below underlayments, vapor barriers, pipe trenches and other subsurface utilities, etc.] If additional suspect ACMs are uncovered which were not accessible during this survey, it is recommended that these materials either be assumed to contain asbestos or be sampled prior to disturbance upon discovery for asbestos content by an asbestos inspector in accordance with 29 CFR 1926.1101.

ECS recommends that a project specification be prepared to delineate and quantify known and suspect hazardous and regulated materials in the buildings and to outline proper procedures for the abatement. This will help protect the owner's liability in better defining the scope of work and contractors' roles and responsibilities in the abatement process and holding the contractor accountable for the performance of the project. The specification typically defines the Contractor's scope of work and outline requirements and procedures that must be followed for the project. The intent of the specification is to give performance requirements for the Contractor so that the project can be completed safely and in compliance with applicable federal and state regulations. Typically, the specification document serves as part of the site owner's contract with the contractor.

5.2 Lead in Paint and Surface Coatings

The results of the lead-based paint survey did not identify detectable concentrations of lead in the surfaces analyzed by ECS using paint chip samples. Should future activities disturb building materials which were not tested for the presence of lead additional testing should be performed or the



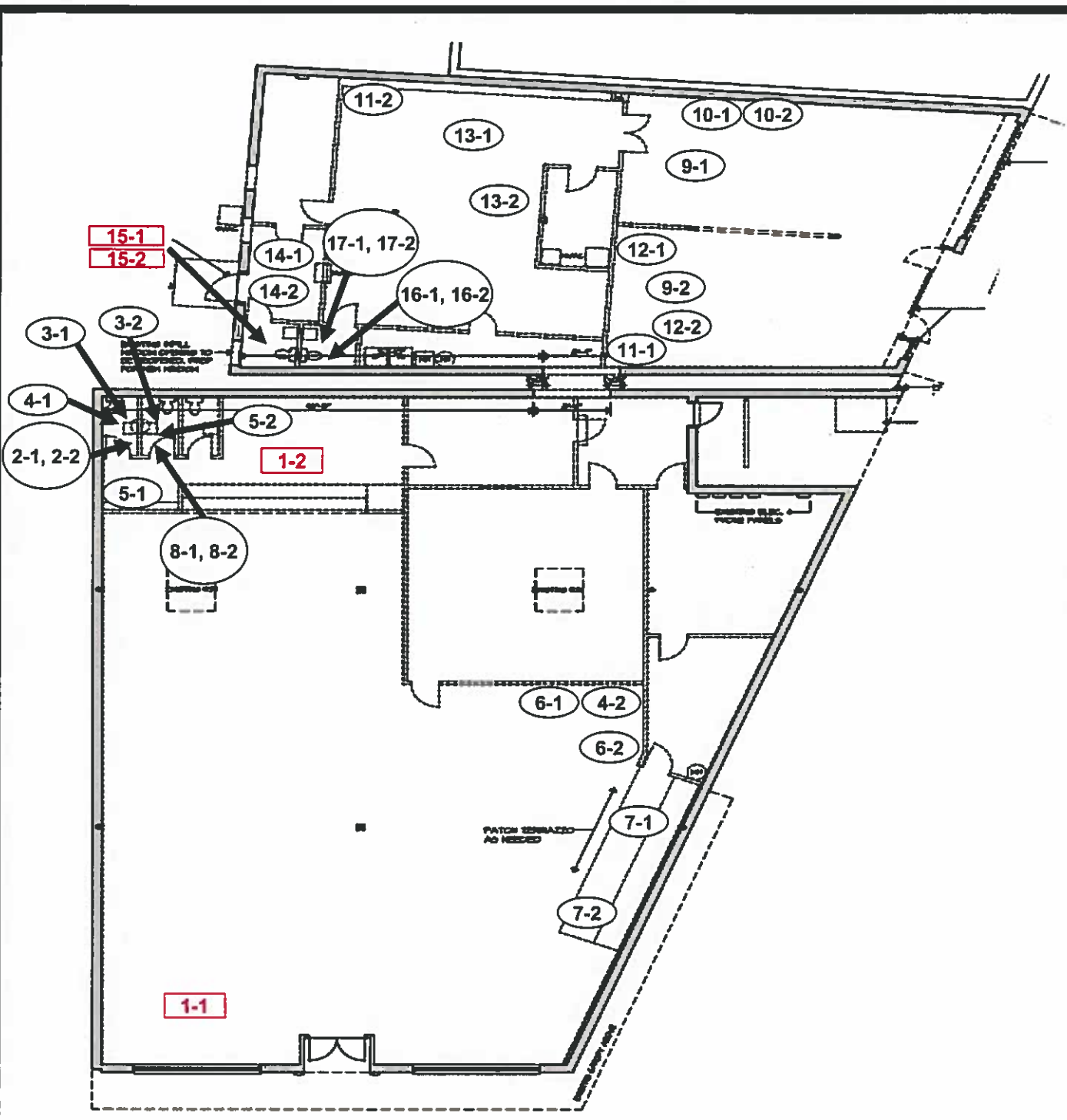
materials should be assumed to contain lead.

6.0 LIMITATIONS

The conclusions and recommendations presented within this report are based upon a reasonable level of assessment within normal bounds and standards of professional practice for a site in this particular geographic setting. ECS is not responsible or liable for the discovery and elimination of hazards that may potentially cause damage, accidents, or injuries.

The observations, conclusions, and recommendations pertaining to environmental conditions at the subject site are necessarily limited to conditions observed, and/or materials reviewed at the time this study was undertaken. No warranty, expressed or implied, is made with regard to the conclusions and recommendations presented within this report. This report is provided for the exclusive use of the client. This report is not intended to be used or relied upon in connection with other projects or by other unidentified third parties without the written consent of ECS and the client.

Our recommendations are in part based on federal, state, and local regulations and guidelines. ECS does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies, any conditions at the site that may present a potential danger to public health, safety, or the environment. Under this scope of services, ECS assumes no responsibility regarding any response actions initiated as a result of these findings. General compliance with regulations and response actions are the sole responsibility of the Client and should be conducted in accordance with local, state, and/or federal requirements.



LEGEND

Sample Number

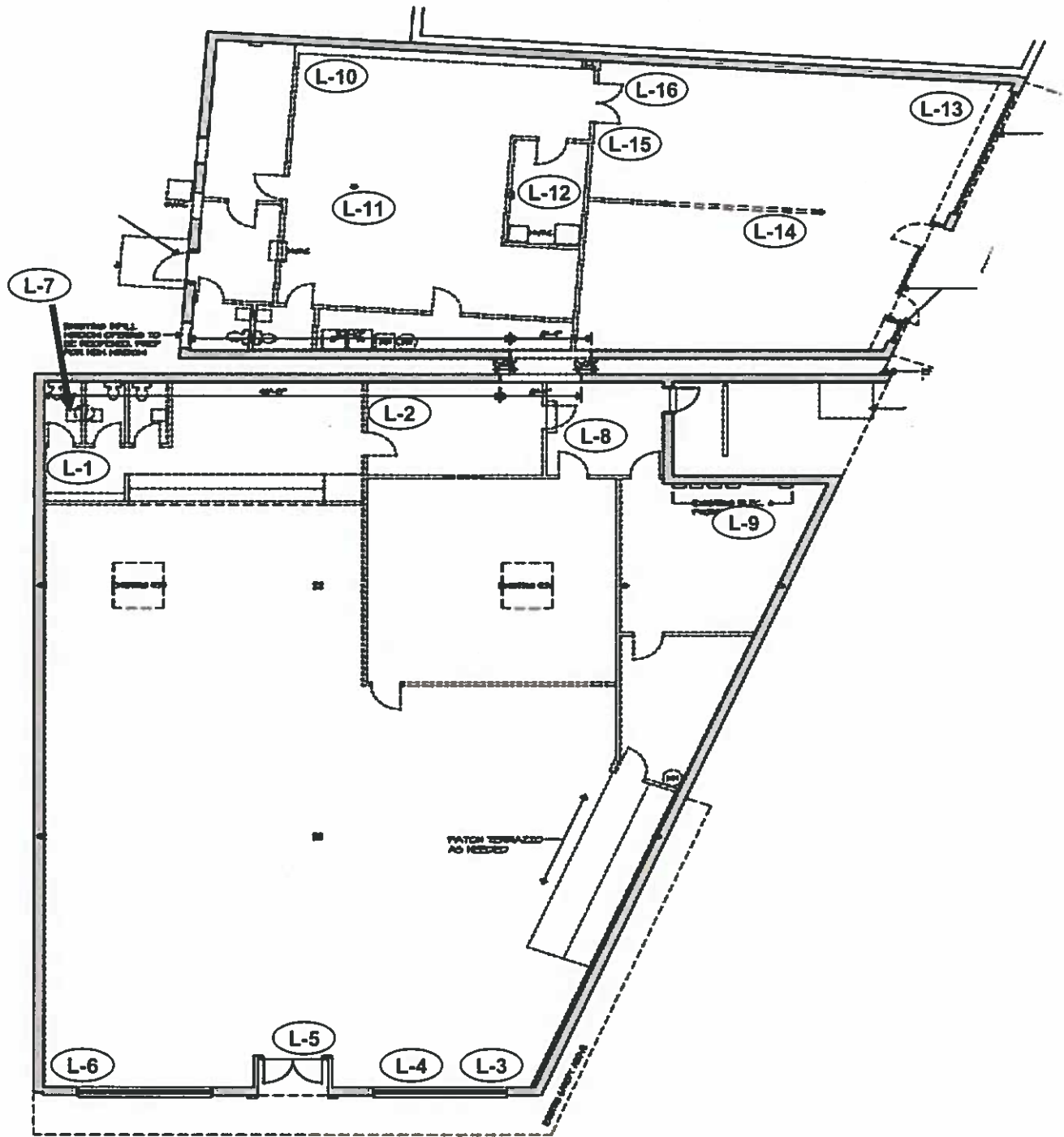
Positive ACM Sample Number

SOURCE:
 NOTES AND DETAILS
 BY ECS
 NO SCALE



FIGURE 1 – ASBESTOS SAMPLING LOCATION MAP

CASEY ENGINEERING CENTER
 106 COLLEGE STREET AND 120 MAIN STREET
 YANCEYVILLE, CASSELL COUNTY, NC
 ECS PROJECT NO. 4919130



LEGEND

Sample Number

Positive ACM Sample Number

SOURCE:

NOSES AND DECKS

BY ECS

NO SCALE



FIGURE 2 – LEAD-BASED PAINT SAMPLING LOCATION MAP

CASEY ENGINEERING CENTER
 106 COLLEGE STREET AND 12th MAIN STREET
 YANCEYVILLE, CASEY COUNTY, NC
 ECS PROJECT NO. 4919130