DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT LIBERTY
2843 NORMANDY DRIVE
FORT LIBERTY, NC 28310-5000

DRAFT MITIGATED FINDING OF NO SIGNIFICANT IMPACT for the DEMOLITION OF BUILDING 708 AND CONSTRUCTION AND OPERATION OF AN AIRCRAFT MAINTENANCE HANGAR at FORT LIBERTY, NORTH CAROLINA

1. Proposed Action. The proposed project (Project Number 93099) will demolish Buildings 707, 709, 710, 711, and individually listed National Register of Historic Places aircraft maintenance Building 708 as well; and construct and operate a new aircraft maintenance hangar within the footprint of the demolished facilities for the United States Army Special Operations Aviation Command (ARSOAC).

2. This Environmental Assessment (EA) is being undertaken in accordance with the National Environmental Policy Act of 1969 (NEPA) and Title 32 of the Code of Federal Regulations (CFR), Part 651, to inform decision makers and the public of likely environmental consequences of the proposed actions and alternatives and provide a forum for public feedback.

3. Anticipated Environmental Impacts. The analysis in the EA found non-significant impacts to soil erosion/water resources and cultural resources.

Fort Liberty developed mitigation measures in coordination with the North Carolina State Historic Preservation Office (SHPO) to compensate for adverse effects resulting from demolition of Building 708 through a Memorandum of Agreement (MOA) to be signed by the SHPO, Fort Liberty and the Advisory Council on Historic Preservation.

4. The mitigation measures stipulated in the MOA consist of:

- Prior to demolition, the property will be documented by or under the direct supervision of personnel who meet the Secretary of the Interior's Professional Qualifications Standards in Architectural History or Historic Architecture.
- A program of signage will be implemented by Fort Liberty at eligible historic districts and buildings that will be keyed to a Geographic Information System GIS story map to be hosted by the SHPO. The signage program will be completed within five years of the execution of the MOA.

5. Public Review and Interagency Coordination. The EA and draft mitigated Finding of No Significant Impact (FNSI) will be made available to state and federal agencies (through the North Carolina Department of Administration) and the public for a 30-day review at:

- Cumberland County Public Library, 300 Maiden Lane**,** Fayetteville, NC 28301.

- Harnett County Library, 455 McKinney Parkway, Lillington, NC 27546
- Hoke County Public Library, 334 N. Main Street, Raeford, NC 28376
- John L. Throckmorton Library, Building 1-3346, Randolph Street, Fort Liberty, NC 28310.
- Moore County Library, 101 Saunders Street, Carthage, NC 28327

6. Written comments and questions about the EA and its analyses may be directed to: Ms. Ginny Carswell, NEPA Coordinator, United States Army Installation Management Command, Headquarters, United States Army Garrison, Fort Liberty, 2175 Rock Merritt Avenue, Fort Liberty, North Carolina (NC) 28310. Ms. Carswell is also available for questions regarding the EA by phone at (910) 396-9888 and by email at virginia.l.carswell.civ@army.mil.

7. Conclusion. The EA was prepared in accordance with the NEPA (40 CFR 1500 *et seq.*), the Council on Environmental Quality regulations, and Environmental Analysis of Army Actions, 32 CFR, Part 651. Based on a review of the information contained in the EA, I have determined that the proposed action to demolish Building 708 and construct and operate an aircraft maintenance hangar at Fort Liberty, North Carolina would not have a significant impact on the quality of the human or natural environment on the Installation or in nearby communities, nor does it constitute a major federal action. Therefore, the preparation of an Environmental Impact Statement is not required and the mitigated FNSI is appropriate. This decision complies with legal requirements and has been made after considering all submitted information.

K. CHAD MIXON
COL, LG
Commanding

Date:

ENVIRONMENTAL ASSESSMENT
and
DRAFT MITIGATED FINDING OF NO SIGNIFICANT IMPACT
for the
DEMOLITION OF BUILDING 708 AND CONSTRUCTION AND OPERATION OF AN AIRCRAFT MAINTENANCE HANGAR at FORT LIBERTY, NORTH CAROLINA

The Right Way.
The Green Way.
All the Way.

September 2024

Prepared by the:

Department of the Army
US Army Installation Management Command
Headquarters, United States Army Garrison
ATTN: AMIM-LIP-EM
Fort Liberty, North Carolina 28310

In accordance with the
National Environmental Policy Act of 1969

ENVIRONMENTAL ASSESSMENT
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DRAFT MITIGATED FINDING OF NO SIGNIFICANT IMPACT
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DEMOLITION OF BUILDING 708 AND CONSTRUCTION AND OPERATION OF AN AIRCRAFT MAINTENANCE HANGAR at FORT LIBERTY, NORTH CAROLINA

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Commanding

ENVIRONMENTAL ASSESSMENT
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DRAFT MITIGATED FINDING OF NO SIGNIFICANT IMPACT
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DEMOLITION OF BUILDING 708 AND CONSTRUCTION AND OPERATION OF AN AIRCRAFT MAINTENANCE HANGAR at FORT LIBERTY, NORTH CAROLINA
EXECUTIVE SUMMARY

This Environmental Assessment (EA) provides an analysis of the environmental and socioeconomic effects of the following proposed actions. This EA is being undertaken in accordance with the National Environmental Policy Act (NEPA) of 1969 and Title 32 of the Code of Federal Regulations, Part 651, to inform decision makers and the public of likely environmental consequences of the proposed actions and alternatives and provide a forum for public feedback.

1.0 Proposed Action. The proposed project (Project Number 93099) will demolish Buildings 707, 709, 710, 711, and individually listed National Register of Historic Places (NRHP) aircraft maintenance Building 708 as well; and construct and operate a new aircraft maintenance hangar within the footprint of the demolished facilities for the United States Army Special Operations Aviation Command (ARSOAC). The new facility will house approximately 85 existing personnel (USACE, 2022b) over three shifts. The total project site is 9.5 acres, of which approximately two acres of maintained lawn will be disturbed. The project would begin in Fiscal Year (FY) 2025 (USACE, 2019).

2.0 Description of Alternatives. Three potentially suitable alternatives were identified for the proposed actions and evaluated against screening criteria. The alternatives are as follows:

2.1 No Action Alternative: The No Action Alternative would retain historic Building 708 as well as Buildings 707, 709, 710, 711; a modernized aircraft hangar would not be constructed. This alternative does not meet the purpose and need; however, the Council on Environmental Quality (CEQ) and Army NEPA regulations require consideration and analysis of the No Action Alternative to provide a baseline against which the other alternatives may be compared.

2.2 Alternative 2: Alternative 2 would demolish Buildings 707, 709, 710, 711, and individually listed NRHP Building 708; and construct and operate an aircraft maintenance hangar. The facility would be positioned relative to the airfield to meet runway clear zone requirements for an Army Airfield Class B as defined in UFC-3-260-01. Facility personnel would utilize an 88-space parking lot north of the site across Surveyor Street (USACE, 2019).

2.3 Alternative 3 Alternative 3 would renovate Building 708 to current Army building codes and standards.

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1.0 WHAT IS THE PROPOSED ACTION?

The proposed project (Project Number 93099) will demolish Buildings 707, 709, 710, 711, and individually listed National Register of Historic Places (NRHP) aircraft maintenance Building 708; and construct and operate a new aircraft maintenance hangar within the footprint of the demolished facilities for the United States Army Special Operations Aviation Command (ARSOAC). The new facility will house approximately 85 existing personnel over three shifts (USACE, 2022b). The total project site is 9.5 acres, of which approximately two acres of maintained lawn will be disturbed. The project would begin in Fiscal Year (FY) 2025 (USACE, 2019).

This Environmental Assessment (EA) provides an analysis of the environmental and socioeconomic effects of the following proposed actions. This EA is being undertaken in accordance with the National Environmental Policy Act (NEPA) of 1969 and Title 32 of the Code of Federal Regulations (CFR), Part 651, to inform decision makers and the public of likely environmental consequences of the proposed actions and alternatives and provide a forum for public feedback. The proposed action warrants an EA because the project requires demolition of a historic facility, and therefore, does not meet the criteria under 32 CFR § 651, Appendix B, Section II, Categorical Exclusion (c)(2), as described in 32 CFR 651.29(a).

Building 708 cannot be adapted to meet Congressional directives, Army standards, or mission readiness requirements. Building 708 hangar doors are not tall enough to accommodate the largest design aircraft, C-27J. Fort Liberty has determined that Building 708 must be demolished to construct an adequate aircraft maintenance hangar.

1.1 WHAT IS THE PURPOSE AND NEED FOR THE PROPOSED ACTION?

The proposed project would demolish existing maintenance hangar Building 708 due to consistent facility failures to construct a modernized aircraft hangar for maintenance for operation of aircraft serving the United States Army Special Operations Command (USASOC). The proposed new, approximately 98,000 square-foot (sf), four-bay aircraft hangar would accommodate four C-27J Spartan aircraft, two UH-60 aircraft, five CASA-212 aircraft, and one C-12 aircraft. Additionally, the project includes hangar access and parking aprons, associated airfield apron lighting, administration offices, latrines, supporting utilities (water, sewer, electric services, unsecured communications), and force protection and antiterrorism measures (Enclosure 1).

Building 708 was designed as an Army Air Service support facility and constructed in 1934. The property was identified by Pope Air Force Base as eligible for listing in the NRHP, was nominated, and inscribed in 1990. In 2010, Pope Air Force Base (to include the facilities within the proposed project footprint) returned to Army control under the Base Realignment and Closure order of 2005. Building 708 currently serves as an aircraft maintenance hangar for the ARSOAC and operated by the ARSOAC Flight Company.

Building 708 does not meet the Army Standard for Aircraft Maintenance Hangars. The facility lacks adequate humidity control systems, latrines, locker rooms, administrative offices, shops, life support facilities, tool and parts storage and additional necessary flight operations facilities. Aircraft parts storage does is not in compliance with Congressional directives regarding prevention of corrosion of military equipment because they are stored in a separate building. These deficiencies accelerated equipment degradation, hindered maintenance, rendered aircraft inoperable due to maintenance problems.

1.2 WHAT IS THE DECISION TO BE MADE?

The proponent for the proposed action is the Garrison Commander of the Installation who decides which alternative best meets the purpose and need of the proposed action, including location, mitigation, configuration, and supporting infrastructure.

1.3 WHAT IS THE SCOPING AND PUBLIC INVOLVEMENT PROCESS?

This EA was prepared in accordance with the NEPA of 1969 [42 United States Code (USC) 4321 *et seq*.], Council on Environmental Quality (CEQ) Regulations 40 CFR Parts 1500-1508, and Army Regulations (ARs) 32 CFR Part 651 (*National Environmental Policy Act Implementing Regulations).* This EA will evaluate the potential impacts of the proposed project, including a determination of a finding of no significant impact (FNSI) or a Notice of Intent to prepare an Environmental Impact Statement (EIS). Pursuant to 32 CFR Part 651, this EA will evaluate the potential environmental impacts of the project. These actions are based on the best information and data available as of July 2024.

Federal agencies may coordinate National Historic Preservation Act (NHPA) Section 106 compliance with the procedures required to satisfy NEPA pursuant to 36 CFR Part 800.08. Section 106 consultation integration the duration of project planning ensures early consideration of historic preservation and NEPA compliance. This combined process provides public access to the proposed project, effects on historic properties, alternatives to resolve adverse effects, and an opportunity to express views on resolving adverse effects. Fort Liberty intends to use the EA and draft mitigated FNSI process to comply with Section 106 in lieu of the procedures set forth in 36 CFR Parts 800.3 through 800.6. The EA and draft mitigated FNSI public comment period will also satisfy the public comment period required under Section 106.

This EA and draft mitigated FNSI will be made available to the public, state, and federal agencies (via the North Carolina Department of Administration) for a 30-day review at the following libraries and online at https://fb.me/FortLibertyEnvironmentalAssessments:

- Cumberland County Public Library, 300 Maiden Lane**,** Fayetteville, NC 28301.
- Harnett County Library, 455 McKinney Parkway, Lillington, NC 27546
- Hoke County Public Library, 334 N. Main Street, Raeford, NC 28376
- John L. Throckmorton Library, Building 1-3346, R. Miller Street, Fort Liberty, NC

28310.

- Moore County Library, 101 Saunders Street, Carthage, NC 28327

During the comment period, any public comments received will be collected, logged, and incorporated into draft mitigated FNSI as necessary. A final mitigated FNSI will be prepared and posted to the following website once all comments have been received: https://fb.me/FortLibertyEnvironmentalAssessments.

2.0 DESCRIPTION OF THE ALTERNATIVES

The three alternatives below were identified as potentially suitable for the proposed actions and evaluated against the screening criteria listed in Section 2.1.

2.0.1 Alternative 1: No Action Alternative: The No Action Alternative would retain historic Building 708 as well as Buildings 707, 709, 710, and 711; a modernized aircraft hangar would not be constructed. This alternative does not meet the purpose and need; however, the CEQ and Army NEPA regulations require consideration and analysis of the No Action Alternative to provide a baseline against which the other alternatives may be compared.

2.0.2 Alternative 2: Alternative 2 would demolish Buildings 707, 709, 710, 711, and NRHP individually listed Building 708; and construct and operate an aircraft maintenance hangar. The facility would be positioned relative to the airfield to meet runway clear zone requirements for an Army Airfield Class B as defined in UFC-3-260-01. Facility personnel would utilize an 88-space parking lot north of the site across Surveyor Street (USACE, 2019). See Enclosure 1.

2.0.3 Alternative 3 Alternative 3 would renovate Building 708 to current Army building codes and standards. Building 708 is approximately 53,000 square feet (sf). The program for the new hangar is 97,600 sf.

2.1 WHAT IS THE ALTERNATIVES SCREENING PROCESS?

2.1.1The screening criteria listed below are used to assess the reasonable alternative(s) to be considered in this EA:

- Support mission requirements. Alternatives considered must support and provide for the mission requirements of Soldiers at the Installation.
- Maintain regulatory compliance**.** Alternatives considered must allow for compliance with all state and federal regulations.
- Maintain safety of Soldiers and Civilians. Alternatives considered must not pose any danger to any Soldiers or Civilians on the Installation.
- Avoid significant impacts to environmentally sensitive resources**.** Alternatives considered must avoid significant impacts to environmentally sensitive resources on the Installation.

2.1.2 Alternatives Eliminated from Full Analysis: Alternative 3 will be eliminated from full analysis in this EA based on the alternatives screening process. The ARSOAC analyzed Building 708 refurbishment, however, determined this alternative cost ineffective due to financing modernization of a facility constructed in 1934 and the current state of Building 708 (USACE, 2019). Alternative 3 does not meet screening maintaining Soldier and Civilian safety and meeting mission criteria based on available funding.

2.1.3 Alternatives Carried Forward for Full Analysis: Alternatives 1-2 will be carried forward for full analysis in this EA. The Alternative 2 site location has existing apron hardstand for aircraft parking. Per the Department of Defense Form 1391 the user identified that the following aircraft needed to be accounted for: (4) C-27J; (3) CASA-212; (2) UH-60; and (1) C-12. Minimum requirements to meet user requested vehicles is 75% of mission craft for parking and 15% for maintenance, per Army Standard for Maintenance Hanger Complex Memorandum dated 18 November 2013. Siting considerations were made to ensure that the facility orientation and the re-alignment of parking striping in the silver ramp met minimum specified requirements. Given the project criteria the new hangar will be sited parallel with the Silver Ramp and will replace the existing two bay hanger. Alternative 2 will construct the hangar to meet runway clear zone requirements for an Army Airfield Class B as set forth in UFC-3-260-01 (USACE, 2019).

2.2 WHAT IS THE PREFERRED ALTERNATIVE?

Of the alternatives considered, the preferred alternative is Alternative 2 – *Demolish Buildings 707, 709, 710, 711, and Individually Listed NRHP Building 708; and Construct and Operate an Aircraft Maintenance Hangar*. This is the only alternative that will fully satisfy the purpose and need for the mission.

3.0 ENVIRONMENTAL CONSEQUENCES

This section describes the potential effects of each alternative to baseline environmental resource conditions the Installation. An analysis of the potential direct and indirect effects associated with each of the alternatives immediately follows the description of each environmental resource. The analysis also includes cumulative effects potentially resulting from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions. Impact classification occurs by identification according to the impact severity (no impact, minor impact, less than significant impact, significant but mitigable impact, significant impact). Impacts are further identified as short-term or long-term. Both the affected environment and environmental consequences are described for comparison within broad resource areas. The following provides a general impact description (Department of the Army (DA), 2007):

- **No Impact/Negligible Impact** – No impact or minimal impacts are anticipated.
- **Minor Impact**–impact anticipated that may compound a collective resource impact but is not a singular major source of impact.

- **Less than Significant Impact** –impact that would not directly or indirectly significantly impact a resource.
- **Significant but Mitigable Impact** –significant impact would result; however, management actions would mitigate impacts to less than significant.
- **Significant** – Significant impact anticipated without a practical mean to mitigate to a level below significance.

The Army will issue a FNSI if the proposed action results in environmental effects less than 'significant'. The Army will prepare an EIS if the proposed action results in significant effects as defined for the following resource areas:

- **Air Quality and Climate Change:** A National Ambient Air Quality Standards (NAAQS) attainment area becomes a nonattainment area, a violation of Clean Air Act (CAA) Title V operating permits.
- **Airspace**: Violation of Federal Aviation Administration (FAA) regulations that undermines aviation safety or results in substantial infringement of private, military, or commercial flight activity.
- **Cultural Resources**: Direct /indirect impacts to archeological sites, or other properties of traditional religious and cultural importance without appropriate mitigation; or alteration of characteristics that qualify a property for inclusion in the NRHP without appropriate mitigation.
- **Energy (Utilities)/ Facilities**: The Proposed Action cannot be supported by the infrastructure or results in a violation of regulatory limits.
- **Hazardous and Toxic Substances and Waste**: Intended violation of federal or state regulations.
- **Noise**: Reclassification to Noise Zones (NZ) III and sensitive receptors exist (e.g., residences, schools, hospitals, churches, or daycare facilities). Decibel (dB) limits of each NZ are defined in Army Regulation 200-1 (DA, 2007a).
- **Soil Erosion/ Water Resources Management**: Ground disturbance or other activities that would violate a federal or state law or regulation or violate the terms and conditions of a permit issued under a federal or state law or regulation.
- **Solid Waste**: Intended violation of federal or state regulations.
- **Socioeconomics, Environmental Justice, and Protection of Children**: Significant impacts of socioeconomic consequence alone do not merit an EIS per 32 CFR § 651.39.
- **Threatened and Endangered (T&E) Species and Other Biological Resources**: The Installation's inability to manage the T&E species to conserve and recover the species, or the placement of a T&E species in jeopardy, or the violation of any provision of the Endangered Species Act.
- **Traffic and Transportation**: The Proposed Action would halt the Installation's ability to conduct necessary activities supporting the training and security mission.
- **Water Quality:** Intended violation of federal or state regulations.
- **Wetlands and Floodplain**: Drainage of an existing wetland or filling an existing wetland resulting in a violation of Section 404 of the Clean Water Act (CWA) or violation of the terms and condition of any permit issued under Section 404.

See Enclosure 2 for the list of resources and associated impacts.

3.1 RESOURCES ELIMINATED FROM FURTHER ANALYSIS:

The following resource areas are not discussed in detail in this EA due to negligible or minor impacts as further discussed:

3.1.1 Air Quality and Climate Change**:** The primary sources of emissions from the completed project include engine emissions, purchased electricity and possible release of refrigerants and fire suppressants. Construction activities, such as vehicle/equipment mobile emissions, purchased electricity, generation and waste disposal will also produce air emissions. Emissions associated with mobile sources during construction will be short-term and temporary. The United States Environmental Protection Agency (EPA) presently designates this region as an attainment area for all criteria pollutants. As a result, an applicability analysis and formal conformity demonstration under the general conformity rule are not required for the proposed action.

Executive Order (EO) 13990 (Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis) outlines policies intended to ensure federal agencies capture the full cost of Greenhouse Gas (GHG) emissions while factoring in compounded global emissions. The GHGs are components of the atmosphere that trap heat relatively near the surface of the earth, and therefore, contribute to the greenhouse effect and climate change. Most of the GHGs occur naturally in the atmosphere but increases in their concentration result from human activities such as burning fossil fuels. Many people expect global temperatures to continue to rise as human activities add carbon dioxide (CO_2), methane, NO_2, and other greenhouse (or heat-trapping) gases to the atmosphere. Moreover, increased GHG emissions are believed to contribute to changing weather patterns, wildfires, riverine flooding, hurricanes, and increasing high heat days.

Direct emissions of criteria and GHG emissions and the associated social cost from the preferred alternative will be negligible compared to the No Action Alternative- which consists of the continuance of existing aerospace operations. For example, purchased electricity during construction is effectively offset due to the purchased electricity that would occur if no action were taken because of the on-going existing operations. Likewise, potential indirect emission increases will be negligible because there will be no new sources of emissions. Similarly, any increase in regional and global emissions because of implementing the preferred action will be negligible when compared to the No Action Alternative.

Emissions of fugitive dust from construction activities- emissions that would not be generated under the No Action Alternative- will be minimized. Containment systems will be employed to assure no lead or asbestos is released to the ambient air during the removal process. Moreover, the proposed site is primarily paved, minimizing fugitive dust generation from vehicle traffic and construction equipment.

Overall, demolition of Building 708 and construction of a hangar serving the same purpose as Building 708 will result in a negligible, if any, social cost of greenhouse gasses. The Army continues to focus on climate change mitigation goals outlines in the Army Climate Strategy while executing the prompt and sustained land dominance as part of the Joint Force.

3.1.2 Airspace: The Federal Aviation Administration (FAA) manages all airspace within the US and its territories. The FAA recognizes the military needs to conduct various flight operations and training within airspace other than commercial and general aviation. Most military operations are conducted within designated airspace and follow specific procedures to maximize flight safety. Neither alternative requires altering airspace designation, expansion, or usage. Therefore, airspace is eliminated from further analysis.

3.1.3 Energy, Utilities/Facilities: The existing water distribution system is adequate to support domestic use. The existing waterline looped around existing hangar including service lateral will be demolished (approximately 550 linear feet of 12-inch lines and 350 linear feet of six-inch lines). Water service will connect to the existing 16-in water main. An eight-inch water line will be installed south of the proposed hangar from the eight-inch water line west of the hangar to the six-inch water line east of the hangar. The existing water distribution system adequate to support fire protection requirements. Three additional fire hydrants; two, 2,500 gallon per minute pumps, a 14-inch water service line connecting to the 16-inch water main; and one, 30,000 containment tank to capture fire suppression foam from discharge events will be installed. Sewer connection to Building 708 will be demolished; sufficient capacity is available in the wastewater collection system to handle the new construction hangar load. The proposed new hangar would connect to an existing 12,470V, three-phase underground electrical primary along the north side of Surveyor Street adjacent to the proposed site (USACE, 2022b).

3.1.4 Hazardous Waste and Materials: The project consists of two, 150-sf satellite accumulation areas on the existing hardstand to temporarily place hazardous material and Petroleum, Oil, Lubricants (POL). Hazardous material and POL will be stored according to UFC 4-214-02 Section 3-10.5 and according to all state and federal requirements. Hazardous waste and POL will not be transported, distributed, used, stored, treated or disposed of as defined by the Resource Conservation and Recovery Act

Asbestos sample testing of all facilities proposed for demolition determined Asbestos Containing Material (ACM) is not present in Buildings 707, 709, 710, or 711 (Enclosure 3). Based on the inspection, sampling, and laboratory results, asbestos is present in multiple locations within Building 708 (Enclosure 3). Underground piping may be present and was not accessible for sampling. The underground piping may be asbestos containing. A North Carolina (NC) certified asbestos abatement contractor will perform abatement prior to any work occurring on any ACM, per NC Administrative Code Chapter 10-A Subchapter 41C - Occupational Health Section 0600 - Asbestos Hazard

Management Program. All abated ACM will be handled and disposed of per 40 CFR, Chapter 61, Subpart M National Emission Standard for Asbestos.

Facility renovation, maintenance, demolition, and/or painting have the potential for Lead-Based Paint (LBP) disturbance. Any detectable concentration of lead triggers Occupational Safety and Health Administration (OSHA) regulation. Most paint/coatings contain some detectable concentration of lead. Limited LBP sampling was conducted on Buildings 708 and 710; the results determined presence of LBP (Enclosure 4). Project demolition of all the remaining facilities will operate under the assumption that all paint/coatings contain lead and/or heavy metals such as chromium, unless directed otherwise. Nearly every building surface is painted/coated with some sort of paint/primer. The project design will require building demolition with painted/coated items instead of abatement or removal of painted/coated items prior to demolition. The project design will limit occupational and environmental exposure to paint dust during demolition. Demolition debris will be properly characterized and recycled and/or disposed (USACE, 2022b). If paint is removed from the surface by chemical (paint stripper, paint remover, etc.) or physical (scraping, sanding, grinding, blasting, etc.) means, then the removed paint will have a Toxicity Characteristic Leaching Procedure (TCLP) test performed by an accredited testing laboratory to determine proper disposal methods. The TCLP results will be provided to the Hazardous Waste Program Manager who will determine if the paint is a hazardous or non-hazardous waste. If determined to be a hazardous waste, the Hazardous Waste Program Manager will sign all manifests for LBP waste prior to disposal by the contractor in a Subtitle C landfill. Once disposed, the contractor is required by 49 CFR to return the final manifest to the Hazardous Waste Program Manager within 45 days.

3.1.5 Noise: The proposed project will be constructed in a Day-Night Average Sound Level (DNL) of 57-62 Decibels (dB). The Federal Aviation Administration has established 65 DNL as the threshold above which aircraft noise is incompatible with residential areas. The proposed project supports residential purposes and therefore will not impact the existing DNL.

3.1.6 Solid Waste**:** There will be no impacts to solid waste management. The Fort Liberty Lamont Construction and Demolition (C&D) Landfill is closed and will not accept any C&D waste. All contractors will use a State Certified C&D Landfill or Subtitle “D” Landfill off Fort Liberty for C&D and asbestos waste disposal. The contractor is responsible to maintain data of all waste disposed and materials recycled off Fort Liberty. The Department of the Army (DA) and the North Carolina Department of Environmental Quality (NCDEQ) requires monthly and annual reporting of all materials (waste and recyclables) managed by Fort Liberty. The Fort Liberty Environmental Compliance Branch, Solid Waste/Recycling Office is responsible for compiling data into monthly reports for the DA and the NCDEQ. The Solid Waste/Recycling Office or a contractor form will be filled out with the type of waste or recycled material, the weight of the waste/material (tons or pounds), and the facility to which the waste or recyclables were delivered. This information will be provided to the Fort Liberty Solid Waste/Recycling Office by the second Friday of each month.

Federal Department of Transportation, State Law and Fort Liberty regulations require covering waste or recyclable loads to prevent litter. All waste or recyclable material loads are subject to inspection while present on Fort Liberty. All recyclable materials generated from a construction or demolition job is property of the government unless the contract specifies the contractor can obtain the materials. Items such as heating, ventilation, and air conditioning units (refrigerant removed); air handlers; piping; metals; beams; motors; valves; copper wire; etc. will be transported to the Directorate of Public Works (DPW) Recycling Center (Butner and Rock Merritt Avenue) or the recycling area at the Lamont Landfill Facility. The Lamont Landfill recycling area will accept concrete, brick, and block. The concrete will be tested and void of asbestos or lead based paint to be recycled. Any concrete, brick, and block containing asbestos and/or lead based will be disposed of by the contractor at a State Certified C&D Landfill or Subtitle "D" Landfill located off the Installation. The concrete will be no larger than 2 by 2-foot pieces or equivalent, will have minimal amount of dirt in load, will have minimal amount of asphalt, and shall have no rebar protruding out of the concrete.

3.1.7 Socioeconomics, Environmental Justice, and Protection of Children: The EO 12898 (*Federal actions to Address Environmental Justice in Minority Populations and Low-income Populations*) requires federal agencies to identify and address "disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." The alternatives will be contained within the Fort Liberty boundary on an existing airfield; consequently, there will be no direct effect to minority or low-income populations. The EO 14096 (*Revitalizing Our Nation's Commitment to Environmental Justice for All)* provides opportunities for early and meaningful involvement in the environmental review process by communities with environmental justice concerns potentially affected by a proposed action and considers best available science and information on any disparate health effects (including risks) arising from exposure to pollution and other environmental hazards." The alternatives are within the Fort Liberty boundary; consequently, there will be no direct effect to minority or low-income populations.

In accordance with EO 13045 (*Protection of Children from Environmental Health Risks and Safety Risks*), all federal actions must evaluate whether there would be any impacts on populations of children in the region from the proposed actions. There will be no environmental or socioeconomic impacts that will cross installation boundaries into areas with populations of children (EPA, 2022). See Enclosure 5. Therefore, there would be no impacts on children or low-income populations resulting from alternatives analyzed in this EA.

3.1.8 Threatened and Endangered Species and Other Biological Resources. Fort Liberty is home to five federally endangered species. They include: the Red-Cockaded Woodpecker (RCW; *Dryobates borealis*); rough-leaved loosestrife (*Lysimachia asperulifolia*); Michaux's sumac (*Rhus michauxii*); American chaffseed (*Schwalbea americana*); and the Saint Francis' satyr butterfly (*Neonympha mitchellii francisci*),

(SFS)). The proposed project is not located within designated threatened or endangered species habitat and therefore will not be impacted by the proposed project.

3.1.9 Traffic: The proposed action will house 85 existing personnel. Additionally, project traffic control and work zone safety will comply with the Fort Liberty 2021 Traffic Engineering Installation Design Guide (DA, 2021). Therefore, the proposed action will have no effect on existing traffic.

3.1.10 Water Quality: The proposed project overlaps Installation Restoration Program (IRP) Category 3 Sites FTBR-303, FTBR-305, FTBR-311, CCFTBR0314, and CCFTBR0323. See Enclosure 6. Each of these sites have known groundwater contamination exceeding the NCDEQ groundwater quality standards under Title 15A NCAC 2L. Groundwater across the site ranges from six to 30 feet below ground surface. The proposed hangar project actions are not likely to encounter groundwater, but in the event contaminated groundwater is discovered, it will be handled in accordance with all applicable rules and regulations. The proposed stormwater management pond construction may encounter groundwater; this area is also under investigation for Per- and Polyfluoroalkyl Substances (PFAS) because this location historically served as an Aqueous Film Forming Foam (AFFF) overflow area. If any soil or groundwater from this area is removed, it will be handled in accordance with all applicable rules and regulations.

The design will incorporate worker protection and waste disposal requirements and will assess the potential for vapor intrusion caused by any contamination in soil and groundwater (USACE, 2022a). Ground water filtration will not be allowed unless a pervious liner is used and separated from existing ground water that is estimated to be between ten to 15 feet below natural ground elevation. The project design will annotate restrictions for each IRP site, worker protection requirements necessitated by the contamination, and requirements for the handling, characterization, and disposal of waste generated during construction activities, such as excess excavated soil and groundwater produced during dewatering. One groundwater monitoring well located approximately 140 feet west/southwest of Building 708 (MW4-05) associated with IRP Site FTBR-305 will be protected or properly abandoned (Enclosure 7). An additional groundwater monitoring well located west/northwest of the proposed stormwater management area (12M06) associated with IRP Site FTBR-303 will be protected or properly abandoned (Enclosure 7). If monitoring wells are abandoned, new monitoring wells will be installed in the vicinity of the abandoned wells as directed by the IRP Support Program, DPW. The new wells will be installed to be the same depth, size, and surface completion as the existing wells (USACE, 2019).

The existing Oil Water Separator (OWS) at Building 708 will be demolished according to the NCDEQ Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement (STIRA). The existing OWS closure will most likely follow requirements for a non-regulated petroleum Underground Storage Tank (UST). Closure requirements for a regulated UST will apply if a suspected release is discovered. The trench drains in the hangar will be routed to the new OWS to route wastewater from aircraft washing inside the hangar bays.

3.1.11 Wetlands and Floodplains. The United States Army Corps of Engineers (USACE) (33 CFR 328.3) and the EPA (40 CFR 230.3) defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Well-drained, sandy hills dissected by a dendritic wetland and small stream system characterize the Sandhills region. Typical jurisdictional waters and wetlands on Fort Liberty include sandhill seeps, streamhead pocosins, small stream swamps, vernal pools, and open water habitats consisting of streams, rivers, and impoundments. Section 404 of the Clean Water Act (CWA) of 1977, as amended (33 USC 1344) regulates discharge of dredged or fill material into jurisdictional wetlands and open waters. The proposed project does not occur within designated wetlands.

Floodplains moderate flood events, enhance water quality, recharge groundwater, and stabilize stream channels. Additionally, floodplains provide valuable habitat for fish, wildlife, and plants; recreational opportunities; and aesthetic benefits. The EO 11988 (Floodplain Management) requires federal agencies to “provide leadership and take action to reduce the risk of flood loss; minimize the impact of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values served by floodplains in carrying out the agency's responsibilities.” Additionally, EO 11988 defines floodplains relatively flat lowland areas adjoining inland and coastal waters subject to a one percent or greater chance of flooding in any given year (i.e., 100-year floodplain). The Federal Emergency Management Agency delineates the regulatory 100-year floodplain for use in the National Flood Insurance Program. The proposed project area is approximately 1,400 feet southeast from an unnamed tributary. The Federal Emergency Map Service Center program determined floodplains are not within the vicinity of the proposed project area (Enclosure 8).

3.2 RESOURCES IMPACTED AND POTENTIAL EFFECTS OF THE PROPOSED ALTERNATIVES

3.2.1 Soil Erosion/Water Resources**:** Soil erosion results in elevated stream sedimentation rates and turbidity levels. Primary sediment sources include unpaved roads, drop zones, landing zones, flight strips, artillery firing points, borrow pits, clear-cut operations, and stormwater runoff from other areas during development. Fort Liberty targets to maintain a 100-foot riparian buffer zone to protect wetlands and streams by minimizing sediment entering the waterways. Fort Liberty manages stormwater runoff according to the Installations permit to discharge stormwater under the National Pollutant Discharge Elimination System (NPDES) Permit No. NCS000331.

3.2.2.1 Alternative 1: No Action Alternative. Retain and continue to utilize Buildings 707,708, 709, 710, and 711.

Potential Impacts: Under the No Action Alternative, demolition or construction would not occur. Therefore, this alternative would result in no impact to water or soil resources.

Cumulative Impacts: The No Action Alternative will result in no significant cumulative impacts on water or soil resources.

3.2.2.2 Alternative 2: Demolish Buildings 707, 709, 710, 711, and individually listed NRHP Building 708; and construct and operate an aircraft maintenance hangar within the existing footprint. The proposed project will result in a less than significant impact to soil erosion/water resources management.

Potential Impacts: The project approximates two acres of hardstand access apron demolition to satisfy grading and drainage requirements per UFC-03-260-02 and provide adequate hangar access. Additionally, the project will reduce the current vegetated area from 4.7 to 3.0 acres (USACE, 2019). The project will require an erosion/stormwater control plan approved by the DPW Water Management Section. In addition, the proposed construction exceeds one acre and therefore a NC state erosion control permit will be required. Construction of the facility requires a NCDEQ stormwater management permit/plan designed to meet requirements set forth in NC Session Law 2006-246. Plans will be developed per criteria in the NCDEQ Erosion and Sediment Control Planning and Design Manual for erosion control (2013), and Department of Water Quality Best Management Practices Manual for post construction Stormwater Management. State stormwater applications must provide an applicable soils report with the associated Seasonal High Water Table as well as a map of the boring locations within the footprint of the stormwater control measure. Development and redevelopment that exceeds one acre requires water quality treatment for the first inch of rainfall (Session Law 2006-246). Additionally, Section 438 of the Energy Independence and Security Act (EISA) of 2007 requires that development and redevelopment projects that exceed 5,000 square feet are required to maintain or restore predevelopment hydrology (including temperature, rate, volume, and duration of flow) to the maximum extent technically feasible. The EPA has issued guidance that onsite management of the total volume of rainfall from the 95th percentile storm addresses Section 438 of EISA. The 95th percentile rain event is equal to 1.8 inches of rainfall for this locality. To comply with Section 438 of EISA, a variety of low-impact development methods, such as reducing impervious areas, porous pavements, infiltration basins, vegetated swales, and bio-retention, shall be incorporated into the development to help reach the goal of having 100 percent of stormwater retained or detained onsite.

The NCDEQ mandates that a State Individual Post-Construction Stormwater Permit will be submitted and approved before construction. The overall design objective is to maintain or restore pre-development hydrology and prevent any net increase in stormwater runoff. Adherence to these laws and regulations will result in a non-significant impact to water resources due to additional stormwater runoff. The footprints of all chosen utilities will be included within the limits of disturbance for the entire project.

The United States Department of Agricultural (USDA) Natural Resources Conservation Service Web Soil Survey tool provided a map and approximate percentage of soil-type within the project area (https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx).

The project area consists of the following soils and is composed of the approximate percentage of each soil as listed (Enclosure 9; https://soilseries.sc.egov.usda.gov):

- 100% of the project area is Blaney loamy sand, two to eight percent slopes, which are well drained soils.

The construction contractor will be responsible for obtaining all necessary stormwater and erosion control project review and permits from the NCDEQ. The NCDEQ mandates that a State Individual Post-Construction Stormwater Permit be submitted and approved before construction. The overall design objective is to maintain or restore pre-development hydrology and prevent any net increase in stormwater runoff. Adherence to these laws and regulations will result in a non-significant impact to water resources.

Cumulative Impacts: Alternative 2 will result in no significant cumulative impacts to water and soil resources; the contractor will coordinate with the NCDEQ to ensure all necessary permitting and erosion control measures are obtained and employed.

3.2.2 Cultural Resources: Cultural resources are historic properties (buildings, other structures, districts, landscapes, and viewsheds), Native American sites, archaeological sites, archaeological districts, and objects that are eligible for listing or already listed on the National Register of Historic Places (NRHP), as defined by the NHPA; cultural items as defined in the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA); Native American sites to which access is protected under the American Indian Religious Freedom Act of 1978; archaeological resources as defined by the Archaeological Resources Protection Act of 1979 and Antiquities Act of 1906 and Army Regulation 200-4; and archaeological artifact collections and associated records as defined by 36 CFR part 79. The cultural resources region of influence for the proposed action includes the project footprint, project depth, and adjacent properties. No known archeological sites occur within the proposed project footprint. The NRHP-listed Building 708 occurs within the proposed project footprint.

3.2.2.1 Alternative 1: No Action Alternative. Retain and continue to utilize Buildings 707,708, 709, 710, and 711.

Potential Impacts: Under the No Action Alternative, demolition or construction would not occur. Therefore, this alternative would result in no impact to cultural resources.

Cumulative Impacts: The No Action Alternative will result in no significant cumulative impacts to cultural resources.

3.2.2.2 Alternative 2: Demolish Buildings 707, 709, 710, 711, and individually listed NRHP Building 708; and construct and operate an aircraft maintenance hangar within the existing footprint. The proposed alternative will result in a significant but mitigable impact.

Potential Impacts: In accordance with 36 CFR Part 800, an adverse effect to cultural resources occurs when the proposed action directly or indirectly alters any historic property characteristics diminishing the location integrity, design, setting, materials, workmanship, feeling, or association that qualify the property for NRHP inclusion. Adverse effects could also include reasonably foreseeable effects caused by the proposed action that occur later in time or that are cumulative. A significant impact occurs if prehistoric or historic-era resources eligible for listing or formally listed on the NRHP are disturbed or destroyed. Project activities that disturb or destroy the integrity of NRHP-listed or NRHP-eligible cultural resources result in direct impacts to include ground-disturbing activities, noise or other vibrations, renovation, and removal. Indirect impacts may not be immediate but can be reasonably predicted at the time of project implementation.

Fort Liberty first notified the North Carolina State Historic Preservation Office (SHPO) of the intent to initiate consultation with the undertaking in accordance with 36 CFR Part 800 on 6 September 2022 (Enclosure 10). Fort Liberty simultaneously consulted on demolition of NRHP-eligible Buildings 708 and 1-3151. Separate NEPA analysis will be conducted analyzing Building 1-3151 demolition. The SHPO acknowledged receipt of the proposed undertaking, developing a Memorandum of Agreement (MOA) and creative mitigation measures (Enclosure 11).

The concurrence letter dated 18 October 2023 from the SHPO acknowledged an “Adverse Affect” to demolishing Building 708 (Enclosure 12). A MOA draft outlining necessary mitigation requirements is attached as (Enclosure 13). Documentation will be produced by or under the direct supervision of personnel who meet the Secretary of the Interior’s Professional Qualifications Standards in Architectural History or Historic Architecture. The SHPO and Fort Liberty agreed to the following measures to mitigate the adverse effect of demolishing Building 708 as stipulated in the MOA:

- Prior to demolition, the property will be documented by or under the direct supervision of personnel who meet the Secretary of the Interior’s Professional Qualifications Standards in Architectural History or Historic Architecture.
- A program of signage will be implemented by Fort Liberty at eligible historic districts and buildings that will be keyed to a GIS story map to be hosted by the SHPO. The signage program will be completed within five years of the execution of the MOA.

Cumulative Impacts: The proposed demolition of Building 708 will be mitigated in accordance with North Carolina SHPO’s requirements. As a result, there will be no significant cumulative impacts to cultural resources at the Installation by implementing Alternative 2.

4.0 IMPACT SUMMARY

No significant impacts will occur because of implementing the proposed action provided all mitigation measures as specified in this EA are achieved rendering an EIS and ROD unwarranted. The proposed action does not constitute a major federal action

significantly affecting the quality of the natural and human environment when considered individually or cumulatively in the context of NEPA. The Army will prepare and publish a mitigated FNSI to document this decision. The mitigated FNSI will summarize why the proposed action will not significantly affect the environment.

5.0 PREPARATION AND CONSULTATION

5.0.1 List of Preparers: This document was prepared for the Fort Liberty DPW by Ms. Ginny Carswell, NEPA Coordinator.

5.0.2 List of Agencies Consulted**:** The following agencies were consulted during the development of this EA:

- North Carolina State Clearinghouse Department of Administration, 116 West Jones Street, Raleigh, NC, 27603-8003.
- North Carolina State Historic Preservation Office. Department of Natural and Cultural Resources, 4617 Mail Service Center, Raleigh, NC, 27699-4617.
- North Carolina Department of Environmental Quality, 217 West Jones Street, Raleigh, NC 27693.

5.0.3 List of Persons Consulted: The following persons were consulted during the development of this EA:

- Acosta, Victoria. Wildlife Biologist, ED, DPW, Fort Liberty, NC.
- Baker, B. Alan. Environnemental Attorney, OSJA, HQ, XVIII ABN Corps Fort Liberty, NC.
- Cates, Dustin. Installation Restoration Program Support, ED, DPW, Fort Liberty, NC
- Fischer, Michael. Air Quality Program, ED, DPW, Fort Liberty, NC.
- Fleming, Rodney. Wildlife Biologist, ED, DPW, Fort Liberty, NC.
- Fernandez, Kathy. Compliance Branch Chief, DPW, Fort Liberty, NC.
- Glehill-Early, Renee. North Carolina State Historic Preservation Office, Raleigh, NC.
- Goff, E. Ray. Traffic Engineer. BOID, Fort Liberty, NC.
- Hardy, Shawn. Solid Waste Program, ED, DPW, Fort Liberty, NC.
- Huskins, Stacy. Botanist, ED, DPW, Fort Liberty, NC.
- Locklear, Lance. Master Planner, DPW, Fort Liberty, NC.
- McMillan, Kenny. Water Management Branch, ED, DPW, Fort Liberty, NC.
- Spates, Jeremy. Cultural Resources Support. ED, DPW, Fort Liberty, NC.
- Sloop, Jeff. Water Management Branch, ED, DPW, Fort Liberty, NC.
- Ward, Lee. Water Management Branch, ED, DPW, Fort Liberty, NC.
- Wilson, Jack. Hazardous Waste Program Manager, ED, DPW, Fort Liberty, NC.

5.0.4 Literature Cited

Council on Environmental Quality (CEQ), 1997. *Considering Cumulative Impacts Under the National Environmental Policy Act*. Washington, DC: Executive Office of the President, CEQ. January 1997.

Department of the Army (DA*).* 2021. Fort Bragg Traffic Control and Workzone Safety Policy. June 2021.

Department of the Army (DA),2007. Army Regulation 200-1 Environmental Protection and Enhancement. 13 December 2007.

Department of the Army (DA), 2004. *Protection of Historic Properties* (Title 36 CFR Part 800), as published in the Federal Register, Vol. 69: 40544-40555. Washington, DC: Headquarters, DA. 6 July 2004.

Department of the Army (DA), 2002. *Environmental Effects of Army Actions* (Title 32 CFR Part 651), as published in the Federal Register, Vol. 67(61): 15290-15332. Washington, DC: Headquarters, DA. 29 March 2002.

Department of the Army (DA), 1990. *Curation of Federally Owned or Administered Archeological Collections* (Title 36 CFR Part 79), as published in the Federal Register, Vol. 55: 37630-37665. Washington, DC: Headquarters, DA. 12 September 1990.

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United States Army Corps of Engineers, Programmatic Environmental Assessment for Army 2020 Force Structure Realignment. 4 April 2013.

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United States Geological Service. Accessed. Available online at: https://ngmdb.usgs.gov/topoview/viewer/#15/34.9986/-79.4489

United States Environmental Protection Agency Environmental Justice Screening and Mapping Tool (Version 2020). Accessed 22 September 2022. Available online at https://ejscreen.epa.gov/mapper/.

6.0 FEDERAL REGULATIONS CITED: The following applicable federal statutes and regulations were considered during the development of this document.

- Clean Water Act, 33 U.S.C. §§ 1251-1377 (1972; as amended 1994).
- General Permit for Stormwater Discharge from Construction Activities, Section 402, CWA.
- Environmental Protection Agency, Protection of Environment, 32 CFR Part 260-299.
- Endangered Species Act of 1973 (as amended), U.S. Fish and Wildlife Service, Washington, DC, 1988.
- Environmental Analysis of Army Actions, 32 CFR Part 651.
- National Environmental Policy Act of 1969 (as amended; 40 CFR 1500 et seq.), U.S. Environmental Protection Agency, Washington, D.C., 1975.
- National Historic Preservation Act of 1966, 36 CFR. Advisory Council on Historic Preservation. Washington, D.C
- Government Publishing Office (GPO), Executive Order 12898 (Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations). Federal Register, Vol. 59:7629 (1994), amended by Executive Order No. 12948 (Federal Register, Vol. 60: 6381 (1995)). Washington, DC: GPO. 11 February 1994.
- Government Publishing Office (GPO), Executive Order 13045 (Protection of Children from Environmental Health Risks and Safety Risks). Federal Register: Vol. 62, p. 19885. Washington, DC: GPO. 21 April 1997.

- Government Publishing Office (GPO). Executive Order 13990 (Protecting Public Health and the Environmental and Restoring Science to Tackle the Climate Crisis). Federal Register Vol. 86, p7037-7043. Washington, DC: GPO. 25 January 2021.
- Executive Order 14096 (*Revitalizing Our Nation's Commitment to Environmental Justice for All.* Federal Register Vol. 88, p25251-25261. Washington, DC: GPO. 21 January 2023.
- Government Publishing Office (GPO), Executive Order 19998 (Floodplain Management). 42 FR 26951, 3 CFR, 1977 Comp., p. 117. Washington, DC: GPO May 24, 1977.

7.0 DISTRIBUTION LIST As part of the internal and public review and comment process on this document, the following libraries and agencies have received copies of the EA and its draft mitigated FNSI.

7.0.1 Libraries:

- Cumberland County Public Library, 300 Maiden Lane**,** Fayetteville, NC 28301.
- John L. Throckmorton Library, Building 1-3346, R. Miller Street, Fort Liberty, NC 28310.
- Harnett County Library, 455 McKinney Parkway, Lillington, NC 27546
- Hoke County Public Library, 334 N. Main Street, Raeford, NC 28376
- Moore County Library, 101 Saunders Street, Carthage, NC 28327

7.0.2 Agencies

- North Carolina State Clearinghouse Department of Administration, 116 West Jones Street, Raleigh, NC, 27603-8003

- XVIII Airborne Corps and Fort Liberty, NC 28310
  (a) Garrison Commander (AMIM-LIG-ZA)
  (b) Office of the Staff Judge Advocate (AMIM-LIG-JA)
  (c) Directorate of Public Works (AMIM-LIP)
  (d) Environmental Division (AMIM-LIP-E)

Enclosure 1: Project Location

Civil Site – Project Overview

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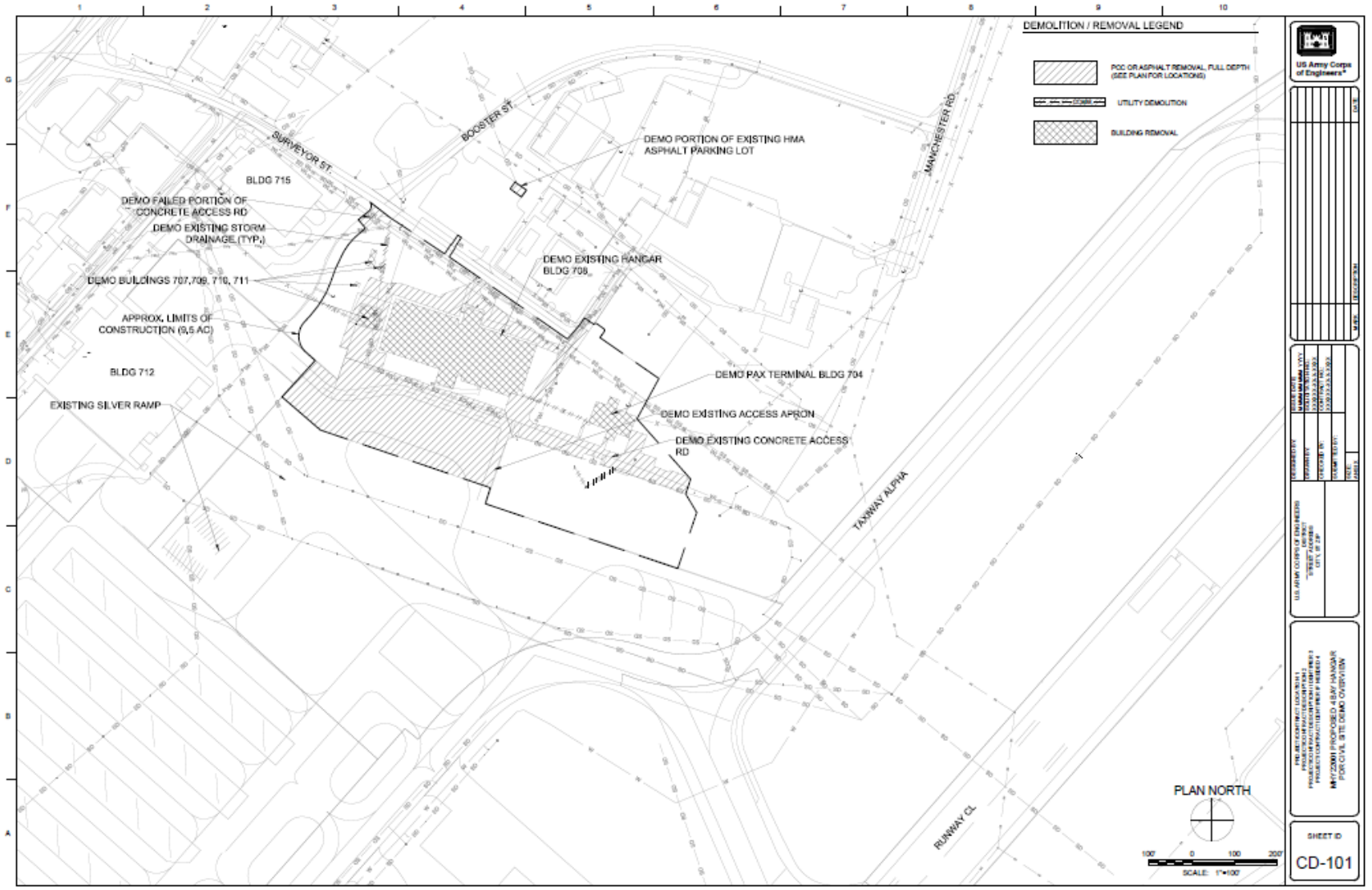
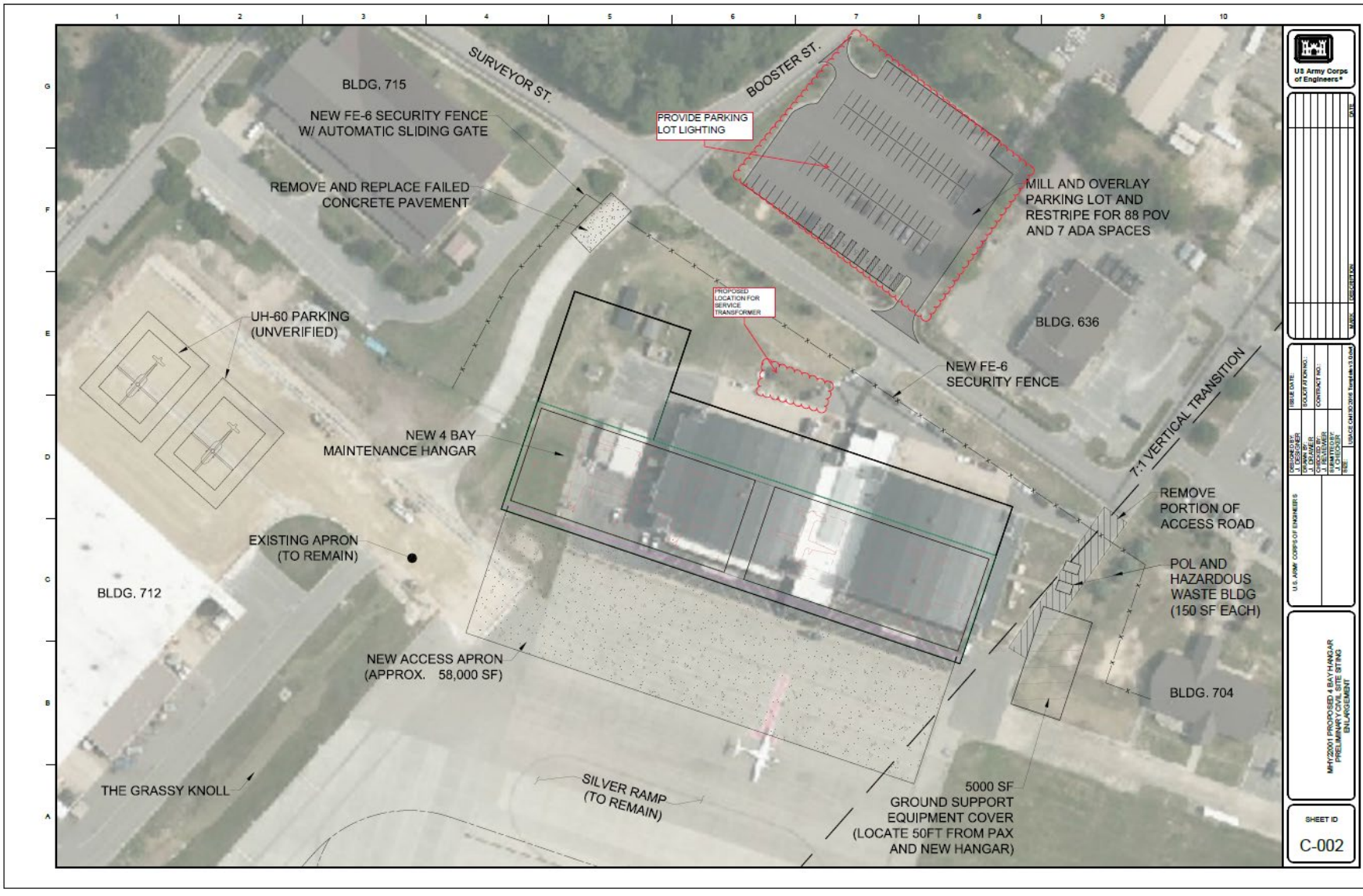
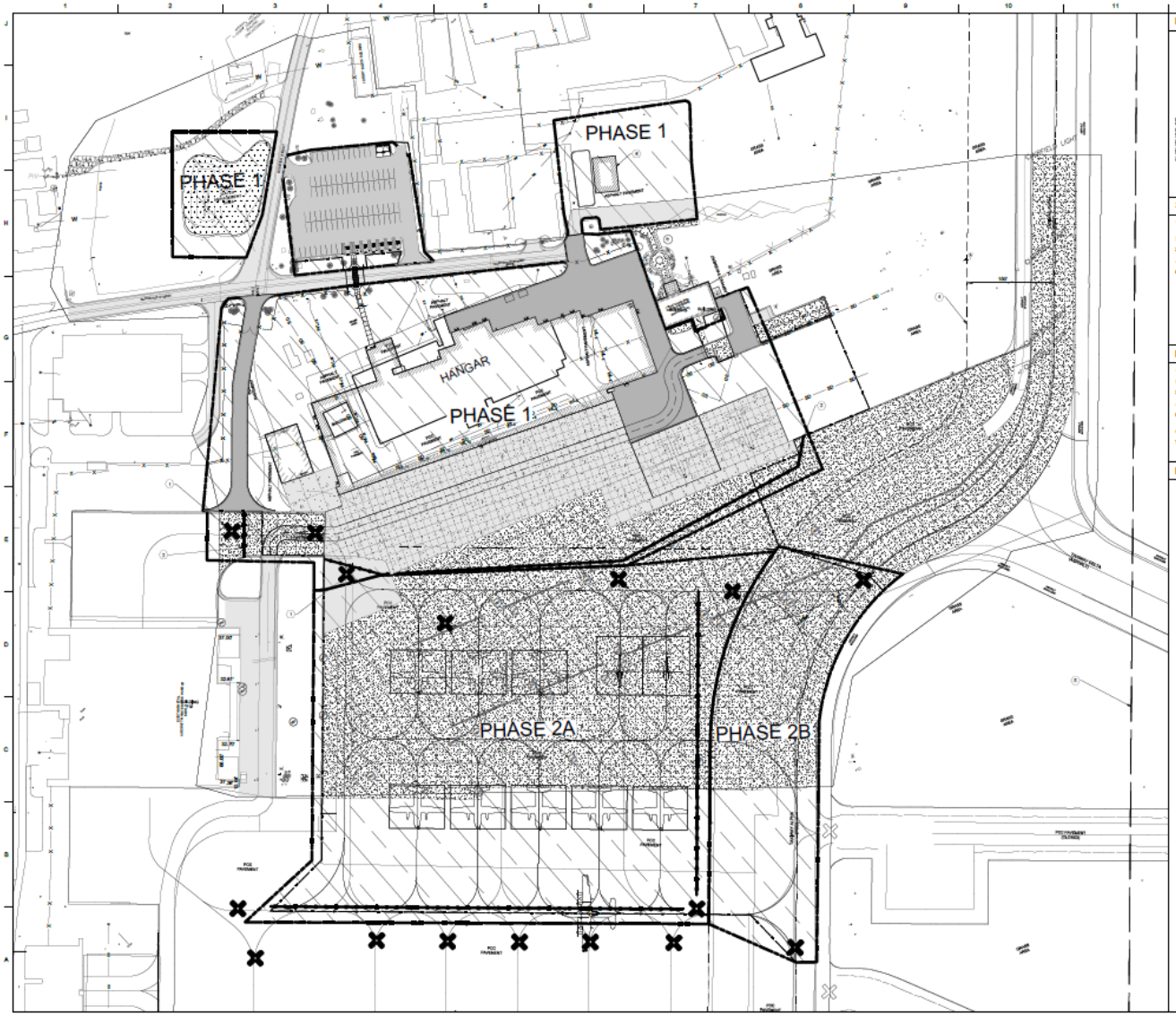

DEMOLITION / REMOVAL LEGEND
PCC OR ASPHALT REMOVAL, FULL DEPTH (SEE PLAN FOR LOCATIONS)
UTILITY DEMOLITION
BUILDING REMOVAL
SURVEYOR ST.
BOOSTER ST.
MANCHESTER RD.
BLDG 715
DEMO FAILED PORTION OF CONCRETE ACCESS RD
DEMO EXISTING STORM DRAINAGE (TYP.)
DEMO BUILDINGS 707,709, 710, 711
APPROX. LIMITS OF CONSTRUCTION (9.5 AC)
BLDG 712
EXISTING SILVER RAMP
DEMO PORTION OF EXISTING HMA ASPHALT PARKING LOT
DEMO EXISTING HANGAR BLDG 708
DEMO PAX TERMINAL BLDG 704
DEMO EXISTING ACCESS APRON
DEMO EXISTING CONCRETE ACCESS RD
TAXIWAY ALPHA
RUNWAY CL
PLAN NORTH
SCALE: 1"=100'
US Army Corps of Engineers®
MY23001 PROPOSED 4-BAY HANGAR
FOR CIVIL SITE DEMO OVERVIEW
SHEET ID
CD-101

%STATUS%


SURVEYOR ST.
BOOSTER ST.
BLDG, 715
NEW FE-6 SECURITY FENCE
W/ AUTOMATIC SLIDING GATE
PROVIDE PARKING
LOT LIGHTING
REMOVE AND REPLACE FAILED
CONCRETE PAVEMENT
MILL AND OVERLAY
PARKING LOT AND
RESTRIPE FOR 88 POV
AND 7 ADA SPACES
PROPOSED
LOCATION FOR
SERVICE
TRANSFORMER
UH-60 PARKING
(UNVERIFIED)
BLDG. 636
NEW FE-6
SECURITY FENCE
7:1 VERTICAL TRANSITION
NEW 4 BAY
MAINTENANCE HANGAR
REMOVE
PORTION OF
ACCESS ROAD
EXISTING APRON
(TO REMAIN)
POL AND
HAZARDOUS
WASTE BLDG
(150 SF EACH)
BLDG. 712
NEW ACCESS APRON
(APPROX. 58,000 SF)
BLDG. 704
THE GRASSY KNOLL
SILVER RAMP
(TO REMAIN)
5000 SF
GROUND SUPPORT
EQUIPMENT COVER
(LOCATE 50FT FROM PAX
AND NEW HANGAR)
US Army Corps of Engineers
U.S. ARMY CORPS OF ENGINEERS
MHY20001 PROPOSED 4 BAY HANGAR
PRELIMINARY CIVIL SITE SITING
ENLARGEMENT
SHEET ID
C-002



KEY MAP

SHEET NOTES

1. SEE C-001 FOR PROJECT LOCATION, GATE ACCESS, HAUL ROUTES, AND STAGING AREA.
2. SEE C-002 FOR ABBREVIATIONS.
3. SEE C-003FOR PROJECT LEGEND.
4. SEE C-004 FOR PROJECT NOTES.
5. UNDERGROUND UTILITIES NOT SHOWN FOR CLARITY. SEE V-01, C-05, AND C-11 SHEETS.

PHASING NOTES

1. INSTALL TEMPORARY TRAILBRAKING SPACE.
2. CLOSE ACCESS TO HANGAR 112 AS SHOWN.
3. INSTALL LOW PROFILE BARRIER.
4. DEMO EXISTING HANGAR AND SUPPORTING BUILDINGS.
5. CONSTRUCT NEW HANGAR, WASH RACK, AND APRON PAVEMENT.
6. MILL AND OVERLAY PARKING LOT.
7. CONSTRUCT POND.

KEY NOTES

1. TAXIWAY CLOSURE.
2. LOW PROFILE BARRIER.
3. APRON OFFSET TO FOA/OBLE OBJECTS.
4. TAXIWAY CLEARANCE TO FOA/OBLE OBJECTS.
5. RUNWAY LATERAL CLEARANCE LIMIT.
6. TEMPORARY TRAILBRAKING SPACE

PLAN NORTH

60' 0 60' 120'

SCALE: 1"=60'

US Army Corps of Engineers®

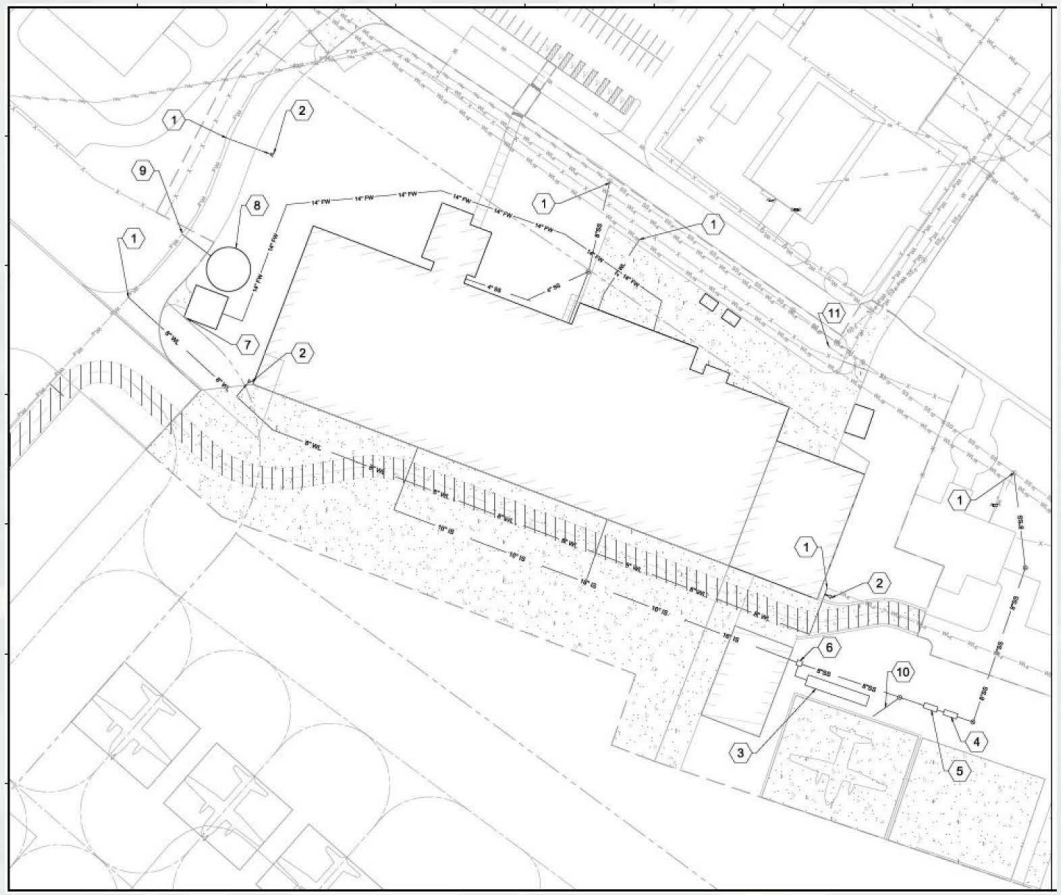
PARKING PLAN

SHEET ID

GC101

65% SUBMITTAL

Water/Wastewater



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Enclosure 2: Resource Area Issues, Concerns, Risks

Resource Area	Action Alternatives	No Action Alternative
Air Quality and Greenhouse Gas • Conformity • NAAQS • PSD • New Source Review • Minor Source Preconstruction Permitting • Dust	❖ Level of Analysis: Less than Significant ❖ Issues/concerns/risks: • None identified	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • None identified
Airspace • controlled airspace • SUAs • MOAs	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • None	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • None identified
Cultural Resources • historic buildings and structures • archaeological resources • SHPO consultation • Native American Tribes consultation • historic viewsheds	❖ Level of Analysis: Significant but Mitigatable ❖ Issues/concerns/risks: • Building 708 is NRHP-eligible. Demolition will be mitigated through measures as outlined in an MOA between Ft. Liberty and the NC SHPO.	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • None identified
Energy(Utilities)/Facilities • energy • heating • cooling, • communications	❖ Level of Analysis: Less than Significant ❖ Issues/concerns/risks: • Utilities will be repaired/replaced and connected to existing lines.	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • None identified
Hazardous and Toxic Materials and Waste • hazardous material • hazardous waste • USTs/ASTs • asbestos • radon • LBP • PCBs • UXOs • MECs • POLs	❖ Level of Analysis: Less than Significant ❖ Issues/concerns/risks: • Hazardous material and POL will be stored according to all state and federal requirements • ACM and LBP will be impacted by the proposed project, however, handled and disposed of in accordance with state and federal regulations.	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • The location is within the training area of an active military installation
Noise • noise zones • noise impacts to community • noise impacts to wildlife • risks of noise complaints	❖ Level of Analysis: Minor Issues/concerns/risks: • None identified •	❖ Level of Analysis: Negligible Issues/concerns/risks: • None identified
Soil Erosion/ Water Resources Management bedrock properties • seismology • economically viable minerals	❖ Level of Analysis: Less than Significant ❖ Issues/concerns/risks: • Soil erosion from proposed construction activities,	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • None identified

Resource Area	Action Alternatives	No Action Alternative
• soil series and properties • soil erosion potential		
Solid Waste • Construction and demolition landfill • Recyclable materials	❖ Level of Analysis: Less than Significant • Debris will be hauled off site	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • None identified
Socioeconomics • demographics • housing • economic development • quality of life • environmental justice in minority and low-income populations • protection of children from environmental health risks and safety risks	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • None identified; project occurs within the Fort Liberty training area	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • None identified
Threatened and Endangered Species and Other Biological Resources • vegetation • wildlife • threatened and endangered species • invasive species • wildland fires	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • RCW clusters present • Other threatened and endangered species potentially present or nearby	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • RCW clusters present • Other threatened and endangered species potentially present or nearby
Transportation and Traffic • traffic • roadways • rail transportation • air transportation • traffic volume • level of congestion	❖ Level of Analysis: Negligible Issues/concerns/risks: • Minimal increase in traffic during construction o End users already work at Fort Liberty and will use existing infrastructure.	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • None identified
Water Quality • groundwater	❖ Level of Analysis: Minor ❖ Issues/concerns/risks: •	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • None identified ❖
Wetlands and Floodplain Management • surface water • groundwater • floodplains • wetlands • 404 permits	❖ Level of Analysis: Negligible ❖ Issues/concerns/risks: • None identified .	❖ Level of Analysis: Negligible Issues/concerns/risks: • None identified

Enclosure 3: ACM Reports
Building 707

Asbestos Survey for Demolition

Building 707 Fort Liberty, North Carolina

Prepared by Bruce Billings of Ayuda Management Corporation
For the Directorate of Public Works,
Fort Liberty, North Carolina

XVIII AIRBORNE CORPS

Building 707 was inspected for asbestos by Bruce Billings,
inspector certification number: NC 12397 on July 31, 2023.

Introduction

Scope of the Investigation

This report documents the focused asbestos inspection and survey of Building 707 at Fort Liberty, North Carolina for project number PN-93099. The work description is detailed in the DD1391 Form and is attached in this report.

Background

Building 707 is a one-story brick structure with a sloped roof. Ceilings are concrete. The floor system is concrete throughout the building. Building 707 is approximately 200 square feet and was constructed in 1957. Building 707 is currently used as a generator storage building.

Description of study

Investigation

Building 707 was visually inspected for suspected asbestos containing materials (ACM) by a North Carolina accredited inspector. Bulk samples of all suspect ACM's were collected. This report details ACM as identified at the time of inspection only. Samples of materials to be disturbed during the course of work to be performed were taken and sent to a NVLAP certified laboratory for analysis. The approximate location where bulk samples were obtained are shown on the building floor plan included in this report. However, if suspect materials are discovered during renovation in concealed spaces, renovation activities should stop and the materials sampled by a North Carolina accredited asbestos inspector.

In compliance with the AHERA regulations, material is considered an Asbestos Containing Material (ACM) when it contains greater than one percent asbestos. Likewise, in this report, any material containing concentrations greater than one percent asbestos will be considered "positive". Occasionally, materials containing less than one percent asbestos, or not sampled, are assumed to be a "positive" asbestos containing material at the discretion of the inspectors. A narrative discussion of the AHERA ACM types (i.e., thermal systems insulation, miscellaneous and surfacing materials) found in the building is included in this report where relevant. Bulk sample information appears, estimated quantities of individual asbestos containing materials, material characterization of asbestos containing materials appears on the Asbestos Table.

Conclusions

Thermal System Insulation

TSI is insulation material applied to pipes, fittings, tanks, ducts, or on other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes. Asbestos was detected in the TSI materials sampled in Building 707 at the time of sampling.

Miscellaneous Materials

Miscellaneous Materials include building material on structural components, structural members, or fixtures, such as floor and ceiling tiles, and do not include surfacing or TSI. Asbestos was not detected in the miscellaneous materials sampled in Building 707 at the time of the sampling.

Surfacing

Surfacing Material is friable material that is sprayed on, troweled on, or otherwise applied to surfaces for decorative or other purposes. Surfacing Material was not observed in Building 707 at the time of sampling.

ASBESTOS-CONTAINING MATERIAL WAS NOT DETECTED.

Table
Asbestos Containing Material
Building 707 Fort Liberty, North Carolina

MATERIAL		CHARACTERISTICS			ASSESSMENT	
Sample Type	Homogenous Area /Location	Yes/No/Presumed % Asbestos Type	Quantity (If ACM)	Friable	Condition	Disturbance Potential
Misc	Inaccessible Underground Piping	Presumed	Unknown Quantity	Unknown	Unknown	Unknown

SF.-Square Foot, LN.-Linear Foot, CF.-Cubic Foot Amounts are estimated, Contractor is responsible for exact measurements.
Condition-Good, Fair, Poor.
ACBM Type-T=Thermal Insulation, Misc=Miscellaneous, S=Surfacing.
Friable: Y=Yes, N=Not Friable.
NPACM-No Presumed Asbestos Containing Material.
Disturbance Potential-Low Potential Damage, Potential Damage, Potential Significantly Damage.

Chain of Custody

DMS CHOC DEG: POPE-005

ASBESTOS CHAIN OF CUSTODY

CLIENT: AFCEE/POPE AFB	WESTON W.O.: 20077.043.026
BUILDING: 0707	DATE: 04/15/2004
Requested Turnaround: 7 Days	Send Results To: J. Frank Burgess

CHOC SEQ.	Sample Number	HA No.	Sys	Loc	Size	Color	Additional Description (Material Type, if Material = Mis)	F / NF
101	P-0707-DW-01	1		WL		GY		NF
102	P-0707-DW-02	1		WL		GY		NF

Name of Lab: **EMSL Lab**
Lab Address: **2500 Gateway Centre Blvd, Sui**
Morrisville, NC 27560

CHAIN OF CUSTODY RECORD ASBESTOS/LEAD

Lab Tel: (919) 456-3900
Lab Fax: (919) 456-3950

OrderID: 291907732

Client: Plexus Scientific Corporation **Client ID:** PLEX75	**Point of Contact:** Bruce E. Billings
Address: DPW Environment Compliance Branch	**Phone:** (910) 322-6338 **Fax:** (910) 398-4188
Bldg 3-1137 Reilly RD, Fort Bragg,NC 23810	**Email:** bruce.e.billings.ctr@mail.mil
Building Number: 707 **Project Number:** PN-93099	**Turn Around Time** 24 Hours

DESCRIPTION	SAMPLE NUMBER	ASBESTOS						LEAD PAINT	
		PLM Bulk	PLM Point Count	PLM Gravimetric	PCM Air	TEM Bulk	TEM Air	Lead Paint	Lead Wipe
ROOFING MATERIAL / Main Roof	707-RM-1-RM	X							
ROOFING MATERIAL / Main Roof	707-RM-2-RM	X							
ROOFING MATERIAL / Main Roof	707-RM-3-RM	X							

Page 1 Of 1

Client: Plexus Scientific Corporation Test: PLM #Samples: 3
Order: 291907732 Project: Bldg 707, PN-93099
Disposition: ***Discard after 9/24/2019***

REMARKS:

Samples will be disposed of 30 days after analysis, unless otherwise requested.

Relinquished By: Dave Clark	Date/Time 7/24/19 1700	Recieved By:	Date/Time 7/24/19 10:20
Relinquished By:	Date/Time	Recieved By:	Date/Time

7957 3314 8821

Page 1 of 1

OrderID: 291907956

Name of Lab: **EMSL Lab**
Lab Address: **2500 Gateway Centre Blvd, Sui**
Morrisville, NC 27560

CHAIN OF CUSTODY RECORD ASBESTOS/LEAD

Lab Tel: **(919) 456-3900**
Lab Fax: **(919) 456-3950**

Client: Plexus Scientific Corporation **Client ID:** PLEX75	**Point of Contact:** Bruce E. Billings
Address: DPW Environment Compliance Branch Bldg 3-1137 Reilly RD, Fort Bragg,NC 23810	**Phone:** (910) 322-6338 **Fax:** (910) 396-4188 **Email:** bruce.e.billings.ctr@mail.mil
Building Number: 707 **Project Number:** PN-93099	**Turn Around Time** 24 Hours

DESCRIPTION	SAMPLE NUMBER	ASBESTOS: PLM Bulk	ASBESTOS: PLM Point Count	ASBESTOS: PLM Gravimetric	ASBESTOS: PCm Air	ASBESTOS: TEM Bulk	ASBESTOS: TEM Air	LEAD PAINT: Lead Paint	LEAD PAINT: Lead Wipe
SHEETROCK (WALL OR CEILING) / Ceiling	707-SR-1-SR	X							
SHEETROCK (WALL OR CEILING) / Ceiling	707-SR-2-SR	X							
SHEETROCK (WALL OR CEILING) / Ceiling	707-SR-3-SR	X							

Client: Plexus Scientific Corporation Test: PLM #Samples: 3
Order: 291907956 Project: Bldg 707, PN-93099
Disposition: ***Discard after 9/30/2019***

REMARKS:

Samples will be disposed of 30 days after analysis, unless otherwise requested.

Relinquished By: Dave Clark	Date/Time 9/5/19 1700	Recieved By:	Date/Time 9/11/19
Relinquished By:	Date/Time	Recieved By:	Date/Time

FC 7957 33148832

Page 1 of 1

Page 1 Of 1

Analytical Report

POLARIZED LIGHT MICROSCOPY SAMPLE ANALYSIS SUMMARY

Roy F. Weston, Inc.
1635 Pumphrey Avenue
Auburn, AL. 36832-4303

Weston W.O. No. 20077-043-026-0108
Sample Number LF476 through LF477

AO LAB ID NO.	CLIENT/CLIENT ID	BLDG	HA	MATERIAL DESCRIPTION and REMARKS	FRIABILITY	RESULTS CH	AM	CR	OT	TL	ANALYST	ANALYZED
LF476	POPE AFB/P707-DW-01	0707	1	DRY WALL, GRAY, WALL	NON-FRIABLE	-	-	-	-	-	16803	05/04/04
Layer 1				NON-FIBROUS, CEMENTITIOUS, WHITE		-	-	-	-	-		05/04/04
Layer 2				FIBROUS, MATTED, TAN		-	-	-	-	-		05/04/04
Layer 3				PAINT, WHITE		-	-	-	-	-		05/04/04
LF477	POPE AFB/P707-DW-02	0707	1	DRY WALL, GRAY, WALL	NON-FRIABLE	-	-	-	-	-	16803	05/04/04
Layer 1				NON-FIBROUS, CEMENTITIOUS, WHITE		-	-	-	-	-		05/04/04
Layer 2				NON-FIBROUS, CEMENTITIOUS, GRAY		-	-	-	-	-		05/04/04
Layer 3				FIBROUS, MATTED, TAN		-	-	-	-	-		05/04/04
Layer 4				FIBROUS, MATTED, WHITE		-	-	-	-	-		05/04/04

RESULTS LEGEND

CH - Chrysotile AM - Amosite CR - Crocidolite OT - Other TL - Total - - None Detected **Bold** - Results of the Sample as a Whole

Results Approved for Transmittal by:

J. Stan Strickland, CIE
Laboratory Manager

May 10, 2004

Upon issue, this report may be reproduced only in full and relates only to the items tested. The detection limit for this analysis is <1%. All analyses are performed in accordance with U.S. EPA 600/M4-82-020, as ammended. Unless stated otherwise, asbestos content is determined by visual estimation methods and reported as a volume percentage. Individual layers are analyzed separately and results are reported for each layer as well as the sample as a whole. Weston's Optical Microscopy Laboratory is accredited by the National Institute of Standards and Technology's National Voluntary Laboratory Accreditation Program (NVLAP) for asbestos fiber analysis (Laboratory Code 101254). This laboratory report does not constitute product endorsement by NVLAP or any agency of the U.S. government. Page 1 of 1

EMSL Analytical, Inc.
2500 Gateway Centre Blvd., Suite 600 Morrisville, NC 27560
Tel/Fax: (919) 465-3900 / (919) 465-3950
http://www.EMSL.com / raleighlab@emsl.com

EMSL Order:	291907732
Customer ID:	PLEX75
Customer PO:	
Project ID:	

Attention:	Bruce Billings	**Phone:**	(910) 322-6338
	Plexus Scientific Corporation	**Fax:**	
	3-1137 Bunter Road	**Received Date:**	07/26/2019 10:30 AM
	Fort Bragg, NC 28310	**Analysis Date:**	07/26/2019
		Collected Date:	
Project:	Bldg 707, PN-93099		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
707-RM-1-RM 291907732-0001	Main Roof – Roofing Material	Black Fibrous Homogeneous	20% Glass	10% Quartz 20% Ca Carbonate 50% Non-fibrous (Other)	None Detected
707-RM-2-RM 291907732-0002	Main Roof – Roofing Material	Black Fibrous Homogeneous	20% Glass	10% Quartz 20% Ca Carbonate 50% Non-fibrous (Other)	None Detected
707-RM-3-RM 291907732-0003	Main Roof – Roofing Material	Black Fibrous Homogeneous	20% Glass	40% Ca Carbonate 40% Non-fibrous (Other)	None Detected

Analyst(s)
Joshua Moorman (2)
Kelly Gallsdorfer (1)

Billy Barnes, Asbestos Lab Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Morrisville, NC NVLAP Lab Code 200671-0, VA 3333 000278, WVA LT000296

Initial report from: 07/29/2019 10:17:15

EMSL Analytical, Inc.
2500 Gateway Centre Blvd., Suite 600 Morrisville, NC 27560
Tel/Fax: (919) 465-3900 / (919) 465-3950
http://www.EMSL.com / raleighlab@emsl.com

EMSL Order:	291907956
Customer ID:	PLEX75
Customer PO:	
Project ID:	

Attention:	Bruce Billings	**Phone:**	(910) 322-6338
	Plexus Scientific Corporation	**Fax:**	
	3-1137 Bunter Road	**Received Date:**	08/01/2019 10:00 AM
	Fort Bragg, NC 28310	**Analysis Date:**	08/01/2019 - 08/02/2019
		Collected Date:	
Project:	Bldg 707, PN-93099		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
707-SR-1-SR-Sheetrock 291907956-0001	Ceiling - Sheetrock, Wall/Ceiling	Brown/Gray Fibrous Homogeneous	20% Cellulose	40% Gypsum 40% Non-fibrous (Other)	None Detected
707-SR-1-SR-Joint Compound 291907956-0001A	Ceiling - Sheetrock, Wall/Ceiling	White Non-Fibrous Homogeneous	<1% Cellulose	40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
707-SR-2-SR-Sheetrock 291907956-0002	Ceiling - Sheetrock, Wall/Ceiling	Brown/Gray Fibrous Homogeneous	20% Cellulose	40% Gypsum 40% Non-fibrous (Other)	None Detected
707-SR-2-SR-Joint Compound 291907956-0002A	Ceiling - Sheetrock, Wall/Ceiling	White Non-Fibrous Homogeneous	<1% Cellulose	40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
707-SR-3-SR-Sheetrock 291907956-0003	Ceiling - Sheetrock, Wall/Ceiling	Gray Fibrous Homogeneous	20% Cellulose	20% Ca Carbonate 45% Gypsum 15% Non-fibrous (Other)	None Detected
707-SR-3-SR-Joint Compound 291907956-0003A	Ceiling - Sheetrock, Wall/Ceiling	White Fibrous Homogeneous	2% Cellulose	60% Ca Carbonate 38% Non-fibrous (Other)	None Detected

Analyst(s)
Joshua Moorman (4)
Olivia Bradley (2)

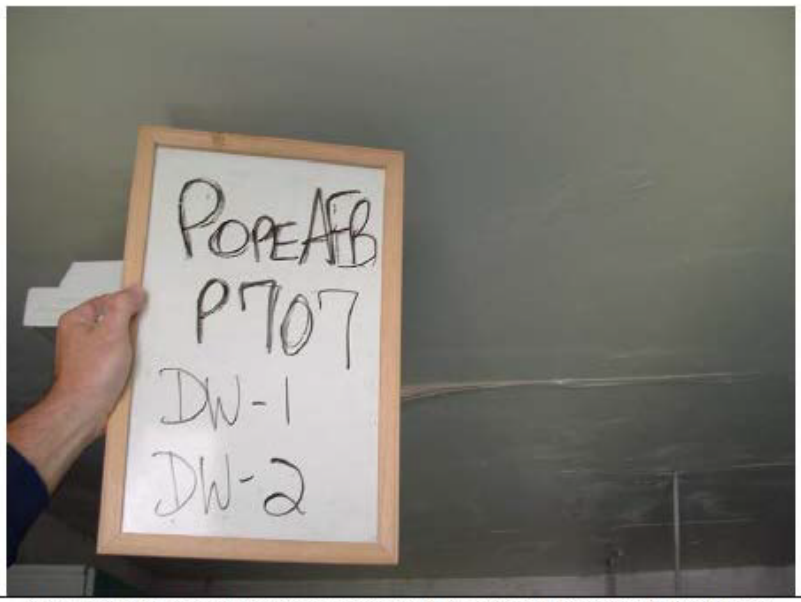
Billy Barnes, Asbestos Lab Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Morrisville, NC NVLAP Lab Code 200871-0, VA 3333 000278, WVA LT000296

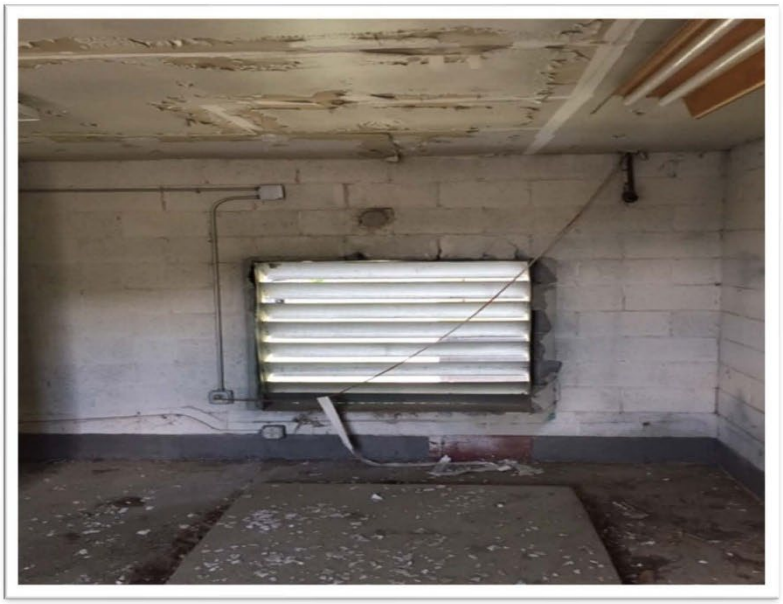
Initial report from: 08/02/2019 10:11:00

Photos



Samples of dry wall and joint compound that tested negative for asbestos.

Roofing Material was found not to contain Asbestos

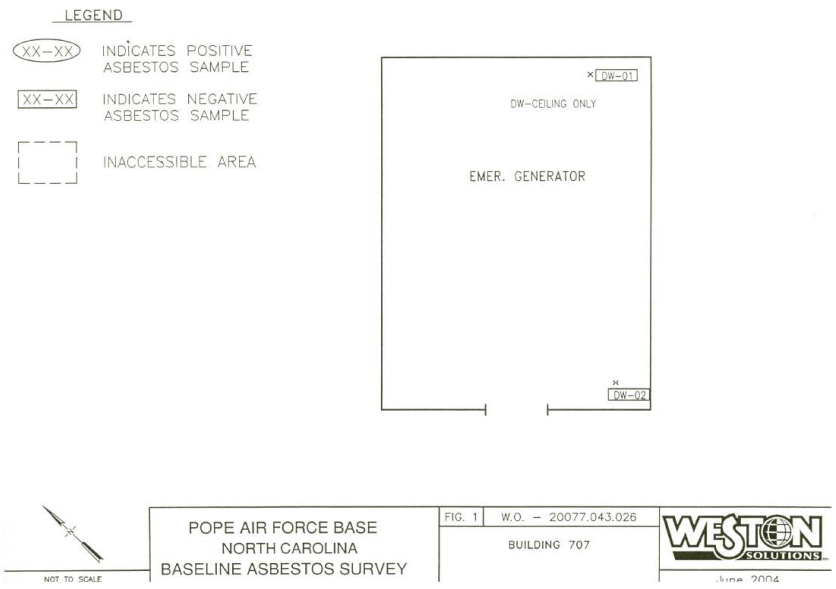


Material on Ceiling was found not to contain Asbestos

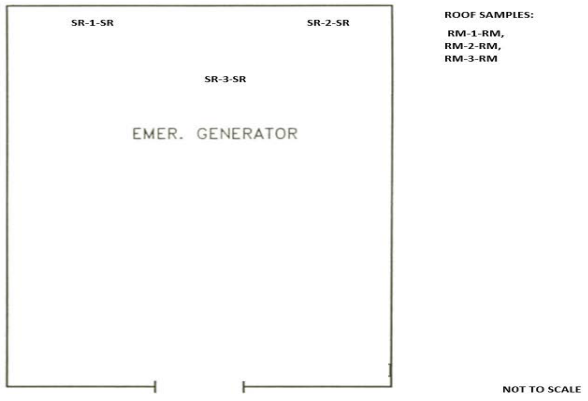
Asbestos Do and Don't

- DON'T remove materials that may contain asbestos.
- DON'T dust, sweep or vacuum debris that may contain asbestos.
- DON'T saw, sand, scrape or drill holes in asbestos materials or suspect asbestos material.
- DON'T use abrasive pads or brushes or power strippers on a dry floor.
- DON'T sand or try to level asbestos flooring or its backing. When asbestos flooring needs replacing, notify DPW-Customer Service.
- DO have a facility thoroughly inspected by a North Carolina accredited asbestos inspector for asbestos prior to any renovation or demolition activity.
- DO have removal and repair performed by people who are North Carolina accredited asbestos professionals.
- DO contact DPW-Customer Service at 910 396-0321 if suspect asbestos containing materials are damaged.
- DO keep activities to a minimum in any areas – such as crawl spaces or attics – that have damaged material that may contain asbestos.
- DO take every precaution to avoid damaging materials that may contain asbestos.

Sample Locations



BLDG. 707 SAMPLE LOCATIONS



ROOF SAMPLES:
RM-1-RM,
RM-2-RM,
RM-3-RM

NOT TO SCALE

Accreditations

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200671-0

EMSL Analytical, Inc.
Morrisville, NC

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2019-04-01 through 2020-03-31
Effective Dates

For the National Voluntary Laboratory Accreditation Program

NOT TO SCALE

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL Analytical, Inc.
2500 Gateway Centre, Ste. 600
Morrisville, NC 27560
Mr. Billy Barnes
Phone: 919-465-3900
Email: bbarnes@emsl.com
http://www.emsl.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 200671-0**

Bulk Asbestos Analysis

Code	Description
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	Description
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

Effective 2019-04-01 through 2020-03-31

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK T. BENTON • Deputy Secretary for Health
SUSAN KANSANGRA • Assistant Secretary for Public Health
Division of Public Health

November 22, 2022

Bruce E Billings
827 Beuer Dr
Fayetteville, NC 28314

Dear Mr. Billings:

Based upon the review of your accreditation application, the Health Hazards Control Unit (HHCU) has determined that you have fulfilled the requirements and are eligible for asbestos accreditation as a(n) INSPECTOR. Your assigned North Carolina accreditation number is 12397, which is reflected on your enclosed North Carolina Accreditation card. Please be sure to take this card with you to any asbestos work site where you are employed. The State requires that all persons conducting asbestos abatement or asbestos management activities be accredited and have their identification card on site.

Your North Carolina Inspector accreditation will expire on NOVEMBER 30, 2023. It is NOT the policy of the HHCU to issue renewal notices. If you wish to continue working as a(n) Inspector after this expiration date, you must successfully complete the required training and submit a completed application to this office prior to November 30, 2023. If you should continue to perform asbestos management activities as a(n) Inspector without a valid North Carolina accreditation, you will be in violation of State regulations and may be cited for noncompliance.

Bruce E Billings
827 Beuer Dr
Fayetteville, NC 28314

138224

North Carolina
Asbestos Accreditation

EXPIRATION			
11-30-2023			
DOB	SEX	HT	WT
05-07-1959	M	6'2"	220
CLASS		#	EXP
DESIGNER		40443	11-30-2023
INSPECTOR		12397	11-30-2023
MGMT PLANNER		20946	11-30-2023

Sincerely,

Ed Norman
Program Manager
Health Hazards Control Unit

Enclosure

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
MANDY COHEN, MD, MPH • Secretary
DANNY STALEY • Director, Division of Public Health

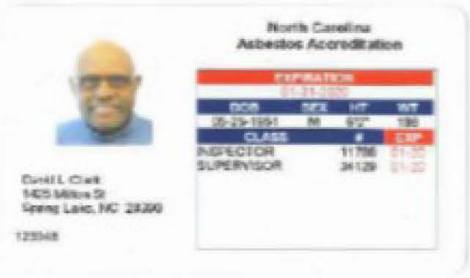
February 21, 2019

David L Clark
1425 Milton St
Spring Lake, NC 28390

Dear Mr. Clark:

Based upon the review of your accreditation application, the Health Hazards Control Unit (HHCU) has determined that you have fulfilled the requirements and are eligible for asbestos accreditation as a(n) INSPECTOR. Your assigned North Carolina accreditation number is 11788, which is reflected on your enclosed North Carolina Accreditation card. Please be sure to take this card with you to any asbestos work site where you are employed. The State requires that all persons conducting asbestos abatement or asbestos management activities be accredited and have their identification card on site.

Your North Carolina Inspector accreditation will expire on JANUARY 31, 2020. It is NOT the policy of the HHCU to issue renewal notices. If you wish to continue working as a(n) Inspector after this expiration date, you must successfully complete the required training and submit a completed application to this office prior to January 31, 2020. If you should continue to perform asbestos management activities as a(n) Inspector without a valid North Carolina accreditation, you will be in violation of State regulations and may be cited for noncompliance.



Sincerely,

Ed Norman
Program Manager
Health Hazards Control Unit

DD1391

~~2022~~ 93099E P REVISION DATE: 13 JAN 2020
Army MCA (AS OF 01/14/2021 AT 17:04:24) 06 MAR 2018
ACF=0.88 UM=E

Fort Bragg
North Carolina Aircraft Maintenance Hangar-FCH

211 10 93099 ~~57,000~~

PRIMARY FACILITY				46,431
Hangar - High Bay, >40' height	SF	91,000	446.90	(40,668)
Fixed Wing Parking Apron, Paved-Modify	SY	70,150	1.61	(113)
Hangar Access Apron, Paved	SY	7,505	126.02	(946)
HAZMAT Storage - Installation	SF	300	~~252.12~~	(76)
Cybersecurity Measures	LS	--	--	(750)
Total from Continuation page(s)				(3,878)
SUPPORTING FACILITIES				4,486
Electric Service	LS	--	--	(398)
Water, Sewer, Gas	LS	--	--	(845)
Paving, Walks, Curbs And Gutters	LS	--	--	(29)
Storm Drainage	LS	--	--	(353)
Site Imp(1,267) Demo(1,533)	LS	--	--	(2,800)
Information Systems	LS	--	--	(61)

ESTIMATED CONTRACT COST	50,917
CONTINGENCY (5.00%)	2,546
SUBTOTAL	53,463
SUPERVISION, INSPECTION & OVERHEAD (5.70%)	3,047
TOTAL REQUEST	56,510
TOTAL REQUEST (ROUNDED)	57,000
INSTALLED EQT-OTHER APPROPRIATIONS	(1,612)

Construct a four bay fixed and rotary wing aircraft operations and maintenance hangar that includes maintenance bays for scheduled and unscheduled maintenance, flight detachment administration and operations, maintenance support, tool and parts storage, and shop space. The facility will include 1.5-ton bridge cranes for each fixed wing bay, 0.75-ton bridge cranes for each rotor wing bay, oil water separator, and separate oil and hazardous material storage areas. The unscheduled maintenance bay includes a wash rack with catch basin and collective water recycling system. Built-in building systems include fire alarm/mass notification, fire suppression, energy management controls, advanced communications network, Intrusion Detection Systems (IDS), electronic access control, Energy Monitoring Control Systems (EMCS) connection, and a protected distribution system (PDS). The project includes construction of a new hangar access apron, hangar parking apron, and associated lighting for airfield pavements. Other supporting facilities include all related sitework and utilities (electrical, water, gas, sanitary sewer, and information system distribution), lighting, parking, access drives, roads, curb and gutter, sidewalks, landscaping, and other site improvements. Special construction includes sustainable construction features complying with Leadership in Energy and Environmental Design (LEED) "Silver". Access for individuals with disabilities will be provided. Comprehensive interior design is included. Air conditioning: 176Kw (50 tons). Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance.

Fort Bragg
North Carolina

Aircraft Maintenance Hangar-FCH 93099

9. COST ESTIMATES (CONTINUED)

ITEM	UM	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITY (CONTINUED)				
Overhead Protection/Canopy - General	SF	5,000	150.00	(750)
Aircraft Washing Apron, Paved	SY	1,333	~~132.03~~	(176)
Plant /Utilities Building	SF	1,200	497.67	(597)
Swing Space Airfield Ops Bldg.	LS	--	--	(700)
Aircraft Maintenance Check Pad	SY	1,333	123.59	(165)
Sustainability/Energy Measures	LS	--	--	(736)
Antiterrorism Measures	LS	--	--	(754)
			Total	3,878

11. REQ: NONE ADQT: NONE SUBSTD: NONE

PROJECT:
Construct one four bay, 64,000 SF fixed and rotary wing aircraft maintenance hangar. Project includes hangar access and parking aprons, associated airfield apron lighting, administration offices, latrines, supporting utilities (water, sewer, electric services), as well as secured and unsecured communications. Force protection and antiterrorism measures will be required in the design and construction. Hazardous materials, such as asbestos, lead, etc., will be remediated as found.

REQUIREMENT:
This project is required to provide permanent facilities and infrastructure to accommodate the operations and maintenance of aircraft serving the U.S. Army Special Operations Command (USASOC) at Fort Bragg, NC. To support this mission, the U.S. Army Special Operations Aviation Command (USASOAC) Flight Company (UFC) requires an adequate four bay aircraft hangar that is configured to accommodate four C-27J Spartan aircraft, two UH-60 aircraft, five CASA-212 aircraft, and one C-12 aircraft. The four bay aircraft maintenance hangar will directly improve mission readiness, providing expeditious service to the maintainer and operators. Humidity significantly degrade the hydraulic systems, seals, and lubricated moving metal parts on the Aircraft Ground Support Equipment (AGSE) when they are left exposed to the environment. Keeping them stored in a controlled climate is required by Army Regulations as well as with the U.S. Army and major command's (AMCOM's) Corrosion Control Program. This equipment includes hydraulic tripod jacks, standard Army tug system, ground power unit trailers, generators, forklifts, and a hydraulic scissor lift, as well as large spare items like engines and propellers.

CURRENT SITUATION:
The UFC has an extremely high operation tempo for supporting SOF training and operational requirements. This greatly accelerates the need for scheduled and unscheduled aircraft maintenance. Existing facility is outdated, inadequate, more than 60 years old, and has not been modernized. Internal systems (electrical,

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Aircraft Maintenance Hangar-FCH 93099

CURRENT SITUATION: (CONTINUED)
mechanical, plumbing, etc.) are reaching failure and considerable amount of O&M repair funding is being applied to the existing facility on an annual basis. Existing facilities lack many of the functional requirements and have inadequate administrative and shop space, flight operations, tool and parts storage, life support, and locker rooms and latrines required to conduct routine aircraft maintenance operations as required by the Army Standard for Aircraft Maintenance Hangars. Lack of adequate maintenance facilities accelerates degradation of the equipment, hinders maintenance operations, and interrupts the UFC mission when aircraft are inoperable due to maintenance problems. Class IX aviation parts storage is currently located in a separate facility that is inadequate to comply with Congressional Direction provided in the FY03-14 NDAAs, Public Law 107-314 Sec 1067 [10 U.S.C. 2228]: "Prevention and mitigation of corrosion of military equipment and infrastructure"), DODI 5000.67 - Prevention and Mitigation of Corrosion on DoD Military Equipment and Infrastructure, the OSD Corrosion Program Strategic Plan, the AMCOM Corrosion Control Program One (CCP1), AR 750-59 - Army Corrosion Prevention and Control Program, and TM1-1500-344-23-2.

IMPACT IF NOT PROVIDED:
Facility will continue to fail to a point that a considerable amount of modernization funding will need to be applied to the facility to maintain operational readiness. The UFC will continue to assume risk in the readiness of their aircraft from potential damage caused by corrosion due to improper storage of Class IX aviation repair part. Also, the UFC will continue to be in violation of Public Law 107-314, Sec 1067 [10 U.S.C. 2228]: "Prevention and mitigation of corrosion of military equipment and infrastructure" and the Army Aviation and Missile Command Corrosion Control Program One (CCP1).
The C-27J is produced overseas by an Italian company, and only operated in the United States by the US Coast Guard and USASOC. As a result, there is limited availability of spare parts in CONUS. Excessive price increases on these parts by the manufacturer makes keeping the aircraft optimally functioning critical at the unit level. The spare parts are intensively managed items that are difficult to procure and will result in increased downtime for this complex aircraft if it is not carefully maintained and protected from corrosion. Any long period of down-time for the aircraft may result in decremented support to USASOC.

ADDITIONAL:
Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. A parametric cost estimate based upon project engineering design was used to develop this budget estimate.

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PHILLIP D. SOUNIA
COL, AR
Commanding

ESTIMATED CONSTRUCTION START:	MAR 2022	INDEX: 3123
ESTIMATED MIDPOINT OF CONSTRUCTION:	SEP 2022	INDEX: 3154
ESTIMATED CONSTRUCTION COMPLETION:	MAR 2023	INDEX: 3186

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Aircraft Maintenance Hangar-FCH 93099

		Item	U/M	Qty	Unit Cost	Cost ($000)
PRIMARY FACILITY.						
GENERAL.						
1.0)	21110	Hangar - High Bay, >40' height	SF	91,000	446.90	(40,668)
1)	21110	Hangar - High Bay, >40' height	SF	80,052	460.00	36,824
2)	21113	Aircraft Parts Storage	SF	8,404	351.12	2,951
3)	21113	Aircraft Mission Equipment Storage	SF	2,544	351.12	893
2.0)	11310	Fixed Wing Parking Apron, Paved-Modify	SY	70,150	1.61	(113)
1)		Pavement Marking Removals	LF	3,000	0.40	1
2)		Pavement Markings	LF	4,000	3.96	16
3)		Tie Down Anchors	EA	44	1,928.08	85
4)		Grounding Points	EA	44	247.19	11
3.0)	11340	Hangar Access Apron, Paved	SY	7,505	126.02	(946)
1)		Hangar Access Apron, Paved	SY	7,505	86.62	650
2)		Access Apron, 6" Base	SY	7,505	9.59	72
3)		Drainage Layer	SY	7,505	7.91	59
4)		Sudrain Collection System	LF	700	6.43	5
5)		Access Apron, 12" Subbase	SY	7,505	18.00	135
6)		Access Apron, Shoulder Paved	SY	540	12.61	7
7)		Shoulder Base, 6"	SY	540	9.59	5
8)		Shoulder Subbase, 12"	SY	540	18.00	10
9)		Shoulder Subgrade, 12"	SY	540	0.38	1
10)		Apron Subgrade, 12"	SY	7,505	0.38	3
4.0)	44228	HAZMAT Storage - Installation	SF	300	252.12	(76)
1)		POL Storage Bldg.	SF	150	285.12	43
2)		HAZMAT Storage Bldg.	SF	150	219.12	33
5.0)	00000	Cybersecurity Measures	LS	--	--	(750)
1)		UMCS	LS	--	--	250
2)		LFS	LS	--	--	250
3)		IDS	LS	--	--	250
6.0)	14179	Overhead Protection/Canopy - General	SF	5,000	150.00	(750)
1)		GSE	SF	3,000	150.00	450
2)		ASIOE	SF	2,000	150.00	300
7.0)	11370	Aircraft Washing Apron, Paved	SY	1,333	132.03	(176)
1)		Wash Apron, 6" Base	SY	1,333	9.59	13
2)		Drainage Layer	SY	1,333	7.91	11
3)		Sub Drain System	LF	200	6.43	1
4)		Curb and Gutter	LF	330	34.61	11
5)		Subbase, 12"	SY	1,333	18.00	24
6)		Apron, Paved	SY	1,333	86.62	115
7)		Apron Subgrade, 12"	SY	1,333	0.38	1
8.0)	89120	Plant /Utilities Building	SF	1,200	497.67	(597)
1)		Fire Pump Bldg.	SF	1,200	316.40	380

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Aircraft Maintenance Hangar-FCH 93099

		Item	U/M	Qty	Unit Cost	Cost ($000)
2)		Fire Water Pump, 2,500 GPM	EA	2	108,764	218
9.0)	14110	Swing Space Airfield Ops Bldg.	LS	--	--	(700)
1)		Modular Bldg. Lease (Monthly)	EA	12	25,000	300
2)		Modular Bldg. Setup/Services/Demob.	LS	--	--	400
10.0)	11370	Aircraft Maintenance Check Pad	SY	1,333	123.59	(165)
1)		6" Base Course	SY	1,333	9.59	13
2)		Drainage Layer	SY	1,333	7.91	11
3)		Sub Drain System	LF	225	6.43	1
4)		Subbase, 12"	SY	1,333	18.00	24
5)		Check Pad, Paved	SY	1,333	86.62	115
6)		Check Pad Subgrade, 12"	SY	1,333	0.38	1
11.0)	00005	Sustainability/Energy Measures	LS	--	--	(736)
1)		Hangar, High Bay	SF	80,052	9.20	736
12.0)	88041	Antiterrorism Measures	LS	--	--	(754)
1)		Hangar, High Bay	SF	80,052	9.20	736
2)		Aircraft Mission Equip. Storage	SF	2,544	7.02	18

INFO SYS & ANTITERRORISM MEASURES.
The following Building Information Systems cost can be found only in Tab F: $547,003

SUPPORTING FACILITIES.

Electric Service			LS	--	--	(398)
1)	81242	Underground Electric Lines in Conduit, 6-W	LF	250	420.13	105
2)	81360	Transformers XFMR 1,500	EA	1	62,734	63
3)	93310	Remove Exist. Transformers	EA	2	988.76	2
4)	81230	Site Lighting, 40' Aluminum Pole, 1000 Wat	EA	6	5,928.52	36
5)		Site Communications	LF	1,000	191.92	192
6)		Connection Fee (Estimate)	EA	1	1,000.00	1
Water, Sewer, and Gas			LS	--	--	(845)
1)	84210	Water Distribution Lines, Cement Lined Duc	LF	100	151.39	15
2)	84210	Water Distribution Lines, Plastic Pipe, PV	LF	650	77.04	50
3)	84610	Water Storage Tank, Elevated Steel 165000	EA	1	650,000	650
4)	89240	Fire Hydrant, 6' Depth	EA	3	5,311.29	16
5)	89340	Utilidor, 20" Ductile Iron MH Cluster	EA	1	66,098	66
6)	84610	Foam Containment Tank, 35,000	EA	1	44,494	44
7)		Connection Fee (Estimate) Water	EA	1	1,000.00	1

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	Item	U/M	Qty	Unit Cost	Cost ($000)
8)	Connection Fee (Estimate) Sewer	EA	1	1,000.00	1
9)	Connection Fee (Estimate) Gas	EA	1	1,000.00	1
Paving, Walks, Curbs, and Gutters		LS	--	--	(29)
1) 85220	Sidewalks & Walkways 4" Thick Cast in Plac	SY	167	55.54	9
2) 85110	Base Course 1-1/2" Crushed Stone to 6" De	SY	167	8.69	1
3) 85110	Cast in Place Curb & Gutter 6" HI, 6" THK,	LF	350	27.69	10
4) 85110	Road Pavement, Asphalt Concrete Surface 1-	SY	167	8.69	1
5) 93310	Remove Pavement	SY	1,120	6.18	7
Storm Drainage		LS	--	--	(353)
1) 87110	Reinforced Concrete Pipe 36" Dia	LF	1,750	152.29	267
2)	LID Considerations	LS	--	--	87
Site Improvements		LS	--	--	(1,267)
1) 93220	Cleanup and Landscaping	AC	7	8,280.87	58
2) 93410	Excavation, Cut and Fill	CY	7,500	78.16	586
3) 87210	Industrial Chain Link Fencing & Walls 8'	LF	1,200	39.06	47
4) 85110	Surface Treatments, Pavement Markings, 4"	LF	9,000	5.29	48
5) 93310	Remove Pavement	CY	2,778	177.37	493
6) 93310	Remove Piping	LF	1,500	13.69	21
7) 93310	Remove Fencing	LF	500	2.87	1
8) 93310	Remove Manhole	EA	10	346.07	3
9)	Dumpster Enclosure	LS	--	--	10
Demolition		LS	--	--	(1,533)
1) 93310	Demolition, Concrete Structure	SF	55,756	27.50	1,533
Information Systems		LS	--	--	(61)
1) 80800	Information Systems	LS	--	--	61

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INSTALLATION: Fort Bragg
LOCATION: North Carolina

TAB B - PLANNING AND DESIGN DATA (ESTIMATE)

1. Status

A. Design Start Date, Estimated.....
B. Percent Complete as of 15 SEP 2020 (Design Year).....
C. Percent Complete as of 01 JAN 2021 (Budget Year).....
D. Percent Complete as of 01 OCT 2021 (Program Year).....
E. Concept Complete Date.....
F. Design Complete Date.....
G. Type of Design Contract:

2. Basis

A. Standard or Definitive Design (yes/no) NO

3. Cost (Total $000)

A. Production of Plans and Specs.....	0
B. All Other Design Cost.....	0
C. Total Design Cost (C) = (A)+(B) OR (D)+(E).....	0
D. Contract Architect-Engineer Design Cost, Estimated.....	0
E. In-House Design Cost Plus Architect Engineer Contract Supervision and Administration Cost Government Forces Design Cost, Estimated	0

4. Construction Contract Award.....

5. Construction Start Date (Planned)..... MAR 2022

6. Construction Completion Date..... MAR 2023

7. LEED Rating (at Design).....

8. Design Charrette

A. Date of Design Charrette.....

Energy/Life Cycle Statement

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TAB E - FURNISHINGS AND EQUIPMENT

Information Systems Equipment

Item	Description	Total Cost ($000)	Proc Appr FY	Proc Appr	Est Delivery Date	Proc Status	Est Instl Cost ($000)	Instl FY	Instl Appr
1	Info Sys - ISC	560	2023	OPA					
2	Info Sys - PROP	1,052	2023	OPA					

Totals by Appropriation Type ($000)

Total OMA/OMN/3400/OM DHP:	0
Installed Equipment - Other Appropriations:	1,612
Total Furnishings and Equipment Amount:	1,612

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TAB F - INFORMATION SYSTEMS COST ESTIMATE (ISCE):

PROGRAM TYPE - MCA PRIMARY PROPONENT FUND - OPA
USACE DISTRICT - Mobile District Region/MACOM - HQ USA Special Opns Cmd
CONF Primary Facility costs transferred to Tab A/DD1391 Form? - No

Section I - Primary Facility, Inside the 5-Foot Line - Installed Equipment (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	EMT 1'' W/HDW (SGL RJ45 & TV)	LF	2,000	5.35	10,700	C
2	EMT 1'' W/HDW (Dual Outlets)	LF	9,986	5.35	53,425	C
3	EMT 4'' W/HDW (Backbone Cable)	LF	350	24.58	8,603	C
4	Backboard: 4 X 8 X 3/4''	EA	12	157.82	1,894	C
5	Cable Tray (18'' wide)	LF	1,345	26.16	35,185	C
				Total	109,807	

Section II - Primary Facility, Inside the 5-Foot Line - Equipment in Place (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	Set, 2500 Type	EA	11	85.00	935	I
2	Set, Multiline	EA	5	552.94	2,765	I
3	Set, Weather-Proof	EA	1	1,011	1,011	I
4	PO LC Patch PNL 12 SM W/CPLRS	EA	8	339.22	2,714	C
5	PO LC Patch PNL 24 SM W/CPLRS	EA	2	547.26	1,095	C
6	MDF CONN: 100 PR W/60 FT Stub	EA	6	1,592	9,550	C
7	MDF: Standard DBL-Sided 8 VERT	EA	1	464.31	464	C
8	MDF Wire Jumper: Wrapped	EA	184	3.47	638	C
9	Outlet: SGL RJ45 W/Cable	EA	6	169.86	1,019	C
10	Outlet: Dual RJ45 W/Cable	EA	222	239.56	53,182	C
11	Outlet: SGL CATV, F-Type W/Cable	EA	15	157.47	2,362	C
12	Patch Panel, RJ45 CAT 6, 48 PORT	EA	20	692.89	13,858	C
13	Patch Panel, RJ45 CAT 6A, 48 PORT	EA	8	898.00	7,184	C
14	Patch Cord RJ45 CAT6, 3 FT	EA	10	5.00	50	C
15	Patch Cord RJ45 CAT6, 7 FT	EA	75	6.82	512	C
16	Patch Cord RJ45 CAT6, 12 FT	EA	75	8.82	662	C
17	Patch Cord RJ45 CAT6, 14 FT	EA	35	10.82	379	C
18	Patch Cord RJ45 CAT 6A, 7 FT	EA	50	7.82	391	C

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TAB F - INFORMATION SYSTEMS COST ESTIMATE (ISCE):

Section II - Primary Facility, Inside the 5-Foot Line - Equipment in Place (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
22	Block: 110 Type, 100 PR	EA	6	162.97	978	C
23	Riser: 100 PR Inside Plant Cable	LF	450	3.16	1,422	C
24	FO-SM DUPL Cord: LC, 5 FT	EA	102	186.93	19,067	C
25	Protected Terminal: 100 PR	EA	2	1,517	3,035	C
26	SWT-M: 48 User (NIPR)	EA	10	35,550	355,500	I
27	SIPR BLDG Node SPT	EA	2	8,327	16,654	C
28	SIPR BLDG Node Equipment	EA	2	36,290	72,580	I
29	SIPR Drops (CAT 6 STP) Structure	EA	25	5,149	128,731	C
30	Small Conf Room Enhanced Const Costs	EA	2	17,114	34,229	C
31	Medium Conf Room Enhanced Const Costs	EA	2	18,696	37,393	C
32	Phone: Single Line (VoIP)	EA	75	600.00	45,000	I
33	TELECOMM ENCLOSURE 7FT VERT	EA	4	6,425	25,701	C
34	TACLANE (SIPR)	EA	1	14,136	14,136	I
35	FO BREAK OUT KIT (1 STRAND)	EA	24	51.65	1,240	I
36	Wireless LAN Controller	EA	1	32,299	32,299	I
37	Wireless LAN AP Controller License	EA	50	683.96	34,198	I
38	Wireless Access Point	EA	50	1,306	65,281	C
				Total	996,860	

Primary Facility Notes:

Provide I3A/UFC 3-580-01 compliant PDS/BCS for 1 building Provide NIPR voice/data to all appropriate outlets serving approximately 75 authorized users. Provide NIPR AV/ VTC. Provide SIPR data/VTC IAW the SIPRNET Technical Implementation Criteria/AR 380-5. (Other comments as required, quantifying unusual voice/data requirements exceeding the I3A standards.) USASOC require 3 drop for NIPR per WAO and 2 drops for SIPR per WAO. This facility will have 2 different networks. The RNECFB will only provide NIPR VOIP Service and a L2BS connection for USASOC networks.

Section III - Supporting Facilities, Outside the 5-Foot Line - Installed Equipment (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	UG Duct: 4-Way	LF	820	11.50	9,430	C
2	UG Duct: 4-WAY CONC-ENC	LF	150	20.43	3,065	C
3	Innerduct 3-3''	LF	1,000	4.51	4,510	C
4	GIP 4'' 2-Way Boring/Pushing	LF	45	65.26	2,937	C
5	Trench: Backhoe 24''X 36''	LF	920	7.97	7,332	C
6	Trench: Handdig 24''X 36''	LF	50	22.31	1,116	C

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TAB F - INFORMATION SYSTEMS COST ESTIMATE (ISCE):

Section III - Supporting Facilities, Outside the 5-Foot Line - Installed Equipment (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
7	Cut & Resurface Asphalt 4''	SF	113	8.66	979	C
8	Cut & Resurface Concrete 4''	SF	56	10.61	594	C
9	CONC Core Drill 4'' Diameter	EA	6	159.23	955	C
				Total	30,918	

Section IV - Supporting Facilities, Outside the 5-Foot Line - Equipment in Place (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	UG: 600 PR, 24 AWG (B1)	LF	500	8.35	4,175	C
2	UNDGRD: 600 PR, 24 AWG (OSP)	LF	1,500	8.35	12,525	C
3	UG COPPER STAINLESS STEELSplice Cases	EA	1	564.79	565	C
4	UG FIBER STAINLESS STEEL Splice Cases	EA	1	724.00	724	C
5	UG Splice Pairs	EA	1,200	1.18	1,416	C
6	FO Cable DC DIELEC SM 24 Strand (OSP)	LF	2,000	4.46	8,920	C
7	FO Cable DC DIELEC SM 12 Strand	LF	450	2.88	1,296	C
				Total	29,621	

Supporting Facilities Notes:

Provide I3A compliant outside plant (OSP) infrastructure for 1 building. Provide 12 SMF and 25 pair 24 AWG copper. Assumed OSP to be approximately 500 feet from the "IS/IT voice/data cable sources" to the construction site. Assumed each building will be set back from the "curb" an average of approximately 85 feet.

Section V - Mission Unique Equipment

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	Small Conference Room Enhanced	EA	2	211,913	423,826	P
2	Medium Conference Room Enhanced	EA	2	314,024	628,049	P
				Total	1,051,875	

Information Systems Cost Summary:

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INSTALLATION: Fort Bragg
LOCATION: North Carolina

TAB F - INFORMATION SYSTEMS COST ESTIMATE (ISCE):

	CONF	ISC	PROP	Total
Primary Facility	547,003	559,664	0	1,106,667
Supporting Facility	60,539	0	0	60,539
Mission Unique Equipment	0	0	1,051,875	1,051,875
Total	607,542	559,664	1,051,875	2,219,081

Remarks:

The costs are just an estimate and are subject to change.

/S/ Sherman K. Huff Sr
Project Manager
RNEC Fort Bragg, NC
12/17/2019

Information Systems Certification:

"This project has been reviewed by USAISEC to determine the adequacy of its Information Systems Cost Estimate." This project is certified "adequate as submitted".

Certified by: /S/ David Kelso
Site Project Lead
USAISEC-FDED
12/17/2019

Cost Model Project Information:

Square Footage

Project Fiscal Year: 2022 Estimate Name: 93099

Square Footage	Building Name	Bldg 1	(B1)				
	Admin	Intermediate	Barracks	Warehouse / Storage	Clinic / Medical	Classroom	Others	Total
(SF/Outlet)	(80 SF)	(200 SF)	(150 SF)	(5000 SF)	(80 SF)	(80 SF)	(500 SF)	
Basement	0	0	0	0	0	0	0	0
1st Floor	17,000	0	0	47,000	0	0	0	64,000
2nd Floor	0	0	0	0	0	0	0	0
3rd Floor	0	0	0	0	0	0	0	0
4th Floor	0	0	0	0	0	0	0	0
5th Floor	0	0	0	0	0	0	0	0
6th Floor	0	0	0	0	0	0	0	0
7th Floor	0	0	0	0	0	0	0	0
8th Floor	0	0	0	0	0	0	0	0
9th Floor	0	0	0	0	0	0	0	0
10th Floor	0	0	0	0	0	0	0	0
Total	17,000	0	0	47,000	0	0	0	64,000
Outlet Type	Dual	Dual	Dual	Dual	Medical	Dual	Dual	
# Outlets	212	0	0	9	0	0	0	

Initial New Services Required

Project Fiscal Year: 2022 **Estimate Name:** 93099

New Services	Building Name	Bldg 1 (B1)
	New	Notes
Single Line Phones (Analog/Digital)	5	One per user.
Multi-line Phones (Analog/Digital)	5	One per secretary (not to exceed 10% of population).
Single Line Phones (VoIP)	75	One per user if VoIP is enabled..
Multi-line Phones (VoIP)	0	One per secretary (not to exceed 10% of population) if VoIP is enabled.
Softphones	0	One per user. No other phone or headset is to be provided.
Headsets	0	One per user. No other phone or headset is to be provided.
Wall Phone Outlet w/ Telephone Set	6	One per equipment room; plus safety and convenience locations.
Weatherproof Phones	1	One per building (exterior unattended door).
Explosive Environment Phones	0	HAZMAT facilities: i.e., paint/battery/chemical/etc.
LAN Ports	75	One per authorized NIPRNET user.
Fiber Optic Outlets (2 RJ-45 w/Dual SC)	0	As required; replaces non-fiber outlets (special needs only).
SIPRNET	25	One per authorized SIPRNET user.
TV Outlets - All Services	15	1.5 per barracks bed area (Round up to next whole number).

Mission Unique Services	Building Name	Bldg 1 (B1)
Team/Huddle Room (6 Person):	0	Stand alone with no control room connectivity
Small Conference Room (12 Person):	0	Stand alone with no control room connectivity
Small Conference Room Enhanced (12 Person):	2	With control room connectivity
Medium Conference Room (24 Person):	0	Stand alone with no control room connectivity
Medium Conference Room Enhanced (24 Person):	2	With control room connectivity
Large Conference Room (35 Person):	0	Stand alone with no control room connectivity
Large Conference Room Enhanced (35 Person):	0	With control room connectivity
Classroom (20 Person):	0	Stand alone with no control room connectivity
Classroom Enhanced (20 Person):	0	With control room connectivity
Training Room (18 Person):	0	Stand alone with no control room connectivity
Training Room Enhanced (18 Person):	0	With control room connectivity
Executive Conference Room (35 Person):	0	Stand alone with no control room connectivity
Executive Conference Room Enhanced (35 Person):	0	With control room connectivity
Command Briefing Room (Secret with VTC 150 person):	0	Stand alone with no control room connectivity
Command Briefing Room Enhanced (150 Person):	0	With control room connectivity
Audio Visual Control Room (1for TS/SCI and 1 for all other classifications):	0	

Cable, Switching and Building Requirements

Project Fiscal Year: 2022 Estimate Name: 93099

Cable, Switching, and Building	Building Name	Bldg 1 (B1)
Item	Value	Notes
Initial # of Building Occupants	75	
Number of Ducts into Building	Maximum Occupant Capacity - 100 to 200	
Type of Building	Warehouse / Storage	Use with Intermediate type facility.
Building Entry Duct / System Length Underground (Distance in Linear Feet)	500	Generates a maintenance hole and duct system from the new building to the site's "local" IS node.

Outside Cable Plant

Project Fiscal Year: 2022 Estimate Name: 93099

Telephone Switching Requirements:

Existing DCO

Outside Cable Plant	Complex Serving DCO/RSU			
	Existing/Available	Proposed	Total	Notes
Aerial (Figure 8)	0	0	0	Rarely used; self-supporting - cable and messenger in one.
Buried (Trenched)	0	0	0	Rarely used; back-hoe and hand-dig trenching used.
Underground	1,000	500	1,500	I3A Standard Outside Plant Construction; maintenance hole and duct system.
Total	1,000	500	1,500	Should account for total OSP requirement.

* Distance in Linear Feet

Building 708

Asbestos Survey for Demolition

Building 708 Fort Liberty, North Carolina

Prepared by Bruce Billings of Ayuda Management Corporation
For the Directorate of Public Works,
Fort Liberty, North Carolina

XVIII AIRBORNE CORPS

Building 708 was inspected for asbestos by Bruce Billings,
inspector certification number: NC 12397 on February 7, 2023.

Introduction

Scope of the Investigation

This report documents the asbestos inspections and surveys of Building 708 at Fort Liberty, North Carolina. Building 708 has undergone several renovations and the asbestos inspection was conducted for project number PN93099. The work description is detailed in the DD1391 Form and is attached in this report.

Background

Building 708 is a two-story brick and metal structure with a sloped(rounded) roofing system. Ceilings are suspended with ceiling tiles attached in hallways and rooms. Bathroom ceilings are sheetrock. The floor system is concrete throughout the building and is covered with 12" x 12" inch vinyl floor tiles, 9 x 9-inch floor tiles, carpet with ceramic tiles in bathrooms. Building 708 is approximately 64,000 square feet and was constructed in 1934. Building 708 is currently used as an aircraft hangar.

Description of study

Investigation

Building 708 was visually inspected for suspected asbestos containing materials (ACM) by a North Carolina accredited inspector. Bulk samples of all suspect ACM's were collected. This report details ACM as identified at the time of inspection only. Samples of materials to be disturbed during the course of work to be performed were taken and sent to a NVLAP certified laboratory for analysis. The approximate location where bulk samples were obtained are shown on the building floor plan included in this report. However, if suspect materials are discovered during renovation in concealed spaces, renovation activities should stop and the materials sampled by a North Carolina accredited asbestos inspector.

In compliance with the AHERA regulations, material is considered an Asbestos Containing Material (ACM) when it contains greater than one percent asbestos. Likewise, in this report, any material containing concentrations greater than one percent asbestos will be considered "positive". Occasionally, materials containing less than one percent asbestos, or not sampled, are assumed to be a "positive" asbestos containing material at the discretion of the inspectors. A narrative discussion of the AHERA ACM types (i.e., thermal systems insulation, miscellaneous and surfacing materials) found in the building is included in this report where relevant.

Conclusions

Thermal System Insulation

TSI is insulation material applied to pipes, fittings, tanks, ducts, or on other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes. Asbestos was detected in the TSI materials sampled in Building 708 at the time of sampling.

Miscellaneous Materials

Miscellaneous Materials include building material on structural components, structural members, or fixtures, such as floor and ceiling tiles, and do not include surfacing or TSI. Asbestos was detected in the miscellaneous materials sampled in Building 708 at the time of the sampling.

Surfacing

Surfacing Material is friable material that is sprayed on, troweled on, or otherwise applied to surfaces for decorative or other purposes. Surfacing Material was not observed in Building 708 at the time of sampling.

ASBESTOS-CONTAINING MATERIAL WAS DETECTED.

HISTORY AND SURVEY FINDINGS

The previous inspection for Building 708 was performed by Weston Solutions (Weston) of Auburn, Alabama on April 15th, 2004. According to the Weston report dated June 2004, the building was constructed in 1934 and there have been at least 4 renovations since 1964. On April 22nd, 2004, the following samples were analyzed and laboratory results were positive for containing asbestos:

- 4" water pipe run and fitting insulation;
- Green, 9" x 9" Floor Tile;
- Tan, 9" x 9" Floor Tile;
- Tan, 12"x 12" Floor Tile;
- White, 12"x 12" Floor Tile and Mastic

Other samples collected by Weston were analyzed and laboratory results were negative for containing asbestos.

The asbestos surveillance/re-inspection was performed at Building 708 on August 31, 2017 by Mr. Kevin Arnold, a North Carolina licensed asbestos inspector, license number 12589. A copy of Mr. Arnold's license is included as **Attachment A**.

Previously reported asbestos containing materials were re-inspected and the following results were identified:

- 4" water pipe run and fitting insulation appeared to be in good condition.
- Tan and green 9" x 9" floor tile and tan 12" x 12" floor tile within former construction areas 1 and 2 were not found and are assumed to have been removed. The construction areas have been converted into offices and the flooring in the area is carpet.
- Green 9" x 9" floor tile and mastic within the North stairwell, Repair/Reclamation office, South Stairwell and TA Control Room of hangar 5 has been replaced with 12" x 12" floor tile and mastic that does not contain asbestos. And,
- Beige 12" x 12" floor tile and mastic in the Office, TA Lounge, Manager Office, Kitchen and Restroom is predominantly covered by carpet.

Twenty-three additional homogeneous areas were sampled and asbestos was detected within the beige 12" x 12" floor tile and mastic previously mentioned and identified within photograph 7 of **Attachment C**. The roof was inspected and homogeneous areas were identified and sampled. None of the samples collected on the roof contained asbestos. The attached **Table 1** shows homogeneous areas, sample IDs and the analytical result of the collected samples.

The collected samples were submitted to EMSL of Morrisville, NC, and analyzed by Polarized Light Microscopy via EPA method 600/R-93/116. The laboratory report is included as **Attachment B**.

Photographs of AECOM collected samples are included as **Attachment C**. The building layout including locations of previously and recently collected samples is shown on **Figure 1** which is included as **Attachment D**.

Attachment B

EMSL Analytical, Inc.
2600 Gateway Centre Blvd., Suite 600 Morrisville, NC 27560
Tel/Fax: (919) 465-3900 / (919) 465-3950
http://www.EMSL.com / raleighlab@emsl.com

EMSL Order:	291707394
Customer ID:	URSC77B
Customer PO:	60445396.5
Project ID:	

Attention:	Kevin Arnold	**Phone:**	(919) 461-1100
	AECOM	**Fax:**	(919) 461-1415
	1600 Perimeter Park	**Received Date:**	09/05/2017 1:52 PM
	Suite 400	**Analysis Date:**	09/06/2017 - 09/07/2017
	Morrisville, NC 27560	**Collected Date:**	
Project:	Fort Bragg - Building 708/60445396		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
708-HA1-083017-A 291707394-0001	Blue Paint, Flakey	Blue Non-Fibrous Homogeneous	HA: 400/HA1	100% Non-fibrous (Other)	None Detected
708-HA1-083017-B 291707394-0002	Blue Paint, Flakey	Blue Non-Fibrous Homogeneous	HA: 400/HA1	100% Non-fibrous (Other)	None Detected
708-HA1-083017-C 291707394-0003	Blue Paint, Flakey	Silver/Blue Non-Fibrous Homogeneous	HA: 400/HA1	100% Non-fibrous (Other)	None Detected
708-HA2-083017-A 291707394-0004	Window Glazing, Black	Black Fibrous Homogeneous	2% Glass 5% Wollastonite	93% Non-fibrous (Other)	None Detected
708-HA2-083017-B 291707394-0005	Window Glazing, Black	Black Fibrous Homogeneous	2% Glass 2% Wollastonite	96% Non-fibrous (Other)	None Detected
708-HA2-083017-C 291707394-0006	Window Glazing, Black	Black Fibrous Homogeneous	<1% Glass 2% Wollastonite	98% Non-fibrous (Other)	None Detected
708-HA3-083117-A-Paint 1 291707394-0007	Paint, Beige, Interior Walls	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA3-083117-A-Paint 2 291707394-0007A	Paint, Beige, Interior Walls	Black/Silver Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA3-083117-B 291707394-0008	Paint, Beige, Interior Walls	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA3-083117-C-Paint 1 291707394-0009	Paint, Beige, Interior Walls	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA3-083117-C-Paint 2 291707394-0009A	Paint, Beige, Interior Walls	Black/Silver Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
708-HA4-083117-A 291707394-0010	Peach Colored, Exterior Paint	Black/Silver/Orange Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA4-083117-B 291707394-0011	Peach Colored, Exterior Paint	Black/Silver/Orange Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA4-083117-C 291707394-0012	Peach Colored, Exterior Paint	Black/Silver/Peach Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Report amended: 10/11/2017 08:32:32 Replaces amended report from: 09/12/2017 14:33:19 Reason Code: Client-Change to Location

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EMSL Order: 291707394
Customer ID: URSC77B
Customer PO: 60445396.5
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
708-HA5-083117-A *291707394-0013*	12"x12" Beige Floor Tile w/ Yellow Markings	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA5-083117-B *291707394-0014*	12"x12" Beige Floor Tile w/ Yellow Markings	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA5-083117-C *291707394-0015*	12"x12" Beige Floor Tile w/ Yellow Markings	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA6-083117-A *291707394-0016*	Floor Tile Mastic for HA5	Yellow Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
708-HA6-083117-B *291707394-0017*	Floor Tile Mastic for HA5	Yellow Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
708-HA6-083117-C *291707394-0018*	Floor Tile Mastic for HA5	Yellow Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
708-HA7-083117-A *291707394-0019*	Beige and White 12"x12" Floor Tile	White/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA7-083117-B *291707394-0020*	Beige and White 12"x12" Floor Tile	White/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA7-083117-C *291707394-0021*	Beige and White 12"x12" Floor Tile	White/Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA8-083117-A *291707394-0022*	Mastic for HA7	Brown Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
708-HA8-083117-B *291707394-0023*	Mastic for HA7	Brown Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
708-HA8-083117-C *291707394-0024*	Mastic for HA7	Brown/Tan Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
708-HA9-083117-A *291707394-0025*	White 12"x12" Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA9-083117-B *291707394-0026*	White 12"x12" Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA9-083117-C *291707394-0027*	White 12"x12" Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA10-083117-A-Mastic *291707394-0028*	Mastic for HA9	Tan Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
708-HA10-083117-A-Leveler *291707394-0028A*	Mastic for HA9	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
708-HA10-083117-B-Mastic *291707394-0029*	Mastic for HA9	Tan Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected

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Customer ID: URSC77B
Customer PO: 60445396.5
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
708-HA10-083117-B-Leveler *291707394-0029A*	Mastic for HA9	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
708-HA10-083117-C-Mastic *291707394-0030*	Mastic for HA9	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
708-HA10-083117-C-Leveler *291707394-0030A*	Mastic for HA9	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
708-HA11-083117-A *291707394-0031*	12"x12" Floor Tile, Tan w/ Red Streaks	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
708-HA11-083117-B *291707394-0032*	12"x12" Floor Tile, Tan w/ Red Streaks	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
708-HA11-083117-C *291707394-0033*	12"x12" Floor Tile, Tan w/ Red Streaks	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
708-HA12-083117-A *291707394-0034*	Mastic for HA11	Black Fibrous Homogeneous	5% Cellulose	90% Non-fibrous (Other)	5% Chrysotile
708-HA12-083117-B *291707394-0035*	Mastic for HA11				Positive Stop (Not Analyzed)
708-HA12-083117-C *291707394-0036*	Mastic for HA11				Positive Stop (Not Analyzed)
708-HA50-083117-A *291707394-0037*	Caulk Bottom of Exhaust Pipe	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA50-083117-B *291707394-0038*	Caulk Bottom of Exhaust Pipe	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA50-083117-C *291707394-0039*	Caulk Bottom of Exhaust Pipe	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA51-083117-A-Roof Lining *291707394-0040*	Liner of Roof, White, Top	White/Black Fibrous Homogeneous	20% Synthetic	80% Non-fibrous (Other)	None Detected
708-HA51-083117-A-Mastic *291707394-0040A*	Liner of Roof, White, Top	Tan Fibrous Homogeneous	2% Cellulose 2% Synthetic	96% Non-fibrous (Other)	None Detected
708-HA51-083117-B *291707394-0041*	Liner of Roof, White, Top	White/Black Fibrous Homogeneous	20% Synthetic	80% Non-fibrous (Other)	None Detected
708-HA51-083117-C *291707394-0042*	Liner of Roof, White, Top	White/Black Fibrous Homogeneous	25% Synthetic	75% Non-fibrous (Other)	None Detected
708-HA52-083117-A *291707394-0043*	Liner of Roof, White, Bottom	White/Black Fibrous Homogeneous	20% Synthetic	80% Non-fibrous (Other)	None Detected

Report amended: 10/11/2017 08:32:32 Replaces amended report from: 09/12/2017 14:33:19 Reason Code: Client-Change to Location

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EMSL Order: 291707394
Customer ID: URSC77B
Customer PO: 60445396.5
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
708-HA52-083117-B 291707394-0044	Liner of Roof, White, Bottom	Brown/Black Fibrous Homogeneous	20% Synthetic	80% Non-fibrous (Other)	None Detected
708-HA52-083117-C 291707394-0045	Liner of Roof, White, Bottom	White/Black Fibrous Homogeneous	25% Synthetic	75% Non-fibrous (Other)	None Detected
708-HA53-083117-A 291707394-0046	Black, Roof Caulk	Black Fibrous Homogeneous	20% Cellulose 20% Synthetic	60% Non-fibrous (Other)	None Detected
708-HA53-083117-B 291707394-0047	Black, Roof Caulk	Black Fibrous Homogeneous	20% Cellulose 20% Synthetic	60% Non-fibrous (Other)	None Detected
708-HA53-083117-C 291707394-0048	Black, Roof Caulk	Black Fibrous Homogeneous	10% Cellulose 15% Synthetic	75% Non-fibrous (Other)	None Detected
708-HA54-083117-A 291707394-0049	Grey, Window Caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA54-083117-B 291707394-0050	Grey, Window Caulk	Brown/Gray Fibrous Homogeneous	2% Cellulose	98% Non-fibrous (Other)	None Detected
708-HA54-083117-C 291707394-0051	Grey, Window Caulk	Brown/Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA55-083117-A 291707394-0052	White, Roofing Caulk, Near Window	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA55-083117-B 291707394-0053	White, Roofing Caulk, Near Window	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA55-083117-C 291707394-0054	White, Roofing Caulk, Near Window	Brown/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
708-HA56-083117-A 291707394-0055	Roof Shingle, Top	Black Fibrous Homogeneous	45% Cellulose 20% Glass	35% Non-fibrous (Other)	None Detected
708-HA56-083117-B 291707394-0056	Roof Shingle, Top	Black Fibrous Homogeneous	45% Cellulose 20% Glass	35% Non-fibrous (Other)	None Detected
708-HA56-083117-C 291707394-0057	Roof Shingle, Top	Black Fibrous Homogeneous	30% Cellulose 15% Glass	55% Non-fibrous (Other)	None Detected
708-HA57-083117-A 291707394-0058	Roof Shingle, Bottom	Brown/Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
708-HA57-083117-B 291707394-0059	Roof Shingle, Bottom	White/Black Fibrous Homogeneous	20% Glass	80% Non-fibrous (Other)	None Detected
708-HA57-083117-C 291707394-0060	Roof Shingle, Bottom	Black Fibrous Homogeneous	5% Cellulose 20% Glass	75% Non-fibrous (Other)	None Detected
708-HA58-083117-C 291707394-0061	Roofing Felt	Brown/Black Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected
708-HA58-083117-C 291707394-0062	Roofing Felt	Brown/Black Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected

Report amended: 10/11/2017 08:32:32 Replaces amended report from: 09/12/2017 14:33:19 Reason Code: Client-Change to Location

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EMSL Order:	291707394
Customer ID:	URSC77B
Customer PO:	60445396.5
Project ID:	

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
708-HA58-083117-C *291707394-0063*	Roofing Felt	Brown/Black Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected

Analyst(s)
Joshua Moorman (23)
Roxsee Stover (44)

Billy Barnes, Asbestos Lab Manager
or Other Approved Signatory

Report amended: 10/11/2017 08:32:32 Replaces amended report from: 09/12/2017 14:33:19 Reason Code: Client-Change to Location

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EMSL Order:	291707394
Customer ID:	URSC77B
Customer PO:	60445396.5
Project ID:	

Attention:	Kevin Arnold AECOM 1600 Perimeter Park Suite 400 Morrisville, NC 27560	**Phone:**	(919) 461-1100
		Fax:	(919) 461-1415
		Received Date:	09/05/2017 1:52 PM
		Analysis Date:	09/15/2017
		Collected Date:	
Project:	Fort Bragg - Building 708/60445396		

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
708-HA11-083117-A *291707394-0031*	12"x12" Floor Tile, Tan w/ Red Streaks	Beige Fibrous Homogeneous	95.6	None	4.4% Chrysotile

Analyst(s)

Kelly Gallsdorfer (1)

Billy Barnes, Asbestos Lab Manager
or other approved signatory

This laboratory is not responsible for % asbestos in total sample when the residue only is submitted for analysis. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc. Morrisville, NC

Report amended: 10/11/2017 08:32:32 Replaces initial report from: 09/15/2017 12:41:19 Reason Code: Client-Change to Location

AECOM
1600 Perimeter Park Drive
Morrisville, NC 27560
919-461-1100

Submitted By:
Email Results:

TAT:
Job:
PO:

AECOM
Fort Bragg - Building 708/90445396
9/5/2017 13:52
PLM

TAT: 72 Hour
Bulk

Order ID: 291707394
No Samples: 69
Due: 09/08 1:52 PM
Fax: 919-461-1415

Sample #	Description
708-HA1-083017-A	blue paint, flakey
708-HA1-083017-B	blue paint, flakey
708-HA1-083017-C	blue paint, flakey
708-HA2-083017-A	window glazing, black
708-HA2-083017-B	window glazing, black
708-HA2-083017-C	window glazing, black
708-HA3-083117-A	paint, beige, interior walls
708-HA3-083117-B	paint, beige, interior walls
708-HA3-083117-C	paint, beige, interior walls
708-HA4-083117-A	peach colored, exterior paint
708-HA4-083117-B	peach colored, exterior paint
708-HA4-083117-C	peach colored, exterior paint
708-HA5-083117-A	12" x 12" beige floor tile with yellow marking
708-HA5-083117-B	12" x 12" beige floor tile with yellow marking
708-HA5-083117-C	12" x 12" beige floor tile with yellow marking
708-HA6-083117-A	floor tile mastic for HA5
708-HA6-083117-B	floor tile mastic for HA5
708-HA6-083117-C	floor tile mastic for HA5
708-HA7-083117-A	beige and white 12" x 12" floor tile
708-HA7-083117-B	beige and white 12" x 12" floor tile
708-HA7-083117-C	beige and white 12" x 12" floor tile
708-HA8-083117-A	mastic for HA7
708-HA8-083117-B	mastic for HA7
708-HA8-083117-C	mastic for HA7
708-HA9-083117-A	white 12" x 12" floor tile
708-HA9-083117-B	white 12" x 12" floor tile
708-HA9-083117-C	white 12" x 12" floor tile
708-HA10-083117-A	mastic for HA9
708-HA10-083117-B	mastic for HA9
708-HA10-083117-C	mastic for HA9
708-HA11-083117-A	12" x 12" floor tile; tan with red streaks
708-HA11-083117-B	12" x 12" floor tile; tan with red streaks

708-HA11-083117-C	12" x 12" floor tile; tan with red streaks
708-HA12-083117-A	floor tile mastic for HA11
708-HA12-083117-B	floor tile mastic for HA11
708-HA12-083117-C	floor tile mastic for HA11
708-HA50-083117-A	caulk bottom of exhaust pipe
708-HA50-083117-B	caulk bottom of exhaust pipe
708-HA50-083117-C	caulk bottom of exhaust pipe
708-HA51-083117-A	liner of roof, white, top
708-HA51-083117-B	liner of roof, white, top
708-HA51-083117-C	liner of roof, white, top
708-HA52-083117-A	liner of roof, white, bottom
708-HA52-083117-B	liner of roof, white, bottom
708-HA52-083117-C	liner of roof, white, bottom
708-HA53-083117-A	black, roof caulk
708-HA53-083117-B	black, roof caulk
708-HA53-083117-C	black, roof caulk
708-HA54-083117-A	grey, window caulk
708-HA54-083117-B	grey, window caulk
708-HA54-083117-C	grey, window caulk
708-HA55-083117-A	white, roofing caulk, near window
708-HA55-083117-B	white, roofing caulk, near window
708-HA55-083117-C	white, roofing caulk, near window
708-HA56-083117-A	roof shingle, top
708-HA56-083117-B	roof shingle, top
708-HA56-083117-C	roof shingle, top
708-HA57-083117-A	roof shingle, bottom
708-HA57-083117-B	roof shingle, bottom
708-HA57-083117-C	roof shingle, bottom
708-HA58-083117-C	roofing felt
708-HA58-083117-C	roofing felt
708-HA58-083117-C	roofing felt

AECOM
Fort Bragg - Building 708/60445356
9/5/2017 13:52
PLM
TAT: 72 Hour
Bulk

Order ID: 29170739
No Samples: 69
Due: 09/08 1:52 PM
Fax: 919-461-1415

Table 1

Homogeneous Area	Material Description	Sample Identifications	Location	F (friable)/NF (non-friable)	Condition	% ACM	Approx. Quantity (LF - linear feet; SF -
HA1	Interior paint, blue/grey	708-HA1-083117-A 708-HA1-083117-B 708-HA1-083117-C	Support/Supply room adjacent to Hangar 5	F	Poor	None Detected	400 SF
HA2	Window glazing, black	708-HA2-083117-C 708-HA2-083117-C 708-HA2-083117-C	Southwest of Hangar #4	NF	Poor	None Detected	100 LF
HA3	Interior paint, peach colored	708-HA3-083117-A 708-HA3-083117-B 708-HA3-083117-C	Hangar Bay #4	F	Poor	None Detected	10,000 SF
HA4	Exterior paint, peach colored	708-HA4-083117-A 708-HA4-083117-B 708-HA4-083117-C	Hangar Bay #4	F	Poor	None Detected	10,000 SF
HA5	Light brown floor tile, 12" x 12"	708-HA5-083117-C 708-HA5-083117-C 708-HA5-083117-C	Pre-fabricated break room in Hangar 5	NF	Good	None Detected	260 SF
HA6	floor tile mastic for HA5	708-HA6-083117-C 708-HA6-083117-C 708-HA6-083117-C	Pre-fabricated break room in Hangar 5	F	Good	None Detected	260 SF
HA7	White floor tile, 12" x 12"	708-HA7-083117-C 708-HA7-083117-C 708-HA7-083117-C	Stairwell adjacent to Hangar 5 and repair/reclamation room	NF	Good	None Detected	1,200 SF
HA8	Mastic on HA7	708-HA8-083117-C 708-HA8-083117-C 708-HA8-083117-C	Stairwell adjacent to Hangar 5 and repair/reclamation room	F	Good	None Detected	1,200 SF
HA9	White and grey floor tile, 12" x 12"	708-HA9-083117-A 708-HA9-083117-B 708-HA9-083117-C	Second floor near Hangar 5	NF	Good	None Detected	150 SF
HA10	Floor tile mastic for HA9	708-HA10-083117-A 708-HA10-083117-B 708-HA10-083117-C	Second floor near Hangar 5	F	Good	None Detected	150 SF
HA11	White and brown floor tile, 12" x 12"	708-HA11-083117-A 708-HA11-083117-B 708-HA11-083117-C	Restroom, Kitchen, TA Manager office, TA Lounge on first floor, adjacent/east of Hangar 5	NF	Good	4% Chrysotile	760 SF
HA12	Floor tile mastic for HA11	708-HA12-083117-A 708-HA12-083117-B 708-HA12-083117-C	Restroom, Kitchen, Manager office, TA Lounge on first floor, adjacent/east of Hangar 5	F	Good	5% Chrysotile	760 SF

Homogeneous Area	Material Description	Sample Identifications	Location	F (friable)/NF (non-friable)	Condition	% ACM	Approx. Quantity (LF - linear feet; SF -
HA50	caulk, grey	708-HA50-083117-A	Roof, above base operations area, bottom of exhaust pipe	NF	Fair	None Detected	100 SF
		708-HA50-083117-B					
		708-HA50-083117-C					
HA51	top liner, white	708-HA51-083117-A	Roof, above base operations area	NF	Fair	None Detected	1,000 SF
		708-HA51-083117-B					
		708-HA51-083117-C					
HA52	bottom liner, white	708-HA52-083117-A	Roof, above base operations area	NF	Fair	None Detected	1,000 SF
		708-HA52-083117-B					
		708-HA52-083117-C					
HA53	Grey, window caulk	708-HA53-083117-A	Roof, above base operations area, base of window	NF	Fair	None Detected	150 LF
		708-HA53-083117-B					
		708-HA53-083117-C					
HA54	White, caulk	708-HA54-083117-A	Roof, above base operations area, top of roof liner	NF	Fair	None Detected	250 LF
		708-HA54-083117-B					
		708-HA54-083117-C					
HA55	Black, roofing caulk	708-HA55-083117-A	Roof, above base operations area, near shingles	NF	Poor	None Detected	100 LF
		708-HA55-083117-B					
		708-HA55-083117-C					
HA56	White, roofing shingles	708-HA56-083117-A	Roof, above base operations area	NF	Good	None Detected	1,000 SF
		708-HA56-083117-B					
		708-HA56-083117-C					
HA57	Black, roofing shingles	708-HA57-083117-A	Roof, above base operations area	NF	Good	None Detected	1,000 SF
		708-HA57-083117-B					
		708-HA57-083117-C					
HA58	Black, roofing felt	708-HA57-083117-C	Roof, above base operations area	NF	Good	None Detected	1,000 SF
		708-HA57-083117-C					
		708-HA57-083117-C					

Homogeneous Area	Material Description	Sample Identifications	Location	F (friable)/NF (non-friable)	Condition	% ACM	Approx. Quantity (LF - linear feet; SF -
Data collected and provided by Weston Solutions in report dated June 2004							
HA7*	Green, 9" x 9" floor tile	Pope AFB/P708-FT-16 Pope AFB/P708-FT-17	Former Construction Area 1	NF	NA	3% Chrysotile	1020 SF
HA8*	Tan, 9" x 9" floor tile	Pope AFB/P708-FT-18 Pope AFB/P708-FT-19	Former Construction Area 1	NF	NA	10% Chrysotile	1020 SF
HA9*	Tan, 12" x 12" floor tile	Pope AFB/P708-FT-22 Pope AFB/P708-FT-23	Former Construction Area 2	NF	NA	2% Chrysotile	700 SF
HA10*	Tan, 9" x 9" floor tile	Pope AFB/P708-FT-20 Pope AFB/P708-FT-21	Former Construction Area 2	NF	NA	2% Chrysotile	700 SF
HA19	White, 12" x 12" floor tile and mastic	Pope AFB/P708-FT-39 Pope AFB/P708-FT-40	Office, TA Ready Room, South Stairwell, TA Control, North Stairwell, Repair Reclamation, TA Managers Office, Restroom/Break Room, Hallway	Floor tile - NF; Mastic - F	Fair	3% Chrysotile	1,435 SF
HA12	4" Water Pipe Run Insulation	Pope AFB/P708-PRI-26 Pope AFB/P708-PRI-28	Hangar Bay #4	F	Fair	2% Chrysotile	2,160 SF
HA13	4" Water Pipe Run Insulation	Pope AFB/P708-PRI-27 Pope AFB/P708-PRI-29	Hangar Bay #4	F	Fair	2% Chrysotile	135 SF

Notes - * Indicates a material that was not found during the inspection on August 30 and 31, 2017.

Attachment C

AECOM

PHOTOGRAPHIC LOG

Client:	Site Location:	Project #
Fort Bragg	Building 708	60554195

Photo No.	Date:
1	8/30/17

Direction Photo Taken:
Not applicable

Description:
708-HA1-083017; paint on the floor, Support/Supply room adjacent to Hangar 5.

Photo No.	Date:
2	8/31/17

Direction Photo Taken:
Not applicable.

Description:
708-HA3-083117; paint on Interior walls of Hangar Bay 4.

AECOM

PHOTOGRAPHIC LOG

Client:	Site Location:	Project #
Fort Bragg	Building 708	60554195

Photo No.	Date:
3	8/31/17

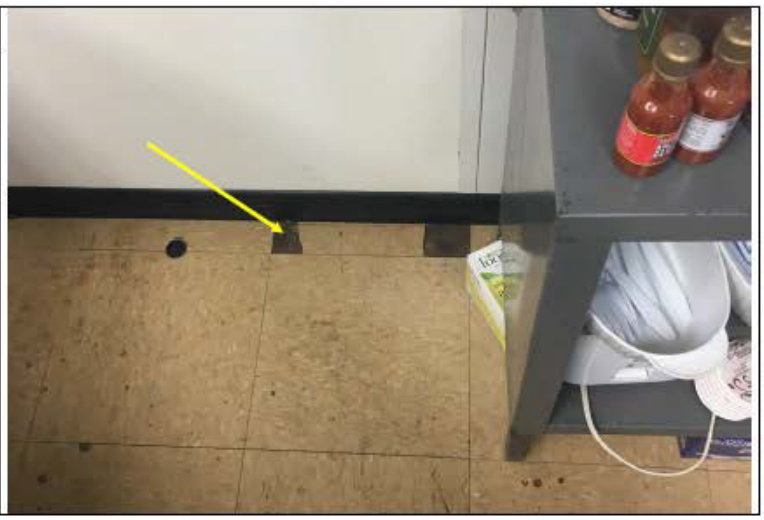
Direction Photo Taken:
Not applicable

Description:
708-HA4-083117; Exterior paint of Hangar 4, North side.

Photo No.	Date:
4	8/31/17

Direction Photo Taken:
Not applicable.

Description:
708-HA5-083117 and 708-HA6-083117; floor tile and mastic, pre- fabricated break room in Hangar 5.



AECOM

PHOTOGRAPHIC LOG

Client:	Site Location:	Project #
Fort Bragg	Building 708	60554195

Photo No.	Date:
5	8/31/17

Direction Photo Taken:
Not applicable

Description:
708-HA7-083117 and 708-HA8-083117; floor tile and mastic, stairwell adjacent to Hangar 5 and repair/reclamation room.

Photo No.	Date:
6	8/31/17

Direction Photo Taken:
Not applicable.

Description:
708-HA9-083117 and 708-HA10-083117; floor tile and mastic second floor near Hangar 5.

AECOM

PHOTOGRAPHIC LOG

Client:	Site Location:	Project #
Fort Bragg	Building 708	60554195

Photo No.	Date:
7	8/31/17

Direction Photo Taken:
Not applicable

Description:
708-HA11-083117 and 708-HA12-083117; floor tile and mastic, restroom on the first floor adjacent/east of Hangar 5. According to the laboratory report, mastic contains 5% Chrysotile and the floor tile contains 4.4% Chrysotile.

Photo No.	Date:
8	8/31/17

Direction Photo Taken:
Not applicable.

Description:
708-HA50-083117; roof caulk by the exhaust pipe.

AECOM

PHOTOGRAPHIC LOG

Client:	Site Location:	Project #
Fort Bragg	Building 708	60554195

Photo No.	Date:
9	8/31/17

Direction Photo Taken:
Not applicable

Description:
708-HA51-083117 and 708-HA52-083117; roof liner.

Photo No.	Date:
10	8/31/17

Direction Photo Taken:
Not applicable.

Description:
708-HA53-083117; roof, grey, window caulk.

AECOM

PHOTOGRAPHIC LOG

Client:	Site Location:	Project #
Fort Bragg	Building 708	60554195

Photo No.	Date:
11	8/31/17

Direction Photo Taken:
Not applicable

Description:
708-HA54-083117; roof, white caulk.

Photo No.	Date:
12	8/31/17

Direction Photo Taken:
Not applicable.

Description:
708-HA55-083117; black, roofing caulk.

AECOM

PHOTOGRAPHIC LOG

Client:	Site Location:	Project #
Fort Bragg	Building 708	60554195

Photo No.	Date:
13	8/31/17

Direction Photo Taken:
Not applicable

Description:
708-HA56-083117 and 708-HA57-083117; roofing shingles. Top layer is white. Bottom layer is black.

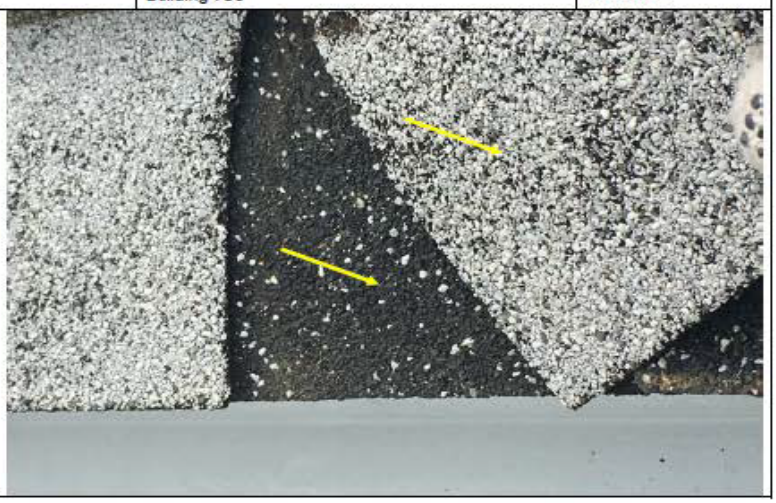


Photo No.	Date:
14	8/31/17

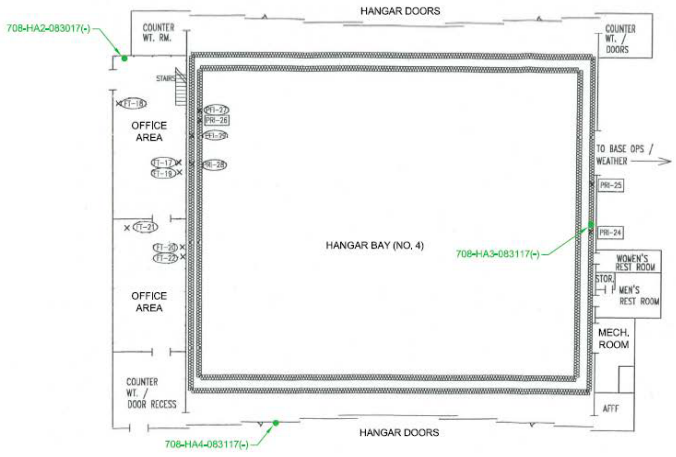
Direction Photo Taken:
Not applicable.

Description:
708-HA58-083117; black, roofing felt, beneath both layers of roofing shingles.

Asbestos Do and Don't

- DON'T remove materials that may contain asbestos.
- DON'T dust, sweep or vacuum debris that may contain asbestos.
- DON'T saw, sand, scrape or drill holes in asbestos materials or suspect asbestos material.
- DON'T use abrasive pads or brushes or power strippers on a dry floor.
- DON'T sand or try to level asbestos flooring or its backing. When asbestos flooring needs replacing, notify DPW-Customer Service.
- DO have a facility thoroughly inspected by a North Carolina accredited asbestos inspector for asbestos prior to any renovation or demolition activity.
- DO have removal and repair performed by people who are North Carolina accredited asbestos professionals.
- DO contact DPW-Customer Service at 910 396-0321 if suspect asbestos containing materials are damaged.
- DO keep activities to a minimum in any areas – such as crawl spaces or attics – that have damaged material that may contain asbestos.
- DO take every precaution to avoid damaging materials that may contain asbestos.

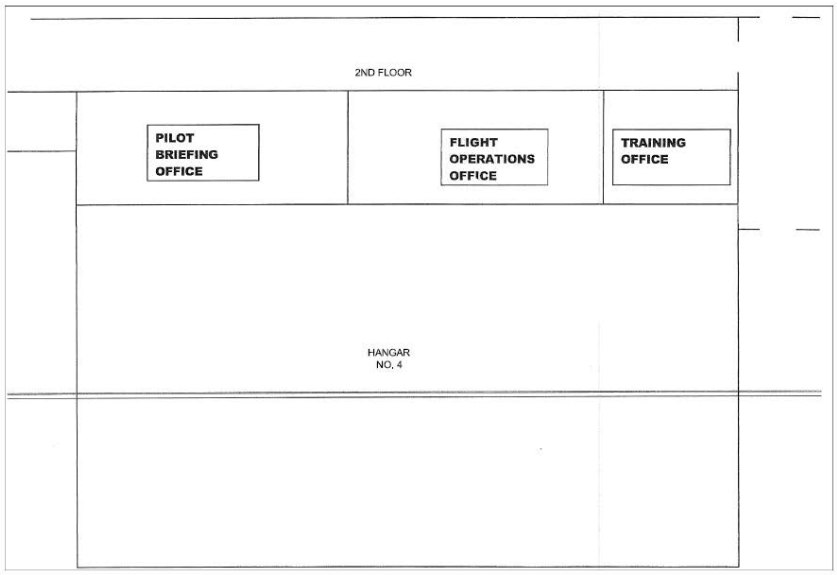
Attachment D



2017 ASBESTOS REINSPECTION
FORT BRAGG, NORTH CAROLINA
FAYETTEVILLE, NORTH CAROLINA
Project No.: 60445396 Date: 2017-10-16

ACBM AND SAMPLE LOCATIONS
BUILDING 708

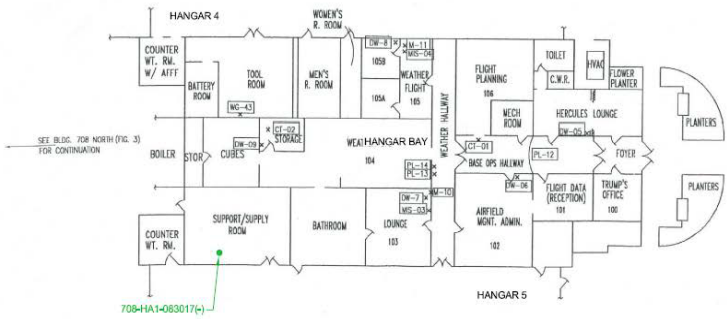
AECOM
Figure: 1



2017 ASBESTOS REINSPECTION
FORT BRAGG, NORTH CAROLINA
FAYETTEVILLE, NORTH CAROLINA
Project No.: 60445396 Date: 2017-10-16

ACBM AND SAMPLE LOCATIONS
BUILDING 708

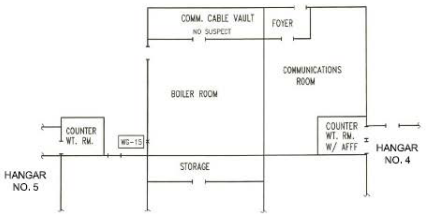
AECOM
Figure: 2



2017 ASBESTOS REINSPECTION
FORT BRAGG, NORTH CAROLINA
FAYETTEVILLE, NORTH CAROLINA
Project No.: 60445396 Date: 2017-10-16

ACBM AND SAMPLE LOCATIONS
BUILDING 708

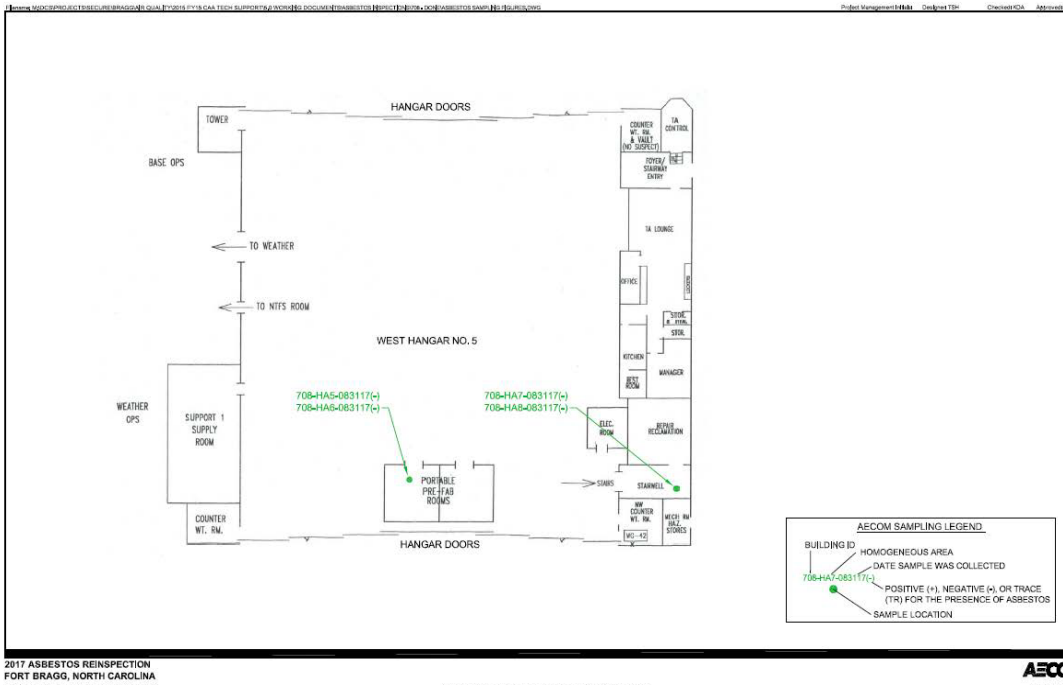
AECOM
Figure: 3



2017 ASBESTOS REINSPECTION
FORT BRAGG, NORTH CAROLINA
FAYETTEVILLE, NORTH CAROLINA
Project No.: 60445396 Date: 2017-10-16

ACBM AND SAMPLE LOCATIONS
BUILDING 708

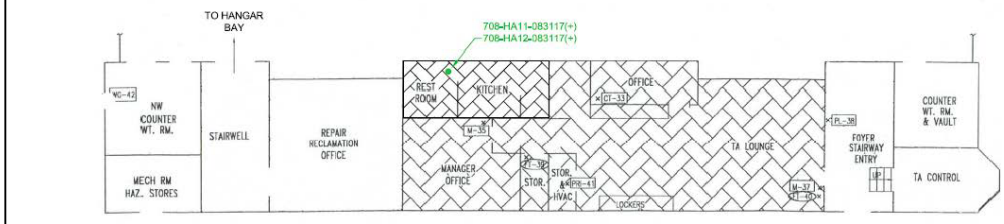
AECOM
Figure: 4



2017 ASBESTOS REINSPECTION
FORT BRAGG, NORTH CAROLINA
FAYETTEVILLE, NORTH CAROLINA
Project No.: 60445396 Date: 2017-10-16

ACBM AND SAMPLE LOCATIONS

AECOM
Figure: 5



ACM LEGEND

BEIGE 12x12 FLOOR TILE & MASTIC

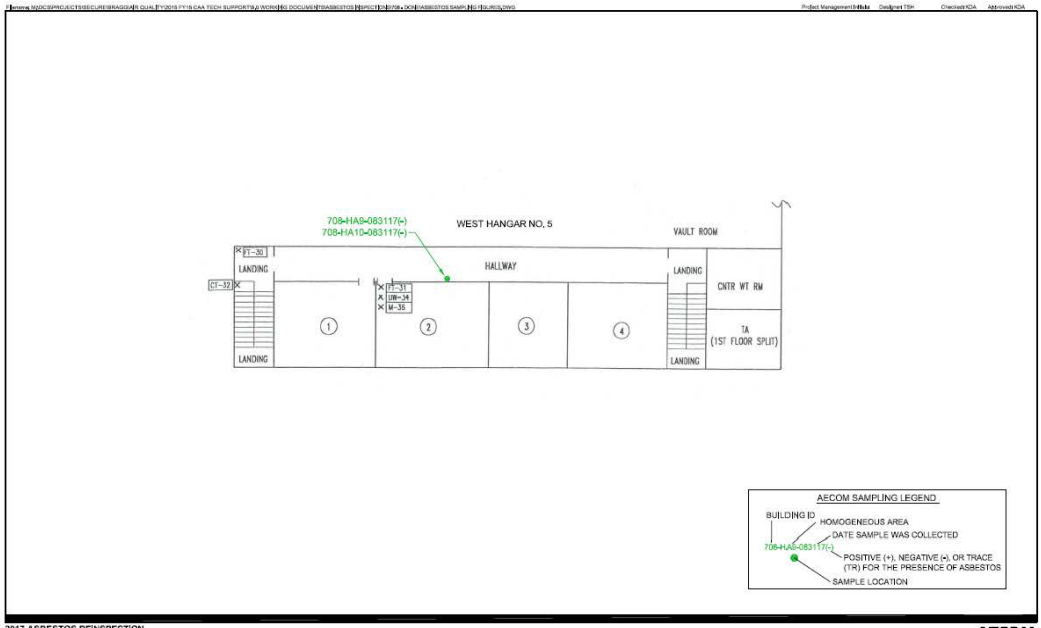
AECOM SAMPLING LEGEND

BUILDING ID
HOMOGENEOUS AREA
DATE SAMPLE WAS COLLECTED
708-HA11-083117(+)
POSITIVE (+), NEGATIVE (-), OR TRACE (TR) FOR THE PRESENCE OF ASBESTOS
SAMPLE LOCATION

2017 ASBESTOS REINSPECTION
FORT BRAGG, NORTH CAROLINA
FAYETTEVILLE, NORTH CAROLINA
Project No.: 60445396 Date: 2017-10-16

ACBM AND SAMPLE LOCATIONS
BUILDING 708

AECOM
Figure: 6

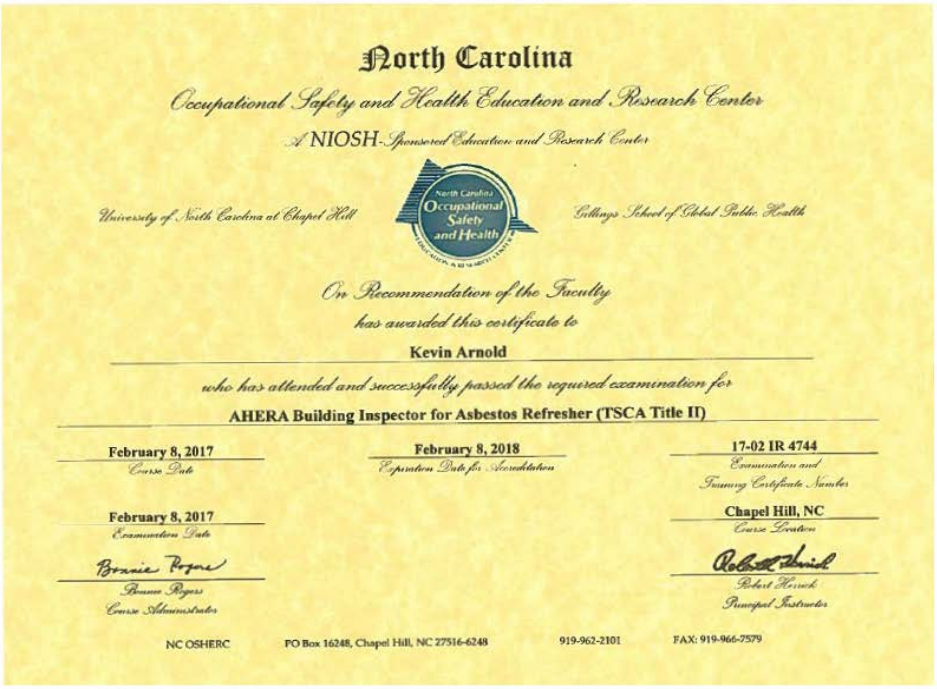


2017 ASBESTOS REINSPECTION
FORT BRAGG, NORTH CAROLINA
FAYETTEVILLE, NORTH CAROLINA
Project No.: 60445396 Date: 2017-10-16

ACBM AND SAMPLE LOCATIONS
BUILDING 708

AECOM
Figure: 7

Attachment A



North Carolina

Occupational Safety and Health Education and Research Center

A NIOSH-Sponsored Education and Research Center

University of North Carolina at Chapel Hill — Gillings School of Global Public Health

On Recommendation of the Faculty
has awarded this certificate to

Kevin Arnold

who has attended and successfully passed the required examination for

AHERA Building Inspector for Asbestos Refresher (TSCA Title II)

February 8, 2017 Course Date	**February 8, 2018** Expiration Date for Accreditation	**17-02 IR 4744** Examination and Training Certificate Number
February 8, 2017 Examination Date		**Chapel Hill, NC** Course Location
Bonnie Rogers Bonnie Rogers Course Administrator		Robert Herrick Robert Herrick Principal Instructor

NC OSHERC PO Box 16248, Chapel Hill, NC 27516-6248 919-962-2101 FAX: 919-966-7579

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK T. BENTON • Deputy Secretary for Health
SUSAN KANSANGRA • Assistant Secretary for Public Health
Division of Public Health

November 22, 2022

Bruce E Billings
827 Beuer Dr
Fayetteville, NC 28314

Dear Mr. Billings:

Based upon the review of your accreditation application, the Health Hazards Control Unit (HHCU) has determined that you have fulfilled the requirements and are eligible for asbestos accreditation as a(n) INSPECTOR. Your assigned North Carolina accreditation number is 12397, which is reflected on your enclosed North Carolina Accreditation card. Please be sure to take this card with you to any asbestos work site where you are employed. The State requires that all persons conducting asbestos abatement or asbestos management activities be accredited and have their identification card on site.

Your North Carolina Inspector accreditation will expire on NOVEMBER 30, 2023. It is NOT the policy of the HHCU to issue renewal notices. If you wish to continue working as a(n) Inspector after this expiration date, you must successfully complete the required training and submit a completed application to this office prior to November 30, 2023. If you should continue to perform asbestos management activities as a(n) Inspector without a valid North Carolina accreditation, you will be in violation of State regulations and may be cited for noncompliance.

Bruce E Billings
827 Beuer Dr
Fayetteville, NC 28314

138224

North Carolina
Asbestos Accreditation

EXPIRATION 11-30-2023			
DOB	SEX	HT	WT
05-07-1959	M	6'2"	220
CLASS		#	EXP
DESIGNER		40443	11-23
INSPECTOR		12397	11-23
MGMT PLANNER		20946	11-23

Sincerely,

Ed Norman
Program Manager
Health Hazards Control Unit

Enclosure

North Carolina Department of Health and Human Services

Division of Public Health

Roy Cooper
Governor

Mandy Cohen, MD, MPH
Secretary

Daniel Stanley
Director

April 6, 2017

Kevin R Arnold
949 Jones Wynd
Wake Forest, NC 27587

Dear Mr. Arnold:

Based upon the review of your accreditation application, the Health Hazards Control Unit (HHCU) has determined that you have fulfilled the requirements and are eligible for asbestos accreditation as a(n) INSPECTOR. Your assigned North Carolina accreditation number is 12589, which is reflected on your enclosed North Carolina Accreditation card. Please be sure to take this card with you to any asbestos work site where you are employed. The State requires that all persons conducting asbestos abatement or asbestos management activities be accredited and have their identification card on site.

Your North Carolina Inspector accreditation will expire on FEBRUARY 28, 2018. It is NOT the policy of the HHCU to issue renewal notices. If you wish to continue working as a(n) Inspector after this expiration date, you must successfully complete the required training and submit a completed application to this office prior to February 28, 2018. If you should continue to perform asbestos management activities as a(n) Inspector without a valid North Carolina accreditation, you will be in violation of State regulations and may be cited for noncompliance.

Sincerely,

Ed Norman
Program Manager
Health Hazards Control Unit

DD1391

~~2022~~ 93099E P REVISION DATE: 13 JAN 2020
Army MCA (AS OF 01/14/2021 AT 17:04:24) 06 MAR 2018
ACF=0.88 UM=E

Fort Bragg
North Carolina

Aircraft Maintenance Hangar-FCH

211 10 93099 ~~57,000~~

PRIMARY FACILITY				46,431
Hangar - High Bay, >40' height	SF	91,000	446.90	(40,668)
Fixed Wing Parking Apron, Paved-Modify	SY	70,150	1.61	(113)
Hangar Access Apron, Paved	SY	7,505	126.02	(946)
HAZMAT Storage - Installation	SF	300	~~252.12~~	(76)
Cybersecurity Measures	LS	--	--	(750)
Total from Continuation page(s)				(3,878)
SUPPORTING FACILITIES				4,486
Electric Service	LS	--	--	(398)
Water, Sewer, Gas	LS	--	--	(845)
Paving, Walks, Curbs And Gutters	LS	--	--	(29)
Storm Drainage	LS	--	--	(353)
Site Imp(1,267) Demo(1,533)	LS	--	--	(2,800)
Information Systems	LS	--	--	(61)

ESTIMATED CONTRACT COST	50,917
CONTINGENCY (5.00%)	2,546
SUBTOTAL	53,463
SUPERVISION, INSPECTION & OVERHEAD (5.70%)	3,047
TOTAL REQUEST	56,510
TOTAL REQUEST (ROUNDED)	57,000
INSTALLED EQT-OTHER APPROPRIATIONS	(1,612)

Construct a four bay fixed and rotary wing aircraft operations and maintenance hangar that includes maintenance bays for scheduled and unscheduled maintenance, flight detachment administration and operations, maintenance support, tool and parts storage, and shop space. The facility will include 1.5-ton bridge cranes for each fixed wing bay, 0.75-ton bridge cranes for each rotor wing bay, oil water separator, and separate oil and hazardous material storage areas. The unscheduled maintenance bay includes a wash rack with catch basin and collective water recycling system. Built-in building systems include fire alarm/mass notification, fire suppression, energy management controls, advanced communications network, Intrusion Detection Systems (IDS), electronic access control, Energy Monitoring Control Systems (EMCS) connection, and a protected distribution system (PDS). The project includes construction of a new hangar access apron, hangar parking apron, and associated lighting for airfield pavements. Other supporting facilities include all related sitework and utilities (electrical, water, gas, sanitary sewer, and information system distribution), lighting, parking, access drives, roads, curb and gutter, sidewalks, landscaping, and other site improvements. Special construction includes sustainable construction features complying with Leadership in Energy and Environmental Design (LEED) "Silver". Access for individuals with disabilities will be provided. Comprehensive interior design is included. Air conditioning: 176Kw (50 tons). Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance.

Fort Bragg
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Aircraft Maintenance Hangar-FCH 93099

9. COST ESTIMATES (CONTINUED)

ITEM	UM	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITY (CONTINUED)				
Overhead Protection/Canopy - General	SF	5,000	150.00	(750)
Aircraft Washing Apron, Paved	SY	1,333	~~132.03~~	(175)
Plant /Utilities Building	SF	1,200	497.67	(597)
Swing Space Airfield Ops Bldg.	LS	--	--	(700)
Aircraft Maintenance Check Pad	SY	1,333	123.59	(165)
Sustainability/Energy Measures	LS	--	--	(736)
Antiterrorism Measures	LS	--	--	(754)
			Total	3,873

11. REQ: NONE ADQT: NONE SUBSTD: NONE

PROJECT:
Construct one four bay, 64,000 SF fixed and rotary wing aircraft maintenance hangar. Project includes hangar access and parking aprons, associated airfield apron lighting, administration offices, latrines, supporting utilities (water, sewer, electric services), as well as secured and unsecured communications. Force protection and antiterrorism measures will be required in the design and construction. Hazardous materials, such as asbestos, lead, etc., will be remediated as found.

REQUIREMENT:
This project is required to provide permanent facilities and infrastructure to accommodate the operations and maintenance of aircraft serving the U.S. Army Special Operations Command (USASOC) at Fort Bragg, NC. To support this mission, the U.S. Army Special Operations Aviation Command (USASOAC) Flight Company (UFC) requires an adequate four bay aircraft hangar that is configured to accommodate four C-27J Spartan aircraft, two UH-60 aircraft, five CASA-212 aircraft, and one C-12 aircraft. The four bay aircraft maintenance hangar will directly improve mission readiness, providing expeditious service to the maintainer and operators. Humidity significantly degrade the hydraulic systems, seals, and lubricated moving metal parts on the Aircraft Ground Support Equipment (AGSE) when they are left exposed to the environment. Keeping them stored in a controlled climate is required by Arny Regulations as well as with the U.S. Army and major command's (AMCOM's) Corrosion Control Program. This equipment includes hydraulic tripod jacks, standard Army tug system, ground power unit trailers, generators, forklifts, and a hydraulic scissor lift, as well as large spare items like engines and propellers.

CURRENT SITUATION:
The UFC has an extremely high operation tempo for supporting SOF training and operational requirements. This greatly accelerates the need for scheduled and unscheduled aircraft maintenance. Existing facility is outdated, inadequate, more than 60 years old, and has not been modernized. Internal systems (electrical,

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CURRENT SITUATION: (CONTINUED)
mechanical, plumbing, etc.) are reaching failure and considerable amount of O&M repair funding is being applied to the existing facility on an annual basis. Existing facilities lack many of the functional requirements and have inadequate administrative and shop space, flight operations, tool and parts storage, life support, and locker rooms and latrines required to conduct routine aircraft maintenance operations as required by the Army Standard for Aircraft Maintenance Hangars. Lack of adequate maintenance facilities accelerates degradation of the equipment, hinders maintenance operations, and interrupts the UFC mission when aircraft are inoperable due to maintenance problems. Class IX aviation parts storage is currently located in a separate facility that is inadequate to comply with Congressional Direction provided in the FY03-14 NDAAs, Public Law 107-314 Sec 1067 [10 U.S.C. 2228]: "Prevention and mitigation of corrosion of military equipment and infrastructure"), DODI 5000.67 - Prevention and Mitigation of Corrosion on DoD Military Equipment and Infrastructure, the OSD Corrosion Program Strategic Plan, the AMCOM Corrosion Control Program One (CCP1), AR 750-59 - Army Corrosion Prevention and Control Program, and TM1-1500-344-23-2.

IMPACT IF NOT PROVIDED:
Facility will continue to fail to a point that a considerable amount of modernization funding will need to be applied to the facility to maintain operational readiness. The UFC will continue to assume risk in the readiness of their aircraft from potential damage caused by corrosion due to improper storage of Class IX aviation repair part. Also, the UFC will continue to be in violation of Public Law 107-314, Sec 1067 [10 U.S.C. 2228]: "Prevention and mitigation of corrosion of military equipment and infrastructure" and the Army Aviation and Missile Command Corrosion Control Program One (CCP1).
The C-27J is produced overseas by an Italian company, and only operated in the United States by the US Coast Guard and USASOC. As a result, there is limited availability of spare parts in CONUS. Excessive price increases on these parts by the manufacturer makes keeping the aircraft optimally functioning critical at the unit level. The spare parts are intensively managed items that are difficult to procure and will result in increased downtime for this complex aircraft if it is not carefully maintained and protected from corrosion. Any long period of down-time for the aircraft may result in decremented support to USASOC.

ADDITIONAL:
Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. A parametric cost estimate based upon project engineering design was used to develop this budget estimate.

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ACF=0.88 UM=E

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PHILLIP D. SOUNIA
COL, AR
Commanding

ESTIMATED CONSTRUCTION START:	MAR 2022	INDEX: 3123
ESTIMATED MIDPOINT OF CONSTRUCTION:	SEP 2022	INDEX: 3154
ESTIMATED CONSTRUCTION COMPLETION:	MAR 2023	INDEX: 3186

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Aircraft Maintenance Hangar-FCH 93099

		Item	U/M	Qty	Unit Cost	Cost ($000)
PRIMARY FACILITY.						
GENERAL.						
1.0)	21110	Hangar - High Bay, >40' height	SF	91,000	446.90	(40,668)
1)	21110	Hangar - High Bay, >40' height	SF	80,052	460.00	36,824
2)	21113	Aircraft Parts Storage	SF	8,404	351.12	2,951
3)	21113	Aircraft Mission Equipment Storage	SF	2,544	351.12	893
2.0)	11310	Fixed Wing Parking Apron, Paved-Modify	SY	70,150	1.61	(113)
1)		Pavement Marking Removals	LF	3,000	0.40	1
2)		Pavement Markings	LF	4,000	3.96	16
3)		Tie Down Anchors	EA	44	1,928.08	85
4)		Grounding Points	EA	44	247.19	11
3.0)	11340	Hangar Access Apron, Paved	SY	7,505	126.02	(946)
1)		Hangar Access Apron, Paved	SY	7,505	86.62	650
2)		Access Apron, 6" Base	SY	7,505	9.59	72
3)		Drainage Layer	SY	7,505	7.91	59
4)		Sudrain Collection System	LF	700	6.43	5
5)		Access Apron, 12" Subbase	SY	7,505	18.00	135
6)		Access Apron, Shoulder Paved	SY	540	12.61	7
7)		Shoulder Base, 6"	SY	540	9.59	5
8)		Shoulder Subbase, 12"	SY	540	18.00	10
9)		Shoulder Subgrade, 12"	SY	540	0.38	1
10)		Apron Subgrade, 12"	SY	7,505	0.38	3
4.0)	44228	HAZMAT Storage - Installation	SF	300	252.12	(76)
1)		POL Storage Bldg.	SF	150	285.12	43
2)		HAZMAT Storage Bldg.	SF	150	219.12	33
5.0)	00000	Cybersecurity Measures	LS	--	--	(750)
1)		UMCS	LS	--	--	250
2)		LFS	LS	--	--	250
3)		IDS	LS	--	--	250
6.0)	14179	Overhead Protection/Canopy - General	SF	5,000	150.00	(750)
1)		GSE	SF	3,000	150.00	450
2)		ASIOE	SF	2,000	150.00	300
7.0)	11370	Aircraft Washing Apron, Paved	SY	1,333	132.03	(176)
1)		Wash Apron, 6" Base	SY	1,333	9.59	13
2)		Drainage Layer	SY	1,333	7.91	11
3)		Sub Drain System	LF	200	6.43	1
4)		Curb and Gutter	LF	330	34.61	11
5)		Subbase, 12"	SY	1,333	18.00	24
6)		Apron, Paved	SY	1,333	86.62	115
7)		Apron Subgrade, 12"	SY	1,333	0.38	1
8.0)	89120	Plant /Utilities Building	SF	1,200	497.67	(597)
1)		Fire Pump Bldg.	SF	1,200	316.40	380

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		Item	U/M	Qty	Unit Cost	Cost ($000)
2)		Fire Water Pump, 2,500 GPM	EA	2	108,764	218
9.0)	14110	Swing Space Airfield Ops Bldg.	LS	--	--	(700)
1)		Modular Bldg. Lease (Monthly)	EA	12	25,000	300
2)		Modular Bldg. Setup/Services/Demob.	LS	--	--	400
10.0)	11370	Aircraft Maintenance Check Pad	SY	1,333	123.59	(165)
1)		6" Base Course	SY	1,333	9.59	13
2)		Drainage Layer	SY	1,333	7.91	11
3)		Sub Drain System	LF	225	6.43	1
4)		Subbase, 12"	SY	1,333	18.00	24
5)		Check Pad, Paved	SY	1,333	86.62	115
6)		Check Pad Subgrade, 12"	SY	1,333	0.38	1
11.0)	00005	Sustainability/Energy Measures	LS	--	--	(736)
1)		Hangar, High Bay	SF	80,052	9.20	736
12.0)	88041	Antiterrorism Measures	LS	--	--	(754)
1)		Hangar, High Bay	SF	80,052	9.20	736
2)		Aircraft Mission Equip. Storage	SF	2,544	7.02	18

INFO SYS & ANTITERRORISM MEASURES.
The following Building Information Systems cost can be found only in Tab F: $547,003

SUPPORTING FACILITIES.

Electric Service			LS	--	--	(398)
1)	81242	Underground Electric Lines in Conduit, 6-W	LF	250	420.13	105
2)	81360	Transformers XFMR 1,500	EA	1	62,734	63
3)	93310	Remove Exist. Transformers	EA	2	988.76	2
4)	81230	Site Lighting, 40' Aluminum Pole, 1000 Wat	EA	6	5,928.52	36
5)		Site Communications	LF	1,000	191.92	192
6)		Connection Fee (Estimate)	EA	1	1,000.00	1
Water, Sewer, and Gas			LS	--	--	(845)
1)	84210	Water Distribution Lines, Cement Lined Duc	LF	100	151.39	15
2)	84210	Water Distribution Lines, Plastic Pipe, PV	LF	650	77.04	50
3)	84610	Water Storage Tank, Elevated Steel 165000	EA	1	650,000	650
4)	89240	Fire Hydrant, 6' Depth	EA	3	5,311.29	16
5)	89340	Utilidor, 20" Ductile Iron MH Cluster	EA	1	66,098	66
6)	84610	Foam Containment Tank, 35,000	EA	1	44,494	44
7)		Connection Fee (Estimate) Water	EA	1	1,000.00	1

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	Item	U/M	Qty	Unit Cost	Cost ($000)
8)	Connection Fee (Estimate) Sewer	EA	1	1,000.00	1
9)	Connection Fee (Estimate) Gas	EA	1	1,000.00	1
Paving, Walks, Curbs, and Gutters		LS	--	--	(29)
1) 85220	Sidewalks & Walkways 4" Thick Cast in Plac	SY	167	55.54	9
2) 85110	Base Course 1-1/2" Crushed Stone to 6" De	SY	167	8.69	1
3) 85110	Cast in Place Curb & Gutter 6" HI, 6" THK,	LF	350	27.69	10
4) 85110	Road Pavement, Asphalt Concrete Surface 1-	SY	167	8.69	1
5) 93310	Remove Pavement	SY	1,120	6.18	7
Storm Drainage		LS	--	--	(353)
1) 87110	Reinforced Concrete Pipe 36" Dia	LF	1,750	152.29	267
2)	LID Considerations	LS	--	--	87
Site Improvements		LS	--	--	(1,267)
1) 93220	Cleanup and Landscaping	AC	7	8,280.87	58
2) 93410	Excavation, Cut and Fill	CY	7,500	78.16	586
3) 87210	Industrial Chain Link Fencing & Walls 8'	LF	1,200	39.06	47
4) 85110	Surface Treatments, Pavement Markings, 4"	LF	9,000	5.29	48
5) 93310	Remove Pavement	CY	2,778	177.37	493
6) 93310	Remove Piping	LF	1,500	13.69	21
7) 93310	Remove Fencing	LF	500	2.87	1
8) 93310	Remove Manhole	EA	10	346.07	3
9)	Dumpster Enclosure	LS	--	--	10
Demolition		LS	--	--	(1,533)
1) 93310	Demolition, Concrete Structure	SF	55,756	27.50	1,533
Information Systems		LS	--	--	(61)
1) 80800	Information Systems	LS	--	--	61

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INSTALLATION: Fort Bragg
LOCATION: North Carolina

TAB B - PLANNING AND DESIGN DATA (ESTIMATE)

1. Status

A. Design Start Date, Estimated.....
B. Percent Complete as of 15 SEP 2020 (Design Year).....
C. Percent Complete as of 01 JAN 2021 (Budget Year).....
D. Percent Complete as of 01 OCT 2021 (Program Year).....
E. Concept Complete Date.....
F. Design Complete Date.....
G. Type of Design Contract:

2. Basis

A. Standard or Definitive Design (yes/no) NO

3. Cost (Total $000)

A. Production of Plans and Specs.....	0
B. All Other Design Cost.....	0
C. Total Design Cost (C) = (A)+(B) OR (D)+(E).....	0
D. Contract Architect-Engineer Design Cost, Estimated.....	0
E. In-House Design Cost Plus Architect Engineer Contract Supervision and Administration Cost Government Forces Design Cost, Estimated	0

4. Construction Contract Award.....

5. Construction Start Date (Planned)..... MAR 2022

6. Construction Completion Date..... MAR 2023

7. LEED Rating (at Design).....

8. Design Charrette

A. Date of Design Charrette.....

Energy/Life Cycle Statement

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TAB E - FURNISHINGS AND EQUIPMENT

Information Systems Equipment

Item	Description	Total Cost ($000)	Proc Appr FY	Proc Appr	Est Delivery Date	Proc Status	Est Instl Cost ($000)	Instl FY	Instl Appr
1	Info Sys - ISC	560	2023	OPA					
2	Info Sys - PROP	1,052	2023	OPA					

Totals by Appropriation Type ($000)

Total OMA/OMN/3400/OM DHP:	0
Installed Equipment - Other Appropriations:	1,612
Total Furnishings and Equipment Amount:	1,612

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TAB F - INFORMATION SYSTEMS COST ESTIMATE (ISCE):

PROGRAM TYPE - MCA
PRIMARY PROPONENT FUND - OPA
USACE DISTRICT - Mobile District
Region/MACOM - HQ USA Special Opns Cmd
CONF Primary Facility costs transferred to Tab A/DD1391 Form? - No

Section I - Primary Facility, Inside the 5-Foot Line - Installed Equipment (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	EMT 1'' W/HDW (SGL RJ45 & TV)	LF	2,000	5.35	10,700	C
2	EMT 1'' W/HDW (Dual Outlets)	LF	9,986	5.35	53,425	C
3	EMT 4'' W/HDW (Backbone Cable)	LF	350	24.58	8,603	C
4	Backboard: 4 X 8 X 3/4''	EA	12	157.82	1,894	C
5	Cable Tray (18'' wide)	LF	1,345	26.16	35,185	C
				Total	109,807	

Section II - Primary Facility, Inside the 5-Foot Line - Equipment in Place (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	Set, 2500 Type	EA	11	85.00	935	I
2	Set, Multiline	EA	5	552.94	2,765	I
3	Set, Weather-Proof	EA	1	1,011	1,011	I
4	FO LC Patch PNL 12 SM W/CPLRS	EA	8	339.22	2,714	C
5	FO LC Patch PNL 24 SM W/CPLRS	EA	2	547.26	1,095	C
6	MDF CONN: 100 PR W/60 FT Stub	EA	6	1,592	9,550	C
7	MDF: Standard DBL-Sided 8 VERT	EA	1	464.31	464	C
8	MDF Wire Jumper: Wrapped	EA	184	3.47	638	C
9	Outlet: SGL RJ45 W/Cable	EA	6	169.86	1,019	C
10	Outlet: Dual RJ45 W/Cable	EA	222	239.56	53,182	C
11	Outlet: SGL CATV, F-Type W/Cable	EA	15	157.47	2,362	C
12	Patch Panel, RJ45 CAT 6, 48 PORT	EA	20	692.89	13,858	C
13	Patch Panel, RJ45 CAT 6A, 48 PORT	EA	8	898.00	7,184	C
14	Patch Cord RJ45 CAT6, 3 FT	EA	10	5.00	50	C
15	Patch Cord RJ45 CAT6, 7 FT	EA	75	6.82	512	C
16	Patch Cord RJ45 CAT6, 12 FT	EA	75	8.82	662	C
17	Patch Cord RJ45 CAT6, 14 FT	EA	35	10.82	379	C
18	Patch Cord RJ45 CAT 6A, 7 FT	EA	50	7.82	391	C
19	Patch Cord RJ45 CAT6A , 12 FT	EA	50	9.82	491	C
20	Patch Cord RJ45 CAT6A 3 FT	EA	50	4.50	225	C
21	EQUIP Rack&HWD	EA	20	496.47	9,929	C

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TAB F - INFORMATION SYSTEMS COST ESTIMATE (ISCE):

Section II - Primary Facility, Inside the 5-Foot Line - Equipment in Place (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
22	Block: 110 Type, 100 PR	EA	6	162.97	978	C
23	Riser: 100 PR Inside Plant Cable	LF	450	3.16	1,422	C
24	FO-SM DUPL Cord: LC, 5 FT	EA	102	186.93	19,067	C
25	Protected Terminal: 100 PR	EA	2	1,517	3,035	C
26	SWT-M: 48 User (NIPR)	EA	10	35,550	355,500	I
27	SIPR BLDG Node SPT	EA	2	8,327	16,654	C
28	SIPR BLDG Node Equipment	EA	2	36,290	72,580	I
29	SIPR Drops (CAT 6 STP) Structure	EA	25	5,149	128,731	C
30	Small Conf Room Enhanced Const Costs	EA	2	17,114	34,229	C
31	Medium Conf Room Enhanced Const Costs	EA	2	18,696	37,393	C
32	Phone: Single Line (VoIP)	EA	75	600.00	45,000	I
33	TELECOMM ENCLOSURE 7FT VERT	EA	4	6,425	25,701	C
34	TACLANE (SIPR)	EA	1	14,136	14,136	I
35	FO BREAK OUT KIT (1 STRAND)	EA	24	51.65	1,240	I
36	Wireless LAN Controller	EA	1	32,299	32,299	I
37	Wireless LAN AP Controller License	EA	50	683.96	34,198	I
38	Wireless Access Point	EA	50	1,306	65,281	C
				Total	996,860	

Primary Facility Notes:

Provide I3A/UFC 3-580-01 compliant PDS/BCS for 1 building Provide NIPR voice/data to all appropriate outlets serving approximately 75 authorized users. Provide NIPR AV/ VTC. Provide SIPR data/VTC IAW the SIPRNET Technical Implementation Criteria/AR 380-5. (Other comments as required, quantifying unusual voice/data requirements exceeding the I3A standards.) USASOC require 3 drop for NIPR per WAO and 2 drops for SIPR per WAO. This facility will have 2 different networks. The RNECFB will only provide NIPR VOIP Service and a L2BS connection for USASOC networks.

Section III - Supporting Facilities, Outside the 5-Foot Line - Installed Equipment (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	UG Duct: 4-Way	LF	820	11.50	9,430	C
2	UG Duct: 4-WAY CONC-ENC	LF	150	20.43	3,065	C
3	Innerduct 3-3''	LF	1,000	4.51	4,510	C
4	GIP 4'' 2-Way Boring/Pushing	LF	45	65.26	2,937	C
5	Trench: Backhoe 24''X 36''	LF	920	7.97	7,332	C
6	Trench: Handdig 24''X 36''	LF	50	22.31	1,116	C

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INSTALLATION: Fcrt Bragg
LOCATION: Ncrth Carolina

TAB F - INFORMATION SYSTEMS COST ESTIMATE (ISCE):

Section III - Supporting Facilities, Outside the 5-Foot Line - Installed Equipment (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
7	Cut & Resurface Asphalt 4''	SF	113	8.66	979	C
8	Cut & Resurface Concrete 4''	SF	56	10.61	594	C
9	CONC Core Drill 4'' Diameter	EA	6	159.23	955	C
				Total	30,918	

Section IV - Supporting Facilities, Outside the 5-Foot Line - Equipment in Place (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	UG: 600 PR, 24 AWG (B1)	LF	500	8.35	4,175	C
2	UNDGRD: 600 PR, 24 AWG (OSP)	LF	1,500	8.35	12,525	C
3	UG COPPER STAINLESS STEELSplice Cases	EA	1	564.79	565	C
4	UG FIBER STAINLESS STEEL Splice Cases	EA	1	724.00	724	C
5	UG Splice Pairs	EA	1,200	1.18	1,416	C
6	FO Cable DC DIELEC SM 24 Strand (OSP)	LF	2,000	4.46	8,920	C
7	FO Cable DC DIELEC SM 12 Strand	LF	450	2.88	1,296	C
				Total	29,621	

Supporting Facilities Notes:

Provide I3A compliant outside plant (OSP) infrastructure for 1 building. Provide 12 SMF and 25 pair 24 AWG copper. Assumed OSP to be approximately 500 feet from the "IS/IT voice/data cable sources' to the construction site. Assumed each building will be set back from the "curb" an average of approximately 85 feet.

Section V - Mission Unique Equipment

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	Small Conference Room Enhanced	EA	2	211,913	423,826	P
2	Medium Conference Room Enhanced	EA	2	314,024	628,049	P
				Total	1,051,875	

Information Systems Cost Summary:

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INSTALLATION: Fort Bragg
LOCATION: North Carolina

TAB F - INFORMATION SYSTEMS COST ESTIMATE (ISCE):

	CONF	ISC	PROP	Total
Primary Facility	547,003	559,664	0	1,106,667
Supporting Facility	60,539	0	0	60,539
Mission Unique Equipment	0	0	1,051,875	1,051,875
Total	607,542	559,664	1,051,875	2,219,081

Remarks:

The costs are just an estimate and are subject to change.

/S/ Sherman K. Huff Sr
Project Manager
RNEC Fort Bragg, NC
12/17/2019

Information Systems Certification:

"This project has been reviewed by USAISEC to determine the adequacy of its Information Systems Cost Estimate." This project is certified "adequate as submitted".

Certified by: /S/ David Kelso
Site Project Lead
USAISEC-FDED
12/17/2019

Cost Model Project Information:

Square Footage

Project Fiscal Year: 2022 Estimate Name: 93099

Square Footage	Building Name	Bldg 1	(B1)				
	Admin	Intermediate	Barracks	Warehouse / Storage	Clinic / Medical	Classroom	Others	Total
(SF/Outlet)	(80 SF)	(200 SF)	(150 SF)	(5000 SF)	(80 SF)	(80 SF)	(500 SF)	
Basement	0	0	0	0	0	0	0	0
1st Floor	17,000	0	0	47,000	0	0	0	64,000
2nd Floor	0	0	0	0	0	0	0	0
3rd Floor	0	0	0	0	0	0	0	0
4th Floor	0	0	0	0	0	0	0	0
5th Floor	0	0	0	0	0	0	0	0
6th Floor	0	0	0	0	0	0	0	0
7th Floor	0	0	0	0	0	0	0	0
8th Floor	0	0	0	0	0	0	0	0
9th Floor	0	0	0	0	0	0	0	0
10th Floor	0	0	0	0	0	0	0	0
Total	17,000	0	0	47,000	0	0	0	64,000
Outlet Type	Dual	Dual	Dual	Dual	Medical	Dual	Dual	
# Outlets	212	0	0	9	0	0	0	

Initial New Services Required

Project Fiscal Year: 2022 **Estimate Name:** 93099

New Services	Building Name	Bldg 1 (B1)
	New	Notes
Single Line Phones (Analog/Digital)	5	One per user.
Multi-line Phones (Analog/Digital)	5	One per secretary (not to exceed 10% of population).
Single Line Phones (VoIP)	75	One per user if VoIP is enabled..
Multi-line Phones (VoIP)	0	One per secretary (not to exceed 10% of population) if VoIP is enabled.
Softphones	0	One per user. No other phone or headset is to be provided.
Headsets	0	One per user. No other phone or headset is to be provided.
Wall Phone Outlet w/ Telephone Set	6	One per equipment room; plus safety and convenience locations.
Weatherproof Phones	1	One per building (exterior unattended door).
Explosive Environment Phones	0	HAZMAT facilities: i.e., paint/battery/chemical/etc.
LAN Ports	75	One per authorized NIPRNET user.
Fiber Optic Outlets (2 RJ-45 w/Dual SC)	0	As required; replaces non-fiber outlets (special needs only).
SIPRNET	25	One per authorized SIPRNET user.
TV Outlets - All Services	15	1.5 per barracks bed area (Round up to next whole number).

Mission Unique Services	Building Name	Bldg 1 (B1)
Team/Huddle Room (6 Person):	0	Stand alone with no control room connectivity
Small Conference Room (12 Person):	0	Stand alone with no control room connectivity
Small Conference Room Enhanced (12 Person):	2	With control room connectivity
Medium Conference Room (24 Person):	0	Stand alone with no control room connectivity
Medium Conference Room Enhanced (24 Person):	2	With control room connectivity
Large Conference Room (35 Person):	0	Stand alone with no control room connectivity
Large Conference Room Enhanced (35 Person):	0	With control room connectivity
Classroom (20 Person):	0	Stand alone with no control room connectivity
Classroom Enhanced (20 Person):	0	With control room connectivity
Training Room (18 Person):	0	Stand alone with no control room connectivity
Training Room Enhanced (18 Person):	0	With control room connectivity
Executive Conference Room (35 Person):	0	Stand alone with no control room connectivity
Executive Conference Room Enhanced (35 Person):	0	With control room connectivity
Command Briefing Room (Secret with VTC 150 person):	0	Stand alone with no control room connectivity
Command Briefing Room Enhanced (150 Person):	0	With control room connectivity
Audio Visual Control Room (1for TS/SCI and 1 for all other classifications):	0	

Cable, Switching and Building Requirements

Project Fiscal Year: 2022 Estimate Name: 93099

Cable, Switching, and Building	Building Name	Bldg 1 (B1)
Item	Value	Notes
Initial # of Building Occupants	75	
Number of Ducts into Building	Maximum Occupant Capacity - 100 to 200	
Type of Building	Warehouse / Storage	Use with Intermediate type facility.
Building Entry Duct / System Length Underground (Distance in Linear Feet)	500	Generates a maintenance hole and duct system from the new building to the site's "local" IC node.

Outside Cable Plant

Project Fiscal Year: 2022 **Estimate Name:** 93099

Telephone Switching Requirements:

Existing DCO

Outside Cable Plant	Complex Serving DCO/RSU			
	Existing/Available	**Proposed**	**Total**	**Notes**
Aerial (Figure 8)	0	0	0	Rarely used; self-supporting - cable and messenger in one.
Buried (Trenched)	0	0	0	Rarely used; back-hoe and hand-dig trenching used.
Underground	1,000	500	1,500	I3A Standard Outside Plant Construction; maintenance hole and duct system.
Total	1,000	500	1,500	Should account for total OSP requirement.

* Distance in Linear Feet

Building 709

Full Asbestos Survey for Demolition

Building 709 Fort Bragg, North Carolina

Prepared by David L Clark, Plexus Scientific Corporation
For the Directorate of Public Works,
Ft Bragg, North Carolina

XVIII AIRBORNE CORPS

Buildings 709 was inspected for asbestos on July 24, 2019 by David L Clark, inspector certification number: NC 11788 for Project Number PN-93099

Asbestos Inspection Report

Introduction

Scope of the Investigation

This report documents the full asbestos inspection and survey of Building 709 at Ft. Bragg, North Carolina conducted on July 24, 2019 by David L Clark, inspector certification number: NC 11788.

Background

Building 709 is a single story cinder block structure with a sloped metal roof. The building is currently used for storage. The floor is concrete throughout and a sheetrock ceiling. The building was inspected for asbestos for project number PN-93099.

Description of study

Investigation

Building 709 was visually inspected for suspected asbestos containing materials (ACM) by a North Carolina accredited inspector. A copy of the inspector's accreditation certificate is included in this report. Bulk samples of all suspect ACM's were collected. This report details ACM as identified at the time of inspection only. The inspection was conducted for the presence of asbestos containing building materials (ACBM). **Laboratory results indicated that NO ASBESTOS WAS DETECTED.**

EMSL Analytical analyzed the bulk samples. The laboratory is accredited by the National Voluntary Laboratory Accredited Program (NVLAP) Accreditation sponsored by the National Institute of Standards and Technology (NIST). A Copy of their accreditation certificate is included in this report. The samples were analyzed by the accepted method of polarized light microscopy (PLM) using EPA's "Method For the Determination of Asbestos In Bulk Building Materials", EPA/600/R-93/116. The laboratory's analytical report is included in this report.

Conclusions

ASBESTOS-CONTAINING MATERIAL WAS NOT DETECTED.

Asbestos Table

MATERIAL		CHARACTERISTICS			ASSESSMENT	
Type	Description/Location/Amount	Asbestos Yes/No/Presumed/ND	Percentage/Type (If ACM)	Friable / Non-Friable	Condition	Disturbance Potential
Misc	Sheetrock/ Joint Compound Ceiling Approx. 100 Sq. Ft	ND	NA	Non Friable	Damaged	Low
Misc	Black Exterior Sealant in Hole in Wall, Approx. 1 Sq. Ft.	ND	NA	Non Friable	Damaged	Low

Sq. Ft.-Square Foot, Ln. Ft.-Linear Foot, C. Ft.-cubic Foot

Amounts are estimated, contractor is responsible for exact measurements.

Analytical Report

EMSL Analytical, Inc.
2500 Gateway Centre Blvd., Suite 600 Morrisville, NC 27560
Tel/Fax: (919) 465-3900 / (919) 465-3950
http://www.EMSL.com / raleighlab@emsl.com

EMSL Order:	291907733
Customer ID:	PLEX75
Customer PO:	
Project ID:	

Attention:	Bruce Billings	Phone:	(910) 322-6338
	Plexus Scientific Corporation	Fax:	
	3-1137 Bunter Road	Received Date:	07/26/2019 10:30 AM
	Fort Bragg, NC 28310	Analysis Date:	07/26/2019
		Collected Date:	
Project:	Bldg 709, PN-93099		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
709-SR-1-SR *291907733-0001*	Wall #1 - Sheetrock, Wall/Ceiling	Brown/Gray Fibrous Homogeneous	15% Cellulose	20% Ca Carbonate 30% Gypsum 35% Non-fibrous (Other)	None Detected
709-S-1-YK *291907733-0002*	4" Hole in Wall #3 - Sealant, Black Exterior	Gray/Tan/Black Non-Fibrous Homogeneous		25% Ca Carbonate 75% Non-fibrous (Other)	None Detected
709-SR-2-SR *291907733-0003*	Wall #2 - Sheetrock, Wall/Ceiling	Brown/Gray Fibrous Homogeneous	20% Cellulose	40% Gypsum 40% Non-fibrous (Other)	None Detected
709-S-2-YK *291907733-0004*	4" Hole in Wall #3 - Sealant, Black Exterior	Black/Beige Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
709-SR-3-SR *291907733-0005*	Wall #3 - Sheetrock, Wall/Ceiling	Brown/Gray Fibrous Homogeneous	15% Cellulose	20% Ca Carbonate 30% Gypsum 35% Non-fibrous (Other)	None Detected

Analyst(s)
Kelly Gallisdorfer (2)
Roxsee Stover (3)

Billy Barnes, Asbestos Lab Manager
or Other Approved Signatory

Initial report from: 07/26/2019 15:02:18

Chain of Custody

OrderID: 291907733

Name of Lab: EMSL Lab
Lab Address: 2500 Gateway Centre Blvd, Sui
Morrisville, NC 27560

Lab Tel: (919) 456-3900
Lab Fax: (919) 456-3950

CHAIN OF CUSTODY RECORD ASBESTOS/LEAD

Client: Plexus Scientific Corporation	**Client ID:** PLEX75	**Point of Contact:** Bruce E. Billings	
Address: DPW Environment Compliance Branch		**Phone:** (910) 322-6338	**Fax:** (910) 396-4188
Bldg 3-1137 Reilly RD, Fort Bragg,NC 23810		**Email:** bruce.e.billings.ctr@mail.mil	
Building Number: 709	**Project Number:** PN-93099	**Turn Around Time** 24 Hours	

DESCRIPTION	SAMPLE NUMBER	ASBESTOS: PLM Bulk	PLM Point Count	PLM Gravimetric	PCm Air	TEM Bulk	TEM Air	LEAD PAINT: Lead Paint	Lead Wipe
SHEETROCK (WALL OR CEILING) / Wall #1	709-SR-1-SR			X					
SEALANT, BLACK EXTERIOR / 4 In. hole in Wall #3	709-S-1-YK			X					
SHEETROCK (WALL OR CEILING) / Wall #2	709-SR-2-SR			X					
SEALANT, BLACK EXTERIOR / 4 In. hole in Wall #3	709-S-2-YK			X					
SHEETROCK (WALL OR CEILING) / Wall #3	709-SR-3-SR			X					

Client: Plexus Scientific Corporation Test: PLM #Samples: 5
Order: 291907733 Project: Bldg 709, PN-93099
Disposition: *Discard after 9/24/2019*

REMARKS:

Samples will be disposed of 30 days after analysis, unless otherwise requested.

Relinquished By: Dave Clark	Date/Time 7/19/19 1100	Recieved By:	Date/Time	7/19/19 1620
Relinquished By:	Date/Time	Recieved By:	Date/Time	

TC 7457334982

Page 1 of 1

Page 1 Of 1

Accreditations

United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200671-0

EMSL Analytical, Inc.
Morrisville, NC

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

Asbestos Fiber Analysis

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).

2019-04-01 through 2020-03-31
Effective Dates

For the National Voluntary Laboratory Accreditation Program

NVLAP® National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL Analytical, Inc.
2500 Gateway Centre, Ste. 600
Morrisville, NC 27560
Mr. Billy Barnes
Phone: 919-465-3900
Email: bbarnes@emsl.com
http://www.emsl.com

ASBESTOS FIBER ANALYSIS **NVLAP LAB CODE 200671-0**

Bulk Asbestos Analysis

Code	*Description*
18/A01	EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

Code	*Description*
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

For the National Voluntary Laboratory Accreditation Program

Effective 2019-04-01 through 2020-03-31

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
MANDY COHEN, MD, MPH • Secretary
DANNY STALEY • Director, Division of Public Health

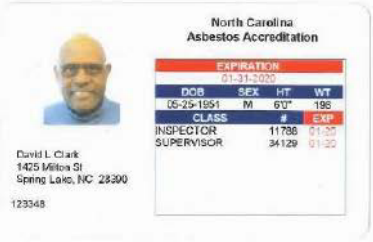
February 21, 2019

David L Clark
1425 Milton St
Spring Lake, NC 28390

Dear Mr. Clark:

Based upon the review of your accreditation application, the Health Hazards Control Unit (HHCU) has determined that you have fulfilled the requirements and are eligible for asbestos accreditation as a(n) INSPECTOR. Your assigned North Carolina accreditation number is 11788, which is reflected on your enclosed North Carolina Accreditation card. Please be sure to take this card with you to any asbestos work site where you are employed. The State requires that all persons conducting asbestos abatement or asbestos management activities be accredited and have their identification card on site.

Your North Carolina Inspector accreditation will expire on JANUARY 31, 2020. It is NOT the policy of the HHCU to issue renewal notices. If you wish to continue working as a(n) Inspector after this expiration date, you must successfully complete the required training and submit a completed application to this office prior to January 31, 2020. If you should continue to perform asbestos management activities as a(n) Inspector without a valid North Carolina accreditation, you will be in violation of State regulations and may be cited for noncompliance.



Sincerely,

Ed Norman
Program Manager
Health Hazards Control Unit

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES . DIVISION OF PUBLIC HEALTH

LOCATION: 5505 Six Forks Road, Building 1, Raleigh, NC 27609
MAILING ADDRESS: 1912 Mail Service Center, Raleigh, NC 27699-1912
www.ncdhhs.gov . TEL: 919-707-5950 . FAX: 919-870-4808

Building 710

Asbestos Survey for Demolition

Building 710 Fort Liberty, North Carolina

Prepared by Bruce Billings of Ayuda Management Corporation
For the Directorate of Public Works,
Fort Liberty, North Carolina

XVIII AIRBORNE CORPS

Building 710 was inspected for asbestos by Bruce Billings,
inspector certification number: NC 12397 on July 31, 2023.

Introduction

Scope of the Investigation

This report documents the asbestos inspection and survey of Building 710 at Fort Liberty, North Carolina for project number PN-93099. The work description is detailed in the DD1391 Form and is attached in this report.

Background

Building 710 is a one-story brick structure with a flat rubber membrane roof. Ceilings are metal. The floor system is concrete throughout the building. Building 710 is approximately 1,920 square feet and was constructed in 1934. Building 710 is currently used a garage and storage.

Description of study

Investigation

Building 710 was visually inspected for suspected asbestos containing materials (ACM) by a North Carolina accredited inspector. Bulk samples of all suspect ACM's were collected. This report details ACM as identified at the time of inspection only. Samples of materials to be disturbed during the course of work to be performed were taken and sent to a NVLAP certified laboratory for analysis. The approximate location where bulk samples were obtained are shown on the building floor plan included in this report. However, if suspect materials are discovered during renovation in concealed spaces, renovation activities should stop and the materials sampled by a North Carolina accredited asbestos inspector.

In compliance with the AHERA regulations, material is considered an Asbestos Containing Material (ACM) when it contains greater than one percent asbestos. Likewise, in this report, any material containing concentrations greater than one percent asbestos will be considered "positive". Occasionally, materials containing less than one percent asbestos, or not sampled, are assumed to be a "positive" asbestos containing material at the discretion of the inspectors. A narrative discussion of the AHERA ACM types (i.e., thermal systems insulation, miscellaneous and surfacing materials) found in the building is included in this report where relevant. Bulk sample information appears, estimated quantities of individual asbestos containing materials, material characterization of asbestos containing materials appears on the Asbestos Table.

Conclusions

Thermal System Insulation

TSI is insulation material applied to pipes, fittings, tanks, ducts, or on other interior structural components to prevent heat loss or gain, or water condensation, or for other purposes. Asbestos was detected in the TSI materials sampled in Building 710 at the time of sampling.

Miscellaneous Materials

Miscellaneous Materials include building material on structural components, structural members, or fixtures, such as floor and ceiling tiles, and do not include surfacing or TSI. Asbestos was not detected in the miscellaneous materials sampled in Building 710 at the time of the sampling.

Surfacing

Surfacing Material is friable material that is sprayed on, troweled on, or otherwise applied to surfaces for decorative or other purposes. Surfacing Material was not observed in Building 710 at the time of sampling.

ASBESTOS-CONTAINING MATERIAL WAS NOT DETECTED.

Table
Asbestos Containing Material
Building 710 Fort Liberty, North Carolina

MATERIAL		CHARACTERISTICS			ASSESSMENT	
Sample Type	Homogenous Area /Location	Yes/No/Presumed % Asbestos Type	Quantity (If ACM)	Friable	Condition	Disturbance Potential
Misc	Inaccessible Underground Piping	Presumed	Unknown Quantity	Unknown	Unknown	Unknown

SF.-Square Foot, LN.-Linear Foot, CF.-Cubic Foot Amounts are estimated, Contractor is responsible for exact measurements.
Condition-Good, Fair, Poor.
ACBM Type-T=Thermal Insulation, Misc=Miscellaneous, S=Surfacing.
Friable: Y=Yes, N=Not Friable.
NPACM-No Presumed Asbestos Containing Material.
Disturbance Potential-Low Potential Damage, Potential Damage, Potential Significantly Damage.

Chain of Custody

DMS CHOC DEG: POPE-007

ASBESTOS CHAIN OF CUSTODY

CLIENT: AFCEE/POPE AFB	WESTON W.O.: 20077.043.026
BUILDING: 0710	DATE: 04/19/2007
Requested Turnaround: 7 Days	Send Results To: J. Frank Burgess

CHOC SEQ.	Sample Number	HA No.	Sys	Loc	Size	Color	Additional Description (Material Type, if Material = Mis)	F / NF
101	P-0710-WG-01	1		WL		GY		NF
102	P-0710-WG-02	1		WL		GY		NF

Report: ChocRepo.frx 2004 Jul 14 Revision 07/15/2004

OrderID: 291702011

Name of Lab: EMSL Lab
Lab Address: 2500 Gateway Center Blvd, Suite 600
Morrisville,, NC 27560

CHAIN OF CUSTODY RECORD ASBESTOS ANALYSIS

Lab Tel: (919) 456-3900
Lab Fax: (919) 456-3950

Client: Chenega Support Services **Client ID** CHEG25	**Project Manager:** Bruce E. Billings
Address: Directorate of Public Works (IMBG-PWE) 2175 Reilly Rd Stop A, Fort Bragg, NC 23810-5000	**Phone:** (910) 432-3564 **Fax:** (910) 396-4188
	Email: bruce.e.billings.ctr@mail.mil
Building Number: 710 **Project Number:** P2-00192-17	**Turn Around Time:** 24 Hours

DESCRIPTION	SAMPLE NUMBER	ASBESTOS					
		PLM Bulk	PLM Point Count	Gravimetric PLM	PCM Air	TEM Bulk	TEM Air
GLAZING, SEALANT WHITE INTERIOR WINDOW / Wall #1	710-S-1-YW	X					
GLAZING, SEALANT WHITE INTERIOR WINDOW / Wall #1	710-S-2-YW	X					
GLAZING, SEALANT WHITE INTERIOR WINDOW / Wall #1	710-S-3-YW	X					

Chenega Support Services, LLC
Bldg 710, P2-00192-17
3/10/2017 11:0
PLM
TAT: 24 Hour
Bulk
Order ID: 291702011
No Samples: 3
Due: 03/13 11:00 AM
Fax:

REMARKS:				Samples will be disposed of 30 days after analysis, unless otherwise requested.
Relinquished By: David Clark	Date/Time: 3-7-17 1600	Received By:	Date/Time: 3-10-17 11a	
Relinquished By:	Date/Time:	Received By:	Date/Time:	

Page 1 of 1

1952102 38482

Page 1 Of 1

Analytical Report

POLARIZED LIGHT MICROSCOPY SAMPLE ANALYSIS SUMMARY

Weston W.O. No. 20077-043-026-0108
Sample Number LF958 through LF959

AQ LAB ID NO.	CLIENT/CLIENT ID	BLDG	HA	MATERIAL DESCRIPTION and REMARKS	FRIABILITY	RESULTS CH	AM	CR	OT	TL	ANALYST	ANALYZED
LF958	POPE AFB/P710-WG-01	0710	1	WINDOW GLAZING, GRAY, WALL	NON-FRIABLE	-	-	-	-	-	16803	05/18/04
Layer 1				NON-FIBROUS, CEMENTITIOUS, WHITE		-	-	-	-	-		05/18/04
Layer 2				PAINT, WHITE		-	-	-	-	-		05/18/04
LF959	POPE AFB/P710-WG-02	0710	1	WINDOW GLAZING, GRAY, WALL	NON-FRIABLE	-	-	-	-	-	16803	05/18/04
Layer 1				NON-FIBROUS, CEMENTITIOUS, WHITE		-	-	-	-	-		05/18/04
Layer 2				PAINT, WHITE		-	-	-	-	-		05/18/04

RESULTS LEGEND

CH - Chrysotile AM - Amosite CR - Crocidolite OT - Other TL - Total - - None Detected **Bold** - Results of the Sample as a Whole

Results Approved for Transmittal by:

J. Stan Strickland, CIB
Laboratory Manager

May 18, 2004

Upon issue, this report may be reproduced only in full and relates only to the items tested. The detection limit for this analysis is <1%. All analyses are performed in accordance with U.S. EPA 600/M4-82-020, as ammended. Unless stated otherwise, asbestos content is determined by visual estimation methods and reported as a volume percentage. Individual layers are analyzed separately and results are reported for each layer as well as the sample as a whole. Weston's Optical Microscopy Laboratory is accredited by the National Institute of Standards and Technology's National Voluntary Laboratory Accreditation Program (NVLAP) for asbestos fiber analysis (Laboratory Code 101254). This laboratory report does not constitute product endorsement by NVLAP or any agency of the U.S. government. Page 1 of 1

EMSL Analytical, Inc.
2500 Gateway Centre Blvd., Suite 600 Morrisville, NC 27560
Tel/Fax: (919) 465-3900 / (919) 465-3950
http://www.EMSL.com / raleighlab@emsl.com

EMSL Order: 291702011
Customer ID: CHEG25
Customer PO:
Project ID:

Attention: Bruce Billings
Chenega Support Services, LLC
IMBG-PWE-C/Bruce Billings
2175 Reilly Road, Stop A
Fort Bragg, NC 28310-5000
Project: Bldg 710, P2-00192-17

Phone: (910) 584-1062
Fax:
Received Date: 03/10/2017 11:00 AM
Analysis Date: 03/10/2017
Collected Date:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
710-S-1-YW 291702011-0001	Wall #1 - Glazing, Sealant White Interior Window	White Fibrous Homogeneous	2% Wollastonite	98% Non-fibrous (Other)	None Detected
710-S-2-YW 291702011-0002	Wall #1 - Glazing, Sealant White Interior Window	White Fibrous Homogeneous	<1% Cellulose 3% Wollastonite	97% Non-fibrous (Other)	None Detected
710-S-3-YW 291702011-0003	Wall #1 - Glazing, Sealant White Interior Window	White Non-Fibrous Homogeneous	<1% Wollastonite	100% Non-fibrous (Other)	None Detected

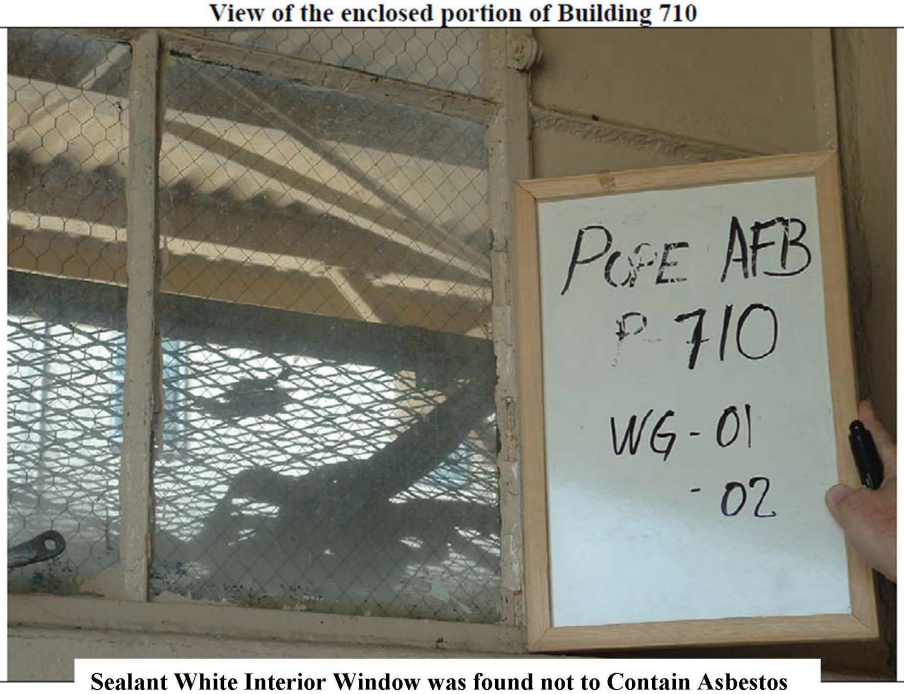
Analyst(s)
Joshua Moorman (1)
Olivia Bradley (2)

Billy Barnes, Asbestos Lab Manager
or Other Approved Signatory

Initial report from: 03/10/2017 16:35:53

Photos

View of the enclosed portion of Building 710



Sealant White Interior Window was found not to Contain Asbestos

Asbestos Do and Don't

- DON'T remove materials that may contain asbestos.
- DON'T dust, sweep or vacuum debris that may contain asbestos.
- DON'T saw, sand, scrape or drill holes in asbestos materials or suspect asbestos material.
- DON'T use abrasive pads or brushes or power strippers on a dry floor.
- DON'T sand or try to level asbestos flooring or its backing. When asbestos flooring needs replacing, notify DPW-Customer Service.
- DO have a facility thoroughly inspected by a North Carolina accredited asbestos inspector for asbestos prior to any renovation or demolition activity.
- DO have removal and repair performed by people who are North Carolina accredited asbestos professionals.
- DO contact DPW-Customer Service at 910 396-0321 if suspect asbestos containing materials are damaged.
- DO keep activities to a minimum in any areas – such as crawl spaces or attics – that have damaged material that may contain asbestos.
- DO take every precaution to avoid damaging materials that may contain asbestos.

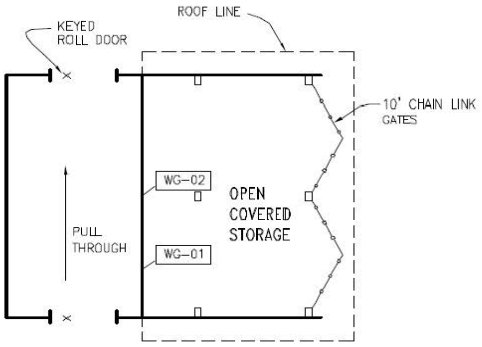
Sample Locations

LEGEND

XX–XX INDICATES POSITIVE ASBESTOS SAMPLE

XX–XX INDICATES NEGATIVE ASBESTOS SAMPLE

INACCESSIBLE AREA



NOT TO SCALE

POPE AIR FORCE BASE
NORTH CAROLINA
BASELINE ASBESTOS SURVEY

FIG. 1 W.O. – 20077.043.026

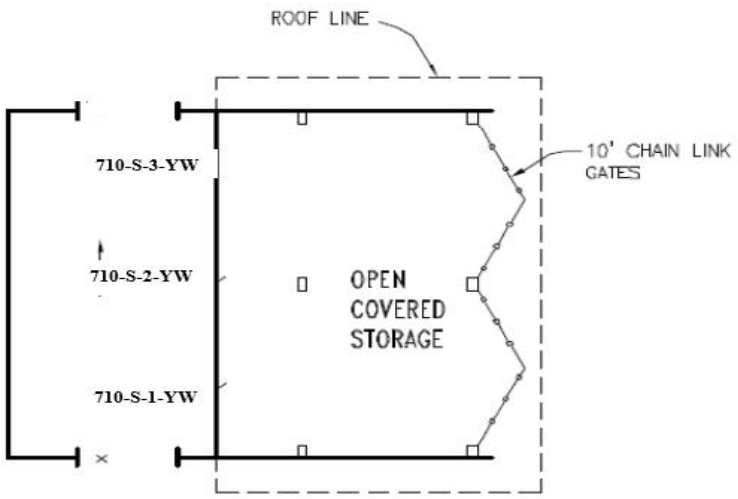
BUILDING 710

WESTON SOLUTIONS

June 2004

BLDG. 710 SAMPLE LOCATIONS

SAMPLES COLLECTED
MARCH 10,2017



NOT TO SCALE

Accreditations

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
KODY H. KINSLEY • Secretary
MARK T. BENTON • Deputy Secretary for Health
SUSAN KANSANGRA • Assistant Secretary for Public Health
Division of Public Health

November 22, 2022

Bruce E Billings
827 Beuer Dr
Fayetteville, NC 28314

Dear Mr. Billings:

Based upon the review of your accreditation application, the Health Hazards Control Unit (HHCU) has determined that you have fulfilled the requirements and are eligible for asbestos accreditation as a(n) INSPECTOR. Your assigned North Carolina accreditation number is 12397, which is reflected on your enclosed North Carolina Accreditation card. Please be sure to take this card with you to any asbestos work site where you are employed. The State requires that all persons conducting asbestos abatement or asbestos management activities be accredited and have their identification card on site.

Your North Carolina Inspector accreditation will expire on NOVEMBER 30, 2023. It is NOT the policy of the HHCU to issue renewal notices. If you wish to continue working as a(n) Inspector after this expiration date, you must successfully complete the required training and submit a completed application to this office prior to November 30, 2023. If you should continue to perform asbestos management activities as a(n) Inspector without a valid North Carolina accreditation, you will be in violation of State regulations and may be cited for noncompliance.

Bruce E Billings
827 Beuer Dr
Fayetteville, NC 28314

138224

North Carolina
Asbestos Accreditation

EXPIRATION 11-30-2023			
DOB	SEX	HT	WT
05-07-1959	M	6'2"	220
CLASS		#	EXP
DESIGNER		40443	11-30-2023
INSPECTOR		12397	11-30-2023
MGMT PLANNER		20946	11-30-2023

Sincerely,

Ed Norman
Program Manager
Health Hazards Control Unit

Enclosure

DD1391

~~2022~~ 93099E P REVISION DATE: 13 JAN 2020
Army MCA (AS OF 01/14/2021 AT 17:04:24) 06 MAR 2018
ACF=0.88 UM=E

Fort Bragg
North Carolina

Aircraft Maintenance Hangar-FCH

211 10 93099 ~~57,000~~

PRIMARY FACILITY				46,431
Hangar - High Bay, >40' height	SF	91,000	446.90	(40,668)
Fixed Wing Parking Apron, Paved-Modify	SY	70,150	1.61	(113)
Hangar Access Apron, Paved	SY	7,505	126.02	(946)
HAZMAT Storage - Installation	SF	300	~~252.12~~	(76)
Cybersecurity Measures	LS	--	--	(750)
Total from Continuation page(s)				(3,878)
SUPPORTING FACILITIES				4,486
Electric Service	LS	--	--	(398)
Water, Sewer, Gas	LS	--	--	(845)
Paving, Walks, Curbs And Gutters	LS	--	--	(29)
Storm Drainage	LS	--	--	(353)
Site Imp(1,267) Demo(1,533)	LS	--	--	(2,800)
Information Systems	LS	--	--	(61)

ESTIMATED CONTRACT COST	50,917
CONTINGENCY (5.00%)	2,546
SUBTOTAL	53,463
SUPERVISION, INSPECTION & OVERHEAD (5.70%)	3,047
TOTAL REQUEST	56,510
TOTAL REQUEST (ROUNDED)	57,000
INSTALLED EQT-OTHER APPROPRIATIONS	(1,612)

Construct a four bay fixed and rotary wing aircraft operations and maintenance hangar that includes maintenance bays for scheduled and unscheduled maintenance, flight detachment administration and operations, maintenance support, tool and parts storage, and shop space. The facility will include 1.5-ton bridge cranes for each fixed wing bay, 0.75-ton bridge cranes for each rotor wing bay, oil water separator, and separate oil and hazardous material storage areas. The unscheduled maintenance bay includes a wash rack with catch basin and collective water recycling system. Built-in building systems include fire alarm/mass notification, fire suppression, energy management controls, advanced communications network, Intrusion Detection Systems (IDS), electronic access control, Energy Monitoring Control Systems (EMCS) connection, and a protected distribution system (PDS). The project includes construction of a new hangar access apron, hangar parking apron, and associated lighting for airfield pavements. Other supporting facilities include all related sitework and utilities (electrical, water, gas, sanitary sewer, and information system distribution), lighting, parking, access drives, roads, curb and gutter, sidewalks, landscaping, and other site improvements. Special construction includes sustainable construction features complying with Leadership in Energy and Environmental Design (LEED) "Silver". Access for individuals with disabilities will be provided. Comprehensive interior design is included. Air conditioning: 176Kw (50 tons). Facilities will be designed to a minimum life of 40 years in accordance with DoD's Unified Facilities Criteria (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance.

Fort Bragg
North Carolina

Aircraft Maintenance Hangar-FCH 93099

9. COST ESTIMATES (CONTINUED)

ITEM	UM	QUANTITY	UNIT COST	COST ($000)
PRIMARY FACILITY (CONTINUED)				
Overhead Protection/Canopy - General	SF	5,000	150.00	(750)
Aircraft Washing Apron, Paved	SY	1,333	~~132.03~~	(176)
Plant /Utilities Building	SF	1,200	497.67	(597)
Swing Space Airfield Ops Bldg.	LS	--	--	(700)
Aircraft Maintenance Check Pad	SY	1,333	123.59	(165)
Sustainability/Energy Measures	LS	--	--	(736)
Antiterrorism Measures	LS	--	--	(754)
			Total	3,878

11. REQ: NONE ADQT: NONE SUBSTD: NONE

PROJECT:
Construct one four bay, 64,000 SF fixed and rotary wing aircraft maintenance hangar. Project includes hangar access and parking aprons, associated airfield apron lighting, administration offices, latrines, supporting utilities (water, sewer, electric services), as well as secured and unsecured communications. Force protection and antiterrorism measures will be required in the design and construction. Hazardous materials, such as asbestos, lead, etc., will be remediated as found.

REQUIREMENT:
This project is required to provide permanent facilities and infrastructure to accommodate the operations and maintenance of aircraft serving the U.S. Army Special Operations Command (USASOC) at Fort Bragg, NC. To support this mission, the U.S. Army Special Operations Aviation Command (USASOAC) Flight Company (UFC) requires an adequate four bay aircraft hangar that is configured to accommodate four C-27J Spartan aircraft, two UH-60 aircraft, five CASA-212 aircraft, and one C-12 aircraft. The four bay aircraft maintenance hangar will directly improve mission readiness, providing expeditious service to the maintainer and operators. Humidity significantly degrade the hydraulic systems, seals, and lubricated moving metal parts on the Aircraft Ground Support Equipment (AGSE) when they are left exposed to the environment. Keeping them stored in a controlled climate is required by Army Regulations as well as with the U.S. Army and major command's (AMCOM's) Corrosion Control Program. This equipment includes hydraulic tripod jacks, standard Army tug system, ground power unit trailers, generators, forklifts, and a hydraulic scissor lift, as well as large spare items like engines and propellers.

CURRENT SITUATION:
The UFC has an extremely high operation tempo for supporting SOF training and operational requirements. This greatly accelerates the need for scheduled and unscheduled aircraft maintenance. Existing facility is outdated, inadequate, more than 60 years old, and has not been modernized. Internal systems (electrical,

Fort Bragg
North Carolina

Aircraft Maintenance Hangar-FCH 93099

CURRENT SITUATION: (CONTINUED)
mechanical, plumbing, etc.) are reaching failure and considerable amount of O&M repair funding is being applied to the existing facility on an annual basis. Existing facilities lack many of the functional requirements and have inadequate administrative and shop space, flight operations, tool and parts storage, life support, and locker rooms and latrines required to conduct routine aircraft maintenance operations as required by the Army Standard for Aircraft Maintenance Hangars. Lack of adequate maintenance facilities accelerates degradation of the equipment, hinders maintenance operations, and interrupts the UFC mission when aircraft are inoperable due to maintenance problems. Class IX aviation parts storage is currently located in a separate facility that is inadequate to comply with Congressional Direction provided in the FY03-14 NDAAs, Public Law 107-314 Sec 1067 [10 U.S.C. 2228]: "Prevention and mitigation of corrosion of military equipment and infrastructure"), DODI 5000.67 - Prevention and Mitigation of Corrosion on DoD Military Equipment and Infrastructure, the OSD Corrosion Program Strategic Plan, the AMCOM Corrosion Control Program One (CCP1), AR 750-59 - Army Corrosion Prevention and Control Program, and TM1-1500-344-23-2.

IMPACT IF NOT PROVIDED:
Facility will continue to fail to a point that a considerable amount of modernization funding will need to be applied to the facility to maintain operational readiness. The UFC will continue to assume risk in the readiness of their aircraft from potential damage caused by corrosion due to improper storage of Class IX aviation repair part. Also, the UFC will continue to be in violation of Public Law 107-314, Sec 1067 [10 U.S.C. 2228]: "Prevention and mitigation of corrosion of military equipment and infrastructure" and the Army Aviation and Missile Command Corrosion Control Program One (CCP1).
The C-27J is produced overseas by an Italian company, and only operated in the United States by the US Coast Guard and USASOC. As a result, there is limited availability of spare parts in CONUS. Excessive price increases on these parts by the manufacturer makes keeping the aircraft optimally functioning critical at the unit level. The spare parts are intensively managed items that are difficult to procure and will result in increased downtime for this complex aircraft if it is not carefully maintained and protected from corrosion. Any long period of down-time for the aircraft may result in decremented support to USASOC.

ADDITIONAL:
Required assessments have been made for supporting facilities and the project is not in a 100-year floodplain in-accordance-with Executive Order 11988. This project has been coordinated with the installation physical security plan, and all physical security measures are included. All required antiterrorism protection measures are included. Alternative methods of meeting this requirement have been explored during project development. This project is the only feasible option to meet the requirement. A parametric cost estimate based upon project engineering design was used to develop this budget estimate.

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North Carolina

Aircraft Maintenance Hangar-FCH 93099

PHILLIP D. SOUNIA
COL, AR
Commanding

ESTIMATED CONSTRUCTION START:	MAR 2022	INDEX: 3123
ESTIMATED MIDPOINT OF CONSTRUCTION:	SEP 2022	INDEX: 3154
ESTIMATED CONSTRUCTION COMPLETION:	MAR 2023	INDEX: 3186

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Fort Bragg
North Carolina

Aircraft Maintenance Hangar-FCH 93099

		Item	U/M	Qty	Unit Cost	Cost ($000)
PRIMARY FACILITY.						
GENERAL.						
1.0)	21110	Hangar - High Bay, >40' height	SF	91,000	446.90	(40,668)
1)	21110	Hangar - High Bay, >40' height	SF	80,052	460.00	36,824
2)	21113	Aircraft Parts Storage	SF	8,404	351.12	2,951
3)	21113	Aircraft Mission Equipment Storage	SF	2,544	351.12	893
2.0)	11310	Fixed Wing Parking Apron, Paved-Modify	SY	70,150	1.61	(113)
1)		Pavement Marking Removals	LF	3,000	0.40	1
2)		Pavement Markings	LF	4,000	3.96	16
3)		Tie Down Anchors	EA	44	1,928.08	85
4)		Grounding Points	EA	44	247.19	11
3.0)	11340	Hangar Access Apron, Paved	SY	7,505	126.02	(946)
1)		Hangar Access Apron, Paved	SY	7,505	86.62	650
2)		Access Apron, 6" Base	SY	7,505	9.59	72
3)		Drainage Layer	SY	7,505	7.91	59
4)		Sudrain Collection System	LF	700	6.43	5
5)		Access Apron, 12" Subbase	SY	7,505	18.00	135
6)		Access Apron, Shoulder Paved	SY	540	12.61	7
7)		Shoulder Base, 6"	SY	540	9.59	5
8)		Shoulder Subbase, 12"	SY	540	18.00	10
9)		Shoulder Subgrade, 12"	SY	540	0.38	1
10)		Apron Subgrade, 12"	SY	7,505	0.38	3
4.0)	44228	HAZMAT Storage - Installation	SF	300	252.12	(76)
1)		POL Storage Bldg.	SF	150	285.12	43
2)		HAZMAT Storage Bldg.	SF	150	219.12	33
5.0)	00000	Cybersecurity Measures	LS	--	--	(750)
1)		UMCS	LS	--	--	250
2)		LFS	LS	--	--	250
3)		IDS	LS	--	--	250
6.0)	14179	Overhead Protection/Canopy - General	SF	5,000	150.00	(750)
1)		GSE	SF	3,000	150.00	450
2)		ASIOE	SF	2,000	150.00	300
7.0)	11370	Aircraft Washing Apron, Paved	SY	1,333	132.03	(176)
1)		Wash Apron, 6" Base	SY	1,333	9.59	13
2)		Drainage Layer	SY	1,333	7.91	11
3)		Sub Drain System	LF	200	6.43	1
4)		Curb and Gutter	LF	330	34.61	11
5)		Subbase, 12"	SY	1,333	18.00	24
6)		Apron, Paved	SY	1,333	86.62	115
7)		Apron Subgrade, 12"	SY	1,333	0.38	1
8.0)	89120	Plant /Utilities Building	SF	1,200	497.67	(597)
1)		Fire Pump Bldg.	SF	1,200	316.40	380

Fort Bragg
North Carolina

Aircraft Maintenance Hangar-FCH 93099

		Item	U/M	Qty	Unit Cost	Cost ($000)
2)		Fire Water Pump, 2,500 GPM	EA	2	108,764	218
9.0)	14110	Swing Space Airfield Ops Bldg.	LS	--	--	(700)
1)		Modular Bldg. Lease (Monthly)	EA	12	25,000	300
2)		Modular Bldg. Setup/Services/Demob.	LS	--	--	400
10.0)	11370	Aircraft Maintenance Check Pad	SY	1,333	123.59	(165)
1)		6" Base Course	SY	1,333	9.59	13
2)		Drainage Layer	SY	1,333	7.91	11
3)		Sub Drain System	LF	225	6.43	1
4)		Subbase, 12"	SY	1,333	18.00	24
5)		Check Pad, Paved	SY	1,333	86.62	115
6)		Check Pad Subgrade, 12"	SY	1,333	0.38	1
11.0)	00005	Sustainability/Energy Measures	LS	--	--	(736)
1)		Hangar, High Bay	SF	80,052	9.20	736
12.0)	88041	Antiterrorism Measures	LS	--	--	(754)
1)		Hangar, High Bay	SF	80,052	9.20	736
2)		Aircraft Mission Equip. Storage	SF	2,544	7.02	18

INFO SYS & ANTITERRORISM MEASURES.
The following Building Information Systems cost can be found only in Tab F: $547,003

SUPPORTING FACILITIES.

Electric Service			LS	--	--	(398)
1)	81242	Underground Electric Lines in Conduit, 6-W	LF	250	420.13	105
2)	81360	Transformers XFMR 1,500	EA	1	62,734	63
3)	93310	Remove Exist. Transformers	EA	2	988.76	2
4)	81230	Site Lighting, 40' Aluminum Pole, 1000 Wat	EA	6	5,928.52	36
5)		Site Communications	LF	1,000	191.92	192
6)		Connection Fee (Estimate)	EA	1	1,000.00	1
Water, Sewer, and Gas			LS	--	--	(845)
1)	84210	Water Distribution Lines, Cement Lined Duc	LF	100	151.39	15
2)	84210	Water Distribution Lines, Plastic Pipe, PV	LF	650	77.04	50
3)	84610	Water Storage Tank, Elevated Steel 165000	EA	1	650,000	650
4)	89240	Fire Hydrant, 6' Depth	EA	3	5,311.29	16
5)	89340	Utilidor, 20" Ductile Iron MH Cluster	EA	1	66,098	66
6)	84610	Foam Containment Tank, 35,000	EA	1	44,494	44
7)		Connection Fee (Estimate) Water	EA	1	1,000.00	1

Fort Bragg
North Carolina

Aircraft Maintenance Hangar-FCH 93099

	Item	U/M	Qty	Unit Cost	Cost ($000)
8)	Connection Fee (Estimate) Sewer	EA	1	1,000.00	1
9)	Connection Fee (Estimate) Gas	EA	1	1,000.00	1
Paving, Walks, Curbs, and Gutters		LS	--	--	(29)
1) 85220	Sidewalks & Walkways 4" Thick Cast in Plac	SY	167	55.54	9
2) 85110	Base Course 1-1/2" Crushed Stone to 6" De	SY	167	8.69	1
3) 85110	Cast in Place Curb & Gutter 6" HI, 6" THK,	LF	350	27.69	10
4) 85110	Road Pavement, Asphalt Concrete Surface 1-	SY	167	8.69	1
5) 93310	Remove Pavement	SY	1,120	6.18	7
Storm Drainage		LS	--	--	(353)
1) 87110	Reinforced Concrete Pipe 36" Dia	LF	1,750	152.29	267
2)	LID Considerations	LS	--	--	87
Site Improvements		LS	--	--	(1,267)
1) 93220	Cleanup and Landscaping	AC	7	8,280.87	58
2) 93410	Excavation, Cut and Fill	CY	7,500	78.16	586
3) 87210	Industrial Chain Link Fencing & Walls 8'	LF	1,200	39.06	47
4) 85110	Surface Treatments, Pavement Markings, 4"	LF	9,000	5.29	48
5) 93310	Remove Pavement	CY	2,778	177.37	493
6) 93310	Remove Piping	LF	1,500	13.69	21
7) 93310	Remove Fencing	LF	500	2.87	1
8) 93310	Remove Manhole	EA	10	346.07	3
9)	Dumpster Enclosure	LS	--	--	10
Demolition		LS	--	--	(1,533)
1) 93310	Demolition, Concrete Structure	SF	55,756	27.50	1,533
Information Systems		LS	--	--	(61)
1) 80800	Information Systems	LS	--	--	61

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INSTALLATION: Fort Bragg
LOCATION: North Carolina

TAB B - PLANNING AND DESIGN DATA (ESTIMATE)

1. Status

A. Design Start Date, Estimated.....
B. Percent Complete as of 15 SEP 2020 (Design Year).....
C. Percent Complete as of 01 JAN 2021 (Budget Year).....
D. Percent Complete as of 01 OCT 2021 (Program Year).....
E. Concept Complete Date.....
F. Design Complete Date.....
G. Type of Design Contract:

2. Basis

A. Standard or Definitive Design (yes/no) NO

3. Cost (Total $000)

A. Production of Plans and Specs.....	0
B. All Other Design Cost.....	0
C. Total Design Cost (C) = (A)+(B) OR (D)+(E).....	0
D. Contract Architect-Engineer Design Cost, Estimated.....	0
E. In-House Design Cost Plus Architect Engineer Contract Supervision and Administration Cost Government Forces Design Cost, Estimated	0

4. Construction Contract Award.....

5. Construction Start Date (Planned)..... MAR 2022

6. Construction Completion Date..... MAR 2023

7. LEED Rating (at Design).....

8. Design Charrette

A. Date of Design Charrette.....

Energy/Life Cycle Statement

PREP DATE: 06 MAR 2018 ACF=0.88 UM=E
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PROJECT TITLE: Aircraft Maintenance Hangar-FCH
INSTALLATION: Fort Bragg
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TAB E - FURNISHINGS AND EQUIPMENT

Information Systems Equipment

Item	Description	Total Cost ($000)	Proc Appr FY	Proc Appr	Est Delivery Date	Proc Status	Est Instl Cost ($000)	Instl FY	Instl Appr
1	Info Sys - ISC	560	2023	OPA					
2	Info Sys - PROP	1,052	2023	OPA					

Totals by Appropriation Type ($000)

Total OMA/OMN/3400/OM DHP:	0
Installed Equipment - Other Appropriations:	1,612
Total Furnishings and Equipment Amount:	1,612

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TAB F - INFORMATION SYSTEMS COST ESTIMATE (ISCE):

PROGRAM TYPE - MCA
PRIMARY PROPONENT FUND - OPA
USACE DISTRICT - Mobile District
Region/MACOM - HQ USA Special Opns Cmd
CONF Primary Facility costs transferred to Tab A/DD1391 Form? - No

Section I - Primary Facility, Inside the 5-Foot Line - Installed Equipment (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	EMT 1'' W/HDW (SGL RJ45 & TV)	LF	2,000	5.35	10,700	C
2	EMT 1'' W/HDW (Dual Outlets)	LF	9,986	5.35	53,425	C
3	EMT 4'' W/HDW (Backbone Cable)	LF	350	24.58	8,603	C
4	Backboard: 4 X 8 X 3/4''	EA	12	157.82	1,894	C
5	Cable Tray (18'' wide)	LF	1,345	26.16	35,185	C
				Total	109,807	

Section II - Primary Facility, Inside the 5-Foot Line - Equipment in Place (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	Set, 2500 Type	EA	11	85.00	935	I
2	Set, Multiline	EA	5	552.94	2,765	I
3	Set, Weather-Proof	EA	1	1,011	1,011	I
4	FO LC Patch PNL 12 SM W/CPLRS	EA	8	339.22	2,714	C
5	FO LC Patch PNL 24 SM W/CPLRS	EA	2	547.26	1,095	C
6	MDF CONN: 100 PR W/60 FT Stub	EA	6	1,592	9,550	C
7	MDF: Standard DBL-Sided 8 VERT	EA	1	464.31	464	C
8	MDF Wire Jumper: Wrapped	EA	184	3.47	638	C
9	Outlet: SGL RJ45 W/Cable	EA	6	169.86	1,019	C
10	Outlet: Dual RJ45 W/Cable	EA	222	239.56	53,182	C
11	Outlet: SGL CATV, F-Type W/Cable	EA	15	157.47	2,362	C
12	Patch Panel, RJ45 CAT 6, 48 PORT	EA	20	692.89	13,858	C
13	Patch Panel, RJ45 CAT 6A, 48 PORT	EA	8	898.00	7,184	C
14	Patch Cord RJ45 CAT6, 3 FT	EA	10	5.00	50	C
15	Patch Cord RJ45 CAT6, 7 FT	EA	75	6.82	512	C
16	Patch Cord RJ45 CAT6, 12 FT	EA	75	8.82	662	C
17	Patch Cord RJ45 CAT6, 14 FT	EA	35	10.82	379	C
18	Patch Cord RJ45 CAT 6A, 7 FT	EA	50	7.82	391	C
19	Patch Cord RJ45 CAT6A , 12 FT	EA	50	9.82	491	C
20	Patch Cord RJ45 CAT6A 3 FT	EA	50	4.50	225	C
21	EQUIP Rack&HWD	EA	20	496.47	9,929	C

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LOCATION: North Carolina

TAB F - INFORMATION SYSTEMS COST ESTIMATE (ISCE):

Section II - Primary Facility, Inside the 5-Foot Line - Equipment in Place (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
22	Block: 110 Type, 100 PR	EA	6	162.97	978	C
23	Riser: 100 PR Inside Plant Cable	LF	450	3.16	1,422	C
24	FO-SM DUPL Cord: LC, 5 FT	EA	102	186.93	19,067	C
25	Protected Terminal: 100 PR	EA	2	1,517	3,035	C
26	SWT-M: 48 User (NIPR)	EA	10	35,550	355,500	I
27	SIPR BLDG Node SPT	EA	2	8,327	16,654	C
28	SIPR BLDG Node Equipment	EA	2	36,290	72,580	I
29	SIPR Drops (CAT 6 STP) Structure	EA	25	5,149	128,731	C
30	Small Conf Room Enhanced Const Costs	EA	2	17,114	34,229	C
31	Medium Conf Room Enhanced Const Costs	EA	2	18,696	37,393	C
32	Phone: Single Line (VoIP)	EA	75	600.00	45,000	I
33	TELECOMM ENCLOSURE 7FT VERT	EA	4	6,425	25,701	C
34	TACLANE (SIPR)	EA	1	14,136	14,136	I
35	FO BREAK OUT KIT (1 STRAND)	EA	24	51.65	1,240	I
36	Wireless LAN Controller	EA	1	32,299	32,299	I
37	Wireless LAN AP Controller License	EA	50	683.96	34,198	I
38	Wireless Access Point	EA	50	1,306	65,281	C
				Total	996,860	

Primary Facility Notes:

Provide I3A/UFC 3-580-01 compliant PDS/BCS for 1 building Provide NIPR voice/data to all appropriate outlets serving approximately 75 authorized users. Provide NIPR AV/ VTC. Provide SIPR data/VTC IAW the SIPRNET Technical Implementation Criteria/AR 380-5. (Other comments as required, quantifying unusual voice/data requirements exceeding the I3A standards.) USASOC require 3 drop for NIPR per WAO and 2 drops for SIPR per WAO. This facility will have 2 different networks. The RNECFB will only provide NIPR VOIP Service and a L2BS connection for USASOC networks.

Section III - Supporting Facilities, Outside the 5-Foot Line - Installed Equipment (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	UG Duct: 4-Way	LF	820	11.50	9,430	C
2	UG Duct: 4-WAY CONC-ENC	LF	150	20.43	3,065	C
3	Innerduct 3-3''	LF	1,000	4.51	4,510	C
4	GIP 4'' 2-Way Boring/Pushing	LF	45	65.26	2,937	C
5	Trench: Backhoe 24''X 36''	LF	920	7.97	7,332	C
6	Trench: Handdig 24''X 36''	LF	50	22.31	1,116	C

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LOCATION: North Carolina

TAB F - INFORMATION SYSTEMS COST ESTIMATE (ISCE):

Section III - Supporting Facilities, Outside the 5-Foot Line - Installed Equipment (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
7	Cut & Resurface Asphalt 4''	SF	113	8.66	979	C
8	Cut & Resurface Concrete 4''	SF	56	10.61	594	C
9	CONC Core Drill 4'' Diameter	EA	6	159.23	955	C
				Total	30,918	

Section IV - Supporting Facilities, Outside the 5-Foot Line - Equipment in Place (See AR 420-1, Table 4-2)

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	UG: 600 PR, 24 AWG (B1)	LF	500	8.35	4,175	C
2	UNDGRD: 600 PR, 24 AWG (OSP)	LF	1,500	8.35	12,525	C
3	UG COPPER STAINLESS STEELSplice Cases	EA	1	564.79	565	C
4	UG FIBER STAINLESS STEEL Splice Cases	EA	1	724.00	724	C
5	UG Splice Pairs	EA	1,200	1.18	1,416	C
6	FO Cable DC DIELEC SM 24 Strand (OSP)	LF	2,000	4.46	8,920	C
7	FO Cable DC DIELEC SM 12 Strand	LF	450	2.88	1,296	C
				Total	29,621	

Supporting Facilities Notes:

Provide I3A compliant outside plant (OSP) infrastructure for 1 building. Provide 12 SMF and 25 pair 24 AWG copper. Assumed OSP to be approximately 500 feet from the "IS/IT voice/data cable sources" to the construction site. Assumed each building will be set back from the "curb" an average of approximately 85 feet.

Section V - Mission Unique Equipment

Line	Description	UM	Quantity	Unit Price	Total Cost	F S
1	Small Conference Room Enhanced	EA	2	211,913	423,826	P
2	Medium Conference Room Enhanced	EA	2	314,024	628,049	P
				Total	1,051,875	

Information Systems Cost Summary:

FY 2022 93099E P REVISION DATE: 13 JAN 2020
MCA (AS OF 01/14/2021 AT 17:04:24)

PREP DATE: 06 MAR 2018 ACF=0.88 UM=E
FORM/PROJECT NUMBER: 93099
PROJECT TITLE: Aircraft Maintenance Hangar-FCH
INSTALLATION: Fort Bragg
LOCATION: North Carolina

TAB F - INFORMATION SYSTEMS COST ESTIMATE (ISCE):

	CONF	ISC	PROP	Total
Primary Facility	547,003	559,664	0	1,106,667
Supporting Facility	60,539	0	0	60,539
Mission Unique Equipment	0	0	1,051,875	1,051,875
Total	607,542	559,664	1,051,875	2,219,081

Remarks:

The costs are just an estimate and are subject to change.

/S/ Sherman K. Huff Sr
Project Manager
RNEC Fort Bragg, NC
12/17/2019

Information Systems Certification:

"This project has been reviewed by USAISEC to determine the adequacy of its Information Systems Cost Estimate." This project is certified "adequate as submitted".

Certified by: /S/ David Kelso
Site Project Lead
USAISEC-FDED
12/17/2019

Cost Model Project Information:

Square Footage

Project Fiscal Year: 2022 Estimate Name: 93099

Square Footage	Building Name	Bldg 1	(B1)				
	Admin	Intermediate	Barracks	Warehouse / Storage	Clinic / Medical	Classroom	Others	Total
(SF/Outlet)	(80 SF)	(200 SF)	(150 SF)	(5000 SF)	(80 SF)	(80 SF)	(500 SF)	
Basement	0	0	0	0	0	0	0	0
1st Floor	17,000	0	0	47,000	0	0	0	64,000
2nd Floor	0	0	0	0	0	0	0	0
3rd Floor	0	0	0	0	0	0	0	0
4th Floor	0	0	0	0	0	0	0	0
5th Floor	0	0	0	0	0	0	0	0
6th Floor	0	0	0	0	0	0	0	0
7th Floor	0	0	0	0	0	0	0	0
8th Floor	0	0	0	0	0	0	0	0
9th Floor	0	0	0	0	0	0	0	0
10th Floor	0	0	0	0	0	0	0	0
Total	17,000	0	0	47,000	0	0	0	64,000
Outlet Type	Dual	Dual	Dual	Dual	Medical	Dual	Dual	
# Outlets	212	0	0	9	0	0	0	

Initial New Services Required

Project Fiscal Year: 2022 **Estimate Name:** 93099

New Services	Building Name	Bldg 1 (B1)
	New	Notes
Single Line Phones (Analog/Digital)	5	One per user.
Multi-line Phones (Analog/Digital)	5	One per secretary (not to exceed 10% of population).
Single Line Phones (VoIP)	75	One per user if VoIP is enabled..
Multi-line Phones (VoIP)	0	One per secretary (not to exceed 10% of population) if VoIP is enabled.
Softphones	0	One per user. No other phone or headset is to be provided.
Headsets	0	One per user. No other phone or headset is to be provided.
Wall Phone Outlet w/ Telephone Set	6	One per equipment room; plus safety and convenience locations.
Weatherproof Phones	1	One per building (exterior unattended door).
Explosive Environment Phones	0	HAZMAT facilities: i.e., paint/battery/chemical/etc.
LAN Ports	75	One per authorized NIPRNET user.
Fiber Optic Outlets (2 RJ-45 w/Dual SC)	0	As required; replaces non-fiber outlets (special needs only).
SIPRNET	25	One per authorized SIPRNET user.
TV Outlets - All Services	15	1.5 per barracks bed area (Round up to next whole number).

Mission Unique Services	Building Name	Bldg 1 (B1)
Team/Huddle Room (6 Person):	0	Stand alone with no control room connectivity
Small Conference Room (12 Person):	0	Stand alone with no control room connectivity
Small Conference Room Enhanced (12 Person):	2	With control room connectivity
Medium Conference Room (24 Person):	0	Stand alone with no control room connectivity
Medium Conference Room Enhanced (24 Person):	2	With control room connectivity
Large Conference Room (35 Person):	0	Stand alone with no control room connectivity
Large Conference Room Enhanced (35 Person):	0	With control room connectivity
Classroom (20 Person):	0	Stand alone with no control room connectivity
Classroom Enhanced (20 Person):	0	With control room connectivity
Training Room (18 Person):	0	Stand alone with no control room connectivity
Training Room Enhanced (18 Person):	0	With control room connectivity
Executive Conference Room (35 Person):	0	Stand alone with no control room connectivity
Executive Conference Room Enhanced (35 Person):	0	With control room connectivity
Command Briefing Room (Secret with VTC 150 person):	0	Stand alone with no control room connectivity
Command Briefing Room Enhanced (150 Person):	0	With control room connectivity
Audio Visual Control Room (1for TS/SCI and 1 for all other classifications):	0	

Cable, Switching and Building Requirements

Project Fiscal Year: 2022 Estimate Name: 93099

Cable, Switching, and Building	Building Name	Bldg 1 (B1)
Item	Value	Notes
Initial # of Building Occupants	75	
Number of Ducts into Building	Maximum Occupant Capacity - 100 to 200	
Type of Building	Warehouse / Storage	Use with Intermediate type facility.
Building Entry Duct / System Length Underground (Distance in Linear Feet)	500	Generates a maintenance hole and duct system from the new building to the site's "local" IS node.

Outside Cable Plant

Project Fiscal Year: 2022 Estimate Name: 93099

Telephone Switching Requirements:

Existing DCO

Outside Cable Plant	Complex Serving DCO/RSU			
	Existing/Available	Proposed	Total	Notes
Aerial (Figure 8)	0	0	0	Rarely used; self-supporting - cable and messenger in one.
Buried (Trenched)	0	0	0	Rarely used; back-hoe and hand-dig trenching used.
Underground	1,000	500	1,500	I3A Standard Outside Plant Construction; maintenance hole and duct system.
Total	1,000	500	1,500	Should account for total OSP requirement.

* Distance in Linear Feet

Building 711

Asbestos Survey for Demolition

Building 711 Fort Bragg, North Carolina

Prepared by Bruce Billings, Plexus Scientific for the Directorate of Public Works, Fort Bragg, North Carolina

XVIII AIRBORNE CORPS

Asbestos Inspection Report

Introduction

Scope of the Investigation

This report documents the asbestos inspection and survey of Building 711 at Ft. Bragg, North Carolina conducted on July 24, 2019 by Bruce Billings, inspector certification number: NC 12397.

Description of study

Investigation

Building 710 was visually inspected for suspected asbestos containing materials (ACM) by a North Carolina accredited inspector. A copy of the inspector's accreditation certificate is included in this report. The walls and ceilings are constructed of concrete. The roof is flat rubber membrane construction. No materials were found that were suspected of containing asbestos, therefore, no samples were collected.

.

Conclusions

NO ASBESTOS-CONTAINING MATERIAL WAS PRESENT TO BE SAMPLED

Inspector Accreditation

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES

ROY COOPER • Governor
MANDY COHEN, MD, MPH • Secretary
DANNY STALEY • Director, Division of Public Health

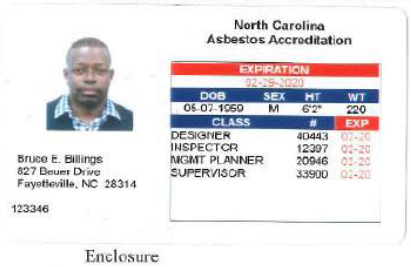
February 21, 2019

Bruce E. Billings
827 Beuer Drive
Fayetteville, NC 28314

Dear Mr. Billings:

Based upon the review of your accreditation application, the Health Hazards Control Unit (HHCU) has determined that you have fulfilled the requirements and are eligible for asbestos accreditation as a(n) INSPECTOR. Your assigned North Carolina accreditation number is 12397, which is reflected on your enclosed North Carolina Accreditation card. Please be sure to take this card with you to any asbestos work site where you are employed. The State requires that all persons conducting asbestos abatement or asbestos management activities be accredited and have their identification card on site.

Your North Carolina Inspector accreditation will expire on FEBRUARY 29, 2020. It is NOT the policy of the HHCU to issue renewal notices. If you wish to continue working as a(n) Inspector after this expiration date, you must successfully complete the required training and submit a completed application to this office prior to February 29, 2020. If you should continue to perform asbestos management activities as a(n) Inspector without a valid North Carolina accreditation, you will be in violation of State regulations and may be cited for noncompliance.



Sincerely,

Ed Norman
Program Manager
Health Hazards Control Unit

Enclosure

Enclosure 4: Limited Lead Based Paint Survey

Building 708

Limited Lead-Based Paint Survey of

Building 708
Fort Bragg, North Carolina

Prepared by Kathryn O. Hubicki, Get The Lead Out, LLC
for the Directorate of Public Works at Ft. Bragg
The Directorate of Public Works, Ft. Bragg, North Carolina

XVIII AIRBORNE CORPS

Kathryn O. Hubicki

Signature: _____ Date: 1 September 2016
Kathryn O. Hubicki Get The Lead Out, LLC NC Risk Assessor #120243

Lead Based Paint Survey Report

Introduction

Scope of the Investigation

This report documents the Limited Lead-Based Paint survey of Building 708 located in Fort Bragg, North Carolina conducted on August 30, 2016 by Kathryn O. Hubicki NC Lead Paint Risk Assessor license number: 120243.

Background

The inspector only tested painted components in Hangers 4 and 5, the boiler room and the exterior of the building.

Conclusions

Positive lead-based paint was detected on the walls, columns, window and door casings, ceiling beams and on exterior window sashes and casing, walls and the roll-up door of the boiler room.

Elevated levels of lead (above 0.1 mg/cm^2) are listed in the table on page 4. In those locations where any lead in paint was found, even if it does not reach the level of lead-based paint, worker protection plans should be implemented.

NOTE: When evaluating this report, it is assumed, that if one testing combination (ex: beam/metal) is found to be positive for lead-based paint, then all other similar testing combinations in that area are also assumed to be positive for lead-based paint.

Limitations

It should be noted that even the painted surfaces that contain levels of lead below 1.0 mg/cm^2 could create lead dust or lead contaminated soil hazards if the paint is turned into dust by abrasion, scraping, or sanding. If conditions of intact paint surfaces become destabilized, these conditions will need to be addressed in the future. If any construction or modernization work is done on the premises, this report should be given to the contractors as well.

This is Get the Lead Out's report of a visual survey, and X-Ray Fluorescence (XRF) analysis of the readily accessible areas of this building and tested components. The presence or absence of lead-based paint or lead-based paint hazards applies only to the tested or assessed surfaces on the date of the site visit and it should be understood that conditions might change due to deterioration or maintenance. The results and material conditions noted within this report were accurate at the noted time of the

inspection and in no way reflect the conditions at the property after the date of the inspection.

Get The Lead Out, LLC cannot guarantee and does not warrant that this Assessment has identified all adverse environmental factors and/or conditions affecting the subject property on the date of the Assessment. Get The Lead Out, LLC cannot and will not warrant that the Assessment that was requested by the client will satisfy the dictates of, or provide a legal defense in connection with, any environmental laws or regulations.

This report is not intended for use as a lead based paint removal specification. It is not within the scope of this work to describe all appropriate precautions, safeguards and regulations relating to lead based paint.

Sole Use Statement

This report is provided for the sole use of the Directorate of Public Works at Ft. Bragg. Reliance on this report by any third parties will be at such party's sole risk, and Get The Lead Out disclaims liability for any use of or reliance on this report by third parties. All portions of this report, including attachments and figures, are interrelated and integral to this report and should not be transmitted independent of each other.

Bldg 708
Positive XRF Readings

Reading No	Rooms	Side	Component	Feature	Condition	Substrate	Color	PbC	Results
5	Hangar 5	B	Wall, Int.		Deteriorated	Concrete	White	2.00	Positive
6	Hangar 5	B	Wall, Int.		Deteriorated	Concrete	Grey	1.80	Positive
9	Hangar 5	B	Wall, Int.	Column	Deteriorated	Concrete	White	3.70	Positive
10	Hangar 5	B	Door, Int.	Casing	Intact	Metal	Brown	2.20	Positive
11	Hangar 5	B	Door, Int.		Deteriorated	Metal	Brown	2.70	Positive
12	Hangar 5	C	Door, Roll-Up	Casing	Deteriorated	Metal	White	6.80	Positive
13	Room 1	D	Wall, Int.		Deteriorated	Concrete	Grey	1.60	Positive
14	Room 1	D	Stairs		Deteriorated	Metal	Grey	1.60	Positive
15	Room 1	B	weight	Casing	Deteriorated	Metal	Grey	2.90	Positive
16	Room 1	A	Win., Int.	Casing	Deteriorated	Metal	Grey	1.10	Positive
17	Room 1	D	Wall, Int.	Ladder	Deteriorated	Metal	Black	5.00	Positive
26	Hangar 5	A	Wall, Int.		Deteriorated	Metal	White	3.80	Positive
27	Hangar 5	A	Win., Int.	Sash	Deteriorated	Metal	White	3.60	Positive
30	Hangar 5	A	Door, Int.2.5		Deteriorated	Metal	White	1.70	Positive
31	Hangar 5	D	Door, Int.1	Door	Deteriorated	Metal	Grey	1.20	Positive
36	Room 2	A	Wall, Int.		Intact	Concrete	White	2.40	Positive
38	Hangar 5	D	Wall, Int.	brace	Deteriorated	Metal	White	7.20	Positive
39	Hangar 5	D	Wall, Int.		Deteriorated	Block	White	3.00	Positive
40	Hangar 5	D	Door, Int.3		Deteriorated	Metal	White	1.70	Positive
41	Hangar 5	D	Door, Int.3	Jamb	Deteriorated	Metal	White	2.50	Positive
43	Hangar 5	C	Wall, Int.		Deteriorated	Concrete	White	3.20	Positive
47	Hangar 5	A	Win., Ext.	Casing	Deteriorated	Metal	Black	14.70	Positive
53	Exterior	D	Win., Ext.	Casing	Deteriorated	Metal	Beige	14.90	Positive
54	Exterior boiler	D	Win., Ext.	Casing	Deteriorated	Metal	Beige	30.80	Positive
55	Exterior boiler	D	Win., Ext.	Sash	Deteriorated	Metal	Brown	20.00	Positive
57	Exterior boiler	D	Door, Roll-Up4	Door	Deteriorated	Metal	Brown	7.80	Positive
58	Exterior boiler	D	Door, Roll-Up4	Casing	Deteriorated	Metal	Brown	15.20	Positive
60	Exterior boiler	D	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	11.50	Positive
65	Hangar 4	A	Siding, Ext.	Wall	Deteriorated	Metal	Beige	8.70	Positive
70	Exterior	A	Win., Ext.	Casing	Deteriorated	Metal	Brown	15.40	Positive
73	Exterior	B	Win., Ext.	Casing	Deteriorated	Metal	Brown	6.70	Positive
77	Exterior	B	Door, Ext.	Casing	Deteriorated	Metal	Brown	9.50	Positive
78	Exterior	C	Win., Ext.	Casing	Deteriorated	Metal	Brown	13.20	Positive
80	Hangar 4	D	Wall, Int.	Wall	Deteriorated	Concrete	White	2.60	Positive
84	Hangar 4	D	Win., Int.	Casing	Deteriorated	Metal	Beige	1.70	Positive
89	Hangar 4	D	Door, Int.4	Casing	Deteriorated	Metal	Brown	2.30	Positive
90	Hangar 4	A	Wall, Int.		Deteriorated	Metal	White	3.80	Positive
99	Hangar 4	B	Wall, Int.		Deteriorated	Concrete	White	3.20	Positive
100	Hangar 4	B	Wall, Int.	brace	Deteriorated	Metal	White	4.70	Positive
101	Hangar 4	B	Wall, Int.		Deteriorated	Block	White	2.60	Positive
102	Hangar 4	B	Door, Int.3	Casing	Intact	Metal	Brown	3.80	Positive
104	Hangar 4	C	Door, Roll-Up	Casing	Deteriorated	Metal	White	2.80	Positive
112	Hangar 4	B	Ceiling	beam	Deteriorated	Metal	White	5.70	Positive
113	Hangar 4	B	Ceiling	beam	Deteriorated	Metal	White	4.90	Positive

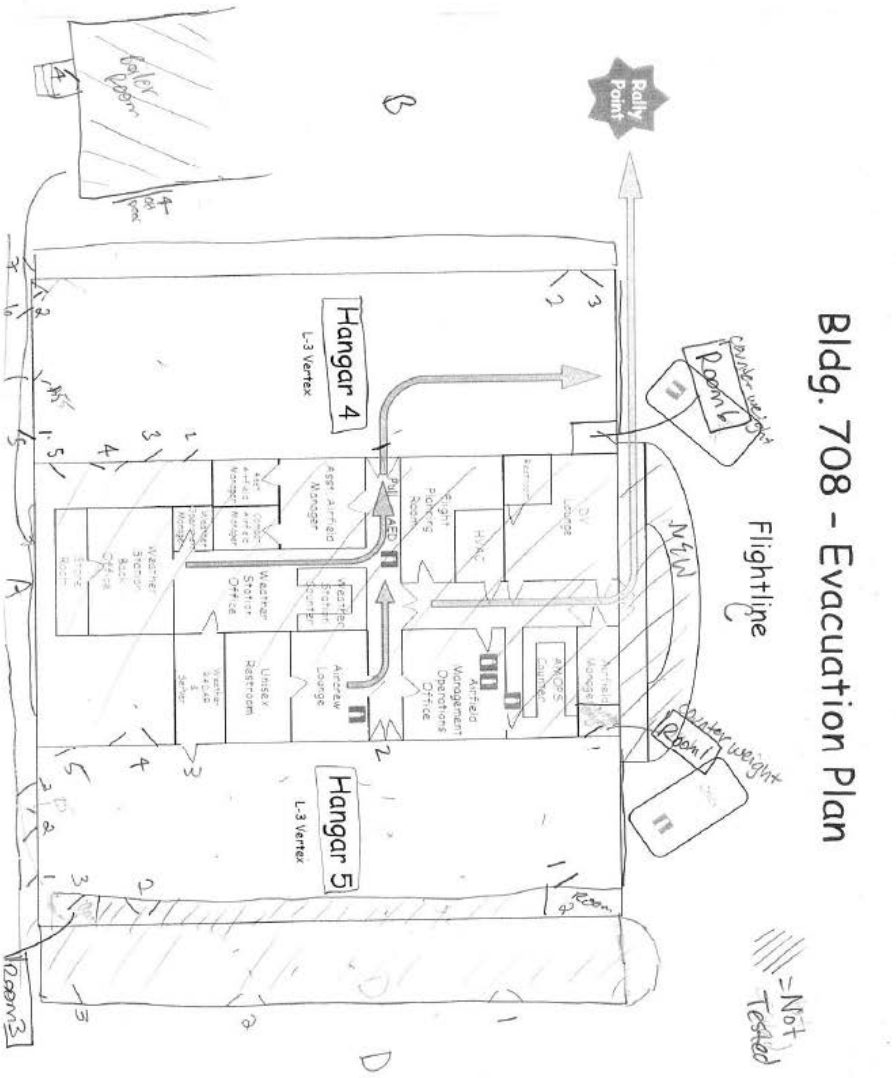
Bldg 708
All XRF Readings
Greater Than
0.10 mg/cm2

Reading No	Rooms	Side	Component	Feature	Condition	Substrate	Color	PbC	Results
5	Hangar 5	B	Wall, Int.		Deteriorated	Concrete	White	2.00	Positive
6	Hangar 5	B	Wall, Int.		Deteriorated	Concrete	Grey	1.80	Positive
9	Hangar 5	B	Wall, Int.	Column	Deteriorated	Concrete	White	3.70	Positive
10	Hangar 5	B	Door, Int.	Casing	Intact	Metal	Brown	2.20	Positive
11	Hangar 5	B	Door, Int.		Deteriorated	Metal	Brown	2.70	Positive
12	Hangar 5	C	Door, Roll-Up	Casing	Deteriorated	Metal	White	6.80	Positive
13	Room 1	D	Wall, Int.		Deteriorated	Concrete	Grey	1.60	Positive
14	Room 1	D	Stairs		Deteriorated	Metal	Grey	1.60	Positive
15	Room 1	B	weight	Casing	Deteriorated	Metal	Grey	2.90	Positive
16	Room 1	A	Win., Int.	Casing	Deteriorated	Metal	Grey	1.10	Positive
17	Room 1	D	Wall, Int.	Ladder	Deteriorated	Metal	Black	5.00	Positive
26	Hangar 5	A	Wall, Int.		Deteriorated	Metal	White	3.80	Positive
27	Hangar 5	A	Win., Int.	Sash	Deteriorated	Metal	White	3.60	Positive
28	Hangar 5	A	Win., Int.	Casing	Deteriorated	Metal	White	0.25	Negative
30	Hangar 5	A	Door, Int.2.5		Deteriorated	Metal	White	1.70	Positive
31	Hangar 5	D	Door, Int.1	Door	Deteriorated	Metal	Grey	1.20	Positive
32	Hangar 5	D	Door, Int.1	Casing	Deteriorated	Metal	Grey	0.26	Negative
33	Room 2	D	Door, Int.	Casing	Intact	Wood	Grey	0.11	Negative
36	Room 2	A	Wall, Int.		Intact	Concrete	White	2.40	Positive
38	Hangar 5	D	Wall, Int.	brace	Deteriorated	Metal	White	7.20	Positive
39	Hangar 5	D	Wall, Int.		Deteriorated	Block	White	3.00	Positive
40	Hangar 5	D	Door, Int.3		Deteriorated	Metal	White	1.70	Positive
41	Hangar 5	D	Door, Int.3	Jamb	Deteriorated	Metal	White	2.50	Positive
42	Hangar 5	D	Wall, Int.		Deteriorated	Concrete	White	0.14	Negative
43	Hangar 5	C	Wall, Int.		Deteriorated	Concrete	White	3.20	Positive
45	Hangar 5	A	Siding, Ext.	Wall	Deteriorated	Metal	Beige	0.24	Negative
47	Hangar 5	A	Win., Ext.	Casing	Deteriorated	Metal	Black	14.70	Positive
49	Exterior	D	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.90	Negative
53	Exterior	D	Win., Ext.	Casing	Deteriorated	Metal	Beige	14.90	Positive
54	Exterior boiler	D	Win., Ext.	Casing	Deteriorated	Metal	Beige	30.80	Positive
55	Exterior boiler	D	Win., Ext.	Sash	Deteriorated	Metal	Brown	20.00	Positive
57	Exterior boiler	D	Door, Roll-Up4	Door	Deteriorated	Metal	Brown	7.80	Positive
58	Exterior boiler	D	Door, Roll-Up4	Casing	Deteriorated	Metal	Brown	15.20	Positive
60	Exterior boiler	D	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	11.50	Positive
65	Hangar 4	A	Siding, Ext.	Wall	Deteriorated	Metal	Beige	8.70	Positive
68	Exterior	A	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.60	Negative
69	Exterior	A	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.30	Negative
70	Exterior	A	Win., Ext.	Casing	Deteriorated	Metal	Brown	15.40	Positive
73	Exterior	B	Win., Ext.	Casing	Deteriorated	Metal	Brown	6.70	Positive
74	Exterior	B	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.50	Negative
75	Exterior	B	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.90	Negative
77	Exterior	B	Door, Ext.	Casing	Deteriorated	Metal	Brown	9.50	Positive
78	Exterior	C	Win., Ext.	Casing	Deteriorated	Metal	Brown	13.20	Positive
79	Exterior	C	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.24	Negative
80	Hangar 4	D	Wall, Int.	Wall	Deteriorated	Concrete	White	2.60	Positive
83	Hangar 4	D	Win., Int.	Casing	Deteriorated	Metal	Beige	0.80	Negative
84	Hangar 4	D	Win., Int.	Casing	Deteriorated	Metal	Beige	1.70	Positive

Bldg 708
All XRF Readings
Greater Than
0.10 mg/cm2

Reading No	Rooms	Side	Component	Feature	Condition	Substrate	Color	PbC	Results
89	Hangar 4	D	Door, Int.4	Casing	Deteriorated	Metal	Brown	2.30	Positive
90	Hangar 4	A	Wall, Int.		Deteriorated	Metal	White	3.80	Positive
95	Hangar 4	A	Door, Int.1.5		Deteriorated	Metal	Brown	0.60	Negative
97	Hangar 4	A	Win., Int.		Deteriorated	Metal	White	0.40	Negative
98	Hangar 4	A	Wall, Int.		Deteriorated	Concrete	White	0.17	Negative
99	Hangar 4	B	Wall, Int.		Deteriorated	Concrete	White	3.20	Positive
100	Hangar 4	B	Wall, Int.	brace	Deteriorated	Metal	White	4.70	Positive
101	Hangar 4	B	Wall, Int.		Deteriorated	Block	White	2.60	Positive
102	Hangar 4	B	Door, Int.3	Casing	Intact	Metal	Brown	3.80	Positive
104	Hangar 4	C	Door, Roll-Up	Casing	Deteriorated	Metal	White	2.80	Positive
106	Exterior	C	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.30	Negative
110	Room 6	B	Wall, Int.		Intact	Concrete	Silver	0.11	Negative
112	Hangar 4	B	Ceiling	beam	Deteriorated	Metal	White	5.70	Positive
113	Hangar 4	B	Ceiling	beam	Deteriorated	Metal	White	4.90	Positive
115	Exterior	C	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.30	Negative

FLOOR PLAN


Bldg. 708 - Evacuation Plan
Hangar 4
L-3 Vertex
Hangar 5
L-3 Vertex
Rally Point
Flightline
Room 1
Room 2
Room 3
Room 4
Pull AED
Unisex Restroom
Airfield Management Operations Office
Weather Station Office
Asst. Airfield Manager
Flight Planning Room
Aircrew Lounge
Not Tested

All XRF Test Results

Bldg 708
All XRF Readings

Reading No	Time	Rooms	Side	Component	Feature	Condition	Substrate	Color	PbC	Results
2	8/30/2016 11:35					Calibration			1.00	Positive
3	8/30/2016 11:36					Calibration			0.90	Negative
4	8/30/2016 11:37					Calibration			1.00	Positive
5	8/30/2016 11:40	Hangar 5	B	Wall, Int.		Deteriorated	Concrete	White	2.00	Positive
6	8/30/2016 11:40	Hangar 5	B	Wall, Int.		Deteriorated	Concrete	Grey	1.80	Positive
7	8/30/2016 11:41	Hangar 5	B	Floor		Deteriorated	Concrete	Yellow	0.07	Negative
8	8/30/2016 11:41	Hangar 5	B	Floor		Deteriorated	Concrete	Grey	0.00	Negative
9	8/30/2016 11:42	Hangar 5	B	Wall, Int.	Column	Deteriorated	Concrete	White	3.70	Positive
10	8/30/2016 11:43	Hangar 5	B	Door, Int.	Casing	Intact	Metal	Brown	2.20	Positive
11	8/30/2016 11:43	Hangar 5	B	Door, Int.		Deteriorated	Metal	Brown	2.70	Positive
12	8/30/2016 11:44	Hangar 5	C	Door, Roll-Up	Casing	Deteriorated	Metal	White	6.80	Positive
13	8/30/2016 11:45	Room 1	D	Wall, Int.		Deteriorated	Concrete	Grey	1.60	Positive
14	8/30/2016 11:45	Room 1	D	Stairs		Deteriorated	Metal	Grey	1.60	Positive
15	8/30/2016 11:46	Room 1	B	weight	Casing	Deteriorated	Metal	Grey	2.90	Positive
16	8/30/2016 11:46	Room 1	A	Win., Int.	Casing	Deteriorated	Metal	Grey	1.10	Positive
17	8/30/2016 11:50	Room 1	D	Wall, Int.	Ladder	Deteriorated	Metal	Black	5.00	Positive
18	8/30/2016 12:03	Hangar 5	B	Door, Int.5	Casing	Intact	Metal	Grey	0.00	Negative
19	8/30/2016 12:03	Hangar 5	B	Door, Int.5		Intact	Metal	Grey	0.00	Negative
20	8/30/2016 12:03	Hangar 5	B	Door, Int.4		Deteriorated	Metal	Brown	0.00	Negative
21	8/30/2016 12:04	Hangar 5	B	Door, Int.4	Casing	Deteriorated	Metal	Grey	0.00	Negative
22	8/30/2016 12:04	Hangar 5	B	Door, Int.2	Casing	Deteriorated	Metal	Grey	0.00	Negative
23	8/30/2016 12:05	Hangar 5	B	Door, Int.2	Door	Deteriorated	Metal	Grey	0.01	Negative
24	8/30/2016 12:07	Hangar 5	A	Door, Int.3	Door	Deteriorated	Metal	White	0.00	Negative
25	8/30/2016 12:07	Hangar 5	A	Door, Int.3	Jamb	Deteriorated	Metal	White	0.00	Negative
26	8/30/2016 12:07	Hangar 5	A	Wall, Int.		Deteriorated	Metal	White	3.80	Positive
27	8/30/2016 12:08	Hangar 5	A	Win., Int.	Sash	Deteriorated	Metal	White	3.60	Positive
28	8/30/2016 12:09	Hangar 5	A	Win., Int.	Casing	Deteriorated	Metal	White	0.25	Negative
29	8/30/2016 12:09	Hangar 5	A	Door, Int.2.5	Casing	Deteriorated	Metal	White	0.08	Negative
30	8/30/2016 12:09	Hangar 5	A	Door, Int.2.5		Deteriorated	Metal	White	1.70	Positive
31	8/30/2016 12:12	Hangar 5	D	Door, Int.1	Door	Deteriorated	Metal	Grey	1.20	Positive
32	8/30/2016 12:12	Hangar 5	D	Door, Int.1	Casing	Deteriorated	Metal	Grey	0.26	Negative
33	8/30/2016 12:13	Room 2	D	Door, Int.	Casing	Intact	Wood	Grey	0.11	Negative
34	8/30/2016 12:13	Room 2	D	Door, Int.		Intact	Wood	Grey	0.09	Negative
35	8/30/2016 12:13	Room 2	D	Wall, Int.		Intact	Block	White	0.03	Negative
36	8/30/2016 12:14	Room 2	A	Wall, Int.		Intact	Concrete	White	2.40	Positive
37	8/30/2016 12:14	Room 2	A	Floor		Deteriorated	Concrete	White	0.02	Negative
38	8/30/2016 12:15	Hangar 5	D	Wall, Int.	brace	Deteriorated	Metal	White	7.20	Positive
39	8/30/2016 12:15	Hangar 5	D	Wall, Int.		Deteriorated	Block	White	3.00	Positive
40	8/30/2016 12:18	Hangar 5	D	Door, Int.3		Deteriorated	Metal	White	1.70	Positive
41	8/30/2016 12:18	Hangar 5	D	Door, Int.3	Jamb	Deteriorated	Metal	White	2.50	Positive
42	8/30/2016 12:18	Hangar 5	D	Wall, Int.		Deteriorated	Concrete	White	0.14	Negative
43	8/30/2016 12:19	Hangar 5	C	Wall, Int.		Deteriorated	Concrete	White	3.20	Positive
44	8/30/2016 12:19	Hangar 5	C	Door, Int.	Threshold	Intact	Concrete	Red	0.02	Negative
45	8/30/2016 12:22	Hangar 5	A	Siding, Ext.	Wall	Deteriorated	Metal	Beige	0.24	Negative
46	8/30/2016 12:23	Hangar 5	A	Door, Ext.1	Door	Deteriorated	Metal	Beige	0.00	Negative
47	8/30/2016 12:24	Hangar 5	A	Win., Ext.	Casing	Deteriorated	Metal	Black	14.70	Positive
48	8/30/2016 12:24	Exterior	A	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.00	Negative
49	8/30/2016 12:25	Exterior	D	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.90	Negative
50	8/30/2016 12:26	Exterior	D	Door, Ext.3	Door	Intact	Metal	Brown	0.00	Negative
51	8/30/2016 12:26	Exterior	D	Door, Ext.2	Door	Intact	Metal	Brown	0.00	Negative
52	8/30/2016 12:26	Exterior	D	Siding, Ext.	Ladder	Deteriorated	Metal	Brown	0.00	Negative
53	8/30/2016 12:27	Exterior	D	Win., Ext.	Casing	Deteriorated	Metal	Beige	14.90	Positive
54	8/30/2016 12:31	Exterior boiler	D	Win., Ext.	Casing	Deteriorated	Metal	Beige	30.80	Positive
55	8/30/2016 12:31	Exterior boiler	D	Win., Ext.	Sash	Deteriorated	Metal	Brown	20.00	Positive
56	8/30/2016 12:32	Exterior boiler	D	Siding, Ext.	Ladder	Deteriorated	Metal	Beige	0.00	Negative
57	8/30/2016 12:32	Exterior boiler	D	Door, Roll-Up4	Door	Deteriorated	Metal	Brown	7.80	Positive
58	8/30/2016 12:32	Exterior boiler	D	Door, Roll-Up4	Casing	Deteriorated	Metal	Brown	15.20	Positive
59	8/30/2016 12:33	Exterior boiler	D	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.02	Negative
60	8/30/2016 12:33	Exterior boiler	D	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	11.50	Positive

Bldg 708
All XRF Readings

Reading No	Time	Rooms	Side	Component	Feature	Condition	Substrate	Color	PbC	Results
61	8/30/2016 12:34	Exterior boiler	A	Stairs	Hand Rail	Deteriorated	Metal	Brown	0.00	Negative
62	8/30/2016 12:34	Exterior boiler	A	Door, Ext.4	Door	Deteriorated	Metal	Brown	0.00	Negative
63	8/30/2016 12:35	Exterior boiler	A	Door, Ext.4	Casing	Deteriorated	Metal	Brown	0.00	Negative
64	8/30/2016 12:36	Exterior boiler	B	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.00	Negative
65	8/30/2016 12:37	Hangar 4	A	Siding, Ext.	Wall	Deteriorated	Metal	Beige	8.70	Positive
66	8/30/2016 12:37	Hangar 4	A	Door, Ext.5	Door	Deteriorated	Metal	Brown	0.00	Negative
67	8/30/2016 12:38	Hangar 4	A	Door, Ext.5	Casing	Deteriorated	Metal	Brown	0.01	Negative
68	8/30/2016 12:40	Exterior	A	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.60	Negative
69	8/30/2016 12:40	Exterior	A	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.30	Negative
70	8/30/2016 12:40	Exterior	A	Win., Ext.	Casing	Deteriorated	Metal	Brown	15.40	Positive
71	8/30/2016 12:41	Exterior	A	Door, Ext.7	Casing	Deteriorated	Wood	Beige	0.00	Negative
72	8/30/2016 12:42	Exterior	A	Door, Ext.7	Door	Intact	Metal	Brown	0.00	Negative
73	8/30/2016 12:43	Exterior	B	Win., Ext.	Casing	Deteriorated	Metal	Brown	6.70	Positive
74	8/30/2016 12:44	Exterior	B	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.50	Negative
75	8/30/2016 12:45	Exterior	B	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.90	Negative
76	8/30/2016 12:47	Exterior	B	Door, Ext.	Door	Intact	Metal	Black	0.00	Negative
77	8/30/2016 12:47	Exterior	B	Door, Ext.	Casing	Deteriorated	Metal	Brown	9.50	Positive
78	8/30/2016 12:47	Exterior	C	Win., Ext.	Casing	Deteriorated	Metal	Brown	13.20	Positive
79	8/30/2016 12:48	Exterior	C	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.24	Negative
80	8/30/2016 13:05	Hangar 4	D	Wall, Int.	Wall	Deteriorated	Concrete	White	2.60	Positive
81	8/30/2016 13:05	Hangar 4	D	Floor		Deteriorated	Concrete	Grey	0.01	Negative
82	8/30/2016 13:05	Hangar 4	D	Floor		Intact	Concrete	Red	0.03	Negative
83	8/30/2016 13:07	Hangar 4	D	Win., Int.	Casing	Deteriorated	Metal	Beige	0.80	Negative
84	8/30/2016 13:08	Hangar 4	D	Win., Int.	Casing	Deteriorated	Metal	Beige	1.70	Positive
85	8/30/2016 13:08	Hangar 4	D	Door, Int.1	Casing	Intact	Metal	White	0.00	Negative
86	8/30/2016 13:09	Hangar 4	D	Door, Int.1		Deteriorated	Metal	White	0.00	Negative
87	8/30/2016 13:09	Hangar 4	D	Door, Int.2		Intact	Metal	Brown	0.00	Negative
88	8/30/2016 13:09	Hangar 4	D	Door, Int.2	Casing	Intact	Metal	Brown	0.02	Negative
89	8/30/2016 13:10	Hangar 4	D	Door, Int.4	Casing	Deteriorated	Metal	Brown	2.30	Positive
90	8/30/2016 13:11	Hangar 4	A	Wall, Int.		Deteriorated	Metal	White	3.80	Positive
91	8/30/2016 13:12	Hangar 4	D	Wall, Int.		Intact	Block	White	0.00	Negative
92	8/30/2016 13:12	Hangar 4	D	Floor		Intact	Concrete	Yellow	0.01	Negative
93	8/30/2016 13:13	Hangar 4	A	Door, Int.1	Casing	Deteriorated	Metal	Brown	0.03	Negative
94	8/30/2016 13:14	Hangar 4	A	Door, Int.1		Deteriorated	Metal	Brown	0.00	Negative
95	8/30/2016 13:14	Hangar 4	A	Door, Int.1.5		Deteriorated	Metal	Brown	0.60	Negative
96	8/30/2016 13:17	Hangar 4	B	Door, Int.1		Deteriorated	Wood	Brown	0.01	Negative
97	8/30/2016 13:18	Hangar 4	A	Win., Int.		Deteriorated	Metal	White	0.40	Negative
98	8/30/2016 13:18	Hangar 4	A	Wall, Int.		Deteriorated	Concrete	White	0.17	Negative
99	8/30/2016 13:18	Hangar 4	B	Wall, Int.		Deteriorated	Concrete	White	3.20	Positive
100	8/30/2016 13:19	Hangar 4	B	Wall, Int.	brace	Deteriorated	Metal	White	4.70	Positive
101	8/30/2016 13:19	Hangar 4	B	Wall, Int.		Deteriorated	Block	White	2.60	Positive
102	8/30/2016 13:21	Hangar 4	B	Door, Int.3	Casing	Intact	Metal	Brown	3.80	Positive
103	8/30/2016 13:21	Hangar 4	B	Door, Int.3		Intact	Metal	Brown	0.02	Negative
104	8/30/2016 13:21	Hangar 4	C	Door, Roll-Up	Casing	Deteriorated	Metal	White	2.80	Positive
105	8/30/2016 13:24	Exterior	C	Siding, Ext.	Ladder	Deteriorated	Metal	Brown	-0.17	Negative
106	8/30/2016 13:25	Exterior	C	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.30	Negative
107	8/30/2016 13:25	Exterior	C	Door, Ext.	Door	Intact	Metal	Brown	0.00	Negative
108	8/30/2016 13:26	Exterior	C	Door, Ext.	Casing	Intact	Metal	Brown	0.01	Negative
109	8/30/2016 13:26	Room 6	B	Wall, Int.	Ladder	Intact	Metal	Red	0.00	Negative
110	8/30/2016 13:27	Room 6	B	Wall, Int.		Intact	Concrete	Silver	0.11	Negative
111	8/30/2016 13:29	Hangar 4	B	Ceiling		Deteriorated	Metal	White	0.00	Negative
112	8/30/2016 13:30	Hangar 4	B	Ceiling	beam	Deteriorated	Metal	White	5.70	Positive
113	8/30/2016 13:30	Hangar 4	B	Ceiling	beam	Deteriorated	Metal	White	4.90	Positive
114	8/30/2016 13:33	Hangar 5	D	Ceiling	stairs	Deteriorated	Wood	White	0.09	Negative
115	8/30/2016 13:39	Exterior	C	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.30	Negative
140	8/30/2016 14:00					Calibration			1.00	Positive
142	8/30/2016 14:01					Calibration			1.00	Positive
143	8/30/2016 14:02					Calibration			1.00	Positive

Photographs

SHOWING LOCATION OF POSITIVE LBP XRF TEST RESULTS

Building - Side A

Building - Side A Left

Building - Side A Right

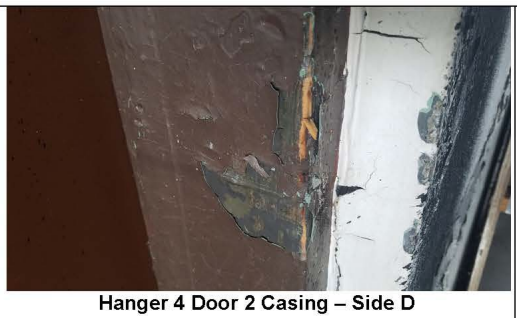
Building - Side B

Building – Side C

Building – Side D

Hanger 4 Ceiling Braces

Hanger 4 Ceiling Braces



Hanger 4 Door 2 Casing – Side D

Hanger 4 Door- Side C

Hanger 4 Wall D

Hanger 4 Wall A

Hanger 4

Hanger 5 Block Wall and Brace

Certifications and Accreditations

North Carolina Department of Health and Human Services
Division of Public Health

Pat McCrory
Governor

Richard O. Brajer
Secretary

Daniel Staley
Division Director

March 10, 2016

Kathryn Hubicki
2121 Commonwealth Ave Ste 202
Charlotte, NC 28205

Dear Ms. Hubicki:

The Health Hazards Control Unit (HHCU) has determined that you have fulfilled the application requirements and are eligible for lead certification as a(n) RISK ASSESSOR. Your assigned Risk Assessor certification number is 120243, which is reflected on your enclosed North Carolina Lead Certification card. The State requires that all persons conducting regulated lead-based paint activities be certified and have their identification card on-site.

A "Lead-Based Paint Activity Summary" shall be submitted to the HHCU by the certified inspector or risk assessor within 45 days of each inspection, risk assessment, or lead hazard screen conducted. The information shall be submitted on a form provided or approved by the Program, per 10A NCAC 41C .0807(b), Lead-Based Paint Hazard Management Program Rules.

Accredited refresher training must be completed at least every 24 months from the date of the last accredited training course **AND** within twelve months prior to applying for certification. The HHCU strongly recommends that individuals note the date of certification expiration and ensure all refresher training meets the above requirements.

Your North Carolina Risk Assessor certification will expire on MARCH 31, 2017. It is NOT the policy of the HHCU to issue renewal notices. If you wish to continue working as a(n) Risk Assessor after this expiration date, you must successfully complete the required training and submit a completed application to this office prior to March 31, 2017. If you should perform lead-based paint activities as a(n) Risk Assessor without a valid North Carolina certification, you will be in violation of State regulations and may be cited for noncompliance.

If you have any questions, please contact our office at (919) 707-5954.

Sincerely,

Ed Norman
Program Manager
Health Hazards Control Unit

Enclosure

North Carolina Department of Health and Human Services
Division of Public Health

Pat McCrory
Governor

Richard O. Brajer
Secretary

Daniel Staley
Acting Division Director

October 8, 2015

Sandra Sechler
Get The Lead Out LLC
2121 Commonwealth Ave Ste 202
Charlotte NC 28205-5100

Dear Sechler:

Based upon the review of your Lead Firm Certification application, the Health Hazards Control Unit (HHCU) has determined that you have fulfilled the requirements and are eligible for Lead Firm Certification. Your assigned certification number is FPB-0002, which is reflected on your enclosed North Carolina Lead Firm Certification certificate.

Your North Carolina Firm Certification will expire on October 31, 2016. It is not the policy of the HHCU to issue renewal notices. If you wish to remain a certified firm after this expiration date, you must submit a completed application to this office prior to October 31, 2016. If you should continue to perform lead-based paint activities without a valid North Carolina firm certification, you will be in violation of State regulations and may be cited for noncompliance.

If you have any questions, please contact the HHCU at (919) 707-5950.

Sincerely,

Ed Norman
Program Manager
Health Hazards Control Unit

Enclosure

RADIOACTIVE MATERIALS BRANCH
RADIATION PROTECTION SECTION
N. C. DEPARTMENT OF HEALTH AND HUMAN SERVICES

RADIOACTIVE MATERIALS LICENSE

Pursuant to North Carolina Regulations for Protection Against Radiation and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, own, possess, transfer, and import radioactive materials listed below; and use such radioactive material for the purpose(s) and at the place(s) designated below. This License is subject to all applicable rules and regulations of the North Carolina Radiation Protection Section now and hereafter in effect and to any conditions specified below.

1. Licensee Name:	Get the Lead Out, LLC	**3. License No:** 060-0989-1	**License Type** 00310
2a. Mailing Address:	3717 Latrobe Drive, Suite 760 Charlotte, NC 28211-4826	**4. Expiration Date:** December 31, 2019	
b. Physical Address:	3717 Latrobe Drive, Suite 760 Charlotte, NC 28211-4826	**Application Type:** Amendment Application	
c. Radiation Safety Officer:	Peter M. Hubicki,	**5. a. Amendment No.: 15** **b. Issuance Date: June 02, 2016**	

6. Radioactive Material (element and mass no.)	**7. Chemical and/or Physical Form**	**8. Maximum Amount of Radioactivity and/or Quantity of Radioactive material which Licensee May Possess at Any One Time.**
A. Cobalt 57	A. Sealed Source MA-0573 -D-1 03-B	A. Total Possession not to exceed 60.00 mCi. 4.00 source(s), not to exceed 15.00 mCi.
B. Cadmium 109	B. Sealed Source MA-1159-D-101-B	B. Total Possession not to exceed 200.00 mCi. 4.00 source(s), not to exceed 50.00 mCi.
C. Americium-241 / Beryllium	C. Sealed Source MA-1159-D-101-B	C. Total Possession not to exceed 120.00 mCi. 4.00 source(s), not to exceed 30.00 mCi.

9. Authorized Use:

A. To be used in an RMD Model LPA-1 X-ray Fluorescence Analyzer to test for lead content in paint. Sealed Source & Device Registry No. MA-0573-D-103-B, with a leak test frequency of twelve months.

B. To be used in a Niton Model XLp 300 analyzer to test for lead content in paint. Sealed Source & Device Registry No. MA-1159-D-101-B, with a leak test frequency of six months.

C. To be used in a Niton Model XLp 300 analyzer to test for lead content in paint. Sealed Source & Device Registry No. MA-1159-D-101-B, with a leak test frequency of six months.

CONDITIONS

10. A. The authorized place of receipt and storage of radioactive material is the licensee's address stated in condition 2b. above.

B. Additional authorized places of receipt and use of radioactive material are listed below if applicable:

No Additional Locations

C. Radioactive materials may be used at temporary jobsites of the licensee throughout the State of North Carolina in areas not under exclusive Federal jurisdiction (Federal installations such as military bases, V.A. Hospitals, etc.). Authorization for the use of radioactive materials at temporary jobsites under exclusive Federal Jurisdiction shall be obtained either by (1) filing a NRC Form 241 [10 CFR 150.20(b)], or (2) applying for reciprocity, or (3) applying for a specific license from the NRC if the length of the job is to exceed six (6) months.

D. This condition does not prohibit the use of radioactive materials in other states; however, before radioactive materials can be used at a temporary jobsite in another state, authorization must be obtained from the State, if it is an Agreement state, or from the Nuclear Regulatory Commission for any non-Agreement State, either by filing for reciprocity or applying for a specific license.

11. The licensee shall comply with the provisions of 10A NCAC 15 .1600 "Standards for Protection Against Radiation," and 10A NCAC 15 .1000 "Notices, Instructions, Reports and Inspections." (The North Carolina Regulations for Protection Against Radiation are contained in 10A NCAC 15.)

WITHHOLD FROM PUBLIC DISCLOSURE UNDER N.C.G.S. 104E-9(a)(4) EXCEPT TO INDIVIDUALS WITH A NEED TO KNOW

12. A. Licensed material shall only be used by:
Peter Hubicki

OR individuals who (1) have successfully completed a manufacturers training program for gauge users, (2) have been instructed in the licensee's routine operating and emergency procedures, and (3) have been designated in writing as having completed these requirements by the Radiation Safety Officer.

B. Records of these designations shall be maintained for three (3) years after the company no longer employs the individual.

C. The licensee shall establish a method of identification and documentation of training for the persons authorized in condition A above. This shall be made available for review by the agency at the time of either a field or home office inspection.

D. The Radiation Safety Officer for the activities authorized under this license shall be Peter M. Hubicki .

13. A. Each sealed source containing radioactive material, other than Hydrogen 3 with a half-life greater than thirty (30) days and in any form other than gas, shall be tested for leakage and/or contamination at intervals prescribed in the respective Registry of Radioactive Sealed Sources and Devices sheet. In the absence of a Registry of Radioactive Sealed Sources and Devices sheet, tests for leakage and/or contamination shall be conducted at intervals not to exceed six (6) months, except that each source designed for the purpose of emitting alpha particles shall be tested at intervals not to exceed three (3) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, the sealed source shall not be put into use until tested.

B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the agency.

C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with agency regulations. A report shall be filed within five (5) days of the test with the **Radioactive Materials Branch, Radiation Protection Section, 1645 Mail Service, Raleigh, NC 27699-1600,** describing the equipment involved, the test results, and the corrective action taken.

D. Tests for leakage and /or contamination shall be performed by persons specifically authorized by the agency to perform such services.

14. The licensee may transport licensed material or deliver licensed material to a carrier for transport in accordance with the provision of Section 71.5, Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Material For Transport."

15 Sealed sources containing radioactive material shall not be opened or removed from their respective source holders by the licensee.

16. The licensee shall keep records for each device authorized in this license showing which authorized user has the device, the time and date the device was removed from storage, job where device was used and the time and date the device was placed back into storage. Records of use shall be kept for three (3) years for inspection by the agency or until they have been reviewed by the agency and if the records are determined to be satisfactory, then they may be disposed of.

17. The licensee shall conduct a physical inventory of all sealed sources received and possessed under this license at intervals not to exceed six (6) months. Records of the inventories shall be maintained for inspection by the agency and shall include the quantities and kinds of radioactive material, location of sources and the date of the inventory.

18. In addition to the possession limits in condition 8 above, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10A NCAC 15 .0353 for establishing decommissioning financial assurance.

19. The licensee shall annually review its Radiation Protection Program for content and implementation [Reference 10A NCAC 15 .1603(c)]. Documentation of the Radiation Protection Program reviews shall be retained for inspection by the agency [Reference: 10A NCAC 15 .1636].

20. The licensee shall institute the provisions of 10A NCAC 15 .1610 when an occupationally exposed woman voluntarily informs her supervisor, in writing, of the pregnancy and the estimated date of conception.

21. The licensee shall ensure that no individual "member of the public" [Reference: 10A NCAC 15 .0104(81)] receives a radiation dose in excess of the limits specified in 10A NCAC 15 .1611(a) while conducting licensed activities.

22. This license may be subject to amendment, revision, modification, suspension, or revocation in accordance with the provisions of 10A NCAC 15 .0344.

23. In addition to the possession limits referenced in condition 8. above, the licensee shall further restrict possession of radionuclides listed in the table below to the quantities noted within the table. Sum of fractions for the radionuclides listed below shall not exceed

Radionuclide	Quantity (curies)	Radionuclide	Quantity (curies)
Am-241	16	Pm-147	10,800
Am-241: Be	16	Pu-238	16
Cf-252	5.4	Pu-239:Be	16
Cm-244	13.5	Ra-226	10.8
Co-60	8.1	Se-75	54
Cs-137	27	Sr-90 (Y-90)	270
Gd-153	270	Tm-170	5,400
Ir-192	21.6	Yb-169	81

24. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in conditions 6., 7., and 8. of this license in accordance with statements, representations and procedures and attachments listed below. The *North Carolina Regulations for Protection Against Radiation* shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

A. Application for renewal with attachments dated March 24, 2014, signed by Peter M. Hubicki, RSO.

B. Application with attachments dated April 29, 2014, signed by Peter M. Hubicki, Assistant VP, RSO.

C. Application with attachments, dated April 13, 2016, signed by Peter M. Hubicki, Treasurer, RSO. Administrative correction of amendment number and previous tie down statements.. Mailing address remains the same until decommissioning is accomplished. Radionuclide activity adjustments made based on maximum activity of SS&D sheets.

D. Application for amendment with attachments dated May 18, 2016, signed by Peter M. Hubicki, RSO.

For: W. Lee Cox, III

Chief, Radiation Protection Section

Performance Characteristic Sheet

EFFECTIVE DATE: **September 24, 2004** **EDITION NO.: 1**

MANUFACTURER AND MODEL:

Make: *Niton LLC*
Tested Model: *XLp 300*
Source: ^{109}Cd
Note: This PCS is also applicable to the equivalent model variations indicated below, for the Lead-in-Paint K+L variable reading time mode, in the XLi and XLp series:

XLi 300A, XLi 301A, XLi 302A and XLi 303A.
XLp 300A, XLp 301A, XLp 302A and XLp 303A.
XLi 700A, XLi 701A, XLi 702A and XLi 703A.
XLp 700A, XLp 701A, XLp 702A, and XLp 703A.

Note: The XLi and XLp versions refer to the shape of the handle part of the instrument. The differences in the model numbers reflect other modes available, in addition to Lead-in-Paint modes. The manufacturer states that specifications for these instruments are identical for the source, detector, and detector electronics relative to the Lead-in-Paint mode.

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Lead-in-Paint K+L variable reading time mode.

XRF CALIBRATION CHECK LIMITS:

0.8 to 1.2 mg/cm^2 (inclusive)

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION:

For XRF results using Lead-in-Paint K+L variable reading time mode, substrate correction is <u>not</u> needed for:

Brick, Concrete, Drywall, Metal, Plaster, and Wood

INCONCLUSIVE RANGE OR THRESHOLD:

K+L MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm^2)
Results not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted in August 2004 on 133 testing combinations. The instruments that were used to perform the testing had new sources; one instrument's was installed in November 2003 with 40 mCi initial strength, and the other's was installed June 2004 with 40 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Substrate correction is not needed for brick, concrete, drywall, metal, plaster or wood when using Lead-in-Paint K+L variable reading time mode, the normal operating mode for these instruments. If substrate correction is desired, refer to Chapter 7 of the HUD Guidelines for guidance on correcting XRF results for substrate bias.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use the K+L variable time mode readings.

Conduct XRF retesting at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family housing a result is defined as the average of three readings. In multifamily housing, a result is a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

TESTING TIMES:

For the Lead-in-Paint K+L variable reading time mode, the instrument continues to read until it is moved away from the testing surface, terminated by the user, or the instrument software indicates the reading is complete. The following table provides testing time information for this testing mode. The times have been adjusted for source decay, normalized to the initial source strengths as noted above. Source strength and type of substrate will affect actual testing times. At the time of testing, the instruments had source strengths of 26.6 and 36.6 mCi.

Testing Times Using K+L Reading Mode (Seconds)						
	All Data			Median for laboratory-measured lead levels (mg/cm^2)		
Substrate	25^{th} Percentile	Median	75^{th} Percentile	Pb < 0.25	0.25 ≤ Pb<1.0	1.0 ≤ Pb
Wood Drywall	4	11	19	11	15	11
Metal	4	12	18	9	12	14
Brick Concrete Plaster	8	16	22	15	18	16

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than or equal to the threshold, and negative if they are less than the threshold.

DOCUMENTATION:

A document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD.

This XRF Performance Characteristic Sheet was developed by the Midwest Research Institute (MRI) and QuanTech, Inc., under a contract between MRI and the XRF manufacturer. HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

Building 710

Limited Lead-Based Paint Survey of

Building 710
Fort Bragg, North Carolina

Prepared by Kathryn O. Hubicki, Get The Lead Out, LLC
for the Directorate of Public Works at Ft. Bragg
The Directorate of Public Works, Ft. Bragg, North Carolina

XVIII AIRBORNE CORPS

Kathryn O. Hubicki

Signature: _____ Date: 1 September 2016

Kathryn O. Hubicki Get The Lead Out, LLC NC Risk Assessor #120243

Lead Based Paint Survey Report

Introduction

Scope of the Investigation

This report documents the Limited Lead-Based Paint survey of Building 710 located in Fort Bragg, North Carolina conducted on August 30, 2016 by Kathryn O. Hubicki NC Lead Paint Risk Assessor license number: 120243.

Background

The inspector only tested painted components in rooms 1 and 2 of Building 710 and the exterior of the building.

Conclusions

Positive lead-based paint was detected in room 1, on the wall, the window casing and the door leaning on side D of the room. It was also detected on the exterior of the roll-up door casing and jamb on side C and the concrete wall on side A.

Elevated levels of lead (above 0.1 mg/cm^2) are listed in the table on page 4. In those locations where any lead in paint was found, even if it does not reach the level of lead-based paint, worker protection plans should be implemented.

NOTE: When evaluating this report, it is assumed, that if one testing combination (ex: beam/metal) is found to be positive for lead-based paint, then all other similar testing combinations in that area are also assumed to be positive for lead-based paint.

Limitations

It should be noted that even the painted surfaces that contain levels of lead below 1.0 mg/cm^2 could create lead dust or lead contaminated soil hazards if the paint is turned into dust by abrasion, scraping, or sanding. If conditions of intact paint surfaces become destabilized, these conditions will need to be addressed in the future. If any construction or modernization work is done on the premises, this report should be given to the contractors as well.

This is Get the Lead Out's report of a visual survey, and X-Ray Fluorescence (XRF) analysis of the readily accessible areas of this building and tested components. The presence or absence of lead-based paint or lead-based paint hazards applies only to the tested or assessed surfaces on the date of the site visit and it should be understood that conditions might change due to deterioration or maintenance. The results and material conditions noted within this report were accurate at the noted time of the

inspection and in no way reflect the conditions at the property after the date of the inspection.

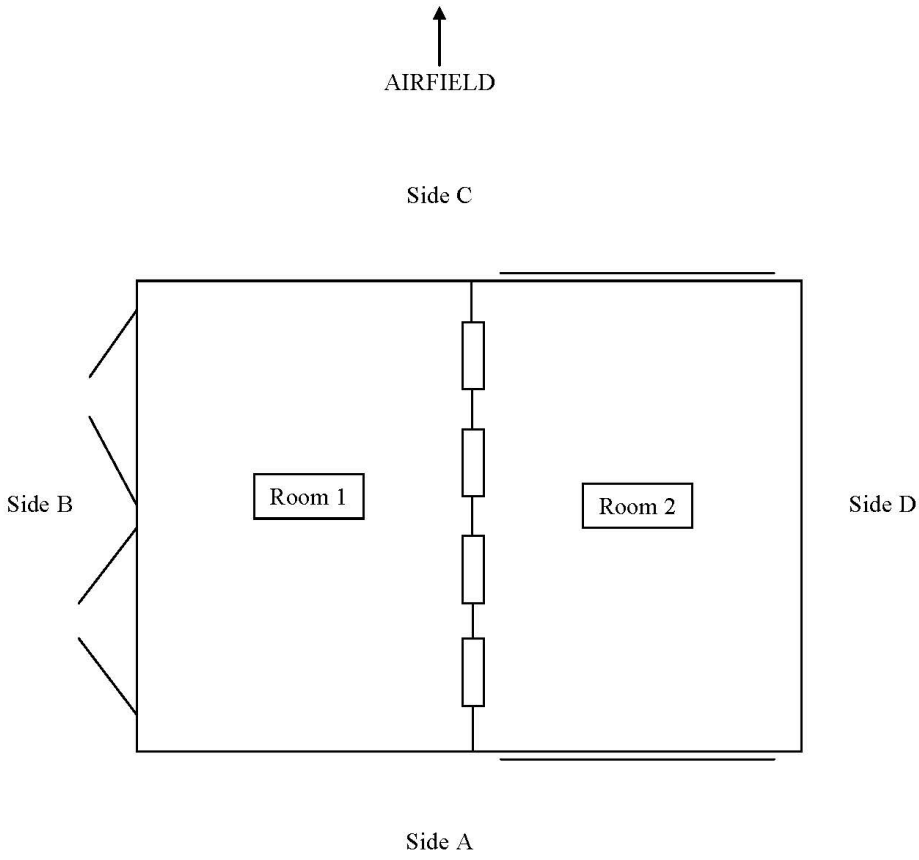
Get The Lead Out, LLC cannot guarantee and does not warrant that this Assessment has identified all adverse environmental factors and/or conditions affecting the subject property on the date of the Assessment. Get The Lead Out, LLC cannot and will not warrant that the Assessment that was requested by the client will satisfy the dictates of, or provide a legal defense in connection with, any environmental laws or regulations.

This report is not intended for use as a lead based paint removal specification. It is not within the scope of this work to describe all appropriate precautions, safeguards and regulations relating to lead based paint.

Sole Use Statement

This report is provided for the sole use of the Directorate of Public Works at Ft. Bragg. Reliance on this report by any third parties will be at such party's sole risk, and Get The Lead Out disclaims liability for any use of or reliance on this report by third parties. All portions of this report, including attachments and figures, are interrelated and integral to this report and should not be transmitted independent of each other.

FLOOR PLAN


AIRFIELD
Side C
Side B
Room 1
Room 2
Side D
Side A
Surveyor Street

XRF TEST RESULTS

Building 710
Fort Bragg, NC

Elevated Lead in Paint
Greater than 0.10 mg/cm^2

Reading No	Rooms	Side	Component	Feature	Condition	Substrate	Color	Lead	Results
119	Exterior	C	Door, Roll-Up	Jamb	Deteriorated	Metal	Brown	9.10	Positive
120	Exterior	C	Door, Roll-Up	Casing	Deteriorated	Metal	Brown	8.80	Positive
126	Room 1	D	Wall, Int.		Deteriorated	Concrete	Beige	3.70	Positive
128	Room 1	D	Win., Int.	Casing	Deteriorated	Metal	Brown	0.60	Negative
129	Room 1	D	Win., Int.	Casing	Deteriorated	Metal	Beige	4.30	Positive
131	Room 1	A	Door, Int.	leaning	Deteriorated	Wood	Brown	3.50	Positive
132	Exterior	A	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	1.30	Positive
135	Room 2	B	Wall, Int.		Deteriorated	Concrete	Beige	0.16	Negative
137	Room 2	B	Ceiling		Deteriorated	Concrete	Beige	0.25	Negative

Building 710
All XRF Readings

Reading No	Time	Rooms	Side	Component	Feature	Condition	Substrate	Color	Lead	Results
2	8/30/2016 11:35					Calibration			1.00	Positive
3	8/30/2016 11:36					Calibration			0.90	Negative
4	8/30/2016 11:37					Calibration			1.00	Positive
116	8/30/2016 13:42	Exterior	C	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.04	Negative
117	8/30/2016 13:42	Exterior	C	Siding, Ext.	Wall	Intact	Block	Beige	0.00	Negative
118	8/30/2016 13:43	Exterior	C	Door, Roll-Up	Door	Intact	Metal	Brown	0.00	Negative
119	8/30/2016 13:43	Exterior	C	Door, Roll-Up	Jamb	Deteriorated	Metal	Brown	9.10	Positive
120	8/30/2016 13:43	Exterior	C	Door, Roll-Up	Casing	Deteriorated	Metal	Brown	8.80	Positive
121	8/30/2016 13:44	Exterior	C	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.02	Negative
122	8/30/2016 13:44	Exterior	D	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	0.01	Negative
123	8/30/2016 13:45	Exterior	C	Siding, Ext.	Downspout	Deteriorated	Metal	Beige	0.00	Negative
124	8/30/2016 13:46	Exterior	B	Siding, Ext.	Wall	Intact	Block	Beige	0.00	Negative
125	8/30/2016 13:46	Exterior	B	Door, Ext.	Column	Deteriorated	Metal	Beige	0.04	Negative
126	8/30/2016 13:47	Room 1	D	Wall, Int.		Deteriorated	Concrete	Beige	3.70	Positive
127	8/30/2016 13:48	Room 1	A	Wall, Int.		Intact	Block	Beige	0.00	Negative
128	8/30/2016 13:48	Room 1	D	Win., Int.	Casing	Deteriorated	Metal	Brown	0.60	Negative
129	8/30/2016 13:49	Room 1	D	Win., Int.	Casing	Deteriorated	Metal	Beige	4.30	Positive
130	8/30/2016 13:49	Room 1	D	Ceiling		Deteriorated	Metal	Beige	0.09	Negative
131	8/30/2016 13:50	Room 1	A	Door, Int.	leaning	Deteriorated	Wood	Brown	3.50	Positive
132	8/30/2016 13:53	Exterior	A	Siding, Ext.	Wall	Deteriorated	Concrete	Beige	1.30	Positive
133	8/30/2016 13:53	Exterior	A	Siding, Ext.	Wall	Intact	Block	Beige	0.00	Negative
134	8/30/2016 13:53	Exterior	A	Door, Roll-Up	Casing	Deteriorated	Metal	Brown	0.01	Negative
135	8/30/2016 13:54	Room 2	B	Wall, Int.		Deteriorated	Concrete	Beige	0.16	Negative
136	8/30/2016 13:55	Room 2	B	Win., Int.	Sash	Deteriorated	Metal	Beige	0.08	Negative
137	8/30/2016 13:56	Room 2	B	Ceiling		Deteriorated	Concrete	Beige	0.25	Negative
138	8/30/2016 13:56	Room 2	A	Door, Roll-Up	Casing	Deteriorated	Metal	Brown	0.00	Negative
139	8/30/2016 13:57	Room 2	A	Ceiling	brace	Deteriorated	Metal	Beige	0.09	Negative
140	8/30/2016 14:00					Calibration			1.00	Positive
141	8/30/2016 14:01					Calibration			1.00	Positive
142	8/30/2016 14:02					Calibration			1.00	Positive

Photographs

SHOWING LOCATION OF POSITIVE LBP XRF TEST RESULTS

Building - Side A

Exterior - Side C Door Casing and Jamb

Building - Side C

Certifications and Accreditations

North Carolina Department of Health and Human Services
Division of Public Health

Pat McCrory
Governor

Richard O. Brajer
Secretary

Daniel Staley
Division Director

March 10, 2016

Kathryn Hubicki
2121 Commonwealth Ave Ste 202
Charlotte, NC 28205

Dear Ms. Hubicki:

The Health Hazards Control Unit (HHCU) has determined that you have fulfilled the application requirements and are eligible for lead certification as a(n) RISK ASSESSOR. Your assigned Risk Assessor certification number is 120243, which is reflected on your enclosed North Carolina Lead Certification card. The State requires that all persons conducting regulated lead-based paint activities be certified and have their identification card on-site.

A "Lead-Based Paint Activity Summary" shall be submitted to the HHCU by the certified inspector or risk assessor within 45 days of each inspection, risk assessment, or lead hazard screen conducted. The information shall be submitted on a form provided or approved by the Program, per 10A NCAC 41C .0807(b), Lead-Based Paint Hazard Management Program Rules.

Accredited refresher training must be completed at least every 24 months from the date of the last accredited training course **AND** within twelve months prior to applying for certification. The HHCU strongly recommends that individuals note the date of certification expiration and ensure all refresher training meets the above requirements.

Your North Carolina Risk Assessor certification will expire on MARCH 31, 2017. It is NOT the policy of the HHCU to issue renewal notices. If you wish to continue working as a(n) Risk Assessor after this expiration date, you must successfully complete the required training and submit a completed application to this office prior to March 31, 2017. If you should perform lead-based paint activities as a(n) Risk Assessor without a valid North Carolina certification, you will be in violation of State regulations and may be cited for noncompliance.

If you have any questions, please contact our office at (919) 707-5954.

Sincerely,

Ed Norman
Program Manager
Health Hazards Control Unit

Enclosure

North Carolina Department of Health and Human Services
Division of Public Health

Pat McCrory
Governor

Richard O. Brajer
Secretary

Daniel Staley
Acting Division Director

October 8, 2015

Sandra Sechler
Get The Lead Out LLC
2121 Commonwealth Ave Ste 202
Charlotte NC 28205-5100

Dear Sechler:

Based upon the review of your Lead Firm Certification application, the Health Hazards Control Unit (HHCU) has determined that you have fulfilled the requirements and are eligible for Lead Firm Certification. Your assigned certification number is FPB-0002, which is reflected on your enclosed North Carolina Lead Firm Certification certificate.

Your North Carolina Firm Certification will expire on October 31, 2016. It is not the policy of the HHCU to issue renewal notices. If you wish to remain a certified firm after this expiration date, you must submit a completed application to this office prior to October 31, 2016. If you should continue to perform lead-based paint activities without a valid North Carolina firm certification, you will be in violation of State regulations and may be cited for noncompliance.

If you have any questions, please contact the HHCU at (919) 707-5950.

Sincerely,

Ed Norman
Program Manager
Health Hazards Control Unit

Enclosure

RADIOACTIVE MATERIALS BRANCH
RADIATION PROTECTION SECTION
N. C. DEPARTMENT OF HEALTH AND HUMAN SERVICES

RADIOACTIVE MATERIALS LICENSE

Pursuant to North Carolina Regulations for Protection Against Radiation and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, own, possess, transfer, and import radioactive materials listed below; and use such radioactive material for the purpose(s) and at the place(s) designated below. This License is subject to all applicable rules and regulations of the North Carolina Radiation Protection Section now and hereafter in effect and to any conditions specified below.

1. Licensee Name:	Get the Lead Out, LLC	**3. License No:** 060-0989-1	**License Type** 00310
2a. Mailing Address:	3717 Latrobe Drive, Suite 760 Charlotte, NC 28211-4826	**4. Expiration Date:** December 31, 2019	
b. Physical Address:	3717 Latrobe Drive, Suite 760 Charlotte, NC 28211-4826	**Application Type:** Amendment Application	
c. Radiation Safety Officer:	Peter M. Hubicki,	**5. a. Amendment No.: 15** **b. Issuance Date: June 02, 2016**	

6. Radioactive Material (element and mass no.)	**7. Chemical and/or Physical Form**	**8. Maximum Amount of Radioactivity and/or Quantity of Radioactive material which Licensee May Possess at Any One Time.**
A. Cobalt 57	A. Sealed Source MA-0573 -D-1 03-B	A. Total Possession not to exceed 60.00 mCi. 4.00 source(s), not to exceed 15.00 mCi.
B. Cadmium 109	B. Sealed Source MA-1159-D-101-B	B. Total Possession not to exceed 200.00 mCi. 4.00 source(s), not to exceed 50.00 mCi.
C. Americium-241 / Beryllium	C. Sealed Source MA-1159-D-101-B	C. Total Possession not to exceed 120.00 mCi. 4.00 source(s), not to exceed 30.00 mCi.

9. Authorized Use:

A. To be used in an RMD Model LPA-1 X-ray Fluorescence Analyzer to test for lead content in paint. Sealed Source & Device Registry No. MA-0573-D-103-B, with a leak test frequency of twelve months.

B. To be used in a Niton Model XLp 300 analyzer to test for lead content in paint. Sealed Source & Device Registry No. MA-1159-D-101-B, with a leak test frequency of six months.

C. To be used in a Niton Model XLp 300 analyzer to test for lead content in paint. Sealed Source & Device Registry No. MA-1159-D-101-B, with a leak test frequency of six months.

CONDITIONS

10. A. The authorized place of receipt and storage of radioactive material is the licensee's address stated in condition 2b. above.

B. Additional authorized places of receipt and use of radioactive material are listed below if applicable:

No Additional Locations

C. Radioactive materials may be used at temporary jobsites of the licensee throughout the State of North Carolina in areas not under exclusive Federal jurisdiction (Federal installations such as military bases, V.A. Hospitals, etc.). Authorization for the use of radioactive materials at temporary jobsites under exclusive Federal Jurisdiction shall be obtained either by (1) filing a NRC Form 241 [10 CFR 150.20(b)], or (2) applying for reciprocity, or (3) applying for a specific license from the NRC if the length of the job is to exceed six (6) months.

D. This condition does not prohibit the use of radioactive materials in other states; however, before radioactive materials can be used at a temporary jobsite in another state, authorization must be obtained from the State, if it is an Agreement state, or from the Nuclear Regulatory Commission for any non-Agreement State, either by filing for reciprocity or applying for a specific license.

11. The licensee shall comply with the provisions of 10A NCAC 15 .1600 "Standards for Protection Against Radiation," and 10A NCAC 15 .1000 "Notices, Instructions, Reports and Inspections." (The North Carolina Regulations for Protection Against Radiation are contained in 10A NCAC 15.)

WITHHOLD FROM PUBLIC DISCLOSURE UNDER N.C.G.S. 104E-9(a)(4) EXCEPT TO INDIVIDUALS WITH A NEED TO KNOW

12. A. Licensed material shall only be used by:
Peter Hubicki

OR individuals who (1) have successfully completed a manufacturers training program for gauge users, (2) have been instructed in the licensee's routine operating and emergency procedures, and (3) have been designated in writing as having completed these requirements by the Radiation Safety Officer.

B. Records of these designations shall be maintained for three (3) years after the company no longer employs the individual.

C. The licensee shall establish a method of identification and documentation of training for the persons authorized in condition A above. This shall be made available for review by the agency at the time of either a field or home office inspection.

D. The Radiation Safety Officer for the activities authorized under this license shall be Peter M. Hubicki .

13. A. Each sealed source containing radioactive material, other than Hydrogen 3 with a half-life greater than thirty (30) days and in any form other than gas, shall be tested for leakage and/or contamination at intervals prescribed in the respective Registry of Radioactive Sealed Sources and Devices sheet. In the absence of a Registry of Radioactive Sealed Sources and Devices sheet, tests for leakage and/or contamination shall be conducted at intervals not to exceed six (6) months, except that each source designed for the purpose of emitting alpha particles shall be tested at intervals not to exceed three (3) months. In the absence of a certificate from a transferor indicating that a test has been made within six (6) months prior to the transfer, the sealed source shall not be put into use until tested.

B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the agency.

C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with agency regulations. A report shall be filed within five (5) days of the test with the **Radioactive Materials Branch, Radiation Protection Section, 1645 Mail Service, Raleigh, NC 27699-1600,** describing the equipment involved, the test results, and the corrective action taken.

D. Tests for leakage and /or contamination shall be performed by persons specifically authorized by the agency to perform such services.

14. The licensee may transport licensed material or deliver licensed material to a carrier for transport in accordance with the provision of Section 71.5, Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Material For Transport."

15 Sealed sources containing radioactive material shall not be opened or removed from their respective source holders by the licensee.

16. The licensee shall keep records for each device authorized in this license showing which authorized user has the device, the time and date the device was removed from storage, job where device was used and the time and date the device was placed back into storage. Records of use shall be kept for three (3) years for inspection by the agency or until they have been reviewed by the agency and if the records are determined to be satisfactory, then they may be disposed of.

17. The licensee shall conduct a physical inventory of all sealed sources received and possessed under this license at intervals not to exceed six (6) months. Records of the inventories shall be maintained for inspection by the agency and shall include the quantities and kinds of radioactive material, location of sources and the date of the inventory.

18. In addition to the possession limits in condition 8 above, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10A NCAC 15 .0353 for establishing decommissioning financial assurance.

19. The licensee shall annually review its Radiation Protection Program for content and implementation [Reference 10A NCAC 15 .1603(c)]. Documentation of the Radiation Protection Program reviews shall be retained for inspection by the agency [Reference: 10A NCAC 15 .1636].

20. The licensee shall institute the provisions of 10A NCAC 15 .1610 when an occupationally exposed woman voluntarily informs her supervisor, in writing, of the pregnancy and the estimated date of conception.

21. The licensee shall ensure that no individual "member of the public" [Reference: 10A NCAC 15 .0104(81)] receives a radiation dose in excess of the limits specified in 10A NCAC 15 .1611(a) while conducting licensed activities.

22. This license may be subject to amendment, revision, modification, suspension, or revocation in accordance with the provisions of 10A NCAC 15 .0344.

23. In addition to the possession limits referenced in condition 8. above, the licensee shall further restrict possession of radionuclides listed in the table below to the quantities noted within the table. Sum of fractions for the radionuclides listed below shall not exceed

Radionuclide	Quantity (curies)	Radionuclide	Quantity (curies)
Am-241	16	Pm-147	10,800
Am-241: Be	16	Pu-238	16
Cf-252	5.4	Pu-239:Be	16
Cm-244	13.5	Ra-226	10.8
Co-60	8.1	Se-75	54
Cs-137	27	Sr-90 (Y-90)	270
Gd-153	270	Tm-170	5,400
Ir-192	21.6	Yb-169	81

24. Except as specifically provided otherwise by this license, the licensee shall possess and use radioactive material described in conditions 6., 7., and 8. of this license in accordance with statements, representations and procedures and attachments listed below. The *North Carolina Regulations for Protection Against Radiation* shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

A. Application for renewal with attachments dated March 24, 2014, signed by Peter M. Hubicki, RSO.

B. Application with attachments dated April 29, 2014, signed by Peter M. Hubicki, Assistant VP, RSO.

C. Application with attachments, dated April 13, 2016, signed by Peter M. Hubicki, Treasurer, RSO. Administrative correction of amendment number and previous tie down statements.. Mailing address remains the same until decommissioning is accomplished. Radionuclide activity adjustments made based on maximum activity of SS&D sheets.

D. Application for amendment with attachments dated May 18, 2016, signed by Peter M. Hubicki, RSO.

For: W. Lee Cox, III

Chief, Radiation Protection Section

Enclosure 5: Environmental Justice Enclosure

United States Environmental Protection Agency

EJScreen Report (Version 2.0)

the User Specified Area, NORTH CAROLINA, EPA Region 4

Approximate Population: 0

Input Area (sq. miles): 0.21

(The study area contains 1 blockgroup(s) with zero population.)

Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0

EJScreen Report (Version 2.0)

the User Specified Area, NORTH CAROLINA, EPA Region 4

Approximate Population: 0

Input Area (sq. miles): 0.21

(The study area contains 1 blockgroup(s) with zero population.)

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Pollution and Sources							
Particulate Matter 2.5 ($\mu g/m^3$)	N/A	7.74	N/A	8.18	N/A	8.74	N/A
Ozone (ppb)	N/A	41.7	N/A	37.9	N/A	42.6	N/A
2017 Diesel Particulate Matter* ($\mu g/m^3$)	N/A	0.182	N/A	0.261	N/A	0.295	N/A
2017 Air Toxics Cancer Risk* (lifetime risk per million)	N/A	29	N/A	31	N/A	29	N/A
2017 Air Toxics Respiratory HI*	N/A	0.37	N/A	0.4	N/A	0.36	N/A
Traffic Proximity (daily traffic count/distance to road)	N/A	350	N/A	430	N/A	710	N/A
Lead Paint (% Pre-1960 Housing)	N/A	0.16	N/A	0.15	N/A	0.28	N/A
Superfund Proximity (site count/km distance)	N/A	0.082	N/A	0.083	N/A	0.13	N/A
RMP Facility Proximity (facility count/km distance)	N/A	0.39	N/A	0.6	N/A	0.75	N/A
Hazardous Waste Proximity (facility count/km distance)	N/A	0.83	N/A	0.62	N/A	2.2	N/A
Underground Storage Tanks (count/km^2)	N/A	3.4	N/A	3.5	N/A	3.9	N/A
Wastewater Discharge (toxicity-weighted concentration/m distance)	N/A	0.25	N/A	0.45	N/A	12	N/A
Socioeconomic Indicators							
Demographic Index	N/A	36%	N/A	37%	N/A	36%	N/A
People of Color	N/A	37%	N/A	39%	N/A	40%	N/A
Low Income	N/A	34%	N/A	35%	N/A	31%	N/A
Unemployment Rate	N/A	6%	N/A	6%	N/A	5%	N/A
Linguistically Isolated	N/A	2%	N/A	3%	N/A	5%	N/A
Less Than High School Education	N/A	12%	N/A	13%	N/A	12%	N/A
Under Age 5	N/A	6%	N/A	6%	N/A	6%	N/A
Over Age 64	N/A	16%	N/A	17%	N/A	16%	N/A

*Diesel particular matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's 2017 Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: https://www.epa.gov/haps/air-toxics-data-update.

For additional information, see: www.epa.gov/environmentaljustice

Enclosure 6: IRP Sites

PN-93099

N
W E
S

Legend

EDIT Environme... Restoration Site

Phase

- NFA

EDIT Land Use Control

Phase

- GW NORP
- LUC
- LUC/ MNA GW/ Const

EDIT EnvironmentalSa...

Monitoring Well Status

- Installed/ Active
- Properly Removed/ Abandoned/ Closed
- WMAIN_NCW
- WLATERAL_NCW
- PWC_WLATER...
- PWC_WMAIN_...
- RoadCenterline
- Fence
- Building

0 65 130 260 390 520 Feet

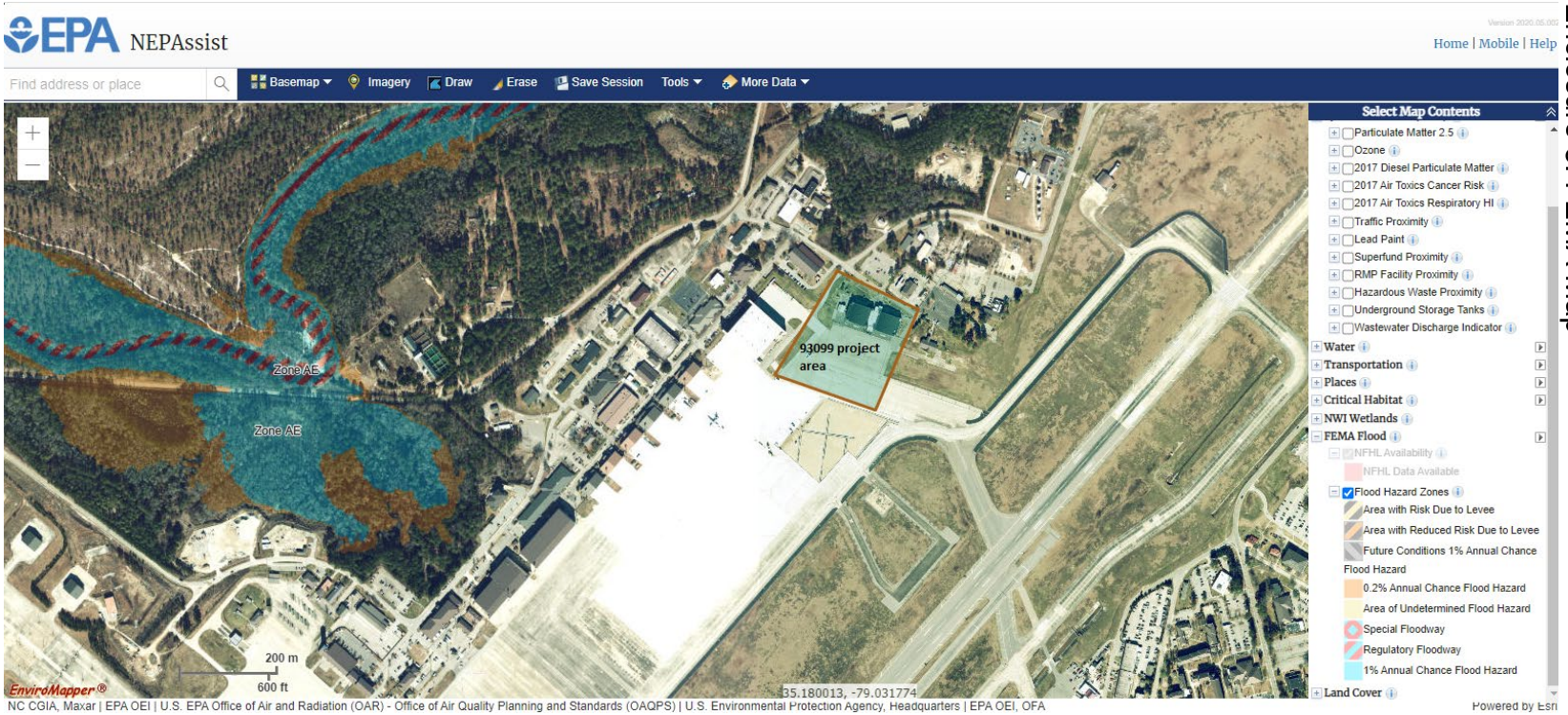
Title: USASOC Hangar
PN: 93099
Prepared By: LS
Prepared Date: 7/11/2019

Liberty: Project 93099 Hangar 708 Map

Fort Bragg DPW Environmental Management Branch: IRP - Map

Enclosure 7: Monitoring Well Locations

Enclosure 8: FEMA Map



PIN
- Approximate location based on user input and does not represent an authoritative property location

MAP PANELS
- Selected FloodMap Boundary
- Digital Data Available
- No Digital Data Available
- Unmapped

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*
- Otherwise Protected Area
- Coastal Barrier Resource System Area

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth
- Regulatory Floodway *Zone AE, AO, AH, VE, AR*

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

Enclosure 9: USDA Soil Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Cumberland County, North Carolina

October 24, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map (93099)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cumberland County, North Carolina
Survey Area Data: Version 24, Sep 8, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 23, 2022—Apr 27, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (93099)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BdB	Blaney-Urban land complex, 2 to 8 percent slopes	14.6	100.0%
Totals for Area of Interest		**14.6**	**100.0%**

Map Unit Descriptions (93099)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Cumberland County, North Carolina

BdB—Blaney-Urban land complex, 2 to 8 percent slopes

Map Unit Setting

National map unit symbol: w6z4
Elevation: 160 to 660 feet
Mean annual precipitation: 38 to 52 inches
Mean annual air temperature: 61 to 70 degrees F
Frost-free period: 210 to 245 days
Farmland classification: Not prime farmland

Map Unit Composition

Blaney and similar soils: 40 percent
Urban land: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Blaney

Setting

Landform: Low hills
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 4 inches: loamy sand
E - 4 to 25 inches: loamy sand
Bt - 25 to 62 inches: sandy clay loam
C - 62 to 80 inches: loamy coarse sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: C
Ecological site: F137XY006GA - Loamy Backslope Woodland - PROVISIONAL
Hydric soil rating: No

Description of Urban Land

Typical profile

A - 0 to 6 inches: variable

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

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Enclosure 10: Fort Liberty SHPO Initiation Notification 6 Sept 2022

DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
HEADQUARTERS, UNITED STATES ARMY GARRISON, FORT BRAGG
2175 REILLY ROAD
FORT BRAGG, NORTH CAROLINA 28310-5000

September 6, 2022

SUBJECT: Section 106 Consultation for the Demolition of Bldg. 708 (Hangars 4 & 5), Pope Army Airfield, Cumberland County, North Carolina

Ms. Renee Gledhill-Earley
State Historic Preservation Office
Department of Natural and Cultural Resources
4617 Mail Service Center
Raleigh, North Carolina 27699-4617

Dear Ms. Gledhill-Earley:

In accordance with Section 106 of the National Historic Preservation Act of 1966 (36 C.F.R. Part 800), Fort Bragg wishes to initiate consultation on the demolition of Building 708 (Hangars 4 and 5) at Pope Army Airfield. Building 708 is a historic property listed in the National Register of Historic Places (NRHP).

Built in 1934, Building 708 was designed as an Army Air Service support facility. It stands southwest of Surveyor Street, south of its intersection with Booster Street. In 1990, the property was identified by Pope Air Force Base as eligible for listing in the NRHP and was duly nominated and inscribed. In 2010, the property returned to Army control under the Base Realignment and Closure order of 2005. Today, it is an aircraft maintenance hangar serving the Special Operations Forces (SOF) under the U.S. Army Special Operations Command (USASOC) and operated by the USASOC Flight Company (UFC).

Currently, the building does not meet the Army Standard for Aircraft Maintenance Hangars as it lacks adequate humidity control systems, life support facilities, latrines, locker rooms, administrative offices, shops, tool and parts storage, and additional necessary flight operations facilities. Parts are stored in a separate building which is not in compliance with Congressional directives regarding prevention of corrosion of military equipment. These deficiencies result in accelerated degradation of equipment, hindered maintenance, and interruption of the UFC mission when aircraft are inoperable due to maintenance problems.

The building cannot be adapted to meet Congressional directives, Army standards, or SOF mission readiness requirements. Therefore, Fort Bragg has determined that Building 708 must be demolished so an adequate aircraft maintenance hangar may be built. It is our finding that the loss of this NRHP-listed property constitutes an adverse

effect as defined in 36 C.F.R. § 800.5(a)(1). We therefore wish to initiate consultation with you to resolve the effects of this undertaking in accordance with 36 C.F.R. § 800.6. We anticipate the development of a memorandum of agreement regarding mitigation measures will be required. An Environmental Assessment will also be completed in accordance with the National Environmental Policy Act of 1969 (NEPA; 40 C.F.R. Part 1500), and public involvement will be solicited as part of the NEPA process in accordance with 36 C.F.R. § 800.2(d)(3). Additionally, the Advisory Council on Historic Preservation will be invited to consult on this undertaking in accordance with 36 C.F.R. § 800.6(a)(1).

If you have questions regarding this undertaking, please direct your correspondence to Mr. Jeremy T. Spates, Historic Preservation Specialist, at (910) 908-4279, email jeremy.t.spates.ctr@army.mil, or Mr. Paul G. Humphrey, Chief, Environmental Management Branch, at (910) 396-6518, email paul.g.humphrey2.civ@army.mil.

Sincerely,

Kevin L. Griess
Deputy Garrison Commander

Enclosure 11: 18 October 2022 SHPO Initiation Receipt

North Carolina Department of Natural and Cultural Resources
State Historic Preservation Office
Ramona M. Bartos, Administrator

Governor Roy Cooper
Secretary D. Reid Wilson

Office of Archives and History
Deputy Secretary, Darin J. Waters, Ph.D.

October 18, 2022

Paul Humphrey
Fort Bragg
Directorate of Public Works
Bldg. 3-1137, Butner Road
Fort Bragg, NC 28310

paul.g.humphrey2.civ@army.mil

Re: Memorandum of Agreement for the Demolition of Buildings 708 (Hangars 4 and 5) and 1-3151, and Replace Bridge BRDGR at Puppy Creek and Chicken Road, Fort Bragg and Pope Army Airfield, Cumberland County, ER 22-2295

Dear Mr. Humphrey:

Thank you for your email of September 13, 2022, regarding the above-referenced undertaking. We have reviewed your submission and offer the following comments.

We note that a meeting with Ft. Bragg and SHPO staff, including yourself, Jeremy Spates, Katie Harville and Renee Gledhill-Earley, was held on September 27, 2022. As discussed, we have no objection to the development of a Memorandum of Agreement (MOA) that covers the demolition of 3 historic structures, Buildings 708 (Hangars 4 and 5) and 1-3151, and Bridge BRDGR. This will be tracked under the number ER 22-2295. Additionally, we do not object to carrying forward the set of mitigation strategies outlined in the 2018 MOA draft, with a few recommendations which are listed below. We look forward to receiving the updated draft MOA from your staff in the coming weeks.

- Timetables for deliverables – All stipulations where deliverables are produced should include detailed timelines for review of drafts, finals, and installation (where necessary).
    - Timelines for Recordation/Documentation of structures – finals should be delivered to SHPO within 12 months – Should also note that demolition cannot begin until packet has been accepted or 30 days from receipt.
    - Pamphlet – draft should be delivered to SHPO within 18 months and a final within 24 months
- Creative Mitigation - Stipulation III.D: Consider incorporating a more interactive digital version of the pamphlet, such as a StoryMap, rather than a pdf version. This will encourage an engaging design and will hopefully result in a user-friendly, interactive experience. We note that the SHPO has the capability to assign a consultant account for the StoryMap development under our umbrella so that development, review, and long-term access are streamlined and cost-effective.

Example language for deliverables timelines is enclosed.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-814-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

Renee Gledhill-Earley

for Ramona Bartos, Deputy
State Historic Preservation Officer

enclosed: Timeline example language (docx)

cc Jeremy Spates, Ft. Bragg jeremy.t.spates.ctr@army.mil
Katie Harville, NCHPO katie.harville@ncdcr.gov

Enclosure 12: SHPO Concurrence Letter

North Carolina Department of Natural and Cultural Resources
State Historic Preservation Office
Ramona M. Bartos, Administrator

Governor Roy Cooper
Secretary D. Reid Wilson

Office of Archives and History
Deputy Secretary, Darin J. Waters, Ph.D.

October 18, 2022

Paul Humphrey
Fort Bragg
Directorate of Public Works
Bldg. 3-1137, Butner Road
Fort Bragg, NC 28310

paul.g.humphrey2.civ@army.mil

Re: Memorandum of Agreement for the Demolition of Buildings 708 (Hangars 4 and 5) and 1-3151, and Replace Bridge BRDGR at Puppy Creek and Chicken Road, Fort Bragg and Pope Army Airfield, Cumberland County, ER 22-2295

Dear Mr. Humphrey:

Thank you for your email of September 13, 2022, regarding the above-referenced undertaking. We have reviewed your submission and offer the following comments.

We note that a meeting with Ft. Bragg and SHPO staff, including yourself, Jeremy Spates, Katie Harville and Renee Gledhill-Earley, was held on September 27, 2022. As discussed, we have no objection to the development of a Memorandum of Agreement (MOA) that covers the demolition of 3 historic structures, Buildings 708 (Hangars 4 and 5) and 1-3151, and Bridge BRDGR. This will be tracked under the number ER 22-2295. Additionally, we do not object to carrying forward the set of mitigation strategies outlined in the 2018 MOA draft, with a few recommendations which are listed below. We look forward to receiving the updated draft MOA from your staff in the coming weeks.

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Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-814-6579 or environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

Renee Gledhill-Earley

for Ramona Bartos, Deputy
State Historic Preservation Officer

enclosed: Timeline example language (docx)

cc Jeremy Spates, Ft. Bragg jeremy.t.spates.ctr@army.mil
Katie Harville, NCHPO katie.harville@ncdcr.gov

Enclosure 13: Draft MOA

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY
INSTALLATIONS, ENERGY AND ENVIRONMENT
110 ARMY PENTAGON
WASHINGTON DC 20310-0110

SAIE-ESO (AR 200-1)

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Memorandum of Agreement (MOA) for Demolition of Building 708 and Building 1-3151, Fort Liberty, NC.

1. References:

a. Army Regulation (AR) 200-1 Environmental Protection and Enhancement.

b. Memorandum, SAIE-ESO, dated 25 March 2022, subject: Coordination of National Historic Preservation Act Compliance Agreements.

2. The subject MOA has been reviewed in accordance with references 1.a. and 1.b. The MOA has been revised according to prior Headquarters Department of the Army (HQDA) comments and is endorsed for signature. This endorsement is contingent upon further coordination with the Army Deputy Federal Preservation Officer (DFPO) if any substantive changes are made to the MOA after this date. A copy of the MOA shall be provided to the Army DFPO once signed by all consulting parties.

3. If there are any questions regarding this correspondence, please contact Ms. Mary Schmidt, Army DFPO, at mary.e.schmidt37.civ@army.mil.

GULDENZOPF.DAVID.B.1228820802
Digitally signed by GULDENZOPF.DAVID.B.1228820802
Date: 2024.07.29 09:48:19 -04'00'

David Guldenzopf, Ph.D.
Department of the Army Federal Preservation Officer

DISTRIBUTION:

Office of the Army General Counsel
Deputy Chief of Staff G-9
Commander
Army Materiel Command
Installation Management Command

MEMORANDUM OF AGREEMENT
BETWEEN
UNITED STATES ARMY GARRISON, FORT LIBERTY
AND THE
NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR THE
DEMOLITION OF BUILDING 708 AND BUILDING 1-3151
FORT LIBERTY, CUMBERLAND COUNTY, NORTH CAROLINA

WHEREAS, Building 708 (Pope Army Airfield, Cumberland County), a property listed in the National Register of Historic Places (hereafter "NRHP") as "Hangars 4 & 5, Pope Air Force Base", a single building consisting of two, conjoined hangar bays side-by-side (see Attachment A, Sheet 2), is crucial to the mission readiness of airborne units stationed at Fort Liberty, yet does not meet and cannot be brought up to the Army standard for aircraft maintenance facilities, and occupies a site, adjacent to the airfield, which is necessary as a hangar facility and cannot feasibly be adapted for another use, and United States Army Garrison Fort Liberty (hereafter "Fort Liberty") considers it necessary that said building be demolished so that an adequate facility may be built on the site; and

WHEREAS, Building 1-3151 (bus station; see Attachment A, Sheet 1), a contributing element of the NRHP-eligible Old Post Historic District, Cumberland County (hereafter "OPHD"), has no current or projected mission value to the Army, and Fort Liberty proposes to demolish it under the Facilities Reduction Program; and

WHEREAS, in accordance with (hereafter "IAW") Section 106 of the National Historic Preservation Act (hereafter "NHPA"; 54 U.S.C. § 306108, implementing regulations at 36 CFR Part 800), Fort Liberty has established that each of these actions constitutes an undertaking (hereafter "the undertakings") as defined in § 800.16(y), and has, for each undertaking, identified the Area of Potential Effects (hereafter "APE"), as defined in § 800.16(d), shown in the maps at Attachment A, including said historic properties; and

WHEREAS, IAW § 800.5, Fort Liberty has, in consultation with the North Carolina State Historic Preservation Officer (hereafter "the SHPO"), determined that the undertakings meet the criteria of adverse effect listed in 800.5(a)(1) as they will result in the physical destruction of said historic properties (Attachment B); and

WHEREAS, IAW § 800.6(b)(1), Fort Liberty and the SHPO have engaged in consultation to resolve the adverse effects to said properties caused by the undertakings; and

WHEREAS, IAW § 800.6(a)(1), Fort Liberty notified the Advisory Council on Historic Preservation (hereafter "the Council") of the findings of adverse effect in the cases of the undertakings, and provided the documentation required at § 800.11(e), the Council declining to participate, (Attachment C); and

WHEREAS, IAW § 800.2(d) & § 800.6(a)(4), Fort Liberty solicited the involvement of the public under the procedures of the National Environmental Policy Act (hereafter "NEPA"; 42 USC § 4321 et seq.), through the issuance of an Environmental Assessment (hereafter "EA"), which contained information regarding Fort Liberty's effort to identify historic properties, evaluate their significance and assess the undertaking's effects upon them sufficient to provide the public an opportunity to examine the results of the consultation and to express their views on resolving adverse effects. [public response and dates of response period to be summarized here]; and

WHEREAS, the APEs of the undertakings have been subject to extensive ground disturbance due to development before 1966 which precludes the presence of eligible archaeological sites; and

WHEREAS, Fort Liberty has established consultatory relationships with federally-recognized Indian tribes with a potential interest in the Fort Liberty area, and these tribes have not identified any properties of religious or cultural significance which would be affected by the undertakings, nor has Fort Liberty identified any properties within the APEs of the undertakings which would potentially meet this criterion;

NOW, THEREFORE, Fort Liberty and the SHPO agree that the undertakings shall be implemented in accordance with the following stipulations in order to take into account the effects of the undertakings on historic properties.

STIPULATIONS:
Fort Liberty shall ensure that the following stipulations are carried out:

I. **DOCUMENTATION**

A. Demolition of a property shall not commence until it has been documented as stipulated below.

B. Documentation shall be produced by or under the direct supervision of personnel who meet the Secretary of the Interior's Professional Qualifications Standards in Architectural History or Historic Architecture (hereinafter "qualified personnel").

C. One finalized set of documentation for each property shall be submitted by Fort Liberty to the SHPO and another shall be archived by the Fort Liberty Cultural Resources Management Program. Documentation deliverables for each property shall consist of:

1. Photographic documentation IAW the Digital Photography Policy of the North Carolina Department of Natural & Cultural Resources, State Historic Preservation Office (the "SHPO"). Digital photos shall be 3000x2000 pixels or greater, taken with a 6-megapixel camera or greater, submitted as JPG files on

a disc or drive, named according to the 2022 HPO standards, with accompanying proof sheets, photo log, and keyed site/floor plans. Hard copies shall include the previously listed items and archival quality prints measuring 5"x7" with a minimum resolution of 300 ppi.

2. Measured or existing drawings in digital format. (PDF files on disc or drive)

3. An archivally bound report, along with a digital copy, containing a historical narrative of twenty pages or fewer composed by qualified personnel, plus a list of referenced sources. The report shall also contain pertinent images or other graphic documentation discovered during research.

D. For each property, Fort Liberty shall submit draft documentation deliverables to the SHPO for review and comment within one year of the execution of this agreement. The SHPO shall have 30 days to review and comment on the submittal. If the SHPO does not have any comments or if no response is received within 30 days, Fort Liberty may proceed to produce finalized deliverables. Any timely input received will be considered in developing the final deliverables.

E. Documentation of Building 708 shall consist of:

1. Scans of measured or existing drawings.

2. A minimum of 44 digital photos: overall shots from various angles (eight photos minimum), elevations (three photos minimum each side), interiors (twelve photos minimum), and details (i.e., close-ups of doors and windows, fixtures, hardware, structural and mechanical systems, etc.; twelve photos minimum).

3. A documentation report.

F. Documentation of Building 1-3151 (Bus Station) shall consist of:

1. Scans of measured or existing drawings.

2. A minimum of 26 digital photos: overall setting from Randolph Street and Polo Field (two photos minimum), overall setting from Throckmorton Library and parking lot (two photos minimum), elevations (three photos minimum each side), interiors (four photos minimum), and details (six photos minimum).

3. A documentation report.

II. SIGNAGE PROGRAM

A. Fort Liberty shall implement a program of signage. Consisting of 38 free-standing, historic district boundary signs at primary entrance road and street locations

around the boundaries of the OPHD (Attachment E), the PAFBHD (Attachment F) and the JFKSWCSHD (Attachment G).

B. Fort Liberty shall also develop a public education tool in the form of a web-based GIS story map that will be a companion to the signage program. The story map will cover the sites designated under Stipulation II(A)(4)(iii) and will be built under the SHPO's ArcGIS® account.

1. Fort Liberty will provide a draft story map to the SHPO. The SHPO shall have 30 days to review and comment on the draft story map. If the SHPO does not have comments or if no response is received within 30 days, Fort Liberty may proceed to finalize the story map. Any timely input received will be considered in developing the final story map.

2. Fort Liberty will provide the finalized story map to the SHPO within two years of the execution of this agreement. All data, records, photographs, etc., used in the development of the story map will be provided to the SHPO for filing to ensure permanent maintenance of the deliverable.

3. The story map will be permanently housed under the SHPO's ArcGIS® account and the SHPO shall make the story map available to the public via their website for a period of no fewer than five years.

III. **ADMINISTRATIVE STIPULATIONS**

A. Definition of parties: For the purposes of this agreement the term "Signatories" means the Fort Liberty Garrison Commander and the North Carolina SHPO, each of which has authority under 36 CFR § 800.6(c) to execute, amend, or terminate this agreement.

B. Professional supervision: Fort Liberty shall ensure that all historic preservation technical work carried out in the implementation of this agreement be done by or under the direct supervision of personnel who meet the Secretary of the Interior's Professional Qualifications Standards.

C. Alterations to project documents: Fort Liberty shall not alter any plan, scope of services, or other document that has been reviewed and commented on pursuant to this agreement, except to finalize documents commented on in draft, without first affording the parties to this agreement the opportunity to review the proposed change and determine whether it shall require that this agreement be amended. If one or more signatories determine that an amendment is needed, the parties to this agreement shall consult IAW 36 CFR § 800.6(c)(7) to consider such an amendment.

D. Post-Review Discoveries: If properties are discovered that may be historically significant or unanticipated effects on historic properties found, Fort Liberty shall

resume consultation with the SHPO IAW the NHPA. In the event of the inadvertent discovery of archaeological resources, Fort Liberty shall resume consultation with the SHPO, and, in the event of the inadvertent discovery of Native American human remains, associated funerary objects, sacred objects, or objects of cultural patrimony, Fort Liberty shall also initiate consultation with the THPOs of the ten federally-recognized American Indian tribes who have expressed an interest in the installation..

E. Dispute Resolution: Should any signatory or concurring party to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, Fort Liberty shall consult with such party to resolve the objection. If Fort Liberty determines that such objection cannot be resolved, Fort Liberty will:

1. Forward all documentation relevant to the dispute, including Fort Liberty's proposed resolution, to the ACHP. The ACHP shall provide Fort Liberty with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, Fort Liberty shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories and concurring parties, and provide them with a copy of this written response. Fort Liberty will then proceed according to its final decision.

2. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, Fort Liberty may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, Fort Liberty shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA, and provide them and the ACHP with a copy of such written response.

3. Fort Liberty's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.

E. Anti-Deficiency Act Compliance: The stipulations of this agreement are subject to the provisions of the Anti-Deficiency Act, found at Title 31, Section 1341 of the United States Code. If sufficient federal funds are not made available to fully execute this agreement, Fort Liberty shall consult with the Signatories to this agreement to either terminate or amend the agreement IAW with the amendment and termination procedures found at Stipulations III(H) or III(I) of this agreement.

F. Duration: This agreement is in effect beginning with the last dated signature and shall expire if its terms are not carried out within five years from the date of its execution. Prior to such time, Fort Liberty may consult with the other Signatories to reconsider the terms of the agreement and amend it IAW Stipulation III(H).

G. Reporting: Each year (12-month period) following the date of execution for this agreement, until it expires (or is otherwise terminated), Fort Liberty shall provide all Signatories a summary report (i.e., email report) detailing work undertaken pursuant to its terms. Summary reports shall be in the form of an email from the Fort Liberty Cultural Resources Management Program staff and include brief descriptions of work completed to date, anticipated schedules for completing any remaining work, any problems encountered, and any disputes and objections received in Fort Liberty's efforts to carry out the terms of this agreement.

H. Amendment: This agreement may be amended when such an amendment is agreed to in writing by all signatories. The amendment shall be effective on the date a copy signed by all of the Signatories is filed with the Council; 36 CFR §800.6(c)(7) shall govern the execution of the amendment.

I. Termination. If any signatory to this agreement determines that its terms are not being or cannot be carried out, that party shall immediately consult with the other Signatories to attempt to develop an amendment per Stipulation III(H). If within thirty (30) calendar days (or another time period agreed to by all Signatories) an amendment cannot be reached, any signatory may terminate the agreement upon written notification to the other Signatories. Once the agreement is terminated, and prior to work continuing on the undertakings, Fort Liberty must either (a) execute an agreement pursuant to 36 CFR §800.6 or (b) request, take into account, and respond to the comments of the Council under 36 CFR §800.7. Fort Liberty shall notify the signatories as to the course of action it will pursue.

J. A signed copy of this agreement shall be filed with the Council IAW 36 CFR §800.6(b)(1)(iv).

Execution of this MOA by Fort Liberty and the SHPO and implementation of its terms evidence that Fort Liberty has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

MEMORANDUM OF AGREEMENT
BETWEEN
UNITED STATES ARMY GARRISON, FORT LIBERTY
AND THE
NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR THE
DEMOLITION OF BUILDING 708 AND BUILDING 1-3151
FORT LIBERTY, CUMBERLAND COUNTY, NORTH CAROLINA

AGREED:

U.S. ARMY GARRISON, FORT LIBERTY

By: _____ Date: _____
K. Chad Mixon, Colonel, Garrison Commander
U.S. Army Garrison, Fort Liberty

MEMORANDUM OF AGREEMENT
BETWEEN
UNITED STATES ARMY GARRISON, FORT LIBERTY
AND THE
NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR THE
DEMOLITION OF BUILDING 708 AND BUILDING 1-3151
FORT LIBERTY, CUMBERLAND COUNTY, NORTH CAROLINA

AGREED:

NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER

By: _____ Date: _____
Darin J. Waters, PhD., Deputy Secretary
North Carolina Office of Archives and History
State Historic Preservation Officer

MEMORANDUM OF AGREEMENT
BETWEEN
UNITED STATES ARMY GARRISON, FORT LIBERTY
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NORTH CAROLINA STATE HISTORIC PRESERVATION OFFICER
FOR THE
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FORT LIBERTY, CUMBERLAND COUNTY, NORTH CAROLINA

Attachments