

Draft Environmental Assessment

City of Laurinburg

Proposed North Fire Station

DR-4393-NC PW 00234 PN 71275

Scotland County, North Carolina

July 2020



U.S. Department of Homeland Security
Federal Emergency Management Agency
Region 4
3003 Chamblee Tucker Road
Atlanta, GA 30341

Table of Contents

1.0	INTRODUCTION.....	i
2.0	PURPOSE.....	i
3.0	NEED.....	ii
4.0	ALTERNATIVES ANALYSIS	ii
4.1	No Action Alternative.....	ii
4.2	Proposed Action	iii
4.3	Alternatives Considered and Dismissed.....	iii
5.0	AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS.....	iv
5.1	Physical Resources	vi
5.1.1	<i>Geology and Soils</i>	<i>vi</i>
5.1.1.1	No Action Alternative.....	vii
5.1.1.2	Proposed Alternative	vii
5.1.2	<i>Prime Farmland</i>	<i>vii</i>
5.1.2.1	No Action Alternative.....	vii
5.1.2.2	Proposed Alternative	viii
5.1.3	<i>Forest Resources</i>	<i>viii</i>
5.1.3.1	No Action Alternative.....	viii
5.1.3.2	Proposed Alternative	viii
5.1.4	<i>Air Quality</i>	<i>viii</i>
5.1.4.1	No Action Alternative.....	ix
5.1.4.2	Proposed Alternative	ix
5.1.5	<i>Seismic Safety</i>	<i>ix</i>
5.1.5.1	No Action Alternative.....	ix
5.1.5.2	Proposed Alternative	ix
5.1.6	<i>Climate Change</i>	<i>ix</i>
5.2	Water Resources	x
5.2.1	<i>Water Quality</i>	<i>x</i>
5.2.1.1	No Action Alternative.....	x

Environmental Assessment
Proposed North Fire Station

Laurinburg, Scotland County, North Carolina
S&ME Project No. 4305-20-096

5.2.1.2	Proposed Alternative	x
5.2.2	<i>Wetlands</i>	<i>x</i>
5.2.2.1	No Action Alternative.....	xi
5.2.2.2	Proposed Alternative	xi
5.2.3	<i>Floodplains</i>	<i>xi</i>
5.2.3.1	No Action Alternative.....	xi
5.2.3.2	Proposed Alternative	xi
5.2.4	<i>Coastal Waters</i>	<i>xii</i>
5.3	Biological Resources.....	xii
5.3.1	<i>Wildlife and Natural Vegetation</i>	<i>xii</i>
5.3.1.1	No Action Alternative.....	xiii
5.3.1.2	Proposed Alternative	xiii
5.3.2	<i>Migratory Birds</i>	<i>xiii</i>
5.3.2.1	No Action Alternative.....	xiv
5.3.2.2	Proposed Alternative	xiv
5.3.3	<i>Fish and Aquatic Habitat</i>	<i>xiv</i>
5.3.3.1	No Action Alternative.....	xiv
5.3.3.2	Proposed Alternative	xiv
5.3.4	<i>Cultural Resources</i>	<i>xiv</i>
5.3.4.1	No Action Alternative.....	xv
5.3.4.2	Proposed Alternative	xv
5.4	Socioeconomic Resources.....	xv
5.4.1	<i>Environmental Justice</i>	<i>xv</i>
5.4.1.1	No Action Alternative.....	xvi
5.4.1.2	Proposed Alternative	xvi
5.4.2	<i>Hazardous Materials</i>	<i>xvi</i>
5.4.2.1	No Action Alternative.....	xvi
5.4.2.2	Proposed Alternative	xvii
5.4.3	<i>Noise</i>	<i>xvii</i>
5.4.3.1	No Action Alternative.....	xvii
5.4.3.2	Proposed Alternative	xvii
5.4.4	<i>Traffic</i>	<i>xvii</i>

Environmental Assessment
Proposed North Fire Station

Laurinburg, Scotland County, North Carolina
S&ME Project No. 4305-20-096

5.4.4.1 No Action Alternative..... xviii

5.4.4.2 Proposed Alternative xviii

5.4.5 *Public Services and Utilities* xviii

5.4.5.1 No Action Alternative..... xviii

5.4.5.2 Proposed Alternative xviii

5.4.6 *Public Health and Safety*..... xviii

5.4.6.1 No Action Alternative..... xviii

5.4.6.2 Proposed Alternative xix

5.5 Comparison of Alternatives..... xix

6.0 CUMULATIVE IMPACTS..... xxii

7.0 PUBLIC INVOLVEMENT..... xxiii

8.0 MITIGATION MEASURES..... xxvi

8.1 Geology, Soils, and Prime and Unique Farmland xxvi

8.2 Air Quality..... xxvi

8.3 Water Quality and Aquatic Habitat..... xxvi

8.4 Cultural Resources xxvi

8.5 Noise xxvii

8.6 Traffic xxvii

Public Health and Safety xxvii

8.7 xxvii

9.0 AGENCY COORDINATION AND REFERENCES..... xxvii

10.0 LIST OF PREPARERS xxx

List of Tables

Table 4.1 – Evaluation Criteria for Potential Impactsiv

Table 4.2 – Protected Species of Scotland County, NC xii

Table 4.3 – Comparison of Alternatives..... xix

Table 8-1 – Coordination and Consultation Summary xxvii

Appendices

Appendix A – Site Exhibits and Site Photographs

Environmental Assessment

Proposed North Fire Station

Laurinburg, Scotland County, North Carolina

S&ME Project No. 4305-20-096

Appendix B – Physical Resources

Appendix C – Water Resources

Appendix D – Biological Resources

Appendix E – Cultural and Historic Resources

Appendix F – Socioeconomic Resources

Environmental Assessment

Proposed North Fire Station

Laurinburg, Scotland County, North Carolina

S&ME Project No. 4305-20-096

Abbreviations and Acronyms

ACHP	Advisory Council on Historic Preservation
ASTM	American Society for Testing and Materials
BMP	Best Management Practices
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
EA	Environmental Assessment
EDC	Economic Development Corporation
EIS	Environmental Impact Statement
ESA	Environmental Site Assessment
ESA	Endangered Species Act
ESCP	Erosion and Sedimentation Control Plan
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONIS	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
HSA	Historic Site Act
IPaC	Information and Planning and Consultation
ISO	Insurance Services Offices
NCA	Noise Control Act
NCDEQ	North Carolina Division of Environmental Quality
NCDOT	North Carolina Division of Transportation
NCNHP	North Carolina Natural Heritage Program
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OSHA	Occupational Safety and Health Administration
PA	Public Assistance
PNP	Private Nonprofit
REC	Recognized Environmental Condition
NCSHPO	North Carolina State Historic Preservation Office
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USGS	United States Geological Survey
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service

1.0 INTRODUCTION

The City of Laurinburg Fire Department is seeking reimbursement for federal funding from the Federal Emergency Management Agency (FEMA) in the form of Public Assistance (PA) Program Funding for the construction of a new fire station in Laurinburg, North Carolina. The objective of the FEMA PA Grant Program is to provide assistance to State, Tribal, and Local Governments, and certain types of Private Nonprofit (PNP) organizations so that communities can quickly respond to and recover from major disasters or emergencies declared by the President. Through the PA Program, FEMA provides supplemental federal disaster grant assistance for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain PNP organizations. The PA Program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process. The FEMA project worksheet number for DR-4393-NC is PW 00234 and Grants Manager project number is PN 71275.

The City of Laurinburg (City) is a full-service municipality that includes paid fire protection. There are approximately 6,136 households in Laurinburg encompassing approximately 12.6 square miles. The City has two fire stations, the North Fire Station and the South Fire Station, which serve the City and a portion of the rural residents of Scotland County. After the existing North Fire Station sustained flood damage in September 2018, during Hurricane Florence, the City is pursuing the option of relocating the fire station to another site at the Laurinburg Scotland Industrial Site in lieu of using FEMA funding to make the necessary repairs to the existing fire station within the flood zone.

The existing North Fire Station is located at 501 North Main Street within the City. A new fire station located at the proposed site on the eastern side of Aberdeen Road (34.80752, -79.45780) would allow the City of Laurinburg Fire Department to better serve its citizens and allow for increased service demand from expected population growth. The proposed project would have a direct and immediate effect on protecting the lives and property within the target service area because of enhanced response capabilities in the form of shortened response times.

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, the President's Council on Environmental Quality (CEQ) regulations to implement NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), and FEMA Directive 108-1 and FEMA Instruction 108-1-1. FEMA is required to consider potential environmental impacts before funding or approving actions and projects. The purpose of this EA is to analyze the potential environmental impacts of the proposed North Fire Station project. FEMA will use the findings in this EA to determine if an Environmental Impact Statement (EIS) is required, or if the project can be authorized under a Finding of No Significant Impact (FONSI).

2.0 PURPOSE

This EA provides information to support the Public Assistance Program's review of potential effects to the natural and human environment from relocation and construction of a new fire station. The purpose of the proposed action is to provide funding for the relocation and construction of a new fire station outside of the flood zone, allowing the municipality to fulfill their obligations as a full-service municipality with fire service.

The North Fire Station was nearly flooded during Hurricane Matthew in 2016 and sustained flood damage in September 2018, during Hurricane Florence. While the fire station building was not located in a floodplain when it was constructed in 1980, the designation of the land has since been changed and the fire station is now located within a FEMA flood zone. The flooding in 2018 rendered the building uninhabitable and since that time, the

building has been utilized as an un-manned substation for housing fire-fighting equipment and apparatuses. Fire-fighting personnel who were formerly able to stay at the North Fire Station have been required to stay at the South Fire Station, the second fire station serving the approximately 72 square-mile service area. These changes have nearly doubled the response time of the fire department to areas on the north side of the City, partially as a result of a major CSX railroad line located between the two fire houses which forces responders to take a longer route to cross the single bypass over the railroad.

Rather than use funding to repair and renovate the existing structure, the City proposes to construct a new fire station in an alternative location. The existing North Fire Station is considered critical infrastructure in Public Safety for the City and Scotland County as it provides City and county fire and rescue services. The facility has served as the main headquarters for the City of Laurinburg Fire Department and Scotland County Rescue Squad as a staffed and manned station, providing office space, conference rooms for meetings and trainings, and living facilities for on-duty rescue personnel. Since flooding damaged the existing building, the station has been downgraded from the main hub to a substation, which will eventually increase insurance costs for residents and businesses due to the reduced Insurance Services Offices (ISO) Fire Insurance Ratings. Construction of the proposed fire station on the proposed site will increase the ability of the City of Laurinburg Fire Department to serve rural areas north of Laurinburg, potentially reduce fire insurance rates and lower response times to fires and other emergencies.

3.0 NEED

The proposed fire location will decrease average response times compared to the current location of the North Fire Station and to the current operational status. It will also reduce the hazard posed by the potential for flooding of the main drainage creek adjacent to the existing fire station and will allow for all necessary equipment and vehicles to be stored within the facility. New development in the form of industrial sites and some commercial sites is anticipated within the vicinity of the proposed North Fire Station.

4.0 ALTERNATIVES ANALYSIS

NEPA requires the identification and evaluation of reasonable project alternatives, including impacts to the natural and human environment as part of the planning process. This EA addresses two alternatives, the no action alternative and the Proposed Action. Prior to evaluating all feasible alternatives, the City considered two alternative locations and the alternative of repairing the existing fire station to a pre-disaster condition with elevation adjustments and floodproofing. These alternatives were ultimately dismissed.”

4.1 No Action Alternative

The no action alternative would result in no construction of a new fire station on the northern side of Laurinburg and continued reliance on the South Fire Station. The City of Laurinburg Fire Department would continue to conduct its operations from the South Fire Station. This action would leave emergency response times to this area of the community unchanged with the potential to increase if the northern side of Laurinburg is developed in the future. In addition, the existing North Fire Station facility would still be located within the FEMA flood zone, leaving it vulnerable to additional damage from future flooding and rendering it unreliable for use during natural emergencies where flooding may incapacitate the facility. The no action alternative would also leave the existing North Fire Station rated as a substation instead of a main hub. As a result, the ISO Fire Insurance Ratings for the municipality would be impacted, increasing insurance costs for residences and businesses on the northern side of

Laurinburg. The no action alternative results in a lower level of overall public safety and firefighter safety than the proposed action.

4.2 Proposed Action

Based on the results of the above investigations, the City determined that to meet the emergency response needs of the northern portion of the City, reduce the potential for increased insurance costs, and reduce the potential of the Fire Station to be impacted by further flood events during natural emergencies, a fire station would need to be constructed within the North Fire District north of the railroad. After considering several potential sites which have been dismissed, the City considered a portion of a property owned by the Scotland Economic Development Corporation (EDC). After consideration of the potential benefits to infrastructure that would be provided through the construction of an on-site fire station, the EDC agreed to donate the property to the City.

The proposed action would involve the construction of a new fire station facility. The final design for this facility has not been completed, but current plans indicate that the facility will have four bays on the front of the building and four on the back resulting in eight drive-through bays and one additional single bay at the end of the building to house the ladder truck. The building will also accommodate a training room for 50 people as well as living quarters for four fire employees with rotating shifts, a kitchen, and room for at least two administrative offices. Utilities are already available on site.

The daily operations of the City of Laurinburg Fire Department would be positively affected by the construction of a new fire station within the North Fire District, thereby meeting the above-described project needs. The proposed action would have a direct and immediate effect on protecting the lives and property of the community within the fire district because of the enhanced response capabilities. Responders would no longer need to detour to the single bypass that crosses the railroad tracks, reducing response time north of the railroad. The reduced response times would decrease the overall time spent on each response and reduce the risks to firefighters' health and safety. Faster response would allow the firefighters to spend "saved" time on recovery and other operational concerns. In addition, the reduced response times have the potential to reduce damage to property and loss of life for the community. The location would be located outside of the floodplain, reducing the potential for the site to be damaged further and reducing the potential for the facility to be incapacitated due to flooding during natural emergencies. Additionally, the location of the proposed fire station adjacent to the future industrial park could have positive economic development impacts for Scotland County and the City.

4.3 Alternatives Considered and Dismissed

After the existing North Fire Station was flooded during Hurricane Florence, the City began exploring options to repair their fire station. Based on estimates obtained by the City from contractors and FEMA, repairing the current facility to its pre-disaster state would cost approximately \$500,000. Per guidance from FEMA, the City cannot repair the facility to its pre-disaster state due to its location within the flood zone using FEMA funds. Therefore, to remain in the existing location, mitigation such as dry-flood proofing would have to be included, increasing the cost of the renovation in addition to the high costs of flood insurance. The City obtained additional estimates and learned that they could build a new facility that will meet the City's needs outside of the floodplain for approximately \$1.6 million. Before deciding to pursue FEMA funding, the City determined that this would be a better investment for the City and for all finding parties involved. In addition, due to 44CFR 9.6(b), because an alternative location was identified outside of the floodplain, the fire station must be relocated.

Two additional sites were considered as potential locations for the relocation of the North Fire Station. One property is owned by the Thomas family and is located on North Main Street. This site is not currently for sale and the family has stated that they are not interested in discussing selling or leasing the property. The second site is located on Wilkinson Drive and is owned by the Cross Pointe Church. The property was eliminated because it is located south of Hillside Avenue. As a result, this location would result in needing to cross the railroad track. This would result in increased response times as the emergency response vehicles would need to utilize the single bypass that crosses the railroad. The Fire Inspector also expressed concern about the hazardous material that is transported on trains and that the proposed location was too far from the North Fire District, which would in turn have a negative effect on the fire insurance ratings. Finally, the Cross Pointe Church property is for sale at the price of \$12,000 per acre, resulting in a total cost of \$36,000 to purchase the property. For these reasons, the alternative sites were dismissed from consideration.

5.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

This section describes the natural and human environment potentially affected by the alternatives, evaluates potential impacts, and recommends measures to avoid or reduce those impacts. When possible, quantitative information is provided to establish potential impacts, and the potential impacts are evaluated qualitatively based on the criteria listed in **Table 4.1**.

Table 5.1 – Evaluation Criteria for Potential Impacts

Impact Scale	Criteria
None/Negligible	The resource area would not be affected, or changes or benefits would be either nondetectable, or if detected, would have effects that would be slight and local. Impacts would be well below regulatory standards, as applicable.
Minor	Changes to the resources would be measurable, although the

	<p>changes would be small and localized. Impacts or benefits would be within or below regulatory standards, as applicable. Mitigation measures would reduce and potential adverse impacts.</p>
Moderate	<p>Changes to the resource would be measurable and have either localized or regional scale impacts/benefits. Impacts would be within or below regulatory standards, but historical conditions would be altered on a short-term basis. Mitigation measures would be necessary, and the measures would reduce and potential</p>

	adverse effects.
Major	Changes would be readily measurable and would have substantial consequences on a local or regional level. Impacts would exceed regulatory standards. Mitigation measures to offset the adverse effects would be required to reduce impacts, but long-term changes to the resource would be expected.

5.1 Physical Resources

The North Fire Station is proposed to be located within an approximately three-acre portion of a parcel owned by the Scotland County EDC. This parcel is located on the eastern side of Aberdeen Road (Latitude 34.80812/Longitude -79.45804) (**Figure 1**). The site is currently farmed. Site photographs can be seen in **Appendix A**.

This section discusses the existing environmental conditions at the proposed project site including descriptions of the physical, biological, and socioeconomic resources throughout the general area and the proposed action site. The characterization of existing conditions provides a baseline for assessing the potential environmental impacts from activities associated with the proposed action.

5.1.1 *Geology and Soils*

In September of 2019, ECS Southeast, LLP (ECS) performed a geotechnical analysis of the proposed site. In their report, ECS identified the site as being located in the Coastal Plain physiographic region. The Coastal Plain is

typically characterized by marine, alluvial, and aeolian sediments. These sediments were deposited during periods of fluctuating sea levels and moving shorelines. Per the geotechnical report, the site is underlain by the Middendorf Formation of Cretaceous age. This formation generally consists of gray to pale gray with an orange cast, mottled sand, sandstone, and mudstone. Clay balls and iron-cemented concretions, as well as laterally discontinuous cross-bedding are common in this formation. Within the Middendorf Formation, the top of the coastal formations is typically on the order of 30 to 100 feet below the ground surface.

During the subsurface explorations, cultivated soil was encountered at the ground surface to a depth of approximately 12 inches. In the agricultural fields, the cultivated soil was often between 12 and 18 inches thick and the upper layer contains approximately six inches contains significant organic material.

According to the United States Department of Agriculture (USDA) Soil Survey, the primary soil type within the proposed site is Coxville loam, zero to two percent slopes. Coxville loam is a nearly level, poorly drained soil found on upland flats and depressions within the Coastal Plain. These soils have a loamy surface and loamy to clayey subsurface. The depth to groundwater is usually zero to 12 inches, which was confirmed during the geotechnical exploration. During the subsurface exploration, ECS generally observed a water table at approximately 12 inches.

5.1.1.1 No Action Alternative

Under the no action alternative, no construction would occur and therefore, there would be a negligible impact on geology or soils.

5.1.1.2 Proposed Alternative

The proposed action will have minor impacts geology or soils at the site. All construction activity will incorporate practices to minimize soil erosion during the construction phase, including the use of best management practices (BMPs) such as installation of silt fencing and straw bales and proper staging of construction equipment. Following completion of the construction phase, the site will be landscaped with decorative and cover vegetation, reducing the potential for soil erosion.

5.1.2 *Prime Farmland*

As defined in the Farmland Protection Policy Act (FPPA) of 1981, prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor. The proposed action was reviewed for potential impacts on prime farmlands in accordance with Section 1541 of the FPPA (FPPA 1982). There are approximately 2.1 acres of Coxville loam, a farmland of statewide importance on the site which will be impacted by construction activities such as clearing, grubbing, grading, or filling. The physical properties of these soils could be temporarily or permanently altered by changing the soil composition and characteristics, or by replacing these soils with fill materials. Consultation with the USDA was conducted on June 9, 2020 and their response and impact rating form included in **Appendix B**. FEMA completed Parts VI and VII of the form. The site received a score of 147. If the site receives a score less than 160, then review under the FPPA is considered complete and no avoidance, minimization, or mitigation is required.

5.1.2.1 No Action Alternative

Under the no action alternative, no construction would occur and therefore, there would be no impact on prime or unique farmland.

5.1.2.2 Proposed Alternative

FEMA initiated consultation with the USDA-Natural Resources Conservation Service (NRCS) on June 10, 2020, via e-mail correspondence with Mr. Milton Cortes, State Soil Scientist. Based on the results of this consultation, there will be minimal impacts to prime and unique farmland and no mitigation is necessary. Farmland documentation is included in **Appendix B**.

5.1.3 *Forest Resources*

5.1.3.1 No Action Alternative

Under the no action alternative, no construction would occur and therefore, there would be no impact on forest resources.

5.1.3.2 Proposed Alternative

No trees or shrubs occur on the North Fire Station project site. The proposed action will not impact merchantable forest resources as such resources are not present on the project site.

5.1.4 *Air Quality*

In accordance with the Clean Air Act (CAA), the United States Environmental Protection Agency (USEPA) has established Primary and Secondary National Ambient Air Quality Standards (NAAQS) for six criteria pollutants, and the State of North Carolina has adopted these standards. A geographic area that meets a given standard is designated as an attainment area for that standard. Conversely, an area that exceeds a given standard is designated as a non-attainment area. Non-attainment areas are further classified based on the degree to which the specific standard is exceeded. According to the USEPA, Scotland County is in attainment for all NAAQS criteria pollutants. In addition, no activities are known to occur at the proposed project area or in the immediate vicinity that currently generate air pollutant emissions or significant amounts of greenhouse gases.

Minor new traffic will be generated by employees of and visitors to the proposed North Fire Station and approximately 25 parking spaces are anticipated to be constructed. However, designs indicate that there will be less than 150 parking spaces constructed at the project site. Roads, parking lots, parking decks, shopping centers, malls, and airports are considered transportation facilities. The construction or modification of a transportation facility may result in carbon monoxide levels above the NAAQS. Therefore, a construction permit is required for a new or expanded transportation facility if the facility exceeds the following NAAQS threshold requirements:

Highway projects with a projected traffic volume of 2,000 vehicles per hour or more within 10 years;

- Airport facilities designed for at least 100,000 annual aircraft hours of operation or at least 45 landing and takeoff cycles in any one hour;
- Parking facilities with a capacity of 1,500 spaces or open parking area of 450,000 square feet or expansion of such a facility by 500 spaces;
- Parking decks or garages with capacity of at least 750 spaces or a potential parking area of at least 225,000 square feet or expansion of such a facility by 250 spaces; or
- A combination of decks, lots, and garages with capacity of at least 1,000 spaces or a potential parking area of at least 300,000 square feet, or expansion of such a facility by at least 500 spaces.

Based on the description of the proposed North Fire Station and the fact that the project elements, inclusive of the fire station parking lot and engine garage, will not exceed the aforementioned threshold requirements, a construction permit (i.e., for a new or expanded transportation facility) is not presumed to be required.

5.1.4.1 No Action Alternative

Under the no action alternative, no construction would occur and therefore, there would be a negligible impact on air quality. The fire station would continue to operate as they are. Compared to the proposed alternative, the no action alternative could result in slightly increased fuel use due to longer distances traveled to respond to emergencies.

5.1.4.2 Proposed Alternative

As a construction project, the proposed action will require earth-moving procedures, such as excavation, cutting, filling, and placing soil or engineered fill. These procedures could create fugitive dust. Construction BMPs would be used to minimize dust build-up. Construction would require use of various pieces of heavy equipment, such as haul trucks, backhoes, bulldozers, and scrapers. Any effects to air quality will be the result of construction activity. Such impacts, however, will be minimal, short in duration, temporary, and of local influence only. Emissions would most likely originate with vehicle emissions and fugitive dust. Implementing construction BMPs to control dust will mitigate this concern. Although the emissions would be temporarily increased, no long-term air quality degradation is presumed. Furthermore, the emissions would effectively cease upon completion of the construction project. Impacts to air quality under the proposed action are expected to be minor and temporary.

5.1.5 *Seismic Safety*

President Bush signed Executive Order 12699 *Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction* on January 5, 1990. Section 2 of Executive Order 12699 states that the "purposes of these requirements are to reduce risks to the lives of occupants of buildings leased for federal uses or purchased or constructed with federal assistance, to reduce risks to the lives of persons who would be affected by earthquake failures of federally assisted or regulated buildings, and to protect public investments, all in a cost-effective manner." Furthermore, "local building codes shall be used in design and construction by those concerned with such activities ... to achieve appropriate seismic design and construction standards."

5.1.5.1 No Action Alternative

Under the no action alternative, no construction would occur and therefore, there would be a negligible impact on seismic safety.

5.1.5.2 Proposed Alternative

To ensure seismic safety, the North Fire Station facility will be constructed in compliance with the provisions of Executive Order 12699.

5.1.6 *Climate Change*

The CEQ has recently released guidance on how federal agencies should consider climate change in their action decision-making. The suggested threshold whereby quantitative analysis should be done in NEPA documents is for an action to release over 25,000 metric tons of greenhouse gases per year (CEQ 2010). Given the nature and

small scale of the Proposed Action and expected negligible greenhouse gas releases both during construction and operation, no detailed analysis was completed because it would not meet the above threshold.

5.2 Water Resources

5.2.1 *Water Quality*

The North Fire Station is located within the Lumber River Basin. The site drains to an unnamed tributary of Leith Creek, which is classified C; Sw. Class C waters are protected for uses such as secondary recreation, fishing, wildlife, fish consumption, aquatic life, survival and maintenance of biological integrity, and agriculture. Secondary recreation is classified as recreational activities where human body contact with the water takes place in an infrequent, unorganized, or incidental manner such as wading or boating. Within the Coastal Plain, shallow unconfined groundwater movement within the overlying soils is controlled primarily by topographic gradients. Recharge of the groundwater occurs primarily through infiltration and discharges into surface waters. In this way, groundwater from the site would eventually flow to Leith Creek and eventually to the Lumber River.

5.2.1.1 No Action Alternative

Under the no action alternative, no construction would occur and therefore, there would be a negligible impact on water quality.

5.2.1.2 Proposed Alternative

Disturbance of soils at the project site during construction activity could result in erosion and runoff, which in turn could impact local surface water quality. The implementation of the Erosion and Sedimentation Control Plan (ESCP) is expected to minimize the potential for sedimentation of streams and wetlands within the Lumber River Basin during and immediately following the construction of the proposed project. The ESCP will include inspections of erosion and sediment control devices for compliance with the construction contract documents during and after construction, as well as following major storm events, to identify needed repair, maintenance, or redesign. The ESCP will be designed and approved before the start of construction.

5.2.2 *Wetlands*

Jurisdictional waters of the U.S., including perennial and intermittent streams, wetlands, and other special aquatic sites, are defined by 33 CFR Part 328.3 et al. and are protected by Section 404 and other applicable sections of the Clean Water Act (e.g., 33 United States Code [USC] 1344 et al.), which is administered and enforced by the United States Army Corps of Engineers (USACE) as well as other federal and state government agencies. Executive Order 11990, Protection of Wetlands, requires federal agencies to take action to minimize the destruction or modification of wetlands, by considering both direct and indirect impacts to wetlands that may result from federally funded actions.

ECS authored a Preliminary Wetland Delineation Report dated July 10, 2019 (**Appendix C**). In this report, ECS reviewed a variety of maps and other resources including United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) map, NRCS soil survey map, NRCS hydric soil list, United States Geological Survey (USGS) topographic quadrangle map, and aerial photography, were used to facilitate the determination of potential jurisdictional waters of the U.S., including wetlands, on the project site. The field investigation included an inspection of the proposed North Fire Station site to identify areas which exhibited wetland or surface water

criteria. The criteria for wetland determination were based on the identification of three principal parameters in accordance with the USACE delineation manual: i.e., the prevalence of hydrophytic vegetation, the presence of hydrology, and the presence of hydric soils. The field investigation was conducted on June 25, 2019. Based on the results of the June 25, 2019 field investigation and the examination of the aforementioned resources, no potentially jurisdictional wetlands or other surface waters, including lakes, ponds, streams, or isolated wetlands subject to State of North Carolina regulatory protection, were found or characterized within the footprint of the proposed North Fire Station site.

5.2.2.1 No Action Alternative

Under the no action alternative, no construction would occur and therefore, there would be a negligible impact on wetlands.

5.2.2.2 Proposed Alternative

The proposed action will not impact any waters of the U.S., including wetlands, as such features are absent from the project site. No review or concurrence (i.e., through a Notification of Jurisdictional Determination) by the USACE is necessary for the proposed action, as no waters of the U.S. are present on the project site. Waters of the U.S. are located within the portions of the parent parcel that will be retained by the EDC. These wetland and ditch surface waters drain to Leith Creek. Best management practices will be utilized at the project site to control sediment-laden runoff during construction and reduce the potential for water quality impacts to the Leith Creek watershed.

5.2.3 *Floodplains*

Executive Order 11988, Floodplain Management, requires federal agencies to minimize occupancy and modifications of floodplains. Furthermore, Executive Order 11988 specifically prohibits federal agencies from funding construction in 100-year floodplain (or 500-year floodplain for critical facility) unless there are no practical alternatives. The FEMA Flood Insurance Rate Map (FIRM) Panel No. 8368 (Map No. 3710836800K, effective date July 7, 2014) depicts no flood zones for the proposed North Fire Station site (**Appendix C**). The proposed North Fire Station site is mapped as Zone X, an area that is determined to be outside the 100- and 500-year floodplains (i.e., an area outside the 0.2 percent annual chance floodplain).

5.2.3.1 No Action Alternative

The existing site of the North Fire Station is located in the 100-year floodplain. The no action alternative would result in the continued use of the existing facility. As a result, response times for emergencies would remain unchanged from the existing conditions, the structure would be susceptible to damage from future flood events, and fire insurance rates would potentially increase as a result of the decreased Fire Insurance Ratings. Because flood-proofing would be a requirement of continued use of this structure if FEMA funds are used, this would reduce the cost effectiveness of this option.

5.2.3.2 Proposed Alternative

Because the proposed site is not located within a FEMA floodplain, the proposed action will not result in floodplain impacts.

5.2.4 Coastal Waters

The North Fire Station project site does not encompass coastal waters, including anadromous waterways. Furthermore, the subject property does occur within any of the 20 counties which comprise the area of jurisdiction under the North Carolina Division of Environmental Quality (NCDEQ) Division of Coastal Management, as pursuant to State of North Carolina Coastal Area Management Act rules. Finally, federal consistency under the Coastal Zone Management Act of 1972 will not be required, as neither the no action alternative nor the proposed action will entail work in the coastal zone.

5.3 Biological Resources

5.3.1 Wildlife and Natural Vegetation

The Endangered Species Act (ESA) provides a program for the conservation of threatened and endangered plants, animals, and the habitats in which they are found (16 U.S.C. §1531 et seq. (1973)). In their report *Limited NEPA Database Review* dated September 18, 2019, ECS identified the species listed in **Table 4.2** below as listed by the USFWS for Scotland County:

Table 4.2 – Protected Species of Scotland County, NC

Common Name	Scientific Name	Federal Status	Record Status
Vertebrate			
American alligator	<i>Alligator mississippiensis</i>	T(S/A)	Current
Bald eagle	<i>Haliaeetus leucocephalus</i>	BGPA	Current
Red-cockaded woodpecker	<i>Picoides borealis</i>	E	Current
Vascular Plant			
American chaffseed	<i>Schwalbea americana</i>	E	Current
Canby's dropwort	<i>Oxypolis canbyi</i>	E	Current
Michaux's sumac	<i>Rhus michauxii</i>	E	Current
Rough-leaved loosestrife	<i>Lysimachia asperulaefolia</i>	E	Current

E- Endangered T(S/A) – Threatened due to Similarity of Appearance BGEPA – Bald and Golden Eagle Protection Act

ECS initiated consultation with the North Carolina Natural Heritage Program (NCNHP) on August 29, 2019 and the USFWS on July 11, 2019. In their protected species assessment within the *Limited NEPA Database Review*, ECS

concluded that there was no suitable habitat for protected species within the site. ECS received a response from the NCNHP on August 20, 2019 which stated that based on a query of the NCNHP database, there were no records for rare species, important natural communities, natural areas, or conservation/managed areas within the project boundary. No records of federally protected species were identified within one mile of the proposed site. On September 13, 2019, ECS received a response from Mr. Pete Benjamin of the USFWS. In his letter, Mr. Benjamin states that based on the information provided and other information available, it appears that the proposed action is not likely to adversely affect federally listed endangered or threatened species, their formally designated critical habitat, or species currently proposed for listing under the Act at the site. Therefore, they believe that the requirements under Section 7(a)(2) of the Act are fulfilled. This assessment was conducted for the larger Laurinburg Scotland Industrial Park, which is the parent parcel for the much smaller site of the proposed action.

5.3.1.1 No Action Alternative

Under the no action alternative, no construction would occur and therefore, there would be a negligible impact on protected species.

5.3.1.2 Proposed Alternative

Based on the results of the literature and records search, the on-site habitat assessment, and the concurrence from the NCNHP and the USFWS, FEMA has determined that the North Fire Station project will have “no effect” (no impact, positive or negative) to listed biological resources; i.e., no listed biological resources will be exposed to the proposed action and its environmental consequences based on the findings of the Limited NEPA report by ECS (2019). In their letter dated September 13, 2019, the USFWS identified concerns regarding impacts of the proposed project on aquatic species as a result from sedimentation. Therefore, the USFWS requested that an erosion and sedimentation control plan be submitted to and approved by the North Carolina Division of Land Resources, Land Quality section prior to the start of construction. This plan should include erosion and sedimentation controls being installed and maintained between the construction site and any nearby down-gradient surface waters. The City currently plans to apply for and abide by an erosion and sedimentation control plan during construction. Therefore, it is also presumed that the proposed project will have no adverse effect on non-listed wildlife species (populations), as suitable habitat for mammalian, avian, and reptile and amphibian generalist species is present on adjoining properties and throughout the region.

5.3.2 *Migratory Birds*

A migratory bird is any species or family of birds that live, reproduce, or migrate within or across international borders at some point during their annual life cycle. The Migratory Bird Treaty Act (MTBA) of 1918, as amended, 16 U.S.C. §§ 703-711, protects migratory birds and their nests, eggs, and body parts from harm, sale, or other injurious actions. All native birds, including common species such as the American robin (*Turdus migratorius*) and American crow (*Corvus brachyrhynchos*) are protected by the MTBA. The proposed fire station site is currently serving as an active agricultural field and is not wooded. Potential habitat and forage for migratory birds within the site is limited and degraded.

The Bald and Golden Eagle Protection Act, 16 U.S.C. §§ 668, prohibits the take, possession, sale, or other harmful action of any golden (*Aquila chrysaetos*) or bald eagle (*Haliaeetus leucocephalus*), alive or dead, including any part, nest, or egg (16 U.S.C. §§ 668(a)). During an assessment by ECS in 2019, the biologists determined that there was no suitable habitat for the bald eagle in the proposed site or in the surrounding vicinity. This assessment was

performed for the proposed Scotland County Industrial Park. The study area for this assessment consists of the parent parcel of which the proposed fire station site is a part.

5.3.2.1 No Action Alternative

The no action alternative would not directly impact migratory birds because there would be no construction. The existing degraded habitat conditions would persist, providing poor cover and forage for migratory birds.

5.3.2.2 Proposed Alternative

Under the proposed alternative, the construction of the fire station would have a negligible short-term impact on migratory bird species because of the poor quality of the existing habitat on site. As an active agricultural field with no tree coverage, the site has poor existing habitat. Minor impacts would result from the removal of the herbaceous vegetation along the road that could provide habitat for migratory birds. These impacts can be offset by new plantings from the landscaping for the new fire station facility.

5.3.3 *Fish and Aquatic Habitat*

The North Fire Station site is not within close proximity (i.e., abutting, or at least within 500 feet) of fish and aquatic habitat and does not encompass streams or other surface waters such as lakes and ponds.

5.3.3.1 No Action Alternative

Under the no action alternative, no construction would occur and therefore, there would be a negligible impact on fish and aquatic species. Minor impacts could result in the event of future flooding of the site.

5.3.3.2 Proposed Alternative

There are no surface water bodies present so no fish or aquatic macro-invertebrates are located on the site. Thus, the proposed action will have no effect on fish or aquatic habitat.

5.3.4 *Cultural Resources*

Under Section 106 of the National Historic Preservation Act (NHPA), federal agencies must consider the potential effects of their actions on historical properties and cultural resources and consult with the NC State Historic Preservation Office (NCSHPO) to resolve any effects.

In their Limited NEPA Database Review report, ECS summarizes the findings of their historic and archaeological resources review. This review was conducted for the entire industrial park parcel, of which the proposed fire station is a smaller portion. The scope of work included field reconnaissance to identify potential historic structures, a review of aerial photographs, and a review of the NCSHPO online GIS mapping. ECS visited the site on June 25, 2019. Based on their site visit and a review of the NCSHPO online database, no historic sites or structures are located within 1,000 feet of the site. On July 11, 2019, ECS submitted their findings in a scoping letter to the NCNHP. In a response dated August 16, 2019, Ms. Renee Gledhill-Earley of the NCSHPO stated that NCSHPO conducted a review of the project and are not aware of historic resources which would be affected by the project. On August 21, 2020, FEMA sent a scoping letter to NCSHPO for the proposed fire station only. On September 2, 2020, NCSHPO responded that they are not aware of any historic resources which would be affected by the proposed project. Therefore, the NCHPO has no comment on the project as proposed, satisfying the

requirements for Section 106 of the National Historic Preservation Act. A copy of this correspondence can be found in **Appendix E**.

The NHPA is the basis for Tribal consultation provisions in the Advisory Council on Historic Preservation (ACHP) regulations. The two amended sections of NHPA that have a direct bearing on the Section 106 review process are Section 101(d)(6)(A), which clarifies that historic properties of religious and cultural significance to Indian tribes may be eligible for listing in the National Register, and Section 101(d)(6)(B), which requires federal agencies, in carrying out their Section 106 responsibilities, to consult with any Indian tribe that attaches religious and cultural significance to historic properties that may be affected by an undertaking. The ACHP regulations incorporate these provisions and reflect other directives about Tribal consultation from Executive Orders, Presidential memoranda, and other authorities. FEMA sent letters on June 9 and 10, 2020 to the following tribes to determine interest: Lumbee Tribe, Catawba Indian Nation, Shawnee Tribe, Seminole Nation of Oklahoma, and Seminole Tribe of Florida. The tribal consultation period ended on July 24, 2020 and only the Catawba Indian Nation responded. The Catawba Indian Nation stated that the Catawba Indian Nation are to be notified in Native American artifacts and/or human remains are located during the ground disturbance phase of this project.

Finally, under the Historic Site Act (HSA) of 1935, natural areas can be designated by the Secretary of the Interior as national landmarks and listed on the Registry of National Natural Landmarks. The National Park Service, National Natural Landmarks Program, indicates that there are 13 designated Natural Landmarks in North Carolina. However, none of the designated Natural Landmarks occur within Scotland County. There are no formally designated State of North Carolina parks, scenic or recreational areas, or natural areas on the project site; therefore, the construction of the proposed project will not impact State of North Carolina public lands, scenic areas, or natural areas.

5.3.4.1 No Action Alternative

Under the no action alternative, no construction would occur and therefore, there would be no impacts on historic properties or other cultural resources.

5.3.4.2 Proposed Alternative

The proposed action will have no impact on cultural and historic resources.

5.4 **Socioeconomic Resources**

5.4.1 *Environmental Justice*

President Clinton signed Executive Order 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* on February 11, 1994. Executive Order 12898 directs federal agencies to focus attention on human health and environmental conditions in minority and/or low-income communities. The goals of Executive Order 12898 are to: (1) achieve environmental justice; (2) foster non-discrimination in federal programs that substantially affect human health or the environment; and (3) give minority or low-income communities greater opportunities for public participation in and access to public information on matters relating to human health and the environment.

The current census estimates indicate the population of Laurinburg, North Carolina consists of 39.4 percent white, 49.0 percent African American, 7.1 percent Native American, 1.4 percent Asian, and 1.4 percent from two or more

racers. Hispanic or Latino of any race was 2.8 percent of the population. The median income for a household in the city was \$37,198 and the median income for a family was \$29,388. About 34.0 percent of the population are below the poverty line. The existing service area will not be altered if the proposed fire station is constructed. However, the construction of the proposed fire station will result in improved response times within the fire district. Responders would no longer need to detour to the single bypass that crosses the railroad tracks, reducing response time north of the railroad. The reduced response times would decrease the overall time spent on each response and would allow the firefighters to spend "saved" time on recovery and other operational concerns. In addition, the reduced response times have the potential to reduce damage to property and loss of life for the community.

5.4.1.1 No Action Alternative

Under the no action alternative, no construction would occur. As a result, the citizens in the North Fire District would continue to be underserved by the Fire Station, resulting in continued lengthy response times and increases in their insurance due to decreased Fire Insurance Ratings. This would result in major impacts for the North Fire District.

5.4.1.2 Proposed Alternative

Based on discussions with the City, the proposed action will result in significant upgrades to and enhancement of the district's ability to respond quickly and effectively to all residents and commercial establishments within the designated response area of the proposed North Fire Station, as well as providing mutual aid to neighboring districts. The new facility will be considered a main hub and therefore will have a positive effect on Fire Insurance Ratings. As such, the proposed action will have a major positive impact on environmental justice.

5.4.2 *Hazardous Materials*

Hazardous materials are any items or agents (biological, chemical, radiological, or physical) that have the potential to cause harm to humans, animals, or the environment either by itself or through interaction with other factors.

A Phase I Environmental Site Assessment (ESA), dated July 9, 2019, was performed by ECS for the proposed Industrial Park which is the parent parcel for the proposed North Fire Station. The Phase I ESA was completed in general accordance with the standard developed by the American Society for Testing and Materials (ASTM) entitled "E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process." The Phase I ESA was conducted in accordance with ASTM E1527-13 and USEPA Standards and Practices for All Appropriate Inquiry (40 CFR §312.10). No Business Environmental Risks, Recognized Environmental Conditions (RECs), Historical RECs, or Controlled RECs were identified. Environmental risk management documentation is included in **Appendix F**.

5.4.2.1 No Action Alternative

Under the no action alternative, no construction would occur. As a result, the staff would continue to utilize the existing North Fire Station, which is believed to have mold in the walls as a result of the flooding. This would pose a health risk to future building occupants and could constitute a major health and safety impact.

5.4.2.2 Proposed Alternative

The proposed project area is currently undeveloped with no structures; therefore, there are no potential issues with asbestos, lead-based paint, mold, or radon. The City has not currently made any decisions regarding future plans for the existing fire station if the proposed project is constructed. In the event that the structure is demolished, all asbestos has already been removed by a licensed contractor and disposed of properly. The demolition debris from the structure would be taken to a permitted construction debris disposal or landfill facility.

5.4.3 *Noise*

The Noise Control Act (NCA) of 1972 provides federal regulation of noise, which is defined as undesirable sound. The NCA gives the USEPA authority to establish guidelines for acceptable ambient noise levels. Under USEPA guidelines, outdoor sound levels in excess of 65 decibels (dB) are considered "normally unacceptable" for noise-sensitive land uses such as residences, schools, and hospitals.

5.4.3.1 No Action Alternative

Under the no action alternative, no construction would occur. As a result, there would be no impacts due to construction under the no action alternative. There would be no changes to noise due to operation at the facility.

5.4.3.2 Proposed Alternative

The proposed site is located on the eastern side of Aberdeen Road in an area zoned for industrial uses and is bordered by a mix of rural residential, undeveloped, agricultural, and industrial uses. Temporary short-term impacts due to noise are anticipated during the construction period. To reduce noise levels during this period, construction activities will take place during normal daylight business hours.

The proposed action will introduce long-term operational impacts to adjacent residences. Fire equipment and station alarms during an emergency can range from approximately 95 to 120 dB. This intermittent elevated noise would be above acceptable levels but would only be sustained for extremely short durations. This impact cannot be mitigated due to National Fire Protection Association (NFPA) 1901 and State Fire Marshal requirements for minimum sound-warning requirements for fire equipment when responding to an emergency.

5.4.4 *Traffic*

The proposed North Fire Station is located within the extraterritorial jurisdiction along Aberdeen Road (primarily rural). The most recent (2018) NC Department of Transportation (NCDOT) annual average daily traffic for Aberdeen Road is 6,500 vehicles. The proposed North Fire Station will entail the construction of a fire station that will be staffed by a maximum of one to two individuals per shift. In addition to staff commuting, traffic will consist of emergency call responses, scheduled trainings, and occasional (random) visits by the public. The roads in the vicinity of the proposed project are adequately sized to handle the expected traffic load.

Construction activities could produce temporary impacts to the transportation system that include increases in noise, dust, vibration, congestion, and truck traffic along roadways within the proximity of the proposed project. Such impacts, however, will be minimal, short in duration, temporary, and of local influence only.

Mr. Charles Nichols III (City Manager, City of Laurinburg) stated that the NCDOT owns and maintains Aberdeen Road. During the planning and design process, the NCDOT will evaluate what signage and signals are necessary

due to traffic volumes. The NCDOT will then install these systems when the proposed North Fire Station is constructed.

5.4.4.1 No Action Alternative

Under the no action alternative, no construction would occur. As a result, there would be no impacts due to construction under the no action alternative. There would be no changes to noise due to operation at the facility.

5.4.4.2 Proposed Alternative

With these considerations, the construction and operation of the new facility is not expected to adversely impact the transportation system.

5.4.5 *Public Services and Utilities*

All utilities (electric, telephone, water, sanitary sewer, and storm sewer) run along Aberdeen Road and are available to the site. These utilities will be provided by the City. A limited amount of trenching and installation of underground lines and connections to the utilities will be required. An 80-kW generator currently being stored at the existing North Fire Station will be transported to and utilized at the proposed North Fire Station Site. The proposed action will place an additional, limited demand on utilities in the area; however, the utility infrastructure has been designed to accommodate the planned future residential, commercial, and industrial expansion of the area.

5.4.5.1 No Action Alternative

Under the no action alternative, no construction would occur. As a result, there would be no impacts due to construction under the no action alternative. There would be no changes to public services and utilities at the existing facility.

5.4.5.2 Proposed Alternative

Impacts to public services and utilities will be minor and temporary in nature due to the existing utility infrastructure on and in the vicinity of the proposed site.

5.4.6 *Public Health and Safety*

The Occupational Safety and Health Act requires safe and healthful conditions for working men and women by setting and enforcing standards; and providing training, outreach, and education and compliance assistance. The act created the Occupational Safety and Health Administration (OSHA) which established construction standards under 29 C.F.R. 1926.

5.4.6.1 No Action Alternative

Under the no action alternative, no construction would occur. Safety risks at the existing North Fire Station include flooding risks and health risks due to potential mold within the existing structure walls.

5.4.6.2 Proposed Alternative

All construction activities would be performed using qualified personnel and in accordance with job safety standards and related regulations promulgated by the OSHA. Appropriate signage and barriers will be in place prior to any construction-related activity in order to make motorists and pedestrians aware of any potential hazards associated with the presence and movement of heavy machinery and construction vehicles. After construction, appropriate signage, signals, and lighting will be installed by NCDOT along Aberdeen Road to alert motorists and pedestrians of any potential hazards due to emergency response vehicles. Therefore, there will be minor short-term impacts to public health and safety.

5.5 Comparison of Alternatives

Table .3 – Comparison of Alternatives

Resources	No Action Impacts	Proposed Action Impacts	Mitigation
Geology and Soils	Minor long-term impacts from continued soil erosion	Minor short-term impacts from excavation and site grading	ESCP will be implemented to reduce potential for erosion
Prime Farmland	No impact to prime farmland	Minor impacts to prime and unique farmlands from conversion	No mitigation necessary
Forest Resources	No impact on forest resources	No impact on forest resources	No mitigation necessary
Air Quality	Minor short- and long-term impacts from continued equipment emissions	Minor short-term impacts from construction equipment emissions and exposed soils Negligible long-term impacts from continued equipment emissions	Construction equipment engine idling will be minimized to the extent practicable Dust suppression techniques will be implemented during construction
Seismic Activity	No impact on seismic safety	No impact on seismic safety	No mitigation necessary
Climate Change	Negligible impact on climate change	Negligible impact on climate change	No mitigation necessary
Water Quality	No impact on groundwater or water quality	Minor short-term impacts from excavation and site grading	ESCP will be implemented to reduce potential for sedimentation of downstream waters

Resources	No Action Impacts	Proposed Action Impacts	Mitigation
Wetlands	No impact on wetlands	No impact on wetlands	No mitigation necessary
Floodplains	Major impacts from continued use of an emergency response facility within an active floodplain Increased costs of renovations due to necessity of flood-proofing the existing structure	No impacts to floodplains. The proposed structure would be located outside of the floodplain and would not require flood-proofing.	No mitigation necessary
Coastal Waters	No impacts to coastal waters	No impacts to coastal waters	No mitigation necessary
Wildlife and Natural Vegetation	No impacts to threatened or endangered species	Minor long-term impacts from conversion of site from agriculture to a developed fire station. No impacts to threatened or endangered species. An erosion and sedimentation control plan will be applied for and approved from state authorities and will be abided by during construction.	No mitigation necessary
Fish and Aquatic Habitat	Potential minor long-term impacts due to the chance of future on-site flooding	Minor short-term impacts from excavation and site grading	ESCP will be implemented to reduce potential for sedimentation of downstream waters
Cultural Resources	No impacts to cultural resources	No impacts to cultural resources	During ground disturbance, the construction contractors will monitor for skeletal

Resources	No Action Impacts	Proposed Action Impacts	Mitigation
			remains or historic or archaeological materials. See Section 6 for additional information
Environmental Justice	<p>Major impacts due to continued longer response times to emergencies</p> <p>Major impact due to increased fire insurance</p>	<p>Major positive impacts from quicker responses to emergencies</p> <p>Major positive impact from Fire Insurance Ratings</p>	No mitigation necessary
Hazardous Materials	Potential major impacts from potential mold and other hazards within existing structure	<p>Negligible short-term impact as long as all construction safety measures are followed.</p> <p>The proposed project would not involve the addition of any hazardous materials or chemicals to the site, nor would it increase the overall risk of hazardous materials known to already exist on site</p>	No mitigation necessary
Noise	Intermittent elevated noise would be sustained for extremely short durations during emergency response events	<p>Intermittent elevated noise would be sustained for extremely short durations during emergency response events</p> <p>Minor short-term noise impacts are anticipated during the construction period</p>	Exterior construction of the facility will be completed in a timely manner per the construction schedule and will limit construction activities to allowable noise hours consistent with local regulations
Traffic	No effect	Minor short-term impacts from construction detours and the	Construction activities will limit construction

Resources	No Action Impacts	Proposed Action Impacts	Mitigation
		operation of construction vehicles and equipment to and from the site	detours as much as practicable
Public Services and Utilities	No effect	<p>Minor short-term impact on public services from construction detours and the operation of construction equipment to and from the site</p> <p>Negligible short-term impact on utilities unless there is a need to shut services for utility extension</p>	No mitigation necessary
Public Health and Safety	Potential major impacts from potential mold and other hazards within existing structure	Negligible short-term impact as long as all construction safety measures are followed	

6.0 CUMULATIVE IMPACTS

Cumulative impacts represent the impact on either the natural or human environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.

The proposed Fire Station would occur on a site that has been actively used in agriculture since at least the 1950s. The site's natural functions have been significantly degraded by the use of the property for agriculture for more than 70 years and it is not anticipated that adding a new building will significantly degrade the site further. The proposed North Fire Station site would occur on a project site located in an area that is currently rural residential, agricultural, and undeveloped but near several planned or recently constructed industrial projects. Based on this and information provided by the Scotland County EDC and the City, local trends indicate that the project vicinity is moving toward industrial uses.

In addition, the proposed Fire Station would be located within the Pate Site/Industrial Site owned by the Scotland County EDC. This park has the capacity to accommodate three to four separate facilities ranging from 100,000 to 500,000 square feet. Two of these facilities would be considered rail-served. The location of a fire station less than 200 yards from these sites provides an advantage over other rail-served sites in the Southeast.

Other industrial or commercial sites that would be served by the proposed Fire Station include the Small Business Innovation Center, FCC (North Carolina), LLC building, and the Incubator Park. These sites are within ½ mile from the proposed Fire Station location. The Scotland County Economic Development Center owns approximately 150

acres between the incubator and industrial site they are marketing for future industrial growth and there are current plans to construct a 50,000 square-foot building in the incubator park within the coming months.

The site is also located near the NC-401/NC-501 intersection. NC-401 currently consists of a four-lane road near the site, but transitions to a two-lane road. NCDOT currently intends to expand the two-lane section of NC-401 to a four-lane road to the Hoke County Boundary. Per the Scotland County Economic Development Center, this could result in additional sites that become available along the widened road for commercial use. This future industrial and commercial development would be served by the proposed North Fire Station.

With regard to the proposed action, the proposed North Fire Station facility will be sited within an area of the City which is favorably suited for development. The proposed project can be developed with either minimal impact or no impact to geology and soils, water resources, biological resources, air quality, historic and cultural resources, socioeconomic resources, and safety. This is supported by the Limited NEPA Database Review performed by ECS in 2019 for the Laurinburg Scotland Industrial Park of which the proposed site is a portion of. It is consequently presumed that cumulative impacts should be minimal or absent as a result of the development of the site. Finally, the proposed Fire Station would service several new or anticipated industrial and commercial sites and as such, the proposed action is consistent with reasonably foreseeable future action within this area and therefore no adverse cumulative impacts are anticipated.

7.0 PUBLIC INVOLVEMENT

The City has conducted an extensive public involvement process in the development of the proposed alternative.

After the existing North Fire Station was flooded in September 2018 as a result of Hurricane Florence, the City explored a variety of options, including renovating the existing fire station. During the City Council Meeting for the City of Laurinburg on March 19, 2019 (<https://www.laurinburg.org/wp-content/uploads/2019/06/031919-final.pdf>), the City Council discussed the current situation with the existing Fire Station. This discussion included addressing requirements to receive FEMA funding, costs of necessary renovations to continue to utilize the existing North Fire Station, insurance repercussions of remaining in the current location, the potential for continued damage of the existing Fire Station during future flood events, space constraints with the existing facilities, and the potential need to relocate the station outside of a flood zone. No comments were received from the public during the meeting or before the next City Council Meeting on this topic.

During the May 21, 2019 City of Laurinburg City Council Meeting (<https://www.laurinburg.org/wp-content/uploads/2019/09/052119.pdf>), the City Manager identified several requests the City has made to Community Development Block Grants and other funding agencies. The Mayor identified concerns regarding the fairness of constructing a brand-new facility on the north side of town. A discussion ensued regarding the fire station location, fire insurance, and the need for facilities such as a conference room for meetings and trainings. The City Council decided to wait for responses concerning funding opportunities before continuing to discuss. No public comments were received at that time.

On May 23, 2019, the Laurinburg Exchange posted an article (<https://www.laurinburgexchange.com/news/25849/council-discusses-new-fire-station>) summarizing the May 21, 2019 City Council Meeting's discussion regarding relocating or renovating the North Fire Station. Comments on the article on the Laurinburg Exchange website addressed a need for the Mayor and City Council to compromise and work together.

During the July 16, 2019 City of Laurinburg City Council Meeting (<https://www.laurinburg.org/wp-content/uploads/2019/11/071619.pdf>), the City Manager identified the two options for the North Fire Station. These options consisted of repairing and replacing the contents of the current facility and constructing a new facility. The financials behind the two options were discussed. The City Manager also explained that without a full force fire station on the north side of the City, the ISO fire rating would be impacted and could therefore impact citizen's insurance rates. Council members requested additional information regarding construction costs for both a new facility and for renovating the existing facility, alternative property options for the fire situation on the north side of town, alternative locations in the northern part for relocation, and additional information on potential changes to ISO and homeowners' insurance rates.

The City Council again discussed the North Fire Station at their City Council Meeting on August 20, 2019 (<https://www.laurinburg.org/wp-content/uploads/2020/02/082019.pdf>). In this meeting, the City Manager explained that the staff had looked at two different options for the Fire Station. The City Manager intended to provide more concrete numbers on rehabbing the existing Fire Station after the mold, air quality, and structural engineering reports have been completed. In the meantime, City staff were in the process of submitting a grant application to The Golden Leaf Foundation for relocation of the North Fire Station. As a condition of receiving the funding, The Golden Leaf Foundation requires local matches to its funding. A discussion also took place regarding the location of the existing North Fire Station within the floodplain and the cost of flood insurance for the property moving forward if the site continued to be utilized. More concrete figures on the cost of rehabbing the existing facility would be provided at the September 2019 meeting.

The City of Laurinburg City Council met on September 17, 2019 (<https://www.laurinburg.org/wp-content/uploads/2020/02/091719.pdf>). During this meeting, the City Manager explained that staff is still finalizing estimates for rehabbing and constructing a new fire station. Funding from The Golden Leaf Foundation was discussed as well as alternatives for funding sources. It was also mentioned that the Fire Chief had discussed the potential for donating property with some citizens.

During the December 17, 2019 City of Laurinburg City Council Meeting (<https://www.laurinburg.org/wp-content/uploads/2020/02/121719.pdf>), the City Manager provided an update on funding sources for the proposed fire station, which included being awarded a \$1 million grant from the Golden Leaf Foundation for the relocation in addition to their \$250,000 grant previously provided and \$111,000 from FEMA. Funding from these sources totaled \$1.36 million. The City Manager also addressed estimates for the construction of a new facility. The council members discussed the downsides of remaining in the current facility, which would result in flood insurance at the cost of \$33,000 per year. In addition, if the City turned down FEMA funding to continue to use the existing facility and there were future disasters, FEMA, would not look upon the City's claims as favorably. The lack of suitable space within the existing facility for the ladder truck. In addition, council members discussed the need for the proposed fire station to be located at least as far north as the existing facility. Several addition concerns were identified by the council members including financial impacts on citizens and the potential for the land to be donated.

On December 18, 2019, the Laurinburg Exchange published an article (<https://www.laurinburgexchange.com/news/31946/city-receives-grant-to-relocate-firestation>) announcing the receipt of the grants from The Golden Leaf Foundation and summarized the December 17, 2019 City Council Meeting. There were no comments on the article on the Laurinburg Exchange website.

On January 20, 2020, the Laurinburg Exchange posted an article (<https://www.laurinburgexchange.com/news/32804/city-to-discuss-fire-station-options>) summarizing the update

that the City Council would be receiving on the North Fire Station and briefly summarizing the findings from the previous City Council meeting. Two comments were received on the Laurinburg Exchange website. One comment stated that the commenter is not sure why Laurinburg needs a ten-bay station and suggested that the City Council focus more on training facilities and use that to generate income from the surrounding outside areas. The second comment addressed the concern that the existing fire station had been in its existing location for many years without flooding and suggested that the City Council repair the existing station and continue to use it since Hurricane Florence was not a normal situation.

On January 21, 2020 the City Council met again (<https://www.laurinburg.org/wp-content/uploads/2020/04/012120.pdf>) and discussed updates to the North Fire Station funding process. During this meeting, the City Manager explained that FEMA representatives were unable to attend the council meeting and discussed several frustrations they are having with the FEMA process. Ms. Shonda Corbett, Grants Manager from the North Carolina Emergency Management Agency, explained that her purpose is to provide support for the City to receive as much reimbursement as possible and addressed several challenges in the process that have been ongoing.

During this meeting, the City Manager also identified the proposed site as a potential location for the relocated fire station. He explained the rationale behind the location of the property, as well as the concept that due to the benefits the EDC would receive, the property might not cost the City any additional money. Several other potential locations were identified, and the Council Meeting concluded with the City Manager being instructed to explore the identified properties.

On January 22, 2020, the Laurinburg Exchange published a follow up article to the City Council Meeting (<https://www.laurinburgexchange.com/news/32897/city-talks-about-a-new-fire-station-location>) summarizing what was discussed in the Meeting. Three comments were received. Of the three comments, two addressed the lack of "drama" at the meetings with the addition of the new mayor. The last comment mentioned a need to think beyond the present regarding what would be needed 10 to 40 years from now.

During a City of Laurinburg City Council Meeting/ Retreat on February 4, 2020 (<https://www.laurinburg.org/wp-content/uploads/2020/04/020420retreat.pdf>), the City Council received another update on the North Fire Station from the City Manager. The City manager explained that city staff had explored several alternative locations for the proposed fire station and summarized their findings. After a discussion of the FEMA process and the alternatives, the City Council voted for the City Manager to move forward with the Aberdeen Road location.

In a subsequent article written by the Laurinburg Exchange on February 5, 2020 (<https://www.laurinburgexchange.com/news/33316/council-approves-city-to-move-forward-with-fire-station>), the Laurinburg Exchange summarized the February 4, 2020 City Council meeting, benefits of utilizing the Aberdeen Road site, and the City Council's decision to move forward with the Aberdeen Road site. No comments were received on the Laurinburg Exchange website.

On February 25, 2020 the City of Laurinburg City Council held a special meeting and citizen input session (<https://www.laurinburg.org/wp-content/uploads/2020/04/022520CitizenInputfinal.pdf>) which included time to receive comments on the North Fire Station. One citizen expressed concerns regarding the North Fire Station. In response, the City Manager explained that the City Council has given staff direction to research the possible location of the proposed fire station on a property owned by the EDC on Aberdeen Road and identified the funding sources for the new fire station. City staff is currently finding design/build firms for the project. He also

explained that the timeline is unknown since the City needs to complete the FEMA process before project initiation.

In addition to these public meetings and news articles, this EA will be available for agency and public review and comment for a period of 30 days. The public information process includes a public notice with information about the Proposed Action. The public notice will be posted on the FEMA website, the City of Laurinburg website between [dates TBD] at [Link TBD], and an additional location such as a sign on the proposed property location identifying where they can find the EA. The public notice identifies the action, location of the proposed site, participants, location of the draft EA, and who to write to provide comments. FEMA will take into consideration any substantive comments received during the public review period to inform the final decision regarding grant approval and project implementation and will incorporate any resolutions into the final EA, as appropriate.

8.0 MITIGATION MEASURES

The recipient is responsible for compliance with federal, state, and local laws and regulations, including obtaining any necessary permits prior to initiating construction activities and adhering to any conditions laid out in these permits. Any substantive change to the scope of work will require re-evaluation by FEMA for compliance with NEPA and any other laws or executive orders. Failure to comply with FEMA grant conditions may jeopardize federal funding. The following mitigation measures are being proposed.

8.1 Geology, Soils, and Prime and Unique Farmland

Before construction is initiated, an ESCP will be obtained in accordance with the applicable NCDENR sediment and erosion control regulations.

8.2 Air Quality

To reduce the production of criteria pollutants, construction equipment engine idling will be minimized to the extent practicable. Equipment engines will be properly maintained.

Dust suppression techniques (e.g., covering or spraying bare soils with water) will be used to control fugitive dust from construction activities as needed. By implementing these measures, the proposed project will not be a significant source of fugitive dust emissions.

8.3 Water Quality and Aquatic Habitat

An approved ESCP will be implemented prior to beginning construction to reduce potential for sedimentation of downstream waters.

8.4 Cultural Resources

If human remains or intact archaeological deposits are uncovered, work in the vicinity of the discovery will stop immediately and all reasonable measures to avoid or minimize harm to the finds will be taken. The applicant will ensure that archaeological discoveries are secured in place, that access to the sensitive area is restricted, and that all reasonable measures are taken to avoid further disturbance of the discoveries. The applicant's contractor will provide immediate notice of such discoveries to the applicant. The applicant shall contact the Office of State Archaeology and FEMA within 24 hours of the discovery. Work in the vicinity of the discovery may not resume

until FEMA has completed consultation with SHPO, Tribes, and other consulting parties as necessary. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately, and the proper authorities notified in accordance with NC General Statutes Chapter 70, Article 3 and § 70-32.

8.5 Noise

Exterior construction of the facility will be completed in a timely manner per the construction schedule and will limit construction activities to allowable noise hours consistent with local regulations.

8.6 Traffic

Construction activities will limit construction detours or lane closures as much as practicable. If detours or lane closures are necessary, the appropriate signage and safety measures will be implemented.

8.7 Public Health and Safety

Construction activities will be performed using qualified personnel trained to use the required equipment properly.

Facility personnel and visitors will be required to follow OSHA guidelines during construction and operation of the proposed fire station.

9.0 AGENCY COORDINATION AND REFERENCES

The following entities were contacted during the preparation of this EA and summarized in **Table 8-1**:

Table 8-1 – Coordination and Consultation Summary

Person/Agency/Subject	Date	Type of Correspondence	Appendix
Milton Cortes USDA-NRCS Important Farmland	June 10, 2020 July 22, 2020	Scoping E- mail/Letter Response Form	B
ECS Southeast, LLP Wetlands/Waters	July 10, 2019	Preliminary Wetland Delineation Report	C
Pete Benjamin USFWS Endangered Species	July 11, 2019 September 13, 2019	Scoping Letter Response Letter	D

NCNHP Endangered Species	August 20, 2019	Automated Online Database Response	D
Renee Gledhill-Earley/ Ramona M. Bartos NC SHPO Cultural/Historic Properties	July 11, 2019 August 16, 2019 August 21, 2020 September 2, 2020	Scoping Letter Response Letter Scoping Letter Response Letter	D D E E
Wenonah G. Haire, THPO Catawba Indian Nation Cultural/Historic Properties	June 9, 2020 July 9, 2020	Scoping Letter Response Letter	E
Dr. Freda Porter, THPO Lumbee Tribe Cultural/Historic Properties	June 9, 2020	Notification Letter	E
Tonya Tipton, THPO Shawnee Tribe Cultural/Historic Properties	June 9, 2020	Scoping Letter	E
Dr. Paul Backhouse, THPO Seminole Tribe of Florida Cultural/Historic Properties	June 9, 2020	Scoping Letter	E
David Frank, THPO Seminole Tribe of Oklahoma Cultural/Historic Properties	June 9, 2020	Scoping Letter	E

The following resources were consulted during preparation of the EA:

- ECS Southeast, LLP – Limited NEPA Database Review (September 18, 2019)
- ECS Southeast, LLP – Phase I ESA (July 9, 2019)
- ECS Southeast, LLP – Preliminary Geotechnical Engineering Report (September 17, 2019)
- ECS Southeast, LLP – Preliminary Wetland Delineation Report (July 10, 2019)
- Federal Emergency Management Agency – Flood Map Service Center:
<https://msc.fema.gov/portal/home>
- North Carolina Department of Environmental Quality – Basin Planning Branch Maps:
<https://deq.nc.gov/about/divisions/water-resources/planning/basin-planning/maps>
- Scotland County GIS: <https://www.scotlandcounty.org/456/GIS-Maps>

- United States Census Bureau: <https://www.census.gov/>
- United States Department of Agriculture – Natural Resources Conservation Service – Web Soil Survey: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>
- United States Environmental Protection Agency – Air Quality: <https://www.epa.gov/green-book>
- United States Fish and Wildlife National Wetlands Inventory: <https://www.fws.gov/wetlands/data/mapper.html>
- United States Geological Survey – 7.5-minute topographic Map, Laurinburg, NC (2019)

10.0 LIST OF PREPARERS

Prepared by:

S&ME, Inc.

3201 Spring Forest Road, Raleigh, North Carolina 27616
Phone: (919) 872-2660

Ashley Bentz, PWS

Project Scientist

Chris Daves, PWS
Senior Project Scientist

Samuel P. Watts, PG

Senior Project Scientist

Federal Emergency Management Agency

3003 Chamblee Tucker Road, Atlanta, GA 30341

Chelsea Klein, MA, CFM

Environmental Planning and Historic Preservation Advisor/Technical Editor

Stephanie Everfield

Regional Environmental Officer

With information provided by project team members:

City of Laurinburg

Contact: **Harold Haywood, MPA, CLGPO**
General Service Director, City of Laurinburg
Phone: (910) 291-2587

Appendices are available for review upon request to FEMA-R4EHP@fema.dhs.gov