

Environmental Assessment Report
Fort White Communications Tower Lease
Tower ID: 4-D023 F
7354 SW Elim Church Road
Fort White, Florida 32038

Prepared For:
Harris Corporation

September 22, 2011

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URS Job No. 38617968

TABLE OF CONTENTS

1.0 INTRODUCTION..... 2

1.1 Introduction..... 2

1.2 Purpose and Need 2

2.0 PROPOSED ACTION..... 2

2.1 Project Description 2

2.2 Alternatives..... 3

2.3 No Action Alternative 3

3.0 EXISTING ENVIRONMENT 3

3.1 Noise 3

 3.1.1 Existing Conditions..... 4

3.2 Air Quality 4

 3.2.1 Existing Conditions..... 4

3.3 Geology and Soils 4

 3.3.1 Existing Conditions..... 4

3.4 Water Resources 5

 3.4.1 Surface Water..... 5

 3.4.2 Groundwater 5

 3.4.3 Coastal Zones..... 5

 3.4.4 Floodplains..... 5

3.5 Biological Resources 5

 3.5.1 Existing Conditions..... 7

3.6 Historic and Cultural Resources 7

 3.6.1 Existing Conditions..... 8

 3.6.2 Indian Religious Sites 8

3.7 Aesthetic and Visual Resources 9

 3.7.1 Existing Conditions..... 9

3.8 Land Use 9

 3.8.1 Existing Conditions..... 9

3.9 Infrastructure 9

 3.9.1 Existing Conditions..... 10

3.10 Socioeconomic Resources 10

 3.10.1 Existing Conditions..... 11

3.11 Human Health and Safety 11

 3.11.1 Existing Conditions..... 11

 3.11.2 Radio Frequency (Rf) Radiation..... 11

4.0 ENVIRONMENTAL CONSEQUENCES 12

4.1 Noise 12

 4.1.1 Proposed Improvements..... 12

 4.1.2 No Action Alternative..... 13

4.2 Air Quality..... 13

 4.2.1 Proposed Improvements..... 13

 4.2.2 No Action Alternative..... 13

4.3 Geology and Soils 14

 4.3.1 Proposed Improvements..... 14

4.3.2	No Action Alternative.....	14
4.4	Water Resources	14
4.4.1	Proposed Improvements.....	14
4.4.2	No Action Alternative.....	15
4.5	Biological Resources	16
4.5.1	Proposed Improvements.....	16
4.5.2	No Action Alternative.....	18
4.6	Historic and Cultural Resources	18
4.6.1	Proposed Improvements.....	18
4.6.2	No Action Alternative.....	19
4.7	Aesthetic and Visual Resources	19
4.7.1	Construction-Related	19
4.7.2	Operations-Related	20
4.7.3	No Action Alternative.....	20
4.8	Land Use	20
4.8.1	Proposed Improvements.....	20
4.8.2	No Action Alternative.....	21
4.9	Infrastructure.....	21
4.9.1	Proposed Improvements.....	21
4.10	Socioeconomic Resources	22
4.10.1	Proposed Improvements.....	22
4.10.2	No Action Alternative.....	22
4.11	Human Health and Safety	22
4.11.1	Proposed Improvements.....	23
4.10.2	No Action Alternative.....	23
5.0	FINDINGS AND CONCLUSIONS	23
5.1	Findings.....	23
6.0	LIST OF PREPARERS.....	24
7.0	LIMITATIONS.....	24
8.0	REFERENCES.....	26

FIGURES

- Figure 1 Topographic Location Map
- Figure 2 2009 Aerial Site Plan Map

APPENDICES

- Appendix A Site Photographs
- Appendix B Site Survey
- Appendix C EDR NEPA Check Report
- Appendix D USFWS and FNAI Endangered and Threatened Species Lists for Columbia County, Florida
- Appendix E Cultural Resource Assessment Survey
- Appendix F Memorandum for Clearance to Proceed with Communication Tower Projects
- Appendix G FCC Wireless Telecommunications Bureau, FCC Form 620

1.0 INTRODUCTION

1.1 Introduction

URS Corporation (URS) is pleased to provide Harris Corporation (Harris) with this Environmental Assessment Report (EA) for the Fort White communications tower lease area located at 7354 SW Elim Church Road, Columbia County, Fort White, Florida (subject property). Harris is proposing to extend the current guyed communications tower to 400 feet in height including installation of new communications equipment on the subject property.

The subject property contains approximately 5.81 acres of property fronting SW Elim Church Road near Fort White, Florida. The subject property is a square shaped parcel approximately 500 feet by 500 feet with a gravel access road from SW Elim Church Road. The existing communications tower is 285 feet high and is situated in the northwest central area of the parcel within a fenced area approximately 75 feet by 75 feet.

The communications tower improvements consist of a small building (120 square feet) with a propane powered emergency generator situated on a concrete slab. Pasture land surrounds the communications tower compound. The existing communications tower anchors extend approximately 206 feet to the northeast, northwest and south of the tower structure. There is a horse corral situated on the parent parcel adjoining the southeastern corner of the leased parcel. The areas west of SW Elim Church Road are wooded and located within the Ichetucknee Springs State Park.

1.2 Purpose and Need

The purpose of this EA is to collect information regarding potential environmental impacts relative to the proposed construction activities at the subject property per Subpart I of the Federal Communications Commission's (FCC's) Regulations, 47 CFR - § 1.1307, Parts A and B, Revised October 1, 2004. URS' EA consisted of gathering information regarding the subject property based on the Public Safety Interoperable Communications (PSIC) Grant Program recommend outline for a Programmatic Environmental Assessment (PEA). Each of the elements investigated is discussed below.

2.0 PROPOSED ACTION

2.1 Project Description

Harris is proposing to extend an existing guyed wire communications tower from 285 feet to approximately 400 feet in height including installation of new communications equipment on the subject property.

The subject property contains approximately 5.81 acres of property fronting SW Elim Church Road near Fort White, Florida. The subject property is a square shaped parcel approximately 500 feet by 500 feet with a gravel access road from SW Elim Church Road. The existing communications tower is 285 feet high and is situated in the northwest central area of the parcel within a fenced area approximately 75 feet by 75 feet.

The communications tower improvements consist of a small building (120 square feet) with a propane powered emergency generator situated on a concrete slab. Pasture land surrounds the communications tower compound. The existing communications tower anchors extend approximately 206 feet to the northeast, northwest and south of the tower structure. There is a horse corral situated on the parent parcel adjoining the southeastern corner of the leased parcel. The areas west of SW Elim Church Road are wooded and located within the Ichetucknee Springs State Park.

A portion of the USGS *Hildreth, Florida* Topographic Quadrangle Map is presented as the Topographic Location Map Figure 1. An Aerial Site Plan Map (2009) depicting the approximate site boundaries and existing onsite features is provided as Figure 2. Site photographs of the subject property are attached in Appendix A. A site survey is attached in Appendix B.

2.2 Alternatives

Because the proposed improvements are to the existing Fort White tower, and due to its isolated location, alternative sites were not considered to meet the purpose and need stated above.

2.3 No Action Alternative

The No Action alternative would not meet the current radio system coverage requirements causing serious limitation on security and emergency response, funding for interoperable communications and information systems infrastructure would not be released, and infrastructure would neither be developed nor enhanced. Ongoing maintenance activities would continue using the current funding sources; however, no new activities would be funded with PSIC grant funding. It is assumed that the project proposed for PSIC grant funding would not go forward with any alternative funding sources.

The No Action Alternative will serve as the baseline for assessing the impacts of the other alternatives. The No Action Alternative would not address the needs for Columbia County and surrounding areas.

3.0 EXISTING ENVIRONMENT

This section provides information on the existing environment including descriptions of the physical setting for each resource area.

3.1 Noise

Sound is measured in decibels (db) on the A-weighted scale, which is the scale corresponding to the range of sound that the human ear can recognize. The Day-Night Average Sound Level (DNL) is the average measure of noise/sound.

Noise, undesirable sound, is federally regulated by the Noise Control Act of 1972 (NCA). Although the NCA gives the U.S. Environmental Protection Agency (EPA) authority to prepare guidelines for acceptable ambient noise levels, it only charges the federal agencies that operate noise producing facilities or equipment to implement noise standards. The U.S. EPA's guidelines state that outdoor sound levels in excess of 55 db DNL are normally unacceptable for noise sensitive areas such as residences, schools or hospitals.

3.1.1 Existing Conditions

The subject property is located in a rural area of Columbia County as shown on the 2009 aerial photograph (Figure 2). Construction activities, including the use of heavy equipment, would cause a temporary and short-term increase in the day to day noise levels depending on the level of activity and the weather. Work will be limited to the daylight hours to minimize the noise levels. Therefore, the noise levels to be experienced during the construction of the tower are not anticipated to adversely impact the local population.

3.2 Air Quality

The Clean Air Act (CAA) requires the U.S. EPA to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. CAA established two types of national air quality standards: primary standards set limits to protect public health, including the health of “sensitive” populations such as asthmatics, children and the elderly; secondary standards set limits to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation and buildings. The current criteria pollutants are: Carbon Monoxide, Nitrogen Oxide, Ozone, Lead, Particulate Matter and Sulfur Dioxide.

3.2.1 Existing Conditions

Due to the general undeveloped and rural nature of Columbia County, the State of Florida operates only one air quality monitoring station in the county; AIRS # 023-002 located at 751 Sycamore Terrace, Lake City, Florida. This station records ozone and particulate material air quality measurements. For 2011 to date, the average ozone and particulate material concentrations at this station have been below the respective Federal Air Quality Standards.

3.3 Geology and Soils

3.3.1 Existing Conditions

Based on a review of the United States Department of Agriculture (USDA), Soil Conservation Service, Soil Survey of Columbia County, Florida; soils in this area are classified as belonging to the Blanton series of soils. Blanton fine sand, 0 to 5% slopes is a moderately well drained, nearly level to gently sloping soil on broad ridges and undulating side slopes. Typically, the surface layer is gray, fine sand about 7-inches thick. The subsurface layer is very pale brown, fine sand in the upper 30-inches and light gray, fine sand in the lower 15-inches. The subsoil extends to a depth of 80-inches. In the upper 10-inches, it is light yellowish brown, fine sandy loam with brownish yellow mottles; in the next 5-inches, it is very pale brown with strong brown and pale brown mottles; and in the lower part, it is light brownish gray, fine sandy loam with strong brown mottles. Blanton soil has a water table at a depth of 5 to 6-feet most of the year. In wet seasons, a perched water table is above the subsoil for less than a month. The available water capacity is medium in the surface layer and low in the subsurface layer and subsoil. Permeability is rapid in the surface and subsurface layers and moderate in the subsoil. Natural fertility and the organic matter content are low.

The subject property area is situated within the Coastal Lowlands physiographic subdivision of Columbia County. The Coastal Lowlands area is a region of karst topography generally between 25 and 100-feet in elevation. This area is underlain by flattened hills of cavernous limestone. The limestone is overlain and

filled with undifferentiated Pleistocene clay and sand layers. The underlying limestone is the Miocene Hawthorne Formation and is up to 150 feet thick.

3.4 Water Resources

3.4.1 Surface Water

Based on URS' site inspection performed on August 17, 2010, there are no surface water features on the subject property.

3.4.2 Groundwater

Groundwater occurs in the surficial sand and clay layers in Columbia County. However, the Floridan Aquifer provides the majority of potable water supply for the county. The older sediment layers of the Hawthorn Formation are part of the Floridan Aquifer.

The direction and movement of groundwater are influenced by many factors, including, but not limited to, the aquifer's hydraulic characteristics, surface and bedrock topography, the presence of surface water bodies, and the influence of pumping wells. Based upon topography of the area, the local direction of groundwater flow appears to be toward the west-southwest towards the Ichetucknee River drainage basin.

3.4.3 Coastal Zones

The subject property is not located with a coastal zone, as shown on the topographic location map Figure 1.

3.4.4 Floodplains

According to Federal Emergency Management Agency (FEMA) flood zone data provided on the Flood Plain Map on page 8 of the in the EDR NEPACheck Report (Appendix C), the subject property's location is depicted outside of the 100-year and 500-year floodplains. No additional information was provided regarding floodplains at the subject property in the NEPACheck Report. FCC Regulation 47 CFR 1.1307 states that a significant environmental effect will occur only if "facilities... are to be located in a (100-year) floodplain". Because the subject property is not located within the 100-year or 500-year floodplains, no further consideration of floodplains is warranted for this project.

3.5 Biological Resources

Biological resources are animals, plants, and associated habitats that are native to an area, including threatened or endangered species. In general, biological resources can include native and introduced (non-native) plants that comprise the various habitats. Animals present in such habitats, and natural areas help support these plant and wildlife populations. Protected or sensitive biological resources include plant and animal species listed as threatened or endangered by U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), or a State. The following section describes categories of biological resources such as threatened and endangered species, wildlife, along with habitat and wetlands.

The Endangered Species Act (ESA) (16 U.S.C. §1531) requires Federal agencies to conserve endangered species by listing endangered and threatened species of plants and animals and designating the critical habitat for animal species. The ESA defines an endangered species as any species in danger of extinction throughout all or a significant area of its range and a threatened species as any species likely to become

endangered in the near future. Under Section 7 of the ESA, Federal agencies, in consultation with USFWS or NMFS, must ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species (i.e., a listed species) or to result in the destruction or adverse modification of critical habitat, defined as a specific geographic area that is essential for the conservation of a threatened or endangered species and that may require special management and protection (USFWS, 2007). USFWS and NMFS are responsible for compiling official lists of threatened and endangered species. If a Proposed Action may adversely affect a listed species or critical habitat, the Federal agency must prepare a Biological Assessment (BA) and initiate a formal consultation with USFWS or NMFS. After reviewing the BA, USFWS or NMFS prepares a Biological Opinion stating whether the Proposed Action is likely to jeopardize the continued existence of a listed species or cause the destruction or adverse modification of critical habitat. The purpose of the consultation process is to ensure avoidance and minimization of potential adverse impacts on listed species or critical habitats. Formal consultation is not required if the Federal agency determines, and USFWS or NMFS concurs in writing, that the Proposed Action is not likely to adversely affect listed species. In addition, the ESA prohibits all persons subject to U.S. jurisdiction, including Federal agencies, from, among other things, “taking” endangered or threatened species. The “taking” prohibition includes any harm or harassment, and applies in the United States and on the high seas.

The Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. §703) was first enacted to implement the 1916 convention between the United States and Great Britain for the protection of birds migrating between the U.S. and Canada, offering much-needed protection to many bird species during a time when commercial trade in birds and their feathers was popular. The statute makes it unlawful to pursue, hunt, take, capture, kill or sell birds listed in the statute as "migratory birds", and does not discriminate between live or dead birds and also grants full protection to any bird parts including feathers, eggs and nests. The MBTA is the primary law that affirms or implements the nation’s commitment to four international conventions (with Canada, Japan, Mexico, and Russia) for the protection of a shared migratory bird resource. Each convention protects selected species of birds that are common to both countries (e.g., they occur in both countries at some point during their annual life cycle). The potential impact to property owners can exist when migratory birds seek respite within trees or on buildings considered private property.

EO 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds) strengthens the protection of migratory birds and their habitats by directing Federal agencies to take certain actions that implement the MBTA. Specifically, Federal agency actions that have, or are likely to have, a measurable negative effect on migratory bird populations require development and implementation of an Memorandum of Understanding (MOU) with USFWS that promotes the conservation of migratory bird populations. The EO and MOUs are the regulatory basis for conservation actions or renewal of contracts, permits, delegations, or other third-party agreements associated with migratory birds. MOUs established under EO 13186 are published in the Federal Register.

USFWS's Division of Migratory Bird Management established several initiatives in the past decade to research collisions of birds with communication towers. In 1999, USFWS established the Communication Tower Working Group, composed of government, industry, and academic groups to study and determine tower construction approaches that prevent bird strikes.

EO 11990 (Protection of Wetlands) requires Federal agencies to provide leadership and take action to minimize the destruction, loss, or degradation of wetland habitat and to preserve and enhance the natural and beneficial values of wetland habitats in carrying out the agency's responsibilities. Wetland habitats

generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.

3.5.1 Existing Conditions

The subject property is located adjacent to an existing access road within an improved pasture area.

3.5.1.1 Wildlife Preserve Areas

The EDR NEPA Check Report did not identify conservation areas within a 1-mile radius of the subject property. This information was verified during the field investigation. FCC Regulation 47 CFR 1.1307 states that a significant environmental effect will occur only if “facilities... are to be located in an officially designated wildlife preserve”. This information was verified during the field investigation.

3.5.1.2 Threatened or Endangered Species

Compliance with the Endangered Species Act places ultimate responsibility for identification of threatened and endangered species habitats with the USFWS. Official updated lists of federal endangered and threatened species and state listed species were obtained from the USFWS and the Florida Natural Areas Inventory (FNAI), respectively. The complete USFWS and FNAI lists for Columbia County are provided in Appendix D.

The following species were listed as endangered or threatened in Columbia County, Florida: bald eagle (*Haliaeetus leucocephalus*), wood stork (*Mycteria americana*), red-cockaded woodpecker (*Picoides borealis*), Gulf sturgeon (*Acipenser oxyrinchus desotoi*), and eastern indigo snake (*Drymarchon couperi*). URS cross-referenced the listed species identified in the EDR NEPA screen with the updated lists obtained from USFWS and FNAI. Habitat descriptions for listed species were also obtained from FNAI and were utilized to determine if a given habitat appeared to correspond to habitats located on the subject property.

3.5.1.3 Wetland Areas

Based on the information obtained from the U.S. Fish & Wildlife Service, National Wetlands Inventory website, wetlands are not shown on the subject property (see <http://www.fws.gov/wetlands/Data/Mapper.html>). Based on URS’ site visit, URS did not observe standing water or evidence of wetland vegetation on the subject property.

3.6 Historic and Cultural Resources

Historic and cultural resources are sites, structures, buildings, districts, or objects, associated with important historic events or people, demonstrating design or construction associated with a historically significant movement, or with the potential to yield historic or prehistoric data, that are considered important to a culture, a subculture, or a community for scientific, traditional, religious, or any other reason (NPS, 2008). Typically, historic and cultural resources are subdivided into the following categories:

- **Archaeological resources.** This includes prehistoric or historic sites where human activity has left physical evidence of that activity but few aboveground structures remain standing.

- **Architectural resources.** This includes buildings or other structures or groups of structures that are of historic or aesthetic significance.
- **Native resources.** These include resources of traditional, cultural, or religious significance to a Native American Tribe, Native Hawaiian, or Native Alaskan organization.

3.6.1 Existing Conditions

The subject property is located within an improved pasture area in rural Columbia County, Florida. The nearest structures include two residential homes situated approximately 570 feet and 1,300 feet southeast of the subject property.

3.6.1.1 Historic Properties

EDR contacted the National Register of Historic Places for the official federal list of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering, and culture. EDRs search of the National Register of Historic Places did not identify the subject property as a National Register property. Additional historic records were searched by EDR including: the Park Service; Advisory Council on Historic Preservation and the Department of State; Division of Historical Resources. Neither of these historic record sources identified the subject property in their respective databases.

The FCC undertaking to license proposed communication towers requires compliance with Section 106 of the National Historic Preservation Act and its implementing regulations. URS subcontracted Environmental Services Incorporated (ESI) to meet the requirements of the Section 106 process. The process for Section 106 Consultation begins with a review of the files of the State Historic Preservation Office (SHPO) to identify properties within the area of potential effect that are listed on the State Register. The next step is a field study to identify and photograph historic properties listed in the National Register of Historic Places (NRHP) or the state-register. A field visit includes identifying and recording previously unknown historic properties. Next, researchers assess the potential for the proposed undertaking to affect the historic properties. Field visits to the site were made in 2001 for the initial tower construction that identified lithic scatter associated with a site known as the Three Horses (8C0904). Consequently, the tower equipment area was relocated to avoid any cultural resource impacts. A cultural resource assessment survey dated November 2001 is attached in Appendix E.

For the proposed improvements, another shovel test was performed near the proposed new guy wire anchor locations. The shovel tests failed to detect artifacts.

3.6.2 Indian Religious Sites

The EDR NEPA Check report contacted the National Register of Historic Places for listings of properties significant in American, state, or local prehistory and history that have been nominated possessing national significance. The EDR report did not identify the subject property as a National Register property, Indian Reservation, or Indian Religious Site. Additional historic records were searched by EDR including: the Bureau of Indian Affairs, the National Association of Tribal Historic Preservation Officers, and the Florida Trail Association. These historic record sources did not identify the subject property or surrounding properties within a one-mile radius of the subject property in their respective databases.

3.7 Aesthetic and Visual Resources

The APE for visual effects includes the geographic area around the proposed tower installation area within which the proposed tower may be seen, thus having an effect through the introduction of visual elements that might diminish or alter the setting of any historic property listed on or eligible for listing on the National Register of Historic Places. This is only the case if the setting is a character-defining feature of the property, which has contributed to NR eligibility. If the tower is visible from such a property it may also function to diminish the integrity of the property's relationship to surrounding features and open space, thus compromising its historic significance. In accordance with the Nationwide Programmatic Agreement of March 2005, it is presumed that a three-quarter mile APE for visual effects is appropriate for this project, in that the proposed tower will be greater than 200 feet tall and less than 400 feet tall.

3.7.1 Existing Conditions

The subject property is located within an improved pasture area in rural Columbia County, Florida. The nearest structures are two residential homes situated approximately 560 feet and 1,300 feet southeast of the subject property.

3.8 Land Use

The term "land use" refers to real property classifications that indicate either natural conditions or the types of human activity that occur, or are permitted, on a parcel. There is no nationally recognized convention or uniform terminology for describing land use categories; definitions are typically promulgated at the local level in the form of zoning ordinances. As a result, the meanings of land use descriptions and definitions vary among jurisdictions. Land use plans are usually established to ensure that development proceeds in an orderly fashion, encouraging compatible uses for adjacent land. A master plan is generally written by a county or municipality to provide a long-term strategy for growth and development. The foremost factor affecting land use is compliance and compatibility with master plans and zoning regulations. Other relevant factors include existing land use at project sites, the types of land uses on adjacent properties and their proximity to a proposed tower location, the duration of a proposed activity, and project permanence as a change in land use.

3.8.1 Existing Conditions

According to information obtained from the Columbia County Property Appraiser online property database, the proposed tower property and the surrounding area are zoned as improved agricultural property. The subject property is identified as part of a larger parcel with Parcel Identification No. 07-6S-16-03789-000 with a listed land use of improved agricultural. There would be no changes necessary to the current land use or zoning for the proposed tower installation.

3.9 Infrastructure

Infrastructure consists of the systems and physical structures that enable a population in a specified area to function. Infrastructure by definition includes a broad array of facilities (e.g., utility systems, streets, highways, railroads, airports, buildings and structures, and other manmade facilities). Individuals, businesses, governmental entities, and virtually all relationships between these groups depend upon this infrastructure for their most basic needs, as well as for critical and advanced needs (e.g., emergency response and health care).

An essential component of economic growth to an area is the availability of infrastructure and its capacity to support growth. The infrastructure components to be discussed in this section include utilities (electricity and communications), solid waste, and the transportation network.

Regulations governing communications infrastructure include Part 17 Construction, Marking, and Lighting of Antenna Structures of the FCC regulations (47 CFR Chapter 1), which prescribes procedures for antenna structure registration and requires the Federal Aviation Administration (FAA) to conduct an aeronautical study of the navigation air space to determine appropriate tower marking and lighting requirements to achieve safe air space. Before the FCC authorizes the construction of new antenna structures or alteration in the height of existing antenna structures, an FAA determination of “no hazard” may be required. FAA notification is required for any new construction greater than 200 feet above the ground, and near an airport runway (taller than 100:1 for a horizontal distance of 20,000 feet, 50:1 for a horizontal distance of 10,000 feet, and 25:1 for a horizontal distance of 5,000 feet of a heliport). By checking the heights of proposed antennae and their proximity to airports, the FCC’s TOWAIR software system assists in determining if FAA notification is required. The FAA can vary marking and lighting recommendations when requested, provided that aviation safety is not compromised. In all cases, safe aviation conditions around the tower are the FCC’s primary concern, and safety concerns dictate the marking and lighting requirements. Navigation air space, which starts at 200 feet above the ground, decreases in elevation in close proximity to airports; the minimum height for required marking or lighting would decrease in these areas.

3.9.1 Existing Conditions

The proposed tower installation is serviced by the local electric utility, and telephone company along an adequate roadway network available in the area. Access to the subject property is via SW Elim Church Road that is situated approximately 396 feet west of the current tower. Two small general aviation airports are located within approximately 4.5 miles of the proposed tower location. The Thompson Airfield is situated approximately 4.5 miles northwest near Branford, Florida, and Bradley Airport is situated approximately 4.5 miles southeast near Fort White, Florida.

3.10 Socioeconomic Resources

Socioeconomics comprise the basic attributes and resources associated with the human environment, including demographic, economic, and social assets of a community. Demographics focus on population trends and age. Economic metrics provide information on employment trends and industries. Housing, infrastructure, and services are also influenced by socioeconomic factors.

EO 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) directs agencies to address environmental and human health conditions in minority and low-income communities. Environmental justice addresses the disproportionate and adverse effects of a Federal action on low-income or minority populations. The intent of EO 12898 and related directives and regulations is to ensure that low-income and minority populations do not bear a disproportionate burden of negative effects resulting from Federal actions. The general purposes of EO 12898 are the following:

- To focus the attention of Federal agencies on human health and environmental conditions in minority communities and low-income communities, with the goal of achieving environmental justice
- To foster nondiscrimination in Federal programs that substantially affect human health or the environment

- To give minority communities and low-income communities greater opportunities for public participation in, and access to, public information on matters relating to human health and the environment.

3.10.1 Existing Conditions

With regard to socioeconomic conditions near the current tower site, the subject property area is not located in low-income or minority area. Land area for Columbia County is 797 square miles with a population estimated at approximately 67,531 (U.S. Census Bureau). The subject property is located primarily in improved pasture land with residential homes situated approximately 563 feet and 1,300 feet southeast of the existing tower property. The city of Fort White with a population of approximately 567 is located approximately 4.3 miles southeast of the subject property.

3.11 Human Health and Safety

A Health and Safety Plan (HASP) would be prepared for the tower construction activities. The HASP will discuss issues related to safety meetings, emergency routes, distances to hospitals, etc. Occupational Safety and Health Administration (OSHA) regulations will also be referenced. The protection of human health and safety is the primary goal of the project. The communication tower improvements will advance service to the public and provide additional protection in case of emergencies.

3.11.1 Existing Conditions

3.11.1.1 High Intensity White Lights

FCC regulations 47 CFR 1.1307 states that an Environmental Assessment needs to be prepared in the event of “antenna towers and/or supporting structures that are to be equipped with high intensity white lights, which are to be located in residential neighborhoods as defined by the applicable zoning law”. The currently existing Fort White tower is equipped with medium intensity white lights that will continue to be used at the tower facility.

3.11.2 Radio Frequency (Rf) Radiation

FCC regulations 47 CFR 1.1307 states that an Environmental Assessment needs to be prepared if “the particular facility, operation, or transmitter would cause human exposure to levels of radio frequency radiation in excess of the limits in §§ 1.1310 and 2.1093 of this chapter”. Guidelines included in the FCC’s Office of Engineering and Technology (OET) Bulletin 65, “Evaluating Compliance with the FCC Guidelines for Human Health Exposure to Radio Frequency Electromagnetic Fields,” August 1997, incorporate the limits for Maximum Permissible Exposure (MPE) in terms of electric and magnetic field strength and power density for the transmitters operating between 300 kHz and 100 GHz. Based on information available to URS, antennas will be located above 6 meters in height; therefore there is a categorical exclusion for the proposed antennas. No further evaluation of RF radiation is warranted.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Noise

4.1.1 *Proposed Improvements*

Construction-Related

Due to the proposed construction-related activities, there would be a temporary increase in localized noise generated during the tower construction activities. Noise from the construction activities will vary depending on the distance from the source of the noise. The noise levels generated by construction equipment would vary substantially depending on the type of equipment used, operations schedule, and condition of the project area. In addition to daily variations in construction activities, major construction would be accomplished in several different stages, with each stage having a specific equipment mix for the work to be accomplished. The use of heavy equipment during construction activities may result in short-term minor adverse impacts on the noise environment. Typically, construction related noise generation would last only for the duration of construction activities and occur during normal working hours (i.e., 7:00 a.m. to 5:00 p.m.), when noise is tolerated better because of the masking effect of background noise, with equipment being shut off when not in use. Evening noise levels would likely drop to ambient noise levels of the project area.

Therefore, it is anticipated that noise impacts from the proposed tower construction activities would be temporary and would not exceed typical noise levels. Noise levels (dBA) at 50 feet from the source would be no greater than 85 dBA for no more than four to six continuous hours per day over a 10 to 35 day period. Construction-related noise impacts from this tower project would not be significant.

Operations-Related

After construction activities have been completed, the ambient noise level would return to its normal level. Temporary noise could be generated by the air conditioning equipment or the backup generator at the tower facility. A backup generator is currently in use to provide electric power to communications equipment as needed. Noise from the backup generator is primarily composed of engine noise and exhaust noise.

The Fort White tower site has a propane fueled backup generator with a 1,000 gallon tank, which will emit noise levels less than 86 dBA from 50 feet from the source. The backup generator is not expected to cause the ambient noise levels to increase. It is anticipated that the use of the generator would be limited and would only occur during equipment maintenance and testing as a backup for primary power equipment and during interruption of the primary (grid) power supply. It can be estimated that the emergency generator would be operated for approximately 12 to 16 hours per year, based on manufacturer maintenance instructions and public safety agency standard operating procedures (SOP).

Because of the occasional and intermittent operation of the backup generator, the proposed tower improvements are not anticipated to cause adverse long-term impacts or measurably increase the ambient noise levels. Impacts to ambient noise levels resulting from typical operations would not exceed typical noise levels and would be short-term. Therefore, there would be no significant long-term noise impacts.

4.1.2 No Action Alternative

Under the No Action Alternative, there would be no new construction, and there would be no changes in the current ambient noise environment under the No Action Alternative.

4.2 Air Quality

Air quality impacts are anticipated from a limited number of sources located at the proposed tower site. During construction, new emissions sources are temporary, and include exhaust from construction vehicles and equipment, fugitive dust emissions from ground-disturbing activities and demolition. Operations-related air quality impacts from transmitting and receiving sites would occur as a result of the operation of the propane fueled backup generator.

4.2.1 Proposed Improvements

Construction-Related

Air quality impacts during construction would originate from construction vehicle and equipment emissions, and fugitive dust stirred up during ground disturbing activities. Both would be temporary and of limited duration. Air quality impacts from construction activities vary depending on the construction activity, where the construction would occur, and the distance from the source of the emission.

The use of heavy equipment during construction activities may result in short-term minor adverse impacts on air quality on and near the proposed tower site. Typically, construction-related air quality impacts would last only for the duration of construction activities and occur during normal working hours (i.e., 7:00 a.m. to 5:00 p.m.), and would not result in increases in criteria air pollutants greater than exceedance levels. Construction activities are estimated to be six to eight continuous hours per day and will take place during an approximately one month time frame. Therefore, it is anticipated that short-term negligible adverse impacts would be expected as a result of construction activities. There would be no significant impact to air quality from construction activities from the proposed construction activities. The minor emissions from construction can be further reduced or mitigated through the use of best management practices (BMP). BMPs for dust control include spraying water to minimize dust, limiting the area of uncovered soil to the minimum needed for each activity, siting of staging areas to minimize fugitive dust, using a soil stabilizer (chemical dust suppressor), mulching, using a temporary gravel cover, limiting the number and speed of vehicles on the site, and covering trucks hauling dirt. BMPs for construction vehicle and equipment emissions include limiting vehicle idling time, using low or ultra-low sulfur fuel (including biodiesel), conducting proper vehicle maintenance, and using electric- instead of gas-powered tools. The Fort White tower construction activities will utilize these BMPS and will also use locally available products and materials to reduce transportation-related emissions.

In addition, the Fort White tower improvements will not result in significant ground disturbance. The proposed improvements would have no significant impact to air quality from construction related activities. Since there will be no continuously operating air sources at the tower facility, there are no anticipated long-term air quality issues.

4.2.2 No Action Alternative

Under the No Action Alternative, there would be no new construction, and there would be no changes in the current air quality under the No Action Alternative No Action Alternative.

4.3 Geology and Soils

Impacts to geology and soils may result from ground disturbing activities, such as excavation, grading, backfilling, trenching, and other activities.

4.3.1 Proposed Improvements

Construction-Related

Soil erosion and runoff may occur at the proposed tower site as a result of ground-disturbing activities, such as slight grading, and digging with the use of a backhoe, and the use of a mobile crane for erecting the tower. Preparation of a stormwater pollution prevention plan may be necessary. The proposed improvements to the Fort White tower do not include significant ground-disturbing activities at the current site.

There would be no significant impact to local soil or geology from the proposed construction-related activities such as excavation, and the use of a mobile crane for erecting the tower components.

Operations-Related

The Fort White tower operation would not involve any ground-disturbing activities or other activities that would affect local soil or geology. There would be no impacts to soil and geology involving the surrounding improved pasture areas.

4.3.2 No Action Alternative

Under the No Action Alternative, there would be no ground disturbing activities or any new construction. Therefore, there would be no impacts to the local soil or geology as a result of the No Action Alternative.

4.4 Water Resources

Potential water resources impacts can result from several types of activities that performed at transmitting and receiving sites. Impacts would typically result from erosion caused by site runoff, unintentional discharge of chemicals used in the surrounding area that would be washed into a water body or absorbed into the water table. Erosion-control BMPs are required to be used for construction activities in Florida.

4.4.1 Proposed Improvements

4.4.1.1 Surface Water and Groundwater

Construction-Related

Since there are no surface water features on the proposed tower site, chemical, physical, or biological effects to surface water resources are not expected.

Groundwater at the proposed tower site is estimated to be greater than 10 feet in depth based on the local topography. Chemical, physical, or biological effects to groundwater resources are not expected to result

groundwater quality impacts that exceed the State of Florida groundwater quality standards as set forth in Chapter 62-777, Florida Administrative Code.

Operations-Related

Since there are no surface water features on the proposed tower site, chemical, physical, or biological effects to surface water resources are not expected from operation activities.

Operations-related impacts would be limited to spill protection of any lead-acid batteries in use at the proposed facility. A spill plan will be developed and followed to provide procedures for a response in the event of a battery acid spill if required. Chemical, physical, or biological effects to groundwater resources are not expected to result groundwater quality impacts that exceed the State of Florida groundwater quality standards as set forth in Chapter 62-777, Florida Administrative Code. Therefore, there is a very low potential for potential groundwater impacts from operation activities.

4.4.1.2 Floodplains

According to Federal Emergency Management Agency (FEMA) flood zone data provided on the Flood Plain Map on page 8 of the in the EDR NEPA Check Report (Appendix C), the subject property's location is depicted outside of the 100-year and 500-year floodplains. No additional information was provided regarding floodplains at the subject property in the NEPA Check Report. FCC Regulation 47 CFR 1.1307 states that a significant environmental effect will occur only if "facilities... are to be located in a (100-year) floodplain". Because the subject property is not located within the 100-year or 500-year floodplains, no further consideration of floodplains is warranted for this project.

4.4.1.3 Wild and Scenic Rivers

Based on information obtained from the U.S. Fish and Wildlife Service, National Wild & Scenic Rivers System website (<http://www.rivers.gov/wildriverslist.html>), there are no National Wild & Scenic Rivers within 50 miles of the subject property.

The subject property was not identified as a Federal wilderness area. The Itchetucknee Springs State Park (Itchetucknee River) is located approximately ¼-mile to the west of the subject property. There are no other National Parks, National Forests, National Parkways, or State Forests and State Parks located within a one-mile radius of the subject property. This information was verified during the field investigation. FCC Regulation 47 CFR 1.1307 states that a significant environmental effect will occur only if "facilities... are to be located in an officially designated wilderness area". No further evaluation of wilderness areas is warranted for the subject property.

4.4.2 No Action Alternative

Under the No Action Alternative, there would be no new construction. Therefore, there would be no risk of soil erosion or runoff from construction-related activities, nor would there be, a risk of hazardous spills or other consequences from operations-related impacts. Therefore, there would be no impacts to either water resources or floodplains from the No Action Alternative.

4.5 Biological Resources

Biological resource impacts can result from several activities, including construction activities such as demolition, grading, excavation, and construction that could alter or destroy habitat, either temporarily or permanently. In addition, the continued presence of human activity on a smaller scale could result in behavioral impacts to certain animal species that could affect feeding and reproductive patterns and habits.

4.5.1 Proposed Improvements

4.5.1.1 Construction-Related

Construction related short- and long-term minor to moderate adverse impacts on wildlife and vegetation are anticipated since the proposed tower location is situated within an existing improved pasture area adjacent to an existing unimproved access road.

On September 12, 2001, URS submitted a written request for *Confirmation of No Opinion of No Significant Impact, Fort White Communication Tower* to the U.S. Fish and Wildlife Service (USFWS) North Florida Ecological Services Office. The USFWS provided a response to our request dated September 19, 2001 that recommended bird diverters on the guy wires used to support the Ft. White tower and medium intensity white lights at night flashing at the shortest duration and frequency in order for the USFWS to conclude no significant impacts. URS responded in a letter dated November 2, 2001 indicating the tower construction would incorporate bird diverters on the guy wires and medium intensity white lights.

Subsequently, the USFWS issued a memorandum for Clearance to Proceed with Communication Tower Projects dated March 12, 2010 (see Appendix F). Since the proposed improvements to the Fort White tower meet the USFWS guidelines as set forth in their memorandum, URS has concluded that there are no significant impacts with respect to biological resources related to the proposed communications tower improvements.

4.5.1.2 Operations-Related

Operations-related activities at the Fort White tower site will not have an effect on listed or proposed protected species or critical habitats, such as a Wildlife Preserve area.

4.5.1.3 Wildlife Preserve Areas

The EDR NEPA Check Report did not identify conservation areas within a 1-mile radius of the subject property. This information was verified during the field investigation. FCC Regulation 47 CFR 1.1307 states that a significant environmental effect will occur only if “facilities... are to be located in an officially designated wildlife preserve”. No further evaluation of wildlife preserves is warranted for the subject property.

4.5.1.4 Threatened or Endangered Species

Compliance with the Endangered Species Act places ultimate responsibility for identification of threatened and endangered species habitats with the USFWS. Official updated lists of federal endangered and threatened species and state listed species were obtained from the USFWS and the Florida Natural

Areas Inventory (FNAI), respectively. The complete USFWS and FNAI lists for Columbia County are provided in Appendix D.

The following species were listed as endangered or threatened in Columbia County, Florida: bald eagle (*Haliaeetus leucocephalus*), wood stork (*Mycteria americana*), red-cockaded woodpecker (*Picoides borealis*), Gulf sturgeon (*Acipenser oxyrinchus desotoi*), and eastern indigo snake (*Drymarchon couperi*). URS cross-referenced the listed species identified in the EDR NEPA screen with the updated lists obtained from USFWS and FNAI. Habitat descriptions for listed species were also obtained from FNAI and were utilized to determine if a given habitat appeared to correspond to habitats located on the subject property.

Because the subject property is one acre in size and primarily pasture land with no trees the, red-cockaded woodpecker eastern and indigo snake does not have sufficient habitat and are not likely to be species of concern to the subject property. In addition, since there are no surface water features on the subject property, there are no surface water habitats for the Gulf sturgeon.

GIS database information from the USFWS for wood stork nesting colonies indicates that there are three nesting colonies (<http://www.fws.gov/northflorida/WoodStorks/wood-storks.htm>) within Columbia County. All three of these nesting colonies are located near the Lake City, Florida, which is approximately 18 miles northeast of the subject property. As per the USFWS, wood stork foraging areas have a 13 mile radius. Based on the reported locations of the Wood Stork nesting colonies, the subject property is situated approximately 15 miles away from the nearest wood stork nesting colony and is outside of the 13 mile foraging area radius.

Relative to the USFWS 2008 guidelines letter, URS performed a search for bald eagle (*Haliaeetus leucocephalus*) nesting sites near the proposed tower site using the Florida Fish and Wildlife Conservation Commission (<https://public.myfwc.com/FWRI/EagleNests/nestlocator.aspx>) bald eagle nest locator website. As shown on the bald eagle nest site map provided in Appendix D, there are no bald eagle nest sites situated within 5 miles of the existing tower site.

In addition, URS performed a search for wading bird nesting colonies. Based on information from the Florida Fish and Wildlife Commission, Fish and Wildlife Research Institute, Terrestrial GIS Data Website (http://ocean.floridamarine.org/TRGIS/Description_Layers_Terrestrial.htm#speciesLoc) there are no wading bird nesting colonies within 5 miles of the subject property.

No further evaluation of threatened or endangered species is warranted for the subject property.

4.5.1.5 Wetland Areas

Based on the information obtained from the U.S. Fish & Wildlife Service, National Wetlands Inventory website, wetlands are not shown on the subject property (see <http://www.fws.gov/wetlands/Data/Mapper.html>). Based on URS' site visit, standing water or evidence of wetland vegetation was not observed on the subject property.

FCC Regulation 47 CFR 1.1307 states that a significant environmental impact will occur if construction of facilities "will involve significant change in surface features (e.g., wetland fill, deforestation or water diversion)". Based on the existing tower, extension of the Fort White communications tower will not significantly change the surface features at the subject property.

4.5.2 No Action Alternative

Under the No Action Alternative, there would be no new construction. Therefore, there would be no significant impacts on vegetation and wildlife, migratory birds, threatened and endangered species, or wetlands would occur under the No Action Alternative.

4.6 Historic and Cultural Resources

Historic and cultural resources impacts can occur both from physical disturbance of historic properties and from aesthetic changes to a historic property or its viewshed. To determine the nature of impacts to historic properties, as defined under the NHPA, consultation with the State of Florida State Historic Preservation Office (SHPO) and Tribal Historic Preservation Office (TPHO) was performed.

4.6.1 Proposed Improvements

4.6.1.1 Construction-Related

Construction-related impacts to historic and cultural resources near the proposed Fort White tower site were assessed to determine if temporary impacts to viewsheds and present risk of permanent impact or harm to historic properties, primarily through ground-disturbing activities. URS contracted with Environmental Services, Inc. (ESI) to provide a report of all available information regarding historical or cultural results.

The FCC undertaking to license proposed communication towers requires compliance with Section 106 of the National Historic Preservation Act and its implementing regulations. URS subcontracted Environmental Services Incorporated (ESI) to meet the requirements of the Section 106 process. The process for Section 106 Consultation begins with a review of the files of the State Historic Preservation Office (SHPO) to identify properties within the area of potential effect that are listed on the State Register. The next step is a field study to identify and photograph historic properties listed in the National Register of Historic Places (NRHP) or the state-register. The field visit includes identifying and recording previously unknown historic properties. Next, researchers assess the potential for the proposed undertaking to affect the historic properties. Field visits to the site were made by ESI in 2001 that did identify lithic scatter associated with the Three Horses Site (8C0904). Consequently, the tower equipment area was relocated to avoid any cultural resource impacts. ESI's cultural resource assessment survey reported dated November 2001 is attached in Appendix E.

For the proposed improvements, ESI performed another shovel test near the proposed new guy wire anchor locations. The shovel tests failed to detect artifacts.

This information was compiled and FCC Form 620 – FCC Wireless Telecommunications Bureau New Tower Submission Packet was completed. On February 3, 2011, in order to initiate consultation, FCC Form 620 was transmitted electronically to the SHPO through the FCC Tower Construction Notification System (“system”).

ESI determined no historic properties are in the Area of Potential Effects (APE) and the proposed communications tower will have no visual effects on historic properties.

The FCC Wireless Telecommunications Bureau, FCC Form 620 and the FCC email Notification of Concurrence dated February 17, 2011 is included for reference in Appendix G.

4.6.1.2 Historic Properties

EDR contacted the National Register of Historic Places for the official federal list of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering, and culture. EDRs search of the National Register of Historic Places did not identify the subject property as a National Register property. Additional historic records were searched by EDR including: the Park Service; Advisory Council on Historic Preservation and the Department of State; Division of Historical Resources. Neither of these historic record sources identified the subject property in their respective databases.

In October 2010, ESI performed a field visit on to the site for the proposed improvements that included three shovel tests, which failed to reveal any additional cultural resources within tower's proposed improvement areas. The proposed cell tower and fenced area will not directly impact any Nationally Registered or potentially eligible Historic Resources. ESI's 2001 field visits to the site that did identify lithic scatter associated with the Three Horses Site (8C0904). Consequently, the tower equipment area was relocated to avoid any cultural resource impacts. Based on the location of the proposed improvements, there will be no adverse effects on this historic resource.

4.6.1.3 Indian Religious Sites

The EDR NEPA Check report contacted the National Register of Historic Places for listings of properties significant in American, state, or local prehistory and history that have been nominated possessing national significance. The EDR report did not identify the subject property as a National Register property, Indian Reservation, or Indian Religious Site. Additional historic records were searched by EDR including: the Bureau of Indian Affairs, the National Association of Tribal Historic Preservation Officers, and the Florida Trail Association. These historic record sources did not identify the subject property or surrounding properties within a one-mile radius of the subject property in their respective databases.

On February 17, 2011, URS received a Section 106 Notification of SHPO/THPO Concurrence email as part of the FCC Form 620 submittal. The lead SHPO/THPO has concurred with the Form 620 filing regarding no adverse effect on historic or tribal properties. The FCC Wireless Telecommunications Bureau, FCC Form 620 is included for reference in Appendix G.

No further consideration of Indian religious sites is warranted for this project.

4.6.2 No Action Alternative

Under the No Action Alternative, there would be no new construction. Therefore, no additional impacts would occur to cultural or historic resources under the No Action Alternative.

4.7 Aesthetic and Visual Resources

Aesthetic and visual resource impacts may be short- or long-term, depending on whether the impact is related to construction activities or the communications tower that is being constructed.

4.7.1 Construction-Related

Aesthetic and visual resource impacts from construction-related activities would include the construction of infrastructure necessary to operate the transmitting and receiving site, and the construction of the

communication tower facilities on the existing site. The degree of visual disturbance depends on the project-specific construction activities, and each viewer's perception. Short-term impacts on aesthetic and visual resources resulting from construction-related activities would likely have no significant impact.

4.7.2 Operations-Related

According to the FCC Nationwide Programmatic Agreement (NPA) of March 2005 an Area of Potential Effects (APE) for visual effects includes the geographic area around the proposed tower installation area within which the proposed tower may be seen, thus having an effect through the introduction of visual elements that might diminish or alter the setting of any historic property listed on or eligible for listing on the National Register of Historic Places. The NPA defines the following presumed APE for visual effects for towers more than 200 but less than 400 feet in height - within $\frac{3}{4}$ mile from the tower site

This is only the case if the setting is a character-defining feature of the property, which has contributed to NR eligibility. If the tower is visible from such a property it may also function to diminish the integrity of the property's relationship to surrounding features and open space, thus compromising its historic significance. In accordance with the NPA, it is presumed that a three-quarter mile APE for visual effects is appropriate for this tower project, in that the proposed tower will be greater than 200 feet tall and less than 400 feet tall. Based on ESIs' visit to the site, they concluded that a three-quarter mile diameter APE is sufficient. While not listed, eligible, or potentially eligible for the National Register, ESI's previous cultural resource survey revealed that there are 19 previously recorded cultural resource sites within the $\frac{3}{4}$ mile visual APE of the proposed tower that are over fifty years old (see Appendix G). These sites lack the characteristics to make them eligible for inclusion in the National Register.

4.7.3 No Action Alternative

Under the No Action Alternative, there would be no new construction. Therefore, there would be no impacts to the aesthetic or visual resources under the No Action Alternative.

4.8 Land Use

Land use impacts can occur when incompatible land uses are placed adjacent to one another. PSIC-funded transmitting and receiving projects would not be compatible with all land use types and should be carefully sited, in accordance with local master plans, planning initiatives, local zoning, and coastal land use restrictions. Transmitting and receiving sites are most compatible with industrial, commercial, or public and quasi-public land uses, such as utilities, because of the basic intended function of these sites and the associated activities by which their operation is characterized. Local land use and zoning compatibility is compared to the objectives and purpose of the proposed communications tower project. Construction activities generally do not have any substantive bearing on impacts to land use planning. Therefore, only impacts from operations will be discussed in this section.

4.8.1 Proposed Improvements

The Fort White tower would not be compatible with all General Land Use areas. In general it is expected that siting of the proposed improvements would be compatible with existing land use plans and zoning at and adjacent to the proposed site and would not impose an incompatible land use on an area. The Fort White tower site is located within an improved pasture area within 396 feet of a county road. According to information obtained from the Columbia County Property Appraiser online property database, the proposed tower property and the surrounding area are zoned as improved agricultural property. The

subject property is identified as part of a larger parcel with Parcel Identification No. 07-6S-16-03789-000 with a listed land use of improved agricultural. There would be no changes necessary to the current land use or zoning for the proposed tower improvements.

4.8.2 No Action Alternative

Under the No Action Alternative, there would be no new construction. Therefore, there would be no impacts to general land use compatibility resulting from the No Action Alternative.

4.9 Infrastructure

Infrastructure impacts are typically observed as disruptions in service and utilities, either short- or long-term, resulting from increases in demand that may overwhelm the capacity of the local area to absorb them. Engagement in a planning process to ensure that system capacity will be able to meet projected increases in demand is the most effective way to avoid impacts to infrastructure, although resources may not always be available to implement upgrades.

4.9.1 Proposed Improvements

4.9.1.1 Utilities

Construction-Related

The Fort White tower is located within an existing improved pasture area adjacent to another existing communications tower site near Fort White, Florida. Construction-related activities would require additional short-term electric and communication services from available utility networks. The proposed improvements will utilize the existing electrical power lines currently in use at the subject property. Construction-related impacts are not expected to lead to major shortages in supply, nor are they expected to require major changes to the system. Impacts to utilities would not be significant. All potential modifications to utility services have been evaluated and coordination with the local utility service providers has been completed to avoid unnecessary damage or interruption of service. There would be no significant impact to utility services from construction-related activities with the Fort White tower improvement project.

Operations-Related

The proposed impacts would not be expected to cause noticeable impacts to local utility services across all category types. Operations impacts are not expected to lead to major shortages in supply, nor are they expected to require major changes to the services. There would be no significant impact to utility services from operations-related activities of the Fort White tower.

4.9.1.1 Transportation Network

Construction-Related

During site construction-related activities, heavy equipment and materials that may be needed for site access and site preparation would not pose a significant impact to the transportation network. The proposed improvements will require delivery of materials to the project site. Since the Fort White tower improvements are limited, the amount of construction related traffic would be significant to complete the

project. Potential impacts to transportation are expected to be low, provided appropriate planning and implementation actions are taken. Existing roads would be used to the maximum extent possible. There would be no significant impact to transportation networks from construction related activities.

Operations-Related

During operations transportation activities would consist of weekly and or monthly visits to the subject property using light duty or personal vehicles. Therefore, operations would not be expected to cause noticeable impacts to local transportation networks. There would be no significant impact to transportation networks from operations-related activities.

4.9.2 No Action Alternative

Under the No Action Alternative, there would be no new construction. There would be no impact to utilities or the transportation network resulting from the No Action Alternative.

4.10 Socioeconomic Resources

Socioeconomic resource impacts are assessed in terms of the effects of expenditures on the overall local economy and the impact of in-migration on demographics, employment, the availability of housing, and the ability of a jurisdiction to provide services such as education and public safety. In addition, disproportionate impacts to low-income or minority populations would result in adverse environmental justice impacts.

4.10.1 Proposed Improvements

The implementation of PSIC-funded project may result in increase in jobs as a result of the Fort White tower improvements, but the increase is not expected to be significant in Columbia County, Florida. Although increase in employment would be expected as a result of the implementation of PSIC funded project, increases are not expected to be significant. There would, therefore, be no expected in-migration and therefore no impacts expected to demographics, the supply of housing, or other local entities to provide public services.

The potential for impacts on minority and low-income populations would be based on the evaluation of specific site characteristics. The site is situated within an improved pasture area approximately 4.3 miles northwest of City of Fort White, Florida.

4.10.2 No Action Alternative

Under the No Action Alternative, there would be no new construction. Therefore, there would be no increase in economic activity and job creation related to implementation of the project and no related impacts to demographics, the availability of housing, the availability of services, or environmental justice.

4.11 Human Health and Safety

Human health and safety impacts can come from a wide range of activities. Workplace and construction site safety can adversely impact health and safety, as well as the generation, handling, storage, use, or disposal of hazardous or toxic materials.

4.11.1 Proposed Improvements

Construction-Related

For the proposed improvements, there would be a slight increase in workplace safety hazards during the construction phase of the Fort White tower improvements due to the nature of construction work and the increased intensity of work at the proposed site. The impact of this increase would not be significant. Work areas surrounding construction activities would be fenced, and appropriate signs would be posted to further minimize safety risks. In addition, a Health and Safety Plan (HASP) would be prepared for the tower construction activities. The HASP will discuss issues related to safety meetings, emergency routes, distances to hospitals, etc. Occupational Safety and Health Administration (OSHA) regulations will also be referenced. The protection of human health and safety is the primary goal of the project. The Fort White communication tower improvements will advance service to the public and provide additional protection in case of emergencies. Construction-related impacts to human health and safety impacts would not be significant.

Operations-Related

For the proposed improvements, propane fuel is required to power the backup generator. The backup generator is equipped with a 1,000 gallon propane tank for use during a power outage. The Fort White tower site is currently fenced, and access is restricted to authorized personnel to minimize risks to human health and safety. There would be no additional or significant adverse impacts to human health and safety resulting from operation of the Fort White communications tower.

The primary objective of the Fort White communications tower improvement project is to enable public safety agencies to improve interoperable communications and communicate more effectively in an emergency or crisis situation. This would result in an operations-related beneficial impact to human health and safety.

4.10.2 No Action Alternative

Under the No Action Alternative, there would be no new construction. Current interoperability interruption would continue, compromising the ability of first responders to respond effectively and rapidly to emergency situations. There could be adverse impacts to human health and safety as a result of the No Action Alternative.

5.0 FINDINGS AND CONCLUSIONS

5.1 Findings

URS conducted an EA of the proposed improvements at the Fort White communications tower lease located at 7354 SW Elim Church Road in Fort White, Florida. Harris is proposing to extend the current guyed communications tower to 400 feet in height including installation of new communications equipment on the subject property. In compliance with National Environmental Policy Act (NEPA), this EA describes the anticipated effects that the proposed actions would have on farmland, water resources, floodplains, biological resources including threatened and endangered species, air quality, historic properties, cultural resources, and health and safety.

The proposed improvements will not involve any unusual risks or impacts to the resource areas identified in Section 4.

The No Action Alternative could result in adverse impacts to human health and safety. Therefore, the Proposed Action would warrant the issuance of a FONSI for this Proposed Action.

In accordance with 47 CFR Section 1.1307 (a) (1) through (8), an evaluation has been made to determine whether any of the listed FCC special interest items would be significantly affected if a tower structure and/or antenna and associated equipment control cabinets were constructed at the proposed site location. No FCC special interest items were identified.

Consequences of the Proposed Improvements

The proposed improvements would not have a significant impact on any resource area for those projects falling within the 11 resource parameters described in this EA. The findings of our investigation and review, indicate that the environmental consequences are insignificant for the requirement of 47 CFR Subpart I, § 1.1307, Parts A and B. The proposed improvements would have beneficial impact on human health and safety, because it would enable countywide improvements to public safety interoperable communications.

Consequences of the No Action Alternative

Under the No Action Alternative, no interoperable communications capability would occur. Existing interruption in public safety interoperable communications would persist, resulting in an adverse impact to human health and safety.

6.0 LIST OF PREPARERS

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7.0 LIMITATIONS

This report and the associated work have been provided in accordance with the principles and practices generally employed by the local environmental consulting profession. This is in lieu of all warranties, expressed or implied.

The conclusions presented in this report are professional opinions based solely upon indicated data described in this report, visual observations of the site and vicinity, and our interpretation of the available historical information and documents reviewed, as described in this report. Unless URS has actual knowledge to the contrary, information obtained from interviews or provided to URS by the client has been assumed to be correct and complete. URS does not assume any liability for information that has been misrepresented to us by others, or for items not visible, accessible or present on the subject property during the time of the site reconnaissance. The conclusions are intended exclusively for the purpose outlined herein and the site location and project indicated.

Opinions and recommendations presented herein apply to the site conditions existing at the time of our investigation and cannot necessarily apply to site changes of which URS is not aware and has not had the opportunity to evaluate. Changes in the conditions of this property may occur with time due to natural processes or the works of man on the subject site or adjacent properties. Changes in applicable standards may also occur as a result of legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or in part, by changes beyond our control. Opinions and judgments expressed herein are based on URS' understanding and interpretation of current regulatory standards, and should not be construed as legal opinions.

Opinions and recommendations presented in this report are based on URS' preliminary review of the data supplied by EDR and governmental agency responses. They cannot necessarily apply to conditions of which URS is unaware and has not had an opportunity to evaluate. Portions of the conclusions presented in this report are based on information drawn from available database sources that may be subject to unavoidable error. Although URS made every effort to verify the database information, we cannot be held liable for unidentified errors in the data.

8.0 REFERENCES

Soil Survey of Columbia County Florida, U.S. Department of Agriculture Soil Conservation Service, 1984.

United States Geological Survey, 7.5 minute topographic quadrangle map, Hildreth, Florida, 1993; Dept. of Interior, Geological Survey, Scale 1:24,000.

EDR, 2010. Environmental Data Resources Inc. (EDR) NEPA Check Report, Fort White Tower, CR 238, Fort White, FL 32038, Inquiry Number: 2846895.9s, August 16, 2010.

CFR, 2004. Code of Federal Regulations (CFR) 47 CFR - § 1.1307, Parts A and B, Revised October 1, 2004. http://edocket.access.gpo.gov/cfr_2004/octqtr/pdf/47cfr1.1307.pdf

FNAI, 2009. Florida Natural Areas Inventory (FNAI), Columbia County, Florida Species and Natural Communities Tracking Lists. <http://www.fnai.org/index.cfm>

URS, 2010. Phase I Environmental Site Assessment Fort White Communications Tower Lease, Tower ID: 4-D023 F, 7354 SW Elim Church Road, Fort White, Florida 32038, October 21, 2010.

USFWS, 2010. US Fish & Wildlife Service (USFWS), Columbia County, Florida, Federally Listed Species. <http://www.fws.gov/northflorida/CountyList/Columbia.htm>

Columbia County, Property Appraiser Website: http://g2.columbia.floridapa.com/GIS/Search_F.asp?GIS

Publication of Archival, Library & Museum Materials Website, Archive of Florida Aerial Photography (PALMM <http://web.uflib.ufl.edu/digital/collections/FLAP/>), aerial photographs from 1954 and 1969.

Florida Department of Transportation, Aerial Photo Look Up System (<http://www2.dot.state.fl.us/surveyingandmapping/aplus.internet/Map.aspx?initmode=polygon>), aerial photographs from 1974, 1984 and 1994.

Florida Department of Environmental Protection, Consolidated Web Mapping Application