Lead contaminated soil can pose a risk to human health through direct ingestion, uptake in vegetable gardens, or tracking into homes. The EPA's standard for lead in bare soil in play areas is 400 ppm by weight and 1,200 ppm for non-play areas.

## **3.17.6 Socioeconomics and Human Health**

As noted in the Socioeconomic Resources section, there is a notable absence of grocery stores in the study area. Portions of the study area are identified as food deserts, which the USDA defines as a "census tract with a substantial share of residents who live in low-income areas that have low levels of access to a grocery store or healthy, affordable food retail outlet." Lack of access to healthy foods contributes to a poor diet and can lead to higher levels of obesity and other diet-related diseases, such as diabetes and heart disease.

# 3.17.7 Emergency Response Times and Human Health

A risk to human health can result from a lack of emergency service providers or inadequately spaced dispatch centers/garages. As identified in Section 3.16 – Socioeconomics and Environmental Justice, there are no hospitals or active emergency medical stations located near the Proposed Project, and the City of North Charleston recently consolidated two separate fire stations into a new larger Station 2 located at the corner of Carner Avenue and Clement Avenue.

According to the Charleston County Comprehensive Plan (October 2014), response time goals adopted by Charleston County EMS for urban/suburban areas are:

- Acceptable Response time less than 8 minutes 80 percent of the time
- Marginal Response time between 8 and 15 minutes
- Unacceptable Response time greater than 15 minutes

#### 3.18 SECTION 4(f) AND 6(f) RESOURCES

#### 3.18.1 Introduction

Section 4(f) of the USDOT Act (49 U.S.C. § 303(c)) protects publicly owned parks, recreation areas, wildlife and waterfowl refuges, and historic properties or archaeological sites (whether publically or privately owned) on or eligible for listing on the NRHP (collectively "Section 4(f) properties"). The FRA, as an operating administration within USDOT, may not approve the use of a Section 4(f) property unless it determines that there is no feasible and prudent alternative to avoid the use of the property and the action includes all possible planning to minimize harm resulting from such use, or the project has a *de minimis* impact consistent with the requirements of Title 49 U.S.C. section 303(d).

FRA's Procedures for Considering Environmental Impacts (64 FR 25445 (May 26, 1999)) contains FRA processes and protocols for analyzing the potential use of Section 4(f) resources. In addition, although not subject to the Federal Highway Administration and Federal Transit Administration regulations implementing Section 4(f), the FRA uses them as additional guidance.

Under Section 4(f), "use" of a protected property can occur in one of three ways:

- When land is permanently incorporated into a transportation facility (i.e., demolition or land acquisition) and the acquisition does not meet the *de minimis* criteria;
- When there is a temporary occupancy of land that is adverse in terms of the statute's preservationist purposes (i.e., physical alteration of the land during construction); however, the Section 4(f) property must be restored to its original condition (e.g., regrading or revegetating the area); or
- When there is a constructive use of a Section 4(f) property (i.e. ancillary impacts such as noise, vibration, air quality and visual impacts that effectively act as a permanent incorporation).<sup>67</sup>

However, even where an FRA project uses a Section 4(f) property, under certain conditions, FRA may determine the impact is *de minimis*. A *de minimis* impact involves the use of a Section 4(f) property that is generally minor in nature. For a historic site, a determination of *de minimis* impact may be made when all three of the following criteria are satisfied:

- The process required by Section 106 of the NHPA results in the determination of "no adverse effect" or "no historic properties affected" with the concurrence of the SHPO and/or THPO, and ACHP, if the ACHP is participating in the Section 106 consultation;
- The SHPO and/or THPO, and ACHP, if the ACHP is participating in the Section 106 consultation, is informed of USDOT's intent to make a *de minimis* impact determination based on their written concurrence in the Section 106 determination; and
- USDOT has considered the views of any consulting parties participating in the Section 106 consultation.

Before approving the use of a Section 4(f) property, FRA must first determine whether there are feasible and prudent alternatives to avoiding the use. An alternative is not feasible if it cannot be built as a matter of sound engineering judgment. In determining whether an alternative is prudent, the FRA may consider whether the alternative would result in any of the following: (1) compromise the project to a degree that is unreasonable for proceeding with the project in light of its stated purpose and need, (2) unacceptable safety or operational problems, (3) after reasonable mitigation the project results in severe social, economic, or environmental impacts; severe disruption to established

<sup>&</sup>lt;sup>67</sup> A Constructive use occurs when the transportation project does not incorporate land from a Section 4(f) resource but the project's proximity impacts are so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4f) are substantially impaired. Substantial impairment occurs only when the protected activities, features, or attributes of the resource are substantially diminished.

communities; severe disproportionate impacts on minority or low-income populations; or severe impacts on environmental resources protected under other federal statutes, (4) additional construction, maintenance, or operational costs of an extraordinary magnitude, (5) other unique problems or unusual factors, (6) multiple factors that, while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

If FRA concludes that there is no feasible and prudent alternative to the use of Section 4(f) property, then it may approve only the alternative that causes the least overall harm in light of the statute's preservation purpose. The least overall harm is determined by balancing the following:

- The ability to mitigate adverse impacts to each Section 4(f) property (including any measures that result in benefits to the property);
- The relative severity of the remaining harm, after mitigation, to the protected activities, attributes, or features that qualify each Section 4(f) property for protection;
- The relative significance of each Section 4(f) property;
- The views of the official(s) with jurisdiction over each Section 4(f) property;
- The degree to which each alternative meets the purpose and need for the project;
- After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f); and
- Substantial differences in costs among the alternatives.

Section 6(f) lands are regulated by the National Park Service (NPS), an agency within the U.S. Department of the Interior (DOI). Section 6(f) properties are recreational resources funded under the Land and Water Conservation Fund (LWCF) Act. Conversion of these lands for uses other than for outdoor recreation must be approved by the U.S. DOI. Conversions of Section 6(f) properties are prohibited unless the Secretary of the Interior finds it to be in accordance with the existing statewide outdoor recreation plan and if substitute property of equal value is provided as mitigation. Situations that trigger a 6(f) conversion include: if property interests are conveyed for private use or non-public outdoor recreation uses; if non-outdoor recreation uses (public or private) are made of the project area, or a portion thereof, including those occurring on pre-existing rights-of-way and easements, or by a lessor; if unallowable indoor facilities are developed within the project area without NPS approval, such as unauthorized public facilities and sheltering of an outdoor facility; if public outdoor recreation use of property acquired or developed with LWCF assistance is terminated (NPS 2008).

The study area for Section 4(f) resources and Section 6(f) resources is defined as the area that may be directly and indirectly affected by the Proposed Project and is identified in Figure 3.18-1. Properties within the study area that are categorized as Section 4(f) resources and Section 6(f) resources are described in this section.

## 3.18.2 Methods

### 3.18.2.1 Section 4(f)

As described in Section 3.18, Section 4(f) prohibits the use of protected properties unless there are no feasible and prudent alternatives of the use of such properties and the project incorporates all possible measures to avoid or minimize harm to such properties.

A park or recreation area qualifies for protection under Section 4(f) if: (1) the property is publicly owned; (2) the park property is open to the general public; (3) the property's primary purpose is as a park or recreation area and is being used for recreation; and (4) the property is considered significant by the authority with jurisdiction. A wildlife or waterfowl refuge qualifies for protection under Section 4(f) if: (1) it is publicly owned at the time at which the "use" occurs, (2) is being used as a refuge, and (3) is considered significant by the authority with jurisdiction."

For a cultural resource to be protected by Section 4(f), it must be on, or eligible for listing on, the NRHP. The U.S. Department of Interior provides guidance in applying evaluation criteria to assist in determining NRHP eligibility of the site; the NPS administers the NRHP.

For archaeological sites, in addition to the general requirements for cultural resources, Section 4(f) applies only to those sites that are on or eligible for the NRHP and that warrant preservation in place, including those sites discovered during construction. Section 4(f) does not apply if FRA determines, after consultation with the State Historic Preservation Officer (SHPO)/Tribal Historic Preservation Officer (THPO), federally recognized Indian tribes (as appropriate), and the Advisory Council on Historic Preservation (ACHP) (if participating), that the archeological resource is important chiefly because of what can be learned by data recovery, and has minimal value for preservation in place.<sup>68</sup>

This section relies on, and incorporates the information and analysis in Section 3.10 and 3.16.

### 3.18.2.2 Section 6(f)

Under Section 6(f) of the LWCF Act,<sup>69</sup>, no property acquired or developed with assistance under the Act, may be converted to other than public outdoor recreation uses without the approval of the Secretary of the Department of the Interior. The Secretary shall approve such conversion only if he/she finds it to be in accord with the then existing comprehensive statewide outdoor recreation plan and only upon such conditions as he/she deems necessary to assure the substitution of other

<sup>&</sup>lt;sup>68</sup> The results of the Section 106 process determine whether Section 4(f) applies to historic properties and are critical in determining the applicability and outcome of the Section 4(f) evaluation. The most important difference between the two statutes is the way each measures impacts on cultural resources. Whereas Section 106 is concerned with adverse effects, Section 4(f) is concerned with use of protected properties.

<sup>69</sup> Public Law 88-578, 78 Stat 897

recreation properties of at least equal fair market value and of reasonably equivalent usefulness and location (see Section 8.1 – Federal Laws and Regulations).

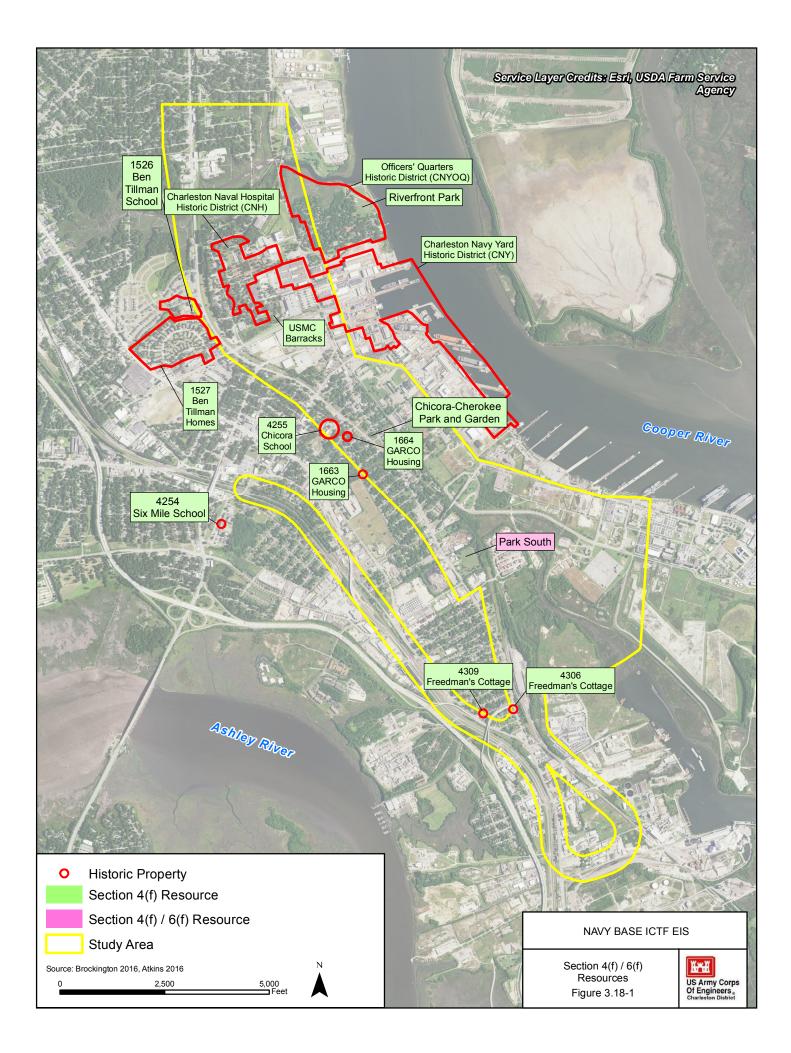
# 3.18.3 Existing Conditions

The Study Area for Section 4(f) resources and Section 6(f) resources is defined as the area that may be directly and indirectly affected by the Proposed Project and is identified in Figure 3.18-1. It is generally bounded to the north by Buist Avenue and continues southwest along Rugheimer Avenue to S. Rhett Avenue. The western boundary continues along Spruill Avenue before turning southwest along McMillian Avenue to Rivers Avenue. It runs southeast to Carner Avenue before reaching the southern boundary along Green Leaf Road. The east side of the Study Area runs northward along the railroad over to a path skirting Least Tern Lane and north paralleling Holland Street to Hobson Avenue and continues north along Noisette Boulevard to Buist Avenue. Properties within the Study Area that are categorized as Section 4(f) resources and Section 6(f) resources are described in this section.

There are two publicly owned parks located within the Study Area that are considered Section 4(f) properties (see Figure 3.18-1). Descriptions of the Chicora-Cherokee Community Park and the unnamed community park can be found in Section 3.16.5 (Community Resources). Two additional parks, Riverfront Park and North Park Village Park, are located outside of the Study Area; however, they provide additional recreational opportunities to residents.

There are 11 historic properties within the Study Area that are listed in or eligible for the NRHP, and as such, are classified as Section 4(f) properties. The Section 4(f) historic properties consist of three historic districts, one planned residential community, and eight individual buildings (one property contains two buildings). The three districts are the Charleston Navy Yard (CNY) Historic District, the Charleston Naval Hospital (CNH) Historic District, and the Charleston Navy Yard Officers' Quarters (CNYOQ) Historic District. The planned residential community is the Ben Tillman Homes. The historic buildings consist of three schools (Chicora Elementary School, The Ben Tillman Graded School, and Six Mile Elementary School), four residential structures (GARCO Residences [Resources 1663 and 1664], and the Charleston Freedman's Cottages [Resources 4306 and 4309]), and the former U.S. Marine Corps Barracks (see Figure 3-18.1). Detailed descriptions of these historic properties can be found in Section 3.10 (Cultural Resources).





This page intentionally left blank.

