



**ENVIRONMENTAL REVIEW
AUSTIN HOMES
1115 EAST NEW STREET
KNOXVILLE, TENNESSEE**

**D3G PROJECT NUMBER:
2017-0546**

**DRAFT REPORT ISSUE DATE:
JUNE 14, 2017**

**INSPECTION DATE:
MAY 31, 2017**

**PREPARED FOR:
KNOXVILLE'S COMMUNITY DEVELOPMENT CORPORATION
901 BROADWAY NORTHEAST
KNOXVILLE, TENNESSEE 37917-6699**

Scott Byerly, BPI-MFBA
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Signature

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Signature

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EXECUTIVE PROPERTY DESCRIPTION

Property: Austin Homes
1115 East New Street
Knoxville, Knox County, Tennessee

Site Description: The subject property consists of twenty-six (26) two-story apartment structures and one (1) two-story apartment structure that has been converted into a day care/after school care facility constructed in 1963. The subject property structures contain a total of 129 residential dwelling units and are situated on approximately 19.84 acres of land. The subject property contains a gross building area of approximately 120,966 square feet. Located within the apartment structures is a community room. Exterior property improvements include landscaped regions and asphalt parking areas. The subject property is serviced by electricity, natural gas, and municipally supplied water and sewer.



1.0 Compliance with Related Federal Laws and Authorities

The following table summarizes the results of Dominion Due Diligence Group's (D3G's) Environmental Review of the Austin Homes located at 1115 East New Street in Knoxville, Knox County, Tennessee (subject property). The U.S. Housing and Urban Development (HUD) Environmental Review Record Related Federal Laws and Authorities Worksheets are located in the corresponding appendix listed below.

| STATUTE/EXECUTIVE ORDER/REGULATION | APPENDIX REFERENCE | ACCEPTABLE | COMPLIANCE STEPS/MITIGATION |
|------------------------------------|--------------------|------------|-----------------------------|
| AIR QUALITY | A | √ | |
| AIRPORT HAZARDS | B | √ | |
| COASTAL BARRIER RESOURCES | C | √ | |
| COASTAL ZONE MANAGEMENT | D | √ | |
| ENDANGERED SPECIES | E | √ | |
| ENVIRONMENTAL JUSTICE | F | √ | |
| EXPLOSIVE AND FLAMMABLE HAZARDS | G | √ | |
| FARMLANDS PROTECTION | H | √ | |
| FLOOD INSURANCE | I | √ | |
| FLOODPLAIN MANAGEMENT | J | | (1) |
| HISTORIC PRESERVATION | K | | (2) |
| NOISE ABATEMENT AND CONTROL | L | √ | |
| SITE CONTAMINATION | M | √ | |
| SOLE SOURCE AQUIFERS | N | √ | |
| WETLANDS PROTECTION | O | √ | |
| WILD AND SCENIC RIVERS | P | √ | |

The following Related Federal Laws and Authorities were identified in connection with the subject property that require further compliance documentation:

- (1) According to FEMA Flood Insurance Rate Map (FIRM) #47093C-0281G, dated August 5, 2013, the majority of the subject property is located in Zone X, designated as an area outside the 100 and 500-year flood zones. However, an incidental portion along the northwestern boundary of the subject property may be located within the regulatory floodway associated with First Creek. Future development on the northwestern portion of the subject property may be restricted. In addition, according to the National Flood Insurance Program (NFIP) Community Status Book accessed at <https://www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-community-status-book>, the subject property is located in Community ID #475434, which is a participating community in the NFIP.

In accordance with the HUD MAP Guide, unless the property is exempt from compliance with 24 CFR Part 55, mortgage insurance shall not be approved for a property, other than a functionally dependent use, located in a floodway.

D3G recommends conducting an ALTA/ACSM Land Title Survey of the subject property depicting the regulatory floodway. Whenever HUD financial assistance is proposed for a project which has the potential to impact a floodplain, compliance with Executive Order 11988, "Floodplain Management," is required, as well as implementing procedures contained in 24 CFR Part 55.

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- (2) To assist HUD in making its historic preservation determination, D3G has submitted a determination letter to the appropriate State Historic Preservation Officer (SHPO). As of the date of this report, D3G has not received a response to this inquiry. Upon receipt of the agency response, D3G will forward this information as an addendum to this report. If no response is received or no material information is identified, our report will not be modified.

2.0 Additional Nuisances and Hazards

No "nuisances" or "hazards" were observed at the subject property or surrounding properties during the subject property inspection.

3.0 Reference Materials

- EPA Green Book – Current Nonattainment Counties for All Criteria Pollutants: <http://www3.epa.gov/airquality/greenbk/ancl.html>
- CBRA information: <http://www.fws.gov/CBRA/Maps/index.html>
- National Oceanic and Atmospheric Administration - Ocean and Coastal Resource Management accessed at <https://coast.noaa.gov/czm/mystate/>
- U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation (IPaC) System, accessed at <http://ecos.fws.gov/ipac/>
- U.S. Census Bureau TIGERweb Geography Division website accessed at <http://tigerweb.geo.census.gov/tigerweb/>
- Web Soil Survey accessed at <http://websoilsurvey.nrcs.usda.gov/app/>
- FEMA Flood Insurance Rate Map (FIRM) #47093C-0281G, dated August 5, 2013
- National Flood Insurance Program (NFIP) Community Status Book accessed at <https://www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-community-status-book>
- Federal Aviation Administration website accessed at <https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showCircleSearchAipportsForm>
- Environmental Data Resources Inc. (EDR) Report, dated May 9, 2017
- *A Smaller Intrusion*, by Anthony J. Buonicore, P.E. published in the May 2009 Issue of Pollution Engineering magazine
- U.S. EPA NEPAassist access at <http://nepassisttool.epa.gov/nepassist/entry.aspx>
Below provides basic descriptions for the data included in the mapping layers available through NEPAassist that were utilized in this Phase I ESA
 - The Airport Polygons layer includes airport boundaries and airport runways within the United States. Source: National Transportation Atlas Database
 - Demographic Information is obtained from the Census Bureau data from the full 2000 Census Summary File 3 (SF3) estimates, the 2010 Census Summary File 1 (SF1) 100% count data, and the annual American Community Survey (ACS) estimates using the 2008-2012 ACS 5-Year Summary database. Please note that all variables that show the percent rather than count were derived from count-based Census variables using the standard approach of count divided by total population of the population in question.

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- The National Register of Historic Places - National Register layer is downloaded from the NPS National Register of Historic Places KML files. Source: <http://focus.nps.gov/nrhp/Download?path=/natreg/docs/Download.html>
- The Sole Source Aquifer layer includes information on the sole source aquifers (SSA) designated by EPA under section 1424(e) of the Safe Drinking Water Act of 1974. Source: <http://catalog.data.gov/dataset>
- USFWS National Wetlands Inventory map accessed at <http://www.fws.gov/wetlands/Data/Mapper.html>
- The Wild and Scenic Rivers layer includes segments of the National Wild and Scenic River System for the United States. Source: <http://www.rivers.gov/mapping-gis.php>
- National Park Service National Rivers Inventory accessed at <http://www.nps.gov/ncrc/programs/rtca/nri/index.html>

4.0 Appendices

| | |
|-------------|---------------------------------|
| Appendix A: | Air Quality |
| Appendix B: | Airport Hazards |
| Appendix C: | Coastal Barrier Resources |
| Appendix D: | Coastal Zone Management |
| Appendix E: | Endangered Species Act |
| Appendix F: | Environmental Justice |
| Appendix G: | Explosive and Flammable Hazards |
| Appendix H: | Farmlands Protection |
| Appendix I: | Flood Insurance |
| Appendix J: | Floodplain Management |
| Appendix K: | Historic Preservation |
| Appendix L: | Noise Abatement and Control |
| Appendix M: | Site Contamination |
| Appendix N: | Sole Source Aquifers |
| Appendix O: | Wetlands Protection |
| Appendix P: | Wild and Scenic Rivers |



Appendix A

Air Quality



Air Quality (CEST and EA)

| General Requirements | Legislation | Regulation |
|---|---|---------------------------|
| The Clean Air Act is administered by the U.S. Environmental Protection Agency (EPA), which sets national standards on ambient pollutants. In addition, the Clean Air Act is administered by States, which must develop State Implementation Plans (SIPs) to regulate their state air quality. Projects funded by HUD must demonstrate that they conform to the appropriate SIP. | Clean Air Act (42 USC 7401 et seq.) as amended particularly Section 176(c) and (d) (42 USC 7506(c) and (d)) | 40 CFR Parts 6, 51 and 93 |
| Reference | | |
| https://www.hudexchange.info/environmental-review/air-quality | | |

Scope of Work

- 1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?**

Yes

→ Continue to Question 2.

No

Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

Air Quality Attainment Status of Project's County or Air Quality Management District

- 2. Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants?**

Follow the link below to determine compliance status of project county or air quality management district:

<http://www.epa.gov/oaqps001/greenbk/>

No, project's county or air quality management district is in attainment status for all criteria pollutants

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.

Yes, project's management district or county is in non-attainment or maintenance status for one or more criteria pollutants.

Describe the findings:

→ Continue to Question 3.

3. Determine the estimated emissions levels of your project for each of those criteria pollutants that are in non-attainment or maintenance status on your project area. Will your project exceed any of the *de minimis* or *threshold* emissions levels of non-attainment and maintenance level pollutants or exceed the screening levels established by the state or air quality management district?

No, the project will not exceed *de minimis* or threshold emissions levels or screening levels

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Explain how you determined that the project would not exceed *de minimis* or threshold emissions.

Yes, the project exceeds *de minimis* emissions levels or screening levels.

→ Continue to Question 4. Explain how you determined that the project would not exceed *de minimis* or threshold emissions in the Worksheet Summary.

4. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

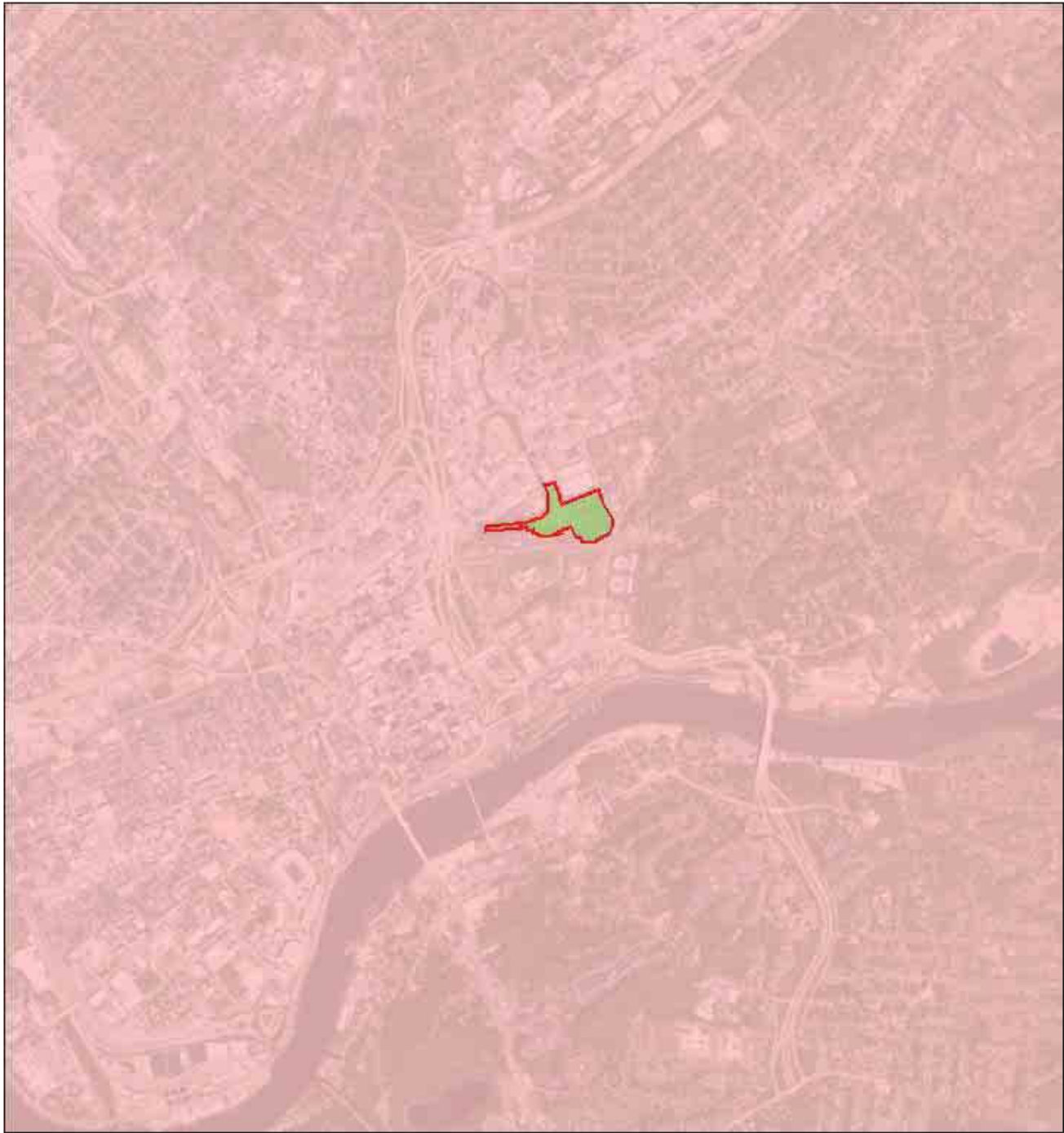
According to <http://www.epa.gov/airquality/greenbk/ancl.html>, the subject property is located within an 8-hour Ozone Maintenance area (2008 standard) and within a PM2.5 24-hour Non-attainment area (2006 standard) of the State of Tennessee. Based on the nature of the subject property (multi-family apartments), the subject property is in compliance with the air quality State Implementation Plan (SIP) and is not suspected to affect the air quality of the surrounding areas. Additionally, the project does not include new construction or conversion of land use facilitating the development of public, commercial, or industrial land use or of five or more dwelling units; therefore, no further action is required.

Are formal compliance steps or mitigation required?

Yes

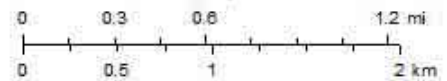
No

Nonattainment Areas



June 2, 2017

1:36,112



U.S. EPA Office of Air and Radiation (OAR) - Office of Air Quality Planning and Standards (OAQPS)
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
 EPA OEI

6/14/2017

NEPAssist: Print Map

PM 2.5 24hr NonAttainment





Green Book

You are here: [EPA Home](#) [Green Book](#) Current Nonattainment Counties for All Criteria Pollutants

Current Nonattainment Counties for All Criteria Pollutants

As of October 01, 2015

Listed by State, County then Pollutant The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.

[View Notes](#)

State, County, Pollutant, * Part County NAA, NAA Area Name - Classification Standard

TENNESSEE

Anderson Co

PM-2.5 (1997)

Knoxville, TN - (Moderate)

PM-2.5 (2006)

Knoxville-Sevierville-La Follette, TN - (Moderate)

Blount Co

PM-2.5 (1997)

Knoxville, TN - (Moderate)

PM-2.5 (2006)

Knoxville-Sevierville-La Follette, TN - (Moderate)

Hamilton Co

PM-2.5 (1997)

Chattanooga, TN-GA-AL (TN portion) - (Moderate)

Knox Co

PM-2.5 (1997)

Knoxville, TN - (Moderate)

PM-2.5 (2006)

Knoxville-Sevierville-La Follette, TN - (Moderate)

Loudon Co

PM-2.5 (1997)

Knoxville, TN - (Moderate)

PM-2.5 (2006)

Knoxville-Sevierville-La Follette, TN - (Moderate)

Roane Co

PM-2.5 (1997)

* Knoxville, TN - (Moderate)

PM-2.5 (2006)

* Knoxville-Sevierville-La Follette, TN - (Moderate)

Shelby Co

8-Hr Ozone (2008) Memphis, TN-MS-AR - (Marginal)

Sullivan Co

Lead (2008)

* Bristol, TN

Sulfur Dioxide (2010)

* Sullivan County, TN

Appendix B

Airport Hazards



Airport Hazards (CEST and EA)

| General policy | Legislation | Regulation |
|---|-------------|--------------------------|
| It is HUD's policy to apply standards to prevent incompatible development around civil airports and military airfields. | | 24 CFR Part 51 Subpart D |
| References | | |
| https://www.hudexchange.info/environmental-review/airport-hazards | | |

1. To ensure compatible land use development, you must determine your site's proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within the applicable distances to a military or civilian airport.*

Yes → *Continue to Question 2.*

2. Is your project located within a Runway Potential Zone/Clear Zone (RPZ/CZ) or Accident Potential Zone (APZ)?

Yes, project is in an APZ → *Continue to Question 3.*

Yes, project is an RPZ/CZ → *Project cannot proceed at this location.*

No, project is not within an APZ or RPZ/CZ

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within either zone.*

3. Is the project in conformance with DOD guidelines for APZ?

Yes, project is consistent with DOD guidelines without further action.

Explain how you determined that the project is consistent:

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

No, the project cannot be brought into conformance with DOD guidelines and has not been approved. → *Project cannot proceed at this location.*

Project is not consistent with DOD guidelines, but it has been approved by Certifying Officer or HUD Approving Official.

Explain approval process:

If mitigation measures have been or will be taken, explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting this determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

According to Federal Aviation Administration (FAA) information accessed at <https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showCircleSearchAirportsForm> and <http://nepassisttool.epa.gov/nepassist/entry.aspx>, there are no military airports within 15,000 feet of the subject property or civil airport runways within 2,500 feet of the subject property.

Are formal compliance steps or mitigation required?

- Yes
 No

NEPAassist: Print Map
2500 foot Airport Hazards



Transportation
Airport Polygons

15000 foot Airport Hazards



Appendix C

Coastal Barrier Resources



Coastal Barrier Resources (CEST and EA)

| General requirements | Legislation | Regulation |
|---|---|------------|
| HUD financial assistance may not be used for most activities in units of the Coastal Barrier Resources System (CBRS). See 16 USC 3504 for limitations on federal expenditures affecting the CBRS. | Coastal Barrier Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501) | |
| References | | |
| https://www.hudexchange.info/environmental-review/coastal-barrier-resources | | |

Projects located in the following states must complete this form.

| | | | | | |
|-------------|-----------|---------------|----------------|----------------|----------------|
| Alabama | Georgia | Massachusetts | New Jersey | Puerto Rico | Virgin Islands |
| Connecticut | Louisiana | Michigan | New York | Rhode Island | Virginia |
| Delaware | Maine | Minnesota | North Carolina | South Carolina | Wisconsin |
| Florida | Maryland | Mississippi | Ohio | Texas | |

1. Is the project located in a CBRS Unit?

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a CBRS Unit.*

Yes → *Continue to Question 2.*

Federal assistance for most activities may not be used at this location. You must either choose an alternate site or cancel the project. In very rare cases, federal monies can be spent within CBRS units for certain exempted activities (e.g., a nature trail), after consultation with the Fish and Wildlife Service (FWS) (see [16 USC 3505](#) for exceptions to limitations on expenditures).

2. Indicate your selected course of action.

After consultation with the FWS the project was given approval to continue
 → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map and documentation of a FWS approval.*

Project was not given approval
Project cannot proceed at this location.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

According to Coastal Barrier Resource Area information accessed at <http://www.fws.gov/CBRA/Maps/index.html>, the subject property is not located within a coastal barrier.

Are formal compliance steps or mitigation required?

Yes

No

Coastal Barrier Resources System

Ecological Services

[ES Home](#) [About Us](#) [Species](#) [Wildlife and Habitat Conservation](#) [Development and Energy](#) [FWS Regions](#) [Library](#) [Newsroom](#)

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Testimony](#)

[CBRA Prohibitions](#)

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Official CBRS Maps

The John H. Chafee Coastal Barrier Resources System (CBRS) is a collection of specific units of land and associated aquatic habitats that serve as barriers protecting the Atlantic, Gulf, and Great Lakes coasts. The CBRS currently includes 585 System units, which comprise nearly 1.3 million acres of land and associated aquatic habitat. There are also 272 "otherwise protected areas," a category of coastal barriers already held for conservation purposes that include an additional 1.9 million acres of land and associated aquatic habitat.

Step 1: Use the [CBRA Online Mapper](#) or the [State Locator Maps \(PDF format\)](#) below to find a unit name (s).

State Locator Maps

| | | | | | |
|-----------------------------|---------------------------|-------------------------------|--------------------------------------|--------------------------------|--------------------------------|
| Alabama | Georgia | Massachusetts | New Jersey | Ohio | Texas |
| Connecticut | Louisiana | Michigan | New York Great Lakes | Puerto Rico | Virgin Islands |
| Delaware | Maine | Minnesota | New York Long Island | Rhode Island | Virginia |
| Florida | Maryland | Mississippi | North Carolina | South Carolina | Wisconsin |

Step 2: Download Official CBRS Maps (PDF format)

To download a map, click on a file name to save it, then open the file with a PDF viewer or editor.



[Click here to access Official CBRS Maps](#)

Last updated: June 29, 2015

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Appendix D

Coastal Zone Management



Coastal Zone Management Act (CEST and EA)

| General requirements | Legislation | Regulation |
|--|--|-----------------|
| Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans. | Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d)) | 15 CFR Part 930 |
| References | | |
| https://www.onecpd.info/environmental-review/coastal-zone-management | | |

Projects located in the following states must complete this form.

| | | | | | |
|----------------|----------|---------------|--------------------------|----------------|----------------|
| Alabama | Florida | Louisiana | Mississippi | Ohio | Texas |
| Alaska | Georgia | Maine | New Hampshire | Oregon | Virgin Islands |
| American Samoa | Guam | Maryland | New Jersey | Pennsylvania | Virginia |
| California | Hawaii | Massachusetts | New York | Puerto Rico | Washington |
| Connecticut | Illinois | Michigan | North Carolina | Rhode Island | Wisconsin |
| Delaware | Indiana | Minnesota | Northern Mariana Islands | South Carolina | |

1. Is the project located in, or does it affect, a Coastal Zone as defined in your state Coastal Management Plan?

Yes → Continue to Question 2.

No → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing that the site is not within a Coastal Zone.

2. Does this project include activities that are subject to state review?

Yes → Continue to Question 3.

No → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.

3. Has this project been determined to be consistent with the State Coastal Management Program?

Yes, with mitigation. → Continue to Question 4.

Yes, without mitigation. → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination.

No, project must be canceled.

Project cannot proceed at this location.

4. Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the State Coastal Management Program letter of consistency) and any other documentation used to make your determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

According to the National Oceanic and Atmospheric Administration (NOAA) Office for Coastal Management (OCM) accessed at <https://coast.noaa.gov/czm/mystate/>, the entire State of Tennessee is not located within a coastal zone. Therefore, the proposed undertaking is consistent with the State Coastal Management Program.

Are formal compliance steps or mitigation required?

Yes

No



Coastal Zone Management Programs

| | | |
|--------------------------------|---------------------------------|-------------------------------------|
| Alabama [#alabama] | Alaska (*) [#alaska] | American Samoa [#samoa] |
| California [#california] | Connecticut [#connecticut] | Delaware [#delaware] |
| Florida [#florida] | Georgia [#georgia] | Guam [#guam] |
| Hawaii [#hawaii] | Illinois [#illinois] | Indiana [#indiana] |
| Louisiana [#louisiana] | Maine [#maine] | Maryland [#maryland] |
| Massachusetts [#massachusetts] | Michigan [#michigan] | Minnesota [#minnesota] |
| Mississippi [#mississippi] | New Hampshire [#newhampshire] | New Jersey [#newjersey] |
| New York [#newyork] | North Carolina [#northcarolina] | Northern Mariana Islands [#mariana] |
| Ohio [#ohio] | Oregon [#oregon] | Pennsylvania [#pennsylvania] |
| Puerto Rico [#puertorico] | Rhode Island [#rhodeisland] | South Carolina [#southcarolina] |
| Texas [#texas] | Virgin Islands [#virginislands] | Virginia [#virginia] |
| Washington [#washington] | Wisconsin [#wisconsin] | |

** All 35 coastal and Great Lakes states and territories (with the exception of Alaska) participate in the National Coastal Zone Management Program.*

ALABAMA

The Alabama Coastal Management Program [<http://www.adem.state.al.us/programs/coastal/default.cnt>] , approved by NOAA in 1979, is administered by two state agencies:

- The Alabama Department of Conservation and Natural Resources [<http://www.outdooralabama.com/alabama-coastal-area-management-program>] is responsible for planning, fiscal management, public education, and research management; and the
- Alabama Department of Environmental Management [<http://adem.alabama.gov/programs/coastal/default.cnt>] carries out permitting, regulatory, and enforcement functions.

The primary authority for the coastal management program is the Alabama Coastal Area Act of 1976 (Act 534). The Alabama coastal zone [</czm/media/StateCZBoundaries.pdf>] extends inland to the continuous 10-foot contour in Mobile and Baldwin Counties.

ALASKA

Alaska withdrew from the voluntary National Coastal Zone Management Program [</czm/about/>] on July 1, 2011. Contact NOAA's Office of Ocean and Coastal Resource Management for additional information.

AMERICAN SAMOA

The American Samoa Coastal Management Program [<http://www.doc.as/resource-management/ascmp/>] , approved by NOAA in 1980, is led by the American Samoa Department of Commerce. The coastal program has developed a unique approach that incorporates both western and traditional systems of management. The American Samoa Coastal Management Act provides the primary authority for the program. American Samoa's coastal zone boundary [</czm/media/StateCZBoundaries.pdf>] consists of seven islands, totaling roughly 77 square miles, with a coastline of 126 miles.

CALIFORNIA

The California Coastal Management Program, approved by NOAA in 1978, is administered by three state agencies:

Appendix E

Endangered Species Act



Endangered Species Act (CEST and EA)

| General requirements | ESA Legislation | Regulations |
|--|--|-----------------|
| Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure that actions that they authorize, fund, or carry out shall not jeopardize the continued existence of federally listed plants and animals or result in the adverse modification or destruction of designated critical habitat. Where their actions may affect resources protected by the ESA, agencies must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service (“FWS” and “NMFS” or “the Services”). | The Endangered Species Act of 1973 (16 U.S.C. 1531 <i>et seq.</i>); particularly section 7 (16 USC 1536). | 50 CFR Part 402 |
| References | | |
| https://www.hudexchange.info/environmental-review/endangered-species | | |

1. Does the project involve any activities that have the potential to affect species or habitats?

No, the project will have No Effect due to the nature of the activities involved in the project.
 → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office.

Explain your determination:

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

Yes, the activities involved in the project have the potential to affect species and/or habitats. → *Continue to Question 2.*

2. Are federally listed species or designated critical habitats present in the action area?

Obtain a list of protected species from the Services. This information is available on the [FWS Website](#) or you may contact your [local FWS](#) and/or [NMFS](#) offices directly.

No, the project will have No Effect due to the absence of federally listed species and designated critical habitat.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation*

may include letters from the Services, species lists from the Services' websites, surveys or other documents and analysis showing that there are no species in the action area.

Yes, there are federally listed species or designated critical habitats present in the action area. → *Continue to Question 3.*

3. What effects, if any, will your project have on federally listed species or designated critical habitat?

No Effect: Based on the specifics of both the project and any federally listed species in the action area, you have determined that the project will have absolutely no effect on listed species or critical habitat.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination. Documentation should include a species list and explanation of your conclusion, and may require maps, photographs, and surveys as appropriate.*

May Affect, Not Likely to Adversely Affect: Any effects that the project may have on federally listed species or critical habitats would be beneficial, discountable, or insignificant.

→ *Continue to Question 4, Informal Consultation.*

Likely to Adversely Affect: The project may have negative effects on one or more listed species or critical habitat.

→ *Continue to Question 5, Formal Consultation.*

4. Informal Consultation is required

Section 7 of ESA (16 USC. 1536) mandates consultation to resolve potential impacts to endangered and threatened species and critical habitats. If a HUD-assisted project may affect any federally listed endangered or threatened species or critical habitat, then compliance is required with Section 7. See 50 CFR Part 402 Subpart B Consultation Procedures.

Did the Service(s) concur with the finding that the project is Not Likely to Adversely Affect?

Yes, the Service(s) concurred with the finding.

→ *Based on the response, the review is in compliance with this section. Continue to Question 6 and provide the following:*

- (1) A biological evaluation or equivalent document*
- (2) Concurrence(s) from FWS and/or NMFS*
- (3) Any other documentation of informal consultation*

Exception: If finding was made based on procedures provided by a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office, provide whatever documentation is mandated by that agreement.

No, the Service(s) did not concur with the finding. → *Continue to Question 5.*

5. Formal consultation is required

Section 7 of ESA (16 USC 1536) mandates consultation to resolve potential impacts to federally listed endangered and threatened species and critical habitats. If a HUD assisted project may affect any endangered or threatened species or critical habitat, then compliance is required with Section 7. See 50 CFR Part 402 Subpart B Consultation Procedures.

→ Once consultation is complete, the review is in compliance with this section. Continue to Question 6 and provide the following:

- (1) A biological assessment, evaluation, or equivalent document
- (2) Biological opinion(s) issued by FWS and/or NMFS
- (3) Any other documentation of formal consultation

6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the proposed measures that will be implemented to mitigate for the impact or effect, including the timeline for implementation.

Mitigation as follows will be implemented:

No mitigation is necessary.

Explain why mitigation will not be made here:

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

An Information, Planning, and Conservation (IPaC) System Trust Resource Report was generated for the subject property by utilizing the U.S. Fish and Wildlife Service (USFWS) IPaC System, accessed at <http://ecos.fws.gov/ipac/>. According to the IPaC Trust Resource List generated for the subject property, eight (8) endangered or threatened species have the potential to be located within the subject property boundaries. However, the subject property is currently developed and there are no ground disturbing activities proposed, therefore the project will have No Effect on the listed species. In addition, the proposed project will have no effect on federally designated critical habitat.

Are formal compliance steps or mitigation required?

- Yes
- No

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Knox County, Tennessee



Local office

Tennessee Ecological Services Field Office

☎ (931) 528-6481

📅 (931) 528-7075

446 Neal Street
Cookeville, TN 38501-4027

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ are managed by the [Endangered Species Program](#) of the U.S. Fish and Wildlife Service.

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.

The following species are potentially affected by activities in this location:

Clams

| NAME | STATUS |
|--|------------|
| Dromedary Pearlymussel <i>Dromus dromas</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6377 | Endangered |
| Finerayed Pigtoe <i>Fusconaia cuneolus</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3038 | Endangered |
| Orangefoot Pimpleback (pearlymussel) <i>Plethobasus cooperianus</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1132 | Endangered |
| Tubercled Blossom (pearlymussel) <i>Epioblasma torulosa torulosa</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4126 | Endangered |

Mammals

| NAME | STATUS |
|---|------------|
| Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6329 | Endangered |
| Indiana Bat <i>Myotis sodalis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5949 | Endangered |
| Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045 | Threatened |

Snails

| NAME | STATUS |
|--|------------|
| Anthony's Riversnail <i>Athearnia anthonyi</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4827 | EXPN |
| Anthony's Riversnail <i>Athearnia anthonyi</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4827 | Endangered |

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service³. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Conservation measures for birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data <http://www.birdscanada.org/birdmon/default/datasummaries.jsp>

The migratory birds species listed below are species of particular conservation concern (e.g. [Birds of Conservation Concern](#)) that may be potentially affected by activities in this location. It is not a list of every bird species you may find in this location, nor a guarantee that all of the bird species on this list will be found on or near this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the [AKN Histogram Tools](#) and [Other Bird Data Resources](#). To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

| NAME | SEASON(S) |
|---|------------|
| Bald Eagle <i>Haliaeetus leucocephalus</i> https://ecos.fws.gov/ecp/species/1626 | Year-round |
| Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> https://ecos.fws.gov/ecp/species/9399 | Breeding |
| Black-capped Chickadee <i>Parus atricapillus</i> | Year-round |
| Blue-winged Warbler <i>Vermivora pinus</i> | Breeding |
| Canada Warbler <i>Wilsonia canadensis</i> | Breeding |
| Fox Sparrow <i>Passerella iliaca</i> | Wintering |
| Kentucky Warbler <i>Oporornis formosus</i> | Breeding |
| Loggerhead Shrike <i>Lanius ludovicianus</i> https://ecos.fws.gov/ecp/species/8833 | Year-round |
| Louisiana Waterthrush <i>Parkesia motacilla</i> | Breeding |
| Northern Saw-whet Owl <i>Aegolius acadicus</i> | Year-round |
| Peregrine Falcon <i>Falco peregrinus</i> https://ecos.fws.gov/ecp/species/8831 | Breeding |
| Prairie Warbler <i>Dendroica discolor</i> | Breeding |
| Red Crossbill <i>Loxia curvirostra</i> https://ecos.fws.gov/ecp/species/8743 | Year-round |
| Rusty Blackbird <i>Euphagus carolinus</i> | Wintering |
| Short-eared Owl <i>Asio flammeus</i> https://ecos.fws.gov/ecp/species/9295 | Wintering |

| | |
|--|----------|
| Willow Flycatcher <i>Empidonax traillii</i> https://ecos.fws.gov/ecp/species/3482 | Breeding |
| Wood Thrush <i>Hylocichla mustelina</i> | Breeding |
| Worm Eating Warbler <i>Helmitheros vermivorum</i> | Breeding |

What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?

Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAA/NCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAA/NCCOS models: the models were developed as part of the NOAA/NCCOS project: [Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#). The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the [Northeast Ocean Data Portal](#), which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

Landbirds:

The [Avian Knowledge Network \(AKN\)](#) provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest, survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the [Migratory Bird Programs AKN Histogram Tools](#) webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

Atlantic Seabirds:

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA/NCCOS [Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project](#) webpage.

Facilities

Wildlife refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix F

Environmental Justice



Environmental Justice (CEST and EA)

| General requirements | Legislation | Regulation |
|--|-----------------------|------------|
| Determine if the project creates adverse environmental impacts upon a low-income or minority community. If it does, engage the community in meaningful participation about mitigating the impacts or move the project. | Executive Order 12898 | |
| References | | |
| https://www.hudexchange.info/environmental-review/environmental-justice | | |

HUD strongly encourages starting the Environmental Justice analysis only after all other laws and authorities, including Environmental Assessment factors if necessary, have been completed.

1. Were any adverse environmental impacts identified in any other compliance review portion of this project's total environmental review?

Yes → *Continue to Question 2.*

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

2. Were these adverse environmental impacts disproportionately high for low-income and/or minority communities?

Yes

Explain:

→ *Continue to Question 3. Provide any supporting documentation.*

No

Explain:

→ *Continue to the Worksheet Summary and provide any supporting documentation.*

3. All adverse impacts should be mitigated. Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

Mitigation as follows will be implemented:

→ Continue to Question 4.

No mitigation is necessary.

Explain why mitigation will not be made here:

→ Continue to Question 4.

4. Describe how the affected low-income or minority community was engaged or meaningfully involved in the decision on what mitigation actions, if any, will be taken.

→ Continue to the Worksheet Summary and provide any supporting documentation.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

According to the NEPAAssist website accessed at <https://nepassisttool.epa.gov/nepassist/nepamap.aspx>, the subject property is located in a low-income or predominately minority area within the City of Knoxville, as 44% of the population in the area surrounding the subject property is above the poverty level, and the percent minority for the subject property and its surrounding area is 67%. However, D3G does not believe that the project site or neighborhood suffer from disproportionately adverse environmental effects on minority and low-income populations relative to the community-at-large as there are no adverse environmental impacts identified on the subject property nor immediately surrounding areas.

Are formal compliance steps or mitigation required?

Yes

No



Location: User-specified polygonal location
 Ring (buffer): 0.5-mile radius
 Description:

| Summary of ACS Estimates | | 2010 - 2014 |
|--------------------------------------|--|-------------|
| Population | | 4,016 |
| Population Density (per sq. mile) | | 3,099 |
| Minority Population | | 2,680 |
| % Minority | | 67% |
| Households | | 2,234 |
| Housing Units | | 2,338 |
| Housing Units Built Before 1950 | | 359 |
| Per Capita Income | | 23,205 |
| Land Area (sq. miles) (Source: SF1) | | 1.30 |
| % Land Area | | 100% |
| Water Area (sq. miles) (Source: SF1) | | 0.00 |
| % Water Area | | 0% |

| | 2010 - 2014 ACS Estimates | Percent | MOE (±) |
|--|------------------------------|---------|---------|
| Population by Race | | | |
| Total | 4,016 | 100% | 439 |
| Population Reporting One Race | 3,886 | 97% | 981 |
| White | 1,399 | 35% | 269 |
| Black | 2,445 | 61% | 428 |
| American Indian | 0 | 0% | 142 |
| Asian | 30 | 1% | 54 |
| Pacific Islander | 9 | 0% | 14 |
| Some Other Race | 3 | 0% | 74 |
| Population Reporting Two or More Races | 129 | 3% | 285 |
| Total Hispanic Population | 159 | 4% | 390 |
| Total Non-Hispanic Population | 3,857 | | |
| White Alone | 1,335 | 33% | 233 |
| Black Alone | 2,413 | 60% | 428 |
| American Indian Alone | 0 | 0% | 142 |
| Non-Hispanic Asian Alone | 30 | 1% | 54 |
| Pacific Islander Alone | 9 | 0% | 14 |
| Other Race Alone | 0 | 0% | 12 |
| Two or More Races Alone | 69 | 2% | 74 |
| Population by Sex | | | |
| Male | 1,944 | 48% | 259 |
| Female | 2,071 | 52% | 284 |
| Population by Age | | | |
| Age 0-4 | 494 | 12% | 151 |
| Age 0-17 | 980 | 24% | 203 |
| Age 18+ | 3,036 | 76% | 279 |
| Age 65+ | 330 | 8% | 97 |

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available.
Source: U.S. Census Bureau, American Community Survey (ACS) 2010 - 2014.



Location: User-specified polygonal location

Ring (buffer): 0.5-mile radius

Description:

| | 2010 - 2014 ACS Estimates | Percent | MOE (±) |
|--|------------------------------|---------|---------|
| Population 25+ by Educational Attainment | | | |
| Total | 2,188 | 100% | 250 |
| Less than 9th Grade | 172 | 8% | 73 |
| 9th - 12th Grade, No Diploma | 224 | 10% | 109 |
| High School Graduate | 743 | 34% | 156 |
| Some College, No Degree | 531 | 24% | 129 |
| Associate Degree | 172 | 8% | 74 |
| Bachelor's Degree or more | 518 | 24% | 167 |
| Population Age 5+ Years by Ability to Speak English | | | |
| Total | 3,522 | 100% | 411 |
| Speak only English | 3,388 | 96% | 304 |
| Non-English at Home ¹⁺²⁺³⁺⁴ | 134 | 4% | 187 |
| ¹ Speak English "very well" | 48 | 1% | 76 |
| ² Speak English "well" | 49 | 1% | 87 |
| ³ Speak English "not well" | 28 | 1% | 60 |
| ⁴ Speak English "not at all" | 9 | 0% | 40 |
| ³⁺⁴ Speak English "less than well" | 37 | 1% | 60 |
| ²⁺³⁺⁴ Speak English "less than very well" | 86 | 2% | 105 |
| Linguistically Isolated Households* | | | |
| Total | 12 | 100% | 50 |
| Speak Spanish | 0 | 0% | 12 |
| Speak Other Indo-European Languages | 0 | 0% | 12 |
| Speak Asian-Pacific Island Languages | 5 | 41% | 17 |
| Speak Other Languages | 7 | 59% | 49 |
| Households by Household Income | | | |
| Household Income Base | 2,234 | 100% | 184 |
| < \$15,000 | 1,242 | 56% | 177 |
| \$15,000 - \$25,000 | 287 | 13% | 93 |
| \$25,000 - \$50,000 | 394 | 18% | 143 |
| \$50,000 - \$75,000 | 114 | 5% | 82 |
| \$75,000 + | 197 | 9% | 103 |
| Occupied Housing Units by Tenure | | | |
| Total | 2,234 | 100% | 184 |
| Owner Occupied | 299 | 13% | 89 |
| Renter Occupied | 1,936 | 87% | 183 |
| Employed Population Age 16+ Years | | | |
| Total | 3,130 | 100% | 322 |
| In Labor Force | 1,448 | 46% | 272 |
| Civilian Unemployed in Labor Force | 237 | 8% | 81 |
| Not In Labor Force | 1,682 | 54% | 217 |

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2010 - 2014.

*Households in which no one 14 and over speaks English "very well" or speaks English only.



Location: User-specified polygonal location

Ring (buffer): 0.5-mile radius

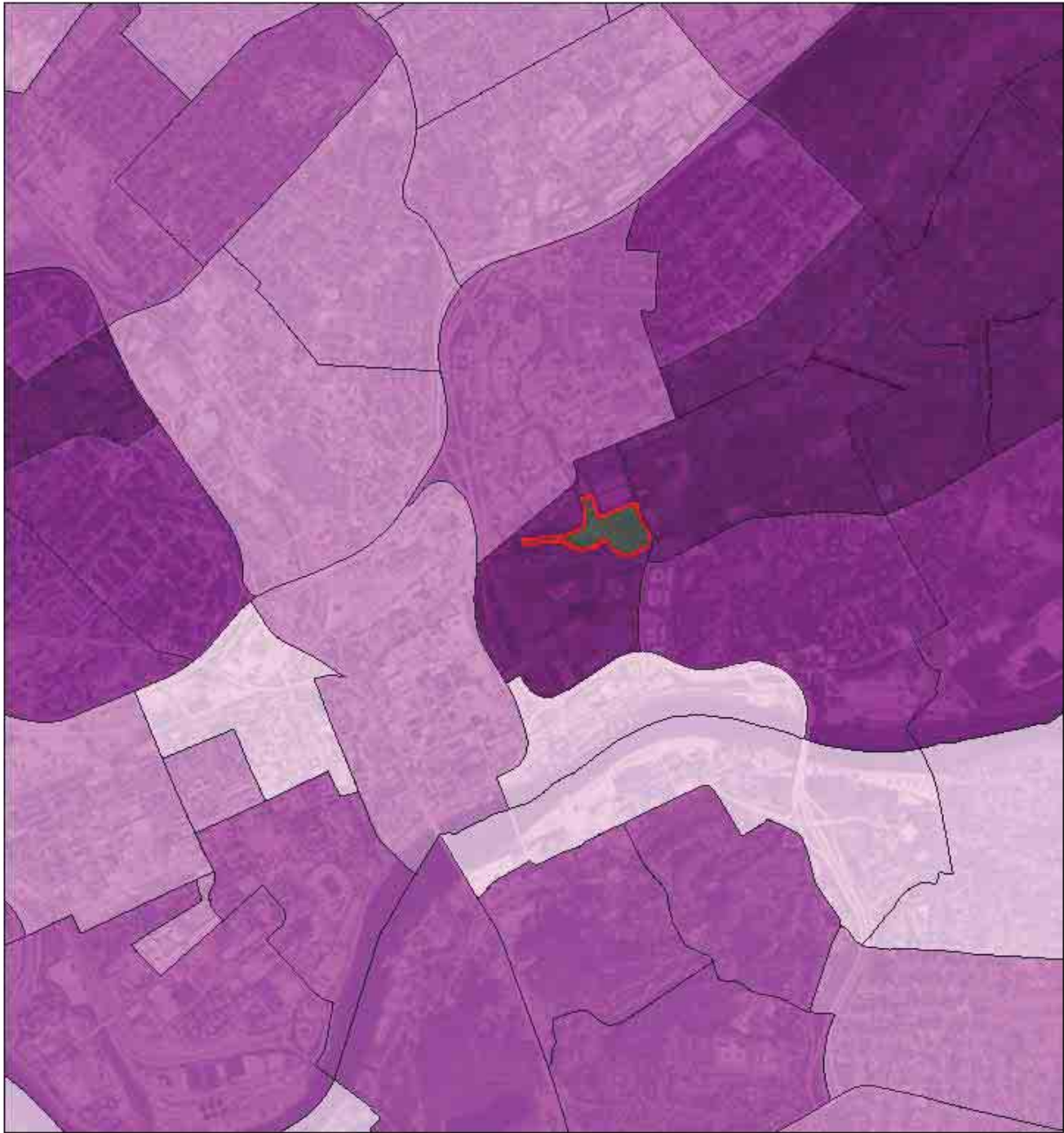
Description:

| | 2010 - 2014 ACS Estimates | Percent | MOE (±) |
|---|------------------------------|---------|---------|
| Population by Language Spoken at Home* | | | |
| Total (persons age 5 and above) | 3,522 | 100% | 411 |
| English | N/A | N/A | N/A |
| Spanish | N/A | N/A | N/A |
| French | N/A | N/A | N/A |
| French Creole | N/A | N/A | N/A |
| Italian | N/A | N/A | N/A |
| Portuguese | N/A | N/A | N/A |
| German | N/A | N/A | N/A |
| Yiddish | N/A | N/A | N/A |
| Other West Germanic | N/A | N/A | N/A |
| Scandinavian | N/A | N/A | N/A |
| Greek | N/A | N/A | N/A |
| Russian | N/A | N/A | N/A |
| Polish | N/A | N/A | N/A |
| Serbo-Croatian | N/A | N/A | N/A |
| Other Slavic | N/A | N/A | N/A |
| Armenian | N/A | N/A | N/A |
| Persian | N/A | N/A | N/A |
| Gujarathi | N/A | N/A | N/A |
| Hindi | N/A | N/A | N/A |
| Urdu | N/A | N/A | N/A |
| Other Indic | N/A | N/A | N/A |
| Other Indo-European | N/A | N/A | N/A |
| Chinese | N/A | N/A | N/A |
| Japanese | N/A | N/A | N/A |
| Korean | N/A | N/A | N/A |
| Mon-Khmer, Cambodian | N/A | N/A | N/A |
| Hmong | N/A | N/A | N/A |
| Thai | N/A | N/A | N/A |
| Laotian | N/A | N/A | N/A |
| Vietnamese | N/A | N/A | N/A |
| Other Asian | N/A | N/A | N/A |
| Tagalog | N/A | N/A | N/A |
| Other Pacific Island | N/A | N/A | N/A |
| Navajo | N/A | N/A | N/A |
| Other Native American | N/A | N/A | N/A |
| Hungarian | N/A | N/A | N/A |
| Arabic | N/A | N/A | N/A |
| Hebrew | N/A | N/A | N/A |
| African | N/A | N/A | N/A |
| Other and non-specified | N/A | N/A | N/A |
| Total Non-English | N/A | N/A | N/A |

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race. N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2010 - 2014.

*Population by Language Spoken at Home is available at the census tract summary level and up.

Percent Minority Population




June 2, 2017


 Project 2

by Block Group

 0.00 - 7.82

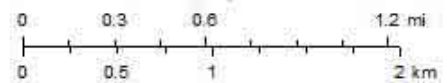
 7.82 - 20.69

 20.69 - 40.68

 40.68 - 73.80

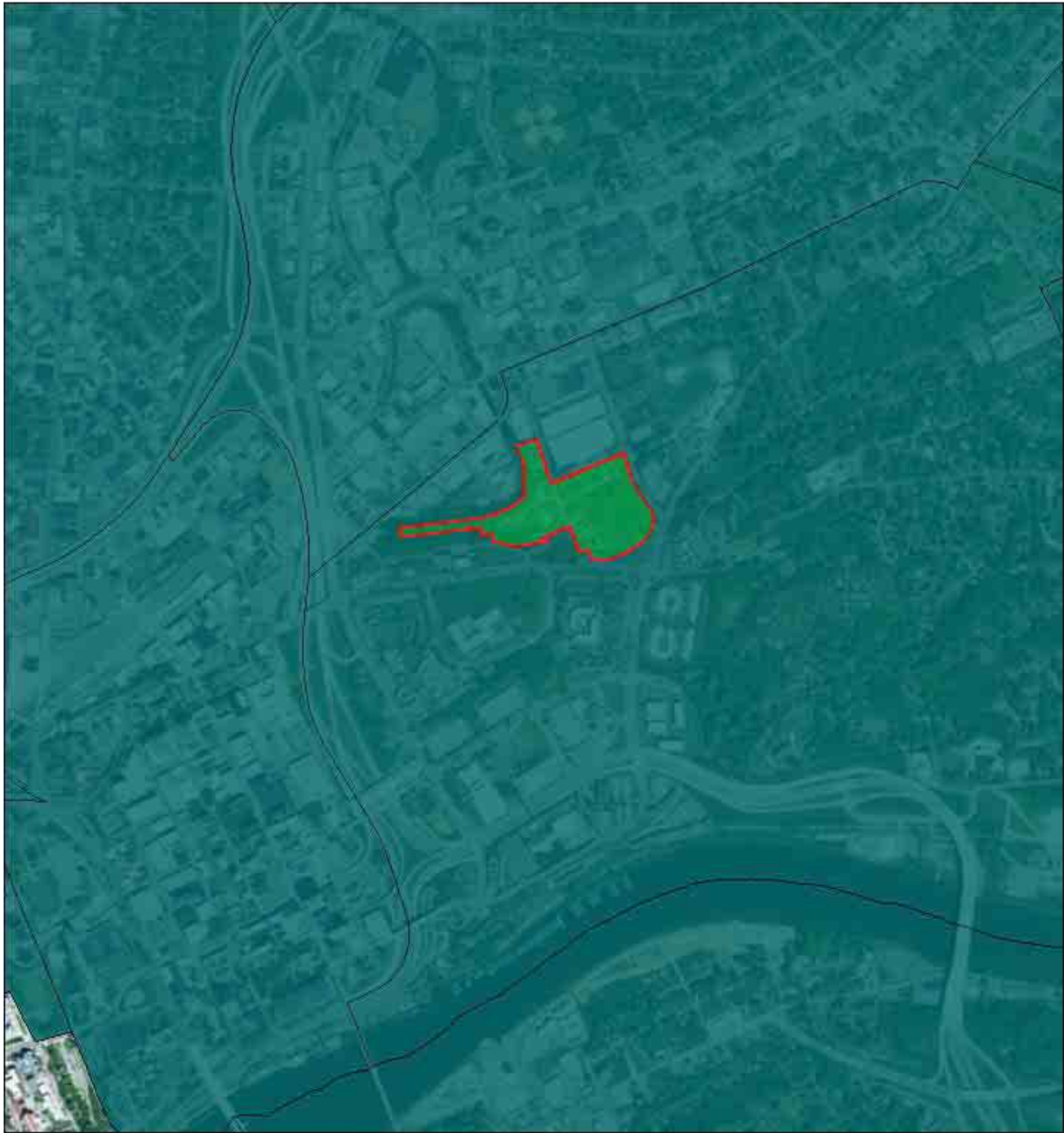
 73.80 - 100.00

1:36,112



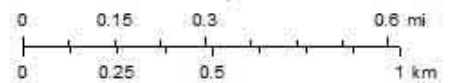
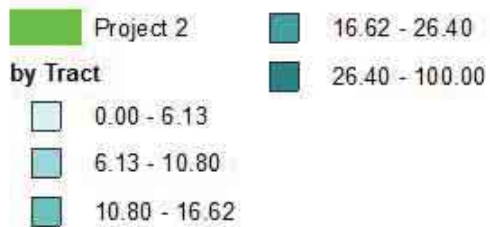
EPA
U.S. EPA Office of Air and Radiation (OAR) - Office of Air Quality Planning
and Standards (OAQPS)
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Percent Population Below Poverty Level



June 2, 2017

1:18,056



EPA
U.S. EPA Office of Air and Radiation (OAR) - Office of Air Quality Planning
and Standards (OAQPS)
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Appendix G

Explosive and Flammable Hazards



Explosive and Flammable Hazards (CEST and EA)

| General requirements | Legislation | Regulation |
|---|-------------|--------------------------|
| HUD-assisted projects must meet Acceptable Separation Distance (ASD) requirements to protect them from explosive and flammable hazards. | N/A | 24 CFR Part 51 Subpart C |
| Reference | | |
| https://www.hudexchange.info/environmental-review/explosive-and-flammable-facilities | | |

1. Does the proposed HUD-assisted project include a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?

No

→ Continue to Question 2.

Yes

Explain:

→ Continue to Question 5.

2. Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?

No

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.

Yes

→ Continue to Question 3.

3. Within 1 mile of the project site, are there any current *or planned* stationary aboveground storage containers:

- Of more than 100 gallon capacity, containing common liquid industrial fuels OR
- Of any capacity, containing hazardous liquids or gases that are not common liquid industrial fuels?

No

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide all documents used to make your determination.

Yes

→ Continue to Question 4.

4. Is the Separation Distance from the project acceptable based on standards in the Regulation?

Please visit HUD's website for information on calculating Acceptable Separation Distance.

Yes

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the "assessed tank."

No

→ Provide map(s) showing the location of the project site relative to any tanks and your separation distance calculations. If the map identifies more than one tank, please identify the tank you have chosen as the "assessed tank." Continue to Question 6.

5. Is the hazardous facility located at an acceptable separation distance from residences and any other facility or area where people may congregate or be present?

Please visit HUD's website for information on calculating Acceptable Separation Distance.

Yes

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations.

No

→ Provide map(s) showing the location of the project site relative to residences and any other facility or area where people congregate or are present and your separation distance calculations. Continue to Question 6.

6. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to make the Separation Distance acceptable, including the timeline for implementation. If negative effects cannot be mitigated, cancel the project at this location.

Note that only licensed professional engineers should design and implement blast barriers. If a barrier will be used or the project will be modified to compensate for an

unacceptable separation distance, provide approval from a licensed professional engineer.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

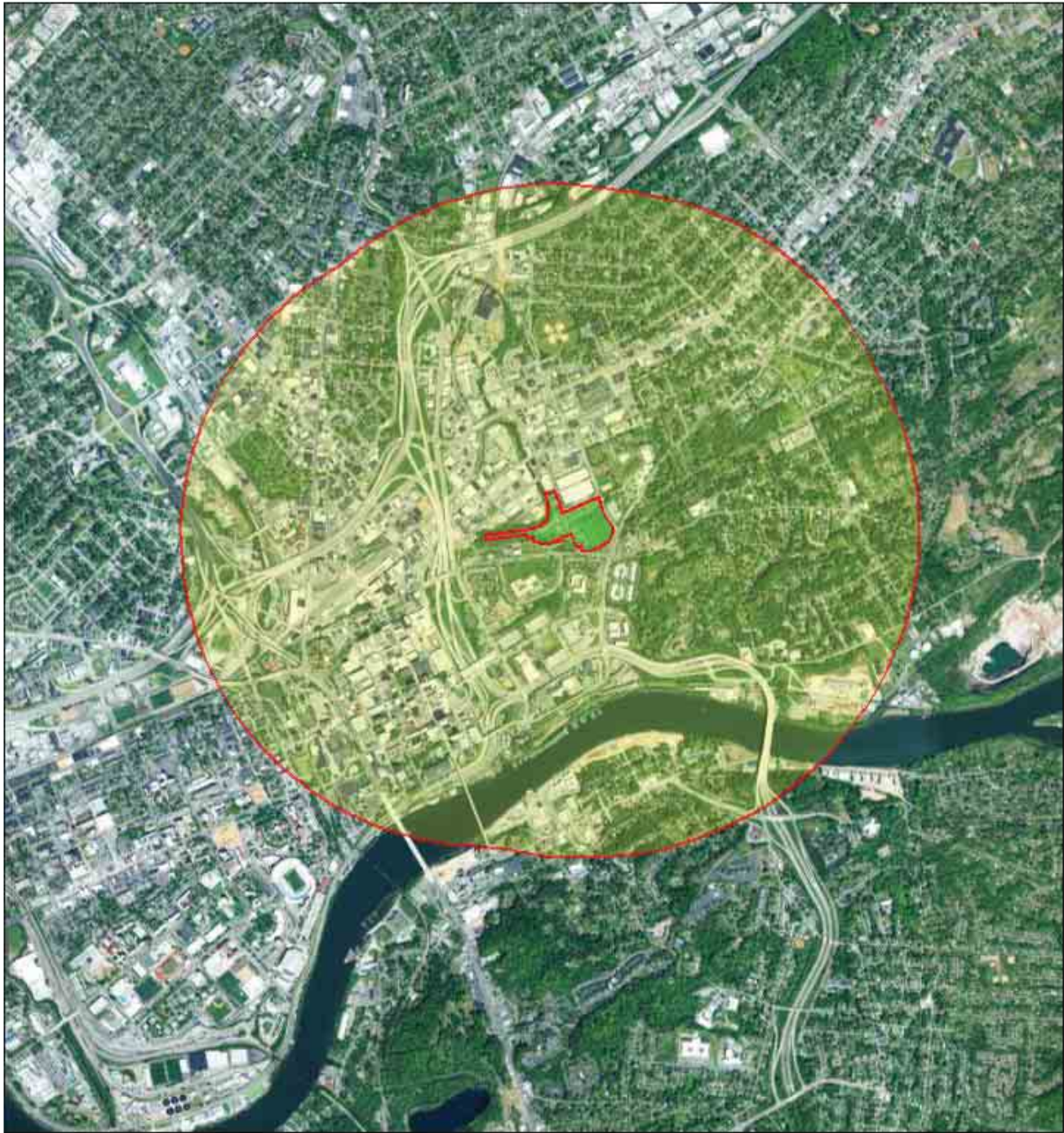
- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

According to a review of NEPAassist accessed at <https://nepassisttool.epa.gov/nepassist/nepamap.aspx> and visual observations during the site visit conducted by D3G on May 31, 2017, there are no facilities handling explosive or fire-prone materials such as liquid propane, gasoline, or other storage tanks as defined by 24 CFR 51.201 located on-site, adjacent to, or visible from the subject property. In addition, according to David Bokenkamp, Office Assistant with the City of Knoxville Fire Department, there are no thermal/explosive hazards (ASTs) on the subject property, or in the vicinity, that will adversely affect the subject property. A copy of the correspondence is located in Appendix G of this report.

Are formal compliance steps or mitigation required?

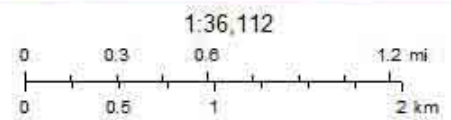
- Yes
- No

1 Mile Radius - ASTs



June 2, 2017

-  Project 2
-  Buffer Area



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



CITY OF KNOXVILLE

Knoxville Fire Department
Fire Prevention Bureau
Assistant Chief Danny Beeler
Fire Marshal

March 29, 2017

Chad Matthews
Dominon Due Diligence Group
201 Wylderose Drive
Midlothian, VA 23113

Via Email

RE: Site Assessment Request

Dear Mr. Matthews,

Per your request on 3/27/17, a site assessment was completed on 3/29/17 for the properties owned by KCDC and named The Verandas, Austin Homes, a duplex at 238 Douglas Avenue, and Passport Residences. A search of our records resulted in the following information:

Aboveground Tank Permits: No permits
Underground Tank Permits: No permits
Hazardous Materials Response: No responses
Fire Response: Yes, 7 fire reports attached
Outstanding Fire Code Violations: No violations

Should you have any questions or concerns about the results of this site assessment, please contact me at 865.215.2283.

Sincerely,

David Bokenkamp
Office Assistant II

Appendix H

Farmlands Protection



Farmlands Protection (CEST and EA)

| General requirements | Legislation | Regulation |
|---|--|--------------------------------|
| The Farmland Protection Policy Act (FPPA) discourages federal activities that would convert farmland to nonagricultural purposes. | Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.) | 7 CFR Part 658 |
| Reference | | |
| https://www.hudexchange.info/environmental-review/farmlands-protection | | |

1. Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?

- Yes → *Continue to Question 2.*
 No

Explain how you determined that agricultural land would not be converted:

The subject property is currently utilized as a multi-family apartment complex. According to the U.S. Census Bureau Urbanized Area Map, accessed at <http://tigerweb.geo.census.gov/tigerweb/>, the subject property is located within an urbanized area; therefore, the subject property is already in an area committed to urban development and is exempt from compliance with the Farmland Protection Policy Act.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documentation supporting your determination.*

2. Does “important farmland,” including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site?

You may use the links below to determine important farmland occurs on the project site:

- Utilize USDA Natural Resources Conservation Service’s (NRCS) Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- Check with your city or county’s planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non-agricultural does not exempt it from FPPA requirements)
- Contact NRCS at the local USDA service center <http://offices.sc.egov.usda.gov/locator/app?agency=nrccs> or your NRCS state soil scientist http://soils.usda.gov/contact/state_offices/ for assistance

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide any documents used to make your determination.*

Yes → *Continue to Question 3.*

3. Consider alternatives to completing the project on important farmland and means of avoiding impacts to important farmland.

- Complete form **AD-1006**, "Farmland Conversion Impact Rating" http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045394.pdf and contact the state soil scientist before sending it to the local NRCS District Conservationist.
(NOTE: for corridor type projects, use instead form **NRCS-CPA-106**, "Farmland Conversion Impact Rating for Corridor Type Projects: http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1045395.pdf.)
- Work with NRCS to minimize the impact of the project on the protected farmland. When you have finished with your analysis, return a copy of form AD-1006 (or form NRCS-CPA-106 if applicable) to the USDA-NRCS State Soil Scientist or his/her designee informing them of your determination.

Document your conclusion:

Project will proceed with mitigation.

Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

Project will proceed without mitigation.

Explain why mitigation will not be made here:

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide form AD-1006 and all other documents used to make your determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

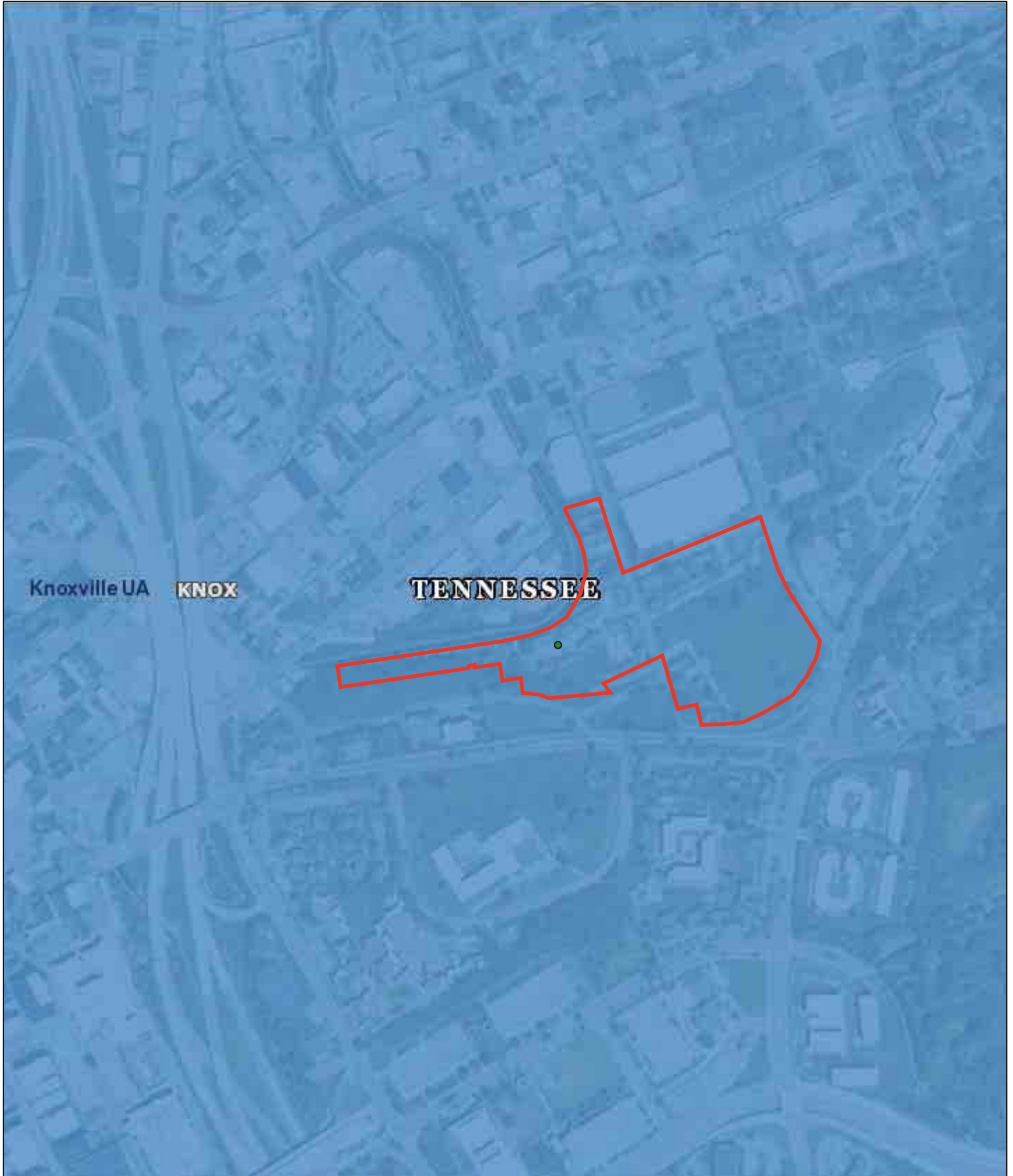
The subject property is currently utilized as a multi-family apartment complex. According to the U.S. Census Bureau Urbanized Area Map, accessed at <http://tigerweb.geo.census.gov/tigerweb/>, the subject property is located within an urbanized area; therefore, the subject property is already in an area committed to urban development and is exempt from compliance with the Farmland Protection Policy Act.

Are formal compliance steps or mitigation required?

Yes

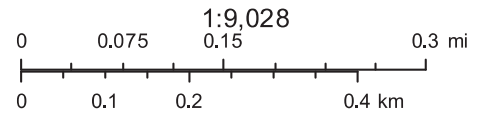
No

Census Bureau Urban Area Map



June 1, 2017

- | | |
|-------------------------------|----------------------|
| 2010 Census Urbanized Areas | — Linear Hydrography |
| 2010 Census Urban Clusters | ■ Areal Hydrography |
| States | ■ Glaciers |
| Counties | ■ States |
| ■ 2010 Census Urbanized Areas | ■ Counties |



Source: U.S. Census Bureau
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Appendix I

Flood Insurance



Flood Insurance (CEST and EA)

| General requirements | Legislation | Regulation |
|---|---|---|
| Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained. | Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128) | 24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.1(b). |
| Reference | | |
| https://www.hudexchange.info/environmental-review/flood-insurance | | |

1. Does this project involve financial assistance for construction, rehabilitation, or acquisition of a mobile home, building, or insurable personal property?

No. This project does not require flood insurance or is excepted from flood insurance. →
Continue to the Worksheet Summary.

Yes → *Continue to Question 2.*

2. Provide a FEMA/FIRM map showing the site.

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site. Provide FEMA/FIRM floodplain zone designation, panel number, and date within your documentation.

Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?

No → *Continue to the Worksheet Summary.*

Yes → *Continue to Question 3.*

3. Is the community participating in the National Flood Insurance Program or has less than one year passed since FEMA notification of Special Flood Hazards?

Yes, the community is participating in the National Flood Insurance Program.

For loans, loan insurance or loan guarantees, flood insurance coverage must be continued for the term of the loan. For grants and other non-loan forms of financial assistance, flood insurance coverage must be continued for the life of the building irrespective of the transfer of ownership. The amount of coverage must equal the total project cost or the maximum coverage limit of the National Flood Insurance Program, whichever is less

Provide a copy of the flood insurance policy declaration or a paid receipt for the current annual flood insurance premium and a copy of the application for flood insurance.

→ *Continue to the Worksheet Summary.*

- Yes, less than one year has passed since FEMA notification of Special Flood Hazards. If less than one year has passed since notification of Special Flood Hazards, no flood Insurance is required.

→ *Continue to the Worksheet Summary.*

- No. The community is not participating, or its participation has been suspended.

Federal assistance may not be used at this location. Cancel the project at this location.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

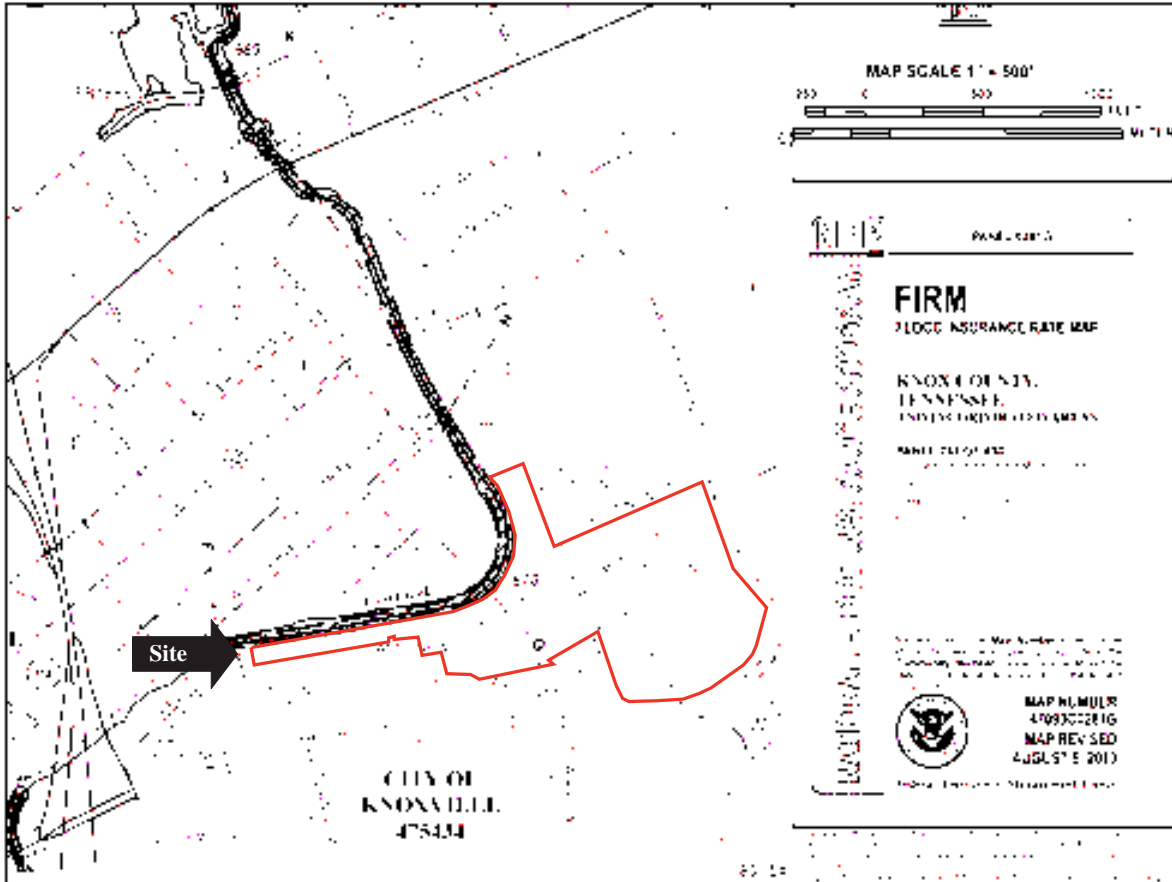
- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

According to FEMA Flood Insurance Rate Map (FIRM) #47093C-0281G, dated August 5, 2013, the majority of the subject property is located in Zone X, designated as an area outside the 100 and 500-year flood zones. However, an incidental portion along the northwestern boundary of the subject property may be located within the regulatory floodway associated with First Creek. Future development on the northwestern portion of the subject property may be restricted. In addition, according to the National Flood Insurance Program (NFIP) Community Status Book accessed at <https://www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-community-status-book>, the subject property is located in Community ID #475434, which is a participating community in the NFIP.

Are formal compliance steps or mitigation required?

Yes

No



Appendix I
FEMA Flood
Insurance
Rate Map



Austin Homes
1115 East New Street
Knoxville, Tennessee

*Community Panel #47093C-0281G,
dated August 5, 2013*

**DOMINION
DUE DILIGENCE
GROUP**

Federal Emergency Management Agency Community Status Book Report

TENNESSEE

Communities Participating in the National Flood Program

| CID | Community Name | County | Init FHBM Identified | Init FIRM Identified | Curr Eff Map Date | Reg-Emer Date | Tribal |
|---------|--|---------------------------------|----------------------|----------------------|-------------------|---------------|--------|
| 470161# | GREENBRIER, CITY OF | ROBERTSON COUNTY | 06/18/76 | 04/16/08 | 04/16/08 | 08/27/10 | No |
| 470345# | GREENE COUNTY* | GREENE COUNTY | 12/02/77 | 08/01/86 | 07/03/06 | 08/01/86 | No |
| 470069# | GREENEVILLE, TOWN OF | GREENE COUNTY | 03/01/74 | 08/01/86 | 07/03/06 | 08/01/86 | No |
| 470250# | GRUNDY COUNTY * | GRUNDY COUNTY | 08/25/78 | 03/01/95 | 09/25/09(M) | 03/01/95 | No |
| 470231# | HALLS, TOWN OF | LAUDERDALE COUNTY | 01/17/75 | 03/18/87 | 09/28/07 | 03/18/87 | No |
| 470346# | HAMBLEN COUNTY * | HAMBLEN COUNTY | 11/11/77 | 03/18/91 | 07/03/06 | 09/05/91 | No |
| 470071# | HAMILTON COUNTY * | HAMILTON COUNTY | | 08/01/79 | 02/03/16 | 08/01/79 | No |
| 470226# | HANCOCK COUNTY* | HANCOCK COUNTY | 08/19/77 | 09/01/02 | 06/18/10(M) | 09/01/02 | No |
| 470360# | HARDEMAN COUNTY * | HARDEMAN COUNTY | 01/20/78 | 04/02/91 | 09/28/07 | 02/28/08 | No |
| 470082# | HARDIN COUNTY* | HARDIN COUNTY | 05/12/78 | 09/01/86 | 06/16/06 | 09/01/86 | No |
| 475427# | HARRIMAN, CITY OF | ROANE COUNTY | | 02/26/71 | 11/18/09 | 02/26/71 | No |
| 470420# | HARROGATE, CITY OF | CLAIBORNE COUNTY | | 09/25/09 | 09/25/09(M) | 09/15/01 | No |
| | USE CLAIBORNE COUNTY (CID 470212) FIRM DATED 5/4/88 PANEL # 50C. | | | | | | |
| 470093# | HARTSVILLE, TOWN OF | TROUSDALE COUNTY | 06/07/74 | 08/16/82 | 09/29/10 | 08/16/82 | No |
| 470085# | HAWKINS COUNTY* | HAWKINS COUNTY | 10/21/77 | 03/18/91 | 07/03/06 | 03/18/91 | No |
| 470227# | HAYWOOD COUNTY* | HAYWOOD COUNTY | 12/30/77 | 09/01/86 | 04/16/08 | 09/01/86 | No |
| 470088# | HENDERSON COUNTY * | HENDERSON COUNTY | 12/20/74 | 12/23/77 | 04/16/08 | 05/17/90 | No |
| 470029# | HENDERSON, CITY OF | CHESTER COUNTY | 01/14/77 | 03/18/86 | 05/04/09(M) | 03/18/86 | No |
| 470186# | HENDERSONVILLE, CITY OF | SUMNER COUNTY | 06/21/74 | 11/04/81 | 04/17/12 | 11/04/81 | No |
| 470259# | HENNING, TOWN OF | LAUDERDALE COUNTY | 01/03/75 | 03/04/88 | 09/28/07 | 03/04/88 | No |
| 470228# | HENRY COUNTY* | HENRY COUNTY | 12/30/77 | 07/05/83 | 09/28/07 | 04/28/92 | No |
| 470091# | HICKMAN COUNTY* | HICKMAN COUNTY | 12/22/78 | 09/01/86 | 08/04/08(M) | 09/01/86 | No |
| 470304# | HOHENWALD, CITY OF | LEWIS COUNTY | 09/24/76 | 07/02/87 | 01/20/10(M) | 07/02/87 | No |
| 470305# | HOLLOW ROCK, TOWN OF | CARROLL COUNTY | 06/25/76 | 03/18/08 | 03/18/08(M) | 10/25/13 | No |
| 470288# | HORNSBY, TOWN OF | HARDEMAN COUNTY | 03/05/76 | 09/28/07 | 09/28/07 | 11/24/10 | No |
| 470059# | HUMBOLDT, CITY OF | GIBSON COUNTY | 05/03/74 | 09/15/83 | 11/05/08 | 09/15/83 | No |
| 470022# | HUNTINGDON, TOWN OF | CARROLL COUNTY | 02/22/74 | 06/03/88 | 03/18/08 | 06/03/88 | No |
| 470055B | HUNTLAND, TOWN OF | FRANKLIN COUNTY | 01/28/77 | 11/01/98 | 08/04/08(M) | 11/01/98 | No |
| 470397# | HUNTSVILLE, TOWN OF | SCOTT COUNTY | | 09/28/07 | 09/28/07(M) | 09/29/89 | No |
| 475428# | JACKSBORO, TOWN OF | CAMPBELL COUNTY | 12/07/71 | 07/01/74 | 09/28/07 | 12/07/71 | No |
| 470370# | JACKSON COUNTY * | JACKSON COUNTY | 03/23/79 | 09/04/85 | 04/19/10(M) | 09/04/85 | No |
| 470113# | JACKSON, CITY OF | MADISON COUNTY | 11/01/74 | 07/05/83 | 08/03/09 | 07/05/83 | No |
| 470052# | JAMESTOWN, CITY OF | FENTRESS COUNTY | 03/28/75 | 03/02/10 | (NSFHA) | 11/16/10 | No |
| 475429# | JASPER, TOWN OF | MARION COUNTY | 02/26/72 | 02/26/72 | 01/06/12 | 02/26/72 | No |
| 475430# | JEFFERSON CITY, TOWN OF | JEFFERSON COUNTY | | 04/09/71 | 12/16/08 | 04/09/71 | No |
| 470097# | JEFFERSON COUNTY* | JEFFERSON COUNTY | 09/02/77 | 11/02/90 | 12/16/08 | 11/02/90 | No |
| 475431# | JELLICO, CITY OF | CAMPBELL COUNTY | | 06/18/71 | 09/28/07 | 06/18/71 | No |
| 475432# | JOHNSON CITY, CITY OF | CARTER COUNTY/WASHINGTON COUNTY | 05/19/70 | 05/22/70 | 09/29/06 | 05/22/70 | No |
| 470230# | JOHNSON COUNTY* | JOHNSON COUNTY | 03/30/79 | 07/17/86 | 06/16/09(M) | 07/17/86 | No |
| 470198# | JONESBOROUGH, TOWN OF | WASHINGTON COUNTY | 02/01/74 | 09/30/82 | 09/29/06 | 09/30/82 | No |
| 470224# | KENTON, TOWN OF | GIBSON COUNTY | 12/27/74 | 02/16/83 | 11/05/08 | 12/02/85 | No |
| 470116# | KIMBALL, TOWN OF | MARION COUNTY | 06/14/74 | 05/19/87 | 01/06/12 | 05/19/87 | No |
| 470184# | KINGSPORT, CITY OF | SULLIVAN COUNTY | 03/08/74 | 06/04/90 | 09/29/06 | 12/04/79 | No |
| 470289B | KINGSTON SPRINGS, TOWN OF | CHEATHAM COUNTY | 07/18/75 | 11/19/80 | 12/22/16 | 06/11/84 | No |
| 470274# | KINGSTON, CITY OF | ROANE COUNTY | 03/08/74 | 12/15/78 | 11/18/09(M) | 12/15/78 | No |
| 475433# | KNOX COUNTY * | KNOX COUNTY | | 07/23/71 | 08/05/13 | 07/23/71 | No |
| 475434# | KNOXVILLE, CITY OF | KNOX COUNTY | | 05/01/71 | 08/05/13 | 04/30/71 | No |
| 470454# | LAFAYETTE, CITY OF | MACON COUNTY | | 10/19/10 | 10/19/10 | 11/17/10 | No |
| 475435# | LAFOLLETTE, CITY OF | CAMPBELL COUNTY | | 12/23/71 | 09/28/07 | 12/17/71 | No |

Appendix J

Floodplain Management



Floodplain Management (CEST and EA)

| General Requirements | Legislation | Regulation |
|---|-----------------------|------------|
| Executive Order 11988, Floodplain Management, requires Federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable. | Executive Order 11988 | 24 CFR 55 |
| Reference | | |
| https://www.hudexchange.info/environmental-review/floodplain-management | | |

1. Does [24 CFR 55.12\(c\)](#) exempt this project from compliance with HUD's floodplain management regulations in Part 55?

Yes

Provide the applicable citation at 24 CFR 55.12(c) here. If project is exempt under 55.12(c)(7) or (8), provide supporting documentation.

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.

No → Continue to Question 2.

2. Provide a FEMA/FIRM or ABFE map showing the site.

The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs) or Advisory Base Flood Elevations (ABFEs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site.

Does your project occur in a floodplain?

No → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.

Yes

Select the applicable floodplain using the FEMA map or the best available information:

Floodway → *Continue to Question 3, Floodways*

Coastal High Hazard Area (V Zone) → *Continue to Question 4, Coastal High Hazard Areas*

500-year floodplain (B Zone or shaded X Zone) → *Continue to Question 5, 500-year Floodplains*

100-year floodplain (A Zone) → *The 8-Step Process is required. Continue to Question 6, 8-Step Process*

3. Floodways

Is this a functionally dependent use?

Yes

The 8-Step Process is required. Work with your HUD FEO to determine a way to satisfactorily continue with this project. Provide a completed 8-Step Process, including the early public notice and the final notice.

→ *Continue to Question 6, 8-Step Process*

No

Federal assistance may not be used at this location unless a 55.12(c) exception applies. You must either choose an alternate site or cancel the project at this location.

4. Coastal High Hazard Area

Is this a critical action?

Yes

Critical actions are prohibited in coastal high hazard areas. Federal assistance may not be used at this location. Unless the action is excepted at 24 CFR 55.12(c), you must either choose an alternate site or cancel the project.

No

Does this action include construction that is not a functionally dependent use, existing construction (including improvements), or reconstruction following destruction caused by a disaster?

Yes, there is new construction.

New construction is prohibited in V Zones ((24 CFR 55.1(c)(3)).

No, this action concerns only a functionally dependent use, existing construction (including improvements), or reconstruction following destruction caused by a disaster.

This construction must have met FEMA elevation and construction standards for a coastal high hazard area or other standards applicable at the time of construction.

→ *Continue to Question 6, 8-Step Process*

5. 500-year Floodplain

Is this a critical action?

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Yes → *Continue to Question 6, 8-Step Process*

6. 8-Step Process.

Does the 8-Step Process apply? Select one of the following options:

8-Step Process applies.

Provide a completed 8-Step Process, including the early public notice and the final notice.

→ *Continue to Question 7, Mitigation*

5-Step Process is applicable per 55.12(a)(1-3).

Provide documentation of 5-Step Process.

Select the applicable citation:

55.12(a)(1) HUD actions involving the disposition of HUD-acquired multifamily housing projects or “bulk sales” of HUD-acquired one- to four-family properties in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24).

55.12(a)(2) HUD's actions under the National Housing Act (12 U.S.C. 1701) for the purchase or refinancing of existing multifamily housing projects, hospitals, nursing homes, assisted living facilities, board and care facilities, and intermediate care facilities, in communities that are in good standing under the NFIP.

55.12(a)(3) HUD's or the recipient's actions under any HUD program involving the repair, rehabilitation, modernization, weatherization, or improvement of existing multifamily housing projects, hospitals, nursing homes, assisted living facilities, board and care facilities, intermediate care facilities, and one- to four-family properties, in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and are in good standing, provided that the number of units is not increased more than 20 percent, the action does not involve a conversion from nonresidential to residential land use, the action does not meet the thresholds for “substantial improvement” under § 55.2(b)(10), and the footprint of the structure and paved areas is not significantly increased.

- 55.12(a)(4) HUD's (or the recipient's) actions under any HUD program involving the repair, rehabilitation, modernization, weatherization, or improvement of existing nonresidential buildings and structures, in communities that are in the Regular Program of the NFIP and are in good standing, provided that the action does not meet the thresholds for "substantial improvement" under § 55.2(b)(10) and that the footprint of the structure and paved areas is not significantly increased.

→ Continue to Question 7, Mitigation

- 8-Step Process is inapplicable per 55.12(b)(1-4).

Select the applicable citation:

- 55.12(b)(1) HUD's mortgage insurance actions and other financial assistance for the purchasing, mortgaging or refinancing of existing one- to four-family properties in communities that are in the Regular Program of the National Flood Insurance Program (NFIP) and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24), where the action is not a critical action and the property is not located in a floodway or coastal high hazard area.
- 55.12(b)(2) Financial assistance for minor repairs or improvements on one- to four-family properties that do not meet the thresholds for "substantial improvement" under § 55.2(b)(10)
- 55.12(b)(3) HUD actions involving the disposition of individual HUD-acquired, one- to four-family properties.
- 55.12(b)(4) HUD guarantees under the Loan Guarantee Recovery Fund Program (24 CFR part 573) of loans that refinance existing loans and mortgages, where any new construction or rehabilitation financed by the existing loan or mortgage has been completed prior to the filing of an application under the program, and the refinancing will not allow further construction or rehabilitation, nor result in any physical impacts or changes except for routine maintenance.
- 55.12(b)(5) The approval of financial assistance to lease an existing structure located within the floodplain, but only if—
 - (i) The structure is located outside the floodway or Coastal High Hazard Area, and is in a community that is in the Regular Program of the NFIP and in good standing (i.e., not suspended from program eligibility or placed on probation under 44 CFR 59.24);
 - (ii) The project is not a critical action; and
 - (iii) The entire structure is or will be fully insured or insured to the maximum under the NFIP for at least the term of the lease.

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.

7. Mitigation

For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

Which of the following mitigation/minimization measures have been identified for this project in the 8-Step or 5-Step Process? Select all that apply.

- Permeable surfaces
- Natural landscape enhancements that maintain or restore natural hydrology
- Planting or restoring native plant species
- Bioswales
- Evapotranspiration
- Stormwater capture and reuse
- Green or vegetative roofs with drainage provisions
- Natural Resources Conservation Service conservation easements or similar easements
- Floodproofing of structures
- Elevating structures including freeboarding above the required base flood elevations
- Other

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

According to FEMA Flood Insurance Rate Map (FIRM) #47093C-0281G, dated August 5, 2013, the majority of the subject property is located in Zone X, designated as an area outside the 100 and 500-year flood zones. However, an incidental portion along the northwestern boundary of the subject property may be located within the regulatory floodway associated with First Creek. Future development on the northwestern portion of the subject property may be restricted. In addition, according to the National Flood Insurance Program (NFIP) Community Status Book accessed at <https://www.fema.gov/national-flood-insurance-program/national-flood-insurance-program-community-status-book>, the subject property is located in Community ID #475434, which is a participating community in the NFIP.

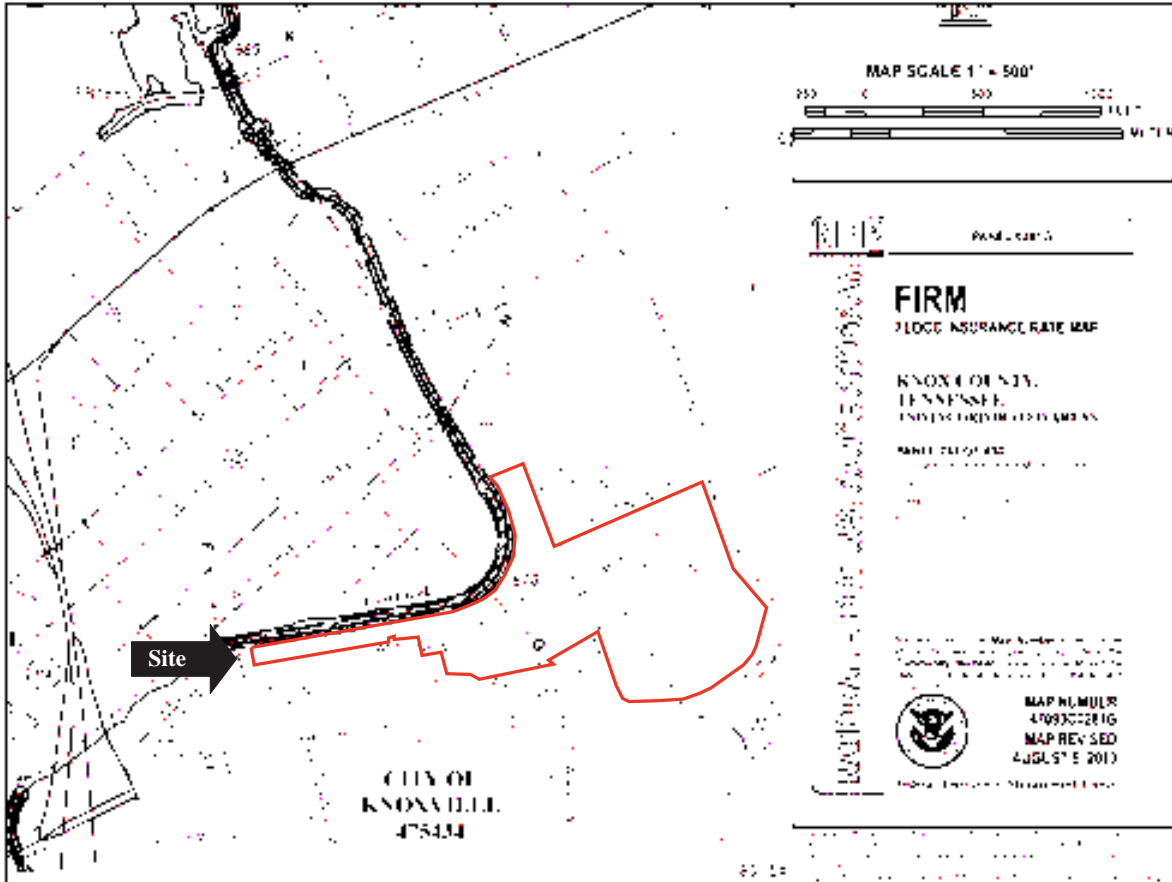
In accordance with the HUD MAP Guide, unless the property is exempt from compliance with 24 CFR Part 55, mortgage insurance shall not be approved for a property, other than a functionally dependent use, located in a floodway.

D3G recommends conducting an ALTA/ACSM Land Title Survey of the subject property depicting the regulatory floodway. Whenever HUD financial assistance is proposed for a project which has the potential to impact a floodplain, compliance with Executive Order 11988, "Floodplain Management," is required, as well as implementing procedures contained in 24 CFR Part 55.

Are formal compliance steps or mitigation required?

Yes

No



Appendix J
FEMA Flood
Insurance
Rate Map



Austin Homes
1115 East New Street
Knoxville, Tennessee

*Community Panel #47093C-0281G,
dated August 5, 2013*

**DOMINION
DUE DILIGENCE
GROUP**

Appendix K

Historic Preservation



Historic Preservation (CEST and EA)

| General requirements | Legislation | Regulation |
|---|--|--|
| Regulations under Section 106 of the National Historic Preservation Act (NHPA) require a consultative process to identify historic properties, assess project impacts on them, and avoid, minimize, or mitigate adverse effects | Section 106 of the National Historic Preservation Act (16 U.S.C. 470f) | 36 CFR 800 "Protection of Historic Properties" |
| References | | |
| https://www.hudexchange.info/environmental-review/historic-preservation | | |

Threshold

Is Section 106 review required for your project?

- No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA). (See the [PA Database](#) to find applicable PAs.)

Either provide the PA itself or a link to it here. Mark the applicable exemptions or include the text here:

→ Continue to the Worksheet Summary.

- No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].

Either provide the memo itself or a link to it here. Explain and justify the other determination here:

→ Continue to the Worksheet Summary.

- Yes, because the project includes activities with potential to cause effects (direct or indirect). → Continue to Step 1.

The Section 106 Process

After determining the need to do a Section 106 review, initiate consultation with regulatory and other interested parties, identify and evaluate historic properties, assess effects of the project on properties listed on or eligible for the National Register of Historic Places, and resolve any adverse effects through project design modifications or mitigation. Note that consultation continues through all phases of the review.

Step 1: Initiate consultation

Step 2: Identify and evaluate historic properties

Step 3: Assess effects of the project on historic properties

Step 4: Resolve any adverse effects

Step 1 - Initiate Consultation

The following parties are entitled to participate in Section 106 reviews: Advisory Council on Historic Preservation; State Historic Preservation Officers (SHPOs); federally recognized Indian tribes/Tribal Historic Preservation Officers (THPOs); Native Hawaiian Organizations (NHOs); local governments; and project grantees. The general public and individuals and organizations with a demonstrated interest in a project may participate as consulting parties at the discretion of the RE or HUD official. Participation varies with the nature and scope of a project. Refer to HUD's website for guidance on consultation, including the required timeframes for response. Consultation should begin early to enable full consideration of preservation options.

Use the [When To Consult With Tribes checklist](#) within [Notice CPD-12-006: Process for Tribal Consultation](#) to determine if you should invite tribes to consult on a particular project. Use the [Tribal Directory Assessment Tool \(TDAT\)](#) to identify tribes that may have an interest in the area where the project is located. Note that consultants may not initiate consultation with Tribes.

Select all consulting parties below (check all that apply):

- State Historic Preservation Officer (SHPO)
- Advisory Council on Historic Preservation
- Indian Tribes, including Tribal Historic Preservation Officers (THPOs) or Native
- Hawaiian Organizations (NHOs)

List all tribes that were consulted here and their status of consultation:

- Other Consulting Parties

List all consulting parties that were consulted here and their status of consultation:

Describe the process of selecting consulting parties and initiating consultation here:

According to the HUD MAP Guide, applications for Firm Commitment, whether for new construction, rehabilitation, refinancing or conversion from non-residential to residential property, are considered “federal undertakings” which require HUD to make a determination of no effect, no adverse effect, or adverse effect upon historic properties. To assist HUD in making its historic preservation determination, D3G has submitted a determination letter to the appropriate State Historic Preservation Officer (SHPO). In addition, it should be noted that HUD is responsible for contacting the Tribal Historic Preservation Officer (THPO) and any affected tribes.

Provide all correspondence, notices, and notes (including comments and objections received) and continue to Step 2.

Step 2 - Identify and Evaluate Historic Properties

Define the Area of Potential Effect (APE), either by entering the address(es) or providing a map depicting the APE. Attach an additional page if necessary.

1115 East New Street, Knoxville, Tennessee 37915

Gather information about known historic properties in the APE. Historic buildings, districts and archeological sites may have been identified in local, state, and national surveys and registers, local historic districts, municipal plans, town and county histories, and local history websites. If not already listed on the National Register of Historic Places, identified properties are then evaluated to see if they are eligible for the National Register.

Refer to HUD’s website for guidance on identifying and evaluating historic properties.

In the space below, list historic properties identified and evaluated in the APE.

Every historic property that may be affected by the project should be listed. For each historic property or district, include the National Register status, whether the SHPO has concurred with the finding, and whether information on the site is sensitive. Attach an additional page if necessary.

Provide the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination.

Was a survey of historic buildings and/or archeological sites done as part of the project?

If the APE contains previously unsurveyed buildings or structures over 50 years old, or there is a likely presence of previously unsurveyed archeological sites, a survey may be necessary. For Archeological surveys, refer to HP Fact Sheet #6, [Guidance on Archeological Investigations in HUD Projects](#).

- Yes → *Provide survey(s) and report(s) and continue to Step 3.*

Additional notes:

- No → *Continue to Step 3.*

Step 3 - Assess Effects of the Project on Historic Properties

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. ([36 CFR 800.5](#)) Consider direct and indirect effects as applicable as per HUD guidance.

Choose one of the findings below - No Historic Properties Affected, No Adverse Effect, or Adverse Effect; and seek concurrence from consulting parties.

- No Historic Properties Affected

Document reason for finding:

- No historic properties present. → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*
- Historic properties present, but project will have no effect upon them. → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

If consulting parties concur or fail to respond to user's request for concurrence, project is in compliance with this section. No further review is required. If consulting parties object, refer to ([36 CFR 800.4\(d\)\(1\)](#)) and consult further to try to resolve objection(s).

No Adverse Effect

Document reason for finding:

Does the No Adverse Effect finding contain conditions?

Yes

Check all that apply: (check all that apply)

- Avoidance
- Modification of project
- Other

Describe conditions here:

→ *Monitor satisfactory implementation of conditions. Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

No → *Provide concurrence(s) or objection(s) and continue to the Worksheet Summary.*

If consulting parties concur or fail to respond to user's request for concurrence, project is in compliance with this section. No further review is required. If consulting parties object, refer to ([36 CFR 800.5\(c\)\(2\)](#)) and consult further to try to resolve objection(s).

Adverse Effect

Document reason for finding:

Copy and paste applicable Criteria into text box with summary and justification.

Criteria of Adverse Effect: [36 CFR 800.5](#)]

Notify the Advisory Council on Historic Preservation of the Adverse Effect and provide the documentation outlined in [36 CFR 800.11\(e\)](#). The Council has 15 days to decide whether to enter the consultation (Not required for projects covered by a Programmatic Agreement).

→ *Continue to Step 4.*

Step 4 - Resolve Adverse Effects

Work with consulting parties to try to avoid, minimize or mitigate adverse effects. Refer to HUD guidance and [36 CFR 800.6 and 800.7](#).

Were the Adverse Effects resolved?

Yes

Describe the resolution of Adverse Effects, including consultation efforts and participation by the Advisory Council on Historic Preservation:

For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Provide signed Memorandum of Agreement (MOA) or Standard Mitigation Measures Agreement (SMMA). Continue to the Worksheet Summary.*

No

The project must be cancelled unless the “Head of Agency” approves it. Either provide approval from the “Head of Agency” or cancel the project at this location.

Describe the failure to resolve Adverse Effects, including consultation efforts and participation by the Advisory Council on Historic Preservation and “Head of the Agency”:

Explain in detail the exact conditions or measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Provide correspondence, comments, documentation of decision, and “Head of Agency” approval. Continue to the Worksheet Summary.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

The facility was constructed in 1963 and is not suspected to qualify as an historic property. The subject property is not listed, and is not suspected to be eligible to be listed, in the National Register of Historic Places. In addition, the subject property is not located within a historic district of the City of Knoxville or Knox County. Based on the fact that the subject property is being refinanced and there is no proposed ground disturbance, there will be "No Effect" on properties that are listed or eligible to be listed on the National Register of Historic Places. However, according to the HUD MAP Guide, applications for Firm Commitment, whether for new construction, rehabilitation, refinancing or conversion from non-residential to residential property, are considered "federal undertakings" which require HUD to make a determination of no effect, no adverse effect, or adverse effect upon historic properties. In addition, it should be noted that HUD is responsible for contacting the Tribal Historic Preservation Officer (THPO) and any affected tribes. To assist HUD in making its historic preservation determination, D3G has submitted a determination letter to the appropriate State Historic Preservation Officer (SHPO). As of the date of this report, D3G has not received a response to this inquiry. Upon receipt of the agency response, D3G will forward this information as an addendum to this report. If no response is received or no material information is identified, our report will not be modified.

Are formal compliance steps or mitigation required?

Yes

No



June 14, 2017

Mr. Patrick McIntyre, Jr., Executive Director, SHPO
Tennessee Historical Commission
2941 Lebanon Road
Nashville, Tennessee 37243-0442

Subject: Federal Agency/SHPO Consultation/Determination
Austin Homes
1115 East New Street
Knoxville, Knox County, Tennessee

Dear Mr. McIntyre;

HUD PROGRAM:

HUD RAD – RAD conversion of a multi-family apartment complex.

LOCATION:

Knoxville, Knox County, Tennessee

PROJECT SIZE:

Approximately 19.84 acres

PRESENT CONDITION OF THE SITE:

Existing Structures on the site – Yes

The subject property consists of twenty-six (26) two-story apartment structures and one (1) two-story apartment structure that has been converted into a day care/after school care facility constructed in 1963. The subject property structures contain a total of 129 residential dwelling units and are situated on approximately 19.84 acres of land. The subject property contains a gross building area of approximately 120,966 square feet. Located within the apartment structures is a community room. Exterior property improvements include landscaped regions and asphalt parking areas. The subject property is serviced by electricity, natural gas, and municipally supplied water and sewer.

The sponsor is submitting this project under the HUD RAD – RAD conversion of a multi-family apartment complex.

Site and location maps are enclosed for your review. Photographs of the site and the surrounding area have been included for your review. A United States Geological Survey Topographic Quadrangle is also included. A Phase 1 Environmental Site Assessment has already been completed of the site.

We have reviewed the National Register of Historic Places, including the most recent additions. There are no National Register Properties adjacent to the project.

Based on the foregoing information, we are of the opinion that, pursuant to 36CFR800.4(b), there will be No Effect.

Your response and concurrence within 30 days of receipt will be appreciated.

Should you or your staff require additional information or have any questions, please contact me at (804) 358-2020 as soon as possible.

Sincerely;

DOMINION DUE DILIGENCE GROUP



Hannah Pearl
h.pearl@d3g.com



National Register of Historic Places



June 2, 2017

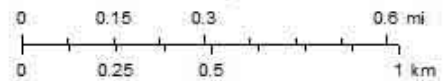
1:18,056



Project 2



National Register of Historic Places



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
EPA OEI
EPA OEI, OFA

Appendix L

Noise Abatement and Control



Noise (CEST Level Reviews)

| General requirements | Legislation | Regulation |
|---|---|---------------------------|
| HUD's noise regulations protect residential properties from excessive noise exposure. HUD encourages mitigation as appropriate. | Noise Control Act of 1972 General Services Administration Federal Management Circular 75-2: "Compatible Land Uses at Federal Airfields" | Title 24 CFR 51 Subpart B |
| References | | |
| https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control | | |

1. What activities does your project involve? Check all that apply:

- New construction for residential use

NOTE: HUD assistance to new construction projects is generally prohibited if they are located in an Unacceptable zone, and HUD discourages assistance for new construction projects in Normally Unacceptable zones. See 24 CFR 51.101(a)(3) for further details.

→ *Continue to Question 4.*

- Rehabilitation of an existing residential property

NOTE: For modernization projects in all noise zones, HUD encourages mitigation to reduce levels to acceptable compliance standards. See 24 CFR 51 Subpart B for further details.

→ *Continue to Question 2.*

- A research demonstration project which does not result in new construction or reconstruction, interstate, land sales registration, or any timely emergency assistance under disaster assistance provisions or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

- None of the above

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

2. Do you have standardized noise attenuation measures that apply to all modernization and/or minor rehabilitation projects, such as the use of double glazed windows or extra insulation?

Yes

Indicate the type of measures that will apply (check all that apply):

Improved building envelope components (better windows and doors, strengthened sheathing, insulation, sealed gaps, etc.)

Redesigned building envelope (more durable or substantial materials, increased air gap, resilient channels, staggered wall studs, etc.)

Other

Explain:

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below and provide any supporting documentation.

No

→ Continue to Question 3.

3. Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport). Describe findings of the Preliminary Screening:

→ Continue to Question 6.

4. Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport). Indicate the findings of the Preliminary Screening below:

There are no noise generators found within the threshold distances above.

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map showing the location of the project relative to any noise generators.

Noise generators were found within the threshold distances.

→ Continue to Question 5.

5. Complete the Noise Assessment Guidelines to quantify the noise exposure. Indicate the findings of the Noise Assessment below:

Acceptable: (65 decibels or less; the ceiling may be shifted to 70 decibels in circumstances described in §24 CFR 51.105(a))

Indicate noise level here:

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide noise analysis, including noise level and data used to complete the analysis.

Normally Unacceptable: (Above 65 decibels but not exceeding 75 decibels; the floor may be shifted to 70 decibels in circumstances described in 24 CFR 51.105(a))

Indicate noise level here:

Is the project in a largely undeveloped area¹?

No

→Your project requires completion of an Environmental Assessment (EA) pursuant to 51.104(b)(1)(i). Elevate this review to an EA-level review.

Provide noise analysis, including noise level and data used to complete the analysis.

Continue to Question 6.

Yes

→Your project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). Elevate this review to an EIS-level review.

Provide noise analysis, including noise level and data used to complete the analysis.

Continue to Question 6.

¹ A largely undeveloped area means the area within 2 miles of the project site is less than 50 percent developed with urban uses and does not have water and sewer capacity to serve the project.

Unacceptable: (Above 75 decibels)

Indicate noise level here:

Your project requires completion of an Environmental Impact Statement (EIS) pursuant to 51.104(b)(1)(i). You may either complete an EIS or provide a waiver signed by the appropriate authority. Indicate your choice:

Convert to an EIS

→ Provide noise analysis, including noise level and data used to complete the analysis.

Continue to Question 6.

Provide waiver

→ Provide an Environmental Impact Statement waiver from the Certifying Officer or the Assistant Secretary for Community Planning and Development per 24 CFR 51.104(b)(2) and noise analysis, including noise level and data used to complete the analysis.

Continue to Question 6.

- 6. HUD strongly encourages mitigation be used to eliminate adverse noise impacts. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation. This information will be automatically included in the Mitigation summary for the environmental review.**

Mitigation as follows will be implemented:

→ Provide drawings, specifications, and other materials as needed to describe the project's noise mitigation measures.

Continue to the Worksheet Summary.

No mitigation is necessary.

Explain why mitigation will not be made here:

→ *Continue to the Worksheet Summary.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

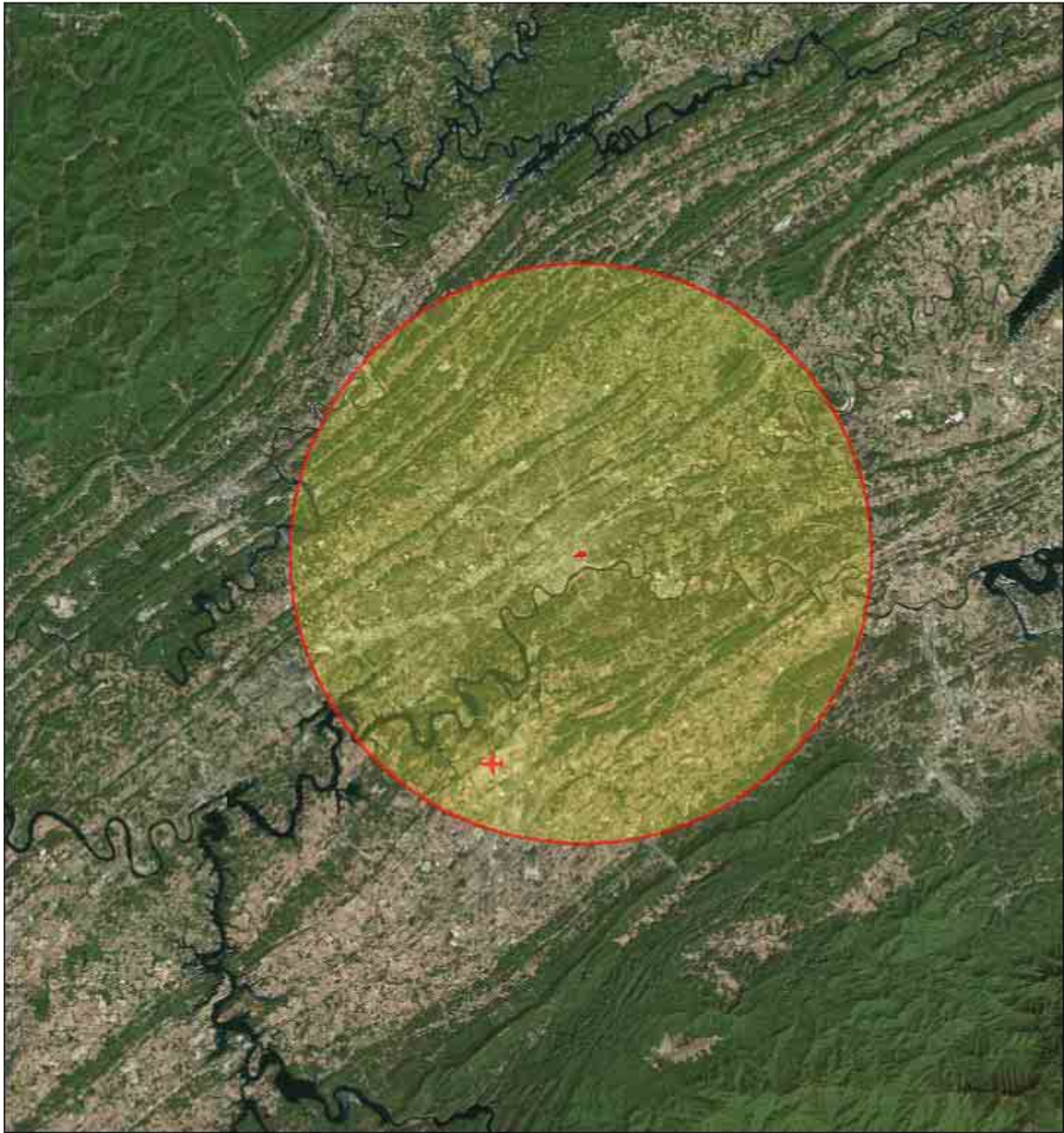
The subject property is located within 1,000 feet of East Summit Hill Avenue, Dandridge Avenue, Martin Luther King Jr. Avenue, and East Hill Avenue; within fifteen (15) miles of Knoxville Downtown Island and McGhee Tyson Airport; and within 3,000 feet of Norfolk Southern Railway and Knoxville and Holston River Railroad. There are no other civil or military airports that would be considered a noise source within fifteen (15) miles of the subject property. However, according to HUD guidelines, a noise analysis is not necessary for a refinance/acquisition.

Are formal compliance steps or mitigation required?

Yes

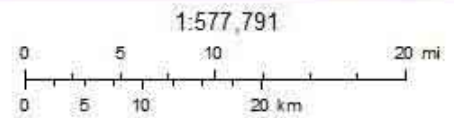
No

15 Mile Radius - Airports



June 2, 2017

-  Project 2
-  Buffer Area
-  Airport Points



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
EPA OEI



Circle Search For Airports Results

Records 1 to 3 of 3

Page 1 of 1

| Locator Id | Name | Site Type | City | State | Latitude | Longitude | Distance(NM) | Azimuth |
|----------------------|-----------------------------------|-----------|-----------|-------|------------------|------------------|--------------|---------|
| DKX | KNOXVILLE DOWNTOWN ISLAND | Airport | KNOXVILLE | TN | 35° 57' 49.80" N | 83° 52' 25.20" W | 1.87 | 76.06° |
| 09TN | UNIV OF TENNESSEE MEDICAL CENT... | Heliport | KNOXVILLE | TN | 35° 56' 29.91" N | 83° 56' 37.77" W | 2.38 | 41.67° |
| TYS | MC GHEE TYSON | Airport | KNOXVILLE | TN | 35° 48' 33.75" N | 83° 59' 43.16" W | 10.53 | 22.8° |

Rows per Page:

Records 1 to 3 of 3

Page: 1

Page 1 of 1

Appendix M

Site Contamination



Contamination and Toxic Substances (Multifamily and Non-Residential Properties)

| General requirements | Legislation | Regulations |
|--|-------------|-------------------------------------|
| It is HUD policy that all properties that are being proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of the occupants or conflict with the intended utilization of the property. | | 24 CFR 58.5(i)(2) 24 CFR 50.3(i) |
| Reference | | |
| https://www.hudexchange.info/programs/environmental-review/site-contamination | | |

1. How was site contamination evaluated?¹ Select all that apply.

- ASTM Phase I ESA
- ASTM Phase II ESA
- Remediation or clean-up plan
- ASTM Vapor Encroachment Screening
- None of the above

→ Provide documentation and reports and include an explanation of how site contamination was evaluated in the Worksheet Summary.

Continue to Question 2.

2. Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)

- No

Explain:

Dominion Due Diligence Group has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Practice E 1527-13 of the Austin Homes located at 1115 East New Street in Knoxville, Knox County, Tennessee (subject property). Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report. This assessment has revealed no evidence of recognized environmental conditions (RECs) in connection with the subject property.

¹ HUD regulations at 24 CFR § 58.5(i)(2)(ii) require that the environmental review for multifamily housing with five or more dwelling units or non-residential property include the evaluation of previous uses of the site or other evidence of contamination on or near the site. For acquisition and new construction of multifamily and nonresidential properties HUD strongly advises the review include an ASTM Phase I Environmental Site Assessment (ESA) to meet real estate transaction standards of due diligence and to help ensure compliance with HUD's toxic policy at 24 CFR §58.5(i) and 24 CFR §50.3(i). Also note that some HUD programs require an ASTM Phase I ESA.

→ Based on the response, the review is in compliance with this section.
Continue to the Worksheet Summary below.

Yes.

→ Describe the findings, including any recognized environmental conditions (RECs), in Worksheet Summary below. Continue to Question 3.

3. Mitigation

Document the mitigation needed according to the requirements of the appropriate federal, state, tribal, or local oversight agency. If the adverse environmental effects cannot be mitigated, then HUD assistance may not be used for the project at this site.

Can adverse environmental impacts be mitigated?

Adverse environmental impacts cannot feasibly be mitigated

→ Project cannot proceed at this location.

Yes, adverse environmental impacts can be eliminated through mitigation.

→ Provide all mitigation requirements² and documents. Continue to Question 4.

4. Describe how compliance was achieved. Include any of the following that apply: State Voluntary Clean-up Program, a No Further Action letter, use of engineering controls³, or use of institutional controls⁴.

² Mitigation requirements include all clean-up actions required by applicable federal, state, tribal, or local law. Additionally, provide, as applicable, the long-term operations and maintenance plan, Remedial Action Work Plan, and other equivalent documents.

³ Engineering controls are any physical mechanism used to contain or stabilize contamination or ensure the effectiveness of a remedial action. Engineering controls may include, without limitation, caps, covers, dikes, trenches, leachate collection systems, signs, fences, physical access controls, ground water monitoring systems and ground water containment systems including, without limitation, slurry walls and ground water pumping systems.

⁴ Institutional controls are mechanisms used to limit human activities at or near a contaminated site, or to ensure the effectiveness of the remedial action over time, when contaminants remain at a site at levels above the applicable remediation standard which would allow for unrestricted use of the property. Institutional controls may include structure, land, and natural resource use restrictions, well restriction areas, classification exception areas, deed notices, and declarations of environmental restrictions.

If a remediation plan or clean-up program was necessary, which standard does it follow?

Complete removal

→ *Continue to the Worksheet Summary.*

Risk-based corrective action (RBCA)

→ *Continue to the Worksheet Summary.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

Dominion Due Diligence Group has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Practice E 1527-13 of the Austin Homes located at 1115 East New Street in Knoxville, Knox County, Tennessee (subject property). Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report. This assessment has revealed no evidence of recognized environmental conditions (RECs) in connection with the subject property.

Are formal compliance steps or mitigation required?

Yes

No

Austin Homes
 1115 East New Street
 Knoxville, TN 37915
 Inquiry Number: 4931902.2s
 May 09, 2017

Search Summary Report

TARGET SITE 1115 EAST NEW STREET
 KNOXVILLE, TN 37915

| Category | Sel | Site | 1/8 | 1/4 | 1/2 | > 1/2 | ZIP | TOTALS |
|-----------------------|-----|------|-----|-----|-----|-------|-----|--------|
| NPL | Y | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NPL Delisted | Y | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CERCLIS | Y | 0 | 1 | 1 | 0 | - | 1 | 3 |
| NFRAP | Y | 0 | 0 | 0 | 0 | - | 0 | 0 |
| RCRA COR ACT | Y | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| RCRA TSD | Y | 0 | 0 | 0 | 0 | - | 0 | 0 |
| RCRA GEN | Y | 0 | 0 | 2 | - | - | 0 | 2 |
| Federal IC / EC | Y | 0 | 0 | 0 | 0 | - | 0 | 0 |
| ERNS | Y | 0 | - | - | - | - | 0 | 0 |
| State/Tribal NPL | Y | 0 | 0 | 0 | 0 | - | 0 | 0 |
| State/Tribal SWL | Y | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| State/Tribal LTANKS | Y | 0 | 3 | 5 | 5 | - | 3 | 16 |
| State/Tribal Tanks | Y | 0 | 7 | - | - | - | 0 | 7 |
| State/Tribal IC / EC | Y | 0 | 2 | - | - | - | 0 | 2 |
| State/Tribal VCP | Y | 0 | 2 | 0 | 1 | - | 2 | 5 |
| ST/Tribal Brownfields | Y | 0 | 0 | 0 | 0 | - | 0 | 0 |
| US Brownfields | Y | 0 | 0 | 0 | 1 | - | 0 | 1 |
| Other Haz Sites | Y | 0 | - | - | - | - | 0 | 0 |
| Other Tanks | Y | 0 | 9 | - | - | - | 0 | 9 |
| Spills | Y | 0 | - | - | - | - | 0 | 0 |
| Other | Y | 0 | 2 | 6 | - | - | 0 | 8 |
| EDR Exclusive | Y | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| - Totals -- | | 0 | 26 | 14 | 9 | 3 | 6 | 58 |

FirstSearch Report

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 Suite 400
 Knoxville, TN 37915
 Toll Free: 800.352.0050
 www.edrnet.com



Search Summary Report

TARGET SITE: 1115 EAST NEW STREET
KNOXVILLE, TN 37915

| Category | Database | Update | Radius | Site | 1/8 | 1/4 | 1/2 | > 1/2 | ZIP | TOTALS |
|------------------------------|-----------------|------------|--------|------|-----|-----|-----|-------|-----|--------|
| NPL | NPL | 12/05/2016 | 1.000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Proposed NPL | 12/05/2016 | 1.000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| NPL Delisted | Delisted NPL | 12/05/2016 | 1.000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CERCLIS | SEMS | 02/07/2017 | 0.500 | 0 | 1 | 1 | 0 | - | 1 | 3 |
| NFRAP | SEMS-ARCHIVE | 02/07/2017 | 0.500 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| RCRA COR ACT | CORRACTS | 12/12/2016 | 1.000 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| RCRA TSD | RCRA-TSDF | 12/12/2016 | 0.500 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| RCRA GEN | RCRA-LOG | 12/12/2016 | 0.250 | 0 | 0 | 0 | - | - | 0 | 0 |
| | RCRA-SQG | 12/12/2016 | 0.250 | 0 | 0 | 0 | - | - | 0 | 0 |
| | RCRA-CESQG | 12/12/2016 | 0.250 | 0 | 0 | 2 | - | - | 0 | 2 |
| Federal IC / EC | US ENG CONTROLS | 11/15/2016 | 0.500 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| | US INST CONTROL | 11/15/2016 | 0.500 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| ERNS | ERNS | 09/26/2016 | TP | 0 | - | - | - | - | 0 | 0 |
| State/Tribal NPL | SHWS | 06/27/2016 | 0.375 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| State/Tribal SWL | SWF/LF | 12/12/2016 | 0.750 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| State/Tribal LTANKS | LUST | 11/22/2016 | 0.375 | 0 | 3 | 5 | 5 | - | 3 | 16 |
| | INDIAN LUST | 11/14/2016 | 0.375 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| State/Tribal Tanks | UST | 11/23/2016 | 0.125 | 0 | 7 | - | - | - | 0 | 7 |
| | AST | 10/01/1999 | 0.125 | 0 | 0 | - | - | - | 0 | 0 |
| | INDIAN UST | 11/14/2016 | 0.125 | 0 | 0 | - | - | - | 0 | 0 |
| State/Tribal IC / EC | ENG CONTROLS | 12/06/2016 | 0.125 | 0 | 0 | - | - | - | 0 | 0 |
| | INST CONTROL | 12/06/2016 | 0.125 | 0 | 2 | - | - | - | 0 | 2 |
| State/Tribal VCP | VCP | 01/04/2017 | 0.500 | 0 | 2 | 0 | 1 | - | 2 | 5 |
| ST/Tribal Brownfields | BROWNFIELDS | 06/27/2016 | 0.500 | 0 | 0 | 0 | 0 | - | 0 | 0 |

Search Summary Report

TARGET SITE: 1115 EAST NEW STREET
KNOXVILLE, TN 37915

| Category | Database | Update | Radius | Site | 1/8 | 1/4 | 1/2 | > 1/2 | ZIP | TOTALS |
|------------------------|-------------------|------------|--------|------|-----|-----|-----|-------|-----|--------|
| US Brownfields | US BROWNFIELDS | 03/02/2017 | 0.500 | 0 | 0 | 0 | 1 | - | 0 | 1 |
| Other Haz Sites | US CDL | 09/30/2016 | TP | 0 | - | - | - | - | 0 | 0 |
| Other Tanks | HIST UST | 09/01/2016 | 0.125 | 0 | 9 | - | - | - | 0 | 9 |
| Spills | HMIRS | 12/28/2016 | TP | 0 | - | - | - | - | 0 | 0 |
| Other | RCRA NonGen / NLR | 12/12/2016 | 0.250 | 0 | 2 | 6 | - | - | 0 | 8 |
| | TSCA | 12/31/2012 | TP | 0 | - | - | - | - | 0 | 0 |
| | TRIS | 12/31/2014 | TP | 0 | - | - | - | - | 0 | 0 |
| | SSTS | 12/31/2009 | TP | 0 | - | - | - | - | 0 | 0 |
| | RAATS | 04/17/1995 | TP | 0 | - | - | - | - | 0 | 0 |
| | PRP | 10/25/2013 | TP | 0 | - | - | - | - | 0 | 0 |
| | PADS | 01/20/2016 | TP | 0 | - | - | - | - | 0 | 0 |
| | ICIS | 11/18/2016 | TP | 0 | - | - | - | - | 0 | 0 |
| | FTTS | 04/09/2009 | TP | 0 | - | - | - | - | 0 | 0 |
| | MLTS | 08/30/2016 | TP | 0 | - | - | - | - | 0 | 0 |
| | RADINFO | 01/04/2017 | TP | 0 | - | - | - | - | 0 | 0 |
| | INDIAN RESERV | 12/31/2014 | 1.000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | LEAD SMELTERS | 12/05/2016 | TP | 0 | - | - | - | - | 0 | 0 |
| | US AIRS | 10/12/2016 | TP | 0 | - | - | - | - | 0 | 0 |
| | FINDS | 07/15/2016 | TP | 0 | - | - | - | - | 0 | 0 |
| | AIRS | 08/01/2016 | TP | 0 | - | - | - | - | 0 | 0 |
| | DRYCLEANERS | 01/12/2017 | 0.250 | 0 | 0 | 0 | - | - | 0 | 0 |
| | LEAD | 02/21/2017 | TP | 0 | - | - | - | - | 0 | 0 |
| EDR Exclusive | EDR MGP | 08/28/2009 | 1.000 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| | - Totals -- | | | 0 | 26 | 14 | 9 | 3 | 6 | 58 |

Site Information Report

Request Date: MAY 9, 2017
Request Name: HALEY HOKE

Search Type: COORD
Job Number: NA

Target Site: 1115 EAST NEW STREET
 KNOXVILLE, TN 37915

Site Location

| | | | | | |
|-------------------|-------------------------|--------------------------|-----------------------------|-------------|---------------------|
| Longitude: | 83.911143 | Degrees (Min/Sec) | 83.9111430 - 83° 54' 40.11" | UTMs | Easting: 237489.2 |
| Latitude: | 35.971353 | | 35.9713530 - 35° 58' 16.87" | | Northing: 3984490.0 |
| Elevation: | 891 ft. above sea level | | | | Zone: Zone 17 |

Demographics

Sites: 52 **Non-Geocoded:** 6 **Population:** N/A
RADON

Federal EPA Radon Zones for KNOX County: 1
 Note: Zone 1 indoor average level > 4 pCi/L
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L
 : Zone 3 indoor average level < 2 pCi/L

Federal Area Radon Information for Zip Code: 37915
 Number of sites tested: 1

| Area | Average Activity | % <4 pCi/L | % 4-20 pCi/L | % >20 pCi/L |
|-------------------------|------------------|--------------|--------------|--------------|
| Living Area - 1st Floor | 3.400 pCi/L | 100% | 0% | 0% |
| Living Area - 2nd Floor | Not Reported | Not Reported | Not Reported | Not Reported |
| Basement | Not Reported | Not Reported | Not Reported | Not Reported |

Federal Area Radon Information for KNOX COUNTY, TN
 Number of sites tested: 81

| Area | Average Activity | % <4 pCi/L | % 4-20 pCi/L | % >20 pCi/L |
|-------------------------|------------------|--------------|--------------|--------------|
| Living Area - 1st Floor | 2.168 pCi/L | 86% | 14% | 0% |
| Living Area - 2nd Floor | Not Reported | Not Reported | Not Reported | Not Reported |
| Basement | 3.650 pCi/L | 72% | 25% | 2% |

Site Information Report

RADON

State Database: TN Radon
 Radon Test Results

| County | Total Sites | Avg | Max | <4 pCi/L | 4-10 pCi/L | 10-20 pCi/L | 20-50 pCi/L | 50-100 pCi/L | >100 pCi/L |
|--------|-------------|-----|------|----------|------------|-------------|-------------|--------------|------------|
| KNOX | 133 | 4.9 | 87.0 | 87 | 31 | 13 | 1 | 1 | 0 |

Target Site Summary Report

Target Property: 1115 EAST NEW STREET
KNOXVILLE, TN 37915

JOB: NA

TOTAL: 58 GEOCODED: 52 NON GEOCODED: 6

TOTAL: 58 GEOCODED: 52 NON GEOCODED: 6

| Map ID | DB Type --ID/Status | Site Name | Address | Dist/Dir | Elev/Diff | Page No. |
|--------|--|-----------------------------|--|------------|-----------|----------|
| A1 | HIST UST --Permanently Out of Use --Currently in Use --2-470458 | MILLERS DISTRIBUTION CENTER | 212 BELL ST. KNOXVILLE, TN 37915 | 0.02 NNE | +9 | 1 |
| A2 | UST --Permanently Out of Use --2470458 | MILLERS DISTRIBUTION CENTER | 212 BELL ST. KNOXVILLE, TN 37915 | 0.02 NNE | +9 | 3 |
| B3 | HIST UST --Permanently Out of Use --2-470160 | DTN REAL ESTATE | 400 GEORGIA KNOXVILLE, TN 37915 | 0.03 NNE | -7 | 5 |
| B4 | HIST UST --Permanently Out of Use --2470160 | DTN REAL ESTATE | 400 GEORGIA KNOXVILLE, TN 37915 | 0.03 NNE | -7 | 8 |
| 5 | HIST UST --Currently in Use --2-470815 | WEIGEL'S NO. 37 | 411 EAST SUMMITT HILL DRI KNOXVILLE, TN 37902 | 0.08 WSW | +23 | 11 |
| 5 | UST --Permanently Out of Use --Temporarily Out of Use --2470815 | WEIGEL'S NO. 37 | 411 EAST SUMMITT HILL DRI KNOXVILLE, TN 37902 | 0.08 WSW | +23 | 15 |
| 5 | LUST --2470815 --1a Completed Tank Closure | WEIGEL'S NO. 37 | 411 EAST SUMMITT HILL DRI KNOXVILLE, TN 37902 | 0.08 WSW | +23 | 21 |
| C6 | RCRA NonGen / NLR --TND890651689 | | 1220 WILLOW ST KNOXVILLE, TN 37915 | 0.09 North | +4 | 22 |
| D7 | RCRA NonGen / NLR ZINTECH METAL FINISHING --TND063194815 | | 707 WILLOW STREET KNOXVILLE, TN 37915 | 0.09 NW | +10 | 24 |
| D7 | SEMS --0407721 --TND063194815 | ZINTECH METAL FINISHING | 707 WILLOW STREET KNOXVILLE, TN 37915 | 0.09 NW | +10 | 26 |

No sites found for target address

Sites Summary Report

Target Property: 1115 EAST NEW STREET
KNOXVILLE, TN 37915

JOB: NA

TOTAL: 58 GEOCODED: 52 NON GEOCODED: 6

| Map ID | DB Type --ID/Status | Site Name | Address | Dist/Dir | Elev/Diff | Page No. |
|--------|--|-----------------------------|--|------------|-----------|----------|
| A1 | HIST UST --Permanently Out of Use --Currently in Use --2-470458 | MILLERS DISTRIBUTION CENTER | 212 BELL ST. KNOXVILLE, TN 37915 | 0.02 NNE | +9 | 1 |
| A2 | UST --Permanently Out of Use --2470458 | MILLERS DISTRIBUTION CENTER | 212 BELL ST. KNOXVILLE, TN 37915 | 0.02 NNE | +9 | 3 |
| B3 | HIST UST --Permanently Out of Use --2-470160 | DTN REAL ESTATE | 400 GEORGIA KNOXVILLE, TN 37915 | 0.03 NNE | -7 | 5 |
| B4 | HIST UST --Permanently Out of Use --2470160 | DTN REAL ESTATE | 400 GEORGIA KNOXVILLE, TN 37915 | 0.03 NNE | -7 | 8 |
| 5 | HIST UST --Currently in Use --2-470815 | WEIGEL'S NO. 37 | 411 EAST SUMMITT HILL DRI KNOXVILLE, TN 37902 | 0.08 WSW | +23 | 11 |
| 5 | UST --Permanently Out of Use --Temporarily Out of Use --2470815 | WEIGEL'S NO. 37 | 411 EAST SUMMITT HILL DRI KNOXVILLE, TN 37902 | 0.08 WSW | +23 | 15 |
| 5 | LUST --2470815 --1a Completed Tank Closure | WEIGEL'S NO. 37 | 411 EAST SUMMITT HILL DRI KNOXVILLE, TN 37902 | 0.08 WSW | +23 | 21 |
| C6 | RCRA NonGen / NLR --TND890651689 | | 1220 WILLOW ST KNOXVILLE, TN 37915 | 0.09 North | +4 | 22 |
| D7 | RCRA NonGen / NLR ZINTECH METAL FINISHING --TND063194815 | | 707 WILLOW STREET KNOXVILLE, TN 37915 | 0.09 NW | +10 | 24 |
| D7 | SEMS --0407721 --TND063194815 | ZINTECH METAL FINISHING | 707 WILLOW STREET KNOXVILLE, TN 37915 | 0.09 NW | +10 | 26 |

Sites Summary Report

Target Property: 1115 EAST NEW STREET
KNOXVILLE, TN 37915

JOB: NA

TOTAL: 58 GEOCODED: 52 NON GEOCODED: 6

| Map ID | DB Type --ID/Status | Site Name | Address | DistDir | ElevDiff | Page No. |
|--------|---|-------------------------------|--|------------|----------|----------|
| D8 | VCP --47574 --Closed | ZINTECH METAL FINISHING | 707 WILLOW AVENUE KNOXVILLE, TN | 0.09 NW | + 10 | 29 |
| D8 | INST CONTROL --47574 | ZINTECH METAL FINISHING | 707 WILLOW AVENUE KNOXVILLE, TN | 0.09 NW | + 10 | 30 |
| E9 | INST CONTROL --SRS-0891 | LAY PACKING FACILITY (FORMER) | 400 E JACKSON, 501 WILLOW KNOXVILLE, TN | 0.11 WNW | + 3 | 31 |
| E10 | VCP --Closed | LAY PACKING FACILITY (FORMER) | 400 E JACKSON, 501 WILLOW KNOXVILLE, TN | 0.11 WNW | + 3 | 32 |
| E11 | LUST --2470427 --8 Case Closed | LAY'S GARAGE | 400 E JACKSON AVE KNOXVILLE, TN 37915 | 0.11 WNW | + 3 | 33 |
| E12 | UST --Permanently Out of Use --2470427 | LAY'S GARAGE | 400 EAST JACKSON AVENUE KNOXVILLE, TN 37915 | 0.11 WNW | + 3 | 35 |
| E13 | HIST UST --Permanently Out of Use --2470427 | LAY'S GARAGE | 400 EAST JACKSON AVENUE KNOXVILLE, TN 37915 | 0.11 WNW | + 3 | 39 |
| D14 | UST --Permanently Out of Use --2470455 | MCKENRY PRODUCE | 717 WILLOW AVENUE KNOXVILLE, TN 37915 | 0.11 NNW | + 12 | 43 |
| D15 | HIST UST --Permanently Out of Use --2470455 | MCKENRY PRODUCE | 717 WILLOW AVENUE KNOXVILLE, TN 37915 | 0.11 NNW | + 12 | 44 |
| C16 | HIST UST --Permanently Out of Use --2470844 | EFFICIENT ELECTRIC CO INC | 1104 MCCALLA AVENUE KNOXVILLE, TN 37915 | 0.11 North | - 6 | 45 |
| C17 | UST --Permanently Out of Use --2470944 | EFFICIENT ELECTRIC CO INC | 1104 MCCALLA AVENUE KNOXVILLE, TN 37915 | 0.11 North | - 6 | 47 |

Sites Summary Report

Target Property: 1115 EAST NEW STREET
KNOXVILLE, TN 37915

JOB: NA

TOTAL: 58 GEOCODED: 52 NON GEOCODED: 6

| Map ID | DB Type --ID/Status | Site Name | Address | DistDir | ElevDiff | Page No. |
|--------|---|--|---|------------|----------|----------|
| C17 | LUST --2470944 --1a Completed Tank Closure | EFFICIENT ELECTRIC CO INC | 1104 MCCALLA AVENUE KNOXVILLE, TN 37915 | 0.11 North | - 6 | 49 |
| F18 | UST --Permanently Out of Use --2470372 | KELLER CAST METALS INC | 1010 EAST JACKSON AVENUE KNOXVILLE, TN 37915 | 0.12 North | - 3 | 50 |
| F19 | HIST UST --Permanently Out of Use --2470372 | KELLER CAST METALS INC | 1010 EAST JACKSON AVENUE KNOXVILLE, TN 37915 | 0.12 North | - 3 | 51 |
| C20 | HIST UST --Permanently Out of Use --2471208 | DANIEL A ROBINSON | 1310 MCCALLA AVENUE KNOXVILLE, TN 37917 | 0.12 NNE | + 9 | 52 |
| C21 | UST --Permanently Out of Use --2471208 | DANIEL A ROBINSON | 1310 MCCALLA AVENUE KNOXVILLE, TN 37917 | 0.12 NNE | + 9 | 53 |
| F22 | LUST --2471216 --1a Completed Tank Closure | KUB - JACKSON AVENUE FUEL CENT | 1003 JACKSON AVENUE KNOXVILLE, TN 37917 | 0.13 North | - 8 | 54 |
| F23 | LUST --2471216 --1a Completed Tank Closure | KUB - JACKSON AVE FUEL CENTER | 1003 JACKSON AVENUE KNOXVILLE, TN 37917 | 0.13 North | - 8 | 55 |
| F24 | RCRA-CESQG --TNR000004291 | KUB, FLEMING CENTER | 1003 EAST JACKSON AVENUE KNOXVILLE, TN 37915 | 0.13 North | - 8 | 56 |
| G25 | RCRA NonGen / NLR --TND052657384 | RCRA NonGen / NLR SOUTHERN CARTAGE INC | 401 JACKSON AVENUE WEST KNOXVILLE, TN 37902 | 0.14 WNW | + 6 | 65 |
| E26 | RCRA NonGen / NLR --TND081195810 | RCRA NonGen / NLR | 401 E JACKSON AVE KNOXVILLE, TN 37915 | 0.14 WNW | + 8 | 67 |
| F27 | LUST --2470413 --1a Completed Tank Closure | KNOXVILLE UTILITIES BOARD | 207 KENTUCKY ST. KNOXVILLE, TN 37915 | 0.15 NNW | + 6 | 68 |

Sites Summary Report

Target Property: 1115 EAST NEW STREET
KNOXVILLE, TN 37915

JOB: NA

TOTAL: 58 GEOCODED: 52 NON GEOCODED: 6

| Map ID | DB Type --ID/Status | Site Name | Address | Dist/Dir | ElevDiff | Page No. |
|--------|---|--------------------------------|--|------------|----------|----------|
| G28 | RCRA NonGen /NLR --TNR000020586 | | 301 EAST JACKSON AVENUE KNOXVILLE, TN 37915 | 0.17 West | + 7 | 69 |
| H29 | SEMS --0406720 --TND003380037 | KELLER FOUNDRY AKA MIKE'S FOUN | 112 KENTUCKY STREET KNOXVILLE, TN | 0.18 NNW | + 10 | 72 |
| 30 | RCRA NonGen /NLR --TND034710244 | | 1420 LINDEN AVE KNOXVILLE, TN 37917 | 0.18 NNE | + 21 | 77 |
| H31 | RCRA-CESQG --TNR000004317 | | 101 KENTUCKY STREET KNOXVILLE, TN 37915 | 0.19 NNW | + 11 | 79 |
| H32 | LUST --2471272 --1a Completed Tank Closure | CITY OF KNOXVILLE OLD POLICE G | 101 KENTUCKY STREET KNOXVILLE, TN 37913 | 0.19 NNW | + 11 | 82 |
| 33 | LUST --K479069 --8 Case Closed | VEHICLE MAINTENANCE FACILITY | 1601 MCCALLA AVENUE KNOXVILLE, TN 37915 | 0.21 NNE | + 30 | 83 |
| 34 | RCRA NonGen /NLR ACME PREMIUM SUPPLY CORP OF TN --TND081197410 | | 125 EAST JACKSON STREET KNOXVILLE, TN 37901 | 0.21 West | + 5 | 85 |
| 35 | RCRA NonGen /NLR --TND05395404 | | 1309 CHILHOWIE AVE KNOXVILLE, TN 37917 | 0.23 North | + 6 | 86 |
| B36 | LUST --2470725 --1a Completed Tank Closure | WALLACE SAW WORKS INC | 708 E DEPOT ST KNOXVILLE, TN 37917 | 0.26 NW | + 23 | 88 |
| B37 | LUST --K479060 --8 Case Closed | KNOXVILLE GENERATOR | 308 RANDOLPH STREET KNOXVILLE, TN 37917 | 0.27 NW | + 28 | 89 |
| 38 | LUST --2470150 --8 Case Closed | FUEL PLUS | 1186 EAST MAGNOLIA AVENUE KNOXVILLE, TN 37917 | 0.28 North | + 8 | 90 |

Sites Summary Report

Target Property: 1115 EAST NEW STREET
KNOXVILLE, TN 37915

JOB: NA

TOTAL: 58 GEOCODED: 52 NON GEOCODED: 6

| Map ID | DB Type --ID/Status | Site Name | Address | Dist/Dir | ElevDiff | Page No. |
|--------|---|--------------------------------|---|-----------|----------|----------|
| 39 | LUST --2470993 --8 Case Closed | MAGNOLIA SERVICE STATION | 702 E. MAGNOLIA AVE. KNOXVILLE, TN 37917 | 0.29 NW | + 31 | 93 |
| 40 | LUST --2470278 --8 Case Closed | GREYHOUND LINES, INC. | 100 MAGNOLIA AVENUE KNOXVILLE, TN 37917 | 0.35 West | + 21 | 94 |
| 41 | SWFILF --Termination --SWP470001432 | ENVIRONMENTAL WASTE SOLUTIONS | ENVIRONMENTAL WASTE SOLUT , TN 37921 | 0.36 West | + 4 | 97 |
| 42 | VCP --47605 --Closed | OUTPATIENT DIAGNOSTIC CENTER | 601 HALL OF FAME DRIVE KNOXVILLE, TN | 0.43 SSW | - 28 | 98 |
| 43 | US BROWNFIELDS --161147 | HISTORIC KNOXVILLE HIGH SCHOOL | 101 E. FIFTH ST. KNOXVILLE, TN 37917 | 0.44 WNW | + 49 | 99 |
| 44 | SWFILF --Inactive --DWL850000013 | TVA HARTSVILLE DEMO LANDF | TVA HARTSVILLE DEMO LANDF , TN 37074 | 0.48 WSW | + 65 | 106 |
| 45 | CORRACTS --TND079025688 | SAFETY KLEEN | 826 STEWART KNOXVILLE, TN 37917 | 0.85 NW | + 62 | 107 |
| 46 | EDR MGP | KNOXVILLE GASLIGHT CO | FRONT STREET KNOXVILLE, TN 37902 | 0.91 SSW | - 45 | 108 |
| 47 | EDR MGP | KNOXVILLE GASLIGHT CO | BERNARD AVE KNOXVILLE, TN 37917 | 0.95 WNW | - 6 | 109 |

Sites Summary Report

Target Property: 1115 EAST NEW STREET
KNOXVILLE, TN 37915

JOB: NA

TOTAL: 58 GEOCODED: 52 NON GEOCODED: 6

| Map ID | DB Type -ID/Status | Site Name | Address | Dist/Dir | ElevDiff | Page No. |
|--------|------------------------------------|------------------------------|--|----------|----------|----------|
| | VCP -47561 -Closed | TDOT/I-640 SINKHOLE | I-640 & I-40 EAST KNOXVILLE, TN | NON GC | N/A | N/A |
| | SEMS -0406685 -TN0001921477 | CRUZE ROAD DUMP | CRUZE ROAD KNOXVILLE, TN 37920 | NON GC | N/A | N/A |
| | LUST -2470739 -8 Case Closed | THE WHITE LILY FOODS COMPANY | 218 DEPOT AVENUE -PO BOX KNOXVILLE, TN 37917 | NON GC | N/A | N/A |
| | LUST -2470645 -8 Case Closed | STEVENS AVIATION, INC. | KNOXVILLE DOWNTOWN ISLAND KNOXVILLE, TN 37920 | NON GC | N/A | N/A |
| | LUST -2470070 -8 Case Closed | CAMPBELL AERO INC | KNOXVILLE DOWNTOWN AIRPOR KNOXVILLE, TN | NON GC | N/A | N/A |
| | VCP -47607 -Closed | HEDSTROM DESIGN | 110 MAGNOLIA AVENUE KNOXVILLE, TN | NON GC | N/A | N/A |

Site Detail Report

Target Property: 1115 EAST NEW STREET
KNOXVILLE, TN 37915

JOB: NA

HIST UST

| | | | |
|--|-----------------------------|-----------------------------------|------------|
| EDR ID: U002099768 | DIST/DIR: 0.021 NNE | ELEVATION: 900 | MAP ID: A1 |
| NAME: MILLERS DISTRIBUTION CENTER | Rev: 09/01/2016 | ID/Status: Permanently Out of Use | |
| ADDRESS: 212 BELL ST. KNOXVILLE, TN 37915 KNOX | ID/Status: Currently in Use | ID/Status: 2-470458 | |
| SOURCE: TN Department of Environment & Conservation | | | |

HIST UST:

Facility ID: 2-470458
Facility Description: Not Listed
Owner ID: 6478
Owner Name: MILLERS
Owner Address: 600 Henley St.
Owner City, St, Zip: Knoxville, TN 37902
Owner Telephone: (423) 521-5899
Owner Description: Not Listed

Tank ID: 2

Tank Status: Permanently Out of Use
Tank Capacity: 2000
Tank Contents: Gasoline
Tank Material: Asphalt Coated or Bare Steel
Tank 2ndary Trait: None
Tank Manual Gauge: False
Tank Tightness: False
Tank Inventory Control: False
Tank ATG: False
Tank Vapor Monitor: False
Tank Groundwater Monitor: False
Tank Double Walled: False
Tank 2nd Contained: False
Tank SIR: False
Overfill Installed: False
Spill Installed: False
Cathodic Protection: False
Date Installed: 04/25/1966
Tank Leak Detection Listed: True
Pipe Material: Galvanized Steel
Pipe Other Material: None
Pipe Type: Not Listed
Pipe Auto Line Leak Detect.: False
Pipe Leak Detection Listed: False
Pipe Vapor Monitor: False
Pipe Groundwater Monitor: False
Pipe Dbl Walled: Not reported
Pipe 2nd Contained: False
Pipe SIR: False
Pipe Leak Detection Listed: True

Tank ID: 1

- Continued on next page -

Database Descriptions

NPL, NPL National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices. NPL - National Priority List Proposed NPL - Proposed National Priority List Sites.

NPL Deletist. Delisted NPL. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL, where no further response is appropriate. Delisted NPL - National Priority List Deletions

CERCLIS. SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL. SEMS - Superfund Enterprise Management System

NFRAP. SEMS-ARCHIVE SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site. SEMS-ARCHIVE - Superfund Enterprise Management System Archive

RCRA COR ACT. CORRACTS. CORRACTS identifies hazardous waste handlers with RCRA corrective action activity. CORRACTS - Corrective Action Report

RCRA TSD. RCRA-TSDF RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDPS treat, store, or dispose of the waste. RCRA-TSDF - RCRA - Treatment, Storage and Disposal

RCRA GEN. RCRA-LOG RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month. RCRA-LQG - RCRA - Large Quantity Generators RCRA-SQG - RCRA - Small Quantity Generators. RCRA-CESQG - RCRA - Conditionally Exempt Small Quantity Generators.

Federal IC / EC. US ENG CONTROLS A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health. US ENG CONTROLS - Engineering Controls Sites List

US INST CONTROL - Sites with Institutional Controls.

Database Descriptions

ERNS. ERNS Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances. ERNS - Emergency Response Notification System

State/Tribal NPL. SHWS "inactive hazardous substance sites that constitute an imminent, substantial danger" is which is both real and presently existing. Such situations may include, but are not limited to one or more of the following: an immediate action is necessary to minimize an ongoing threat to the public health or pollution of the environment, an inactive hazardous substance site where there is an active release, where direct access to the hazardous substance is not controlled, or where incompatible hazardous substances are found in close proximity. Also known as Promulgated Sites List. SHWS - Promulgated Sites

State/Tribal SWLF. SWFLF Solid Waste Facilities/Landfills Sites. SWFLF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites. SWFLF - Solid Waste Disposal Facilities

State/Tribal LTANKS. LUST A listing of leaking underground storage tank site locations. LUST - Fund Eligible Leaking Underground Storage Tank Sites INDIAN LUST R10 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R5 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R6 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R4 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R7 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R1 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R8 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R9 - Leaking Underground Storage Tanks on Indian Land.

State/Tribal Tanks. UST Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program. UST - Facility and Tank Report AST - Aboveground Storage Tanks. INDIAN UST R1 - Underground Storage Tanks on Indian Land. INDIAN UST R6 - Underground Storage Tanks on Indian Land. INDIAN UST R5 - Underground Storage Tanks on Indian Land. INDIAN UST R4 - Underground Storage Tanks on Indian Land. INDIAN UST R9 - Underground Storage Tanks on Indian Land. INDIAN UST R8 - Underground Storage Tanks on Indian Land. INDIAN UST R7 - Underground Storage Tanks on Indian Land. INDIAN UST R10 - Underground Storage Tanks on Indian Land.

State/Tribal IC / EC. ENG CONTROLS Sites that have engineering controls. ENG CONTROLS - Engineering Control Sites

INST CONTROL - Institutional Control Sites.

State/Tribal VCP. VCP The Voluntary Cleanup Oversight and Assistance Program (VOAP) offers people the opportunity to work proactively with state government to address necessary cleanup of a property to return it to productive use. In return for their efforts, participants can receive a No Further Action letter and a release of liability for areas where investigation and cleanup is conducted. The program is open to everyone with an interest in addressing contamination at a site. VCP - Voluntary Cleanup, Oversight and Assistance Program Sites

ST/Tribal Brownfields. BROWNFIELDS Brownfields sites included on the Superfund Voluntary Cleanup, Oversight & Assistance Program listing. BROWNFIELDS - Superfund VOAP Listing

US Brownfields. US BROWNFIELDS Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reusing in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs. US BROWNFIELDS - A Listing of Brownfields Sites

Database Descriptions

Other Haz. Sites: US CDL A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. US CDL - Clandestine Drug Labs

Other Tanks: HIST UST This database is no longer updated by the agency. It contains records and detail fields that the current UST database does not. HIST UST - Underground Storage Tank Database

Spills: HMIRS Hazardous Materials Incident Report System: HMIRS contains hazardous material spill incidents reported to DOT. HMIRS - Hazardous Materials Information Reporting System

Other: RCRA NonGen / NLR RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste. RCRA NonGen / NLR - RCRA - Non Generators / No Longer Regulated FEDERAL - Federal and Indian Lands. TSCA - Toxic Substances Control Act. TRIS - Toxic Chemical Release Inventory System. SSTS - Section 7 Tracking Systems. RAATS - RCRA Administrative Action Tracking System. PRP - Potentially Responsible Parties. PADS - PCB Activity Database System. ICIS - Integrated Compliance Information System: FTTS - FIFRA/TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act). FTTS - FIFRA/TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act). WLTS - Material Licensing Tracking System. RADINFO - Radiation Information Database. BRS - Biennial Reporting System: INDIAN RESERV - Indian Reservations. LEAD SMELTER 1 - Lead Smelter Sites. LEAD SMELTER 2 - Lead Smelter Sites. US AIRS (AFS) - Aerometric Information Retrieval System Facility Subsystem (AFS). US AIRS MINOR - Air Facility System Data. FINDS - Facility Index System/Facility Registry System. AIRS - Listing of Permitted Sources. DRYCLEANERS - Registered Facilities List. LEAD CERT - Lead Safe Housing Registry.

EDR Exclusive: EDR MGP The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, resin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oil) waste containing volatile and non-volatile chemicals) sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination. EDR MGP - EDR Proprietary Manufactured Gas Plants

Database Sources

NPL: EPA
Updated Quarterly

NPL Delisted: EPA
Updated Quarterly

CERCLIS: EPA
Updated Quarterly

NFRAP: EPA
Updated Quarterly

RCRA COR ACT: EPA
Updated Quarterly

RCRA TSD: Environmental Protection Agency
Updated Quarterly

RCRA GEN: Environmental Protection Agency
Updated Quarterly

Federal IC / EC: Environmental Protection Agency
Varies

ERNS: National Response Center, United States Coast Guard
Updated Annually

State/Tribal NPL: Department of Environment & Conservation
Updated Semi-Annually

State/Tribal SWL: Department of Environment and Conservation
Updated Annually

State/Tribal LTANKS: Department of Environment and Conservation
Updated Quarterly

State/Tribal Tanks: Department of Environment and Conservation
Updated Quarterly

Street Name Report for Streets near the Target Property

Target Property: 1115 EAST NEW STREET
KNOXVILLE, TN 37915

State/Tribal IC / EC: Department of Environment & Conservation
Varies

State/Tribal VCP: Department of Environmental & Conservation
Varies

US Brownfields: Environmental Protection Agency
Updated Semi-Annually

Other Haz Sites: Drug Enforcement Administration
Updated Quarterly

Other Tanks: Department of Environment & Conservation
No Update Planned

Spills: U.S. Department of Transportation
Updated Annually

Other: Environmental Protection Agency
Varies

EDR Exclusive: EDR, Inc.
No Update Planned

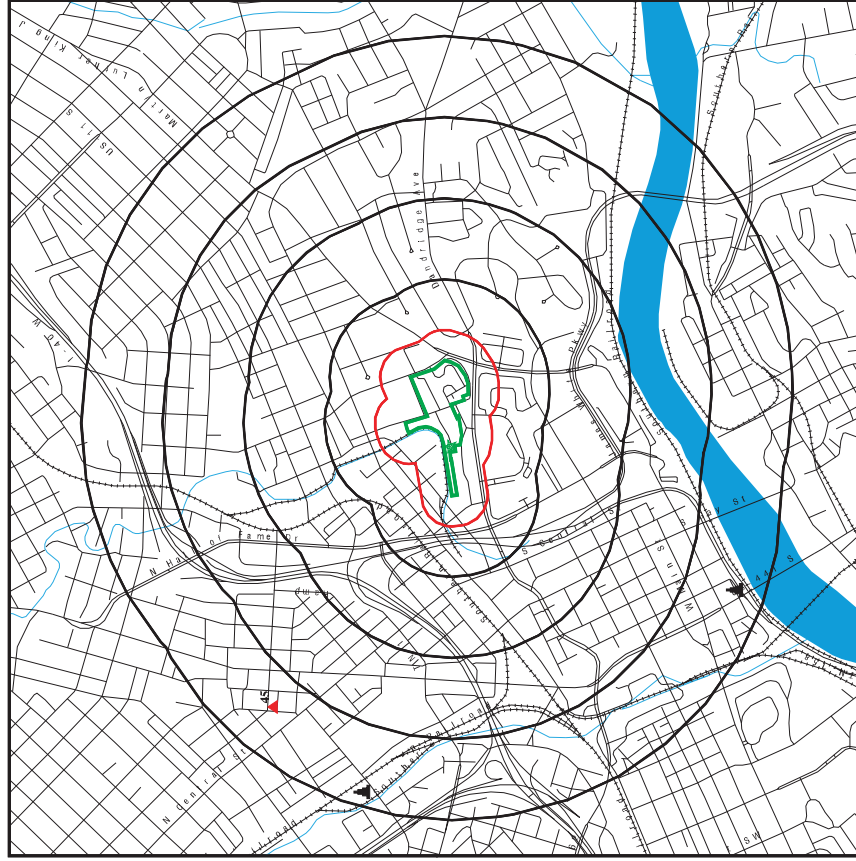
JOB: NA

| Street Name | Dist/Dir | Street Name | Dist/Dir |
|--------------|------------|------------------|------------|
| Bell St | 0.07 SE | Burge Ave | 0.12 ENE |
| Campbell Ave | 0.16 NW | E Jackson Ave | 0.21 NW |
| E New St | 0.13 NE | E Summit Hill Dr | 0.07 South |
| Florida St | 0.09 WNW | Florida St NE | 0.17 NW |
| Georgia St | 0.05 North | Georgia St NE | 0.21 NW |
| Harrison Ave | 0.19 ESE | Humes St | 0.23 WNW |
| Humes St SE | 0.22 WNW | Kentucky St | 0.15 North |
| McCalla Ave | 0.24 North | Meigs St | 0.15 East |
| Nelson Cir | 0.15 East | Nelson Rd | 0.03 South |
| New Ave SE | 0.15 East | New St | 0.00 SE |
| Old Vine Ave | 0.16 ESE | Old Vine Ave | 0.19 WSW |
| Patton St | 0.20 ESE | Ramp | 0.21 NW |
| Randolph St | 0.16 WNW | Southern Rwy | 0.12 ESE |
| Townview Dr | 0.13 NW | Willow Ave | 0.13 NW |

Environmental FirstSearch
1.030 Mile Radius
ASTM MAP: NPL, RCNACOR, STATES Sites



1115 EAST NEW STREET KNOXVILLE, TN 37915

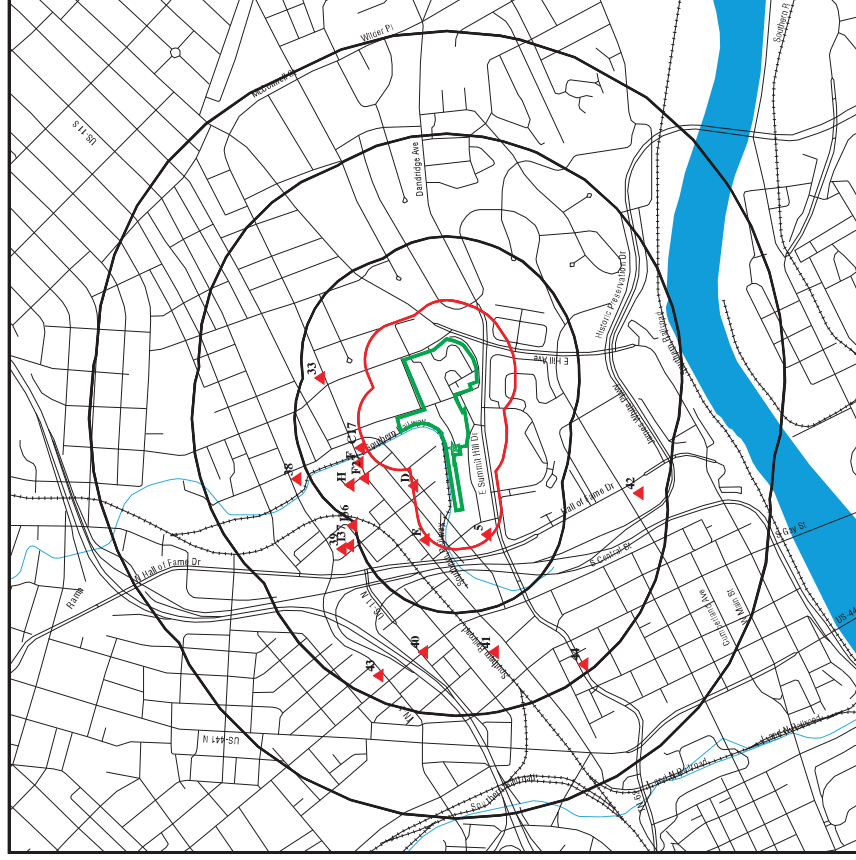


Black Rings Represent Ctr. Mile Radius; Red Ring Represents 500 ft. Radius
★ Target Property (Latitude: 35.971353 Longitude: 83.911143)
▲ Identified Sites
Indian Reservations BIA
National Priority List Sites

Environmental FirstSearch
0.750 Mile Radius
ASTM MAP: CERCLUS, RCRTSD, LUST, SWL



1115 EAST NEW STREET KNOXVILLE, TN 37915



Black Rings Represent Ctr. Mile Radius; Red Ring Represents 500 ft. Radius
★ Target Property (Latitude: 35.971353 Longitude: 83.911143)
▲ Identified Sites
Indian Reservations BIA
National Priority List Sites

Environmental FirstSearch

ASTM MAP-RCRAGEN, ERNS, UST, FED I/EC, METH LABS

1115 EAST NEW STREET KNOXVILLE, TN 37915



Black Rings Represent Ctr. Mile Radius: Red Ring Represents 500 ft. Radius

★ Target Property (Latitude: 35.971353 Longitude: 83.911143)

▲ Identified Sites

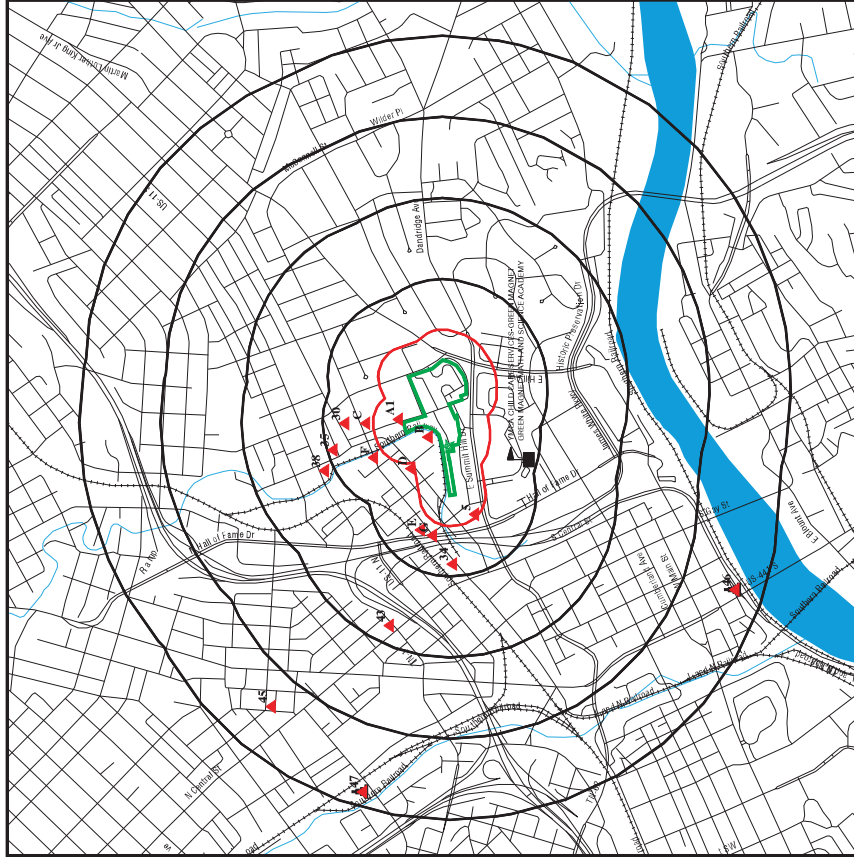
Indian Reservations BIA

National Priority List Sites

Environmental FirstSearch

1,000 Mile Radius
Non-ASTM Map, Spills, FINDS

1115 EAST NEW STREET KNOXVILLE, TN 37915



Black Rings Represent Ctr. Mile Radius: Red Ring Represents 500 ft. Radius

★ Target Property (Latitude: 35.971353 Longitude: 83.911143)

▲ Identified Sites

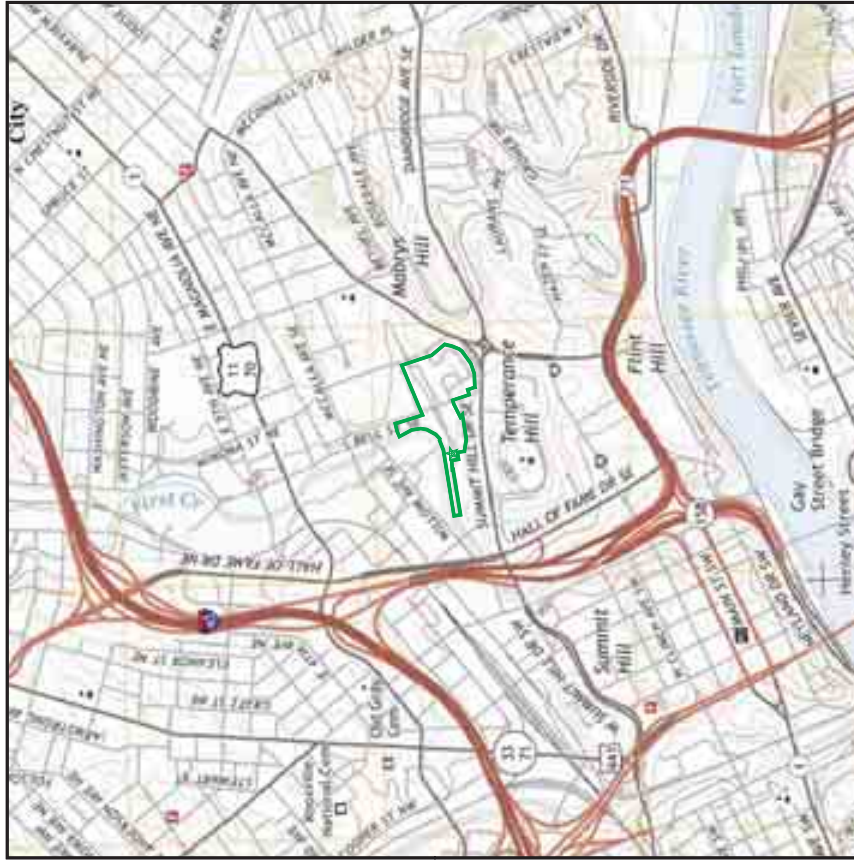
Indian Reservations BIA

National Priority List Sites

Site location Map
Topoc: 0.75 Mile Radius



1115 EAST NEW STREET KNOXVILLE, TN 37915



Map Image Position: TP
Map Reference Code & Name: 6035343 Knoxville
Map State(s): TN
Version Date: 2014

Non-Invasive Tier 1 Vapor Encroachment Screening - Database Review Worksheet
Austin Homes

| Area of Concern | Up-gradient | | Down-gradient | | Cross-gradient | | Notes |
|-----------------|----------------|---------------------|----------------|---------------------|----------------|---------------------|-------|
| | COC : .33 mile | Petroleum: .10 mile | COC : .02 mile | Petroleum: .02 mile | COC: .07 mile | Petroleum: .03 mile | |

State Standard Environmental Record Sources

| Database | Site Name | Site Address | Distance | Direction | Gradient |
|----------|-------------------------------------|--------------------------------|-----------|-----------|----------|
| LUST | WIEBELS #37 | 411 EAST SUMMITT HILL DRIVE | 0.084 WSW | N | N |
| VCP | ZINTECH METAL FINISHING | 707 WILLOW AVENUE | 0.094 NW | N | N |
| VCP | LAY PACKING FACILITY (FORMER) | 400 E JACKSON, 501 WILLOW, 65; | 0.105 WNW | N | N |
| LUST | LAY'S GARAGE | 400 E JACKSON AVE | 0.105 WNW | N | N |
| LUST | EFFICIENT ELECTRIC CO INC | 1104 MCCALLA AVE | 0.109 0.0 | N | N |
| LUST | KUB - JACKSON AVENUE FUEL CENTER | 1003 JACKSON AVENUE | 0.130 N | N | N |
| LUST | KNOWVILLE UTILITIES BOARD | 207 KENTUCKY ST | 0.146 NNW | N | N |
| LUST | CITY OF KNOXVILLE OLD POLICE GARAGE | 101 KENTUCKY STREET | 0.188 NNW | N | N |
| LUST | USPS VEHICLE MAINTENANCE FACILITY | 1601 MCCALLA AVENUE | 0.210 NNE | N | N |
| LUST | WALLACE SAW WORKS INC | 708 E DEPOT ST | 0.256 NW | N | N |
| LUST | KNOWVILLE GENERATOR | 308 RANDOLPH STREET | 0.274 NW | N | N |
| LUST | DIRECT #1940 | 1198 E. MAGNOLIA AVE | 0.282 N | N | N |
| LUST | MAGNOLIA SERVICE STATION | 702 E. MAGNOLIA AVE. | 0.295 NW | N | N |

Federal Standard Environmental Record Sources

| Database | Site Name | Site Address | Distance | Direction | Gradient |
|----------|----------------------------------|---------------------|-----------|-----------|----------|
| CERCLIS | ZINTECH METAL FINISHING | 707 WILLOW STREET | 0.094 NW | N | N |
| CERCLIS | KELLER FOUNDRY AKA MIKES FOUNDRY | 112 KENTUCKY STREET | 0.182 NNW | N | N |

Sites outside of the maximum area of concern (1/3 mile) for both State and Federal Environmental Record Sources are not a VEC and are therefore not included in this worksheet.

| | | | | | |
|--|---|---|---|---|---|
| Total Sources of Vapor Encroachment | 0 | 0 | 0 | 0 | 0 |
|--|---|---|---|---|---|

A Smaller Intrusion

by Anthony J. Buonicore, P.E.

Posted: May 1, 2009

Reducing the area of concern in the ASTM vapor intrusion standard could make the screening process much more efficient.

Based upon feedback from the marketplace since the ASTM E 2600-08 vapor intrusion standard was published in March 2008,^[1] the standard is currently undergoing revision. There are two proposed technical revisions that will enable the area of concern (AOC) for vapor intrusion screening in real estate transactions to be significantly reduced and save considerable time.

The first technical revision is directed at differentiating in Tier 1 between what steps to take when groundwater flow direction cannot be estimated (in the Phase I investigation) and when it can. The second revision would eliminate the secondary area of concern (AOC) in Tier 1 as field experience to-date has shown it not to be necessary. Moreover, it can waste valuable time and money investigating sites a considerable distance from the target property (TP) that are highly unlikely to result in a vapor intrusion problem.

Starting with the basics

These proposed revisions in the standard have the potential to significantly reduce the AOC, and thus the time and cost of investigations. The existing standard identifies a primary and secondary AOC in the Tier 1 search distance test, distinguished by whether the record search is done within the area completely around a target property (primary AOC), or whether the up-gradient direction beyond the primary AOC (secondary AOC) is included as well.

Also, the search distances are different for sites contaminated with volatile and semi-volatile chemicals of concern (COC) – such as many chlorinated solvents – versus sites contaminated with petroleum hydrocarbon COC – such as BTEX. The search distances are shorter for petroleum hydrocarbons because they are known to undergo significant bio-degradation in the presence of oxygen. The primary AOC search distances were determined based upon conservative consideration of both plume length and



A former industrial site located near a residential area which caused a vapor intrusion issue.



An old waste dump area located near a residential area that created a vapor intrusion issue.

the distance vapors might travel along a path of least resistance from a source (such as contaminated groundwater) through the vadose zone directly to a structure on a TP. The secondary AOC was included to keep the search distances in the E 2600-08 standard consistent with those in the E 1527-05 Phase I standard.^[2]

There is sound technical basis for establishing the primary AOC. Plume length research was conducted for both volatile chemical plumes (such as chlorinated solvent plumes from dry cleaners) and volatile petroleum hydrocarbon plumes from leaking underground storage tank sites. In order to be conservative, the plume length selected to determine the primary AOC was based upon the 90th percentile distance.^[3-6] For (non-petroleum hydrocarbon) COC plumes – such as may be associated with dry cleaners – 90 percent of the time the plume length was less than approximately 1,590 feet. For volatile petroleum hydrocarbon COC plumes, 90 percent of the time it was less than approximately 390 feet.

Using experience from vapor intrusion sites in the U.S. on the distances vapors may migrate through the vadose zone, and adding them to the 90th percentile plume length, the primary AOC search radii were determined, i.e., 1/3 mile (1,760 feet) for non-petroleum hydrocarbon COC, and 1/10 mile (520 feet) for petroleum hydrocarbon COC.

Under the proposed technical revisions, if it is not possible to estimate groundwater flow direction in the Phase I investigation, then the Tier 1 screen must consider all known or suspect COC-contaminated property surrounding the TP within the search radii of the primary AOC, as defined in the existing standard. However, if it is possible to estimate groundwater flow direction (and assuming four quadrants can be distinguished around a TP: an up-gradient, two cross-gradient, and a down-gradient), then the AOC can be further reduced. This is important because each known or suspect contaminated property within the AOC may need to be investigated further, and may even require a file review at state regulatory offices (in accordance with Tier 2 of the standard). The key consideration is where the known or suspected contaminated property is located with respect to the TP.

Contaminated sources located up-gradient of the TP

For contaminated sources – such as a drycleaner with a PERC release or a gas station with a release from a leaking underground storage tank – located up-gradient of the TP, the focus would continue to be those contaminated properties within the primary AOC distances (i.e., 1,760 feet for COC sources and 520 feet for petroleum hydrocarbon COC sources).

For contaminated sources located cross-gradient of the TP

When a contaminated property (such as a drycleaner with a PERC release or a gas station with a release from a leaking underground storage tank) is located cross gradient from the TP, the length of the plume associated with the cross-gradient source is not really relevant. However, its width is relevant. According to the E 2600-08 standard, what matters for cross-gradient sources is whether the nearest edge of the contaminated plume is within the critical distance from the nearest structure on the TP. The critical distance as defined in E 2600-08 effectively is the maximum distance a vapor can reasonably be expected to migrate in relatively permeable soil, assuming the path of least resistance is directly from the nearest edge of the contaminated media (such as groundwater) to the nearest structure on the TP. The distance of concern from the structure on the TP to the property that created the contamination (e.g., a dry cleaner), would be the critical distance plus a distance to account for the plume width at that point. While the critical distance numbers are specifically identified in E 2600-08 for petroleum hydrocarbon and non-petroleum hydrocarbon contamination, nothing prescriptive is mentioned in the standard about how to deal with plume width if such information is not available. A suggested approach is described later.



A former gas station site.

For contaminant sources located down-gradient of the TP

For contaminated sites – such as a dry cleaner with a PERC release or a gas station with a release from a leaking underground storage tank – located down-gradient of the TP, plume length and width matter little and the focus would only be on the critical distance. Hence, the AOC can be reduced from 1,760 feet to 100 feet for COC contamination, except for petroleum hydrocarbon COC contamination where the AOC can be reduced from 520 feet to either 100 feet (when LNAPL or free product is presumed to be present), or 30 feet (when only dissolved petroleum hydrocarbons are presumed to be present in the groundwater).

Suggested methodology for dealing with plume width at cross-gradient sources

For contaminated properties located cross-gradient from the TP, plume width must be taken into consideration in selecting an appropriate distance of concern (D_{concern}). The question is, what would be a reasonably conservative estimate for plume width (a default value) to use in the screening process assuming no actual plume information is available?



A former drycleaners. Such sites present high potential risk in any vapor intrusion

One approach is to base the default plume width on 1/3rd of the plume length^[7,8] and, to be conservative, use the 90th percentile plume length (PL90) discussed previously, regardless of where the contaminated property is located in the cross-gradient quadrant. Plume width, for example, would matter little if the contaminated property is located close to the boundary separating the cross-gradient quadrant from the down-gradient quadrant. On the other hand, it would be of much greater concern if the contaminated property is located close to the boundary separating the cross-gradient quadrant from the up-gradient quadrant.

Assuming symmetry of the plume on both sides of the source, one-half of the plume width (PW) would be added to the critical distance ($D_{critical}$) to establish the distance of concern. This can be expressed as:

$$D_{concern} = D_{critical} + 1/2 PW = D_{critical} + 1/2 (PL90/3)$$

Comparing this approach for default plume width with actual plume data^[3-6] suggests the approach is reasonable. For non-petroleum hydrocarbon COC contamination sources (such as a dry cleaner) located cross-gradient from the TP:

$$D_{critical} = 100 \text{ ft.}$$

$$PL90 = 1,590 \text{ ft.}$$

Therefore:

$$D_{concern} = 100 + 1/2 (1,590/3) = 365 \text{ feet}$$

The default E 2600-08 search radius in the cross-gradient quadrant can then be reduced from 1,760 feet to 365 feet for non-petroleum hydrocarbon COC.

For LNAPL or free product petroleum hydrocarbon sources (such as a gas station with a release from a leaking underground storage tank) located cross gradient from the TP:

$$D_{critical} = 100 \text{ ft.}$$

$$PL90 = 390 \text{ ft.}$$

Therefore:

$$D_{\text{concern}} = 100 + 1/2 (390/3) = 165 \text{ ft.}$$

Using this approach, the default E 2600-08 search radius in the cross-gradient quadrant could then be reduced from 520 feet to 165 feet for LNAPL petroleum hydrocarbon sources. If only dissolved petroleum hydrocarbons (in groundwater) are presumed to be present:

$$D_{\text{critical}} = 30 \text{ ft.}$$

$$PL90 = 390 \text{ ft.}$$

Therefore:

$$D_{\text{concern}} = 30 + 1/2 (390/3) = 95 \text{ ft.}$$

Using this approach, the default E 2600-08 search radius in the cross-gradient quadrant could then be reduced from 520 feet to 95 feet for dissolved petroleum hydrocarbon sources.

Status of E 2600-08

Several changes are planned for the ASTM E 2600-08 standard that should improve its practicality, clarity and consistency. These changes were balloted in April 2009. After discussion of these changes and any further revisions, there will be another ballot in summer 2009. If all goes well, it is anticipated that the revised standard could be approved at the October 2009 ASTM meeting in Atlanta and published by the end of the year.

Furthermore, using reasonable assumptions, it may be possible to reduce significantly the default distances of concern, which could significantly reduce the investigation effort in many cases with minimal reduction to the protectiveness of the screening process. *PE*

Anthony J. Buonicore, P.E.

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Anthony Buonicore is a consultant and chaired the ASTM task group responsible for developing the vapor intrusion assessment standard. He can be reached at (800) 238-1841, or ajb@edrnet.com.

Appendix N

Sole Source Aquifers



Sole Source Aquifers (CEST and EA)

| General requirements | Legislation | Regulation |
|---|--|-----------------|
| The Safe Drinking Water Act of 1974 protects drinking water systems which are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health. | Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300f et seq., and 21 U.S.C. 349) | 40 CFR Part 149 |
| Reference | | |
| https://www.hudexchange.info/environmental-review/sole-source-aquifers | | |

1. Is the project located on a sole source aquifer (SSA)¹?

- No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map of your project (or jurisdiction, if appropriate) in relation to the nearest SSA and its source area.*
- Yes → *Continue to Question 2.*

2. Does your project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?

- Yes → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*
- No → *Continue to Question 3.*

3. Does your region have a memorandum of understanding (MOU) or other working agreement with EPA for HUD projects impacting a sole source aquifer?

Contact your Field or Regional Environmental Officer or visit the HUD webpage at the link above to determine if an MOU or agreement exists in your area.

- Yes → *Provide the MOU or agreement as part of your supporting documentation. Continue to Question 4.*
- No → *Continue to Question 5.*

4. Does your MOU or working agreement exclude your project from further review?

- Yes → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination and document where your project fits within the MOU or agreement.*

¹ A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

No → Continue to Question 5.

5. Will the proposed project contaminate the aquifer and create a significant hazard to public health?

Consult with your Regional EPA Office. Your consultation request should include detailed information about your proposed project and its relationship to the aquifer and associated streamflow source area. EPA will also want to know about water, storm water and waste water at the proposed project. Follow your MOU or working agreement or contact your Regional EPA office for specific information you may need to provide. EPA may request additional information if impacts to the aquifer are questionable after this information is submitted for review.

No → Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide your correspondence with the EPA and all documents used to make your determination.

Yes → Work with EPA to develop mitigation measures. If mitigation measures are approved, attach correspondence with EPA and include the mitigation measures in your environmental review documents and project contracts. If EPA determines that the project continues to pose a significant risk to the aquifer, federal financial assistance must be denied. Continue to Question 6.

6. In order to continue with the project, any threat must be mitigated, and all mitigation must be approved by the EPA. Explain in detail the proposed measures that can be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

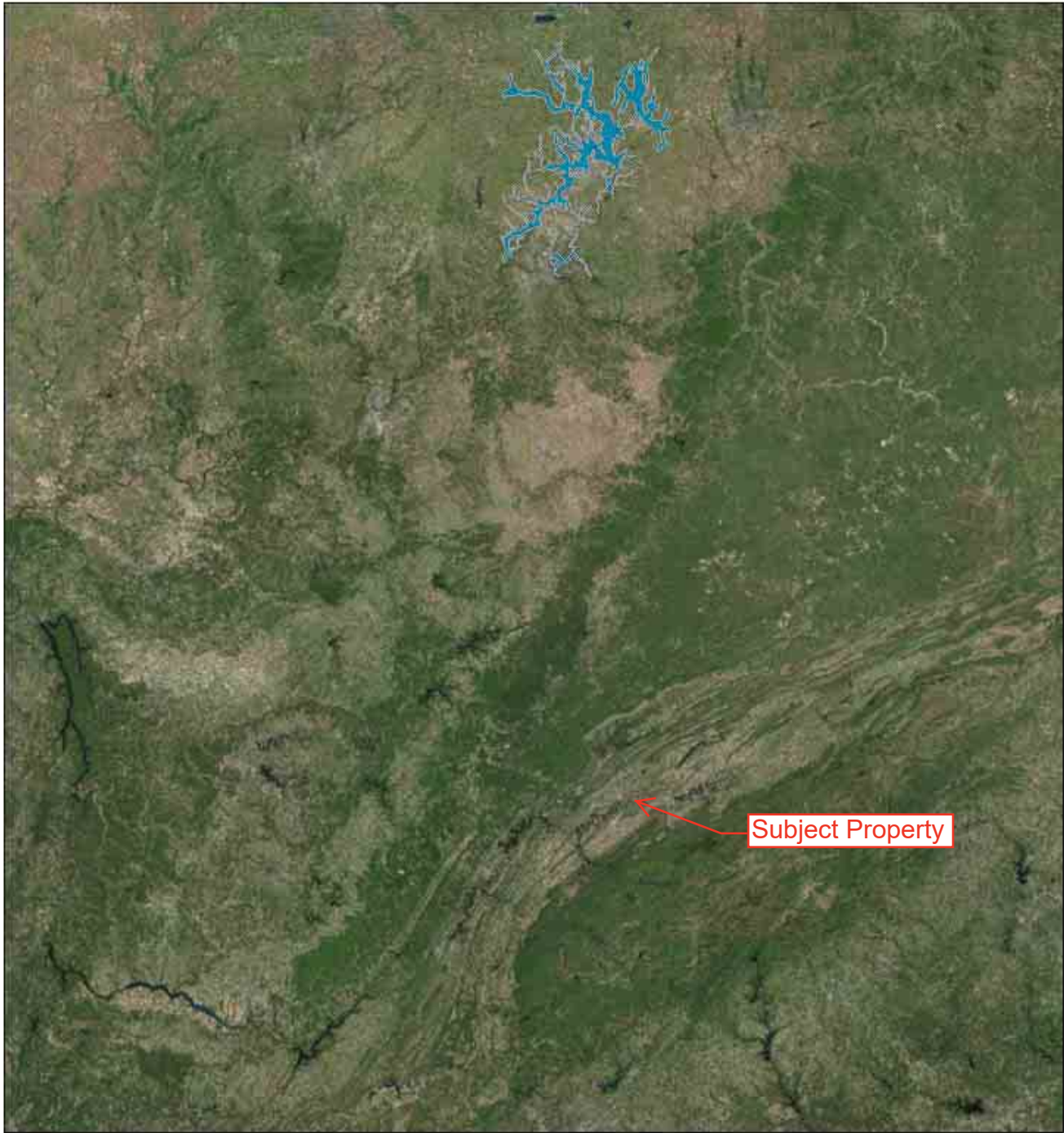
According to the Sole Source Aquifer layer obtained from EPA NEPAassist accessed at <http://nepassisttool.epa.gov/nepassist/entry.aspx>, the subject property is not serviced or supplied by a protected aquifer system.

Are formal compliance steps or mitigation required?



Yes

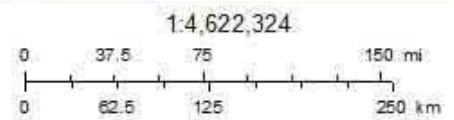
No

Sole Source Aquifers



June 2, 2017

-  Project 2
-  Sole Source Aquifers



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
EPA OEI
EPA OEI, OFA

Appendix O

Wetlands Protection



Wetlands (CEST and EA)

| General requirements | Legislation | Regulation |
|--|-----------------------|---|
| Executive Order 11990 discourages that direct or indirect support of new construction impacting wetlands wherever there is a practicable alternative. The Fish and Wildlife Service's National Wetlands Inventory can be used as a primary screening tool, but observed or known wetlands not indicated on NWI maps must also be processed. Off-site impacts that result in draining, impounding, or destroying wetlands must also be processed. | Executive Order 11990 | 24 CFR 55.20 can be used for general guidance regarding the 8 Step Process. |
| References | | |
| https://www.hudexchange.info/environmental-review/wetlands-protection | | |

1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance?

The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order.

No → *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below.*

Yes → *Continue to Question 2.*

2. Will the new construction or other ground disturbance impact an on- or off-site wetland?

The term "wetlands" means those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. Wetlands under E.O. 11990 include isolated and non-jurisdictional wetlands.

No, a wetland will not be impacted in terms of E.O. 11990's definition of new construction.
→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide a map or any other relevant documentation to explain your determination.*

Yes, there is a wetland that be impacted in terms of E.O. 11990's definition of new construction.

→ You must determine that there are no practicable alternatives to wetlands development by completing the 8-Step Process.

Provide a completed 8-Step Process as well as all documents used to make your determination, including a map. Be sure to include the early public notice and the final notice with your documentation.

Continue to Question 3.

- 3. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the exact measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.**

Which of the following mitigation actions have been or will be taken? Select all that apply:

- Permeable surfaces
- Natural landscape enhancements that maintain or restore natural hydrology through infiltration
- Native plant species
- Bioswales
- Evapotranspiration
- Stormwater capture and reuse
- Green or vegetative roofs with drainage provisions
- Natural Resources Conservation Service conservation easements
- Compensatory mitigation

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

A wetland delineation/determination has not been performed at the subject property; however, according to the USFWS National Wetlands Inventory Layer accessed at <http://nepassisttool.epa.gov/nepassist/entry.aspx> and visual observations, there are not suspected to be any wetland areas on the subject property associated with First Creek. However, a wetland area was identified on the northern adjacent property boundary. Future development in the vicinity of the northern adjacent property boundary may be restricted.

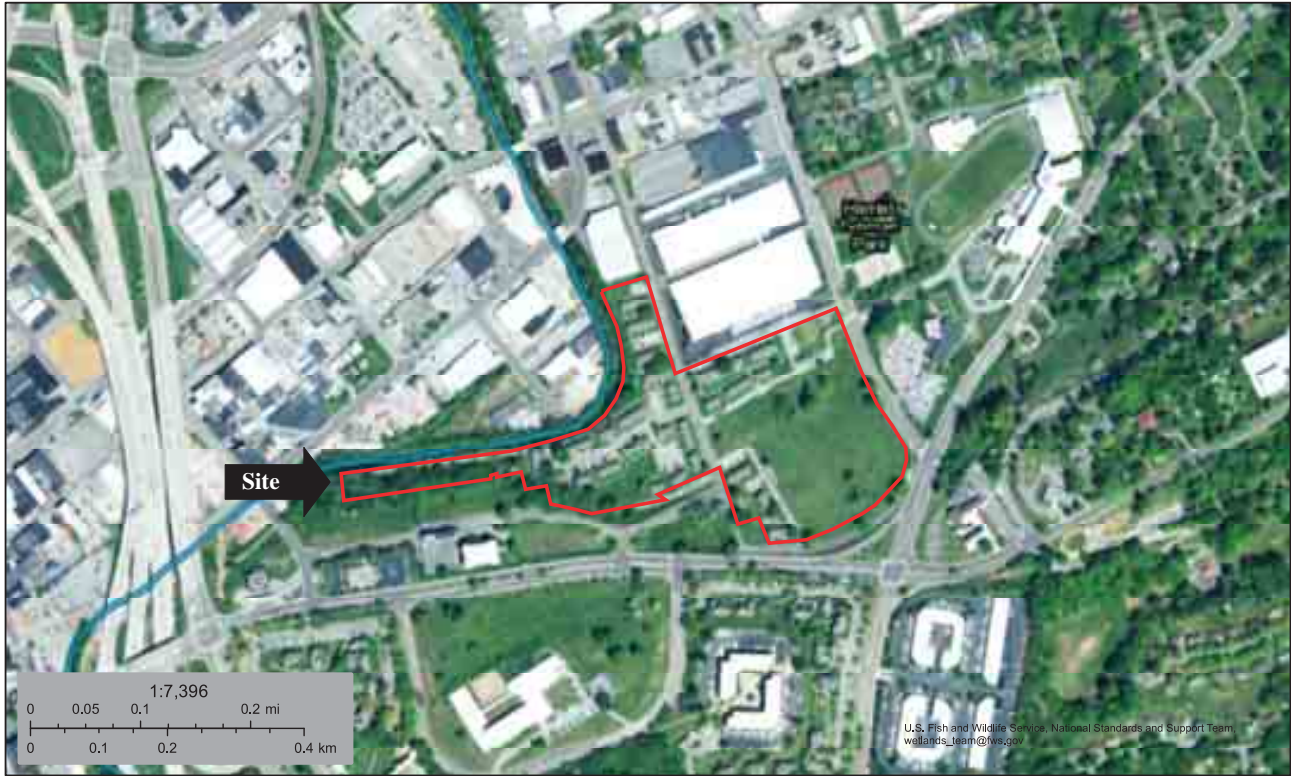
Are formal compliance steps or mitigation required?

Yes

No



National Wetlands Inventory



U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov

June 1, 2017

- | | | |
|--------------------------------|-----------------------------------|----------|
| Wetlands | Freshwater Emergent Wetland | Lake |
| Estuarine and Marine Deepwater | Freshwater Forested/Shrub Wetland | Other |
| Estuarine and Marine Wetland | Freshwater Pond | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Appendix O
National
Wetland
Inventory Map



Austin Homes
1115 East New Street
Knoxville, Tennessee
USFWS National Wetlands Inventory

**DOMINION
DUE DILIGENCE
GROUP**

Appendix P

Wild and Scenic Rivers



Wild and Scenic Rivers (CEST and EA)

| General requirements | Legislation | Regulation |
|---|---|-----------------|
| The Wild and Scenic Rivers Act provides federal protection for certain free-flowing, wild, scenic and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS) from the effects of construction or development. | The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287), particularly section 7(b) and (c) (16 U.S.C. 1278(b) and (c)) | 36 CFR Part 297 |
| References | | |
| https://www.hudexchange.info/environmental-review/wild-and-scenic-rivers | | |

1. Is your project within proximity of a NWSRS river as defined below?

Wild & Scenic Rivers: These rivers or river segments have been designated by Congress or by states (with the concurrence of the Secretary of the Interior) as wild, scenic, or recreational

Study Rivers: These rivers or river segments are being studied as a potential component of the Wild & Scenic River system.

Nationwide Rivers Inventory (NRI): The National Park Service has compiled and maintains the NRI, a register of river segments that potentially qualify as national wild, scenic, or recreational river areas

No

→ Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation used to make your determination, such as a map identifying the project site and its surrounding area or a list of rivers in your region in the Screen Summary at the conclusion of this screen.

Yes, the project is in proximity of a Nationwide Rivers Inventory (NRI) River.

→ Continue to Question 2.

2. Could the project do *any* of the following?

- Have a direct and adverse effect within Wild and Scenic River Boundaries,
- Invade the area or unreasonably diminish the river outside Wild and Scenic River Boundaries, or
- Have an adverse effect on the natural, cultural, and/or recreational values of a NRI segment.

Consultation with the appropriate federal/state/local/tribal Managing Agency(s) is required, pursuant to Section 7 of the Act, to determine if the proposed project may have an adverse effect on a Wild & Scenic River or a Study River and, if so, to determine the appropriate avoidance or mitigation measures.

Note: Concurrence may be assumed if the Managing Agency does not respond within 30 days; however, you are still obligated to avoid or mitigate adverse effects on the rivers identified in the NWSRS

No, the Managing Agency has concurred that the proposed project will not alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *Based on the response, the review is in compliance with this section. Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

Yes, the Managing Agency was consulted and the proposed project may alter, directly, or indirectly, any of the characteristics that qualifies or potentially qualifies the river for inclusion in the NWSRS.

→ *Continue to Question 3.*

3. For the project to be brought into compliance with this section, all adverse impacts must be mitigated. Explain in detail the proposed measures that must be implemented to mitigate for the impact or effect, including the timeline for implementation.

→ *Continue to the Worksheet Summary below. Provide documentation of the consultation (including the Managing Agency's concurrence) and any other documentation used to make your determination.*

Worksheet Summary

Compliance Determination

Provide a clear description of your determination and a synopsis of the information that it was based on, such as:

- Map panel numbers and dates
- Names of all consulted parties and relevant consultation dates
- Names of plans or reports and relevant page numbers
- Any additional requirements specific to your region

According to the National Wild & Scenic Rivers website accessed at <https://www.rivers.gov/map.php>, there are no Wild and Scenic Rivers in the vicinity of the subject property. In addition, according to the Nationwide Rivers Inventory list accessed at <https://www.nps.gov/ncrc/programs/rtca/nri/index.html>, the Holston River is located approximately three (3) miles to the east and downstream of the subject property. Based on the fact that there are no RECs and no proposed ground disturbing activities at the subject property, the proposed project is not suspected to negatively impact the Holston River.

Are formal compliance steps or mitigation required?

Yes

No

Wild and Scenic Rivers



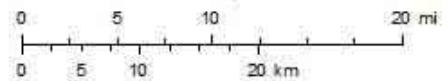
Approximately 42 miles

Subject Property

June 2, 2017

1:577,791

-  Project 2
-  Wild and Scenic Rivers (Contiguous)



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
EPA OEI
EPA OEI, OFA



NATIONAL WILD AND SCENIC RIVERS SYSTEM



- HOME
- NATIONAL SYSTEM
- MANAGEMENT
- RESOURCES
- PUBLICATIONS
- CONTACT US
- KID'S SITE

TENNESSEE

Tennessee has approximately 61,075 miles of river, of which 45.3 miles of one river are designated as wild & scenic—approximately 7/100ths of 1% of the state's river miles.

Obed River

EXPLORE DESIGNATED RIVERS



Choose A State

Choose A River

While progress should never come to a halt, there are many places it should never come to at all. — Paul Newman



- NATIONWIDE RIVERS INVENTORY
- KID'S SITE
- CONTACT US
- PRIVACY NOTICE
- Q & A SEARCH ENGINE
- SITE MAP

Designated Rivers

National System

River Management

Resources

Nationwide Rivers Inventory

Legend

- 1115 E New St
- River

Approximately 3 miles

| | |
|------------|---|
| NRI_ | 1893 |
| NRI_ID | 1893 |
| PRJID | tnhol53.0a0 |
| geometry_i | {91E6965D-5C24-402D-81C6-E4A02736D3B6} |
| OID_ | 9076 |
| PRJID_1 | tnhol53.0a0 |
| DESCRIP | Scenic stream segment affording excellent duck hunting and fishing. |
| OID_1 | 2180 |
| STATE | TN |
| PRJID_12 | tnhol53.0a0 |
| RIVER | Holston River |
| OTHSTATE | None |
| COUNTY | Knox, Grainger, Jefferson |
| REACH | RM 0, confluence with Tennessee River, to RM 53, Cherokee Dam |
| LENGTH | 53 |





Conservation and Outdoor Recreation



Tennessee Segments



Jeff Duncan
National Park Service
 Rivers, Trails & Conservation Assistance
 515 Chestnut St. Ste 207 Chattanooga, TN
 37402
 (423) 897-5137

Authorizations / History / Eligibility Descriptions / Outstandingly Remarkable Values / Potential Classifications / WED and Scenic Rivers System

Return to NRE Page

| River | County | Reach | Length (miles) | Year Listed/Updated | Potential Classification | ORVs | Description | Other States |
|---------------------------|--------------------------------------|---|----------------|---------------------|--------------------------|---------------|---|--------------|
| Abrams and Anthony Creeks | Bloount | RM 0, confluence with Little Tennessee River, headwaters one mile above NC State line | 26 | 1982 | | S, R, G, W | Small scenic stream entirely within Great Smoky Mountain National Park, near National Park Service campground. | |
| Bee Creek | White, Van Buren, Blount, Cumberland | RM 0, confluence with Caney Fork River, headwaters one mile above NC State line | 24 | 1982 | | S, R, G, F, W | Small twisting, plunging stream with small to medium drops, precipitous ledges, and bluffs; densely forested corridor that provides for wildlife habitat. | |
| Big Creek | Grundy | RM 0, confluence with Collins River, to RM 8, near Alignment | 8 | 1982 | | S, F, W | Scenic pastoral stream. | |
| Big Frey Gizzard Creek | Marion, Grundy | RM 0, confluence with Battle Creek, headwaters one mile north of Tracy City | 17 | 1982 | | S, R, G, F, W | Densely forested stream within TVA Foster Falls Recreation Area. | |
| Big Turnbull Creek | Cheatham, Dixon | RM 0, confluence with Harpeth River, to RM 16, TN 260+40 bridges | 16 | 1982 | | S, R, G, F, W | Clear, small and very scenic forested stream with 40 foot waterfall and numerous bluffs. | |
| Blackburn Fork of Roaring | Jackson, Putnam | RM 0, confluence with Blackburn River, to RM 20, one mile below community of Double Springs | 20 | 1982 | | S, R, G, W | Small scenic stream; outstanding 75 foot Cummins Mill Falls. | |

| | | | | | | | | |
|--|-----------------------------|--|----|-----------|---|---------------------|--|--|
| Bledsoe Creek | Sumner | RM 0, Old Hickory Lake, to RM 14, Bethpage | 14 | 1982 | | S, R, G, F, W, H, C | Historic, very scenic fast stream; General Winchester's home located on creek. | |
| Calkiller River | White | RM 5, three miles southeast of Dabell, to RM 12, below Sparta | 7 | 1982 | | S, R, G, F, W | Scenic stream in area of very active karstification with its caves, ground water springs, and numerous bluffs. | |
| Calkiller River | White, Putnam | RM 21, one mile south of Yanketown, to RM 41, headwaters one mile south of I-40 | 20 | 1982 | | S, R, G, F, W | See initial comments. | |
| Cane Creek of Caney Fork | Van Buren, Blount | RM 0, confluence with Caney Fork of Caney River, to RM 31, headwaters two miles south of Dill | 31 | 1982 | | S, R, G, F, W | Flows through Fall Creek Falls State Forest and Park; narrowly incised with rugged, rocky landscape; dense laurel thickets; good whitewater. | |
| Charles Creek | Warren | RM 0, confluence with Collins River, to RM 15, headwaters near Cannon County line | 15 | 1982 | | S, R, F | Popular scenic fishing stream. | |
| Clear Creek | Morgan, Fentess, Cumberland | RM 14, Morgan County line, to RM 45, headwaters below I-40 bridge | 31 | 1982 | | S, R, G, F, W | RM 0 through 14, designated component of the National Wild and Scenic Rivers System; remote, rugged stream partially within Caloosa State Wildlife Management Area; mild whitewater rapids and variety of flora and fauna. | |
| Clear Fork of S Fork of Cumberland and N. Prong Clear Fork Creek | Scott, Morgan, Fentess | RM 0, confluence with South Fork of the Cumberland River, to RM 44, headwaters northeast of Clarkrange | 44 | 1982 | | S, R, G, W | Scenic stream with deep, steep valley walls; numerous trollers, precipitous bluffs; heavily wooded valley with laurel thickets; long pools, moderate rapids, and short, quick drops. | |
| Clinch River | Anderson | RM 14, above Mellon Hill Lake, to RM 26, below Norris Lake | 26 | 1982 | | S, R, G, F, W, H, C | Numerous recorded archaeological sites; steep ridges, long shallow steepland areas, and deep pools; excellent habitat and is habitat for most diverse mussel fauna in the world. | |
| Clinch River | Cobbler, Claiborne, Hancock | RM 130, above Norris Lake Reservoir, to RM 155, approximately one mile southeast of Evanson | 26 | 1982 | | S, R, G, F, W | See initial comments. | |
| Collins River | Warren, Grundy | RM 0, confluence with Clinch River, to RM 59, headwaters two miles southeast of Tatesville | 59 | 1982 | | S, R, G, F, W | Slow moving, clear and cold pastoral stream with long pools and mild riffles; surrounded by high, forested hills and numerous bluffs. | |
| Conasauga River | Bradley, Polk | River mile 64, Georgia state line to Georgia state line | 11 | 1982/1993 | W | S, R, H | Scenic gorge within Class II/IV rapids; Civil War sites of state historical significance. | |
| Conasauga River | Bradley, Polk | RM 64, GA State line, to RM 75, GA State line | 11 | 1982 | | S, R, G, F, W, H, C | Flows through Cherokee National Forest and Colata Wilderness Area; scenic gorge with Class III/IV rapids; Civil War Sites of State historical significance. | |

| | | | | | | | |
|-------------------------------------|---------------------------------|---|-----------|----|-----------|---------------------|---|
| Crab Orchard Creek | Morgan, Cumberland | RM 0, confluence with Emory River, to RM 22, headwaters in Crab Orchard Mountain | 1982 | 22 | 1982 | S, R, G, F, W | Remote, scenic stream that flows through Cabosa Wildlife Management Area. |
| Cripple Creek | Rutherford | with East Fork of Stones River, to RM 18, headwaters two miles south of town | 1982 | 18 | 1982 | S, R, G, W | Popular rocky, scenic float stream. |
| Crooked Creek | Fentress | RM 0, confluence with Clear Fork River, to RM 16, TN 52 bridge east of Alford | 1982 | 18 | 1982 | S, R, G, W | Flows through scenic Northup Falls natural area. |
| Crooked Fork Creek | Morgan | RM 0, confluence with Emory River, to RM 5, US 27 bridge | 1982 | 5 | 1982 | S, R, G, F, W | Very scenic stream with several beautiful waterfalls and deep gorge area. |
| Cumberland River, Caney Fork | White, Cumberland | RM 98, Federal Aid Secondary Highway 4251 bridge west of Dora, to RM 135, headwaters near community of Maryland | 1982 | 36 | 1982 | S, R, G, F, W | See initial comments |
| Cumberland River, Caney Fork | Smith, Pickett, DeKalb | RM 0, confluence with Cumberland River, below Clear Hill Dam | 1982 | 26 | 1982 | S, R, G, F, W | Blue Hole Falls; ledges, numerous drops, huge boulders, sheer cliffs and limestone bluffs; rugged gorge area, excellent water quality, numerous springs; abundance of wildlife. |
| Cumberland River, Little South Fork | Pickett | RM 32, KY State line, to RM 34, headwaters west of Pickett State Park and Forest | 1982 | 2 | 1982 | S, R, G | Forested, highly scenic, and sparsely developed stream; characterized by deep channels bordered by large boulders and rock ledges. |
| Cumberland River, South Fork | Scott | RM 55, KY State line, to RM 76, confluence with New River and North Fork | 1982 | 21 | 1982 | S, R, G, F, W, H, C | Outstanding, popular whitewater; rugged, forested area; high scenic values; numerous archaeological sites. |
| Doe River | Carter | RM 0, confluence with Smith Fork, to RM 11, headwaters and Cannon County line | 1982 | 5 | 1982 | S, R, G | One of most majestic deep gorge areas in Eastern United States; remote with 1000 foot walls. |
| Doe River | Carter | RM 0, confluence with Smith Fork, to RM 11, headwaters and Cannon County line | 1982/1993 | 5 | 1982/1993 | S | One of most majestic, deep-gorge areas in eastern US in remote area, with 1000-foot walls. |
| Dry Creek of Smith Fork | DeKalb | RM 0, confluence with Smith Fork, to RM 11, headwaters and Cannon County line | 1982 | 11 | 1982 | S, R, F, W | Small scenic stream with recreational values. |
| EK River | Giles, Lincoln, Moore, Franklin | RM 33, AL State line, to RM 130, above TN 50 bridge | 1982 | 97 | 1982 | S, R, F, W, H, C | Significant recorded archaeological sites; fine float and game fish stream. |
| Emory River | Morgan | RM 27, confluence with Ocoee River, to RM 47, headwaters in Frozen Head State Park near Anderson County line | 1982 | 20 | 1982 | S, R, G, F, W | See initial comments |

| | | | | | | | |
|---------------------|--|--|-----------|-----|-----------|---------------------|--|
| Emory River | Morgan | RM 14, Roane County line, to RM 23, one mile below Nemo bridge | 1982 | 11 | 1982 | S, R, G, F, W | Scenic pastoral stream that flows through impressive gorge area; supports game fishery, RM 25 through 27, the original component of National Wild and Scenic Rivers System. |
| Falling Water River | White, Putnam | RM 12, above Center Hill Lake, to RM 41, headwaters near town of Monterey | 1982 | 29 | 1982 | S, R, G, F, W | Clear, scenic stream, Burgess Falls. |
| Flynn Creek | Jackson | RM 0, confluence with Cumberland River, to RM 10, headwaters approximately five miles southwest of McConsaife | 1982 | 10 | 1982 | S, R, F, W | Small scenic mountain stream that supports game fishery. |
| French Broad River | Cooke | River mile 94.7 to river mile 101, North Carolina state line | 1982/1993 | 6 | 1982/1993 | S, H, O | Upper section mountainous with scenic gorge area, rock gardens, rapids, ledges, diversity of flora and fauna. Significant archaeological sites. Game fishing. |
| French Broad River | Knox, Sevier | RM 0, confluence with Tennessee River, to RM 32, below Douglas Dam | 1982 | 32 | 1982 | S, R, G, F, W, H, C | Significant archaeological sites, scenic segment is mountainous stream with good whitewater and scenic gorge area; numerous rock gardens, boulder beds, rapids, islands, and ledges; diversity of flora and fauna. |
| French Broad River | Cooke | RM 96, TN 9 bridge, to RM 101, NC State line | 1982 | 5 | 1982 | S, R, G, F, W, H, C | See initial comments. |
| Goose Creek | Trousdale, Macon | RM 0, confluence with Cumberland River, to RM 15, headwaters south of Lafayette | 1982 | 15 | 1982 | S, R, F, W | Small, scenic mountain stream that supports game fishery. |
| Green Creek | Wayne | RM 0, confluence with Buffalo River, to RM 14, Waynesboro and US 64 bridge | 1982 | 14 | 1982 | S, R, G, F, W | Scenic, rocky float stream. |
| Harpeth River | Cheatham, Cheatham/Dickson, Davidson, Williams, Rutherford | RM 6, near Jackie Branch on Cheatham/Dickson line, to RM 121, confluence with Puckett Branch and Concord Creek | 1982 | 115 | 1982 | S, R, G, F, W, H, C | Rich in history and of archaeological significance; numerous historic, prehistoric, and historic buildings at "The Narrows"; impressive carved bluffs, including Paint Rock which is adorned with petroglyphs. |
| Hatchie River | Lauderdale, Tipton, Haywood, Madison, Hardeman, Hickory | RM 0, confluence with Mississippi River, to RM 163, MS State line | 1982 | 163 | 1982 | S, R, G, F, W, H, C | Slow, meandering swamp river with many oxbows surrounded by wilderness and inhabited by large diversified wildlife population, including rare species. |
| Hiwassee Creek | Polk | RM 34, confluence with Ocoee River, to RM 66, Apalachia Dam | 1982 | 32 | 1982 | S, R, G, F, W, H, C | Popular scenic float stream; supports excellent game fishery; numerous beautiful mountainous settings. |
| Hiwassee River | Polk | RM 0, confluence with Ocoee River, to river mile 65, at North Carolina state line | 1982/1993 | 31 | 1982/1993 | S, R | Popular for canoeing, kayaking, rafting, and fishing in scenic mountain setting. Excellent game fishery. |

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| Knox Gainger, Jefferson | RM 0, confluence with Tennessee River, to RM 53, Cherokee Dam. | 1982 | 53 | 1982 | S, R, G, F, W, H, C | Scenic stream segment affording excellent duck hunting and fishing. | Holston River |
| Dickson | RM 0, confluence with Fryingpan River, to RM 16, TN 47 bridge. | 1982 | 16 | 1982 | S, R, G, F, W | Narrow stream with frequent gravel bars, winds through picturesque valley, fine limestone bluffs. | Jones Creek |
| Sevier | RM 10, southeast of Cherokee Hill, to RM 34, Mount Sequoyia in Great Smoky Mountains National Park | 1982 | 24 | 1982 | S, R, G, F, W, H, C | Scenic, sparkling, excellent whitewater stream with waterfalls, tour habitat. | Little Pigeon and Middle Prong |
| Sevier | RM 19, south of Galinsburg, to RM 23, headwaters in Great Smoky Mountains National Park | 1982 | 10 | 1982 | S, R, G | Most scenic, clear mountain stream with considerable recreational potential. | Little Pigeon, West Prong |
| Marion, Grundy | RM 0, confluence with Sequatchie River, to RM 25, headwaters west of Palmer. | 1982 | 25 | 1982 | S, R, F, W | Scenic stream that supports game fishery. | Little Sequatchie River |
| Loudon, Monroe, Blount | RM 1, above dam construction, to RM 33, Chilhowee Dam and Cherokee National Forest | 1982 | 32 | 1982 | S, R, G, F, W, H, C | Critical habitat for small darter; excellent fishing and float stream; 180 recorded archaeological sites; of historical significance; unique scenery. | Little Tennessee River |
| Loudon, Monroe, Blount | River mile 1, above Tallico Dam to river mile 33, at Chilhowee Dam | 1982/1993 | 32 | 1982/1993 | R, W | Critical habitat for small darter. Excellent fishing and float stream. | Little Tennessee River |
| Stewart | RM 0, confluence with Cumberland River, to RM 10, headwaters two miles west of Stewart State Forest | 1982 | 10 | 1982 | S, R, F | Scenic stream that supports game fishery. | Long Creek |
| Warren, Cannon | RM 0, confluence with Collins River, to RM 24, approximately two miles northwest of Cement Chapel | 1982 | 24 | 1982 | S, R, F, W | Scenic stream that supports game fishery. | Mountain Creek |
| Scott | RM 0, confluence of Cumberland and Clear Fork Rivers, to RM 9, US 277/N 29 bridge | 1982 | 9 | 1982 | S, R, G | Pleasant, winding stream that flows through steep-sided valley with some Class III ledges and gorge area. | New River |
| Union | The mainstem from Poplar, NC downstream to the railroad bridge at Unaka Springs, TN | 1993 | 8 | 1993 | S, R, G | Spectacular scenery with steep slopes fishing more than 2,000 feet adjacent to the river. The Gorge is a popular attraction for whitewater boaters, including commercial outfitters. | Nolichucky River |

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| North Chickamauga River | Hamilton, Sequitache | RM 13, confluence with Falling Water Creek southeast of Falling Water, to RM 31, headwaters north of Lane Oak | 18 | 1982 | S, R, G, F, W, H, C | Scenic, rocky clear mountain stream; variety of flora and abundance of wildlife. |
| North Whiteoak Creek | Scott, Fentress | RM 0, confluence with South Fork of Cumberland River, to RM 25, headwaters near Jamestown | 25 | 1982 | S, R, G | Rocky, scenic stream with 400 foot deep gorge area, moderate whitewater and small waterfalls. |
| Obeys River | Clay | RM 0, confluence with Cumberland River, to RM 7, below Dale Hollow Dam | 7 | 1982 | S, R, G, F, W | Winds through scenic valley with steep sides and some massive, wooded limestone bluffs; supports excellent fishery. |
| Obeys River, East Fork | Fentress, Overton | RM 12, two miles south of Helena, to RM 35, unimproved approximately one mile west of Cliff Springs | 26 | 1982 | S, R, G, F, W | Dangerous, rugged stream with widely fluctuating gradient, heavily forested gorge area, 8 foot waterfall. |
| Obeys River, West Fork | Pickett, Overton | RM 0, confluence with East Fork, to RM 25, headwaters two miles west of Obeyesville | 28 | 1982 | S, R, G, F | Flows through scenic, narrow valley flanked by high wooded hills, lively Class III run, shallow gorge area. |
| Obion River | Lauderdale, Dyer | RM 0, confluence with Mississippi River, to RM 59, Obion County line | 59 | 1982 | S, R, F, W | Pastoral stream with variety of flora and fauna. |
| Ocoee River | Polk | River mile 19, Parksville Reservoir to river mile 29, Ocoee No. 3 dam | 10 | 1982/1993 | S, R | High quality whitewater recreation river, with spectacular mountain scenery. |
| Ocoee River | Polk | RM 14, Parksville Reservoir, to RM 28, below Ocoee No. 3 Dam | 14 | 1982 | S, R, G, F, W | High quality whitewater stream with spectacular mountain scenery. |
| Overall Creek | Rutherford | RM 0, confluence with West Fork of Stones River, to RM 17, headwaters one mile southeast of Windrow | 17 | 1982 | R, F, W | Popular canoe stream in rural setting, supports game fishery. |
| Pine Creek of Caney Fork | DeKalb | RM 0, confluence with Caney Fork, to RM 14, headwaters southwest of Smithville | 14 | 1982 | R, F, W | Small, scenic fishing stream. |
| Piney Creek | Rhea | RM 9, confluence with Piney Creek, to Spring City, to RM 32, headwaters near Bleedssee County line | 23 | 1982 | S, R, G | One of most wild, scenic, and clear streams in State; adjacent waterfalls; affords exciting river run. |
| Piney River | Hickman, Dickson | RM 0, confluence with Duck River, to RM 24, Pinewood and TN 48 bridge | 24 | 1982 | S, R, H, C | Small, scenic stream of historical significance; fourteen recorded archaeological sites, including extensive village complex and mound. |

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| Powell River | Calbarne, Hancock | RM 47, backwaters of Norris Lake, to RM 100, VA State line | 58 | 1982 | S, R, G, F, W, H, C | Slow, winding, sparsely populated corridor with wooded banks; highly diverse mussel fauna, including two endangered species. |
| Red River | Montgomery, Robertson | RM 9, east of Clarksville City limits, to RM 50, KY State line | 41 | 1982 | S, R, G, F, W, H, C | Pastoral float stream with numerous small bridges in State and Port Royal; heavily wooded bluffs with limestone outcroppings. |
| Red River | Robertson, Sumner | RM 70, KY State line, to RM 98, headwaters one mile west of TN | 19 | 1982 | S, R, G, F, W, H, C | See initial comments. |
| Red River, Elk Fork | Robertson | RM 0, confluence with Red River, to RM 8, KY State line | 8 | 1982 | S, R, G, F, W | Karst topography with exceptional geological features, including numerous sinkholes and caves; supports important black bass fishery, unique wildlife. |
| Red River, South Fork | Robertson, Sumner | RM 8, KY State line, to RM 29, confluence with Red River, to Rocky Creek | 21 | 1982 | S, R, G, F, W | Pastoral stream with low bluffs, numerous gravel bars and riffles; banks lined with hardwoods. |
| Red River, Sulphur Fork | Montgomery, Robertson | RM 0, confluence with Red River, to RM 27, confluence of Springfield | 27 | 1982 | S, R, G, F | Natural springs area; wooded banks. |
| Red River, West Fork | Montgomery | RM 0, confluence with Red River, to RM 14, KY State line | 14 | 1982 | R, F, W | High recreational and aesthetic potential. |
| Richland Creek | Giles, Marshall | RM 0, confluence with Elk River, to RM 87, headwaters near Lewisburg | 67 | 1982 | S, R | Scenic float stream. |
| Roaring River | Jackson, Overton | RM 1, above confluence with Cumberland River, to RM 39, headwaters four miles northeast of Rockwell | 38 | 1982 | S, R, G, F, W, H, C | Natural, sheer gorge walls, rock ledges, and gardens are characteristic. |
| Rock Creek | Scott, Pickett, Ferriss | RM 22, KY State line, to RM 1, headwaters in Pickett State Park | 9 | 1982 | S, R, G, F, W | Beautiful stream in wild terrain; deep, narrow valleys and wooded hillsides. |
| Rock Creek | Morgan | RM 0, confluence with Emory River, to RM 13, US 27 bridge near Pilot Mountain | 13 | 1982 | R, F, W | Float stream; habitat for river muskie. |
| Rocky River | Van Buren, Sequatchie | RM 10, Center Hill Lake, to RM 28, headwaters above TN 8 highway | 18 | 1982 | S, R, G, F, W | Scenic stream; Karst topography; Norton Springs. |
| Sequatchie River | Marion, Sequatchie, Cumberland | RM 0, confluence with Tennessee River, to RM 109, headwaters approximately ten miles south of Homestead | 109 | 1982 | S, R, G, F, W | Clean, pastoral float stream that flows through beautiful narrow scenic valley. |
| Sink Creek | DeKalb | RM 0, confluence with Caney Fork of Cumberland River, to RM 23, headwaters near Cannon County line | 23 | 1982 | S, R, F, W | Scenic floating stream. |

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| Smith Fork | Smith, DeKalb | RM 0, confluence with Caney Fork, to RM 20, Murfreesboro County line | 26 | 1982 | S, R, G, F, W | Scenic stream flowing over limestone bed with riffles and deep pools; numerous bluffs and wooded banks along riparian woodlands line corridor. |
| South Harpeth River | Cheatham, Williamson | RM 0, confluence with Harpeth River, to RM 28, headwaters five miles south of Lake Weona | 25 | 1982 | S, R, G, F, W | High bluffs with extensive adjacent forested area. |
| Spring Creek | Jackson, Overton, Putnam | RM 0, confluence with Roaring River, to RM 25, headwaters two miles northeast of Broberon | 25 | 1982 | S, R, G | Natural, spectacular gorge area; intricately carved bluffs; 35 foot vertical drop; small riffles and shallow pools; heavily wooded banks. |
| Stinking Creek | Campbell | RM 0, confluence with Clear Fork, to RM 29, headwaters one mile east of I-75 | 29 | 1982 | S, R, G | Rural, scenic stream that flows through unique Cumberland Black geologic formation. |
| Stones River | Davidson, Rutherford | RM 8, above Percy Priest Dam, to RM 38, confluence with East and West Forks, to below Jefferson Springs | 30 | 1982 | S, R, F, W, H, C | Excellent fishing stream in pastoral setting. |
| Stones River, East Fork | Rutherford | RM 0, confluence with Stones River, to RM 18, TN 96 bridge | 18 | 1982 | S, R, G, F, W, H, C | Excellent scenic canoeing stream; several recorded historic sites; limestone outcroppings. |
| Stones River, Middle Fork | Rutherford | RM 0, confluence with West Fork of Stones River, to RM 14, Federal Aid Secondary Road, 4289 bridge at Hoover's Gap | 14 | 1982 | S, R, F, W, H | Pastoral float and fishing stream with forested banks. |
| Stones River, West Fork | Rutherford | RM 17, southwest of Murfreesboro, to RM 27, bridge west of Christiana | 10 | 1982 | S, R, G, F, H | See initial comments. |
| Stones River, West Fork | Rutherford | RM 0, confluence with Stones River and East Fork, to RM 12, north of Murfreesboro | 12 | 1982 | S, R, G, F, H | Prime recreational stream providing variety of opportunities of significant historical interest. |
| Sweden Creek | Marion | RM 0, confluence with Belle Creek, to RM 15, headwaters in Franklin State Forest | 15 | 1982 | S, R, F, W | Wilderness stream affording recreational opportunities. |
| Sycamore Creek | Cheatham | RM 3, above TN 12 bridge, to RM 17, US 41/TN 112 bridge below I-24 bridge | 14 | 1982 | S, R, G, F, W, H, C | Excellent recreational stream with many steep scenic bluffs and forested banks; abundance of wildlife. |
| Tellco River | Monroe | RM 0, confluence with Little Tennessee River, to RM 47, NC State line | 47 | 1982 | S, R, G, F, W, H, C | Wild whitewater mountain stream with numerous and numerous recreational opportunities. |

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| Tellico River | Monroe | River mile 0, confluence with Lake Mead. River to river mile 47, North Carolina state line | 47 | 1982/1993 | R | S, R | Whitewater mountain river with spectacular waterfalls and numerous recreation opportunities. |
| Watauga Creek | Johnson | RM 49, backwaters of Lake Mead. River to river mile 51, NC State line | 2 | 1982 | | S, R, G, F, W, H, C | Scenic gorge area with several waterfalls and large boulders; recreational opportunities throughout. |
| Watauga River | Johnson | River miles 52.6, upper portion of Watauga Lake to river mile 54.9, North Carolina state line | 2 | 1982/1993 | | S | Scenic gorge area with several waterfalls and large boulders. |
| West Harpeth River | Williamson | RM 0, confluence with Harpeth River, to RM 21, US 31/TN 6 bridge | 21 | 1982 | | S, R, F, H | Scenic float stream with frequent riffles; significant historical values; low, tree-lined banks. |
| White Creek | Morgan | RM 0, confluence with Clear Creek, to RM 13, backwaters like outlet of Deer Lodge | 13 | 1982 | | S, R, F | Scenic float and fishing stream. |
| Whiteoak Creek | Scott, Morgan | RM 0, confluence with Clear Fork, to RM 17, Burnville Road | 17 | 1982 | | S, R, H, C | Scenic float stream of historical significance. |
| Wolf River | Pickett, Ferritess | RM 18, backwaters of Dale Hollow Lake, to RM 38, confluence with Pogue and Oak Creeks | 20 | 1982 | | S, H, C | Scenic stream of historical interest. |
| Yellow Creek | Montgomery, Houston | RM 5, Possum Road bridge below TN 149, to RM 13, Wilson Branch junction | 8 | 1982 | | S, R, F | Scenic, recreational stream that supports game fishery. |