



Cultural Resource Management

HANDBOOK



ENVIRONMENTALLY RESPONSIBLE
TRANSPORTATION DELIVERED

PREFACE

The *Cultural Resource Management Handbook* (CRM Handbook or Handbook) was developed to assist Florida Department of Transportation (FDOT or Department) personnel, including project managers and cultural resource coordinators, as well as cultural resource consultants providing professional services to the Department. The general purpose of this *Handbook* is to foster quality assurance through the standardization of the way the Department manages archaeological sites and historic resources. A diverse user group is assumed, ranging from persons with little knowledge of cultural resources to experienced cultural resource professionals.

This *Handbook*, a companion document to FDOT's *Project Development and Environment Manual* (*PD&E Manual*), is a training and reference guide. It contains procedures for complying with *Section 106* of the National Historic Preservation Act of 1966, as amended, and *Chapter 267, Florida Statutes* (*Fl. Stat.*). As detailed in this *Handbook*, the compliance process begins with the identification and evaluation of cultural resources, followed by the assessment of transportation project effects on significant resources, and the conditions under which the Department agrees to avoid, minimize, or mitigate adverse effects to significant cultural resources. Significant cultural resources, more accurately referenced as historic properties, are archaeological sites and historic resources that are listed or eligible for listing in the National Register of Historic Places (NRHP or National Register).

CHAPTER 1 introduces the legislative foundations and standards for cultural resource investigations and describes the qualifications for cultural resource consultants.

Chapter 2 explains the four-step *Section 106* process.

Chapter 3 describes the process of consultation with the Native American tribes with historical and cultural affiliations in Florida.

Chapter 4 discusses the Efficient Transportation Decision Making (ETDM) Process and Cultural Resource Evaluations.

Chapter 5 provides a detailed look at the Cultural Resource Assessment Survey (CRAS) process for archaeological and historic resources.

Chapter 6 explains how identified cultural resources are evaluated as per their eligibility for inclusion in the NRHP.

Chapter 7 details documentation requirements for CRAS Report types.

Chapter 8 explains the effects determination process and provides guidance for preparing agreement documents.

Chapter 9 examines the ways in which adverse effects to NRHP-listed or -eligible historic properties are avoided, minimized, or mitigated.

Chapter 10 examines the mitigation process for significant archaeological resources.

Appendix A provide a list of suggested references.

Appendix B has a glossary of key terms.

Appendix C defines the list of acronyms used throughout the *Handbook*.

Each chapter features **hyperlinks** for easy navigation to primary source materials, including federal and state laws and regulations, and agency standards and guidelines.

TABLE OF CONTENTS

PREFACE	i
TABLE OF CONTENTS	ii
CHAPTER 1 INTRODUCTION.....	1
1.1 OVERVIEW	1
1.2 TYPES OF CULTURAL RESOURCES.....	1
1.3 LEGAL MANDATES	3
1.3.1 National Historic Preservation Act of 1966.....	3
1.3.2 National Environmental Policy Act of 1969	5
1.3.3 Department of Transportation Act of 1966	5
1.3.4 Other Applicable Federal Legislation.....	6
1.3.5 Florida Historical Resources Act.....	10
1.3.6 Other Applicable State Legislation.....	10
1.4 CONSULTANT QUALIFICATIONS.....	12
1.4.1 Personnel Standards.....	12
1.4.2 Facilities and Corporate Standards	12
1.4.3 Quality Assurance.....	13
CHAPTER 2 THE SECTION 106 REVIEW PROCESS	14
2.1 OVERVIEW	14
2.2 INTRODUCTION TO SECTION 106	14
2.3 PARTICIPANTS IN THE SECTION 106 PROCESS	15
2.4 IMPLEMENTING THE SECTION 106 PROCESS: THE FOUR STEPS	16
2.4.1 Step 1: Initiate the <i>Section 106</i> Process	18
2.4.2 Step 2: Identify Historic Properties	18
2.4.3 Step 3: Assess Adverse Effects.....	22
2.4.4 Step 4: Resolve Adverse Effects.....	24
2.5 COORDINATING SECTION 106 WITH OTHER REGULATIONS	26
CHAPTER 3 NATIVE AMERICAN TRIBAL CONSULTATION.....	28
3.1 OVERVIEW	28
3.2 THE CONSULTING TRIBES.....	28
3.3 THE NATIVE AMERICAN CONSULTATION PROCESS	29
3.3.1 Authority.....	29
3.3.2 Contacts	30
3.3.3 FDOT Process.....	30
3.4 AREAS OF CONCERN AND ONGOING DIALOGUE	31
EXHIBIT 3.1	34
EXHIBIT 3.2.....	35

CHAPTER 4 THE ETDM PROCESS AND CULTURAL RESOURCES	36
4.1 INTRODUCTION	36
4.2 THE ETDM PROCESS	36
4.2.1 Planning Screen	37
4.2.2 Programming Screen	37
4.2.3 Project Development	37
4.3 THE ETDM TEAM	38
4.4 THE ENVIRONMENTAL SCREENING TOOL	39
4.5 DETERMINING TECHNICAL STUDY NEEDS AND LEVEL OF EFFORT	40
4.5.1 Determining the Cultural Resources Level of Effort in ETDM Screenings.....	40
4.5.2 Determining the Cultural Resources Level of Effort for Projects Not in ETDM.....	41
EXHIBIT 4.1	42
CHAPTER 5 RESOURCE IDENTIFICATION: THE CULTURAL RESOURCE ASSESSMENT SURVEY	44
5.1 OVERVIEW	44
5.2 PRELIMINARY ADMINISTRATIVE ACTIONS.....	44
5.2.1 <i>Section 106</i> Programmatic Agreement	44
5.2.2 Phased Approach to Cultural Resource Assessments.....	45
5.2.3 Defining the Area of Potential Effect (APE).....	47
5.2.4 Staff hour Considerations	49
5.3 BACKGROUND RESEARCH.....	49
5.3.1 Florida Master Site File Data.....	49
5.3.2 Department of Environmental Protection	50
5.3.3 Other State, Regional, and Local Sources	50
5.4 RESEARCH DESIGN	51
5.4.1 Introduction.....	51
5.4.2 Predictive Model for Archaeological Sites.....	51
5.4.3 Historic Resource Considerations.....	52
5.4.4 Methodology and Site Evaluation Criteria	53
5.5 FIELD SURVEY	53
5.5.1 Introduction.....	53
5.5.2 Project Planning.....	53
5.5.3 Archaeological Survey Methods.....	55
5.5.4 Historic Resources Survey Methods.....	59
5.6 ARTIFACT PROCESSING AND ANALYSIS	61
5.6.1 Introduction.....	61
5.6.2 Preliminary Processing	62
5.6.3 Standard Artifact Analyses	62

5.7	SITE RECORDING	63
5.7.1	FMSF Number Requests.....	63
5.7.2	Archaeological FMSF Forms	64
5.7.3	Historic Resources Forms.....	64
5.8	ARCHAEOLOGICAL ARTIFACT CURATION.....	65
	EXHIBIT 5.1	66
	EXHIBIT 5.2.....	67
	CHAPTER 6 EVALUATION OF SIGNIFICANCE: APPLYING THE NATIONAL REGISTER CRITERIA.....	68
6.1	OVERVIEW	68
6.2	THE NATIONAL REGISTER	69
6.2.1	National Register Property Types.....	69
6.2.2	NRHP Criteria for Evaluation	70
6.2.3	Criteria Considerations	71
6.3	INTEGRITY	72
6.3.1	The Aspects of Integrity	72
6.3.2	Assessing Integrity.....	73
6.4	HISTORIC CONTEXTS	74
6.5	ASSESSING SIGNIFICANCE.....	75
6.5.1	Introduction.....	75
6.5.2	Applying the Criteria for Evaluation	76
6.5.3	Evaluating the Significance of Historic Districts	78
6.6	DOCUMENTING SIGNIFICANCE	79
	CHAPTER 7 DOCUMENTING THE CRAS: REPORT TYPES	80
7.1	OVERVIEW	80
7.2	PRELIMINARY REPORT CONTENTS	80
7.3	DESKTOP ANALYSIS AND EFFECTS DETERMINATION LETTER CONTENTS.....	82
7.4	CRAS REPORT CONTENTS	82
7.4.1	Preliminary Pages	83
7.4.2	Report Body.....	84
7.5	DOCUMENT DELIVERABLES	88
7.5.1	Draft and Final Documents.....	88
7.5.2	Accompanying Materials.....	88
7.5.3	Use in Other Environmental Documents.....	89
7.6	DOCUMENT DISTRIBUTION	89
7.6.1	Document Routing Procedures	89
7.6.2	Transmittal Letters.....	90
	EXHIBIT 7.1	92

CHAPTER 8 DETERMINATION OF EFFECTS AND THE RESOLUTION OF ADVERSE EFFECTS	93
8.1 OVERVIEW	93
8.2 DETERMINING EFFECTS	93
8.2.1 Applying the Criteria of Adverse Effect.....	94
8.2.2 Determination of No Adverse Effect.....	94
8.2.3 Determination of <i>Adverse Effect</i>	96
8.3 RESOLVING ADVERSE EFFECTS.....	98
8.3.1 Advisory Council Involvement.....	99
8.3.2 Consultation Process and Procedures for Resolving Adverse Effects.....	100
8.4 PREPARING AGREEMENT DOCUMENTS.....	102
8.4.1 Memorandum of Agreement.....	102
8.4.2 Other Agreement Documents	103
EXHIBIT 8.1	104
CHAPTER 9 HISTORIC RESOURCE MITIGATION.....	107
9.1 OVERVIEW	107
9.2 HISTORIC PROPERTY MITIGATION OPTIONS.....	107
9.2.1 HISTORIC DOCUMENTATION.....	108
9.2.2 PRESERVATION, REHABILITATION, RESTORATION, & RECONSTRUCTION.....	115
9.2.3 SALVAGE OF ARCHITECTURAL INFORMATION AND MATERIALS.....	116
9.2.4 RELOCATION AND MARKETING	117
9.2.5 OFF-SITE AND CREATIVE MITIGATION.....	118
CHAPTER 10 ARCHAEOLOGICAL MITIGATION.....	120
10.1 OVERVIEW	120
10.2 ARCHAEOLOGICAL MITIGATION ALTERNATIVES.....	120
10.2.1 Minimization Measures	120
10.2.2 Off-Site Mitigation	121
10.3 EXCAVATION AND DATA RECOVERY	122
10.3.1 Project Planning Considerations.....	123
10.3.2 Types of Archaeological Sites.....	123
10.3.3 Data Recovery Plan/Research Design	126
10.3.4 Excavation and Data Collection Procedures.....	127
10.4 ANALYSIS AND CURATION.....	132
10.5 DOCUMENTATION.....	136
APPENDIX A SUGGESTED REFERENCE LIBRARY	140
APPENDIX B GLOSSARY OF KEY TERMS.....	148
APPENDIX C LIST OF ACRONYMS.....	154

CHAPTER 1

INTRODUCTION

1.1 OVERVIEW

Most FDOT projects include cultural resource investigations, in compliance with federal and state laws and regulations. The purpose of the CRAS is to identify and evaluate all archaeological sites and historic resources (collectively, cultural resources) located within the project area of potential effect (APE). The level of detail in this *Handbook* will provide FDOT personnel with a working knowledge of the Department's Cultural Resource Management (CRM) Program, objectives, and process. Consultants will find what is required to perform a range of services, from planning and conducting a complete and sufficient CRAS to mitigation measures.

The primary audience is FDOT personnel and CRM consultants who provide services on behalf of the Department. The *Handbook* contains the required procedures for all phases of work for both archaeological sites and historic resources. The overall objective is to ensure the integrity and quality of all CRM work efforts and products through adherence to a common set of standards.

This chapter begins with a definition of cultural resources. It then examines the legislative foundations and standards for conducting cultural resource investigations, from site identification to mitigation measures. The minimum professional qualifications for cultural resource consultants are also provided.

1.2 TYPES OF CULTURAL RESOURCES

Cultural resources refer to archaeological sites, historic structures, objects, and districts, which are typically 50 or more years old. **Significant** cultural resources are those that meet the *Criteria for Evaluation* ([36 Code of Federal Regulations \[CFR\] § 60.4](#)) for listing in the **National Register** and that maintain integrity. **Integrity** means the ability of the resource to convey the quality or qualities for which it is considered important. **Significant** cultural resources are synonymous with **Historic Properties** as defined by [36 CFR § 800.16](#) (as amended), the implementing regulations for *Section 106* of the [National Historic Preservation Act \(NHPA\)](#) of 1966 (as amended). NRHP [Publications](#), formerly called *National Register of Historic Places Bulletins* (NRB), are available for a variety of resources and will be mentioned below, as appropriate.

Cultural resources are found both above and below ground. Generally, but not always, archaeological sites are found below ground. Archaeological sites, also referred to as **archaeological resources**, represent the locations of precontact or historic occupations or activities. They may be evidenced by a single diagnostic artifact or the extensive ruins of a historic period military fortification. In some cases, archaeological sites may be associated with either standing or non-extant historic structures. The evaluation and recording of archaeological sites is detailed in [Guidelines for Evaluating and Registering Archeological Properties](#). **Historic resources** include bridges, residences, commercial buildings, objects, roadways, causeways, or constructed features, etc., which are at least 50 years old.

The Florida Master Site File (FMSF) of the Florida Division of Historical Resources (FDHR) documents archaeological, historic, and mixed districts; landscapes; building complexes; and linear resources as a Resource Group. An **archaeological district** consists of a group of sites that are linked historically by function, theme, or physical development or aesthetically by plan. **Historic districts** are associated buildings that retain integrity as a whole. Examples of historic districts include the commercial center of a small town or a residential neighborhood. **Mixed districts** include more than one type of historic resource, for example archaeological sites and buildings. **Landscapes** are classified as either a designed landscape, e.g., a golf course or college campus, or a rural historic landscape, e.g., a lumber camp or

traditional ceremonial site. A **building complex** consists of multiple buildings in close spatial and functional association. A **historic residential suburb** is a historic district that is defined as a geographic area, usually located outside the central city, that was historically connected to the city by one or more modes of transportation; subdivided and developed primarily for residential use according to a plan; and possessing a significant concentration, linkage, and continuity of dwellings on small parcels of land, roads and streets, utilities, and community facilities. The publication *Historic Residential Suburbs: Guidelines for Evaluation and Documentation for the National Register of Historic Places* ([Suburbs Part 1](#) and [Suburbs Part 2](#)), details how to document and evaluate historic residential suburbs. **Linear resources** include historic roads, railways, and canals.

Cemeteries and **burial places**, both precontact and historic, are other types of cultural resources. Such sites may be considered eligible for inclusion in the NRHP if they meet special requirements. These requirements are discussed in detail in [Guidelines for Evaluating and Registering Cemeteries and Burial Places](#).

Rural historic landscapes, designed historic landscapes, and Traditional Cultural Properties (TCPs) are other types of cultural resources. A **rural historic landscape** is a geographic area that historically has been shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features. Rural historic landscapes commonly reflect the day-to-day occupational activities of people engaged in traditional work such as farming, mining, and fishing. Large acreage and a proportionately small number of buildings and structures differentiate rural historic landscapes from other kinds of historic properties. Examples of a rural historic landscape include a fishing village with dwellings, boats, wharves and canals, as well as a farmstead containing homes, outbuildings, barns, sheds, fences, roads, and fields. [Guidelines for Evaluation and Documenting Rural Historic Landscapes](#) provides details on the evaluation of rural historic landscapes. **Linear resources** such as canals and causeways are a special kind of rural historic landscape.

A **designed historic landscape** is defined as any of the following: a landscape that has significance as a design or work of art; a landscape consciously designed and laid out by a master gardener, landscape architect, architect, or horticulturalist to a design principle, or an owner or other amateur using a recognized style or tradition in response or reaction to a recognized style or tradition; a landscape having a historical association with a significant person, trend, event, etc. in landscape gardening or landscape architecture; or a landscape having a significant relationship to the theory or practice of landscape architecture. [How to Evaluate and Nominate Designed Historic Landscapes](#) provides information on the recording and evaluation of this resource type, which includes parks, golf courses, resorts, and campuses.

Traditional cultural properties are properties that are associated with cultural practices or beliefs of a living community. These practices or beliefs must be rooted in that community's history and be important in maintaining the continuing cultural identity of the community for them to be eligible for inclusion in the NRHP. Examples include a locality used by generations of a Native American tribe for rituals, as well as an ethnic neighborhood that reflects the cultural values and traditions of its inhabitants through architectural details, organization of space, and activities. [Guidelines for Evaluating and Documenting Traditional Cultural Properties](#) details how to evaluate and document TCPs.

1.3 LEGAL MANDATES

Whether a transportation project is federally funded or state funded, the same requirements for the assessment of cultural resources apply. Through National Environmental Policy Act (NEPA) Assignment and the execution of a Programmatic Agreement, FDOT is the responsible agency and coordinates directly with the State Historic Preservation Officer (SHPO).

A body of federal and state laws and regulations mandates that the transportation project development process takes into consideration cultural resources that may be affected by project activities. Some legislation specifically requires an archaeological and historical assessment of transportation projects. An overview of selected applicable federal and state laws and regulations follows.

Pursuant to 23 U.S.C. § 327 and the implementing Memorandum of Understanding (MOU) executed on May 26, 2022, the FDOT has assumed and Federal Highway Administration (FHWA) has assigned its responsibilities under the *National Environmental Policy Act (NEPA)* for highway projects on the State Highway System (SHS) and Local Agency Program (LAP) projects off the SHS (this agreement is referred to as *NEPA Assignment MOU*). In general, FDOT's assumption includes all highway projects in Florida in which the source of federal funding comes from FHWA or which constitute a federal action through FDOT. *NEPA* Assignment includes responsibility for environmental review, interagency consultation, and other activities pertaining to the review or approval of *NEPA* actions. Consistent with law and the *NEPA Assignment MOU*, FDOT is the Lead Federal Agency for highway projects with approval authority resting in the Office of Environmental Management (OEM).

FDOT compliance with applicable federal and state mandates is accomplished by adherence to the *Section 106* process for federally funded or assisted projects and the historic preservation compliance and review program of the Florida Department of State (FDOS), FDHR for projects involving state funds. In order to avoid confusion, the FDHR has incorporated the *Section 106* process into Florida's uniform compliance review program in [Module Three Guidelines for Use by Historic Preservation Professionals \(Module Three\)](#). The primary difference between the two review processes is the involvement of the **Advisory Council on Historic Preservation (ACHP or Council)** on federally funded or assisted projects. With respect to the procedures necessary to identify, evaluate, and document cultural resources that will be affected by FDOT **undertakings**, the two processes are identical.

The standards and guidelines developed for federally funded or assisted projects are memorialized in the [Programmatic Agreement Among the Federal Highway Administration, the Florida Department of Transportation, the Advisory Council on Historic Preservation, and the Florida State Historic Preservation Officer Regarding Implementation of the Federal-Aid Highway Program in Florida](#). These same processes are applicable to state funded or assisted projects per the *Letter of Agreement Between Florida Department of Transportation and The State Historic Preservation Officer*. These two agreements, collectively referenced as the 2023 PA or **Section 106 PA**, are effective as of September 27, 2023.

1.3.1 National Historic Preservation Act of 1966

The *NHPA* of 1966 is the keystone of federal historic preservation law. *Sections 101, 106, 110, and 112* are highlighted below as well as the implementing regulations found in *36 CFR Part 800*. The ACHP curates access to the [National Historic Preservation Act](#) in its entirety.

Section 101 of the Act establishes the [NRHP](#) and authorizes the Secretary of the Interior (SOI or Secretary) to expand and maintain it (codified in [54 U.S.C. § 3021](#)). Particular consideration is afforded in *Section 101* to address Native American cultural properties and participation in site evaluation outcomes and *Section 106* consultation. *Section 101(d)(6)(A)* clarifies that properties of traditional

religious and cultural significance to a Native American tribe may be eligible for the NRHP. *Section 101(d)(6)(B)* requires federal agencies to consult with any Native American tribes that attach religious and cultural significance to properties of “traditional religious and cultural importance” during the *Section 106* process. It is the federal agency’s responsibility to make a “reasonable and good faith effort” to identify the appropriate tribes to be consulted. Consultation with a Native American tribe must recognize the “government-to-government” relationship that exists between the federal government and federally recognized tribes and should be respectful of tribal sovereignty.

Section 101 also provides for establishment of **Certified Local Governments (CLG)**. This program serves to link the three levels of government into a preservation partnership for the identification, evaluation, and protection of historic properties. The designation as a CLG, either a municipality or county, makes historic preservation a public policy through the passage of historic preservation ordinances that establish historic preservation boards to develop and oversee the functions of their historic preservation program. The CLG program is housed in the Bureau of Historic Preservation within the FDHR, and they maintain the list of current [CLGs](#) in Florida.

Section 106 requires all federal agencies to take into consideration the effect of federally assisted, licensed, or permitted projects on cultural resources that are listed or eligible for listing in the NRHP. [Listing in the National Register, or meeting the criteria of eligibility, is a basic prerequisite for a cultural resource to benefit from protection and assistance under *Section 106*. The NRHP is administered by the SOI through the National Park Service (NPS).] *Section 106* of the *NHPA* also requires that the ACHP, a body of Presidential appointees charged with addressing historic preservation issues, be afforded an opportunity to comment on such effects. The process for addressing the provisions of *Section 106* is contained in implementing regulations *36 CFR Part 800*, issued by the ACHP. The multi-step *Section 106* process is elaborated in **CHAPTER 2** of this *Handbook*. In recognition of the fact that not all significant archaeological and historic resources may have been identified and recorded within the project APE, *36 CFR § 800.4(b)* requires that federal agencies make “a reasonable and good faith effort” to identify any cultural resources (including unrecorded and previously recorded properties) that may be affected by their undertakings and evaluate the eligibility of these resources for listing in the NRHP.

Section 110 of the *NHPA* (as amended in 2000) obligates federal agencies to establish a historic preservation program for the identification, evaluation, and nomination of historic properties under their jurisdiction to the NRHP, and to ensure that such properties are managed and maintained in a way that considers their historic, archaeological, architectural, and cultural values. *Section 110(a)(2)(D)* requires that the federal agency’s preservation-related activities are carried out in consultation with other federal, state, and local agencies, Native American tribes, and other stakeholders, including the private sector. *Section 110(b)* mandates that federal agencies document historic properties that may be destroyed or altered as a result of federal actions or assistance. It also calls for such records to be deposited in the Library of Congress or other designated repository for “future use and reference.” *Section 110(d)* calls for agencies to integrate historic preservation concerns into their plans and programs, and *Section 110(f)* addresses impacts to **National Historic Landmarks (NHLs)**. These are resources designated by the Secretary of the Interior that have significance at the national level.

Section 112 addresses both professional standards for agency personnel and contractors responsible for historic resources (*Section 112(a)(1)(A)*), as well as records and data management (*Section 112(a)(2)*). Confidentiality regarding the locations of historic resources is addressed in *Section 304*, which stipulates that disclosure shall be withheld from the public if it has the potential to cause “significant invasion of privacy,” harm to the historic resources, or “impede the use of a traditional religious site by practitioners.”

36 CFR Part 800 – Protection of Historic Properties currently incorporates amendments effective August 5, 2004 ([36 CFR Part 800 - Protection Of Historic Properties](#)). Subpart B of the regulations defines how federal agencies meet the statutory responsibilities in the *Section 106* process, and how the steps of this process can be coordinated with reviews under other federal laws. Specifically, *Section 800.8* encourages federal agencies to coordinate compliance with *Section 106* with steps taken to meet the requirements of *NEPA*. The regulations underscore the need to initiate consultation early in the *Section 106* process, and to consider a broad range of alternatives in project planning. *Section 800.8(c)* permits substitution of *NEPA* analyses and documents for standard *Section 106* review, if certain conditions are met.

Section 800.9 of the regulations empowers the ACHP to review federal agency compliance with the *Section 106* process, including an evaluation of the agency’s policies, procedures and actions, and the provision of recommended actions to improve the process (*Section 800.9(d)(2)*). When an agency official is found to have failed to complete the requirements of *Section 106* prior to the approval of an undertaking, the ACHP’s opportunity to comment may be foreclosed (*Section 800.9(b)*). In accordance with *Section 800.10*, in the case of NHLs, the agency official shall request ACHP participation in any consultation to resolve adverse effects and shall also notify and invite the Secretary of the Interior to participate in the consultation.

1.3.2 National Environmental Policy Act of 1969

The importance of cultural resources to the nation is reflected in the [NEPA](#) where it is stated that it is the policy of the federal government “to use all practicable means and measures...to create and maintain conditions under which man and nature can exist in productive harmony” (*Section 101[a]*). To carry out this policy, *NEPA* declares that it shall be the continuing responsibility of the federal government to “preserve important historic, cultural, and natural aspects of our national heritage.” Consequently, *Section 102(c)* requires that an Environmental Impact Statement (EIS) be prepared when federal actions will significantly affect the quality of the human environment, including cultural resources.

The *NEPA* process consists of an evaluation of the environmental impacts of a federally funded project on significant cultural resources. The *NEPA* process is the framework for environmental impact documentation and allows for public participation in the consideration of impacts to cultural resources. Implementing regulations developed by FHWA are contained in [23 CFR Part 771 - Environmental Impact And Related Procedures](#). As previously stated, Florida is a *NEPA* Assignment state and FDOT acts as the lead federal agency for compliance with *NEPA*, *Section 106* of the *NHPA*, and other federal environmental regulations. Extensive guidance on FDOT’s process to carry out this role is available in the [PD&E Manual](#).

Compliance with *NEPA* can and should be coordinated with *Section 106* review, although compliance with one does not substitute for compliance with another. See [Section 2.5](#) of this *Handbook* for further information regarding the coordination of *Section 106* and other regulations. The regulations of the Council on Environmental Quality (CEQ) which implements *NEPA* (*40 CFR §§ 1500-1508*) encourage agencies to integrate *NEPA* and *NHPA* compliance. The CEQ’s implementing regulations define “effects” or “impacts” to include cultural and environmental justice concerns, whether direct, indirect or cumulative (*40 CFR § 1508.1*). Demonstration of *Section 106* compliance is often contained in the *NEPA* Environmental Document.

1.3.3 Department of Transportation Act of 1966

Under the provisions of [Section 4\(f\)](#) of the *Department of Transportation Act of 1966* (*Pub. L. 89-670*), the United States Department of Transportation (USDOT) is prohibited from using any historic site of national, state, or local significance (i.e., listed in or eligible for the NRHP) for public transportation purposes without first determining that there is no prudent and feasible alternative to the use of such

land. Subsequent to 1966, the protections have been recodified under [49 U.S.C. §303 - Policy on lands, wildlife and waterfowl refuges, and historic sites](#) and [23 U.S.C. §138 – Preservation of Parkland](#); however, it is still universally referred to as *Section 4(f)*. If no prudent and feasible alternative exists, then the Department is required to develop measures to minimize harm to the resource resulting from the transportation project. FHWA regulations [23 CFR § 771.135](#) specifically address the evaluation of *Section 4(f)* resources and impacts. The current legislation includes a simplified process and approval of projects that have only *de minimis* impacts on resources protected by *Section 4(f)*. Under these provisions, once it is determined that a transportation use of a *Section 4(f)* property results in a *de minimis* impact, an analysis of avoidance alternatives is not required, and the *Section 4(f)* evaluation process is complete. Implementing regulations that clarify the consideration factors and the application standards when determining if an alternative for avoiding the use of a *Section 4(f)* property is feasible and prudent are outlined in [23 CFR Part 774 – Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites \(Section 4\(f\)\)](#). The bulk of the Interstate Highway System (IHS) is exempt from consideration as a historic resource under *Section 4(f)* under [23 CFR § 774.11\(e\)\(2\)](#) with four exceptions from this exemption due to their significant nature: a segment of Alligator Alley, the Bob Graham/Sunshine Skyway Bridge, the I-75 Snake Wall, and Myrtle Avenue Overpass.

1.3.4 Other Applicable Federal Legislation

[EO 11593](#): Protection and Enhancement of the Cultural Environment, signed by President Richard M. Nixon in 1971, requires all federal agencies to identify, and take steps to avoid impact to, archaeological and historic properties under their jurisdiction that are eligible for listing in the NRHP. It also calls for the complete documentation of any NRHP-eligible site or property that will be demolished as a result of a federal undertaking.

The [Archeological and Historic Preservation Act \(AHPA\)](#) of 1974 ([16 U.S.C. § 469](#)) requires that federal agencies provide for “...the preservation of historical and archeological data (including relics and specimens) which might otherwise be irreparably lost or destroyed as the result of...any alteration of the terrain caused as a result of any Federal construction project.” In addition, it requires federal agencies to fund impact mitigation measures when their activities threaten to destroy or damage NRHP-eligible properties.

The [American Indian Religious Freedom Act \(AIRFA\)](#) of 1978 ([42 U.S.C. § 1996](#)) establishes as federal policy the protection of the rights of Native American tribes to the free exercise of their religion, including access to sacred sites, and requires federal agencies to evaluate their programs to accommodate this policy. Amendments to *Section 106* of the *NHPA* in 1992 strengthened the interface with this Act by declaring that under *Section 106* a federal agency must include Native American tribes in the consultation process.

The [Archaeological Resources Protection Act \(ARPA\)](#) of 1979 ([16 U.S.C. §§ 470aa-mm](#)) prohibits the unauthorized excavation of archaeological resources on federal and Native American land without a permit issued by the relevant land management agency. It also prohibits the sale, receipt, and interstate transportation of archaeological resources obtained illegally (without permits) from public or Native American land and establishes substantial civil and criminal penalties for violations. ARPA prescribes standards that must be met by the permit applicant. Where both ARPA and *Section 106* of the *NHPA* apply (e.g., where data recovery is proposed on federal land), it is important to coordinate ARPA and *Section 106* compliance. [43 CFR Part 7](#) contains the regulations implementing the provisions of ARPA and establishes uniform definitions, standards, and procedures to be followed by all federal land managers in protecting archaeological resources located on public and Native American land.

The [Native American Graves Protection and Repatriation Act \(NAGPRA\)](#) of 1990 ([25 U.S.C. §§ 3001-3013](#)), amended January 12, 2024, addresses the proper treatment of Native American human remains

and funerary and sacred objects. It prohibits the intentional removal of Native American cultural items from federal or tribal lands except under an *ARPA* permit and in consultation with the appropriate Native American tribes. It also requires federal agencies and museums receiving federal funds to inventory Native American human remains and associated funerary objects, and to develop written summaries for unassociated funerary objects, sacred objects, and objects of cultural patrimony that are in the collections they own or control. Another principal intention of the Act is the protection, on federal and tribal land, of Native American graves and other cultural items still located within archaeological sites. The *NAGPRA* contains provisions for the return (repatriation) of human remains and other cultural items held by federal agencies and museums that receive federal support to the appropriate Native American groups or descendants, upon their request. *NAGPRA* is implemented by the regulations contained in [43 CFR Part 10](#).

The [Intermodal Surface Transportation Efficiency Act](#) (ISTEA) of 1991 (Pub. L. 102-240) provides funding for transportation-related enhancement projects, including “rails to trails” programs as well as the rehabilitation of significant historic transportation facilities such as railroad depots. The [Transportation Equity Act for the 21st Century](#) (TEA-21) of 1998 (Pub. L. 105-178) reaffirms the commitment to historic preservation established by ISTEA and confirms the eligibility of historic preservation projects through a number of links to transportation systems: functional, historical, economic, social, and visual.

[EO 13007](#): Indian Sacred Sites, issued by President William J. Clinton on May 24, 1996, requires federal agencies to protect Native American sacred sites by avoiding adverse effects to the physical integrity of such sites. It also accommodates access to and ceremonial use of Native American sacred sites by Native American religious practitioners and requires federal agencies to maintain the confidentiality of information on such sites.

[EO 13175](#): Consultation and Coordination with Indian Tribal Governments signed by President Clinton in 2000, affirms and strengthens the federal government’s commitment to meaningful consultation with Native American tribes concerning federal actions; renews federal commitment to recognition of tribal sovereignty; and recognizes the government-to-government relationship between Native American tribes and the U.S. government. In September 2004, President George W. Bush’s Memorandum, [Government-to-Government Relationship with Tribal Governments](#) reaffirmed the policy set forth in EO 13175. Further strengthening of and support for this commitment has been made between 2021 and 2024 and is curated at [Government-to-government engagement](#).

In addition to these laws and regulations, on March 10, 2005, the ACHP’s [Exemption Regarding Historic Preservation Review Process for Effects to the Interstate Highway System](#) went into effect. In accordance with this exemption, all federal agencies are exempt from the *Section 106* requirement of considering the effects of their undertakings on the IHS. FHWA has designated individual elements of the IHS that are to be excluded from this exemption. This [Final List of Nationally and Exceptionally Significant Features of the Federal Interstate Highway System](#), published on the FHWA website, includes four historic properties in Florida: the Bob Graham/Sunshine Skyway Bridge; a segment of Alligator Alley (I-75) extending from the tollbooth near Naples to the tollbooth west of Andytown; the I-75 Snake Wall at the north edge of Paynes Prairie; and the Myrtle Avenue Overpass in Downtown Jacksonville. Section III describes the elements of the IHS excluded from exemption, as follows:

- (a) *The following elements of the Interstate Highway System shall be excluded from the scope of this exemption, and therefore shall require Section 106 review:*
 - (i) *Elements that are at least 50 years old, possess national significance, and meet the National Register eligibility criteria (36 CFR Part 63), as determined pursuant to Section II;*

- (ii) *Elements that are less than 50 years old, possess national significance, meet the National Register eligibility criteria, and are of exceptional importance (and therefore meet criteria consideration G for properties that have achieved significance within the last fifty years), as determined pursuant to Section II; and*
 - (iii) *Elements that were listed in the National Register, or determined eligible for the National Register by the Keeper pursuant to 36 CFR Part 63, prior to the effective date of this exemption.*
- (b) *The following elements of the Interstate Highway System may be excluded from the exemption, at the discretion of the Federal Highway Administration: Elements such as bridges, tunnels, and rest areas so long as they were constructed prior to June 30, 1956, were later incorporated into the Interstate Highway System, possess State or local significance, and meet the National Register eligibility criteria, as determined pursuant to Section II.*

On November 2, 2012, the ACHP issued the [Program Comment for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges](#). The comment was requested by FHWA in an effort to eliminate case-by-case reviews for common “cookie-cutter” post-1945 concrete and steel bridges and culverts, such as reinforced concrete slab bridges, reinforced concrete beam and girder bridges, and steel multi-beam bridges or multi-girder bridges, and culverts and reinforced concrete boxes, that are unlikely to be significant for preservation in place. FHWA, in collaboration with FDOT and the Florida SHPO, created a list of exceptions to the streamlining process. Section IV of the Program Comment describes those types of bridges that are excluded from the streamlining process, as follows:

- (A) *The bridge is listed in or has previously been determined eligible for the National Register of Historic Places or is located adjacent to or within a National Register listed or eligible historic district, including linear historic districts such as a parkway, historic road, or canal;*
- (B) *The bridge in question is or includes spans of the following types: Arch bridges, truss bridges, bridges with movable spans, suspension bridges, cable-stayed bridges, or covered bridges; or*
- (C) *The bridge was identified in a list created through the process detailed below as having exceptional significance for association with an event or individual, or being a very early or particularly important example of its type in a State or the nation, having distinctive engineering or architectural features that depart from standard designs, such as an aesthetic railing or balustrade, includes spans of exceptional length or complexity, or displaying other elements that were engineered to respond to a unique environmental context.*

On August 17, 2018, the ACHP issued the [Program Comment to Exempt Consideration of Effects to Rail Properties Within Rail Rights-of-Way](#) (amended June 10, 2019). This Program Comment relieves federal agencies from the requirement under *Section 106* of the *NHPA* to consider the effects of undertakings on historic rail properties within railroad and rail transit Right of Way (ROW). This program comment was prompted by the *Fixing America's Surface Transportation (FAST) Act*, (49 U.S.C. 24202, December 4, 2015), which required that the Secretary of the USDOT propose an exemption of railroad rights of way from review under *Section 106*, consistent with the exemption for interstate highways approved on March 10, 2005.

This Program Comment is comprised of an activity-based approach and a property-based approach. The activity-based approach provides a list of activities for which no further *Section 106* review is required.

The property-based approach establishes a process whereby project sponsors can opt to work with the relevant USDOT Operating Administrations and stakeholders to develop a list of excluded historic rail properties that would remain subject to *Section 106* review, and which are exempt from review. FDOT implements this program comment in accordance with the activities-based approach developed by the Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and the ACHP. The current exempt activities list is available in *84 FR 31075* (June 28, 2019).

The [Exemption Regarding Historic Preservation Review Process for Undertakings Involving Electric Vehicle Supply Equipment](#) the ACHP issued on October 26, 2022, relieves FDOT from the requirement to conduct reviews under *Section 106* of the *NHPA* for effects on historic properties related to installation of certain electric vehicle supply equipment (EVSE) provided they meet the below conditions (*87 FR 66201*). Except as noted below, all federal agencies are exempt from the *Section 106* requirements of considering the effects of the installation, maintenance, repair, or expansion of EVSE and Level 1, 2, or 3 [also known as Direct Current (DC) Fast Charging] charging stations, provided these:

1. Take place in existing parking facilities with no major electrical infrastructure modifications and are located as close to an existing electrical service panel as practicable;
2. Use reversible, minimally invasive, non-permanent techniques to affix the infrastructure;
3. Minimize ground disturbance to the maximum extent possible, and ensure that it does not exceed previous levels of documented ground disturbance;
4. Use the lowest profile EVSE reasonably available that provides the necessary charging capacity;
5. Place the EVSE in a minimally visibly intrusive area; and
6. Use colors complementary to the surrounding environment, where possible.

Definitions applicable to this exemption presented in *87 FR 66201* are incorporated by reference herein. This exemption shall not apply on Tribal Lands, or to activities that may affect historic properties located on Tribal Lands, unless the THPO, Tribe, or a designated representative of the Tribe has provided prior written notification to the ACHP that it agrees with the use of the exemption on its lands. ACHP shall provide notice on its website of any such agreements with Tribes. While the ACHP does not expect that activities carried out consistent with this exemption will affect historic properties of religious and cultural significance to Tribes, the ACHP advises that, where the installation of EVSE may occur in a location on or near an existing archaeological site, feature, or district, or any other property with known potential significance to Tribes, FDOT should coordinate with interested Tribes to determine whether they ascribe significance to the site or property. Should a Tribe ascribe significance to the site area, FDOT should undertake a *Section 106* review.

On December 22, 2023, the ACHP adopted the [Policy Statement on Housing and Historic Preservation](#) encouraging the accelerating rehabilitation of historic buildings for housing and to harmonizing historic preservation and housing goals. The document's intent is to guide the ACHP's own actions, including its oversight of *Section 106* of the *NHPA*, encourages a focus on effects to exterior (not interior) features, encourages federal historic preservation standards to be flexibly applied, and promotes streamlining of reviews. Finally, the policy statement also is designed to advise all levels of government, community groups, nonprofit organizations, developers, and others in the private sector on the role historic buildings can play in alleviating America's housing shortage, as well as supporting the federal government in making underutilized historic government buildings available for housing development and developing expanded guidance regarding reuse and rehabilitation of historic properties for housing.

The ACHP's [Policy Statement on Burial Sites, Human Remains, And Funerary Objects](#) issued on March 1, 2023, established a set of standards and guidelines that FDOT will seek to implement in order to provide burial sites, human remains, and funerary objects the consideration and protection they deserve.

1.3.5 Florida Historical Resources Act

The *Florida Historical Resources Act*, [Chapter 267, Fl. Stat.](#), is the principal state law regarding the protection of archaeological and historical resources and contains requirements similar to those found in the *NHPA*. The Act declares it to be state policy to protect and preserve archaeological and historical sites that “have scientific or historical value or are of interest to the public” (*Section 267.061(1)(a), Fl. Stat.*). The [FDHR](#) is charged with administering the Act and is responsible for cooperating with federal and state agencies to promote and ensure the preservation of archaeological and historical resources, and for assisting each level of state government in carrying out its respective preservation programs. *Section 267.061(2), Fl. Stat.*, requires that each state agency consider the effects of its undertakings on any historic property that is eligible for inclusion in the NRHP, and requires that the agency consult the FDHR concerning any action or assisted action that results in substantial alteration or destruction of a historic property. *Section 267.061(2)(c), Fl. Stat.*, requires that each state agency exercise caution to assure that any historic property under its ownership or control is not inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly. *Section 267.061(2)(d), Fl. Stat.*, established a procedure to encourage state agencies to use historic structures when acquiring additional space. State agencies are directed to give preference to the acquisition and use of historic properties when feasible and prudent to do so. *Section 267.135, Fl. Stat.*, provides for the non-disclosure of archaeological site location.

Pursuant to *Chapter 267, Fl. Stat.*, implementing rule [Chapter 1A-46, Florida Administrative Code \(F.A.C.\)](#) specifies the criteria under which the FDHR will review CRAS Reports and the appropriate information that is required within the reports. [Chapter 1A-32, F.A.C.](#) provides the procedures to obtain a permit for archaeological investigations on state lands. Other relevant Florida rules to protect the state’s historical assets provide procedures for conducting exploration and salvage of historic shipwreck sites ([Chapter 1A-31, F.A.C.](#)), caring for permanent collections ([Chapter 1A-40, F.A.C.](#)), and establishing a historic marker program ([Chapter 1A-48, F.A.C.](#)).

1.3.6 Other Applicable State Legislation

In 1987, [Chapter 872, Fl. Stat.](#), *Offenses Concerning Dead Bodies and Graves*, was amended to make it a third degree felony to willfully and knowingly disturb, destroy, remove, or damage any unmarked human burial. The law pertains to any human burials, human skeletal remains, and associated burial artifacts on public or private lands in Florida. The law’s intent is to accord equal treatment to human burials regardless of ethnic origin, cultural background, or religious affiliation. The implementing rule for this law, [Chapter 1A-44, F.A.C.](#), specifies the procedures to follow in the event that unmarked burials are encountered, the criteria used by the State Archaeologist in determining whether the FDHR will assume jurisdiction over an unmarked burial, and the responsibilities of the State Archaeologist and others in the event that the FDHR does assume jurisdiction.

[Chapter 380, Fl. Stat.](#), *Land and Water Management*, administered by the Florida Department of Commerce, was established to protect Florida’s natural resources by establishing land and water management policies. Protection of historic resources is afforded under the *Florida Environmental Land and Water Management Act* of 1972 and *Section 380.05(2)(b), Fl. Stat.*, states that an “Area of Critical Concern” may be designated if it contains significant historical resources that would be adversely impacted by public or private development. This act also authorized the development of the *Florida Coastal Management Program (FCMP)* in 1978 which was approved by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) in 1981. This program is also administered by the Florida Department of Commerce and coordinates the actions of a network of state agencies with the goal of more efficiently implementing Florida’s coastal regulations and outlines the coastal infrastructure policy. Federal and tribal lands are exempt from this program.

[Chapter 253, Fl. Stat.](#), *State Lands*, directs Florida’s Governor and Cabinet, acting as the Board of Trustees of the Internal Improvement Fund, to acquire, manage, conserve, protect, and dispose of all state lands to assure maximum benefit and use for the public. Responsibility for the management of state lands rests with the Florida Department of Environmental Protection (FDEP) and the Water Management Districts (WMDs). In addition, [Chapter 253.027, Fl. Stat.](#), *Emergency Archaeological Property Acquisition*, provides a procedure to purchase archaeological and historical resources of major statewide significance to ensure their protection. This Act sets aside \$2 million annually for the emergency acquisition of such properties that are endangered by development.

[Chapter 258, Fl. Stat.](#), *State Parks and Preserves*, authorizes the FDEP to preserve, manage, regulate, and protect all parks and recreational areas held by the state, including all monuments, memorials, sites of historic interest and value, and sites of archaeological interest and value.

[Chapter 373, Fl. Stat.](#), *Water Resources*, authorizes the FDEP and WMDs to regulate the construction and operation of stormwater management systems and the withdrawal, diversion, storage, and consumption of water.

[Chapter 403, Fl. Stat.](#), *Environmental Control*, requires that consideration of historic resources be taken into account during industrial, power plant, and power line siting. In addition, this authority addresses the issues in wetlands permitting in a way that parallels those used by the U.S. Army Corps of Engineers (USACE). The statute also states that in determining whether a project is not contrary to the public interest, or it is clearly in the public’s interest, the Florida Department of Environmental Protection shall consider and balance a number of criteria, including whether the project will adversely affect or will enhance significant historical and archaeological resources under the provision of *Section 267.061*.

[Chapter 163, Fl. Stat.](#), *Intergovernmental Programs*, requires that all County Comprehensive Plans consider the protection of historic resources. *Subsection 163.3178*, pertaining to coastal management, has detailed historic preservation requirements. *Subsection 163.2517(c)* directs that each jurisdiction provides for the identification, designation, and protection of historically significant properties. In addition, local historic preservation ordinances may include project review by the FDHR in its implementation per [Chapter 125, Fl. Stat.](#), *County Government*.

Several state laws address designated historic highways, officially called State Historic Highways. Such laws prohibit the use of state funds for certain physical changes on or near the road, with the intent of preserving the physical dimensions and location of the highway. They also may authorize the FDHR to erect markers and to obtain historic easements in property along the road. A list of legislation for designated historic highways follows.

Laws of Florida, Chapter	Designated Historic Highway	Highway Location
74-400/2007-41	Old Cutler Road	Dade Co.
75-312/81-164	McGregor Boulevard	Lee Co.
76-304/84-379	Coral Way	Dade Co.
77-491	South Bayshore Dr./South Miami Ave.	Dade Co.
80-433	Bird Road	Dade Co.
83-365	Sunset Drive	Dade Co.
86-308	Calle Ocho	Dade Co.
88-418/2002-20/2004-366	Crandon Boulevard	Dade Co.
89-383/2007-196	Red Road	Dade Co.
91-320	Old Apopka Road	Orange Co.
92-152	North Ocean Boulevard	Palm Beach

93-294	SW 62 nd Avenue	Dade Co.
95-434	Killian Drive	Dade Co.
2002-304	Le Jeune Road	Dade Co.
2007-259	Brickell Ave	Dade Co.
2010-230	Ludlam Road	Dade Co.

1.4 CONSULTANT QUALIFICATIONS

1.4.1 Personnel Standards

Personnel qualified to conduct cultural resource projects for FDOT are those individuals who meet at least the minimum [Professional Qualifications Standards](#) for historians, archaeologists, architectural historians, and other professionals as set forth in [Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation \(SOI Qualifications\)](#) which were first published in the *Federal Register (FR)*, 1983, Vol. 48, No. 190, pages 44738-44739. The *SOI Qualifications* outline the minimum qualifications for five specific areas of expertise: History, Archaeology, Architectural History, Architecture, and Historic Architecture. Principal Investigators (PIs) should possess appropriate knowledge and experience pertinent to Florida. This ensures that individuals responsible for supervising FDOT related cultural resource projects have the requisite knowledge of regional prehistory and history to make informed decisions regarding NRHP eligibility. Moreover, it ensures that these individuals are familiar with the types of resources likely to be encountered during FDOT cultural resource projects, as well as the appropriate methods for identifying, evaluating, and documenting these resources.

It is also necessary that all of the qualified personnel assigned to a project should perform project activities directly related to their specific area of expertise. In other words, archaeologists will not conduct historic building surveys, nor will historians or architectural historians describe and evaluate archaeological sites. This will ensure that individuals conducting specific tasks meet the professional qualifications specified herein and will perform the necessary work in a credible and professional manner consistent with the intent of federal and state law.

[Prequalification](#) is the process by which a consultant or contractor is approved to work with FDOT. It is overseen by the FDOT's Procurement Office in Central Office, not directly by OEM or FDOT Districts. Cultural resource contractors shall submit resumes of PIs and other supervisory personnel, as well as any special consultants, to FDOT for review prior to the initiation of individual projects. A PI is defined as the person or persons responsible for supervising the identification, evaluation, and documentation of archaeological and/or historic resources pursuant to FDOT cultural resource projects. In addition to providing academic qualifications and general work experience, the resumes shall document and provide references for FDOT cultural resource project experience, or experience with similar undertakings, timely project completion, and successful SHPO review. In other words, the contractor shall provide the FDOT with sufficient information to evaluate a contractor's ability to handle the project in question and indicate who will be responsible for each task in the project. If senior personnel change during the course of the project, documentation for the individuals who will replace these professionals must also be provided by the contractor for review and approval by FDOT.

1.4.2 Facilities and Corporate Standards

Any institution, corporation, or organization sponsoring the qualified professionals performing cultural resource projects for FDOT must:

- Provide or demonstrate access to adequate field and laboratory equipment necessary to complete the work required for the project; and

- Provide or demonstrate access to adequate facilities necessary for the proper treatment, analysis, and storage of specimens and documents recovered from and/or related to a project.

At a minimum, facilities and equipment should include adequate transportation, field equipment, laboratory processing space, research materials (reports, journals, books, maps and other documents), comparative collections, and storage facilities.

1.4.3 Quality Assurance

Quality Assurance (QA) programs are a standard part of the FDOT procedures. Consequently, any institution, corporation, or organization that conducts cultural resource projects for FDOT shall establish a QA program to ensure that the work performed is in compliance with FDOT guidelines, as well as federal and state standards and guidelines. Minimally, the QA program will include a detailed statement of procedures, evaluation criteria, methods for implementing the program, and a staffing plan for each project. FDOT may request records of QA actions performed during the course of a project. Therefore, all QA records must be kept current. QA programs may include periodic seminars for internal peer review and assistance, presentation of advances in field or laboratory methods, preservation techniques, and changes in law or policy that may affect FDOT cultural resource projects.

The individual responsible for implementing the QA program should be a senior staff member. This individual will be responsible for assigning qualified personnel to each project task, reviewing existing and proposed federal, state and local cultural resource legislation and implementing regulations, providing spot checks on field and laboratory procedures, conducting in-house peer review of project reports, and ensuring personnel safety.

CHAPTER 2

THE SECTION 106 REVIEW PROCESS

2.1 OVERVIEW

This *Handbook* chapter presents a simplified description of the *Section 106* process as implemented by *36 CFR Part 800*. Although the discussion is in terms of federal involvement, the actions described apply to all types of FDOT projects because Florida's historic preservation laws and compliance review program parallel the federal process for *Section 106* review. The use of a single process for processing projects regardless of funding source is documented in the *2023 PA*.

The four-step *Section 106* process is initiated by FDOT in its determination of whether the proposed project is an undertaking, i.e., an action that could affect historic properties. If there is no undertaking, there are no further obligations under *Section 106*. If, on the other hand, the project has the potential to affect significant archaeological sites and/or historic resources, FDOT initiates the *Section 106* process with the identification of the appropriate parties with which to consult, followed by performance of a cultural resource survey (archival and/or physical survey, as appropriate) to identify and evaluate all archaeological sites and historic resources located within the defined project APE. If any cultural resources identified within the project APE are listed or eligible for listing in the NRHP, FDOT, in consultation with the SHPO and other appropriate parties, assesses potential adverse effects. If no adverse effects are identified, the project may proceed.

If adverse effects are identified, FDOT begins consultation to resolve these adverse effects through avoidance, minimization, or mitigation. Consultation should result in a Memorandum of Agreement (*MOA*) among the consulting parties, which outlines the agreed upon measures to resolve the adverse effects. Occasionally, there is no way to resolve the adverse effects of an undertaking, and the effects must be accepted in the public's interest. The transportation undertaking may not initiate project activities that will adversely affect the historic property until the appropriate commitments made during the *Section 106* process have been complete to the satisfaction of the consulting parties and *MOA* specifications. The *MOA* or agreement document must include specific timelines associated with the commitment stipulations, if any, so that project progression is appropriately scheduled and managed.

2.2 INTRODUCTION TO SECTION 106

Section 106 of the [NHPA](#) states that:

The head of any federal agency having direct or indirect jurisdiction over a proposed federal or federally-assisted undertaking in any state and the head of any federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the NRHP. The head of any such federal agency shall afford the Advisory Council on Historic Preservation established under Title II of this Act a reasonable opportunity to comment with regard to such undertaking.

In essence, *Section 106* requires federal agencies to:

- Consider the effects their actions (or actions they may assist, permit, or license) may have on NRHP-listed or eligible historic properties; and
- Provide the ACHP with a reasonable opportunity to comment on such actions.

The main purpose of *Section 106* is to avoid, minimize, or mitigate impacts to significant historic properties resulting from federal actions. *Section 106* applies to:

- Properties that have been formally listed in the NRHP;
- Properties that have been determined eligible for inclusion in the NRHP; and
- Properties that may be eligible but have not yet been fully identified, documented, and evaluated.

The goal of the *Section 106* process is to balance the needs of federal undertakings with historic preservation concerns, and to resolve potential conflicts between the two in the public interest. *Section 106* also recognizes that it is not realistic, nor in the public interest, to preserve every historic resource. Therefore, *Section 106* does not require preservation in every case. It does, however, require full consideration of potential project effects and available options. The procedures for implementing the *Section 106* process are contained in [36 CFR Part 800](#), as amended.

Federal agencies under the USDOT that may have undertakings subject to *Section 106* review include the FHWA, the Federal Aviation Administration (FAA), the FTA, and the FRA. Other federal agencies, such as the USACE, or the U.S. Coast Guard (USCG), may be involved through their permitting requirements. As the lead agency on federally-aided transportation projects, pursuant to *NEPA* Assignment, FDOT is responsible for all aspects of the *Section 106* process from identifying and documenting historic resources, to consultations with the SHPO, ACHP, and other parties, to making determinations of NRHP eligibility and effects to historic properties. The [2023 PA](#) documents these roles, responsibilities, and processes extensively. The *2023 PA* is also utilized to process state-funded transportation projects with no federal funding or assistance in compliance with *Chapter 267, Fl. Stat.*, via the *Letter of Agreement Between FDOT and SHPO* attached therein.

FDOT's CRM responsibilities are vested in OEM at the state level, and the District Environmental Management Offices (DEMO) at the District level. Project Managers (PM) and Cultural Resource Coordinators (CRC) have responsibility for *Section 106* compliance in both OEM and DEMO. OEM ensures that **FDOT's CRM program** complies with all applicable federal and state laws and regulations. It is responsible for establishing overall guidance, procedures, and training; for assisting in project reviews; and for monitoring the overall performance of the Department's program. OEM assists the District PMs and CRCs with their *Section 106* compliance. The primary responsibility of the DEMOs is to ensure that **individual projects** follow the applicable laws and regulations, and that all cultural resource documentation meets federal and state standards and guidelines. The District offices play a key role in moving the *Section 106* process forward.

2.3 PARTICIPANTS IN THE SECTION 106 PROCESS

In accordance with the revised regulations (*36 CFR § 800.2(a)(4)*), FDOT consults with other parties having an interest in the effects of the undertaking. **Consultation** involves seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them. Consulting parties in the *Section 106* process include the SHPO, the ACHP, the Tribal Historic Preservation Officers (THPOs) or tribal historic preservation representatives, and the public, including representatives of local governments. FHWA retained the responsibility of conducting government-to-government consultation with any Tribes having historic and cultural associations with Florida (see [NEPA Assignment MOU](#) for expanded stipulation). A Tribe may request government-to-government consultation with FDOT for any project which may impact resources of religious and/or cultural significance to the Tribe or for confidentiality purposes. If, at any time during consultation for any project where FDOT is the lead federal agency, a Tribe should request government-to-government consultation, FDOT will notify FHWA in accordance with the processes established in the [2023 PA](#).

State Historic Preservation Officer (SHPO): The office of the SHPO is established within the FDHR, Florida’s primary historic preservation agency. The SHPO, appointed by the Governor, advises and assists FDOT in carrying out their responsibilities under *Section 106* and *Chapter 267, Fl. Stat.*, and participates in all phases of the compliance process, from defining the project APE to the resolution of adverse effects.

Advisory Council on Historic Preservation (ACHP): An independent federal agency established by the *NHPA* of 1966, the ACHP provides guidance and assistance in the *Section 106* consultation process. The ACHP consults with, and comments to, agency officials on individual undertakings and programs that affect historic properties. It may enter the *Section 106* process at the request of FDOT, or when an undertaking has substantial impacts to important historic properties, presents important questions of policy or interpretation, has the potential for presenting procedural problems, or presents issues of concern to Native American tribes. The ACHP also assists in the resolution of disputes. In accordance with the revisions to *36 CFR Part 800*, the ACHP no longer routinely reviews No Adverse Effect determinations, nor do they review findings where FDOT and SHPO agree on how to mitigate adverse effects. The ACHP does not participate in state funded projects.

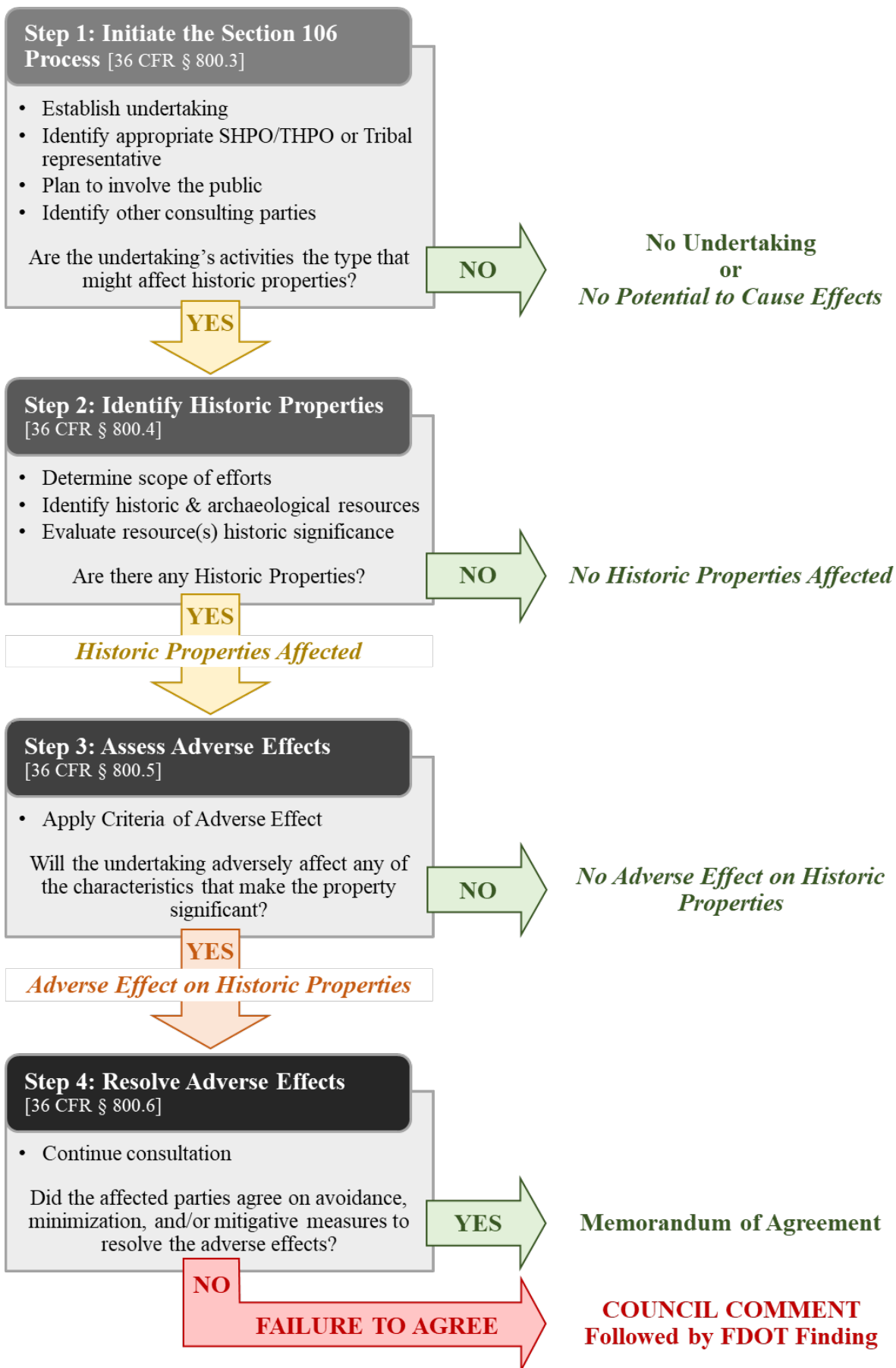
Tribal Historic Preservation Officer (THPO): The THPO is the tribal official appointed by a federally recognized tribe’s chief governing body or designated by tribal ordinance or preservation program who has assumed the responsibilities of the SHPO for purposes of *Section 106* compliance on tribal lands. Tribal lands refer to lands within the boundaries of any Native American reservation and all dependent Native American communities. A tribal historic preservation representative may be consulted if a THPO has not officially been appointed and certified. In the latter case, the SHPO will also be a consulting party concerning resources on tribal lands. The THPO or an appointed historic preservation representative is also consulted concerning historic properties of interest to a tribe that are located off tribal lands. The SHPO also participates as a consulting party in such cases. For a detailed discussion of Native American Consultation, see **CHAPTER 3**.

The Public: The views of the public are essential to informed decision-making in the *Section 106* process. Early in the *Section 106* process, FDOT identifies parties with a demonstrated interest in the undertaking, including local governments, organizations, and individuals; seeks their comments and input; and considers their views. Where possible, FDOT may use the public involvement process associated with other regulatory requirements to fulfill its responsibility in this area. Most frequently this is coordinated with the [Public Involvement Plan](#) (PIP) required for *NEPA*. See **Section 2.5** of this *Handbook* for more information about coordinating *Section 106* with other regulations. While the *Section 106* process may be completed without agreement from the public, FDOT has a responsibility to make all reasonable efforts to resolve objections from the public. A representative of a local government with jurisdiction over the area in which the effects of an undertaking may occur is entitled to participate as a consulting party (opposed to the more common coordinating party role).

2.4 IMPLEMENTING THE SECTION 106 PROCESS: THE FOUR STEPS

The *Section 106* review process is divided into the following four steps and illustrated on the flow chart:

- Step 1:** Initiate the *Section 106* Process
- Step 2:** Identify Historic Properties
- Step 3:** Assess Adverse Effects
- Step 4:** Resolve Adverse Effects



2.4.1 Step 1: Initiate the *Section 106* Process

FDOT first determines whether the proposed action is an **undertaking**, defined as:

a project, activity, or program funded in whole or part under the direct or indirect jurisdiction of a federal agency, including those carried out by or on behalf of a federal agency; those carried out with federal financial assistance; those requiring a federal permit, license or approval; and those subject to state or local regulations administered pursuant to a delegation or approval by a federal agency (36 CFR § 800.16(y)).

FDOT has responsibilities under a number of other laws (including *NEPA*, *AHPA*, *AIRFA*, and *NAGPRA*) that may influence the way it carries out its *Section 106* duties. [36 CFR § 800.3\(b\)](#) specifically encourages coordination of *Section 106* responsibilities with other historic preservation and environmental laws, such as *NEPA*. Planning to do so should begin during Step 1.

FDOT initiates consultation with the SHPO/THPOs and the appropriate representatives of federally recognized Native American tribes, as well as identifies other potential consulting parties. Other consulting parties may include the ACHP; representatives of local governments with jurisdiction over the project area; historic preservation groups; and parties with legal or economic interest in the undertaking or affected historic properties. A plan to involve the public in the *Section 106* process is also developed to seek public input and for notifying the public of proposed actions. Existing FDOT public involvement procedures can be used. The public outreach effort should reflect the nature and complexity of the undertaking, the potential effects involved, and the projected public interest in the project. Confidentiality must be considered in cases where resources may be threatened by public disclosure, especially where resources of religious or cultural significance to Native American tribes are involved.

If FDOT determines that the proposed action does not have the potential to affect historic properties, then it has no further obligations under *Section 106*. Undertakings or actions which do not have the potential to affect historic properties are defined as non-construction related activities. For example, purchasing equipment, planning, and design all fall under this portion of the regulation and do not require any further obligations under *Section 106*. All construction-related actions with a federal nexus must comply with *36 CFR §§ 800.4 to 800.6* including any maintenance, new construction, and all construction related actions. If FDOT establishes that it has an undertaking that requires further review, it then moves forward with Step 2: Identifying Historic Properties.

2.4.2 Step 2: Identify Historic Properties

The primary goal of Step 2 of the *Section 106* process is to identify all NRHP-listed, determined eligible, or potentially eligible archaeological sites and/or historic resources located within the project APE. The specific actions involved in Step 2 include the following:

- Define the APE and determine the scope of the resource identification effort;
- Identify and record historic resources in the APE;
- Evaluate the significance of cultural resources identified; and
- Document the survey effort and results in the appropriate document type.

Area of Potential Effect (APE): In accordance with [36 CFR § 800.16\(d\)](#), the APE is “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties.” While the *project area* or *area of study* is known during Step 1 of the process, the project APE is defined during Step 2 of the *Section 106* process. The APE definition is typically determined by the District CRC and/or cultural resource consultants in consideration of *Module Three* and the *2023 PA* parameters. There may be times, such as large complex projects or non-standard circumstances, that the APE must be defined in coordination with and approved by the SHPO and OEM.

Take care to clearly differentiate between the common *project area* or *area of study* phrases from the *Section 106*-specific project APE. See additional discussion of the project APE in **CHAPTER 5**.

Scope: For typical undertakings, the FDOT District-level PM and CRC determine the required level of effort, in reference to the *Agency Operation and Funding Agreement (AOFA)* (effective until April 14, 2028), which identifies specific project types and their respective levels of cultural resource analysis. The AOFA is available in the [ETDM Document Library](#). Two considerations determine the **scope** or required level of cultural resource review: the project location in terms of its potential for the presence of cultural resources, and the specific type of project activity and its potential to impact cultural resources.

The scoping process may require consultation between FDOT and SHPO/THPOs. Scoping activities involve a review of existing historic properties within the APE including any data about possible historic properties not yet identified. Information is sought from consulting parties identified in Step 1 and, as appropriate, from any other individuals or organizations that are likely to have knowledge concerning cultural resources in the area. The gathering of such information includes background research involving prior studies, oral history interviews where appropriate, and sample field investigation where necessary. At this stage, it also is important to gather information from appropriate federally recognized Native American tribes concerning archaeological resources that may be of religious or cultural significance to them on or off tribal lands.

Identify: Conduct an appropriate level of survey for the project activities. The *Section 106 PA* discusses three avenues to process undertakings based on the type of activity:

- **Stipulation V** covers the process for minor projects with minimal potential to affect historic properties. The activities allowed to be processed under Stipulation V are listed in Appendix 1 of the *2023 PA*.
- **Stipulation VI** discusses minor projects considered unlikely to affect historic properties. Project activities that may be processed under Stipulation VI can be from Appendix 1 and/or Appendix 2 of the *2023 PA*.
- **Stipulation VII** outlines the standard *Section 106* process for all project activities not contained within Appendix 1 and/or Appendix 2 of the *2023 PA*, projects where the activities met the conditions Stipulation V/VI but were elevated out of the Alternative PA Form due to known or potential historic properties in the APE, and any project which requires any level of CRAS.

Stipulation V and VI projects receive thorough archival research via desktop analysis but do not involve any field survey to document and record new historic resources; reconnaissance or windshield surveys may be appropriate to verify current conditions, as appropriate. Stipulation VII projects are subjected to additional effort beyond archival research, most frequently a CRAS. The CRAS is conducted as appropriate to the nature of the undertaking and its potential effects. The successive actions involved in the CRAS are detailed in **CHAPTER 5**.

Where project alternatives consist of various corridors or involve large land areas, or where access to property is restricted, a **phased approach** for the CRAS may be used. In addition to complex highway transportation projects, a phased approach also may be appropriate for project reevaluations, design projects, and undertakings where submerged cultural resources potentially may be affected. Phased approaches break up the scope of a CRAS into different phases whereby different components of the survey are conducted at different times. Examples of a phased approach may include, but are not limited to:

- Conducting the archaeological survey separate from the historic structure survey; or

- Conducting the CRAS of previously inaccessible properties during a later phase of the project, such as once that right-of-way is acquired; or
- Conducting the CRAS of pond locations if they were not included in the original survey APE.

The key to a successful phased approach is two-pronged. First and foremost, early coordination with OEM and SHPO is required to gain support and approval for the phased approach. Barring access issues which may not be predictable, the need for a phased approach should be determined early in project planning, and appropriate time must be allocated in the project schedule to allow for *Section 106* survey and consultation at each phase of the project. Early and frequent communication with the project team and thoughtful scheduling are proactive measures recommended to avoid any predictable delays and facilitate efficient project management. Second, the language used to present the *Section 106* determination of effects at the various phases of the project must be explicit. The expectation is that the subsequent phases are acknowledged in the discussion of project effects and that the determination of effect be stated clearly and in detail, leaving no room for confusion or doubt that the finding relates to the survey effort completed thus far, with the understanding that later phases will require continued consultation with SHPO/THPO which may alter the project's effect determination.

Note, a phased approach is not to be confused with **segmentation** of a project. Segmentation involves breaking a large-scale project into smaller pieces, geographically, and sometimes financially. It is the latter component that impacts how one approaches CRAS efforts and *Section 106* compliance. If segmentation is strictly for ease of project management (such as for staggered letting and construction) rather than separate funding, segments can be surveyed and documented in separate or combined *CRAS Reports*, as needed, and all results taken together will be the basis of a single *Section 106* determination of project effects. If, however, a project is segmented for financial reasons into separate projects/undertakings, each segment or group of segments associated with a new financial allocation must receive comprehensive CRAS efforts and separate *Section 106* determinations of project effects based on the undertaking's financial and geographic limits.

While the above two situations address segmentation early in project development prior to conducting CRAS efforts, large or complex projects are sometimes segmented after a CRAS has been completed and a *Section 106* effects determination has been made. In these circumstances, the financial allocation discussed above still applies to determine whether the segmentation has created separate undertakings or is merely being used as a project management tool. For both of those scenarios, each of the segments derived from the parent project may reference the previous CRAS results and determination of effects when addressing their *Section 106* compliance, but any subsequent CRAS efforts within the new segment limits will warrant re-initiation of *Section 106* consultation with SHPO/THPO (and interested parties if applicable), updated APE definitions for that segment, and an updated effects determination which will apply to that specific segment(s) (when a new undertaking has been established) or will apply to the project as a whole (inclusive of all segments within that undertaking even if no changes happened in the other segments). Please note that segmentation is not a valid tool to circumvent the *Section 106* process.

A common example of subsequent CRAS efforts is completing a *Desktop Analysis and Effects Determination Letter* that identifies the new geographic limits and funding, defines the APE for the new segment/undertaking, outlines any project changes to this segment since the date of the previously approved CRAS Report, and reaffirms the validity of the previously determined *Section 106* effects finding. Alternately, the new segment/undertaking may warrant a CRAS Report Addendum to update the architectural survey for structures that have become "historic age" since the previous CRAS Report and *Section 106* determination. One potential outcome of this additional survey could be that the *Section 106* effects finding must be updated from the previous determination due to potential project effects on a newly recorded NRHP-eligible historic district documented within the APE.

Evaluation: Each identified archaeological site and historic resource must be evaluated for its significance by applying the *NRHP Criteria for Evaluation*. This process is detailed in **CHAPTER 6**. It is critical to provide explicit reasons for why a resource is or is not NRHP-eligible, including the applicable criteria. Other key factors requiring explicit explanation include the historic context, integrity, and boundaries of each significant resource. Include the special expertise of Native American tribes when assessing the eligibility of a property to which the Tribe may attach religious and cultural significance. Also, old determinations of eligibility may need to be reevaluated due to the passage of time (such as more than 10 years since its last evaluation) or other factors.

Documentation: Minor projects consisting of activities inclusive of Appendix 1 and/or Appendix 2 of the *2023 PA*, and for which a desktop review (background research) is sufficient to identify known and evaluate the potential for unknown historical properties in the APE, are documented in a **Section 106 PA Stipulation V and VI Program Alternative Form** in the StateWide Environmental Project Tracker (SWEPT) or in a **Notification Letter** for tribal review, if requested. Minor projects that do not meet the conditions of Stipulations V or VI of the *2023 PA* must be documented in accordance with Stipulation VII.

Stipulation VII documentation may take the form of a **Desktop Analysis and Effects Determination Letter (Desktop Analysis)**, **CRAS Report**, or **CRAS Addendum Report**. Brief descriptions of each follow, and detailed content requirements for each document type are discussed in **CHAPTER 7**. **Desktop Analyses** are most frequently used to document projects that are comprised of minor project activities (*2023 PA* Appendix 1 and/or 2), but which did not meet one or more of the conditions of Stipulation V and VI and does not require field survey. **Desktop Analyses** may also be appropriate if the summarization and evaluation of previous CRAS efforts and results is a sufficient basis on which to apply the criteria of adverse effect and make an effects determination for the current project. The results of any level of field survey must be documented in a **CRAS Report** or **CRAS Addendum Report** regardless of whether or not significant cultural resources were identified. These approved document types will collectively be referred to as **Report(s)** when discussing aspects applicable to all three.

Two possible outcomes result from the CRAS identification and evaluation effort. Outcome 1: If no historic properties are present, OR if historic properties are present, but will not be affected by the undertaking, FDOT determines there are **No Historic Properties Affected**, in accordance with *36 CFR § 800.4(d)(1)*. The appropriate documentation is provided to the SHPO/THPOs for review, comment, and concurrence. Barring any objection within 30 days of the receipt of the finding, FDOT's obligations under *Section 106* are fulfilled, and FDOT may **proceed with the undertaking**. In practice, FDOT will endeavor to obtain written concurrence from SHPO prior to proceeding with the undertaking, even if the 30-day window has closed.

Outcome 2: If historic properties are identified within the project APE which may be affected by the undertaking, then a **Historic Properties Affected** determination results, as per *36 CFR § 800.4(d)(2)*. Two types of historic properties may be identified during the CRAS: those properties already listed on or previously determined eligible for listing in the NRHP, and those newly identified historic resources that are assessed as eligible or potentially eligible for the NRHP during the CRAS.

Potential eligibility results from having partial or incomplete information on which to base the NHRP evaluation. It can represent resources which show clear indications of significance, but whose full documentation is beyond the capabilities of the current undertaking, or it can represent a largely unknown entity that by default maintains its potential for listing in the absence of complete knowledge. In both situations these resources receive a determination of '*Insufficient Information for a definitive NRHP determination*' and are afforded the same protections as eligible properties until proven otherwise. It is FDOT's obligation to determine the eligibility or ineligibility of each historic resource within the

APE. *Potentially eligible* is not commonly used determination anymore, nor is its use encouraged; however, it does show up on some of the older FMSF forms and is a term worth being familiar with. Historic resources which exist within the APE, but continue beyond the limits of the undertaking are more difficult to evaluate since only a portion of the resource is available *Insufficient Information* is also used in situations where evaluation of a resource in its totality is not possible This is frequently utilized for archaeological sites, historic districts, and linear resources that extend past the limits of the project APE and the scope does not allow for its complete documentation and evaluation. The portion of the resource documented within the APE is still discussed and evaluated based on the known data, and its potential (or lack thereof) to contribute to the resource as a whole is presented in the *Report*. For simplification throughout this document, all discussions of process and treatment of *eligible* historic properties will also include *potentially eligible* resources.

Following review of the survey documentation and results, FDOT then proceeds to Step 3 of the *Section 106* process, Assess Adverse Effects. Please note that FDOT has the ability to submit just the results of Step 2: Identification efforts to SHPO/THPO for review; however, many projects with clear, uncomplicated interactions with historic properties will complete Step 3, Assess Adverse Effects, and then submit results of Step 2 and Step 3 to SHPO/THPO for review at the same time. If submitting only the results of the survey effort and resource evaluation, SHPO concurrence will pertain to the NRHP evaluations and the complete and sufficient (or not) nature of both the survey and the *Report*. In these cases, clearly indicate in the *Transmittal Letter* that subsequent coordination regarding the effects determination will follow.

2.4.3 Step 3: Assess Adverse Effects

After NRHP-listed or -eligible properties have been identified within the project APE, and an initial determination of *Historic Properties Affected* has been made, FDOT determines how the undertaking will affect the historic properties. Consultation with the SHPO/THPO is required, and the views of any interested parties must be considered. The evaluation of effects is based on application of the *Criteria of Adverse Effect (36 CFR § 800.5(a)(1))*. This assessment will result in a finding of either *No Adverse Effect to Historic Properties* or *Adverse Effect to Historic Properties* (frequently abbreviated to *No Adverse Effect* or *NAE* and *Adverse Effect*, respectively).

Clear-cut cases of a *No Adverse Effect* finding may, at the District's cultural resource professional's discretion, be discussed within the *Transmittal Letter* accompanying the survey *Report* as an efficiency for SHPO coordination (the aforementioned combined Step 2 and 3 results in one submission). Alternately, simple *No Adverse Effect* determinations can be conveyed in a *Desktop Analysis* if submitted to SHPO/THPO separately from the survey *Report*. Following SHPO/THPO review and receiving concurrence on the *Section 106* finding of *No Adverse Effect*, FDOT's obligations under *Section 106* are fulfilled, and FDOT may **proceed with the undertaking**.

As a general rule, more complex cases of *No Adverse Effect* and all *Adverse Effect* findings are discussed in a *Section 106 Case Study Report (CSR)* that provides the concerned parties (FDOT, SHPO/THPOs, ACHP, and others) with all pertinent information. The *Transmittal Letter* accompanying *Reports* which anticipate an *Adverse Effect*, or a complex *No Adverse Effect* evaluation, will typically present the survey parameters and results, the NRHP evaluations, and communicate to the reviewers that subsequent documentation to determine project effects is warranted and forthcoming. Concurrence received from SHPO in these *Transmittal Letters* pertains to the NRHP evaluations, the completeness and sufficiency of both the survey and report, and their acknowledgement and agreement regarding the next steps of the *Section 106 Process*, a *CSR*.

The *CSR* presents all available documentation pertaining to the significance and characteristics of the NRHP-listed or -eligible property or properties, as well as a discussion of all effects that the proposed

undertaking may have on the property. This document also includes a description and evaluation of all potential alternatives considered by FDOT in order to avoid or minimize impacts to the property, including the No-Build Alternative. By having a solid base of information, the consulting parties are able to evaluate the potential effects on NRHP-listed or -eligible resources, and to use this information to determine measures to Resolve Adverse Effects (Step 4). The specific contents of a CSR are presented in **Section 8.3**.

The information provided in the *CSR* (or other *Report*, as appropriate) is the basis upon which FDOT, in consultation with the SHPO/THPOs, determines whether the project will result in a finding of *No Adverse Effect* or *Adverse Effect*. To accomplish this, FDOT must apply the *Criteria of Adverse Effect* to the project. An *Adverse Effect* is defined in 36 CFR § 800.5(a)(1) as:

When the undertaking may directly or indirectly alter characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the NRHP. Adverse effects may include reasonably foreseeable effects caused by an undertaking that may occur later in time, be farther removed in distance or be cumulative.

As enumerated in 36 CFR § 800.5(a)(2), adverse effects on historic properties include, but are not limited to:

- (a) *Physical destruction or damage to all or part of the property;*
- (b) *Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties [36 CFR Part 68](#) and applicable guidelines;*
- (c) *Removal of a property from its historic location;*
- (d) *Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;*
- (e) *Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;*
- (f) *Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and*
- (g) *Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.*

In some cases, FDOT may propose a finding of *No Adverse Effect* when the project's effects do not meet the criteria of 36 CFR § 800.5(a)(1). Such a case might occur when the effects of the project are not judged harmful to those characteristics that qualify the property for inclusion in the NRHP. If FDOT proposes a finding of *No Adverse Effect*, it must document the finding and provide it to all consulting parties. Documentation, as specified in 36 CFR § 800.11(e), shall include:

- (1) *A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, and drawings, as necessary;*
- (2) *A description of the steps taken to identify historic properties;*

- (3) A description of the affected historic properties, including information on the characteristics that qualify them for the National Register;
- (4) A description of the undertaking's effects on historic properties;
- (5) An explanation of why the criteria of adverse effect were found applicable or inapplicable, including any conditions or future actions to avoid, minimize or mitigate adverse effects; and
- (6) Copies of summaries of any views provided by consulting parties and the public.

The SHPO/THPO has 30 days from receipt of the complete documentation to review the finding(s). Typically, the SHPO will respond by letter in a timely fashion in accordance with the 2023 PA and AOFA parameters. Failure to respond indicates that FDOT can go forward with the undertaking (36 CFR § 800.5(c)(1)). But again, in practice, FDOT will endeavor to obtain written concurrence from SHPO prior to proceeding with the undertaking, even if the 30-day window has closed.

FDOT provides the documentation on the finding of *No Adverse Effect* to the general public in a manner consistent with the confidentiality provisions of 36 CFR § 800.11(c). Implementation of the project in accordance with the findings as documented fulfills FDOT's responsibilities under *Section 106*.

In the event that the SHPO/THPO or any consulting party disagrees within the 30-day review period, they shall specify the reasons for disagreeing with the finding. FDOT must then consult to resolve the disagreement or request the ACHP to review the finding pursuant to 36 CFR § 800.5(c)(3). If the ACHP is asked to review the finding, FDOT will be notified of the ACHP's determination as to whether the adverse effect criteria were applied correctly within 15 days of receiving the documented finding from FDOT.

A FDOT project may be determined to have an *Adverse Effect* when the characteristics that qualify a property for inclusion in the NRHP are diminished by the undertaking. Numerous situations may cause different types of adverse effects. The project may physically impact the resource by taking all or part of its property. The project also may impact the resource, both directly and indirectly, by affecting visual and/or aesthetic qualities (including views to or from the property), noise levels, landscaping, use of the property, air quality, vibration levels, and access, among others. If a historic property will be adversely affected, the agency proceeds to the Step 4: Resolving Adverse Effects.

2.4.4 Step 4: Resolve Adverse Effects

When it has been determined that FDOT's proposed undertaking will have an *Adverse Effect* on a NRHP-listed or -eligible property, FDOT consults with the SHPO/THPOs and other consulting parties to develop and evaluate alternatives or modifications to the undertaking that could avoid or minimize the adverse effects, and if necessary, mitigate for adverse effects that cannot be avoided or minimized. A successful consultation accommodates the needs of the agency's undertaking and the integrity of the historic property in a way that the consulting parties agree best serves the public interest and ideally promotes the protection and enhancement of historic resources.

FDOT also notifies the ACHP of the *Adverse Effect* finding and provides ACHP with the requisite documentation. This documentation should be prepared by the District but sent by OEM via ACHP's Electronic *Section 106* Documentation Submittal System (e106). In accordance with 36 CFR § 800.6(a)(1)(i), FDOT also must invite the ACHP to participate in the consultation when the undertaking has an *Adverse Effect* upon an NHL. The SHPO, a Native American tribe, or any other consulting party may at any time request the ACHP to participate in the consultation.

[Appendix A, 36 CFR Part 800](#) specifies the *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*. The ACHP is likely to enter the *Section 106* process when an undertaking:

- (1) *Has substantial impacts to important historic properties;*
- (2) *Presents important questions of policy or interpretation;*
- (3) *Has the potential for presenting procedural problems; or*
- (4) *Presents issues of concern to Indian tribes or Native Hawaiian organizations.*

The ACHP has 15 days from receipt of a request to respond, basing its decision on the aforementioned criteria. If the ACHP decides to participate in the consultation process, the ACHP must notify FDOT and the consulting parties. This is intended to keep the policy level of the federal agency informed of those cases where the ACHP has determined present issues significant enough to warrant its involvement.

At this point, FDOT, the SHPO/THPOs, and the ACHP (if participating) may agree to invite other individuals or organizations to become consulting parties. This certainly will be the case for any individual or organization that will assume a specific role or responsibility in the development and implementation of a *MOA* concerning resolution of the adverse effect. FDOT provides all appropriate documentation to consulting parties subject to the confidentiality provisions of *36 CFR § 800.11(c)*. FDOT also makes similar information available to the public and provides the opportunity to comment.

If the ACHP is not participating, FDOT consults with the SHPO/THPOs and the other consulting parties to devise ways to **avoid, minimize, or mitigate** the adverse effects. First consideration is given to alternative ways of accomplishing the agency's goals without unacceptably damaging the NRHP-listed or eligible property. This may include consideration of alternative sites, alternative alignments, and alternative designs as well as the No-Build Alternative. The latter can be used to evaluate the importance of the undertaking against the severity of its effects. If the consulting parties find that the consideration of such alternatives does not result in a viable solution that best serves the public interest, they can proceed to a discussion of mitigation measures. Mitigation refers to actions that reduce or compensate for the impacts an undertaking may have on an NRHP-listed or -eligible property. This process and options are described in **CHAPTER 8**, **CHAPTER 9**, and **CHAPTER 10**.

In some cases, it may be agreed that there are no avoidance or minimization options available and that the adverse effects must be accepted in the public interest. On the other hand, consulting parties may occasionally not be able to come to mutual agreement concerning the undertaking and its effects. In this case, FDOT, the SHPO and/or THPOs, or the ACHP (if participating) may decide to terminate consultation. If this occurs, FDOT requests the ACHP's comments in accordance with *36 CFR § 800.7(c)*. FDOT considers the ACHP's comments before reaching a final decision on the undertaking. The agency head will document the final decision that includes the rationale for the final decision and demonstrates that the ACHP's comments have been duly considered. This documentation will be provided to the ACHP, all consulting parties, and to the public for notification purposes. FDOT will either proceed or not proceed with the undertaking at this point. Either way, this concludes the *Section 106* process and satisfies FDOT's statutory responsibilities under *Section 106* of the *NHPA*.

The consulting parties generally can agree on ways to accommodate historic preservation concerns as the undertaking proceeds. The decisions reached during the consultation process are defined in a formal **agreement document**. This legal document outlines FDOT's fulfillment of responsibilities under *Section 106* and obligates the signing parties to carry out its terms. It shows that the agency has considered the effects on NRHP-listed or -eligible properties and has given the ACHP a reasonable opportunity to comment. **CHAPTER 7** of the *Handbook* provides further information related to the determination of effects and preparation of agreement documents.

The most common agreement document for FDOT is a *MOA*. This document outlines the measures that the consulting parties have agreed upon to resolve the adverse effects of an undertaking on historic

properties. There are two kinds of *MOAs*, “three party” and “two party.” A three-party *MOA* occurs when the ACHP is involved in the consultation process, and a two-party *MOA* is when the ACHP has not been involved in consultation but receives the *MOA* after the others have prepared and signed it. Additional signatories, such as local agencies and the District, may be listed as concurring parties to the *MOA*, as appropriate.

The first section of the *MOA* introduces the undertaking, the affected NRHP-listed or -eligible properties, and identifies the consulting parties. This section is usually composed of a series of “Whereas” statements about the project. The stipulations follow, often using the language, “The FDOT will ensure that” the various agreed-upon steps are carried out. The document ends with a statement concerning the execution of the *MOA* and the implementation of its terms, followed by signatures from all the consulting parties.

The ACHP is given the opportunity to comment in one of three ways:

- They may have been involved by participating as a consulting party and signing the resulting *MOA*. This serves as the ACHP’s comment on the undertaking;
- The ACHP may not have been a consulting party but is given the *MOA* for review. The ACHP’s acceptance of this *MOA* serves as its comment in this case; and
- The final option occurs when consultation fails and therefore produces no *MOA*. In this case, the ACHP issues written comments.

The ACHP may accept the *MOA* as-is, request changes, or issue written comments. After they receive the required documentation, the ACHP has 45 days in which to respond.

If a *MOA* was prepared and signed by all appropriate parties, the project continues under the terms of the *MOA*. An *MOA* includes provisions for termination and for reconsideration of the terms if the undertaking has not been implemented within a specified time. If no *MOA* was signed and the ACHP has issued written comments to FDOT, they must consider these comments in deciding the next course of action or proceed as proposed. FDOT may decide not to proceed with the project at all or to proceed with an alternative. FDOT must notify the ACHP of its decision, preferably before work has begun on the proposed undertaking, if their decision is to proceed. Either way, this concludes the *Section 106* process and satisfies FDOT’s statutory responsibilities under *Section 106* of the *NHPA*.

2.5 COORDINATING SECTION 106 WITH OTHER REGULATIONS

Timing the *Section 106* process with other federal regulations such as *NEPA* or *Section 4(f)* is essential to achieve efficient project management and avoid duplication of efforts. This is especially important for public involvement, which is typically the public hearing for *NEPA* projects. Documentation associated with historic properties, such as *CRAS Reports*, *CSR*, and a semi-final draft of the *MOA*, must be made available to the public in advance of the public hearing and effects to historic properties should be addressed in the public hearing materials and presentation. Additionally, the appropriate *Section 4(f)* document needs to be available for public review and comment during this pre-hearing period and addressed in the pre-hearing materials and public hearing presentation. For all these documents to be ready for public availability, the *Section 106* process has to have been initiated (and adverse effects must have been identified) early in the project.

The length of the *Section 106* process is highly variable and depends on many factors that cannot be ascribed a specific, predictable amount of time. Factors such as the number and type of historic property(s), type of undertaking, degree of significance of the historic property(s), complexity of the affected party(s) involvement in the consultative process, and the degree of anticipated effects are just some of the variables. Early initiation of the *Section 106* process, clear expectations, and frequent

communication with the project team are recommended to achieve efficient project management and avoid schedule delays.

Cultural resource documents may be developed well in advance of the public hearing; however, care must be taken to assure that early *Section 106* steps, namely identification of historic properties via CRAS, are inclusive of any potential effects from the undertaking. This may equate to a broader-defined APE to include all possible alignments or careful monitoring of project plan development so that the CRAS APE is more narrowly focused on just the alignments still under consideration. Do keep in mind that while most documents can be drafted, reviewed, and completed early, an *MOA* may not be executed without public involvement and as such can only progress to a semi-final state before the public hearing or alternate public involvement opportunity takes place.

To assist with the timing of the *Section 106* process and project schedule development, a number of timelines have been created for the latter steps of the *Section 106* process for different classes of action and interaction with *Section 4(f)*, these can be found on the [Cultural Resources](#) webpage. The initial steps of the *Section 106* process leading up to the determination that there are historic properties present within the project area are omitted from these charts because they are more readily predictable but must be based on the project specifics. The provided timelines are estimates of best-case scenarios where there are no delays or complications and represent the minimum amount of time that should be entertained for any step in the process. There are also clear designations of the party responsible for each step and any potential for efficiency is incumbent upon that party. These timelines are a framework from which each specific project can start their planning and should not be interpreted as absolute.

CHAPTER 3

NATIVE AMERICAN TRIBAL CONSULTATION

3.1 OVERVIEW

Chapter 3 identifies and provides contact information for the six federally recognized Native American tribes that have historical and cultural affiliations in Florida. A step-by-step process for FDOT to follow when conducting consultation with Native American tribes under *Section 106* follows. This chapter concludes with a discussion of areas of concern relating to Native American consultation, including the government-to-government relationship that exists between the federal government and federally recognized tribes; the confidentiality of sacred information; and Native American views on human remains and archaeological sites.

3.2 THE CONSULTING TRIBES

As defined in the *NHPA* and the implementing regulations, **Native American Tribes** are those tribes that have received formal recognition by the U.S. government. In Florida, the six federally recognized tribes are:

- The Miccosukee Tribe of Indians of Florida
- The Mississippi Band of Choctaw Indians
- The Muscogee Creek Nation
- The Poarch Band of Creek Indians
- The Seminole Nation of Oklahoma
- The Seminole Tribe of Florida

All six tribal governments have ancestral lands throughout the southeastern United States. The Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida currently reside and have tribal lands in Florida. Although the Muscogee Creek Nation, the Poarch Band of Creek Indians, the Seminole Nation of Oklahoma, and the Mississippi Band of Choctaw Indians do not currently have reservation lands in the state, at one time they lived in Florida and have a direct historical and cultural affiliation with archaeological sites in the state.

The Miccosukee Tribe of Indians of Florida was originally part of the same group of Creek Indians as the Seminole Tribe who fought against the U.S. government during the Seminole Wars of the 1800s. They took refuge in the Everglades during these wars and were part of the small group that was not removed to Oklahoma following the war. Eventually, they separated from the Seminole Tribe to become an independent tribe and, in 1962, were formally recognized by the U.S. government. Today, they have three reservation areas in the state of Florida: Tamiami Trail, Alligator Alley, and Krome Avenue. Additional information on the Miccosukee.com website.

The Mississippi Band of Choctaw Indians is part of the Muskogean linguistic family that includes Creek, Chickasaw, Seminole, Apalachi, and other smaller groups. Ancestral lands of the Mississippi Choctaw included present day Mississippi, Alabama, and the western Florida panhandle. The Mississippi Choctaw reservation contains some 35,000 acres of tribal lands located in ten different Mississippi counties. There are seven officially recognized communities within the tribe that include the Pearl River, Red Water, Bogue Chitto, Standing Pine, Tucker, Conehatta, and Bogue Homa communities. The Pearl River community is the largest and is the site of the Mississippi Choctaw government headquarters. The Mississippi Choctaw government structure has been in place since 1943 when a tribal constitution was

ratified and a representative, democratic form of government was established with equal representation among all seven Mississippi Choctaw communities. The tribe was federally recognized in 1945. Additional information is available on the Choctaw.org website.

The Muscogee (Creek) Nation is descendent of a culture that, before 1500 C.E. (Common Era), spanned the entire region known today as the southeastern United States. Early ancestors of the Muscogee constructed earthen pyramids along the rivers of this region as part of their elaborate ceremonial complexes. The historic Muscogee later built expansive towns within these same broad river valleys in the present states of Alabama, Georgia, Florida, and South Carolina. Per the *Indian Removal Act* of 1830, Muscogee leadership exchanged the last of their ancestral homelands for new lands in Indian Territory (Oklahoma). The U.S. Army enforced the removal of more than 20,000 Muscogee (Creeks) to Indian Territory in 1836 and 1837. Today, the Muscogee (Creek) Nation is located in Oklahoma, their tribal headquarters is located in Okmulgee, Oklahoma, and they have land claims in the Florida panhandle. Additional information is available on the MuscogeeNation-nsn.gov website.

The Poarch Band of Creek Indians was historically part of the Creek Confederacy with territory primarily in Georgia and Alabama. The Poarch represent one of the few tribes not removed to Indian Territory by the U.S. government, and they have lived in the same general areas for nearly 150 years. They have a 400-acre reservation in southern Alabama on the Florida border, but tribal members also live off-reservation in Escambia County, Florida. Federal recognition was obtained in 1984. Additional information is available on the pci-nsn.gov website.

The Seminole Nation of Oklahoma was established in 1856 by the U.S. government in Indian Territory. They are historically associated with the Seminole Tribe of Florida and represent the more than 3,000 Seminoles who were removed from Florida by the U.S. government at the end of the Seminole Wars in the 1800s. The Seminole Nation of Oklahoma considers Florida its ancestral home and has historical and cultural connections to the state. The tribal headquarters are located at Wewoka (meaning Barking Waters), which is the county seat of Seminole County. Additional information is available on the sno-nsn.gov website.

The Seminoles are comprised of various culturally related Creek tribes that began to migrate into northern Florida sometime before 1750. In all likelihood, those Native Americans who survived the period of European settlement and the resultant diseases were absorbed into the Seminole Tribe as they migrated south into Florida. During and following the Seminole Wars, approximately 300 Seminoles took refuge in the Everglades and avoided removal to Indian Territory. Their descendants form the Seminole Tribe of Florida. In 1957, a majority of these people voted to establish an administrative entity called the **Seminole Tribe of Florida**, and, in that same year, the U.S. Congress officially recognized them as a Native American tribe. Those who chose to not become members of the newly-formed Seminole Tribe either remained independent or eventually joined together to form the Miccosukee Tribe of Indians of Florida. Today, the Seminole Tribe of Florida members live on six reservations across the peninsula: Hollywood (formerly Dania), Big Cypress, Brighton, Fort Pierce, Immokalee, and Tampa. Additional information is available on the SemTribe.com website.

3.3 THE NATIVE AMERICAN CONSULTATION PROCESS

3.3.1 Authority

In accordance with *36 CFR Part 800*, federal agencies are required to consult with federally recognized Native American Tribes (Tribes) in all phases of the *Section 106* process when an agency undertaking may have the potential to affect Native American historic properties on or off tribal lands. Prior to *NEPA* Assignment, FHWA, in partnership with FDOT, established a government-to-government relationship with the six federally recognized Native American tribes with cultural affiliation or interest in Florida.

Following *NEPA* Assignment and the assumed responsibility for *Section 106* consultation, FDOT may conduct routine coordination with the Tribes regarding undertakings; however, government-to-government consultation responsibilities were retained by FHWA (see *NEPA Assignment MOU* for additional details). Should a Tribe request government-to-government consultation at any point during project coordination, FDOT will notify FHWA of the request and FHWA will lead all subsequent consultation, keeping FDOT informed as appropriate.

3.3.2 Contacts

Since both FDOT and FHWA have roles in tribal consultation, situation depending, each has a designated Native American Coordinator. The FHWA Native American Coordinator is the Florida Division Administrator, and the FDOT Native American Coordinator is the Director of OEM. The State Cultural Resources Coordinator (State CRC) in OEM provides additional support for Tribal coordination, and each FDOT District has a designated point of contact to conduct project-related Tribal coordination; typically, the District CRC or Environmental Manager.

THPOs may not have been designated by every tribal government to function as the sole point of contact, therefore, FDOT should contact the designated tribal representative provided by each Tribe according to their preferred manner of contact. The FDOT [Native American Tribal Consultation](#) website is kept current of each Tribe's designated representative and contact preferences. For some projects, it may be appropriate to expand the contact list to include Native American tribes expressing interest as a consulting party under *Section 106*. These decisions will be made on a case-by-case basis.

3.3.3 FDOT Process

The objective of tribal consultation is to conduct good faith efforts to elicit information from the Tribes concerning properties of traditional or historical importance to them. As with current contacts, the FDOT Native American Tribal Coordination website maintains the most current account of Tribal interest in FDOT projects, their desired level of participation, and preferred method to receive submissions. If it is unclear whether to conduct Tribal Coordination for a project, or when, please reach out to OEM staff for assistance.

Regular project coordination with the Tribes should go through FDOT personnel, and, if in writing, on FDOT letterhead; however, communications of a sensitive nature should be elevated to OEM Staff. Situations that warrant elevating tribal consultation to OEM include projects anticipating adverse effects to historic properties in which a Tribe(s) ascribes cultural significance and/or affiliation; any interaction with burial sites, human remains, and funerary objects (whether during planned CRAS activities or as an inadvertent discovery); when a Tribe requests elevated coordination (excluding government-to-government consultation); or other non-standard circumstances. The FDOT Native American Coordinator is the primary point of contact for communicating these highly sensitive situations with the Tribes and the State CRC provides subject matter expertise for document review (as with adverse effect CRAS Reports) and other support for elevated Tribal consultation.

The basic steps FDOT follows when conducting tribal consultation are:

- Step 1:** Send an Advanced Notification (AN) package according to the *PD&E Manual* and the ETDM process. The Seminole Tribe of Florida participates in the ETDM process as a member of the Environmental Technical Advisory Team (ETAT). The remaining five Tribes do not have an ETAT member, but the AN package is still sent electronically via the Environmental Screening Tool (EST). The AN package should include:
- A clear statement that the project is being conducted pursuant to either *Section 106* of the *NHPA* or *Chapter 267, Fl. Stat.* (this will be auto-populated based on the project parameters entered into the system);

- A statement that the AN letter is intended to initiate project-specific consultation between FDOT and the federally recognized tribe [include the full, legal name of the tribe] and to identify any issues of importance to the tribe;
- A brief description of the project and proposed improvements;
- A map showing the location of the project and proposed improvements;
- A statement that a CRAS will be conducted, and that a copy of the *Report* will be forwarded to the tribe in accordance with their review preferences;
- A request for comments from the tribe; and
- The names of FDOT contact person(s) and methods for providing comments.

Step 2: For each tribe specifically requesting to be a participant in the *Section 106* consultation process, or in accordance with each Tribe’s areas of interest and level of preferred participation, send a *Transmittal Letter* and a copy of the final survey *Report* (see **CHAPTER 7** for document types). See **EXHIBIT 3.1** for a sample *Transmittal Letter* if the survey identified no archaeological sites and **EXHIBIT 3.2** for a sample *Transmittal Letter* if the survey identified archaeological sites.

- If comments are received, the District conducts any follow-up coordination with the THPO or *Section 106* tribal representative and documents the Tribe’s participation in the project file.
- If appropriate, arrange meetings and/or a site visit if a significant Native American cultural resource was identified during the CRAS, or if requested by the tribe.
- If no response is received, the *Section 106* process may move forward. If at any time a Tribe requests participation in a project, their participation, requests, or suggestions will be incorporated into the project decision-making, as appropriate.

3.4 AREAS OF CONCERN AND ONGOING DIALOGUE

Tribal consultation can be challenging given the history of Native American and government relations in the United States and the varied cultural perspectives. FDOT and the Tribes work diligently to establish and maintain the relationships and mutual understanding essential to successful consultation. The established consultation process continues to evolve and improve and FDOT continues to work with tribal representatives to help them more fully participate in the planning and programming activities used in the Geographic Information System (GIS)-based ETDM process. The Seminole Tribe of Florida is a member of the ETAT, and the opportunity is available for any other Tribe interested in similar participation.

Coordination with the six federally recognized tribes represents a developing and evolving process that, to date, has identified the following four areas of concern to the tribes:

- Government-to-government relationship;
- Confidentiality;
- Human Remains; and
- Archaeological Sites.

Government-to-government Relationship: Consultation with a Native American tribe must recognize the “government-to-government” relationship that exists between the federal government and federally recognized Native American tribes and be conducted in a sensitive manner that is respectful of tribal

sovereignty. This relationship derives from the Constitution, treaties, Supreme Court decisions, and federal laws and authorities. Under *NEPA* Assignment, FDOT acts as the lead federal agency responsible for conducting tribal consultation for each Tribe according to their preferences and interests and in consideration of processes that will satisfy tribal and agency objectives. Tribal preferences and areas of interest are maintained on the [Native American Tribal Coordination](#) website and should be referenced frequently to accurately coordinate with Tribes during each step of the *Section 106* process.

Confidentiality: Native American tribes may be concerned about revealing the locations of their religious and cultural sites. Providing such information to the public on traditional use areas, such as plant gathering places, ceremonial centers, and burial mounds also may lead to the disruption of its use or even destruction by curious or ill-intentioned people. *Section 304* of the *NHPA*, and codified in regulation [36 CFR § 800.11\(c\)\(1\)](#), allows agencies to withhold information from the public regarding an undertaking or its effects if it determines that such information would:

- Cause a significant invasion of privacy;
- Risk harm to the resource; or
- Impede the use of a traditional religious site by its practitioners.

Additionally, legislation enacted by the Florida state legislature in January 2002 exempts the locations of archaeological sites in Florida from the provisions of what is commonly referred to as the “Sunshine Law,” (*s.119.07(1)* and *2.24(a)* of *Article I* of the *State Constitution*). The law allows agencies to limit the distribution of location information on sites vulnerable to looting or vandalism, in particular, precontact archaeological sites. FDOT continues to work with the Tribes to identify those cases where confidentiality is desired or required. The District CRCs should consult with the FDOT Native American Coordinator when determining the need to redact sensitive information from publicly available documents.

Human Remains: Human remains are a matter of cultural, historical, and sacred significance to Native American tribes and should not be looked at only in an archaeological context. For archaeologists, the significance of human remains sites lies in their ability to provide biological, pathological, epidemiological, dietary, and mortuary information that will assist in better describing, understanding, and explaining past human behavior and historical processes. Many Native Americans, on the other hand, view such interests as incompatible with their traditional beliefs and values. So strong are their beliefs regarding the sacredness of these types of sites that some tribes refuse to even discuss the subject of death. Not surprisingly, the excavation of human remains for the purposes of scientific investigation is viewed as abhorrent to them and tantamount to an unauthorized exhumation of their ancestors. The discovery of human remains must be approached with a great deal of cultural sensitivity and an understanding that, to Native Americans, human remains are sacred.

In the event that human remains are found during any project, the provisions of [Chapter 872, Fl. Stat.](#) must be followed. Briefly, this law states that when “an unmarked human burial is discovered..., all activity that may disturb the unmarked human burial shall cease” and may not resume until authorized by either the District Medical Examiner or the State Archaeologist (*Section 872.05(4), Fl. Stat.*). If human remains less than 75 years old are encountered or if they are involved in a criminal investigation, the District Medical Examiner has jurisdiction. If the remains are determined to be more than 75 years of age, then the State Archaeologist takes the lead in determining appropriate treatments and options for the remains. In cases where the State Archaeologist has jurisdiction, the State Archaeologist will set up a committee to initiate consultation with the tribes and make decisions regarding the steps to be taken to satisfy the legal requirements of *Chapter 872, Fl. Stat.* It is advisable to notify the FDOT Native American Coordinator and State CRC immediately to ensure that the proper legal procedures are

followed. The FDOT protocol for the discovery of human remains are specifically outlined in Stipulation X of the 2023 PA as well as the [*FDOT Standard Specifications*](#).

Archaeological Sites: To non-Native American people, the past, as reflected in archaeological sites, is not part of their cultural heritage, traditional religious system, or ancestral sites. By the very nature of their profession, archaeologists are trained to view archaeological sites as sources of information about the past to be excavated and analyzed, and a means to understand better the way of life of ancient and historic Native American groups. To Native Americans, archaeological sites are part of their ongoing cultural traditions and are frequently referred to as ancestral or cultural sites. Consequently, these sites remain an integral part of their history and culture. In many cases, such sites may have more importance than the scientific value that can be yielded through excavation.

It is, therefore, imperative that Native American tribes be consulted regarding these sites. The District CRCs should consult with the FDOT Native American Coordinator and State CRC for any project where significant archaeological sites are identified during the CRAS. Note that significance in this situation is not necessarily tied to the NRHP eligibility determination, for example, any site with documented human remains, funerary objects, or locations associations with sacred rituals regardless of their NRHP significance evaluation. They will provide directions to assure that the Tribes receive the proper information and are included in the determination of effects and in the subsequent efforts to find an appropriate avoidance, minimization, or mitigation solution.

EXHIBIT 3.1

SAMPLE TRANSMITTAL LETTER WHEN NO ARCHAEOLOGICAL SITES ARE IDENTIFIED

[DATE]

[TRIBAL CONTACT NAME]

[TITLE]

[ADDRESS]

Re: [PROJECT NAME]
COUNTY: [Name]

Dear [TRIBAL CONTACT NAME]:

The Florida Department of Transportation (FDOT) (District [NUMBER]) are conducting a [PROJECT NAME and DESCRIPTION].

FDOT submitted an Advanced Notification of this project to [INSERT TRIBE NAME] on [DATE] to initiate the *Section 106* process, announce that a Cultural Resource Assessment Survey (CRAS) would be conducted, and request input on the CRAS parameters.

Enclosed, please find the [DATE] CRAS Report for the project. No archaeological sites considered eligible for listing in the National Register of Historic Places (NRHP) were identified.

As part of the ongoing consultation process pursuant to Section 106, we are soliciting input from the [INSERT TRIBE NAME] concerning any religious or cultural significance associated with any historic property that may be affected by this project. We look forward to any comments you may have on cultural resources in the project area, or comments on the CRAS recommendations. If you have any questions, please do not hesitate to contact [NAME] at [PHONE NUMBER].

Sincerely,

[NAME]

District Environmental Manager

Enclosures

cc: [Additional tribal contacts]

[District specific contacts]

[Native American Coordinator], FDOT

[State Cultural Resource Coordinator], FDOT

EXHIBIT 3.2

SAMPLE CRAS LETTER WHEN ARCHAEOLOGICAL SITES ARE IDENTIFIED

[DATE]

[TRIBAL CONTACT NAME]

[TITLE]

[ADDRESS]

Re: [PROJECT NAME]
COUNTY: [Name]

Dear [TRIBAL CONTACT NAME]:

The Florida Department of Transportation (FDOT) (District [NUMBER]) are conducting a [PROJECT NAME and DESCRIPTION].

Please find enclosed one copy of the Cultural Resource Assessment Survey (CRAS) Report for the [PROJECT NAME] for your review and comment. This report documents the cultural resource survey conducted pursuant to *Section 106* of the *National Historic Preservation Act (NHPA)* of 1966 (Public Law 89-665, as amended) and its implementing regulations (*36 CFR Part 800: Protection of Historic Properties*, as revised August 2004). The objectives of this survey were to identify cultural resources within the project corridor and assess their eligibility for inclusion in the *National Register of Historic Places (NRHP)*. As noted in the [INSERT DATE] Advanced Notification package that initiated *Section 106* consultation (see attached), this report is being forwarded to you as part of the project specific consultation.

A total of [INSERT NUMBER] archaeological sites were identified during the survey of [PROJECT NAME]. [NOTE TYPE OF SITES AND THEIR NRHP ELIGIBILITY RECOMMENDATION, IF APPLICABLE]

We welcome any comments you may have pertaining to this project and seek your concurrence with the findings. [DETAIL SECTION 106 FINDINGS, IF APPROPRIATE] We look forward to continuing the consultation process and working with you.

If you have any questions, please feel to call either [NAME] (FDOT District) at [PHONE NUMBER], or [NAME] (FDOT Office of Environmental Management) at [PHONE NUMBER]. You may also contact [NAME, TITLE, PHONE NUMBER] for project-specific information if so desired.

Sincerely,

[NAME]

District Environmental Manager (or OEM Director if adverse effects are anticipated)

Enclosures

cc: [Additional tribal contacts]

[District specific contacts]

[Native American Coordinator], FDOT

[State Cultural Resource Coordinator], FDOT

CHAPTER 4

THE ETDM PROCESS AND CULTURAL RESOURCES

4.1 INTRODUCTION

The [ETDM](#) Process was developed to incorporate environmental considerations into transportation planning to inform project delivery. This process supports the environmental policy of the Florida Department of Transportation (FDOT) to “protect and preserve the quality of life, and the natural, physical, social, and cultural resources of the State, while expeditiously developing safe, cost effective, and efficient transportation systems” (*Environmental Policy No.: 000-625-001-m*). The ETDM process provides agencies and other stakeholders with the opportunity for early input and consideration of the environment in transportation planning. To date, over 30 resource agencies, including the FDOS, have signed a Memorandum of Understanding agreeing to participate in the ETDM process and to assign a representative to serve as a member of the ETDM ETAT.

The ETDM Process is designed to provide the SHPO, THPOs, other consulting parties, and the public access to project plans and information about potential effects to Florida’s cultural resources. There are three representatives of the FDHR/SHPO functioning in this capacity. These ETAT representatives will provide official responses to FDOT that will be advisory and will include input regarding regulatory and planning programs. In addition, the Seminole Tribe of Florida has an ETAT representative. The process provides effective communication so agencies and the affected public can discern how their input influences project concepts. It does not replace the *Section 106* process, nor does it negate the need for cultural resource assessments or other types of technical studies. ETDM simply assists with the early identification of cultural resources requiring special consideration before major projects enter the FDOT work program. It also allows those projects with no cultural resource issues to proceed without further technical studies.

This chapter provides an overview of the ETDM process, explains how cultural resources are included, and provides guidance for conducting cultural resource evaluations under this process. The specific procedures for implementing the ETDM process are found in the [ETDM Manual](#).

4.2 THE ETDM PROCESS

Florida’s ETDM Process defines how the state accomplishes transportation planning and project development within its current statutes and regulations. This process provides for interaction with the SHPO, THPOs, and other consulting parties in the early stages of transportation planning and allows them to comment on the potential impacts of a project to cultural resources throughout the planning, programming, and project development phases of a project.

Under this process, cultural resource analysis is included in both the Long Range Transportation Plan (LRTP) and the Transportation Improvement Program (TIP). This upfront inclusion of cultural resources analyses in ETDM allows for the early identification of cultural resource issues that could influence the priority, alignment, and/or design features of candidate transportation projects early in the planning process. Projects involving the Strategic Intermodal System (SIS) also have used the ETDM Process. The SIS is a transportation system that is made up of statewide and regionally significant facilities and services; contains all forms of transportation for moving both people and goods, including linkages that provide for smooth and efficient transfers between modes and major facilities; and integrates individual facilities, services, forms of transportation (modes), and linkages into a single, integrated transportation network.

A key component of ETDM is the EST, an interactive database and mapping application available on the Internet. GIS analyses of previously recorded cultural resources are performed to locate previously recorded archaeological sites and historic resources located near the project area. GIS analysis takes place during the Planning and Programming phase of a project during an event referred to as “screening.” These screening events, known as the Planning Screen and the Programming Screen in the ETDM Process, are conducted prior to project development.

4.2.1 Planning Screen

The Planning Screen allows the SHPO and other agencies (Tribes, WMDs, and some local agencies) to review project Purpose and Need Statements and comment on the potential impact of projects to cultural resources early in the planning process. This opportunity enables planners to adjust project concepts to avoid or minimize adverse impacts, consider mitigation alternatives, and improve estimation of project costs. Secondary and cumulative impacts are evaluated on a project and system-wide basis in connection with the Planning Screen. The interrelationships between historic preservation concerns and mobility plans are considered through integrated agency planning. Key recommendations and conclusions regarding potential project impacts are provided in a Summary Report. This report guides planners to stage transportation priorities in long-range transportation plans and is available electronically to the SHPO, THPOs, and other consulting parties as well as to other resource agencies and the public.

4.2.2 Programming Screen

The intent of the Programming Screen is to identify significant environmental and social issues of priority transportation projects and to develop a methodology for focused technical studies to address those issues or resolve a dispute before priority projects are programmed into the FDOT Five-Year Work Program. It includes priority bridge projects included in the Statewide Bridge Inspection Summary Report and the projects included on county priority lists. In the ETDM Process, most projects that enter the Programming Screen already will have been evaluated in the Planning Screen. The results of these project evaluations of potential impacts to the natural and social environment are stored in the EST. Candidate projects that have not been previously evaluated in the Planning Screen, such as bridge replacement projects, LRTP project amendments, and county priorities in non-MPO areas, will be evaluated in the Programming Screen.

This screen occurs before projects are funded in the FDOT Five-Year Work Program. It initiates the *NEPA* process for federally funded projects or the State Environmental Impact process for state-funded projects. SHPO and other agency input concerning the potential impact to cultural resources is the basis for agency scoping efforts to help ensure compliance with *NEPA* and other applicable federal and state laws, including *NHPA*, *36 CFR Part 800*, and *Chapter 267, Fl. Stat.* If significant issues are identified, the SHPO or THPOs may request Dispute Resolution before the project is programmed in the FDOT Five-Year Work Program. FDOT’s OEM and the Districts agree on a Class of Action Determination for each priority project, which may include consultation with other agencies at times. Community and SHPO input, preliminary project concepts, reasonable project alternatives, and agency scoping recommendations are summarized in a Programming Screen Summary Report. This report is used as the transition document to the Project Development phase.

4.2.3 Project Development

The Project Development phase is the process by which FDOT documents *NEPA* compliance and identifies the required environmental permits. In the Project Development phase, each project is developed to the level of detail necessary to assess accurately the potential impacts to archaeological and historic resources to obtain environmental permits at the conclusion of the *NEPA* process. This interaction continues throughout the life of a project to ensure that mobility needs are balanced with historic preservation decisions, values, and mitigation strategies. In this process, resource avoidance,

minimization options, and mitigation strategies are identified earlier, and cost impacts for these strategies can be considered in establishing transportation plan priorities. SHPO interaction during Project Development allows permitting to be concurrent with the completion of the federal *NEPA* process and reduces the duplication of effort that previously occurred in past production processes.

The *PD&E Manual* is comprised of two volumes (Parts 1 and 2) and is FDOT's procedure for complying with *NEPA* and associated federal and state laws and regulations. It is the primary resource for addressing the environmental requirements associated with planning, developing, and delivering highway projects. It is a compilation of environmental procedures and processes related to cultural, natural, social, and physical resources. The *PD&E Manual* provides project analysts and PMs with information necessary to develop projects that comply with federal and state laws. The *PD&E Manual* is designed to work in conjunction with FDOT handbooks, guidance documents, and design criteria that are used in FDOT's project delivery process, for cultural resources specifically reference the *Archaeological and Historic Resources Chapter*.

4.3 THE ETDM TEAM

The ETDM team is comprised of the following:

- FDOT ETDM Coordinator from each district who is responsible for overall coordination within the Department and with the MPOs, resource agencies, and the community;
- MPO ETDM Coordinator from each district who is responsible for agency and community interaction in MPO areas through the Programming Screen Phase (except for bridges and FIHS);
- Community Liaison Coordinator from each district who is responsible for establishing a two-way conduit of communication with the public; and
- An ETAT consisting of federal, state, and regional agency and MPO representatives, and Native American tribes. From a cultural resource perspective, the ETAT representatives from the SHPO are critical, as they are responsible for commenting and providing that agency's official opinion regarding the potential impacts of a proposed project on cultural resources.

The SHPO has appointed representatives with responsibility to coordinate and perform all agency actions to satisfy the agency's statutory responsibility with respect to the planning and implementation of transportation projects. Interaction with the SHPO occurs throughout the project planning to ensure that transportation decisions are balanced with cultural resource preservation decisions. The SHPO ETAT representatives have agency authority and responsibility to coordinate internally and represent agency positions. The ETAT representatives' role changes from advisory during the planning phase to coordination during the PD&E phase. During planning, the ETAT representatives advise the MPO in urban areas (and FDOT in non-MPO areas) of potential project impacts to known cultural resources and the likelihood of impacts to unrecorded properties, consistent with the SHPO's regulatory and planning program. Recommendations are provided regarding how to avoid, minimize, or mitigate these impacts. The ETAT representatives also evaluate and provide comments on secondary and cumulative impacts of a transportation improvement project for the resources that their agencies are responsible for protecting. This also provides for project review consistency. The ETAT representatives concur with the purpose and need statement for the project and provide updated resource data that may affect decisions based on agency plans and goals. The SHPO ETAT representatives provide an official opinion or concurrence only. Project records must show that the transportation planning agency provided the SHPO, THPO, and the public the opportunity to comment on a project; ACHP participation is requested in accordance with *Appendix A to Part 800, Title 36*. Final decision making for establishing project priorities still lies with the transportation planning agency.

As a project advances into the project development and design phases, the SHPO ETAT representatives continue to provide project input and technical assistance to FDOT to satisfy federal or state historic preservation regulations, including permit requirements from other resource agencies, such as the USACE or the FDEP. This includes requesting technical studies to aid in agency decisions, and identifying, defining, and participating in technical studies needed for SHPO decisions.

4.4 THE ENVIRONMENTAL SCREENING TOOL

The Environmental Screening tool (EST) supports the ETDM Process by integrating data from multiple sources, analyzing environmental effects, communicating information, storing and reporting results, and maintaining project records. This Internet-accessible GIS application brings together information about transportation projects and cultural resources. It enables the ETAT members and the community to examine potential impacts to cultural resources. A key component of the application is its use of the [Florida Geographic Data Library](#) (FGDL) housed at the GeoPlan Center at the University of Florida. The GeoPlan Center compiles geographic information system data from federal, state, and local agencies and makes it available to the public through the FGDL.

GIS information on cultural resources is obtained from the [FMSF](#), the state's official repository for archaeological and historic resource data. The FMSF consists of a paper file and digital archive of known archaeological sites and historic resources in Florida. The FMSF provides quarterly digital file updates to FGDL regarding cultural resource data recorded on FMSF forms. The archaeological data is confidential and is not available on the public access ETDM web site.

Using the FGDL as the foundation for environmental resource data, the EST provides utilities to input and update information about transportation projects and cultural resources, perform standardized GIS analyses, gather and report comments by the ETAT representatives, and provide read-only information to the public (excluding restricted data such as archaeological site locations).

The EST provides results of GIS analyses and affords regulatory and resource agencies and the public the ability to evaluate the effects of transportation plans on Florida's resources, including its affected communities. The EST enables the affected parties to provide feedback on the degree of effect and recommendations or requirements for project modifications to avoid, minimize, or mitigate adverse effects.

Cultural resource data in the EST includes datasets maintained by the FMSF at the FDHR. These datasets are based on information provided on FMSF forms. Updated versions of these datasets are distributed to the FGDL quarterly for inclusion in the EST. The categories of data recorded on FMSF forms and included in the EST are briefly explained below.

- **Archaeological sites** include the following categories of data:
 - Precontact and historic period archaeological sites;
 - Indian watercraft such as canoes or log boats;
 - Aboriginal earthworks such as mounds, ditches, and canals; and
 - Precontact period burials.
- **Historic Cemeteries** include marked or unmarked graves that can consist of grave markers, grave depressions, fencing, and landscape elements.
- **Historic Structures** include buildings, structures, and objects such as monuments and statues.
- **Historic Bridges** include both pedestrian and vehicular bridges.
- **Resource Groups** include the following:

- Historic districts;
 - Archaeological districts;
 - Multiple property listings;
 - Building complexes;
 - Historic landscapes such as city plazas, formal gardens, farmsteads, and golf courses;
 - Linear resources such as roads, trails, railroads, ditches, dikes, and canals; and
 - Historic earthworks such as earthen dams and berms.
- **NRHP-Listed Properties** include the list of properties officially listed in the NRHP.
 - **Survey Areas** include those areas subjected to some level of cultural resource survey where the results have been submitted to the FDHR.

4.5 DETERMINING TECHNICAL STUDY NEEDS AND LEVEL OF EFFORT

The decision regarding the need for a technical study and the level of effort for cultural resource analysis will depend on the project type and activity. For projects that qualify for ETDM screening, this decision will consider the comments of the SHPO ETAT representatives who will review the data in the EST to determine the potential involvement with cultural resources. These comments are noted in the Summary Report. For projects that do not qualify for ETDM screening, FDOT, in consultation with the SHPO, has identified an appropriate level of cultural resource analysis, as defined in the AOFA.

4.5.1 Determining the Cultural Resources Level of Effort in ETDM Screenings

FDOT developed a series of considerations or questions (see **EXHIBIT 4.1**) to be used by the ETAT members as guidance when conducting a review of a project. The goal is to guide the reviewer through a series of considerations to 1) make decisions regarding the nature and status of known cultural resources in a project, 2) determine the need for a technical study, and 3) assign a degree of effect. The degree of effect in ETDM is not the same as a *Section 106* effects determination. In ETDM, the degree of effect represents a judgment regarding the potential involvement a proposed project may have with cultural resources listed in the FMSF or the potential for unrecorded archaeological sites or historic resources. These questions recognize the issues specific to cultural resources and incorporate federal and state guidelines, metropolitan planning factors, and standard analysis used by cultural resource managers. These questions are organized into five categories of information:

- Jurisdictional - related to ownership and management of lands;
- Survey - related to the existence and quality of previous *CRAS Reports*;
- Resource - related to the existence and characteristics of a cultural resource;
- Probability - related to the potential occurrence of a cultural resource in an area; and
- Technical Study - related to determining the need for additional technical studies.

FDOT recognizes that additional guidance will be necessary for assigning a “degree of effect” for cultural resources in the Planning and Programming Summary Reports. Non-compliance with federal and state historic preservation laws, Comprehensive Plan consistency, and/or an existing *MOA* or commitment represent the only statutory requirements that would trigger a *Potential Dispute* degree of effect. The table below provides additional guidance in assigning a degree of potential effect on cultural resources. For projects that are not screened through ETDM, follow the guidance and processes outlined in the *Section 106 PA* to determine the appropriate level effort required to address cultural resources.

DEGREE OF EFFECT	GUIDANCE
Potential Dispute	Does not conduct Consultation under <i>Section 106</i> of the <i>NHPA</i> of 1966
Substantial	Project will likely affect known or recorded historic properties listed or determined eligible for listing in the NRHP
Moderate	Project has the potential to affect properties either listed or determined eligible for listing in the NRHP, or the project area has never been subject to a systematic CRAS to identify unrecorded historic properties.
Minimum/None	The project has been subject to a systematic CRAS and determined no historic properties affected, or the project area is determined low probability for unrecorded historic properties based on available environmental data such as soils charts, topographic quadrangle maps, historic aerial imagery, etc.
Enhanced	The project is designed to protect, interpret, or enhance non-illicit access to historic properties.

4.5.2 Determining the Cultural Resources Level of Effort for Projects Not in ETDM

The *Section 106 PA* defines two categories of project activities that can be processed via program alternatives rather than the full *Section 106* process as well as the definition of project activities that are not subject to *Section 106*. The *2023 PA* also defines the level of cultural resource analysis required to ensure compliance with *Section 106* and provides the procedure for documenting these categories of projects. These definitions and processes are outline din Stipulations IV, V, VI, and VII of the *2023 PA* and are detailed in **44CHAPTER 5**.

EXHIBIT 4.1

CULTURAL RESOURCES CONSIDERATIONS

Jurisdictional Considerations

1. Is the project adjacent to or does it cross any tribal lands?
2. Does the project cross land owned or managed by an agency or jurisdictional authority of the federal or state government?

Survey Considerations

1. Has an archaeological or historic survey been conducted for the proposed project? Study area? General vicinity?
2. When were the surveys conducted?
3. Does the survey meet current survey standards according to *Module Three*?
4. Were the surveys conducted by a CRM professional or firm who meets the *SOI Qualifications*?
5. What was the level of detail of the survey?
6. Were resources identified and evaluated during the survey? Did SHPO/FDHR concur with the evaluations?
7. What was the purpose of the survey?
8. Did the FDHR find the survey report complete and sufficient in accordance with *Chapter 1A-46, F.A.C.*?

Resource Considerations

1. Are archaeological sites or historic resources located in or immediately adjacent to the proposed project? Study area? General vicinity?
2. Are archaeological or historic resources listed in the NRHP located in the project area or in the immediate vicinity of the proposed project area?
3. Are archaeological or historic resources designated potentially eligible for listing in the NRHP located in or immediately adjacent to the proposed project?
4. Are archaeological or historic resources determined as not eligible for inclusion in the NRHP located in or immediately adjacent to the project?
5. Are archaeological or historic resources not evaluated for potential inclusion in the NRHP (by located in or immediately adjacent to the project)?
6. Are archaeological or historic resources considered of special importance to the local community located in or adjacent to the proposed project?
7. Are there historic resources associated with a community that has been previously impacted by a transportation project?
8. Are archaeological or historic resources considered of special importance to Native Americans located in or immediately adjacent to the proposed project?
9. Are archaeological or historic resources considered of special importance to a particular ethnic group located in or immediately adjacent to the proposed project?
10. Is a National Historic Landmark located in or immediately adjacent to the proposed project? Study area? General vicinity?
11. Is an archaeological or historic district(s) or resource group(s) located in the proposed project? Study area? General vicinity?

12. Is a historic cemetery located in the proposed project? Study area? General vicinity?
13. Is the condition of the archaeological and/or historic resources potentially associated with the proposed project known?
14. Is a historic bridge located in the proposed project? Study area? General vicinity?

Probability Considerations

1. Are known archaeological sites located within a one-mile buffer zone of the proposed project?
2. Are known historic resources located within a one-mile buffer zone of the proposed project?
3. Does a probability model exist for the county within which the project is located? If yes, was it ranked HIGH or MODERATE?
4. Are county property appraiser's records available for the project area?
5. Do other historic documents (i.e., historic maps, aerial imagery) indicate the presence of historic or precontact land use within the project area?
6. By using the property appraiser's information (if available), are contiguous concentrations of resources that are 40 years of age or older located within or adjacent to the proposed project?
7. Is the setting of the proposed project similar to that in which known cultural resources occur?
8. Are wetlands (ponds, lakes) located in the immediate vicinity of the proposed project?
9. Are watercourses (rivers, streams) located in the immediate vicinity of the proposed project?
10. Are well-drained soils located in the immediate vicinity of the proposed project?
11. Do areas of elevated topography occur in relation to wetlands and watercourses along the proposed project?
12. Is a historic bridge or bridges located along the proposed project?
13. Is the project located on documented man-made land?

Technical Study Considerations

1. Does an archaeological or historic resource that has not been evaluated by the SHPO, THPO, or NRHP exist within the proposed project? Study area? General vicinity?
2. Does an archaeological or historic resource listed in the NRHP exist within the proposed project? Study area? General vicinity?
3. Does an archaeological or historic resource previously designated as potentially eligible for listing in the NRHP exist within the proposed project? Study area? General vicinity?
4. Does a National Historic Landmark exist within the proposed project? Study area? General vicinity?
5. Does an archaeological or historic resource of special importance to the local community exist within the proposed project area? Study area? General vicinity?
6. Does an archaeological or historic resource of special importance to Native Americans exist within the proposed project? Study area? General vicinity?
7. Does an archaeological or historic resource of special importance to a particular ethnic group exist within the proposed project? Study area? General vicinity?
8. Is the proposed project within an area designated by a county as having a moderate or high probability for archaeological sites?
9. Does the property appraiser's data indicate a high concentration of contiguous buildings that are at least 40 years of age in the project?

CHAPTER 5

RESOURCE IDENTIFICATION: THE CULTURAL RESOURCE ASSESSMENT SURVEY

5.1 OVERVIEW

The second step of the *Section 106* process involves the identification of cultural resources, including archaeological sites, historic structures, districts, and objects within a project's APE. The level of investigation is based on the nature and complexity of the proposed undertaking, and can, through administrative actions, be conducted in phases. This chapter addresses the requirements for background research and field survey, two critical elements in the standard CRAS, and the primary means of identifying cultural resources in the *Section 106* process. A CRAS also is performed to comply with *Chapter 267, Fl. Stat.*

5.2 PRELIMINARY ADMINISTRATIVE ACTIONS

Prior to the initiation of project-specific cultural resource investigations, the District CRC and/or consultant, in coordination with the FDOT District PM, determine the level of investigation for the cultural resource assessment and documentation. This decision is overseen by a person meeting SOI Qualification standards and is based upon the nature of the proposed transportation project (i.e., road design, construction or widening, bridge replacement, drainage project, enhancement project, road jurisdiction transfers), processes outlined in the *2023 PA*, and with reference to the class of action.

5.2.1 *Section 106* Programmatic Agreement

The *AOFA* identifies specific project types and their respective agreed-upon levels of cultural resource analysis. The process for implementing these project types is detailed in the *2023 PA*. Two considerations determine the required level of cultural resource review: the **project location** vis-à-vis the potential for cultural resources to be present, and the **specific type of project activity** and its potential to impact cultural resources. As such, there are four processes identified within the *2023 PA* (Stipulations IV – VII) to address the various levels of these considerations.

5.2.1.1 Stipulation IV: Projects with No Potential to Affect Historic Properties

If the undertaking is a type of activity that does not have the potential to cause effects on historic properties, assuming such historic properties were present, FDOT has no further obligations under *Section 106* in accordance with *36 CFR § 800.3(a)(1)*. These actions are defined as non-construction related activities. For example, purchasing equipment, planning, and design all fall under this portion of the regulation and do not require any further obligations under *Section 106*. All construction-related actions with a federal nexus must comply with *36 CFR §§ 800.4 to 800.6* including any maintenance, new construction, and all construction related actions. If the project meets these parameters it is not an undertaking subject to compliance with *Section 106*. Document the applicability of **Stipulation IV** in the project file and FDOT's responsibilities under *Section 106* are fulfilled.

5.2.1.2 Stipulation V: Minor Projects with Minimal Potential to Affect Historic Properties

Due to their nature and definition, FDOT identified activities listed in Appendix 1 of the *Section 106 PA* that have minimal potential to cause effects to historic properties, provided that the following conditions are confirmed to be true:

1. The undertaking is a standalone project;
2. The undertaking does not occur on tribal lands;

3. The undertaking's activities are limited to those specified in Appendix 1 of the *2023 PA*;
4. The undertaking's APE does not include any historic resources; and
5. The SHPO has been notified of the finding of *No Historic Properties Affected*, and the rationale for the finding via the form developed by OEM, and they have not objected to the finding within thirty (30) days of receipt of the notification.

5.2.1.3 Stipulation VI: Minor Projects Considered Unlikely to Affect Historic Properties

Due to their nature and definition, FDOT has identified activities listed in Appendix 2 of the *Section 106 PA* that are unlikely to cause effects to historic properties. These minor projects will result in No Historic Properties Affected pursuant to *36 CFR § 800.4(d)(1)* provided the following conditions are confirmed to be true:

1. The undertaking is a stand-alone project;
2. The undertaking does not occur on tribal lands;
3. The undertaking's activities are limited to those listed in Appendix 1 and/or 2 of the *2023 PA*;
4. The undertaking's activities do not involve ground disturbance within or adjacent to a cemetery;
5. The undertaking's APE includes one or more of the following situations:
 - i. There are no historic resources in the project APE;
 - ii. There are historic resources that have been evaluated by SHPO as ineligible for listing on the NRHP within the last ten (10) years;
 - iii. There are resources that are exempt from *Section 106* review per the nationwide program alternatives listed in Attachment 1 of the *2023 PA*; or
 - iv. There are linear resource segments that have been evaluated by SHPO as non-contributing, ineligible segments of a larger resource determined eligible or potentially eligible for NRHP listing or which has insufficient information for a definitive NRHP determination for the whole resource.
6. The SHPO has been notified of the finding of *No Historic Properties Affected*, and the rationale for the finding via the form developed by OEM, and they have not objected to the finding within thirty (30) days of receipt of the notification.

5.2.1.4 Stipulation VII: The Standard Program Process

For Program undertakings that are not reviewed pursuant to the above categories (Stipulation IV, V, and VI of the *Section 106 PA*), FDOT will carry out *Section 106* requirements in accordance with *36 CFR §§ 800.3 through 800.6*, summarized in **Section 2.3** and in conformity with the *PD&E Manual*. FDOT will ensure that all findings, determinations, and agreements are documented in accordance with *36 CFR § 800.11*, **CHAPTER 5** of this *Handbook*, and are consistent with applicable standards and guidelines promulgated by the FDOT and the FDHR.

5.2.2 Phased Approach to Cultural Resource Assessments

FDOT and the SHPO will entertain the applicability of a phased approach to cultural resource assessment surveys for complex transportation projects, such as those with large areas of land and/or multiple project corridors. A primary objective of the phased approach is to streamline the cultural resource identification and evaluation with the requirements of *NEPA*. This approach meets the requirements of *Section 106* of the *NHPA* and *Chapter 267, Fl. Stat.* Approval must be granted in writing prior to execution of a phased

survey plan as detailed below. The basic steps of the phased approach to cultural resource identification and evaluation are as follows:

- Step 1:** The District requests OEM to assess the appropriateness of using a phased approach for a project. The District recommends the appropriate project APE, the level of effort, and survey reports anticipated for each phase. If pertinent, the District will propose the conclusions and/or results required to advance through the phases of the cultural resource study. A desktop analysis of the project area, including all alternatives if relevant, should be conducted to inform this proposal. The presence of known or potential for unknown archaeological and historical resources must be addressed.
- Step 2:** The District, with OEM support, submits their recommendations to the SHPO and other *Section 106* consulting parties, as appropriate, and provides all with the opportunity to comment on the phased approach for the project. This coordination may be conveyed in a meeting (optional) but must be documented and approved in writing through the Section 106 SWEPT Tool. The State CRC, District CRC, consultant, District PM, and other pertinent project personnel should be included in this coordination step.
- Step 3:** SHPO, and other consulting parties if applicable, will have the opportunity to collaborate with FDOT to determine the appropriate scope and level of effort for the overall approach, if known, or minimally, the initial phase of the cultural resource study.
- Step 4:** If all parties accept, SHPO approves the submitted proposal, FDOT implements the plan, and submits subsequent CRAS documentation to SHPO and other consulting parties for review, comment, and concurrence (when applicable) per the established phased plan.

For example, a phased approach for multi-corridor complex transportation projects may involve phases that incrementally advance the cultural resource survey efforts until a complete survey has taken place and FDOT is able to make a project effects determination. The initial phase may start with a desktop analysis for all corridors followed by a reconnaissance or pedestrian survey. Based on the findings of the initial survey efforts and progress in the project development process (such as a reduction in the number of corridors or narrowing of alternatives), a more refined project APE may be subjected to an archaeological and historic structures survey in which cultural resources are documented and evaluated for NRHP eligibility. The determination of project effects on historic properties may follow later still once a preferred alternative is chosen to advance in the PD&E process. In addition to complex highway transportation projects, a phased approach may also be appropriate for project reevaluations, proposed ponds, and projects that may include submerged cultural resources. Any portion of the *Section 106 Process* not completed prior to approval of the *NEPA* document must be documented in the Project Commitment Record (PCR).

Prior to advancing to the next phase of project development, each project is reevaluated by FDOT. Major design modifications which result in new “footprints” may require a CRAS Addendum. Drastically altering project activities within the same “footprint” may also require additional *Section 106* consultation and/or survey. For example, changing an at-grade, capacity/widening project to a grade-separated, capacity project would require reevaluation of the project effects, both direct and indirect. Similarly, final pond locations are typically not known until late in the project development process. As they become known, they will need to be analyzed for cultural resource involvement and subjected to the appropriate level of CRAS. Since there is only one *Section 106* finding of project effects for each undertaking, the effects determination will need to be verified as still accurate from earlier *Section 106* consultations or updated as additional survey is completed and the potential for project effects on historic properties become known.

Special cases dealing with road jurisdiction transfers are another type of administrative action within the *Section 106* process. These are coordinated between the District and the FDHR. After receiving the local government's resolution approving transfer of a road off the State Highway System, the appropriate level of CRAS effort is requested. This request should include right-of-way (ROW) maps for the road. In accordance with *Section 267.061(2)(a), Fl. Stat.*, the District affords the FDHR a reasonable opportunity (30 days) to provide written comments on the results of the survey. If the survey finds no evidence of cultural resources, or if the transfer will not adversely affect any such resources, the FDHR provides comments and/or concurrence to the District. If there is evidence of historical or archaeological properties that would be adversely affected by the transfer, a mitigation plan is developed by the District in consultation with the FDHR. The plan includes a commitment from the local government to maintain the resources. The plan and supporting documentation are utilized by the District for inclusion in the request for transfer.

5.2.3 Defining the Area of Potential Effect (APE)

The SOI Qualified District CRC or consultant, District PM, and other appropriate cultural resource personnel involved in the project will define the APE in accordance with *36 CFR Part 800*, the *Section 106 PA*, and *PD&E Manual* guidance. The SHPO, as a signatory to the *Section 106 PA*, has reviewed and approved FDOT's general approach to defining APEs; however, non-standard situations may require up-front coordination with the SHPO prior to conducting the survey. In the event that FDOT and the SHPO, or other consulting parties, fail to agree on the establishment of the APE, FDOT is responsible for making the final determination.

The APE is the area within which the project may directly or indirectly cause changes in the character or use of historic properties listed or eligible for listing in the NRHP (*36 CFR Part 800.16[d]*). In defining the APE, the full range of possible project impacts, both direct and indirect, must be considered. Direct impacts include ground-disturbing activities and auditory and visual effects. Indirect or secondary impacts may include changes in transportation patterns, land use, population densities and/or growth rates. The initial definition of the APE should be large enough to accommodate minor project changes without necessitating additional cultural resource investigations. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.

Direct impacts are effects caused by an undertaking.

Work that is undertaken directly on a property that has the potential to alter its NRHP quality is a direct impact. An undertaking within the APE that introduces visual, audible, or atmospheric effects and has the potential to alter those qualities of the property that make it eligible for NRHP inclusion would also be a direct impact.

Indirect or secondary impacts are effects that may occur as an indirect result of an undertaking whenever the undertaking induces or makes possible related activities that have the potential to alter the NRHP quality of a property or its setting. Indirect impacts are generally removed in either time or distance from the undertaking and may include changes in transportation patterns, land use, population densities, or growth rates, and other reasonably foreseeable impacts.

FDOT uses a number of terms when speaking about the geographical area in which a project will take place; project limits, existing and proposed ROW, project area, or study area. These terms do not necessarily coincide with a project APE for *Section 106* purposes. An undertaking within an existing ROW does not automatically equate to a conclusion that everything is previously disturbed, just as a project requiring ROW acquisition does not automatically equate to a greater survey effort. The specific

details of each undertaking, in that specific area at that place in time, must be afforded an objective evaluation to determine the appropriate APE and level of cultural survey.

The archaeological APE typically differs from the historical APE. The *archaeological APE* is typically conducted in the construction footprint or area in which there will be ground disturbance, inclusive of project related activities such as staging and storing construction equipment and materials, and associated water management facilities, such as pond sites, lift stations, etc. Depth of ground disturbance is a factor to consider as well, the impacts from a lane widening are vastly different from bridge pilings and retaining walls which are different from resurfacing and single pole sign installations. The *historic APE* will be inclusive of the archaeological APE and extend beyond it to include potential effects to the built environment along the project corridor. A set numerical distance from the project centerline is sometimes chosen while other definitions present a more general description such as “to the backside of adjacent parcel boundaries.” Elevated project areas must take into consideration the viewshed of resources that can see the elevated project, this is typically required for bridges or grade separated projects. In these instances, the historic APE must be expanded farther from the physical project area.

The type and extent of construction activities, the horizontal and vertical limits of proposed ground disturbance, and the placement of project-related staging, such as borrow pits, waste, and mitigation areas must always be considered when defining an APE. Also, ROW acquisitions, temporary easements, and temporary access roads may be included in the APE. In addition, the introduction of project-associated visual and aesthetic, noise, and atmospheric impacts need to be considered, as well as changes in vehicular access. For example, a project within sight of a historic property that is listed in or eligible for listing in the NRHP may be within its “viewshed,” and therefore may have potential visual impacts. The introduction of increased noise levels near a previously isolated historic structure may also have an effect. Rely on the appropriate specialists for noise levels, atmospheric information, and other relevant studies.

Include a definition of the geographical limits of the project APE, noting any modifications, in the written *CRAS Report*. For example, if the proposed undertaking is a bridge replacement that requires a standard CRAS, consider:

- New and existing ROWs for bridge replacement re-routes;
- Surrounding neighborhoods and the type of bridge to be constructed (larger and/or higher structures may impact historic vistas or change the character of a surrounding historic neighborhood);
- Associated features such as ponds and borrow areas; and
- Whether or not the bridge is historic.

If the proposed undertaking is a highway construction and/or improvement project requiring a standard CRAS consider one or more of the following:

- Location and number of alternative alignments;
- ROW necessary for existing or new typical sections (rural or urban);
- Surrounding land use(s); i.e., historic (potentially NRHP-eligible) neighborhoods;
- Access roads;
- Stormwater management facility and floodplain compensation areas; and/or
- Other associated construction features.

5.2.4 Staff hour Considerations

When cultural resource consultants perform a CRAS, several factors are considered in evaluating the estimated labor and related expenses. Unless otherwise specified, a CRAS includes both archaeological sites and historic resources. Thus, labor estimates include staff hours for archaeologists and architectural historians to complete background research, a research design, field survey, interviews, analysis, and preparation of draft and final reports, as well as administrative time for planning, coordination, meetings, and quality assurance. Further, projects involving NRHP-listed or eligible cultural resources may require on-going consultation with the Department, affected or interested parties, and the SHPO.

The level of effort for archaeological field survey is typically related to both the size of the project APE and the potential for archaeological site location. For projects where sites are likely to be identified, sufficient time will be needed for artifact analysis and preparation of FMSF forms. As a result, an alignment measuring a few miles in length may require more intensive archaeological survey than a longer and wider corridor if it has a higher potential for the occurrence of sites. Consultants base their labor estimates, in part, on the approximate number of shovel tests needed in high, moderate, and low probability zones, and additional testing to delimit site boundaries. Other factors which influence staff hour estimates include compliance with the Underground Facility Damage Prevention and Safety Act ([Chapter 556, Fl. Stat.](#)), coordination with property owners, access, and travel to and from the work site.

For the typical historic structures field survey, the level of effort reflects the nature of the undertaking and the anticipated number of resources. For example, in the case of elevated roadway concepts, a wider APE will be set to address potential viewshed issues, thus increasing the number of potential historic resources to be surveyed. In addition to the number of anticipated historic resources (buildings, structures, linear resources, bridges, and cemeteries), potential historic districts also are considered, plus time for informant interviews, records research, and preparation of FMSF forms.

5.3 BACKGROUND RESEARCH

Background research is conducted to identify and understand the types of cultural resources known to be present in the general project area. It also provides the cultural contexts by which the NRHP eligibility of newly identified archaeological sites and historic resources is evaluated. Typical resource materials reviewed during the background research phase of investigation include *CRAS Reports* and FMSF Forms for previously recorded resources, local histories and prehistories, environmental data, historical maps and photographs, 19th century federal land records, District Bridge Inspection office records, and county property appraiser's office records, among others. Much of this information is now available via the Internet.

5.3.1 Florida Master Site File Data

The [FMSF](#) is the state's clearinghouse for information on cultural resources and field surveys, as well as NHL and NRHP listings and nominations. It is a computer database and paper file archive administered by the FDOS's FDHR in Tallahassee. The electronic data is updated quarterly and is available to CRM professionals through time-limited, electronic access, upon request. The FMSF GIS digital data is password-protected, and consultants are regularly notified of updates. The FMSF can be contacted at SiteFile@dos.myflorida.com.

The GIS digital data provides the locations of surveys and cultural resources (including NRHP and NHL listings) and site-specific information. For ETAT members, these data layers are available on the EST as part of the ETDM Process. NRHP information is available at the FMSF, but it may not include timely updates, so [National Register](#) data should be accessed directly from the National Park Service website.

FMSF Forms for all types of historic resources are accessible electronically by individual FMSF number through the secure, password-protected application. Summaries for archaeological sites and historic resources also are available by special request. An individual FMSF form for each resource is available in hard copy or in pdf format.

CRAS and excavation reports are electronically accessible by individual survey number through the secure, password-protected application. The reports may be downloaded from the protected site as pdf files. This application is available to cultural resource professionals by arrangement with the FMSF. Archived paper reports are indexed by county, FMSF manuscript number, and author(s). Each document has a “survey number;” these reports are all filed numerically by survey numbers in the Florida State Archives, also located in Tallahassee.

The **National Register Section** at FDHR prepares and processes nominations to the NRHP and provides technical assistance on survey and registration activities. **Preliminary Site Information Questionnaire (PSIQ)** forms, completed for many NRHP-eligible buildings along with the FDHR response, provide a good source about potentially NRHP-eligible resources. Pending or draft NHL and NRHP nominations are also available. The National Register Section contact is NationalRegister@dos.myflorida.com.

5.3.2 Department of Environmental Protection

The Florida FDEP office in Tallahassee houses historic plat maps, federal surveyor’s field notes, and tract book entries. These records also can be accessed on-line at Land Boundary Information System ([LABINS](#)). Various maps, charts, and military records, as well as Spanish Land Grants also are on file at FDEP. Most information is available on-line; it also is accessible on microfilm.

5.3.3 Other State, Regional, and Local Sources

Other project-specific information can be found at state agencies, including the state library and archives, as well as the FDOT. The Florida State Library and Archives in Tallahassee, and special historical collections throughout the state university system, provide a good source of state and regional data. [FGDL](#) is a mechanism for distributing spatial (GIS) data throughout Florida. The FGDL is warehoused and maintained at the University of Florida's GeoPlan Center, a GIS Research and Teaching Facility. The FGDL includes data on Land Use/Land Cover, Hydrography, Soils, Transportation, Boundaries, Environmental Quality, Conservation, Census, and more; these data, primarily vector GIS data layers, also are available on the EST.

The FDOT’s [Surveying and Mapping Section](#), [Office of Design Documents and Publications](#), and/or [Structures Design](#) file room hold documents pertaining to older bridge and road construction projects. Additionally, each FDOT [District Bridge Inspection Office](#) is a repository of state-owned bridge inventory and appraisal information. The individual bridge number is used to access the Structural Inventory Assessment (SIA) and Bridge Management Inventory System (BMIS) forms. These forms provide bridge construction dates, construction materials, bridge length, and other data. Also, the dates of bridge construction and reconstruction are available on the [Florida Bridge Information](#) list, which is updated quarterly. The 2010 edition of [Historic Highway Bridges of Florida](#) also is available online.

Among the regional and local agencies, [CLGs](#) are an important source of data. Also, regional and local libraries and museums may be repositories for community histories, early city and county maps, unpublished manuscripts, photographic collections, and U.S. Department of Agriculture (USDA) soil survey reports. Local preservation boards or commissions, historical and genealogical societies, preservation organizations, and local Main Street Programs are other good information sources. The FDHR can provide information on the [Main Street](#) communities.

The [Florida Public Archaeology Network](#) (FPAN) was created for the purpose of promoting and facilitating the conservation, study, and public understanding of Florida's archaeological heritage

through regional centers. There are eight centers across the state, which also may have information pertinent to the project area in question.

5.4 RESEARCH DESIGN

5.4.1 Introduction

The research design provides an overall plan to guide the location, identification, and evaluation of cultural resources. It addresses all phases of investigation, from background research to report preparation. At a minimum, the research design contains the overall approach and specific methods to be employed; a listing of previously identified NRHP properties; and a listing of all previously recorded archaeological sites and historic resources located within and proximate to the project APE. The potential for unrecorded archaeological sites and historic resources, and a map identifying zones of archaeological probability also are included. Some projects, whether they be minor projects in nature or uncomplicated and straight-forward, may not require an in-depth formal research design and can be initiated with a less formal pre-survey methodology meeting or under a pre-approved generic survey plan. When appropriate, a research design is submitted to the District for review and approval prior to initiating the field survey. Non-standard or atypical research designs should be developed in association with OEM, District staff, and the State CRC and submitted to SHPO for review and approval prior to implementation.

In a phased approach, the research design is prepared in the first phase of the CRAS, early in the project development phase, and should encompass the broadest possible APE, including all viable alternatives. If a phased approach is not used, the research design is prepared prior to conducting the CRAS; submittal to the FDOT District for review, comment, and approval prior to the commencement of field survey is at the discretion of the District PM and District CRC.

5.4.2 Predictive Model for Archaeological Sites

An important component of the research design is a discussion of project expectations vis-à-vis the types of as yet unrecorded **precontact archaeological sites** considered likely to occur, as well as their probable locations within the project APE. This model is also applicable to Native American sites of contact age or postcontact period prior to the existence of written historical accounts. This predictive model is based on the background research, including an examination of pertinent maps (i.e., United States Geological Survey [USGS] quadrangle maps, USDA soil surveys, historic and current aerials), the geographical distribution of known sites, and the results of previous surveys in environmentally similar areas. Considerations relevant to site location models include the following:

- Environmental factors such as relative elevation, local vegetation, and soil type are key factors in predicting archaeological site location. Sites are more often than not found on relatively elevated, better-drained land. Because Florida's environment has changed over time, landforms change, and this must be considered in preparing a predictive model.
- The availability of fresh water is an important site predictor. In general, relatively elevated, better-drained lands within approximately 100 meters (m)/328 feet (ft) of a freshwater source are considered to have a high site location potential. Farther from a water source, site expectancy diminishes. Zones of moderate probability often are defined as being within 100 to 300 m (328-984 ft) from potable water.
- Currently existing conditions may no longer match those illustrated on the USGS quadrangle and USDA soil maps, or other source materials. Residential and commercial development, mining, dredging and filling, and other landscape alterations may affect the potential for discovery of intact archaeological resources within the designated zones of high and moderate site location potential. A preliminary reconnaissance-level field survey can be undertaken to ground-truth the predictive model, and to adjust accordingly.

For **archaeological sites of the historic period**, useful sources of information for predicting site locations include:

- Nineteenth-century federal plats and field notes indicating the locations of forts, homesteads, roads and trails, battle sites, Native American agricultural fields, mounds, etc.
- Tract book records indicating the potential for early homesteads, not shown on the plats.
- Sanborn maps illustrating the types of older residential and commercial structures which once occupied the urban project area, as well as features such as refuse dumps, wells, cisterns, and outbuilding foundations.
- Local historical accounts and maps depicting the locations of former military forts, cemeteries, sugar mills, saltworks, sawmills, work camps, abandoned roads and railroad lines, canals, and other features that are no longer extant.
- Local “history buffs,” artifact and memorabilia collectors, historical society members, and long-term residents of a particular community.
- USGS maps showing the locations of structures as of the date of map preparation.
- Historic aerial photographs illustrating the locations of homesteads, roads, trails, agricultural fields, or other historic features. Many such aerials are available at the Publication of Archival Library & Museum Materials ([PALMM](#)).
- Soil Surveys, especially older ones, are a good source for historic buildings and associated landscape features.

For projects such as bridge replacements in which a portion of the APE is submerged, the potential for **underwater cultural resources** should be addressed in the research design. Relevant sources of information include historic aerial photographs and historic navigation charts. Also helpful is the database of wrecks and obstructions maintained by NOAA’s [U.S. Office of Coast Survey](#). These are available via their on-line viewer and various downloadable GIS/CAD formats. Precontact archaeological sites are prevalent along Florida’s west coast due to the change in sea level following the last glaciers receding approximately 20,000 years ago. The potential for these sites requires consideration when defining project APEs that involve large bodies of water.

5.4.3 Historic Resource Considerations

Similar to the approach for addressing known and potential archaeological sites, the research design should describe the applicable historic context(s) for evaluating the NRHP eligibility of each historic resource located within the project APE. It also includes a listing of all previously recorded historic resources and a description of those listed or determined eligible for listing in the NRHP. The other major component is a discussion of the number and location of anticipated historic resources within the project APE and the identification of resources considered potentially eligible for NRHP consideration, based upon the results of background research. Typical research materials that aid in the early identification of historic resources include those noted above for historic archaeological sites, such as historic maps and aerial photographs. County property appraiser’s office records also are important. In addition to research, a reconnaissance-type field survey of the project APE will aid in the identification of resources that are potentially eligible for listing in the NRHP, including potential historic districts. The boundaries of any listed or potentially eligible districts, and the locations of all contributing resources within or proximate to the APE, should be clearly delineated in the research design.

While some buildings may not appear to be 50 years old, historically important, and/or architecturally significant at first glance, historic research may indicate otherwise. Because historic associations with significant individuals or events may not be readily apparent, a broad-based research approach is important.

What is historic? According to the NRHP criteria of eligibility, historic resources generally are defined as those being 50 years of age or older. However, for multi-year projects such as PD&E studies for road improvements or bridge replacement, surveying resources that are 45 years of age or older is appropriate and will obviate the need for resurvey late in the project development process. Another exception to the 50-year rule is for resources of potentially exceptional significance. For example, while both the Sunshine Skyway (Bridge No. 151089), built in 1986, and the 1989 Napoleon Bonaparte Brevard Bridge over the St. Johns River (Bridge No. 72058) are less than 50 years old, due to their exceptional design and engineering, each is NRHP-eligible under Criterion C. Thus, if present, exceptionally distinguished resources located within the project APE should be addressed in the research design. [Guidelines for Evaluating and Nominating Properties that Have Achieved Significance Within the Past Fifty Years](#) details how to evaluate and nominate properties that have achieved significance within the last 50 years.

5.4.4 Methodology and Site Evaluation Criteria

The research design also specifies how cultural resources, both archaeological and historical, are to be identified and evaluated. For example, archaeological survey methods should address subsurface testing intervals for high, moderate, and low probability zones, and the means by which all archaeological sites will be bounded. [How to Apply the National Register Criteria for Evaluation](#) should be utilized for the evaluation of all cultural resources, both archaeological and historical, also the results of this application should be made explicit. For descriptions of the NRHP eligibility criteria and the process of site evaluation, see **CHAPTER 6**.

5.5 FIELD SURVEY

5.5.1 Introduction

The purpose of the archaeological and historic resource field survey elements of the CRAS are to locate, identify, and assess, according to NRHP criteria, the significance of all archaeological and historic resources that are located within the project APE. This effort provides FDOT and the SHPO/THPO with data sufficient to determine whether the proposed undertaking may affect significant historic resources. It also provides, in accordance with the FDHR's *Cultural Resource Management Standards and Operations Manual* (2003) "a basis for evaluating measures to avoid, minimize or mitigate any adverse project impacts to such resources and to enhance any beneficial effects."

Field survey methodology adheres to the standards contained in the FDHR's [Module Three](#) which states that "inadequate field methodology will generally result in the report results being determined to be incomplete and insufficient" by the SHPO. The methodology also adheres to [PD&E Manual](#) and NPS [Guidelines for Local Surveys: A Basis for Preservation Planning Part 1 and Part 2](#).

5.5.2 Project Planning

In preparation for field survey, the project archaeologist(s) and architectural historian(s) perform several basic tasks, including the procurement of both project maps and an Authorization for Access Letter from FDOT. Aerials marked with the proposed project limits, including existing and proposed ROW lines, proposed stormwater management facility and floodplain compensation areas (hereinafter, pond sites), and other features usually are obtained from the FDOT PM. The APE should be clearly indicated on the maps, which should also include a scale.

Authorization for Access Letter: Archaeological and historic resources field survey usually entail the examination and documentation of land, buildings, and structures in private ownership. [Section 337.274, Fl. Stat.](#), authorizes FDOT agents or employees access to private property for study purposes. Therefore, field crews should carry a copy of the **Authorization for Access Letter**, provided by the FDOT PM, for use in the field. If permission for access is denied by the landowner, leave the property, record the name

and address of individuals or businesses denying access, and refer the matter to the FDOT PM for resolution.

Safety: All field activities should be conducted under the conditions specified in a project safety plan. Among other requirements, professionals working within the ROW are required to wear reflective safety vests. If a field survey will occur within an area considered potentially unsafe due, for example, to a generally high crime rate or the presence of abandoned buildings, extra precautions may be necessary, such as the hiring of security personnel to serve as escorts.

Always be prepared for an emergency. Venomous snake bites and insect stings, contact with poisonous plants, skin punctures or lacerations, bone fractures, and heat stroke are all eventualities that must be taken into consideration during project planning. In accordance with the company's safety plan, at a minimum, each field team must be provided with contact information for the nearest hospital, as well as a first aid kit, plenty of fresh drinking water, and hardhats and reflective safety vests when working in hazardous areas.

Utility Clearance: It will be necessary to make required arrangements for utility clearances in compliance with *The Underground Facility Damage Prevention and Safety Act (Chapter 556, Fl. Stat.)*. This law requires that anyone doing any type of excavation, tunneling, or demolishing call 811 two business days before work begins to have underground lines marked at a dig site. Underground facility owners having lines at the dig site are notified by [Sunshine 811](#). Owners then have two business days to mark lines. As "excavators" it is the responsibility of the consultant to report the impending ground disturbance work (either call the number or report it through their online notification option) not less than two or more than five business days before beginning work. This is a very time-consuming process, so plan accordingly. Leave two full business days, to allow for callbacks, before initiating field survey. Failure to comply can result in serious consequences, including large fines in the event that communications lines are inadvertently severed. The following procedures are recommended to facilitate compliance with this law:

- Prepare explicit project location information before calling. For roadway improvement projects, be prepared to provide the following information: county, nearest city or town, USGS quadrangle, Township, Range, Section, road or highway, length of project, starting point and ending point. For pond sites or other "off-road" parcels, also provide the names of frontage roads and the dimensions of the project areas.
- When calling, first provide your name, the name of your company, and when the crew expects to start the project. Tell "Sunshine" the job is an "Archaeological Excavation" for FDOT. Use of the words survey and assessment are sometimes confusing to the operators.
- The caller is then asked a series of questions. Clearly state that the project involves only careful hand digging with shovels: mechanical equipment is not used. Give the operator an estimate of the number of shovel tests and their location relative to the ROW.
- The operator then provides a "ticket number" and a list of the utilities that they are contacting. If a project involves more than one area (i.e., pond sites), each will receive a separate ticket number. Expect possible calls the same day. Most likely, however, return calls will begin the following day.
- Be prepared for the callbacks. Have a list of all ticket numbers on hand, preferably with the project maps and locations. One of the first questions to ask the utility companies is whether hand digging with a shovel measuring about 20 in x 3 ft (50cm x 1 m) could impact their buried utility. A pertinent question to ask is whether the utilities are located in the ROW only. If this is the case, the utility companies need to mark the entire corridor. In many situations, be prepared to meet the utility company representative in the field.

- According to the law, an excavator must be given clearance within two business days by any notified utility that determines that its lines are not within the excavation area. Excavation can begin prior to 48 hours if all notified utilities have either marked their lines or given “all clears.”

5.5.3 Archaeological Survey Methods

In general, archaeological field survey tactics include both ground surface inspection and subsurface testing. The intensity of the latter varies in accordance with the designated zones of high, moderate, and low site potential, as described in the research design. The components of a typical archaeological field assessment survey include the following:

- Initial reconnaissance;
- Systematic subsurface testing;
- Judgmental subsurface testing;
- Site bounding;
- Data collation; and
- Mapping.

Initial Reconnaissance: The first stage of archaeological field survey is a drive-through of the project area with the aim of supplementing the information gathered for preparation of the research design. While not required, an initial reconnaissance is recommended as this effort provides a more in-depth verification of the predictive model and identifies specific conditions that may impact planned survey efforts. For example:

- Are any parts of the project APE marked by constructed features, underground utilities, hazardous materials, dredged fill, mined land, or standing water that will obviate subsurface testing?
- Is any land within the project APE secured behind fencing or posted “No Trespassing?”

Following this initial field inspection, areas originally considered to have a high, moderate, or low site location potential can be adjusted, and surveyed at the appropriate level of intensity. The field maps should be marked to reflect the observed conditions.

Systematic Subsurface Testing: In accordance with FDOT and FDHR standards, subsurface testing is conducted by shovel. All high and moderate probability areas are subjected to systematic subsurface shovel testing at 25 and 50 m (82 and 164 ft) intervals, respectively. In addition, at least 10 percent of the low probability areas are tested at 100 m (328 ft) intervals. Systematic testing should be supplemented by judgmental testing, as appropriate. Closer interval testing (i.e., at 5 m [15 ft]) may be appropriate at historic period archaeological sites. The distance between shovel test locations is generally determined by measured pacing and/or a Global Positioning System (GPS) device.

If the project APE is a narrow corridor, a single line or transect of shovel tests should suffice. For wider APEs, multiple, parallel transects with staggered shovel tests will provide broader sampling coverage. For proposed pond sites, a strategy combining both systematic and judgmental testing typically affords the best overall coverage.

In accordance with the FDHR’s standards, subsurface shovel tests measure 0.5 m (20 in) in diameter by a minimum of 1 m (3.3 ft) in depth. Under certain conditions (i.e., shallow bedrock, saturated soils, or dense modern fill) it may not be possible to penetrate that deeply. Inability to dig a shovel test to the state’s standard depth, diameter, or interval requires written justification by the field archaeologist so that it may be reported accurately in the CRAS document. All soil removed from each shovel test is

screened through .64 cm (.25 in) mesh to maximize the recovery of cultural materials. All cultural materials collected from the surface or recovered from the shovel tests are bagged by provenience unit. At a minimum, the provenience information (shovel test number, depth below surface) and date should be written legibly on the exterior of all collection bags in waterproof ink. After completing all data recording, the shovel tests should be refilled completely. Failure to replace all the soil may result in serious injuries to individuals, livestock, or other animals.

Judgmental Subsurface Testing: Additional shovel testing in selected areas is appropriate for the purpose of site discovery. By and large, judgmental shovel tests should not be conducted in lieu of standard shovel testing intervals, rather they should be used in concert with the standard intervals. There are limited exceptions to this statement, which are explained below. Judgmental shovel testing may be appropriate in:

- Urbanized environments where pavement, utilities, and constructed features make systematic testing unfeasible, while standard intervals in neat transects may not be possible, effort should be made to conduct a similar volume of testing where possible. Photographs of existing conditions are invaluable to support instances where shovel testing is not possible.
- Project APEs with limited high and moderate site probability areas, but where a larger subsurface test sample may be desirable; adding additional tests outside of the planned transects or intervals may be based on the professional expertise or promising geographic areas.
- Geographically restricted APEs such as proposed pond sites or bridge replacement areas. Pond sites should be treated as area surveys (rather than linear survey) and utilize both the appropriate shovel testing intervals and transect spacing based on the probability model. Bridge replacement areas may present geographic challenges, both naturally occurring and artificially created, and the practitioner should adapt testing strategies as testing progresses using shovel test results and observations to guide their strategy.
- APEs where restricted access, wetlands, or other natural or cultural features impede systematic testing at fixed intervals. Adapting standard linear transects to ones which follow the natural environment is often a solution to these geographic challenges; they may not adhere to a standard grid system but can still gather the appropriate sample indicated by the predictive model. It is also important to note that modern (human altered geography) or seasonal variation in water tables should not be presumed to be historically inhabitable wetland and wholly written off as untestable; archaeological sites have been located in all environments in Florida, including inundated ones. Finally, restricted access to a testing area is not the same as not having consent to access a property, such as if a landowner denies access to their property or encountering a locked, inaccessible gate. If the latter is encountered in the field, it should be noted for further coordination through the appropriate channels and tested once access has been secured.

As with all deviations from the expected standards, explanation or justification of the altered testing methodology should be recorded by the field archaeologist so that subsequent CRAS documents accurately represent the survey effort.

- **Other Considerations:** Depending on landscape and environmental factors, past and present, standard archaeological testing methods may need to be modified. For example: In a deep sandy environment, proximate to present or former water resources, more closely spaced shovel tests, combining a mixture of fixed transects and judgmentally placed shovel tests, may be needed to locate small lithic scatter sites frequently associated with such environmental features as sink holes.

- In areas of shallow lime rock, periodic efforts should be made to extend shovel testing below the rock to be certain concretion zones, the result of fire-slaked bone and shell, etc., are not misinterpreted as naturally occurring lime rock. Archaic-period sites often occur within and below such concretion zones in south Florida.
- In areas that were once shallow, wet prairies around springs or streams, wet sites may be found. Alter field methodology to test such areas sufficiently.
- In disturbed urban and rural ROWs, consider the environmental and historic features that were present before modern land-altering activities. Then, apply appropriate subsurface testing wherever possible. Some of the most significant sites found in FDOT ROWs, including a historic military cemetery and a precontact burial area, were discovered in highly disturbed areas.

Site Bounding: When new or previously recorded archaeological sites are identified, additional subsurface testing is carried out to determine site boundaries, internal structure, and cultural affiliation (where possible). [Defining Boundaries for National Register Properties](#), addresses the definition of NRHP boundaries for archaeological properties and provides a detailed discussion for bounding NRHP-eligible sites.

Delineation of positive shovel tests and archaeological sites are carried out at decreased intervals, typically 12.5 m (41 ft) which is half the distance between high probability shovel test's 25 m (82 ft) interval, until two negative shovel tests are recorded in all directions, location depending. Given the geographically circumscribed nature of many FDOT projects, it may not be possible to really delineate all discovered sites. This is particularly true for large sites extending outside the project APE. As a general rule of thumb, site limits are not "chased" outside the APE. Consider the overall landscape, and estimate the site boundary beyond the APE, where possible. This estimation will not influence the site boundary reported to the FMSF, but it can assist in current and future land management decisions. If standard shovel testing does not yield adequate information and data necessary to evaluate site significance, follow-up Phase II test excavation may be recommended.

In accordance with FDHR standards, "one or two non-diagnostic artifacts, not known to be transported from their original context, which fit within a hypothetical cylinder of thirty meters diameter, regardless of depth below surface" are referred to as an "Archaeological Occurrence." These "AOs" are not recorded as sites, but their locations are recorded, and they are discussed within the report/technical memorandum prepared for the project. Systematic close interval subsurface testing around each AO is typically performed to confirm the isolated nature of the find, and to distinguish it from an archaeological site.

Unanticipated Discoveries of Human Remains: In the event that unmarked burials are encountered, including both non-Indian and Native American remains, the following actions should be taken, consistent with [Chapter 872.05, Fl. Stat.](#), and the implementing rule for this law, [Chapter 1A-44, F.A.C.](#)

- When an unmarked human burial is discovered, all activity that may disturb it shall cease immediately, and the District Medical Examiner (DME or coroner) shall be notified.
- The DME will determine whether the remains are under the DME's jurisdiction (i.e., the remains may be involved in a legal investigation or represent the burial of an individual who has been dead less than 75 years), or that of the State Archaeologist.
- If the DME finds that the remains are not under their jurisdiction, they shall notify the State Archaeologist, who shall designate an archaeologist and human skeletal analyst to examine the remains and report within 15 days as to their cultural and biological characteristics. The State Archaeologist may be reached at (850) 245-6444.

Native American burials or funerary objects which are inadvertently discovered outside of federal or tribal lands fall under the above stated *Chapter 872, Fl. Stat.*, process and, if historic in age, the State Archaeologist will conduct the appropriate notification and consultation with the Tribes.

Native American burials which are inadvertently discovered on federal or tribal lands, are protected under NAGPRA. The regulations governing NAGPRA, [43 CFR Part 10](#) (88 FR 86518, December 13, 2023), effective January 12, 2024, contains procedures for inadvertently discovered Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony on federal and tribal lands. The federal agency with primary authority over the location of the discovery is responsible for complying with *43 CFR Part 10 Subpart B - Protection of Human Remains or Cultural Items on Federal or Tribal Lands* and is vested with the authority to certify when an activity or project may resume. The following is summarized from *43 CFR § 10.5*; the full text is available via the link provided. If human remains or cultural items are discovered during a FDOT undertaking on federal or tribal lands:

- Immediately stop any activity that could threaten the discovery.
- Immediately report the discovery in person or by telephone to the appropriate official and any additional point of contact per *Table 1 to 43 CFR § 10.5(a)(1)*.
- Make a reasonable effort to secure and protect the human remains or cultural items.
- Within 24 hours of the discovery, the discovering party must send written documentation of the discovery to the appropriate official and the additional point of contact which includes:
 - Geographic location and contents of the discovery
 - Steps taken to secure and protect the discovery
 - Information about the FDOT undertaking and any potential threats to the discovery
 - Confirmation that all activity around the discovery has stopped and that it will not resume until the date identified in the written certification.
- Within 3 days of receiving the written documentation of the discovery, or lacking receipt of proper documentation upon learning of the discovery, the appropriate official must respond to the discovery per *43 CFR §10.5(c)*.
- Within 30 days of receiving the written documentation of the discovery, if the appropriate official is a federal agency (not a tribal organization), they must approve and sign a plan of action AND send a written certification to FDOT containing:
 - A copy of the redacted plan of action,
 - Instructions for protection of the discovery (as appropriate), and
 - The date on which the undertaking may resume around the discovery – which can be no later than 30 days after the date of the written certification.

Presuming all parties referenced in the above steps follow the parameters of *43 CFR § 10.5*, “lawful activities” associated with the FDOT undertaking can resume no later than 61 days from the original discovery date.

Data Collation: During the course of the field survey, collation of data at the end of each fieldwork day reduces the potential for data loss. Follow these recommended procedures:

- Assign each artifact bag from each provenience unit a Field Specimen (F.S.) number and record all data in the F.S. Log as well as on the artifact bags. A sample F.S. Log is provided in **EXHIBIT 5.1**; however, if a consulting firm has their own F.S. Log format, they may use it provided the information indicated in the provided example is collected.

- Check the bagged specimens against the F.S. Log and store them in an orderly fashion for processing.
- Prepare field notes summarizing the work accomplished for the day, the number and location of sites found, and logistical problems. Some investigators may wish to keep these records in project-specific field notebooks. Another option is to complete a standardized daily project summary sheet (see **EXHIBIT 5.2**). For longer projects, a project summary sheet is an effective tool for data collation.

The *FDOT Collections and Curation Guidelines* maintained on OEM's [Archaeological Collection](#) website outline parameters for data collection in addition to these basic procedures.

Mapping: The locations of all surface finds and shovel tests are plotted on the project aerial map; shovel tests are labeled by number. Positive (artifact and/or feature bearing) shovel tests are distinguished from negative ones by coding (e.g., X for positive and a black dot for negative). Shovel test locations also may be recorded using GPS devices and the data layers imported into a GIS.

Make measured sketch maps of all discovered sites in the field. Include the location of visible site features, surface artifact finds, artifact concentrations, subsurface tests, site boundaries, nearby markers (such as trees, buildings, roads, etc.), and any other information appropriate to the identification and location of the site. Prepare detailed maps for sites considered to be NRHP-eligible. These will be included in the *CRAS Report*. Also, plot all site locations on the appropriate map(s).

5.5.4 Historic Resources Survey Methods

The following general guidelines are applicable to a standard historic resource/architectural field survey performed as part of a project CRAS. Similar procedures are used for reevaluations involving a historic resources survey update, without an accompanying archaeological survey. The components of a typical historic resources field assessment survey include the following:

- Initial reconnaissance;
- Data collection;
- Photography;
- Mapping; and
- Research.

Initial Reconnaissance: The initial reconnaissance of the project APE typically occurs prior to preparation of the research design. Individual resources are not recorded at this time. Rather, the objective is to verify the presence or absence of previously recorded resources, including NRHP-listed and eligible properties; to estimate the number of unrecorded historic resources that will require documentation and evaluation (a review of the appropriate county property appraiser(s) data can assist in this effort); and to assess the potential for new NRHP-eligible resources (individual properties or historic districts). Examination of GoogleEarth's® street view also can assist in reconnaissance efforts.

Data Collection: Data collection involves a visual examination of each resource sufficient to gather the information required to complete the FMSF Historical Structure Form (residences, commercial properties, schools, churches, fire towers, fountains, etc.), Historical Bridge Form, Resource Group Form (districts, landscapes, building complexes, linear resources, etc.), and Historical Cemetery Form. Current versions of each FMSF form and guides on how to complete said forms are located on the [FMSF website](#). It is recommended that blank copies of FMSF forms for the different types of resources be carried in the field to assure recordation of the required descriptive data while onsite; the forms are fillable pdfs that

can be completed digitally via tablet or mobile device while in the field as well. Interviews with the owner or occupant of a resource can help to determine its date of construction, to provide a better understanding of its former and current function(s) and/or uses, and to identify any additions or alterations that compromise its historic integrity. Additionally, such interviews can provide data regarding historic property lines and outbuildings/ancillary features, which can assist in the selection of resource boundaries and contributing/noncontributing resources, respectively.

In most cases, historic resources are easily observed from the FDOT ROW, thereby respecting the private property rights of any landowner. In the event that a resource cannot be easily observed from the ROW (large setback, extensive vegetation, etc.), make every effort to collect data while remaining within the driveway. Cameras with good zoom lenses are great for photographing design elements from a distance, if necessary. Obey all “no trespassing” signs and locked gates.

Resource groups may extend outside the boundaries of the project APE. This is almost always true of linear resources, such as historic roads, rail lines, and canals. In such a case, collect data for those areas/sections/individual resources located within the project APE; notes on the full extent of the resource can be included on the FMSF form. In the case of historic districts or building complexes that extend outside of the APE, a visual reconnaissance can be conducted to estimate potential boundary lines, to the extent possible.

Likewise, historical cemeteries may extend outside the boundaries of the project APE. Although the Historical Cemetery Form was designed for a grave-by-grave survey, as appropriate, visually inspect at least a representative sample of graves within the historic section(s) of the cemetery, as located within the project APE, noting marker types, grave orientation, date of death, grave furniture, landscape features, and other relevant data sufficient for completion of the FMSF form. Consult [*Florida's Historic Cemeteries: A Preservation Handbook*](#) and [*Guidelines for Evaluating and Registering Cemeteries and Burial Places*](#), for survey assistance.

Photography: Photographs are required for each historic resource per FMSF guidelines. [*FMSF's Photo Submission Policy*](#) on their [Documents & Forms](#) webpage should be followed for all photographs accompanying the FMSF form. Maintain a photo log with the image number, the subject of the photograph taken, and the direction of view. Specific requirements for each resource type are as follows:

- **Historical Structures:** Overall view of the main elevation, either straight on or at an angle; the photograph should be of a high enough quality that the external building materials are discernible. Photographs of key design and/or decorative features should also be taken, especially if the structure is potentially eligible for the NRHP.
- **Historical Bridges:** Take a comprehensive series of digital photographs to document the overall bridge design and engineering, superstructure and substructure, style and decorative details, tender station, plaques and inscriptions, and other noteworthy features.
- **Resource Groups:** Take photographs of the resource group in its entirety, as appropriate; such photographs may not be possible for resources such as large historic districts or building complexes, rail lines, roads, and canals. Also, ensure that there is a photograph of each contributing resource and ancillary feature. Representative photographs of noncontributing resources should also be taken, as well as representative street views within historic districts.
- **Historical Cemeteries:** Photograph representative characteristics or unique aspects of the cemetery, as well as overall views.

Mapping: Mark the locations of all previously recorded and newly identified historic resources on the project aerial photographs and/or USGS map(s). Specific requirements are as follows:

- **Historical Structures:** Use a large-scale street, plat, or parcel map, aerial, or create a sketch map with the basic footprint of the resource and associated outbuildings and landscape features.
- **Bridges:** Mark the geographical boundaries of the bridge, including approaches, spans, and features such as the tender station, which may be detached from the bridge proper, on an aerial or street map.
- **Resource Groups:** Use a large-scale street, plat, or parcel map, aerial, or create a sketch map with the basic footprint of the resource and associated outbuildings and landscape features. For historic districts and building complexes, mark the proposed boundaries, as appropriate, and which resources are contributing, and which are noncontributing. This is usually only completed for those portions of the resource within the project APE. A visual reconnaissance can be conducted to recommend boundaries for the whole district or complex, to the extent possible.
- **Historical Cemeteries:** Use a large-scale street, plat, or parcel map, aerial, or create a sketch map showing the resource boundaries (both within and outside the project APE), as well as the cemetery's internal organization, the general location(s) of historic graves surveyed, cemetery boundaries, and major landscape features, as located within the project APE.

Research: Site-specific research helps provide a context in which to evaluate the significance of a historic resource according to the NRHP criteria. Regional and local libraries, historical societies, and museums may be repositories for community histories, city directories, early city and county maps, unpublished manuscripts, and photographic collections. County clerks of court maintain deed and tax records and plat maps that can help trace the ownership of individual properties or the development of local communities, respectively. They also may have the plans for newer buildings, submitted as part of the permit application process. A wealth of valuable information also is available on the Internet.

These specific data for each resource type can help in the evaluation of significance:

- **Historical Structures:** Architects and/or builders; additions/alterations; ownership history; uses/functions; if the building was moved from a prior location.
- **Historical Bridges:** Designers/engineers; builders/contractors; ownership history; why the bridge was built; how the bridge was funded, dates of rehabilitation/reconstruction/relocation.
- **Resource Groups:** Architects/engineers/landscape architects/urban planners, as appropriate; relationship(s) among individual resources (historic districts/building complexes); historic termini (linear resources); how the original town/community expanded over time (historic districts); ownership history (building complexes, linear resources); why the resource was built (landscapes, linear resources); how the resource was funded (linear resources).
- **Historical Cemeteries:** Architects/landscape architects; ownership history; significant persons buried within the cemetery; marker types and styles; grave furniture.

5.6 ARTIFACT PROCESSING AND ANALYSIS

5.6.1 Introduction

The purpose of artifact processing and analysis is two-fold: 1) to identify and tabulate the various types of artifacts to determine a site's chronological placement and function; and 2) to prepare artifacts for eventual curation.

At the CRAS level, a limited set of analytical techniques are generally sufficient to provide the information needed to evaluate site significance. These standard types of analyses are described in Section 5.6.3. Specialized analyses such as radiocarbon dating, archaeobotanical studies, or lithic use wear are rarely performed as part of the Phase I CRAS project; they are more typically used during Phase

II Test Excavations or Phase III Data Recovery Projects. All artifact analysis methods, but especially the use of these specialized analyses, should be outlined in the research design and utilize the *FDOT Collections & Curation Guidelines* available on OEM's [Archaeological Collection](#) webpage as well as applicable industry best practices and techniques.

5.6.2 Preliminary Processing

Preliminary processing of artifacts includes cleaning and assigning F.S. numbers to all field-labeled artifact bags by shovel test and level provenience. Some artifacts will not need cleaning, but for those that do, wash or clean with a soft-bristle brush to remove extraneous surface debris, carefully rinse them with water if necessary, and let them air-dry. If ceramic, bone, or shell artifacts need stabilization, this should be taken care of immediately. If organic samples have been collected, they should be sorted, prepared for study, or stored separately. Divide artifacts into major classes (e.g., precontact ceramics, historic glass, etc.) in final preparation for analyses. The *FDOT Collections and Curation Guidelines* details parameters for artifact processing beyond these basic procedures and should be referenced for current guidance.

5.6.3 Standard Artifact Analyses

Several classes of artifacts and other remains may be collected from sites of the precontact, protohistoric, and historic periods. These include, but are not limited to the following:

Lithics: The lithic analysis includes the examination of materials with a hand lens or under low-power (10 to 30x) magnification. It includes the initial division of the lithic material into two categories: 1) tool forms/manufacture failures or rejects, and 2) debitage, or waste flakes.

For lithic tool forms and manufacture failures/rejects describe and classify them according to basic morphological categories such as bifaces, unifaces, modified flakes, utilized flakes, blanks, preforms, cores, and hammerstones. Measure and weigh all tool forms and describe by raw material type and presence or absence of thermal alteration. Classify diagnostic bifaces (projectile points) as to commonly acceptable standard types (e.g., Hernando point). Describe any observable wear patterns on finished tools, and fracture types (e.g., lateral snap). Lithic analysis also may include measurement or relative appraisal (i.e., acute, steep) of the angle(s) of the working edge(s) of tool forms to ascertain the functional nature of the artifact assemblage. Sort the debitage by raw material type and presence or absence of thermal alteration. At a minimum, debitage analysis includes limited attribute analysis (e.g., flake size, amount of dorsal surface cortex, technological flake category). If collection size is sufficient, determine, to the extent possible, what stage(s) of stone tool production are reflected by the waste flake assemblage.

Ceramics: Ceramics are diagnostic of post-Archaic period sites in Florida, and in some parts of the state, they are more common than lithics. Much of the utilitarian ware used by precontact native peoples consisted of vessels with plain, undecorated surfaces. Chronological analysis of such pottery is sometimes difficult because of the lack of surface decoration. However, careful attention to differences in vessel wall thickness and rim orientation, as well as the absolute and relative occurrence of different types of aplastic materials, will aid in the identification of ceramic type, chronological placement, and site function.

Conduct the ceramic analysis in a manner sufficient to assign sherds to a currently recognized standard ceramic type. Determine chronological placement and functional attributes (utilitarian/burial) if possible. This is accomplished by:

- Examining sherds with a hand lens or microscope to identify aplastic inclusions, exterior decoration, and/or treatment manufacturing technology (e.g., coil marks);
- Comparing these attributes with known ceramic assemblages; and

- Cross-mending of samples of sufficient size and number to determine rim profiles, vessel type, and size.

Shell and Bone Artifacts: Standard analysis of shell and bone artifacts includes examination for traces of wear to determine function, decoration, and surface treatment. Describe fully such attributes and compare them to other known assemblages to determine chronological and functional associations. Shell tools are common at many precontact sites in Florida and are an important source of information regarding site function and chronological placement. Do not overlook recent studies in the typological and functional analysis of shell tools.

Other Precontact and Protohistoric Remains: Occasionally, botanical, shell, and food remains are found in shell or black dirt middens encountered during a CRAS. Attempt to identify the species and provide fragment counts and weights for the various identified flora and fauna. If the sample(s) is sufficient, consider retaining the services of a qualified individual trained in archaeobotany or zooarchaeology to provide a detailed analysis.

Historic Artifacts: As with precontact artifacts, identify and tabulate the various types of historic artifacts to determine a site's chronological placement, function, and aid in determining the site's NRHP eligibility. Utilize standard references for historic artifacts as well as primary source materials such as catalogues, manufacturer's production information, newspaper and magazine advertisements, and discussions with knowledgeable informants.

Like precontact archaeological materials, initially sort by raw material type. For example, both ceramics and glass are commonly found at historic period archaeological sites. For ceramics, classify by such attributes as ware type and morphology/function. Describe all makers' marks and use these to determine the manufacturer and date of manufacture. Similarly, glass is classified in reference to such attributes as color, vessel form and function, and manufacture marks such as seams and lip treatment. Embossments and makers' marks can be used to ascertain manufacturer and date of manufacture.

5.7 SITE RECORDING

5.7.1 FMSF Number Requests

Each newly identified archaeological and historic resource will require its own FMSF number. In the case of some bridges and linear resources that span multiple counties, multiple FMSF numbers will be needed, one for each county. Once the number and type of resources to be recorded are determined, request the FMSF numbers for each archaeological site, historical structure, bridge, resource group, or cemetery; a separate request form is needed for each category of resource. For resource groups, request a separate number for the resource group proper, as well as each individual resource 50 years of age or older within the resource group, whether contributing or non-contributing. To obtain FMSF numbers, complete a Number Assignment Request Form, then send it to the FMSF via fax, mail, or electronically (preferred). FMSF personnel respond to each request in a timely manner.

When requesting numbers, be sure to have the following information available:

- County or counties in which sites were found;
- Site type (archaeological/historical structure/bridge/resource group/cemetery);
- Site names (if assigned/applicable);
- Address or Township, Range, and Section for each resource; and
- Project name.

5.7.2 Archaeological FMSF Forms

Each newly identified archaeological site is recorded on a FMSF Archaeological Site Form. These forms provide basic information regarding an archaeological site including location; site type, description, and general environment; culture periods; types of artifacts discovered; field methods used; and the archaeological professional's opinion regarding the site's NRHP eligibility and owner/SHPO actions (nomination for listing in the NRHP, physical protection, further excavation, etc.). Required attachments include a site plot on the appropriate USGS 1:24,000 scale topographic map(s) and a detailed site plan in the scale range of 1:200 to 1:600. Although not required, photographs and a summary of artifacts collected or excavated are encouraged; the latter is especially encouraged when the information is too extensive for the artifacts section on the site form. The summary of artifacts, and any other supplementary information, may be included on a continuation page/supplementary form.

For previously recorded archaeological sites, FMSF forms should be updated for every archaeological site examined during field survey. This includes archaeological sites that were reported to be within the project area, but for which no evidence of the site was discovered. For the update, not all fields on the FMSF form need to be completed, provided those data have already been previously recorded. For example, if the soil type(s) have been recorded, there is no need to repeat that information, but if it has not been reported, then do so. The update is to provide new information on the site and should be restricted to data obtained from the current investigations and not reiterate the results of previous work.

5.7.3 Historic Resources Forms

Each newly identified historic resource (structure, bridge, resource group, or cemetery) is recorded on the appropriate FMSF Form. These forms are meant to provide basic information about the resource; continuation pages/supplementary forms can be used for more detailed descriptions, evaluations of significance, etc. Current FMSF Forms, as well as user guides and instructions are available at [FMSF's Documents & Forms](#) webpage. General types of information and required attachments for each form are as follows:

- **Historical Structure Form:** Basic information includes a site name, if applicable; location data; construction history (year built, function/use, alterations/additions); description (style, building materials, distinguishing features); and the architectural historian professional's opinion regarding the resource's NRHP eligibility. Required attachments include the appropriate USGS 1:24,000 scale topographic map(s) with the structure's location pinpointed in red and labeled with the FMSF number; a large-scale street, plat, aerial, or parcel map labeled with the FMSF number and/or site name and/or address; and at least one photograph of the structure's main façade (see [Section 7.4.2](#) for quality requirements).
- **Historical Bridge Form:** Basic information includes the bridge name and FDOT bridge number, if applicable; location data; history; description (style, distinguishing features, tender station, superstructure, substructure); and the architectural historian professional's opinion regarding the resource's NRHP eligibility. Required attachments include the appropriate USGS 1:24,000 scale topographic map(s) with the structure's location pinpointed in red and labeled with the FMSF number, and at least one photograph of the bridge (see [Section 7.4.2](#) for quality requirements). Additional resources such as the ACHP program comment on post-1945 bridges should be considered when determining the need to record a historic aged bridge.
- **Resource Group Form:** Basic information includes the resource group name; location data (including a verbal description of the boundaries); history and description (including number of contributing and noncontributing resources, if appropriate); and the cultural resource professional's opinion regarding the resource's NRHP eligibility. Required attachments include the appropriate USGS 1:24,000 scale topographic map(s) with the resource's boundaries clearly

marked and labeled with the FMSF number(s); a large-scale street, plat, aerial, or parcel map labeled with the FMSF number and/or site name and/or address (for historic districts, all contributing resources should be labeled as well); and at least one photograph of the resource (see **Section 7.4.2** for quality requirements). For historic districts and landscapes, it is recommended that multiple photographs showing street views and/or settings are included. For historic districts, a tabulation of contributing/noncontributing resources also is required (typically provided on a continuation sheet).

- **Historical Cemetery Form:** Basic information includes the cemetery's name; location data; history (year established, year/reason burials ceased, if appropriate); description (type of cemetery, ethnic groups interred, size, boundary, etc.); grave marker descriptions; and the cultural resource professional's opinion regarding the resource's NRHP eligibility. Required attachments include the appropriate USGS 1:24,000 scale topographic map(s) with the resource's boundaries clearly marked in red and labeled with the FMSF number, and at least one photograph of the cemetery (see **Section 7.4.2** for quality requirements). It is recommended that multiple photographs showing features such as distinctive grave markers, entrance gates, and associated buildings, are included.

For previously recorded historical resources, FMSF forms should be updated if one or both of the following conditions exist: the SHPO has not made a determination on the resource's eligibility, or the resource has been significantly altered since originally recorded. In the event that previously recorded historic resources have been demolished or are no longer extant in their recorded location (i.e. relocated), prepare a brief memo/letter to the FMSF that notes the resource's FMSF number, address, and its change in status.

5.8 ARCHAEOLOGICAL ARTIFACT CURATION

At the completion of the CRAS, all artifacts, field notes, maps, and other records are prepared for permanent storage and curation at the FDOT Archaeological Collections repository. The collections of cultural materials resulting from the CRAS should be prepared for curation in accordance with the guidelines promulgated by OEM (2024). The *FDOT Collections & Curation Guidelines* were created to assist with the processing of artifact collections and submission to OEM for long-term curation. In addition to the Collections & Curation Guidelines, an Excel Spreadsheets Template, Access Database Form, and other archaeological curation resources are available on OEM's [Archaeological Collection](#) webpage.

EXHIBIT 5.1

F.S. LOG

Project: ___SR 962, Any County

Site	FS	ST	Depth	Recovered Materials	Initials	Date
A	1	27	0-30	6 flakes, 1 biface frag	ID/TP	02/26
A	2	31	20-45	1 STP, 2 flakes	ID/TP	02/26
A	3	32	15-20	3 flakes	ID/TP	02/26
A	4	34	25-50	1 flake	ID/TP	02/26
B	5	67	80-90	1 flake	ID/TP	02/27
B	6	68	75-100	27 flakes	ID/TP	02/27
B	7	69	80-100	15 flakes, 1 wire nail	ID/TP	02/27
B	8	72	60-80	3 flakes	ID/TP	02/27
B	9	77	70-80	1 flake	ID/TP	02/27
C	10	96	10-20	1 STP	ID/TP	02/28
XX999	11	145	0-20	1 whiteware, 6 glass,	ID/TP	03/05
XX999	12	Surf	0	2 porcelain, 3 glass, 4 brick, 1 stoneware, 2 nails	ID/TP	03/05
XX999	13	158	0-25	6 nails, stove part, 1 bottle base, 6 stoneware, 3 whiteware, 9 glass,	ID/TP	03/05
XX999	14	159	20-30	1 nail	ID/TP	03/05
XX999	15	162	40-50	2 flakes	ID/TP	03/05
D	16	177	80-90	1 flake	ID/TP	03/06
E	17	186	60-70	2 flakes	ID/TP	03/06
E	18	188	50-75	4 flakes	ID/TP	03/06

EXHIBIT 5.2

DAILY SUMMARY FORM

Project: _____ SR 962 _____ County _____ Any _____
Date ___ 02/26 _____ Crew Chief ___ Ima Digger _____
Crew _____ T. Pitts _____
Recorder _____ Digger _____
RESULTS:

Got to the project area around 7:30 and started shovel testing along the east side of SR 962 from the north end of the APE, working south. Area is generally pine flatwoods interspersed with shallow streams and wetlands. Testing was conducted at 50 m intervals until ST 27 which produced 6 flakes and a biface fragment. At that point the interval was decreased to 25 m. Once the basic limits of the site within the corridor were established, the northern and southern limits of the site were refined through testing at 10 m intervals. The eastern boundary is defined by the ROW fence line, western boundary not yet determined since we haven't tested that side of the road yet.

Site A is a relatively low-density artifact scatter. The majority of the artifacts were lithic debitage, although one biface fragment and a piece of STP ceramic were recovered. All the materials were recovered from the upper 50 cm of the tests. 12 STs were excavated in the area, 4 produced cultural materials. The site is located on a low rise next to a wetland (ca. 25 m east). Vegetation consists of pine, water oak, sweetgum, and magnolia.

Basic stratigraphy 0-10 cm dark gray sand
 10-65 cm light gray sand
 65-75 cm dark brown hardpan
 75-100 cm light brown sand

Finished up the day at 4:00, dug 32 STs – 2 at 10 m, 10 at 25 m, and _____ 20 at 50 m – located one new site (Site A)

CHAPTER 6

EVALUATION OF SIGNIFICANCE: APPLYING THE NATIONAL REGISTER CRITERIA

6.1 OVERVIEW

Once all archaeological sites and historic resources have been identified within the project APE, Step 2 of the *Section 106* process continues with the assessment of the significance of each identified archaeological site and historic resource. This is done by applying the NRHP Criteria for Evaluation. The lead transportation agency makes the significance determination, and requests concurrence from the SHPO. FDOT typically uses cultural resource consultants to assist in the NRHP evaluation process as part of the CRAS. In addition to the assessment of newly identified cultural resources, previously recorded resources that have not been evaluated by the SHPO will require significance assessment. Also, for some previously recorded resources, the original determination of eligibility may need to be re-evaluated due to the passage of time (SHPO recommends re-evaluation if the most recent evaluation is over 10 years old) or other factors. Re-evaluation may conclude that nothing has changed, and no action is needed, an updated FMSF form documenting changes in the last decade is warranted (most likely with a downgrading of eligibility), or perhaps new information is identified that elevates a resource's significance.

Evaluation involves an assessment of the significance of a site or group of sites in terms of the criteria used to determine eligibility for inclusion in the NRHP.

Generally, cultural resources must be 50 years of age or more to qualify for listing in the NRHP, must meet one or more of the NRHP eligibility criteria, **and** must retain integrity of those features necessary to convey its significance. They also must be significant within a relevant historic context, i.e., a major trend of history organized by theme, place, and time.

This chapter includes the definition of National Register property types, the NRHP Criteria for Evaluation, and the aspects of integrity. Pertinent considerations in the determination of what constitutes a significant archaeological site or historic resource are examined, followed by guidelines for the documentation of significance.

A special note about coordinating *Section 106* with *Section 4(f)*: The evaluation of significance under the *Section 106* process is a key component used to determine whether or not *Section 4(f)* applies to historic properties within a project APE. Therefore, it is critical during the evaluation process to provide explicit reasons for why a resource is or is not NRHP-eligible. In addition to the specific eligibility criteria and integrity, boundaries for each significant resource must be clearly delineated and justified. In the case of historic districts, contributing and noncontributing resources must be identified and their locations clearly illustrated. For archaeological sites considered NRHP-eligible under Criterion D, it is important to clearly note whether or not preservation in place is a factor contributing to the significance of the site. *Section 4(f)* protects archaeological sites that warrant preservation in place and are listed or eligible for inclusion in the NRHP, but *Section 4(f)* does not apply to archaeological sites where the research potential is the primary reason for significance, and where preservation in place is of minimal value. See **Section 2.4** for additional information regarding coordinating the *Section 106* and *Section 4(f)* processes.

6.2 THE NATIONAL REGISTER

The National Register, maintained by the NPS, is the official listing of historically significant buildings, structures, objects, sites, and districts throughout the country. National Register properties can have significance at the national, state, or local level. The NRHP program is administered at the state level by the SHPO, with the staff support of the [Survey and Registration Section](#) of the FDHR. Guidance in applying the criteria is provided in a number of “[How To](#)” documents (formerly NRBs) published by the NPS. The NRHP List can be accessed via NPS’s [National Register Database and Research](#) webpage.

6.2.1 National Register Property Types

The NRHP includes five property types: buildings, structures, objects, sites, and districts. Definitions follow, and the [How to Apply the National Register Criteria for Evaluation](#) publication provides a number of examples for each category.

A **building** is a feature “created principally to shelter any form of human activity.” Included in this property type are residences, offices, churches, hotels, schools, libraries, courthouses, stores, train stations, theatres, sheds, and barns, among others. Buildings eligible for the NRHP must include all of their basic structural elements and must be considered in their entirety. In accordance with NPS guidelines, parts of buildings cannot be considered eligible independent of the rest of the existing building. If the building has lost its basic structural elements, it is usually considered a “ruin,” and thus, is classified as a site.

Structures are distinguished from buildings by their function; that is, they were made for purposes other than human shelter. Examples include bridges, roads, railroad grades, canals, tunnels, windmills, and lighthouses. As with buildings, structures must include all of the basic structural components and must be considered in their entirety.

Objects are primarily artistic in nature or relatively small in scale and simply constructed. Included in this property type are boundary markers, fountains, mileposts, monuments, sculptures, and statues, among others. Although it may be movable by nature or design, an object is associated with a specific setting or environment. Objects should be in a setting appropriate to their significant historic character, use, or roles. Small objects not designed for a specific location are generally not eligible for inclusion in the NRHP.

A **site** is “the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value, regardless of the value of any existing structure.” Site examples include battlefields, camp sites, rock shelters, shipwrecks, or the ruins of a building or structure, among others.

A **district** is a collection of sites, buildings, structures, or objects “united historically or aesthetically by plan or physical development.” It derives its importance from being a “unified entity” linked either historically or functionally, and distinguished by its historical, architectural, archaeological, engineering, or cultural values. While a district is usually a single geographic area of **contiguous** historic properties, it may be **discontiguous** and composed of two or more definable significant areas separated by non-significant areas. This type of district is appropriate when the elements are spatially discrete; the space between the elements is not related to the significance of the district; and visual continuity is not a factor in the significance. For example, a group of geographically separate archaeological sites that are related to each other through cultural affiliation, periods, use, or type may comprise a discontiguous district. Examples of contiguous historic districts include college campuses, historic neighborhoods, and estates/farms with numerous resources.

Within the defined boundaries of a historic district, there may be elements that do and do not represent or embody the characteristics making the property significant. The [Defining Boundaries for National Register Properties](#) publication can assist in defining boundary for an historic district and archaeological properties. A **contributing** building, site, structure, or object adds to the historic associations, historic engineering or architectural qualities, or archaeological values for which the property is significant because:

- It was present during the period of significance, relates to the documented significance of the property, and possesses historic integrity or is capable of yielding important information about the period; or
- It independently meets the NRHP criteria.

A **noncontributing** building, site, structure, or object does not add to the historic associations, historic engineering or architectural qualities, or archaeological values for which a property is significant because:

- It was not present during the period of significance, or does not relate to the documented significance of the property;
- Due to alterations, disturbances, additions, or other changes, it no longer possesses historic integrity or is capable of yielding important information about the period; or
- It does not independently meet NRHP criteria.

The [How to Complete the National Register Registration Form](#) and its [Additional Guidance Addendum](#) publications provide guidelines for defining contributing and noncontributing resources. Even when all of the components lack individual distinction, the historic district as a whole must possess integrity. For the purposes of *Section 106* compliance, contributing resources are afforded equal consideration to that of individually listed or eligible properties.

In some cases where historically, thematically, and/or physically linked historic properties are not situated within a defined geographical area, or may have been important at different times, a **multiple property** approach rather than a historic district designation may be an appropriate way to nominate related historic properties. Preparation of a Multiple Property Documentation Form begins with the selection of a theme that relates all the relevant historic properties. For example, bridges which derive their significance from their associations with the Lutten Bridge Company may be united under this historic context. The Multiple Property Documentation Form serves as the umbrella or “cover” under which individual historic property nominations, as well as historic district nominations, are submitted. This approach provides flexibility in permitting additional contexts and resources to be added as they become eligible.

6.2.2 NRHP Criteria for Evaluation

The NRHP *Criteria for Evaluation*, as contained in [36 CFR § 60.4](#), are listed below. These criteria are worded in a manner to provide for a diversity of resource types.

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

- (a) that are associated with events that have made a significant contribution to the broad patterns of our history; or*
- (b) that are associated with the lives of persons significant in our past; or*

- (c) *that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or*
- (d) *that have yielded, or may be likely to yield, information important in prehistory or history.*

The four NRHP criteria are subject to very broad interpretation and were purposefully designed to allow the development of specific guidelines on a local basis. Accordingly, the following criteria of significance, contained within the [Module Three](#), were developed to evaluate the significance of archaeological sites and historic resources in Florida. An archaeological site or historic resource is considered significant if:

- *It has already yielded important data and can be expected to yield additional data;*
- *It is in good condition and can be considered to be among the best-known examples of the identified type of site known for the historic context in which it occurs;*
- *It is atypical or rare, and thus considered to contain data not represented at other sites;*
- *It is located such that it represents a good opportunity for interpretation and public display; and/or*
 - *It is associated with other sites such that as a grouping or district they are:*
 - *Representative of sites relating to socio-political, religious, subsistence, settlement, etc. activities of a historic context;*
 - *A typical example of such groupings but in a good or excellent state of preservation;*
 - *A rare or exceptional example of such site groupings;*
 - *Located such they represent a good opportunity for interpretation and public display; and/or*
 - *Offer an opportunity to yield data important to understanding the area's history or prehistory.*

A site will NOT be considered significant if it is extensively damaged or altered and/or if it is so similar to sites already studied that it is unlikely to contain new information. The exception would be a site associated with a famous historical event or person.

6.2.3 Criteria Considerations

Some types of cultural resources are not considered eligible for the NRHP unless they meet special considerations. Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years are not considered eligible for the NRHP. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they meet special requirements, called **Criteria Considerations** (listed below) in addition to meeting the Criteria for Evaluation (Criteria A, B, C, or D) and possessing integrity:

- A. *A religious property deriving primary significance from architectural or artistic distinction or historical importance; or*

- B. *A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or*
- C. *A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or*
- D. *A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or*
- E. *A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or*
- F. *A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or*
- G. *A property achieving significance within the past 50 years if it is of exceptional importance.*

6.3 INTEGRITY

6.3.1 The Aspects of Integrity

To be listed in the NRHP, a cultural resource must meet Criterion A, B, C, or D **and** must possess **integrity**. According to [How to Apply the National Register Criteria for Evaluation](#), integrity is the “ability of a property to convey its historical significance.” The NRHP criteria specify that integrity is a quality that applies to historic and precontact resources in seven ways: **location, design, setting, materials, workmanship, feeling, and association**. A definition of these qualities follows.

Location is “the place where the historic property was constructed or the place where the historic event occurred.” In the case of historic resources, including buildings and structures, determine if the resource is currently in its original location.

Design is “the combination of elements that create the form, plan, space, structure, and style of a property.” A property’s design reflects historic functions and technologies as well as aesthetics. It includes such considerations as the structural system; massing; arrangement of spaces; pattern of fenestration; textures and colors; type, amount, and style of ornamental detailing; and arrangement and type of plantings in a designed landscape. For historic districts, it also can apply to the way in which buildings, sites, or structures are spatially related. In the overall assessment of integrity, determine whether the property retains its original form, massing, and scale, as well as whether the character-defining features of the engineering type or the architectural style have been preserved.

Setting is “the physical environment of a historic property.” It is the relationship between the property and its surroundings and generally reflects the basic physical conditions under which a property was built and the functions it was intended to serve. The setting includes both natural and humanly-constructed features, such as vegetation, paths and fences, and open spaces. The historic property may not be NRHP-eligible if the setting has been irrevocably compromised as a result of damage, neglect, or renovation.

Materials are “the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.” To be eligible for listing in the

NRHP, a property must retain the key exterior materials dating from the period of its historic significance. For buildings, the loss of materials may result from modern renovations such as vinyl siding, roof replacement, and/or window replacement. Also, insensitive additions may compromise the integrity of materials. In the case of historic bridges, the replacement of character-defining decorative railings or removal of the mechanical elements from a movable bridge will compromise the integrity of the historic property.

Workmanship is “the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.” It can apply to the property as a whole or to its individual components. Workmanship can be expressed in vernacular methods of construction and plain finishes, or in highly sophisticated configurations and ornamental detailing, or be based on common traditions or innovative period techniques.

Feeling is “a property’s expression of the aesthetic or historic sense of a particular period of time.” It results from the presence of physical features that, taken together, convey the property’s historic character.

Association is “the direct link between an important historic event or person and a historic property.” A property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer.

6.3.2 Assessing Integrity

Because feeling and association depend on individual perceptions, their retention *alone* is not sufficient to support eligibility of a property to the NRHP. Overall, does the building, structure, object, site, or district possess several or most of the aspects of integrity sufficient to convey its historic significance? Are there any special factors to make an argument of integrity; i.e., is it the last surviving example of a specific type or style? To assess the integrity of individually eligible resources, follow these basic steps:

- Define the **essential physical features** that must be present for a property to represent its significance. For a historic property considered NRHP-eligible under Criteria A and B, it must retain the features that defined its character or appearance during the period of its association with the important event, historical pattern, or individual(s). Archaeological sites eligible under Criteria A and B must be in overall good condition with excellent preservation of features, artifacts, and spatial relationships to the extent that these remains are able to convey important associations with events or persons. A historic building or structure considered significant under Criterion C must retain the majority of the features that illustrate its style or technique in terms of the massing, spatial relationships, proportion, pattern of windows and doors, texture of materials, and ornamentation. Archaeological sites eligible under Criterion C must have excellent preservation of features, artifacts, and spatial relationships to the extent that these remains are able to illustrate a site type, time period, method of construction, or work of a master.
- Determine whether the essential physical features **are visible** enough to convey their significance. Therefore, even if a property is physically intact, its integrity is compromised if its significant features are concealed under modern construction. If the historic exterior building material is covered by non-historic material, the property can still be eligible if the significant form, features, and detailing are not obscured.
- Determine whether the property needs to be **compared with similar properties** to help ascertain what physical features are essential to the properties of that type. This situation is applicable when dealing with surviving examples of a rare property type, such as truss, lift and swing bridges, as well as Paleoindian campsites. These rare properties must have the essential physical features that enable them to convey their historic character or information. The rarity and poor

condition, however, may justify accepting a greater degree of alteration or fewer features, provided that enough of the property survives for it to be a significant resource.

- Determine, based on the significance and essential physical features, **which aspects of integrity** are particularly vital to the property being nominated and if they are present. A basic integrity test for a property associated with an important event or person is whether a historical contemporary would recognize the property as it exists today. A property considered significant under **Criterion C** must retain those physical features that characterize the type, period, or method of construction that the property represents. Retention of design, workmanship, and materials will generally be considered more important than location, setting, feeling, and association. However, location and setting will be paramount for those properties whose design is a reflection of their immediate environment such as designed landscapes and bridges.

For a **historic district** to retain integrity, it must visibly reflect the overall physical appearance it gained during the period(s) of historical significance. The district will not be considered significant if it contains so many alterations and new intrusions (“infill”) that it no longer conveys the sense of its historic environment. In accordance with the FDHR’s [*Revised Guidelines for Preparing District Nominations*](#) (June 2012), the seven qualities of integrity apply to historic districts in the following ways:

- Integrity of **location** requires that to a large extent the boundaries that historically defined the district remain intact. The location of the streets and the size and shape of the lots should have remained constant.
- Integrity of **design** can be affected by changes to the size of the lots and alterations to individual resources in the form of additions, siding, window replacements, and other changes. Large-scale additions that double the elevation, add substantially to the mass of resources, or alter the spatial relationship between house and street generally threaten integrity of design.
- Integrity of **setting** requires that a strong sense of historical setting be maintained within the district boundaries. This relies to a large extent on the retention of built resources, street plantings, parks, and open space.
- Integrity of **materials** requires that the majority of resources retain the key exterior materials that marked their identity during the historic period of significance.
- Integrity of **workmanship** requires that architectural features in the landscape, such as portals, pavement curbs, and walls, exhibit the artistry of craftsmanship of their builders, and that the vegetation historically planted for decorative and aesthetic purposes be maintained in an appropriate fashion and replaced in kind when damaged or destroyed.
- Integrity of **feeling** requires the presence of physical characteristics that convey the sense of past time and place, and that reflect the cumulative effect of setting, design, materials, and workmanship.
- Integrity of **association** requires that the district conveys the period when it achieved importance, and that despite changing patterns of ownership, it continues to reflect the design principles and historic associations that shaped it during the historic period.

6.4 HISTORIC CONTEXTS

The significance of a historic property must be determined within the framework of one or more relevant historic contexts, i.e., major trends of prehistory or history organized by theme, place, and time. Historic contexts are related to such things as patterns of historical development, political divisions, or culture areas. Resources may be significant at the local, state, or national level. A **local** historic context

represents an aspect of a town, city, county, culture area, or region. Properties are evaluated in a **state** context when they represent an aspect of the history of Florida; **national** contexts are relevant when a property represents an aspect of the history of the United States and its territories. A specific property can be significant within one or more historic contexts, and each period of significance must be documented. Historic districts that encompass an entire community or its commercial area may have a very long period of significance. On the other hand, the period of significance for distinct historic neighborhoods is usually limited to the construction dates of the vast majority (80-90%) of the historic resources it encompasses.

Within the applicable historic context, the historic property is considered significant under a particular theme or themes. “A theme is a means of organizing properties into coherent patterns based on elements such as environment, social/ethnic groups, transportation networks, technology, or political developments that have influenced the development of an area during one or more periods of history or prehistory.” The themes used for the NRHP, called [Areas of Significance](#), include 51 categories and 56 subcategories; a list too numerous to replicate here, but which can be accessed at the provided link.

There are five questions that must be answered to determine whether a property is significant within its historic context:

- What facets of local, state, or national prehistory or history does the property represent?
- Is that facet of history or prehistory significant?
- Is it a type of property that has relevance and importance in illustrating that historic context?
- How does the property illustrate that history?
- Does the property possess the physical features necessary to convey the aspect of prehistory or history with which it is associated?

If the property does represent an important aspect of the area’s history or prehistory, and possesses integrity, then it qualifies for the NRHP.

6.5 ASSESSING SIGNIFICANCE

6.5.1 Introduction

When evaluated within its historic context, a property must be shown to be significant for one or more of the Criteria for Evaluation. Whether significant for its association with important events (Criterion A) or people (Criterion B), importance in design or construction (Criterion C), or information potential (Criterion D), these criteria recognize the different types of **values** embodied in buildings, structures, objects, sites, and districts. The criteria fall into three general categories:

- **Associative** value – Criteria A and B – properties significant for their association or linkage with events (A) or persons (B) important in the past;
- **Design or construction** value – Criterion C – properties significant as representatives of the human expression of culture or technology; and
- **Informative** value – Criterion D – properties significant for their ability to yield important information about prehistory or history.

In any evaluation of eligibility, it is critical that the following items are addressed and justified:

- **Boundaries;**
- **Significance and the applicable NRHP criteria;** and

- **Contributing and noncontributing resources** when the historic resource contains more than one historic feature, or when there is a historic district.

Boundaries: The determination of boundaries is a critical consideration because it will have direct bearing on the assessment of the project’s effect on the historic property, which is conducted later in the *Section 106* process. In accordance with NPS guidance on [How to Complete the National Register Registration Form](#):

Carefully select boundaries to encompass, but not exceed, the full extent of the significant resources making up the property. The area . . . should be large enough to include all the features of the property, but should not include “buffer zones” or acreage not directly contributing to the significance of the property.

The boundaries should be selected based upon historical significance and remaining integrity. For historic resources in rural settings, boundaries may be set smaller than the legal parcel as long as the boundaries include historically associated land that conveys the setting. For historic districts, select the boundaries for a single parcel of land that encompasses the significant concentration of buildings, structures, sites, or objects making up the district. Avoid ‘ragged edge’ boundaries, where the boundary lines are drawn to exclude buildings in the middle of a block.

Significance and the applicable NRHP Criteria: Significance must relate to the historic context described for the project area or the broad themes identified. The formal statement of significance must refer to the specific NRHP criteria and provide a justification for how the historic property meets the criteria, as well as the relevant area(s) of significance. It must also address integrity. When properly applied, lack of integrity will disqualify a resource from eligibility, regardless of other considerations.

Contributing and Noncontributing Resources: Within the defined boundaries of a historic district or some individual historic resource groups, there will be elements that do and do not represent or embody the characteristics making the property significant. It is critical for the later assessment of effects that these elements are identified and documented in the project APE. Contributing resources may include landscape features, street design elements such as lighting and curbing, and any element that may sustain the feeling and character of the resource. [How to Complete the National Register Registration Form](#) provides guidelines for defining contributing and noncontributing resources. In accordance with FDHR guidelines for historic districts:

- Only count buildings, structures, sites, and objects located within the district’s boundaries that are substantial in size and scale. Minor structures or objects (e.g., small sheds) need not be counted.
- When a resource made up of elements representing different resource types is being counted, the most historically important element should be used to classify the resource.

6.5.2 Applying the Criteria for Evaluation

Criterion A: To be considered eligible for listing in the NRHP under Criterion A, a property must be significantly associated with a single event or with a pattern of events, repeated activities, or historic trends important within the defined historic context. However, mere association with the event or trend is not sufficient, in and of itself; the specific association must be considered important as well. For example, properties associated with specific events might include a Second Seminole War period battlefield; a building in which an important invention was developed; or an archaeological site evidencing the first human burials in peat bogs. Properties associated with patterns of events might be a trail associated with the development of the region, such as the Camino Real, which connected the mission chain in north Florida; a railroad station which served as the focus of a community’s

transportation system and commerce; a building used by an important local social organization; or a bridge funded and constructed as part of the federal Works Progress Administration (WPA).

Criterion B: To be considered eligible for listing in the NRHP under Criterion B, a property must be associated with individuals whose specific contributions to history can be identified and documented as important within local, state, or national historical contexts. This criterion is generally restricted to properties that illustrate rather than commemorate an individual's important achievements. [*Guidelines for Evaluating and Documenting Properties Associated with Significant Persons*](#) provides further instruction. The importance of the individual and the length and nature of that person's association with the property in question must be considered. Contributions of individuals must be compared to those of others who were active, successful, prosperous, or influential in the same field. A property that is significant as an important example of an individual's skill as an architect or engineer should be nominated under Criterion C rather than Criterion B, but their home or studio may be eligible under Criterion B since they are the properties with which they are most personally associated.

Criterion C: This criterion applies to properties significant for their physical design or construction including such elements as architecture, landscape architecture, engineering, and artwork. To be eligible under Criterion C, a property must meet at least one of the following:

- Embody **distinctive characteristics** of type, period, or method of construction;
- Represent the **work of a master**;
- Possess **high artistic value**; or
- Represent a **significant and distinguishable entity whose components may lack individual distinction** (a district).

The first requirement refers to the way in which a property was conceived, designed, or fabricated by a people or culture. **Distinctive characteristics** are the physical features or traits that commonly recur in individual types, periods, or methods of construction. These are generally expressed in terms of form, proportion, structure, plan, style, or materials. A structure will be considered eligible as representing its type or period of construction if it is an important example (within its context) of building practices or engineering of a particular time in history. **Work of a master** refers to the technical or aesthetic achievement of an architect or craftsman who is generally recognized as being great in the field, a known craftsman of consummate skill, or an anonymous craftsman whose work is distinguishable from others by its characteristic style and quality. The property must express a particular phase in the development of the master's career, an aspect of his or her work, or a particular idea or theme in his or her craft. **High artistic values** may be expressed in many ways such as community design or planning, engineering, and sculpture. A property is eligible for its high artistic value if it so fully articulates a particular concept or design that it expresses an aesthetic ideal or design concept more fully than other properties of its type. **A significant and distinguishable entity whose components may lack individual distinction** refers to a district. It is quite possible that none of the features within a district possess any of the above characteristics, but taken as whole, the district is deemed important for historical, architectural, engineering, or cultural value.

Criterion D: Criterion D encompasses the properties that have the potential to answer, in whole or part, important research questions about human history or prehistory. The most common type of property nominated under Criterion D is the archaeological site or archaeological district. Archaeological sites eligible under Criterion D must possess configurations of artifacts, strata, structural remains, or other natural or cultural features that make it possible to address important hypotheses. It is important that the significant data contained in the site remains sufficiently intact to yield the expected information. Properties that have been partly excavated or otherwise must be shown to retain potential in their

remaining portions. Criterion D also can apply to buildings, structures, and objects that contain important information. However, for them to be considered under this criterion, they must be, or have been, the principal source of the important information.

6.5.3 Evaluating the Significance of Historic Districts

In accordance with the guidelines promulgated by the FDHR for addressing the significance of a historic district, the following questions are relevant:

- *What are the features and characteristics that distinguish the district?*
- *What are the origins and historical developments of the district? Are any architects, builders, designers, or planners important to the district's development?*
- *Does the district convey a sense of historic or architectural cohesiveness through its design, setting, materials, workmanship, or association?*
- *How do the architectural styles or elements within the district contribute to the feeling of time and place?*
- *How have significant individuals or events contributed to the development of the district?*
- *How has the district affected the historical development of the community, region, or state? How does the district reflect the historical development of the community, region, or state?*
- *How have intrusions and noncontributing structures and buildings affected the district's ability to convey a sense of significance?*
- *What are the qualities that distinguish the district from its surroundings?*
- *How does the district compare to other similar areas in the locality, region, or state?*
- *If there are any preservation or restoration activities in the district, how do they affect the significance of the district?*
- *What is the significance of any resources lying outside the period of significance that should be considered contributing? For example, did resources predating the district's period(s) of significance set the stylistic tone of the district, or contribute to the street layout and spatial patterns of development? Did they make the area attractive for later development?*
- *If the district has industrial significance, how do the industrial functions or processes represented relate to the broader industrial or technological development of the locality, region, state, or nation? How important were the entrepreneurs, engineers, designers, and planners who contributed to the development of the district? How do the remaining buildings, structures, sites and objects within the district reflect industrial production or processes?*
- *If the district is rural, how are the natural and man-made elements of the district linked historically or architecturally, functionally, or by common ethnic or social background? How does the open space constitute or unite significant features of the district?*
- *Does the district have any resources of possible archaeological significance? If so, how are they likely to yield important information?*

6.6 DOCUMENTING SIGNIFICANCE

In the past, a completed [NRHP Registration Form](#) was the principle means by which FDOT requested a determination of eligibility from the SHPO, although that action is NOT required under the *Section 106* regulations. The NRHP Registration Form can continue to be used at the FDOT PM's discretion. However, the SHPO now prefers an expanded FMSF form in lieu of the NRHP Registration Form, provided the expanded FMSF form includes the necessary data required to make a determination of eligibility, such as information on a property's boundaries, area(s) and period(s) of significance, the criteria being considered, integrity, etc. Pursuant to [36 CFR § 800.4\(c\)](#), FDOT will not make a determination of NRHP eligibility without consulting with the SHPO. For non-federally funded projects, FDOT consults with the FDHR in accordance with *Chapters 267 and 872, Fl. Stat.*

Either format for the determination of eligibility request can be used to present a case for or against a historic resource's eligibility. This is particularly useful when a resource's eligibility is unclear, for it gives the forum for presenting both the reasons why or why not a resource is considered to be NRHP-eligible. If questions arise about the eligibility of a given property, the agency may seek a formal determination of eligibility from the NPS. The *Section 106* review process gives equal consideration to properties that have already been included in the NRHP as well as those that have not been so included, but that meet NRHP criteria.

When assessing the eligibility of a property to which Native American tribes attach religious and cultural significance, include the special expertise of the Native American tribes during the evaluation. If a Native American tribe disagrees with a determination of eligibility involving a property located off tribal lands to which it attaches religious and cultural significance, then the tribe can ask the ACHP to request that FHWA or FDOT as lead agency obtain a determination of eligibility by the Keeper of the National Register.

NPS provides general guidelines for [How to Complete the National Register Registration Form](#), and separate information regarding [How to Complete the National Register Multiple Property Documentation Form](#). Complete instructions on how to fill out the form also are available in *Module Three* of the FDHR's *Cultural Resource Management Standards and Operational Manual*.

CHAPTER 7

DOCUMENTING THE CRAS: REPORT TYPES

7.1 OVERVIEW

Regardless of whether significant archaeological sites and/or historic resources were identified and evaluated, the results of all cultural resource assessment surveys must be documented. The type of technical support document depends upon the nature of the project. For most transportation projects, a CRAS Report is prepared. The *CRAS Report* presents the methods, findings, evaluations, and recommendations of the completed assessment survey. *CRAS Addendum Reports* document supplementary cultural surveys revisiting or expanding upon a previously surveyed APE for a project already underway; they are most commonly used for pond surveys or alignment changes following the completion of the mainline CRAS. *Desktop Analysis and Effects Determination Letters* are less intensive documents that are prepared when there is no new survey for a previously surveyed project and the current project's effects determination can be based on the previously completed survey results. For projects that meet the conditions detailed within the 2023 PA, *Section 106 Program Alternative Forms* may be utilized as a streamlining measure to document cultural analysis. These document types conform to the standards set forth in the [PD&E Manual, Module Three](#), and [Chapter 1A-46, F.A.C.](#), as well as supplementary guidelines such as the *Stipulation VII Document Guide* available on OEM's [Cultural Resources](#) webpage. All projects with a federal nexus, regardless of the type of document, must include the standards reference to the NEPA MOU assigning lead federal agency responsibilities to FDOT.

Tribes are not signatories to the 2023 PA and therefore do not utilize the above-mentioned *Section 106 Program Alternative Forms*. As such, if Tribes express an interest in a minor project that would typically be entered in these forms, FDOT will provide the project information and supporting documentation via a *Notification Letter*.

In cases where a phased approach is taken, the *CRAS Report* is preceded by a survey proposal or preliminary report consisting of a desktop analysis of all project alternatives/corridors, survey approach, and research design for each phase. These documents are unique to transportation projects and are not specifically addressed in *Module Three*, so the guidance presented herein was developed by FDOT and FDHR directly. This document will be referred to as a *Preliminary Report* in this *Handbook*; however, an alternate title may be used, as appropriate.

This chapter describes the content requirements of the above document types as well as the routing procedures for distribution and review. Statements pertaining to all of these document types will be indicated collectively by the term *Reports*. Finally, regardless of the specific preparer, the recommendations and suggestions being put forth in these documents should be written from the FDOT perspective as a singular agency to the greatest extent practicable and *Reports* should limit the occurrence of consultant perspective to the pertinent areas of the document.

7.2 PRELIMINARY REPORT CONTENTS

In the initial step of a phased CRAS, the objective is to lay out the survey plan and provide a preliminary and equal analysis for all alternatives under study. The *Preliminary Report* that documents this effort includes the identification of all previously recorded archaeological sites and historic resources located within the APE for each alternative, including resources that are listed, determined eligible, or considered potentially eligible for listing in the NRHP. Known as well as potential resources are addressed therein.

In accordance with the guidance developed by FDOT and FDHR, the basic components of the *Preliminary Report* typically include:

Introduction and Background Research:

- A description of the study area(s)/corridor(s)/alignment(s);
- An outline of relevant research considerations identified by FDOT and the consulting parties (such as ETDM comments);
- A description of survey methods;
- A review of the FMSF and NRHP for all known archaeological sites and historic resources, including historic districts, located in or near the project APE, with their NRHP status (*listed, eligible, ineligible, insufficient information*, and not evaluated) (table format is acceptable);
- A review of previous cultural resource studies completed in and near the project APE, including the date, type, and purpose of the studies;
- Appropriate informant interviews and literature research;
- The precontact and historical context for the project area(s); and
- Appropriate environmental information.

Archaeological Site Analysis:

- An evaluation of precontact archaeological site potential, and a project-specific site location predictive model including the definition of high, moderate (medium) and low probability zones, with maps;
- The results of pedestrian survey or site reconnaissance, with or without limited archaeological testing, when appropriate;
- A discussion of historic archaeological site potential; and
- Identification of the likelihood for the occurrence of any archaeological sites potentially eligible for the NRHP under Criteria A, B, or C (i.e., sites significant for other than the data they contain), and the potential for the occurrence of TCPs.

Historic Resources Analysis:

- A discussion of the local history for evaluation of site potential and site value;
- The results of background research and pedestrian survey (if appropriate), including the identification of historic resources present in the project APE for each alternative, and a preliminary assessment of potential NRHP eligibility (table format is acceptable);
- A count of potentially eligible (significant) and ineligible (not significant) historic resources; and
- The potential for significant historic districts.

Findings and Recommendations:

- A comparison of archaeological site potential between the various study areas, corridors, and/or alignments;
- A discussion of the likely involvement of each study area/corridor/alignment with significant historic resources, including buildings, structures, sites, objects, and districts; and

- Identification and discussion of the specific issues the CRAS must address in order to complete the identification and evaluation effort.

The *Preliminary Report* must contain both narrative and graphic descriptions of the project APE, including all study areas and/or project corridors/alignments; resources lists (tables) and maps; maps of archaeological probability zones; and photographic images of potentially significant resources, keyed to the maps. The tables must include all archaeological sites and historic resources previously listed or determined eligible for listing in the NRHP, the date of the listing or determination, and the NRHP criteria for which they are significant, as well as any NHLs or any other special designation sites.

7.3 DESKTOP ANALYSIS AND EFFECTS DETERMINATION LETTER CONTENTS

A *Desktop Analysis and Effects Determination Letter (Desktop Letter)* may be an appropriate documentation effort in cases of minor projects with either no or minimal involvement with significant cultural resources and which result in *No Historic Properties Affected*. These projects may include design studies, ROW transfers; PD&E re-evaluations; or projects in areas that have been subjected to a previous CRAS that meet *Module Three* standards provided the previous APE(s) for the previous survey remains adequate for the current undertaking, and that no resources within the APE have reached historic age in the interim.

The *Desktop Letter* should include the following information:

- Project name, location, description, purpose, and need;
- Purpose of the CRAS effort (with or without survey, as appropriate), definition of the project APE, relevant regulatory authorities, and who performed the work and when;
- Research considerations and methods;
- A discussion of the local history for evaluation of linear resource segments value;
- Results of background research, including a description of previously recorded archaeological sites and historic resources located within and near the project APE, and their status in regard to NRHP eligibility, including the date of the SHPO evaluation;
- Virtual survey findings (only linear resource segments may be documented in a *Desktop Letter*), including a description and evaluation of each linear resource identified;
- Conclusions, *Section 106* findings, and recommendations;
- References cited; and
- Completed Survey Log Sheet, as well as FMSF forms (if applicable).

7.4 CRAS REPORT CONTENTS

The standard *CRAS Report* is a detailed, organized, and suitably illustrated document that contains descriptions and evaluations of all cultural resources located in the project APE. In addition to these materials, the *CRAS Report* must include a narrative and graphic description of archaeological survey testing results, in accordance with the predictive model, a narrative description of historical survey results with graphics, as appropriate, and an NRHP evaluation of all archaeological sites and historic resources identified in the project APE. For projects where the CRAS has resulted in the identification and evaluation of archaeological sites and/or historic resources, completed FMSF forms must be included. As appropriate, NRHP forms or expanded FMSF forms are completed and appended to the body of the report (see [Section 7.5](#)). Typically, the *CRAS Report* contains chapters that cover the following information:

- Project description, including location and purpose and need for the study;
- Definition of the project APE;
- Purpose of the assessment survey;
- Environmental, archaeological, and historic overviews;
- Research considerations and methods;
- Archaeological and historical survey results;
- Archaeological site and historical resources evaluations;
- Conclusions and recommendations for further work;
- References cited; and
- Appendices.

The *CRAS Report* typically is comprised of three major parts: the preliminary pages, the report body, and the appendices. A summary of report contents follows, but *Module Three* should also be referenced for an expanded explanation of report requirements. The content requirements of each are described below. Please note that *CRAS Addenda Reports* require the same considerations and content with any divergence noted below.

7.4.1 Preliminary Pages

The body of the *CRAS Report* is preceded by the title page, inside cover page, executive summary, table of contents, and lists of figures, tables, and photographs.

The **Title Page** usually contains the following information:

- Report title project name and location;
- Project numbers (i.e., financial management number (FM #); federal-aid project (FAP) number);
- Sponsoring agency (i.e., FDOT);
- Date of report - the original date the report was processed appears on the draft; the original date and revised date appear on the final; and
- Volume number - if the report consists of more than one volume, it must be noted on the cover.

The **Inside Cover Page** has the same information included on the front cover, but with some additions:

- The name of the consultants(s) performing the work; and
- The names and titles of the project personnel responsible for the report.

The **Executive Summary** follows the inside cover page and consists of a succinct, comprehensive abstract that:

- Describes the purpose and scope of the project and specifies the type of study;
- Defines the project APE;
- Notes the regulatory authorities under which the CRAS was performed;
- Notes the date(s) of investigation and the consultants who prepared the report;
- Summarizes the findings of the background research and field surveys;
- Briefly describes the previously and newly recorded cultural resources, with a focus on NRHP-listed and eligible historic properties;

- Summarizes the significance of discovered resources pursuant to NRHP criteria; and
- Recommends future actions vis-à-vis potential effects to significant cultural resources.

The **Table of Contents** varies depending on the size and complexity of the project. Standard report sections frequently are numbered sequentially. This is critical in reports that contain multiple volumes. Following is a list of components for a typical table of contents:

- Executive Summary;
- List of Figures, Tables, and Photographs (can appear together or separately);
- Introduction;
- Environmental Overview;
- Culture History Overview (Prehistory and History may be separate sections);
- Research Considerations and Methods;
- Survey Results (Archaeological and Historic Resources Survey Results may be separate section);
- Site Evaluations, Conclusions, and Recommendations;
- References Cited; and
- Appendices.

7.4.2 Report Body

The body of the report is typically divided into the following sections:

The **Introduction** is usually the first chapter or section in the report and identifies the agency responsible for the undertaking, the location and limits of the project, the purpose and need for the study, a description of the proposed undertaking, a definition of the APE, and the purpose of the CRAS. The Introduction also identifies the preparers of the report, the survey date(s), and regulatory requirements and applicable research and reporting standards.

Graphics typically include a project location map depicting the location and limits, as well as a figure showing the boundary of the APE for both archaeological sites and historic resources. Since the CRAS is normally conducted as part of a larger PD&E Study or other multi-disciplinary effort, the project location map and project description, including the purpose and need statement, should be consistent in content with other project documents.

The **Environmental Overview** is based on data obtained during the background research. It identifies natural and cultural features that characterize the project area, and documents environmental changes that may have influenced the distribution of precontact and historic sites. The environmental overview also provides a description and discussion of past and present environmental conditions in terms of their relationship to the occurrence or potential occurrence of precontact and historic sites. Relevant environmental features may include:

- Topography;
- Geology;
- Physiography;
- Hydrology;
- Soils;
- Vegetation;
- Paleoenvironmental conditions;
- Natural resources such as chert and clay; and
- Existing conditions (e.g., general land uses; noteworthy alterations).

Graphics for this section usually include a USGS quadrangle map and/or a soil survey map of the project area to identify salient environmental features. Tables identifying various types of soils, vegetation, and drainage characteristics within the APE also may be included. The Environmental Overview section may possibly be omitted from a *CRAS Addendum Report* if the information remains accurate from what was presented in the original *CRAS Report*; the preparer must address any omitted content within the report narrative with the reasonable justification for its omission.

The **Culture History Overview** provides a summary of regional prehistory and history based on the archaeological and historic record, beginning with the Paleoindian Period and concluding with the recent past. The primary objective of this narrative is to provide a historic context that is sufficient for the evaluation of the NRHP eligibility of all archaeological sites and historic resources identified within the project APE through an examination of key historical events, trends, and persons. The overview may be divided into two separate chapters to address the precontact and protohistoric/postcontact narratives.

The precontact overview section focuses on regional contexts, chronologies, research questions, and site types drawn from FDHR's [Historical Contexts](#), and other standard discussions of Florida prehistory, such as *Florida Archaeology* (Milanich and Fairbanks 1980), *Archaeology of Precolumbian Florida* (Milanich 1994), *Late Prehistoric Florida Archaeology at the Edge of the Mississippian World* (Ashley and White 2012), *The Archaeology of the Everglades* (Griffin 2002), and *The Archaeology of the Florida Gulf Coast* (Willey 1998); journal articles (e.g., *The Florida Anthropologist*, *Southeastern Archaeology*); and other relevant materials. This section may include a figure depicting the location of regional culture areas/archaeological regions (e.g., Milanich and Fairbanks 1980:22; Griffin 2002:121) in relation to the transportation project location, as well as a table summarizing the local succession of culture periods (e.g., Milanich and Fairbanks 1980:23). More recent research and data pertaining to our knowledge of precontact Florida must be used to supplement these sources.

The historical overview section identifies the salient events, structures, locales, and individuals associated with the historic development and land use patterns in the project area, with emphasis on the historical developments along the transportation corridor. It must be sufficient to form the context for the evaluation of significance for all identified historic resources in the project APE. It draws on the historic contexts presented in several standard references of Florida history such as *A History of Florida* (Tebeau 1980), *The New History of Florida* (Gannon 1996), and *A Short Story of Florida* (Gannon 2003), as well as county and local historical accounts. It is broad enough to address issues such as regional exploration, colonization, settlement, industry, and transportation, but emphasizes local developmental trends and significant persons and events, particularly as they relate to historic resources within or near the project APE. As with the precontact overview, the historic overview must be supplemented with more recent research and interpretations to account for the knowledge gained since these seminal publications.

The historic overview section often includes figures and photographs, such as:

- Federal Surveyor's Plats;
- 19th Century Railroad Maps;
- Subdivision Plats;
- Sanborn Maps;
- Early-20th Century Maps;
- City Plats;
- Coast and Geodetic Survey Maps;
- Land Ownership Maps; and
- Historic Aerial Photographs

As mentioned above, there is no need to repeat identical sections of the original *CRAS Report* in the *CRAS Addendum Report* if all information is still accurate and valid. In these instances, justification for the omission must be presented in the report narrative. However, the report preparer must assess and

discuss within the document whether the CRAS Addendum APE, subject, and survey results warranted a revision or expansion of these topics to provide suitable contextualization for interpretation, NRHP evaluations, and project effects analysis.

The **Research Considerations and Methods** section is based, in part, on the environmental and culture history overviews. It takes into account the many factors that will influence the archaeological and historical field surveys, such as the project type (road widening/proposed ponds/bridge replacement/ROW transfer, etc.), location (urban/rural), land use, and access issues. For projects with a phased approach, most of this information should have already been gathered and summarized in the *Preliminary Report*. Update as needed and incorporate into the *CRAS Report*.

Typically, the archaeological considerations contained in this section include research questions relevant to the geographic area and temporal periods, the probability for the occurrence of archaeological sites of both the precontact and historic periods and their anticipated locations, the expected resource types, and the methodology proposed to locate such resources. If relevant to the project, the potential for underwater archaeological resources also may be included.

A detailed discussion of the anticipated archaeological field methods should include the specific sampling strategy and rationale. Specifically address which localities are deemed to have high, moderate, and low site potential, and how subsurface testing will be carried out in each probability zone. The methods for determining site type, condition, and boundaries also are included, as well as the steps taken in the event of the inadvertent discovery of human remains.

For the historic resources survey, include a detailed discussion of the field methodology. Also note which historical archives and other repositories of information were visited, as well as the names of informants.

Graphics for the research considerations and methods section typically include the following:

- Pertinent USGS quadrangle map(s) on which probability zones for archaeological sites are delineated, as detailed in the research design;
- Table(s) and/or map(s) noting the location, type, and chronological placement of previously recorded archaeological sites within and proximate to the project APE. Normally, recorded archaeological sites within one or two miles are considered; and
- Table(s) and/or map(s) illustrating the location of previously recorded historic resources, including structures, bridges, cemeteries, resource groups, etc., noting NRHP-listed/eligible properties and districts within and proximate to the project APE.

The **Survey Results/Site Evaluations** section presents a description of each previously recorded and newly identified archaeological site and historic resource within the project APE. The findings of the background research are incorporated in evaluating the site(s) significance in terms of NRHP eligibility. If numerous archaeological sites and historic structures are found within the project APE, this section of the report is commonly divided into two separate chapters, “Archaeological Survey Results” and “Historic Resources Survey Results.”

The **Archaeological Survey Results** section begins with a summary paragraph noting the number of shovel tests dug, the number of sites found, and a general statement briefly categorizing the precontact and historic archaeological sites identified and assessed, including the FMSF numbers assigned to these resources. The detailed description of each newly discovered or updated site should include the following information:

- FMSF number and site name;
- Site location (Township, Range, and Section);

- Location of site in relation to proposed undertaking (e.g., within existing ROW in Segment 1; adjacent to proposed Pond 2C);
- Description of the site environment, including elevation above mean sea level (amsl), soil type, local vegetation, nearest fresh water source, and disturbances (e.g., cleared for pasture; underground utilities);
- Site stratigraphy;
- Means of site discovery (e.g., previously recorded, surface examination, systematic shovel testing at a 25 m (82 ft) interval, informant information, etc.);
- Nature of the cultural resource, including site size (areal extent), depth of cultural deposit, types and numbers of artifacts recovered, cultural features encountered, site type, and period of site use; and
- Discussion of site integrity and significance as per NRHP eligibility criteria.

The following types of figures and tables are usually included in this section:

- Site location map (USGS quadrangle map or aerial) depicting previously and newly recorded sites, each clearly identified by FMSF number;
- Maps depicting the location of all shovel tests; and
- Summary table listing recorded sites by site name, FMSF number, location, type, period, NRHP eligibility, etc.

The **Historic Resources Survey Results** section is treated similarly. In a summary paragraph, describe the number and type(s) of updated and newly identified historic resources, including FMSF numbers, and briefly describe each by address, construction date, architectural style, present use, historical context, and defining physical characteristics.

Follow the introductory summary with a detailed description of each resource. Content requirements will vary by resource type. For most historic buildings and structures, provide the following information:

- FMSF number and name (if applicable);
- Address;
- Architectural style;
- Construction date;
- Physical description including form, construction material, additions, alterations, and notable features; and
- Significance evaluation according to the NRHP eligibility criteria..

The following types of figures and tables are usually included in the historic resources survey results section:

- Site location map (USGS quadrangle map or aerial) illustrating previously and newly recorded historic resources, each clearly identified by FMSF number;
- Summary table listing recorded historic resources by FMSF number, property name (if appropriate), address, architectural style, use, date of construction, and NRHP eligibility; and

- Photographs of each historic resource, or, if appropriate, photographs of each NRHP-listed, eligible, and potentially eligible property, and representational photographs of the other resources.

The **Conclusions and Recommendations** section provides a summary of the findings of the field surveys, including statements about the NRHP eligibility of identified resources. In addition, this section includes recommendations regarding potential project impacts.

References Cited: All references, including books, articles, manuscripts, maps, interviews, and other data sources cited in the body of the report, are included in the References Cited section. Select a style guide (e.g., *The Chicago Manual of Style*), and use it to standardize your citation format. Be sure each reference specified in the body of the report is included in the References Cited section. Reference omissions are one of the most common report deficiencies and are easily spotted by FDOT quality assurance reviewers.

Appendices: Most *CRAS Reports* include appendices that contain such materials as relevant correspondence; FMSF forms; NRHP forms or expanded FMSF forms for potentially eligible archaeological sites and historic resources; shovel test data; artifact catalogue; historic standing structures tables, if applicable; and a FMSF Survey Log.

7.5 DOCUMENT DELIVERABLES

7.5.1 Draft and Final Documents

Consultants typically draft the survey *Report* and submit it to the District CRC or Environmental Manager for FDOT internal review, comment, and quality control. Once complete, the District CRC/Environmental Manager will submit the CRAS document to the SHPO/THPO, Tribes, and all other consulting parties for their comments on the sufficiency of the document and its findings and recommendations, including the significance determinations. All submissions to the SHPO are completed through the **Section 106 SWEPT Tool** and submissions to THPOs, Tribes, and other consulting parties are arranged individually according to the recipient's preference.

If the SHPO or any other consulting party determines or opines that the report and/or survey efforts do not meet the requirements of *Module Three* and/or the *NHPA*, that consulting party shall inform FDOT. For clarity, this process is not referring to the minor edits or a Request for Additional Information (RAI) requested from SHPO, but rather an unresolvable difference of opinions among consulting parties. FDOT will review the matter and consult with the other parties as appropriate under the law. Any dispute arising during the *Section 106* process will be addressed through the standard dispute resolution processes outlined in *36 CFR § 800.7* and the *Section 106 PA*.

7.5.2 Accompanying Materials

Along with the survey *Report* proper, a completed **FMSF Survey Log** and project map are required for each project, even in cases where no cultural resources were identified. Where applicable, **FMSF Forms** (for both new and updated resources) and associated maps and photographs must accompany the submittal to the SHPO in the SWEPT Tool. Digital versions of the FMSF Survey Log, Forms, maps, and photographs must also accompany the hard copies of the finalized CRAS document sent to FDHR for archiving in the FMSF. These must be saved as JPEG (Joint Photographic Experts Group) or uncompressed TIFF (Tagged Image File format) files on CD or jump drive media. The [FMSF](#) webpage houses all current versions of the forms, user guides for each of their forms, and submission instructions.

Survey Log: The FMSF requires all submitted manuscripts and survey reports to be accompanied by a Survey Log, including the appropriate USGS quadrangle (or equivalent) map marked with the location

of the project APE. Submit the Survey Log Sheet with the final report as both hard copy and electronic copy on CD or flash drive.

FMSF Forms: A complete set of original FMSF forms also are submitted with the final report in both hard copy and electronic format. The FMSF requires photographic documentation of resources as a component of Historical Structure, Historical Bridge, Historical Cemetery, and Resource Group forms. Photographic documentation is not required for Archaeological Site forms. Photographs may be submitted as a digital image file on CD, jump drive, or as archival Black and White photographic prints. The overall quality of the image (resolution, exposure, texture, focus, etc.) should be sufficient to display architectural details, where applicable. Such details include, but are not limited to, ornamentation, window types, masonry patterns and materials, and distinctive roof materials. Digital images should include the site number as part of the file name and must adhere to the FMSF submission specifications.

In the case of Historic Districts, the FMSF Resource Group Form for the district will be completed in addition to individual FMSF Forms for each historic resource, whether contributing or noncontributing. These forms can be attached as a separate appendix from resources not within the district boundaries, if appropriate.

7.5.3 Use in Other Environmental Documents

The CRAS may be conducted as part of a Type 1 or Type 2 Categorical Exclusion *NEPA* document or in a larger transportation project that requires the completion of either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) to meet the requirements of *NEPA*. The *NEPA* document should include the report as a supporting technical document and attach the *Section 106* consultation letters in an appendix. In this way, the potential impacts of the various alternatives on historic properties can be included in the overall *NEPA* analysis used in developing the preferred alternative for the project.

7.6 DOCUMENT DISTRIBUTION

7.6.1 Document Routing Procedures

All *Reports* are submitted in both draft and final forms. The CRAS documents are prepared by a CRM consultant on behalf of FDOT and are ultimately submitted to the SHPO/THPO, Tribes and other consulting parties by FDOT for projects with either federal involvement or state funding. The steps to follow for the transmittal of draft and final *Preliminary Reports*, *Section 106 Program Alternative Forms*, *Desktop Analyses*, *Notification Letters*, *CRAS Reports*, and *CRAS Addendum Reports* are essentially the same; the process is summarized below. Routing procedures for the *Section 106 CSR* are discussed in **Section 8.2.3.2**. All *Reports* are submitted under cover of a ***Transmittal Letter*** from FDOT, as described in **Section 7.6.2**.

- Step 1:** The CRM consultant prepares the draft document and required accompanying materials (e.g., FMSF Forms & Survey Log) and provides them to the District CRC or designee for review.
- Step 2:** The District CRC or designee reviews the document and requests changes, if needed. If changes are needed, the document is returned to the consultant, revisions are made, and the document is resubmitted to the District.
- Step 3:** The District CRC or designee submits the revised report and associated materials and *Transmittal Letter* to OEM for review for projects anticipating *Adverse Effects to Historic Properties* or submits the package directly to the SHPO/THPO for review for projects with all other *Section 106* findings (skip Steps 4 and 5).

- Step 4:** OEM reviews the general findings, the determinations of significance, and the recommendations. If there is a disagreement with the findings presented, OEM, the District, and consultant work to resolve the differences. Revisions may be required.
- Step 5:** Once the report is acceptable to OEM, the District CRC or designee submits the CRAS documentation package and *Transmittal Letter* to the SHPO/THPO, Tribes, and consulting parties for review and concurrence in accordance with their preferences (OEM submits projects to THPO/Tribes when *Adverse Effects* are anticipated to historic property(s) in which the THPO/Tribe may ascribe significance).
- Step 6:** The SHPO/THPO, Tribes, and consulting parties review the document and provide comments, as appropriate. If unacceptable, the agencies consult, and the agreed upon revisions are made.
- Step 7:** Once the SHPO determines the documentation to be complete and sufficient and they concur with the *Section 106* finding, they sign the signature block of the *Transmittal Letter* and return the letter to FDOT. The THPO, Tribal, and other consulting parties' review and comments are typically returned on their individual letterhead, not on a FDOT-provided signature block.

The routing method utilized among OEM, FDOT Districts, and SHPO is the **Section 106 SWEPT Tool**. Consultants are afforded roles within the SWEPT system that allows them to create Section 106 submissions on the designated forms and route the draft submittals to the District CRC, Environmental Manager, or designee. The District CRC or designee are able to QA/QC review the drafted submittal package and are vested with the authority to submit the approved draft submittal package to OEM or SHPO for review, as appropriate. SHPO review staff and the SHPO themselves are provided with the authority to access, download, and review the digital submissions and issue either the SHPO's official concurrence (or not) or request additional information (RAI) necessitating revisions and resubmittal. The official SHPO determination is documented with digital signature and timestamp on the FDOT-provided signature block on the *Transmittal Letter* and this finalized letter is automatically saved to the SWEPT project file.

The routing method utilized for all other consulting parties to receive CRAS documentation and *Transmittal Letters* is in accordance with their individual preferences. The most up-to-date THPO and Tribal *Section 106* consultation submittal preferences are maintained on the OEM [Native American Tribal Consultation](#) webpage. Additional consulting parties and their preferences must be identified on a project-by-project basis. Tribal and other consulting party communications must be saved to the project file manually.

7.6.2 Transmittal Letters

The *Transmittal Letter* from FDOT to SHPO or other consulting party, which accompanies the CRAS Report package, should contain standard summary information. The list of recommended inclusions, which follows, is keyed to the sample letter of transmittal provided in **EXHIBIT 7.1**.

1. In the subject line, provide the project name, location and limits; project phase (e.g., PD&E Study); and identifying state and federal project numbers, as applicable;
2. Project description;
3. Definition of project APE for both archaeological sites and historic resources;
4. Regulatory authorities for the CRAS;

5. Summary results of the background research, including the number of archaeological sites and historic resources previously recorded, and their NRHP status (listed, eligible);
6. Summary results of the field surveys, including the identification of all NRHP-listed and eligible historic properties, and all those newly identified as potentially eligible;
7. Summary of potential project effects to significant cultural resources and recommendations for additional work;
8. Closing statement, including a request for review, comment, and concurrence (as appropriate) as per the evaluation of NRHP eligibility, *Section 106* finding, and recommendations, if applicable;
9. A list of enclosed documents and list of copied recipients (optional); and
10. Signature and comment block. *

**Transmittal Letters* sent to SHPO will auto-populate the appropriate signature block on the *Transmittal Letter* based on how the project has been set up in SWEPT (i.e., federal or state funding). SHPO review requires official concurrence. *Transmittal Letters* sent to THPO and Tribes should never include a signature block as they will provide responses on their own letter head, if so inclined. *Transmittal Letters* sent to other consulting parties may include a signature block for the recipient at the District's discretion.

EXHIBIT 7.1

SAMPLE TRANSMITTAL LETTER

[Date]

[Name]

[Address]

RE: Cultural Resources Assessment Survey
[#1 Document type/name including Project Name and Location]
[Identifying state and federal project numbers]

Dear [Name]:

[#2] A Cultural Resource Assessment Survey (CRAS) was conducted within the area of potential effects (APE) for the above referenced project as part of the Florida Department of Transportation's (FDOT) proposed [Project Description, including existing and proposed conditions, whether new right of way will be required, etc.]. [Clear statement of funding sources; federal or state.] The [#3] archaeological APE was defined, in consultation with the SHPO, as [Insert definition]; the historical APE [Insert definition].

[#4] The CRAS was conducted in accordance with the provisions of the *National Historic Preservation Act* of 1966 (as amended), which are implemented by the procedures contained in *36 CFR, Part 800*, as well as the provisions contained in the revised *Chapter 267, Fl. Stat.*. The investigations were carried out in conformity with the Archaeological and Historical Resources Chapter of the FDOT's Project Development and Environment Manual and the standards contained in the Florida Division of Historical Resources' (FDHR) *Cultural Resources Management Standards and Operational Manual* (2003). In addition, this survey meets the specifications set forth in *Chapter 1A-46, Florida Administrative Code*.

[#5] Background research indicated that [Add results for archaeological sites and historic resources].

[#6] Archaeological and historical field surveys resulted in [Add results]

[#7] Based on the results of the background research and field survey, [Add summary of potential effects to significant cultural resources]. [Statement regarding recommendations for further work].

[#8] The [CRAS Report Type] is provided for your review and comment. If you have any questions, or if I may be of assistance, please contact me at [Phone number and/or email address].

Sincerely,

[Name]

[FDOT Department Title]

[#9] List of enclosures and list of copied recipients (optional).

[#10] Signature and comment block for recipient, as appropriate.

CHAPTER 8

DETERMINATION OF EFFECTS AND THE RESOLUTION OF ADVERSE EFFECTS

8.1 OVERVIEW

Following the identification and evaluation of historic properties, the next step in the *Section 106* process is to determine whether the project will have an effect on the historic properties within the APE, and if so, whether the effect will be adverse. If no historic properties are identified in the CRAS, or if historic properties are identified but will not be affected by the undertaking, then FDOT determines ***No Historic Properties Affected***. This finding, made in consultation with the SHPO and consulting parties, completes the *Section 106* process, and FDOT may proceed with the undertaking, having fulfilled its obligations.

However, if historic properties are identified within the APE, and FDOT determines that the project may affect one or more of these properties, it determines ***Historic Properties Affected***. FDOT then evaluates the nature of these effects and determines whether the effect is adverse. The evaluation of adverse effects, **Step 3** in the *Section 106* process, is done by applying the *Criteria of Adverse Effect* in [36 CFR § 800.5](#), and documenting the finding. If FDOT makes a finding of ***No Adverse Effect***, in consultation with the SHPO and other consulting parties, this completes the *Section 106* process. If the determination is an ***Adverse Effect***, FDOT proceeds to **Step 4** to resolve the adverse effects on historic properties. If the adverse effects cannot be avoided or minimized, agreed upon actions to mitigate these impacts are formalized in an agreement document, commonly a *MOA*. After the formal agreement is executed by all parties, the *Section 106* process is completed; the *Section 106* responsibilities of FDOT are fulfilled when the stipulations contained in the *MOA* are implemented.

For state funded projects, the procedures are the same as for federally funded projects except that the ACHP is not involved.

This chapter follows the actions taken to complete Steps 3 and 4 of the *Section 106* process. It includes the formal definition of what constitutes an adverse effect, how potential effects are documented in a *Section 106 CSR*, and how adverse effects are resolved through the consultative process.

8.2 DETERMINING EFFECTS

The evaluation of effects is a two-step process. First, determine whether the project will have an effect. An undertaking has an effect on a historic property when the characteristics of the property that qualify it for inclusion in the NRHP are altered, in accordance with [36 CFR § 800.16\(i\)](#).

If it is determined that there will be no effect, that is, ***No Historic Properties Affected*** per [36 CFR § 800.4\(d\)](#), FDOT prepares documentation pursuant to [36 CFR § 800.11\(d\)](#), which includes:

- (1) *A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, drawings, as necessary;*
- (2) *A description of the steps taken to identify historic properties, including, as appropriate, efforts to seek information pursuant to §800.4(b); and*
- (3) *The basis for determining that no historic properties are present or affected.*

Consulting party concurrence on determinations of ***No Historic Properties Affected*** completes FDOT's responsibilities under *Section 106*.

If an effect to one or more historic properties is anticipated, then FDOT makes a determination of **Historic Properties Affected** per [36 CFR 800.4\(d\)\(2\)](#), and the next step is to apply the *Criteria of Adverse Effect* to each property.

8.2.1 Applying the Criteria of Adverse Effect

The evaluation of effects is based on application of the *Criteria of Adverse Effect*, pursuant to [36 CFR § 800.5\(a\)\(1\)](#). This analysis will result in either a finding of **No Adverse Effect** or **Adverse Effect** for the individual historic property, with the most severe degree of affect becoming the *Section 106* finding for the undertaking. Thus, where the project APE contains multiple historic properties, an adverse effect to one is sufficient to determine an **Adverse Effect to Historic Properties** for the project.

An **Adverse Effect** is found when:

“an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative” (36 CFR § 800.5(a)(1)).

Adverse effects on historic properties ([36 CFR § 800.5\(a\)\(2\)](#)) include, but are not limited to:

- (i) *Physical destruction of or damage to all or part of a property;*
- (ii) *Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties [36 CFR Part 68](#) and applicable guidelines;*
- (iii) *Removal of the property from its historic location;*
- (iv) *Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;*
- (v) *Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;*
- (vi) *Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and*
- (vii) *Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.*

Direct impact to archaeological sites, despite “mitigation” through data recovery, is an adverse effect.

8.2.2 Determination of No Adverse Effect

FDOT determines a finding of **No Adverse Effect** when the project's effects do not meet the *Criteria of Adverse Effect*, as defined above. A **No Adverse Effect** finding may also be appropriate in cases where the undertaking is modified through redesign or similar changes to avoid or minimize impacts, and where certain **conditions** are implemented, in concurrence with all consulting parties. For example:

- Place fencing or clean fill materials, as appropriate, to minimize adverse effects to a NRHP-eligible archaeological site;
- Rehabilitate the historic property in accordance with the *Secretary's Standards for the Treatment of Historic Properties*;
- Create an at-grade roadway instead of an elevated roadway that would significantly affect views from and toward the NRHP-listed or eligible property;
- Reroute the roadway in certain areas to go around a NRHP-listed or eligible property;
- Create an earth berm or other form of landscaped barrier to limit visual and audible intrusion into a NRHP-listed or eligible property or district;
- Redesign lanes, curb, sidewalk, and other roadway improvements to be compatible in design, scale, and materials with the existing NRHP-listed or eligible property or district. For example, re-use or match existing street paving or sidewalk paving materials (brick, hexagonal pavers, etc.);
- Retain or replant existing landscape elements (trees, shrubs, grass) and/or other boundary elements (fences, walls, etc.) along the roadway ROW; and/or
- Use signs, street lighting, traffic lighting, etc. that will be compatible with the NRHP-listed or eligible property or district.

Most, if not all, of these possible solutions would limit the amount of physical impact or encroachment upon the historic property, and/or limit other potential adverse effects such as visual, audible, and/or access effects.

8.2.2.1 No Adverse Effect Documentation

If a finding of *No Adverse Effect* is proposed, the FDOT documents the finding and provides it to all consulting parties. Clear, uncomplicated arguments to justify an effect finding of *No Adverse Effect to Historic Properties* may fit sufficiently in a *Desktop Analysis* or may be combined into the *CRAS Report's Transmittal Letter*. If the analysis is more complex leading up to the *No Adverse Effect* determination, the information must be presented in a *Case Study Report (CSR)* (see **Section 8.2.3.1**). In accordance with [36 CFR § 800.11\(e\)](#), *No Adverse Effect* documentation includes:

- (1) *A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, and drawings, as necessary;*
- (2) *A description of the steps taken to identify historic properties;*
- (3) *A description of the affected historic properties, including information on the characteristics that qualify them for the National Register;*
- (4) *A description of the undertaking's effects on historic properties;*
- (5) *An explanation of why the criteria of adverse effect were found applicable or inapplicable, including any conditions or future actions to avoid, minimize or mitigate adverse effects; and*
- (6) *Copies or summaries of any views provided by consulting parties and the public.*

8.2.2.2 No Adverse Effect Workflow

For a project determined to have *No Adverse Effect*, follow these steps:

Step 1: District CRC and CRM consultant develop the documentation noted above and submit it to the SHPO/THPO, Tribes, and consulting parties for review and comment.

Step 2: The consulting parties have 30 days from receipt of the complete documentation to review the findings. If there is no response within 30 days, FDOT may presume concurrence via no objection in accordance with *36 CFR § 800.5(c)(1)*.

Step 3: When FDOT and consulting parties have agreed on the finding of *No Adverse Effect*, the *Section 106* process is completed, and FDOT may proceed with the undertaking.

In the event that the SHPO or any consulting party disagrees within the 30-day review period, they must specify the reasons for disagreeing in writing. FDOT consults with the party to resolve the disagreement, or requests the ACHP to review the finding, pursuant to *36 CFR § 800.5(c)(3)*. Proceed to Step 4.

Step 4: If the ACHP is requested to review the finding, it has 15 days to respond or request a 15-day extension to complete the review. If there is no response within that time, FDOT may assume concurrence and proceed with making a final decision on their finding of effect for the undertaking.

If the ACHP provides comments, FDOT must consider the comments when reaching a final decision on their finding of effect.

Following completion of the above process and rendering a final *Section 106* finding for the undertaking, FDOT's responsibilities under *Section 106* are fulfilled and the project may proceed.

8.2.3 Determination of *Adverse Effect*

An FDOT undertaking may be determined to have an *Adverse Effect* when the integrity of the characteristics that qualify a historic property for inclusion in the NRHP are diminished. Numerous situations may cause adverse effects. The project may physically impact the historic property by taking all or part of its property. The undertaking also may impact the resource in other ways, both directly and indirectly, by affecting any of the following:

- Visual and/or aesthetic qualities (including views to or from the property);
- Noise levels;
- Landscaping;
- Use of the property;
- Access (such as vehicular and pedestrian entrance ways to the property);
- ROW needs;
- Parking;
- Economics;
- Traffic volumes;
- Vibration levels; and/or
- Air quality;

Potential visual effects are particularly significant in the case of historic buildings, structures, and districts. Where feasible, use graphic tools to compare existing and proposed conditions to predict visual effects. For large projects, computer-generated imagery has been used effectively to demonstrate potential visual impacts.

8.2.3.1 *Adverse Effects Documentation*

Typically, the evaluation and documentation of project effects are provided in a ***Section 106 Case Study Report (CSR)***. This document is prepared on behalf of FDOT as a joint effort by a cultural resource consultant, working in association with the prime engineering firm responsible for conducting the PD&E Study. The *CSR* brings together both the technical engineering information and the description and evaluation of the historic property or properties in relation to the specific transportation improvements. The *CSR* provides the information needed for FDOT, the SHPO/THPO, tribes, and other consulting parties to make informed decisions regarding project effects. As noted above, the *CSR* may also be utilized to present more complex analysis required to arrive at a determination of *No Adverse Effect*. In such a case, follow the *No Adverse Effect* workflow presented in **Section 8.2.2.2**.

The information presented in the *CSR* also may be used in the resolution of adverse effects during Step 4 of the *Section 106* process if the proposed undertaking is determined to have an *Adverse Effect*, as well as in future agreement documents. The *CSR* serves as the ACHP's project impact review assessment and is submitted to the ACHP along with information regarding the consultation process, public involvement, and the selected mitigative measures (if determined at that time). This package of information is submitted via the e106 process following SHPO's concurrence that the project will have an *Adverse Effect on Historic Properties*. The executed agreement document (*MOA*) is submitted to the ACHP via the same e106 process once it is fully executed by all signatories.

Typically, the *CSR* includes the following information:

- A description of the project, including its purpose and need and benefits;
- The context for evaluating the NRHP-listed and eligible historic properties;
- A physical description (present and historic) and statement of significance for each historic property identified within the project APE;
- A description and analysis of all proposed project alternatives considered, including the No-Build Alternative, Rehabilitation Alternative (if appropriate), Build Alternatives, and Preferred Alternative, including the reasons why the preferred alternative was recommended;
- An evaluation of effects for each historic property based on the Preferred Alternative, including the relationship to the Preferred Alternative, visual/aesthetic impacts, noise and air quality impacts, and access and use impacts; and
- A description of the proposed minimization/mitigation options, such as design alternatives, and stipulated conditions (commitments) that will be implemented to avoid or minimize adverse impacts.

The *CSR* should contain graphics sufficient to illustrate the existing and proposed conditions (usually, typical sections) for each alternative, as well as the relationship of the Preferred Alternative to the affected historic property or properties, including the boundary of each NRHP-listed or eligible property. In addition to graphics, include copies of FMSF Forms for the affected historic properties, as well as all relevant materials that document the decision-making process, such as relevant agency correspondence and consultation meeting minutes; public workshop and public hearing comment summaries; and final traffic noise and air quality reports. Technical materials are usually included by reference to the project file and agency correspondence and concurrence is attached in the *CSR* Appendix.

8.2.3.2 *Adverse Effect Workflow*

For a project determined to have an *Adverse Effect*, follow these steps:

- Step 1:** CRM consultant produces and submits the draft CSR to the District CRC or designee for review.
- Step 2:** District CRC or designee reviews the draft, provides comments, and conducts comment resolution with the consultant resulting in a District-approved draft CSR.
- Step 3:** District CRC submits the draft CSR to OEM’s State CRC for review (30 calendar days is the target review window).
- Step 4:** State CRC review results in either *Returns* with edits (requiring resubmission to OEM to backcheck edits were satisfactorily addressed), *Approves With Minor Edits* (no requirement to resubmit updated draft to OEM for backcheck prior to consulting party submission), or *Approves* the draft CSR for submission to consulting parties.
- Step 5:** District CRC or designee submits the OEM approved draft CSR to SHPO/THPO, Tribes, and consulting parties for concurrent review (required 30 calendar days review).
- Step 6:** SHPO review results in either a *Request Additional Information* (requiring resubmission for their review), *Concurrence* with the presented *Section 106* finding of *Adverse Effect*, or a decision of *Does Not Concur*. The manner in which THPO, Tribal, and consulting parties respond vary, but should minimally state agreement/disagreement with the *Section 106* finding and include any conditions or requests associated with their decision.
- Step 7:** If the consulting parties have **agreed** upon the *Adverse Effect* finding, or no objection was received within 30 days, FDOT will notify the ACHP of the *Adverse Effect* via e106 submission and the Section 106 process can proceed to Step 4: Resolution of Adverse Effects and Agreement Development. (Skip to **Section 8.3**)
- If the consulting parties **did not agree** upon the *Adverse Effect* finding, and FDOT cannot resolve the conflicting opinions, OEM will request ACHP to review the finding per *36 CFR 800.5(c)(2)* and notify all consulting parties of the objection and Council review. ACHP has 15 days from receipt of the request in which to provide a response or request a 15-day extension to review the finding.
- Step 8:** If the ACHP does not provide a response during the allotted timeframe, the *Section 106* process will proceed to Step 4: Resolution of Adverse Effects (Skip Step 9).
- Step 9:** If the ACHP provides comments, FDOT must consider the comments when reaching a final decision on their finding of effect. FDOT will notify all consulting parties of their final decision in writing and proceed to Step 4: Resolution of Adverse Effects (**Section 8.3**).

8.3 RESOLVING ADVERSE EFFECTS

Once FDOT determines the proposed undertaking will adversely affect historic properties, consultation continues with the SHPO and other affected parties, including Native American tribes, local governments, permit or license applicants, owners of affected lands, and members of the public. Consultation brings together the affected parties to consider ways to **avoid, reduce, or mitigate** the adverse effects. A successful consultation accommodates the needs of the FDOT undertaking and the integrity of the historic property in a way that the consulting parties agree best serves the public interest. The strategies developed to resolve adverse effects represent **Step 4** in the *Section 106* process.

FDOT is responsible for coordinating consultation among all the parties and is obligated to provide documentation to all consulting parties at the beginning of the consultation to resolve adverse effects. New consulting parties may enter the consultation if FDOT and the SHPO agree. Any party that may have responsibilities under an agreement document must be invited to participate as a consulting party.

Also, FDOT must provide an opportunity for members of the public to express their views on an undertaking.

8.3.1 Advisory Council Involvement

The ACHP is not involved in all adverse effect cases. As noted above, the ACHP can be provided with a simple notification of *Adverse Effect* for undertaking where FDOT and consulting parties agree upon the project effects. However, there are circumstances where the ACHP must be invited to participate in the resolution of adverse effects in accordance with *36 CFR § 800.6(a)(1)(i)*, the *AOFA*, and *2023 PA*. The ACHP must be invited to consult in the following situations:

- When the lead federal agency official wants the ACHP to participate;
- When the project will adversely affect a NHL; or
- When a Programmatic Agreement (PA) under *36 CFR § 800.14(b)* will be prepared.

In addition to FDOT, any one of the consulting parties may independently request ACHP participation in the consultation process. The e106 notification letter inviting the ACHP to consult is accompanied by the same documentation required for a finding of *No Adverse Effect* or *Adverse Effect* per *36 CFR § 800.11(e)* as listed in **Section 8.2.2.1**.

The ACHP is likely to enter the *Section 106* process, pursuant to [36 CFR Part 800 Appendix A](#) when an undertaking meets one or more of the following criteria:

- *Has substantial impacts on important historic properties* – “Important historic properties” may include:
 - Properties that possess a national level of significance;
 - Properties that are of unusual or noteworthy importance;
 - Properties that are of a rare type; and/or
 - Large numbers of historic properties, such as multiple properties within a historic district.
- *Presents important questions of policy or interpretation* – For example,
 - Questions about how the ACHP’s regulations are being applied or interpreted;
 - Situations where the outcome will set a precedent affecting ACHP policies or program goals; and/or
 - Where the development of programmatic agreements that alter the way the *Section 106* process is applied to a group or type of undertakings.
- *Has the potential for presenting procedural problems* – For example,
 - Cases with substantial public controversy related to historic preservation issues;
 - Cases with disputes among or about consulting parties which the ACHP’s involvement could help resolve;
 - Cases that are involved or likely to be involved in litigation on the basis of *Section 106*; and/or
 - Cases carried out by a federal agency, in a state or locality, or on tribal lands where the ACHP has previously identified problems with *Section 106* compliance.
- *Presents issues of concern to Indian tribes or Native Hawaiian organizations* - For example,
 - Cases where an Indian tribe or Native Hawaiian organization attaches religious and cultural significance to affected properties;

- Where an Indian tribe or Native Hawaiian organization has requested ACHP involvement; and/or
- Where there are questions relating to policy, interpretation or precedent under *Section 106* or its relation to other authorities.

The ACHP has 15 days of receipt of a request to decide to join the consultation or decline participation. If the ACHP decides to participate, it must notify FDOT and the consulting parties of its decision.

8.3.2 Consultation Process and Procedures for Resolving Adverse Effects

The consultation process gives priority to the **consideration of alternatives**, including alternate sites, alternate undertakings, and alternate designs, as well as the No-Build alternative. The latter may be used to evaluate the importance of the undertaking against the severity of its effects. If the consulting parties find that the consideration of alternatives does not result in a viable solution that would best serve the public interest, they can proceed to a discussion and evaluation of mitigation measures. **Mitigation** refers to actions that reduce or compensate for the damage an undertaking may have on an NRHP-listed or eligible property.

The appropriateness of measures proposed to avoid, minimize, or mitigate adverse effects is dependent on the reasons why each historic property is considered significant. The resolution of adverse effects is never predetermined and is not a mechanical process that produces similar outcomes for all projects. While FDOT makes the final decision, resolution is a collaborative process. Standard approaches to mitigation typically include archaeological data recovery and the photographing and documenting of historic resources in accordance with Historic American Buildings Survey/Historic American Engineering Record/Historic American Landscapes Survey (HABS/HAER/HALS) standards. However, non-standard, innovative approaches that can result in better outcomes, and with greater public benefit may be appropriate. **CHAPTER 9** and **CHAPTER 10** include an examination of a variety of these “creative mitigation” alternatives.

In some cases, the consulting parties may agree that there are no viable mitigation measures and that the adverse effects must be accepted in the public’s interest. On the other hand, FDOT, SHPO/THPO, tribes, and/or consulting parties may not be able to reach an agreement (**failure to resolve adverse effects**), and FDOT will request the ACHP’s comments, in accordance with [36 CFR § 800.7\(c\)](#). FDOT notifies all other consulting parties of its request, and provides the ACHP with the following documentation ([36 CFR § 800.11\(g\)](#)):

- A description and evaluation of any alternatives or mitigation measures that FDOT proposes to resolve the undertaking’s adverse effects;
- A description of any reasonable alternatives or mitigation measures that were considered but not chosen, and the reasons for their rejection;
- Copies or summaries of any views submitted to FDOT concerning the adverse effects of the undertaking on historic properties and alternatives to reduce or avoid those effects; and
- Any substantive revisions or additions to the documentation previously provided to the ACHP.

Upon receipt of the request and documentation, the ACHP has 45 days to render comment ([36 CFR § 800.7\(c\)\(2\)](#)).

In the absence of an *MOA* documenting the resolution of adverse effects, FDOT must consider the ACHP’s written comments and then make a final decision about how (or whether) to proceed with its undertaking. FDOT notifies the ACHP of its decision before work on the undertaking begins. This concludes the *Section 106* process, and FDOT has satisfied its statutory responsibilities.

Occasionally a SHPO may withdraw from consultation without intending to terminate the process. It is important that such a withdrawal is documented so as not to inadvertently terminate consultation, allowing FDOT and the ACHP to proceed.

In summary, the procedures for **Resolving Adverse Effects** include the following steps:

- Step 1:** FDOT continues consultation with the SHPO and other consulting parties to resolve the adverse effects by avoidance, minimization, or mitigation, and considers alternatives to the project.
- Step 2:** If applicable as outlined above, the ACHP is notified, invited to participate, or can decide to enter into consultation pursuant to *36 CFR Part 800, Appendix A*. The ACHP has 15 days to notify FDOT and consulting parties whether it will participate in the resolution process.
- Step 3:** If the **ACHP does not participate** or did not require invitation to participate and FDOT and the consulting parties **agree** on the ways to resolve adverse effects, the measures are outlined in a *MOA* or other formal agreement document such as a “Conditional No Adverse Effect” determination, pursuant to *36 CFR § 800.5(b)*. Proceed to Steps 4 through 7.
If FDOT and the consulting parties **fail to agree**, proceed to Step 8.
- Step 4:** The District or consultant drafts an *MOA*, or another appropriate agreement document, on behalf of FDOT and coordinates with all consulting parties on mitigation measures.
- Step 5:** The draft *MOA* is reviewed and revised, as needed, along the same workflow as the *Adverse Effect CSR* (see **Section 8.2.2.2**). Required reviewers include the District legal counsel, OEM, Office of the General Council (OGC), SHPO, SHPO’s legal counsel, and any other consulting parties with responsibilities contained within the *MOA*. Consulting parties with no responsibilities in the *MOA* may review the draft, but it is not required to proceed. Once all parties agree on the resolution FDOT and SHPO, and other parties if applicable, execute the final *MOA* or agreement document.
- Step 6:** The District coordinates the *MOA* signature process, and a copy is provided to all the signatories and consulting parties. The OEM State CRC submits the executed *MOA* to ACHP via the e106 process.
- Step 7:** The undertaking proceeds according to the terms and stipulations of the agreement document, and FDOT has met all of its obligations under *Section 106* of the *NHPA*.
- Step 8:** If FDOT and the consulting parties **fail to agree**, FDOT requests comments from the ACHP and forwards a copy of the documentation package pursuant to *36 CFR § 800.11(g)* along with other information relevant to the disagreement via the e106 process.
- Step 9:** The ACHP has 45 days to comment. The ACHP’s comments are provided to FDOT, with copies to all consulting parties.
- Step 10:** FDOT is obligated to consider and consider the comments of the ACHP, choose to implement or not implement them, or to proceed with an alternative. FDOT documents the final decision in accordance with *36 CFR § 800.7(c)(4)*, the ACHP and all consulting parties are notified, and the project may proceed.

Following completion of the above process and rendering a final *Section 106* finding for the undertaking, the *Section 106* process is complete, and the project may proceed. FDOT *Section 106* responsibilities are

fulfilled when the stipulations contained in the *MOA*, agreement document, or final determination are implemented.

8.4 PREPARING AGREEMENT DOCUMENTS

The decisions reached during the consultation process are contained in a formal **agreement document**. This legal document outlines FDOT’s fulfillment of responsibilities under *Section 106* and obligates the signing parties (signatories) to carry out its terms. It shows that FDOT has considered the effects of the proposed undertaking on NRHP-listed or -eligible historic properties, has consulted with affected parties and the public, and has given the ACHP a reasonable opportunity to comment. The most common agreement document for FDOT projects is an *MOA*.

8.4.1 Memorandum of Agreement

The *MOA* contains the measures that the consulting parties have agreed upon to avoid, minimize, or mitigate the adverse effects that an undertaking may have on NRHP-listed or eligible properties. For each project, the mitigation measures for both archaeological sites and historic resources must be included in the same *MOA*. There are two kinds of *MOAs*: “three-party” and “two-party.” A **three-party** *MOA* is used when the ACHP is involved in the consultation process; in it, FDOT, the SHPO, and the ACHP each have the authority to execute, amend, or terminate the agreement, pursuant to [36 CFR § 800.6\(c\)](#). A **two-party** *MOA* is executed by FDOT and the SHPO. The ACHP is not a participant but rather receives the *MOA* after FDOT and the SHPO have prepared and signed it.

FDOT may invite consulting parties to concur with the *MOA*. In addition, organizations or individuals may request, in writing, that they be allowed to join as concurring parties. The decision to accept additional parties to the *MOA* is made by FDOT. **Concurring parties** do not have the authority to amend or terminate the *MOA*, nor do they have responsibility for implementing any of the stipulations therein. Their signature on the agreement document simply affirms that they are familiar with and support the terms of the agreement.

The contents of the *MOA* will vary, depending on the kind of archaeological and historical properties involved, the nature of the project, and the kind of effect it is expected to have. **EXHIBIT 8.1**, adapted from the ACHP’s 1993 *Check List for a Good Agreement Document Under 36 CFR Part 800* and Thomas King’s (2000) *Federal Projects and Historic Places: the Section 106 Process* (Chapter 14), provides a checklist for effective agreement documents.

King advises against using old *MOAs* as the basis for a current document because:

Every agreement, every project, every property is unique, and what worked in one case is not necessarily appropriate to another. Besides, practitioners are constantly coming up with new and improved ways of writing agreements – better stipulations, clearer language, things that just work better. An old model is likely to be inappropriate to your needs, and technically flawed (2000:118).

Typically, the first section of the *MOA* introduces the undertaking, the affected historic properties, the consulting parties, and the pertinent authority and legislation. It is usually composed of a series of “**Whereas**” statements, and ends with a “**Now, therefore**” clause. Structure this preamble section logically. For example, in succession:

- Identify the undertaking and the agency carrying out the project;
- Identify the APE;
- Identify the affected historic properties within the APE; and
- Identify the consulting parties.

The next section contains the **stipulations**, the negotiated measures to avoid, minimize, or mitigate the adverse effects on historic properties. The stipulations often using the language “FDOT will ensure that...” for the various agreed upon steps that will be carried out. The *MOA* should include strong, structured stipulations for avoiding, minimizing, or mitigating adverse effects, so avoid using the passive voice and terms such as “may,” “should,” “if feasible,” and “if funding permits.” Be specific as to what entity is responsible for completing what. Clear time frames also should be established. In addition to the specific negotiated measures, the stipulations section contains a number of standard administrative stipulations. These typically address the duration of the *MOA*, monitoring and reporting, dispute resolution, amendments, and termination, among others. Wherever possible, use standard stipulations developed for inclusion in *MOAs* provided in the *FDOT MOA Template* available on OEM’s [Cultural Resources](#) webpage. There are additional examples available on the National Preservation Institute’s (NPI) [Standard Stipulations](#) website.

Following the stipulations, the *MOA* includes a closing statement regarding its **execution** and the implementation of its terms. For example, in a two-party *MOA*, state:

Execution of this MOA by FDOT and the Florida SHPO and implementation of its terms evidence that FDOT has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

The *MOA* ends with the **signatures** of all the consulting parties, including concurring parties, and the dates of execution. The *FDOT MOA Template* for a two-party document is available at [Cultural Resources](#). Contact OEM if a three-party document is needed.

8.4.2 Other Agreement Documents

Two other types of agreement documents are the “*Conditional No Adverse Effect*” determination and the **PA**. In the case of the former, FDOT may propose to perform an action such as rehabilitation, repair, or stabilization of a historic property in accordance with the *Secretary of the Interior’s Standards for Rehabilitation* [36 CFR § 68.3\(b\)](#) so that adverse effects can be avoided. If SHPO concurs with these “conditions,” pursuant to [36 CFR § 800.5\(b\)](#), suitable documentation will be prepared, consistent with the requirements for a finding of *No Adverse Effect*, as specified in [36 CFR § 800.11\(e\)](#) and **Section 8.2.2.1**.

A **PA** is a tool by which a federal agency program or large undertaking will comply with the *Section 106* review process by an alternative method. PAs generally are used for common types of undertakings (e.g., routine maintenance), and when a category or group of projects results in similar and repetitive effects on historic properties. The PA replaces case-by-case *Section 106* consultations and compliance with a programmatic approach. In accordance with [36 CFR § 800.14\(b\)\(1\)](#) a PA may be used:

- (i) *When effects on historic properties are similar and repetitive or are multi-State or regional in scope;*
- (ii) *When effects on historic properties cannot be fully determined prior to approval of an undertaking;*
- (iii) *When nonfederal parties are delegated major decision making responsibilities;*
- (iv) *When routine management activities are undertaken at Federal installations, facilities, or other land-management units; or*
- (v) *Where other circumstances warrant a departure from the normal Section 106 process.*

PAs are negotiated between the ACHP and FDOT in consultation with the SHPO, Native American tribes, and other relevant parties. Public involvement is a key facet in their development.

EXHIBIT 8.1

CHECKLIST FOR EFFECTIVE AGREEMENT DOCUMENTS

(Adapted from ACHP (1993) and King (2000))

General

- Structure the document logically
- Organize the document for easy reference
- Review document for internal consistency
- Address the entire undertaking
- Keep information and direction separate
- Make the document personality-free
- Anticipate what might go awry in implementing the agreement, and provide for it
- Consider making the contract scope of work (or other performance measure) an explicit part of the document (e.g., an appendix)
- Address all pertinent statutory authorities
- Have a “cold reader” review the document and provide a critique
- Have the document reviewed by a lawyer
- Check your citations of statutes, regulations, and other documents for accuracy
- Develop a PA or a “three party” *MOA* in consultation with the Council
- If your document is a PA or a “two-party” *MOA*, include the following with your submission to the Council:
 - the documentation needed to make it understandable to the Council, including everything called for by *36 CFR §§ 800.8(b) and (c)* and
 - a copy of the notification you sent the Council pursuant to *36 CFR § 800.8(a)*.
- If your document is an agreement-based determination of no adverse effect, include the following with your submission to the Council:
 - the documentation needed to make it understandable to the Council, including everything called for by *36 CFR § 800.8(a)* and
 - the agreement you have reached with the SHPO upon which the determination is based

Part 1 - Title

- Use the correct title for the kind of document you have prepared
- Identify the undertaking or program in the title
- Identify the signatory parties correctly in the title
- If you are amending an existing document, make this fact clear in the title

Part 2 – Preamble - “Whereas” and “Now, Therefore” clauses

- Clearly identify the undertaking, preferably citing a specific, dated document that describes it
- Clearly and consistently identify the responsible agency
- Document the consultation process
- Clearly identify the APE
- Identify the properties clearly and completely

- If your document is a *MOA*, specifically and consistently identify the historic properties involved
- If your document is a *PA*, include a clause or clauses establishing why you need an alternative to the standard *Section 106* process
- If you are using the document to address laws other than *Section 106*, indicate this and identify the laws
- If you are amending an existing document, make that clear in a “Whereas” clause or its equivalent
- If your document is a *MOA* or *PA*, use the correct “Now, Therefore” clause for the kind of document it is (two-party *MOA*, three-party *MOA*, *PA*)
- If implementation of the agreement is contingent upon agency approval of the undertaking, indicate this in the “Now, Therefore” clause or its equivalent

Part 3 - Stipulations/conditions

- Specify the agency responsible for ensuring that the stipulations or conditions are implemented
- Assign duties only to signatories and concurring parties
- Phrase all the stipulations or conditions in active voice
- Include all agreed upon provisions by the consulting parties
- Structure the stipulations or conditions in a logical order
- Represent only one agreed-upon measure in each stipulation or condition
- If you have used stipulations from King (2000), or from another agreement document, adjust the language appropriately to make it fit your situation
- Use terms, including acronyms, consistently
- Be sure to identify all acronyms
- Define any unusual terms you have used and minimize their use
- Use statutory or regulatory definitions where applicable, rather than alternative terms that lack such definitions
- Include full citations, with dates, whenever you have cited a statute, regulation, guideline, standard, plan, specification, or other document for the first time, and give the document a short title for subsequent reference
- Be consistent in your subsequent references to each such document
- Make sure each stipulation represents a single complete thought
- Give each stipulation its own alphanumerical indicator or name
- Include all relevant background documents
- If you have stipulated that some portion of *36 CFR Part 800* or another regulation, statute, or other document will be followed, do so explicitly by reference, rather than by paraphrasing
- Screen the stipulations or conditions for:
 - passive voice
 - internal or inter-stipulation contradictions
 - “soft” or unclear terms like “avoid,” “may,” and “should
 - subjunctives
 - undue subtlety
 - unspecified assumptions
 - paraphrasing of regulations, laws, or standards

- Consider, and either include or explicitly reject as unnecessary, all relevant administrative stipulations, such as:
 - provisions for dispute resolution among parties
 - provisions for resolving objections from others
 - specific, effective provisions for monitoring performance
 - a sunset clause
 - annual or other periodic reporting, with specific dates and expectations
 - annual reviews
 - performance bonds
 - provisions for review in the event something changes
 - mechanisms for making minor adjustments
 - mechanisms to ensure that responsible personnel are kept aware of their responsibilities under the agreement

Part 4 - Execution Clause and Signatories

- Use the correct ultimate clause for the kind of agreement document you prepared
- If implementation is contingent upon agency approval of the undertaking, indicate this in the concluding clause
- Provide correct signature blocks for all signatories
- If there are concurring parties, provide concurrence blocks for them
- If your document is a “two-party” *MOA*, give the Council an “Accepted” block, not a signature block
- If your document is a “three-party” *MOA*, give the Council a signature block, not an “Accepted” block

Appendices

- Include all necessary appendices
- Give each appendix a clear title and date
- In the body of the document, cite each appendix correctly and at each place you need to cite it

Notes:

When the undertaking is on or affects tribal lands, the term “THPO” refers to the representative of the tribe designated under *Section 101(d)(2)* of the *National Historic Preservation Act (NHPA)*. In the absence of a *Section 101(d)(2)* designee, “Tribal Representative” is used. When a tribe lacks a representative designated under *Section 101(d)(2)* of *NHPA*, the SHPO is also a signatory to the agreement along with that tribe.

Highlighted areas of the template indicate areas that can be tailored to the specifics of the undertaking; this includes omission or personalization, as needed.

The Dispute Resolution stipulation assumes that the term "signatory" has been defined in the *MOA* to include both signatories and invited signatories.

OEM must submit a copy of the executed *MOA*, along with the documentation that is specified in *36 CFR § 800.11(f)* to the ACHP prior to approving the undertaking in order to meet the requirements of *Section 106* and *36 CFR § 800.6(b)(1)(iv)*.

CHAPTER 9

HISTORIC RESOURCE MITIGATION

9.1 OVERVIEW

As part of the consultative process, FDOT considers all possible alternatives to avoid or minimize adverse effects on historic properties. When FDOT determines that adverse effects on historic properties cannot be avoided or minimized, then an appropriate form of mitigation is necessary. As described in **CHAPTER 8**, the mitigation measures are documented as stipulations in an agreement document, usually a *MOA*. This legally binding document is executed by FDOT, SHPO, and other signatories before the undertaking can proceed. FDOT is responsible for monitoring the transportation project activities in terms of the fulfillment of commitments included in the *MOA*.

This chapter focuses on a variety of standard and “creative” mitigation solutions for historic properties. Some mitigation measures, such as architectural and engineering documentation or rehabilitation, follow specific standards and guidelines, as set forth by the Secretary of the Interior. These standards and guidelines are not regulatory; they are intended to provide technical advice. The mitigation process for archaeological sites is the subject of **CHAPTER 10**.

9.2 HISTORIC PROPERTY MITIGATION OPTIONS

Mitigation refers to actions that reduce or compensate for the damage an undertaking may have on an NRHP-listed or eligible property. They are typically developed during the *Section 106* consultation process, and are expressed as stipulations in a *MOA*, *PA*, or other statement of commitments. Mitigation measures should be commensurate with the scale of the undertaking, and may entail a single activity, such as historic documentation, or multiple measures (e.g., historic documentation, salvage, and public interpretation) conducted concurrently for a single project. Public benefit is an essential consideration in determining the appropriate mitigation.

Standard mitigation measures for FDOT undertakings may include the following:

- **Historic Documentation** (i.e., drawings, photographs, and written histories) in accordance with HABS/HAER/HALS standards;
- **Preservation, Repair, Rehabilitation, Restoration, or Reconstruction** of the affected historic property in a manner sensitive to the qualities which make it historically significant, and sympathetic to the historic fabric of the property, in accordance with the Secretary of the Interior’s standards;
- **Salvage** of architectural or scientific/engineering elements; and/or
- **Relocation and Marketing**.

Non-standard mitigation measures for FDOT undertakings may include the following **Off-Site** or **Creative** mitigation measures, either in combination with one or more of the standard measures, or as stand-alone activities:

- **Off-Site Mitigation** is the development funding, and/or implementation of various types of educational materials or programming, or interpretive displays/exhibits;
- **Creative Mitigation** refers broadly to mitigation measures uniquely designed for the historic property in question in association with or in lieu of standard solutions.

Each specific mitigation measure should be appropriate to the significance of the historic property. For example, HABS/HAER/HALS documentation typically is conducted for properties eligible under Criterion C in the area of Architecture, Landscape Architecture, or Engineering. On the other hand, public interpretation or research initiatives may be performed for historic properties eligible under Criteria A or B. The level of documentation for a historic resource significant as a contributing resource to a NRHP-listed or eligible historic district may require less attention than an individually eligible building, structure, site, or object.

It should be reiterated that during the consultation process, and in keeping with *Section 4(f)* of the *Department of Transportation Act of 1966 (PUB. L. 89-670)*, **avoidance** measures should be examined as solutions FDOT can implement so that the proposed undertaking would have a no adverse effect determination for both *Section 106* and *Section 4(f)*. For example:

- Realigning the roadway corridor to avoid a historic property.
- Dividing a multi-lane urban road into two one-way corridors through historic districts to avoid/limit the amount of ROW taking.
- Locating proposed pond sites outside of historic property boundaries.

9.2.1 HISTORIC DOCUMENTATION

At a minimum, for most undertakings that involve demolition or substantial alteration (including partial demolition) of a historic property, mitigation is achieved through **historic documentation** consistent with the [NPS' Heritage Documentation Programs](#) (HABS/HAER/HALS). The goal of the Heritage Documentation Programs is to create a permanent record of the historical, architectural, engineering, technological, and/or cultural significance of a historic property. The HABS/HAER/HALS collection constitutes the nation's largest archive of historic architectural, engineering, and landscape documentation with records on nearly 43,000 historic sites, which are maintained in a special collection at the Library of Congress. The documentation is available to the public copyright free in both hard copy (in the Library of Congress) and electronic formats (at the above link).

HABS, established in 1933, is the oldest of the three programs. Its primary focus is historic buildings with non-industrial functions (residences, churches, offices, etc.); although in its early years, it encompassed all aspects of the built environment. HAER was established in 1969, in conjunction with the American Society of Civil Engineers, to focus on historic sites and structures related to engineering and technology. Resources such as bridges, industrial/manufacturing complexes, railroads, canals, and roads are recorded to HAER guidelines. HALS was established in 2000 to focus on historic landscapes, defined as anything from small gardens to national parks. This includes resources such as cemeteries, farms, and quarries.

HABS/HAER/HALS documentation is completed in accordance with the [Secretary of the Interior's Standards & Guidelines for Architectural and Engineering Documentation](#), hereafter, *Secretary's Standards*, which were derived from the original HABS/HAER standards set by the NPS. Contact the NPS Southeast Regional Office in Atlanta before proceeding with the documentation effort to confirm current HABS/HAER/HALS guidelines. The documentation package provides a detailed and comprehensive record of the property's significance, and must reflect the events, features, and values that qualify the property for listing in the NRHP.

The level of documentation, typically determined by FDOT in consultation with the SHPO and specified in the *MOA*, must be appropriate to the significance of the building, structure, site, object, or district. General guidelines for specifying the level of documentation are as follows:

- **Level I:** This level is required for NHL resources and occasionally is used for NRHP-listed or eligible resources depending on the reason for mitigation.
- **Level II:** This level primarily is used for most NRHP-listed or -eligible resources but depends on the reason for mitigation.
- **Level III:** This level primarily is used for contributing resources within an NRHP-listed or eligible historic district.

The *Secretary's Standards* include four standards of documentation that all HABS/HAER/HALS projects must meet to be accepted into the collections. These four **standards of documentation** are as follows:

- **Standard I-Content:** Documentation shall adequately explicate and illustrate what is significant or valuable about the historic building, site, structure, or object.
- **Standard II-Quality:** Documentation shall be prepared accurately from reliable sources with limitations clearly stated to permit independent verification of the information.
- **Standard III-Materials:** Documentation shall be prepared on materials that are readily reproducible, durable, and in standard sizes.
- **Standard IV-Presentation:** Documentation shall be produced clearly and concisely.

The **Content** standard, as contained in the [FR, Volume 68, No. 139, 43159](#), specifies the requirements for content for each of the three levels of documentation as follows:

Level I

1. *Drawings: a full set of measured drawings depicting existing or historic conditions*
2. *Photographs: photographs with large-format negatives of exterior and interior views; photocopies with large format negatives of select, existing drawings or historic views that are produced in accordance with the U.S. Copyright Act (as amended)*
3. *Written data: history and description*

Level II

1. *Drawings: select existing drawings, where available, may be photographed with large-format negatives or photographically reproduced on Mylar® in accordance with the U.S. Copyright Act, as amended*
2. *Photographs: photographs with large-format negatives of exterior and interior views, or historic views where available and produced in accordance with the U.S. Copyright Act, as amended*
3. *Written data: History and description*

Level III

1. *Drawings: sketch plan*
2. *Photographs: photographs with large-format negatives of exterior and interior views*
3. *Written data: short form for historical reports*

In addition to these requirements, other media, such as films, may be used to document historic properties in accordance with HABS/HAER/HALS standards; these efforts should be coordinated with the NPS Southeast Regional Office.

The other three standards, **quality, materials, and presentation**, are specified by the different types of content (drawings, photographs, written data), as opposed to the different levels of documentation. A discussion of each type of content follows, with **quality, materials, and presentation** standards noted.

Measured drawings: HABS/HAER/HALS **drawings** are considered “as-built” drawings and should illustrate the existing conditions of the historic property at the time of documentation. These drawings should portray or interpret the significant features of the structure or site being documented. For HABS/HAER projects, portrayal drawings can include site plans, floor plans, elevations (interior and exterior), sections, and details; interpretive drawings can include circulation patterns and industrial processes. HALS portrayal drawings can include location plans, layout plans, topographic plans, vegetative plans, sections, and elevations; interpretive drawings might include step-by-step schematics that illustrate the evolution of a site or reconstructed historical perspective views.

Dimensions for measured drawings typically come from hand measuring, existing documents, and photographs. Hand measuring, the most common method of producing measured drawings, entails going to the site and taping distances, surveying, and/or measuring and counting repetitive materials. Existing documents, such as drawings, specifications, or building permits, are the easiest way to obtain measurements. Because these sources may not portray “as-built” conditions, these measurements should be confirmed in the field. Photography methods, such as rectified photography, stereophotogrammetry, and analytical photogrammetry, combine principles of photography and geometry that enable measured drawings to be created from photographs. It is important to establish a measurable scale or grid when using these methods.

In accordance with current NPS guidance, measured drawings from **laser scans** are now acceptable, with restrictions. The use of laser scanning is particularly appropriate when recording exceptionally large structures, sculptural objects, and ones that are not readily accessible. However, HABS/HAER/HALS does not use laser scanning for recording exclusively but always combines it with hand-measuring. “The scanned data taken of the elevations are combined with the hand-measured details and plans and then traced to delineate a hard line for the otherwise indistinct edges created by the point cloud data.” For more information about the pros and cons of using laser scanning for heritage documentation, go to [Laser Scan Guidance - Heritage Documentation Programs \(nps.gov\)](https://www.nps.gov/learn/management/using-laser-scanning-heritage-documentation).

Level III sketch plans typically are included when they help explain a structure, site, or landscape. They can be produced from the same methods as Level I measured drawings but generally are not as detailed as measured drawings. Additionally, they do not have to be on standard HABS/HAER/HALS title blocks/sheet sizes, and do not have to be drawn/printed on translucent material (see below).

Quality, materials, and presentation standards for measured drawings are as follows:

Quality:

- Produced from recorded, accurate measurements.
- No portions produced from hypothesis or non-measurement related activities (inaccessible areas must be clearly labeled as such on drawings).
- Level I measured drawings to be accompanied by a set of field notebooks in which measurements were first recorded.
- Drawings used for Levels II and III must include a statement describing where the original drawings are located.

Materials:

- Ink on translucent material that is archivally stable, such as Mylar®.

- Three standard sizes: 19" x 24", 24" x 36", or 34" x 44".

Presentation:

- Lettered mechanically or in a hand-printed equivalent style.
- Include adequate dimensions on all sheets.
- Level III sketch plans must be neat and orderly.

In accordance with technical information provided by the NPS, if using Computer-Aided Drafting (CAD) to prepare measured drawings, the use of a layering system based on the CAD Layer Guidelines developed by the American Institute of Architects is recommended. Requirements for line weights, fonts, sheet material, and plotters are available in the [HABS/HAER/HALS Guidelines](#) on the NPS website.

Photographs: The HABS/HAER/HALS programs use large-format photography, which produces 4"x5", 5"x7", or 8"x10" negatives, for the formal photographs submitted to the Library of Congress; informal field photographs can be taken with 35mm or digital cameras. Large-format negatives capture details better than small or medium-format prints. Additionally, the formal photographs are produced with black-and-white film, which are more archivally stable than color films, and will last at least 100 years.

While the quantity of photographs and specific views depend on the nature of the structure, site, or object and the purpose for documentation, the NPS offers the following suggestions for various resources:

Architectural Structures (HABS):

- General or environmental view(s) that illustrate the setting, including landscaping, adjacent/ancillary buildings, and roadways.
- Front (main) façade, with and without a scale stick.
- Perspective view, front and one side.
- Perspective view, rear and opposing side.
- Detail, front entrance and/or typical doorway.
- Typical window.
- Exterior details (chimneys, oriels, date stones, ornamentation, etc.) indicative of era of construction or architectural design.
- Interior views to capture spatial relationships, structural evidence, a typical room, and decorative elements (hallways, stairways, fireplaces and mantels, moldings, etc.).
- Ancillary structures (detached garages, sheds, barns, etc.).

Engineering and Industrial Structures (HAER):

- Same views listed for architectural structures; and
- Extant machinery and equipment, including spatial arrangements.
- Machinery details (valves of a steam engine, gearing) or other details that reveal the machine's function.
- Power transmission systems (line shafting).
- General views and details of structural framing systems (roof trusses, floor beams, pedestals, etc.) for the building and equipment.

Bridges (HAER):

- General view of all sides.
- Detail views of various elements (portals, vertical members, traffic deck, manufacturer's badge, decorative features, etc.).
- Traffic deck support system, if accessible (floor beams, stringers, etc., viewed from underneath the bridge).
- Abutments and approach details.

Linear Resources (canals, railroads, roads) (HAER):

- General views of the resource itself.
- Significant or typical structures (e.g., culverts, retaining walls, bridges, locks, dams).
- Contextual views that illustrate the resource's path through the landscape.

Cultural Landscapes (HALS):

- Contextual views of the landscape under various seasonal conditions.
- Aerial photographs, if appropriate (large landscape).
- General landscape views.
- Structures and structural elements (fences, hardscaping).
- Views that capture the spatial relationships of buildings, structures, and the landscape.
- Significant vegetation (identified with the common and botanical names).

Each formal photograph is given its own photograph number, which includes the assigned HABS/HAER/HALS number for the resource, followed by -1, -2, -3, etc. The photographs should be ordered in a logical manner, with contextual views placed first, followed by overall exterior views, exterior details, overall interior views, and interior details. Any photographic copies of historic photographs, maps, or drawings come last. The photographs are accompanied by an Index to Photographs, which includes a caption describing each image. The caption should be specific to the view, and note compass directions (written out instead of abbreviated), locations on or in the structure, and significant features. It should be noted that no two photographs should have the same caption.

Photographic prints are all produced at contact print size; i.e., the image area is the same exact size as the negative. Prints must include the margins or borders of the film. No cropping of the image is allowed. Archival, digitally produced "contact-style" prints produced from scanned TIFFs of the film negatives also are acceptable. These must be equivalent in quality to the traditional photographic contact print, and be a true representation of the negative, including the borders. The digital contact prints can be made from TIFFs by scanning the film and printing it on 100 percent cotton, acid-free matte paper using pigment or carbon inks on an inkjet printer. The most current [HABS/HAER/HALS Photography Guidelines](#) reflect the changes in the availability of necessary materials. If existing drawings or photographs are scanned or photographically copied, a [copyright release form](#) must be obtained if the drawings are not in the public domain.

Quality, materials, and presentation standards for photographs are as follows:

Quality:

- Clearly depict the appearance of the property and its significant area(s).
- Each view shall be perspective-corrected and fully captioned.

Materials:

- One print per negative.
- Negatives on polyester-based film of medium and slow speed (100 and 400 ASA).
- Prints on fiber paper (either single- or double-weight); no resin-coated paper.
- Negatives acceptable in three sizes: 4" x 5", 5" x 7", or 8" x 10".

Presentation:

- **Level I** photos shall include duplicate photographs that include a scale.
- **Level II and III** photos shall include at least one photograph with a scale, usually of the principal facade.

Written Data: The **written data** of a HABS/HAER/HALS documentation project consists of any written work that describes the building, site, structure, object, or landscape, and highlights its historical, architectural, technological, or cultural significance. The written data varies in form and length, depending on the level of documentation. Levels I and II typically use the appropriate outline format, whereas Level III typically uses the short form. However, the short form can be used for any level, especially where research time is limited or research yields little information on the historic property. All written data should follow the *Chicago Manual of Style*.

The [HABS, HAER, and HALS short form](#) is generally only a few pages in length and is ordered in the following manner (applicable program in parenthesis):

- Resource Name (HABS)
- Location (HABS/HAER/HALS)
- Date(s) of Construction (HAER)
- Architect/Engineer/Builder (HAER)
- Original Owner/Occupant and Use (HAER)
- Present Owner/Occupant and Use (HAER)
- Significance (HABS/HAER/HALS)
- Description (HABS/HAER/HALS)
- History (HABS/HAER/HALS)
- Sources (HABS/HAER/HALS)
- Historian(s) (HABS/HAER/HALS)
- Project Information (HABS/HAER)

Similarly, the outline formats for the three programs are similar in nature. All three start with the basic information about the resource and documentation package (location, present owner/occupant, present use, significance, historian(s), and project information), which is then followed by the historical information (including the physical history and historical context); the physical description; and the sources of information. Each program has its own requirements for the historical information, physical description, and sources of information. See the appropriate NPS guidelines for more information.

Quality, materials, and presentation standards for written data are as follows:

Quality:

- **Levels I and II** shall be based on primary sources to the greatest extent possible; for Level III, secondary sources may provide adequate information.

- Include an assessment of the reliability and limitation of sources.
- Include footnotes for statements within the written history as appropriate.
- Include a methodology section that specifies the name of the researcher, date of the research, sources consulted, and limitations of the project.

Materials:

- Clean copy to allow for photocopying.
- 8 1/2" x 11" archival bond paper.

Presentation:

- Typewritten or laser printed.
- Follow accepted rules of grammar.

Procedures for Processing and Submittal: FDOT typically uses the professional services of a cultural resources consultant to prepare the HABS/HAER/HALS documentation package. The consultant and agency follow these steps:

- Step 1:** The CRM consultant prepares the draft documentation package and provides to the District CRC or PM for review (typically, just the written data, index to photographs, and sketch plan [Level III only]; digital representations of the photographs also can be included).
- Step 2:** The District CRC, PM, or designee reviews the documentation package and requests changes, if needed. If changes are needed, the document is returned to the consultant, revisions are made, and the draft documentation package (with photographic prints) is resubmitted to the District.
- Step 3:** The District CRC/PM submits the revised draft documentation package, along with a cover transmittal letter, to the NPS Southeast Regional Office in Atlanta (required) and SHPO (courtesy) for review and copies the State CRC on the submission. The documentation package must include:
- A copy of the signed *MOA* or agreement document, if applicable;
 - Written data printed on standard photocopy paper;
 - A set of archival photographs labeled in numeric order (mount cards are not necessary for this submission);
 - A blank negative and archival print; and
 - A copyright release, if applicable.
- Step 4:** Allow the NPS a minimum of 30 days to review the package. They will assign the official HABS/HAER/HALS number for the project and return the package to FDOT with review comments and the District forwards it to the consultant. The SHPO, typically, will defer to NPS for the content review, but receives the draft submission as courtesy as a signatory to the *MOA*.
- Step 5:** The consultant revises the documentation, as necessary, and provides the written data, index to photographs, and/or sketch plan to the District CRC/PM for review. In the meantime, the consultant labels the photographic prints, mount cards, negatives, and negative sleeves with the NPS-assigned number.

- Step 6:** The District CRC, PM, or designee reviews the revised document and requests changes, if needed. If changes are needed, the document is returned to the consultant and the revisions are made.
- Step 7:** The consultant provides District CRC, PM, or designee with the final package for the NPS, plus additional archival and non-archival sets, as specified in the Scope of Work.
- Step 8:** The District CRC, PM, or designee checks the documentation package for completeness (along with a cover transmittal letter) prior to submittal to the NPS Southeast Regional Office.
- Step 9:** The NPS Southeast Regional Office provides an “acceptance letter” to the FDOT after review and concurrence of the documentation. The NPS office then sends the package to the central NPS Office (Washington, DC), which will forward it to the Library of Congress for incorporation into the National Historic Architectural and Engineering Records or “with such other appropriate agency as may be designed by the Secretary, for future use and reference,” as per *Section 101(b)* of the *NHPA*.
- Step 10** The District CRC sends a copy of the final package and NPR acceptance letter to SHPO for their records.

9.2.2 PRESERVATION, REHABILITATION, RESTORATION, & RECONSTRUCTION

Beneath the umbrella of [The Secretary of the Interior's Standards for the Treatment of Historic Properties \(36 CFR Part 68\)](#), the NPS provides guidance in the form of Technical Preservation Services for historic property owners, managers, and preservationists. These services include clear definitions of **Preservation** (Maintenance & Repair), **Rehabilitation**, **Restoration**, and **Reconstruction**, as well as providing *Secretary of the Interior's Standards and Guideline* documents for each treatment option (individually linked below). SOI Standards present concepts about maintaining, repairing, and replacing historic materials for each treatment category and the Guidelines describe how to apply the Standards and discuss specific treatments that do and do not meet the Standards. These four mitigation measures, Preservation, Rehabilitation, Restoration, and Reconstruction are often utilized in conjunction with HABS/HAER/HALS documentation of the existing historic property, and the documentation of the repair, rehabilitation, restoration, or reconstruction process may also be required as a mitigation measure.

Preservation is defined as “...*the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features, rather than extensive replacement and new construction.*” Routine **maintenance** of historic properties is the preferred management approach to keep a property operational and avoid, or minimally reduce, the need for repair to historic elements of a property. Maintenance is a proactive aspect of preservation whereas **repair** refers to the reactive action of fixing a broken or damaged element, feature, or characteristic of a historic property so that it may resume or continue to function in its current capacity. **Stabilization** can be both proactive and reactive and involves intervening in an aspect of a historic property to head off foreseeable deterioration or halt a deterioration process already set in motion, but which has not yet substantially compromised the historic characteristic to the point of needing repairs. FDOT implements a robust maintenance plan for historic properties, but even the best proactive maintenance plan cannot account for unplanned or accidental damage necessitating repair. In these instances, the reparation should be addressed in a manner appropriate to maintain the historic significance of the property. [Standards for Preservation & Guidelines for Preserving Historic Buildings](#) (pages 27-74).

Rehabilitation is defined as “*the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.*” It entails making alterations to meet new uses while retaining the historic character. [Standards for Rehabilitation & Guidelines for Rehabilitating Historic Buildings](#) (pages 75-162) and [Illustrated Guidelines on Sustainability for Rehabilitating Historic Buildings](#).

Restoration is more restrictive and allows for the depiction of a building at a particular time in its history by preserving materials from the period of significance and removing materials from other periods. Upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project. [Standards for Restoration & Guidelines for Restoring Historic Buildings](#) (pages 163-224).

Reconstruction is defined as “*the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.*” [Standards for Reconstruction & Guidelines for Reconstructing Historic Buildings](#) (pages 225-239).

Some possible scenarios for the application of these measures include the following:

- Rehabilitate or restore an NRHP-listed or -eligible bridge rather than replace it with a new one. This includes maintaining what is significant about the bridge, whether it be architectural or mechanical (i.e., structural design of bridge, architectural or decorative features, or drawbridge machinery).
- Rehabilitate or restore an NRHP-listed or -eligible bridge along with construction of a new aesthetically compatible companion bridge which would handle excess traffic (for traffic in the other direction) or for all automobile traffic when reusing the historic bridge for pedestrian, bicycle, trolley, or other mode of transportation. Again, this includes maintaining what is significant about the bridge, whether it be architectural or mechanical.
- Reconstruct an NRHP-listed or -eligible bridge in the original location, taking care to present a replicate to the original structure during its period of significance, to the greatest extent possible while meeting safety and operational requirements.
- Rehabilitate or restore an NRHP-listed or -eligible landscape bordering the proposed roadway improvement or at least replant the area so that one day it will look similar. This can include canopy trees flanking an existing roadway, significant wildflowers in medians and beside the roadway, and planned hedges of significant plant types. It also could include replanting or restoring all or part of a formal or informal landscape plan on an NRHP-listed or eligible parcel that may be affected by the taking of additional right-of-way.
- Rehabilitate or restore an NRHP-listed or -eligible streetscape’s features such as street paving and curbing, sidewalks, lights, benches, fences, walls, etc.

9.2.3 SALVAGE OF ARCHITECTURAL INFORMATION AND MATERIALS

Salvage is defined as something saved from neglect or destruction. Prior to demolition of a building or structure, significant historical, architectural and/or engineering features may be removed and saved. Salvage is preceded by HABS/HAER/HALS documentation as a companion mitigation measure. Prior to commencing documentation and salvage, a detailed mitigation proposal, including an illustration (drawings and/or photographs) of which elements are to be salvaged should be submitted by FDOT to the SHPO for review and approval. In accordance with the stipulations of the agreement document, an

interested party, such as a local museum or historic preservation group, may participate in the selection of elements significant for their historical associations, architecture and/or engineering. In some cases, FDOT may use the salvaged materials, such as architectural elements of a bridge, road or sidewalk paving, street lighting, etc. in the new construction. Unique or otherwise historically and/or architecturally significant elements also may be donated to a local museum for display and/or curation. A summary report documenting the salvage process, including the methods used and the location of the salvaged materials and elements, should be prepared, including an inventory and photographs of salvaged materials.

9.2.4 RELOCATION AND MARKETING

Although relocation is considered an *adverse effect*, it may be the most appropriate method of mitigation when a historic property will be destroyed if left in place. Relocation of NRHP-listed or -eligible buildings, structures, or objects may involve moving the resource onto another part of the existing property or onto another parcel. Relocation as a mitigation measure is conducted in tandem with initial HABS/HAER documentation. Other companion mitigation measures may include rehabilitation or restoration, in accordance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* ([36 CFR Part 68](#)). In all cases, careful planning is essential.

When a property will be moved from its existing site, FDOT and its consultants prepare a **Relocation Plan** that describes the measures used to determine the feasibility of moving the building or structure. Also included in the plan is a discussion of the appropriateness of the newly proposed site(s). FDOT affords the SHPO the opportunity to review and comment. When reviewing potential sites, FDOT will give preference to locations with similar architecture, land use, and setting. Additional requirements and considerations regarding relocation include:

- The property should be moved in accordance with the recommended approaches in *Moving Historic Buildings* by John Obed Curtis (1979) and in consultation with the SHPO.
- The property should be moved by a professional who has demonstrated experience in moving similar historic properties.
- If the building will stand vacant for a period of time before or after the move, provisions should be made for adequate security and protection, as well as for safeguarding the property from deterioration.
- After the move, the NRHP eligibility of the property on its new site should be reevaluated.

If stipulated in the *MOA*, relocation may be accompanied by the development of a **Marketing Plan**. Marketing is an attempt to make the historic property available for donation to a government or public entity showing a willingness to accept title for and capable of demonstrating the financial ability to continue maintenance. Therefore, the purpose of the Marketing Plan is to find a qualified buyer to move the historic property to a new site.

FDOT, in consultation with the SHPO, can attempt to locate parties who are interested in purchasing and relocating the historic property to a new site. In cases where the historic property or properties are contributing resources to a NRHP-listed or eligible historic district, preference is given to a new site located within or adjacent to the historic district. The Marketing Plan typically includes the following elements:

- An information package about the property, including but not limited to the following:
- Photographs of the property;

- A parcel map;
- Information on the property’s historic significance;
- Information on the property’s cost; information on any Federal assistance that may be available to purchasers; for example, applying the cost of demolition to the purchase price or to the cost of rehabilitation;
- Information on federal [and other] tax benefits for rehabilitation of historic structures;
- Notification that the purchaser will be required to [rehabilitate/maintain] the property in accordance with the recommended approaches in *The Secretary of the Interior’s Standards for the Treatment of Historic Properties*;
- Notification of any requirement for inclusion of a restrictive covenant in the transfer document;
- A distribution list of potential purchasers or transferees;
- An advertising plan and schedule; and
- A schedule for receiving and reviewing offers.

One highly successful example of a FHWA/FDOT undertaking involving relocation as a mitigation measure was the Tampa Interstate Study. Beginning in 1987, FDOT and FHWA developed a master plan for interstate system improvements in Hillsborough County. After every effort had been made to minimize and avoid adverse impacts within the Ybor City National Historic Landmark District, 10% of the nearly 1,000 historic buildings would still have to be cleared to widen I-4. After almost three years of research and negotiations between federal, state, and local agencies, a *MOA* was signed in late 1996. As a result, 64 historic buildings were relocated. Of these, FHWA/FDOT were responsible for the rehabilitation of 35 buildings within the proposed highway footprint. Many of these historic properties were relocated within the Ybor City Historic District, infilling vacant lots and redeveloping the neighborhood. Other relocated historic buildings were sold to private individuals who agreed to rehabilitate the exterior in accordance with the *Secretary of the Interior’s Standards for Rehabilitation* within two years of purchase.

In the case of historic bridges, marketing is a legal requirement. [23 U.S.C. § 144](#) requires that before any bridge listed in or eligible for listing in the NRHP is demolished for a bridge replacement project using funds provided by the federal Highway Bridge Program, the bridge shall first be made “available for donation to a State, locality or responsible private entity.” Additionally, the effort is coordinated with the SHPO and local historical agency/society, as appropriate, to ensure that a reasonable audience is reached, and a good-faith effort is made. Although FDOT does not have a formal marketing program for significant bridges, there are many successful examples of bridge relocation and reuse. When no longer sufficient for highway use, the relocation and use of some truss and swing bridges for incorporation into pedestrian, equestrian, and/or bicycle networks off the state system has proved to be successful. For example, the Tamiami Swing Bridge was moved from its location crossing the Tamiami Canal to along the South Fork of the Miami River, allowing access from Fern Island Park to the Police Benevolent Association property. *A Bridge Worth Saving: A Community Guide to Historic Bridge Preservation* by Mike Mort (2008) is a useful resource to assist in the marketing and rehabilitation process.

9.2.5 OFF-SITE AND CREATIVE MITIGATION

In addition to the standard types of mitigation measures described above, FDOT, in consultation with the SHPO and other consulting parties, may agree that off-site and/or creative mitigation measures provide a greater value to the public in compensating for the loss of the historic property. These

measures, contained as stipulations in the agreement document, may include direct public interpretation initiatives as well as indirect solutions. Examples of research and public education initiatives include:

- Documentary videos presenting the historical/architectural/engineering significance of the historic property;
- Oral histories to help “tell the story” of the affected property and its place in time;
- Educational materials and websites;
- Brochures and other publications;
- Three-dimensional digital representations;
- Historic property management plans;
- NRHP nomination for a group of similar historic property types;
- Historic context development for a group of similar historic property types (e.g., Florida’s swing bridges; significant features along a historic railroad system; residential buildings associated with the Sarasota School of Architecture; pre-World War II citrus packing houses). These contexts may aid in the future identification and evaluation of historic properties;
- Public displays, exhibits, monuments, markers, or plaques; or
- Project information center to educate the citizens about the unique historical, archaeological and/or engineering aspects of the project (e.g., bridge replacement), and including the presentation of research findings.

Indirect “creative” mitigation measures may include:

- Assistance in the development of local historic preservation plans or ordinances;
- Lectures, open houses, and/or development of guided walking or driving tours;
- Purchase of historic properties;
- Funding of historic resources surveys and evaluations;
- Creation of scholarships for graduate research on related historic topics;
- Creation of an agency historic preservation fund for the interpretation and preservation of historic properties;
- Funding of a dedicated SHPO reviewer to accommodate agency needs; or
- Application of funds for study, recordation, stabilization, rehabilitation, or interpretation of related historic properties not owned or controlled by FDOT.

CHAPTER 10

ARCHAEOLOGICAL MITIGATION

10.1 OVERVIEW

In cases where an undertaking will result in adverse effects to a NRHP-listed or eligible archaeological site significant for the information it contains, and where preservation in place is not feasible, excavation and data recovery may be the best mitigation measure. While data recovery is NOT required by law, it is the most commonly agreed-upon measure for archaeological sites evaluated as significant under Criterion D, since it preserves important information that would otherwise be lost. For sites whose significance is not related to their research value (i.e., possesses scientific or educational value, or is potentially important as a heritage tourism asset), there is an opportunity for alternative mitigation treatments.

This chapter begins with a brief look at mitigation treatments designed to avoid or minimize adverse effects to archaeological sites. It lists measures that might be suitable as alternatives to excavation and data recovery. A detailed description of mitigation through archaeological excavation and data recovery follows. Included are content requirements for data recovery plans/research designs and excavation reports, plus standard excavation and analysis techniques.

10.2 ARCHAEOLOGICAL MITIGATION ALTERNATIVES

Mitigation includes actions that reduce or compensate for the impacts an undertaking may have on a NRHP-listed or eligible archaeological site. The appropriate mitigation measures depend on a number of factors, including the applicable criteria for NRHP eligibility and the nature of the effects of the proposed undertaking. Mitigation measures for individual undertakings, as agreed upon by the consulting parties, are usually formalized as stipulations within an *MOA*. Whenever possible, the best measure is to actively preserve the archaeological site in place and to protect it from damage. If preservation is not feasible, minimization alternatives are the next best option. Data recovery through archaeological excavation is an adverse effect and is undertaken only as a measure of last resort.

Burial sites are sensitive for the social, cultural, religious, and ceremonial values attached to them, and avoidance or disturbance to human remains on federal, tribal, state, or privately-held lands is mandated by federal ([NAGPRA](#)) and state ([Chapter 872, Fl. Stat.](#)) laws. Therefore, sites known to contain human remains, such as aboriginal burial mounds and cemeteries (precontact and historic) must be preserved and protected from damage or destruction. For FDOT undertakings, these sites are never appropriate for mitigative excavation. Additionally, sites containing funerary objects, sacred objects, or items of cultural patrimony, as defined by *NAGPRA*, should not be excavated.

10.2.1 Minimization Measures

Commonly applied alternative measures for minimizing harm to significant archaeological sites include the following:

- **Redesign or reorientation** of the project. For example, redesign of a median as open space may be appropriate to preserve an archaeological site of small size and well-defined boundary. Limiting the width of the proposed ROW or adjusting the locations of proposed pond sites also will limit direct construction impacts.
- **Repair, rehabilitation, or restoration** of an affected site. This measure may be suitable for historic period archaeological sites that contain architectural features (e.g., sugar mill ruins, a

turpentine still, and a defensive wall at a battlefield site). The restoration of vandalized or eroded surface features of a site also may be appropriate.

- In-place **preservation/protection** of archaeological deposits can be accomplished in a variety of ways. Examples include covering the site with clean fill material, easily distinguished from the soil matrix of the site; planting native vegetation to stabilize the area (e.g., shoreline) adjacent to a site to prevent erosion; the use of fencing or barriers to route traffic away from the site; or the incorporation of the site into the project design, followed by periodic inspection.
- **Restriction** of ground disturbing activities to depths shallower than the uppermost culturally sterile zone of deeply buried sites. For example, parking lot development is one type of shallow construction activity that may occur without adversely affecting underlying buried significant archaeological resources, conditions depending.
- **Monitoring** is another method to minimize and/or mitigate project impacts. For example, data recovery projects typically focus on only a sample of a large site area; un-excavated portions of the site might still be directly impacted by construction. Archaeological monitoring of ground disturbance, such as trenching or mechanical grading during construction is one way to document features and to recover data that would otherwise be lost.

10.2.2 Off-Site Mitigation

Off-site mitigation measures include a variety of research and education options, including the following:

- Preparation of a historic context for the region or syntheses of existing information;
- Preparation of a NRHP nomination for similar sites in the area, possibly comprising an archaeological district (e.g., St. Johns II period shell midden sites along Mosquito Lagoon);
- Publication of books, articles, technical assistance bulletins, land management plans, and local government comprehensive plans concerned with historic preservation issues, policies, and procedures;
- Preparation of modules for schools and classroom lecture material concerned with Florida's pre-contact heritage and archaeological site preservation and protection;
- Development of exhibits and interpretive displays, documentary videos, brochures, and websites highlighting the local prehistory, historic resources, and/or historic preservation programs of state and local governments;
- Site tours, public lectures and archaeology programs, market days, and celebrations in historic districts, and other activities drawing attention to the historic resources representing the prehistoric and historic heritage of the state and our communities; and
- Acquisition and preservation of archaeological sites away from the project APE in return for doing little or no direct mitigation on sites within the APE.

Given the nature of the FDOT undertaking, if preservation in place or any of these avoidance and minimization alternatives is not feasible, data recovery through archaeological excavation will be performed in an appropriate manner as a means of preserving the site's significance. Often, a combination of strategic data recovery and research, and/or public education initiatives are conducted.

10.3 EXCAVATION AND DATA RECOVERY

Data recovery through archaeological excavation, also referred to as Phase III mitigative excavation, is appropriate for those archaeological sites considered significant for their information potential and with minimal value for preservation in place. Only the portion of the site that will be adversely affected by the undertaking is included in the data recovery effort. While at least part of the significant site will be destroyed, mitigative excavation preserves data in the form of a written document, curated archaeological materials, and informational materials suitable for the public.

The following basic “principles” outlined by the ACHP in their *Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites* are applicable for all FDOT excavation projects:

- The pursuit of knowledge about the past is in the public’s interest.
- An archeological site may have important values for living communities and cultural descendants in addition to its significance as a resource for learning about the past; its appropriate treatment depends on its research significance, weighed against these other public values.
- Not all information about the past is equally important; therefore, not all archeological sites are equally important for research purposes.
- Methods for recovering information from archeological sites, particularly large-scale excavations, are by their nature destructive. The site is destroyed as it is excavated. Therefore, management of archeological sites should be conducted in a spirit of stewardship for future generations, with full recognition of their nonrenewable nature and their potential multiple uses and public values.
- Given the non-renewable nature of archeological sites, it follows that if an archeological site can be practically preserved in place for future study or other use, it usually should be (although there are exceptions). However, simple avoidance of a site is not the same as preservation.
- Recovery of significant archeological information through controlled excavation and other scientific recording methods, as well as destruction without data recovery, may both be appropriate treatments for certain archeological sites.
- Once a decision has been made to recover archeological information through excavation, a research design and data recovery plan based on firm background data, sound planning, and accepted archeological methods should be formulated and implemented. Data recovery and analysis should be accomplished in a thorough, efficient manner, using the most cost-effective techniques practicable. A responsible archeological data recovery plan should provide for reporting and dissemination of results, as well as interpretation of what has been learned so that it is understandable and accessible to the public. Appropriate arrangements for the curation of archeological materials and records must be made. Adequate time and funds should be budgeted for fulfillment of the overall plan.
- Archeological data recovery plans and their research designs should be grounded in and related to the priorities established in regional, state, and local historic preservation plans, the needs of land and resource managers, academic research interests, and other legitimate public interests.
- Human remains and funerary objects deserve respect and should be treated appropriately. The presence of human remains in an archeological site usually gives the site an added importance as

a burial site or cemetery, and the values associated with burial sites need to be fully considered in the consultation process.

- Large-scale, long-term archeological identification and management programs require careful consideration of management needs, appreciation for the range of archeological values represented, periodic synthesis of research and other program results, and professional peer review and oversight.

10.3.1 Project Planning Considerations

In planning a Phase III mitigative excavation project, FDOT and its consultant should consider or be aware of the following:

- **Time and Cost Considerations:** Site excavation and subsequent analyses and report production are costly and labor-intensive activities. A large, internally complex site yielding many artifacts and other classes of materials (e.g., faunal remains), which typically entail specialized analyses, may require several years of study and documentation. To demonstrate that FDOT has met its obligations pursuant to the stipulations of the *MOA*, as appropriate, FDOT and its consultant may prepare a Management Summary at a level of detail sufficient to allow for timely SHPO review and project clearance.
- **Site Security:** The protection of the site from vandalism or other damage is the responsibility of FDOT. It may be necessary to hire a professional security company to protect the site during non-working hours. Archaeological sites located in urban areas are particularly vulnerable to vandals, including artifact collectors. Additionally, during normal working hours, an active archaeological excavation may attract the attention of individuals as well as members of the press. Visitors to the site are disruptive to the progress of the work and pose a danger to the physical integrity of the site. To prevent such situations, FDOT may need to dedicate personnel to control both access to the site, as well as the flow of information.
- **Health and Safety:** The safety and well-being of all employees working on FDOT-related excavations is of great importance. All CRM firms performing the excavation project on behalf of FDOT must provide a copy of their Health and Safety Plan to the FDOT PM. In addition, the fieldwork must be conducted under the direct supervision of a certified Occupational Health and Safety Administration (OSHA) Competent Person, defined as a person who can identify hazards in operation and who has the authority to take appropriate actions.
- **Inadvertent discovery of human remains:** Archaeological sites containing human remains are especially sensitive cultural resources for cultural, legal, ethical, and scientific reasons. If human remains are encountered during the course of the excavation, the contractor shall cease work in the immediate area of the burial, notify the FDOT PM, and proceed in accordance with the procedures outlined in [Section 872.05, Fl. Stat.](#) The procedural requirements for addressing the inadvertent discovery of human remains must be specified in the Data Recovery Plan/Research Design.

10.3.2 Types of Archaeological Sites

For any excavation project, the types of data classes expected, the relevant research questions, and the appropriate field and laboratory methods all are related to the specific type of archaeological site. A description of common site types found in Florida, including the data classes typically associated with each, follows.

Artifact Scatters are composed of ceramic sherds, shell food remains, shell tools, lithic tools and manufacturing debris, or any combination thereof. They most often are located on well-drained sandy ridges or on low rises in the pine flatwoods. Most artifact scatters represent short-term campsites related to hunting and gathering activities; larger sites with greater artifact density and diversity may represent more permanent habitations. **Lithic scatters**, a subtype of artifact scatters, are comprised almost exclusively of stone tools and quarrying and/or tool manufacturing debris. They are located, most commonly, where chert exposures suitable for tool making are present.

Artifact scatters range in size from a few hundred square meters to several hectares in extent. They often have relatively deep subsurface components, sometimes in excess of two meters. Organic preservation is usually poor, so the potential for subsistence remains and environmental data is limited. Occasionally, features such as post molds, hearths, or fire pits are present. Observable soil strata are often lacking. These deceptively simple sites often have experienced relatively complex histories of site formation, which are difficult to interpret based on archaeological data alone since none but the most nonperishable artifacts remain. For this reason, artifact scatters are perhaps most in need of supplementary data supplied by soil scientists, geologists, hydrologists, and palynologists.

Because the density and spatial distribution of artifacts and features are often variable at artifact scatters, initial shovel testing at relatively close intervals (25 m [82 ft] or less) is necessary to identify intrasite activity areas. Once identified, activity areas may be investigated through the placement of blocks of contiguous excavation units. This approach is most effective for identifying and removing artifact concentrations or features. In some cases, the use of heavy equipment such as graders or backhoes may be necessary to remove culturally sterile overburden in order to reveal deeply buried features and cultural deposits.

Research at these sites traditionally has focused on the collection of temporally diagnostic artifacts to establish chronological sequences, as well as studies of technology and site function. Because these sites often are spatially expansive, many researchers now focus attention on the intensive excavation of specific activity areas to learn as much as possible about smaller subsections of these sites. These are presumed to represent individual episodes of occupations within a larger site universe consisting of periodic, overlapping occupations.

Black Earth Middens are characterized by the presence of faunal material (bone and shell), floral material (often charred), and artifacts in dark, organic stained soils. They usually are located in hardwood hammocks adjacent to rivers, streams, lakes, ponds, marshes, sloughs, and swamps. Most of the known middens date to the post-Middle Archaic period although earlier occupations may be present in sub-midden contexts. Black earth middens evidence both long and short-term habitations. In addition to food remains, shell, bone, and antler tools and ornaments; pottery fragments; lithic tools and debris; features such as hearths, roasting pits, storage pits, post molds, and living floors, as well as occasional human burials, all can be expected in black earth middens. These sites are likely to yield charcoal and shell samples suitable for radiocarbon dating. Faunal materials provide data for subsistence, seasonality, environmental, and organizational studies.

Because of the usual excellent state of organic preservation at black earth middens, excavation strategies typically are directed towards obtaining representative samples of faunal and floral material for subsistence and seasonality reconstruction. Distinct stratification related to different occupations often is observable at these sites, and this, in combination with dateable organics and abundant artifacts, makes black earth middens useful sites for establishing ceramic chronologies. The typical excavation strategy includes units and/or trenches that provide a complete stratigraphic profile of the site. In addition, the internal spatial organization of these sites is investigated with large block excavations and the use of

heavy equipment to remove overburden and expose sub-midden features. In the case of cultural deposits found below the water table, wellpoints are used sometimes to dewater excavation units.

Shell Middens are composed primarily of marine or freshwater shell refuse. Marine shell middens usually are located in coastal hammocks along bayshores and estuaries; freshwater shell middens are found along rivers or large streams and lakes. Shell middens generally contain abundant animal and shell food refuse, floral material, and artifacts, as well as features. Both marine and freshwater shell middens have been dated as early as the Middle to Late Archaic period and as late as the protohistoric period. Charcoal and shell from middens enable radiocarbon dating, while faunal and floral materials are suitable for studies of subsistence, seasonality, and environmental change. Except for the presence of abundant shell, shell middens are similar to black earth middens in terms of their research potential. These site types also share research approaches and excavation strategies.

Sand Mounds and Earthworks are common throughout Florida. Associated borrow pits indicate where material was obtained for their construction. Mounds were used for burials, as well as the foundations for dwellings. Very large mounds may have served a ceremonial function or as a foundation for the dwellings of religious and political leaders. Most sand mounds are believed to date to the post-Archaic period, although there are Archaic period mounds. The types of cultural materials found in sand mounds include ceramics, lithics, and faunal remains. Features may contain charcoal suitable for dating.

Earthwork types include linear ridges, circular embankments, and causeways constructed of earth and/or shell, as well as their associated borrow pits, and both linear and circular ditches. While occasionally encountered in isolation, earthworks are most often associated with other precontact features such as mounds or middens. Most of Florida's aboriginal earthworks are located on the southwest coast, in the Kissimmee River Valley, and in the Lake Okeechobee Basin region. Little is known about the function of these constructed features or their data potential. While their artifact content may be limited, analysis of soil stratigraphy, chemistry, and grain size may shed light on their function and construction history. The presence of carbonized materials suitable for dating greatly increases their research potential.

Typical mound and earthwork excavation strategies include the use of perpendicular trenches to obtain stratigraphic cross sections and to identify methods of construction. Additional block excavation of contiguous units also is conducted.

Historic Archaeological Sites typically are classified as artifact scatters. They consist of fragmentary and whole artifacts of glass, ceramic, or metal, as well as structural and industrial materials, and may date to any time after 1500 C.E. Historic period archaeological sites are diverse in kind, reflecting such activities as military, agricultural, commercial, industrial, and domestic activities, among others. Artifacts usually are located relatively close to the modern ground surface, often within 20-30 cm (8-12 in), and features such as trash pits, privy pits, and building foundations may be encountered. In urban areas, substantial amounts of fill material often overlay the earlier historic deposits.

Excavation strategies at historic artifact scatters are similar in many ways to those for precontact scatters. Initial shovel testing or auger testing at close intervals usually is necessary to identify the spatial distribution of subsurface artifact deposits. Remote sensing instrumentation may be used to identify buried features and foundations. For example, at military sites, metal detectors have been used successfully to identify the possible locations of musket balls and field discards from a battle. Electrical resistivity, magnetometer, and ground penetrating radar (GPR) also are useful to locate buried features, including structural remains. The block excavation of artifact concentrations and other features maximizes the recovery of spatial information. For sites in urban areas that are under modern fill, heavy equipment may be necessary to expose buried deposits.

The important feature that distinguishes historic period from precontact period archaeological sites is the availability of a documentary record for the former. Useful archival materials include deeds; tax, census,

military, commercial, and probate records; historic maps and photographs; diaries; and a variety of other primary source materials. Informants also may provide valuable information.

Underwater Sites are grouped into three basic types: sites created on land that have subsequently become submerged, sites created in submerged contexts (e.g., refuse sites), and shipwrecks. The excavation of underwater archaeological sites is a highly specialized undertaking that makes use of remote sensing instrumentation, underwater cameras, and other special equipment. [Chapter 1A-31, F.A.C.](#) provides the *Procedures for Conducting Exploration and Recovery of Historic Shipwreck Sites*.

10.3.3 Data Recovery Plan/Research Design

The first phase of the excavation project is the preparation of a Data Recovery Plan/Research Design, which provides a statement of research objectives and the specific methods to accomplish them in the most effective and least destructive way. It specifies relevant research questions and provides an overall plan to guide the excavation, laboratory analyses, and documentation, including a project schedule. Both the FDOT PM and the SHPO review and approve the Data Recovery Plan/Research Design prepared by the CRM consultant prior to the start of fieldwork. If so stipulated in the *MOA*, tribes and other consulting parties also may comment on the adequacy of the plan.

In accordance with the *SOI's Archeological Documentation Standards* and *Guidelines* (as amended and annotated), the Data Recovery Plan/Research Design typically contains the following elements:

Research Problem(s) and Relevant Data Classes: The research design contains a statement of one or more specific research problems, questions, or hypotheses, as well as the data classes expected, both cultural and natural, and how selected classes will contribute to addressing the stated research questions. It is not necessary to focus equally on all available data classes. For example, faunal remains like fish otoliths are sensitive indicators of seasonality. If such remains are expected, then research questions related to the seasonal use of a site may be addressed successfully. Specifically explain the methods to be used to study each data class. In addition to site-specific research questions, the plan should include field and analytical measures necessary to address such issues as landscape, stratigraphy, site formation, site modification, and landscape modification.

Sampling Design: It is neither desirable nor possible to excavate the entirety of the site, as contained within the project APE. Therefore, the Data Recovery Plan/Research Design should provide an explanation of the proposed sampling strategy or strategies, and the justification for selection. The type of sampling strategy, either purposive or probabilistic, will depend on the types of questions asked, the data classes expected, and the internal structure of the site, among other factors. A purposive sampling strategy is based on prior knowledge about the distribution of artifacts and features at the site. This information may be available from the original CRAS documentation or obtained from systematic testing conducted as part of the mitigation effort. The advantage of using a purposive sampling design is that decisions regarding which parts of the site to include or to exclude are based on hard data. In probabilistic sampling, the decision as to where to excavate is determined randomly. Therefore, all portions of the site have a statistically determined chance of being included in the excavation sample. The advantage of this approach is that it enables predictable statements about the total population of artifacts or features. The disadvantage of a probabilistic sampling design is that potentially productive areas of the site may not be included in the sample. Due to the inherent limitations of each sampling strategy, a combination of purposive and probabilistic sampling typically is used.

In addition to the sampling strategy, include an estimate of what percentage of the site will be part of the data recovery effort. For a very large site, a sample as small as 1 percent or less may be acceptable if the sampling design is appropriate to the stated research goals. For example, a purposive sample that focuses on one or a few specific activity areas within a larger site universe, or a random sample from a previously defined activity area, may be acceptable strategies for dealing with the problems of small sample size at

large sites. Another approach would be an excavation strategy that focuses on a single cultural component (e.g., Paleoindian or Early Archaic) within a multicomponent site. This approach would be especially justifiable if the site's significance derives primarily from the potential information yield associated with the specified component.

Field and Laboratory Methods: The proposed methods specify the requirements of data recovery and analysis relevant to project needs. At a minimum, this will include the following:

- A description of the size and placement of excavation units;
- The excavation procedure, including the use of arbitrary or natural levels, the size of arbitrary excavation levels, screen size, and recording conventions;
- Specification of special sampling techniques for soil, faunal remains, and other special data classes;
- Use of specialized techniques and equipment;
- Mapping procedures;
- Analysis procedures including a discussion of the types of analysis, the specific analytical methods and techniques, the basic artifact typologies that will be used, and the use of specialists; and
- Statement of expected results.

Archaeology is increasingly dependent on specialists in other fields (e.g., geology, sedimentology, palynology, zoology) to provide data that will assist in the interpretation of a particular site. If the services of outside specialists are used, include this information in the Data Recovery Plan/Research Design. Similarly, collaboration with historians and archivists may be needed for historical period sites, and with ethnographers or cultural anthropologists to coordinate, consult with, and solicit the views and concerns of affected local groups who may have a direct ethnic or historical relationship to the site. For example, excavations at a Seminole Indian encampment in the Everglades or a cigar worker's house in Ybor City would benefit from ethnographic research and informant interviews in conjunction with historic documents research.

10.3.4 Excavation and Data Collection Procedures

The excavation process involves the collection and recordation of artifacts, features, and other relevant data in both their horizontal and vertical contexts. The horizontal or spatial dimension preserves contemporary relationships among artifacts that enable the reconstruction of activities conducted at a site at specific points in time. The vertical dimension preserves the temporal relationships among artifacts, features, and occupational strata from which a developmental history of the site is reconstructed.

Regardless of the type of site excavated, all data recovery projects minimally contain the following components:

- Topographic mapping;
- Establishment of an excavation grid system;
- Broad scale testing to determine site boundaries and/or artifact and feature concentrations;
- Data recovery through controlled excavation; and
- Data recording.

Topographic Mapping: The first phase of an excavation involves the generation of a topographic map and the establishment of a permanent site datum. This establishes the point from which all subsequent vertical measurements are referenced. If no benchmark is located nearby, assign an arbitrary elevation to the site datum until a true elevation is established. The topographic survey results in an accurate map of the landscape on which all subsequent artifact and feature distribution data are plotted. Topographic maps of the site available from other sources may be substituted and used to locate excavation units and major features if they are at a scale of 1" = 100' (33.3 m) or larger and show elevation changes at a contour interval of no greater than 1 foot (0.3 m). However, because subtle changes in elevation may be of importance in identifying archaeological site features, it is usually preferable to have a topographic map generated specifically for archaeological use.

Grid System: A master grid system is helpful in maintaining horizontal control during excavation. The excavation units, shovel tests, and test trenches are referenced according to this grid system. Grid systems facilitate accurate three-dimensional recording of artifact and feature locations and allow for the orderly expansion of the excavation in all directions. The grid coordinate system uses numerical and directional designations for each grid intersection (e.g., 100N/100E). The excavation grid is located in reference to a known location in space. The recommended procedure is to establish a base line along an existing section line, property line, or centerline of a major road, and tie in all excavation units relative to this base line. Alternatively, establish an arbitrary base line oriented to one of the cardinal directions, and then tie it into a USGS benchmark or another immovable landmark.

Broad Scale Testing: Typically, mitigative excavation involves broad scale testing to identify or refine site boundaries and to determine the locations of activity areas, artifact concentrations, or subsurface features within the site. If a purposive sampling design is used, broad scale testing provides the information necessary to make decisions regarding the placement of excavation units and test trenches. Although the identification of intrasite features and concentrations is not mandatory, if a probabilistic sampling design is used, delimiting the boundaries of the site is necessary to establish the size of the sampling universe. If boundaries were not determined during the CRAS survey, then sufficient subsurface testing is conducted during the initial stage of the excavation project.

For most sites, the preferred method for implementing a broad-scale testing program is the use of hand excavated shovel tests. These are either round (0.5 m [20 in] in diameter) or square (0.5 x 0.5 m [20 x 20 in]) and shall extend to a depth of at least 1 m (3.3 ft) below ground surface unless prevented by impenetrable conditions. Substitute posthole diggers or augers if the goal of the testing program is simply the identification of site boundaries, especially where artifact density is relatively great and large areas need to be covered. However, it is not possible to maintain vertical control with either of these alternative methods.

The distance between individual tests is dependent on the type of site, the size of the area investigated, and the presumed density of subsurface materials. It also depends on the goal of the broad scale testing. If the goal is to identify site boundaries, and artifact density is relatively great, then larger intervals may be used. If artifact density is relatively low or variable across the site, or the goal of the testing is to identify intrasite activity areas, then smaller test intervals are necessary. However, in no case should test intervals exceed 25 m (82 ft).

Other methods, which may be acceptable under certain conditions, include the use of heavy equipment to excavate test trenches to reveal soil strata or strip off overburden to reveal subsurface features. At sites where surface artifacts occur, conduct controlled surface collections within a grid system. This method is useful particularly at late historic period sites where artifacts and features are often at or very near the modern ground surface.

On some types of sites, particularly those where subsurface features are suspected, the use of remote sensing instrumentation such as a magnetometer, electrical resistivity, or GPR may be employed. The use of these techniques is often a cost-effective way to locate isolated subsurface features such as coquina foundations, tabby walls, brick piers or pilings, and trash pits. Remote sensing also represents a noninvasive technique to help identify cemeteries and human remains. Similarly, stereo pair and false color imagery can assist in the location and identification of mounds, middens, earthworks, canals, and other above ground archaeological features, particularly if obscured from view by vegetation. These techniques enhance the location of features and maximize the data collection process.

Data Recovery through Controlled Excavation: Data recovery usually entails controlled excavation of a predetermined sample of the site universe. Depending on the type of site, research questions, and data classes expected, a number of strategies may be used including block excavation, isolated units, and/or linear trenching. If necessary, heavy equipment such as a grader or front-end loader removes the overburden. This is an effective way of removing sterile, disturbed, or nonsignificant fill, enabling hand excavation to focus on the significant deposits. Whenever heavy equipment is used, archaeologists must be present to monitor the soil removal and record any artifacts or features that are exposed, or to halt work in the event that human remains are uncovered.

Although specific techniques may vary from site to site, all archaeological excavations should conform to the basic practices of data collection and recording. These include the use of standardized excavation units and a grid system, the use of natural or arbitrary levels to maintain vertical control, the screening of excavated soil using a standard .64 cm (.25 in) mesh, the careful and standardized recording of provenience information including maps and stratigraphic profiles, and the maintenance of a complete photographic record of the excavation.

Excavation Units: The size of the excavation units will vary in accordance with the Data Recovery Plan/Research Design. Ordinarily, the most common sizes are 1 x 1 m (3.3 x 3.3 ft), 1 x 2 m (3.3 x 6.6 ft), 2 x 2 m (6.6 x 6.6 ft), and 3 x 3 m (9.9 x 9.9 ft). The advantage of larger sized squares is that the spatial arrangement of any post molds, fire pits, or other features exposed during excavation are visible in plan view, which facilitates accurate mapping. The disadvantage is compromised spatial control for the artifacts recovered during screening. To avoid this problem, subdivide larger units into smaller blocks (e.g., 1 m [3.3 ft] or 0.5 m [20 in] squares) and excavate these separately. Individual excavation units larger than a 3 x 3 m (9.9 x 9.9 ft) square are discouraged because of the lack of spatial control in the collection of smaller artifacts.

Excavation continues until at least two sterile levels are completed. At sites where Paleoindian or Early Archaic components are present, deep coring or the use of backhoe tests to expose deeply buried soil horizons may be required to ensure that these early and sometimes ephemeral sites are not missed.

Archaeological excavation takes place within “natural” units whenever possible. “Natural” means any unit of matter that displays abrupt and observable boundaries. “Natural” units may include soil stains, distinct strata, pits, mounds, or the rooms of a building. While most “natural” collection units have a cultural origin, this may not always be true. For example, windblown sediments, alluvial silts, or storm surges create discernible strata, and these should be excavated as separate collection units. The reason for specifying the use of “natural” units is to ensure that artifacts or other materials resulting from different depositional episodes are not mixed together during recovery.

Features such as post molds, fire pits, and trash pits are excavated separately as a distinct unit and the material collected is bagged and recorded as a new provenience. Similarly, materials from the outside of a structure are kept separate from those materials collected from the structure’s interior.

The methods used to excavate cultural features depend on the type of feature encountered and the nature of the soil matrix. The preferred method is to pedestal the feature and then excavate half of it to expose

a cross-section profile; the profile is mapped and photographed. Excavate the remaining half of the feature as one sample. This is a particularly effective method when excavating in soft, sandy soils. In more stable soils, excavate feature fill as a total sample without pedestaling; however, no profiles are possible using this technique.

Excavation Levels: The excavation of individual units proceeds by arbitrary levels within natural or cultural stratigraphic zones if they are present. If soil stratification is not observable, use arbitrary excavation levels to maintain vertical control. The size of the arbitrary levels may vary depending on the vertical segregation of components.

It is not unusual in Florida to have precontact archaeological deposits extend to depths exceeding 2 m (6.6 ft) below present ground surface. In Florida's sandy soils, the vertical faces of deep excavation units can become unstable and may pose a safety hazard to workers. To overcome this problem, the walls must be sloped back 1.5 m (5 ft) for every 1 m (3.3 ft) in depth for all depths greater than 1.5 m (5 ft), per OSHA regulations. The team's Competent Person analyzes the soils to determine the OSHA requirements for sloping, benching, and shoring. Means of egress (e.g., ladder or ramp) are required for all excavations reaching a depth of 1.2 m (4 ft). Piles of excavated soil must be at least 0.6 m (2 ft) from the edge of the excavation. Also, in accordance with OSHA standard requirements, work is not allowed in excavation units where water has accumulated unless adequate precautions are taken. In addition, ladders of sufficient height and stability to enable excavators to enter and exit deep excavation units safely are required.

Screen Size: All soil is sifted through hardware cloth with a mesh size no greater than .64 cm (.25 inch) to ensure the most complete recovery of artifacts. Large mesh screens are acceptable only when used in conjunction with .64 cm (.25 inch) screens. Use mesh screens smaller than .64 cm (.25 inch) at any time, particularly for special sampling purposes. The use of water to assist in the screening process may be advisable in some situations. However, water sprayed under pressure may damage small bones or delicate botanical remains. Consult with the zooarchaeologist, archaeobotanist, or other specialist regarding appropriate collection methods.

Column Samples: At sites containing faunal or floral material, collect at least one column sample for laboratory analyses. Excavate these using the same method used for the general unit levels; that is, by arbitrary levels or natural/cultural stratigraphic zones. The size of the column samples is appropriate to the needs of the special analyses for which they are used.

Artifact and Sample Collection: Place all recovered artifacts and other cultural materials in collection bags according to provenience: general level, individual features, and artifacts plotted in situ. All artifact collection bags must be of recloseable polyethylene plastic. Paper bags are unacceptable because of the potential for tearing and deterioration, and because they cannot be permanently sealed. Each bag is given an individual F.S. number in the field, and the F.S. Log is continuously updated as the fieldwork proceeds. Write provenience information legibly on the exterior of all collection bags in waterproof ink. At a minimum, label each bag with the following information:

- Project name (optional);
- FMSF number;
- Site name (if applicable);
- Provenience information - collection unit (e.g., excavation unit, feature number); stratigraphic zone or level; and depth;
- Date;
- Excavator's name or initials;

- F.S. number; and
- Bag number (e.g., Bag 1 of 3).

Other information may be included as necessary. Column samples, soil samples, or feature fill collected as total samples (i.e., without screening and discard of the soil matrix) should be placed in large, heavy (at least 4 mil in thickness) plastic bags with the provenience information legibly marked on the exterior of the bag in waterproof ink. Provenience information also is written on waterproof tags and either tied to or placed inside the bag. In order to ensure against bag failure and loss of the sample, the material may be double bagged. In this case, write the provenience information on the exterior of both bags. Another option for storage is plastic 5-gallon buckets or Tupperware-like containers.

Charcoal samples intended for radiocarbon dating are collected with the appropriate provenience information written on the exterior of the bag. It is important to ensure that any samples that will be submitted to specialists for analysis are collected in an appropriate manner. In cases where special techniques or equipment is required, qualified special consultants (e.g., a geomorphologist) collect and prepare the necessary samples (see [Archeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines](#)).

Data Recording: To maintain the highest standards of data recording in the field, use standardized forms. Also capture site data, including the locations of artifacts and features, as well as stratigraphic profiles, through maps, sketches, and photography. Recommended guidance follows. In accordance with standard archaeological conventions, use the metric system for all measurements, except in the case of historical archaeological sites containing artifacts, features, or structural remains of primarily non-Spanish European, Euro-American, or African-American origin. At these sites, use the English system of measurement.

Standardized Forms: Use standardized forms for the recording of excavation and survey (i.e., elevations, angles, distances, etc.) data. These forms may be of variable design and format. Excavation notes on legal paper, notebook paper, or other non-standardized format are unacceptable. The site supervisor maintains a daily log of activities for each excavation unit that summarizes the tasks accomplished in the unit, problems encountered, significant finds, as well as general observations. Traditionally, cultural resource professional's field notebooks are used to record daily progress because they are bound and waterproof; a loose-leaf notebook or binder also is acceptable. A F.S. log and a photo log also are maintained. The type of camera and film used, descriptions of each photograph, including direction and the date of the photograph, are included in the Photo Log.

Maps and Profiles: Draw a stratigraphic profile of at least one wall from each excavation unit and any 0.5 x 0.5 m (20 x 20 in) shovel tests. If walls are noticeably different, more than one profile will be necessary. Floor plans are drawn whenever features or artifact concentrations are encountered but otherwise are not required for every level of every unit.

All maps must be neatly drawn and legible and use standard symbols. Record soil colors using a Munsell soil color chart. Soil descriptions should conform as much as possible to standard soil classification descriptions (e.g., fine sand, sandy-clay, clayey-loam, silt, etc.).

Photographs: A complete photographic record of each excavation is made using either a traditional 35mm camera or a digital camera. For digital cameras, the size/resolution of the photo should be a minimum of 1600 x 1200 pixels at 300 pixels per inch (ppi) in accordance with general FMSF *Photographic Documentation Policy* on their [Documents & Forms](#) webpage. Take photographs of the excavation units to record features, concentrations, isolated finds, and the general work in progress. All photographs of stratigraphic profiles and excavation units must contain a north arrow, a scale, and a menu board with the site number, provenience, brief description (e.g., Feature 6, South wall profile, or

floor at 1.55 m amsl), and date. A blackboard may be substituted for a menu board if the written information is legible and can be clearly discerned from the photo. Photographs containing information written on paper, cardboard, or media other than those specified in this section are not acceptable.

10.4 ANALYSIS AND CURATION

The analysis of artifacts and other cultural materials recovered during the field excavation is conducted at a level appropriate to address the research questions identified in the Data Recovery Plan/Research Design. It also depends upon the actual data classes recovered. To ensure comparability of data, a limited set of standard analyses is required for all FDOT-related excavation projects, as described below. Conduct additional analyses, as needed, to address site-specific research needs.

Prior to the beginning of artifact analysis, wash, clean, repackage in 4 mil polyethylene plastic bags with sealable closures, and assign specimen numbers for all stone and most historic artifacts. Also clean ceramic, bone, and shell artifacts, and stabilize to prevent deterioration, if needed. All washed artifacts are air-dried prior to rebagging. Artifacts recovered from sites exposed to saltwater inundation should be soaked in freshwater to remove the salts that may have been absorbed by the porous artifacts. Organic samples suitable for radiocarbon dating must be stored separately to avoid contamination. If artifacts are removed for outside analysis, or otherwise separated from their original provenience bags, label the new bags with the FMSF number, F.S. number, and specimen number.

Lithic Analysis: Standard analysis of aboriginal lithic artifacts includes:

- Identification of temporally diagnostic tool types;
- Morphological and functional classifications; and
- Debitage attribute analysis (e.g., flake size and amount of dorsal cortex).

Describe and classify all stone tools according to basic morphological categories: bifaces, unifaces, modified flakes, utilized flakes, microliths, waste flakes, cores, and hammerstones. Add other categories of stone artifacts as appropriate. Assign artifacts to existing cultural-temporal typologies, if possible, and describe each. Functional analysis of all identified tools should be conducted to the furthest extent possible. At a minimum, measure the edge angles of all functional tool edges using a goniometer.

Describe waste flakes (debitage) using a selected number of attributes, including flake size and the amount of dorsal cortex, or flake categories based on technological attributes if the consultants use the Sullivan and Rozen (1985) method. The raw material type (e.g., chert, coral, etc.) and presence or absence of thermal alteration also is recorded. Raw data for all of these analyses are included in the report in tabular format.

Other analyses, such as tool use-wear analysis and the identification of raw material provenience, are conducted, if appropriate, to meet the research objectives. These types of lithic analysis typically require specialized expertise, equipment, and/or adequate comparative collections. If such investigations are conducted, demonstrate in the Data Recovery Plan/Research Design that the analysts possess the necessary training, experience, and equipment to perform such work.

Ceramic Analysis: Standard ceramic analysis includes:

- Identification of temporally diagnostic types;
- Description of exterior surface treatment; and
- Description of rim and lip form and orientation.

All ceramic sherds are described and classified according to existing cultural-temporal typologies. Formal definitions of ceramic types are referenced; descriptions of paste, aplastic inclusions, surface

treatment and/or decoration, rim and lip treatment, and any other criteria necessary for a full, complete, and comparable type description are included.

Ceramics are common at post-Archaic period sites in Florida, and in some parts of the state (e.g., in the Panhandle region and southwestern Florida) ceramics are more common than lithic artifacts. Much of the utilitarian ware used by precontact native peoples consisted of vessels with plain, undecorated surfaces. Chronological analysis of these ceramics is difficult because of the lack of surface decoration, but not impossible. Differences in vessel wall thickness, rim orientation, and absolute and relative occurrence of different types of aplastic materials are some of the criteria that are used to develop ceramic seriations. At sites with mostly undecorated ceramics, conduct analyses to the level needed to realize fully the data potential of these artifacts.

Other analyses are conducted, as appropriate, to meet project research objectives. The microscopic identification of paste types and aplastic inclusions, or the identification of vessel function, may require specialized expertise, equipment, and/or comparative collections. The use of such specialists is noted in the Data Recovery Plan/Research Design.

Faunal Analysis: Faunal remains are fragile components of archaeological sites that require special care. The remains recovered from general excavation levels that were screened through a .64 cm (.25 inch) mesh do not require special laboratory processing and can be analyzed as soon as they are cleaned, air-dried, and cataloged. However, column samples and feature fill collected as total samples, and therefore not screened in the field, require such processing in the laboratory. The methods for processing faunal samples are dictated by the research questions to be addressed, and by the preferences of the zooarchaeologist directing the analysis. Controlled experiments have demonstrated that the analysis of faunal remains recovered exclusively from .64 cm (.25 inch) mesh screen is inadequate since it introduces a bias against small size remains, particularly the small, fragile bones associated with fish. As a result, the preferred method of processing the sample material is by screening through graduated, nested screens with .64 cm (1/4 in), .32 cm (1/8 in), and .16 cm (1/16 in) mesh. Sort and bag the three size fractions separately. The screening is performed either dry or wet depending on the nature of the deposits and the preference of the analyst.

The sorting of the faunal remains for each fraction is performed by lab personnel trained in faunal analysis, and is monitored by a lab supervisor trained in zooarchaeological identification. Identify faunal remains to the lowest possible taxonomic classification. Record fragment counts and weights for the identified fauna, as well as Minimum Numbers of Individuals (MNI) counts. Totals, percentages, and estimated biomass for each faunal category are calculated and reported in tabular form. Estimates of species diversity and equitability may be calculated using the Shannon-Wiener Diversity Index and the Sheldon Equitability Index, for example. These represent minimum data requirements for faunal analysis; other analyses also may be appropriate to address research objectives.

Historic Artifacts: Analysis of historic period artifacts includes functional identification and classification, and temporal placement. Artifact identification utilizes standard references for historic artifacts as well as primary source materials such as catalogues, manufacturer's production information, newspaper and magazine advertisements, and discussions with knowledgeable informants. There are many excellent references available for the functional classification of historic artifacts. Among these are works by Sprague (*North American Archaeologist* 2:251-261, 1981); Orser (*The Material Basis of the Postbellum Tenant Plantation*, 1988); and South (*Method and Theory in Historical Archeology*, 1977). The following table summarizes the categories (with examples) of historic artifacts according to Sprague, Orser, and South.

After Sprague (1981), <i>North American Archaeologist</i> 2:251-261.	
Personal Items	<ul style="list-style-type: none"> • items related to clothing, personal adornment, medicine and health, indulgences (e.g., tobacco tins, hip flasks), pocket tools, infant care, etc.
Domestic Items	<ul style="list-style-type: none"> • items such as furnishings, housewares, food containers, cleaning and maintenance items, etc.
Architecture	<ul style="list-style-type: none"> • structures or structural remains, construction materials, plumbing fixtures, illumination and power features, and landscaping features
Transportation	<ul style="list-style-type: none"> • vehicles and items associated with their maintenance
Commerce and Industry	<ul style="list-style-type: none"> • items associated with agriculture and husbandry, hunting, fishing, timbering, turpentine, mining, construction, manufacturing, commercial services, etc.
Group Services	<ul style="list-style-type: none"> • items associated with government administration, education, entertainment, utilities, etc.
Group Ritual	<ul style="list-style-type: none"> • religious paraphernalia, public monuments, etc.
Unknowns	<ul style="list-style-type: none"> • unidentifiable objects or objects of unknown function
After Orser (1988), <i>The Material Basis of the Postbellum Tenant Plantation</i>	
Foodways	<ul style="list-style-type: none"> • Procurement – ammunition, fishhooks, traps • Preparation – baking pans, cooking vessels, large knives • Service – dishes, flatware, tableware • Storage – storage vessels, bottles, canning jars, bottle stoppers • Remains – floral and faunal
Clothing	<ul style="list-style-type: none"> • Fasteners – buttons, eyelets, snaps, hook and eyes • Manufacture – needles, pins, scissors, thimbles • Other – shoe leather, metal shoe shanks, clothes hangers
Household/Structural	<ul style="list-style-type: none"> • Architecture/construction – nails, flat glass, spikes, mortar, brick, slate • Hardware – hinges, tacks, nuts, bolts, staples, hooks, brackets • Furniture/accessories – stove parts, furniture pieces, lamp parts
Personal	<ul style="list-style-type: none"> • Medicinal – medicine bottles, droppers • Cosmetic – hairbrush, combs, jars • Recreational – smoking pipes, toys, musical instruments, souvenirs • Monetary – coins • Decorative – jewelry, hairpins, hatpins, spectacles • Other – pocketknife, fountain pens, pencils, inkwells
Labor	<ul style="list-style-type: none"> • Agricultural – barbed wire, horse/mule shoes, harness buckles, hoes, plow blades, scythe blades • Industrial – tools
After South (1977), <i>Method and Theory in Historical Archeology</i>	
Kitchen	<ul style="list-style-type: none"> • Ceramics • Wine bottles • Case bottles • Tumbler • Pharmaceutical type bottle • Glassware (stemmed, decanter, dishes) • Tableware (cutlery, knives, forks, spoons) • Kitchenware (pots, pans, pothooks, gridiron, trivets, teapots, water kettles, coffee pots, buckets, handles, kettles, etc.)

Bone	<ul style="list-style-type: none"> • Faunal remains
Architectural	<ul style="list-style-type: none"> • Window glass • Nails • Spikes • Construction hardware (hinges, pintels, shutter hooks and dogs, staples, fireplace backing plates, lead window comes, etc.) • Door lock parts (doorknobs, case lock parts, keyhole escutcheons, locking bolts, and brackets)
Furniture	<ul style="list-style-type: none"> • Hardware (hinges, knobs, drawer pulls and locks, escutcheon plates, keyhole surrounds, handles, rollers, brass tacks, etc.)
Arms	<ul style="list-style-type: none"> • Musket balls, shot, sprue • Gunflints, gunspalls • Gun parts, bullet molds
Clothing	<ul style="list-style-type: none"> • Buckles • Thimbles • Buttons • Scissors • Straight pins • Hook and eye fasteners • Bale seals • Glass beads
Personal	<ul style="list-style-type: none"> • Coins • Keys • Personal items (wig curlers, brushes, mirrors, rings, signet sets, watch fobs, fob compass, fan, pencils, spectacles, tweezers, watch key, etc.)
Tobacco Pipe	
Activities	<ul style="list-style-type: none"> • Construction (plane bit, files, augers, gimlets, axe head, saws, chisels, rivets, punches, hammers, etc.) • Farming (hoes, rakes, sickles, spades, etc.) • Toys (marbles, jew's-harp, doll parts, etc.) • Fishing gear (hooks, sinkers, gigs, harpoons) • Stub-stemmed pipes • Colono-Indian pottery • Storage items (barrel bands, brass cock) • Ethnobotanical (nuts, seeds, hulls) • Stable and Barn (stirrup, bit, harness boss, horseshoes, wagon and buggy parts, rein eyes, etc.) • Miscellaneous hardware (rope eye thimble, bolts, nuts, chain, andiron, tongs, case knife, flatiron, wick trimmer, washers, etc.) • Other (button manufacturing blanks, kiln waster furniture, silver smithing debris, etc. – reflecting specialized activities) • Military (swords, insignia, bayonets, artillery shot and shell, etc.)

Shell and Bone Artifacts: Shell and bone artifacts are analyzed both macro- and microscopically for traces of wear to determine their function. Fully describe and graphically record any decoration or surface treatment. Also, compare these artifacts to other known assemblages of shell and bone to determine chronological and functional associations. Use existing typologies to classify all shell and bone tools. In addition to tools, all bone and shell recovered during the excavation are examined for potential tool manufacturing debitage; such shell and bone debitage are analyzed as a standard component of the artifact analysis.

Botanical Analysis: Because plant remains are extremely fragile and do not preserve well, sample collection, processing, and analysis are highly specialized. Individuals trained in the techniques of archaeobotany perform the analysis of botanical remains. These specialists also are responsible for directing the collection of samples, processing the samples (including flotation, if necessary), and the identification and analysis of botanical remains.

Preparation for Curation: The long-term curation of cultural materials and associated records is the responsibility of FDOT. For CRM contractors performing the data recovery, at the completion of the project, provide all artifacts, field notes, maps, photographs, artifact inventory and analysis forms, and other associated records to the FDOT PM for permanent storage and curation at a Department-designated repository. Label the outside of each artifact box with the following information:

- Project name(s);
- FMSF number(s);
- List of F.S. numbers included in the box; and
- Number of boxes associated with the project (e.g. Box 4 of 7).

Also include a typed F.S. Log sheet that contains each individual F.S. listed in numerical order with a brief description of the contents of each bag along with the boxed artifacts. In addition, a typed catalog of all materials (artifacts and other data) transmitted to FDOT is prepared and submitted.

10.5 DOCUMENTATION

The results of the data recovery project are provided or made accessible to a number of users, including the signatories to the *MOA*, Native American tribes, the public, and the professional archaeological community. With the exception of documentation intended for the general public, the report of findings should be a professional quality product that clearly and completely presents the objectives, methods, techniques, and results of the project. For the public, the information obtained from the mitigative excavation may be conveyed in a number of ways, including pamphlets, brochures, displays and exhibits, websites, and multimedia productions, among other vehicles. The goal of disseminating information always is balanced by the need to protect sensitive site information whose disclosure might result in damage to the resource.

Management Summary: Given the large amount of time required for analysis and technical report preparation, the CRM consultant typically prepares a brief memorandum summarizing the results of the data recovery project and submits it to the FDOT PM within approximately 30 days of completion of fieldwork. FDOT provides the *Management Summary* to the SHPO to verify that it has met its obligations under the terms of the *MOA*.

Technical Report: The archaeological excavation report constitutes the only record of the impacted site and its contents. Therefore, it should describe completely, and in a clear and concise fashion, the excavation techniques, recording methods, stratigraphic and spatial relationships, environmental relationships, and analytical techniques employed, and should strive to place the site within its cultural,

temporal, and environmental contexts. The major components of the report, including the content requirements of each, follow.

Executive Summary: All reports contain a brief summary of the project written in nontechnical language. The summary includes an explanation of why the project was conducted, what research problems or questions were addressed, the results, and management recommendations.

Introduction: This contains a statement of when, why, and for whom the excavation was conducted, and references the pertinent agreement document under which the data recovery project was required. It identifies those responsible for conducting the fieldwork, analysis, and report preparation. The introduction includes:

- A description of the nature and extent of the proposed transportation project and associated impacts;
- A description of their effect on the archaeological site that is the subject of the report;
- A description of the project location including a project location map;
- A description of the archaeological site;
- A discussion of its significance; and
- A brief history of previous archaeological work at the site.

Physical Environment: This section provides a narrative description of the project location and associated environment. The purpose is to recognize the interpretive implications of the site's functional and environmental contexts. Thus, the level of detail and the specific features emphasized in the discussion are at the discretion of the authors. At a minimum, this section should provide sufficient information so that the reader is able to understand the relationship of the site to its natural setting. Summarize relevant information contributed by consulting specialists in the fields of palynology, geology, sedimentology, botany, biology, zoology, or hydrology, as appropriate.

This section also contains a discussion of historic land use patterns and the effect of these on the archaeological deposits contained at the site. For precontact sites, the changes that have occurred in the environment over the past 10-12,000 years may be relevant to an adequate interpretation of the site and its features. For example, for sites located in coastal areas, the effects of sea level change through time would be of considerable importance in understanding why and when the site was occupied, as well as factors related to the subsistence adaptation of the site's inhabitants. For interior sites, sea level change may be less important for understanding site use than climatic changes that have affected precipitation and surface water availability.

Research Design: The research design provides the overall plan for the excavation and includes a statement of relevant problems or research questions, a description of relevant data classes, and a specification of how results are evaluated. This section also includes any pertinent background or documentary research relevant to the development of the research design. Any changes or modifications to the research design resulting from consultation with the FDOT PM, or changes in field strategy dictated by unforeseen discoveries or problems, also are addressed in this section.

Methods: This section presents a detailed discussion of the specific methods employed to conduct the excavation and data analyses. General laboratory processing, cataloging, and preliminary analysis methods are presented in this section. Methods associated with special analyses (e.g., radiocarbon dating, palynology, soils analysis, lithic use wear analysis, etc.) may be presented here or separately in their appropriate sections of the report.

Results: This section of the report will typically be the most variable as it is dependent on the type of site, the nature of the research design, and the data classes recovered and analyzed. It should include both description and interpretation. At a minimum, all reports shall contain the following information:

- A description of site stratigraphy;
- A discussion of site formation and transformation processes;
- A description of all excavated features;
- A description of artifact classes;
- Reports of any special analyses such as botanical, faunal, soils, etc.;
- A discussion of spatial and temporal distributions; and
- A section that summarizes the results in an interpretive framework.

The presentation of **site stratigraphy** includes a formal description of each of the major strata (cultural and/or natural) encountered. Representative profiles showing the stratification of the site shall be included. Clearly key these to the discussion of strata in the text. This section also may include the results of any soils analyses, chemical analyses, or other analyses necessary to supplement the discussion of stratigraphy.

The report includes a discussion of the processes (both cultural and natural) that resulted in **site formation**, burial, and preservation, as well as a discussion of any post-depositional processes that have altered the site.

Typical **features** include storage pits, hearths, postholes and molds, structural remains, or any other collection units with discrete boundaries. Such excavated features are described in terms of their overall dimensions (length, width, thickness, or depth), top and bottom elevation, shape, contents, stratigraphic association, function, and dating. If many features are excavated, these may be grouped together by general class (e.g., “oval, basin-shaped pits” or “post molds”), and each group can then be described in detail. In this case, descriptive data for individual features may be presented in a table included either in the body of the report or in an appendix. Plan views and profiles of representative features (preferably at least one example of each identified class) are included in the report.

Describe all **artifact** classes in detail. Many artifacts will occur in numbers too numerous to enable individual artifact descriptions. Describe these artifacts (e.g., ceramic sherds, lithic waste flakes, iron nails, bottle glass, etc.) as a general class. Temporally diagnostic artifacts or artifacts of a special or unique character are described in more detail using standard descriptive techniques. The use of tables is encouraged for the presentation of quantitative data on individual artifacts and for summary data on general artifact classes.

Complete provenience information is provided for all artifacts recovered from the site. This can be in the form of a table with raw counts of different artifact classes provided for each excavated provenience including individual excavation levels, features, surface collections, shovel tests, and test trenches. Since this data is likely to be quite extensive, include them in an appendix rather than the body of the report.

If any **special analyses** are conducted (e.g., faunal, botanical, soils, radiocarbon dating, etc.), the results of these analyses also are included in the report. Depending on the level of detail involved, these may require separate sections. Present any special methods not described in the general methods section with these analysis results.

Describe and discuss the **spatial and temporal distributions** of artifacts, ecofacts, and features, either in separate sections associated with various artifact or other data classes, or together in a section that integrates these data and discusses their relationships.

All reports contain a section that summarizes the excavation and various analysis results within an **interpretive framework**. Typically, this will involve a narrative discussion of the site's chronological, functional, and organizational reconstruction based on the data derived from the excavation and analysis. Additionally, the report should compare the results of the project to the expectations of the research design.

Summary and Conclusions: This section provides a synopsis of the major results of the excavation and evaluates these results in light of the expectations presented in the research design. When results fail to match the expectations, include some discussion of why this may have been the case, with suggestions for further research.

References Cited: Alphabetically list all references cited in the text of the report following an appropriate format (i.e. *Chicago Manual of Style*).

Appendices: The appendices contain a variety of documents and data. These may include, but are not limited to, a copy of the agreement document (*MOA*), relevant correspondence, an updated FMSF form for the excavated site, a glossary of special terms, and data tables or special reports that are too long for the body of the report, or that provide background information not directly relevant to the report.

APPENDIX A

SUGGESTED REFERENCE LIBRARY

FEDERAL HISTORIC PRESERVATION LAWS, LEGISLATION, AND EXECUTIVE ORDERS (in alphabetical order)

[Abandoned Shipwreck Act of 1987](#), ([43 U.S.C. §§ 2101-2106](#))

[American Antiquities Act of 1906](#), as amended (original [16 U.S.C. §§ 431-433](#), as amended [54 U.S.C. §§ 320301-320303](#) and [18 U.S.C. § 1866\(b\)](#))

[American Battlefield Protection Act of 1996](#), (16 U.S.C. § 469k)

[American Indian Religious Freedom Act of 1978](#), as amended ([42 U.S.C. § 1996](#))

[Amtrak Improvement Act of 1974](#) (original [Public Law 104-134, 110 Stat. 1321](#), passed in lieu [Public Law 93-496, 88 Stat. 1526](#))

[Archaeological Resources Protection Act of 1979](#), as amended ([16 U.S.C. §§ 470aa-47011](#))

[Archeological and Historic Preservation Act of 1974](#), as amended ([16 U.S.C. § 469](#))

[Coastal Zone Management Act of 1972](#), as amended ([16 U.S.C. § 33](#))

[Department of Transportation Act of 1966](#), as amended [Declaration of Purpose and *Section 4(f)*] (original [Public Law 89-670, 80 Stat. 931](#), as amended [49 U.S.C. § 303](#) and [23 U.S.C. § 138](#))

[Department of Transportation Act, Section 4\(i\)](#), as amended ([49 U.S.C. §§ 5561-5567](#)), as created by the Amtrak Improvement Act of 1974

[EO 11593 - Protection and Enhancement of the Cultural Environment](#) (1971) ([3 CFR Part 154, 16 U.S.C. § 470](#))

[EO 13006 – Locating Federal Facilities on Historic Properties in Our Nation’s Central Cities](#) (1996)

[EO 13007 – Indian Sacred Sites](#) (1996)

[EO 13175 – Consultation and Coordination with Indian Tribal Governments](#) (2000)

[EO 13287 – Preserve America](#) (2003)

[Federal Property and Administrative Services Act of 1949](#), as amended (Codified as amended in scattered sections of 40 U.S.C. and 41 U.S.C)

[Historic Sites Act of 1935](#), as amended (original [16 U.S.C. § 1A](#), as amended American Antiquities: Policy and Administrative Provisions ([54 U.S.C. §§ 320101-320106](#)), National Park System Advisory Board ([54 U.S.C. § 102303](#)), National Park Service Advisory Council ([54 U.S.C. § 102304](#)), and Commemoration of Former Presidents ([54 U.S.C. § 309101](#)))

Housing and Community Development Act of 1974, as amended ([42 U.S.C. § 5301](#))

Intermodal Surface Transportation Efficiency Act of 1991, as amended ([23 U.S.C. § 101\(a\)\(35\)](#)), 23 U.S.C. § 101 note, and [23 U.S.C. § 109\(b\)\(c\)](#), and (p))

Internal Revenue Code of 1986, as amended, Qualified Conservation Contributions, ([26 U.S.C. § 170\(h\)](#))

Internal Revenue Code of 1990, as amended, Rehabilitation Credit ([26 U.S.C. § 47](#))

Mining in the National Parks Act of 1976, (Section 9)(original [16 U.S.C. § 1908](#), as amended [54 U.S.C. § 100734](#))

National Environmental Policy Act of 1969, as amended ([42 U.S.C. § 55](#))

National Historic Preservation Act of 1966, as amended ([16 U.S.C. § 470](#))

National Marine Sanctuaries Act of 1972, as amended ([16 U.S.C. § 32](#))

National Park Service Organic Act of 1916, as amended (original [16 U.S.C. § 1](#), as amended [54 U.S.C. § 100101](#) and [54 U.S.C. §§ 100301-100302](#))

National Trust for Historic Preservation, as amended, ([16 U.S.C. § 468](#)), 1949

Native American Graves Protection and Repatriation Act of 1990, as amended ([43 CFR Part 10](#))

Public Buildings Cooperative Use Act of 1976, (original 40 U.S.C. § 3306) ([40 U.S.C. § 601\(a\)](#) and [40 U.S.C. § 611](#))

Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users, 2005 ([23 U.S.C. § 101](#))

Section 6002, Efficient Environmental Rules for Project Decision making, as amended ([23 U.S.C. § 139](#))

Sunken Military Craft Act of 2004, ([32 CFR Part 767](#))

Transportation Equity Act for the 21st Century of 1998, (TEA-21) (PUB. L. 105-178)

FEDERAL REGULATIONS

Regulations Governing the Federal Archaeology Program

43 CFR Part 3	Preservation of American Antiquities
43 CFR Part 7	Protection of Archaeological Resources
43 CFR Part 10	Native American Graves Protection and Repatriation Act
36 CFR Part 79	Curation of Federally Owned and Administered Archeological Collections

Regulations Governing Federal Preservation Tax Incentives

36 CFR Part 67	Historic Preservation Certifications
26 CFR 1.47-7	Income Tax: Investment Tax Credit for Qualified Rehabilitation Expenditures
26 CFR 1.170A-14 ,	Income Tax: Qualified Conservation Contributions

Regulations Governing National Historic Landmarks

36 CFR Part 65	National Historic Landmarks Program
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Regulations Governing National Historic Preservation Programs

36 CFR Part 60	National Register of Historic Places
36 CFR Part 61	Procedures for Approved State and Local Government Historic Preservation Programs
36 CFR Part 63	Determinations of Eligibility for Inclusion in the National Register of Historic Places
36 CFR Part 68	The Secretary of the Interior's Standards for Historic Preservation Projects
36 CFR Part 73	World Heritage Convention
36 CFR Part 78	Waiver of Federal Agency Responsibilities under Section 110 of the National Historic Preservation Act
36 CFR Part 800	Protection of Historic Properties (Advisory Council on Historic Preservation)
EO 11593	Protection and Enhancement of the Cultural Environment

Regulations Governing Other Major Federal Historic Preservation Programs

23 CFR Part 771	Environmental Impact and Related Procedures
23 CFR Part 774	Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites (Section 4f)
30 CFR Part 700	Office of Surface Mining Reclamation and Enforcement
40 CFR Parts 1500-1517	Regulations of the Council on Environmental Quality
41 CFR Part 101-17	Assignment and Utilization of Space (General Services Administration, Public Buildings Service)
41 CFR Part 101-20	Management of Buildings and Grounds (General Services Administration, Public Buildings Service)

ADVISORY COUNCIL ON HISTORIC PRESERVATION

Advisory Council on Historic Preservation

[ACHP Policy Statements](#)

[ACHP Staff Directory](#)

[Historic Preservation Contacts and Resources](#)

[Office of Tribal and Indigenous Peoples](#)

[Recovery Act](#)

Working with Section 106

[Section 106 Flowchart](#)

[A Citizen's Guide to Section 106 Review](#)

[Section 106 Archaeology Guidance](#)

[ACHP's Archeology Task Force](#)

[ACHP Section 106 Training and Education](#)

[Federal Historic Preservation Case Law, 1966-2000](#)

ACHP Digital Library (selected publications follow):

[Alternatives for Implementing Section 106 of the National Historic Preservation Act](#)

[Balancing Historic Preservation Needs with the Operation of Highly Technical or Scientific Facilities](#)

[Assessing the Energy Conservation Benefits of Historic Preservation: Methods and Examples](#)

FEDERAL HIGHWAY ADMINISTRATION

Section 106 Exemptions (per FHWA)

[Section 106 Exemption Regarding Effects to the Interstate Highway System](#)

[IHS exemptions in Florida](#)

[Historic Bridges](#)

NATIONAL PARK SERVICE

Secretary of the Interior's Standards and Guidelines

[Abandoned Shipwreck Act Guidelines](#)

Tribal Preservation Program

Archeology Program

National Register of Historic Places

[NRHP Database and Research](#)

[NRHP Criteria of Eligibility 36 CFR 60.4](#)

[NRHP Registration Forms](#)

[National Register Bulletins](#)

[Heritage Documentation Programs](#)

[HABS/HAER/HALS Standards](#)

[HABS/HAER/HALS Guidelines](#)

[Library of Congress HABS/HAER/HALS Collection](#)

[Preservation Briefs](#)

The NPS has a series of preservation briefs that provide guidance on preserving, rehabilitating, and restoring historic buildings. These publications help historic building owners and contractors recognize and resolve common problems prior to work, and recommend methods and approaches for rehabilitating historic buildings that are consistent with their historic character. Topics range from building types (gas stations, log buildings) to specific building materials (terra-cotta, stained/leaded glass).

[Preservation Tech Notes](#)

The NPS has a series of Tech Notes that provide practical information on traditional practices and innovative techniques for successfully maintaining and preserving cultural resources. Topics range from spaces/systems (open offices/corridors, mechanical systems) to specific building elements/materials (windows/glass, finishes).

Print Resources

[Federal Historic Preservation Laws. NPS, USDI, Washington, D.C. \(2018\)](#)

Federal Planning and Historic Places: The Section 106 Process. King, Tomas F (2000), Altamira Press, Walnut Creek.

Recording Historic Structures. John A. Burns, editor. John Wiley and Son. (2003)

NATIVE AMERICAN RESOURCES

Tribes with Land or Ties to Florida

[Miccosukee Tribe of Indians of Florida](#)

[Mississippi Band of Choctaw Indians](#)

[Muscogee \(Creek\) Nation](#)

[Poarch Band of Creek Indians](#)

[Seminole Nation of Oklahoma](#)

[Seminole Tribe of Florida](#)

Federal Laws

[Indian Removal Act of 1830](#)

[Federal Law and Indian Policy Overview | Indian Affairs](#)

Miscellaneous

[National Conference of Tribal Historic Preservation Officers](#)

STATE LEGISLATION

Florida Statutes (Fl. Stat.)

Chapter 125	County Government
Chapter 163	Intergovernmental Programs
Chapter 253	State Lands
Section 253.027	Emergency Archaeological Properties Acquisition Act of 1988
Chapter 258	State Parks and Preserves
Chapter 267	Florida Historical Resources Act
Section 337.274	Authorized FDOT Agency Access to Private Property
Chapter 373	Water Resources
Chapter 380	Land and Water Management
Chapter 403	Environmental Control
Chapter 556	Underground Facility Damage Prevention and Safety
Section 872.05	Offenses Concerning Dead Bodies and Graves-Unmarked human burials

Florida Administrative Rules, Law, Code, Register - FAC, FAR, eRulemaking

Chapter 1A-31	Procedures for Conducting Exploration and Recovery of Historic Shipwreck Sites
Chapter 1A-32	Archaeological Research
Chapter 1A-33	Use of Florida's Old Capitol
Chapter 1A-35	Historic Preservation Grants-In-Aid
Chapter 1A-38	Tax Exemption for Historic Properties
Chapter 1A-40	Administration of Permanent Collections
Chapter 1A-43	Historical Museums Grants-In-Aid
Chapter 1A-44	Procedures for Reporting and Determining Jurisdiction over Unmarked Human Burials
Chapter 1A-45	Guidelines for the Public Display of Human Skeletal Remains
Chapter 1A-46	Archaeological and Historical Report Standards and Guidelines
Chapter 1A-48	Florida Historic Marker Program
Chapter 9J-5	Minimum Criteria for Review of Local Government Comprehensive Plans and Plan Amendments, Evaluation and Appraisal Reports, land Development Regulations and Determinations of Compliance

FLORIDA DEPARTMENT OF TRANSPORTATION

FDOT Procedures and Handbooks

[Project Development and Environmental Manual](#)

[Public Involvement Handbook](#)

[Sociocultural Effects Process](#)

ETDM Information

[Efficient Transportation Decision Making Process](#)

[ETDM Manual](#)

Miscellaneous Data

[Road Jurisdiction Transfers](#)

[Florida Bridge Data](#)

[Historic Highway Bridges of Florida](#)

FLORIDA DIVISION OF HISTORICAL RESOURCES

Division of Historical Resources

[FDHR Collections and Conservation](#)

[FDHR Compliance and Review](#)

[Module Three](#) *Guidelines for Use by Historic Preservation Professionals*

[FDHR Florida Master Site File](#)

[FMSF Forms and Guidelines](#)

[FDHR National Register Section](#)

[Florida's Historical Contexts](#)

[Florida Historic Cemeteries: A Preservation Handbook](#)

MISCELANEOUS RESOURCES

[Publication of Archival Library & Museum Materials](#) - Aerial photographs

[ENC Direct to GIS](#) (formerly the Automated Wreck and Obstruction Information System (AWOIS))

[Historic Bridges](#) (formerly Historic Bridge Foundation)

National Programs and Organizations

[National Conference of State Historic Preservation Officers](#)

[National Trust for Historic Preservation](#)

[Preserve America](#)

[National Center for Preservation Technology and Training](#)

[National Preservation Institute](#)

State Programs and Organizations

[Florida Trust for Historic Preservation](#)

[Florida Public Archaeology Network](#)

[Main Street Program](#)

Local Community Information

[Certified Local Governments in Florida](#)

[County Property Appraisers](#)

Research

[Florida Geographic Data Library](#)

[LABINS](#): Historic plats, field notes, and tract books

APPENDIX B

GLOSSARY OF KEY TERMS

Adverse Effect: An undertaking is considered to have an adverse effect on a resource when it may diminish the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on cultural resources may include, but are not limited to, physical destruction, damage, or alteration to all or part of a resource; isolation of the resource from or alteration of the character of the resource's setting when that character contributes to the resource's qualification for the National Register; neglect of a resource resulting in its deterioration or destruction; and the transfer, lease, or sale of the resource out of federal ownership/control.

Advisory Council on Historic Preservation (ACHP): An independent agency of the U.S. government whose members are charged with advising the President and the Congress on matters relating to historic preservation; recommending measures to coordinate activities of federal, state, and local agencies and private institutions and individuals relating to historic preservation; and advising on the dissemination of information pertaining to such activities. The Council reviews the policies and programs of federal agencies in regard to compliance with the *NHPA*.

Agreement Documents: Legal documents resulting from *Section 106* consultation that obligate the signing parties to fulfill their *Section 106* responsibilities by carrying out its terms. Three kinds of agreement documents include Agreement-based Determinations of No Adverse Effect, Memorandum of Agreements, and Programmatic Agreements.

Archaeological Resources (Sites): The locations of precontact or historic occupations or activities that can be used to reconstruct the lifeways of cultures of the past. They may range from a single artifact to the extensive ruins of a historic military fortification. An **archaeological district** consists of a group of sites that are linked historically by function, theme, or physical development or aesthetically by plan.

Area of Potential Effect (APE): The geographic area or areas within which an undertaking may cause changes in the character or use of cultural resources if any such resources exist. The APE always includes the actual site of the undertaking and also may include other areas where the undertaking will cause changes in land use, traffic patterns, or other aspects that could affect cultural resources.

Avoidance: Active attempts to deflect harm to cultural resources by partial or complete project redesign or relocation.

Building: A feature created principally to shelter any form of human activity such as a house, barn, church, hotel, or similar construction.

Building complex: Multiple buildings in close spatial and functional association.

Burial place: A location where the dead are prepared for burial or cremation, or where the remains of the dead are placed. A burial place may be a single feature, ranging from the monumental tomb to an isolated grave expediently prepared alongside a battlefield or emigrant route. Other burial places are more complex, such as compound burial sites and cemeteries developed after deliberate selection and arrangement of the landscape. In Native American and Pacific Island cultures, certain burial places were ephemeral because they took place above ground. However, where evidence remains of cremation areas and sites traditionally used for scaffold and other encasement burials, such places would be encompassed by the general classification, burial place. Cemeteries and burial places traditionally have been regarded as sacred and inviolate, especially by those whose ancestors are buried there.

Case Study Report (CSR): A document that serves as the preliminary documentation for determining potential effects and mitigative measures. It presents all available documentation pertaining to the significance and characteristics of the NRHP-listed or eligible property as well as a discussion of all effects that the proposed undertaking may have on the property.

Certified Local Government (CLG): Any city, town, or county which meets the criteria set forth in the *NHPA* amendments of 1980 (PUB. L. 96-515). A CLG carries out the requirements of the *NHPA* at the local level.

Code of Federal Regulations (CFR): A series published by the federal government which contains codification of the general and permanent rules published by agencies of the federal government.

Consultation: The process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the *Section 106* process.

Contributing Resource: A building, site, structure, or object that adds to the historic associations, historic architectural qualities, or archaeological values for which a property or historic district is significant.

Cultural Resources: All buildings, sites, structures, objects, and districts which are generally more than 50 years of age, and which are evaluated as having significance in prehistory or history. This includes archaeological sites as well as historic structures; synonymous with Historic Property.

Cultural Resource Assessment Survey (CRAS): The process of identification, documentation, and evaluation of historical, archaeological, architectural, and traditional cultural properties.

Debitage: Pieces of chipped stone debris resulting from the manufacture and modification of stone tools. Also referred to as waste flakes.

De minimis: A *Section 4(f)* finding for which the requirements are satisfied if: either no historic properties are affected, or the Transportation program or project has no adverse effect on historic properties.

Designed Historic Landscape: A landscape that has significance as a design or work of art; a landscape consciously designed and laid out by a master gardener, landscape architect, architect, or horticulturalist to a design principle, or an owner or other amateur using a recognized style or tradition in response or reaction to a recognized style or tradition; a landscape having a historical association with a significant person, trend, event, etc. in landscape gardening or landscape architecture; or a landscape having a significant relationship to the theory or practice of landscape architecture.

Direct Impacts (Effects): An undertaking within the APE that introduces visual, audible, or atmospheric effects and has the potential to alter those qualities of the property that make it eligible for NRHP inclusion would also be a direct impact.

Discontiguous district: A district composed of two or more definable significant areas separated by non-significant areas. This type of district is appropriate when the elements are spatially discrete; the space between the elements is not related to the significance of the district; and visual continuity is not a factor in the significance. An example of this would be a group of archaeological sites that are related to each other through cultural affiliations, periods, use, or site types.

District: A significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. These might include business districts, residential neighborhoods, college campuses, or farms.

Effect: An undertaking has an effect, either harmful or beneficial, on a cultural resource when the undertaking may alter characteristics of the resource that may qualify it for inclusion in the National Register.

Eligible Resource: A cultural resource that has been determined eligible for National Register listing by the Secretary of the Interior, or one that has not yet gone through the formal eligibility determination process, but which meets the National Register Criteria of Eligibility. For *Section 106* purposes, an “eligible” resource is treated in the same manner as a listed resource.

Evaluation: The process of determining the eligibility of a cultural resource for listing in the NRHP.

Florida Master Site File (FMSF): A comprehensive listing of recorded cultural resources in Florida, including archaeological sites, historic structures, bridges, cemeteries, resource groups, and NRHP-listed sites. It includes records for resources which are no longer extant.

Foreclosure: An action taken by an agency official that effectively precludes the Council from providing comments which the agency official can meaningfully consider prior to the approval of the undertaking.

Historic Context: A pattern or trend in history by which a specific occurrence, property, or site, is understood and its meaning within history or prehistory is made clear. The context is identified through consideration of the property as well as the history of the surrounding area.

Historic Property: Under *Section 106* of the *NHPA*, a historic property is any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to a Native American tribe or Native Hawaiian organization and that meet the National Register criteria.

Historic Residential Suburb: A historic district that is defined as a geographic area, usually located outside the central city, that was historically connected to the city by one or more modes of transportation; subdivided and developed primarily for residential use according to a plan; and possessing a significant concentration, linkage, and continuity of dwellings on small parcels of land, roads and streets, utilities, and community facilities.

Historic Structures: Cultural resources including bridges, residences, commercial buildings, constructed features, etc., which, with few exceptions, are at least 50 years old.

Identification: The inventory of all cultural resources within a project area of potential effects. This is accomplished through archaeological and historic structures surveys.

Indian Sacred Site: Any specific, discrete, narrowly delineated location on Federal land that is identified by an Native American tribe, or Native American individual determined to be an appropriately authoritative representative of a Native American religion, as sacred by virtue of its established religious significance to, or ceremonial use by, a Native American religion; provided that the tribe or appropriately authoritative representative of a Native American religion has informed the agency of the existence of such a site

Indian Tribe means “an Indian tribe, band, nation, or other organized group or community....., which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians” (36 CFR § 800.16 (m)).

Indirect Impact (Effect): Indirect or secondary impacts are effects that may occur as an indirect result of an undertaking whenever the undertaking induces or makes possible related activities that have the potential to alter the NRHP quality of a property or its setting. Indirect impacts are generally removed in either time or distance from the undertaking and may include changes in transportation patterns, land use, population densities, or growth rates, and other reasonably foreseeable impacts.

Integrity: The authenticity of a cultural resource's identity, evidenced by the survival of physical characteristics that existed during the resource's historic or precontact period. The seven aspects of integrity are location, design, setting, materials, workmanship, feeling, and association.

Linear Resource: A special kind of rural historic landscape that consists of constructed linear features such as roads, railroads, trails, canals, causeways, and regional drainage systems.

Lithics: Stone tools and the debris (debitage or waste flakes) created in the process of tool manufacturer/modification.

Memorandum of Agreement (MOA): A kind of agreement document that is prepared when an undertaking will have adverse effects on cultural resources, and the consulting parties agree on ways to reduce, avoid, minimize or mitigate such effects. A three-party *MOA* is signed by the federal agency, the SHPO, and the Advisory Council; a two-party *MOA* is when the Advisory Council has not been involved in the consultation but receives the *MOA* after the federal agency has prepared it.

Minimization: Active attempts to reduce harm to cultural resources by project redesign or relocation.

Mitigation: Any actions that reduce or compensate for the damage an undertaking may have on a National Register-listed or eligible property. Mitigation may include project redesign or relocation, data recovery, and documentation.

National Historic Landmark (NHL): A historic property evaluated and found to have significance at the national level and designated as such by the Secretary of the Interior.

National Register of Historic Places (NRHP): The national list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, or culture. It is maintained by the NPS on behalf of the Secretary of the Interior under authority of *Section 101(a)* of the *NHPA*, as amended. Properties listed may be significant at the national, state, or local level.

No Adverse Effect: When an undertaking has an effect on a cultural resource, but the effect would not be harmful to those characteristics that qualify the resource for inclusion in the National Register. A determination of No Adverse Effect can be determined in one of two ways: either the nature of the project itself is not harmful, or the harmful effects are mitigated through preservation covenants, the retrieval of important information through data recovery, or by following the Secretary of the Interior's Standards for Rehabilitation and Guidelines for the Rehabilitation of Historic Buildings.

No Historic Properties Affected: When an undertaking has either no historic properties located within the APE or there are historic properties present within the APE, but the project activities have no impact on said historic properties.

No Effect: When an undertaking has no effect of any kind (either harmful or beneficial) on cultural resources. This is a less formal phrase sometimes used whereas *No Historic Properties Affected* is the proper Section 106 determination language.

Noncontributing Resource: A building, site, structure, or object that does not add to the historic significance of a property or district.

Object: This is primarily artistic in nature or relatively small in scale and simply constructed. It will be associated with a specific setting or environment. Examples include mileposts, fountains, boundary markers, or fixed outdoor sculptures.

Preservation: The act or process of applying measures to sustain the existing form, integrity, and material of a building or structure, and the existing form and vegetative cover to a site. It may include initial stabilization work, where necessary, as well as ongoing maintenance of the historic building materials.

Principal Investigator (PI): A qualified cultural resource professional responsible for the design and implementation of a cultural resources study.

Programmatic Agreement: A type of agreement document which sets forth means by which a whole federal agency program, or a large and complicated undertaking, will comply with *Section 106* of the *NHPA* via an alternative to the standard process set forth in 36 CFR Part 800.

Project Area: For cultural resources studies, the term is synonymous with the Area of Potential Effect.

Provenience: The position of an archaeological find in time and space, recorded three-dimensionally.

Reconnaissance Survey: An examination of all or part of an area accomplished in sufficient detail to make generalizations about the types and distributions of historic properties that may be present.

Rehabilitation: The act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those portions or features of the property which are significant to its historical, architectural, and cultural values.

Research Design: A statement of proposed identification, documentation, investigation, or other treatment of a historic property that identifies the project's goals, methods, and techniques; expected results; and the relationship of the expected results to other proposed activities or treatments.

Resource Group: Classification used by the FDHR to document archaeological, historical, and mixed districts; rural and designed landscapes, building complexes, and linear resources.

Restoration: The act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of the removal of later work or by the replacement of missing earlier work.

Rural historic landscape: A geographic area that historically has been shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features.

Secretary's Standards and Guidelines (48FR44716-44742): The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation provide technical information about archaeological and historic preservation activities and methods. The Standards and Guidelines are prepared under the authority of *Section 101*(f), (g), and (h), and *Section 110* of the *NHPA*, as amended.

Section 106: The portion of the *NHPA* that requires federal agencies to consider the effects of their undertakings on cultural resources. The head of any such federal agency is directed to afford the ACHP a reasonable opportunity to comment with regard to such undertakings.

Section 110: The portion of the *NHPA* that spells out the affirmative responsibilities of federal agencies for dealing with historic properties, above and beyond the agencies' *Section 106* responsibilities. *Section*

110(a)(1) stipulates that it is the federal agencies' responsibility to preserve and use historic buildings; *Section 110(a)(2)* states that each federal agency shall establish a preservation program.

Section 4(f): Part of the Department of Transportation Act of 1966 (PUB. L. 89-670) that states that the Secretary of Transportation may approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge, or land of a historic site of national, state, or local significance only if there is no feasible and prudent alternative to using that land; and the program or project included all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Shovel Tests: Excavation units, usually 0.5 m [20 in] in diameter by a least 1 m [3 ft] deep, used to discover buried archaeological sites and also used to sample or probe a site before large-scale excavation.

Site: The location of an event, a precontact or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archaeological value. Examples include battlefields, campsites, and shipwrecks.

Stabilization: The act or process of applying measures designed to reestablish a weather resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the essential form as it exists at present.

State Historic Preservation Officer (SHPO): The official appointed or designated pursuant to *Section 101(b)(1)* of the *NHPA* to administer the state historic preservation program or a representative designed to act for the SHPO. The SHPO consults with federal and state agencies during *Section 106* review, reviews National Register nominations, and maintains file data on cultural resources.

Structure: Functional constructions made for purposes other than human shelter such as apiaries, automobiles, bridges, earthworks, roads, railroads, or silos.

Traditional Cultural Properties: Properties associated with cultural practices or beliefs of a living community. These practices or beliefs must be rooted in that community's history and be important in maintaining the continuing cultural identity of the community.

Undertaking: Under the *NHPA*, a federal action that is subject to *Section 106* review. It is intended to include any project, activity, or program that can result in changes in the character or use of historic properties, if any such historic properties are located in the APE. The project, activity, or program must be under direct or indirect jurisdiction of a federal agency or licensed or assisted by a federal agency. Undertakings include new and continuing projects, activities, or programs and any of their elements not previously considered under *Section 106*.

ZAPs Low, Medium, and High: Zones of Archaeological Potential; that is, areas of differential archaeological site location expectancy.

APPENDIX C

LIST OF ACRONYMS

ACHP	Advisory Council on Historic Preservation
AHPA	Archaeological and Historic Preservation Act
AIRFA	American Indian Religious Freedom Act
AN	Advanced Notification
AO	Archaeological Occurrence
AOFA	Agency Operating and Funding Agreement
APE	Area of Potential Effect
ARPA	Archaeological Resource Protection Act of 1979
AWOIS	Automated Wreck and Obstruction Information System
BAR	Bureau of Archaeological Research
BMIS	Bridge Management Inventory System
BMP	Best Management Practices
CD	Compact Disk
C.E.	Common Era
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CLG	Certified Local Government
CRAS	Cultural Resource Assessment Survey
CRC	Cultural Resource Coordinator
CRM	Cultural Resource Management
CSR	Case Study Report
DEIS	Draft Environmental Impact Statement
DEMO	District Environmental Management Office
FDEP	Florida Department of Environmental Protection
FDHR	Florida Division of Historical Resources
DME	District Medical Examiner
DOE	Determination of Eligibility
FDOS	Florida Department of State
EA	Environmental Assessment
EIS	Environmental Impact Statement
Fl. Stat.	Florida Statutes
EO	Executive Order
EST	Environmental Screening Tool
ETAT	Environmental Technical Advisory Team
ETDM	Efficient Transportation Decision Making

FAP	Federal-Aid Project
FAA	Federal Aviation Administration
F.A.C.	Florida Administrative Code
FCMP	Florida Coastal Management Program
FDOT	Florida Department of Transportation
FEIS	Final Environmental Impact Statement
FGDL	Florida Geographic Data Library
FHWA	Federal Highway Administration
FIHS	Florida Intrastate Highway System
FMSF	Florida Master Site File
FPAN	Florida Public Archaeology Network
FR	Federal Register
FRA	Federal Railroad Administration
F.S.	Field Specimen
FTA	Federal Transit Administration
GIS	Geographic Information System
GPR	Ground Penetrating Radar
GPS	Global Positioning System
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HALS	Historic American Landscapes Survey
IHS	Interstate Highway System
ISTEA	Intermodal Surface Transportation Efficiency Act
JPEG	Joint Photographic Experts Group
LAP	Local Agency Program
LOA	Letter of Agreement
LRTP	Long Range Transportation Plan
MNI	Minimum Number of Individuals
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
NAGPRA	Native American Graves Protection and Repatriation Act
<i>NEPA</i>	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NPI	National Preservation Institute
NPS	National Park Service

NRB	National Register Bulletin
NRHP	National Register of Historic Places
OEM	Office of Environmental Management
OSHA	Occupational Safety and Health Administration
PA	Programmatic Agreement
PALMM	Publication of Archival Library & Museum Materials
PD&E	Project Development and Environment
PI	Principal Investigator
PPI	Pixels Per Inch
Pub. L.	Public Law
PM	Project Manager
PSIQ	Preliminary Site Information Questionnaire
QA	Quality Assurance
RAI	Request for Additional Information
RGB	Red Green Blue
ROW	Right-of-way
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users
SHS	State Highway System
SEIR	State Environmental Impact Report
SHPO	State Historic Preservation Officer
SIA	Structural Inventory Assessment
SIS	Strategic Intermodal System
SWEPT	StateWide Environmental Project Tracker
TCP	Traditional Cultural Property
TEA-21	Transportation Equity Act for the 21 st Century
THPO	Tribal Historic Preservation Officer
TIFF	Tagged Image File Format
TIP	Transportation Improvement Program
USACE	United States Army Corps of Engineers
U.S.C	United States Code
USCG	United States Coast Guard
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USGS	United States Geological Survey
WMD	Water Management District
WPA	Works Progress Administration