

2014

Natural Resource Assessment Holy Faith Catholic Church Parcel 06502-000-000

Prepared for:

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9/1/2014



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Section 1: Introduction and Project Description

Ecosystem Research Corporation (ERC) was contracted by Holy Faith Catholic Church (Holy Faith) to perform an Environmental Resource Assessment (ERA) of parcel 06502-000-000 (18.147 acres). The parcel is located within Northwest Gainesville with the parcel address location described as 700 NW 39th Road and 747 NW 43rd Street. The parcel location with respect to local access roads is shown on **Figure 1**. The parcel is located within Section 2, Township 10 South, Range 19 East.

Holy Faith is requesting a Rezoning and Small Scale Land Use Amendment for the southern ±5.0 acres of parcel 06502-000-000, which, for the purposes of this report, is referred to as the Parent Parcel. The ±5.0-acre southern portion of the Parent Parcel is referred to as the Project Site. Holy Faith is requesting that the zoning of the Project Site be changed from Residential Single Family-4 (RSF-4) to Mixed-Use 1 (MU1). The land use change request for the Project Site is from Residential Low Density (RL) to Mixed Use Low (MUL). The Parent Parcel and Project Site in relation to adjacent parcels in the local area are shown on **Figure 2**.

The ERA was performed to determine the presence and extent of Regulated Natural Resources that occur within the boundaries of the Parent Parcel. The ERA is required pursuant to **Division 4: Regulated Natural and Archeological Resources**, specifically **Section 30-310 through 30-310.5** of the City of Gainesville Land Development Code.

Section 2: Environmental Resource Assessment Methodology

General Procedure

The Parent Parcel was evaluated consistent with a Level 1 Review as described in **Section 310(e)(2), Level 1 Review** of the City of Gainesville Land Development Code. The purpose of the ERA was to delineate the Regulated Natural Resources occurring within the Parent Parcel boundaries, which include Wetlands, Surface Waters, and Significant Natural Upland Communities. For the ERA, the Resource Assessment Area (RAA) that was evaluated included all of the undeveloped areas of the Parent Parcel (**Figure 3**). The developed area of the Parent Parcel, which includes the existing Holy Faith Catholic Church site, is effectively evaluated by the Boundary and Topographic Survey provided as **Attachment 1**.

Evaluation of Published GIS Data for the Parent Parcel, Resource Assessment Area, and Surrounding Areas

A GIS data search was performed for the Parent Parcel and RAA to include topography, soils, FEMA flood prone areas, and reported occurrences of listed species or other Regulated Natural Resources. GIS data were obtained from the NRCS, Alachua County, St. Johns River Water Management District, the Florida Natural Areas Inventory (FNAI 2012 database), University of

Florida Historical Aerial Map Library, and the Game Commission database for nesting sites for water birds, wading birds, and bald eagles.

Site-Specific Review

Pedestrian surveys of the Parent Parcel and adjacent areas were conducted 12 and 13 June and 30 July 2014. The surveys were performed by Peter M. Wallace, MS, PWS, Certified Gopher Tortoise Agent of Ecosystem Research Corporation to (1) assess the existing ecological condition of the area, (2) delineate the plant communities occurring within the site, (3) generally census the site for potential occurrence of listed plant and animal species, and (4) flag boundaries of all wetlands occurring on or adjacent to the **RAA**. The ERA data obtained additionally provides information and guidance needed to determine if Conservation Future Land Use or Zoning categories are appropriate for Regulated Natural Resources that may exist within the boundaries of the Parent Parcel.

To accomplish these tasks, a series of pedestrian transects were traversed across the site in which observations of plant species occurrences, plant community habitats, and land use were recorded using a Garmin 75CSx hand-held global positioning system (GPS) unit at 393 locations on the site and the immediately adjacent parcel areas. The GPS data points collected in the field were coded according to the type of land use or plant community occurring at the data point location. At each data point, the location coordinates were recorded and land uses were designated with specific GIS icons. The wetland boundaries on the Parent Parcel were flagged with sequentially numbered flags and the flags were located by the survey staff. City of Gainesville Natural Resources Staff and Biologists from the St. Johns River Water Management district reviewed the flagged wetland areas and upland habitats on 30 July 2014.

Section 3: Results

GIS Data Search

The Parent Parcel lies within the Gainesville West USGS quadrangle (**Figure 4**). The USGS topo map within the local area of the Parent Parcel shows no occurrences of named water courses or geologic features. The 2001 Alachua County LiDAR topography of the Parent Parcel and surrounding area shows that existing development within the Parent Parcel is located on a broad topographic ridge within the northwest quadrant of the parcel. The parcel in general slopes from the northwest towards the southeast from a high elevation of 116 ft to a low elevation of 80 ft (**Figure 5**). The FEMA flood prone map indicates the Parent Parcel and immediately surrounding area in all directions is located in Flood Zone X, which lies outside of the 100-year flood elevation (**Figure 6**).

The NRCS soils map (**Figure 7**) indicates there are two (2) soil mapping units located within the boundaries of the Parent Parcel. The Millhopper sand, 0 to 5 percent slopes (mapping unit 8) mapping unit occupies the broad, flatter area located in the northwest corner of this site. The

southern two-thirds of the Parent Parcel, to include the entire extent of the Project Site, is covered by Blichton sand, 2 to 5 percent slopes. The Millhopper sand series is common in this area of the County and are moderately well drained soils with a water table of 40–72 inches below the surface. The series is characterized by having a clay layer occurring at 58–64 inches below the surface, which extends beyond the profile depth of 89 inches. The Blichton series are sloping, poorly drained soils with a clay layer beginning at 28 inches below the surface and extending throughout the horizon depth of 80 inches. The mapped soil units are relatively consistent with soil observations made within the Project Site and Parent Parcel. However, it is more likely that the Millhopper sand extends south along the entire western half of the site above an elevation of 106 ft. The Natural Wetlands Inventory (NWI) map (**Figure 8**) shows that there have been no areas within the Parent Parcel or adjacent areas that have historically been mapped as wetland resources.

The Florida Natural Areas Inventory (FNAI) element occurrence records map (**Figure 9**) shows that no listed plant or animal species have been previously reported for the Parent Parcel or directly adjacent parcels. The occurrence of a short-tailed snake (*Lampropeltis extenuata*) is shown 935 ft directly west of the Parent Parcel. The siting location shown is from a 1953 sighting. This snake typically occupies sandy soils of Sandhills and Xeric Hammocks. There are no habitats on site or in the surrounding area that would provide suitable habitat for this species. Therefore, it is highly unlikely the species would be found within the boundaries of the Parent Parcel.

Based on the data contained within the water bird and eagle nest databases (**Figure 10**), the closest reported eagle nest is 1.9 miles from the site with the closest reported water bird nesting site being 1.1 miles away. The water bird nest site is no longer a viable colony and the eagle nest has moved to a new location adjacent to the northeast corner of the City of Gainesville Kanapaha Water Reclamation Facility (ERC 2013¹). The River Styx wood stork colony regulated buffer is also shown on Figure 10 and indicates the regulated buffer lies 0.3 miles to the southeast of the Project Site. Currently, there are no wetlands on site that would provide optimal or desirable forage habitat for transient wood storks. There is no wood stork nesting habitat present on the Parent Parcel.

Site-Specific Review

The GPS locations where land use and plant community data were obtained are shown on **Figure 11** for the Parent Parcel with a zoomed-in view of the RAA shown on **Figure 12**. From the data collected on site, a plant community and land use map has been generated and is shown on **Figure 13**. The wetlands, surface waters, and stormwater areas delineated on site are further described on **Figure 14**. A description of the major habitat types is provided, as follows:

¹ Ecosystem Research Corporation. 2013. Environmental Resource Assessment: Gainesville Regional Utilities–Kanapaha Water Reclamation Facility. Gainesville, FL. 58 pp.

Uplands (refer to Figure 13)

Mesic Hammock (Moderate and Low Quality)

The Mesic Hammock habitat type is represented by a successional, moderate and low quality Mesic Hammock community that has been cleared and logged at various times in the past. The dominant species are pignut hickory (*Carya glabra* [Mill.] Sweet), eastern hop-hornbeam (*Ostrya virginiana* [Mill.] K. Koch), swamp chestnut oak (*Quercus michauxii* Nutt.), white ash (*Fraxinus americana* L.), American holly (*Ilex opaca* Ait.), cabbage palm (*Sabal palmetto* [Walt.] Lodd. ex J. & J. Schultes), sweetgum (*Liquidambar styraciflua* L.), roughleaf dogwood (*Cornus asperifolia* Michx.), southern magnolia (*Magnolia grandiflora* L.), American basswood (*Tilia americana* L.), black cherry (*Prunus serotina* Ehrh.), red mulberry (*Morus rubra* L.), common persimmon (*Diospyros virginiana* L.), and winged elm (*Ulmus alata* Michx.). In comparison to high quality examples of this community, the onsite habitat contains a substantial population of laurel oak (*Quercus hemisphaerica* Bartr.), water oak (*Quercus nigra* L.), sweetgum (*Liquidambar styraciflua* L.), and loblolly pine (*Pinus taeda* L.), which generally indicate past disturbance to the habitat. The preponderance of oaks and sweetgum within the understory as well as exotic species such as scratchthroat (*Ardisia crenata* Sims), and golden raintree (*Koelreuteria paniculata*) and native indicators of disturbance such as saw greenbrier (*Smilax bona-nox* L.), and yellow jessamine (*Gelsemium sempervirens* [L.] W. T. Aiton) is further indicative of past disturbance.

The habitat areas mapped as low quality Mesic Hammock (Figure 13) typically have a very dense groundcover of scratchthroat (*Ardisia crenata* Sims) as well as populations of air-potato (*Dioscorea bulbifera* L.) and *Ligustrum* species. The lower quality areas typically occur below the 106 ft contour and correspond to areas that have historically been subjected to more intense agricultural practices. To provide support of the descriptions provided for the disturbed Mesic Hammocks, historical aerial photographs were obtained from the University of Florida map library. The aerials for specific years are provided on **Figures 15 through 23**, as follows:

Figure 15	1937	Figure 20	1971
Figure 16	1949	Figure 21	1974
Figure 17	1955	Figure 22	1979
Figure 18	1961	Figure 23	1994
Figure 19	1968		

The aerial photographs are provided to show the land use and changes of historical land management and the dramatic changes that have occurred in adjacent land use since 1937.

In 1937 (Figure 15) the Parent Parcel site is shown to be intensively managed for agriculture. Much of the area, currently mapped as Mesic Hammock (Moderate Quality), has been clearcut and converted to improved pasture. In 1937, the lower elevation, low-quality Mesic Hammock habitat areas show intense ground disturbance has occurred. This signature corresponds well

with the current location of the scratchthroat (*Ardisia crenata* Sims) invasion. From 1949 to 1974, extensive regrowth of the canopy occurs; however, there are very well defined areas where pines and oaks are very dense, which is especially noticeable on the 1961 aerial (Figure 18). These areas correspond directly to the areas occurring as improved pasture on the 1937 aerial. Regrowth of the forest, especially areas of pines and oaks, continued until 1979 when the area is shown as being extensively logged in conjunction with recent development of the site.

Loblolly Pine-Mixed Oaks-Mixed Hardwoods (Successional)

This habitat type is a disturbed successional community typically occurring in areas of significant historical ground disturbance. The onsite areas are dominated by loblolly pine (*Pinus taeda* L.), water oak (*Quercus nigra* L.), laurel oak (*Quercus hemisphaerica* Bartr.), sweetgum (*Liquidambar styraciflua* L.), sugarberry (*Celtis laevigata* Willd.), and a host of exotic species to include air-potato (*Dioscorea bulbifera* L.), skunk vine (*Paederia foetida*), scratchthroat (*Ardisia crenata* Sims), small leaf spiderwort (*Tradescantia fluminensis*), American wisteria (*Wisteria frutescens*), and Japanese climbing fern (*Lygodium japonicum*). This habitat is disturbed and is characterized by widespread historical placement of fill and roadway access for logging and agricultural land use.

Wetlands (refer to Figure 14)

The wetlands and surface waters occurring on the site are all created features with the exception of a small (0.046 ac) natural depression located within the Project Site. The wetlands and surface waters shown on **Figure 14** are primarily the result of storm water discharge from a created stormwater retention basin that was constructed between 1975 and 1979. The southern and western berm of the retention basin is visible on the 1979 aerial photograph shown on Figure 22. There is no current on-ground evidence or historical photographic evidence to indicate that any wetlands were historically present on site except where the small natural depression is shown on Figure 14. The retention basin was permitted and approved by the City of Gainesville in September 1975. The approved plans, which detail the Stormwater Management System, are included as **Attachment 2** for review.

The general intent of the 1975 Stormwater Retention System design is shown on **Figure 24**. Stormwater leaving the developed areas of the Church enters a storm drain/culvert system (Area A), which routed water under the site access road, which then flowed south into the Retention Area B. Once an elevation of 94.5 ft was reached, the stormwater would flow out of the basin over a large concrete weir located at Location C. From the overflow weir, flow was directed off site towards the southeast from Location C to Location E. Currently there is a ditch at Location D; however, it is not known if the ditch was created by scouring by discharge water over the weir or if the ditch was excavated to remove waters off site more rapidly. It appears that storm waters would have exited the Parent Parcel and affected adjacent properties located southeast of the ditch (Area E and farther southeast).

At some time after the stormwater system was placed in operation, the southwest corner of the Retention Basin Berm was breached at Location F without the knowledge of the owner. This breach diverted storm waters from traveling to location E to create flows that would travel south from the breach at location F to location G, which lies at University Avenue. Currently there is a culvert at location G that routes the onsite water into the City's stormwater management system as shown on **Figures 25 and 26**. A historical upland drainage channel is located at Area H, but the source of this drainage has been interrupted by development with the Parent Parcel. Currently, this drainage flows in response to intense rain events but is dominated by upland vegetation and difficult to see except after intense rainfall.

Placement of the breach in the Retention Basin Berm has established a created wetland and surface water system that extends from location F to location G as shown on Figure 24. The boundaries shown represent flagged and surveyed boundaries with the survey of flag numbers and flag locations shown in **Attachment 1**. There is no current evidence on ground that indicates that a natural wetland was present in this area in any location except within the small depression corresponding to Area I on Figure 24.

The majority of the Created Surface Water Area consists of scoured clay and limestone with predominately upland vegetation. The natural wetland is dominated by scattered individuals of common persimmon (*Diospyros virginiana* L.), boxelder (*Acer negundo* L.), red maple (*Acer rubrum* L.), sugarberry (*Celtis laevigata* Willd.), sweetgum (*Liquidambar styraciflua* L.), and cabbage palm (*Sabal palmetto* [Walt.] Lodd. ex J. & J. Schultes). The created drainage has vegetation reflecting the composition of the adjacent Mesic Hammock. The Retention Basin is dominated by laurel oak (*Quercus hemisphaerica* Bartr.), boxelder (*Acer negundo* L.), red maple (*Acer rubrum* L.), sweetgum (*Liquidambar styraciflua* L.), and sugarberry (*Celtis laevigata* Willd.) with the soils showing evidence of long-term deposition of silt, organic matter, and debris. Historically, the flow from Area A to Area B was probably overland flow routed from the culvert (A) to the Retention Basin (B). It appears that the easternmost area of this drainage was altered at a later time causing water to move faster from A to B. In the recent past, the culvert and structure at the A location had become blocked in response to debris deposition during intense rain events. This forced water from upstream of A to flow around A, across the access road, then across the upland located west of A. This has substantially enlarged the area of the surface water to the west and created a larger surface water feature extending from A to F. The depositional debris is routinely removed during maintenance activities performed by Holy Faith.

Section 4: Evaluation of the Parent Parcel Project Site with Respect to Section 30-310 of the Land Development Code

The main purpose of performing an ERA of the Parent Parcel and Project Site is to determine the extent of Regulated Natural Resources and determine if these resources should be placed within a Conservation Management Area (CMA) or if the resources should be protected with

Conservation Zoning or Future Land Use categories. The Mesic Hammock upland habitat located on site is defined as an Upland Hardwood Forest by FNAI and has a State ranking of S3.² “Significant Natural Communities” are in part defined by **Section 30-23, Definitions** of the LDC as “those that are ranked S1, S2, and S3 by the FNAI.” Based on this definition in the code, there is the potential that a portion of the onsite habitat would qualify to be set-aside; however, the onsite habitat needs to be evaluated in context to several variables prior to this consideration being made, as follows:

In the historical context, the term “Significant Natural Community” as specifically defined in Section 30-310 pertains primarily to upland habitats. Wetlands are regulated pursuant to Sections 30-300 through 30-302. The term “Significant Natural Upland Community” historically has been referred to as “Significant Uplands” by both the City of Gainesville and Alachua County Comprehensive Plans and Data Analysis. Section 30-310 contains very little analytical criteria with which to determine if an area is “Significant.” However, historical concepts of the term “Significant Upland” defines some qualitative criteria for the context of this evaluation. For example, within the Data and Analysis section of the Conservation, Open Space, and Groundwater Recharge Element (Petition 175-CPA-00PB, 31 Jan 2001) the City defines Significant Uplands, as follows:

Significant Uplands Because they are so attractive for urban development, upland ecological communities are becoming threatened and endangered in the same way various species have become. As with threatened and endangered species, preservation of significant uplands is critical of the maintenance of biological diversity, particularly because many species are only able to survive in upland ecosystems. **Particular consideration will be given to preserving uplands associated with wetlands and to uplands that have not been cultivated during the past 100 years.** [emphasis added]

Similarly, Alachua County within the Data and Analysis for the 2001–2020 (Conservation and Open Space, Biodiversity) defines “Significant Habitats,” in part, as follows:

Significant habitat

Significant habitat is defined as **contiguous stands of natural upland** [emphasis added] plant communities which have been documented to support, and which have the potential to maintain, healthy and diverse populations of plants or wildlife.

Further, the County, within the Conservation and Open Space; Biodiversity element of the Comprehensive Plan 2001–2020 defines Strategic Ecosystems, in part, as follows:

² The FNAI ranks communities from S1 to S5 in which S5 is common while S1 would be a very rare plant community.

Strategic ecosystems

Policy 3.3.1 includes strategic ecosystems within the primary conservation category in recognition of their ecological value, uniqueness and particular sensitivity to human impacts. Strategic ecosystems are defined as **outstanding examples of ecosystems** [emphasis added] that are intact or capable of restoration and that require conservation or management to maintain important reserves of biodiversity at landscape, natural community and species specific levels. **Strategic ecosystems are generally greater than 20 acres in size** [emphasis added] and contain one or more of the natural ecological communities described above.

Within these definitions is the consideration that “Significant Habitats” are long existing, non-disturbed, **natural** habitats that are **contiguous** with other significant resources and represent outstanding examples of habitat quality that has the potential to be maintained without disturbance in perpetuity.

Section 30-310(d)(1) (Gainesville LDC) provides criteria for lots ≤ 5.0 acres in existence prior to 13 Nov 1991 as being exempt from the provision of **Section 30-310**, as follows:

- (1) Certain small parcels of record. Any parcel of record as of November 13, 1991, that is less than or equal to five acres in size, and does not contain listed species, and does not include in whole or in part an archaeological site identified by a Florida Master Site file number. However, this exemption does not apply in the event the planning parcel equals or is greater than five acres in size.*

Implicit in this language is the establishment of a minimum size standard in which the application of **Section 30-310** is not warranted or practical.

For evaluation of CMAs, **Section 30-310.3(a), Identification of Conservation Management Areas** states that (in part) “Conservation Management Areas shall be designed and maintained in areas with generally intact vegetation, including canopy, understory, and groundcover where applicable, in functional clustered arrangement, with logical contiguous boundaries to eliminate or minimize fragmentation to the greatest extent practicable.”

If a CMA were established on the proposed project site, it would consist of ± 1.0 acre. The area is significantly isolated from any adjacent habitats by high volume roadways and has no definable connectivity to any adjacent habitats. A CMA in this area would establish a successional, moderate quality habitat “island” in which the encroaching pressures of development could not be avoided or controlled. The habitat would be so small as to not provide any haven for other than transient species and only very minimal population sizes of any species could be maintained. This would not be a conservation area that any conservation management entity would be willing to acquire or maintain.

The onsite Mesic Hammock habitats do not satisfy the conditions that define a “Significant Natural Community.” The habitat is too small, isolated, and not contiguous to any local habitat

of significant value. The habitat is degraded by invasion of successional oak and pine species and significant populations of problematic exotic species are present. Wetlands and surface waters on site are created wetlands that have developed in response to direct application of storm water. If the stormwater system is modified, the major hydrologic inflow to the wetland/surface water system will be disrupted and the wet areas will cease to exist. Furthermore, created wetlands are exempt from regulation by the City of Gainesville pursuant to **Section 30-304(a)(8), Exemptions** of the City LDC.

In summary, given the type, nature, function, quality, and location of the onsite habitats, establishment of Conservation Land Use or Zoning categories is not warranted. In addition, creation of an upland set aside for the establishment of a CMA is additionally unwarranted. The most appropriate avenue to address the onsite historical natural wetland is through the provisions of **Sections 30-300, 30-301, and 30-302** subject to the exemptions provided in **Section 30-304** of the LDC.

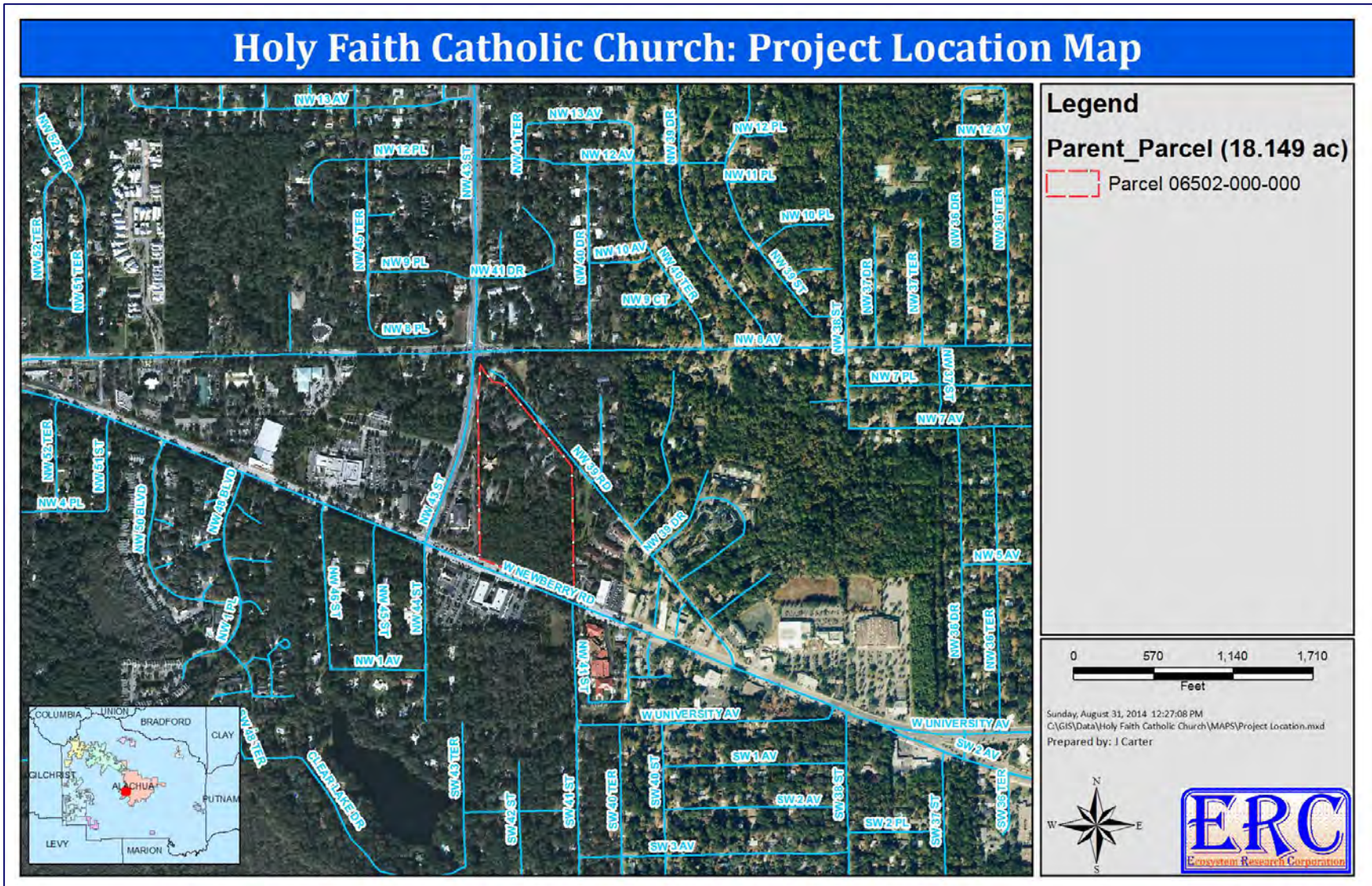


Figure 1. Project site location map.

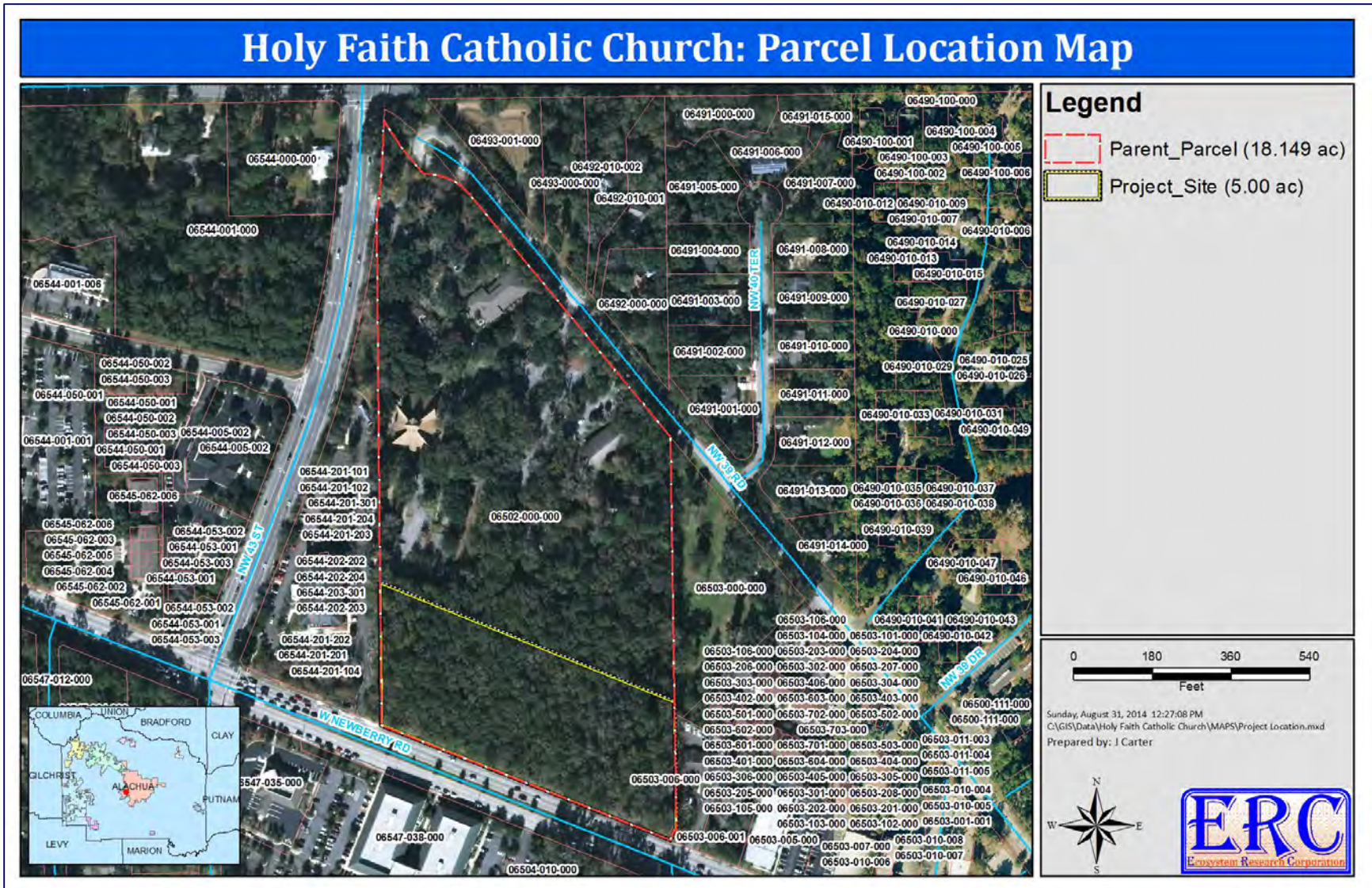


Figure 2. Parcel location map.

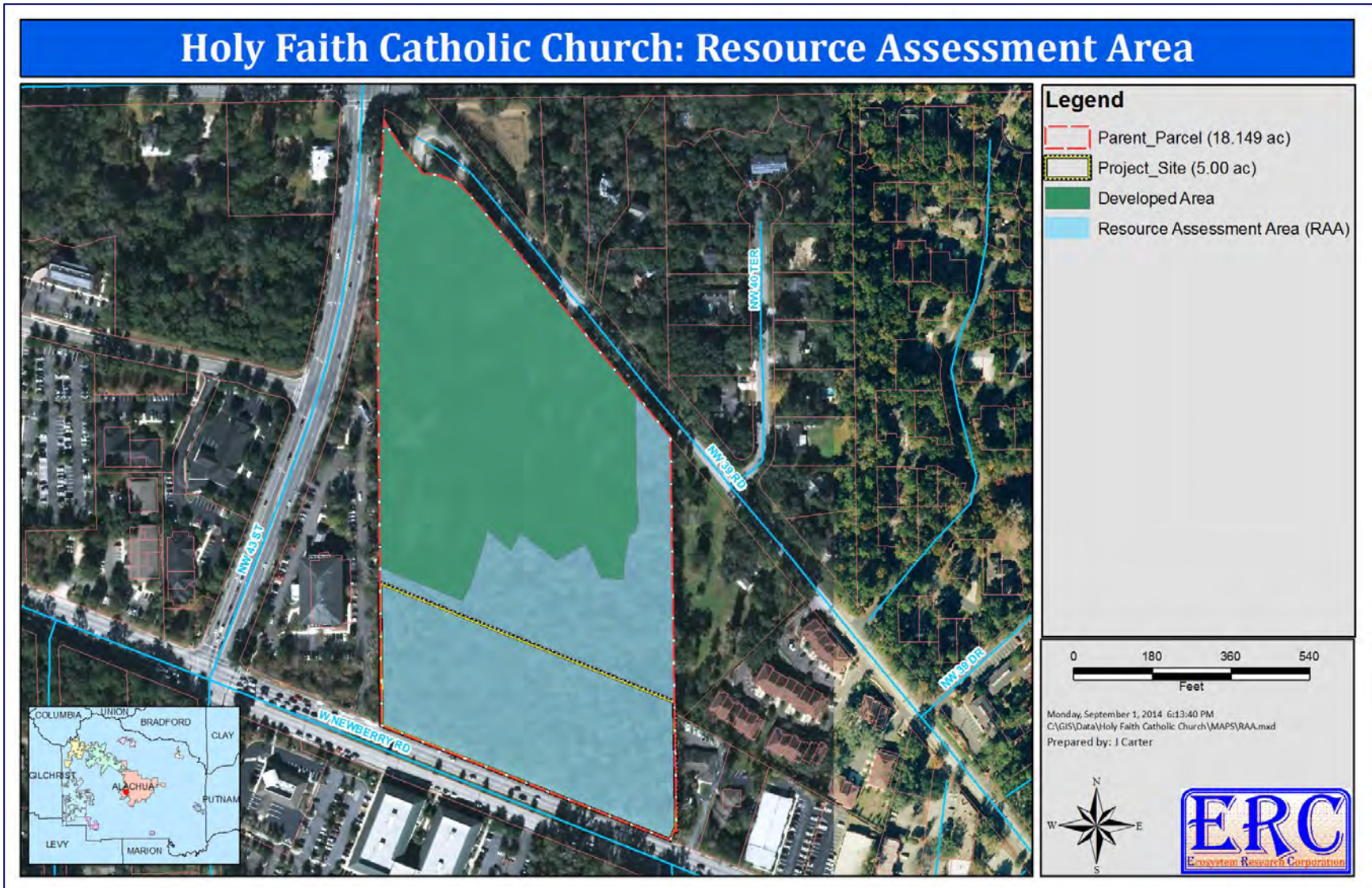


Figure 3. Resource Assessment Area.

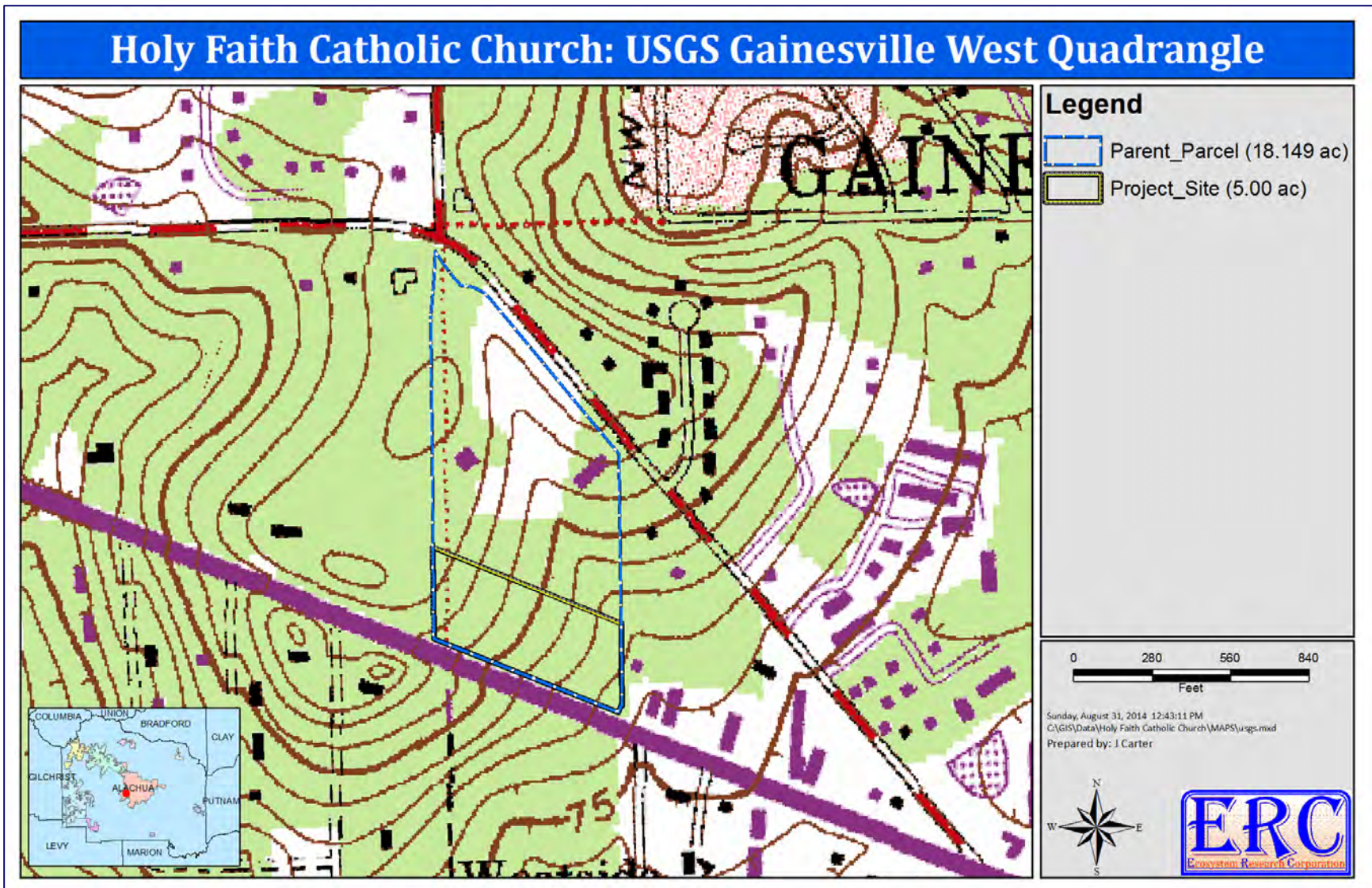


Figure 4. USGS Gainesville West quadrangle map of the project site and surrounding area.

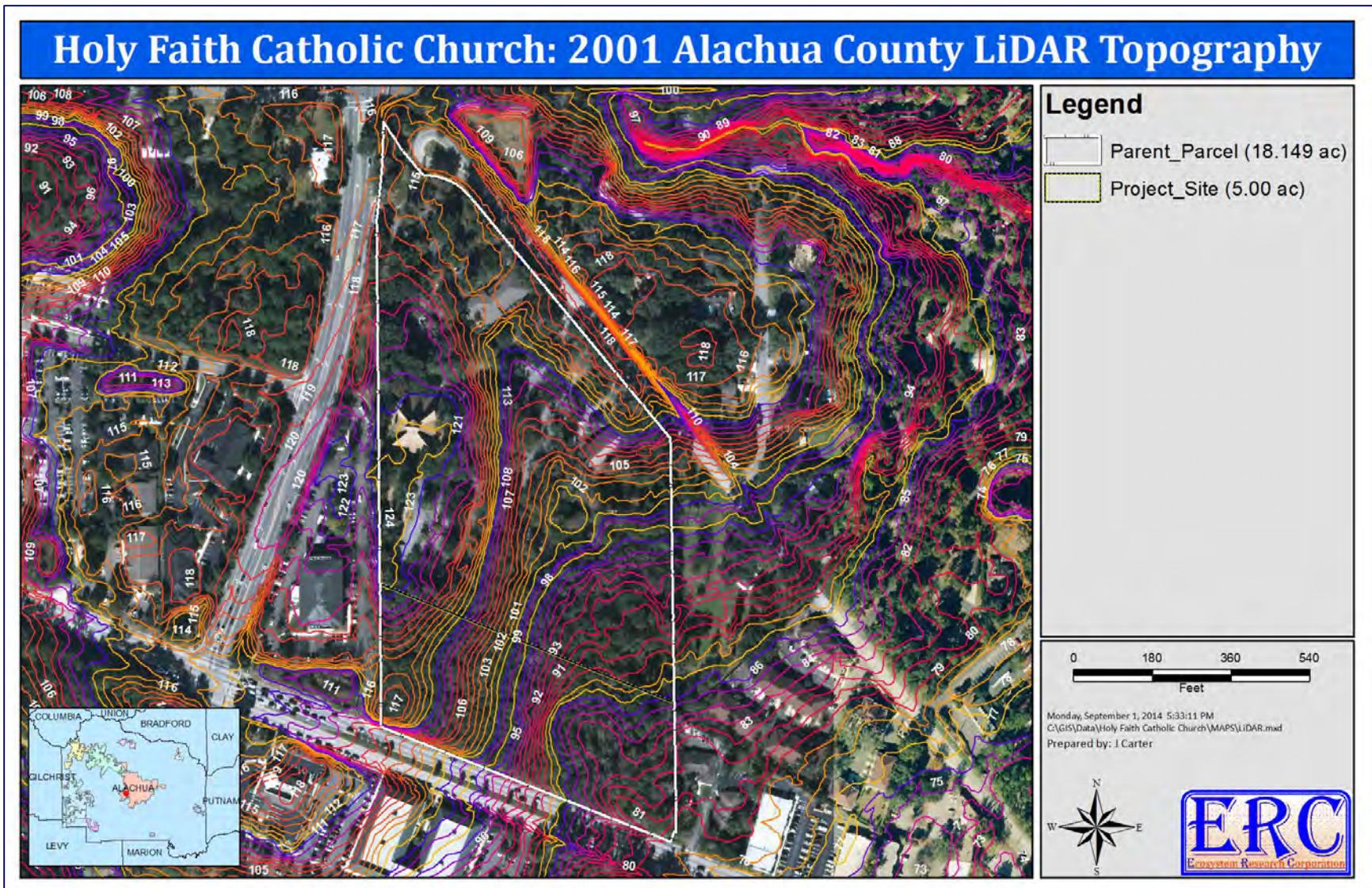


Figure 5. LiDAR topography map of the project site and surrounding area.

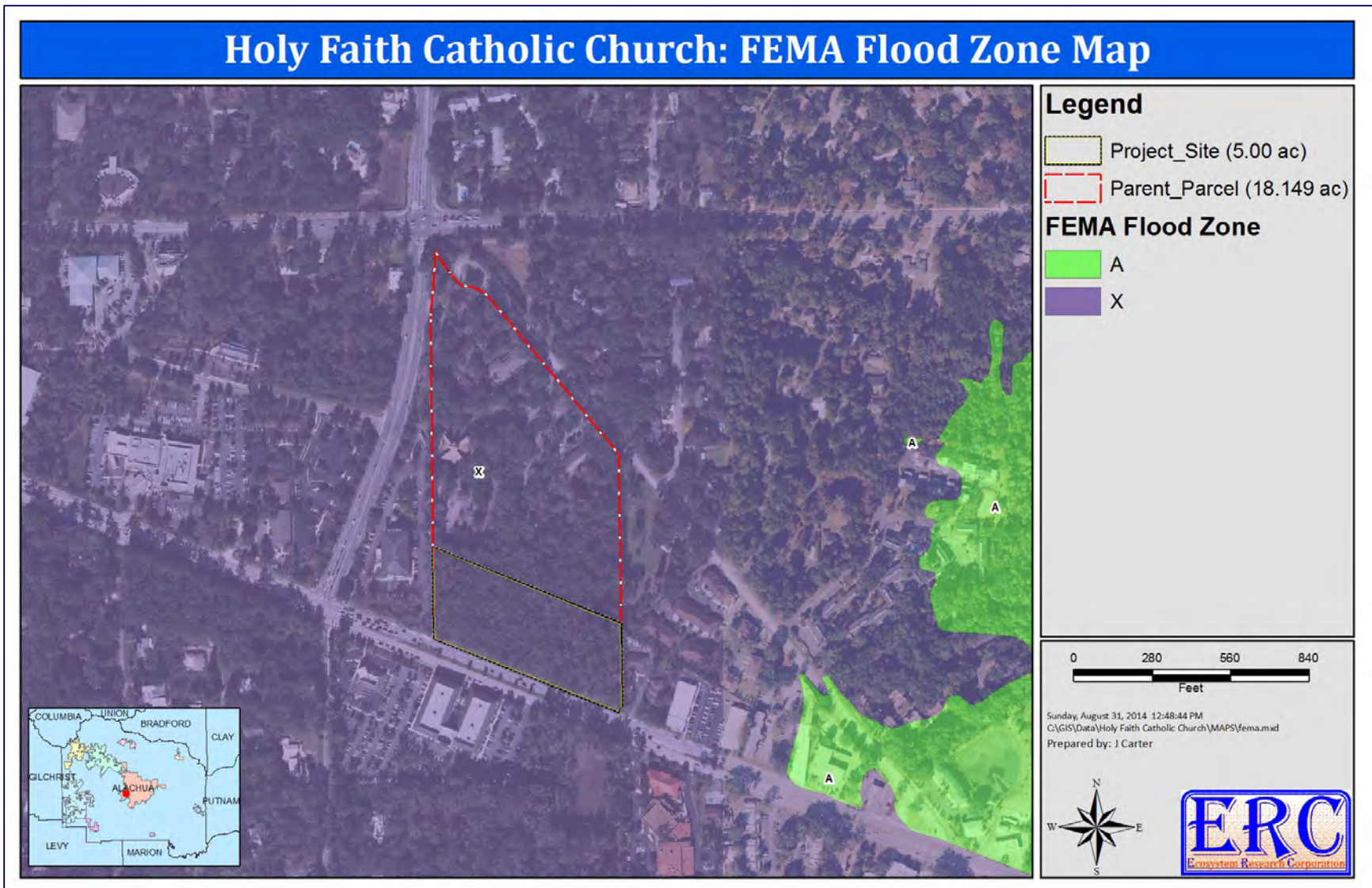


Figure 6. FEMA flood prone map of the project site and surrounding area.

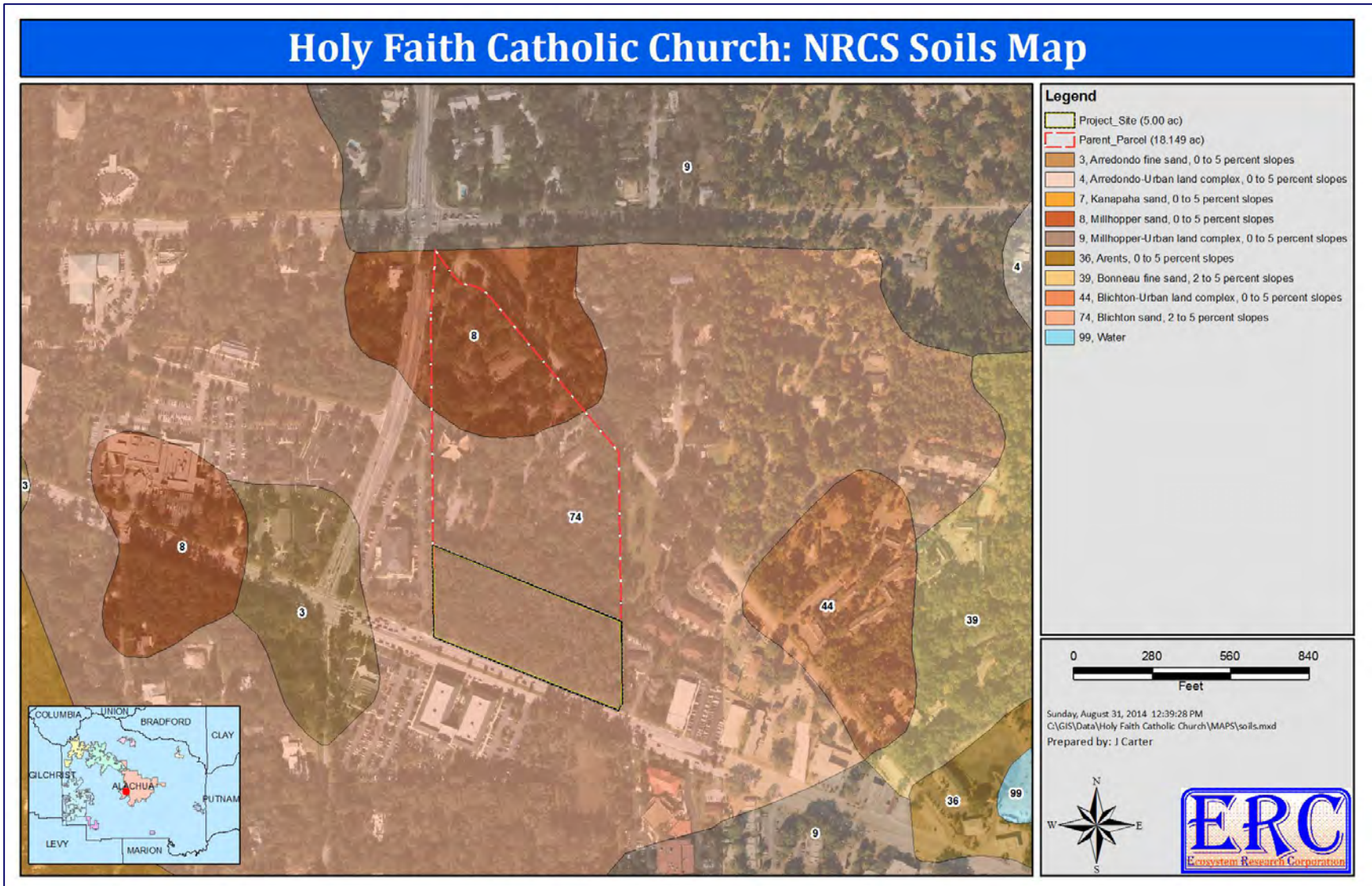


Figure 7. NRCS soils map of the project site and surrounding area.

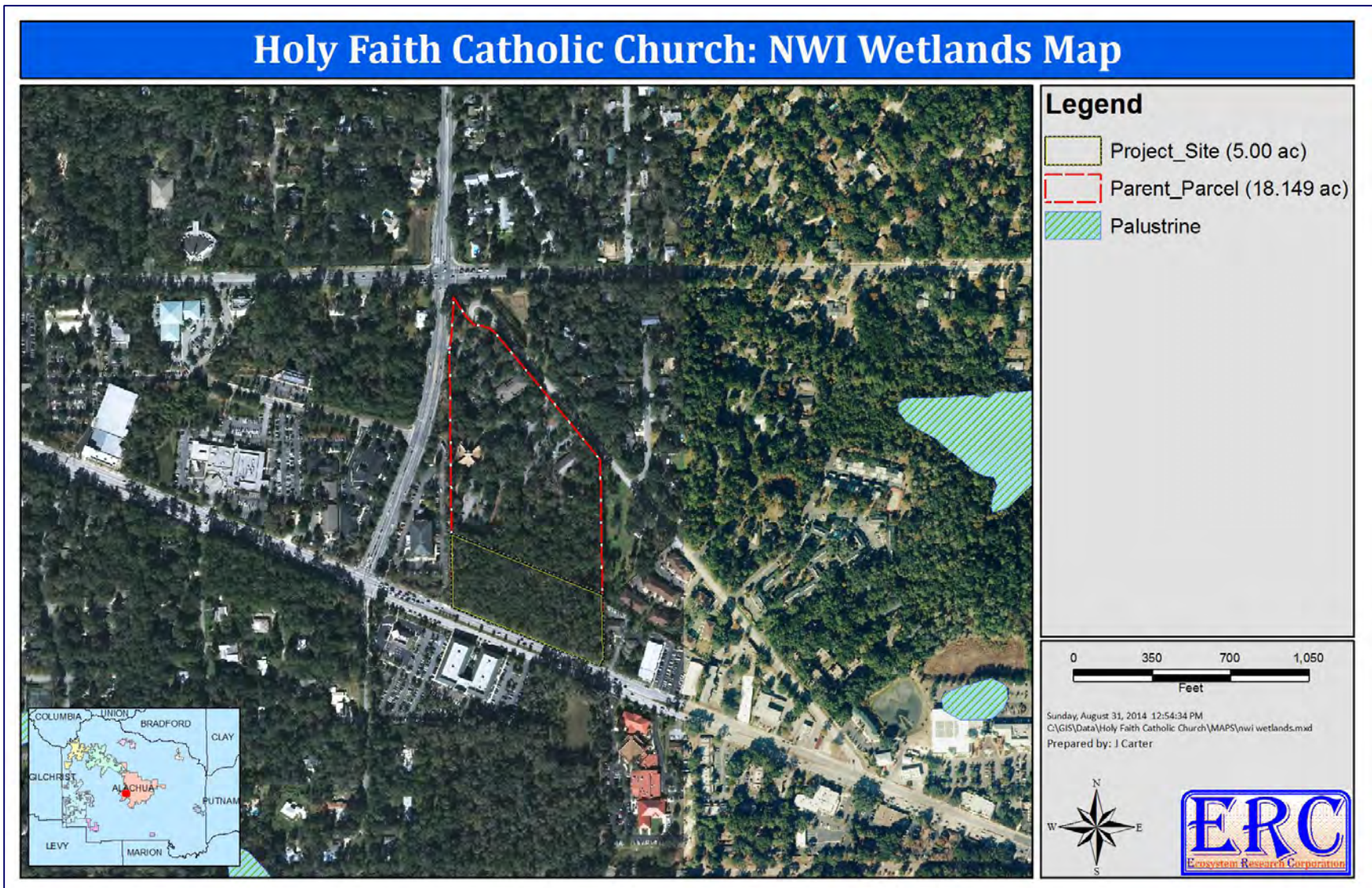


Figure 8. National Wetlands Inventory map.

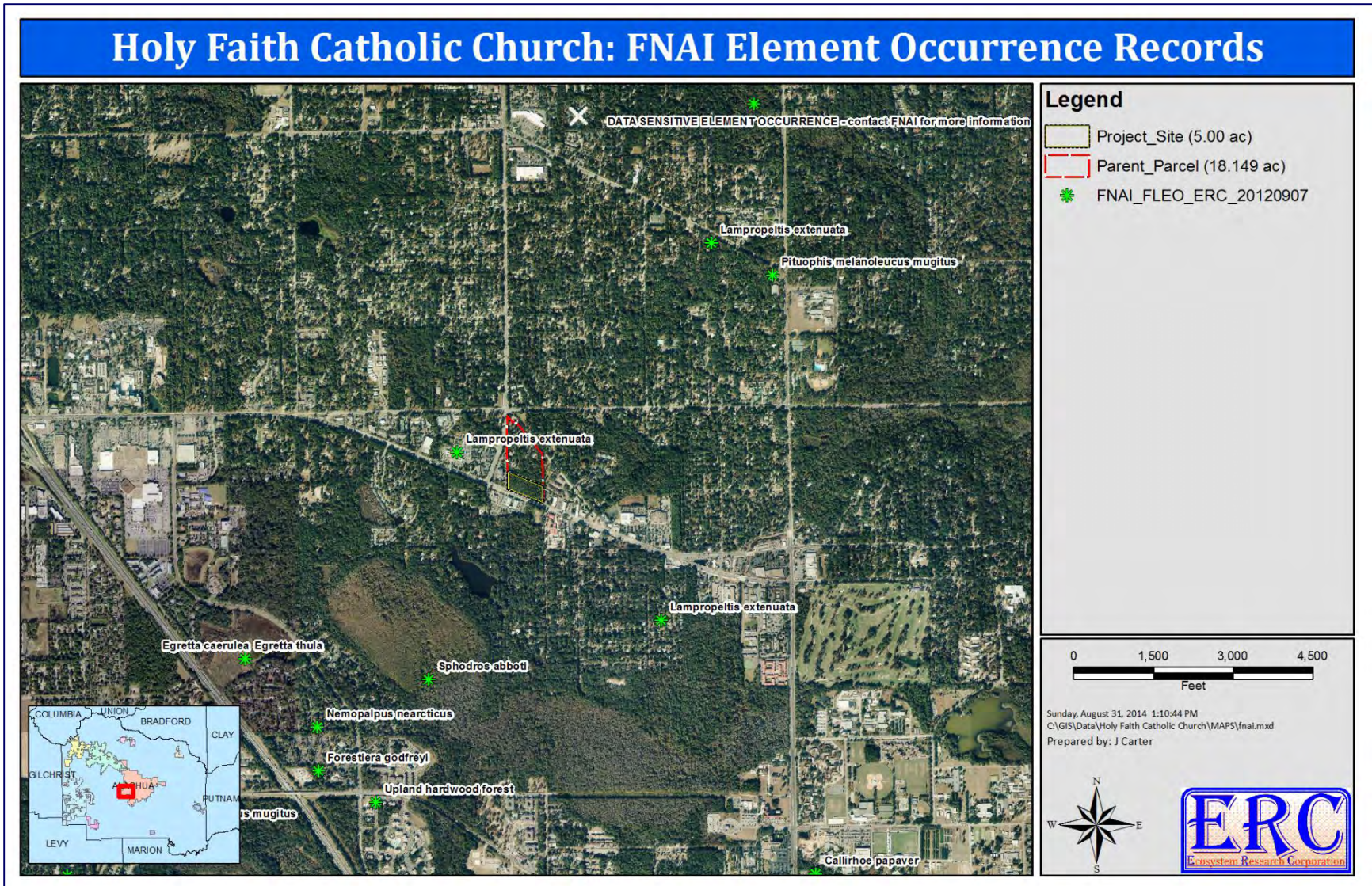


Figure 9. Florida Natural Areas Inventory element occurrence records of the Parent Parcel and adjacent area.

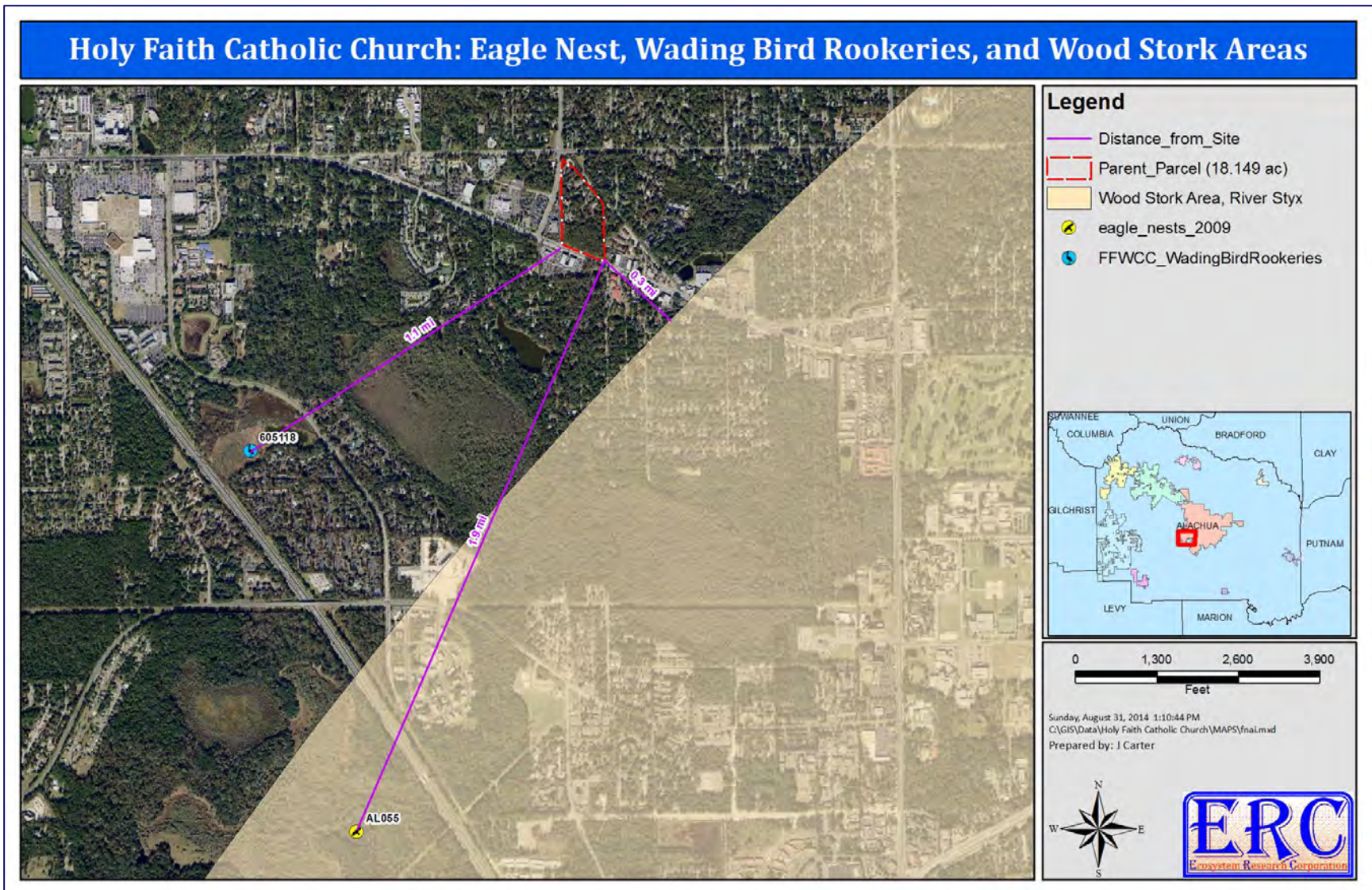


Figure 10. Eagle nest, wading bird rookery, and wood stork areas for the Parent Parcel and surrounding area.

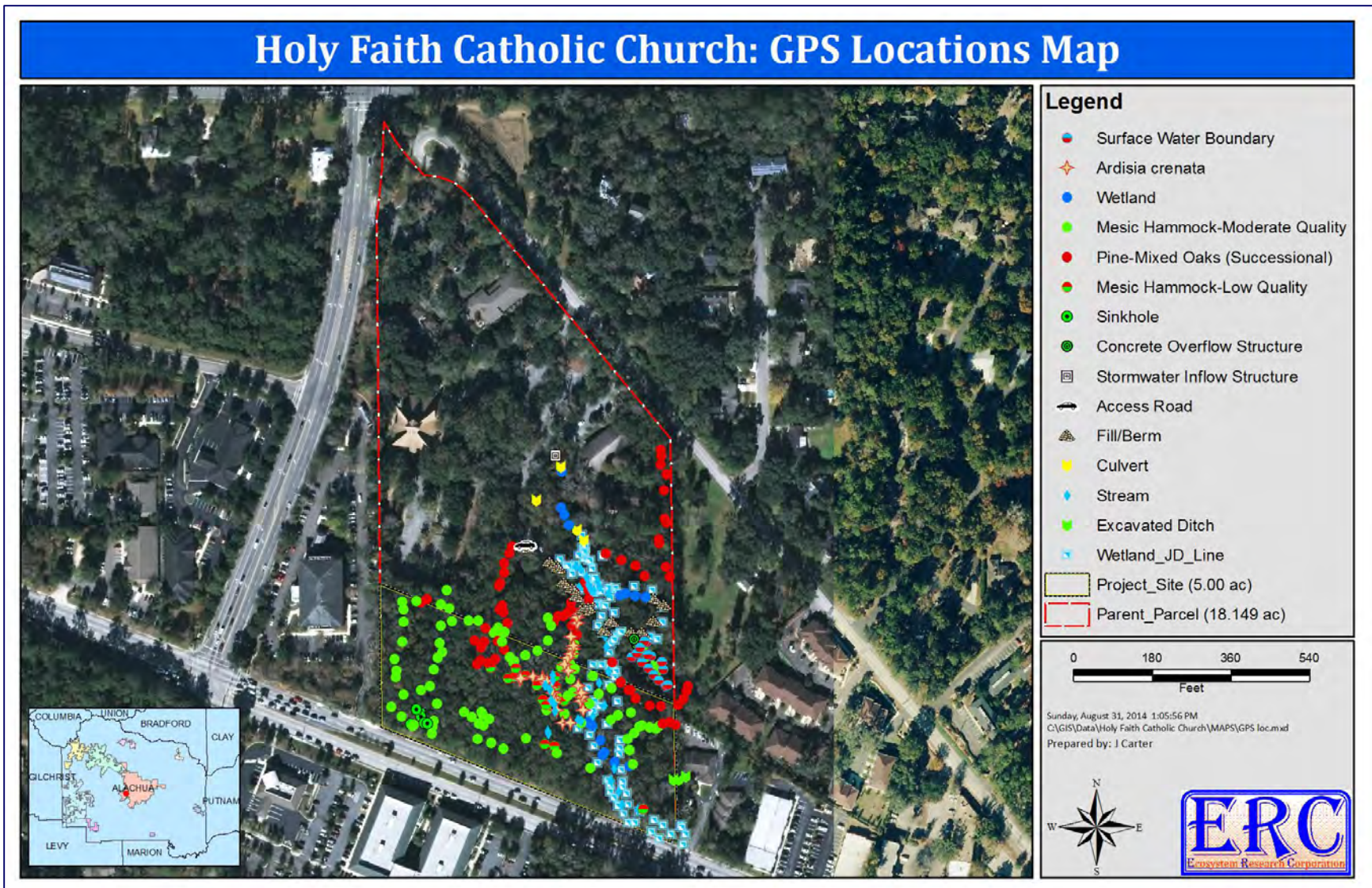


Figure 11. GPS locations where site-specific data were recorded.

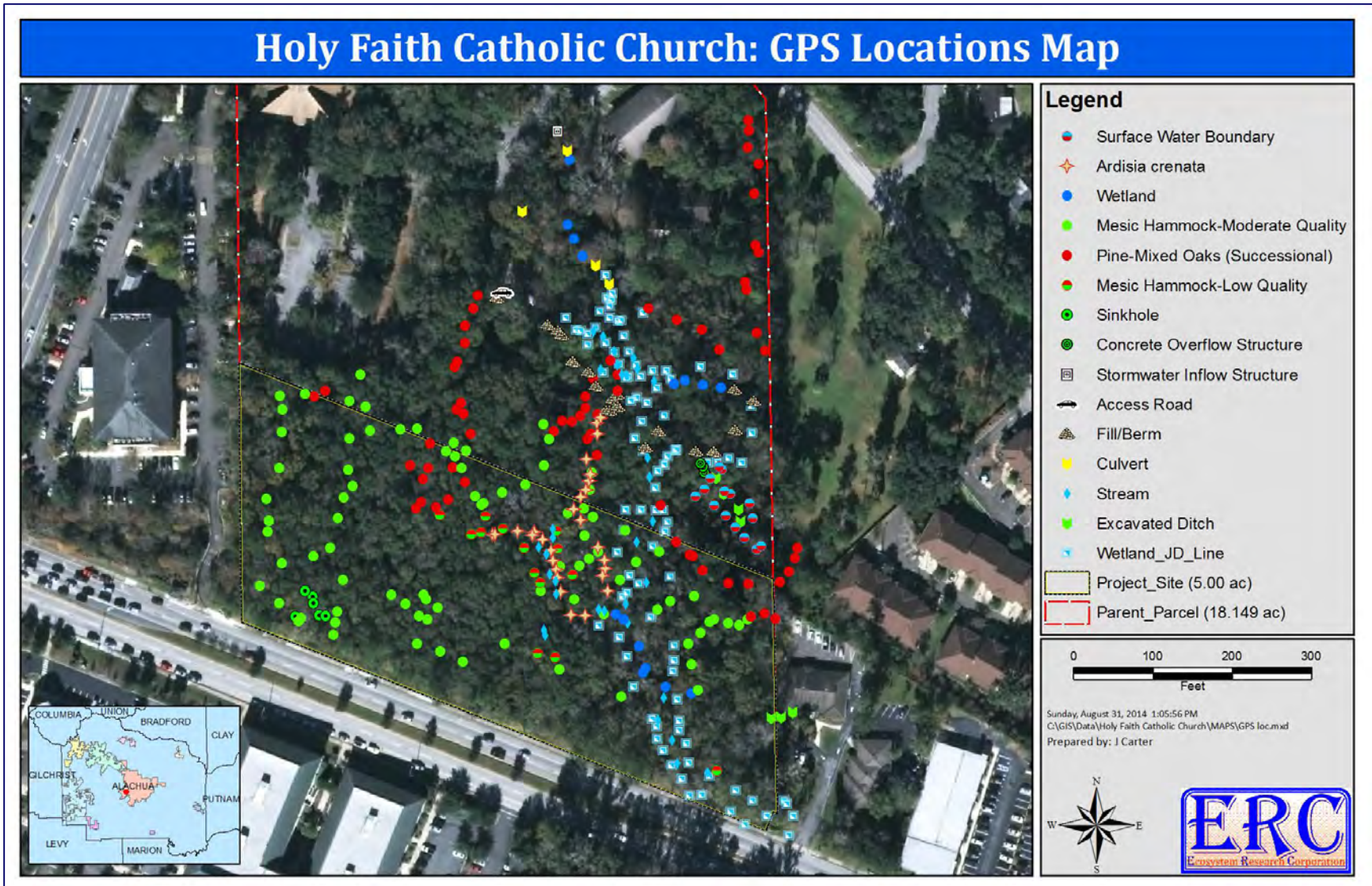


Figure 12. Close-up view of the GPS locations where site-specific data were collected.

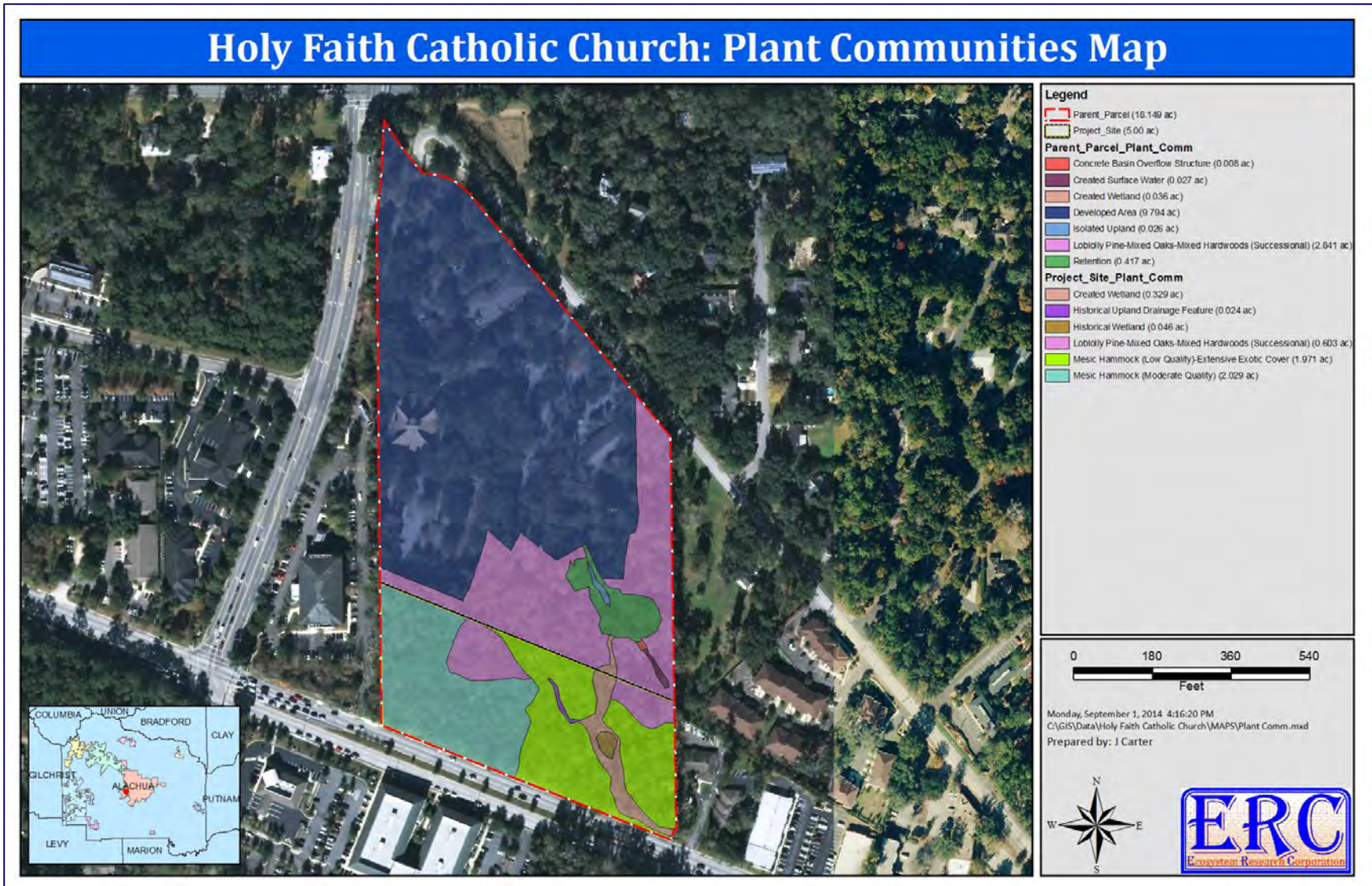


Figure 13. Plant communities map of the Parent Parcel and Project Site.

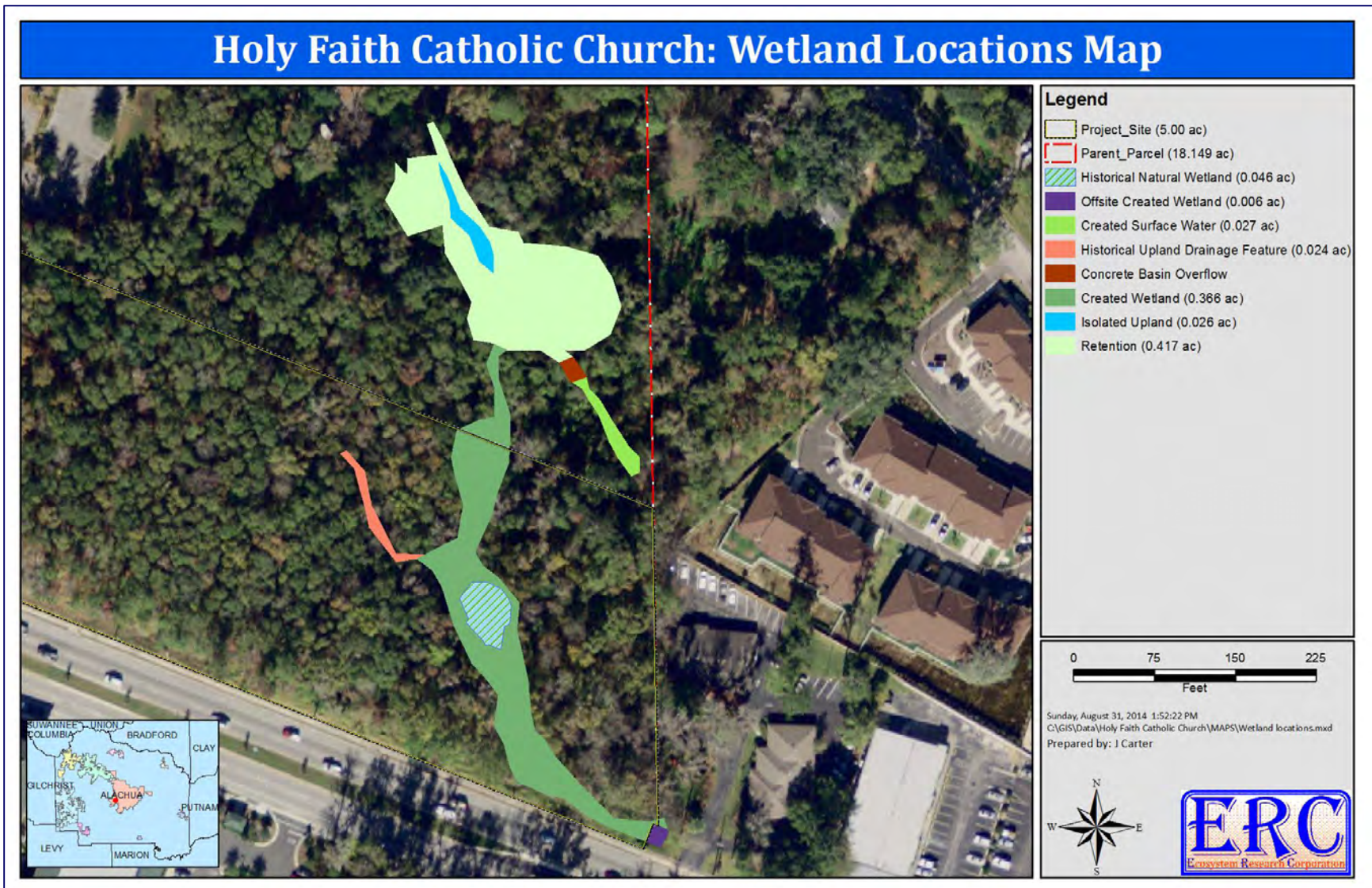


Figure 14. Wetlands and surface waters locations map.

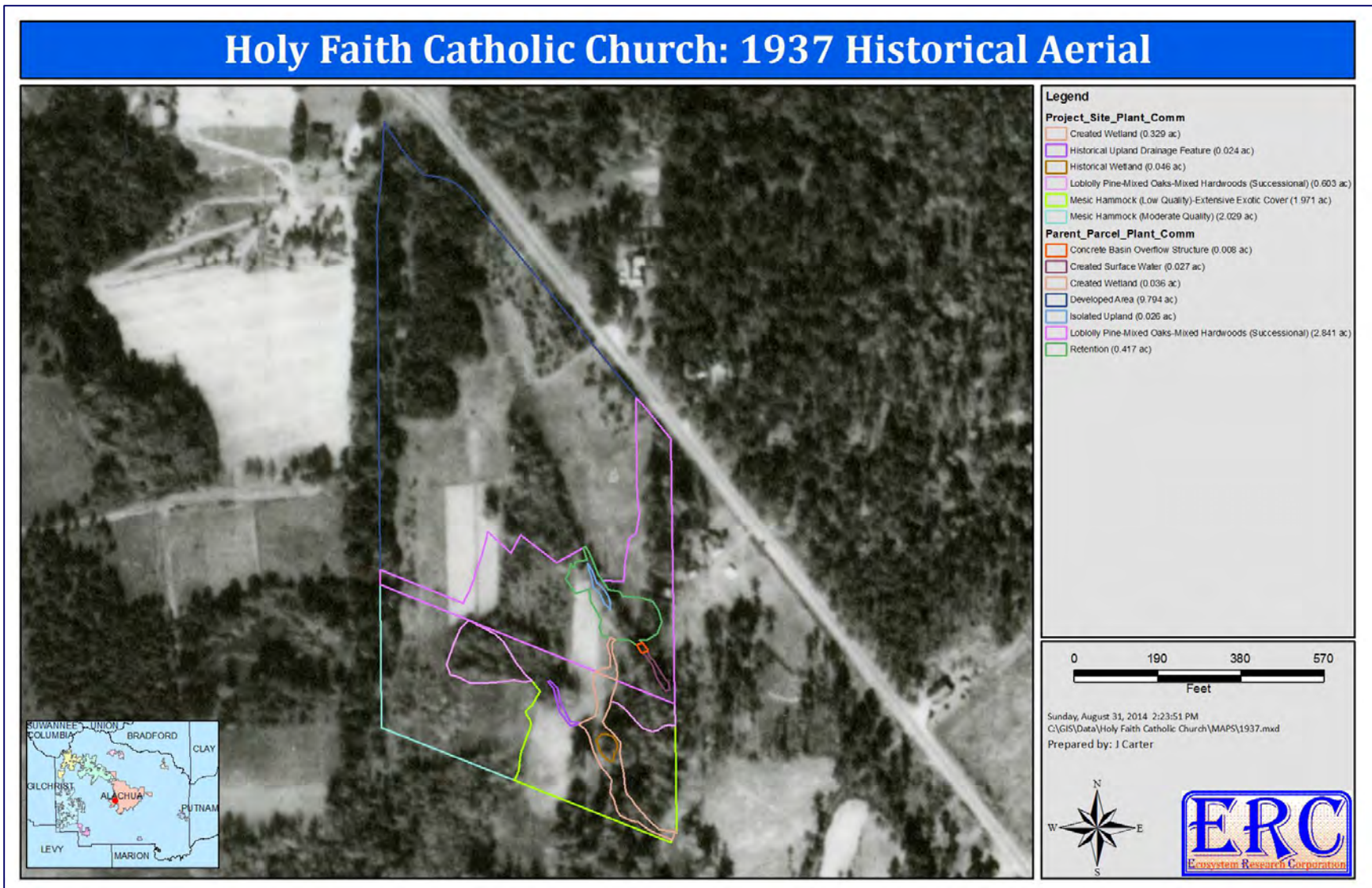


Figure 15. 1937 historical aerial photograph showing the Parent Parcel and Project Site overlain with existing plant communities.

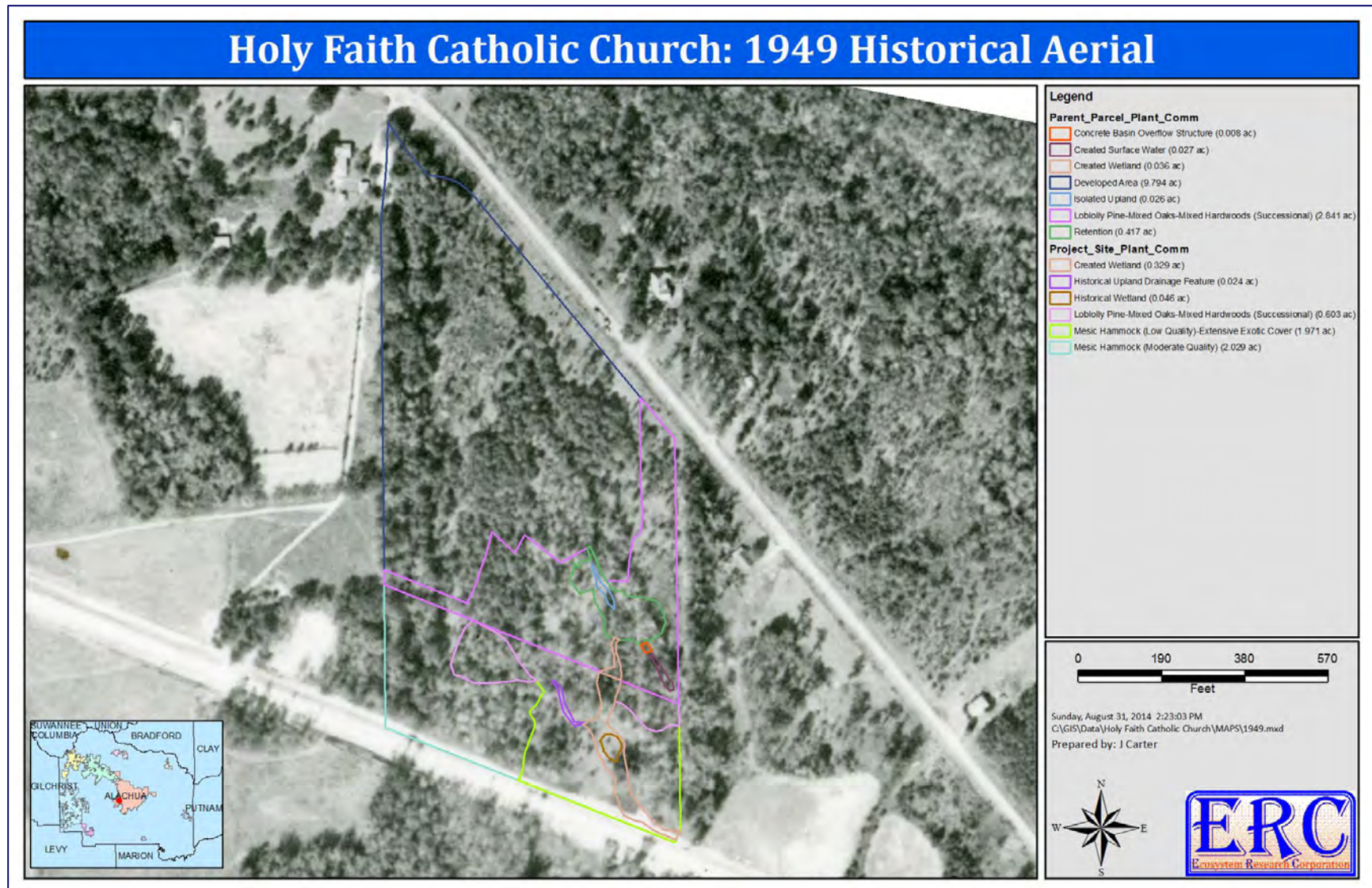


Figure 16. 1949 historical aerial photograph showing the Parent Parcel and Project Site overlain with existing plant communities.

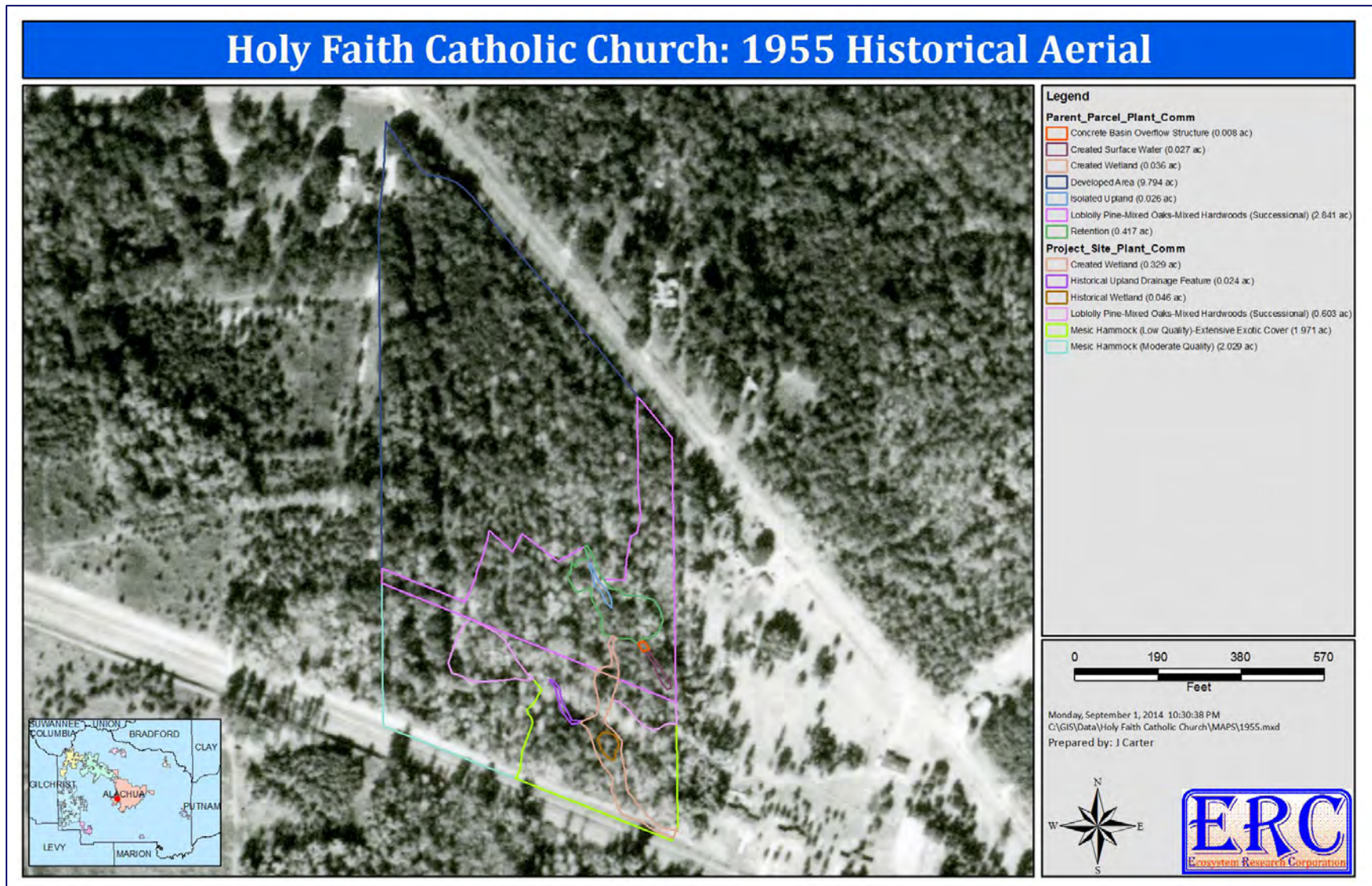


Figure 17. 1955 historical aerial photograph showing the Parent Parcel and Project Site overlain with existing plant communities.

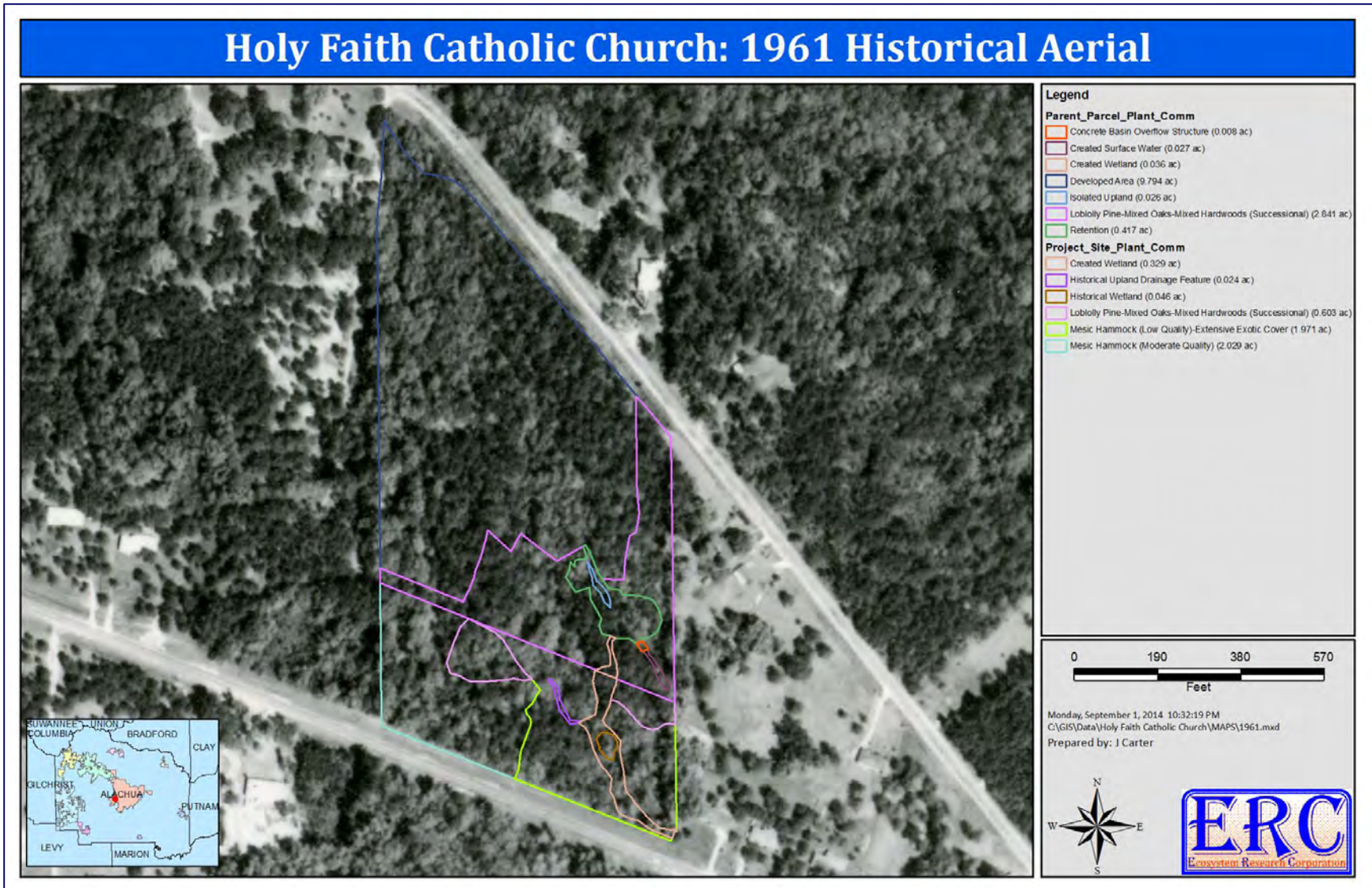


Figure 18. 1961 historical aerial photograph showing the Parent Parcel and Project Site overlain with existing plant communities.

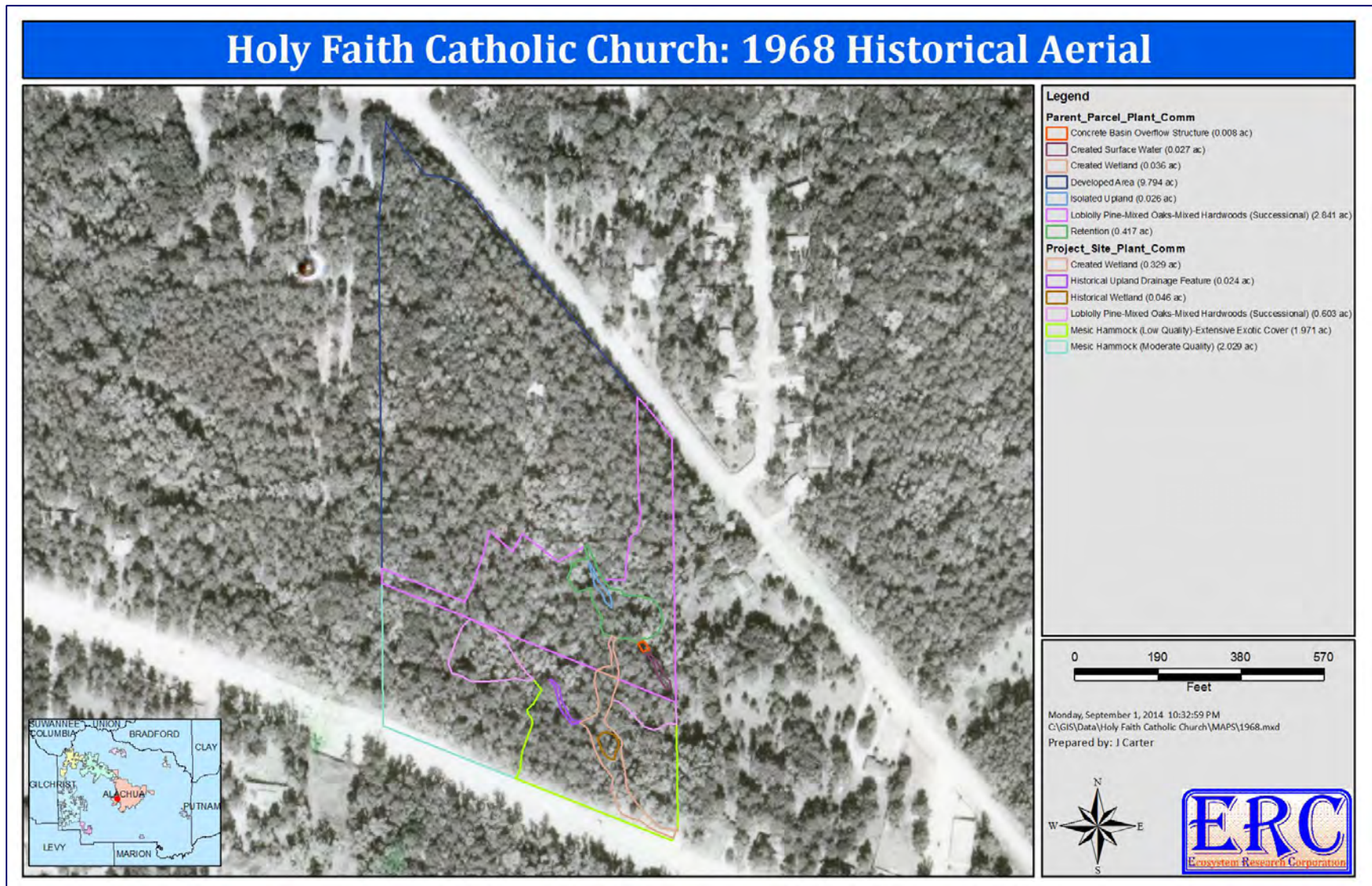


Figure 19. 1968 historical aerial photograph showing the Parent Parcel and Project Site overlain with existing plant communities.

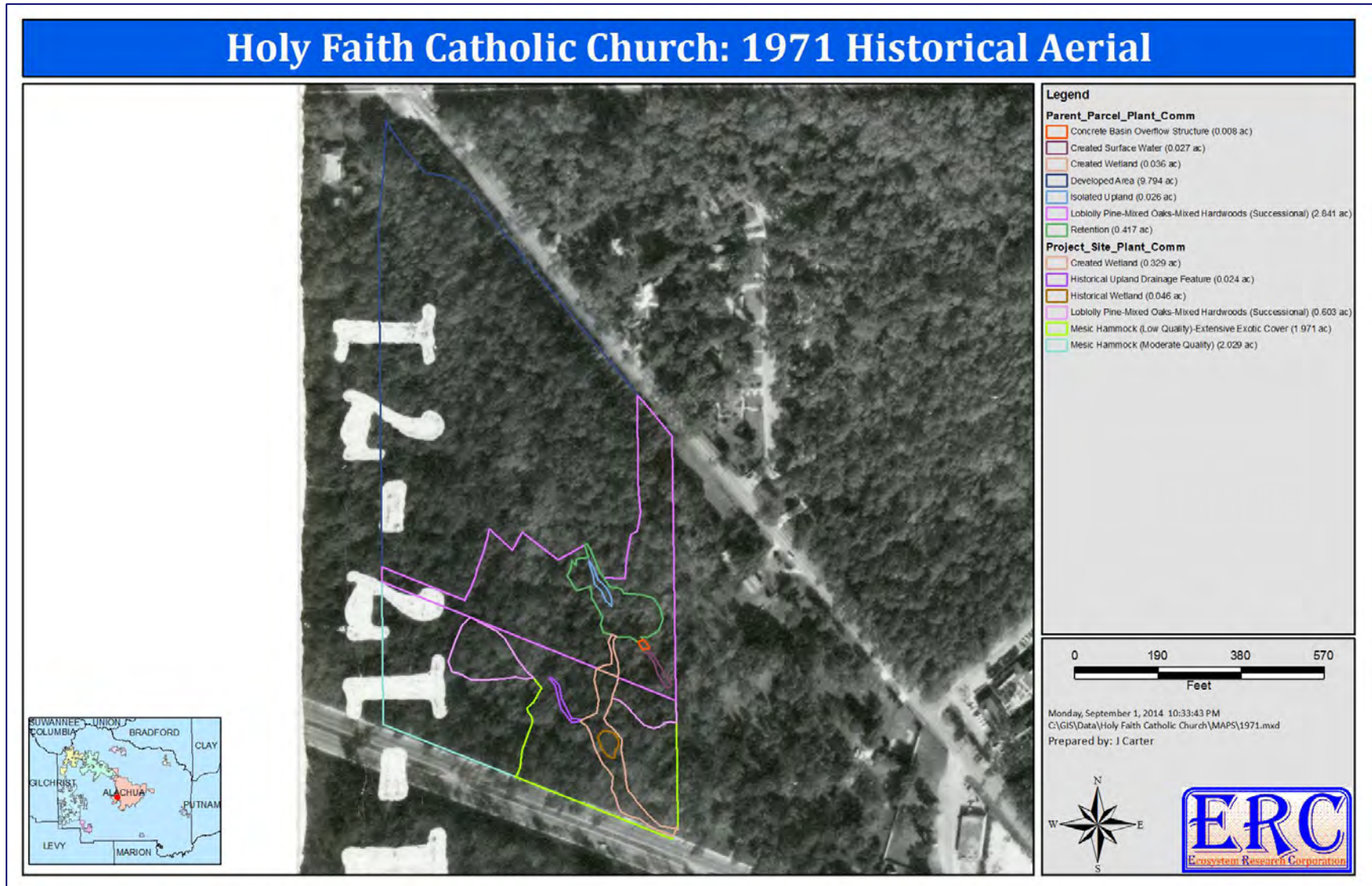


Figure 20. 1971 historical aerial photograph showing the Parent Parcel and Project Site overlain with existing plant communities.

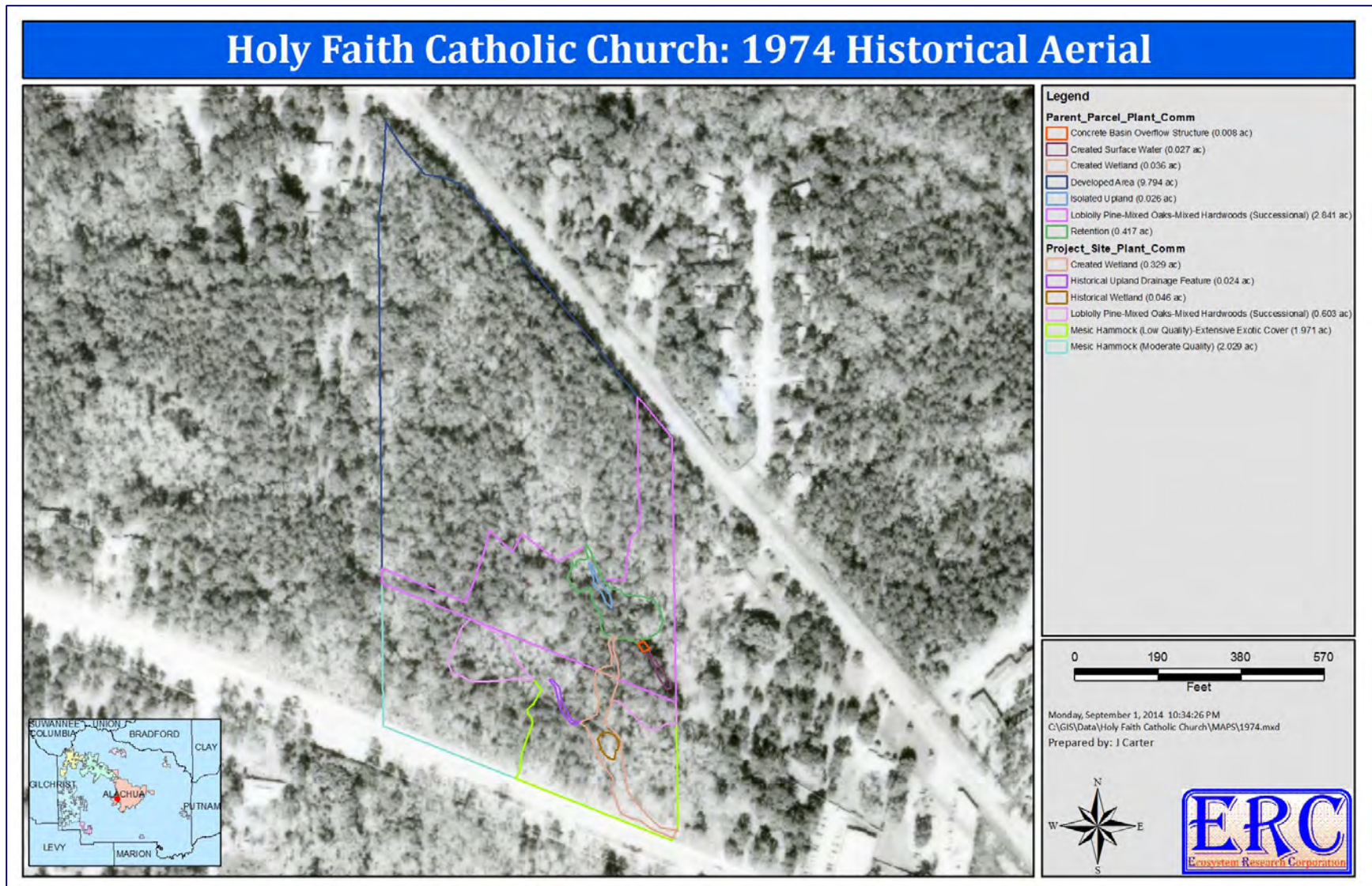


Figure 21. 1974 historical aerial photograph showing the Parent Parcel and Project Site overlain with existing plant communities.

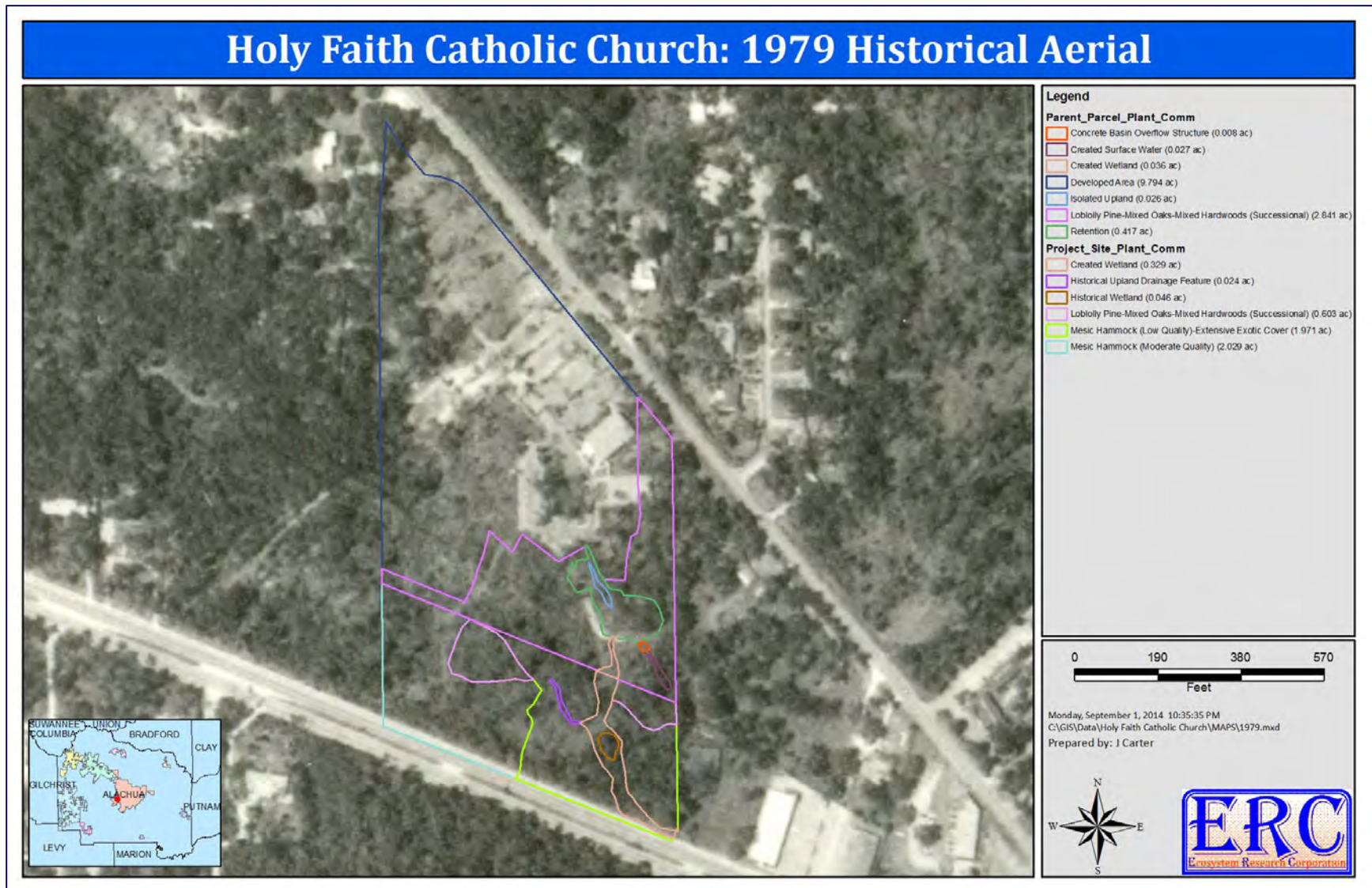


Figure 22. 1979 historical aerial photograph showing the Parent Parcel and Project Site overlain with existing plant communities.

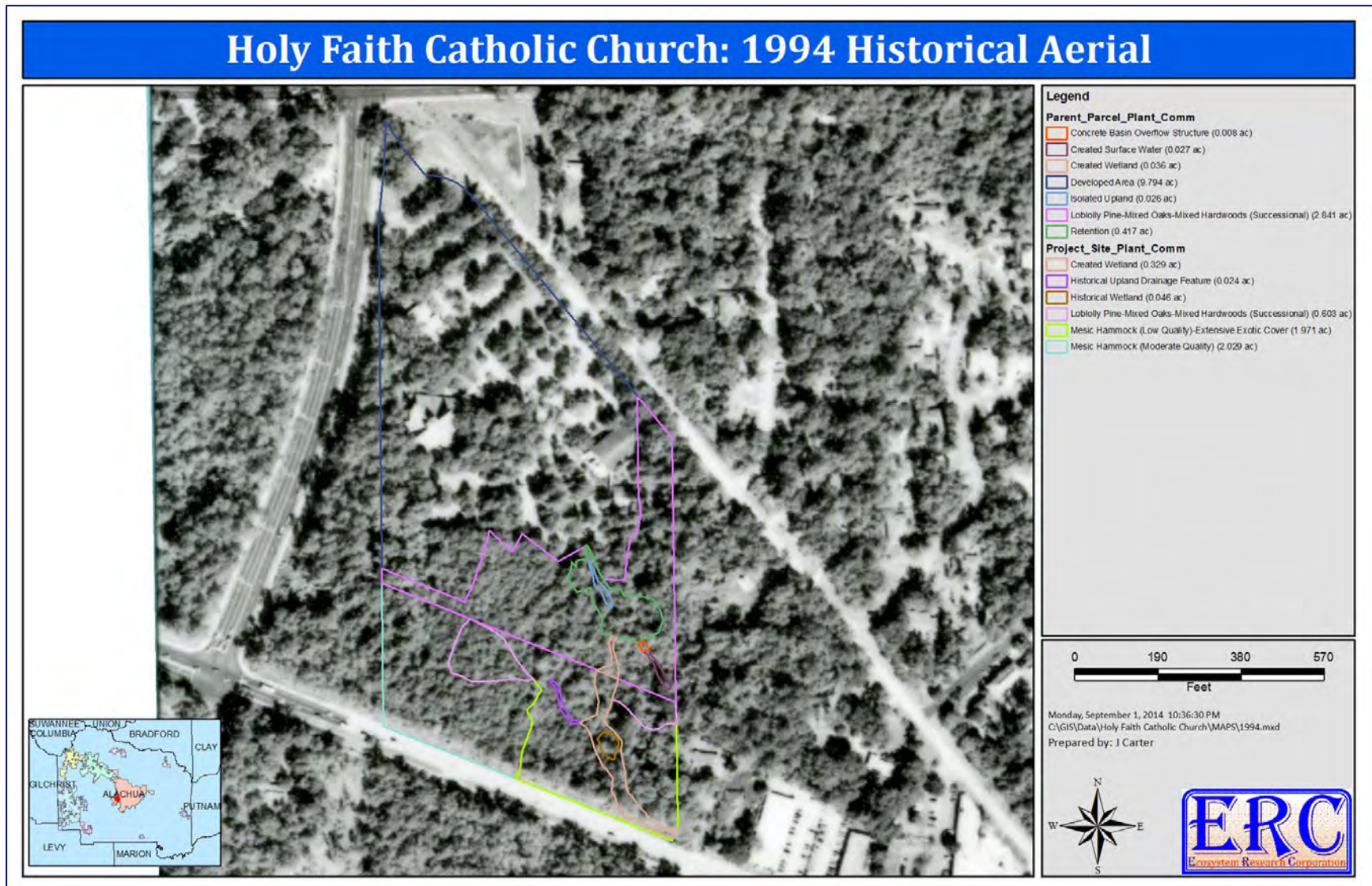


Figure 23. 1994 historical aerial photograph showing the Parent Parcel and Project Site overlain with existing plant communities.

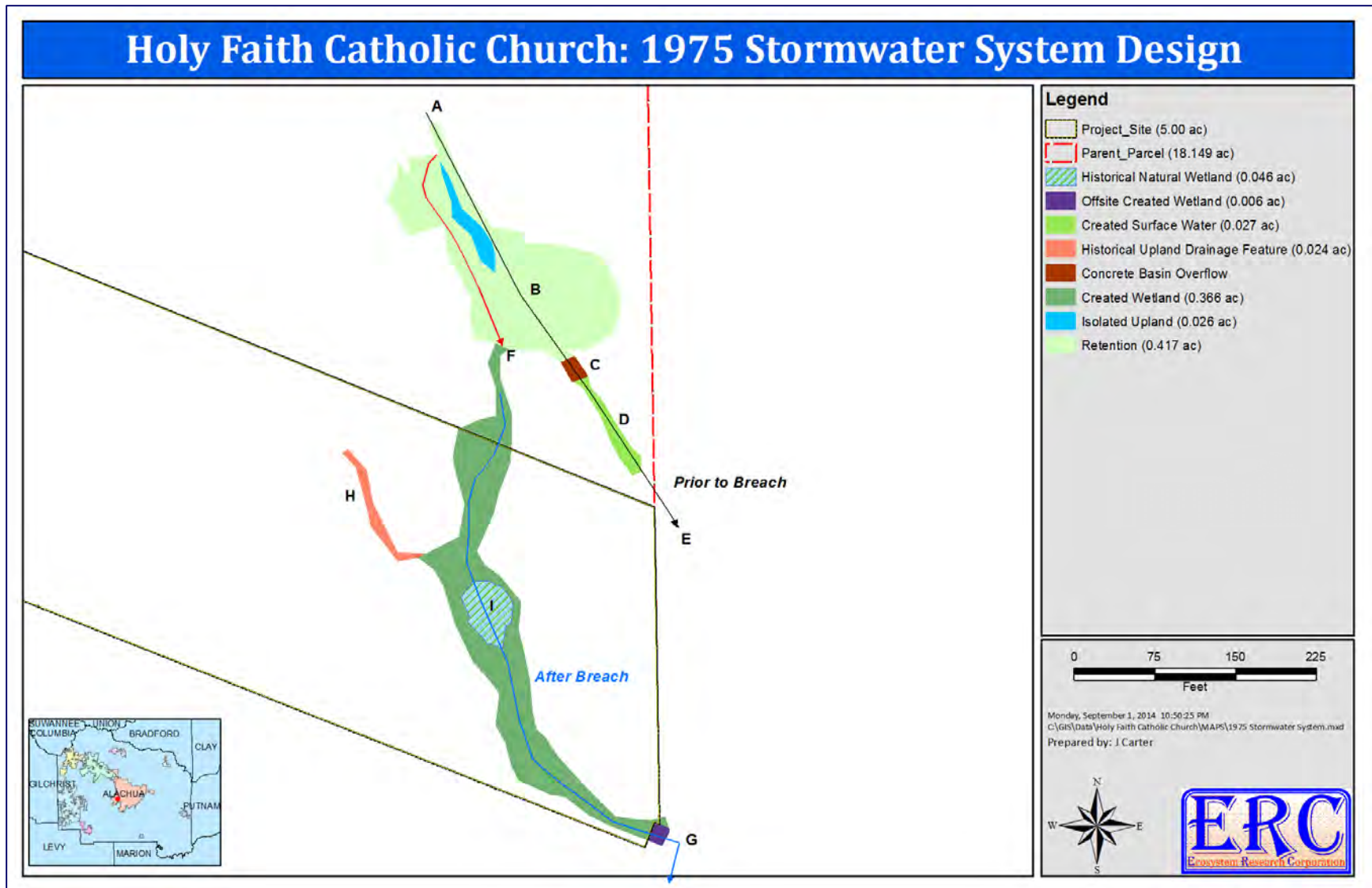


Figure 24. 1975 stormwater system design.



Figure 26. Close-up view of the culvert at Location G (see Figure 24).

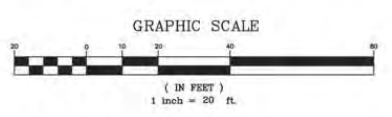
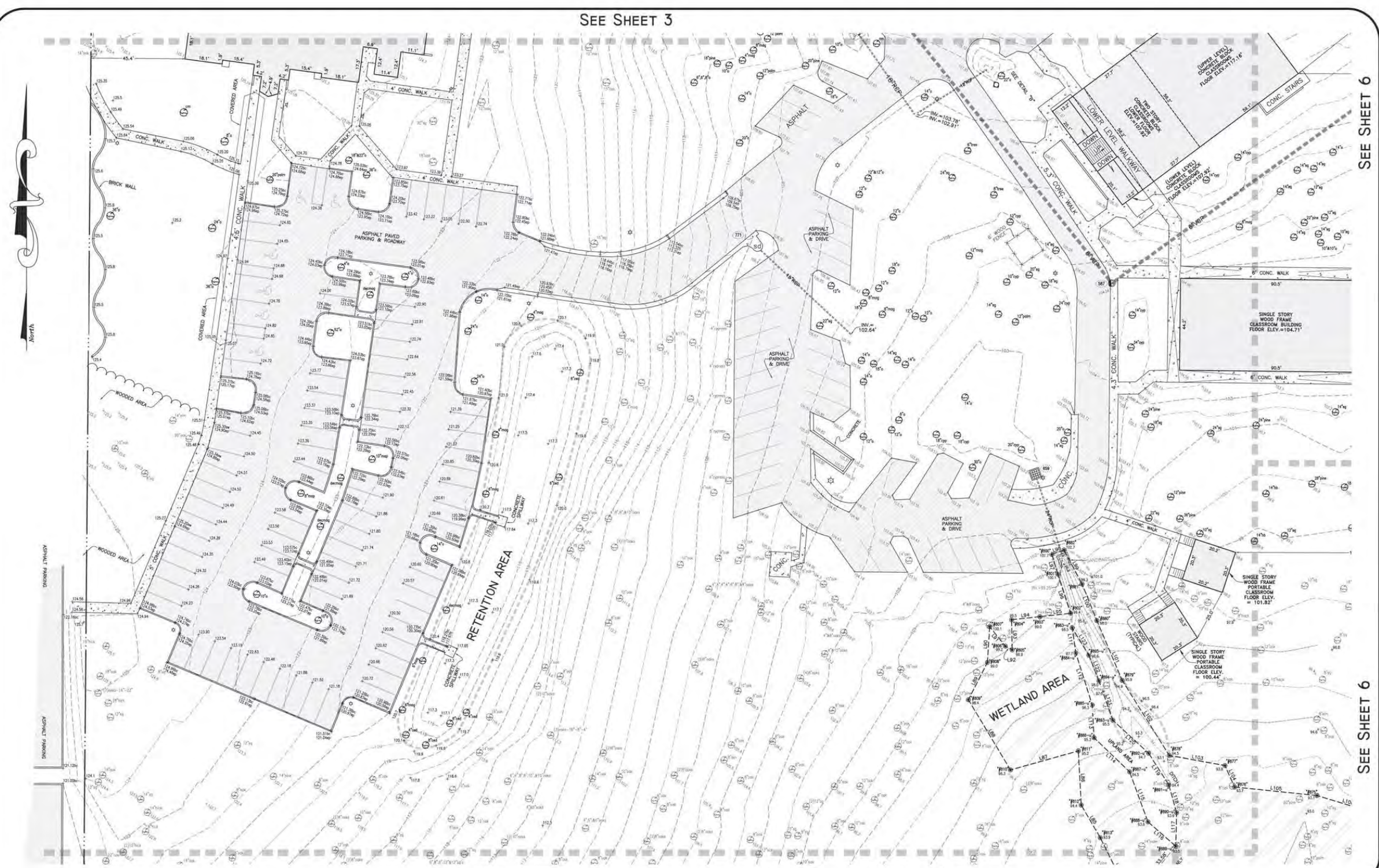
Attachment 1: Boundary and Topographic Survey

SEE SHEET 3

SEE SHEET 6

SEE SHEET 6

SEE SHEET 5



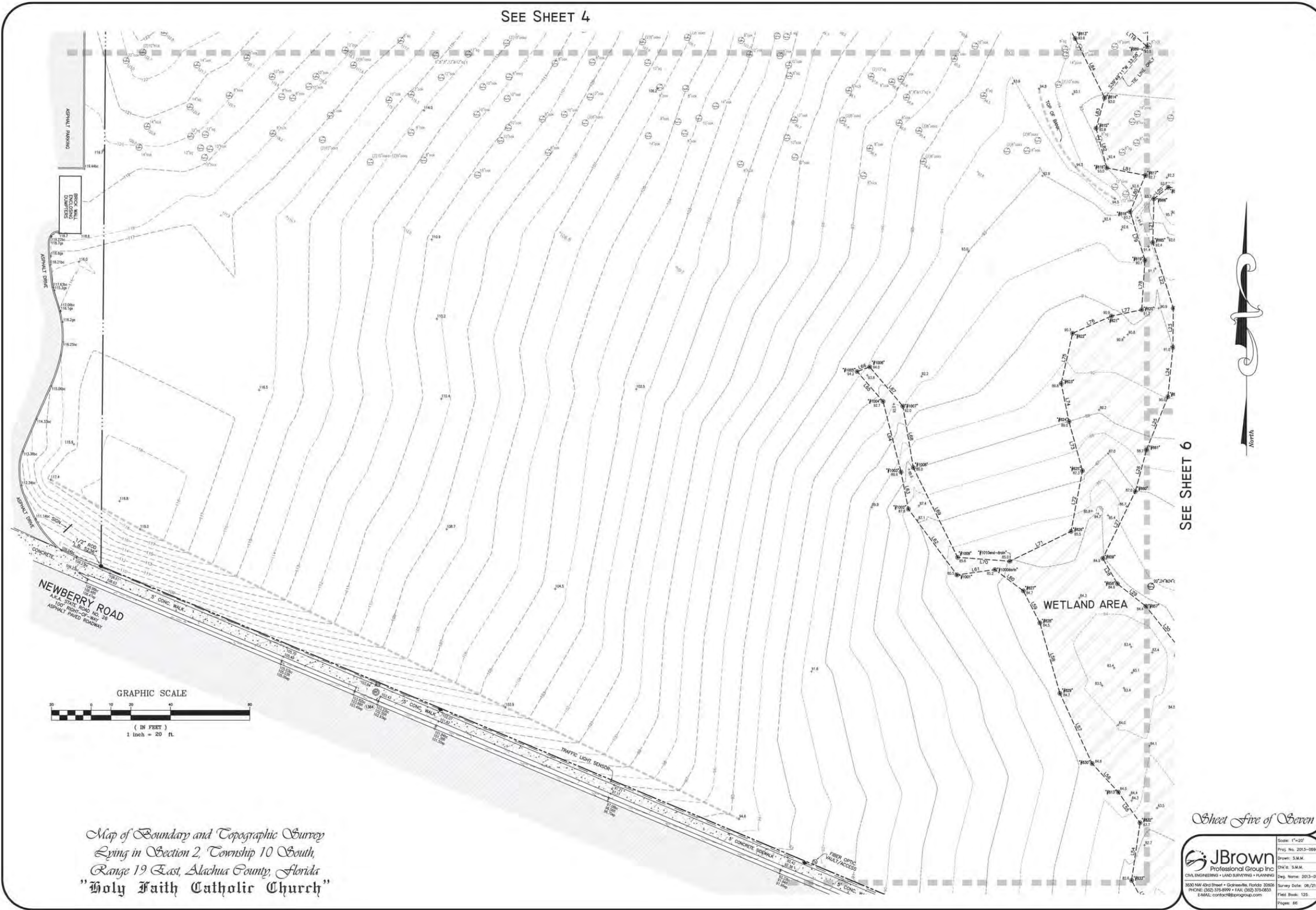
Map of Boundary and Topographic Survey
 Lying in Section 2, Township 10 South,
 Range 19 East, Alachua County, Florida
 "Holy Faith Catholic Church"

Sheet Four of Seven

JBrown
 Professional Group Inc
 CIVIL ENGINEERING • LAND SURVEYING • PLANNING
 3030 NW 43rd Street • Gainesville, Florida 32609
 PHONE: (352) 376-8999 • FAX: (352) 376-0833
 EMAIL: confor@jbrbrowngroup.com

Scale: 1"=20'
Proj. No. 2013-0861
Drawn: S.M.M.
CHK'd: S.M.M.
Dep. Name: 2013-0861
Survey Date: 06/21/13
Field Book: 125
Pages: 66

SEE SHEET 4

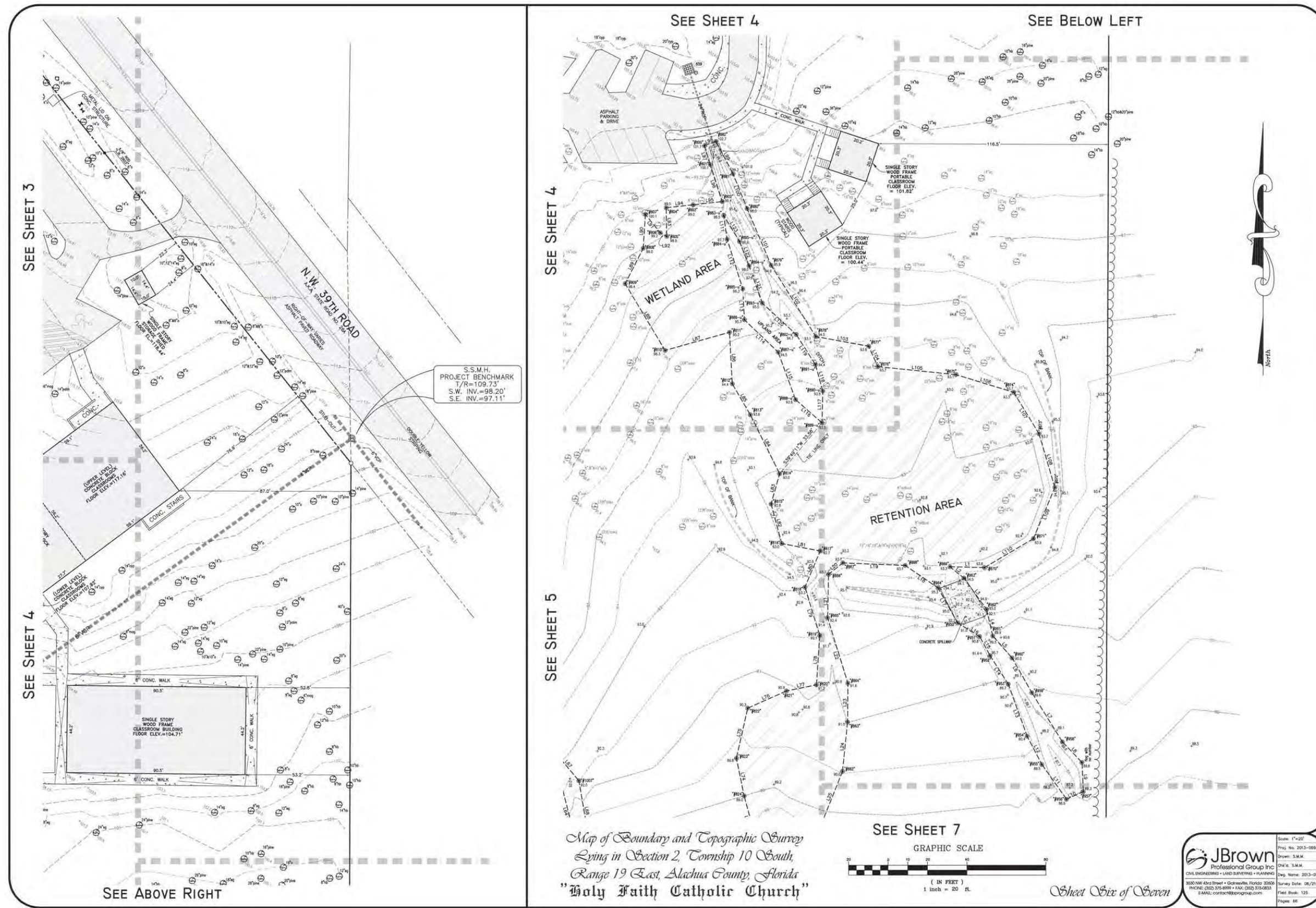


Map of Boundary and Topographic Survey
 Lying in Section 2, Township 10 South,
 Range 19 East, Alachua County, Florida
 "Holy Faith Catholic Church"

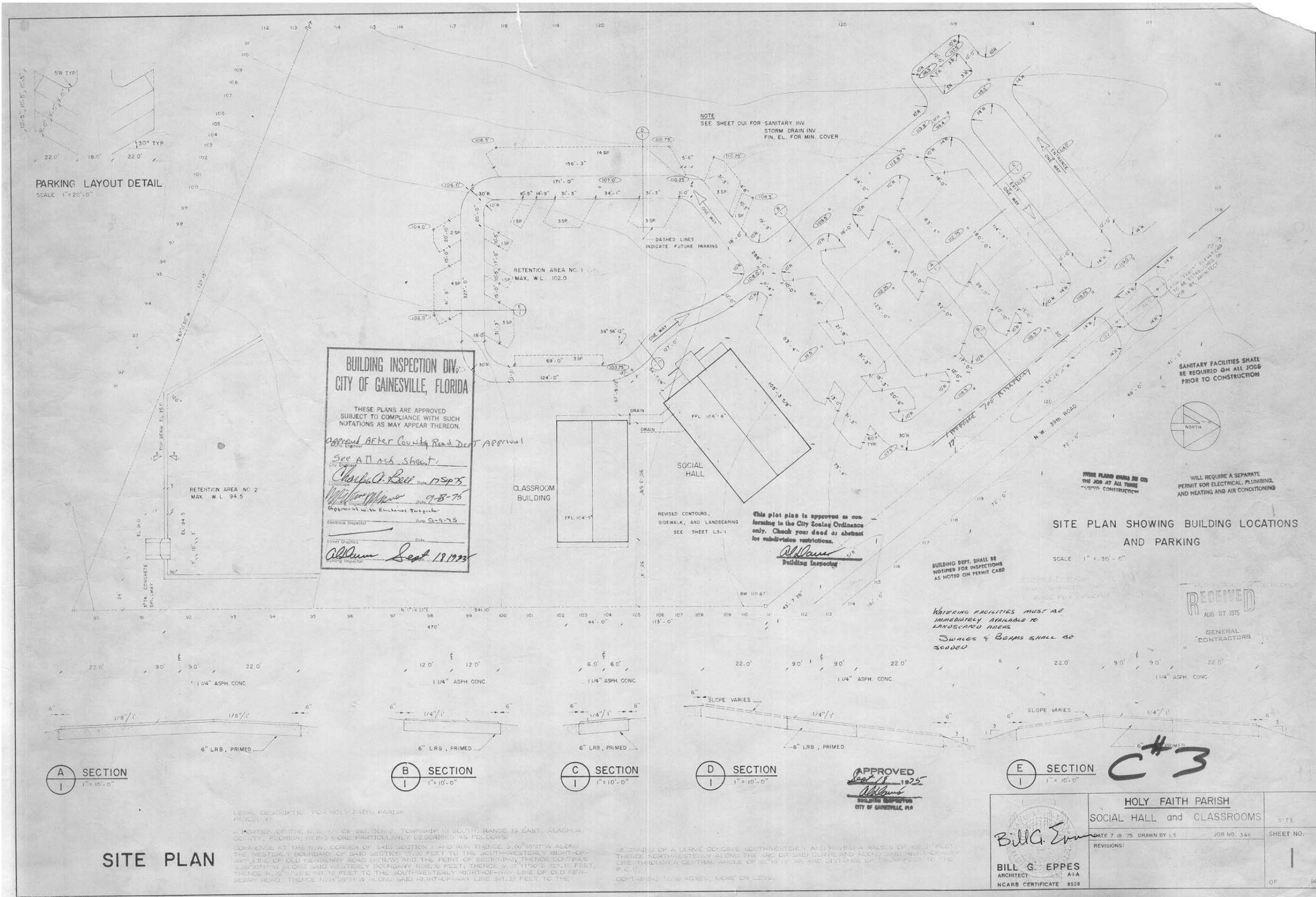
Sheet Five of Seven

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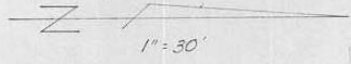
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Drawn:	S.M.M.
CHK'd:	S.M.M.
Dep. Name:	2013-0506
Survey Date:	06/21/13
Field Book:	125
Pages:	66



Attachment 2: Engineering Plans for the Retention Basin Permitted and Approved by the City of Gainesville in September 1975 Detailing the Stormwater Management System



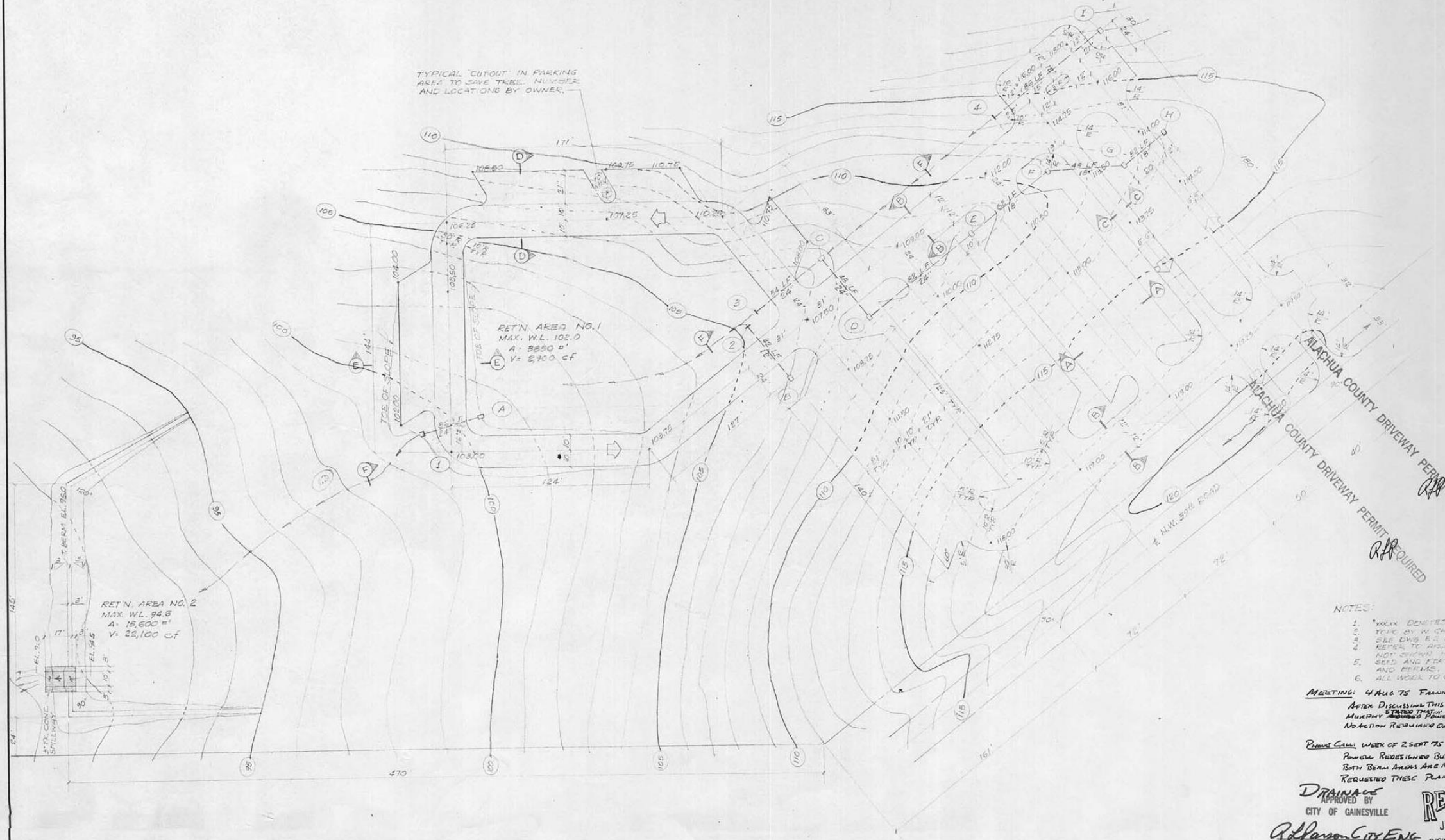
DRESDEN CORP - GEYHRO JAN 80 P43



TYPICAL 'CUTOUT' IN PARKING AREA TO SAVE TREE, NUMBER AND LOCATION BY OWNER.

RETN. AREA NO. 1
MAX. WL. 102.0
A = 5850 sq ft
V = 2900 CF

RETN. AREA NO. 2
MAX. WL. 94.6
A = 15,600 sq ft
V = 22,100 CF



NOTES:

1. *X MARK DENOTES FINISHED GRADE
2. *Y MARK BY W. CHANCE, DRAINAGE
3. SEE DWG. NO. 140369D FOR SETTING, ETC.
4. REFER TO ASHL. DWG. FOR INFO.
5. NOT SHOWN HEREON.
6. SEED AND FERTILIZER ALL SLOPES AND BEHINDS.
7. ALL WORK TO COMPLY W/ CITY SPECS.

MEETING: 4 AUG 75 FRANK MURPHY, R.L. PARSON.
AFTER DISCUSSING THIS DESIGN PROVISION FOR FUTURE CONDT. MURPHY STATED THAT PARSONS WOULD REDESIGN FOR PROPOSED NO ACTION REQUIRED ON THESE PLANS.

PHONE CALL: WORK OF 2 SEPT 75 FRANK MURPHY. PARSONS PROPOSED BUT ONLY MINOR CHANGES BOTH BEHIND AREAS ARE NECESSARY. MURPHY REQUESTED THESE PLANS BE REVIEWED FOR APPROVAL.

DRAINAGE
APPROVED BY
CITY OF GAINESVILLE
R. L. Parson CITY ENG
DATE 11 SEPT 75

RECEIVED
JUN 13 1975
ENGINEERING DEPARTMENT
BY *[Signature]*

HOLY FAITH PARISH	
PAVING AND DRAINAGE PLAN	
DWG. E1 OF 2	<i>[Signature]</i>
JUNE, 1975	FOR REG. ENG. NO. 14651