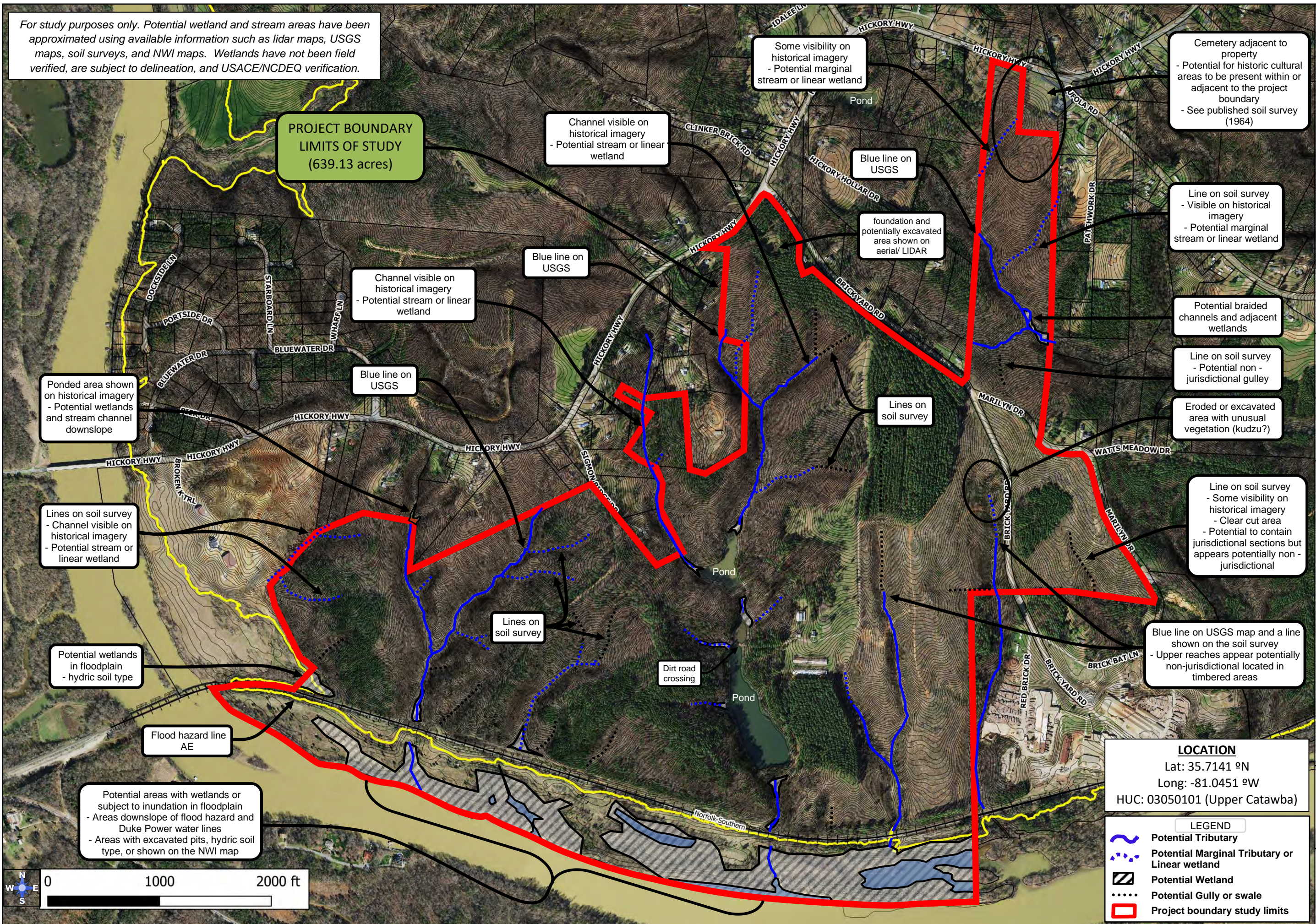


For study purposes only. Potential wetland and stream areas have been approximated using available information such as lidar maps, USGS maps, soil surveys, and NWI maps. Wetlands have not been field verified, are subject to delineation, and USACE/NCDEQ verification.



PROJECT BOUNDARY LIMITS OF STUDY
(639.13 acres)

Some visibility on historical imagery
- Potential marginal stream or linear wetland

Cemetery adjacent to property
- Potential for historic cultural areas to be present within or adjacent to the project boundary
- See published soil survey (1964)

Channel visible on historical imagery
- Potential stream or linear wetland

Blue line on USGS

foundation and potentially excavated area shown on aerial/ LIDAR

Line on soil survey
- Visible on historical imagery
- Potential marginal stream or linear wetland

Channel visible on historical imagery
- Potential stream or linear wetland

Blue line on USGS

Potential braided channels and adjacent wetlands

Line on soil survey
- Potential non-jurisdictional gully

Ponded area shown on historical imagery
- Potential wetlands and stream channel downslope

Blue line on USGS

Eroded or excavated area with unusual vegetation (kudzu?)

Lines on soil survey
- Channel visible on historical imagery
- Potential stream or linear wetland

Lines on soil survey

Line on soil survey
- Some visibility on historical imagery
- Clear cut area
- Potential to contain jurisdictional sections but appears potentially non-jurisdictional

Potential wetlands in floodplain
- hydric soil type

Lines on soil survey

Blue line on USGS map and a line shown on the soil survey
- Upper reaches appear potentially non-jurisdictional located in timbered areas

Flood hazard line AE

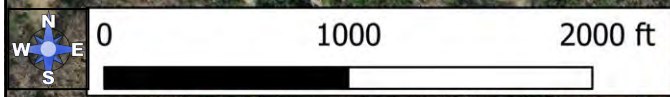
Dirt road crossing

Potential areas with wetlands or subject to inundation in floodplain
- Areas downslope of flood hazard and Duke Power water lines
- Areas with excavated pits, hydric soil type, or shown on the NWI map

LOCATION
Lat: 35.7141 °N
Long: -81.0451 °W
HUC: 03050101 (Upper Catawba)

LEGEND

- Potential Tributary
- Potential Marginal Tributary or Linear wetland
- Potential Wetland
- Potential Gully or swale
- Project boundary study limits



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Checked:	
Drawn:	PIK
Acres:	~639.13
Prepared for:	

Gilbert Tract (Hickory Hwy – Brickyard Rd)
Iredell County, North Carolina

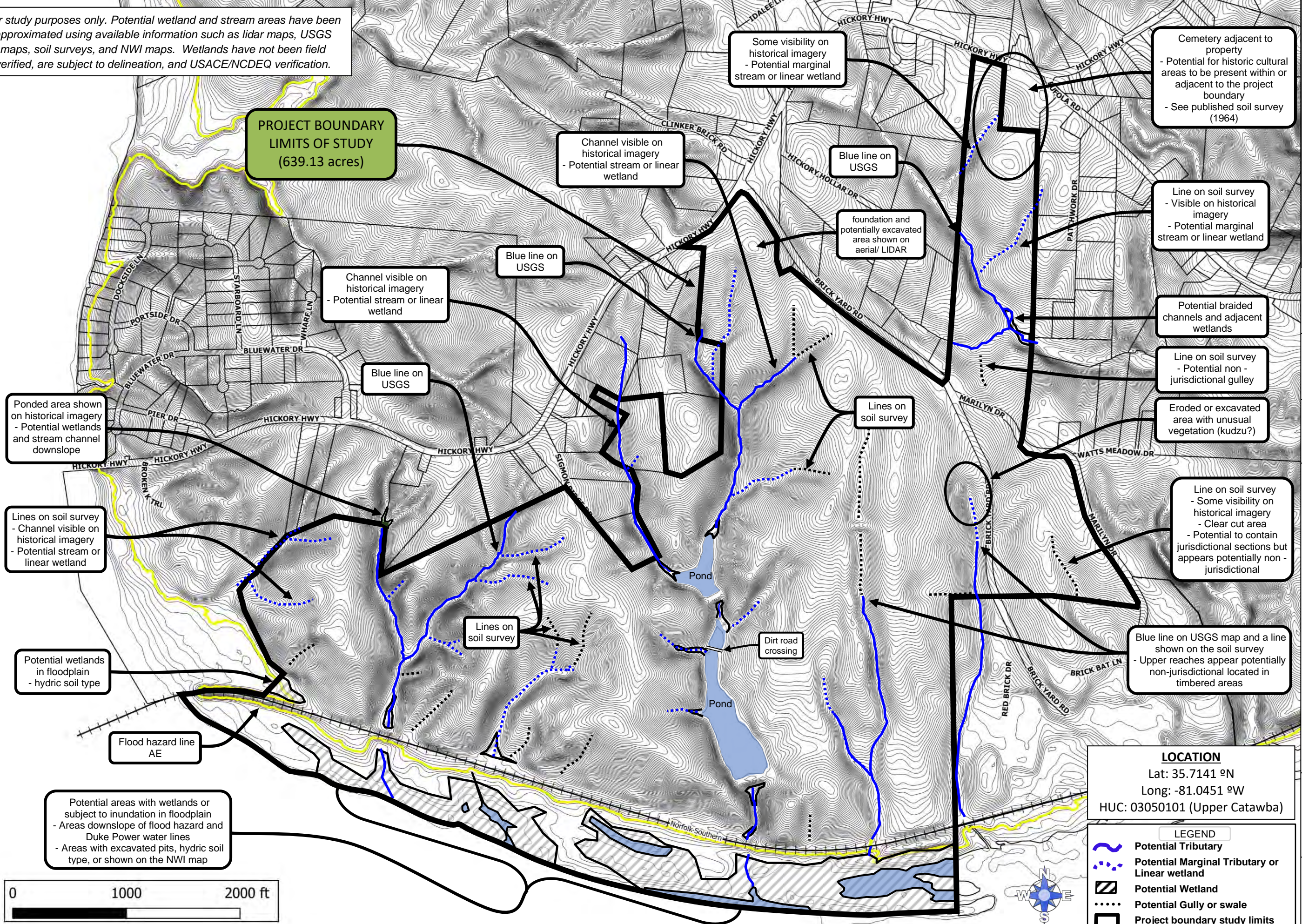
Potential Wetland and Streams Desktop Background Study
For study purposes only. Subject to USACE/NCDEQ verification

FIGURE: 1

Date:
02/21/20

For study purposes only. Potential wetland and stream areas have been approximated using available information such as lidar maps, USGS maps, soil surveys, and NWI maps. Wetlands have not been field verified, are subject to delineation, and USACE/NCDEQ verification.

PROJECT BOUNDARY LIMITS OF STUDY (639.13 acres)



Ponded area shown on historical imagery - Potential wetlands and stream channel downslope

Lines on soil survey - Channel visible on historical imagery - Potential stream or linear wetland

Potential wetlands in floodplain - hydric soil type

Flood hazard line AE

Potential areas with wetlands or subject to inundation in floodplain - Areas downslope of flood hazard and Duke Power water lines - Areas with excavated pits, hydric soil type, or shown on the NWI map

Channel visible on historical imagery - Potential stream or linear wetland

Blue line on USGS

Lines on soil survey

Channel visible on historical imagery - Potential stream or linear wetland

Blue line on USGS

Some visibility on historical imagery - Potential marginal stream or linear wetland

Blue line on USGS

foundation and potentially excavated area shown on aerial/ LIDAR

Lines on soil survey

Dirt road crossing

Cemetery adjacent to property - Potential for historic cultural areas to be present within or adjacent to the project boundary - See published soil survey (1964)

Line on soil survey - Visible on historical imagery - Potential marginal stream or linear wetland

Potential braided channels and adjacent wetlands

Line on soil survey - Potential non-jurisdictional gully

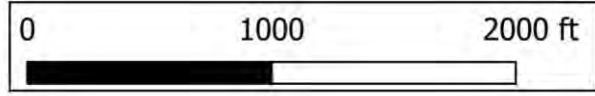
Eroded or excavated area with unusual vegetation (kudzu?)

Line on soil survey - Some visibility on historical imagery - Clear cut area - Potential to contain jurisdictional sections but appears potentially non-jurisdictional

Blue line on USGS map and a line shown on the soil survey - Upper reaches appear potentially non-jurisdictional located in timbered areas

LOCATION
 Lat: 35.7141 °N
 Long: -81.0451 °W
 HUC: 03050101 (Upper Catawba)

- LEGEND**
- Potential Tributary
 - Potential Marginal Tributary or Linear wetland
 - Potential Wetland
 - Potential Gully or swale
 - Project boundary study limits



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Checked:
 Drawn: PIK
 Acres: ~639.13
 Prepared for:

Gilbert Tract (Hickory Hwy – Brickyard Rd)
 Iredell County, North Carolina
Potential Wetland and Streams
Desktop Background Study
 For study purposes only. Subject to USACE/NCDEQ verification

FIGURE: 2
 Date:
 02/21/20



**PROJECT BOUNDARY
LIMITS OF STUDY
(639.13 acres)**

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Checked:	
Drawn:	PIK
Acres:	~639.13
Prepared for:	

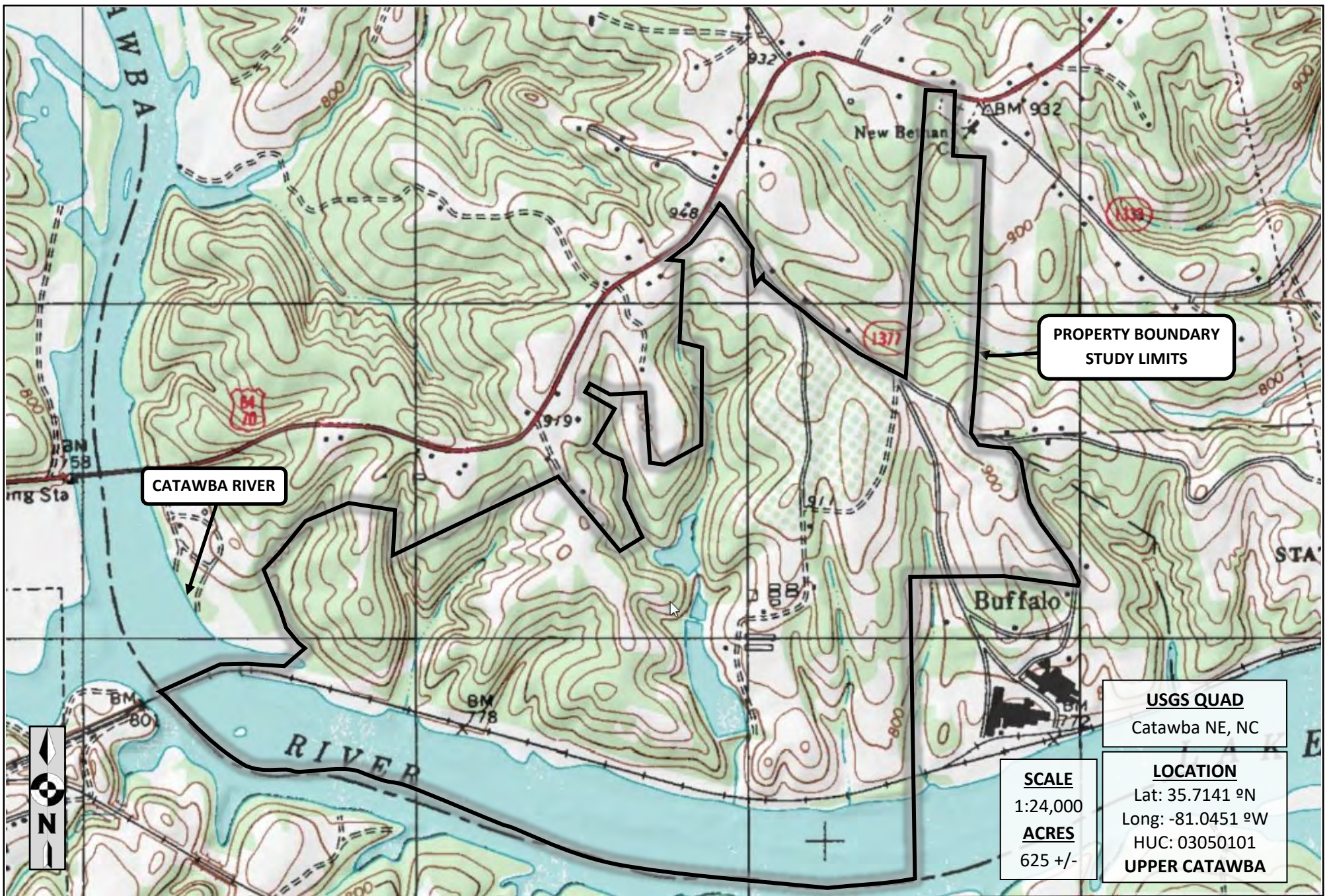
Gilbert Tract (Hickory Hwy – Brickyard Rd)
Iredell County, North Carolina

**2018 AERIAL PHOTOGRAPH
Desktop Background Study**
For study purposes only: Subject to USACE/NCDEQ
verification

**FIGURE:
3**

Date:
02/21/20

LOCATION
Lat: 35.7141 °N
Long: -81.0451 °W
HUC: 03050101 (Upper Catawba)



CATAWBA RIVER

PROPERTY BOUNDARY STUDY LIMITS

USGS QUAD
Catawba NE, NC

SCALE
1:24,000
ACRES
625 +/-

LOCATION
Lat: 35.7141 °N
Long: -81.0451 °W
HUC: 03050101
UPPER CATAWBA

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Prepared for:

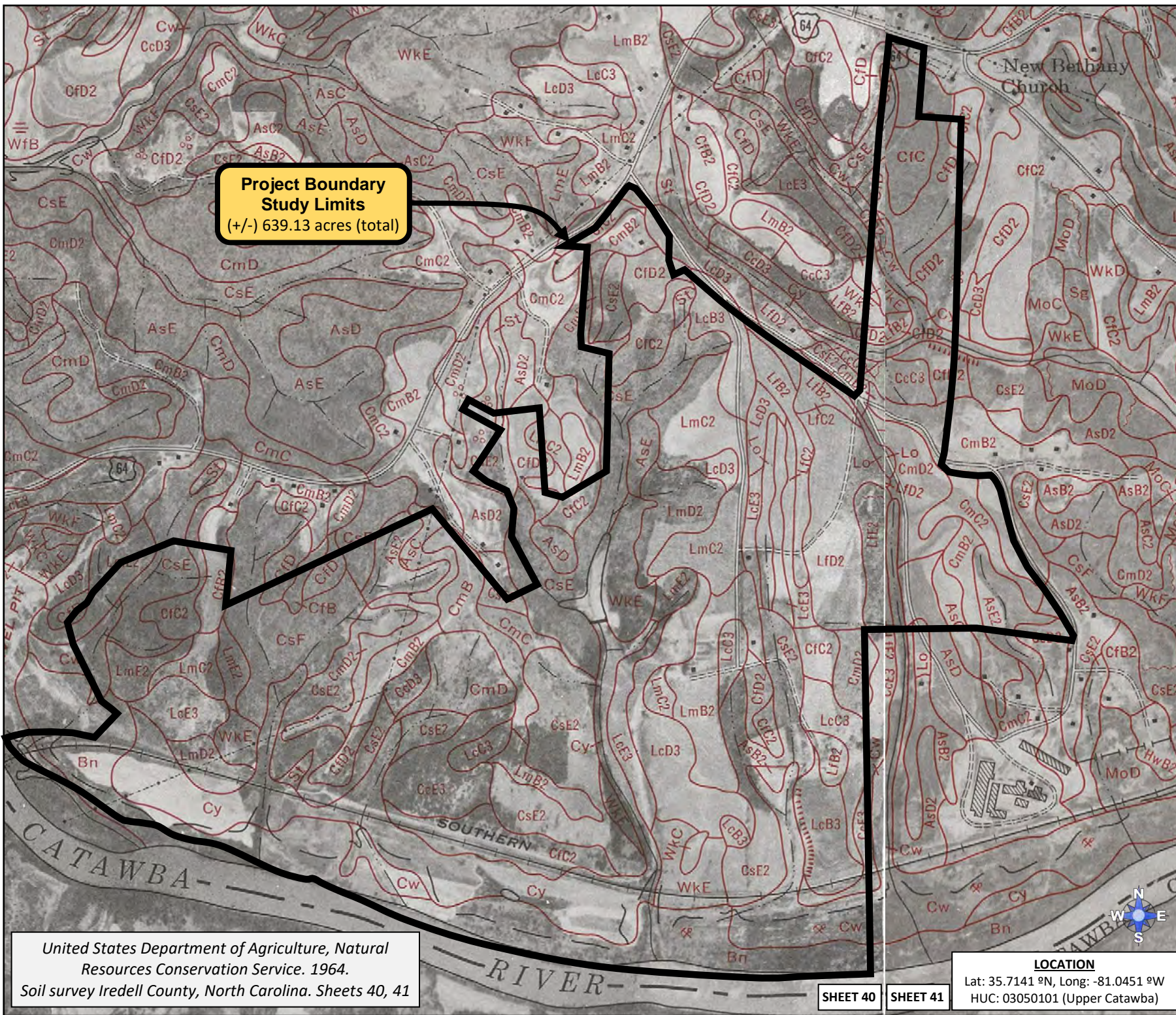
HICKORY HWY – BRICKYARD RD
Iredell County, NC

USGS MAP
For study purposes only - Subject to USACE/NCDEQ verification

Drawn By:
BLK

Reviewed By:

FIGURE:
4
02/05/2020



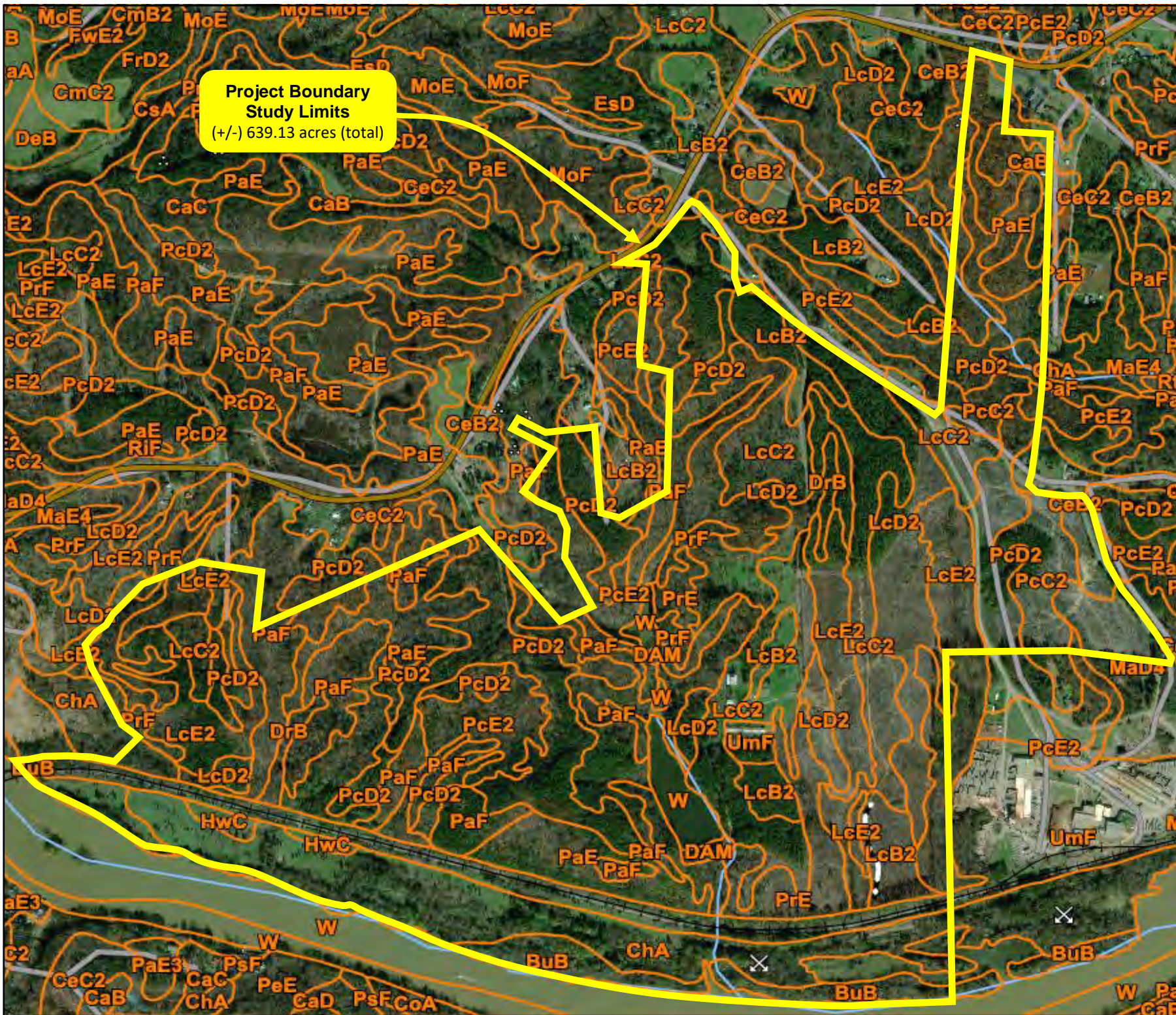
**Project Boundary
Study Limits**
(+/-) 639.13 acres (total)

United States Department of Agriculture, Natural Resources Conservation Service. 1964.
Soil survey Iredell County, North Carolina. Sheets 40, 41

SHEET 40 SHEET 41

LOCATION
Lat: 35.7141 °N, Long: -81.0451 °W
HUC: 03050101 (Upper Catawba)

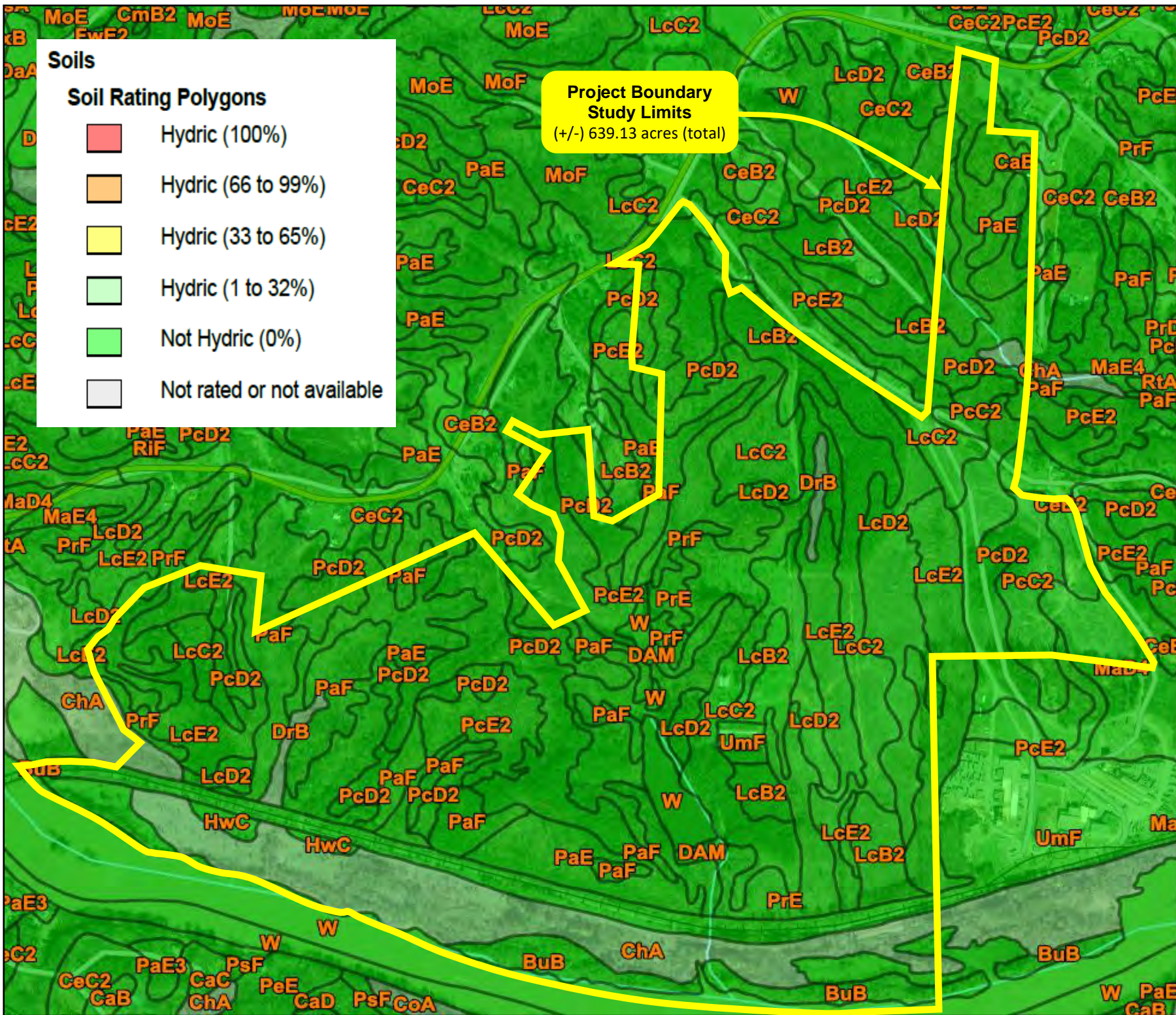
<p>WEPG Wetlands and Environmental Planning Group Leonard S. Rindner, PLLC.</p> <p>len.rindner@wetlands-epg.com (704) 904-2277 www.wetlands-epg.com</p>		Reviewed by:	
		Drawn by:	PIK
<p>Gilbert Tract (Hickory Hwy – Brickyard Rd) Iredell County, North Carolina</p>		Prepared for:	<p>Published NRCS Soil Manuscript Map Iredell County, Sheets 40,41 (1964) – Approximate Location Subject to USACE/NCDEQ verification</p>
<p>FIGURE: 5</p>			02/12/20



**Project Boundary
Study Limits**
(+/-) 639.13 acres (total)

 Wetlands and Environmental Planning Group Leonard S. Rindner, PLLC.	
Reviewed by:	
Drawn by:	PJK
Prepared for:	Gilbert Tract (Hickory Hwy – Brickyard Rd) Iredell County, North Carolina NRCS Web Soil Survey Map https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey Subject to USACE/NCDEQ verification
FIGURE:	6a
Date:	02/12/20

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Soils

Soil Rating Polygons

- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

**Project Boundary
Study Limits**
 (+/-) 639.13 acres (total)

 Wetlands and Environmental Planning Group Leonard S. Rindner, PLLC.	
Reviewed by:	
Drawn by:	Prepared for:
PJK	Gilbert Tract (Hickory Hwy – Brickyard Rd) Iredell County, North Carolina
NRCS Web Soil Survey Map – Hydric Soil Rating https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx Subject to USACE/NCDEQ verification	
FIGURE: 6b	
02/12/20	

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BuB	Buncombe loamy sand, 0 to 5 percent slopes, frequently flooded	0	28.7	1.7%
CaB	Cecil sandy loam, 2 to 6 percent slopes	0	13.3	0.8%
CaC	Cecil sandy loam, 6 to 10 percent slopes	0	9.4	0.6%
CeB2	Cecil sandy clay loam, 2 to 6 percent slopes, moderately eroded	0	56.7	3.4%
CeC2	Cecil sandy clay loam, 6 to 10 percent slopes, moderately eroded	0	133.9	8.0%
ChA	Chewacla loam, 0 to 2 percent slopes, frequently flooded	5	86.4	5.2%
CmB2	Clifford sandy clay loam, 2 to 6 percent slopes, moderately eroded	0	0.7	0.0%
CmC2	Clifford sandy clay loam, 6 to 10 percent slopes, moderately eroded	0	10.3	0.6%
CsA	Codorus loam, 0 to 2 percent slopes, frequently flooded	5	14.1	0.8%
DaA	Dan River and Comus soils, 0 to 4 percent slopes, occasionally flooded	0	5.4	0.3%
DAM	Dam	0	1.6	0.1%
DeB	Danripple sandy loam, 2 to 6 percent slopes	0	4.5	0.3%
DrB	Dorian fine sandy loam, 0 to 6 percent slopes, rarely flooded	3	4.3	0.3%
EsD	Enott-Spriggs complex, 6 to 15 percent slopes, stony	0	25.8	1.5%
FrD2	Fairview sandy clay loam, 10 to 15 percent slopes, moderately eroded	0	9.1	0.5%
FwE2	Fairview sandy clay loam, 15 to 25 percent slopes, moderately eroded	0	2.0	0.1%
HwC	Hiwassee fine sandy loam, 6 to 10 percent slopes	0	2.8	0.2%
LcB2	Lloyd clay loam, 2 to 6 percent slopes, moderately eroded	0	46.4	2.8%
LcC2	Lloyd clay loam, 6 to 10 percent slopes, moderately eroded	0	117.4	7.1%
LcD2	Lloyd clay loam, 10 to 15 percent slopes, moderately eroded	0	78.2	4.7%
LcE2	Lloyd clay loam, 15 to 25 percent slopes, moderately eroded	0	98.4	5.9%
MaD4	Madison-Udorthents complex, 2 to 15 percent slopes, gullied	0	24.4	1.5%
MaE4	Madison-Udorthents complex, 15 to 25 percent slopes, gullied	0	13.0	0.8%

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
MoE	Mocksville-Spriggs complex, 15 to 25 percent slopes, stony	0	18.0	1.1%
MoF	Mocksville-Spriggs complex, 25 to 45 percent slopes, stony	0	34.9	2.1%
PaE	Pacolet sandy loam, 15 to 25 percent slopes	0	109.2	6.6%
PaF	Pacolet sandy loam, 25 to 45 percent slopes	0	102.4	6.2%
PcC2	Pacolet sandy clay loam, 6 to 10 percent slopes, moderately eroded	0	19.0	1.1%
PcD2	Pacolet sandy clay loam, 10 to 15 percent slopes, moderately eroded	0	187.8	11.3%
PcE2	Pacolet sandy clay loam, 15 to 25 percent slopes, moderately eroded	0	125.4	7.5%
PrD	Poindexter-Rowan complex, 8 to 15 percent slopes	0	1.8	0.1%
PrE	Poindexter-Rowan complex, 15 to 25 percent slopes	0	17.7	1.1%
PrF	Poindexter-Rowan complex, 25 to 45 percent slopes	0	32.3	1.9%
RiF	Rion sandy loam, 15 to 45 percent slopes	0	4.4	0.3%
RtA	Riverview and Toccoa soils, 0 to 2 percent slopes, occasionally flooded	0	4.9	0.3%
RxB	Ronda-Comus complex, 0 to 5 percent slopes, occasionally flooded	0	0.7	0.0%
UmF	Udorthents-Urban land complex, 0 to 45 percent slopes	0	65.6	3.9%
W	Water	0	84.0	5.0%
Subtotals for Soil Survey Area			1,595.0	95.9%
Totals for Area of Interest			1,663.7	100.0%

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Reviewed by:

Drawn by:
PIK

Prepared for:

Gilbert Tract (Hickory Hwy – Brickyard Rd)
Iredell County, North Carolina

NRCS Web Soil Survey - Legend
<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey>
Subject to USACE/NCDEQ verification

**FIGURE:
6c**

02/12/20

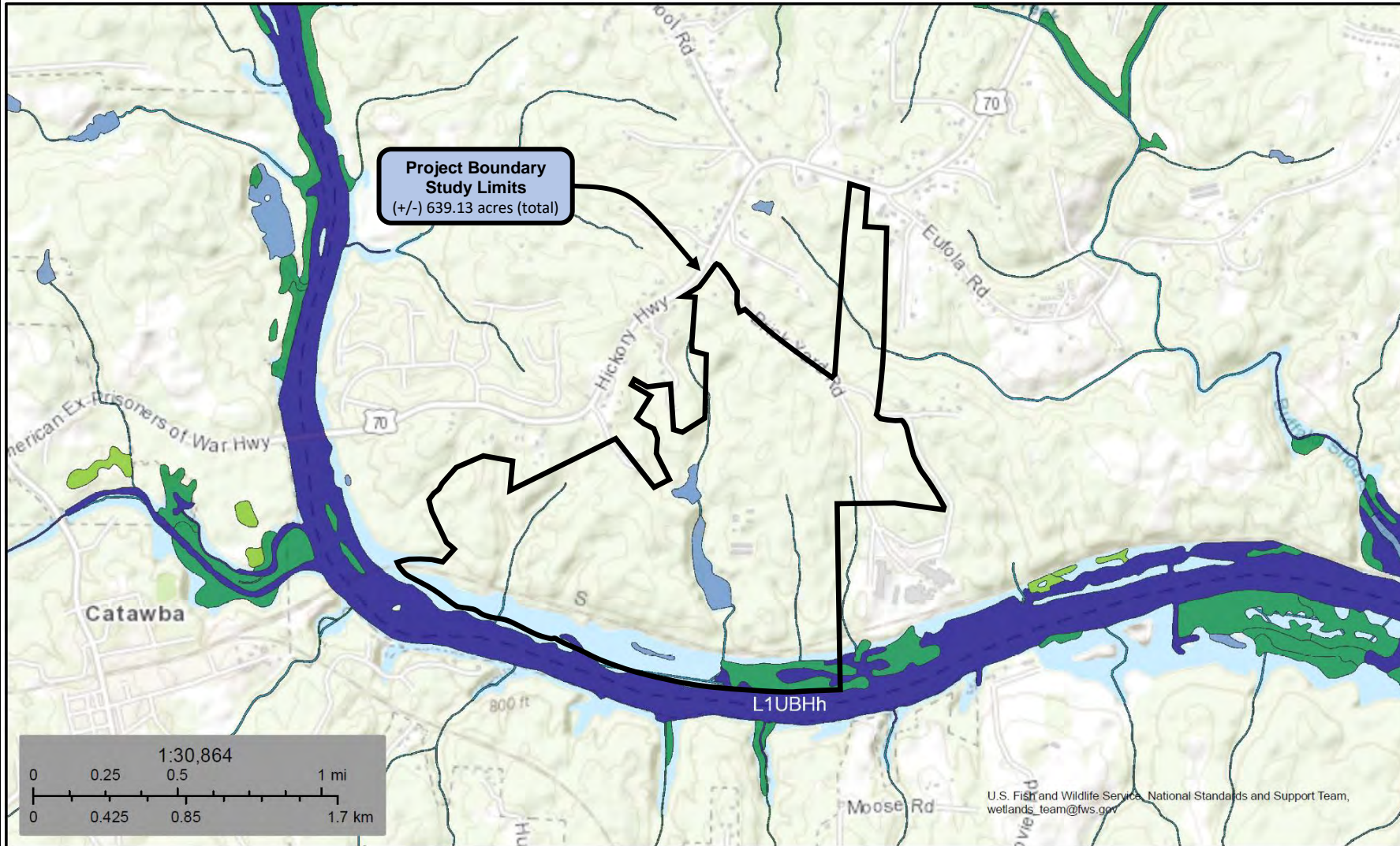


U.S. Fish and Wildlife Service
National Wetlands Inventory

Wetlands



LOCATION
 Lat: 35.7141 °N
 Long: -81.0451 °W
 HUC: 03050101 (Upper Catawba)



February 14, 2020

Wetlands

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

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

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

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Reviewed by:

Drawn by:
 PIK

Prepared for:

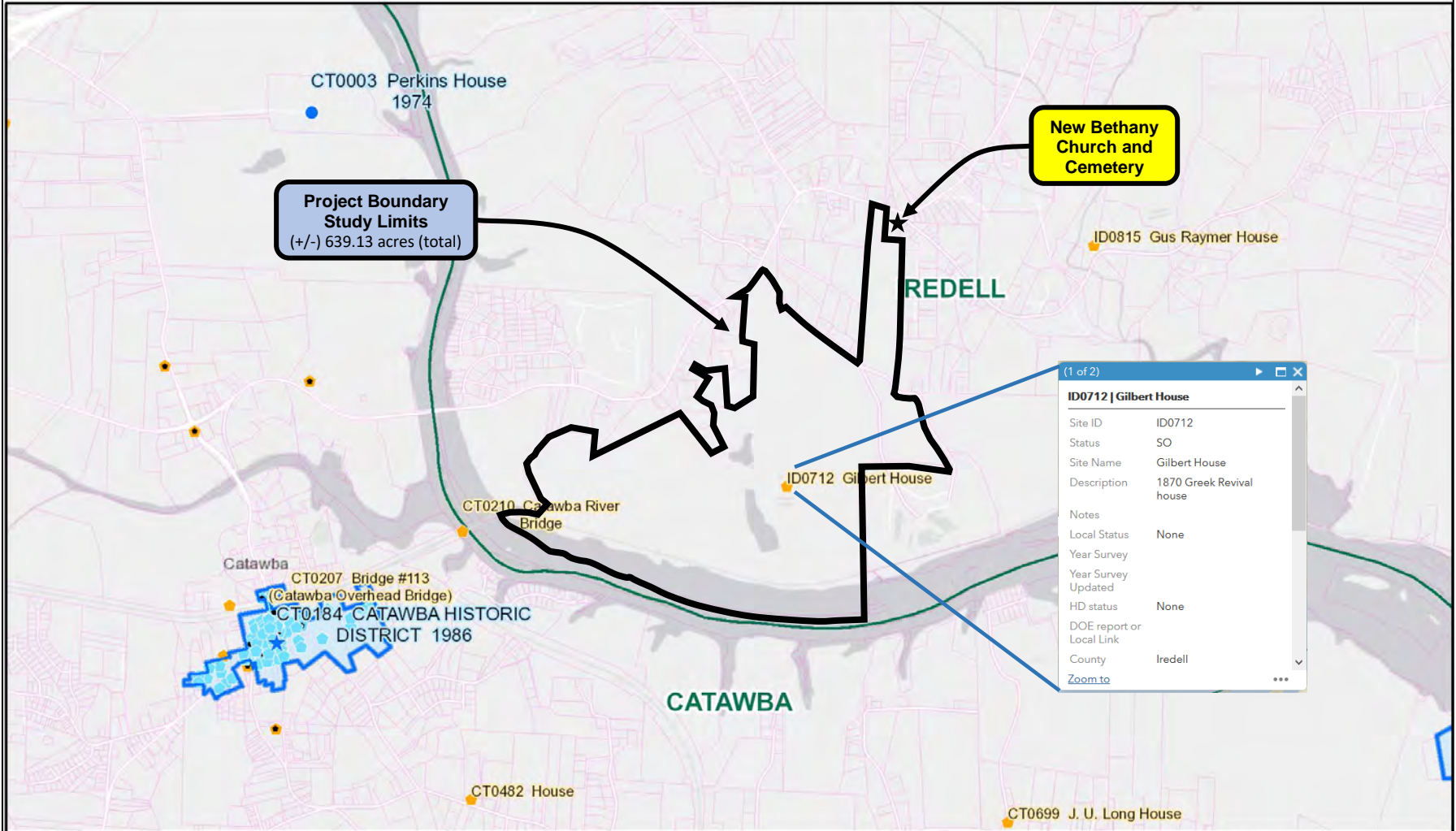
Gilbert Tract (Hickory Hwy – Brickyard Rd)
 Iredell County, North Carolina

NATIONAL WETLANDS INVENTORY MAP
 Approximate Location
 Subject to USACE and NCDEQ verification

FIGURE:
7

02/12/20

NCHPO HPOWEB



Project Boundary Study Limits
(+/-) 639.13 acres (total)

New Bethany Church and Cemetery

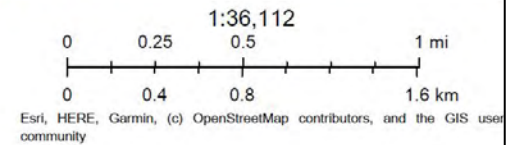
(1 of 2)

ID0712 | Gilbert House

Site ID	ID0712
Status	SO
Site Name	Gilbert House
Description	1870 Greek Revival house
Notes	
Local Status	None
Year Survey	
Year Survey Updated	
HD status	None
DOE report or Local Link	
County	Iredell
Zoom to	...

2/13/2020, 10:46:44 PM

- Local districts & boundaries
- Local HD Center Point
- Surveyed Only, Gone
- Surveyed in NRHD, Gone
- Local Landmark
- Surveyed Only
- Blockface- Multiple properties
- Local Landmark, Gone
- Surveyed in NRHD



North Carolina State Historic Preservation Office
State of North Carolina DOT, Esri, HERE, IPC | State of North Carolina DOT, Esri, HERE | State of North Carolina DOT, Esri, HERE

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Reviewed by:	
Drawn by:	PJK
Prepared for:	

Gilbert Tract (Hickory Hwy – Brickyard Rd)
Iredell County, North Carolina

Listed Cultural Resource Locations in Relation to Project
Subject to USACE/NCDEQ/NCSPHO verification

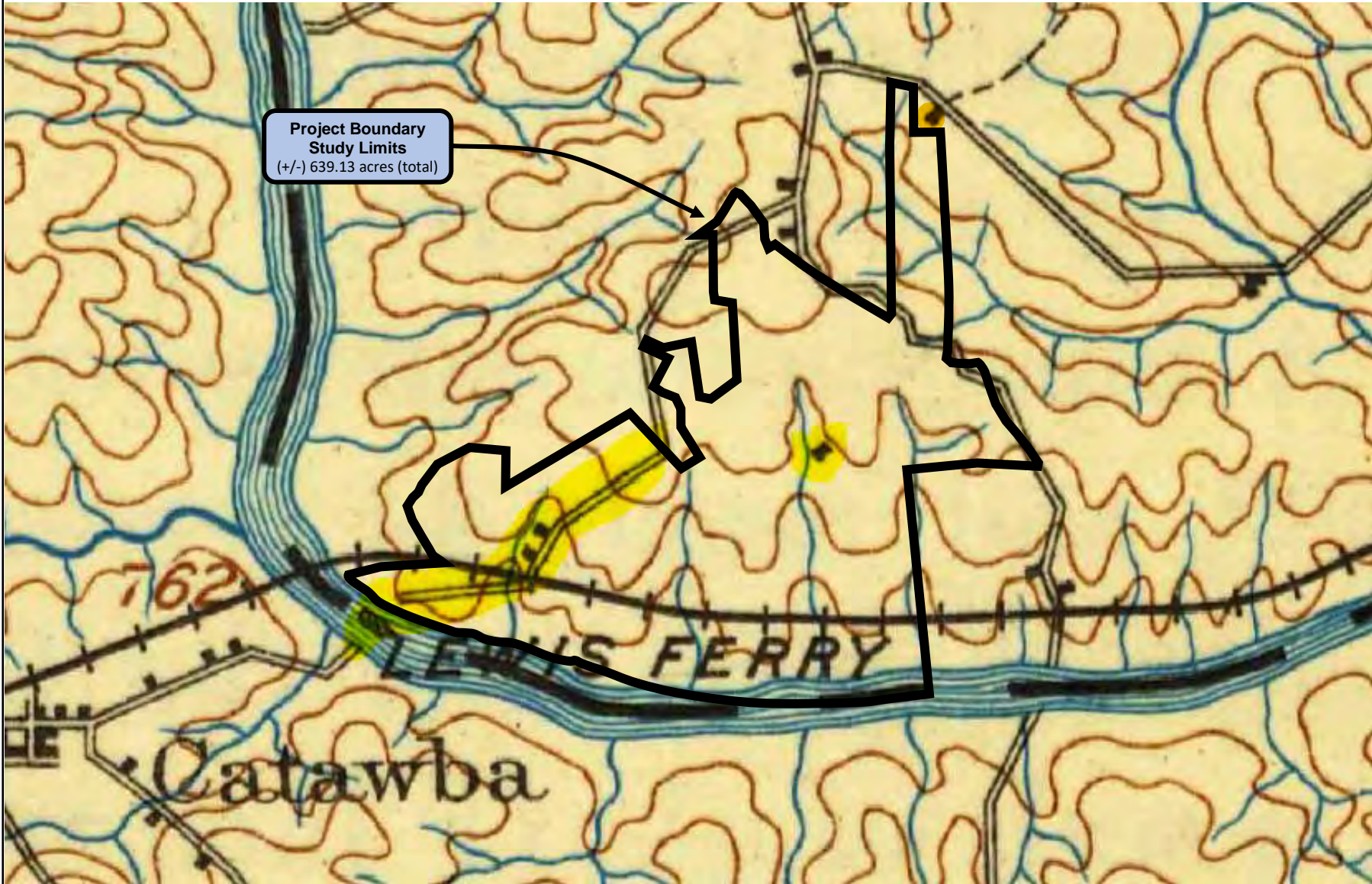
FIGURE: 8



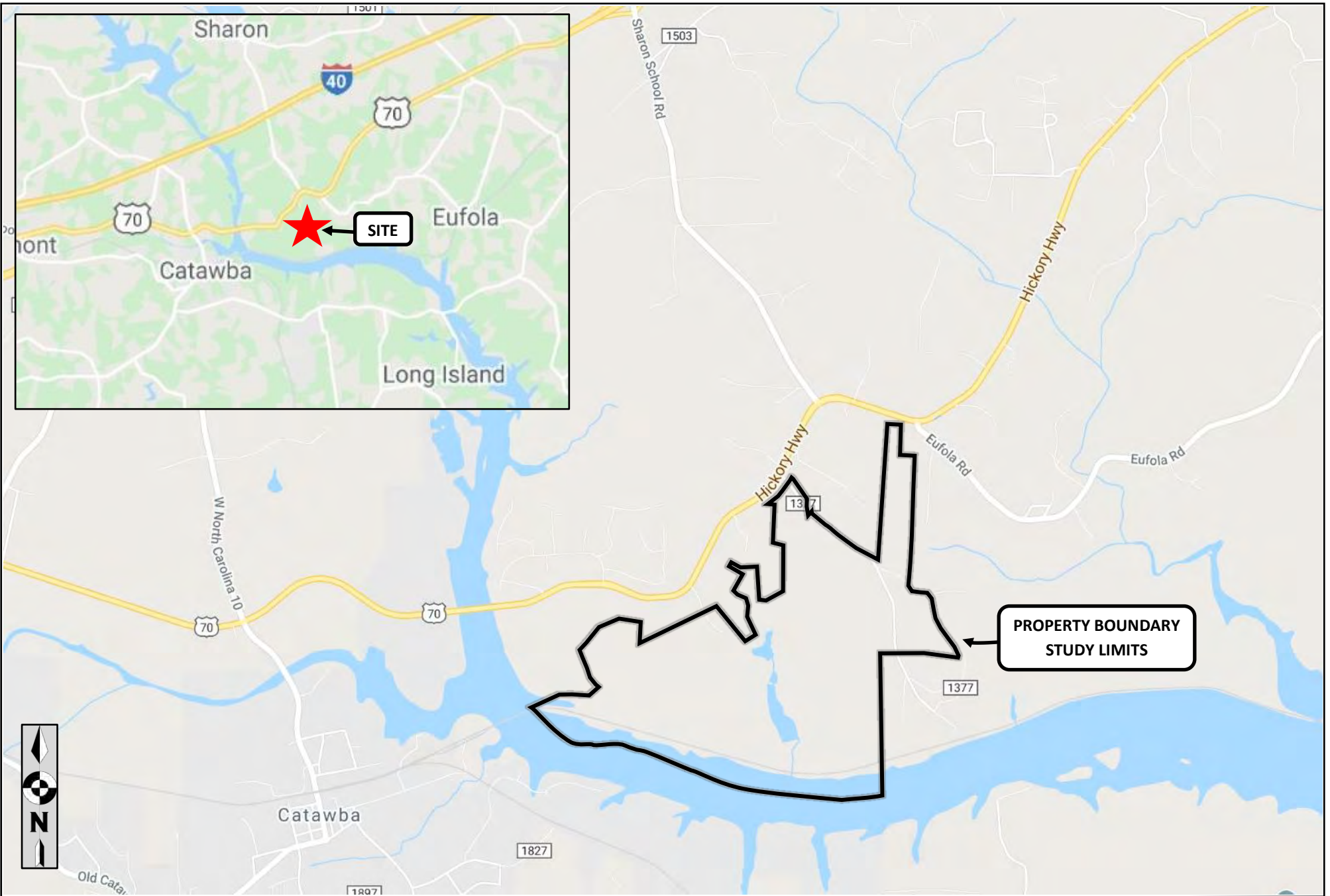
LOCATION
Lat: 35.7141 °N, Long: -81.0451 °W
HUC: 03050101 (Upper Catawba)

02/12/20

Potential Cultural Resource Locations
1895 USGS Map



<p>WEPG Wetlands and Environmental Planning Group Leonard S. Rindner, PLLC. len.rindner@wetlands-epg.com (704) 904-2277 www.wetlands-epg.com</p>		Reviewed by:	
		Drawn by: PIK	Prepared for:
<p>Gilbert Tract (Hickory Hwy – Brickyard Rd) Iredell County, North Carolina</p>		<p>1895 USGS Map (Potential Cultural Resource Locations in Relation to Project) <i>Subject to USACE/NCDEQ/NCSPHO verification</i></p>	
<p>FIGURE: 8a</p>			
		<p>02/21/20</p>	



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Prepared for:

HICKORY HWY – BRICKYARD RD
 Iredell County, NC

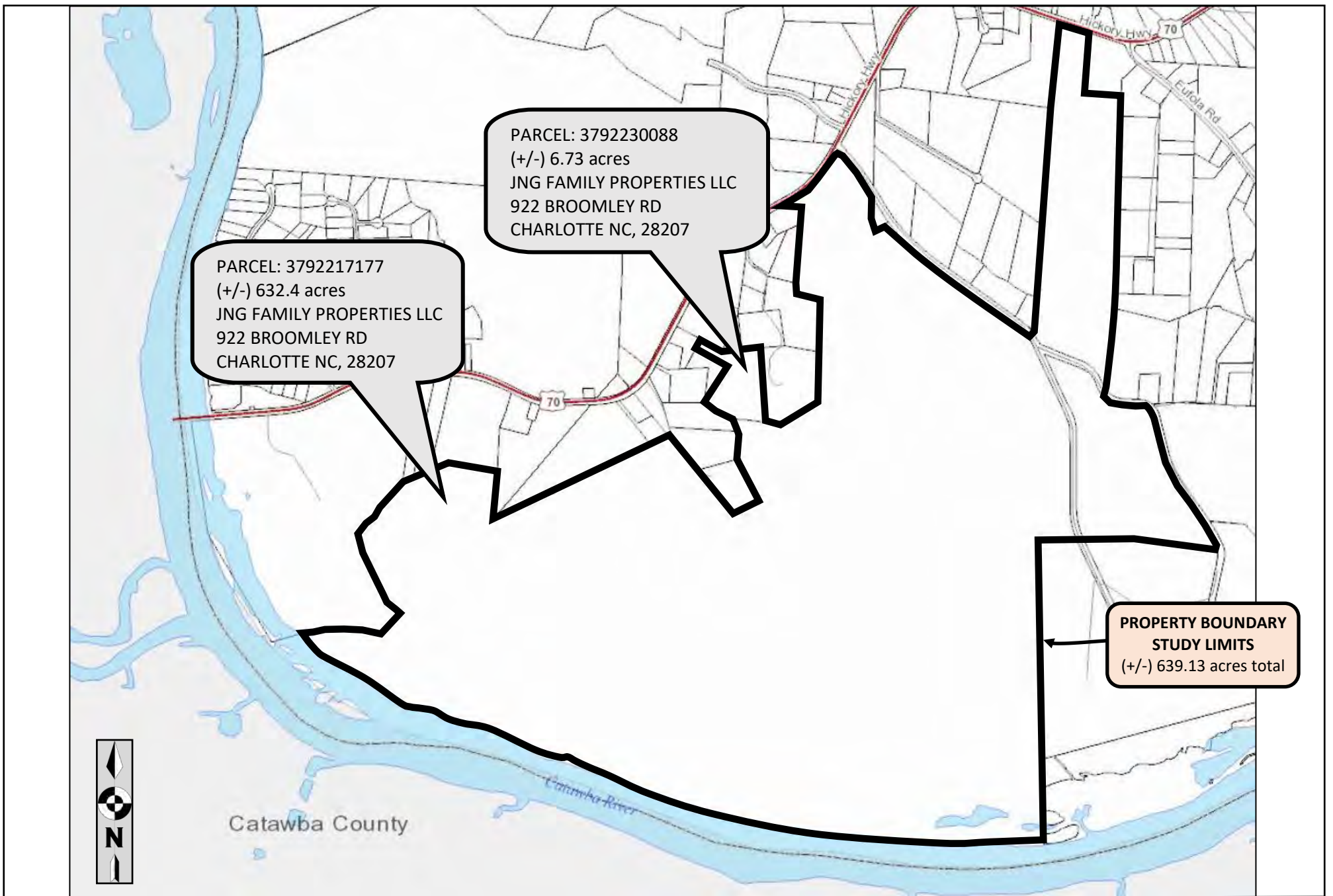
VICINITY MAP
 For study purposes only - Subject to USACE/NCDEQ verification

Drawn By:
 BLK

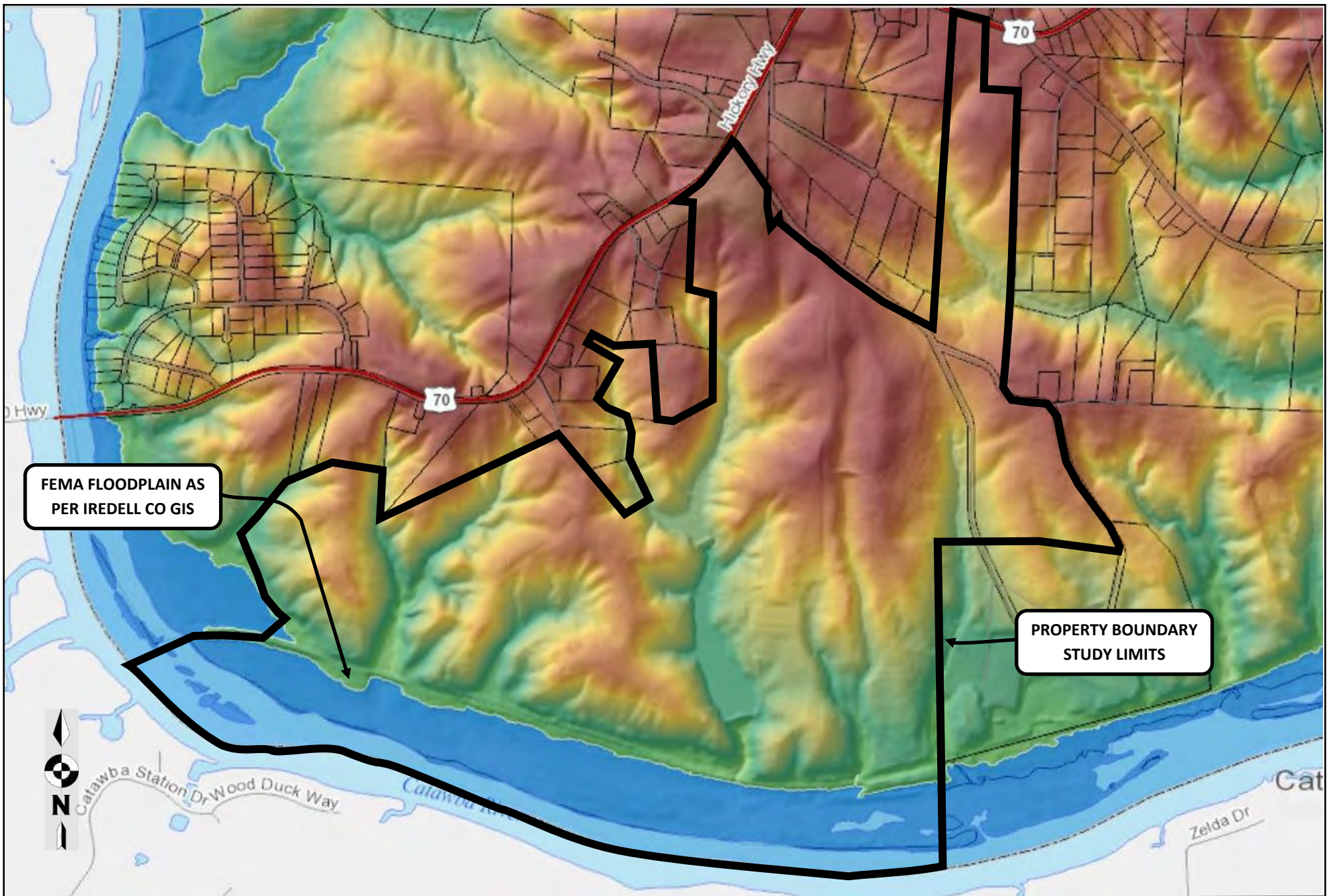
Reviewed By:

FIGURE:
9

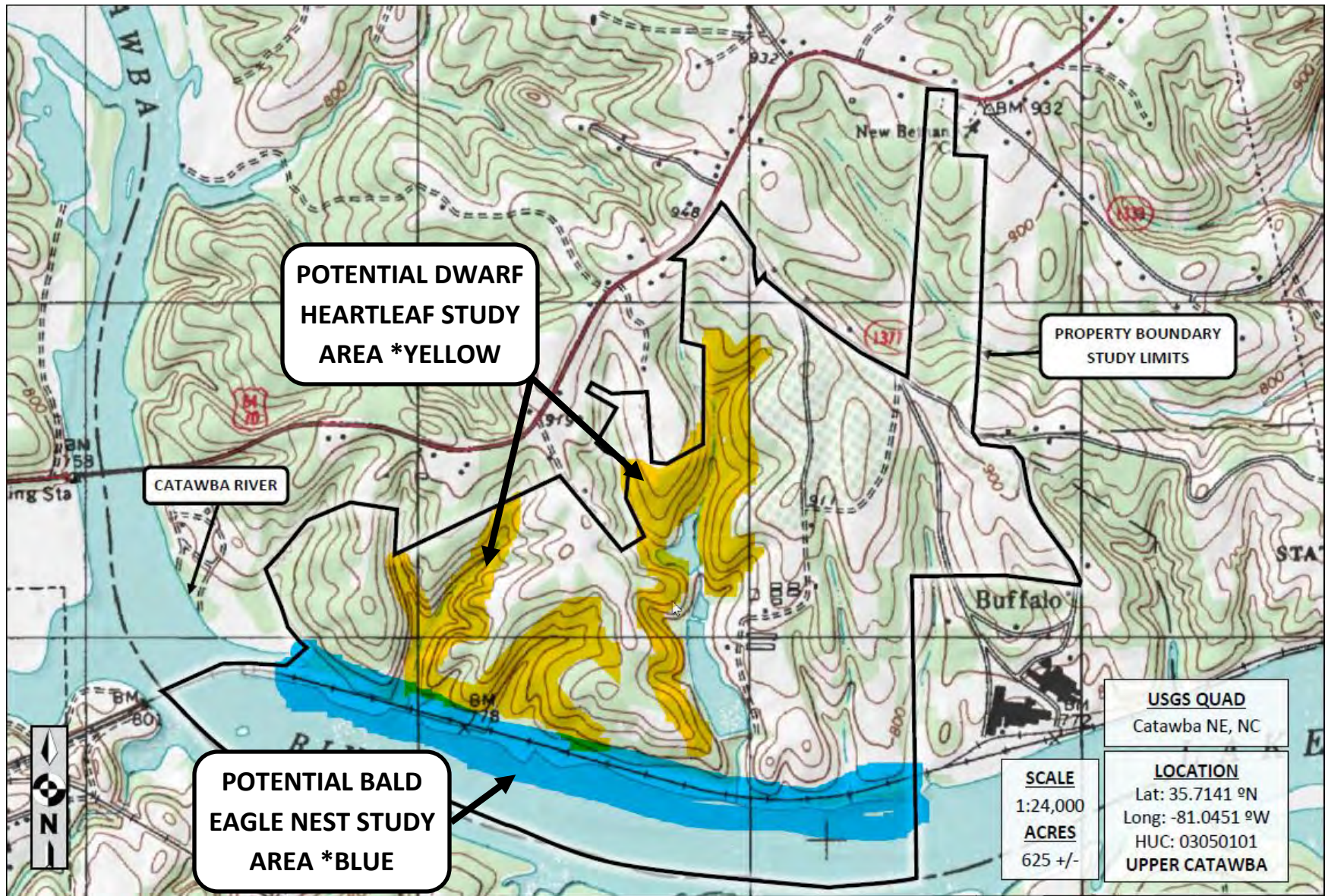
02/05/2020



WEPPG Wetlands and Environmental Planning Group Leonard S. Rindner, PLLC. len.rindner@wetlands-epg.com (704) 904-2277 www.wetlands-epg.com	Prepared for:	GILBERT TRACT (HICKORY HWY – BRICKYARD RD) Iredell County, NC	Drawn By:	Reviewed By:	FIGURE: 10
		PARCEL MAP For study purposes only - Subject to USACE/NCDEQ verification	BLK/PJK		02/05/2020



WEPG Wetlands and Environmental Planning Group Leonard S. Rindner, PLLC. len.rindner@wetlands-epg.com (704) 904-2277 www.wetlands-epg.com	Prepared for:	HICKORY HWY – BRICKYARD RD Iredell County, NC		Drawn By:	Reviewed By:	FIGURE: 11
		FLOODPLAIN MAP For study purposes only - <i>Subject to USACE/NCDEQ verification</i>		BLK		02/05/2020



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Prepared for:

HICKORY HWY – BRICKYARD RD
Iredell Co., NC

Drawn By:

LRG

Reviewed By:

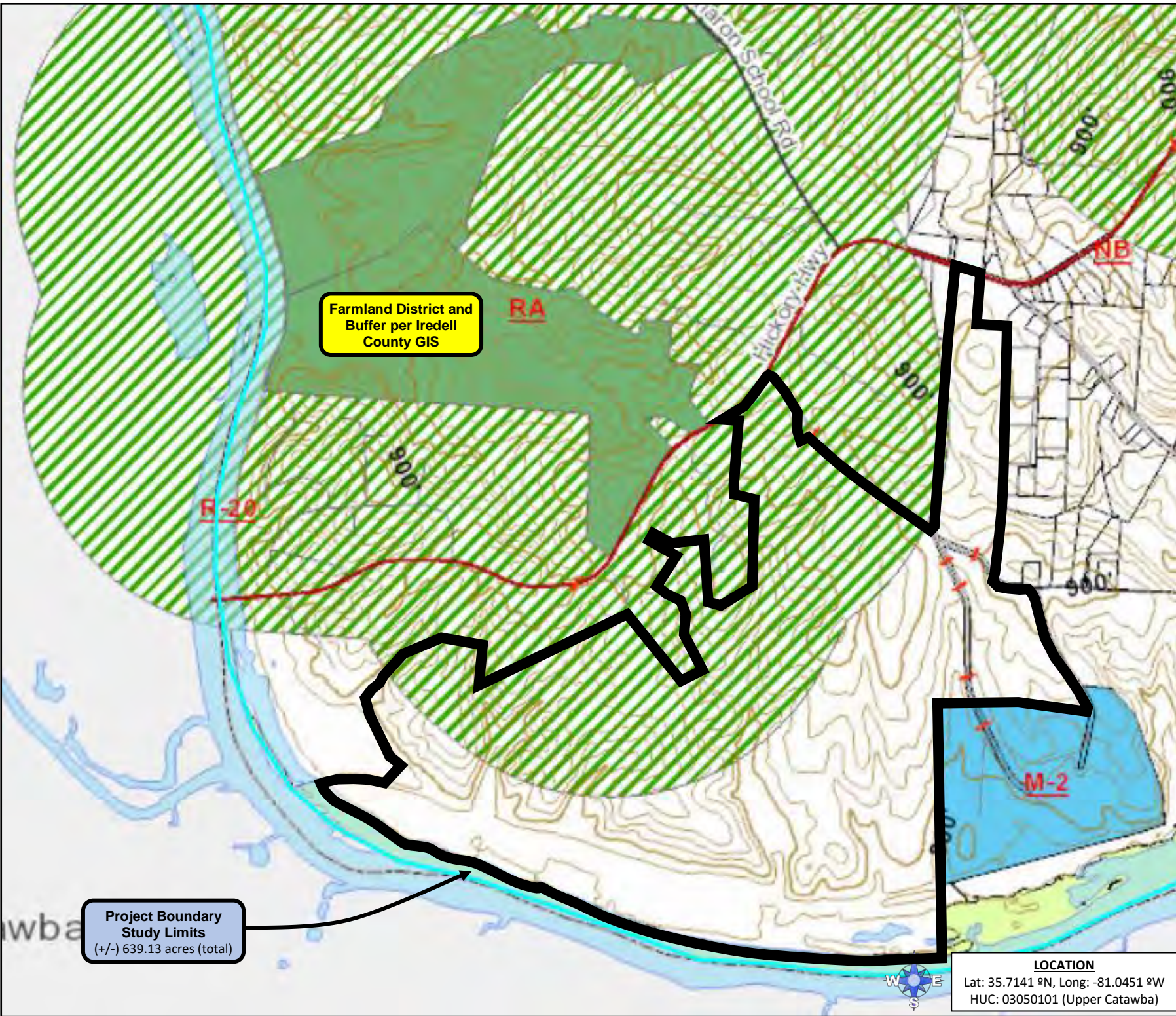
FIGURE:

12

USGS MAP- THREATENED & ENDANGERED SPECIES EVALUATION

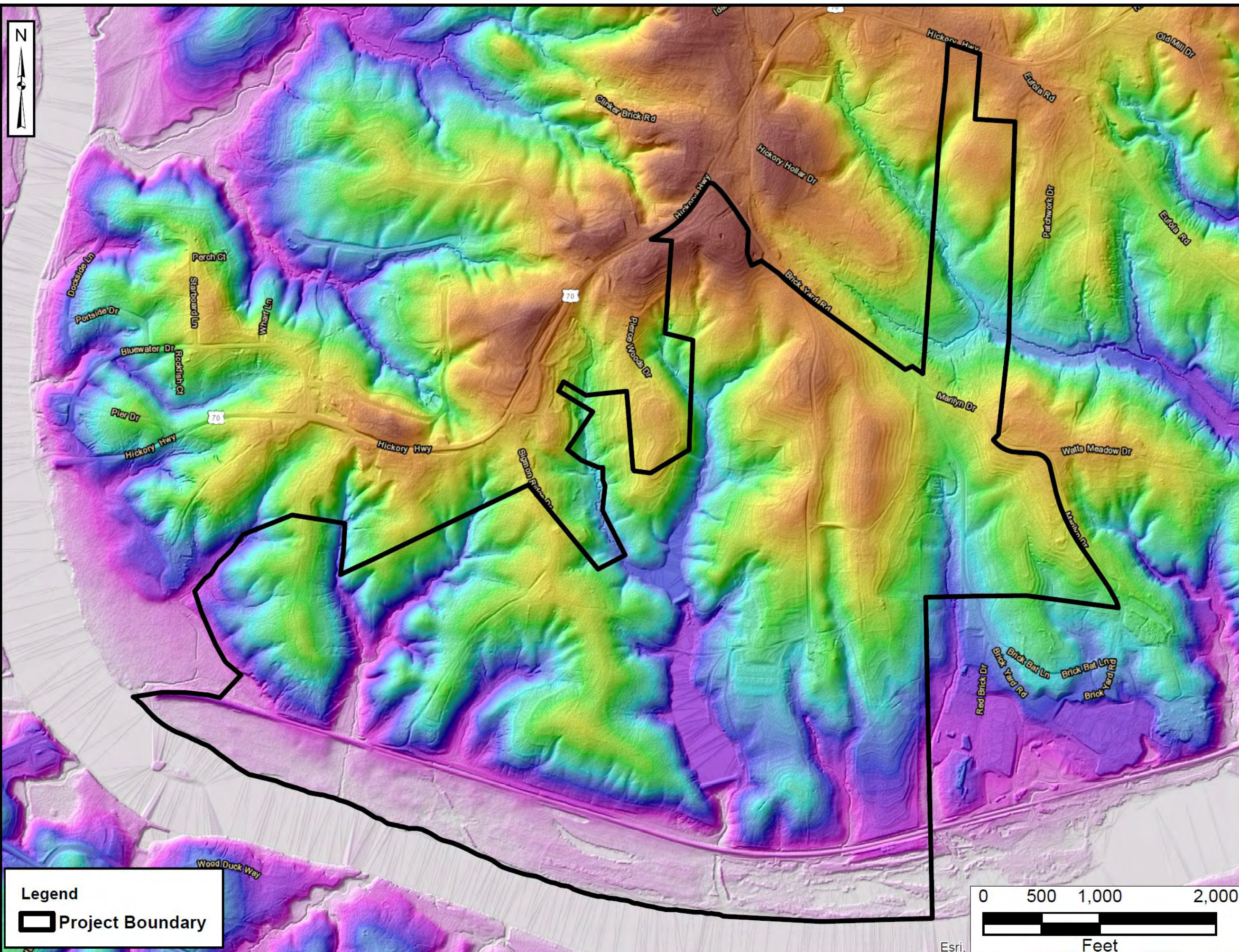
For study purposes only

02/05/2020



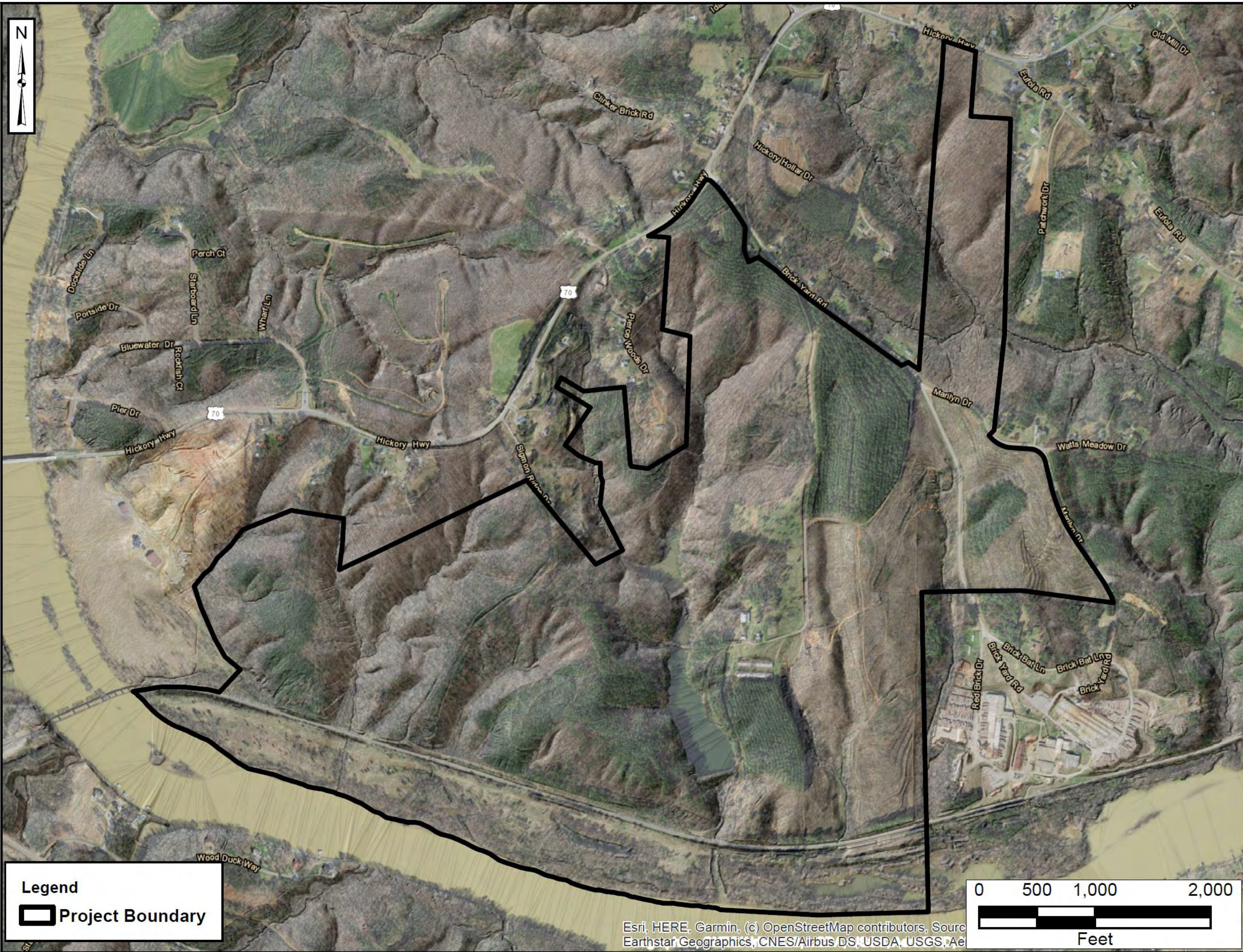
WEPG Wetlands and Environmental Planning Group Leonard S. Rindner, PLLC. len.rindner@wetlands-epg.com (704) 904-2277 www.wetlands-epg.com	
Reviewed by:	
Drawn by:	PKJ
Prepared for:	
Gilbert Tract (Hickory Hwy – Brickyard Rd) Iredell County, North Carolina	
FARMLAND DISTRICT AND BUFFER Subject to USACE and NCDEQ verification	
FIGURE: 13	
	02/12/20

LOCATION
 Lat: 35.7141 °N, Long: -81.0451 °W
 HUC: 03050101 (Upper Catawba)



Legend
 [Black Outline] Project Boundary

 Wetlands and Environmental Planning Group Leonard S. Rindner, PLLC. len.rindner@wetlands-epg.com (704) 904-2277 www.wetlands-epg.com		Checked:	
		Drawn:	HAC/PJK
Acres: ~639.13		Prepared for:	
Gilbert Tract (Hickory Hwy – Brickyard Rd) Iredell County, North Carolina		LIDAR (DEM) For study purposes only: Subject to USACE/NCDEQ verification	
FIGURE: 14		Date:	
		02/21/20	



Legend
 Project Boundary

Esri, HERE, Garmin, (c) OpenStreetMap contributors, Source Earthstar Geographics, CNES/Airbus DS, USDA, USGS, Ae

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Checked:
 Drawn: HAC/PJK
 Acres: ~639.13

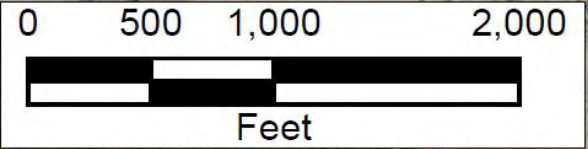
Prepared for:

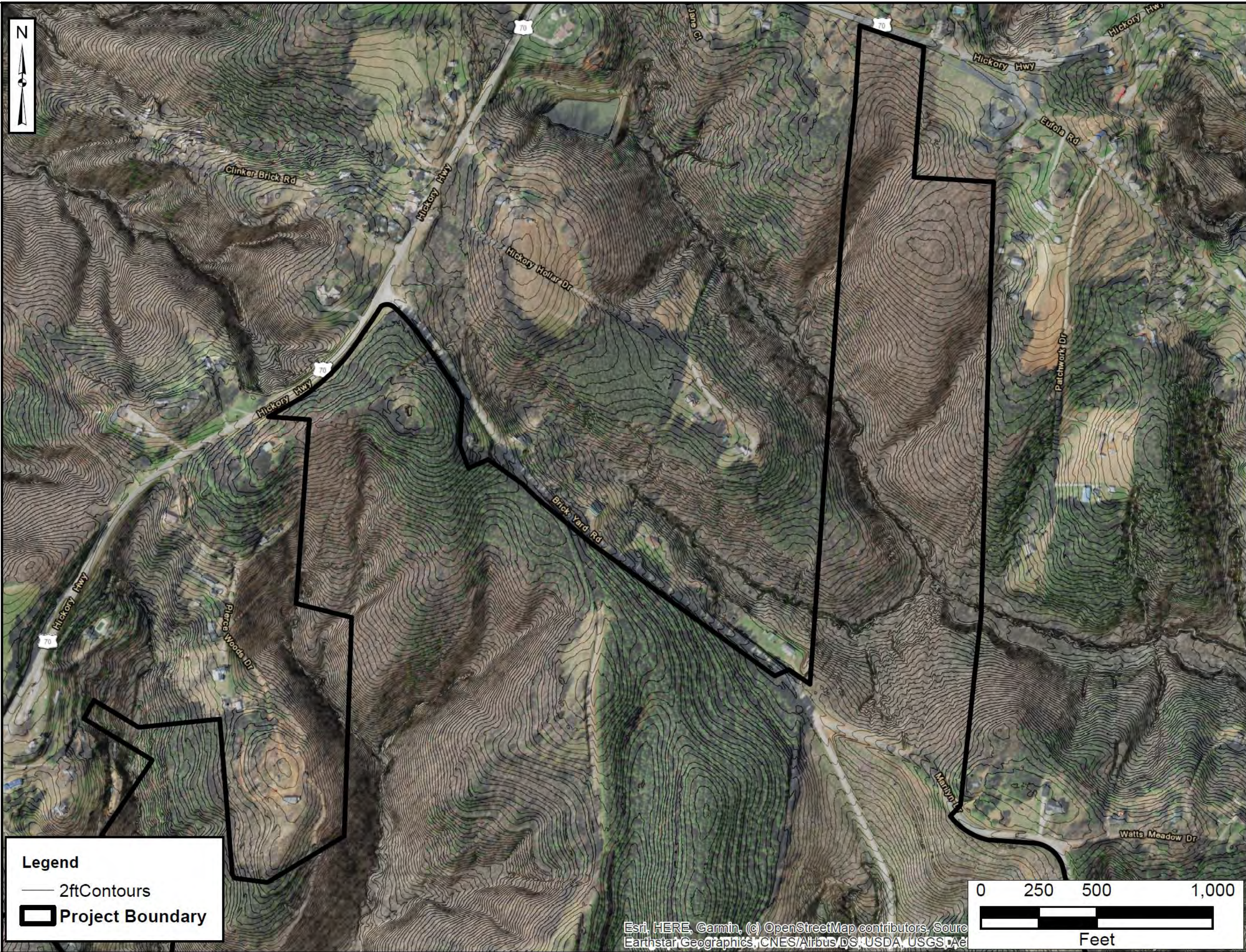
Gilbert Tract (Hickory Hwy – Brickyard Rd)
 Iredell County, North Carolina

LIDAR (AERIAL PHOTOGRAPH WITH HILLSHADE)
 For study purposes only. Subject to USACE/NCDEQ verification

**FIGURE:
 15**

Date:
 02/21/20





Checked:	Drawn:	Acres:	Prepared for:
	HAC/PJK	~639.13	
Gilbert Tract (Hickory Hwy – Brickyard Rd) Iredell County, North Carolina			LIDAR (AREA 1) 2 FOOT CONTOURS WITH AERIAL PHOTOGRAPH <i>For study purposes only: Subject to USACE/NCDEQ verification</i>

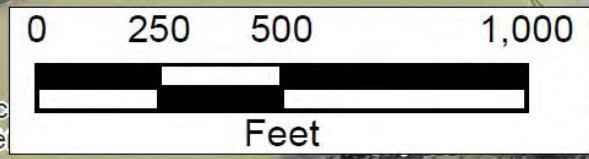
FIGURE:
16a

Date:
 02/21/20

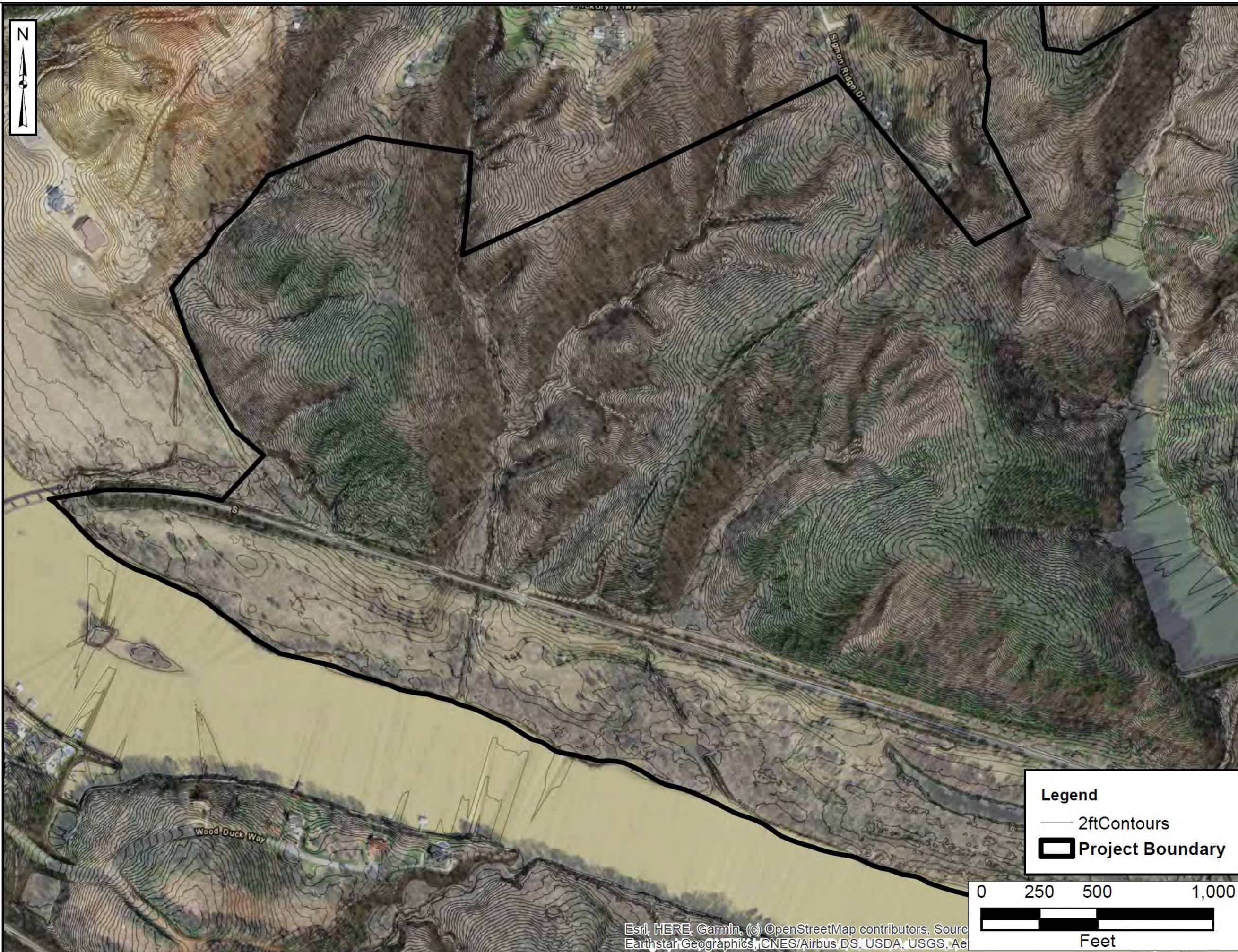


Esri, HERE, Garmin, (c) OpenStreetMap contributors, Source Earthstar Geographics, CNES/Airbus DS, USDA, USGS, Ae

Legend
 — 2ftContours
 [Black Outline] Project Boundary

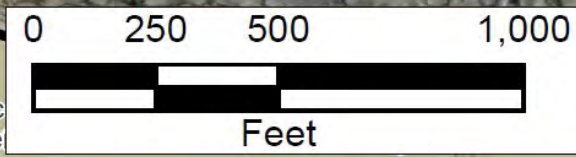


<p>WEPEG Wetlands and Environmental Planning Group Leonard S. Rindner, PLLC. len.rindner@wetlands-epg.com (704) 904-2277 www.wetlands-epg.com</p>		Checked:	Prepared for:
		Drawn: HAC/PJK	
<p>Gilbert Tract (Hickory Hwy – Brickyard Rd) Iredell County, North Carolina</p>		Acres: ~639.13	<p>LIDAR (AREA 2) 2 FOOT CONTOURS WITH AERIAL PHOTOGRAPH For study purposes only: Subject to USACE/NCDEQ verification</p>
<p>FIGURE: 16b</p>		Date: 02/21/20	



Legend

- 2ftContours
- ▭ Project Boundary



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		Drawn: HAC/PJK	
<p>Gilbert Tract (Hickory Hwy – Brickyard Rd) Iredell County, North Carolina</p>		Acres: ~639.13	<p>LIDAR (AREA 3) 2 FOOT CONTOURS WITH AERIAL PHOTOGRAPH <i>For study purposes only. Subject to USACE/NCDEQ verification</i></p>
<p>FIGURE: 16c</p>		Date: 02/21/20	