

National Aeronautics and
Space Administration
John C. Stennis Space Center
Stennis Space Center, MS 39529-6000



March 30, 2017

Reply to Attn of: **Office of the Director**

Ms. Jeannette T. Goldsmith
Goldsmith Strategy
12 Southbourne Court
Greenville, SC 29607

Dear Ms. Goldsmith:

The NASA John C. Stennis Space Center (SSC) is pleased to submit the enclosed application materials for two sites as part of the MPC Project Ready Program. They are situated in an 1100-acre section we are focusing on for future growth potential called Enterprise Park, that is located within the FEE area and owned by the Federal government. The 250-acre Industrial Park site is located on the northern boundary and the 150-acre Large Industrial site is located on the southern boundary.

The NASA team has enjoyed working with you and the Mississippi Power Company through the Project Ready certification process, and we look forward to answering any additional questions you may have. The supporting information is enclosed, and I can be contacted at 228-688-3788 or email Don.H.Beckmeyer@nasa.gov.

Sincerely,

A handwritten signature in black ink that reads "Don Beckmeyer".

Don Beckmeyer
Manager, Strategic Business Development

Enclosure

cc:

RA00/Keith Brock
RA01/Tim Pierce
MPC/Stacy Lester

**MISSISSIPPI POWER – PROJECT READY SITES
INFORMATION REQUEST FOR INDUSTRIAL PARKS**

Industrial Park Information	
Park Name:	Stennis Space Center Project Ready Enterprise Park Industrial Park
City, County, State:	Stennis Space Center, Hancock County, MS
Zip Code:	39529
Category:	Industrial Park

Applicant Information	
Name:	Don Beckmeyer
Organization:	NASA
Address:	Building 1100, Code AA03
City, County, State:	Stennis Space Center, Hancock County, MS
Zip Code:	39529
Office Phone Number:	(228) 688-3788
Mobile Phone Number:	(228) 332-1726
Email Address:	don.h.beckmeyer@nasa.gov

INDUSTRIAL PARK INFORMATION

1. Total acres of proposed Industrial Park:
250 acres
2. Number of developable, contiguous acres of proposed park:
190 acres
3. Is a single parcel within the Industrial Park, 35 acres or greater:
Yes
4. Please indicate the number of additional lots proposed in the industrial park and the acreage of each proposed lot:

Lot #	Total Developable Acreage
1	25 acres
2	45 acres
3	30 acres
4	30 acres
5	60 acres

5. Is property available for purchase or lease:
Lease
6. Indicate method of control:

Check Applicable Box		
X	Applicant is owner of the Industrial Park	
	Letter from owner is provided (Y/N)	
	Real Estate Listing	
	Name of Listing Agent	
	Duration of Listing	
	Option	
	Name of Option Holder	
	Option Expiration Date	
	Contingency Contract to Purchase or Lease	

7. Property price (total or average price per acre):
Lease at Fair Market Value

8. Number of landowners:
One

9. Current property landowners (repeat if necessary):

	Name	Address	City	State	Zip	Phone	Comment
Owner 1	US Government	John C. Stennis Space Center	Stennis Space Center	MS	39529	(228) 688-3788	
Owner 2							
Owner 3							
As many as needed, etc.							

10. Provide a chronology of each parcel's previous use including dates:

Parcel #	Previous Land Use	Date
Industrial Park Site	Rail loading and unloading	1980-1991

11. Number of existing structures in Industrial Park:
One

12. Describe each structure in Industrial Park:
Rail dock

13. Maximum topographic elevation of the Industrial Park:
32.66 ft.

14. Minimum topographic elevation of the Industrial Park:
8.78 ft.

15. Maximum elevation change:
23.88 ft.

16. Indicate the percent of slope of the Industrial Park:
32% has a percent slope of less than 3%

17. Is any portion of the Industrial Park in the 100 year flood plain (if yes, please answer questions 18-20):
Yes

18. If yes, please indicated base flood elevation?
No base flood elevation determined for this area.

- 19. How many acres are in the flood plain?
45.4 acres
- 20. If acreage in the flood plain are included in the developable acreage estimate, please provide plans (including cost and schedules estimates) for developing specific sites within the industrial park above the base flood elevation:
No flood plain in the developable area.

ZONING

- 21. Identify the Industrial Park's current zoning:
US Government is sovereign over the land and has total control over land use.
- 22. Is a zoning change necessary for the intended usage:
No
- 23. Identify the current zoning surrounding the proposed property:
Bounded on the north and west by the SSC buffer zone in Hancock County, which is zoned agricultural with a perpetual restrictive easement.
Bounded on the south and east by the US Government owned land, which is sovereign over the land and has total control over land use.
- 24. Detail the process and approvals necessary to rezone and the timeline to complete:
N/A

TRANSPORTATION

Roads

- 25. Describe Industrial Park ingress / egress routes in regards to congestion and safety:
From north, I-59 to Hwy 607 south to government owned land intersecting Hwy 607.
From east, I-10 to Hwy 603 to Texas Flat Road to Hwy 607 south to government owned land intersecting Hwy 607.
From west, I-10 or I-12 East to I-59 North to Hwy 607 south to government owned land intersecting Hwy 607.

Congestion:	None
Safety:	None

- 26. Identify the closest North / South interstate(s):
I-59
- 27. Number of miles to the closest North / South interstate(s):
5-1/2 miles

28. Identify the closest East / West interstate(s):
I-10
29. Number of miles to the closest East / West interstate(s):
If travelling around the restricted access roads, 17 miles via Hwy 607 to I-59 south to I-10 East/West (in LA) or 17 miles via Hwy 607 to Texas Flat Rd. to Hwy 603 to I-10 East/West (in MS).
If travelling through the restricted access roads, 8 miles via Hwy 607 to I-10 East/West.
30. Will any road access improvements be necessary including the extension of roads, interchange improvements, etc.:
Yes

If yes, please describe:
Primary ingress from Hwy 607 needs widening and improvement.
31. Is an internal park road currently in place within the Industrial Park:
Yes, but needs improvement
32. If no, please describe a plan (including cost and schedule) for developing necessary internal park transportation infrastructure:
N/A

Commercial Air Service

33. Name of commercial airport (include identifier):
GPT – Gulfport/Biloxi International Airport
MSY – Louis Armstrong New Orleans International Airport
KHSA – Stennis International Airport (general aviation facility - public use chartered and cargo flights– 8500 ft runway)
34. Distance from the Industrial Park (miles):
GPT – 40 miles
MSY – 60 miles
KHSA – 15 miles
35. Transit time from Industrial Park to airport (minutes):
GPT – 50 minutes
MSY – 60 minutes
KHSA – 20 minutes

Rail (IF APPLICABLE)

36. Describe rail service to Industrial Park:
None, rail beds from previous rail service still exists.

- 37. Please indicate lots within the Industrial Park to which rail service can be provided:
Rail beds from previous rail service still exist near all lots.
- 38. Describe any improvements to the rail infrastructure that will be required:
Rail service to the industrial park is contingent on reestablishment of previous north/south rail service.

UTILITIES

Electric

- 39. Name of the electric power transmission company serving the proposed Industrial Park:
Mississippi Power Company
- 40. Name of the electric power distribution company or companies serving the proposed Industrial Park:
Stennis Space Center/NASA
- 41. Are electric facilities near or adjacent to the Industrial Park:
None
- 42. If so, how large a load could be served without upgrades and at what voltage:
The substation has a capacity of 40 MW and the current load is approximately 23 MW.
- 43. What is the distance to the nearest substation serving the Industrial Park:
The substation is approximately 2 miles from the site.
- 44. If electrical facilities are not adjacent to Industrial Park, please describe the plans to extend electric facilities capable of meeting minimum requirements to the Industrial Park:
Electrical distribution is originating from the substation located at Leonard Kimble Road. The substation currently has the capacity to support the estimated 5MW of additional power needed to the proposed industrial site. The substation has a capacity of 40MW and the current load is ~23MW. The substation's loads shall be re-evaluated prior to development to ensure that capacity is still available. The estimate includes the tie-in to the existing substation, wiring, and concrete utility poles placed ~200 ft apart up to the proposed site.
- 45. Provide an estimate of the cost of extending electric service to the Industrial Park:
\$285,476
- 46. Provide an estimate the schedule for extending electric service to the Industrial Park:
12 months
- 47. Is dual feed electric service an option at the proposed Industrial Park. If yes, describe:
Yes. Depending on the specific requirements of the customer, Mississippi Power can work with the customer to design redundant services based on their reliability needs. Please note that a redundant feed is a premium service not covered under standard service, which may require an upfront contribution from the customer.

Natural Gas

48. Name of the natural gas transmission company or companies serving the proposed Industrial Park:
NASA
49. Name of the natural gas distribution company or companies serving the proposed Industrial Park:
NASA
50. Distance to the closest gas line serving the Industrial Park:
3/4 mile
51. Indicate the size of the line serving the Industrial Park:
11"
52. Indicate the pressure of the line serving the Industrial Park:
50 psig
53. Describe any bottlenecks within the system that need to be upgraded:
No known bottlenecks
54. If natural gas is not at the Industrial Park, please describe plans to extend natural gas infrastructure capable of meeting minimum requirements to the Industrial Park:
Cost estimate is based on plan to tie into existing infrastructure.
55. Provide an estimate of the cost of extending natural gas service to the Industrial Park:
\$868,732
56. Provide an estimate of the schedule for extending natural gas service to the Industrial Park:
12 months

Water Service

57. Name of the water provider serving the Industrial Park:
NASA
58. Distance to the closest water line serving the Industrial Park:
1-1/2 miles
59. Size of the line serving the Industrial Park:
16"
60. Capacity of the line serving the Industrial Park:
Limited to a State-required maximum design velocity of 5 ft/sec.
61. Capacity of the water system (mgd):
7,064,640 gpd

- 62. Average utilization of the water system (mgd):
360,000 gpd
- 63. Peak utilization of the water system (mgd):
1,000,000 gpd
- 64. Excess capacity of the water system factoring in peak utilization (mgd):
3,172,320 gpd
- 65. If water infrastructure is not at the Industrial Park, please provide a plan for extending water infrastructure capable of meeting the minimum requirements to the Industrial Park:
Cost estimate is based on plan to tie into existing infrastructure.
- 66. Provide an estimate of the schedule for providing water service to the Industrial Park:
9 months
- 67. Provide an estimate of the cost of extending water service to the Industrial Park:
\$1,650,862
- 68. Identify any planned upgrades to the water system, including the schedule and the source of funding for the project:
N/A

Wastewater Service

- 69. Name of the wastewater provider serving the proposed Industrial Park:
NASA (Sanitary wastewater only)
Note: Option exists to investigate use of Hancock County underutilized wastewater facility located approximately 8-1/2 miles away.
- 70. Distance to the closest sewer line serving the Industrial Park:
1-3/4 miles
- 71. Size of the line serving the Industrial Park:
New line required
- 72. Capacity of the line serving the Industrial Park:
New line will be sized for the 300,000 gpd requirement
- 73. Capacity of the sewer system (mgd):
345,000 gpd
- 74. Average utilization of the sewer system (mgd):
101,300 gpd
- 75. Peak utilization of the sewer system (mgd):
199,000 gpd

- 76. Excess capacity of the sewer system factoring in peak utilization (mgd):
243,700 gpd
- 77. Is there any additional capacity under the existing permit:
Yes
- 78. What type of treatment facility:
Lagoon System
- 79. Is there the ability to modify/expand the existing permit:
Yes
- 80. Identify any planned upgrades of the system, including the schedule and the source of funding for the project:
N/A
- 81. If wastewater infrastructure is not at the Industrial Park, please provide a plan for extending wastewater infrastructure capable of meeting the minimum requirements to the Industrial Park:
Cost estimate is based on plan to tie into existing infrastructure.
- 82. Provide an estimate of the schedule for providing wastewater service to the Industrial Park:
9 months
- 83. Provide an estimate of the cost of extending wastewater service to the Industrial Park:
\$1,394,055

ENVIRONMENTAL

- 84. Has an environmental Phase I study been conducted on the proposed Industrial Park (if yes, please provide the date):
Yes, March 2017
- 85. If yes, please indicated whether or not any area of recognized environmental concern were indicated within the proposed developable acreage:
No
- 86. If applicable, please provide a detailed plan (including cost and schedule) for remediating any indicated areas of environmental concern:
N/A
- 87. Has a geotechnical assessment been conducted on the proposed Industrial Park (if yes, please provide the date):
Yes, March 2017
- 88. Has a wetlands delineation been conducted on the proposed Industrial Park (if yes, please provide the date):
Yes, December 2016

89. If yes, has a jurisdictional determination been provided by the U.S. Army Corps of Engineers:
 Yes
90. Are there any areas of wetlands in the proposed developable acreage:
 No
91. If yes, please provide a detailed plan for remediating the wetlands in the proposed developable acreage:
 N/A
92. Has an archeological study been conducted on the proposed Industrial Park (if yes, please provide the date):
 Yes, March 2017
93. If yes, has the State Historical Preservation office concurred with the findings of the study:
 Report submitted to SHPO, waiting for concurrence.
94. Are there any historic Industrial Parks, structures, or areas of archeological significance in the proposed developable acreage:
 No
95. If yes, please provide a detailed plan for addressing the identified areas of archeological significance in the proposed developable acreage:
 N/A
96. Has a threatened and endangered species study been conducted on the proposed Industrial Park (if yes, please provide the date):
 Yes, July 2016
97. If yes, has the U.S. Fish and Wildlife office concurred with the findings of the study:
 Yes
98. Is there any indication of the presence of rare and endangered species in the proposed developable acreage:
 No
99. If yes, please provide a detailed plan for addressing the identified areas of archeological significance in the proposed developable acreage:
 N/A

Current Air Quality Status

100. Indicate the status of the Industrial Park location in regards to federal air pollution regulations:

Pollutant	Attainment	Non-Attainment	Under Review
Ozone	X		
Carbon Monoxide	X		
Particular Matter	X		
Lead	X		
Sulfur Dioxide	X		
Nitrogen Dioxide	X		

WORKFORCE

101. Ten largest employers:

	Company	Industry	Employees
1.	US Navy	Federal Government, Military	1753
2.	Syncom Space Systems (S3) (SACOM)	Government Facilities Services, Manufacturing, and Test Support	616
3.	CSRA	Information Technology Services	598
4.	Hancock Medical Center	General Medical & Surgical Hospitals	500
5.	NASA	Federal Government, Military	467
6.	Hollywood Casino	Casinos (except Casino Hotels)	350
7.	Walmart Supercenter	Department Stores (except Discount Department Stores)	350
8.	Silver Slipper Casino	Casinos (except Casino Hotels)	300
9.	PSL North America, LLC	Fabricated Pipe & Pipe Fitting Manufacturing	242
10.	Lockheed Martin	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System & Instrumental Manufacturing	188

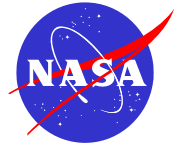
102. Ten largest manufacturers:

	Company	Industry	Employees
1.	PSL North America, LLC	Fabricated Pipe & Pipe Fitting Manufacturing	242
2.	Lockheed Martin	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System & Instrumental Manufacturing	188
3.	DAK Americas, LLC	Plastics Material and Resin Manufacturing	150
4.	Pratt & Whitney	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System & Instrumental Manufacturing	140
5.	Sabic Innovative Plastics	All Other Plastics Product Manufacturing	100
6.	Lockheed Martin	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System & Instrumental Manufacturing	100
7.	Calgon Carbon Corp.	All Other Miscellaneous Chemical Product & Preparation Manufacturing	45
8.	Cuevas Machine Co.	Machine Shops	35
9.	KSI	Fabricated Structural Metal Manufacturing	29
10.	Hot Sticks	Musical Instrument Manufacturing	13

103. Ten most recent new or expanding project announcements:

	Company	Industry	Employees	Year
1.	Jindal Tubular	Pipe Manufacturing	100	2016
2.	Rolls-Royce North America	Aircraft Engine & Engine Parts Manufacturing	47	2016
3.	Lazy Magnolia Brewing Company	Breweries	35	2016
4.	Tyonek	Aircraft Engine & Engine Parts Manufacturing	53	2016
5.	MAC (land expansion, 8.3 acres)	Small Arms Ammunition Manufacturing	13	2016
6.	The Beta Group Engineering & Construction Services LLC (expanded to office use)	Soil Testing	3	2016
7.	DAK Americas, LLC	Plastics Material & Resin Manufacturing	90	2015
8.				
9.				
10.				

Attachment 1: General Location Map



Stennis Space Center



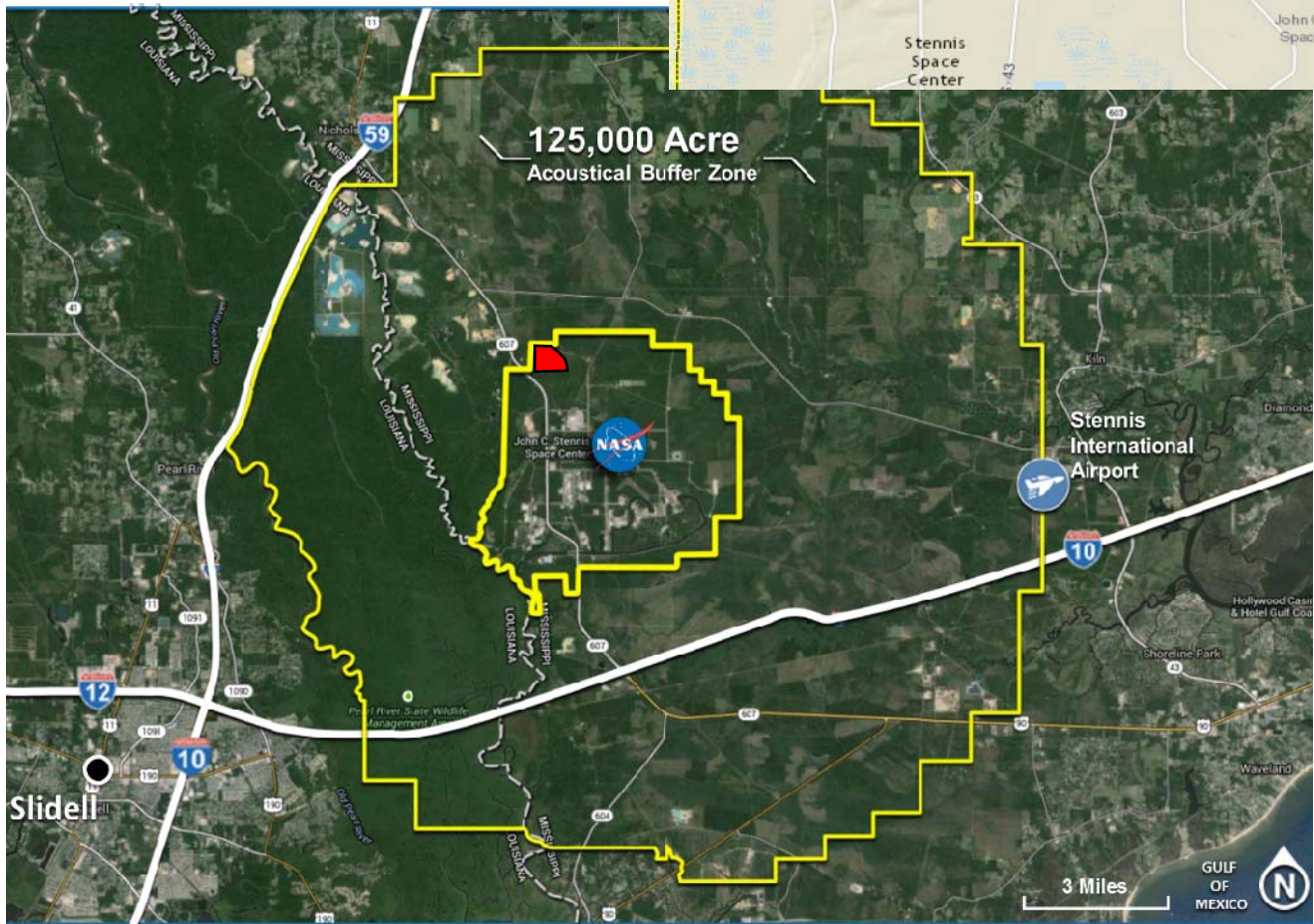
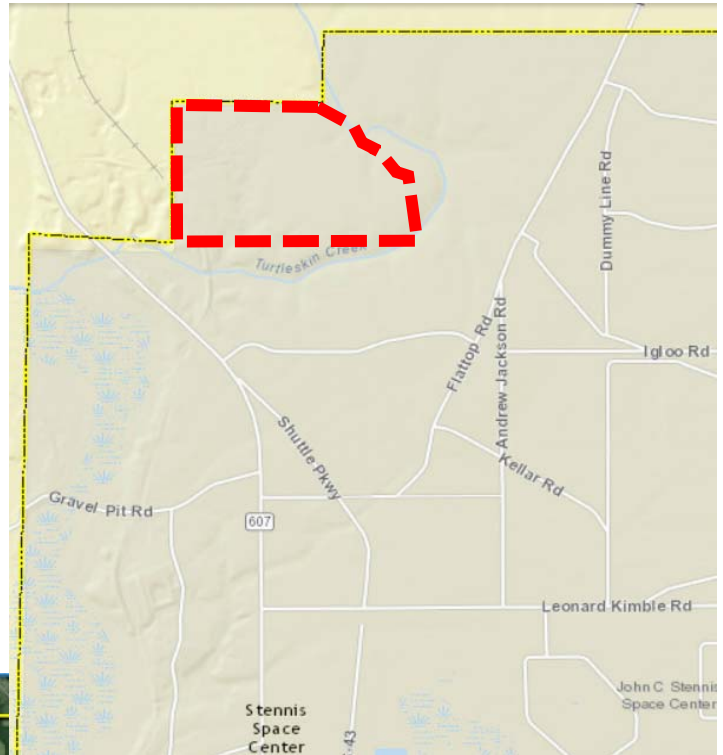


Attachment 2: Site Boundary Map

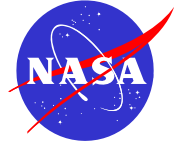
Stennis Space Center

--- Project Ready Proposed Site

~250 Acres



Attachment 3: Aerial Photograph with Site Boundaries

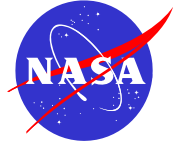


Stennis Space Center

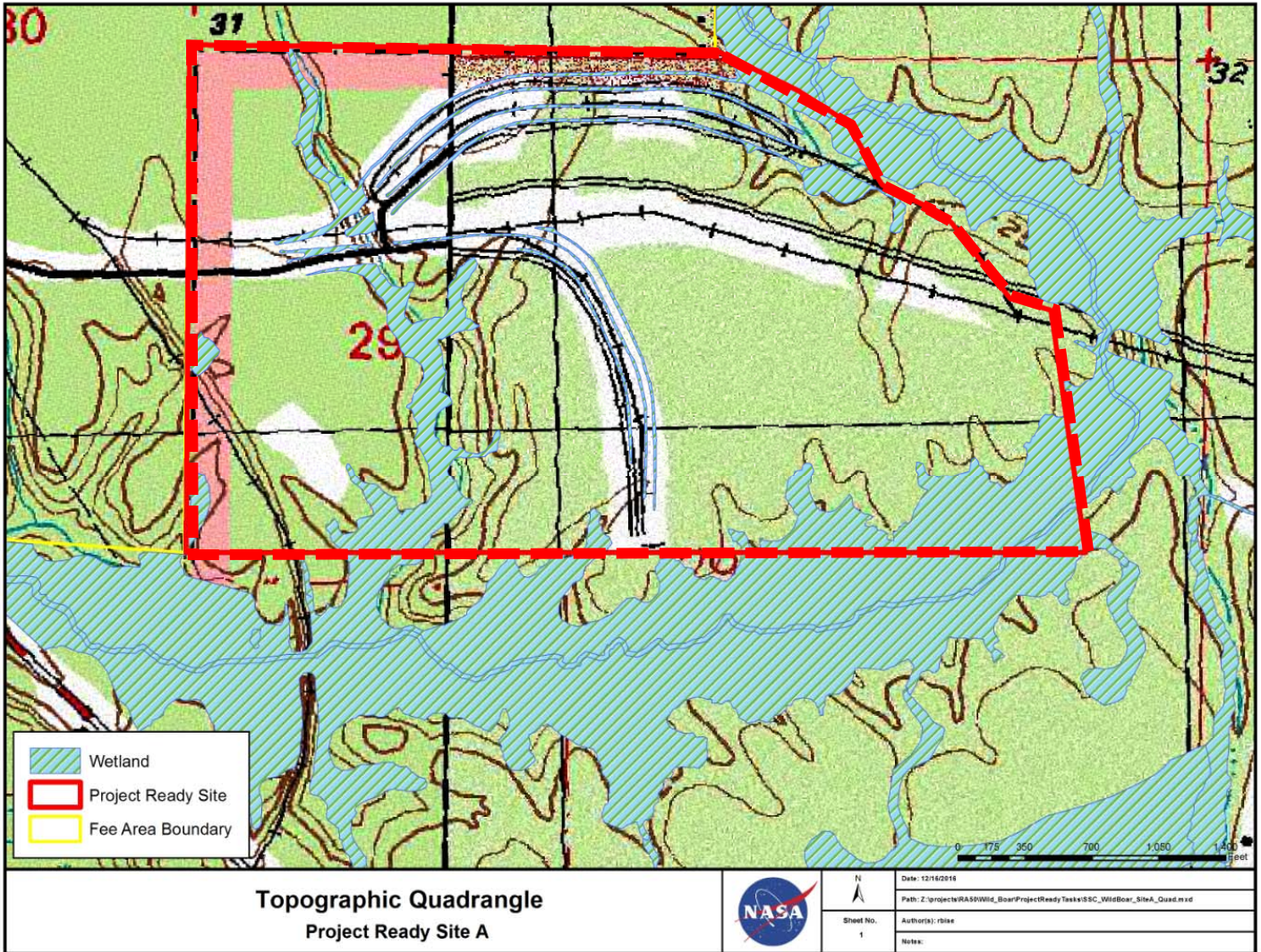


— — Project Ready Proposed Site

Attachment 4: USGS Quadrangle Map



Stennis Space Center



--- Project Ready Proposed Site

Attachment 5: (1 of 4) General Transportation Map

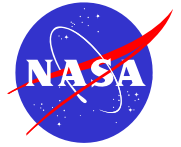


Stennis Space Center

Roads and Rails



Attachment 5: (2 of 4) General Transportation Map

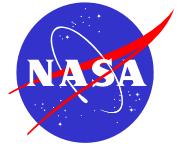


Stennis Space Center

Airports



Attachment 5: (3 of 4) General Transportation Map

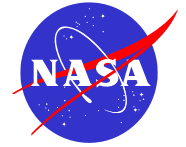


Stennis Space Center

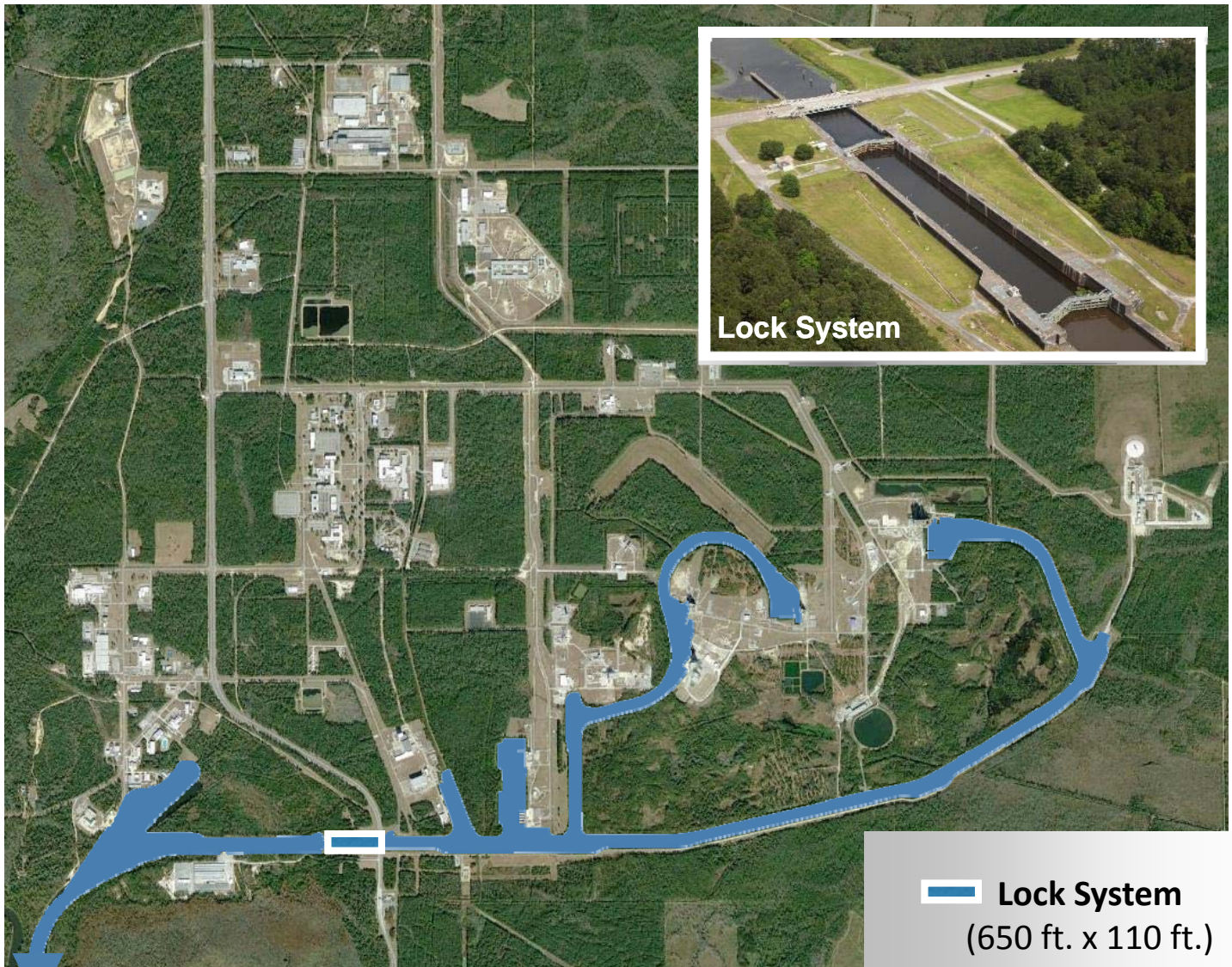
Ports



Attachment 5: (4 of 4) Waterway Transportation



Stennis Space Center



Pearl River to the Gulf of Mexico

- 7-1/2 Miles of Canal System
- Canal width 150 ft., depth 17 ft. (depth maintained by replenishment from the Pear River)
- Connecting SSC Test Complexes to the Gulf of Mexico and Connected Waterways
- Allows Barge Transportation
- Used for Delivery of Propellants to the Large Test Stands



Attachment 6: Documentation of offer to lease

Stennis Space Center

NASA intends to enter into a third party master lease with a developer who will then facilitate sub leases with prospective tenants. NASA intends to utilize an Enhanced Use Lease (EUL) as the master lease. NASA’s EUL authority is the most appropriate for granting a lease hold to a non-government interest for the site identified. The EUL authority allows Stennis Space Center to enter into long term real estate agreements that grant, by lease to others, the use of underutilized real property including land, buildings and other structures.

NASA is developing a Notice of Availability (NOA) to seek public and private entity interest in becoming the master lease holder for development and sub lease of the property. Once interested parties respond, NASA will evaluate and select the most suitable partner and begin the EUL development process. Upon execution of the EUL, the partner will seek tenants for sub lease and be responsible for all activity at the site (i.e., environmental, infrastructure development, build-out).

The notional schedule for the EUL process is shown below:

Notional Timeline – 6 months to 1 year

1. Brief description of EUL provided to NASA HQ for <i>Concurrence</i>	15-30 days
2. Real Estate Agreement Abstracts submitted to NASA HQ for <i>Concurrence</i>	15-30 days
3. Business Case and Life Cycle Costs (LCC) Analysis submitted to HQ for <i>Concurrence</i>	60-120 days
4. Full Submission Package for EUL submitted to HQ for <i>Approval</i>	90-180 days
5. EUL Signed	

Attachment 7: County Tax Map



Stennis Space Center



PREPARED BY:
HANCOCK COUNTY TAX ASSESSOR
JIMMIE LADNER, JR. ASSESSOR/COLLECTOR
854 HIGHWAY 90, SUITE C
BAY ST. LOUIS, MS. 39520
(228)467-0130

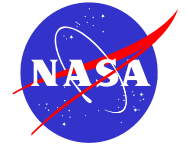
**HANCOCK COUNTY
MISSISSIPPI**

1 inch = 1,250 feet

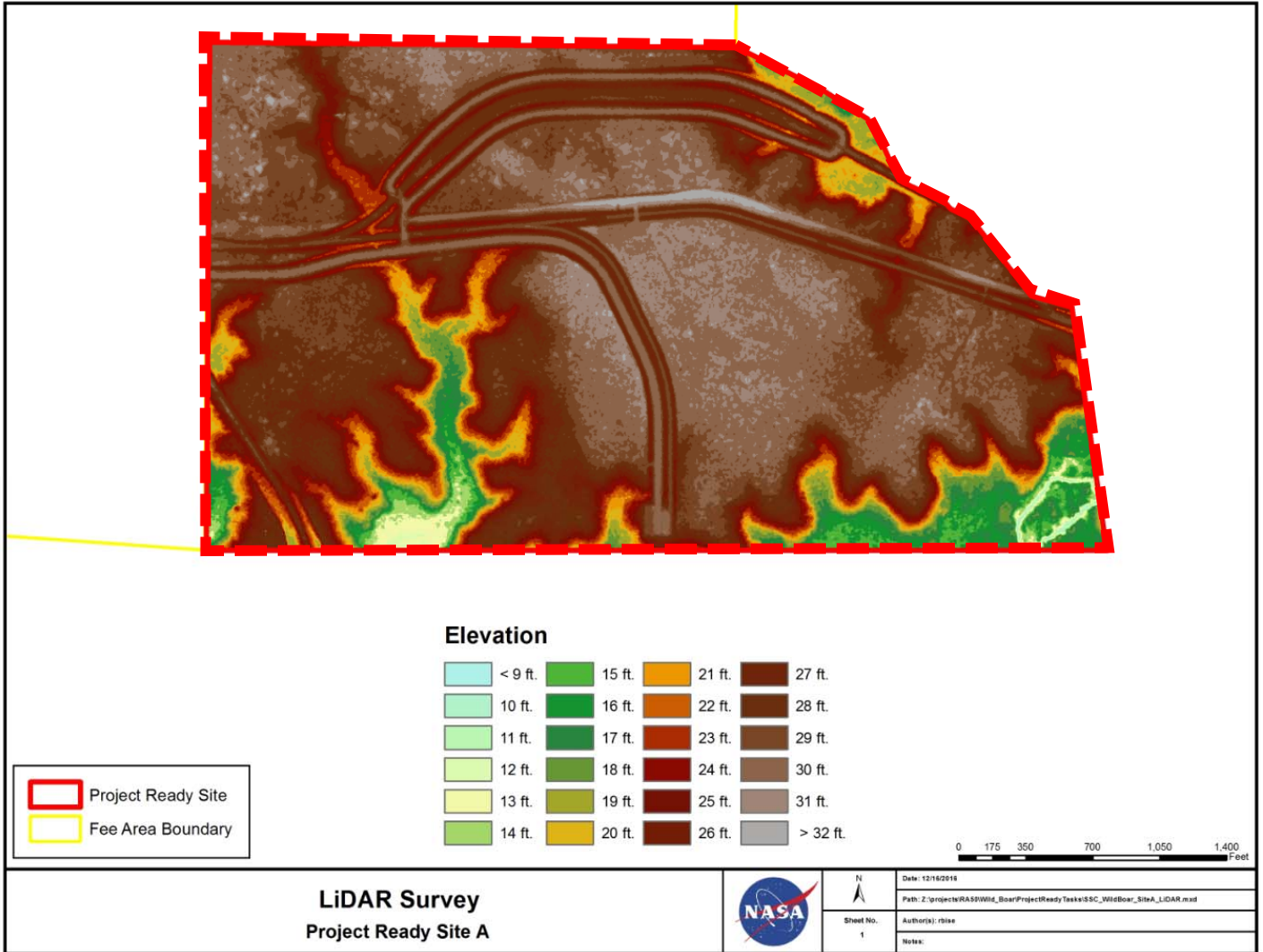


--- Project Ready Proposed Site

Attachment 8: (1 of 2) LIDAR Survey



Stennis Space Center



Project Ready Proposed Site

Attachment 8: (2 of 2)

Restrictions



Stennis Space Center

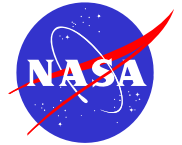
Title Search

At the time SSC was established in the 1960s, the United States Government purchased approximately 13,800 acres in fee simple (i.e., the “Fee Area”) to establish a facility for testing. The two proposed sites are in this fee area and are controlled by the US Government.

Restrictive Covenants

No covenants exist. US Government is sovereign over the land and has total control over land use.

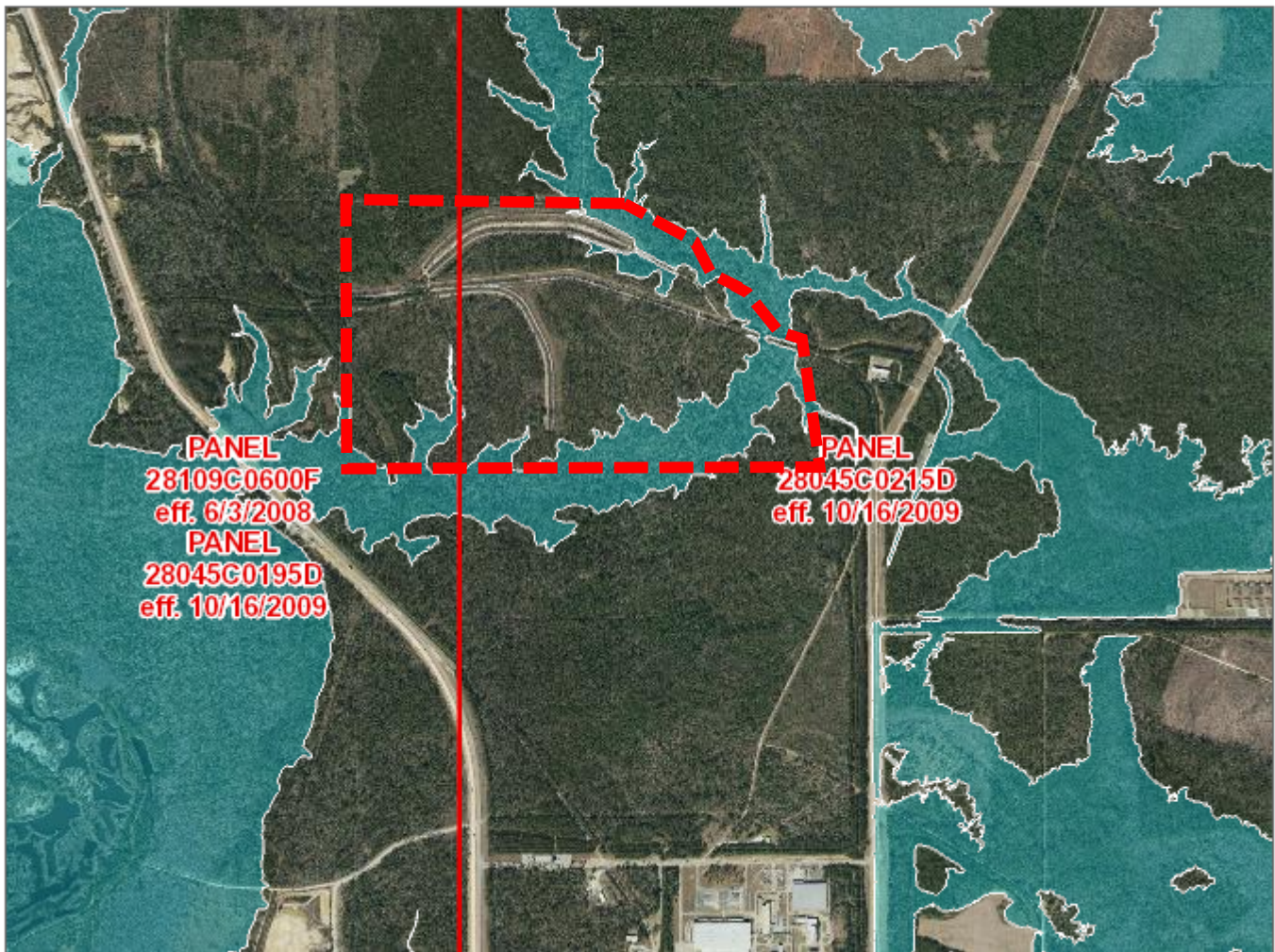
Attachment 9: FEMA Flood Map



Stennis Space Center

FEMA's National Flood Hazard Layer (Official)

Data from Flood Insurance Rate Maps (FIRMs) where available digitally. New NFHL FIRMette Print app available: <http://tinyurl.com/j4xwp5e>



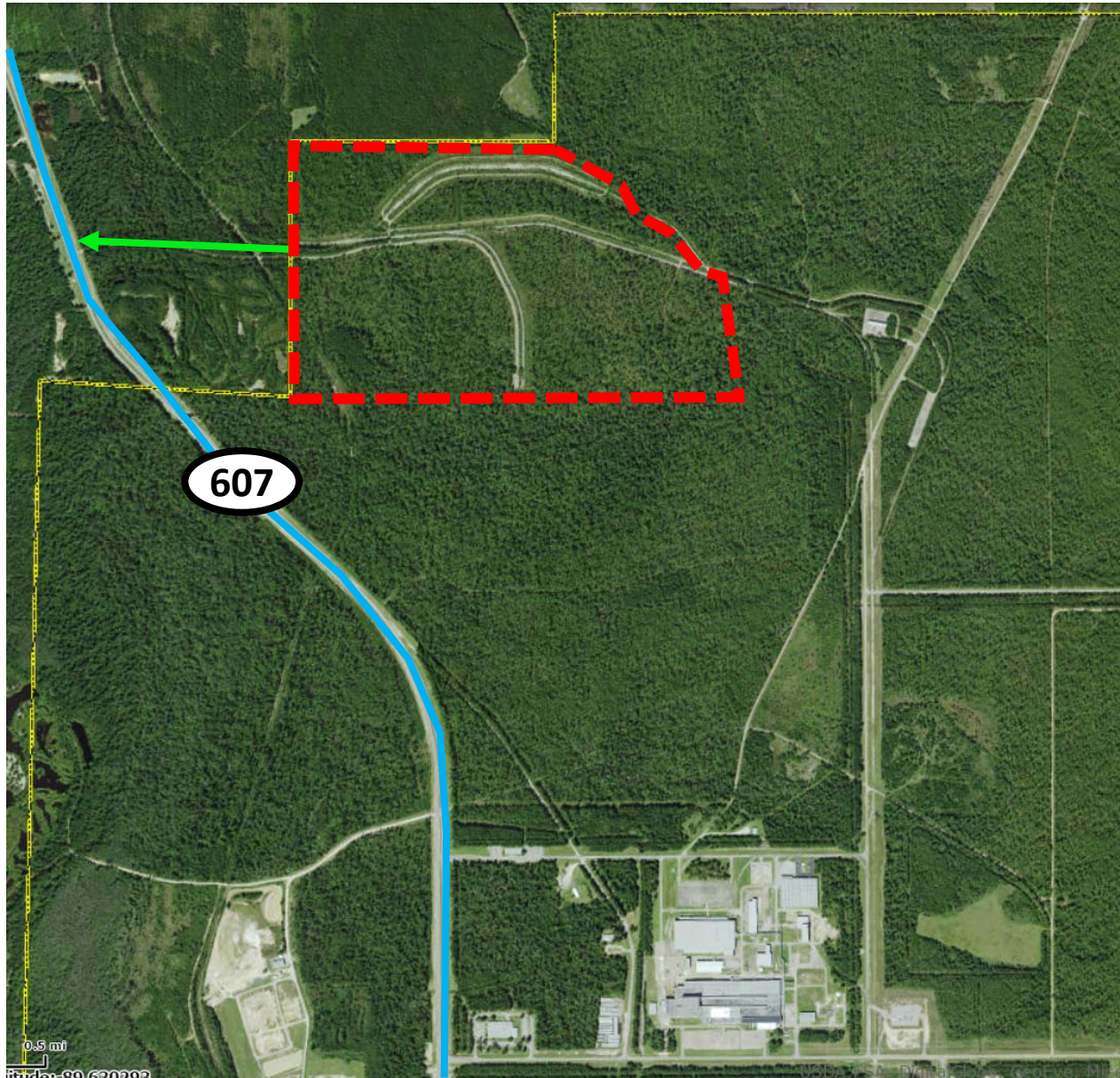
National Geospatial-Intelligence Agency (NGA); Delta State University; Esri | scott.mcafee@fema.dhs.gov

--- Project Ready Proposed Site

Attachment 10: Route from Site to 4-Lane Highway

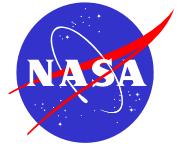


Stennis Space Center

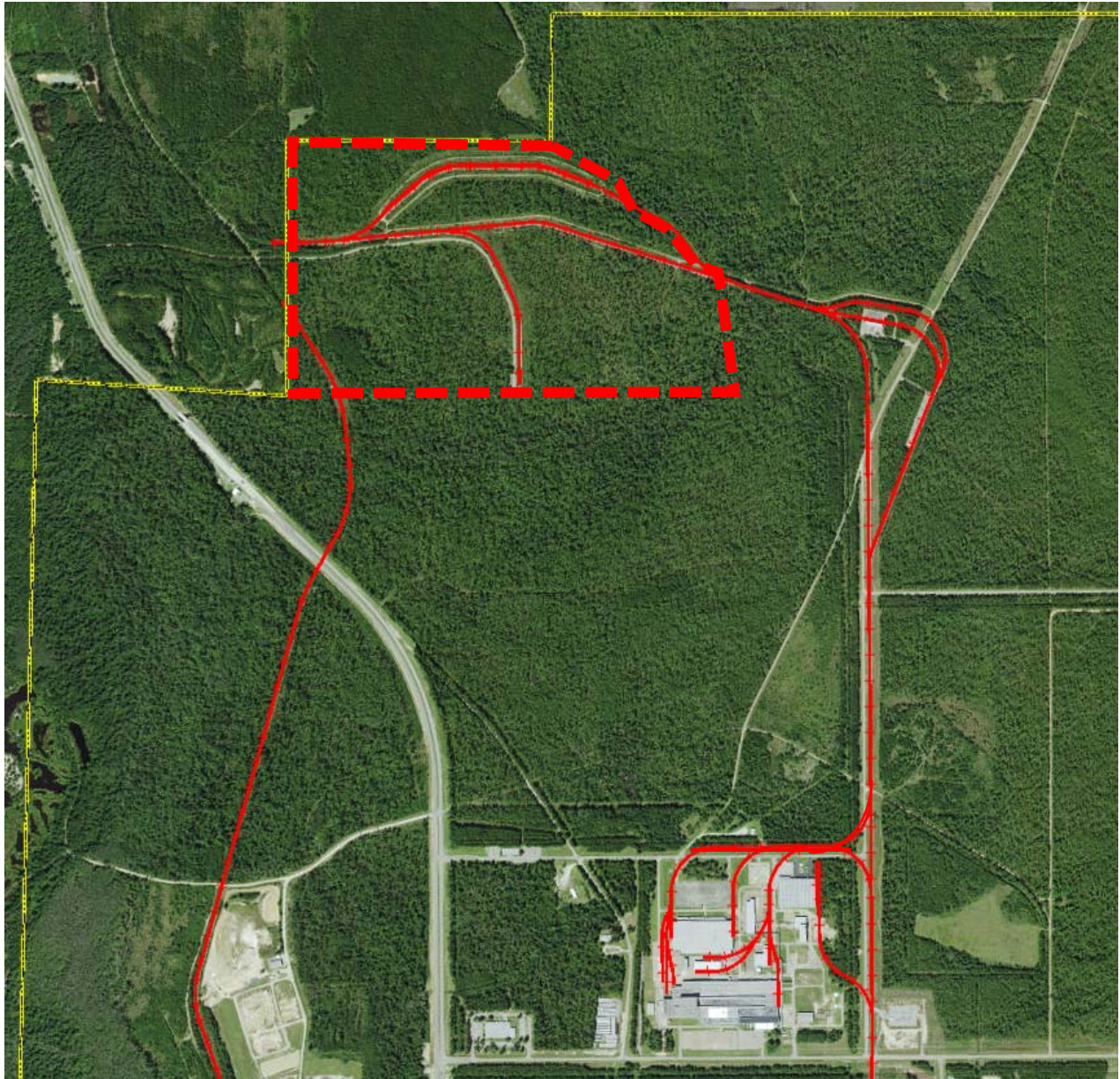


- Project Ready Proposed Site
- Existing 4-lane Highway
- Future access road (needs improvement)

Attachment 11: Existing Rail Infrastructure

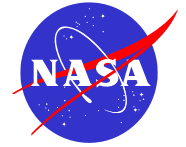


Stennis Space Center

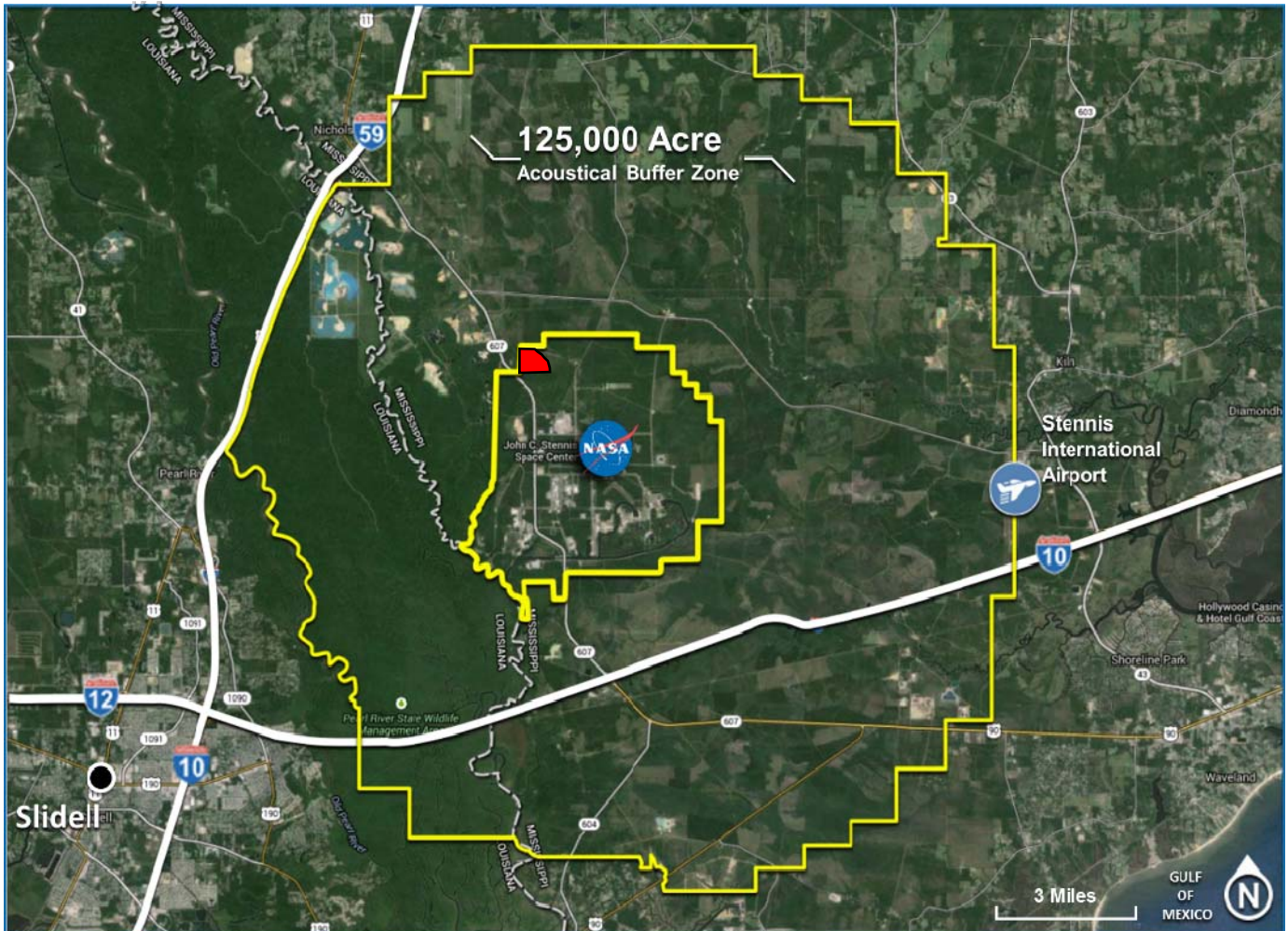


- Project Ready Proposed Site
- Existing Rail Bed Only

Attachment 12: Zoning for Site and Surrounding Area



Stennis Space Center



US Government is sovereign over the land and has total control over land use.

Bounded on the north and west by the SSC buffer zone in Hancock County, which is zoned agricultural with a perpetual restrictive easement. Bounded on the south and east by the U. S. Government owned land, which is sovereign over the land and has total control over land use.

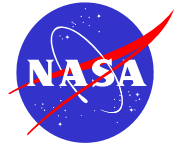
**Attachment 13:
Documentation on zoning**



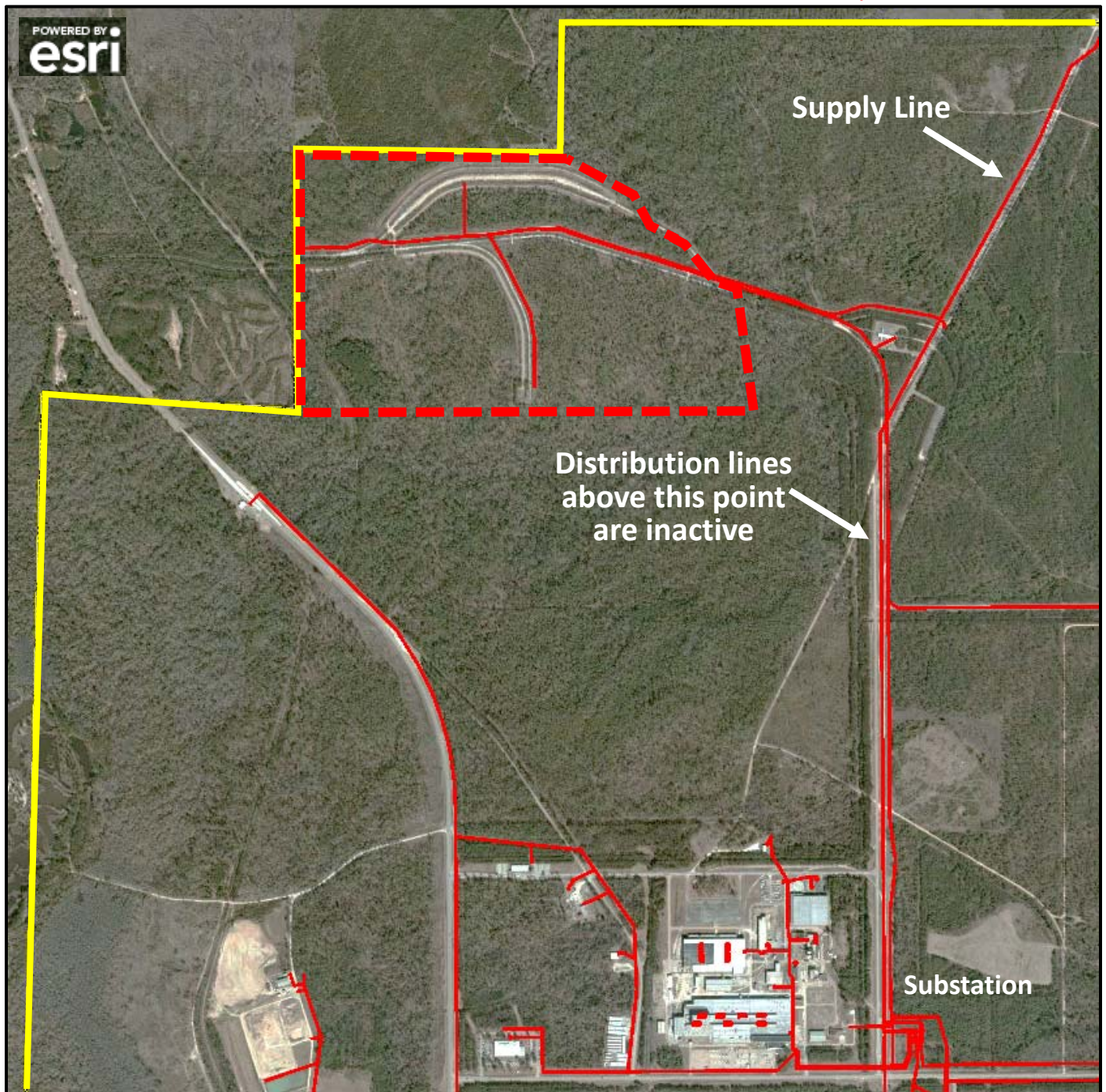
Stennis Space Center

Not Applicable

Attachment 14a: Infrastructure Map – Electric Lines

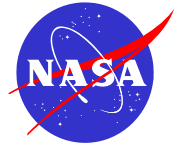


Stennis Space Center



- Fee Area
- - - Project Ready Proposed Site
- Existing Electrical Lines

Attachment 14b: Infrastructure Map – Natural Gas Lines

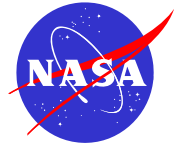


Stennis Space Center

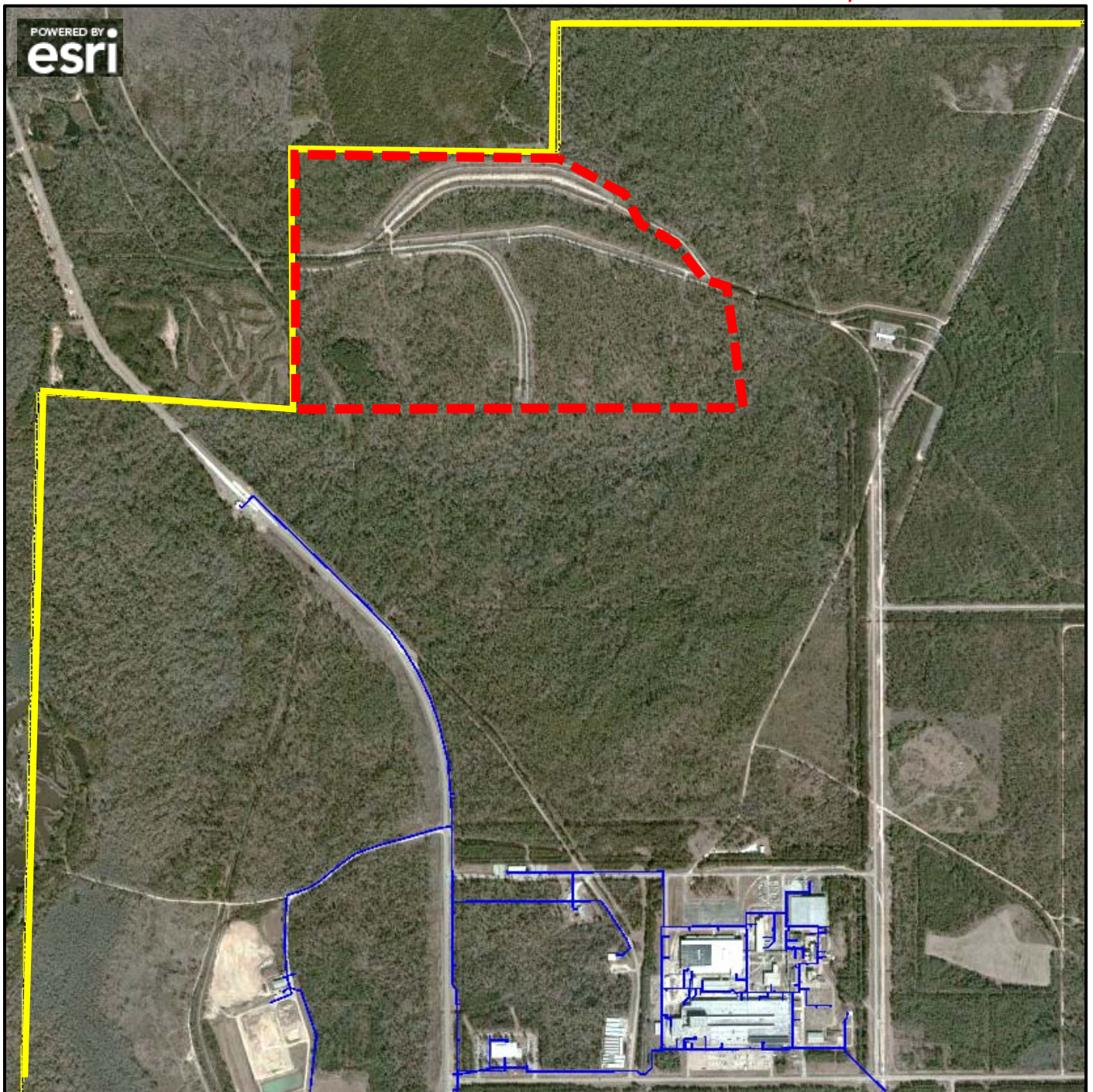


- Fee Area
- - - Project Ready Proposed Site
- Existing Natural Gas Lines

Attachment 14c: Infrastructure Map – Water Lines

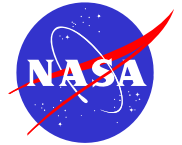


Stennis Space Center

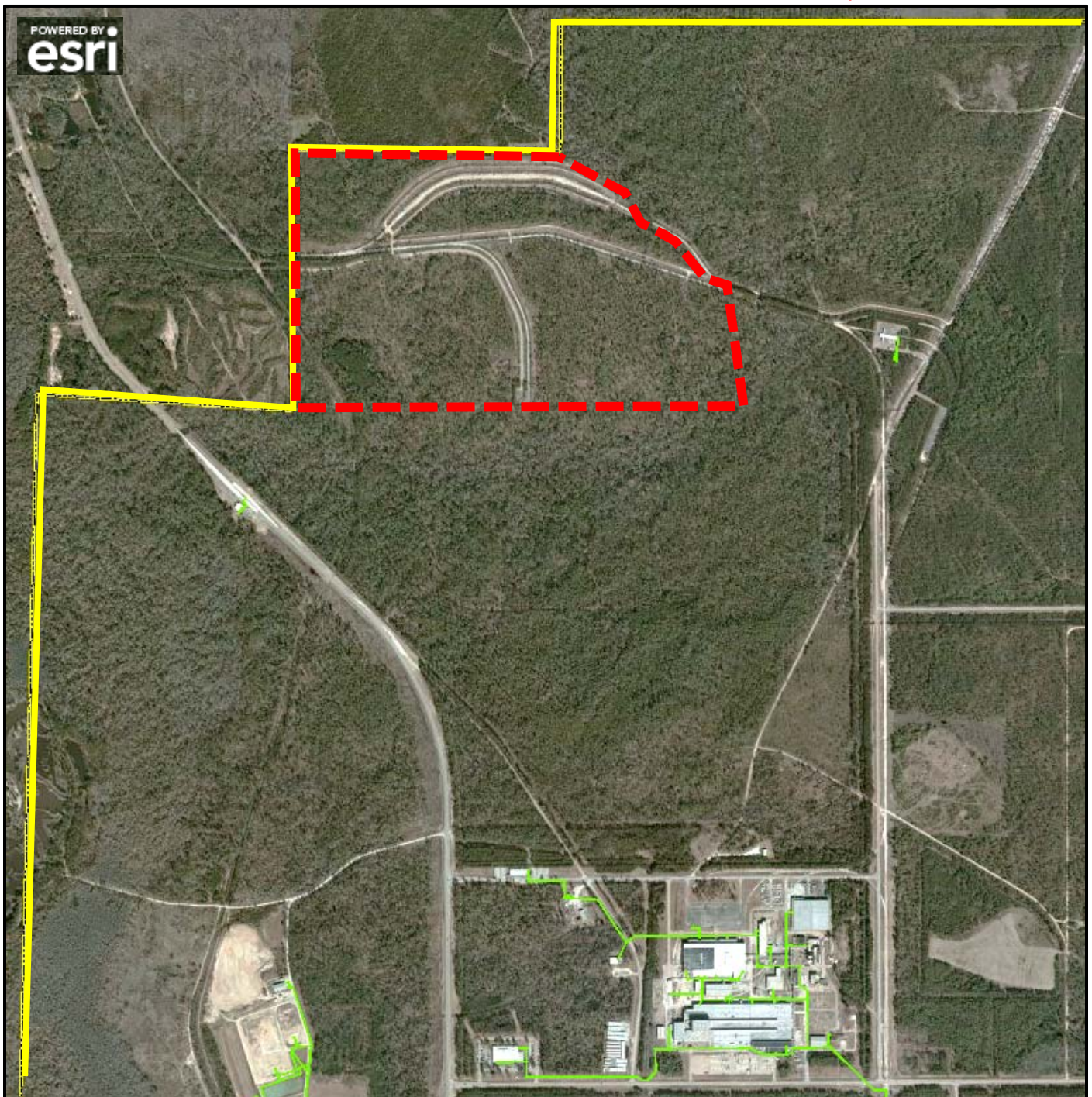


-  Fee Area
-  Project Ready Proposed Site
-  Existing Potable Water Lines

Attachment 14d: Infrastructure Map – Sewer Lines



Stennis Space Center

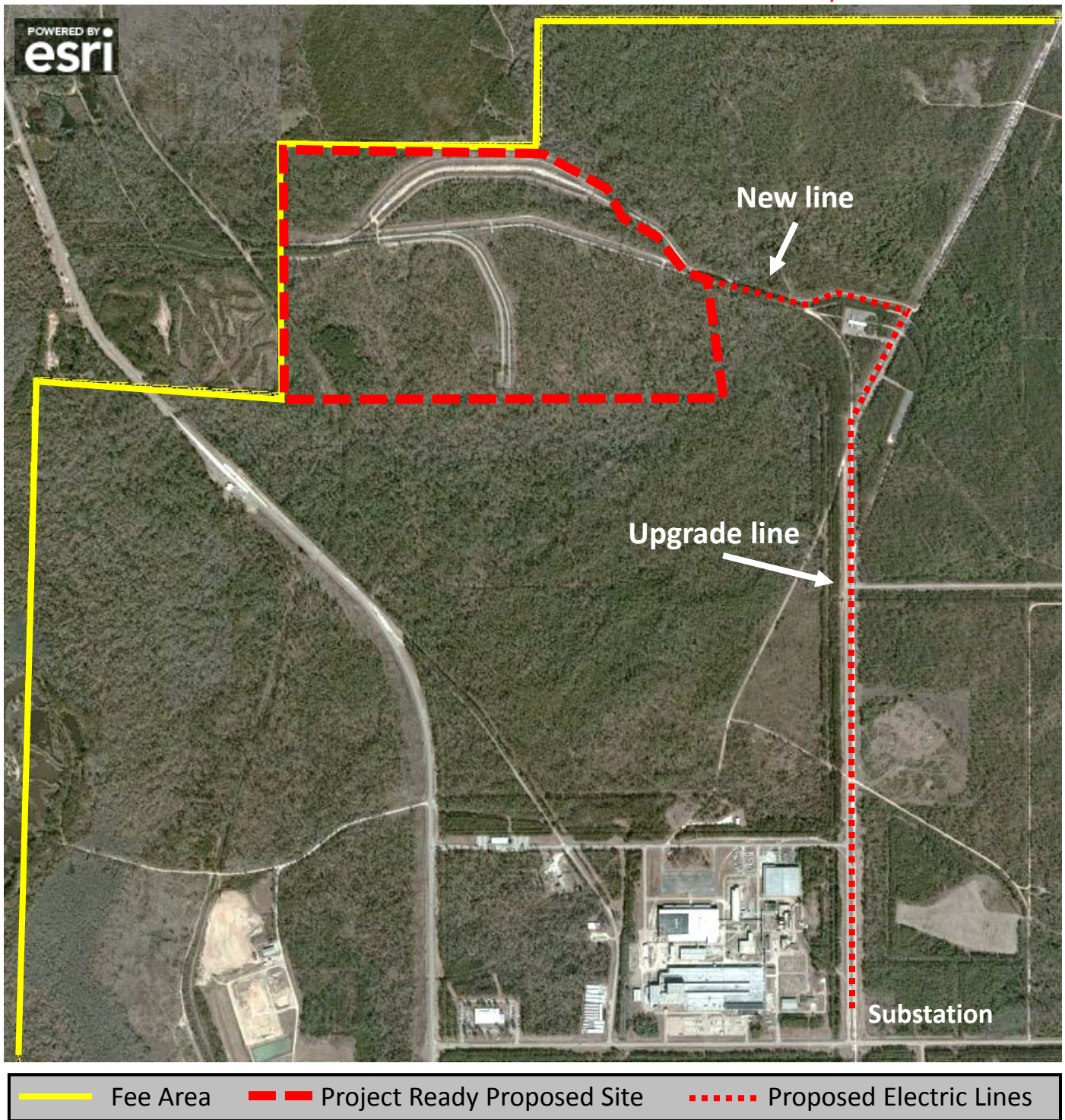


- Fee Area
- - - Project Ready Proposed Site
- Existing Sewer Lines

Attachment 15: Infrastructure Map – Electrical Plans



Stennis Space Center



NASA is the service provider of Electricity.

- a. Route of proposed extension – See map
- b. No covenants exist. US Government is sovereign over the land and has total control over land use.
- c. Utility extension ROM \$285,476 within 12 months.

Attachment 16: Infrastructure Map – Natural Gas Plans



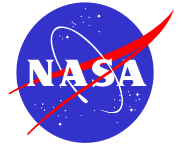
Stennis Space Center



NASA is the service provider of Natural Gas.

- a. Route of proposed extension – See map
- b. No covenants exist. US Government is sovereign over the land and has total control over land use.
- c. Utility extension ROM \$868,732 within 12 months.

Attachment 17: Infrastructure Map – Water Plans



Stennis Space Center



NASA is the service provider of Potable Water.

- a. Route of proposed extension – See map
- b. No covenants exist. US Government is sovereign over the land and has total control over land use.
- c. Utility extension ROM \$1,650,862 within 9 months.

Attachment 18: Infrastructure Map – Sewer Plans



Stennis Space Center



NASA is the service provider of Sewer.

- a. Route of proposed extension – See map
- b. No covenants exist. US Government is sovereign over the land and has total control over land use.
- c. Utility extension ROM \$1,394,055 within 9 months.

**Attachment 19a (page 1 of 2):
Due Diligence – Phase I ESA**



Stennis Space Center

See Appendix A for complete report.

**PHASE I
ENVIRONMENTAL SITE ASSESSMENT**

"Wild Boar Project"

Two Undeveloped Tracts Totaling +/- 400 Acres
Northern Portion of NASA Fee Area
NASA - John C. Stennis Space Center, Mississippi 39563
Subcontract No. S-3-M640000181
"Task Order No. 525 - Phase 2"

Prepared For

Ms. Wendy Robinson
Syncom Space Services, LLC
Building 1100, Room 201-F
Stennis Space Center, Mississippi 39529

Prepared By



2 Schooner Lane
Ocean Springs, Mississippi 39564
(228) 219-2992

Date: March 14, 2017

Attachment 19a (page 2 of 2): Due Diligence – Phase I ESA



Stennis Space Center

See Appendix A for complete report.

This Phase I Environmental Site Assessment report was prepared and reviewed by:

Lars Larson, Registered Professional Geologist
Larson Environmental, LLC

Environmental Professional Statement:

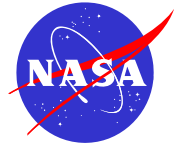
I declare that, to the best of my professional knowledge and belief, I meet the definition of an environmental professional as defined in §312.10 of 40 CFR Part 312 and we have the specific qualifications based on education, training, and experience to assess a properties of the nature, history, and setting of the properties. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Lars Larson, Registered Professional Geologist
Larson Environmental, LLC



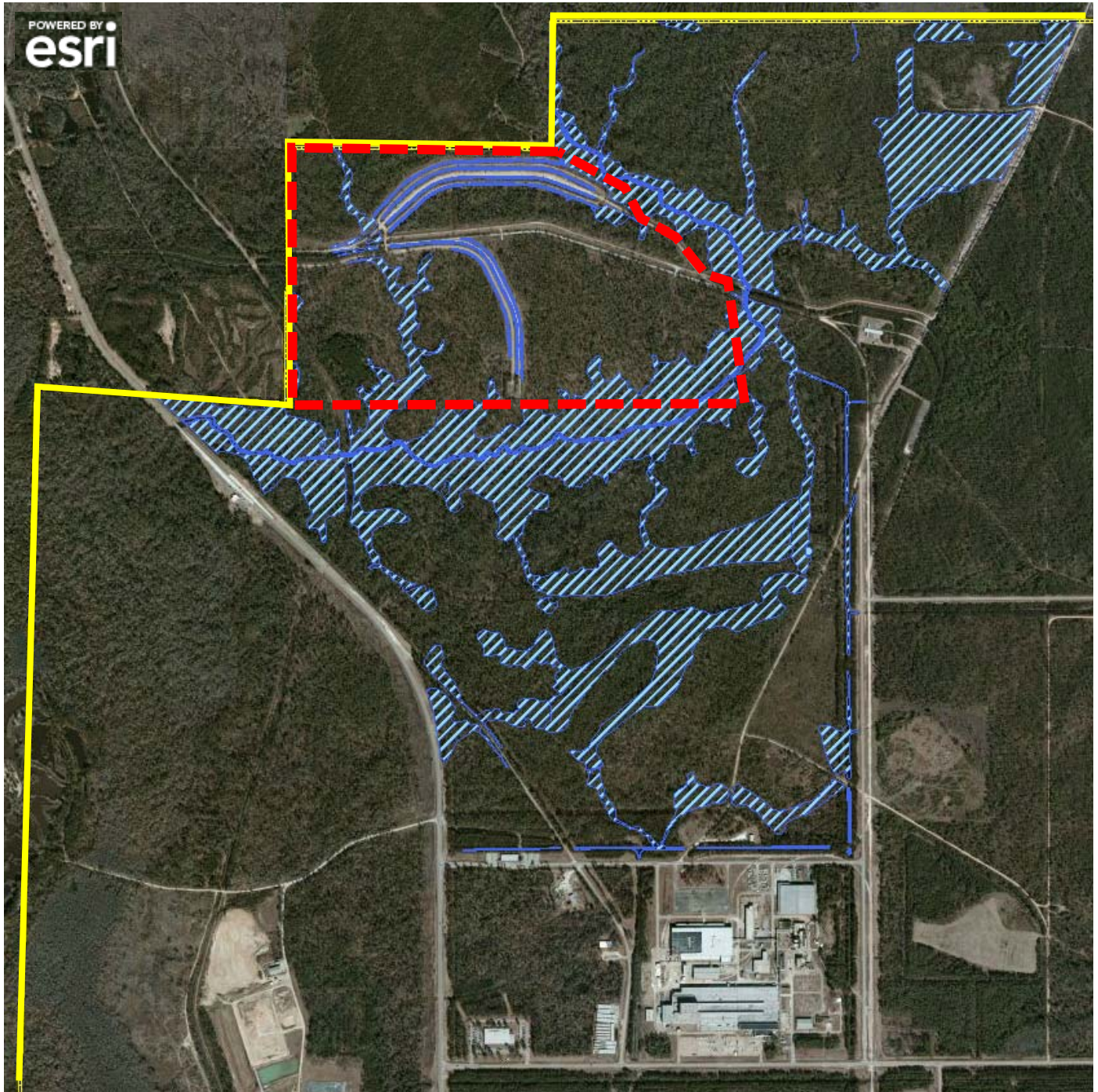
(SEAL)
Registration No. 0448
State of Mississippi
Date: March 14, 2017

Attachment 19b (page 1 of 3): Due Diligence – Wetlands Delineation

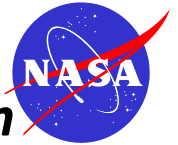


Stennis Space Center

See Appendix B for complete report.



Attachment 19b (page 2 of 3): Due Diligence – Wetlands Preliminary Jurisdictional Determination



Stennis Space Center

See Appendix B for complete report.



DEPARTMENT OF THE ARMY

VICKSBURG DISTRICT, CORPS OF ENGINEERS
4155 CLAY STREET
VICKSBURG, MISSISSIPPI 39183-3435

REPLY TO
ATTENTION OF:

February 28, 2017

Operations Division

SUBJECT: Jurisdictional Determination - John C. Stennis Space Center Fee Area,
Hancock County, Mississippi

Mr. Hugh Carr
NASA Environmental Office
John C. Stennis Space Center
BLDG 1100 Room 3021B
Stennis Space Center, Mississippi 39529-600

Dear Mr. Carr:

This letter is regarding your request for a preliminary jurisdictional determination for the subject property which is located in the John C. Stennis Space Center fee area, located in Hancock County, Mississippi.

Based upon the information provided and obtained during a site investigation, we have determined that it appears there are jurisdictional waters of the United States located on the property subject to regulation pursuant to Section 404 of the Clean Water Act. The approximate extent of potentially jurisdictional waters within the boundary of the project area described in your inquiry is depicted on the enclosed preliminary map (enclosure 1). Any work involving the discharge of dredged or fill material (land clearing, ditching, filling, leveeing, etc.) into jurisdictional wetlands and/or other waters of the United States at the site will require a Department of the Army Section 404 permit prior to beginning work. For your information, I have enclosed a copy of an appeals form for this preliminary jurisdictional determination (enclosure 2).

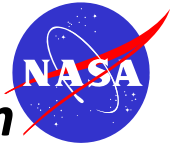
If you have any questions, please refer to identification no. MVK-2016-993 and contact Mr. Jeremy Stokes of this office, telephone (601) 631-5275, fax (601) 631-5459, or e-mail address: jeremy.e.stokes@usace.army.mil.

Sincerely,

Charles R. Allred, Jr.
Chief, Enforcement Section
Regulatory Branch

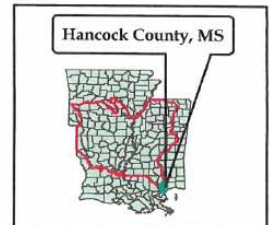
Enclosures

Attachment 19b (page 3 of 3): Due Diligence – Wetlands Preliminary Jurisdictional Determination



Stennis Space Center

See Appendix B for complete report.



28 February 2017
 MVK-2016-933
 Stennis Space Center Northern Portion Site
 Larson Environmental, LLC
 ~160 Acre Site
 Hancock County, Mississippi
Preliminary Jurisdictional Determination
 Jeremy Stokes



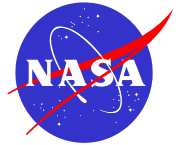
US Army Corps of Engineers
 Regulatory Branch
 Enforcement Section

Stennis Space Center

- Wetlands (295.6 Acres)
- Turtleskin Creek/Other Waters (12.44 Acres)
- Pond/Other Waters (0.11 Acre)
- Boundary

1:16,000

Attachment 19c (page 1 of 2): Due Diligence – Threatened/Endangered Species



Stennis Space Center



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Mississippi Field Office
6578 Dogwood View Parkway, Suite A
Jackson, Mississippi 39213



July 5, 2016

IN REPLY REFER TO:
2016-1-0572

Mr. Hugh Carr
Environmental Specialist
NASA Environmental Office
Stennis Space Center, Mississippi 39529-6000

Dear Mr. Carr:

The Fish and Wildlife Service (Service) has reviewed the information in your May 2016, Threatened and Endangered Species Surveys on Stennis Space Center (SSC), Hancock County, Mississippi. Our comments are submitted in accordance with the Endangered Species Act (87 Stat. 884 as amended; 16 U.S. Code 1531 et seq.).

In previous correspondence the Service has stated that the following federally listed species or their habitats could be found on SSC:

Louisiana black bear (*Ursus a. luteolus*) - threatened
gopher tortoise (*Gopherus polyphemus*) - threatened
black pine snake (*Pituophis melanoleucus ssp. lodingi*) - candidate species
Louisiana quillwort (*Isoetes louisianensis*) - endangered
ringed map turtle (*Graptemys oculifera*) - threatened
Gulf sturgeon (*Acipenser oxyrhynchus desotoi*) - threatened/critical habitat
piping plover (*Charadrius melodus*) - threatened/critical habitat
inflated heelsplitter mussel (*Potamilus inflatus*) - threatened
bald eagle (*Haliaeetus leucocephalus*) - Bald and Golden Eagle Protection Act

Due to the potential for occurrence of the above-listed species on SSC properties, the Service has historically recommended surveys for these species in areas with suitable soils and/or appropriate habitats before beginning any earth disturbing activities. Since the last review, the federal listing status of several species has changed. The Louisiana black bear has

Attachment 19c (page 2 of 2): Due Diligence – Threatened/Endangered Species



Stennis Space Center

been delisted. The black pine snake federal listing status has been changed from a candidate species to a threatened species. Further, the Red knot received a federal listing status of threatened in early 2016.

From 2014-2016, surveys for the above species were conducted by Mississippi State University on lands within the Fee Area of SSC and NASA landholdings within the acoustical buffer area. Although areas of medium to marginal habitat were observed, no individuals were found. Therefore, your agency has determined that ongoing activities within SSC are not likely to adversely affect any federally listed species.

Based on the survey information, the Service concurs with that finding. However, due to the mobility of many of these species, the Service recommends that additional surveys be conducted each year in areas of suitable habitat prior to commencement of any ground disturbing activities. If evidence of any listed species is found, this office must be notified immediately.

If you have any questions, you may contact Paul Necaise in our office, telephone (228) 493-6631.

Sincerely,

A handwritten signature in black ink that reads "Stephen Ricks".

Stephen Ricks
Field Supervisor

**Attachment 19d:
Due Diligence – Archeological/Historical Survey**



Stennis Space Center

See Appendix C for complete report.

**PHASE I CULTURAL RESOURCE ASSESSMENT OF TWO PARCELS
IN THE JOHN C. STENNIS SPACE CENTER,
HANCOCK COUNTY, MISSISSIPPI**

REPORT
Prepared For:

Ecological Asset Management, LLC
724 Dunbar Avenue
Bay St. Louis, Mississippi 39520

Prepared By:

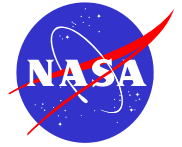


WIREFRASS
ARCHAEOLOGICAL CONSULTING

Sarah E. Price, Principal Investigator

A handwritten signature in blue ink, reading "Sarah E. Price", written over a horizontal line.

Project Number 2016.058
ARPA Permit No. DACW1-4-17-0713
February 2017



Attachment 19e: Due Diligence – Geotechnical Analysis

Stennis Space Center

See Appendix D for complete report.

March 8, 2017



Larson Environmental, LLC
2 Schooner Lane
Ocean Springs, Mississippi 39564

Attn: Lars Larson, RPG
P: [228] 219-2992
E: larslarson28@gmail.com

Re: Preliminary Geotechnical Engineering Report
Stennis Preliminary Site Investigation
Hancock County, Mississippi
Terracon Project No. E4165017

Dear Mr. Larson:

Terracon Consultants, Inc. (Terracon) has completed the geotechnical engineering services for the above referenced project. This study was performed in general accordance with our proposal number PE4165017 dated December 13, 2016, as authorized on December 20, 2016.

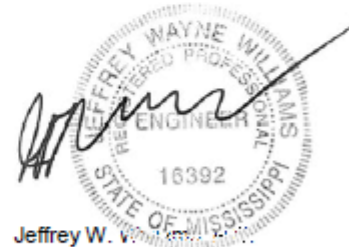
This report presents the findings of the subsurface exploration and provides preliminary geotechnical recommendations concerning development of the potential sites based on widely-spaced borings. Supplemental borings and analyses will be necessary to provide final construction and design recommendations once the location of the planned construction is better defined. A draft memo discussing our findings was presented on February 27, 2017. Comments received about the memo have been incorporated into this report.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report, or if we may be of further service, please contact us.

Sincerely,
Terracon Consultants, Inc.

Adrienne S. Frank
Adrienne S. Frank
Staff Engineer
Geotechnical Services

Enclosures cc: 1 – Client (PDF) & 1 – File

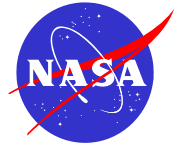


Jeffrey W. Williams
Senior Engineer
Geotechnical Services
Mississippi PE No. 16392

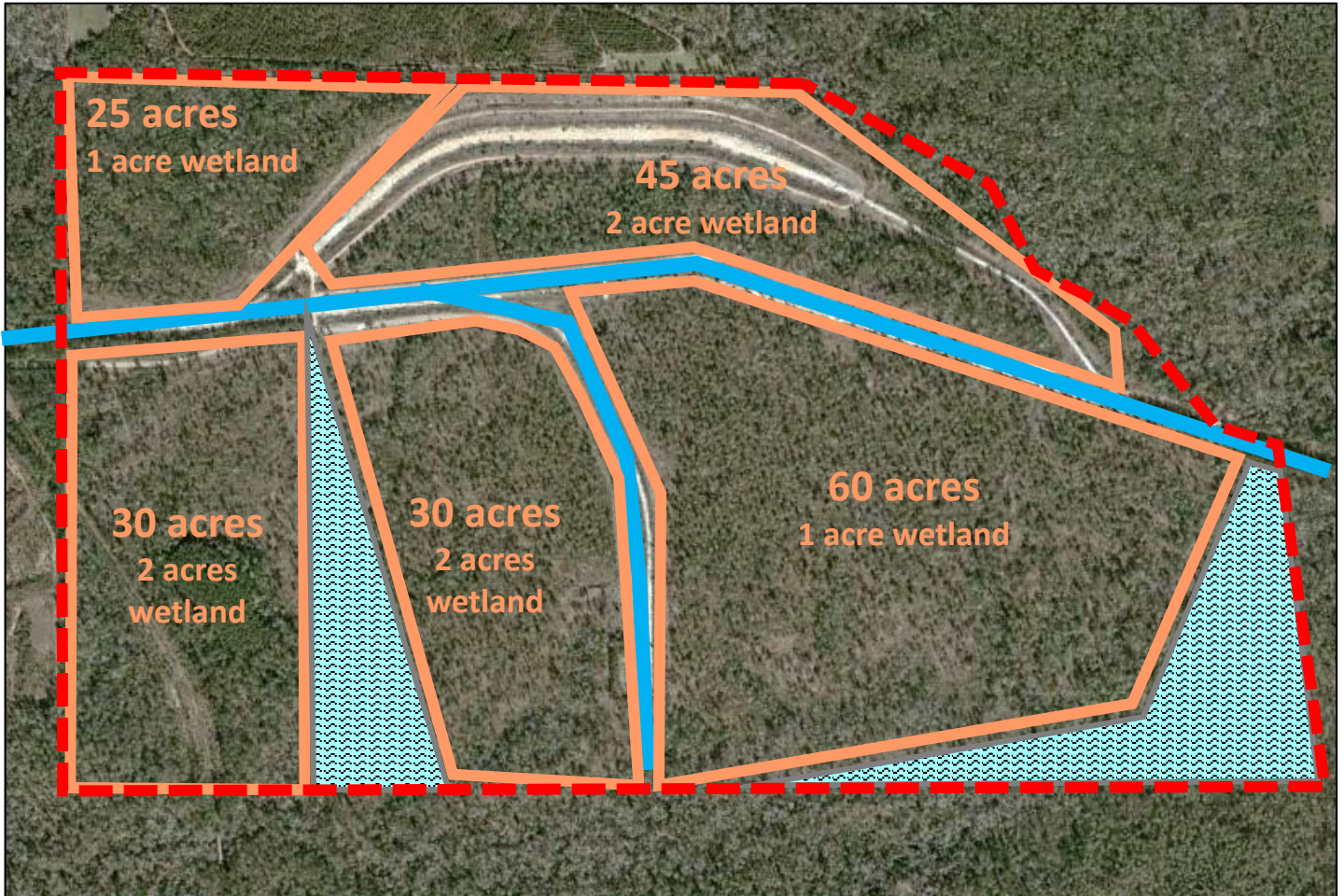
Terracon Consultants, Inc. 859 Pear Orchard Ridgeland, MS 39157
P [601] 956 4467 F [601] 956 9533 terracon.com



Attachment 20: Conceptual Development Plan



Stennis Space Center



- Proposed roads
- Proposed developable sites
- Wetlands

Requirements:

- 200 acres
- 35 contiguous acres
- 60% of remaining developable (100 acres)

Attachment 21: Covenants, Conditions, and Restrictions



Stennis Space Center

Not yet developed.