

PROFESSIONAL SERVICE CONTRACT COASTAL RESILIENCY STUDY

RFQ Number: ASPA-TS-2024-05 October 2024

REQUEST FOR QUALIFICATIONS (RFQ) FOR PROFESSIONAL SERVICES FOR RESILIENCY STUDY INFORMATION AND INSTRUCTIONS

1.0 GENERAL INFORMATION

1.1 The Alabama State Port Authority (ASPA) intends to procure professional environmental staff to provide an environmental risk assessment and sustainability planning in Mobile, Alabama. The estimated total cost of services will not exceed \$250,000. The scope of services will be outlined in more detail in Section 2 – "Anticipated Scope of Services" of this solicitation.

To facilitate the review and award of a contract, the Request for Qualifications and Request for Proposals is combined into one step, hereafter referred to as Request for Proposals (RFP). All times noted within this document are local times. Any requests for information must be given in written form. No verbal inquiries will be recognized.

- 1.2 The Statement of Qualification (SOQ) must be submitted as outlined in Section 3 at the date and time described therein.
- 1.3 Questions and inquiries pertaining to the selection process should be directed to the ASPA Environmental Director, Gretchen Barrera at gretchen.barrera@alports.com by the date indicated in Section 7.
- 1.4 ASPA shall not be held responsible for any oral instructions. Any changes to this RFP will be in the form of an addendum, which will be posted on the website https://alports.com/procurement/
- 1.5 ASPA reserves the right to reject any or all SOQs, to waive any informality or irregularity in any SOC received, and to be the sole judge of the merits of the respective SOQs received.
- 1.6 The environmental consultant will be selected on the basis of demonstrated competence and qualification for the type of services required along with the associated fair and reasonable fee.

2.0 ANTICIPATED SCOPE OF SERVICES

After being selected, the consultant will execute a Professional Services Contract with ASPA to complete the Scope of Services. A brief scope is listed below. It is noted that the below list is not intended to be all inclusive, but to provide a brief overview of the anticipated scope. The final Scope of Services will be negotiated with the selected Firm.

2.1 Overall Objective

The ASPA's objective is to receive wind, storm surge, and flooding risk and mitigation measures within its control to improve coastal resiliency. The deliverable shall not be an Emergency Operation Plan. The deliverable should include preparedness and mitigation strategies for pre-events for ASPA similar to the following port-related resource:

2019 Seaport Resiliency Report for Florida Ports Council. https://flaports.org/wp-content/uploads/2019SeaportsResiliencyReport.pdf

2.2 Phase 1 - Critical Assets

For the following critical assets, focus on analyzing the vulnerabilities associated with hurricanes and extreme rainfall events. Provide a structured approach to risk management.

- Wharves and Berths
- Terminal storage space and on dock storage space
- Shipboard and intermodal cargo handling equipment
- Telecommunications, internet, cell service
- Rail
- Intermodal connections between port and tenant facilities to rail and capacity to move cargo
- Utilities (power, water, sewer)
- Port Security and Access
- Warehouses and other ancillary structures
- Electronic/battery operated equipment to operate warehouse doors
- Office structures
- Tenant facilities
- Transportation fuels and fueling terminals

The following assets shall be excluded from the evaluation:

- Pipeline assets and supply chain for natural gas or petroleum.
- Skilled labor to operate specialized equipment
- Port servicing trucks
- Navigation Channel
- Dredging
- Vessel, equipment, cargo/container tracking systems
- Vehicles/equipment for debris removal
- Financial resources (payroll, purchases, accounts payable, insurance)
- Critical records (paper and digital)

For storm surge evaluation, provide updates to the FHWA Gulf Coast Study results for Mobile's local area for a range of hurricane strengths and degrees of change in sea level rise over time by Year 2100. Tables should include data resulting from NOAA's most recent sea level rise predictions for Low, Intermediate-Low, Intermediate-High, and High scenarios. Figures should include data results for NOAA's intermediate-high scenario for years 2030, 2050, 2070, and 2100.

2.3 Phase 2 - Port Access Routes

Should funds remain at the completion of Phase 1, consultant will evaluate access to port gates from nearest interstate highway. Focus will be on municipal and State road infrastructure including Dunlap Drive, Ezra Trice Boulevard, Telegraph Road, and U.S. 90 Alternative 98 Truck Route, etc. Evaluate dependencies and interdependencies within this radius for insights into possible cascading infrastructure failures.

The consultant shall not include the Bankhead Tunnel or George Wallace Tunnel in this evaluation. Assume construction of the I-10 Mobile River Bridge has been completed.

Provide a guide and figures for ASPA's coordination with other governmental entities and private sector parties for targeted investment areas.

2.4 ASPA Resources

ASPA will provide the selected consultant with the resources listed below. A nondisclosure agreement must be executed prior to delivery.

- 2024 ASPA proposal for CRISI grant regarding railroad interchange yard infrastructure improvements
- ASPA property boundary to be evaluated in GIS. Area will include operating and potential development properties in Mobile County.
- Critical Assets in GIS cargo handling equipment, rail assets, berths, warehouses, etc.
- 2013 LiDAR
- Regional Resilience Assessment Program Report
- Storm water infrastructure for Main Docks in GIS inlets, connections, and outfalls.

2.5 Project Schedule

ASPA will require a draft report within six (6) months of Notice to Proceed. ASPA will provide comments to draft report within three (3) weeks of receipt. ASPA will require the final report within four (4) weeks from delivery of comments.

2.6 Deliverable Format

For both the draft and final report, the selected consultant shall deliver two (2) bound hard copies and one electronic copy on flash drive or electronic link sharing. All backup data and references will be provided to ASPA electronically for the final report. Report figures and other geographic data must be submitted according to ASPA Geospatial Data Delivery Standards and ASPA Metadata Standards (Appendix F).

3.0 STATEMENT OF QUALIFICATIONS SELECTION CRITERIA

Proposer must be a qualified and licensed firm and have current experience in providing the types of professional services required under this RFP. The consultant will be selected through a qualification-based selection process. Firms interested in providing resiliency study must submit a Statement of Qualifications (SOQ) that addresses the following evaluation criteria. Applicants are encouraged to organize their submissions in such a way as to follow the general evaluation criteria listed below. Information included within the SOQ may be used to evaluate your firm as part of any criteria regardless of where that information is found within the SOQ. Information obtained from the SOQ and from any other relevant source may be used in the evaluation and selection process.

3.1 Cover Letter

Cover Letter (1-page) shall contain at a minimum: Company name, contact name, physical address, mailing address and email address.

3.2 General Information

- a. Description of firm/team including any subconsultants.
- b. Legal company organization.
- c. Organization Chart with names (1-page maximum)

3.3 Relevant Firm Experience

- a. Applicant's overall reputation, service capabilities and quality as it relates to this project.
- b. List and briefly describe 2-3 comparable projects completed by your firm or currently in progress; include your firm's role, and discuss contract amendment history, if applicable. For each project, include: contract value, project owner, project location, contact name and title, address, current telephone number, and email address.
- c. A minimum of three referrals and references from other agencies and owners. If possible, references should be from the projects listed above.
- d. List and describe any litigation; arbitration; claims filed by your firm against any project owner as a result of a contract dispute; any claim filed against your firm; termination from a project.

3.4 Team Experience and Qualifications

- a. Describe each team member's position within the firm. Provide resumes of each proposed team member. List relevant professional continuing education.
- b. Briefly describe each team member's role on this project.
- c. Provide "team" experience working together on similar projects.
- d. Identify proposed sub consultant, their proposed role and relevant experience
- e. Provide home office location of each team member and sub-consultant.

3.5 Project Understanding and Approach

- a. Describe your understanding of the project.
- b. Identify and discuss methods, tools, and specialized software to be utilized on the project.

3.6 Other Factors

- a. Location of home office of team member and ability to conference.
- b. Applicant's capacity and intent to proceed without delay if selected for this work.
- c. Willingness to abide by ASPA's standard form Agreement
- d. Provide statement regarding your assurance that this engagement will not result in a conflict of interest.
- e. Relevant factors impacting the quality and value of work.

4.0 ESTIMATED COST/HOURLY RATES

Compensation will be paid in accordance with the proposed hourly rates provided by the selected consultant. ASPA estimates that Phase 1 services will cost \$200,000 and Phase 2 services will cost \$50,000. The project total will not exceed \$250,000.

Proposals should include position descriptions and for each position provide quantity of anticipated hours, hourly rate, and total cost anticipated for each phase.

5.0 SUBMITTAL REQUIREMENTS

- 5.1 The SOQ shall contain no more than twenty (20) pages excluding staff resumes, covers, required attachments, and tab sheets. Attach resumes in Appendix A for each key team member. Please comply with the page limits; Pages that have photos, charts and graphs will be counted towards page limit.
- 5.2 One (1) electronic PDF copy on flash drive and one (1) hard copy of the Statement of Qualifications must be submitted by the date and in the location indicated below.
- 5.3 The SOQ shall be submitted in a sealed container that in plainly marked "STATEMENT OF QUALIFICATIONS FOR RFQ ASPA-TS-2024-05 COASTAL RESILIENCY STUDY" and bear the name of the prime provider.
- The SOQ package must be submitted to the ASPA Environmental Department **no later than 4:00 PM on December 3, 2024**.
- o Submissions made by regular mail may be sent to:

Alabama State Port Authority

Attn: Gretchen Barrera, Environmental Director

P.O. Box 1588

Mobile, AL 36633

o Submissions made by courier mail or hand delivery:

Alabama State Port Authority

Attn: Gretchen Barrera, Environmental Director

250 North Water Street

Mobile, AL 36602

(251) 441-7086

6.0 GRANT REQUIREMENTS

The Project will utilize state grant funds being administered by the Alabama Department of Conservation and Natural Resources (ADCNR). The Contract awarded under this RFQ, along with all contracts procured under the Project, will be required to abide by ADCNR grant requirements. Disadvantaged Business Enterprises (DBE) grant requirements are not expected.

7.0 SELECTION PROCESS AND SCHEDULE

7.1 A minimum 3-member Project Evaluation Board will evaluate each Statement of Qualifications (SOQ) according to the above criteria, as well as past performance evaluations, and select up to three finalists that will be Short Listed for the project.

The Short List firms may be required to meet with the Project Evaluation Board for interviews. The purpose of the interview will be to expand on the information provided in the Proposal, not to repeat information already provided. Those firms selected for the Short List will be provided additional instruction by ASPA. Those firms not selected for further consideration will be notified.

7.2 The following tentative schedule has been prepared for this project. Firms interested in this project must be available on the interview meeting date. All times listed are local times for Mobile, Alabama.

Deadline for inquiries: November 14, 2024 at 4:00 PM

ASPA Response to inquiries: November 18, 2024 at 4:00 PM

RFQ Submittal Deadline: December 3, 2024 at 4:00 PM

Short List Interview Date (if required): December 17, 2024

ASPA Notification of Intent to Award: January 24, 2025

Note that the Professional Services Contract must be signed within 10 days of the issuance of the Intent to Award Professional Services Contract.

8.0 APPENDICES & ATTACHMENTS

The following appendices are attached as part of the RFQ.

- Appendix A Facility Map
- Appendix B Insurance requirements
- Appendix C Beason-Hammon Certification
- Appendix D Acknowledgement of Revision / Addenda
- Appendix E Sample SOQ Score Sheet



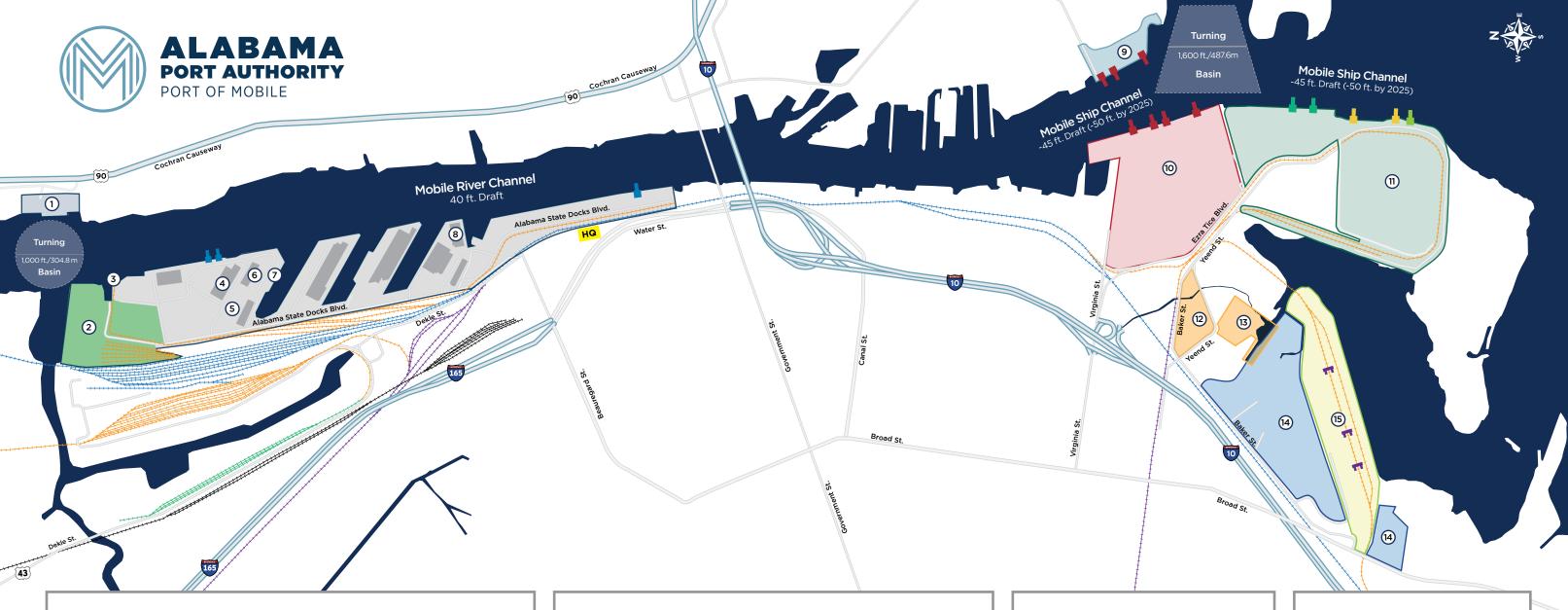
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APPENDIX A: Facility Map



FACILITIES LEGEND

Upper Harbor

1 Blakeley Island Terminal

Main Docks/General Cargo

- 2 AutoMobile International RO/RO Terminal
- (3) CG Railway
- 4 Alabama Steel Terminal (AST)
- 5 Cement Terminal
- **6** Grain Elevator
- 7 Pig Iron Dock
- (8) Seanous Refrigerated Services

Lower Harbor

- 9 Pinto Steel Terminal
- 10 Container Terminal
- (11) McDuffie Coal Terminal
- 12 Lineage Logistics
- (13) Lineage Logistics Option Property
- 14 Logistics Park
- 15 Intermodal Container Transfer Facility (ICTF)

OCEAN CARRIERS

Main Docks/General Cargo

- BBC CharteringClipper Americas
- Clipper AmericasDan Gulf Shipping
- G2 Ocean
- Glovis Americas
- Hoegh Autoliners
- IntermarineLD Seaplane
- Oslo Caribbean Carrier
- Saga Welco
- Wallenius Wilhelmsen

Barge Line Operators

American Commercial Barge Line Cooper Marine & Timberlands Kirby Offshore Marine

Mobile Container Terminal

- CMA-CGM
- Cosco
- EvergreenHapag-Lloyd
- Hyundai Merchant Marine
- Maersk
- MSC
- Ocean Network Express
 OOCL
- SealandYang Ming
- ZIM

Marquette Transportation Parker Towing Company

Waterway Towing

RAIL CARRIERS

- HHH BNSF*/AGR
- HHH Alabama Export Railroad
- ннн CG Railway
- HHH CN*
- Kansas City Southern*
- Norfolk Southern*
- HHH TASD

*Class I Railroad

ALE and KCS have access to the Port of Mobile via CN tracks

PILOT ASSOCIATIONS

Mobile Bar Pilots

Mobile Harbor Pilots

LEGEND

- RTG Cranes
- STS Cranes
- Mobile Harbor Cranes
- Ship Loaders
- Ship Unloaders
- Ship Loader/Unloader
- ----- Rail
- **HQ** 250 N. Water Street Mobile, AL 36602

**Map not shown to scale

Terminal	Address	Pier PSF (Pounds Per Square Foot)	Operator/ Owner	Terminal Type	Berths	Berth Length	Refrigerated Capacity	Total Terminal Area	Firms Code	Assets/Capabilities
McDuffie Coal Terminal	1901 Ezra Trice Blvd., Mobile, AL 36603	N/A	Alabama State Port Authority	Bulk	3	2,697ft./822.05m	N/A	550ac/222.6ha	P045	2 ship loaders; 3 vessel discharge cranes 3 barge loaders; 2 barge unloaders 1 rail loader; 2 rail unloaders 6 stacker/reclaimers; 2 double wing stackers
Container Terminal	901 Ezra Trice Blvd., Mobile, AL 36603	N/A	APM Terminals	Container	2	2,400ft./731.52m	350 outlets/440v	135ac/54.6ha	R103	2 post-Panamax cranes; 2 super post-Panamax cranes 34 container handling machines 6 forklifts 3 RTG cranes for rail operations
Pinto Island Steel Terminal	910 Dunlap Dr., Mobile, AL 36602	N/A	Alabama State Port Authority	Breakbulk	1	1,050ft./320.04m	N/A	20ac/8.09ha	R198	3 rail mounted shore cranes Barge loading slip (3 barge capacity) Barge staging area for 41 barges 5 forklifts
Main Docks/General Cargo	Please contact operator or stevedore for physical address	600-1,500	Various	Container/ Breakbulk/Project Cargo/RO/RO	33	19,194ft./5,850.33m	36 outlets/480v	218ac/88.22ha	P047, P048, P049, P050, P051, P052, P053	Approximately 2 million sq. ft. of warehouse space Approximately 2 million sq. ft. of outdoor storage area 1 Mobile Harbor crane 5 Class I railroads On-dock refrigerated storage with blast freezing capability
Logistics Park	Please contact ASPA commercial development staff	N/A	Alabama State Port Authority	Warehousing/ Development	0	N/A	N/A	124ac/50.18ha	N/A	124 acres combined Near Mobile Container Terminal, Intermodal Container Transfer Facility and Mobile Aeroplex at Brookley Convenient location with proximity to two major interstates (I-65 And I-10)
Grain Elevator	1860 11th Street, Mobile, AL 36602	600-1,000	Agrex	Bulk	1	800ft./243.85m	N/A	Located within Main Docks	P053	Ability to load/unload vessels, railcars and trucks 2 ship loaders 3.3 million bushel storage capacity
Pig Iron Dock	1878 11th Street, Mobile, AL 36602	3,000	Cooper/T. Smith	Bulk	1	650ft./198.12m	N/A	Located within Main Docks	P053	Ability to load railcars and barges Vessel operations conducted via floating cranes
Alabama Steel Terminals	1871 12th Street, Mobile, AL 36602	1,000	Alabama Steel Terminals	Breakbulk	1	715ft./217.93m	N/A	Located within Main Docks	PAN6	173,280 sq. ft. multi-modal steel coil handling terminal 2 Mobile Harbor cranes Ability to handle barge, rail, truck and vessels
CG Railway Ramp	2016 Alabama State Docks Blvd., Mobile, AL 36602	N/A	Genesee & Wyoming/ SEACOR	Rail Ferry	1	400ft./121.92m	N/A	Located within Main Docks	R337	2 vessels with 135 railcar capacity each 3 day transit time port to port Serving Mobile, AL and Coatzacoalcos, Mexico
Blakeley Island Terminal	1765 Cochran Causeway, Mobile, AL 36602	500	Alabama State Port Authority	Breakbulk	1	500ft./152.40m	N/A	10ac/4.05ha	Q175	153,000 sq. ft. warehouse Approximately 5 acres open storage
Cement Terminal	704 Alabama State Docks Blvd., Mobile, AL 36602	N/A	Argos Cement	Bulk	1	650ft./198.12m	N/A	Located within Main Docks	P053	100,000 ST storage capacity Ability to receive product by barge, pneumatic railcar, ship and truck Ability to load railcar or truck
Seaonus Refrigerated Services Mobile	1000 South State Docks Road, Mobile, AL 36602	N/A	Seaonus Refrigerated Services Mobile	Breakbulk/Frozen/ Refrigerated Cargo	1	1,200ft./365.76m	6 outlets/480v	6ac/2.43ha	P050	110,000 sq. ft. warehouse 2,000,000 cu. ft. cold storage warehousing 7,500+ pallet positions FDA approved facility Blast freezing capabilities Rail served
AutoMobile International RO/RO Terminal	1925 Alabama State Docks Blvd., Mobile, AL 36610	N/A	AutoMobile International Terminal	RO/RO/Breakbulk/ Project Cargo	2	1,500ft./457.2m	N/A	57ac/23.07ha	P054	7,000 CEU storage capacity 2 acres for high & heavy storage 1 berth for exclusive use Annual throughput capacity = 150,000 vehicles/year No air draft restrictions 40,000 sq. ft. processing facility 5,800 sq. ft. body shop Rail-Ramp Fully automated carwash
Intermodal Container Transfer Facility (ICTF)	1460 Intermodal Rail Dr., Mobile, AL 36603	N/A	APM Terminals	Intermodal Rail	0	N/A	Refrigerated packs available for Northbound and Southbound cold cargo	77ac/31.2ha	R103	Served by the Terminal Railroad Alabama State Docks (TASD) Includes two operating tracks, a loop storage track, and a 914m car repair track 225,000 TEU annual throughput capacity 3 rubber tire gantry cranes



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APPENDIX B: Insurance Requirements

EPM Coastal Resiliency Study GOMESA RFQ ASOIA-TA 2024-05 Gretchen Barrera Kdm 10-29-24

ALABAMA STATE PORT AUTHORITY INSURANCE REQUIREMENTS FOR CONTRACT WORK

INDEMNIFICATION

The Contractor shall assume all liability for and shall indemnify and save harmless the State of Alabama and the Alabama State Port Authority, and its officers and employees from all damages and liability for injury to any person or persons, and injury to or destruction of property, including the loss of use thereof, by reason of an accident or occurrence arising from operations under the contract, whether such operations are performed by himself or by any subcontractor or by anyone directly or indirectly employed by either of them occurring on or about the premises, or the ways and means adjacent during the term of the contract, or any extension thereof, and shall also assume the liability for injury and/or damages to adjacent or neighboring property by reason of work done under the contract.

INSURANCE REQUIREMENTS

The Contractor shall not commence work under the contract until he has obtained all insurance required under the following paragraphs and until such insurance has been approved by Alabama Sate Port Authority, nor shall the Contractor allow any subcontractor to commence work until all similar applicable insurance has been obtained by the subcontractor or the Contractor has provided coverage for the subcontractor. The Contractor shall provide, at his expense, insurance in accordance with the following:

General Requirements (applicable to all policies)

All policies of insurance must be written with companies acceptable to Alabama state port authority. The Contractor shall furnish to Alabama state port authority certificates of insurance, signed by the licensed agent, evidencing required coverages. Alabama state port authority reserves the right to require certified copies of any and all policies. Each policy of insurance shall provide, either in body of the policy or by endorsement, that such policy cannot be substantially altered or cancelled without thirty (30) days' written notice to Alabama state port authority and to the insured. Except for Workers Compensation, said policies will identify Alabama State Port Authority, its officers, officials, agents, servants and employees as Primary and Non-contributory Additional Insureds in connection with work performed for, on behalf of, or on the property of Alabama state port authority.

Commercial General Liability

The Contractor shall take out and maintain during the life of the contract Commercial General Liability insurance, including Blanket Contractual and Completed Operations coverages, in an amount not less than \$3,000,000 for any one occurrence for bodily injury, including death, and property damage liability.

Business Automobile Liability

The Contractor shall take out and maintain during the life of the contract Business Automobile Liability insurance covering <u>any auto</u> in an amount not less than \$1,000,000 for any one occurrence for bodily injury, including death, and property damage liability.

Workers Compensation

The Contractor shall take out and maintain during the life of the contract Workers Compensation and Employers Liability insurance providing coverage under the Alabama Workers Compensation Act in an amount not less than that required by Alabama law.

Where applicable, Contractor shall take out and maintain during the life of the contract insurance providing coverage as required by Federal statute, including but not limited to U.S. Longshoremen and Harborworkers' Compensation Act (USL&H), Jones Act, and Railroad Federal Employers Liability Act (FELA).



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APPENDIX C: Beason Hammon Certification

State of
County of
CERTIFICATE OF COMPLIANCE WITH THE BEASON-HAMMON ALABAMA TAXPAYER AND CITIZEN PROTECTION ACT (ACT 2011-535, as amended by Act 2012-491)
DATE:
RE Contract/Grant/Incentive (describe by number or subject):
by and between
(Contractor/Grantee) and(State Agency, Department or Public Entity)
(State Agency, Department of Public Entity)
The undersigned hereby certifies to the State of Alabama as follows:
1. The undersigned holds the position of with the Contractor/Grantee named above,
and is authorized to provide representations set out in this Certificate as the official and binding act of that entity, and has knowledge of the provisions of THE BEASON-HAMMON ALABAMA TAXPAYER AND CITIZEN PROTECTION ACT (ACT 2011-535 of the Alabama Legislature, as amended by Act 2012-491) which is described herein as "the Act".
2. Using the following definitions from Section 3 of the Act, select and initial either (a) or (b), below, to describe the
Contractor/Grantee's business structure. <u>BUSINESS ENTITY.</u> Any person or group of persons employing one or more persons performing or engaging in any
activity, enterprise, profession, or occupation for gain, benefit, advantage, or livelihood, whether for profit or not for profit. "Business entity" shall include, but not be limited to the following:
a. Self-employed individuals, business entities filing articles of incorporation, partnerships, limited partnerships,
limited liability companies, foreign corporations, foreign limited partnerships, foreign limited liability companies authorized to transact business in this state, business trusts, and any business entity that registers with the Secretary of State.
b. Any business entity that possesses a business license, permit, certificate, approval, registration, charter, or
similar form of authorization issued by the state, any business entity that is exempt by law from obtaining such a
business license and any business entity that is operating unlawfully without a business license.
<u>EMPLOYER.</u> Any person, firm, corporation, partnership, joint stock association, agent, manager, representative, foreman, or other person having control or custody of any employment, place of employment, or of any employee,
including any person or entity employing any person for hire within the State of Alabama, including a public employer.
This term shall not include the occupant of a household contracting with another person to perform casual domestic
labor within the household.
(a) The Contractor/Grantee is a business entity or employer as those terms are defined in Section 3 of the Act.
(a) The Contractor/Grantee is a business entity of employer as those terms are defined in Section 3 of the Act. (b) The Contractor/Grantee is not a business entity or employer as those terms are defined in Section 3 of the Act.
3. As of the date of this Certificate, Contractor/Grantee does not knowingly employ an unauthorized alien within the State of Alabama and hereafter it will not knowingly employ, hire for employment, or continue to employ an unauthorized alien within the State of Alabama;
4. Contractor/Grantee is enrolled in E-Verify unless it is not eligible to enroll because of the rules of that program or other factors beyond its control.
Certified this day of 20
Name of Contractor/Grantee/Recipient
D
By:
Its
The above Certification was signed in my presence by the person whose name appears above, on
this day of 20
WITNESS:
Printed Name of Witness



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APPENDIX D: Acknowledgement of Revision and/or Addenda

APPENDIX D

ALABAMA STATE PORT AUTHORITY

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ACKNOWLEDGEMENT OF REVISION AND/OR ADDENDA

By signing this Attachment 2.6, the undersigned bidder acknowledges receipt of the following revisions and/or addenda to the RFQ for the above designated project which were issued under cover letter(s) of the date(s) shown hereon:

Signature	Date
T. Addendam Namoel	
4. Addendum Number	
3. Addendum Number	
2. Addendum Number	
1. Addendum Number	



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APPENDIX E: Sample SOQ Score Sheet

APPENDIX E – SAMPLE SOQ SCORE SHEET ASPA-TS-2024-05 COASTAL RESILIENCY STUDY

EVALUATION FACTORS		POINT	Respondent	Respondent	Respondent	Respondent
		MATRIX	1	2	3	4
1	RELEVANT FIRM EXPERIENCE	15				
2	TEAM EXPERIENCE AND QUALIFICATIONS	40				
3	PROJECT UNDERSTANDING AND APPROACH	25				
4	PROPOSED RATE/FEES	15				
5	OTHER FACTORS	5				
	MAXIMUM TOTAL POINTS	100				



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APPENDIX F: ASPA Geospatial Data

<u>Delivery Standards and Metadata</u>

<u>Standards</u>



250 N. Water Street Mobile, AL 36602 www.alports.com

Alabama State Port Authority Port of Mobile

ASPA Geospatial Data Delivery Standards

July 29, 2024



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Processing Tolerances – Coordinate Precision	7
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Naming Convention	8
Start data and field names with alphabetical characters	8
Do not include spaces, dashes, or other special characters	8
Do not use prefix or suffix for data type	8
Do not use geometry type as suffix	8
Avoid using reserved words	8
Always provide alias names for fields	9
Do not store attribute information only as annotation	9
Metadata	9



Purpose

Client ASPA	
Subject	GIS Standards for CAD
Author	NorthSouth GIS LLC



Introduction

Explanation

Approach

The approach of this document is to describe the Geospatial Data Delivery Standards for any and all GIS data, either existing or newly completed for the Alabama State Port Authority (ASPA), or the Port of Mobile, internally or by outside contract.

This encompasses all data developed in *GIS format* for delivery to the Port for inclusion in the Enterprise GIS for any project. Compliance with the Geospatial Data Delivery Standards facilitates smooth and timely integration and compatibility with the Port's Enterprise GIS.

Scope

This standard applies to all existing GIS data utilized by the Port and new GIS data delivered to the Port. Please note the scope applies to the acceptable formats of GIS data by the Port.

The consultant or contractor must get any existing data from the Port before beginning a project. If data was received by the consultant or contractor from the Port to be used, modified or added to during any phase of the pre-determined project, all data must be returned to the Port in the same format in which it was received (no dataset should be split, combined, or otherwise reorganized, and no fields should be renamed or deleted). If data does not exist, the consultant or contractor will work with the Sr. GIS Specialist, Project Manager, and/or GIS Technical Committee designee to design the data structure.

Any exemption requests must be submitted to the ASPA Sr. GIS Specialist at GIS@alports.com for decision before delivery.



Geospatial Data Delivery Standards

Spatial Reference

GIS data represents geospatial locations on Earth. Earth is not a perfect three-dimensional sphere. Any time multiple locations, areas or transecting lines need to be represented in two-dimensional space, such as on paper or on a computer screen, some amount of distortion must occur. Geographers use coordinate systems to define the rules by which those distortions are applied, with the goal of minimizing the distortion at the desired location.

All GIS data must be correctly projected into the following coordinate system:

a. Projection: State Plane

b. Zone: Alabama West

c. Units: US Survey Feet

d. Horizontal Datum: North American Datum 1983, 2011 adjustment (NAD83) (2011)

e. Vertical Datum: North American Vertical Datum (NAVD) 1988 (height and depth)

This is defined as follows:

Parameter	Value
Projected Coordinate System	NAD 1983 (2011) StatePlane Alabama West (US Feet)
Projection	Transverse Mercator
WKID	9749
Authority	Esri
Linear Unit	US Survey Feet (0.3048006096012192)
False Easting	1968500
False Northing	0
Central Meridian	-87.5
Scale Factor	0.999933333
Latitude Of Origin	30
Horizontal	
Geographic Coordinate System	NAD 1983 (2011)
WKID	6318
Previous WKID	104145
Authority	EPSG
Angular Unit	Degree (0.0174532925199433)
Prime Meridian	Greenwich (0.0)
Datum	D NAD 1983 2011



Parameter	Value
Spheroid	GRS 1980
Semimajor Axis	6378137
Semiminor Axis	6356752.314
Inverse Flattening	298.2572221
Vertical (Height)	
Parameter	Value
Vertical Coordinate System	NAVD88 height (ftUS)
WKID	6360
Previous WKID	105703
Authority	EPSG
Linear Unit	US Survey Feet (0.3048006096012192)
Direction	positive up
Vertical Shift	0.0
Vertical Datum	North American Vertical Datum 1988
Vertical (Depth)	<u>'</u>
Parameter	Value
Vertical Coordinate System	NAVD88 depth (ftUS)
WKID	6358
Authority	EPSG
Linear Unit	US Survey Feet (0.3048006096012192)
Direction	positive down
Vertical Shift	0.0
Vertical Datum	North American Vertical Datum 1988

Data Format

The Port requires that all GIS data developed either internally or by outside contract must be delivered in <u>Esri File Geodatabase format</u>. As the Esri File Geodatabase format stores geospatial data at a higher precision, has the capacity to store larger amounts of information, supports topology, and stores field name aliases internally among other estimable advantages, it is the required format.

Files such as .AI, .EPS/.PS, .PDF and/or .PSD created from graphics editing applications such as Adobe Illustrator, Adobe Photoshop, Adobe Acrobat or other PDF generating applications or drivers do not constitute a GIS format and are not acceptable.

Entities required to submit CAD drawings need to refer to the port CAD Standards documentation for requirements.



Delivery Format

Data developers will be provided the preferred data delivery format for a project. File geodatabases within an Esri Pro Map Package (.MPKX) are preferred as this packs and compresses all required geodata as well as example layer symbology, settings and map documents into a single file for easy transmission.

Go to <u>ArcGIS Map Package Overview</u> in the appropriate version of ArcGIS Pro Help for more information.

Otherwise, it is recommended to compress (for example, with WinZip) the file geodatabase folder in Windows Explorer to a single .ZIP file after ensuring that the ArcGIS Pro application is closed to be certain all changes have been saved and that no locks remain on the data.

Data developers are encouraged to include any ArcGIS Pro Layer files (.LYRX), Map files (.MAPX), or Layout files (.PAGX) created to display the data as they intended.

Processing Tolerances - Coordinate Precision

The precision of coordinates and attributes should be adequate to accurately represent the location and values of the data in question.

The following tolerances must be followed for all data:

- Double Precision
- Fuzzy Tolerance 0.0001
- Dangle Tolerance 0.0
- Edit 0.5
- NodeSnap 0.0001
- Snap 0.5

Topology

Topology confirms the accuracy of adjacency, connectivity, proximity, and coincidence and is therefore required for all polygonal and linear data sets submitted to the port.

To create and maintain topology, the following must be met:

- Correct arc directionality must be maintained on streets, facility data, and any dataset with flow.
- Polygons must close without overshoots or undershoots.
- Pseudo nodes must only exist where 1) a line closes on itself 2) only two lines intersect 3)
 there is a change in attribution along a line 4) to maintain the shape and measurements of
 an arc.
- Lines, polygons, points and annotation must not be duplicated.
- Streets and facility data do not break at overpasses and underpasses.
- Line segments have a maximum of 500 vertices.

https://pro.arcgis.com/en/pro-app/latest/help/sharing/overview/map-package.htm



- Polygons must edge match without slivers.
- Polygons must not overlap.

Naming Convention

It is important that GIS data and field names in said data delivered to the Port's Enterprise GIS follow the same naming convention already applied to all existing data. Not all of the following rules may apply to all datasets (for example, if the delivery is for a singular dataset) but it is important to understand the geospatial naming convention already in place to alleviate any confusion or added work upon delivery of the data.

Start data and field names with alphabetical characters

Many processing workflows that GIS data are subjected to are unable to handle objects that start with numbers or special characters. Avoiding names starting with a number also helps to better sort the display of objects in the Enterprise GIS.

Do not include spaces, dashes, or other special characters

Many GIS software processes cannot handle spaces or any kind of special character in the file names and/or in field names. Avoid causing problems for the data later down the line by eliminating any special characters. Underscores, however, do not cause problems and can be used in the place of dashes and/or spaces.

Do not use prefix or suffix for data type

Do not use prefixes like 'tbl' for tables, nor 'fc' for feature classes. This is redundant as tables and feature classes are symbolized differently in the Enterprise GIS.

Do not use geometry type as suffix

The Port's Enterprise GIS provides a preview of the geometry type for each GIS dataset. Therefore, adding a feature type indicator in the name is generally unnecessary. However, data may occasionally be represented in alternative forms such as showing a feature as a polygon and as a point. In such a case, the data with the most logical shape should take on the base name without a geometry type, while the data with the alternative type should be augmented with a feature type suffix separated by an underscore (Point, Poly, Line, Anno), e.g., "Buildings" and "Buildings_Point"

Avoid using reserved words

Using reserved words for the underlying DBMS could easily result in unexplained errors. Avoid using words like Order, File, Range, etc., on their own. Using plurals for feature class names reduces this risk.



Always provide alias names for fields

Setting an alias for field names, especially field names that are cryptic or abbreviated, is the best way to maintain useful information and provide benefits in multiple areas. As the shapefile format does not support field name aliases, for data delivered to the port in that format, be sure to include field aliases as a part of the metadata. This is a required element of metadata.

Do not store attribute information only as annotation

The names, notes, area sizes, etc. of particular features should be stored in the attribute table of the feature and not only as a separate piece of annotation text.

Metadata

All GIS data must have Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata (CSDGM) as defined by the port Metadata Standards document. Refer to that document for more information.

Additionally, avoid using fields in the database to store metadata about the feature class, e.g. a Date Loaded field. Such information is required in the metadata and therefore superfluous in the attribute table. Only exceptions are to either capture row specific metadata, e.g., Modified By, where each record may have different values, or where the origin source of the individual features may vary and need to be tracked. In the second case, the metadata should also document the fact that there are multiple data origins.

Any exemption requests from any part of the metadata requirement must be submitted to the ASPA Sr. GIS Specialist at GIS@alports.com for decision before delivery.



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Alabama State Port Authority Port of Mobile

ASPA Metadata Standards

July 29, 2024



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Purpose

Client ASPA	
Subject	Organizational Metadata Standards
Author	NorthSouth GIS LLC



Introduction

The main governing body for the definition of metadata in the United States is the Federal Geographic Data Committee (FGDC); they describe metadata as follows:

"A metadata record is a file of information, usually presented as an XML document, which captures the basic characteristics of a data or information resource. It represents the who, what, when, where, why and how of the resource. Geospatial metadata are used to document geographic digital resources such as Geographic Information System (GIS) files, geospatial databases, and earth imagery. A geospatial metadata record includes core library catalog elements such as Title, Abstract, and Publication Date; geographic elements such as Geographic Extent and Projection Information; and database elements such as Attribute Label Definitions and Attribute Domain Values."

The creation and maintenance of metadata benefits ASPA by providing information on the quality and heritage of the Port's geospatial data, but also serves the same purpose with data provided by 3rd-party contractors, and other associated outside organizations. Metadata can also serve to document historical information concerning each data set and some see it as the mark of maturity of an organization's GIS and data management efforts. This document covers guidelines and requirements for ASPA metadata standards.

Purpose and Standards

To support this outcome, ASPA has adopted the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata (CSDGM) as a basis to follow when documenting geospatial data sets. To facilitate the implementation of this standard, this document stands as the required metadata standard, a subset of the FGDC CSDGM, that is recognized as the approved implementation pathway toward high quality GIS data documentation.

This standard applies to all geospatial datasets developed internally by the Port and geospatial datasets delivered to the Port by external parties. The standard described herein represents the minimum level of documentation required for all geospatial datasets.

Esri ArcGIS software shall be used to create and maintain FGDC CSDGM metadata using the ArcGIS Metadata Style 'FGDC CSDGM Metadata'.



Refer to the related ASPA Geospatial Data Delivery Standards document for more information on geospatial data and delivery requirements.

Metadata Elements Exemptions

Many metadata elements are automatically generated and updated when using ArcGIS software or may be elements that are difficult to accurately describe for some dataset formats. These elements have been noted in the Metadata Standard for possible Exemption based on the dataset format, agency and/or capturing method with an asterisk next to the Element Number

Exemption requests from these elements must be submitted to the ASPA Sr. GIS Specialist at GIS@alports.com for approval before delivery.

Metadata Standards

Table 1 below documents each element in the FGDC metadata, its definition and reference back to the FGDC Hierarchy. For Elements 14 & 15 (Data Originator & Data Point of Contact), Elements 40 through 48 are also required.

The Elements 36 & 37 (Attribute Definition and Attribute Definition Source) and one of the following (Elements 38.1a and 38.1b, 38.2a and 38.2b, 38.3a and 38.3b or 38.4) are required for all fields in the data attribute table except the identification number field (e.g., OBJECTID) and SHAPE field(s).

Table 1 below gives an example of sample metadata for each element to use as reference.

Table 1 - ASPA Metadata Flements

Element Number	Element Name	Definition	FGDC Hierarchy Reference
1	Title	The name by which the cited resource is known. Data type: Text. From: ISO 19115:2003.	8.4
2	Tags	A set of terms that can be used by GIS to search for the resource. Terms should be provided as a comma-separated list. Data type: Text. From: ArcGIS metadata.	1.6.1.2
3	Summary (Purpose)	A summary of the intentions with which the resource was developed. Data type: Text. From: ISO 19115.	1.2.2
4	Description (Abstract)	A brief narrative summary of the resource's content. Data type: Text. From: ISO 19115.	1.2.1
5	Credits	A recognition of those who created or contributed to the resource. Data type: Text. From: ISO 19115	1.1.1



Element	Element Name	Definition	FGDC
Number	Liement Name	Deminion	Hierarchy
			Reference
6	Use Limitation	Describes limitations affecting the fitness of use of the resource. Data type: Text. From: ISO 19115:2003.	1.8
7*	West Bounding Coordinate	Western-most coordinate of the limit of coverage expressed in longitude. Domain: -180.0 <= West Bounding Coordinate < 180.0	1.5.1.1
8*	East Bounding Coordinate	Eastern-most coordinate of the limit of coverage expressed in longitude. Domain: -180.0 <= East Bounding Coordinate < 180.0	1.5.1.2
9*	North Bounding Coordinate	Northern-most coordinate of the limit of coverage expressed in latitude. Domain: -90.0 <= North Bounding Coordinate <= 90.0; North Bounding Coordinate >= South Bounding Coordinate	1.5.1.3
10*	South Bounding Coordinate	Southern-most coordinate of the limit of coverage expressed in latitude. Domain: -90.0 <= South Bounding Coordinate <= 90.0: South Bounding Coordinate <= North Bounding Coordinate	1.5.1.4
11	Topic Categories	Identifies the primary themes associated with the resource's content. Data type: Code. From: ISO 19115:2003	1.6.1.2
12	Place Keywords	Keywords that associate the resource with a location. Data type: Text. From: ISO 19115:2003.	1.6.2.1
13	Dates	The dates when the cited resource was created and published; note if they are different. Data type: Date. From: ISO 19115:2003.	8.2
14	Data Originator	The name of organization or individual that developed the dataset. Data type: Text. From: ISO 19115:2003.	8.1
15	Data Point of Contact	The name of organization or individual that is the current point of contact. Data type: Text. From: ISO 19115:2003.	1.9
16*	Metadata Update Frequency	The frequency with which the metadata is updated. Data type: Text. From: ISO 19115.2003.	1.4.2
17	Status	The status of the resource. Data type: domain ("Complete" "In Work" "Planned") From: ISO 19115.	1.4.1
18	Credit	A recognition of those who created or contributed to the resource. Data type: Text. From: ISO 19115.	1.11
19	Data Update Frequency	The frequency with which the resource is updated. Data type: Code. From: ISO 19115.2003.	1.4.2
20*	Next Update *Only required if the Update Frequency is set to a specific time frame.	The scheduled revision date. Data type: Date. From: ISO 19115.2003.	
21	Access Constraints	Restrictions and legal prerequisites for using the dataset after access is granted. Data type: Text. From: ISO 19115:2003.	1.7



Supplemental Information	Flomont	Element Name	Definition	FGDC
Supplemental Information Information regarding the vertical datum.	Element	Element Name	Definition	
Supplemental Information Supplemental Information Only add if data includes Z information A plane-rectangular coordinate system established for each state in the United States by the National Geodetic Survey. Identifier for the SPCS zone. Domain: Four-digit numeric code for the State Plane Coordinate Systems based on the North American Datum of 1983 are found in Department of Commerce, 1986, Representation of geographic point locations for Information interchange The identification given to the reference system used for defining the coordinates of points. Domain: "North American Datum of 1983" free text Information about the events, parameters, and source data which constructed the dataset, and information about the responsible parties. 2.5 Data Source	number			
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Only add if data includes Z information 23 State Plane Coordinate System state in the United States by the National Geodetic Survey. 24* SPCS Zone Identifier of the SPCS zone. Domain: Four-digit numeric code for the State Plane Coordinate Systems based on the North American Datum of 1983 are found in Department of Commerce, 1986, Representation of geographic point locations for information interchange 25* Horizontal Datum Name Information Secure System used for defining the coordinates of points. Domain: *North American Datum of 1983* free text 26 Lineage Information about the events, parameters, and source data which constructed the dataset, and information about the responsible parties. 27 Data Source A detailed description of the source. Domain: free text Data Source Citation Title Data Source The name by which the cited resource is known. Domain: free text 29 Data Source The name by which the cited resource was created. Domain: date 30 Data Source The name of a person associated with the resource. Domain: free text 31 Process Step Date Identifies the date and time when the process stat occurred while maintaining the resource, including any parameters or tolerances that were used. Domain: free text 32 Process Step Date Identifies the date and time when the process step occurred. Domain: free text 33 Entity Type Definition The authority that provided the definition. 34 Entity Type The authority that provided the definition. 35* Attribute Definition The Addressing of the authority that provided the definition. Domain: free text 36 Attribute Definition The authority that provided the definition. 37 Attribute Definition The name of the attribute. Domain: free text 38 Attribute Domain The least roll of the authority that provided the definition. Domain: free text 39 Domain: The authority that provided the definition. 30 Domain: The authority that provided the definition. 31 Domain: The authority that provided the definition. 32 Domain: The authority that provided the definition. 34 Domain: T	22		information regarding the vertical datum.	
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36Attribute DefinitionThe description of the attribute. Domain: free text5.1.2.237Attribute Definition SourceThe authority that provided the definition. Domain: free text5.1.2.338Attribute Domain ValueOne of the following (47.1a and 47.1b, 47.2a and 47.2b, 47.3a and 47.3b or 47.4) is required for each attribute field.5.1.2.4.138.1aEnumerated Domain ValueThe name or label of a member of the set. If this is a published standard codeset, such as USGS Digital Line Graph codes or FIPS codes, use the 'Codeset Domain' instead.5.1.2.4.1.138.1bEnumerated Domain Value DefinitionDescription of the value. Domain: free text5.1.2.4.1.238.2aRange DomainThe least value that the attribute can be assigned. Domain:5.1.2.4.2.1				
37 Attribute Definition Source 38 Attribute Domain Value 38.1a Enumerated Domain Value 38.1b Enumerated Domain Value 38.1b Enumerated Domain Value 38.2a Range Domain The authority that provided the definition. Domain: free text One of the following (47.1a and 47.1b, 47.2a and 47.2b, 47.3a and 47.3b or 47.4) is required for each attribute field. The name or label of a member of the set. If this is a published standard codeset, such as USGS Digital Line Graph codes or FIPS codes, use the 'Codeset Domain' instead. Description of the value. Domain: free text 5.1.2.4.1.1 5.1.2.2.1		Attribute Label	The name of the attribute. Domain: free text	
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Definition 38.2a Range Domain The least value that the attribute can be assigned. Domain: 5.1.2.4.2.1	38.1b		Description of the value. Domain: free text	5.1.2.4.1.2
38.2a Range Domain The least value that the attribute can be assigned. Domain: 5.1.2.4.2.1				
	38.2a		The least value that the attribute can be assigned. Domain:	5.1.2.4.2.1



Element Number	Element Name	Definition	FGDC Hierarchy Reference
38.2b	Range Domain Maximum	The greatest value that the attribute can be assigned. Domain: free text	5.1.2.4.2.2
38.3a	Codeset Domain Name	Any published codeset, such as USGS Digital Line Graph codes or FIPS codes. Domain: free text	5.1.2.4.3.1
38.3b	Codeset Domain Source	Source of published codeset. Domain: free text	5.1.2.4.3.2
38.4	Unrepresentable Domain	Any value that is not or cannot be prescribed. For example, names. Domain: free text	5.1.2.4.4.1
39	Contact Person	The name of the individual to which the contact type applies. Domain: free text	10.1.1
40	Contact Organization	The name of the organization to which the contact type applies. Domain: free text	10.1.2
41	Contact Position	The title of the individual. Domain: free text	10.3
42	Contact Address	The address for the organization or individual. Domain: free text	10.4
43	Address Type	The information provided by the address. Domain: "Mailing Address" "Physical Address" "Mailing and Physical Address"	10.4.1
44	City	The city of the address. Domain: free text	10.4.3
45	State or Province	The state or province of the address. Domain: free text	10.4.4
46	Postal Code	The ZIP or other postal code of the address. Domain: free text	10.4.5
47	Contact Telephone	The telephone number by which individuals can speak to the organization or the individual. Domain: free text	10.5
48	Contact Email	The address of the electronic mailbox of the organization or individual. Domain: free text	10.8

^{*} Possible exemption based on the dataset format, agency and/or capturing method.

Table 2 - ASPA Metadata Guidance Example (excluding software generated elements)

Name	Description	Example
Title	The informal name of the dataset. E.g., the data file may be called something like 'UBWL22', but the title should be easy to understand.	Upper Bay Wetlands Areas
Tags	A set of terms that can be used by the GIS to search for the resource.	wetlands port stewardship
Summary (Purpose)	A simple summary of the intentions with which the resource was developed.	This data was created for the purpose of the planning, developing, and managing the Upper Mobile Bay Beneficial Use Wetland Creation Site
Description (Abstract)	A brief narrative summary of the resource's content.	Project areas have been created to aid in the planning, development, and management of the Upper Mobile Bay Wetlands project, a 1,200-acre area of wetlands created through the beneficial use of dredge sediments.
Credits	Recognition of those who created or contributed to the resource. This can be fairly general (e.g., 'Port of Mobile')	Port of Mobile Environmental Department



Name	Description	Example
	and gives a quick identification to the source of the data.	
Use Limitation	Describes limitations affecting the fitness of use of the resource; for example, "Not to be used for navigation."	For planning and management purposes only.
Topic Categories	Identifies the primary themes associated with the resource's content.	Boundaries Environment Geoscientific
Place Keywords	Keywords that associate the resource with a location.	Port of Mobile City of Mobile Upper Middle Bay Wetlands Theodore Mobile County
Dates	The date when the cited resource was created, published and/or revised. In most cases for the Port of Mobile, the Date Created and the Date Published are the same. Revision date should only be updated when broad changes are made, such as a fresh version of assessor parcels is received and replaces the existing data.	Created: 2023-04-20 Published: 2023-04-20 Revised: <null></null>
Contact (originator)	All data must have a contact for the originator.	Zheng Droneguy
Contact (point of contact)	All data must have a point of contact indicated, even if it is the same person as the originator.	Shandra Contactlady
Update Frequency	The frequency with which the metadata is updated. Continual Daily, Weekly, Fortnightly, Monthly, Quarterly, Biannually, Annually, As Needed, Irregular, Other. If other, enter custom frequency. E.g., 45 days.	Monthly
Status	The status of the resource. Completed Historical Archive, Obsolete, On Going, Planned, Required Under Development. In general, this should be set to 'Completed', unless the data is truly in a state of development, archived, etc.	On Going
Credit	A recognition of those who created or contributed to the resource.	Port of Mobile Environmental Department
Supplemental Information (Vertical Datum*) *Only add if data includes Z information	Information regarding the vertical datum. Note that this section may be used to include other information, but if the data contains Z values, it must include information about the vertical datum.	



Name	Description	Example
Update Frequency	The frequency with which the data is updated. Continual, Daily, Weekly, Fortnightly, Monthly, Quarterly, Biannually, Annually, As Needed, Irregular, Other. If other, enter custom frequency. E.g., 45 days.	Monthly
Legal Constraints	Describes legal limitations affecting the use of the resource.	This digital data and metadata, (hereinafter collectively referred to as the "information"), are provided on an "AS IS", "AS AVAILABLE" and "WITH ALL FAULTS" basis.
For each process that occ Step values must be creat	urred to build, update and/or maintain t	the data, the Data Source and Process
Data Source Description	A detailed description of the source.	Port of Mobile Environmental Department's UAV imagery and site inspection reports.
Data Source Citation Title	The name by which the cited resource is known.	UAV areal imagery Site Inspection reports
Data Source Date	The date when the cited resource was created.	Date: 2023-04-20
Data Source Contact	The name of a person associated with the resource.	Shandra Contactlady
Process Step Description	Describes the event, transformation, or process that occurred while maintaining the resource, including any parameters or tolerances that were used.	Dredge sediment deposit areas added to developing wetland polygons as indicated by UAV areal imagery and site inspection reporting. Fixed a few minor topology errors. Imported working FGDB polygon into Enterprise Geodatabase.
Process Step Date	Identifies the date and time when the process step occurred.	Date: 2023-04-20
Entity Type Definition	A description of the features, objects, or cells contained by the dataset.	Each added area date of deposition.
Entity Type Definition Source	The authority that provided the definition.	Shandra Contactlady
table except the identificat	and Attribute Definition Source are requition number field (e.g., OBJECTID) and	SHAPE field(s).
Attribute Definition	The description of the attribute.	Date of deposition
Attribute Definition Source	The authority that provided the definition.	Shandra Contactlady
Enumerated Domain Value	An example value or code of a member of the set. Note: If this is a published standard codeset, such as FIPS codes, use the 'Codeset Domain' instead.	2023-02-10
Enumerated Domain Value Definition	A description of the value or code stored in this field.	Vitreous clay pipe
Range Domain Minimum	The least value that can be stored in the field.	-15
Range Domain Maximum	The greatest value that can be stored in the field.	100



Name	Description	Example
Codeset Domain Name	If the enumerated or coded values stored in the field are specified by an authority, provide the title for this set of values.	FIPS
Codeset Domain Source	The authority that defined the set of values stored in this field.	NIST
Unrepresentable Domain	Characterizes the values stored in this field in a manner that illustrates why they can't be described as an enumerated, codeset, or range domain. For example, explain how the field's unique values are calculated.	Unique sediment deposit environmental monitoring sample site result.
Contact Organization	Organization name	Alabama State Port Authority
Contact Position	The title of the individual.	Sr. GIS Specialist
Contact Address	The address for the organization or individual.	P.O. Box 1588
Address Type	The information provided by the address, e.g., "Mailing Address" "Physical Address" "Mailing and Physical Address"	Mailing Address
City	The city of the address	Mobile
State or Province	The state or province of the address. Domain: free text	Alabama
Postal Code	The ZIP or other postal code of the address. Domain: free text	36633-1588
Contact Telephone	The telephone number by which individuals can speak to the organization or the individual. Domain: free text	251.123.1234
Contact Email	The address of the electronic mailbox of the organization or individual. Domain: free text	Shandra.Contactlady@alports.com