



Aerial Site Intelligence Report

Planning-level aerial and desktop site intelligence supporting preliminary engineering, site evaluation, and project coordination.

Sample ASI | Project identifiers removed

Date of Intelligence: 7/16/2026
Prepared for: Engineering Review

Ryan@CoastalEdgeInfrastructure.com | (717) 808-0072 | www.coastaledgeinfrastructure.com

This report is intended to accelerate preliminary site evaluation and reduce unnecessary field mobilization.
Final design decisions require field verification and engineering judgment

Sample ASI Basis & Exclusions

Purpose

Provide aerial site intelligence for preliminary planning
Reduce initial site reconnaissance effort
Support engineering, site acquisition, and stakeholder strategy

Representative Deliverables and Data

Orthophoto exhibits
Supporting digital datasets when generated
Approximate dimensional observations
Existing Conditions assessment
Visible infrastructure observations
Annotated Aerial exhibits
Photo Documentation

Outside Project Scope

Boundary locations
Utility locations and capacities
Easements
Jurisdictional Approvals
Environmental assessments, delineations, or regulatory determinations
Final Engineering Design

Property Overview

SAMPLE PROJECT

Client, address, parcel number, owner, coordinates, and location identifiers removed for public display.

Operational review area: approximately 148,000 sq ft.

Original aerial exhibits and planning observations are retained to demonstrate the ASI scope.

Site context retained; parcel acreage withheld

Existing gravel access roads
Multiple potential staging areas

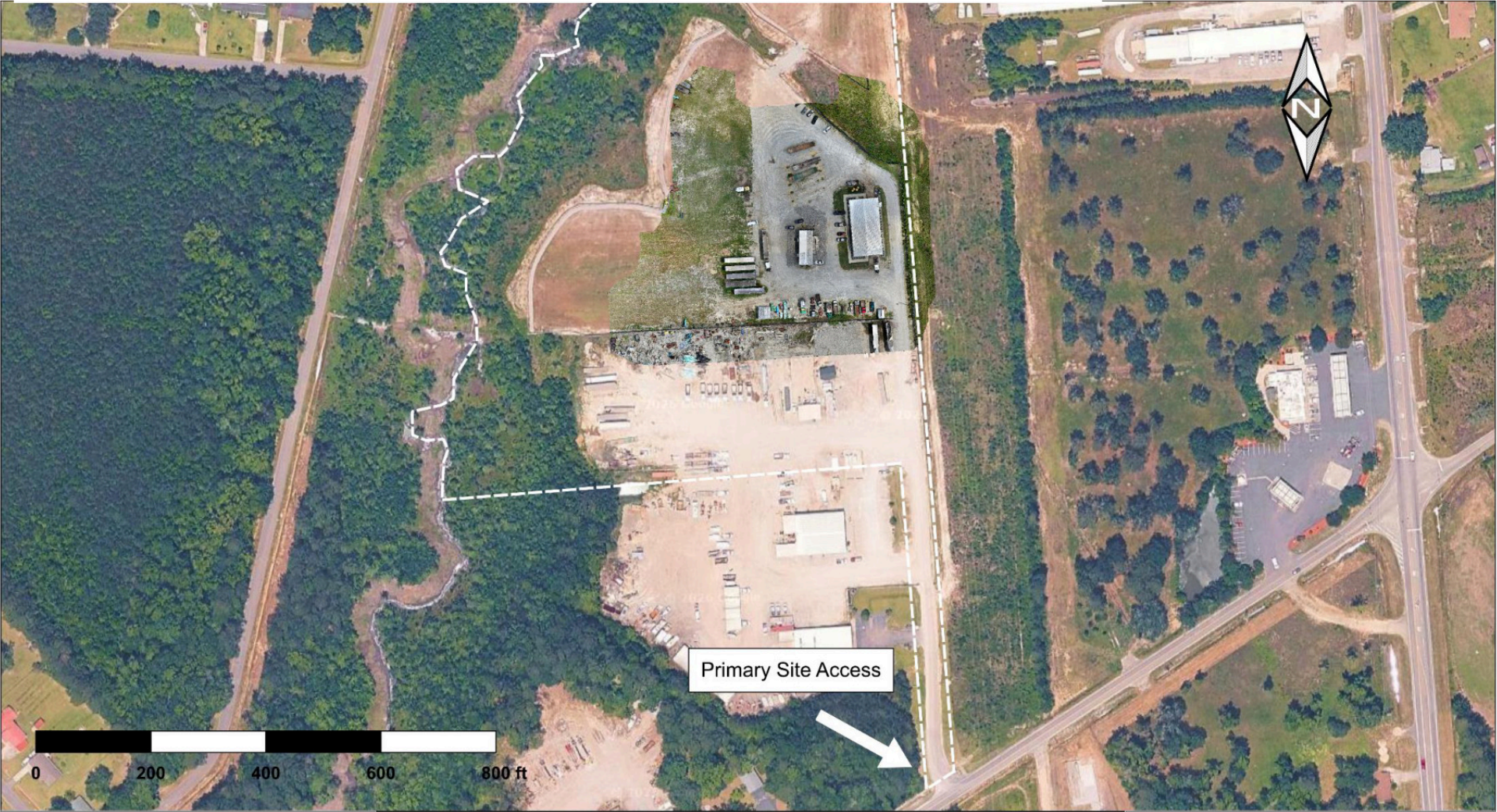
Initial Observations

Multiple laydown/storage areas
Good heavy equipment accessibility
Existing drainage infrastructure observed
No obvious standing water during site visit

Existing Development

Industrial equipment yard
Existing office/shop building
Gravel circulation areas
Secured perimeter fencing

Sample ASI Property and Regional Context



PROJECT Sample project name	COASTAL EDGE INFRASTRUCTURE Aerial Site Intelligence	DATA SOURCES CEI UAS Orthophoto Google Satellite Parcel Boundary GIS	PROPERTY Parcel ID: [sample]
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Site Orientation

Operational yard and surrounding site context

Observed Access : approx. 24’ wide at entrance and 24’ at gate

Primary access: existing site entrance

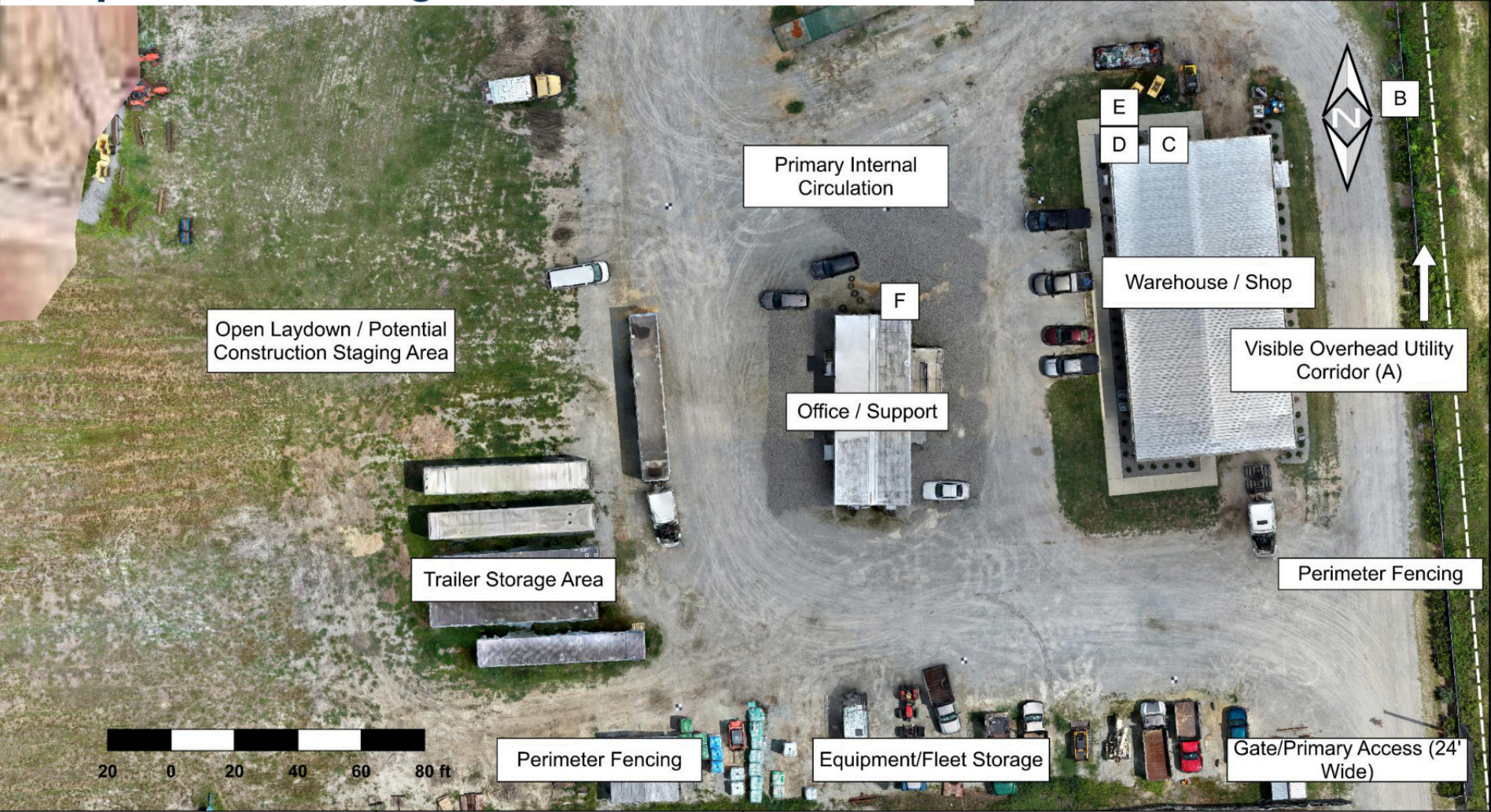
Surface : No standing water observed; stone/gravel parking area, bare soil/sand with grass to the west of the observed area. Drainage patterns require additional verification

Perimeter fencing observed

Approximate Review Area
Dimensions : 148,000 sq ft

Preliminary visual and dimensional coordination aid only. Final boundaries, utilities, elevations, approvals, and design decisions require verification by the appropriate professional or authority.

Sample ASI Existing Conditions Exhibit



PROJECT Sample project name	COASTAL EDGE INFRASTRUCTURE Aerial Site Intelligence	DATA SOURCES CEI UAS Orthophoto Google Satellite Imagery Parcel Boundary GIS Field Verification	PROPERTY Parcel ID: [sample]
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Site Dimensions
Approx. Area : 148,000 sq ft
Approx. Frontage : 500'
Approx. Depth : 280'

Staging Area
Approx. Area : 13,000 sq ft
Approx. Width : 130'
Approx. Depth : 100'

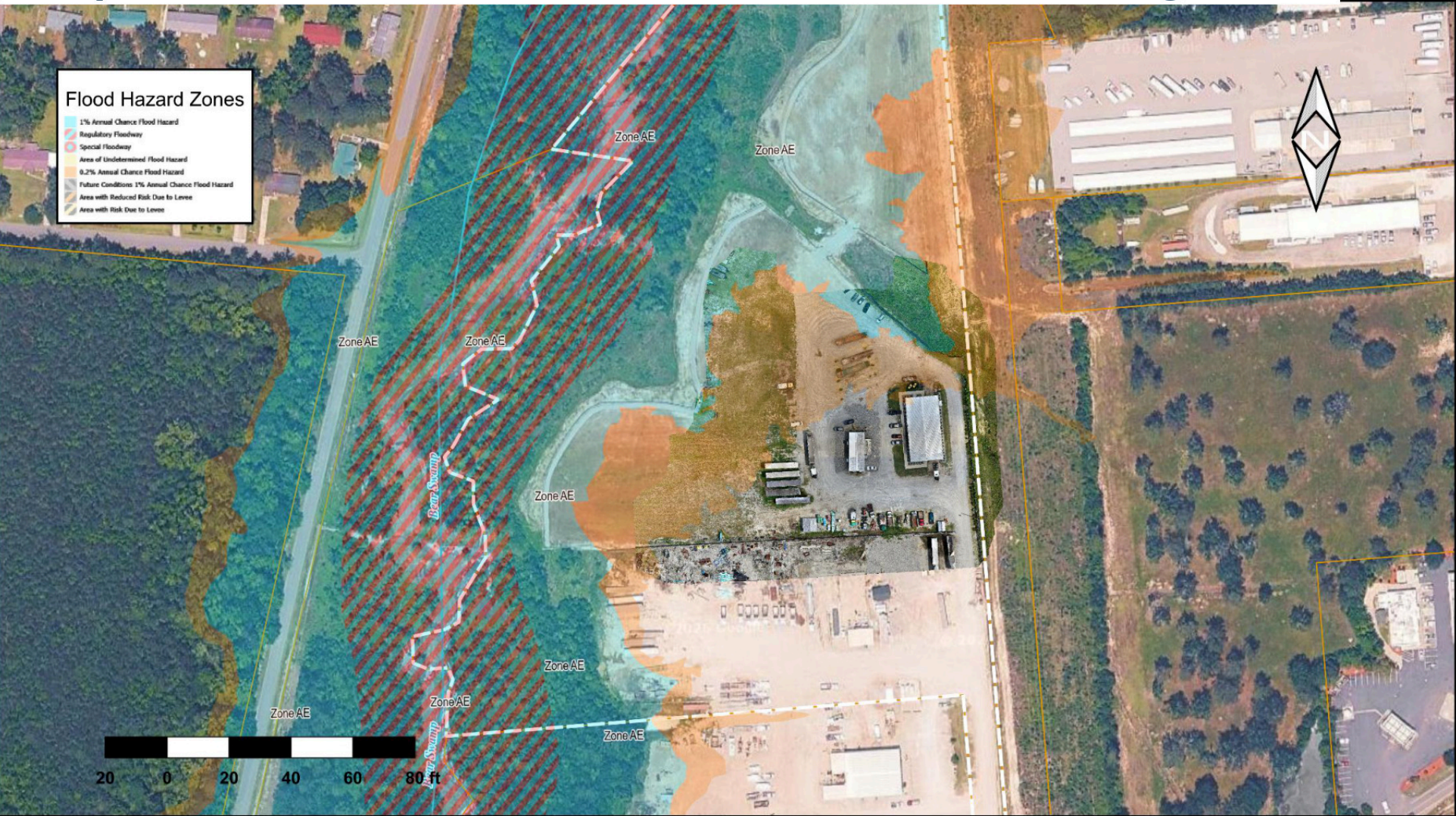
Approx. entrance-to-gate distance: 800 ft

Key Site Observations
Approx. 24 ft wide site entrance

Existing warehouse, office, and open yard configuration supports contractor staging and fleet operations.

Photo Locations : A-F correspond to the Existing Conditions Utility Field Inventory on ASI 06.

Sample ASI Environmental and Infrastructure Screening



PROJECT Sample project name	COASTAL EDGE INFRASTRUCTURE	DATA SOURCES	PROPERTY Parcel ID: [sample]
	Aerial Site Intelligence	CEI UAS Orthophoto Google Satellite Imagery Parcel Boundary GIS FEMA Flood Hazard Mapping	

Mapped Wetlands

Desktop screening indicates mapped wetland features may affect entire parcel.

Flood Hazard

The western portion of the property is located within mapped FEMA Zone AE.

A mapped regulatory floodway extends along the western property area.

Planning Implications

The mapped wetland and flood-hazard conditions indicate potentially significant environmental, drainage, permitting, and development constraints.

Future site planning should avoid reliance on the western floodway area and should not assume usable development area until formal environmental review is completed.

Additional Desktop Screening

No mapped features were identified within the displayed review area for :
Environmental Liabilities : EPA Superfund, Brownfields, Hazardous Waste Sites, FUDS

Protected Resources : Federal Lands, Critical Habitat, CBRS, historic resources

Infrastructure : FAA Airports, railroads, transmission lines, substations, cell towers

Sample ASI Existing Conditions Utility Field Inventory

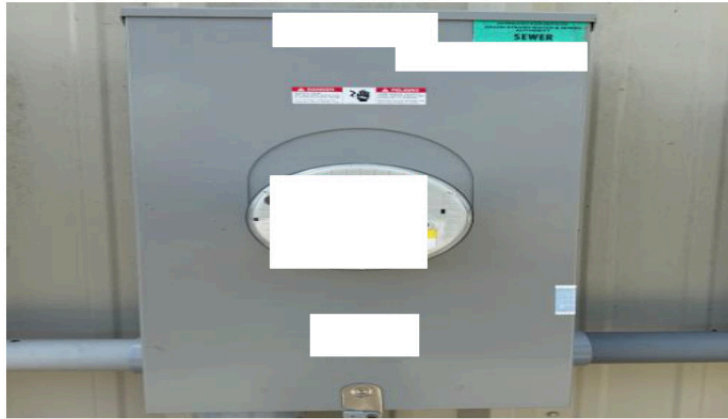
A



B



C



D



E



F



Feature	Field Observation	Verification Requirement
A: Western Utility Corridor	Overhead electric infrastructure extends along western property area behind fencing	Confirm ownership, easements, setbacks, and capacity and phase
B: Pole-Mounted Transformer and Service	Pole-mounted transformer and overhead to underground service equipment	Confirm ownership, voltage, phase, service capacity, underground routing
C: Electrical Meter and Service Cabinet	Santee Cooper electrical meter and service cabinet observed on primary shop building	Confirm account ownership, voltage, phase, service rating, capacity
D: Exterior Electrical Control Equipment	Exterior control equipment with alarm beacon	Confirm function, ownership, connected system, power source, working clearances
E: Open Utility Sleeve / Stub Up	Open unlabeled sleeve observed near building service area	Confirm purpose, ownership, routing, status, complete utility GPR prior to excavation
F: Below-Grade Utility Assembly	Below-grade structure with exposed PVC piping and valves observed near modular	Confirm system function, ownership, routing, depth, operating status

Field observations are preliminary and require appropriate utility, survey, records, locating, and professional verification before design, excavation, construction, or reliance.

Sample ASI Observed Dimensional Verification

Total Targets : 6 2' targets Measure Center to Center

- Independent field verification performed
- Multiple representative site features evaluated
- Measurements validated against physical field observations
- Results support preliminary planning and site coordination

Validation Summary

Validation Measurements : 5 Maximum Difference : 16"

Physical Targets : 6 Observed Average Dimensional Variance : 0.91%

Average Difference : 9.4" Measurement Basis : Center to Center

Validation Measurement	Field Measurement	ASI Measurement	Observed Difference
Target 1-2	65'8"	66'5"	9"
Target 2-3	90'2"	91' 1"	11"
Target 3-4	156'6"	157'10"	16"
Target 4-5	68'3"	68' 10"	7"
Target 5-6	48'6"	48'10"	4"

Representative field measurements were independently compared against ASI-derived measurements to evaluate planning-level dimensional accuracy. Final design, permitting, construction, and boundary determinations should require field verification or professional survey where applicable.

Sample ASI Planning Constraints and Recommended Actions

Key Constraints	Recommended Actions
Environmental and Flood Conditions Mapped wetland features appear across substantial portions of the parcel. The western area also includes FEMA Zone AE and regulatory floodway.	Environmental Review Complete wetland delineation and applicable jurisdictional review before assuming usable or developable area.
Western Utility Corridor Transmission infrastructure, fencing, and utility-clearance requirements constrain the western operational edge.	Flood and Drainage Review Confirm flood-zone and floodway limits and evaluate drainage, grading, stormwater, and floodplain-development requirements.
Unverified Utility Conditions Electrical, control, open-sleeve, and below-grade utility features require confirmation of function, routing, ownership, depth, and active status.	Survey and Easement Verification Confirm property limits, access rights, transmission and utility easements, and applicable setbacks.
Drainage and Surface Conditions No obvious standing water was observed during the site visit, but mapped wetland and flood conditions indicate potential drainage, grading, seasonal saturation, and stormwater constraints.	Utility Coordination Confirm electrical ownership, voltage, phase, capacity, point of service, routing, and expansion availability.
Potential Planning Area Existing cleared or disturbed areas, including areas adjacent to or behind existing buildings, may provide practical locations for preliminary planning while avoiding unnecessary impacts to active operations and western constraints.	Utility Location and GPR Complete records review, public and private locating, and GPR before excavation, foundations, pads, or new utility routing.
Stormwater and Permitting Constraints Proposed construction may require engineered stormwater controls, SWPPP preparation, permitting, and construction-phase compliance measures, resulting in added design cost, review time, and construction duration.	Stormwater Planning and Permitting Engage a civil engineer early to evaluate drainage, disturbance limits, stormwater-management requirements, SWPPP applicability, permitting pathways, and schedule impacts before advancing a site layout.

Recommended Planning Sequence

Environmental Review → Survey & Easements → Utility Coordination & Locating → Flood, Drainage & Stormwater Planning → Conceptual Design → Permitting

Planning observations and recommended actions are preliminary and should be confirmed by the applicable owner, surveyor, engineer, environmental professional, utility, and regulatory authority.

Sample ASI Digital Deliverables

The ASI includes an executive intelligence report and supporting digital files prepared for planning, engineering review, and project coordination.

Available Deliverables	Primary Function
PDF ASI Report	Consolidated aerial, desktop, dimensional, field, constraint, and planning intelligence
Full Resolution Orthomosaic (GeoTIFF)	Georeferenced existing-conditions review, approximate measurement, and GIS/CAD integration
Orthomosaic Reference Image (JPEG/PNG)	Fast viewing, presentations, coordination, and document integration
Digital Surface Model (DSM)	Surface-elevation context including terrain, vegetation, structures, and visible site features
Original Drone Imagery	Full-resolution aerial imagery supporting detailed review of captured conditions
Ground Photography	Close-range documentation of utilities, buildings, access, drainage, and infrastructure
Supporting GIS Data	Parcel, environmental, infrastructure, measurement, and exhibit-layer coordination when generated

Sample ASI Verification Requirements & Limitations

Intended Use

This report is intended to support:

- Preliminary site evaluation
- Engineering and constructability coordination
- Site acquisition and development review
- Access, staging, utility, and infrastructure planning
- Budgetary and scheduling discussions
- Early identification of constraints and verification needs

Not Intended For

This report does not constitute:

- Boundary, ALTA, topographic, or engineering survey
- Utility locate or subsurface investigation
- Wetland delineation or jurisdictional determination
- Flood determination
- Geotechnical investigation
- Engineering design or permit approval
- Title, easement, zoning, or legal determination

Field Verification Required

Prior to final design, permitting, excavation, or construction, confirm as applicable:

- Property limits, easements, access rights, and setbacks
- Utility ownership, routing, depth, voltage, phase, capacity, and active status
- Wetland boundaries and jurisdictional status
- FEMA flood-zone and floodway limits
- Drainage, grading, stormwater, and SWPPP requirements
- Geotechnical and subsurface conditions
- Final dimensions, elevations, permits, and agency approvals

Data Sources

Source
DJI Air 3S imagery
PixPro photogrammetry
QGIS
Field observations
Public GIS and parcel data
Third-party mapping sources

Purpose
Existing conditions and aerial context
Orthomosaic, DSM, and approximate measurements
GIS review and exhibit preparation
Visible conditions and dimensional validation
Parcel, environmental, flood, and infrastructure screening
Supplemental planning context

Professional Reliance Statement

The observations, exhibits, approximate dimensions, mapped conditions, and planning conclusions contained in this report are intended for planning-level decision support only. They are not substitutes for survey, engineering, utility locating, environmental investigation, agency review, or other project-specific professional services. Final engineering, permitting, construction, utility, environmental, property, and regulatory decisions require independent verification by the appropriate qualified professional, utility provider, agency, or authority having jurisdiction.

The ASI identifies visible conditions, planning constraints, coordination needs, and verification priorities early enough to support better decisions before major design, permitting, or mobilization costs are incurred. Public and third-party datasets may be incomplete, outdated, generalized, misclassified, or spatially inaccurate.