

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): May 3, 2016

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: CESAJ-RD-NC, Blue Origin, SAJ-2015-02725

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Florida County/parish/borough: Brevard City:
Center coordinates of site (lat/long in degree decimal format): Lat. 28.51114° N, Long. -80.67965° W.
Universal Transverse Mercator:

Name of nearest waterbody: Indian River Lagoon

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Indian River Lagoon

Name of watershed or Hydrologic Unit Code (HUC): 0308020202, Banana River-Newfound Harbor Frontal

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date: February 19, 2016

Field Determination. Date(s): October 22, 2016

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.

Explain: Banana River currently supports commerce between Indian River and Port Canaveral.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.

Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: .

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. TNW

Identify TNW: _____ .

Summarize rationale supporting determination: The Banana River is a tidal water and supports commerce between Indian River and Port Canaveral; includes a portion of the Intracoastal Waterway.

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is “adjacent”: _____ .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: **Pick List**
Drainage area: **Pick List**
Average annual rainfall: _____ inches
Average annual snowfall: _____ inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

- Tributary flows directly into TNW.
- Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: _____ .

Identify flow route to TNW⁵: _____ .

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known: .

(b) General Tributary Characteristics (check all that apply):

Tributary is: Natural
 Artificial (man-made). Explain: .
 Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):

Average width: . feet
Average depth: . feet
Average side slopes: **Pick List**.

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Type/% cover:
 Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .

Presence of run/riffle/pool complexes. Explain: .

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: .

Other information on duration and volume: .

Surface flow is: **Pick List**. Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

Dye (or other) test performed: .

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by: Mean High Water Mark indicated by:
 oil or scum line along shore objects survey to available datum;
 fine shell or debris deposits (foreshore) physical markings;
 physical markings/characteristics vegetation lines/changes in vegetation types.
 tidal gauges
 other (list):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: .

Identify specific pollutants, if known: .

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. Explain findings:
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: 41.53 acres

Wetland type. Explain: 34.78 forested/Scrub shrub and 6.75 surface waters.

Wetland quality. Explain: Poor quality due to agricultural use and exotic species..

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Perennial flow**. Explain:

Surface flow is: **Confined**

Characteristics: Ditches.

Subsurface flow: **Pick List**. Explain findings:

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. Explain:
 - Ecological connection. Explain:
 - Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **2-5** river miles from TNW.

Project waters are **2-5** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters**.

Estimate approximate location of wetland as within the **100 - 500-year** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Tanic; contribute freshwater to Indian River Lagoon.

Identify specific pollutants, if known: Potential nutrients and agricultural chemicals.

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain: Mostly exotic hardwoods.
- Habitat for:
 - Federally Listed species. Explain findings: wood stork, eastern indigo.
 - Fish/spawn areas. Explain findings:
 - Other environmentally-sensitive species. Explain findings:
 - Aquatic/wildlife diversity. Explain findings: some aquatic food web support.

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **30 (or more)**

Approximately (2,442) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N) Size (in acres) Directly abuts? (Y/N) Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: See Section IV (B).

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
 Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: **Wetlands are directly connected to ditches discharging to the Indian River Lagoon.**
 Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: **2,442** acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or
 Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
 Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
 from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
 which are or could be used for industrial purposes by industries in interstate commerce.
 Interstate isolated waters. Explain: .
 Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.

SECTION IV: DATA SOURCES.

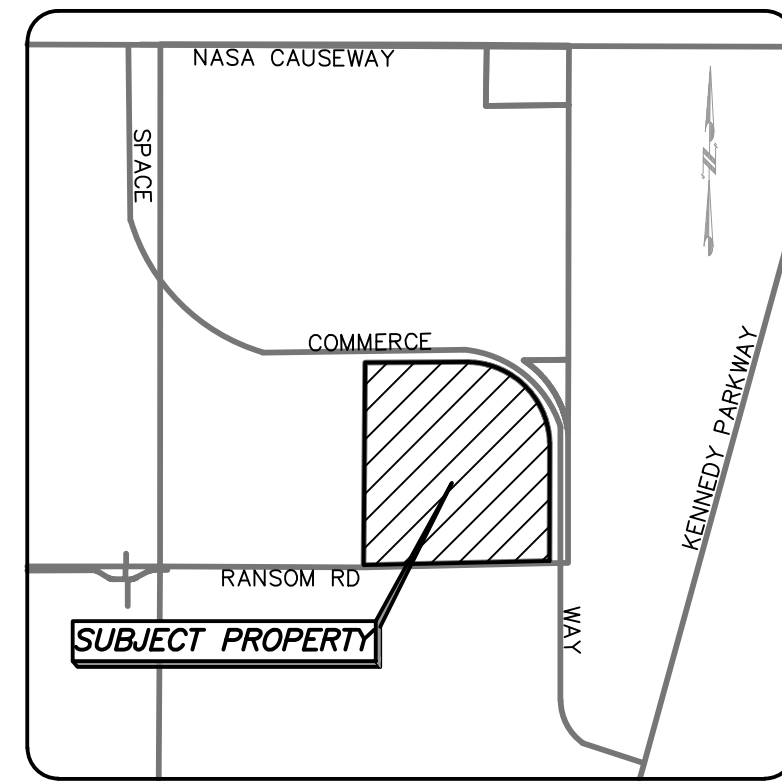
A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Atlantic Environmental Solutions and John Pekar LLC.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: .
- USDA Natural Resources Conservation Service Soil Survey. Citation: Brevard County.
- National wetlands inventory map(s). Cite name: RAR.
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Various dates on Google Earth.
or Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): See IV(B) below.

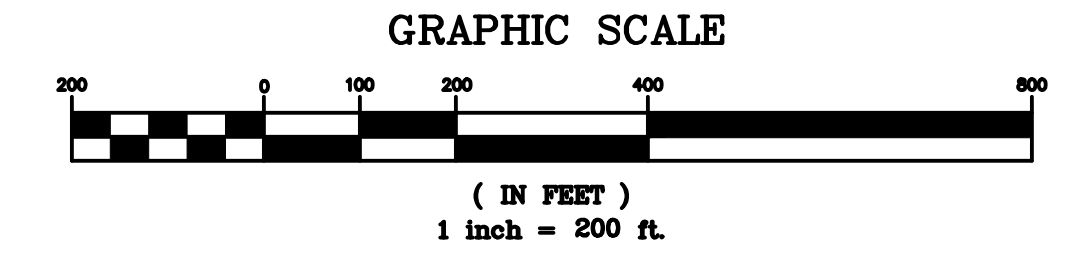
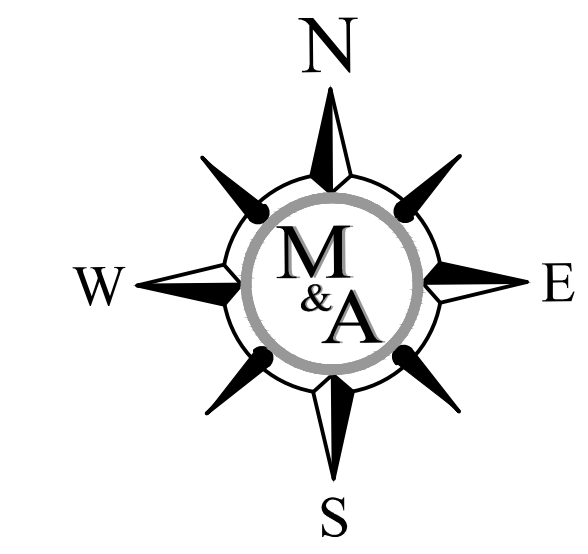
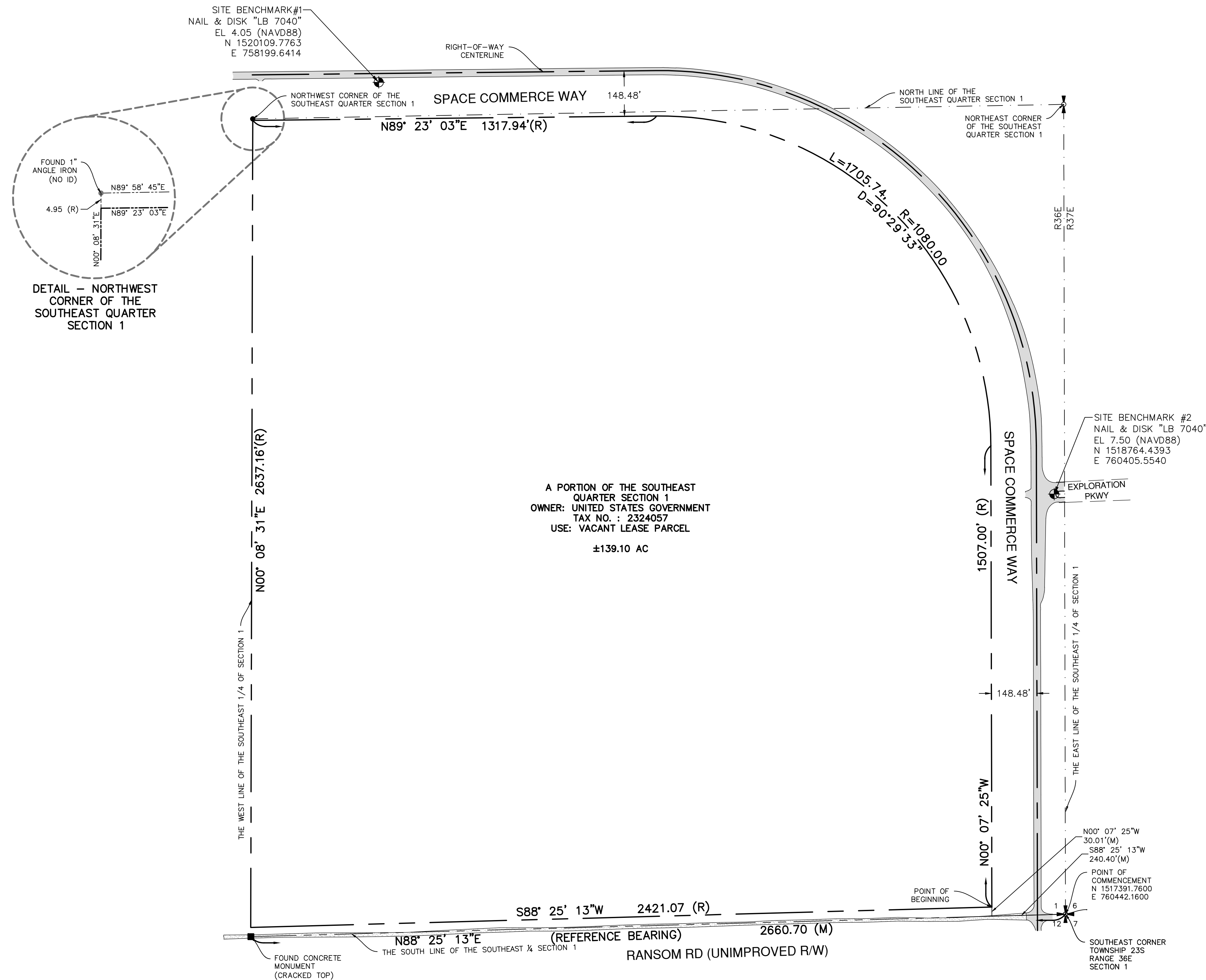
B. ADDITIONAL COMMENTS TO SUPPORT JD: Significant Nexus Determination: The 34.78 acres of forested/scrub shrub palustrine wetlands and 6.75 acres of surface waters (ditches and borrow areas), totaling 41.53 acres, are directly abutting ditches that discharge to the Ransom Road ditch. The Ransom Road ditch drains west approximately 2.8 miles to the Indian River Lagoon. Project

wetlands are part of an estimated 2,760 acre review area that includes a total of approximately 2,442 acres of wetlands (based on NWI mapping). These wetlands provide aquatic palustrine wetland habitat, some of which is on the Merritt Island National Wildlife Refuge. Wetland areas attenuate flows, provide nutrients and other chemical constituents (e.g., carbon), and provide a fresh-saltwater habitat gradient that wildlife species use seasonally (e.g., manatees will swim up the Ransom Road ditch to access fresh water). These functions are significant for downstream estuarine waters and the Indian River Lagoon.

TOPOGRAPHIC-CORRIDOR AND WETLANDS SURVEY OF A PORTION OF TOWNSHIP 22 SOUTH, RANGE 36 EAST, SECTION 1 EXPLORATION PARK PHASE 2



VICINITY MAP
1" = 2500'



LEGAL DESCRIPTION (PER SKETCH OF DESCRIPTION PROVIDED BY CLIENT)

A TRACT OF LAND LYING ON THE JOHN F. KENNEDY SPACE CENTER IN SECTION 1, TOWNSHIP 23 SOUTH, RANGE 36 EAST, BREVARD COUNTY, FLORIDA AND BEING MORE FULLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF SAID SECTION 1, TOWNSHIP 23 SOUTH, RANGE 36 EAST, SAID CORNER HAVING A FLORIDA STATE PLANE COORDINATE VALUE OF NORTH 1517391.76 AND EAST 760442.16, AS DERIVED FROM A NATIONAL GEODETIC SURVEY TRIANGULATION STATION 'STATIC 1965', THENCE S88°25'13"W, ALONG THE SOUTH LINE OF SAID SECTION 1, FOR A DISTANCE OF 240.40 FEET; THENCE N00°07'25"W, FOR A DISTANCE OF 30.01 FEET TO THE POINT OF BEGINNING; THENCE S88°25'13"W, FOR A DISTANCE OF 2421.07 FEET TO A POINT ON THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 1; THENCE N00°08'31"E, ALONG SAID WEST LINE OF THE SOUTHEAST QUARTER, FOR A DISTANCE OF 2637.16 FEET; THENCE N89°23'03"E, FOR A DISTANCE OF 1317.94 FEET TO THE BEGINNING OF A CURVE CONCAVE SOUTHWESTERLY AND HAVING A RADIUS OF 1080.00 FEET; THENCE SOUTHEASTERLY 1705.74 FEET ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 90°29'33" TO A POINT; THENCE S00°07'25"E, FOR A DISTANCE OF 1507.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 139.10 ACRES MORE OR LESS.

SURVEYOR'S NOTES:

- THIS PROPERTY MAY BE SUBJECT TO EASEMENTS, RESTRICTIONS, OR OTHER LIMITATIONS, EITHER RECORDED OR IMPLIED. NO OPINION OF TITLE OR OWNERSHIP IS HEREBY EXPRESSED OR IMPLIED BY THE SURVEYOR. EASEMENTS AND RIGHTS-OF-WAY SHOWN HEREON ONLY INCLUDE THOSE PROVIDED TO THE SURVEYOR. THE SURVEYOR HAS MADE NO SEARCH OF THE PUBLIC RECORDS FOR SUCH.
- ONLY OPEN AND NOTORIOUS EVIDENCE OF EASEMENTS AND RIGHT-OF-WAY ARE LOCATED AND SHOWN HEREON. THE SURVEYOR HAS NOT LOCATED ANY UNDERGROUND UTILITIES OR FOUNDATIONS WHICH MAY ENCROACH.
- BEARINGS SHOWN HEREON ARE BASED ON AN ASSUMED VALUE OF N 88°25'13"E, THE SOUTH LINE OF OF THE SOUTHEAST 1/4 SECTION 1. SAID BEARING IS IDENTICAL WITH THE HEREIN REFERENCED SKETCH OF DESCRIPTION PROVIDED BY CLIENT.
- TYPE OF SURVEY: SPECIAL PURPOSE SURVEY (SEE NOTE 5). THIS IS NOT A BOUNDARY SURVEY.
- THIS SURVEY IS INTENDED TO PROVIDE DELINEATION OF EXISTING WETLANDS AND TOPOGRAPHY OF FIELD EXPLORED AREAS. ONLY SITE SPECIFIC AREAS WERE SURVEYED AND MAPPED HEREON. THIS IS NOT A BOUNDARY SURVEY. SUFFICIENT MONUMENTATION WAS FOUND AND MEASURED WITHIN ACCEPTABLE TOLERANCES. LINWORK SHOWN HEREON WAS DERIVED FROM THE NOTED SOURCES. THIS SURVEY IS A RETRACEMENT OF SAID NOTED SOURCE.
- SOME FEATURES SHOWN HEREON MAY BE EXAGGERATED FOR PICTORIAL PURPOSES. PUBLISHED DIMENSIONS WILL PRECEDE MAP SCALING.
- SITE BENCHMARKS AS SHOWN HEREON WERE DERIVED FROM BREVARD COUNTY BENCHMARK SYSTEM, SPECIFICALLY BENCHMARK NUMBER BCPID: D6A12, ELEV. = 2.34 FT (NAVD 1988). SAID BENCHMARK WAS OBSERVED VIA RTK GPS NETWORK SYSTEM UTILIZING FDOT REFERENCE STATION TTVL (TITUSVILLE).

DATA SOURCES:

- SKETCH OF LEGAL DESCRIPTION PROVIDED BY INSTITUTIONAL SERVICES CONTRACT, TITLED EXPLORATION PARK - PHASE 2

A PORTION OF THE SOUTHEAST QUARTER SECTION 1
OWNER: UNITED STATES GOVERNMENT
TAX NO. : 2324057
USE: VACANT LEASE PARCEL
±139.10 AC

LEGEND

A.K.A. = ALSO KNOWN AS	SB-11 = CONCRETE MITERED END SECTION
(C) = CALCULATED	EL. 2.3 = SOIL BORING ID & EL.
(D) = DEED	
(R) = RECORD	
(M) = MEASURED	
ESMT. = EASEMENT	
FOUND. = FOUND	
FIG. = PAGE	
P.B. = PLAT BOOK	
O.R.B. = OFFICIAL RECORDS BOOK	
STA. = STATION	
PLS. = PROFESSIONAL LAND SURVEYOR	
LB. = LICENSED BUSINESS	
R/W. = RIGHT-OF-WAY	
FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION	
P.C. = POINT OF CURVATURE	
P.T. = POINT OF TANGENCY	
L.S. = LIFT STATION / VALVE VAULT	
P.O.B. = POINT-OF-BEGINNING	
P.O.C. = POINT-OF-COMMENCEMENT	
TYP. = TYPICAL	
O.H.W. = OVER HEAD WIRE	
C.B.S. = CONCRETE BLOCK & STUCCO	
NAVD = NORTH AMERICAN VERTICAL DATUM OF 1988	
ELEV. = ELEVATION	
N.T.S. = NOT TO SCALE	
TOB = TOP OF BANK	
TOE = TOE OF SLOPE	
SHW = SEASONAL HIGH WATER ELEVATION ON 11/12/15	
TW = TOP OF WATER EL. ON 9/25/15	
ASPH. = ASPHALT PAVEMENT	
DIRT = DIRT ROAD	
--- = LIMITS OF DENSE VEGETATION	
	SB-11 = CONCRETE MITERED END SECTION
	EL. 2.3 = SOIL BORING ID & EL.
	--- = DRAINAGE CONTROL STRUCTURE
	--- = TRAFFIC SIGNAL BOX
	--- = GAS VALVE
	--- = TRAFFIC BOLLARD
	--- = SPOT ELEVATION
	--- = LIGHT POLE BASE
	--- = ELECTRIC METER
	--- = WATER METER
	--- = WATER VALVE
	--- = ELECTRICAL ACCESS
	--- = SANITARY SEWER MANHOLE
	--- = STORM DRAIN MANHOLE
	--- = STORM DRAIN CURB INLET
	--- = FIRE HYDRANT
	--- = UTILITY POLE
	--- = TRAFFIC SIGN
	--- = CONCRETE MONUMENT FOUND
	--- = IRON MARKER FOUND (NO ID)
	--- = IRON MARKER SET
	--- = NAIL & DISK FOUND
	--- = NAIL & DISK SET
	--- = SECTION QUARTER CORNER
	--- = STORM PIPE
	--- = DESIGN ELEVATION ID & EL.

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Revision	
Drawn: DMP	Date: 11/19/2015
Checked: CSB	Date: 11/19/2015

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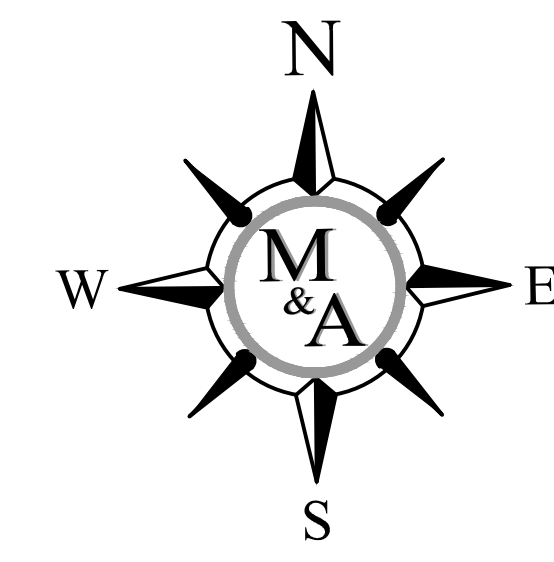
MORGAN & Associates
Consulting Engineers, Inc.
Civil Engineers and Land Surveyors - E.B. # 7903 / L.B. # 7040
504 N. Harbor City Blvd. Melbourne, FL 32935
Phone (321) 751-6088 Fax (321) 751-6089

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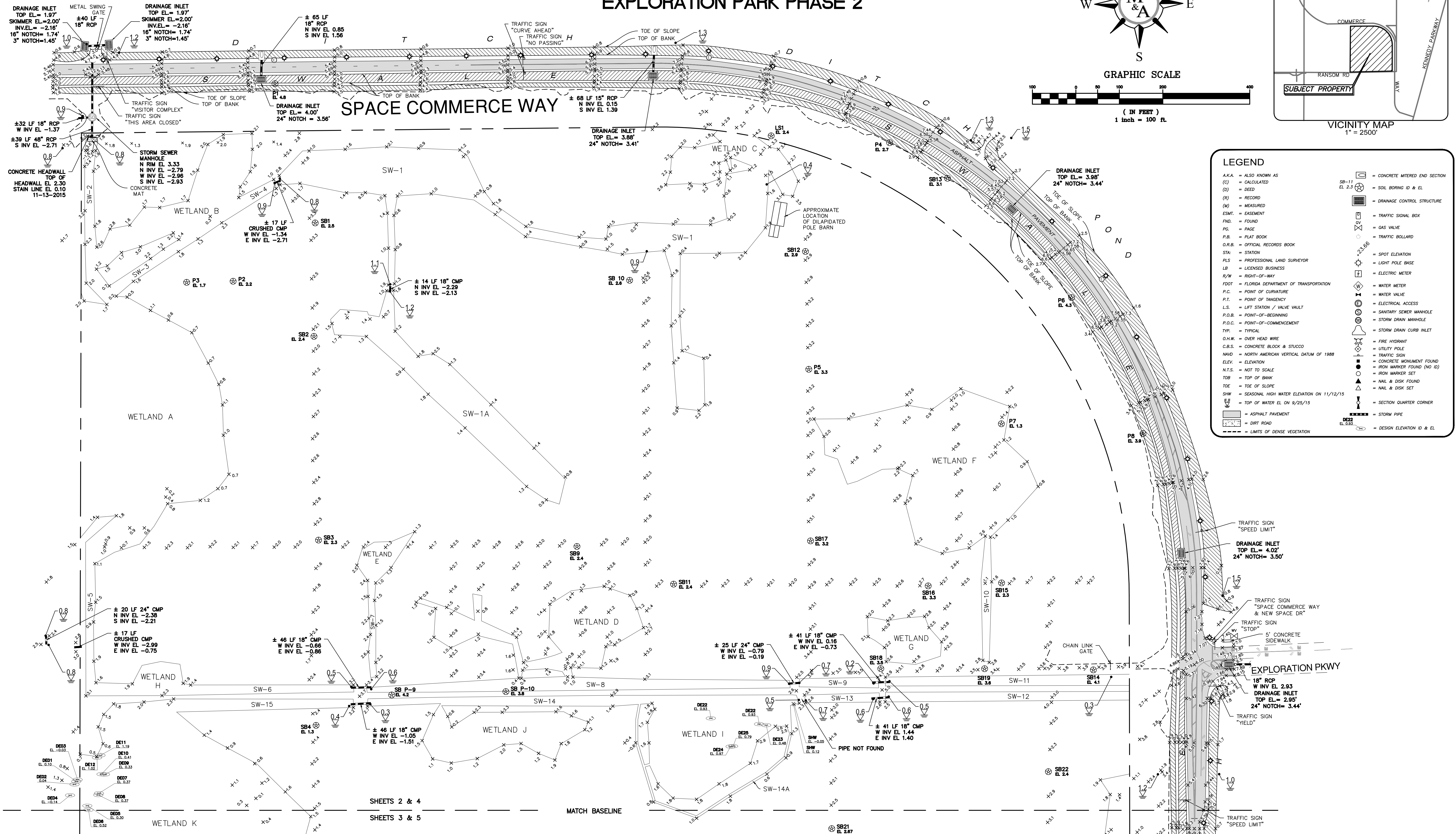
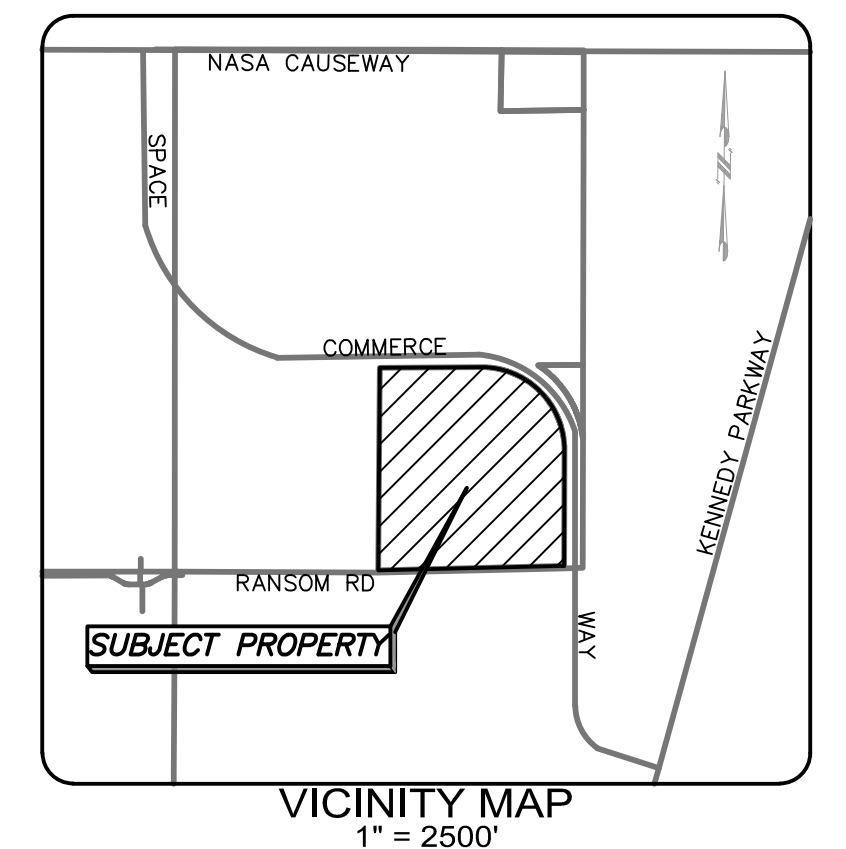
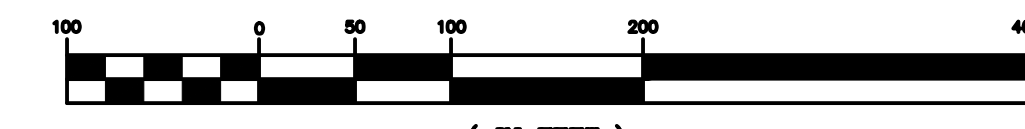
Christopher S. Bowers, Professional Land Surveyor & Mapper
Florida Certification No. 5990
Field Survey Date: 6/25/2015

Project #:	2015-43
Drawing #:	EXP-PARK
Scale:	Horiz. 1" = 200' Vert. N/A
Sheet	1 of 11

TOPOGRAPHIC-CORRIDOR SURVEY OF A PORTION OF TOWNSHIP 22 SOUTH, RANGE 36 EAST, SECTION 1 EXPLORATION PARK PHASE 2



GRAPHIC SCALE



LEGEND	
A.K.A.	= ALSO KNOWN AS
(C)	= CALCULATED
(D)	= DEAD
(R)	= RECORD
(M)	= MEASURED
ESMT.	= EASEMENT
FND.	= FOUND
P.C.	= PAGE
P.B.	= PLAT BOOK
O.R.B.	= OFFICIAL RECORDS BOOK
STA.	= STATION
PLS	= PROFESSIONAL LAND SURVEYOR
LB	= LICENSED BUSINESS
R/W	= RIGHT-OF-WAY
FDOT	= FLORIDA DEPARTMENT OF TRANSPORTATION
P.C.	= POINT OF CURVATURE
P.T.	= POINT OF TANGENCY
L.S.	= LIFT STATION / VALVE VAULT
P.O.B.	= POINT-OF-BEGINNING
P.O.C.	= POINT-OF-COMMENCEMENT
TYP.	= TYPICAL
O.H.W.	= OVER HEAD WIRE
C.B.S.	= CONCRETE BLOCK & STUCCO
NAVD	= NORTH AMERICAN VERTICAL DATUM OF 1988
ELEV.	= ELEVATION
N.T.S.	= NOT TO SCALE
TOB	= TOP OF BANK
TOE	= TOE OF SLOPE
SHW	= SEASONAL HIGH WATER ELEVATION ON 11/12/15
SW	= TOP OF WATER EL ON 9/25/15
ASPH	= ASPHALT PAVEMENT
DIRT	= DIRT ROAD
LDV	= LIMITS OF DENSE VEGETATION
SB-11 EL. 2.3	= CONCRETE MITERED END SECTION
SB-11 EL. 2.3	= SOIL BORING ID & EL
SB-11 EL. 2.3	= DRAINAGE CONTROL STRUCTURE
SB-11 EL. 2.3	= TRAFFIC SIGNAL BOX
SB-11 EL. 2.3	= GAS VALVE
SB-11 EL. 2.3	= TRAFFIC BOLLARD
SB-11 EL. 2.3	= SPOT ELEVATION
SB-11 EL. 2.3	= LIGHT POLE BASE
SB-11 EL. 2.3	= ELECTRIC METER
SB-11 EL. 2.3	= WATER METER
SB-11 EL. 2.3	= ELECTRICAL ACCESS
SB-11 EL. 2.3	= SANITARY SEWER MANHOLE
SB-11 EL. 2.3	= STORM DRAIN MANHOLE
SB-11 EL. 2.3	= STORM DRAIN CURB INLET
SB-11 EL. 2.3	= FIRE HYDRANT
SB-11 EL. 2.3	= UTILITY POLE
SB-11 EL. 2.3	= TRAFFIC SIGN
SB-11 EL. 2.3	= CONCRETE MONUMENT FOUND
SB-11 EL. 2.3	= IRON MARKER SET
SB-11 EL. 2.3	= NAIL & DISK FOUND
SB-11 EL. 2.3	= NAIL & DISK SET
SB-11 EL. 2.3	= SECTION QUARTER CORNER
SB-11 EL. 2.3	= STORM PIPE
SB-11 EL. 2.3	= DESIGN ELEVATION ID & EL

SHEETS 2 & 4
SHEETS 3 & 5
MATCH BASELINE

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Drawn:	DMP
Checked:	CSB
Date:	11/19/2015
Date:	11/19/2015

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Christopher S. Bowers, Professional Land Surveyor & Mapper
Florida Certification No. 5990

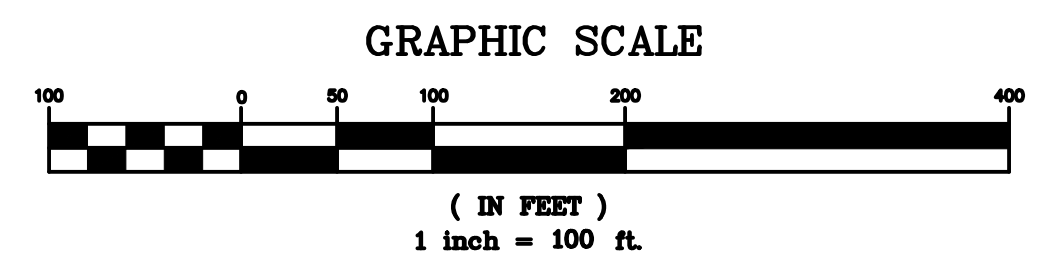
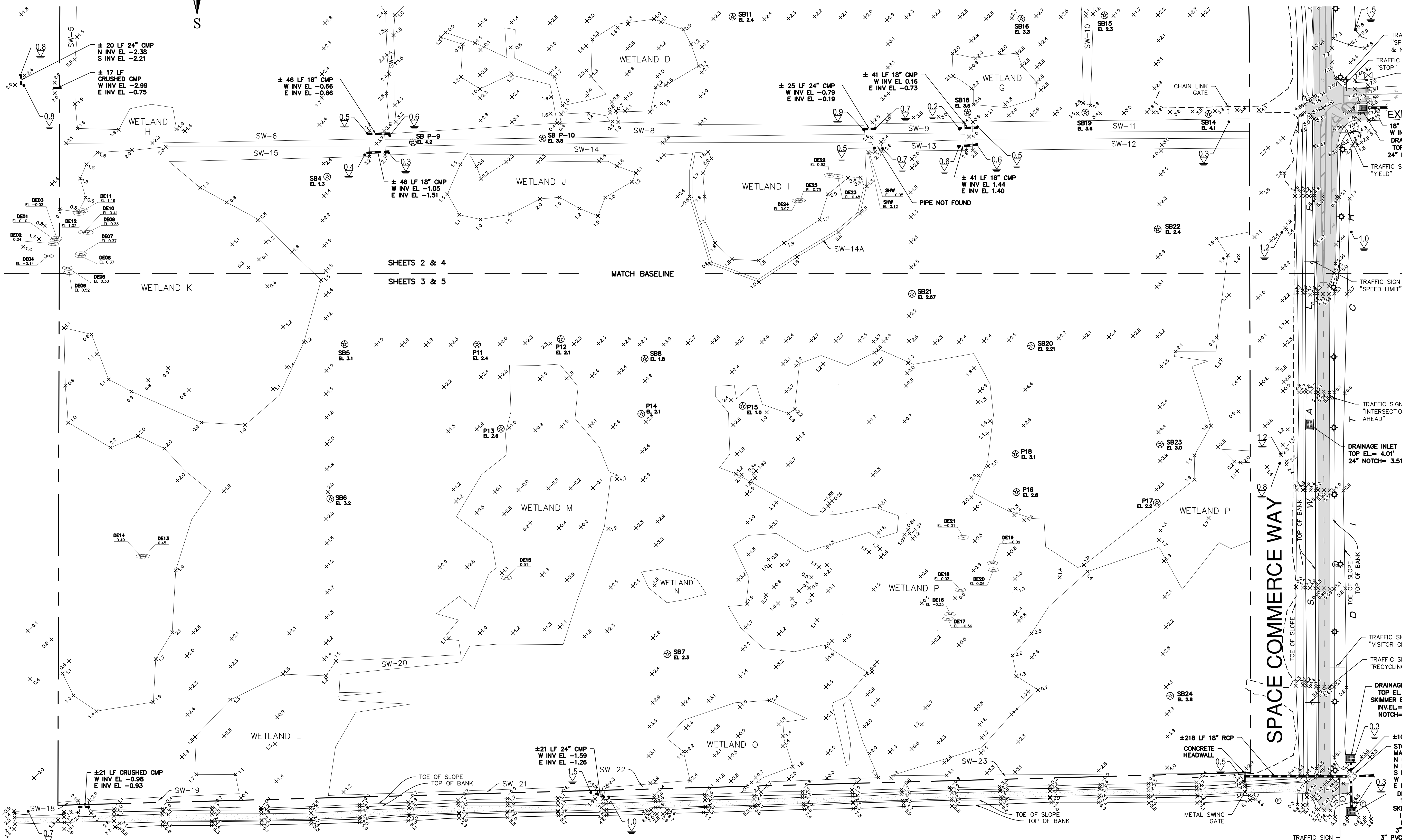
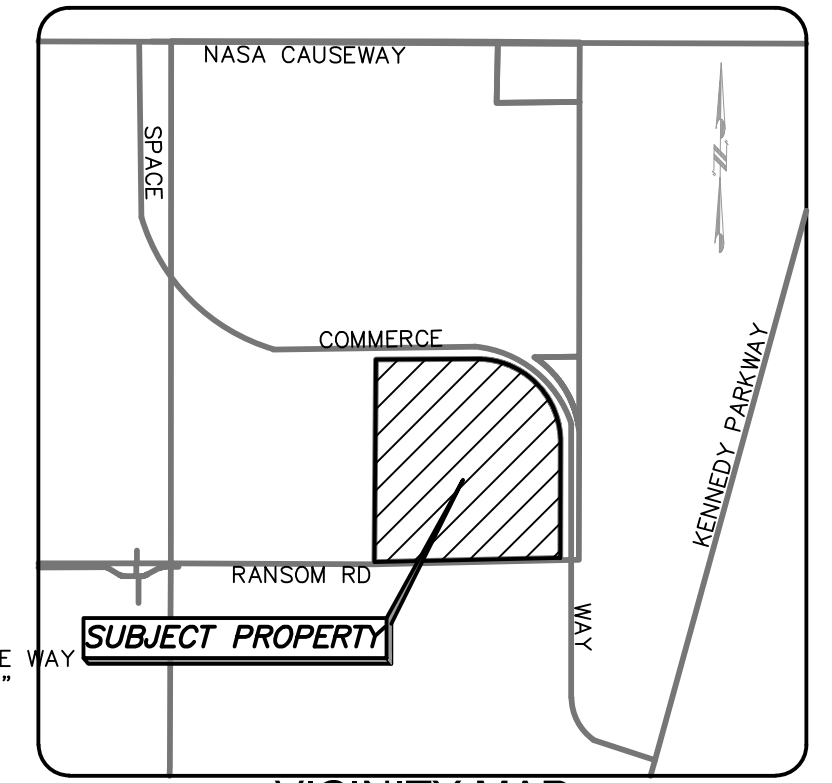
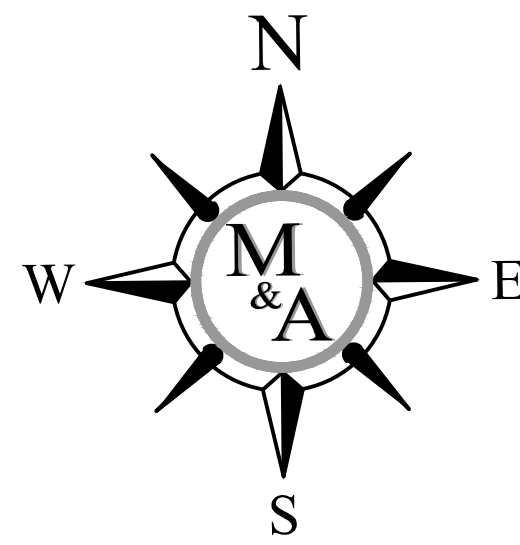
Field Survey Date: 6/25/2015

Project #: 2015-43
Drawing #: EXP-PARK
Scale:
Horiz. 1" = 100'
Vert. N/A
Sheet
2 of 11

TOPOGRAPHIC-CORRIDOR SURVEY

OF A PORTION OF TOWNSHIP 22 SOUTH, RANGE 36 EAST, SECTION 1

EXPLORATION PARK PHASE 2



LEGEND	
A.K.A. = ALSO KNOWN AS	CONCRETE MITERED END SECTION
(C) = CALCULATED	SOIL BORING ID & EL.
(D) = DEED	DRAINAGE CONTROL STRUCTURE
(R) = RECORD	TRAFFIC SIGNAL BOX
(M) = MEASURED	GAS VALVE
ESMT. = EASEMENT	TRAFFIC BOLLARD
FND. = FOUND	OFFICIAL RECORDS BOOK
PG. = PAGE	STATION
P.B. = PLAT BOOK	PROFESSIONAL LAND SURVEYOR
D.R.B. = OFFICIAL RECORDS BOOK	LICENSED BUSINESS
STA. = STATION	RIGHT-OF-WAY
P.L.S. = PROFESSIONAL LAND SURVEYOR	FLORIDA DEPARTMENT OF TRANSPORTATION
LB = LICENSED BUSINESS	POINT OF CURVATURE
R/W = RIGHT-OF-WAY	POINT OF TANGENCY
FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION	LIFT STATION / VALVE VAULT
P.C. = POINT OF CURVATURE	ELECTRICAL ACCESS
P.T. = POINT OF TANGENCY	SANITARY SEWER MANHOLE
L.S. = LIFT STATION / VALVE VAULT	STORM DRAIN MANHOLE
P.O.B. = POINT-OF-BEGINNING	STORM DRAIN CURB INLET
P.O.C. = POINT-OF-COMMENCEMENT	OVER HEAD WIRE
TRP. = TYPICAL	CONCRETE BLOCK & STUCCO
O.H.W. = OVER HEAD WIRE	NORTH AMERICAN VERTICAL DATUM OF 1988
C.B.S. = CONCRETE BLOCK & STUCCO	ELEVATION
NAVD = NORTH AMERICAN VERTICAL DATUM OF 1988	NOT TO SCALE
ELEV. = ELEVATION	TOE OF BANK
N.T.S. = NOT TO SCALE	TOE OF SLOPE
T.O.B. = TOP OF BANK	SEASONAL HIGH WATER ELEVATION ON 11/12/15
T.O.S. = TOE OF SLOPE	TOP OF WATER EL. ON 9/25/15
SHW = SEASONAL HIGH WATER ELEVATION ON 11/12/15	ASPHALT PAVEMENT
T.O.W. = TOP OF WATER EL. ON 9/25/15	DIRT ROAD
ASPH. = ASPHALT PAVEMENT	LIMITS OF DENSE VEGETATION
DIRT = DIRT ROAD	DESIGN ELEVATION ID & EL.
LIMITS OF DENSE VEGETATION	

RANSOM RD (UNIMPROVED R/W)

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Drawn: DMP	Date: 11/19/2015
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Christopher S. Bowers, Professional Land Surveyor & Mapper
Florida Certification No. 5990
Field Survey Date: 6/25/2015

Project #: 2015-43
Drawing #: EXP-PARK
Scale:
Horiz. 1" = 100'
Vert. N/A
Sheet
3 of 11

WETLANDS SURVEY

OF A PORTION OF TOWNSHIP 22 SOUTH, RANGE 36 EAST, SECTION 1 - EXPLORATION PARK PHASE 2

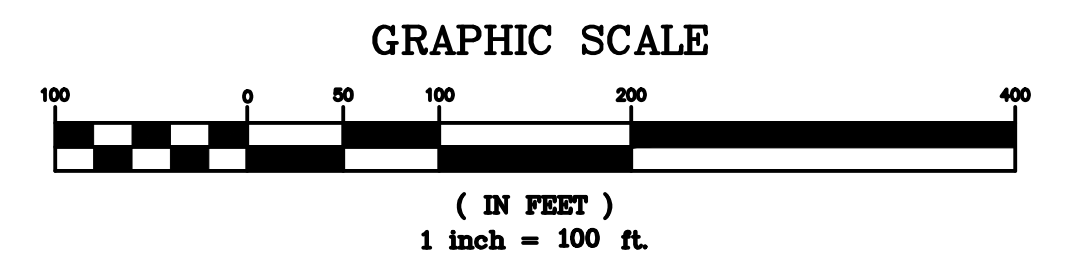
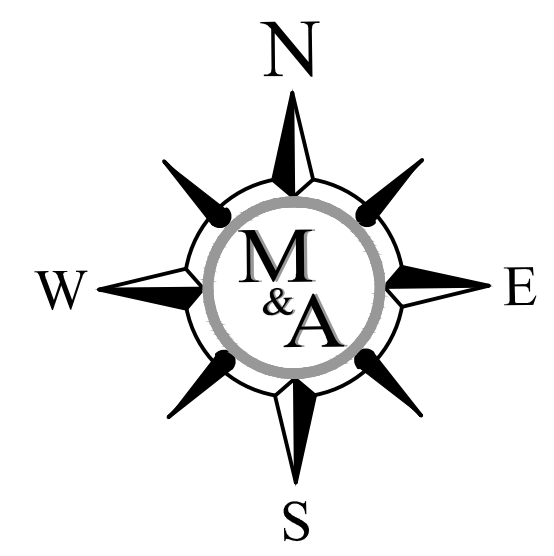
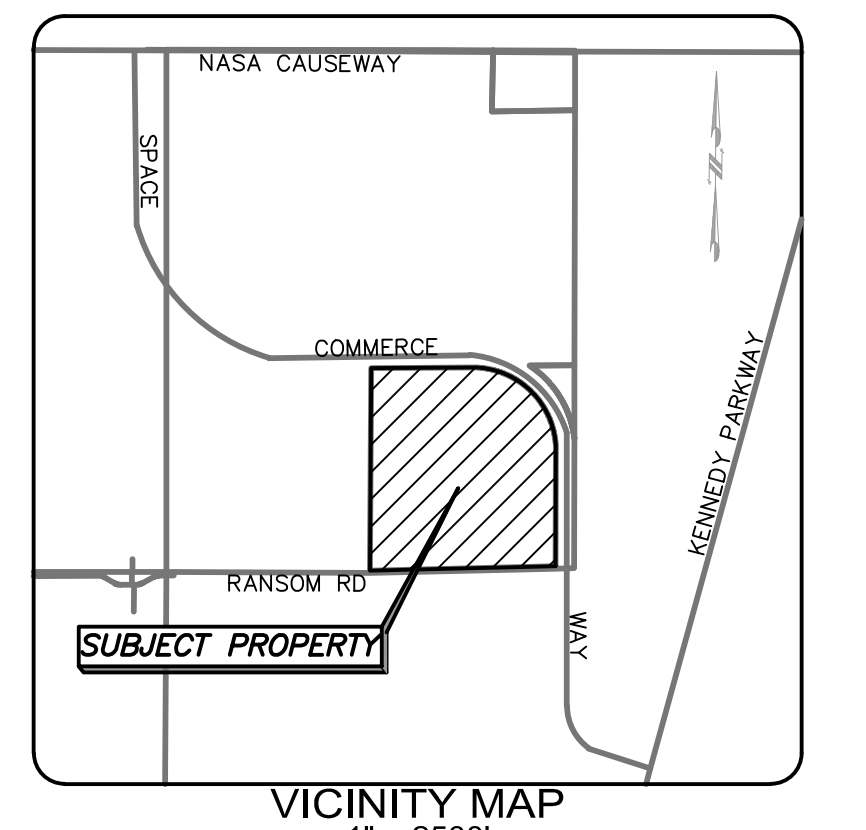
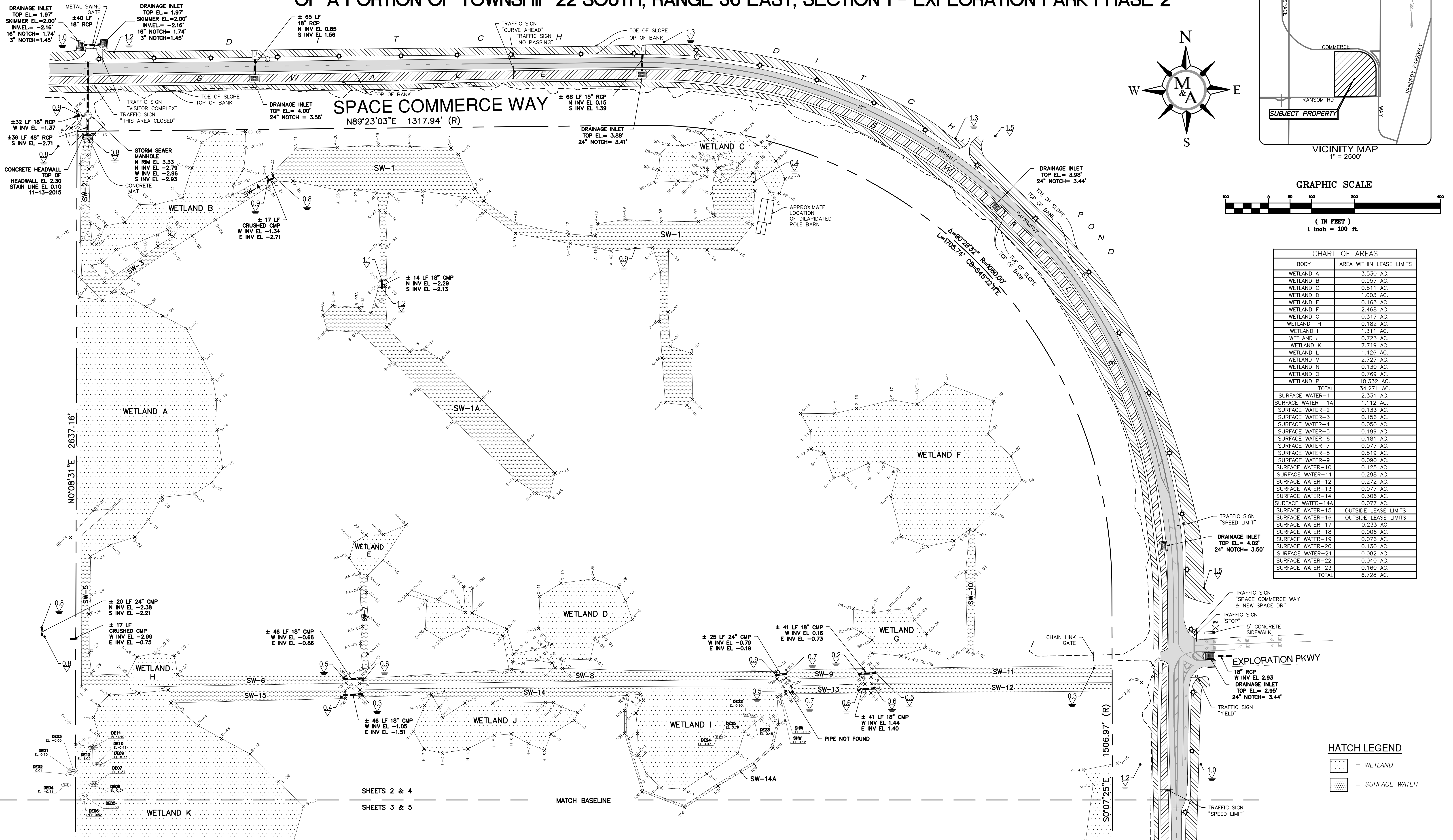


CHART OF AREAS	
BODY	AREA WITHIN LEASE LIMITS
WETLAND A	3.530 AC.
WETLAND B	0.957 AC.
WETLAND C	0.511 AC.
WETLAND D	1.003 AC.
WETLAND E	0.163 AC.
WETLAND F	2.468 AC.
WETLAND G	0.317 AC.
WETLAND H	0.182 AC.
WETLAND I	1.311 AC.
WETLAND J	0.723 AC.
WETLAND K	7.719 AC.
WETLAND L	1.426 AC.
WETLAND M	2.727 AC.
WETLAND N	0.130 AC.
WETLAND O	0.769 AC.
WETLAND P	10.332 AC.
TOTAL	34.271 AC.
SURFACE WATER-1	2.331 AC.
SURFACE WATER-1A	1.112 AC.
SURFACE WATER-2	0.133 AC.
SURFACE WATER-3	0.156 AC.
SURFACE WATER-4	0.050 AC.
SURFACE WATER-5	0.199 AC.
SURFACE WATER-6	0.181 AC.
SURFACE WATER-7	0.077 AC.
SURFACE WATER-8	0.519 AC.
SURFACE WATER-9	0.090 AC.
SURFACE WATER-10	0.125 AC.
SURFACE WATER-11	0.298 AC.
SURFACE WATER-12	0.272 AC.
SURFACE WATER-13	0.077 AC.
SURFACE WATER-14	0.306 AC.
SURFACE WATER-14A	0.077 AC.
SURFACE WATER-15	OUTSIDE LEASE LIMITS
SURFACE WATER-16	OUTSIDE LEASE LIMITS
SURFACE WATER-17	0.233 AC.
SURFACE WATER-18	0.006 AC.
SURFACE WATER-19	0.076 AC.
SURFACE WATER-20	0.130 AC.
SURFACE WATER-21	0.082 AC.
SURFACE WATER-22	0.040 AC.
SURFACE WATER-23	0.160 AC.
TOTAL	6.728 AC.

HATCH LEGEND

	= WETLAND
	= SURFACE WATER

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Revision	Drawn	Checked	Date
	DMP	CSB	11/19/2015

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Christopher S. Bowers, Professional Land Surveyor & Mapper
Florida Certification No. 5990
Field Survey Date: 6/25/2015

Project #: 2015-43
Drawing #: EXP-PARK
Scale:
Horiz. 1" = 100'
Vert. N/A
Sheet
4 of 11

WETLANDS SURVEY

OF A PORTION OF TOWNSHIP 22 SOUTH, RANGE 36 EAST, SECTION 1

EXPLORATION PARK PHASE 2

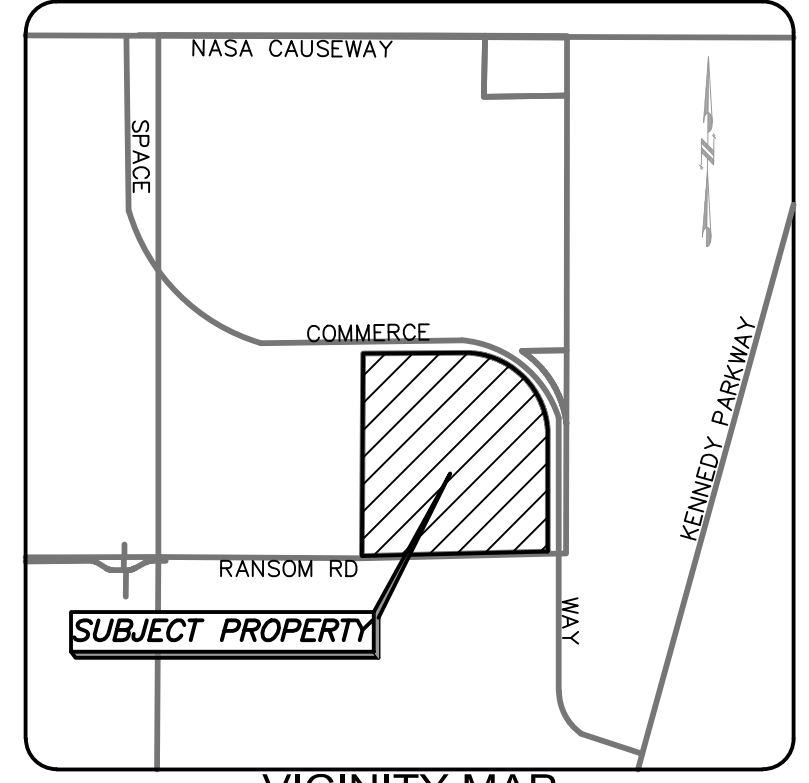
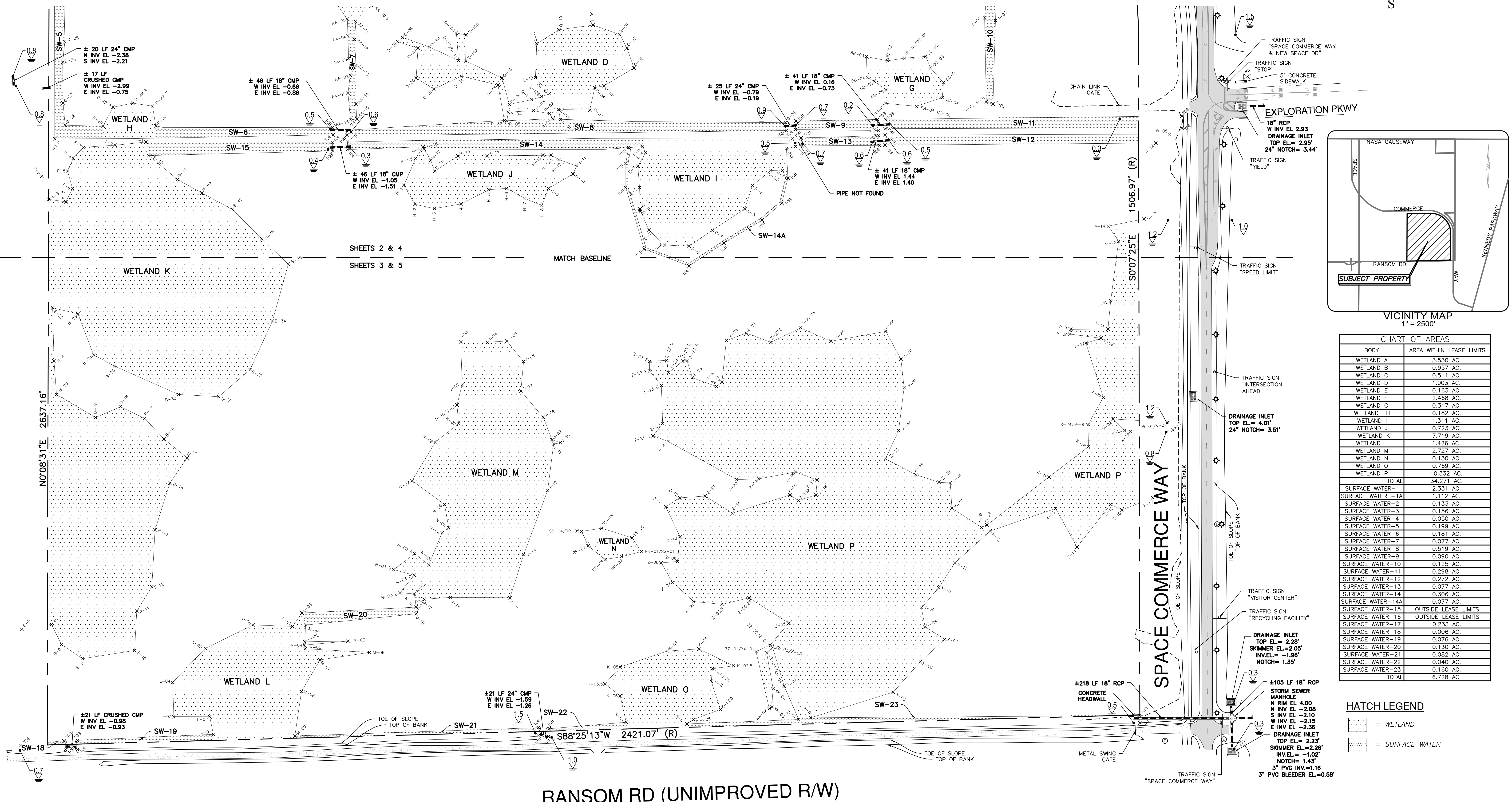
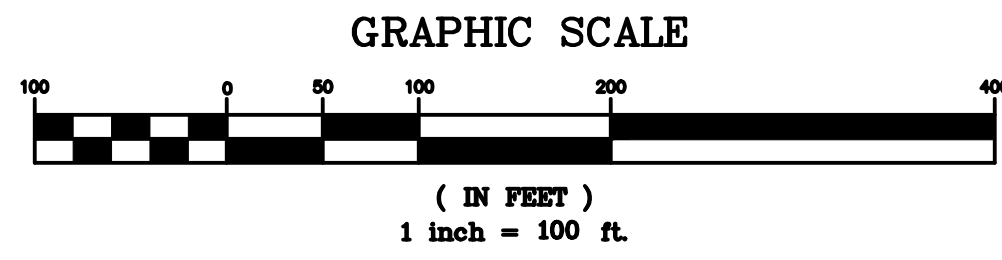
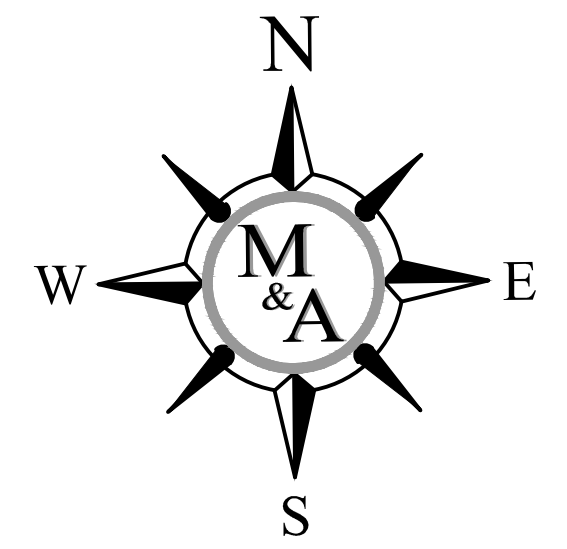


CHART OF AREAS

BODY	AREA WITHIN LEASE LIMITS
WETLAND A	3.530 AC.
WETLAND B	0.957 AC.
WETLAND C	0.511 AC.
WETLAND D	1.003 AC.
WETLAND E	0.163 AC.
WETLAND F	2.468 AC.
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WETLAND H	0.182 AC.
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SURFACE WATER-10	0.125 AC.
SURFACE WATER-11	0.298 AC.
SURFACE WATER-12	0.272 AC.
SURFACE WATER-13	0.077 AC.
SURFACE WATER-14	0.306 AC.
SURFACE WATER-14A	0.077 AC.
SURFACE WATER-15	OUTSIDE LEASE LIMITS
SURFACE WATER-16	OUTSIDE LEASE LIMITS
SURFACE WATER-17	0.233 AC.
SURFACE WATER-18	0.006 AC.
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SURFACE WATER-20	0.130 AC.
SURFACE WATER-21	0.082 AC.
SURFACE WATER-22	0.040 AC.
SURFACE WATER-23	0.160 AC.
TOTAL	6.728 AC.

HATCH LEGEND

	= WETLAND
	= SURFACE WATER

RANSOM RD (UNIMPROVED R/W)

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 Florida Certification No. 5990 Field Survey Date: 6/25/2015

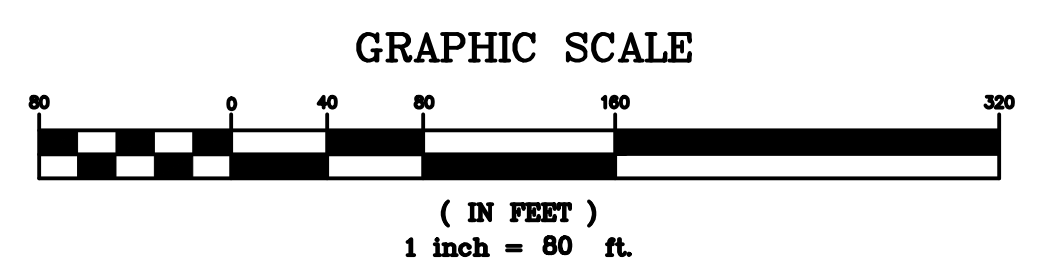
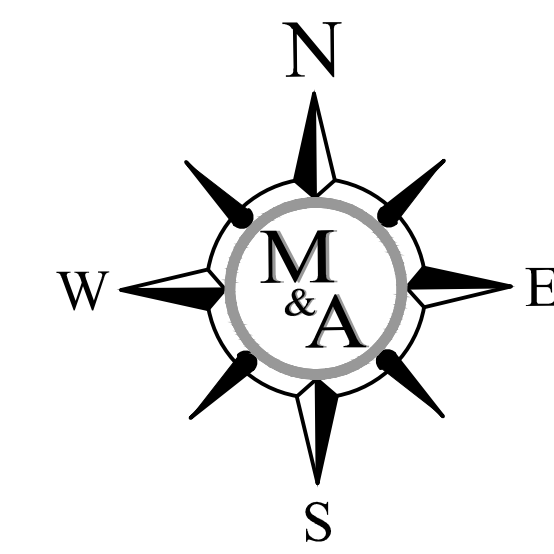
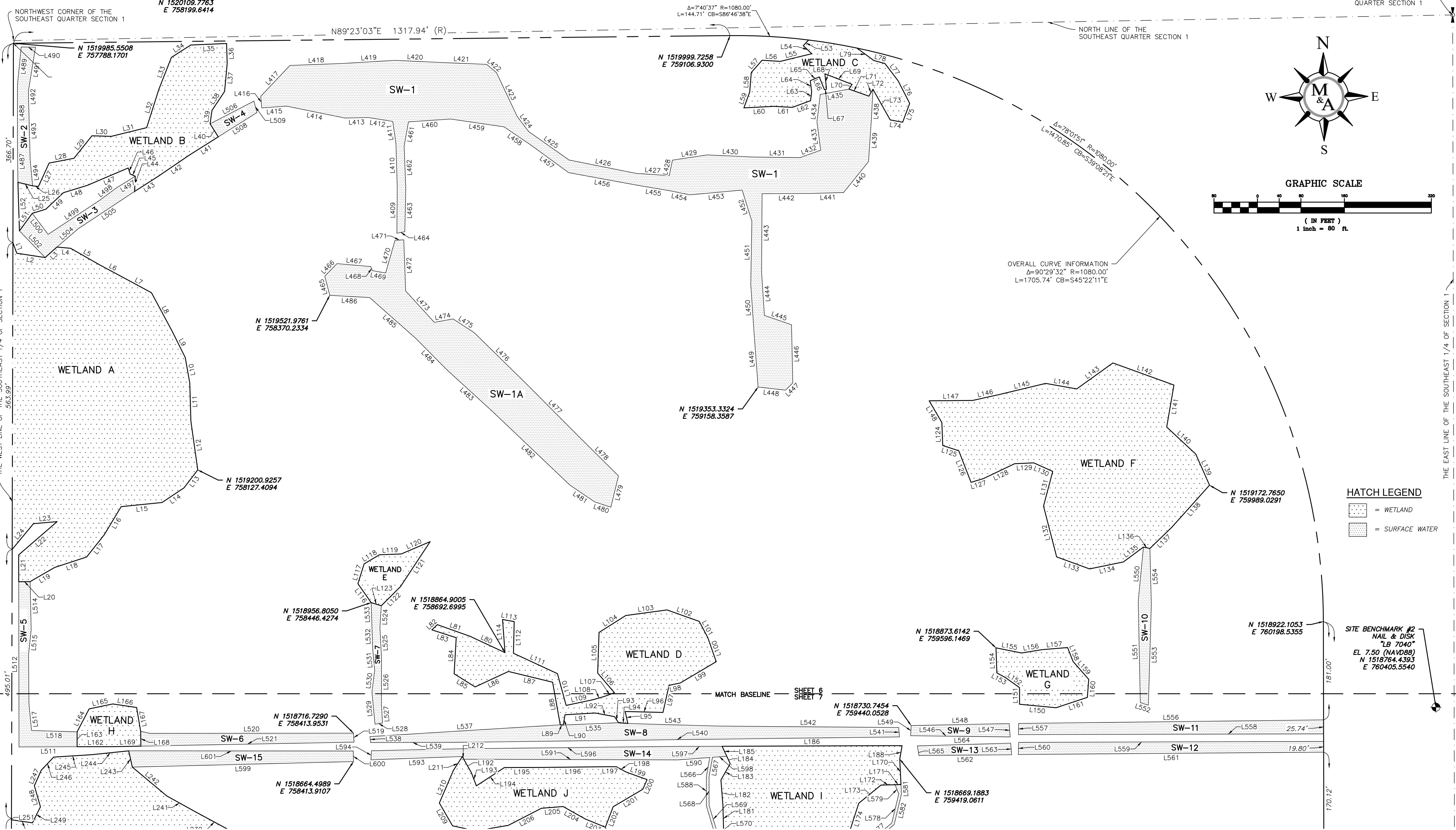
Project #: 2015-43
 Drawing #: EXP-PARK
 Scale:
 Horiz. 1" = 100'
 Vert. N/A
Sheet
 5 of 11

WETLANDS SURVEY

OF A PORTION OF TOWNSHIP 22 SOUTH, RANGE 36 EAST, SECTION 1 - EXPLORATION PARK PHASE 2

SITE BENCHMARK #1
NAIL & DISK "LB 7040"
EL. 4.05 (NAVD88)
N 1520109.7763
E 758199.6414

NORTHEAST CORNER
OF THE SOUTHEAST
QUARTER SECTION 1



HATCH LEGEND

	= WETLAND
	= SURFACE WATER

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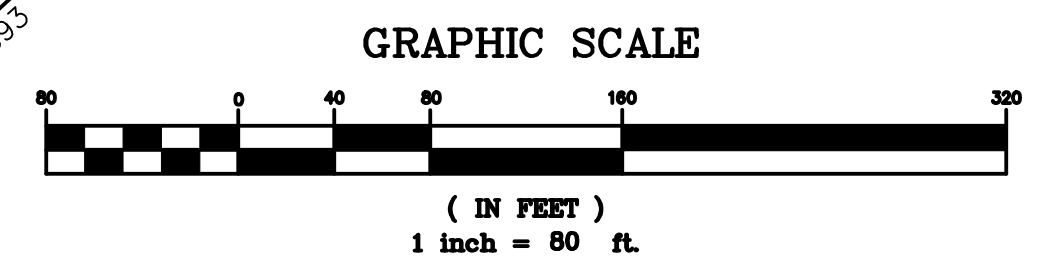
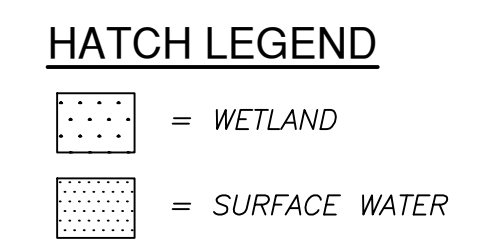
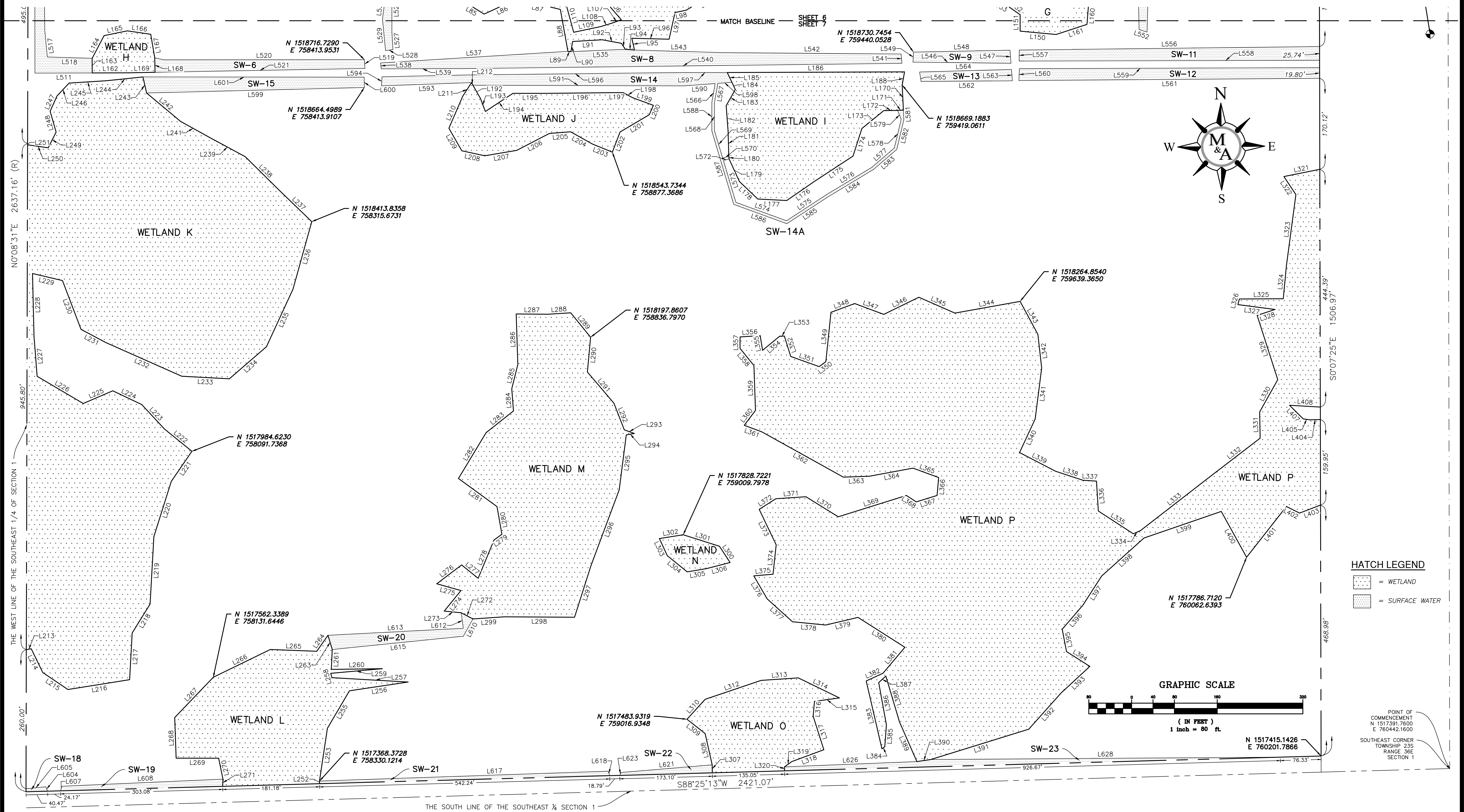
Christopher S. Bowers, Professional Land Surveyor & Mapper
Florida Certification No. 5990

Field Survey Date: 6/25/2015

Project #: 2015-43
Drawing #: EXP-PARK
Scale: Horiz. 1" = 80'
Vert. N/A
Sheet
6 of 11

WETLANDS SURVEY

OF A PORTION OF TOWNSHIP 22 SOUTH, RANGE 36 EAST, SECTION 1 - EXPLORATION PARK PHASE 2



POINT OF COMMENCEMENT
N 1517391.7600
E 760442.1600

SOUTHEAST CORNER
TOWNSHIP 22S
RANGE 36E
SECTION 1

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Revision	
Drawn: DMP	Date: 11/19/2015
Checked: CSB	Date: 11/19/2015

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BLUE ORIGIN FLORIDA, LLC.

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The Survey and this drawing have been prepared to conform with applicable Minimum Technical Standards as set forth by The Florida Board of Professional Surveyors and Mappers in Rule 53-17.051, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes. This Certification is a statement of professional opinion based on the surveyor's knowledge, information and belief, which is based on the existing field evidence and documentary evidence as provided to the surveyor and is not an expressed or implied warranty or guaranty.

Christopher S. Bowers, Professional Land Surveyor & Mapper
Florida Certification No. 5990

Field Survey Date: 6/25/2015

Project #: 2015-43
Drawing #: EXP-PARK
Scale:
Horiz. 1" = 80'
Vert. N/A
Sheet
7 of 11

WETLANDS SURVEY

OF A PORTION OF TOWNSHIP 22 SOUTH, RANGE 36 EAST, SECTION 1

EXPLORATION PARK PHASE 2

SURFACE WATER 1		
Line #	Length	Direction
L409	84.84	N0° 24' 01"E
L410	80.49	N1° 43' 19"W
L411	40.75	N8° 16' 52"W
L412	45.41	N81° 02' 31"W
L413	43.25	S88° 53' 52"W
L414	109.42	N78° 31' 29"W
L415	45.80	S86° 03' 05"W
L416	21.36	N5° 08' 43"W
L417	78.02	N43° 24' 17"E
L418	98.13	N87° 49' 39"E
L419	95.64	N86° 33' 24"E
L420	73.55	S87° 18' 16"E
L421	95.21	S87° 39' 01"E
L422	23.72	S49° 54' 42"E
L423	88.87	S25° 14' 02"E
L424	34.95	S37° 13' 38"E
L425	91.06	S54° 54' 23"E
L426	125.20	S78° 41' 08"E
L427	61.72	S85° 59' 17"E
L428	29.20	N11° 41' 54"E
L429	64.44	N81° 24' 28"E
L430	85.25	S87° 19' 25"E
L431	85.93	S89° 19' 54"E
L432	40.26	N70° 15' 23"E
L433	52.74	N7° 29' 49"W
L434	50.59	N6° 55' 55"E
L435	53.73	N79° 24' 40"E
L438	54.22	S2° 55' 14"W
L439	79.09	S3° 49' 15"W
L440	73.19	S38° 52' 40"W
L441	60.04	S88° 20' 08"W
L442	89.98	S89° 45' 45"W
L443	143.93	S0° 20' 45"W
L444	80.13	S3° 38' 16"E
L445	52.78	S71° 00' 09"E
L446	107.12	S1° 17' 40"E
L447	18.86	S45° 38' 08"W
L448	50.76	N83° 28' 27"W
L449	104.33	N4° 15' 09"W
L450	85.20	N3° 47' 30"W

SURFACE WATER 1		
Line #	Length	Direction
L451	115.87	N0° 56' 33"E
L452	60.02	N17° 15' 56"W
L453	96.92	S84° 49' 28"W
L454	35.28	N78° 17' 49"W
L455	62.18	N80° 24' 27"W
L456	129.14	N79° 35' 39"W
L457	86.31	N53° 50' 19"W
L458	59.16	N55° 51' 30"W
L459	99.31	N81° 37' 26"W
L460	77.85	S86° 10' 43"W
L461	45.45	S10° 07' 35"W
L462	78.68	S2° 11' 12"E
L463	78.81	S1° 19' 53"W
L464	14.71	S79° 41' 47"W

SURFACE WATER 2		
Line #	Length	Direction
L487	77.17	N0° 41' 18"W
L488	101.98	N0° 07' 23"E
L489	70.05	N5° 31' 34"E
L490	26.43	S89° 11' 52"E
L491	81.28	S9° 14' 28"W
L492	21.01	S0° 56' 37"E
L493	105.47	S1° 34' 28"E
L494	48.55	S5° 18' 20"E

SURFACE WATER 6		
Line #	Length	Direction
L519	16.58	S3° 35' 42"E
L520	374.64	N89° 56' 13"E
L521	392.30	S88° 56' 08"W

SURFACE WATER 10		
Line #	Length	Direction
L550	100.16	S5° 29' 52"W
L551	186.34	S1° 11' 24"E
L552	15.60	S71° 58' 34"E
L553	185.61	N1° 40' 40"E
L554	102.75	N1° 28' 28"W

SURFACE WATER 14A		
Line #	Length	Direction
L566	35.66	N10° 00' 00"E
L567	36.49	S10° 00' 00"W
L568	52.50	S0° 03' 31"E
L569	53.48	S16° 37' 00"E
L570	11.90	N73° 23' 00"E
L572	11.05	S73° 23' 00"W
L573	81.42	S16° 37' 00"E
L574	100.64	S70° 00' 00"E
L575	90.20	N56° 50' 20"E
L576	98.03	N58° 57' 50"E
L577	55.45	N49° 19' 44"E
L578	54.88	N13° 27' 34"E
L579	18.17	N21° 30' 21"W
L581	17.92	S2° 45' 09"E
L582	57.21	S13° 27' 34"W
L583	57.49	S49° 19' 44"W
L584	98.36	S58° 57' 50"W
L585	92.61	S56° 50' 20"W
L586	105.66	N70° 00' 00"W
L587	143.21	N16° 37' 00"W
L588	53.48	N0° 00' 00"E

SURFACE WATER 19		
Line #	Length	Direction
L607	8.80	N16° 44' 59"E
L608	301.21	N87° 27' 10"E

SURFACE WATER 20		
Line #	Length	Direction
L610	36.92	N29° 04' 02"E
L612	29.28	S8° 01' 09"E
L613	253.39	S87° 01' 53"W
L615	246.22	N84° 12' 29"E

SURFACE WATER 21		
Line #	Length	Direction
L617	539.79	N88° 02' 55"E
L618	8.72	S18° 22' 24"E

SURFACE WATER 22		
Line #	Length	Direction
L621	170.86	S85° 12' 34"W
L623	6.02	S25° 38' 49"W

SURFACE WATER 23		
Line #	Length	Direction
L626	247.67	N87° 44' 35"E
L628	652.97	N89° 36' 53"E

SURFACE WATER 1A		
Line #	Length	Direction
L465	36.38	N14° 33' 13"W
L466	32.11	N44° 13' 42"E
L467	62.47	S85° 13' 06"E
L468	8.00	S20° 00' 01"E
L469	25.00	S80° 11' 57"E
L470	62.26	N16° 03' 18"E
L471	16.08	N86° 14' 35"E
L472	94.11	S2° 09' 33"E
L473	78.25	S42° 26' 28"E
L474	35.01	N79° 44' 58"E
L475	45.96	S57° 11' 18"E
L476	132.17	S45° 34' 44"E
L477	140.79	S44° 51' 45"E
L478	101.33	S45° 12' 10"E
L479	59.25	S13° 34' 37"W
L480	31.49	N71° 44' 21"W
L481	54.91	N55° 56' 54"W
L482	195.26	N46° 26' 26"W
L483	114.97	N47° 32' 42"W
L484	81.08	N44° 45' 41"W
L485	113.49	N48° 31' 02"W
L486	73.57	N86° 47' 32"W

SURFACE WATER 3		
Line #	Length	Direction
L497	42.21	S58° 19' 21"W
L498	36.39	S53° 19' 44"W
L499	114.09	S56° 31' 42"W
L500	48.54	N37° 09' 47"W
L502	68.25	S43° 59' 42"E
L504	52.05	N49° 18' 43"E
L505	124.02	N56° 33' 04"E

SURFACE WATER 4		
Line #	Length	Direction
L506	90.76	S62° 40' 50"W
L508	84.08	N57° 52' 37"E
L509	21.79	N15° 09' 46"W

SURFACE WATER 5		
Line #	Length	Direction
L511	107.00	S89° 49' 12"W
L512	304.00	N0° 05' 58"W
L514	88.65	S1° 12' 16"E
L515	45.77	S6° 05' 15"W
L517	49.65	S5° 32' 42"E
L518	83.83	S88° 14' 52"E

SURFACE WATER 7		
Line #	Length	Direction
L524	39.79	S3° 45' 40"W
L525	57.73	S2° 56' 37"E
L526	85.47	S0° 06' 18"W
L527	32.92	S3° 34' 31"E
L528	14.02	S81° 17' 36"W
L529	59.25	N5° 29' 45"W
L530	40.37	N7° 08' 42"E
L531	37.62	N5° 17' 44"W
L532	50.27	N2° 00' 01"W
L533	36.76	N1° 56' 14"W

SURFACE WATER 8		
Line #	Length	Direction
L535	101.85	S87° 36' 02"W
L537	350.87	S86° 27' 16"W
L538	11.07	S6° 43' 22"E
L539	154.95	N89° 51' 29"E
L540	818.20	N89° 18' 18"E
L541	17.42	N5° 09' 38"W
L542	332.77	N89° 32' 42"W
L543	165.57	N88° 20' 49"W

SURFACE WATER 9		
Line #	Length	Direction
L546	183.19	S89° 17' 55"E
L547	24.59	N4° 30' 13"W
L548	180.38	S88° 52' 22"W
L549	18.75	S2° 45' 25"W

SURFACE WATER 11		
Line #	Length	Direction
L556	561.23	S89° 20' 00"W
L557	20.51	S0° 40' 46"W
L558	561.50	N89° 51' 59"E

SURFACE WATER 12		
Line #	Length	Direction
L559	561.09	S89° 48' 59"W
L560	22.38	S1° 54' 40"W
L561	561.90	N89° 33' 19"E

SURFACE WATER 13		
Line #	Length	Direction
L562	170.49	N89° 32' 55"E
L563	21.34	N4° 20' 35"W
L564	171.82	S88° 21' 52"W
L565	17.96	S9° 14' 44"E

SURFACE WATER 14		
Line #	Length	Direction
L590	58.93	S85° 47' 06"W
L591	393.76	N89° 50' 18"W
L593	168.35	S87° 54' 16"W
L594	16.89	N3° 09' 12"E
L596	400.10	N89° 21' 27"E
L597	83.68	N89° 56' 40"E
L598	26.34	S85° 47' 06"W

SURFACE WATER 15		
Line #	Length	Direction
L599	407.07	N88° 33' 55"E
L600	19.44	N1° 02' 19"W
L601	413.27	N89° 57' 32"W

SURFACE WATER 16
OFFSITE, SEE NOTE BELOW

SURFACE WATER 17
OFFSITE, SEE NOTE BELOW

SURFACE WATER 18		
Line #	Length	Direction
L604	8.87	N22° 17' 00"W
L605	37.26	S84° 21' 21"W

NOTE: SURFACE WATERS 16 AND 17 ARE COMPLETELY OFFSITE AND THUS EXCLUDED FROM THIS SURVEY.

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Revision	△		
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△			
Drawn:	DMP	Date:	11/19/2015
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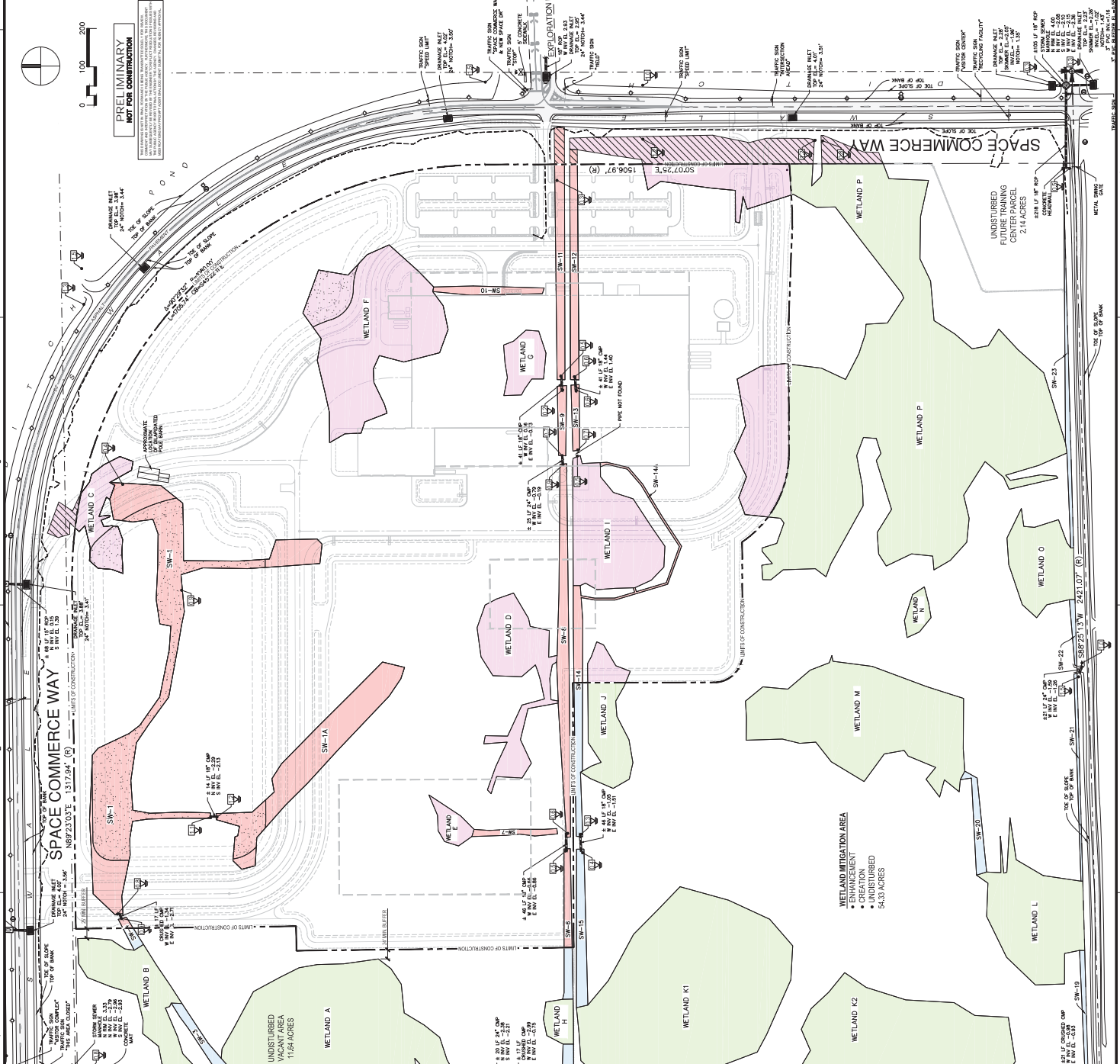
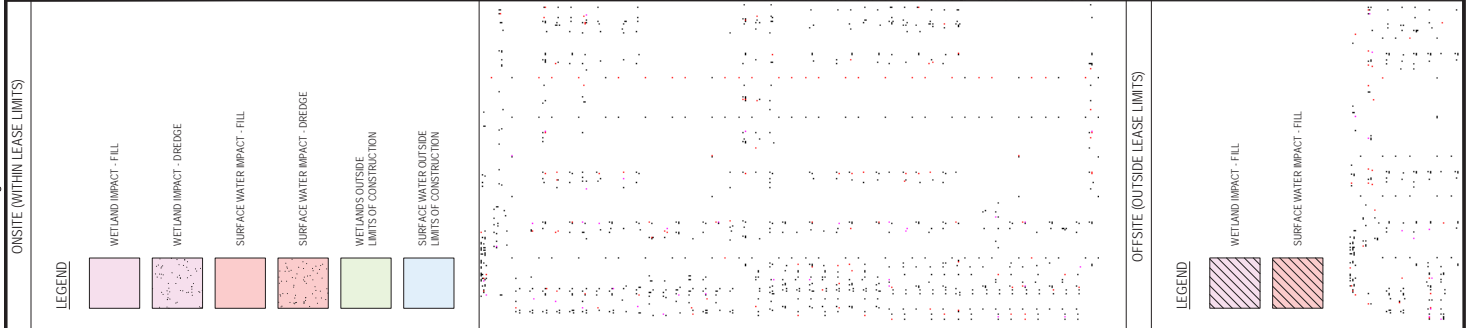
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Christopher S. Bowers, Professional Land Surveyor & Mapper
Florida Certification No. 5990

Field Survey Date: 6/25/2015

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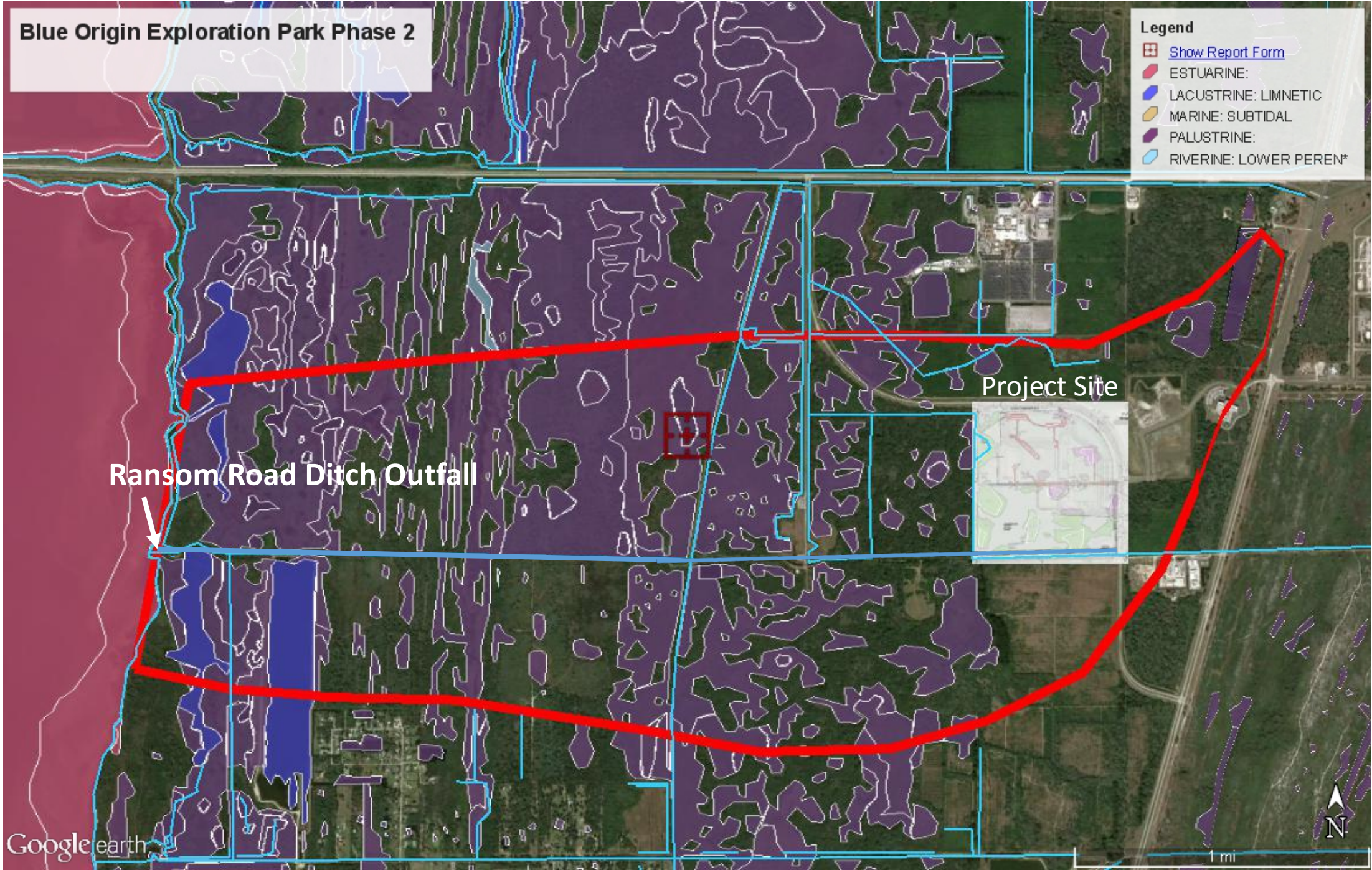
U.S. Army Corps of Engineers
Permit # SAJ-2015-02725
Date: 4/29/2016
Drawings 3 of 12
Attachment 1 of 5



Blue Origin Exploration Park Phase 2

Legend

- Show Report Form
- ESTUARINE:
- LACUSTRINE: LIMNETIC
- MARINE: SUBTIDAL
- PALUSTRINE:
- RIVERINE: LOWER PEREN*



Ransom Road Ditch Outfall

Project Site