



June 23, 2021

Lisa Prather
South Florida Water Management District
Orlando Service Center
1707 Orlando Central Parkway; Suite 200
Orlando, Florida 32809

Proj: Fontana; Osceola County, Florida
Sections 27, 28, 33, & 34, Township 26 South, Range 30 East
(BTC File # 494-25)
Re: Request for Additional Information;
Application No. 210308-5538

Dear Mrs. Prather:

We are corresponding in order to respond to the South Florida Water Management District's (SFWMD) April 6, 2021, letter to Mr. Jeffry Fuqua, of Fontana Lakes, LLC. The following questions and responses are in order to provide additional information:

ENVIRONMENTAL COMMENTS:

2. Please contact Lisa Prather, the environmental reviewer, at 407-858-6100 ext. 3818 to arrange a field inspection to verify the mitigation scoring. If changes are made during the inspection, a revised Section C will be required. [Section C, Form 62-330.060(1), F.A.C.]

A site inspection was conducted on April 28, 2021 between BTC staff (Butler) and SFWMD staff (Prather) to inspect those areas associated with Wetland 16 impacts and it's UMAM scores as these impacts were not part of the original Fontana Conceptual ERP.

However, based upon site plan revisions driven by FDEP's Division of State Lands (DSL) and the "Safe Upland Line" of 55.0 NGVD29 datum (54.0 NAVD88 datum), the highest regulated stage for Lake Tohopekaliga, the project's direct and secondary impacts have changed slightly. The modifications are based upon removal of direct impacts waterward of the SSL elevation.

Orlando: Main Office
3025 East South Street
Orlando, FL 32803

Vero Beach Office
4445 N A1A
Suite 221
Vero Beach, FL 32963

Jacksonville Office
1157 Beach Boulevard
Jacksonville Beach, FL 32250

Tampa Office
6011 Benjamin Road
Suite 101 B
Tampa, FL 33634

Key West Office
1107 Key Plaza
Suite 259
Key West, FL 33040

Aquatic & Land
Management Operations
3825 Rouse Road
Orlando, FL 32817

407.894.5969
877.894.5969
407.894.5970 fax

Orlando

Vero Beach

Jacksonville

Tampa

Key West

However, it should also be noted that as confirmed by FDEP DSL staff (Malloy, Woolam), the small, historically upland excavated “finger” that included portions waterward of the SSL elevation was determined by staff to NOT be considered as SSL. As such, impacts to this finger may be authorized by District staff.

Accordingly, please find attached the following documents which have been revised to reflect the site plan modifications per the above SSL elevations:

- Tables 1-3, Section E;
- Section C;
- UMAM Summary Worksheet; and,
- UMAM Parts I & II

Additionally, please find attached “Surface Water Impacts Key Map” and “Wetland Impact Key Map”; which are consistent with the above as well as the revised construction plans to be submitted by the project engineer.

Based on the above information, mitigation to offset the functional losses incurred via the project’s 40.699 acres of direct wetland impact that require mitigation and 1.90 acres of secondary impact consists of the purchase of off-site mitigation (functional gain) from an approved mitigation bank within the same drainage basin (Lake Tohopekaliga) as the project site. (Final mitigation will be discussed with and approved by District staff).

As detailed in the attached UMAM Summary, the project’s 40.699 acres of direct wetland/surface water impact and 1.90 acres of secondary impact account for a total of 24.33 units of functional loss (FL). As specified above, to offset these losses, a total of 24.33 units of functional gain (FG) will be purchased from an approved off-site mitigation bank within the same drainage basin (Lake Tohopekaliga) as the project site. As such, the purchase of 24.33 FG via UMAM mitigation credits offsets the 24.33 FL.

4. Staff has reviewed the UMAM tables provided. There are some minor rounding errors in the table that result in a minor change in the overall functional loss. The District calculates the loss to be 24.32 units. [Section 10.3, Vol. I]

Please find attached UMAM scores. If there are rounding differences based upon the District’s system, please let me know and I will modify BTC’s submitted UMAM scores to reflect the District’s scores.

Should you have any questions or require any additional information, please do not hesitate to contact our office at (407) 894-5969. Thank you.

Regards,



Stephen Butler
Project Manager



John Miklos
President

Attachments

TABLE 1. PROJECT WETLAND (WL) AND OTHER SURFACE WATER (SW) SUMMARY

WL & SW ID	WL & SW TYPE	WL & SW SIZE (acres)	WL & SW NOT IMPACTED (acres)	TEMPORARY WL & SW IMPACTS			PERMANENT WL & SW IMPACTS			MITIGATION ID
				WL & SW TYPE	IMPACT SIZE	IMPACT CODE	WL & SW TYPE	IMPACT SIZE (acres)	IMPACT CODE	
W-1	641	0.49	0.00				641	0.49	F	NR
W-2	640	0.86	0.00				640	0.86	F	M1
W-3	641	11.43	0.00				641	11.43	D/F	M1
W-4	630	1.75	0.00				630	1.75	F	M1
W-5	641	1.10	0.00				641	1.10	F	M1
W-6	641	1.66	0.00				641	1.66	D/F	M1
W-7	640	0.89	0.00				640	0.89	D/F	M1
W-8	641	1.45	0.00				641	1.45	F	M1
W-9	640	0.68	0.00				640	0.68	F	M1
W-10	640	0.84	0.00				640	0.84	D/F	M1
W-11	641	6.47	6.39				641	0.08	F	N/A
W-12	640	2.38	0.00				640	2.38	D/F	M1
W-13	641	4.83	0.00				641	4.83	D/F	M1
W-14	641	24.13	11.44				641	12.69	D/F	M1
W-15	619	5.12	5.12							N/A
PROJECT TOTALS										

Comments: FLUCFCS - Florida Land Use, Cover and Forms Classification System

CODES (multiple entries per cell not allowed):

Wetland Type: from an established wetland classification system (see Section E, 111b.)

Impact Type: D=dredge; F=fill; H=change hydrology; S=shading; C=clearing; O=other

FORM NUMBER 40C-4.900(1)

Reviewer: _____

TABLE 1. PROJECT WETLAND (WL) AND OTHER SURFACE WATER (SW) SUMMARY

WL & SW ID	WL & SW TYPE	WL & SW SIZE (acres)	WL & SW NOT IMPACTED (acres)	TEMPORARY WL & SW IMPACTS			PERMANENT WL & SW IMPACTS			MITIGATION ID
				WL & SW TYPE	IMPACT SIZE	IMPACT CODE	WL & SW TYPE	IMPACT SIZE (acres)	IMPACT CODE	
W-16	521	15.77	15.72				521	0.05	D/F	M1
SW-1	534	0.38	0.00				534	0.38	D/F	NR
SW-2	534	0.37	0.00				534	0.37	D/F	NR
D-1	510	0.22	0.00				510	0.22	D/F	NR
D-2	510	0.06	0.00				510	0.06	D/F	NR
D-3	510	3.15	0.00				510	3.15	D/F	NR
D-4	510	0.18	0.00				510	0.18	D/F	NR
D-5	510	0.12	0.00				510	0.12	D/F	NR
D-6	510	1.30	0.00				510	1.30	D/F	NR
D-7	510	0.38	0.00				510	0.38	D/F	NR
D-8	510	1.04	0.00				510	1.04	D/F	NR
D-9	510	1.05	0.00				510	1.05	D/F	NR
D-10	510	0.02	0.00				510	0.02	D/F	NR
D-11	510	0.47	0.00				510	0.47	D/F	NR
D-12	510	0.19	0.00				510	0.19	D/F	NR
PROJECT TOTALS										

Comments: FLUCFCS - Florida Land Use, Cover and Forms Classification System

CODES (multiple entries per cell not allowed):

Wetland Type: from an established wetland classification system (see Section E, 111b.)

Impact Type: D=dredge; F=fill; H=change hydrology; S=shading; C=clearing; O=other

FORM NUMBER 40C-4.900(1)

Reviewer: _____

TABLE 1. PROJECT WETLAND (WL) AND OTHER SURFACE WATER (SW) SUMMARY

WL & SW ID	WL & SW TYPE	WL & SW SIZE (acres)	WL & SW NOT IMPACTED (acres)	TEMPORARY WL & SW IMPACTS			PERMANENT WL & SW IMPACTS			MITIGATION ID
				WL & SW TYPE	IMPACT SIZE	IMPACT CODE	WL & SW TYPE	IMPACT SIZE (acres)	IMPACT CODE	
D-13	510	8.44	0.00				510	8.44	D/F	NR
D-14	510	0.16	0.00				510	0.16	D/F	NR
D-15	510	12.14	7.90				510	4.24	D/F	NR
D-16	510	3.08	0.71				510	2.37	D/F	NR
D-17	510	2.60	0.00				510	2.60	D/F	NR
PROJECT TOTALS		115.20	47.28					67.92		

Comments: FLUCFCS - Florida Land Use, Cover and Forms Classification System

115.20

CODES (multiple entries per cell not allowed):

Wetland Type: from an established wetland classification system (see Section E, 111b.)

Impact Type: D=dredge; F=fill; H=change hydrology; S=shading; C=clearing; O=other

FORM NUMBER 40C-4.900(1)

Reviewer: _____

TABLE 2: PROJECT ON-SITE MITIGATION SUMMARY

MITIGATION ID	CREATION		RESTORATION		ENHANCEMENT		WETLAND PRESERVATION		UPLAND PRESERVATION		OTHER	
	AREA	TARGET TYPE	AREA (acres)	TARGET TYPE	AREA	TARGET TYPE	AREA (acres)	TYPE	AREA	TARGET	AREA	TARGET
PROJECT TOTALS:	0		0		0		0		0		0	

Comments:

CODES (multiple entries per cell not allowed):

Target Type or Type = target or existing habitat type from an established wetland classification system or land use classification for non-wetland mitigation

Impact Type: D=dredge; F=fill; H=change hydrology; S=shading; C=clearing; O=other

FORM NUMBER 40C-4.900(1)

Reviewer: _____

TABLE 3: PROJECT OFF-SITE MITIGATION SUMMARY

MITIGATION ID	CREATION		RESTORATION		ENHANCEMENT		WETLAND PRESERVATION		UPLAND PRESERVATION		OTHER	
	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TARGET TYPE	AREA	TYPE	AREA	TARGET	AREA	TARGET
M1											24.33	CR*
PROJECT TOTALS:	0		0		0		0		0		24.33	

Comments: (*) TO BE PURCHASED FROM AN APPROVED MITIGATION BANK.

CODES (multiple entries per cell not allowed):

Target Type or Type = target or existing habitat type from an established wetland classification system or land use classification for non-wetland mitigation

Impact Type: D=dredge; F=fill; H=change hydrology; S=shading; C=clearing; O=other

FORM NUMBER 40C-4.900(1)

Reviewer: _____

SECTION C: SUPPLEMENTAL INFORMATION FOR WORKS OR OTHER ACTIVITIES IN, ON, OR OVER WETLANDS AND/OR OTHER SURFACE WATERS

(Note: This section is not required if all the proposed activities are covered in Section B.)

Instructions: This section is for ERP applications that do not involve activities associated with an individual single-family residence, duplex, triplex or quadruplex. For those activities, please use Section B. This form is to be completed if the proposed work or activity will occur in, on, over, or within 25 feet of a wetland or other surface water. The supplemental information required by this section is in addition to the information required by Section A of the ERP application.

PART 1: WETLAND OR OTHER SURFACE WATER IMPACT SUMMARY

1. Describe the basic purpose of the project or activity: **Construction of a stormwater management system to service a mixed use development, known as Fontana Lakes.**
2. Total area of work (dredging, filling, construction, alteration, or removal) in, on, or over wetlands or other surface waters: sq. ft.; **67.92 ac** ac.
3. Total volume of material in wetlands or other surface waters:
 - a. to be dredged: cubic yards,
 - b. to be filled: cubic yards.
4. Identify the seasonal high water level (SHWL) and wetland normal pool elevations for each wetland or surface water within the project site. For tidal wetlands and/or surface waters provide the elevation of mean high and mean low water. Include an aerial photograph showing the location of each sampling location, dates, datum, and methods used to determine these elevations. **TBD**
5. Name of waterbody(ies) (if applicable & if known) in which work will occur? **Friars Cove**
6. Is the activity proposed in an Outstanding Florida Water or Aquatic Preserve?
☐ yes, name: ☒ no ☐ I don't know
7. Has there ever been a formal or informal wetland determination for the project site? If yes, provide the identifying number and/ or a copy of the jurisdictional map. **Yes, 140507-7**
8. Provide a map(s) of the project area and vicinity delineating USDA/NRCS soil types. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE CONSTRAINTS ANALYSIS REPORT**
9. Provide recent aerials, legible for photointerpretation (no photocopies) with a scale of 1" = 400 ft, or more detailed, with project boundaries and wetland boundaries delineated on the aerial. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE CONSTRAINTS ANALYSIS REPORT**
10. Provide existing and proposed maps indicating vegetative community types based on Florida Land Use and Cover Classification System (FLUCCS) (FDOT 1999). For vegetated areas dominated by exotic vegetation, use the FLUCCS code representative of the native community type that was present prior to exotic infestation. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE CONSTRAINTS ANALYSIS REPORT**

11. Provide existing and proposed maps indicating vegetative community types based on the Florida Natural Areas Inventory Guide to the Natural Communities of Florida. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE CONSTRAINTS ANALYSIS REPORT**
12. Impact Summary Tables (located at the end of this section):
 - a. For all projects, complete Table 1, 2 and 3 as applicable. **SEE ATTACHED TABLES**
 - b. For shoreline stabilization projects, provide the information requested in Table 4. **NA**
13. Adjacent property owners. The following information is required only for projects proposed to occur in, on or over wetlands that need a federal dredge and fill permit and/or authorization to use state owned submerged lands and is not necessary when applying solely for an Environmental Resource Permit. If the activity is located on state owned submerged lands and requires a lease or easement, provide a list of names and addresses from the latest county tax assessment roll of all property owners located within a 500 ft. radius of the proposed lease or easement boundary in mailing label format, or you may elect to send notice to those persons by certified mail, with the return-receipt card addressed to the DEP or water management district, as applicable, in accordance with subsection 18-21.005(3), F.A.C., and Section 253.115, F.S. For projects that need a federal dredge and fill permit, please provide the names, addresses and zip codes of property owners whose property directly adjoins the project (excluding applicant). Attach additional sheets if necessary.

1.	2.
3.	4.
5.	6.

PART 2: ENVIRONMENTAL CONSIDERATIONS

Note: for many questions, a state rule/Applicant's Handbook Volume I (AH I) section is cited to assist the applicant in addressing these questions. However, additional Federal criteria may apply.

1. Elimination or Reduction of Impacts (Avoidance and Minimization). Describe measures taken to eliminate or reduce impacts to wetlands and other surface waters (*Refer to AH I Section 10.2.1*). **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE CONSTRAINTS ANALYSIS REPORT**
2. Fish, Wildlife, Listed Species and their Habitats. Provide results of any wildlife assessments that have been conducted on the project site and provide any comments pertaining to the project from the Florida Fish and Wildlife Conservation Commission and/or the U.S. Fish and Wildlife Service (*Refer to AH I Section 10.2.2*). **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE CONSTRAINTS ANALYSIS REPORT**

3. Water quantity impacts to wetlands and other surface waters (*Refer to AH I Section 10.2.2.4 and AH II*).
 - a. Does the activity include a proposed stormwater water management system with a control elevation different than the wetland normal pool elevation(s) of existing or proposed created wetlands or other surface waters? **NO**
 - b. If yes to (a), provide documentation (e.g. drawdown assessment or other methods) that shows the proposed surface water management system will not change the hydroperiod of the existing or created wetland or other surface water.
4. Public Interest Test. Please describe how the proposed activity will ***not be contrary*** to the public interest, OR if such an activity significantly degrades or is located within an Outstanding Florida Water (OFW), that the regulated activity will be ***clearly in*** the public interest (*Refer to AH I Section 10.2.3*).
 - a. Please describe how the project will be designed to avoid adverse affects to public health, safety, or the welfare or the property of others. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE CONSTRAINTS ANALYSIS REPORT**
 - b. Please describe how the project will be designed to avoid adverse affects to the conservation of fish and wildlife, including endangered or threatened species, or their habitats. **ALL REQUIRED STATE & FEDERAL WILDLIFE PERMITS TO BE OBTAINED AS APPLICABLE**
 - c. Please describe how the project will be designed to avoid adverse affects to navigation or the flow of water or cause harmful erosion or shoaling. **NA**
 - d. Please describe how the project will be designed to avoid adverse affects to the fishing or recreational values or marine productivity in the vicinity of the activity. **NA**
 - e. Will the project be of a temporary or permanent nature? **PERMANENT**
 - f. Please describe how the project will be designed to avoid adverse impacts to significant historical and archaeological resources, under the provisions of section 267.061, F.S. **NA**
 - g. Please describe how the project will be designed to avoid adverse affects to the current condition and relative value of functions being performed by areas affected by the proposed regulated activity. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE CONSTRAINTS ANALYSIS REPORT**
5. Water Quality. Provide a description of how water quality will be maintained in wetlands and other surface waters that will be preserved or will remain undisturbed, both on and offsite. Please address both short-term (such as during construction) and long-term water quality considerations (*Refer to AH I Section 10.2.4*). **SEE SUBMITTED STORMWATER PLANS**
6. Class II Waters; Waters approved for shellfish harvesting (*Refer to AH I Section 10.2.5*).
 - a. Will the project occur in Class II that are NOT approved for shellfish harvesting? If yes, please provide a plan or procedure detailing the measures to be taken to meet the requirements of *AH I Section 10.2.5(a)*. **NO**

- b. Is the project located adjacent to or in close proximity to Class II waters? If yes, please provide a plan or procedure detailing the measures to be taken to meet the requirements of *AH I Section 10.2.5(b)*. **NO**
 - c. Is the project located in Class II or Class III waters that are classified as “approved”, “restricted”, “conditionally approved”, or “conditionally restricted”? If yes, demonstrate that the project meets the requirements of *AH I Section 10.2.5(c)*. **NO**
7. Vertical seawalls. Are vertical seawalls proposed in an estuary or lagoon as part of the project? If yes, please describe how the project meets the requirements of *AH I Section 10.2.6*. **NO**
8. Secondary Impacts (*AH I Section 10.2.7*).
 - a. Will an upland buffer, with a minimum width of 15' and an average width of 25', be provided between the proposed activities and existing wetlands or wetlands to be preserved, enhanced, restored, or created? Provide the location and dimension of all buffers on the plans. If not, demonstrate that secondary impacts will not occur or how they will be offset. **SEE ATTACHED**
 - b. If listed species are present or may be present then coordination with wildlife agencies is needed. Have you coordinated with the FFWCC and/or USFWS? If so, please provide correspondence from the wildlife agencies indicating concurrence with the species management plan(s). **NA**
 - c. What measures will be taken to avoid impacts to wetland-dependent wildlife and/or listed species that use uplands for nesting or denning? **NO WETLAND-DEPENDENT LISTED SPECIES**
 - d. Describe whether there are any other relevant activities that are very closely linked and causally related to any proposed dredging or filling in wetlands or other surface waters that have the potential to cause impacts to significant historical and archaeological resources. **NONE**
 - e. Are there additional future phases or extensions of the proposed activities that are not shown? If yes, please describe. **NA**
9. Cumulative Impacts. Is the proposed mitigation located within the same drainage basin (*Refer to AH I Figures 10.2.8.1 – 10.2.8.5*) as the proposed wetland impacts? **YES** If not, please submit a Cumulative Impact Evaluation in accordance with *AH I Section 10.2.8*.
10. Mitigation Plan (*Refer to AH I Section 10.3*).
 - a. If a mitigation bank is proposed to offset wetland/other surface water impacts, provide:
 - i. the name of the bank: **TBD**. A letter of reservation from the banker will be required once the application has been evaluated.
 - ii. If the mitigation bank was assessed using UMAM, provide UMAM worksheets for impact area(s). If the bank was assessed using a method other than UMAM, then prepare the impact assessment using the same method. **SEE ATTACHED ENVIRONMENTAL ASSESSMENT/SITE CONSTRAINTS ANALYSIS REPORT**
 - b. If mitigation is proposed to offset wetland/other surface water impacts, please provide a mitigation plan that includes, at a minimum, the following:

- i. ☐ Proposed mitigation narrative:
 - (1) ☐ Describe the current and proposed condition for each type of mitigation component (restoration, enhancement, creation, preservation), including:
 - (a) ☐ Describe current and proposed vegetation
 - (b) ☐ Describe current and proposed hydrologic conditions for the proposed mitigation.
 - (c) ☐ Describe the soil types from NRCS maps and confirm if actual soil conditions appear to match.
 - (2) ☐ Provide details of the proposed construction/mitigation activities including phasing and timing, as appropriate.
 - (3) ☐ Identify measures that will be implemented during and after construction to avoid adverse impacts related to the proposed activities.
 - (4) ☐ A mitigation implementation and monitoring schedule with dates.
 - (5) ☐ Identify the success criteria.
 - (6) ☐ Describe the anticipated site conditions in and around the mitigation area after the mitigation plan is successfully implemented.
 - (7) ☐ Provide a comparison of current fish and wildlife habitat to expected habitat after the mitigation plan is successfully implemented.
- ii. ☐ Provide a Management Plan that includes, as appropriate, aspects of operation and maintenance, including water management practices, vegetation establishment, exotic and nuisance species control, fire management, and control of access.
- iii. ☐ Maps:
 - (1) ☐ Soil map (include soil names/codes, hydrologic soil groups and hydric soil types).
 - (2) ☐ Topographic map of the mitigation area and adjacent contributing and receiving areas.
 - (3) ☐ Hydrologic features map of the mitigation area and adjacent contributing and receiving areas.
 - (4) ☐ Vegetative communities map (using FLUCCS or other appropriate classification system).
 - (5) ☐ For all maps, identify source.
- iv. Provide the necessary supporting information for the application of sections 62-345.400 - .600 (Uniform Mitigation Assessment Method (UMAM)). To meet this requirement, submittal of UMAM worksheets is acceptable for impact and mitigation areas. **SEE ATTACHED**
- v. If onsite and/or offsite applicant-responsible mitigation is proposed, submit a draft Conservation Easement document or other form of restrictive covenant that provides for protection of the mitigation area in perpetuity. Standard forms, as described in subsection 62-330.301(6), F.A.C., are available from the Agency or on its website.
- vi. If onsite and/or offsite applicant-responsible mitigation is proposed, submit a cost estimate for completing the mitigation, including monitoring and maintenance.
- vii. If onsite and/or offsite applicant-responsible mitigation is proposed and the proposed mitigation exceeds \$25,000, please provide a draft financial assurance document. **N/A**

- viii. Identify the entity responsible for monitoring, maintenance and long-term stewardship of the mitigation area (i.e. the landowner or homeowner association, not the consultant or contractor that will do the work). **N/A**

PART 3: PLANS

PLANS: The information listed in the checklist below represent the typical information required on the submitted project plans. The Plans checklists in each application section are cumulative unless otherwise noted. Separate plans for each application section are not required.

1. ☒ Include the following on the construction plans and cross sections:
 - a. ☒ An Existing Conditions sheet showing the entire project and wetland/other surface water boundaries. Include the following: Acreage and type (herbaceous, forested or other surface water) of each wetland/other surface water.
 - b. ☒ A Proposed Conditions sheet showing the entire project and wetland/other surface water boundaries with construction plan overlay.
 - c. ☒ A Proposed Wetland Impact sheet that include the following:
 - i. ☒ Acreage and type (herbaceous, forested or other surface water) of each wetland/other surface water to be impacted.
 - ii. ☒ Proposed upland buffers with dimensions.
 - iii. ☐ Identify the seasonal high water and wetland normal pool elevations on the plans.
 - iv. ☐ Separately identify WMD/FDEP and USACE wetland/other surface water impacts if different.
 - d. ☐ Include wetland boundaries on all construction plan sheets.
2. ☐ If onsite and/or offsite applicant-responsible mitigation is proposed, submit mitigation permit plans and cross sections including, at a minimum:
 - a. ☐ existing conditions plan sheet identifying upland and wetland communities and acreage of each, topography, drainage patterns, and location of cross-section detail.
 - b. ☐ proposed conditions plan sheet identifying proposed improvements by type (restoration, enhancement, creation, preservation), acreage of each, topography, drainage patterns, and location of cross-section detail.
 - c. ☐ monitoring plan sheet including proposed improvements, monitoring transects, photostations, and mitigation signage (if applicable).
 - d. ☐ cross-section and/or profile detail(s) sheet(s) including representative section of each type of mitigation component. Include existing and proposed conditions and representative elevations.
 - e. ☐ planting schedule, plant species including common and scientific names divided into three sections (canopy, shrub, herbaceous) by mitigation component, quantity, spacing, size, and elevation range.

TABLE 1 - PROJECT WETLAND (WL) AND OTHER SURFACE WATER (SW) AND IMPACT SUMMARY

SEE ATTACHED TABLES WITHIN EA-ERP SUBMITTAL PACKAGE

WL & SW ID	UMAM ASSESSMENT AREA NAME(S)	WL & SW TYPE	WL & SW SIZE (acres)	WL & SW NOT IMPACTED (acres)	TEMPORARY WL & SW IMPACTS		PERMANENT WL & SW IMPACTS		MITIGATION ID
					IMPACT SIZE (acres)	IMPACT TYPE	IMPACT SIZE (acres)	IMPACT TYPE	
PROJECT TOTALS:									

Comments:

Codes (multiple entries per cell not allowed):

- Wetland & Surface Water ID: Include ID on submitted wetland and surface water impact maps
- Wetland Type: from an established wetland classification system

Form #62-330.060(1) - Joint Application for Environmental Resource Individual Permit/ Authorization to Use
State-Owned Submerged Lands/ Federal Dredge and Fill Permit
Incorporated by reference in subsection 62-330.060(1), F.A.C. (10-1-2013)

- Impact Type: D=dredge; F=fill; H=change hydrology; S=shading; C=clearing; O=other

TABLE 2 - PROJECT ON-SITE MITIGATION SUMMARY **SEE ATTACHED TABLES WITHIN EA-ERP SUBMITTAL PACKAGE**

MITIGATION ID	UMAM ASSESSMENT AREA NAME(S)	TARGET TYPE	CREATION	RESTORATION	ENHANCEMENT	WETLAND PRESERVE	UPLAND PRESERVE	OTHER
			AREA (acres)	AREA (acres)	AREA (acres)	AREA (acres)	AREA (acres)	AREA (acres)
PROJECT TOTALS								

COMMENTS:

Codes (multiple entries per cell not allowed):

- Target Type or Type=target or existing habitat type from an established wetland classification system or land use classification for non-wetland mitigation

TABLE 3 - PROJECT OFF-SITE MITIGATION SUMMARY **SEE ATTACHED TABLES WITHIN EA-ERP SUBMITTAL PACKAGE**

MITIGATION ID	UMAM ASSESSMENT AREA NAME(S)	TARGET TYPE	CREATION	RESTORATION	ENHANCEMENT	WETLAND PRESERVE	UPLAND PRESERVE	OTHER
			AREA (acres)	AREA (acres)	AREA (acres)	AREA (acres)	AREA (acres)	AREA (acres)
PROJECT TOTALS								

COMMENTS:

Codes (multiple entries per cell not allowed):

- Target Type or Type=target or existing habitat type from an established wetland classification system or land use classification for non-wetland mitigation

TABLE 4 - SHORELINE STABILIZATION

Stabilization	Linear Ft. New	Linear Ft. Replaced	Linear Ft. Repaired	Linear Ft. Removed	Slope H: V:	Toe Width (Ft.)
Natural Vegetation (living shoreline)					N/A	N/A
Rip Rap + Vegetation						
Rip Rap						
Seawall + Rip Rap						
Vertical Seawall						
Other Shoreline Stabilization Type						

Size of Rip Rap

Type of Rip Rap

Project: Fontana				Date: 06/23/21									
	Habitat Type	Location Landscape		Water Environment		Community Structure		Acres	UMAM Delta	Functional Units Lost	Total Impact Acres (D/S)	Wetland Preserve Provided	Upland Preserve Provided
		before	after	before	after	before	after						
											42.599	0	0
W-2	640	7	0	3	0	3	0	0.86	0.43	0.373	Total Functional Units Lost 24.33		Total Functional Units Gained 0.00
W-3	641	7	0	6	0	6	0	11.43	0.63	7.239			
W-4	630	7	0	3	0	3	0	1.75	0.43	0.758			
W-5	641	7	0	5	0	5	0	1.10	0.57	0.623			
W-6	641	7	0	5	0	5	0	1.66	0.57	0.941			
W-7	640	7	0	3	0	4	0	0.89	0.47	0.415			
W-8	641	7	0	3	0	4	0	1.45	0.47	0.677			
W-9	640	7	0	3	0	4	0	0.68	0.47	0.317			
W-10	641	7	0	4	0	4	0	0.84	0.50	0.420			
W-11	641	7	0	7	0	7	0	0.08	0.70	0.056			
W-12	640	7	0	5	0	5	0	2.38	0.57	1.349			
W-13	641	7	0	7	0	7	0	4.83	0.70	3.381			
W-14	641	7	0	5	0	6	0	12.69	0.60	7.614			
W-16	521	7	0	7	0	6	0	0.059	0.67	0.040			
W-4 (sec)	630	7	6	3	3	3	2	0.44	0.07	0.029			
W-11 (sec)	641	7	6	7	7	7	6	0.15	0.07	0.010			
W-14 (sec)	641	7	6	5	5	6	5	0.95	0.07	0.064			
W-16 (sec)	521	7	6	7	7	6	5	0.36	0.07	0.025			
										24.33			

Mitigation:								Time Lag	Risk Factor	Preservation Adjustment Factor	Relative Functional Gain	Acres Provided	Functional Units Gained
	Habitat Type	w/o CE	w/ CE	w/o CE	w/ CE	w/o CE	w/CE						
Wetland Preservation													
													0.000
Enhancement		before	after	before	after	before	after						
													0.00
Uplands		w/o CE	w/ CE	w/o CE	w/ CE	w/o CE	w/ CE						

[illegible]

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-2	
FLUCCs Code 640		Further classification (optional) Vegetated Non-Forested Wetlands		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 0.86	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands Small isolated non-forested wetland system. This system is located in the southern portion of the property and is surrounded by improved pasture. The Florida Turnpike is approximately 0.2 miles east of this system.					
Assessment area (AA) description A small mostly undisturbed non-forested wetland system dominated by native species with scattered nuisance and exotic species throughout. Observed vegetation includes smartweed, tropical soda apple, and dogfennel.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.			Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.		
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.			Mitigation for previous permit/other historic use None		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.)			Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog, cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark			Assessment date(s): 9/21/2017		

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-2
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current 7 with 0	AA is surrounded by improved pasture to the north, south, east, and west. The Florida Turnpike is located approximately 0.2 miles east of the AA.
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current 3 with 0	AA's hydrology barely sufficient to maintain community. Evidence of altered hydrologic regime. No direct hydrologic connection to on or off-site wetlands or lakes.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current 3 with 0	AA contains historic species appropriate for this type of system, however currently dominated by non-native species. Scattered N/E species were observed.

Score = sum of above scores/30 (if uplands, divide by 20)
w/o pres or current 0.43333333 with 0.00

Delta = [with current]
-0.4333

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres = 0.373

For mitigation assessment areas
RFG = delta/(t-factor x risk) =

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-3	
FLUCCs Code 641		Further classification (optional) Freshwater Marsh		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 11.43	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands Freshwater marsh wetland system (isolated) located in the southeast quadrant of the property and is adjacent to the Florida Turnpike. A ditch connects to the SW portion of this system. It is surrounded by improved pasture to the north, south, and west.					
Assessment area (AA) description A small mostly undisturbed freshwater marsh wetland system dominated by native species. It consists mostly of typical marsh vegetation but also has a wet prairie component around its periphery. The forested component of this system consists of loblolly bay, swamp bay, and camphor tree, with scattered blackgum throughout. Groundcover species include scattered beautyberry, tropical soda apple, Virginia chain fern, and Brazilian pepper. The herbaceous component of this system consists of little blue maidencane, spikerush, alligatorweed, pickerel weed, common sedges, carpetgrass, horned beakrush, smartweed, maidencane, rattlebox, and beakrush, with scattered salt bush and primrose willow throughout. The perimeter of this area consists of scattered blackgum.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.				Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.	
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.				Mitigation for previous permit/other historic use None	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.)				Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog, cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark				Assessment date(s): 9/6/2017	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-3
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current with 7 0	AA adjacent to improved pasture to the north, south, and west. The Florida Turnpike runs adjacent to AA's eastern boundary . A ditch connects to the SW portion of the system.
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current with 6 0	AA's hydrology sufficient to maintain community. Strong evidence of hydrologic regime.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 6 0	AA contains historic species appropriate for this type of system, and is dominated by native species. Scattered N/E species were observed.

Score = sum of above scores/30 (if uplands, divide by 20)
w/o pres or current with
0.63333333 0.00

If preservation as mitigation,	
Preservation adjustment factor =	
Adjusted mitigation delta =	

For impact assessment areas	
FL = delta x acres =	7.239

Delta = [with current]
-0.6333

If mitigation	
Time lag (t-factor) =	
Risk factor =	

For mitigation assessment areas	
RFG =	
delta/(t-factor x risk) =	

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-4	
FLUCCs Code 630		Further classification (optional) Mixed Forested Wetland		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 1.75	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands Mixed forested wetland system that is located along the northeast property boundary. This system is surrounded by improved pasture to the south and east. The system is a part of a larger forested wetland system that extends off-site to the north and west.					
Assessment area (AA) description An undisturbed mixed forested wetland system dominated by native species. The system is contiguous with an off-site forested wetland system that extends north and west of the property boundary. The most landward component of this system is a shrubby mixture of mesic and facultative-wet flora that transitions into an obligate and facultative-wet dominated canopy. The canopy of this system consists of scattered cypress, and its groundcover consists of dogfennel, blackberry, caesarweed, and chalky bluestem, with scattered camphor tree and Virginia chain fern throughout. Incorporated into agricultural operation					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.				Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.	
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.				Mitigation for previous permit/other historic use None	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.)				Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog, cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark				Assessment date(s): 9/6/2017	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-4
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current with 7 0	AA is contiguous with off-site forested wetland system located north and west of the property boundary. AA is surrounded by improved pasture to the south and east. The Florida Turnpike is approximately 0.1 miles east of the AA.
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current with 3 0	AA's hydrology barely sufficient to maintain community. Evidence of altered hydrologic regime. No direct hydrologic connection to on or off-site wetlands or lakes.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 3 0	AA contains historic species appropriate for this type of system, however due to agricultural operations, transitional and opportunistic species invading.

Score = sum of above scores/30 (if uplands, divide by 20)	
w/o pres or current	with
0.43333333	0.00

Delta = [with current]
-0.4333

If preservation as mitigation,	
Preservation adjustment factor =	
Adjusted mitigation delta =	

If mitigation	
Time lag (t-factor) =	
Risk factor =	

For impact assessment areas	
FL = delta x acres =	0.758

For mitigation assessment areas	
RFG =	
delta/(t-factor x risk) =	

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-5	
FLUCCs Code 641		Further classification (optional) Freshwater Marsh		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 1.10	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands Freshwater marsh wetland system located near the center of the property that is hydrologically connected to Lake Toho via extensive ditch system. This system is surrounded by improved pasture to the north, south, east, and west.					
Assessment area (AA) description A small disturbed freshwater marsh wetland system dominated by native species. This system is hydrologically connected to on-site wetlands (W-6 and W-8) to the northwest and southwest. Its hydrologic regime has been adversely impacted by drainage ditches. Typical marsh vegetation dominates the interior of this system but transitions into a wet prairie component around its periphery. The perimeter of this system consists of scattered cypress and Chinese tallowtree. Vegetation observed within this system includes common sedges, rattlebox, smartweed, goldenrod, and maidencane, with scattered pickerel weed throughout.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.				Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.	
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.				Mitigation for previous permit/other historic use None	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.)				Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog, cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark				Assessment date(s): 9/6/2017	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-5
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current with 7 0	AA is located near the center of the property and is surrounded by improved pasture. The AA is connected to ditches to the north and west. AA is hydrologically connected to on-site wetlands (W-6 and W-8).
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current with 5 0	
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 5 0	

Score = sum of above scores/30 (if uplands, divide by 20)	
w/o pres or current	with
0.56666667	0.00

If preservation as mitigation,	
Preservation adjustment factor =	
Adjusted mitigation delta =	

For impact assessment areas	
FL = delta x acres =	0.623

Delta = [with current]
-0.5667

If mitigation	
Time lag (t-factor) =	
Risk factor =	

For mitigation assessment areas	
RFG =	
delta/(t-factor x risk) =	

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-6	
FLUCCs Code 641		Further classification (optional) Freshwater Marsh		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 1.66	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands Freshwater marsh wetland system located near the center of the property that is hydrologically connected to Lake Toho via extensive ditch system. This system is surrounded by improved pasture to the north, south, and west. A ditch is located along the systems easternmost extent.					
Assessment area (AA) description A small disturbed freshwater marsh wetland system dominated by native species. The system is hydrologically connected to on-site wetlands (W-5 and W-8) to the south. Its hydrologic regime has been adversely impacted by drainage ditch. Typical marsh vegetation dominates the interior of this system but transitions into a wet prairie component around its periphery. Observed vegetation includes common sedges, smartweed, maidencane, and meadowbeauty, with scattered saltbush throughout.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.				Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.	
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.				Mitigation for previous permit/other historic use None	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.)				Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog, cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark				Assessment date(s): 9/6/2017	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-6
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current with 7 0	AA is located near the center of the property and is surrounded by improved pasture to the north, south, and west. A ditch is located along its eastern boundary. The AA is hydrologically connected to on-site wetlands (W-5 and W-8).
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current with 5 0	AA's hydrology sufficient to maintain community. Its hydrologic regime has been adversely impacted by ditches. Direct hydrologic connection to on-site wetlands (W-5 and W-8) via a ditch. Hydrologically connected to Lake Toho via extensive ditch system.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 5 0	AA contains historic species appropriate for this type of system, is dominated by native species with N/E species observed.

Score = sum of above scores/30 (if uplands, divide by 20)
w/o pres or current with
0.56666667 0.00

Delta = [with current]
-0.5667

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres = 0.941

For mitigation assessment areas
RFG =
delta/(t-factor x risk) =

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-7	
FLUCCs Code 640		Further classification (optional) Vegetated Non-Forested Wetland		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 0.89	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands Small vegetated non-forested wetland system located southwest of W-5. A ditch connects to the northern boundary of this system and it is surrounded by improved pasture. The ditch system itself outfalls directly into the property's surrounding canal system, eventually discharging to Lake Toho.					
Assessment area (AA) description A small mostly disturbed vegetated non-forested wetland system dominated by native species. Its hydrologic regime has been adversely impacted by ditch system. Observed vegetation includes carpetgrass, watergrass, common sedges, and smartweed.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.			Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.		
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.			Mitigation for previous permit/other historic use None		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.)			Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog, cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark			Assessment date(s): 9/6/2017		

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-7
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current with 7 0	AA is located southwest of W-5 and is surrounded by improved pasture. A ditch is located along the northern boundary of this system.
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current with 3 0	AA's hydrology sufficient to maintain community. However, its hydrologic regime has been adversely impacted by ditches which drain the system. Hydrologically connected to Lake Toho via extensive ditch system.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 4 0	AA contains historic species appropriate for this type of system, however dominated by non-native species with N/E species observed.

Score = sum of above scores/30 (if uplands, divide by 20)	
w/o pres or current	with
0.466666667	0.00

If preservation as mitigation,	
Preservation adjustment factor =	
Adjusted mitigation delta =	

For impact assessment areas	
FL = delta x acres =	0.415

Delta = [with current]
-0.4667

If mitigation	
Time lag (t-factor) =	
Risk factor =	

For mitigation assessment areas	
RFG =	
delta/(t-factor x risk) =	

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-8	
FLUCCs Code 641		Further classification (optional) Freshwater Marsh		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 1.45	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands Freshwater marsh wetland system located south of W-5. This system is hydrologically connected to Lake Toho via extensive ditch system.					
Assessment area (AA) description A small disturbed freshwater marsh wetland system dominated by native species. This system is hydrologically connected to on-site wetlands (W-5, W-6, and W-9) to the northwest, southwest, and southeast. Its hydrologic regime has been adversely impacted by ditch systems. This system is dominated by typical marsh vegetation. Observed vegetation includes common sedges, smartweed, carpetgrass, and beakrush, with scattered Chinese tallowtree and flatsedge along the perimeter.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.			Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.		
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.			Mitigation for previous permit/other historic use None		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.)			Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog, cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark			Assessment date(s): 9/6/2017		

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-8
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current 7 with 0	AA is located south of W-7 and is surrounded by improved pasture. The AA is connected to ditches to the north and south. The AA is hydrologically connected to on-site wetlands (W-5, W-6, and W-9).
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current 3 with 0	AA's hydrology sufficient to maintain community. Its hydrologic regime has been adversely impacted by ditches. Direct hydrologic connection to on-site wetlands (W-5, W-6, and W-9) via ditch system. Also hydrologically connected to Lake Toho via extensive ditch system.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current 4 with 0	AA contains historic species appropriate for this type of system, however dominated by non-native species with N/E species observed.

Score = sum of above scores/30 (if uplands, divide by 20)
w/o pres or current 0.46666667 with 0.00

Delta = [with current]
-0.4667

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres = 0.677

For mitigation assessment areas
RFG =
delta/(t-factor x risk) =

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-9	
FLUCCs Code 640		Further classification (optional) Vegetated Non-Forested Wetlands		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 0.68	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands Small vegetated non-forested wetland system located along the southern property boundary. This system is hydrologically connected to Lake Toho via extensive ditch system.					
Assessment area (AA) description A small mostly disturbed vegetated non-forested wetland system dominated by native species. This system is hydrologically connected to an on-site wetland (W-8) to the west-northwest. Its hydrologic regime has been adversely impacted by ditch system. Observed vegetation includes common sedges, flatsedge, smartweed, carpetgrass, beakrush, and black bindweed, with scattered Chinese tallowtree throughout.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.			Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.		
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.			Mitigation for previous permit/other historic use None		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.)			Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog, cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark			Assessment date(s): 9/6/2017		

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-9
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current 7 with 0	AA is located southwest of W-8 and is surrounded by improved pasture. Ditches are located along the eastern and western boundary of this system. The AA is hydrologically connected to an on-site wetland (W-8).
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current 3 with 0	AA's hydrology sufficient to maintain community. Its hydrologic regime has been adversely impacted by ditch systems. Direct hydrologic connection to W-8 via a ditch. Also hydrologically connected to Lake Toho via extensive ditch system.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current 4 with 0	AA contains historic species appropriate for this type of system, however dominated by non-native species with N/E species observed.

Score = sum of above scores/30 (if uplands, divide by 20)
w/o pres or current 0.46666667 with 0.00

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

For impact assessment areas
FL = delta x acres = 0.317

Delta = [with current]
-0.4667

If mitigation
Time lag (t-factor) =
Risk factor =

For mitigation assessment areas
RFG =
delta/(t-factor x risk) =

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-10	
FLUCCs Code 641		Further classification (optional) Vegetated Non-Forested Wetland		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 0.84	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands An herbaceous wetland system adjacent to the western property boundary. This system is hydrologically connected to Lake Toho via extensive ditch system.					
Assessment area (AA) description A disturbed herbaceous wetland system dominated by native species and opportunistic/transitional species. This system is hydrologically connected to on-site wetlands (W-11 and W-12) by a ditch system. Its hydrologic regime has been adversely impacted by ditch system. Observed vegetation includes common sedges, smartweed, maidencane, and meadowbeauty, with scattered Chinese tallow and saltbush throughout.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.			Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.		
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.			Mitigation for previous permit/other historic use None		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.)			Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog,cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark			Assessment date(s): 9/6/2017		

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-10
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current with 7 0	AA is located along the western boundary and is surrounded by improved pasture. A ditch is located along its western boundary. The AA is hydrologically connected to on-site wetlands (W-11 and W-12).
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current with 4 0	AA's hydrology sufficient to maintain community. Its hydrologic regime has been adversely impacted by ditch system. Direct hydrologic connection to on-site wetlands (W-11 and W-12) via a ditch. Hydrologically connected to Lake Toho via extensive ditch system. This ditch system significantly affects this wetland in an adverse manner via draining actions.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 4 0	AA contains historic species appropriate for this type of system, such as typical native species. However, a larger percentage of scattered N/E species were observed and portions this system are incorporated into the maintenance operations/agricultural grazing.

Score = sum of above scores/30 (if uplands, divide by 20)
w/o pres or current with
0.5 0.00

If preservation as mitigation,	
Preservation adjustment factor =	
Adjusted mitigation delta =	

For impact assessment areas	
FL = delta x acres =	0.420

Delta = [with current]
-0.5000

If mitigation	
Time lag (t-factor) =	
Risk factor =	

For mitigation assessment areas	
RFG =	
delta/(t-factor x risk) =	

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-11	
FLUCCs Code 641		Further classification (optional) Freshwater Marshes		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 0.08	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands A freshwater marsh wetland system located in the northwest quadrant of the property. This system is hydrologically connected to Lake Toho via extensive ditch system. It is surrounded by improved pasture.					
Assessment area (AA) description A small mostly disturbed freshwater marsh wetland system dominated by native species. This system is hydrologically connected to on-site wetlands (W-10 and W-12) by a ditch system. Its hydrologic regime has been adversely impacted by ditch system. Observed vegetation includes watergrass, maidencane, pickerel weed, smartweed, rattlebox, common sedges, spikerush, and Virginia chain fern, with a scattered canopy of wax myrtle, Chinese tallowtree, and black gum.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.				Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.	
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.				Mitigation for previous permit/other historic use None	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.). In particular, this system supports potential Sandhill Crane habitat.				Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog, cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark				Assessment date(s): 9/6/2017	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-11
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current with 7 0	AA is located in the northwest quadrant of the property and is surrounded by improved pasture. A ditch is located along the northern boundary of this system. The AA is hydrologically connected to on-site wetlands (W-10 and W-12).
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current with 7 0	AA's hydrology sufficient to maintain community. Its hydrologic regime has been adversely impacted by ditch system. Direct hydrologic connection to on-site wetlands (W-10 and W-12) via a ditch. Hydrologically connected to Lake Toho via extensive ditch system.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 7 0	AA contains historic species appropriate for this type of system, is dominated by native species as minimal N/E species observed.

Score = sum of above scores/30 (if uplands, divide by 20)	
w/o pres or current	with
0.7	0.00

If preservation as mitigation,	
Preservation adjustment factor =	
Adjusted mitigation delta =	

For impact assessment areas	
FL = delta x acres =	0.056

Delta = [with current]
-0.7000

If mitigation	
Time lag (t-factor) =	
Risk factor =	

For mitigation assessment areas	
RFG =	
delta/(t-factor x risk) =	

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-12	
FLUCCs Code 640		Further classification (optional) Vegetated Non-Forested Wetland		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 2.38	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands A vegetated non-forested wetland system adjacent to the western property boundary. This system is hydrologically connected to Lake Toho via extensive ditch system.					
Assessment area (AA) description A disturbed vegetated non-forested wetland system dominated by native species. This system is hydrologically connected to on-site wetlands (W-10 and W-11) by a ditch system. Its hydrologic regime has been adversely impacted by ditch system. Observed vegetation includes common sedges, maidencane, pickerel weed, duckpotato, torpedograss, watergrass, and smartweed.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.				Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.	
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.				Mitigation for previous permit/other historic use None	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.)				Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog,cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark				Assessment date(s): 9/6/2017	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-12
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current with 7 0	AA is located along the western boundary and is surrounded by improved pasture. A ditch is located along its western boundary. The AA is hydrologically connected to on-site wetlands (W-10 and W-11).
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current with 5 0	AA's hydrology sufficient to maintain community. Its hydrologic regime has been adversely impacted by ditch system. Direct hydrologic connection to on-site wetlands (W-10 and W-11) via a ditch. Hydrologically connected to Lake Toho via extensive ditch system.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 5 0	AA contains historic species appropriate for this type of system, and is dominated by native species. Scattered N/E species were observed.

Score = sum of above scores/30 (if uplands, divide by 20)
w/o pres or current with
0.56666667 0.00

Delta = [with current]
-0.5667

If preservation as mitigation,
Preservation adjustment factor =
Adjusted mitigation delta =

If mitigation
Time lag (t-factor) =
Risk factor =

For impact assessment areas
FL = delta x acres =
1.349

For mitigation assessment areas
RFG =
delta/(t-factor x risk) =

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-13	
FLUCCs Code 641		Further classification (optional) Fresh Water Marsh		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 4.83	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands An isolated fresh water marsh system located near the western property boundary. A ditch is located along the wetland's eastern boundary. This system is surrounded by improved pasture.					
Assessment area (AA) description An isolated freshwater marsh wetland system dominated by native species. Although there is a ditch along the wetland's eastern boundary, its impact to the wetland is not as evident when compared to the other systems on-site. Vegetation within the wetland consists of typical marsh flora which transitions into the adjacent pasture grass dominated uplands. Observed vegetation includes common sedges, smartweed, pickerel weed, duckpotato, beakrush, watergrass, spikerush, rattlebox, and buttonbush, with a perimeter of wax myrtle.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.				Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.	
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.				Mitigation for previous permit/other historic use None	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.). In particular, this system supports potential Sandhill Crane habitat.				Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog, cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark				Assessment date(s): 9/6/2017	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-13
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current 7 with 0	AA is located near the western boundary and is surrounded by improved pasture. A ditch is located along the wetland's eastern boundary.
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current 7 with 0	AA's hydrology sufficient to maintain community. Strong evidence of hydrologic regime. No direct hydrologic connection to on or off-site wetlands or lakes (isolated).
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current 7 with 0	AA contains historic species appropriate for this type of system, is dominated by native species as no N/E species observed.

Score = sum of above scores/30 (if uplands, divide by 20)
w/o pres or current 0.7 with 0.00

If preservation as mitigation,	
Preservation adjustment factor =	
Adjusted mitigation delta =	

For impact assessment areas	
FL = delta x acres =	3.381

Delta = [with current]
-0.7000

If mitigation	
Time lag (t-factor) =	
Risk factor =	

For mitigation assessment areas	
RFG =	
delta/(t-factor x risk) =	

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-14	
FLUCCs Code 640		Further classification (optional) Vegetated Non-Forested Wetland		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 12.69	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands A vegetated non-forested wetland system located along the southern and western boundary. Historically, it appears this wetland was contiguous to Friar's Cove but it has since been separated via the construction of Friar's Cove Road. This system is hydrologically connected to Lake Toho via underground piping.					
Assessment area (AA) description A large vegetated non-forested wetland system dominated by native species. It consists of a large wet prairie component around its periphery to the north but transitions from that mesic characteristic to obligate and facultative-wet vegetation to the south. Observed vegetation includes common sedges, beakrush, small riveted beakrush, knot root, maidencane, pickerel weed, meadow beautyberry, and chalky bluestem, with scattered primrose willow and rattlebox throughout.					
Significant nearby features A portion of Friar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.				Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.	
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.				Mitigation for previous permit/other historic use None	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.)				Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog, cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark				Assessment date(s): 9/6/2017	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-14
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support <table> <tr> <td>w/o pres or current</td> <td>with</td> </tr> <tr> <td>7</td> <td>0</td> </tr> </table>	w/o pres or current	with	7	0	AA is located along the southern and western boundary and is surrounded by improved pasture to the north, east, and west. Friar's Cove Road is adjacent to this system and runs directly parallel to its southern boundary. Ditches are located along the wetland's southern and eastern boundary.
w/o pres or current	with				
7	0				
.500 (6)(b) Water Environment (n/a for uplands) <table> <tr> <td>w/o pres or current</td> <td>with</td> </tr> <tr> <td>5</td> <td>0</td> </tr> </table>	w/o pres or current	with	5	0	AA's hydrology sufficient to maintain community. Its hydrologic regime has been adversely impacted by ditch systems and roadways. Hydrologically connected to Lake Toho via underground pipping.
w/o pres or current	with				
5	0				
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community <table> <tr> <td>w/o pres or current</td> <td>with</td> </tr> <tr> <td>6</td> <td>0</td> </tr> </table>	w/o pres or current	with	6	0	AA contains historic species appropriate for this type of system, and is dominated by native species. Scattered N/E species were observed.
w/o pres or current	with				
6	0				

Score = sum of above scores/30 (if uplands, divide by 20)	
w/o pres or current	with
0.6	0.00

If preservation as mitigation,	
Preservation adjustment factor =	
Adjusted mitigation delta =	

For impact assessment areas	
FL = delta x acres =	7.614

Delta = [with current]
-0.6000

If mitigation	
Time lag (t-factor) =	
Risk factor =	

For mitigation assessment areas	
RFG =	
delta/(t-factor x risk) =	

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-16	
FLUCCs Code 521		Further classification (optional) Friars Cove shoreline		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 0.059	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands A vegetated non-forested wetland system associated with the shoreline of Friars Cove/Lake Toho, located south of and adjacent to Friar's Cove Road.					
Assessment area (AA) description An aquatic wetland system with emergent vegetation dominated by native species, but containing nuisance/exotic species as well. Observed vegetation includes pickerelweed, arrowhead, cuban bulrush, cattail, soft rush, smartweed, marsh pennywort, watergrass, coinwort, spikerush, torpedo grass, and maidencane.					
Significant nearby features Associated with the shoreline of Firar's Cove, AA located along its northern edge. This cove is a part of the large Lake Tohopekaliga system.			Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.		
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.			Mitigation for previous permit/other historic use None		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include reptiles (moccasin, brown/green anoles, southern leopard frog, etc.) and assorted avian species (wading birds, raptor, songbird, etc.)			Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog,cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology, water quality, and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark			Assessment date(s): 9/6/2017		

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-16
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current with 7 0	AA is located along the shoreline of Friars Cove and is surrounded by improved pasture to the north and east. Friar's Cove Road is adjacent to this system to the north and runs directly parallel to its northern shoreline. Numerous discharges of surface water/ditches associated with the overall project's improved pastures outfall into the AA.
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current with 7 0	AA's hydrology sufficient to maintain community. Its hydrologic regime has been adversely impacted by ditch systems and roadways. Hydrologically connected to Lake Toho via underground pipping.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 6 0	AA contains historic species appropriate for this type of system, and is dominated by native species. Scattered N/E species were observed.

Score = sum of above scores/30 (if uplands, divide by 20)	
w/o pres or current	with
0.666666667	0.00

Delta = [with current]
-0.6667

If preservation as mitigation,	
Preservation adjustment factor =	
Adjusted mitigation delta =	

If mitigation	
Time lag (t-factor) =	
Risk factor =	

For impact assessment areas	
FL = delta x acres =	0.040

For mitigation assessment areas	
RFG =	
delta/(t-factor x risk) =	

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-4 (sec)	
FLUCCs Code 630		Further classification (optional) Mixed Forested Wetland		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 0.44	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands Mixed forested wetland system that is located along the northeast property boundary. This system is surrounded by improved pasture to the south and east. The system is a part of a larger forested wetland system that extends off-site to the north and west.					
Assessment area (AA) description An undisturbed mixed forested wetland system dominated by native species. The system is contiguous with an off-site forested wetland system that extends north and west of the property boundary. The most landward component of this system is a shrubby mixture of mesic and facultative-wet flora that transitions into an obligate and facultative-wet dominated canopy. The canopy of this system consists of scattered cypress, and its groundcover consists of dogfennel, blackberry, caesarweed, and chalky bluestem, with scattered camphor tree and Virginia chain fern throughout.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.				Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.	
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.				Mitigation for previous permit/other historic use None	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.)				Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog, cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark				Assessment date(s): 9/6/2017	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-4 (sec)
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current with 7 6	Minimal adverse impact to AA based on adjacent development.
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current with 3 3	No changes to AA based on adjacent development.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current with 3 2	Minimal adverse impact to AA based on adjacent development.

Score = sum of above scores/30 (if uplands, divide by 20)	
w/o pres or current	with
0.433333333	0.37

Delta = [with current]
-0.0667

If preservation as mitigation,	
Preservation adjustment factor =	
Adjusted mitigation delta =	

If mitigation	
Time lag (t-factor) =	
Risk factor =	

For impact assessment areas	
FL = delta x acres =	0.029

For mitigation assessment areas	
RFG =	
delta/(t-factor x risk) =	

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-11 (sec)	
FLUCCs Code 641		Further classification (optional) Freshwater Marshes		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 0.15	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands A freshwater marsh wetland system located in the northwest quadrant of the property. This system is hydrologically connected to Lake Toho via extensive ditch system. It is surrounded by improved pasture.					
Assessment area (AA) description A small mostly disturbed freshwater marsh wetland system dominated by native species. This system is hydrologically connected to on-site wetlands (W-10 and W-12) by a ditch system. Its hydrologic regime has been adversely impacted by ditch system. Observed vegetation includes watergrass, maidencane, pickerel weed, smartweed, rattlebox, common sedges, spikerush, and Virginia chain fern, with a scattered canopy of wax myrtle, Chinese tallowtree, and black gum.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.				Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.	
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.				Mitigation for previous permit/other historic use None	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.). In particular, this system supports potential Sandhill Crane habitat.				Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog,cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark				Assessment date(s): 9/6/2017	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-11 (sec)
Impact or Mitigation Impact	Assessment conducted by: Mrogan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current 7 with 6	Minimal adverse impact to AA based on adjacent development.
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current 7 with 7	No changes to AA based on adjacent development.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current 7 with 6	Minimal adverse impact to AA based on adjacent development.

Score = sum of above scores/30 (if uplands, divide by 20)
w/o pres or current 0.7 with 0.63

If preservation as mitigation,	
Preservation adjustment factor =	
Adjusted mitigation delta =	

For impact assessment areas	
FL = delta x acres =	0.010

Delta = [with current]
-0.0667

If mitigation	
Time lag (t-factor) =	
Risk factor =	

For mitigation assessment areas	
RFG =	
delta/(t-factor x risk) =	

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-14 (sec)	
FLUCCs Code 640		Further classification (optional) Vegetated Non-Forested Wetland		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 0.95	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands A vegetated non-forested wetland system located along the southern and western boundary. Historically, it appears this wetland was contiguous to Friar's Cove but it has sense been seperated via the construction of Friar's Cove Road. This system is hydrologically connected to Lake Toho via underground pipping.					
Assessment area (AA) description A large vegetated non-forested wetland system dominated by native species. It consists of a large wet prairie component around its periphery to the north but transitions from that mesic characteristic to obligate and facultative-wet vegetation to the south. Observed vegetation includes common sedges, beakrush, small riveted beakrush, knot root, maidencane, pickerel weed, meadow beautyberry, and chalky bluestem, with scattered primrose willow and rattlebox throughout.					
Significant nearby features A portion of Firar's Cove is located in the southwest corner. This cove is a part of the large Lake Tohopekaliga system.				Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.	
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.				Mitigation for previous permit/other historic use None	
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include small to large-sized mammals (opossum, squirrels, deer, etc); reptiles (black racer, rattlesnake, moccasin, brown/green anoles, southern leopard frog, etc.); and assorted avian species (wading birds, raptor, songbird, etc.)				Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)	
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog,cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark				Assessment date(s): 9/6/2017	

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-14 (sec)
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current 7 with 6	Minimal adverse impact to AA based on adjacent development.
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current 5 with 5	No changes to AA based on adjacent development.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current 6 with 5	Minimal adverse impact to AA based on adjacent development.

Score = sum of above scores/30 (if uplands, divide by 20)
w/o pres or current 0.6 with 0.53

If preservation as mitigation,	
Preservation adjustment factor =	
Adjusted mitigation delta =	

For impact assessment areas	
FL = delta x acres =	0.064

Delta = [with current]
-0.0667

If mitigation	
Time lag (t-factor) =	
Risk factor =	

For mitigation assessment areas	
RFG =	
delta/(t-factor x risk) =	

PART I - QUALITATIVE DESCRIPTION
(See Section 62-345.400, F.A.C.)

Site/Project Name Fontana		Application Number 180510-569		Assessment Area Name or Number W-16 (sec)	
FLUCCs Code 521		Further classification (optional) Friars Cove shoreline		Impact or Mitigation Site Impact	
				Assessment Area Size (acres) 0.360	
Basin/Watershed Name/Number Lake Tohopekaliga		Affected Waterbody (class) N/A		Special Classification (i.e. OFW, AP, other local/state/federal designation of importance) N/A	
Geographic relationship to and hydrologic connection with wetlands, other surface waters, uplands A vegetated non-forested wetland system associated with the shoreline of Friars Cove/Lake Toho, located south of and adjacent to Friar's Cove Road.					
Assessment area (AA) description An aquatic wetland system with emergent vegetation dominated by native species, but containing nuisance/exotic species as well. Observed vegetation includes pickerelweed, arrowhead, cuban bulrush, cattail, soft rush, smartweed, marsh pennywort, watergrass, coinwort, spikerush, torpedo grass, and maidencane.					
Significant nearby features Associated with the shoreline of Firar's Cove, AA located along its northern edge. This cove is a part of the large Lake Tohopekaliga system.			Uniqueness (considering the relative rarity in relation to the regional landscape) Wetland ecosystem is common.		
Functions Functions provided include suitable wildlife habitat (foraging, nesting, protection, etc.) for some species, particularly aquatic & wetland dependent species; provides some water quality and storage.			Mitigation for previous permit/other historic use None		
Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found) Based on location, anticipated wildlife to include reptiles (moccasin, brown/green anoles, southern leopard frog, etc.) and assorted avian species (wading birds, raptor, songbird, etc.)			Anticipated Utilization by Listed Species (List species, their legal classification (E,T, SSC), type of use, and intensity of use of the assessment area) Wading birds (E,T,SSC), raptors (T,SSC), reptiles (T), mammals (SSC)		
Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings nests, etc.): brown anole, black racer, green anole, leopard frog,cricket frog, oak toad, armadillo, raccoon, Red-tailed Hawk, Mourning Dove, Mockingbird, Quail, Sandhill Crane, Carolina Wren, Wood stork, white eye vireo grey squirrel, deer, oldfield rat, etc.					
Additional relevant factors: Cattle grazing and drainage improvements have adversely altered hydrology, water quality, and vegetative components of wetland system.					
Assessment conducted by: Morgan Clark			Assessment date(s): 9/6/2017		

PART II - Quantification of Assessment Area (impact or mitigation)
(See Section 62-345.500 and .600, F.A.C.)

Site/Project Name Fontana	Application Number 180510-569	Assessment Area Name or Number W-16 (sec)
Impact or Mitigation Impact	Assessment conducted by: Morgan Clark	Assessment date: 9/6/2017

Scoring Guidance
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed

Optimal (10)	Moderate (7)	Minimal (4)	Not Present (0)
Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface water functions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

.500 (6)(a) Location and Landscape Support w/o pres or current 7 with 6	Minimal adverse impact to AA based on adjacent development.
.500 (6)(b) Water Environment (n/a for uplands) w/o pres or current 7 with 7	No changes to AA based on adjacent development.
.500 (6)(c) Community structure 1. Vegetation and/or 2. Benthic Community w/o pres or current 6 with 5	Minimal adverse impact to AA based on adjacent development.

Score = sum of above scores/30 (if uplands, divide by 20)
w/o pres or current 0.66666667 with 0.60

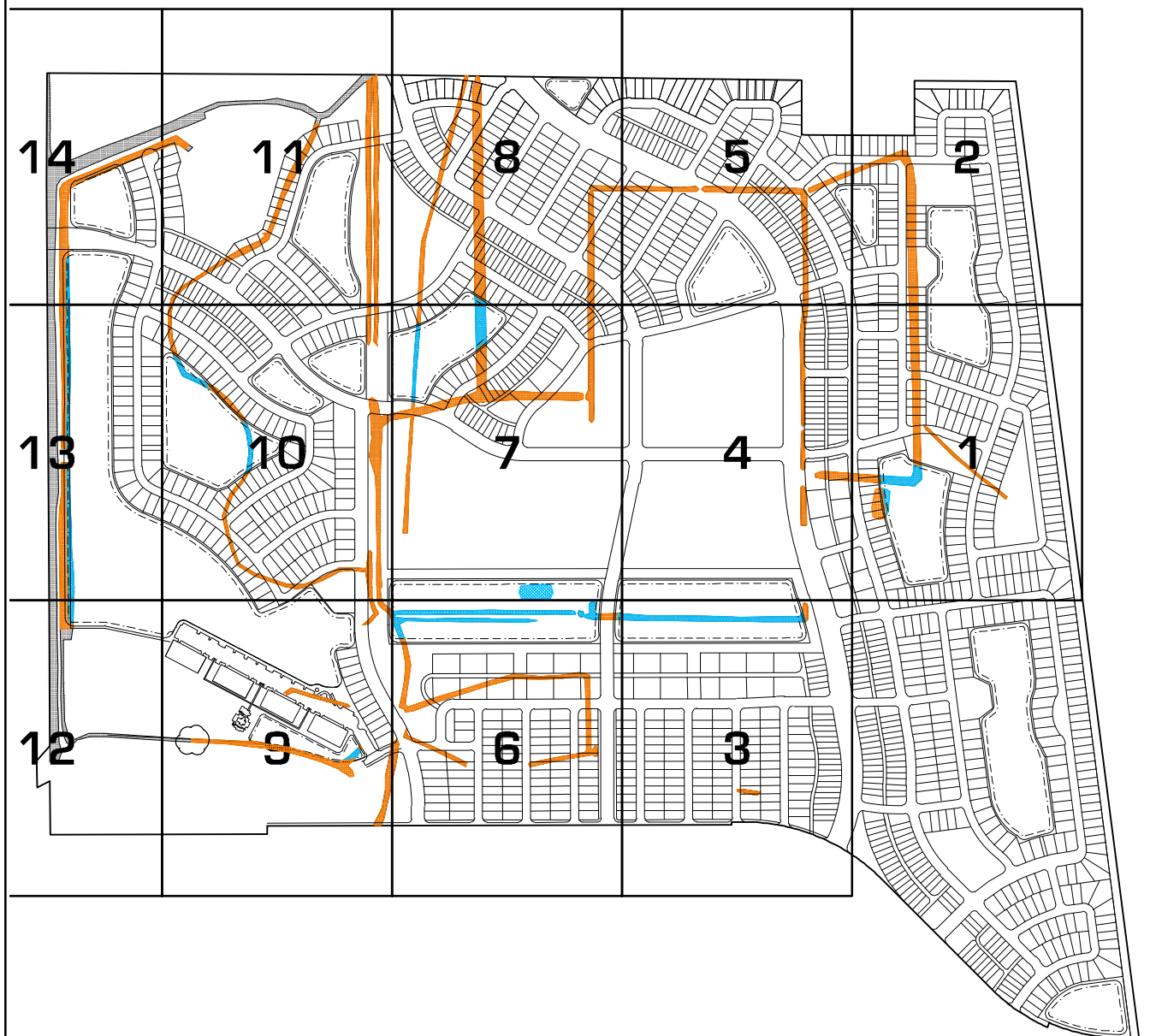
If preservation as mitigation,	
Preservation adjustment factor =	
Adjusted mitigation delta =	

For impact assessment areas	
FL = delta x acres =	0.025

Delta = [with current]
-0.0667

If mitigation	
Time lag (t-factor) =	
Risk factor =	

For mitigation assessment areas	
RFG = delta/(t-factor x risk) =	



4	6/17/21	REVISED PER SFWMD COMMENTS
3	2/22/21	REVISED D16 IMPACTS
2	11/5/18	REVISED PER COUNTY COMMENTS
1	6/28/18	REVISED PER SFWMD COMMENTS
NO.	DATE	REVISIONS


DONALD W. MCINTOSH ASSOCIATES, INC.
 DONALD W. MCINTOSH ASSOCIATES, INC.
 CERTIFICATE OF AUTHORIZATION NO. 68

SCALE
 1"=1000'
 DRAWN BY
 ACC
 CHECKED BY
 JCN
 JOB NUMBER
 13189



FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
SURFACE WATER IMPACTS
KEYMAP

JAMES C. NUGENT
 FLORIDA P.E. NO. 57553
 DATE:

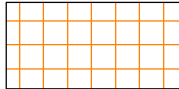
LEGEND

1

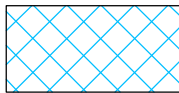
EXISTING SURFACE WATER NUMBER*



EXISTING SURFACE WATERS



FILL IMPACTS TO SURFACE WATERS



DREDGE IMPACTS TO SURFACE WATERS

LABELS

SWI = SURFACE WATER IMPACT

(F) = IMPACTS DUE TO FILL IMPROVEMENTS

(D) = IMPACTS DUE TO DREDGE IMPROVEMENT

*NOTE: SURFACE WATERS WITHOUT A NUMBER DESIGNATION ARE DITCHES OR CANALS



**DONALD W. McINTOSH
ASSOCIATES, INC.**

DONALD W. McINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

SCALE
NTS

DRAWN BY
ACC

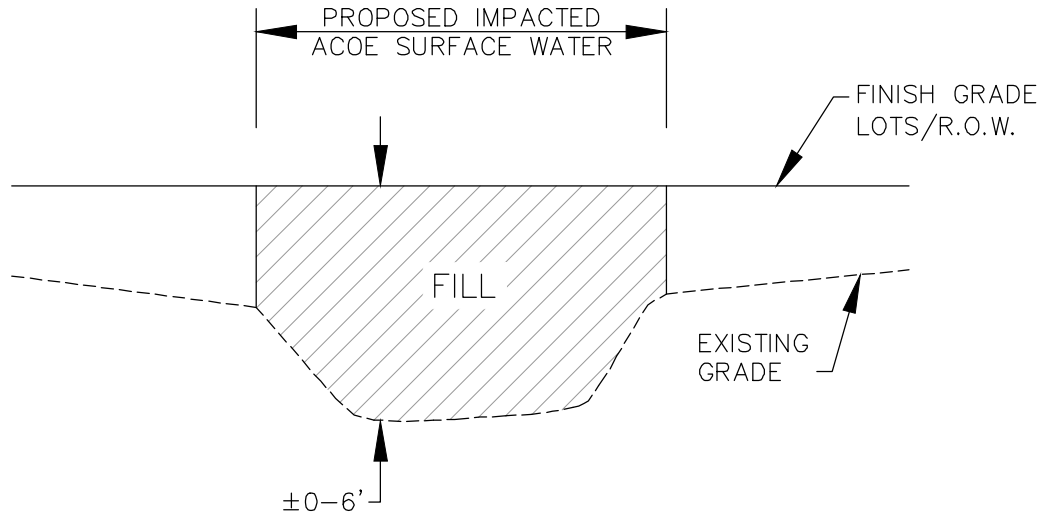
CHECKED BY
JCN

JOB NUMBER
13189

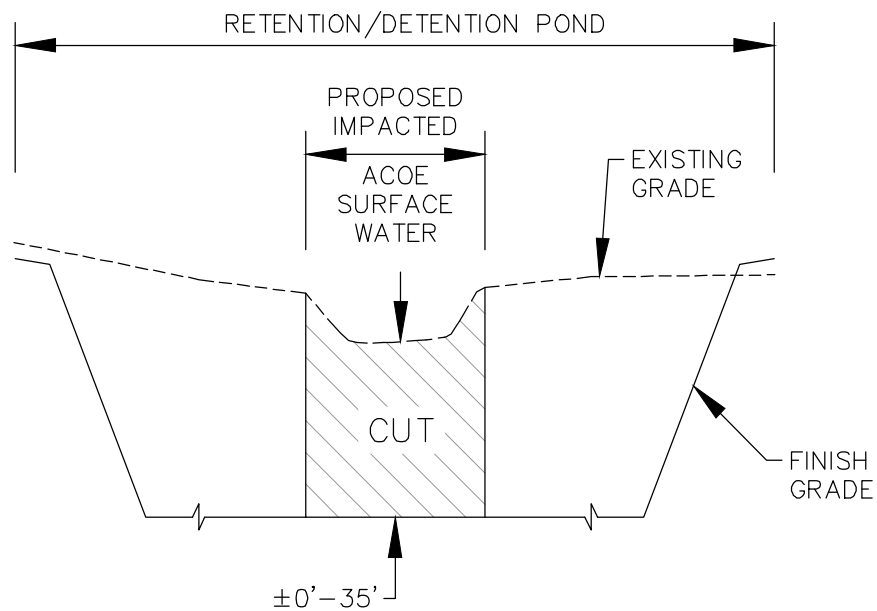


**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
SURFACE WATER IMPACTS
LEGEND**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____



TYPICAL SECTION – FILL IMPACT
PROPOSED IMPACTED ACOE SURFACE WATER



TYPICAL SECTION – CUT IMPACT
PROPOSED IMPACTED ACOE SURFACE WATER



**DONALD W. McINTOSH
ASSOCIATES, INC.**
DONALD W. McINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

SCALE NTS
DRAWN BY ACC
CHECKED BY JCN
JOB NUMBER 13189





**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
SURFACE WATER IMPACTS
SECTIONS**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____

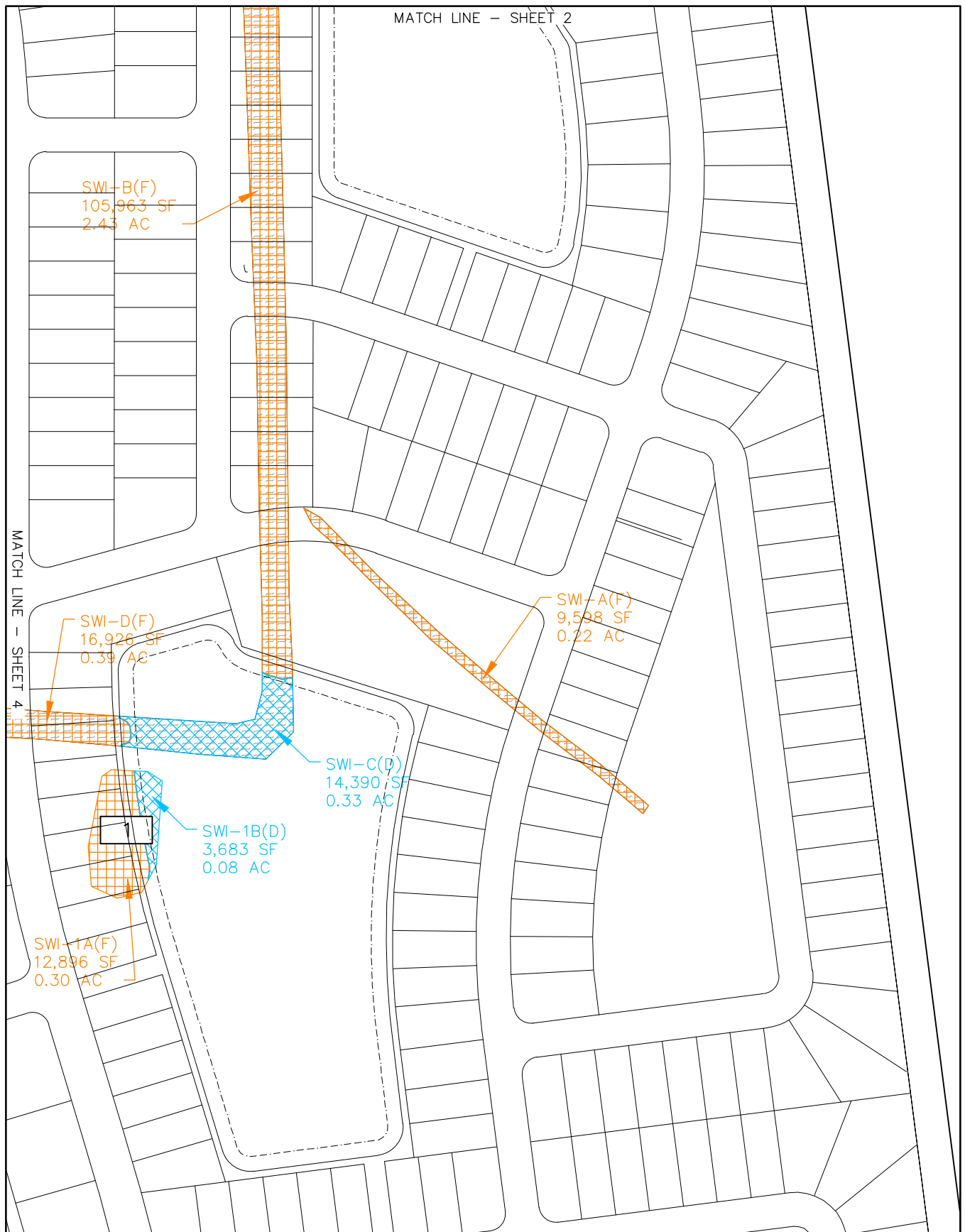
SURFACE WATER IMPACTS DUE TO FILL IMPROVEMENTS			
DESCRIPTION	ID	AREA (SF)	AREA (AC)
SWI-1A	SW-1	12,896	0.30
SWI-A	D1	9,598	0.22
SWI-B	D3	105,963	2.43
SWI-D	D3	16,926	0.39
SWI-E	D2	2,731	0.06
SWI-F	D9	2,902	0.07
SWI-H	D4	7,819	0.18
SWI-I	D5	5,152	0.12
SWI-J	D6	56,681	1.30
SWI-K	D7	16,620	0.38
SWI-L	D13	60,930	1.39
SWI-M	D12	8,368	0.19
SWI-N	D11	20,509	0.47
SWI-O	D9	4,172	0.09
SWI-S	D13	135,965	3.12
SWI-T	D8	45,488	1.04
SWI-W	D13	30,354	0.69
SWI-X	D13	74,607	1.71
SWI-Y	D16	29,752	0.68
SWI-Z	D14	7,080	0.16
SWI-AA	D15	35,412	0.81
SWI-AC	D15	8,531	0.20
SWI-AE	D15	43,876	1.01
SWI-AF	D15	42,550	0.98
SWI-AG	D15	40,786	0.94
SWI-AH	D16	49,043	1.13
SWI-AJ	D17	94,760	2.19
TOTAL		969,471	22.25

SURFACE WATER IMPACTS DUE TO DREDGE IMPROVEMENTS			
DESCRIPTION	ID	AREA (SF)	AREA (AC)
SWI-1B	SW-1	3,683	0.08
SWI-2	SW-2	16,084	0.37
SWI-C	D3	14,390	0.33
SWI-G	D9	33,079	0.76
SWI-P	D9	5,572	0.13
SWI-Q	D10	932	0.02
SWI-R	D13	41,912	0.96
SWI-U	D13	16,809	0.38
SWI-V	D13	8,435	0.19
SWI-AB	D15	6,403	0.15
SWI-AD	D15	6,668	0.15
SWI-AI	D16	21,344	0.49
SWI-AK	D17	17,580	0.41
SWI-AL	D16	2,742	0.06
TOTAL		195,633	4.48

4	6/17/21	REVISED PER SFWMD COMMENTS
3	2/22/21	REVISED D16 IMPACTS
2	11/5/18	REVISED PER COUNTY COMMENTS
1	6/28/18	REVISED PER SFWMD COMMENTS
NO.	DATE	REVISIONS

 <p>DONALD W. McINTOSH ASSOCIATES, INC. DONALD W. McINTOSH ASSOCIATES, INC. CERTIFICATE OF AUTHORIZATION NO. 68</p>	SCALE NTS		<p align="center">FONTANA PROPERTY DREDGE & FILL PERMIT EXHIBIT SITE DEVELOPMENT SURFACE WATER IMPACTS TABLES</p>
	DRAWN BY ACC		
	CHECKED BY JCN		
	JOB NUMBER 13189		

JAMES C. NUGENT
 FLORIDA P.E. NO. 57553
 DATE: _____



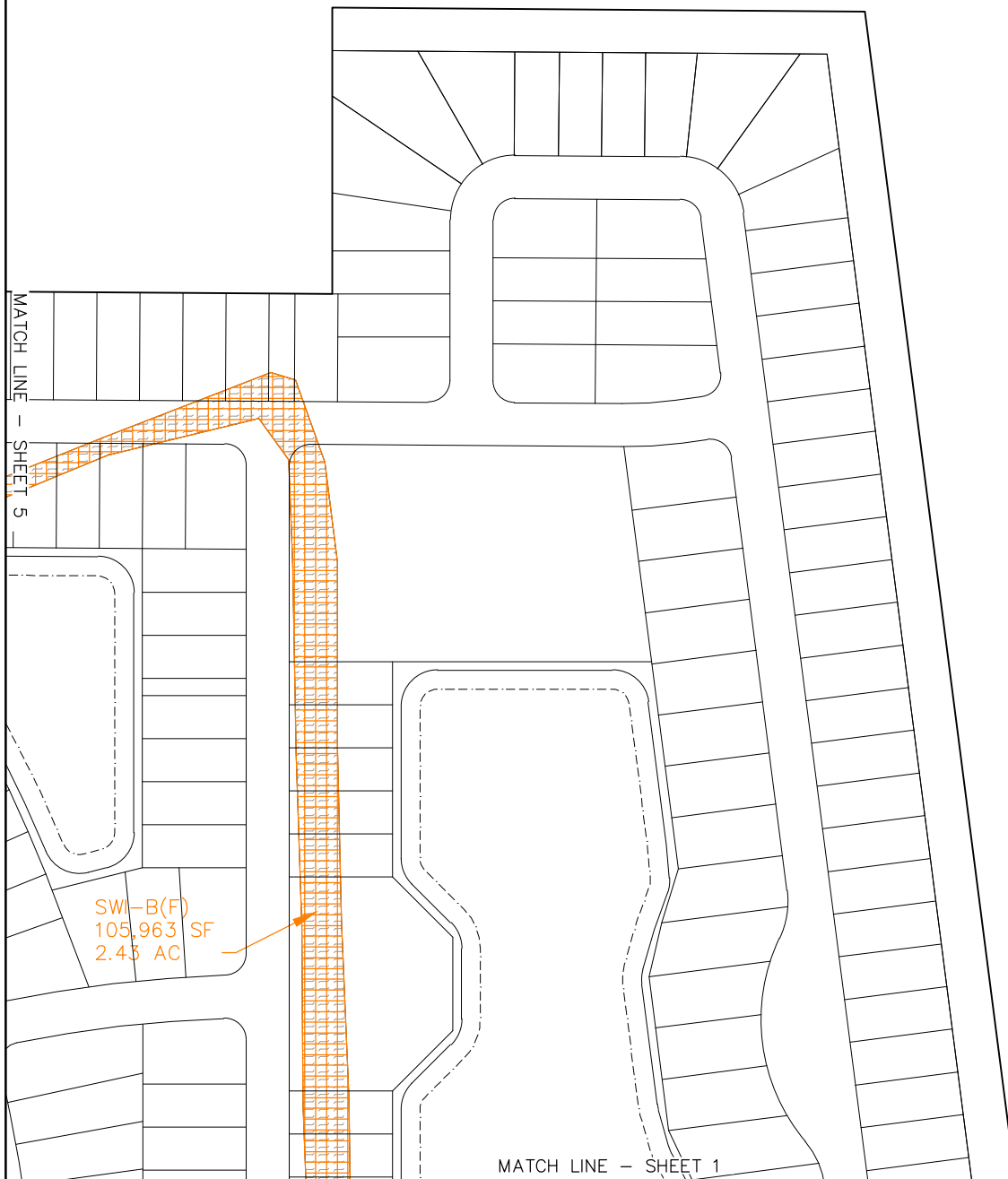
**DONALD W. MCINTOSH
ASSOCIATES, INC.**
DONALD W. MCINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

SCALE
1"=200'
DRAWN BY
ACC
CHECKED BY
JCN
JOB NUMBER
13189



**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
SURFACE WATER IMPACTS
SHEET 1 OF 14**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____



**DONALD W. MCINTOSH
ASSOCIATES, INC.**
DONALD W. MCINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

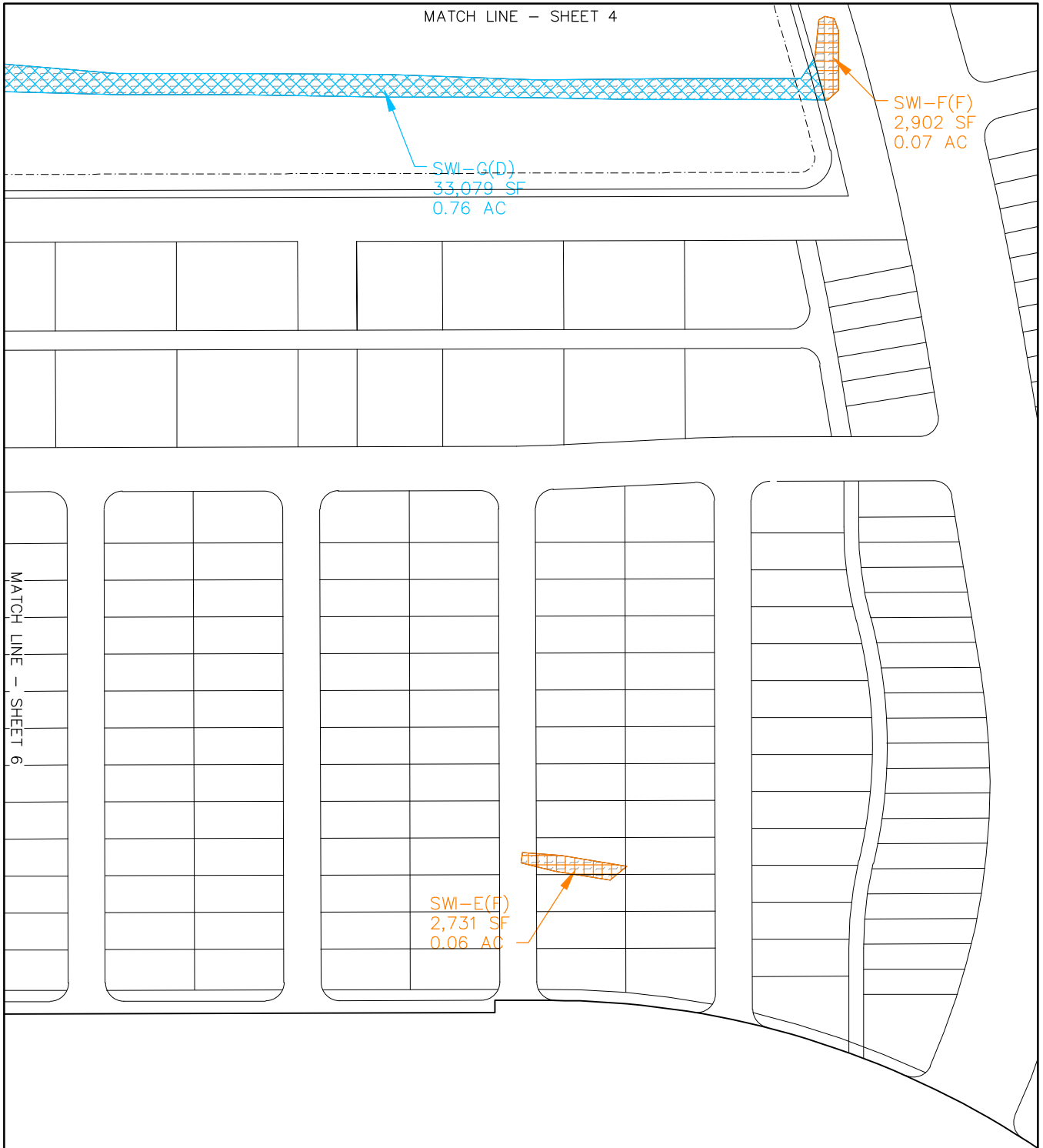
SCALE
1"=200'
DRAWN BY
ACC
CHECKED BY
JCN
JOB NUMBER
13189



**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
SURFACE WATER IMPACTS
SHEET 2 OF 14**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____

MATCH LINE - SHEET 4



**DONALD W. MCINTOSH
ASSOCIATES, INC.**

DONALD W. MCINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

SCALE
1"=200'

DRAWN BY
ACC

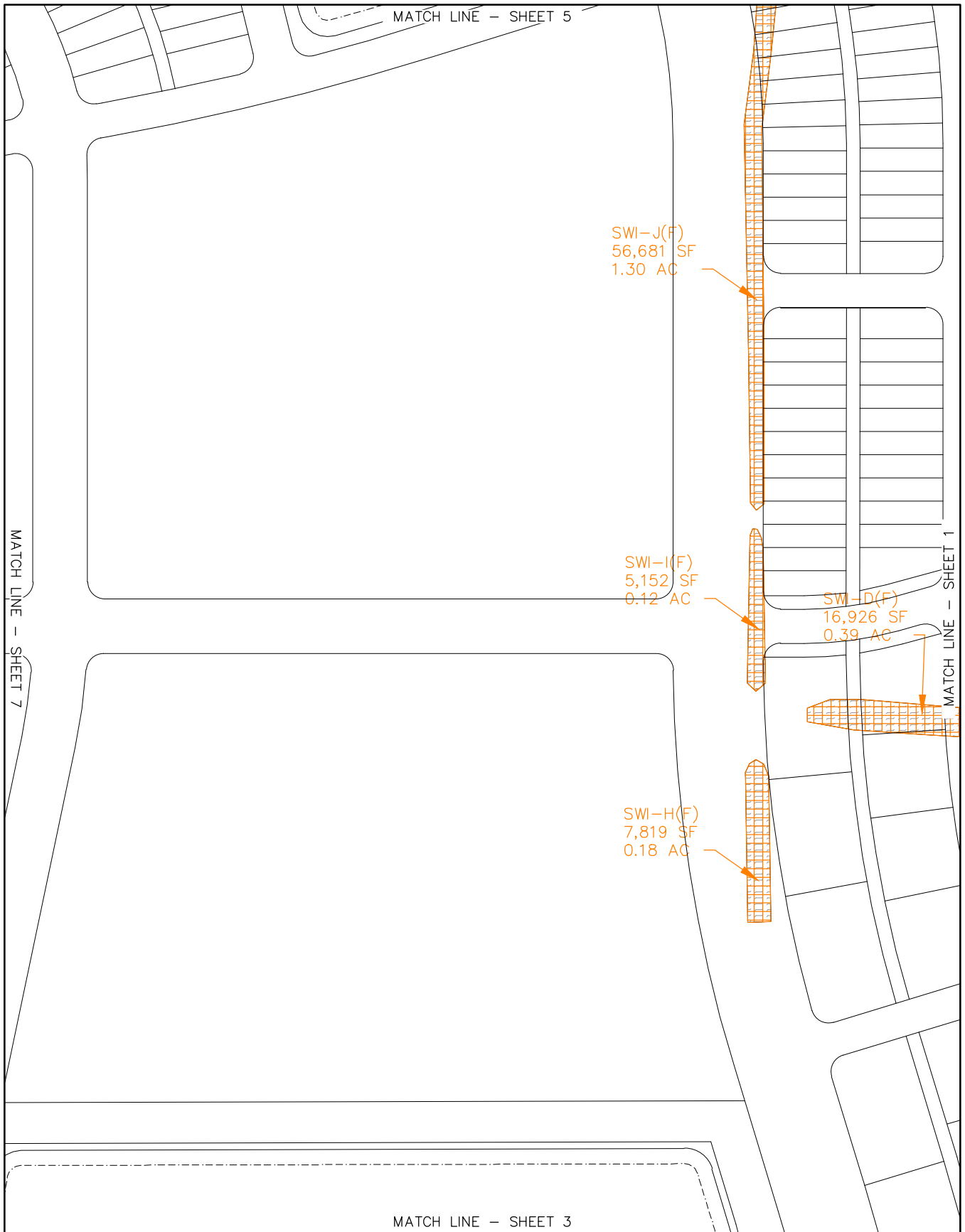
CHECKED BY
JCN



JOB NUMBER
13189

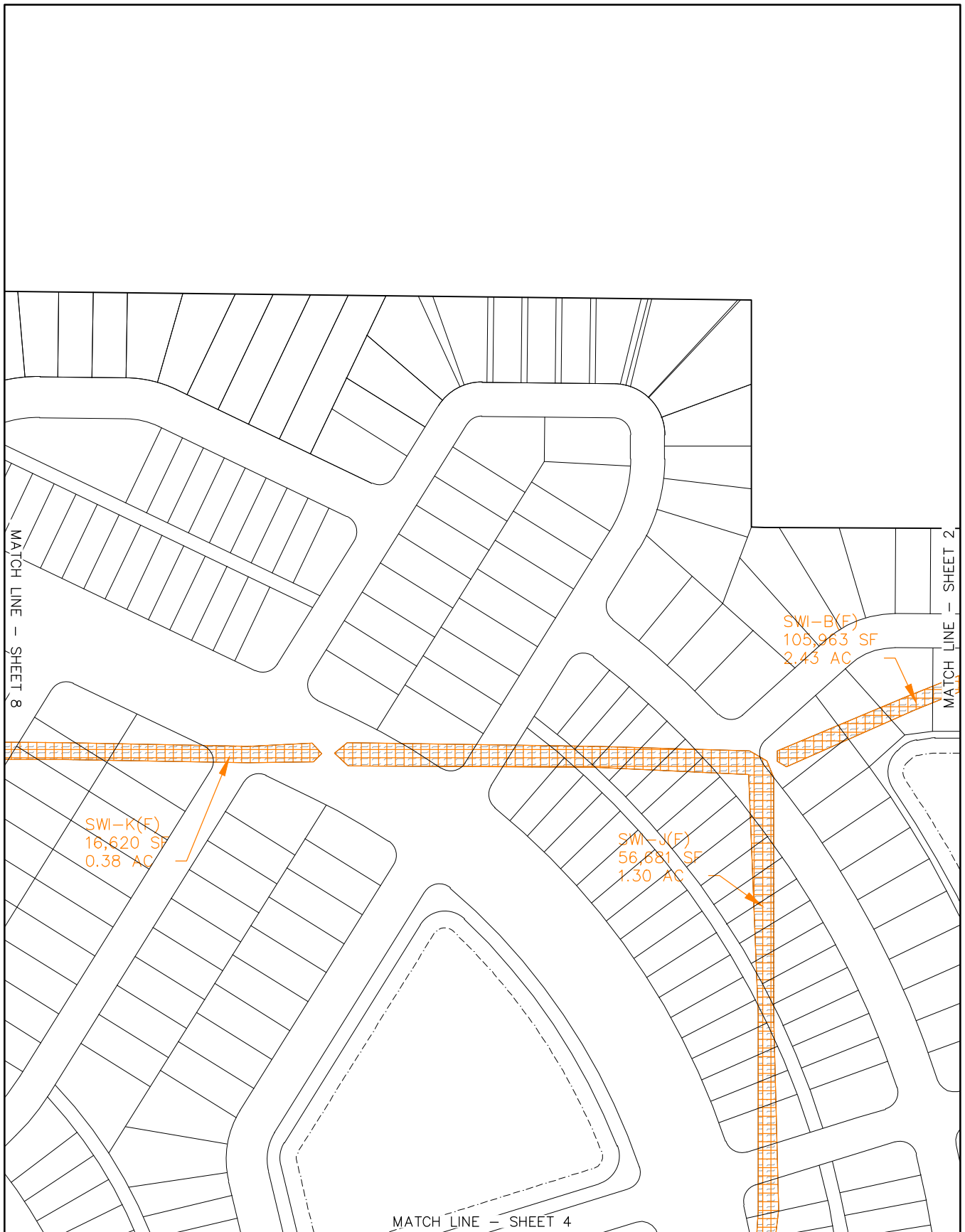




**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
SURFACE WATER IMPACTS
SHEET 3 OF 14**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____

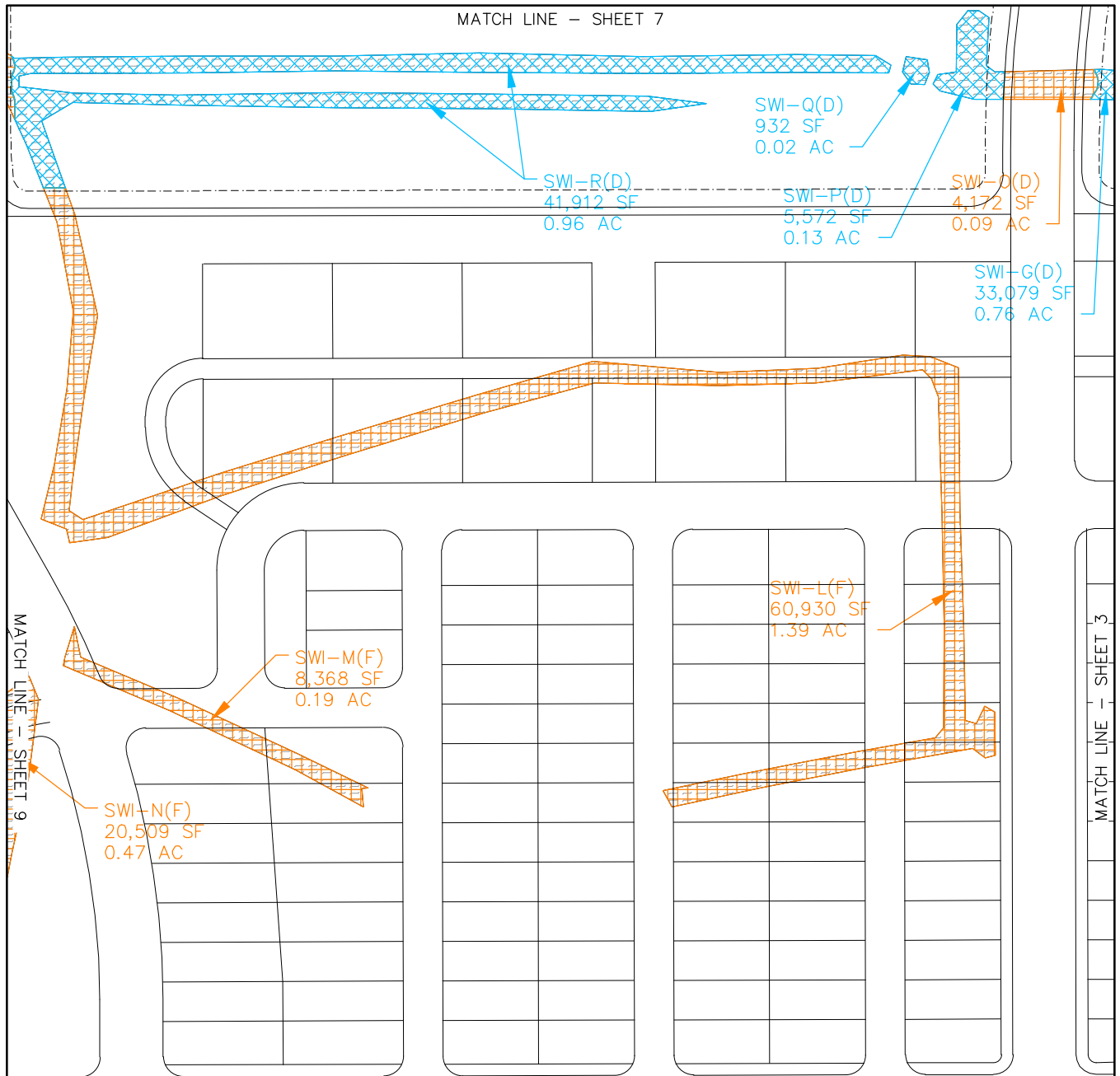


 DONALD W. McINTOSH ASSOCIATES, INC. <small>DONALD W. McINTOSH ASSOCIATES, INC. CERTIFICATE OF AUTHORIZATION NO. 68</small>	SCALE 1"=200'		FONTANA PROPERTY DREDGE & FILL PERMIT EXHIBIT SITE DEVELOPMENT SURFACE WATER IMPACTS SHEET 4 OF 14	JAMES C. NUGENT FLORIDA P.E. NO. 57553 DATE: _____
	DRAWN BY ACC			
	CHECKED BY JCN			
	JOB NUMBER 13189			



 DONALD W. McINTOSH ASSOCIATES, INC. <small>DONALD W. McINTOSH ASSOCIATES, INC. CERTIFICATE OF AUTHORIZATION NO. 68</small>	SCALE 1"=200'		FONTANA PROPERTY DREDGE & FILL PERMIT EXHIBIT SITE DEVELOPMENT SURFACE WATER IMPACTS SHEET 5 OF 14
	DRAWN BY ACC		
	CHECKED BY JCN		
	JOB NUMBER 13189		

JAMES C. NUGENT
 FLORIDA P.E. NO. 57553
 DATE: _____



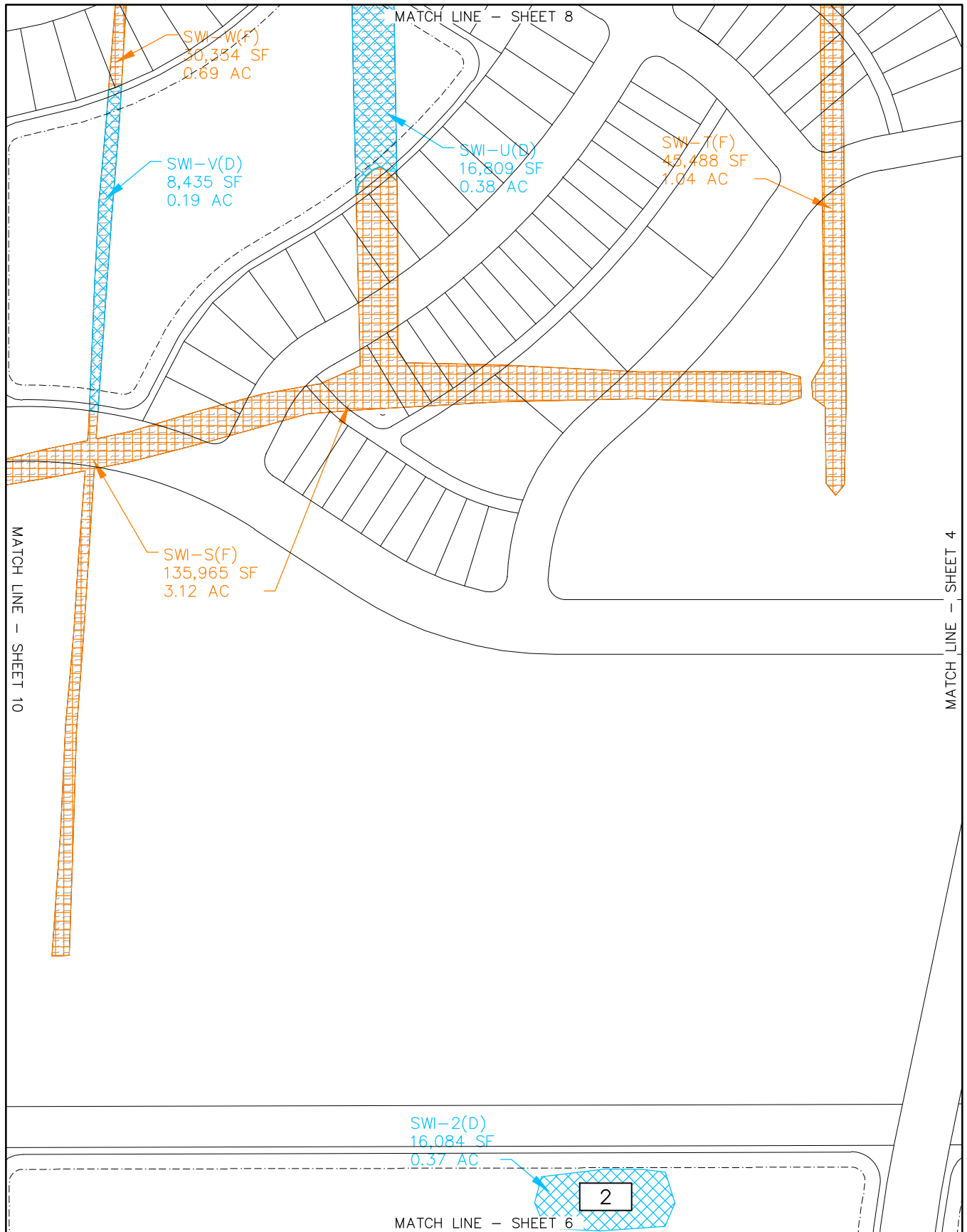
**DONALD W. MCINTOSH
ASSOCIATES, INC.**
DONALD W. MCINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68



SCALE
1"=200'
DRAWN BY
ACC
CHECKED BY
JCN
JOB NUMBER
13189

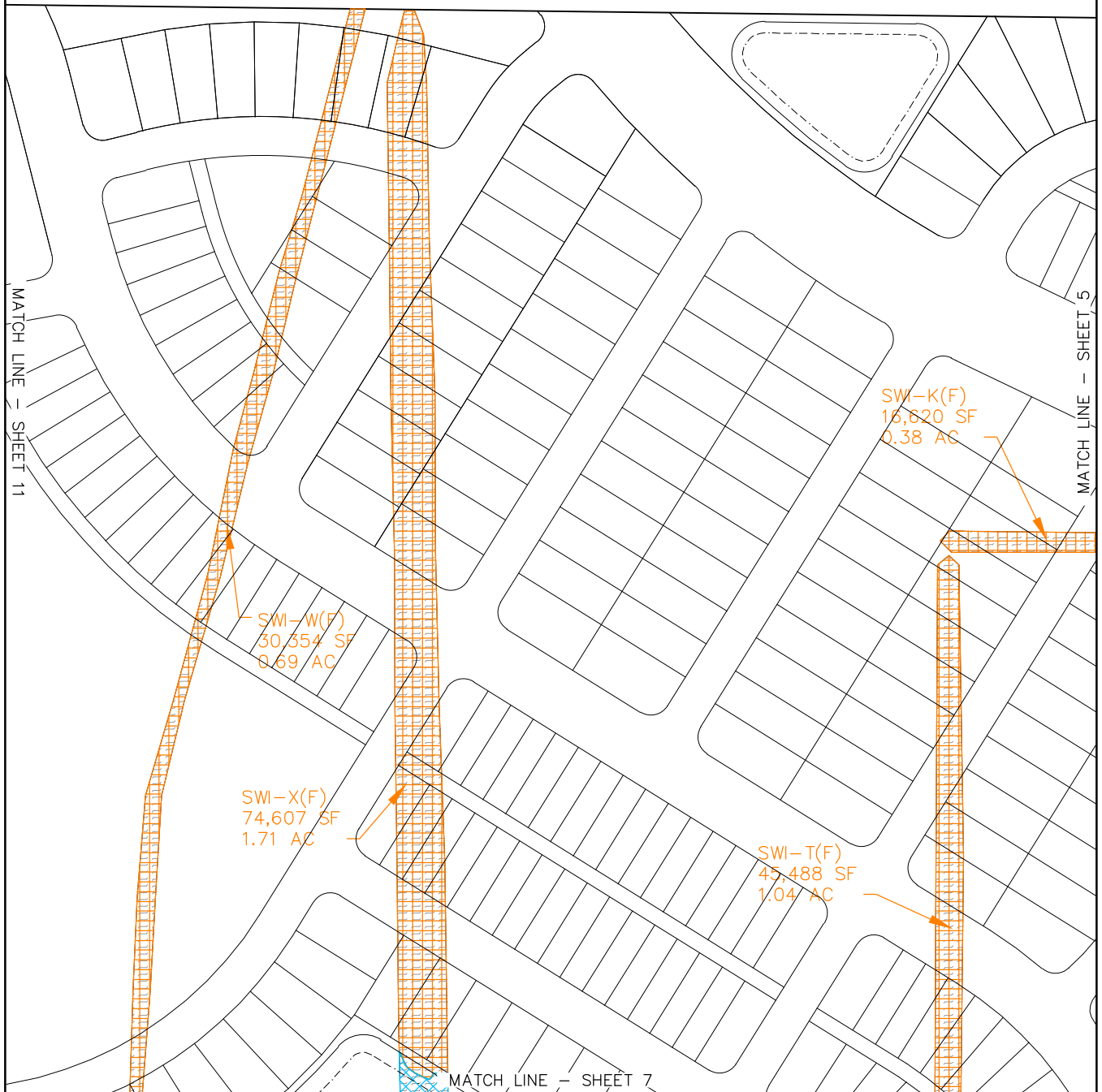


**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
SURFACE WATER IMPACTS
SHEET 6 OF 14**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____



 <p>DONALD W. MCINTOSH ASSOCIATES, INC. DONALD W. MCINTOSH ASSOCIATES, INC. CERTIFICATE OF AUTHORIZATION NO. 68</p>	SCALE 1"=200'		<p>FONTANA PROPERTY DREDGE & FILL PERMIT EXHIBIT SITE DEVELOPMENT SURFACE WATER IMPACTS SHEET 7 OF 14</p>	<p>JAMES C. NUGENT FLORIDA P.E. NO. 57553 DATE: _____</p>
	DRAWN BY ACC			
	CHECKED BY JCN			
	JOB NUMBER 13189			



**DONALD W. MCINTOSH
ASSOCIATES, INC.**
DONALD W. MCINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

SCALE
1"=200'

DRAWN BY
ACC

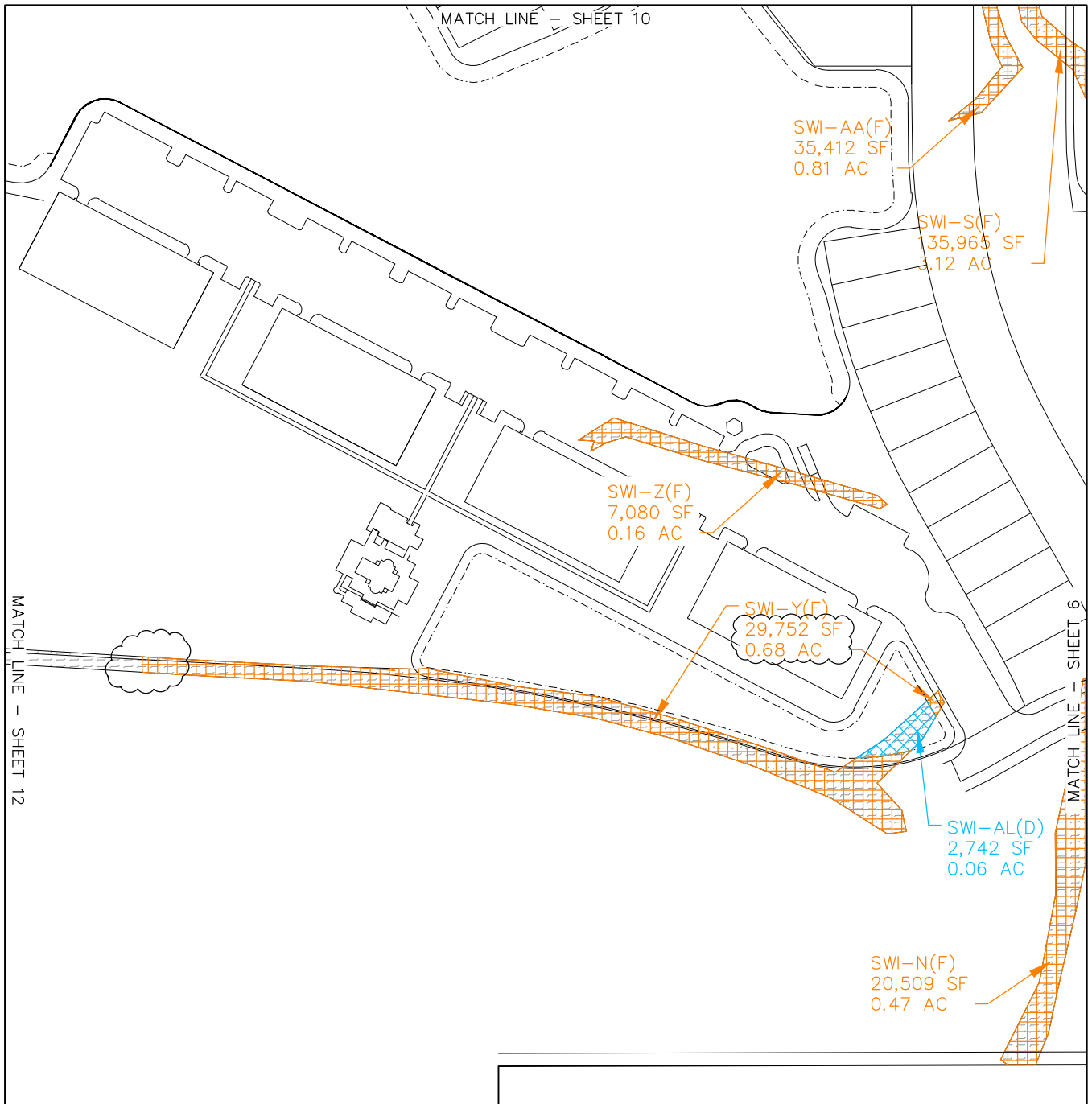
CHECKED BY
JCN

JOB NUMBER
13189



**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
SURFACE WATER IMPACTS
SHEET 8 OF 14**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____



3	6/17/21	REVISED PER SFWMD COMMENTS
2	2/22/21	REVISED D16 IMPACTS
1	6/28/18	REVISED PER SFWMD COMMENTS
NO.	DATE	REVISIONS

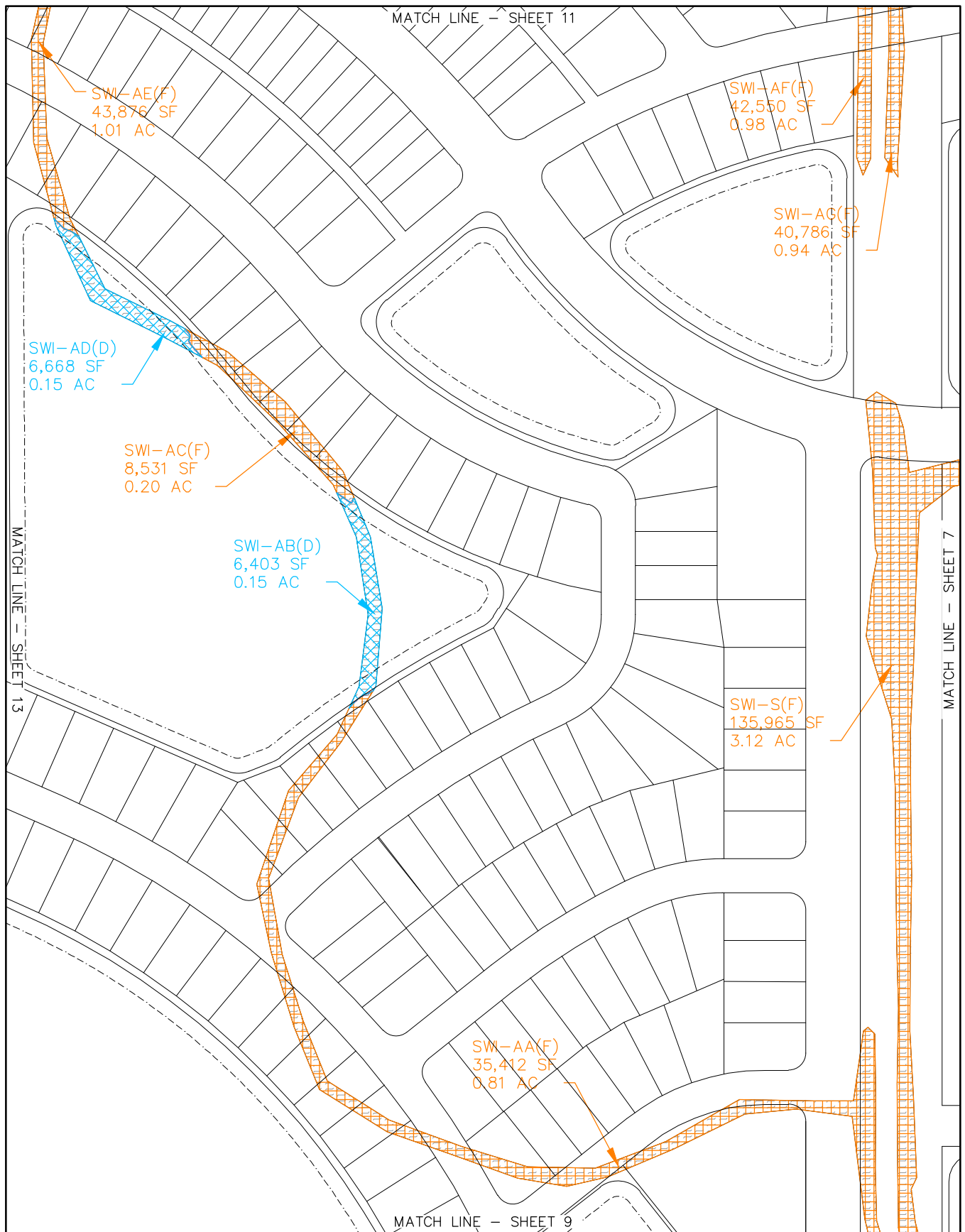
DONALD W. McINTOSH ASSOCIATES, INC.
DONALD W. McINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

SCALE
1"=200'
DRAWN BY
ACC
CHECKED BY
JCN
JOB NUMBER
13189



**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
SURFACE WATER IMPACTS
SHEET 9 OF 14**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE:



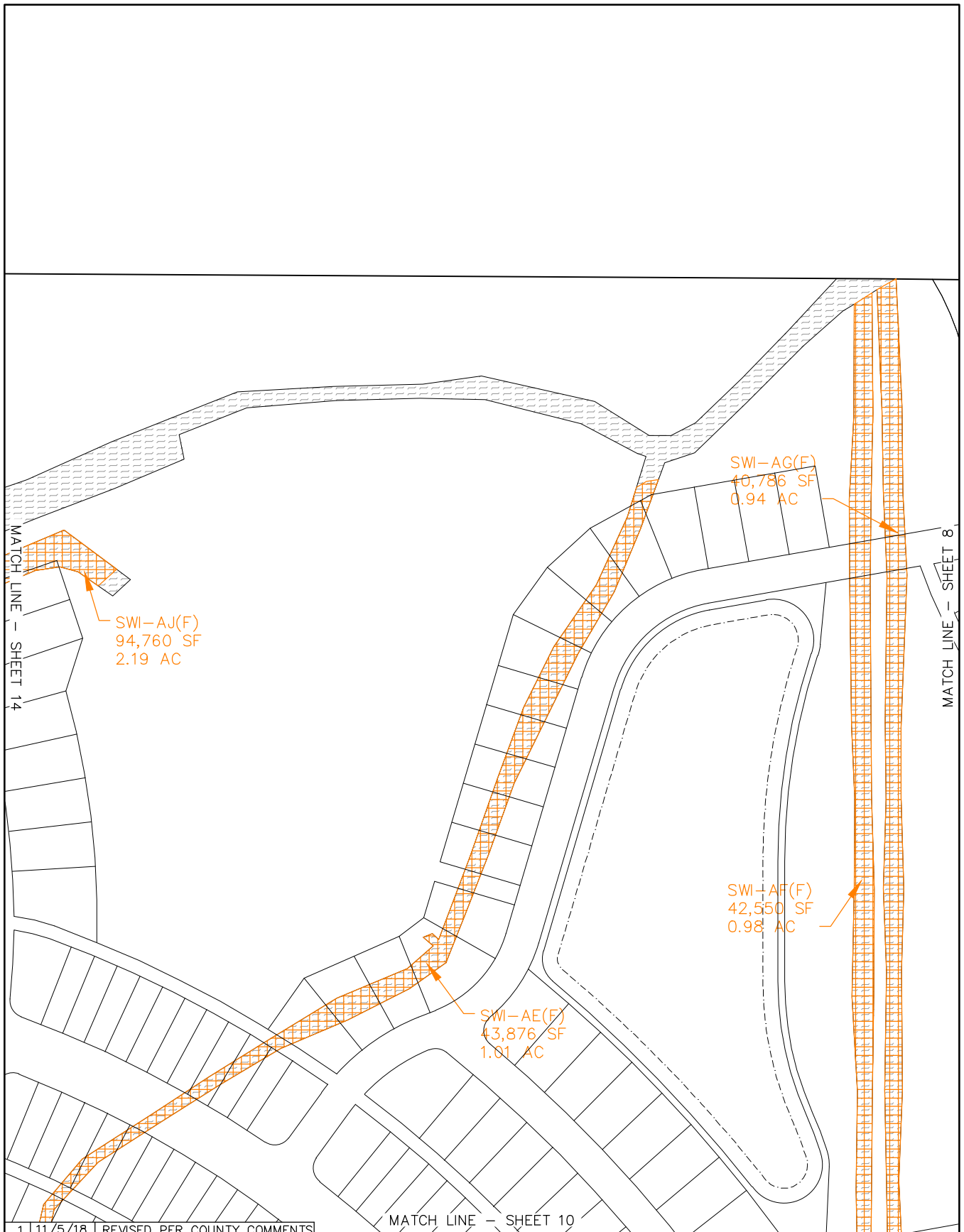
**DONALD W. MCINTOSH
ASSOCIATES, INC.**
DONALD W. MCINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

SCALE
1"=200'
DRAWN BY
ACC
CHECKED BY
JCN
JOB NUMBER
13189



**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
SURFACE WATER IMPACTS
SHEET 10 OF 14**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____



1 11/5/18 REVISED PER COUNTY COMMENTS



DONALD W. MCINTOSH ASSOCIATES, INC.
DONALD W. MCINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

SCALE
1"=200'
DRAWN BY
ACC
CHECKED BY
JCN
JOB NUMBER
13189



**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
SURFACE WATER IMPACTS
SHEET 11 OF 14**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____

MATCH LINE - SHEET 13

SWI-AH(F)
49,043 SF
1.13 AC

SWI-AI(D)
21,344 SF
0.49 AC

MATCH LINE - SHEET 9



**DONALD W. McINTOSH
ASSOCIATES, INC.**
DONALD W. McINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

SCALE
1"=200'

DRAWN BY
ACC

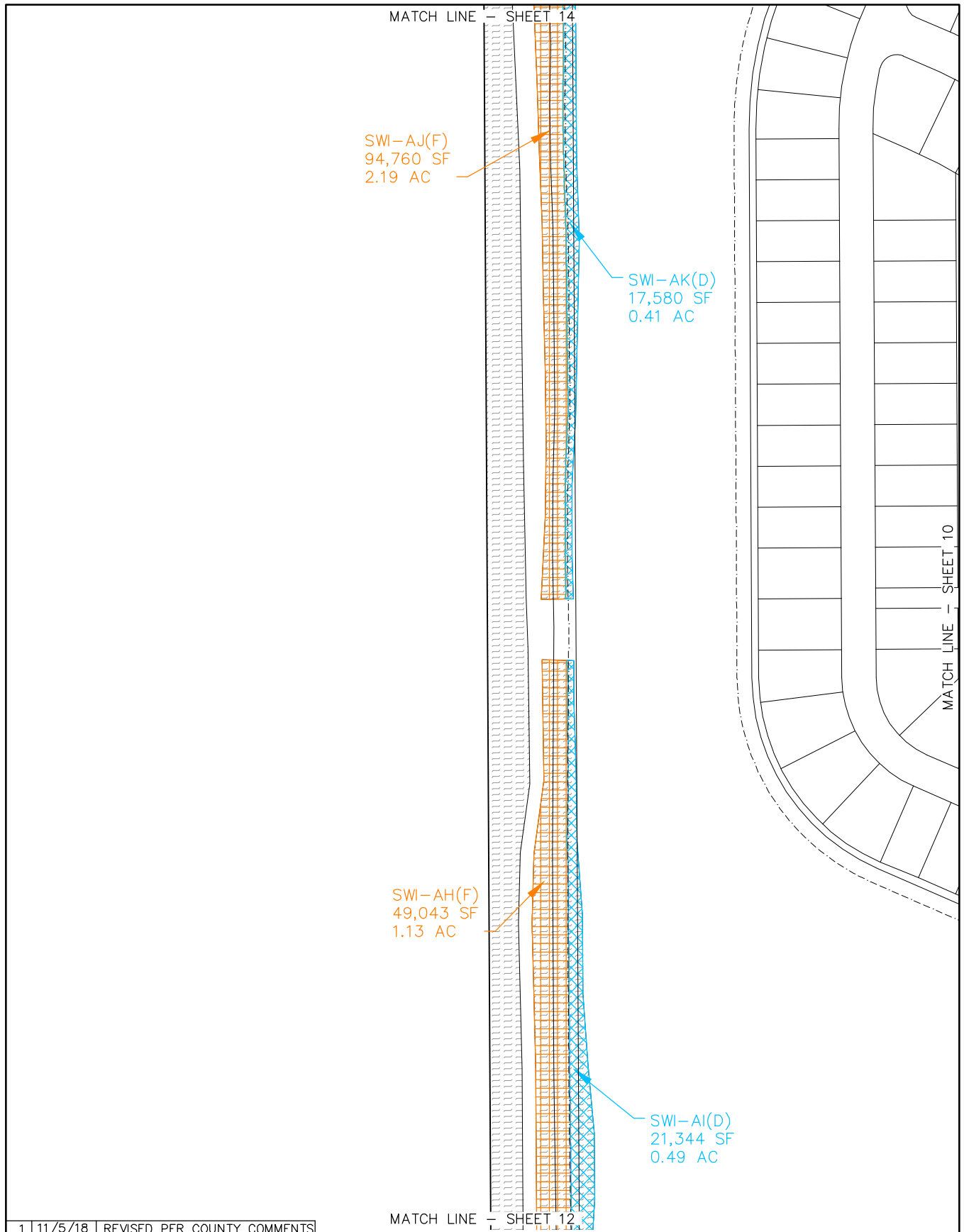
CHECKED BY
JCN

JOB NUMBER
13189



**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
SURFACE WATER IMPACTS
SHEET 12 OF 14**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____



1	11/5/18	REVISED PER COUNTY COMMENTS
---	---------	-----------------------------

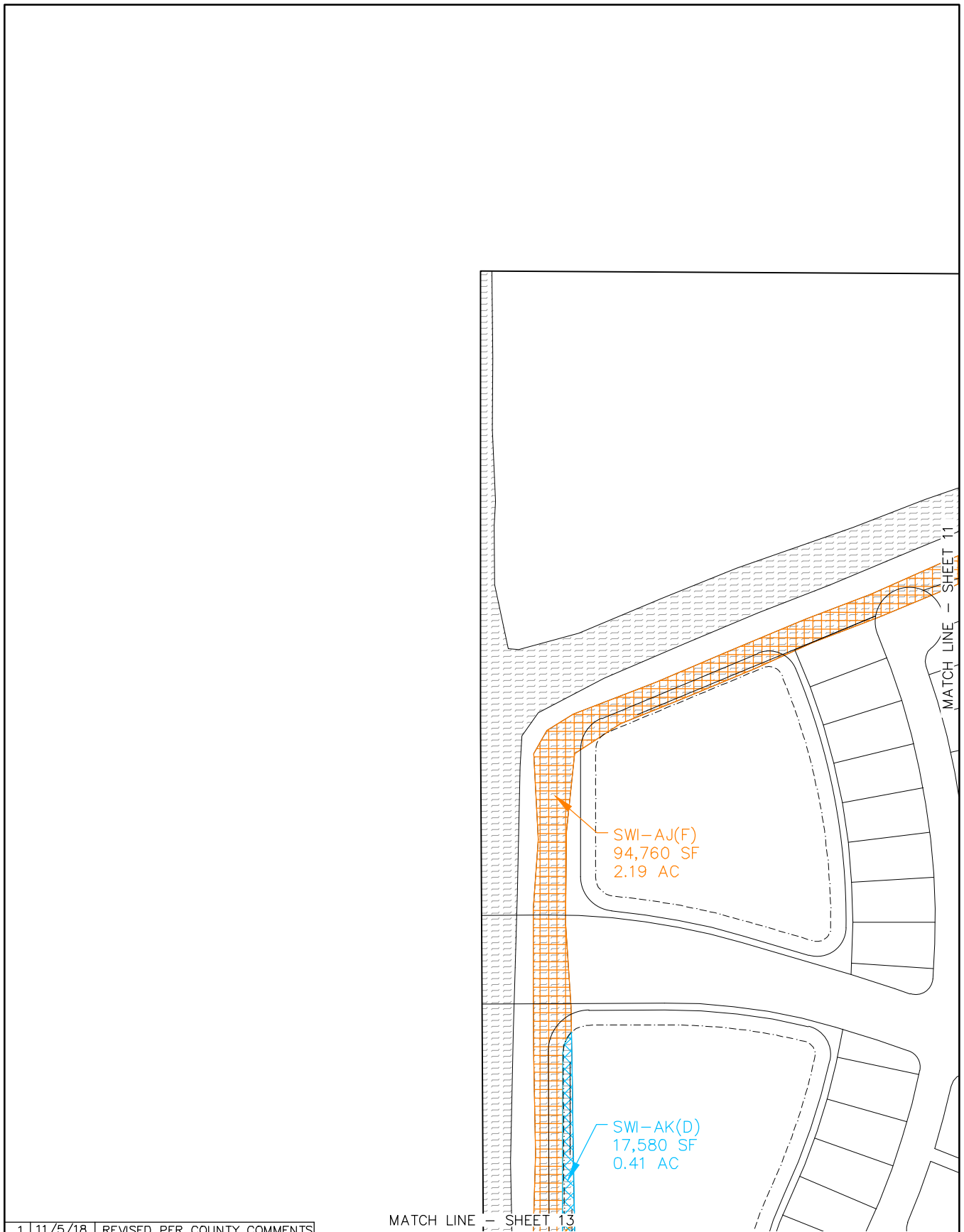
DONALD W. McINTOSH ASSOCIATES, INC.
 DONALD W. McINTOSH ASSOCIATES, INC.
 CERTIFICATE OF AUTHORIZATION NO. 68

SCALE 1"=200'
DRAWN BY ACC
CHECKED BY JCN
JOB NUMBER 13189



**FONTANA PROPERTY
 DREDGE & FILL PERMIT EXHIBIT
 SITE DEVELOPMENT
 SURFACE WATER IMPACTS
 SHEET 13 OF 14**

JAMES C. NUGENT
 FLORIDA P.E. NO. 57553
 DATE: _____



1	11/5/18	REVISED PER COUNTY COMMENTS
---	---------	-----------------------------



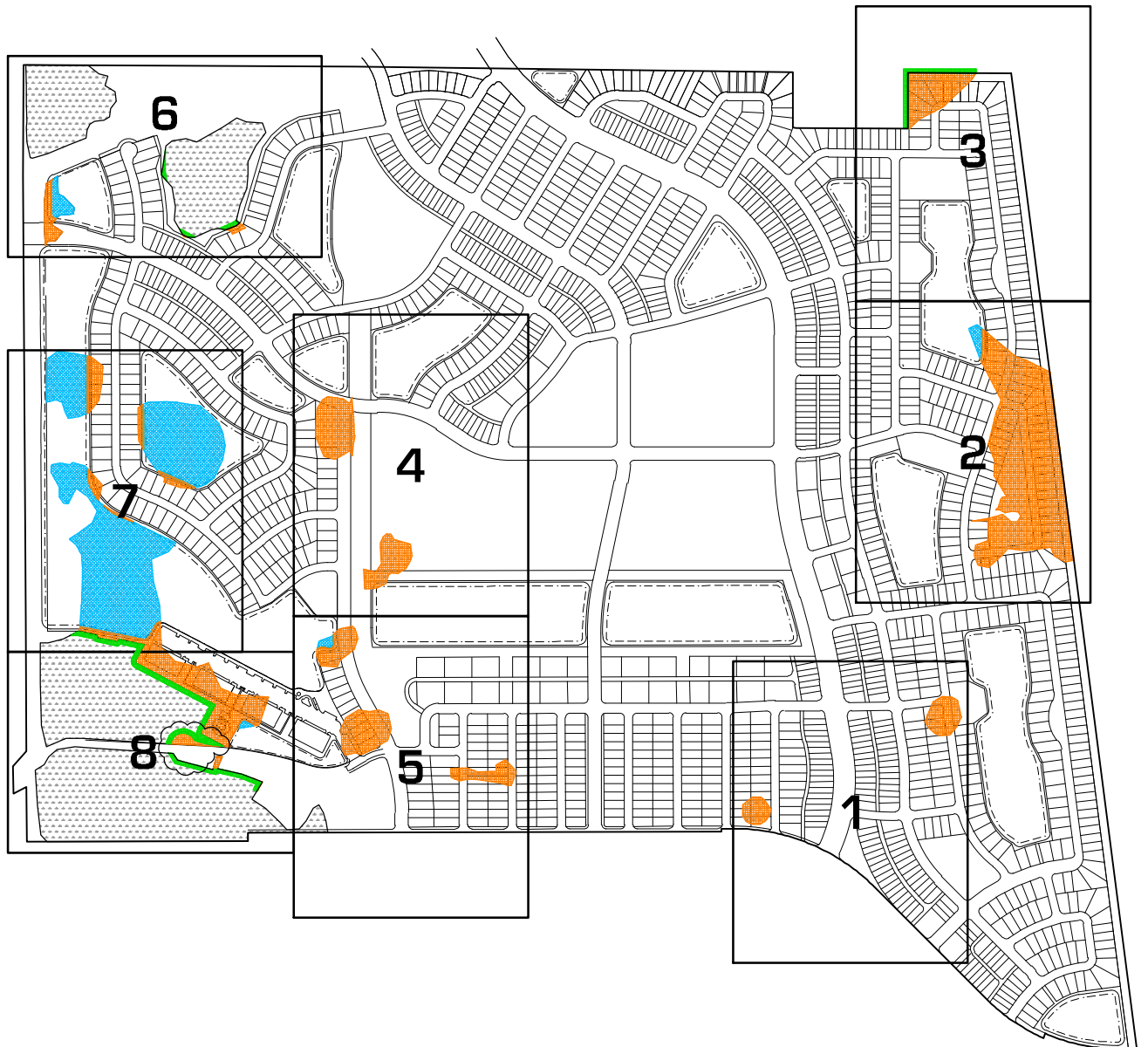
DONALD W. McINTOSH ASSOCIATES, INC.
DONALD W. McINTOSH ASSOCIATES, INC.
 CERTIFICATE OF AUTHORIZATION NO. 68

SCALE 1"=200'
DRAWN BY ACC
CHECKED BY JCN
JOB NUMBER 13189





**FONTANA PROPERTY
 DREDGE & FILL PERMIT EXHIBIT
 SITE DEVELOPMENT
 SURFACE WATER IMPACTS
 SHEET 14 OF 14**

JAMES C. NUGENT
 FLORIDA P.E. NO. 57553
 DATE: _____



4	6/17/21	REVISED PER SFWMD COMMENTS
3	2/22/21	REVISED W-14 & W-16 IMPACTS
2	11/5/18	REVISED PER COUNTY COMMENTS
1	6/28/18	REVISED PER SFWMD COMMENTS
NO.	DATE	REVISIONS

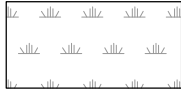
 <p>DONALD W. MCINTOSH ASSOCIATES, INC. DONALD W. MCINTOSH ASSOCIATES, INC. CERTIFICATE OF AUTHORIZATION NO. 68</p>	SCALE 1"=1000'	 <p>FONTANA PROPERTY DREDGE & FILL PERMIT EXHIBIT SITE DEVELOPMENT WETLAND IMPACTS KEYMAP</p>
	DRAWN BY ACC	
	CHECKED BY JCN	
	JOB NUMBER 13189	

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____

LEGEND

14

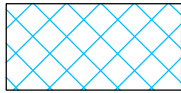
EXISTING WETLAND NUMBER



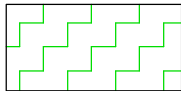
EXISTING WETLANDS



FILL IMPACTS TO WETLANDS



DREDGE IMPACTS TO WETLANDS



SECONDARY WETLAND IMPACTS

LABELS

WI = WETLAND IMPACT

WS = SECONDARY WETLAND IMPACT

(F) = IMPACTS DUE TO FILL IMPROVEMENTS

(D) = IMPACTS DUE TO DREDGE IMPROVEMENT



**DONALD W. MCINTOSH
ASSOCIATES, INC.**

DONALD W. MCINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

SCALE
NTS

DRAWN BY
ACC

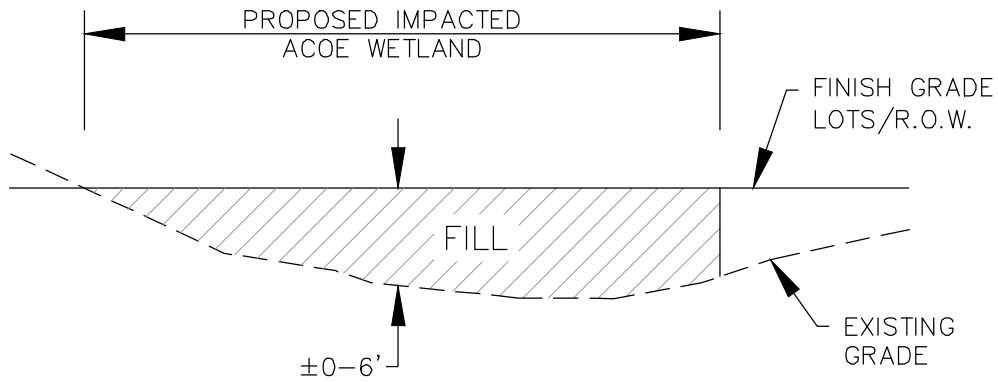
CHECKED BY
JCN

JOB NUMBER
13189

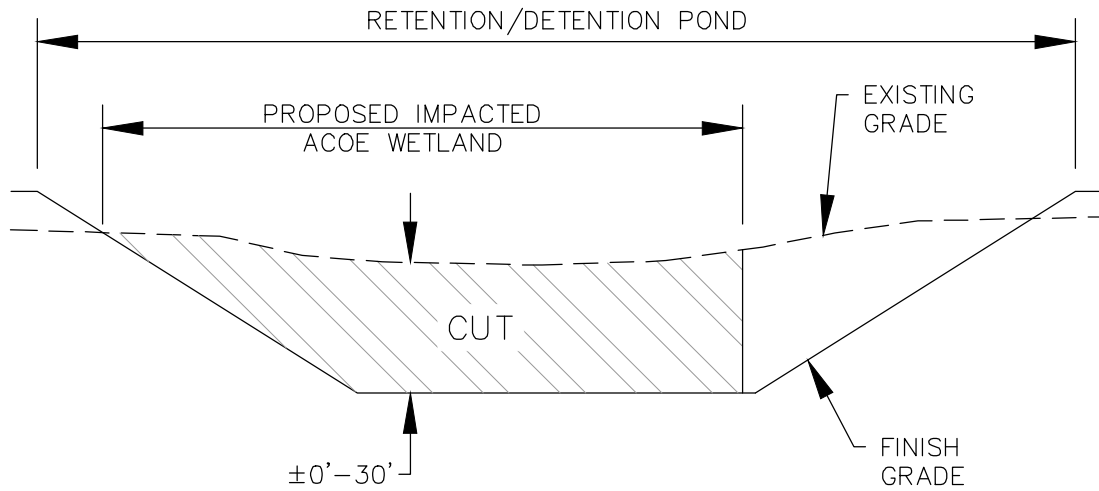


**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
WETLAND IMPACTS
LEGEND**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____



TYPICAL SECTION – FILL IMPACT
PROPOSED IMPACTED ACOE WETLAND



TYPICAL SECTION – CUT IMPACT
PROPOSED IMPACTED ACOE WETLAND



**DONALD W. McINTOSH
ASSOCIATES, INC.**

DONALD W. McINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

SCALE
NTS

DRAWN BY
ACC

CHECKED BY
JCN

JOB NUMBER
13189



**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
WETLAND IMPACTS
SECTIONS**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____



WETLAND IMPACTS DUE TO FILL IMPROVEMENTS		
DESCRIPTION	AREA (SF)	AREA (AC)
WI-1	21,428	0.49
WI-2	37,298	0.86
WI-3A	488,744	11.21
WI-4A	76,207	1.75
WI-5	47,824	1.10
WI-6	72,501	1.66
WI-7A	33,508	0.77
WI-8	63,330	1.45
WI-9	29,826	0.68
WI-10A	19,052	0.44
WI-11A	3,265	0.07
WI-11B	108	0.01
WI-12A	23,531	0.54
WI-13A	7,111	0.17
WI-13B	7,549	0.17
WI-14A	7,717	0.18
WI-14B	1,061	0.02
WI-14D	175,246	4.03
WI-14F	9,727	0.22
WI-16A	1,943	0.05
WI-16B	385	0.009
TOTAL	1,127,361	25.88

WETLAND IMPACTS DUE TO DREDGE IMPROVEMENTS		
DESCRIPTION	AREA (SF)	AREA (AC)
WI-3B	9,767	0.22
WI-7B	5,258	0.12
WI-10B	17,503	0.40
WI-12B	80,274	1.84
WI-13C	195,639	4.49
WI-14C	357,250	8.20
WI-14E	1,838	0.04
TOTAL	667,529	15.31

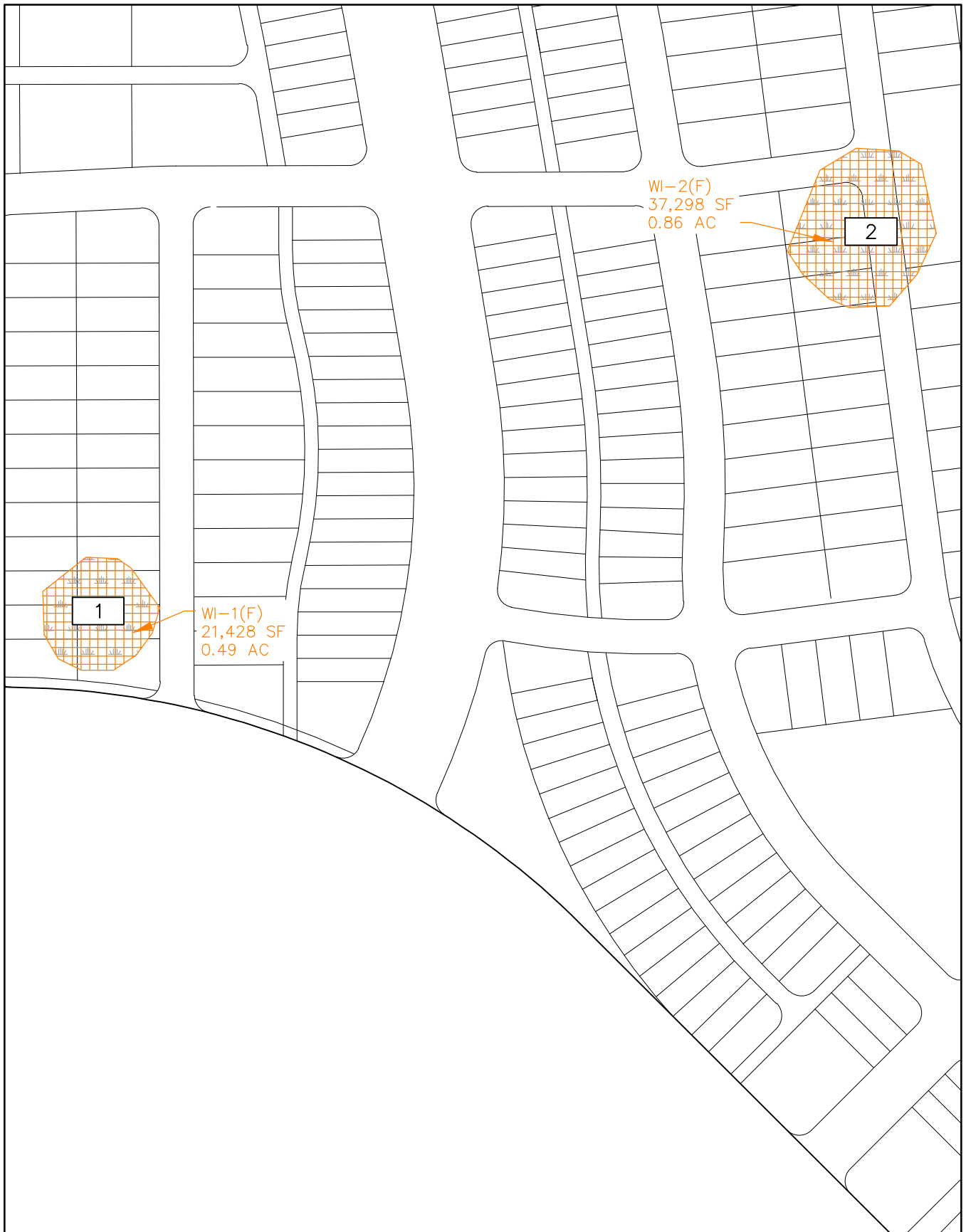
SECONDARY WETLAND IMPACTS		
DESCRIPTION	AREA (SF)	AREA (AC)
WS-4B	19,099	0.44
WS-11C	2,583	0.06
WS-11D	1,860	0.04
WS-11E	2,197	0.05
WS-14E	41,599	0.95
WS-16C	15,736	0.36
TOTAL	83,074	1.90

PRESERVED WETLANDS		
DESCRIPTION	AREA (SF)	AREA (AC)
11	278,539	6.39
14	498,291	11.44
15	222,709	5.12
16	684,660	15.72
TOTAL	1,684,199	38.66

4	6/17/21	REVISED PER SFWMD COMMENTS
3	2/22/21	REVISED W-14 & W-16 IMPACTS
2	11/5/18	REVISED PER COUNTY COMMENTS
1	6/28/18	REVISED PER SFWMD COMMENTS
NO.	DATE	REVISIONS

 <p>DONALD W. McINTOSH ASSOCIATES, INC. DONALD W. McINTOSH ASSOCIATES, INC. CERTIFICATE OF AUTHORIZATION NO. 68</p>	SCALE NTS		<p align="center">FONTANA PROPERTY DREDGE & FILL PERMIT EXHIBIT SITE DEVELOPMENT WETLAND IMPACTS TABLES</p>
	DRAWN BY ACC		
	CHECKED BY JCN		
	JOB NUMBER 13189		

JAMES C. NUGENT
 FLORIDA P.E. NO. 57553
 DATE: _____



**DONALD W. McINTOSH
ASSOCIATES, INC.**
DONALD W. McINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68

SCALE
1"=200'

DRAWN BY
ACC

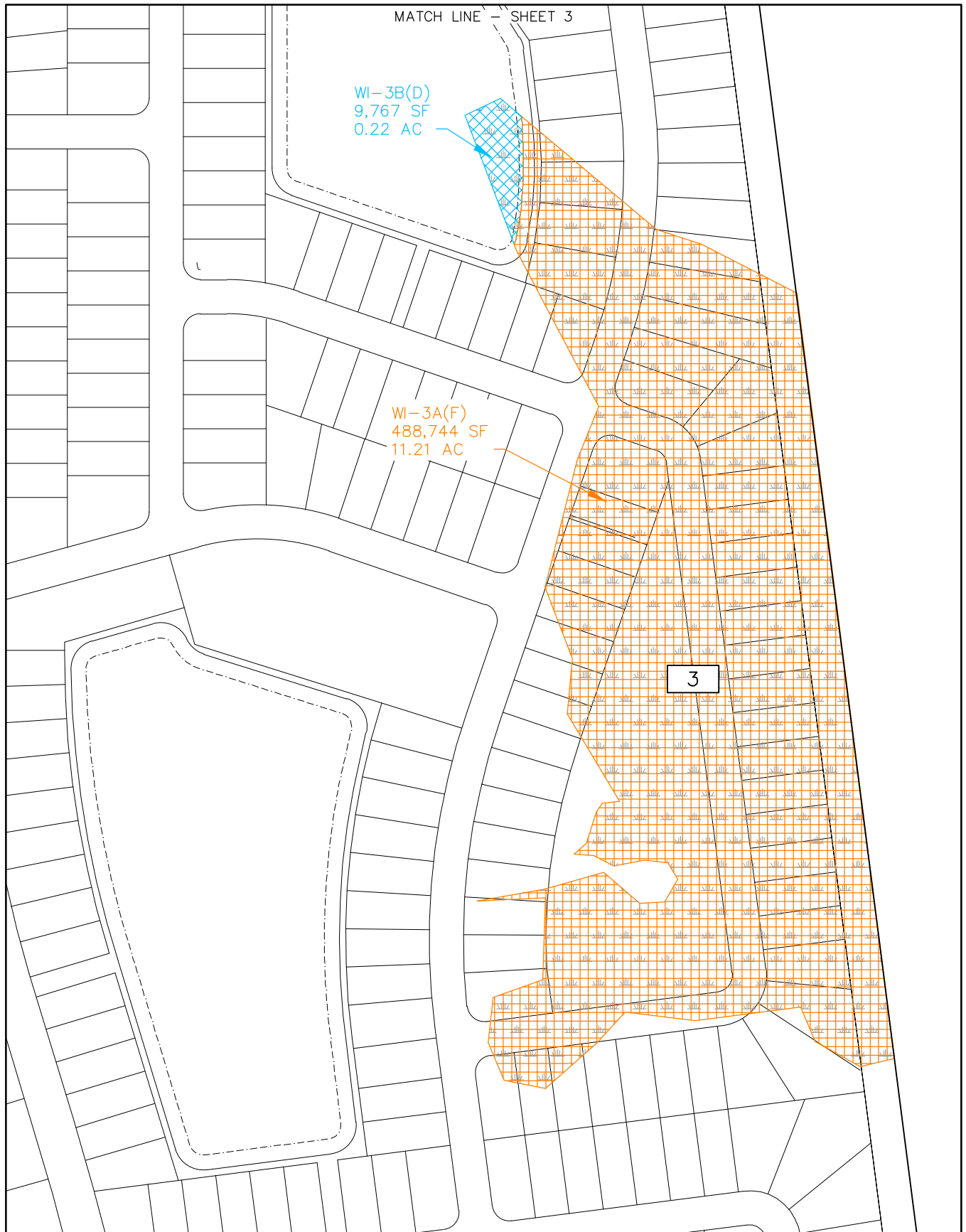
CHECKED BY
JCN

JOB NUMBER
13189



**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
WETLAND IMPACTS
SHEET 1 OF 8**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____



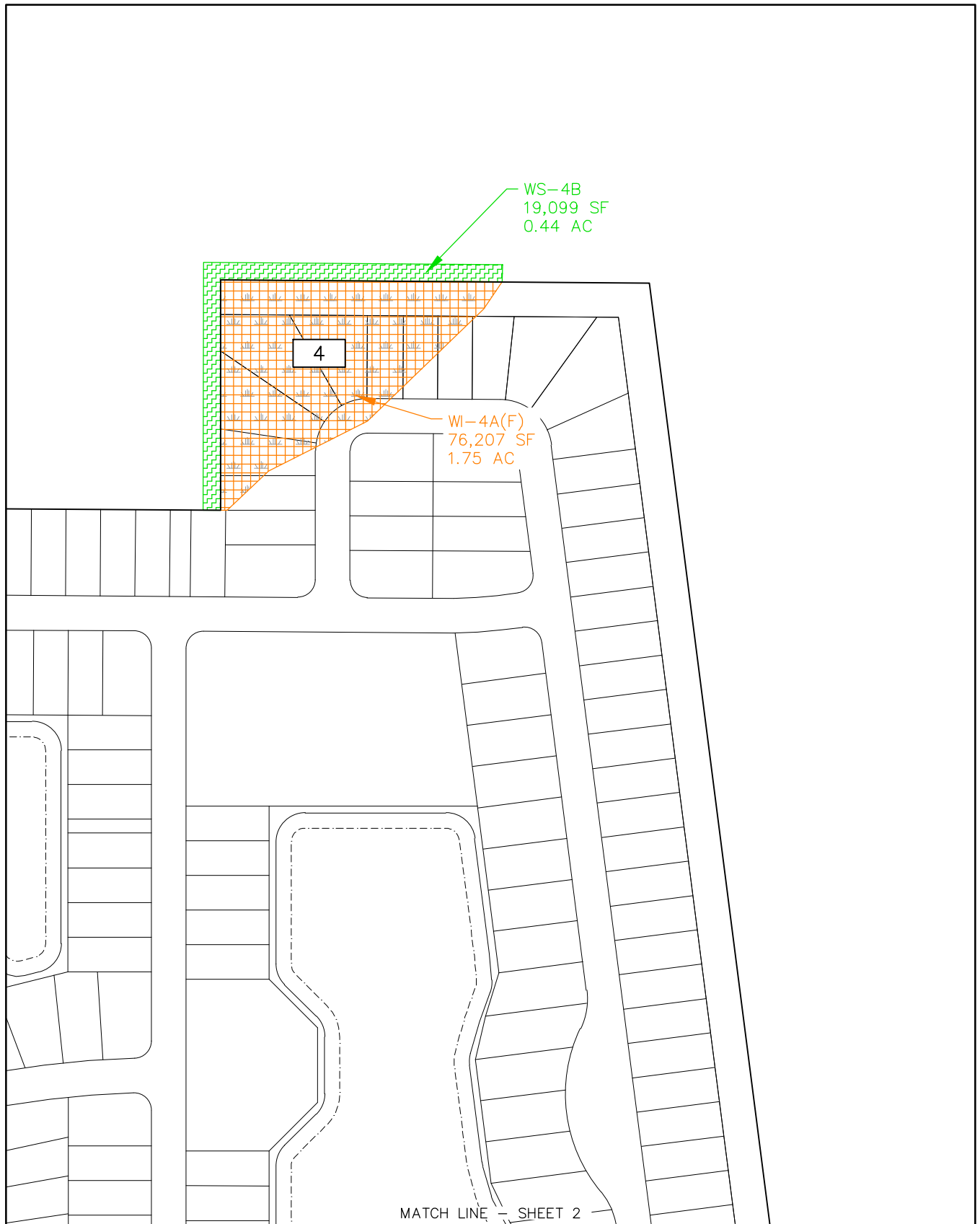
**DONALD W. MCINTOSH
ASSOCIATES, INC.**
DONALD W. MCINTOSH ASSOCIATES, INC.
CERTIFICATE OF AUTHORIZATION NO. 68



SCALE
1"=200'
DRAWN BY
ACC
CHECKED BY
JCN
JOB NUMBER
13189



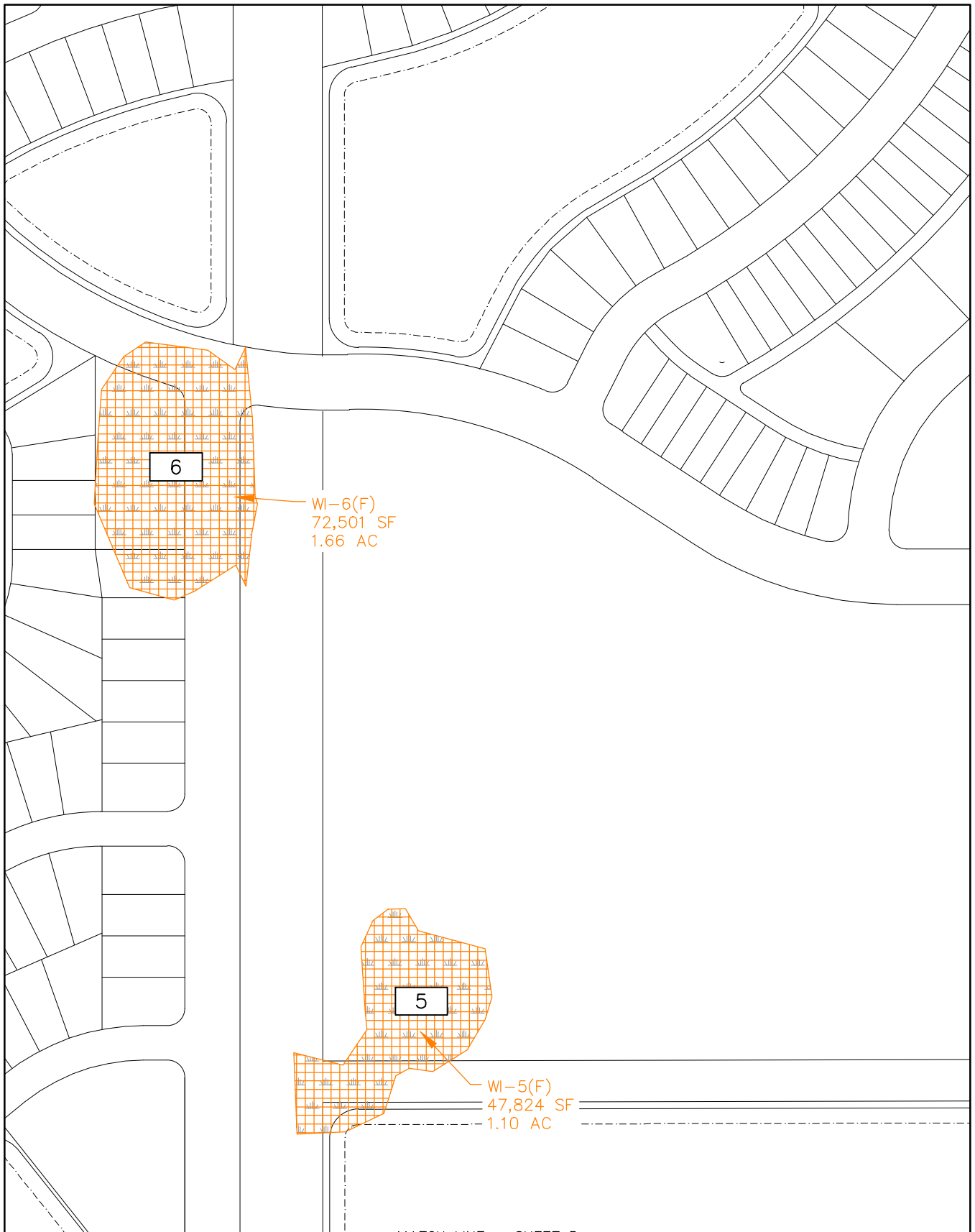
**FONTANA PROPERTY
DREDGE & FILL PERMIT EXHIBIT
SITE DEVELOPMENT
WETLAND IMPACTS
SHEET 2 OF 8**

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____



1	6/5/18	REVISED SECONDARY IMPACTS PER SFWMD COMMENTS	
NO.	DATE	REVISIONS	
 DONALD W. McINTOSH ASSOCIATES, INC. DONALD W. McINTOSH ASSOCIATES, INC. CERTIFICATE OF AUTHORIZATION NO. 68		SCALE 1"=200'	 FONTANA PROPERTY DREDGE & FILL PERMIT EXHIBIT SITE DEVELOPMENT WETLAND IMPACTS SHEET 3 OF 8
		DRAWN BY ACC	
		CHECKED BY JCN	
		JOB NUMBER 13189	

JAMES C. NUGENT
FLORIDA P.E. NO. 57553
DATE: _____



1 | 11/5/18 | REVISED PER COUNTY COMMENTS



DONALD W. MCINTOSH ASSOCIATES, INC.
 DONALD W. MCINTOSH ASSOCIATES, INC.
 CERTIFICATE OF AUTHORIZATION NO. 68

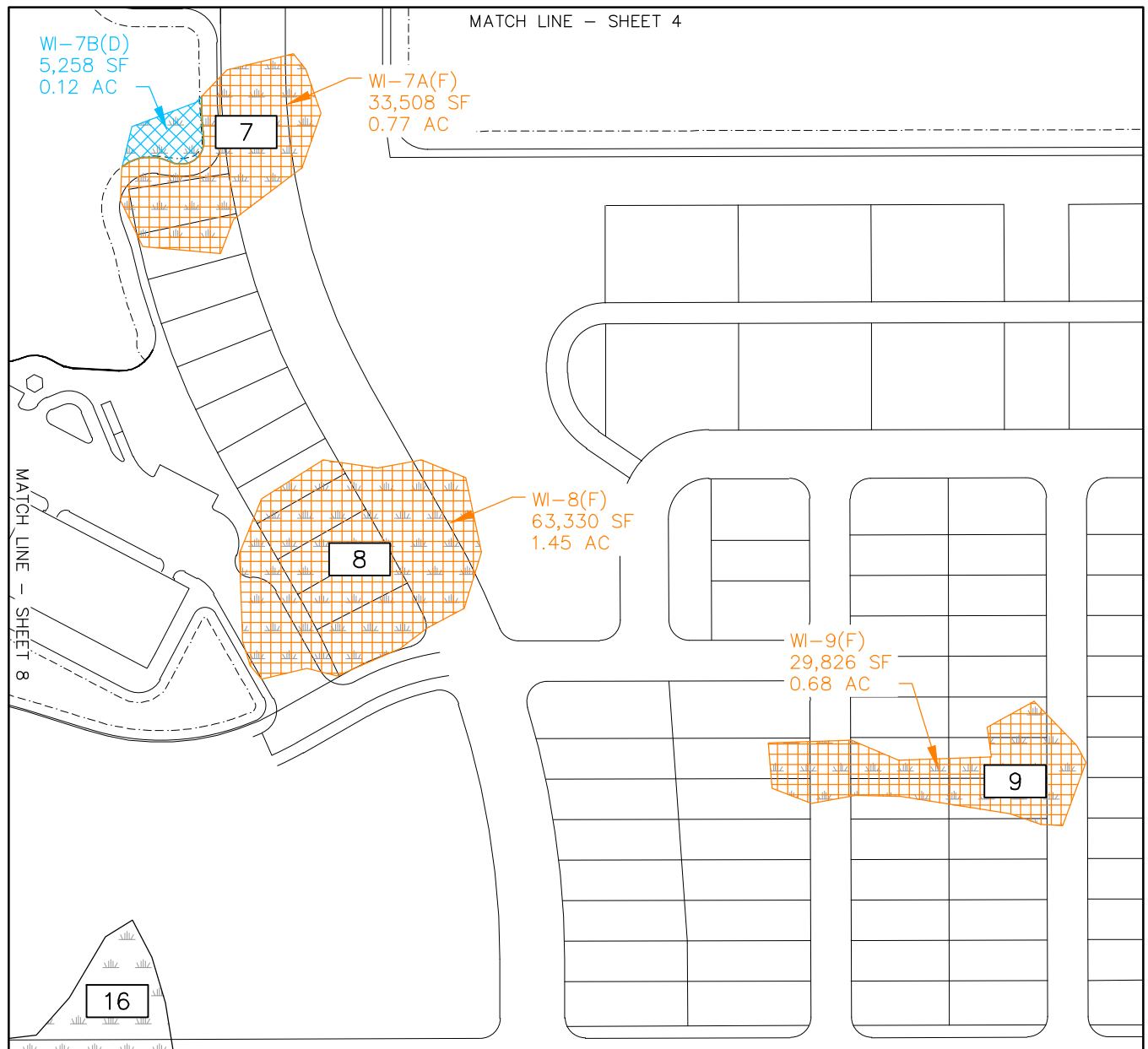
SCALE
 1"=200'
 DRAWN BY
 ACC
 CHECKED BY
 JCN
 JOB NUMBER
 13189





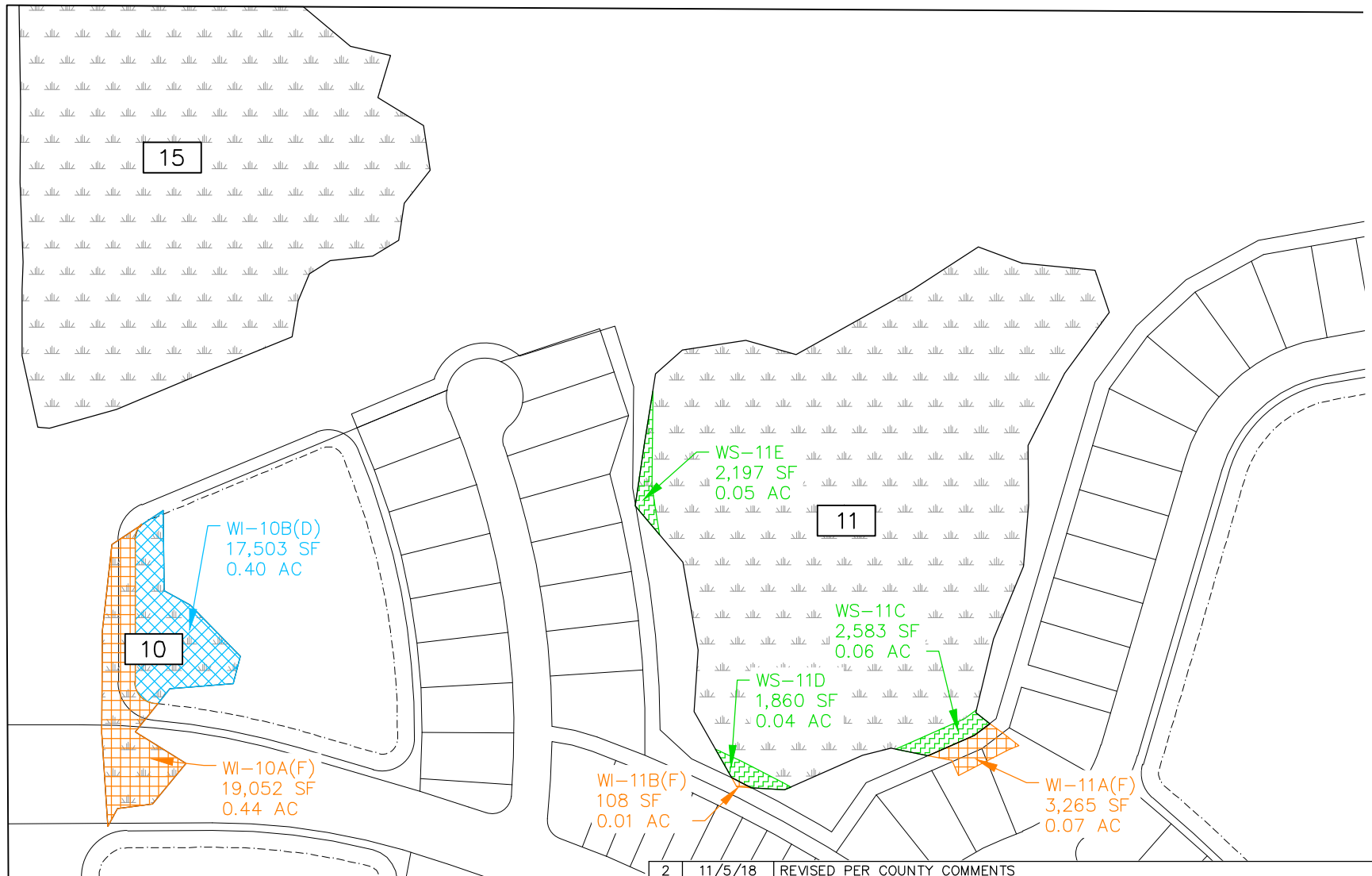
MATCH LINE — SHEET 5

**FONTANA PROPERTY
 DREDGE & FILL PERMIT EXHIBIT
 SITE DEVELOPMENT
 WETLAND IMPACTS
 SHEET 4 OF 8**

JAMES C. NUGENT
 FLORIDA P.E. NO. 57553
 DATE: _____



 <p>DONALD W. McINTOSH ASSOCIATES, INC. <small>DONALD W. McINTOSH ASSOCIATES, INC. CERTIFICATE OF AUTHORIZATION NO. 68</small></p>	<p>SCALE 1"=200'</p> <p>DRAWN BY ACC</p> <p>CHECKED BY JCN</p> <p>JOB NUMBER 13189</p>	 <p>FONTANA PROPERTY DREDGE & FILL PERMIT EXHIBIT SITE DEVELOPMENT WETLAND IMPACTS SHEET 5 OF 8</p>	<p>JAMES C. NUGENT FLORIDA P.E. NO. 57553 DATE: _____</p>
--	--	---	---



2	11/5/18	REVISED PER COUNTY COMMENTS
1	6/5/18	REVISED SECONDARY IMPACTS PER SFWMD COMMENTS
NO.	DATE	REVISIONS

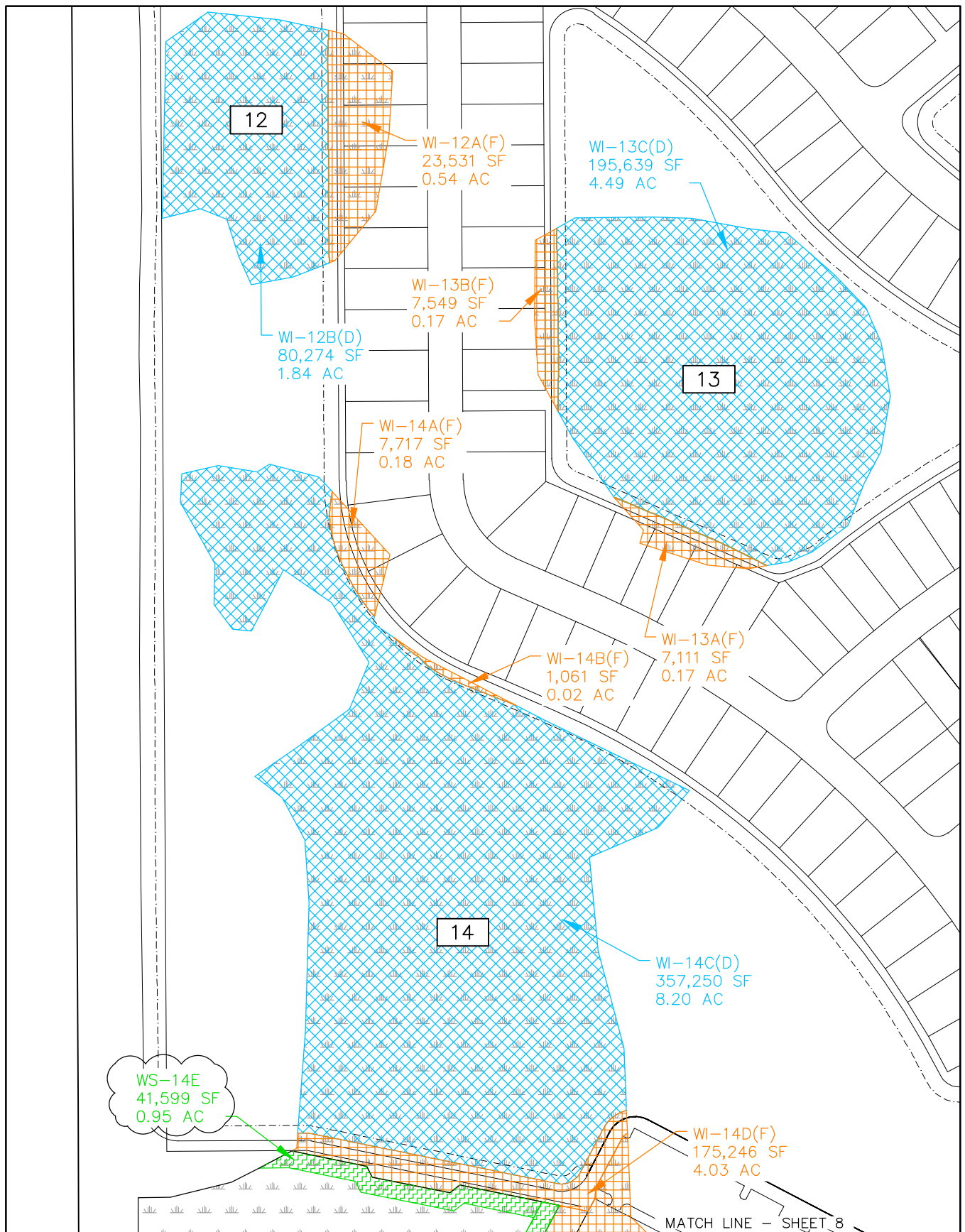
DONALD W. MCINTOSH ASSOCIATES, INC.
 DONALD W. MCINTOSH ASSOCIATES, INC.
 CERTIFICATE OF AUTHORIZATION NO. 68



SCALE
 1"=200'
 DRAWN BY
 ACC
 CHECKED BY
 JCN
 JOB NUMBER
 13189

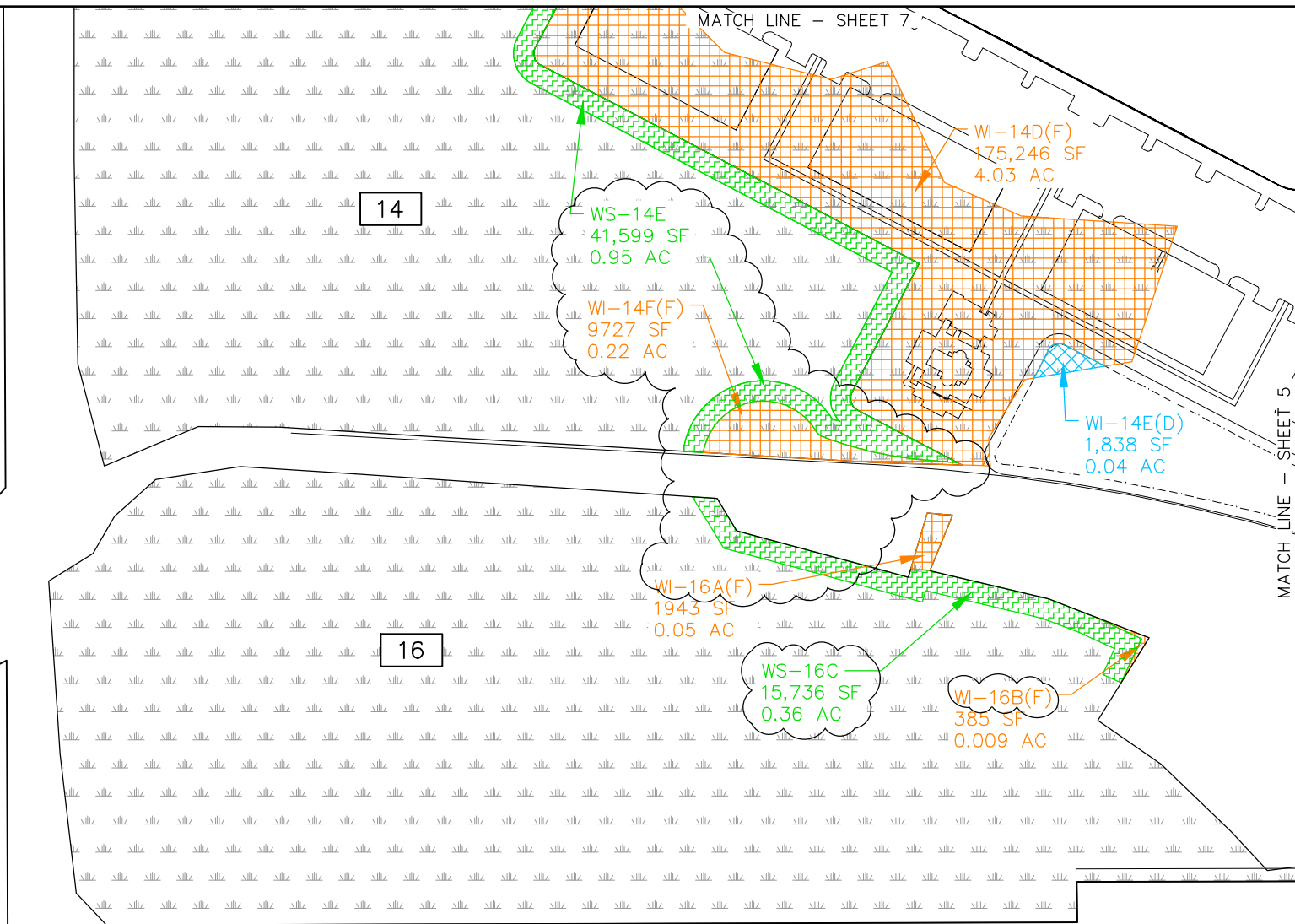


**FONTANA PROPERTY
 DREDGE & FILL PERMIT EXHIBIT
 SITE DEVELOPMENT
 WETLAND IMPACTS
 SHEET 6 OF 8**

JAMES C. NUGENT
 FLORIDA P.E. NO. 57553
 DATE: _____



 DONALD W. MCINTOSH ASSOCIATES, INC. <small>DONALD W. MCINTOSH ASSOCIATES, INC. CERTIFICATE OF AUTHORIZATION NO. 68</small>	SCALE 1"=200'	 FONTANA PROPERTY DREDGE & FILL PERMIT EXHIBIT SITE DEVELOPMENT WETLAND IMPACTS SHEET 7 OF 8	2 6/17/21 PER SFWMD COMMENTS
	DRAWN BY ACC		1 2/22/21 W-14 & W-16 IMPACTS
	CHECKED BY JCN		NO. DATE REVISIONS
	JOB NUMBER 13189		JAMES C. NUGENT FLORIDA P.E. NO. 57553 DATE: _____



3	6/17/21	REVISED PER SFWMD COMMENTS
2	2/22/21	REVISED W-14 & W-16 IMPACTS
1	6/28/18	REVISED PER SFWMD COMMENTS
NO.	DATE	REVISIONS
<div> <div> <p>DONALD W. MCINTOSH ASSOCIATES, INC. DONALD W. MCINTOSH ASSOCIATES, INC. CERTIFICATE OF AUTHORIZATION NO. 68</p> </div> <div> <p>SCALE 1"=200'</p> <p>DRAWN BY ACC</p> <p>CHECKED BY JCN</p> <p>JOB NUMBER 13189</p> </div> <div> <p>FONTANA PROPERTY DREDGE & FILL PERMIT EXHIBIT SITE DEVELOPMENT WETLAND IMPACTS SHEET 8 OF 8</p> </div> </div>		
<div> <div> <p>JAMES C. NUGENT FLORIDA P.E. NO. 57553 DATE: _____</p> </div> </div>		