

#### Board of County Commissioners • Escambia County, Florida

Paul R. Nobles/Purchasing Manager Office of Purchasing

January 30, 2019

To: All Known Prospective Bidders

#### **Addendum Number 1:**

Re: Crockett Street & Crestfield Circle Drainage Improvements, Phase I;

Specification Number PD 18-19.011

All:

We recently sent you an Invitation to Bid on the above-mentioned specification.

This Addendum Number 1 provides for:

#### **Questions/Responses**

1. Where is construction access from?

#### Response:

- a. The most reasonable access is located at the east end of Western Pines Road. Access may also be through a drainage easement acquired for this project. See Attachment A - Recorded Drainage Easement on Mr. David A. Farish's property located at 2853 Pine Forest Road.
- 2. What is the expected start date?

#### Response:

- a. The expected start date is March 12, 2019.
- 3. Is a Geotechnical Report available?

#### Response:

- a. Two geotechnical reports are available. One geotechnical report is dated November 4, 2015. The other geotechnical report is dated October 31, 2006. See Attachment B.
- b. Geotechnical Report dated November 4, 2015 mentions the termination of B-2 at five feet due to iron rock. Iron rock and metallic debris was also found at the surface on Mr. Sapp's property. Contractor should anticipate



- iron rock and debris during excavation. The cost for the removal of waste materials and unsuitable material shall be included in the "Clearing and Grubbing" pay item.
- c. Geotechnical Report dated November 4, 2015 and Engineer of Record mentions recommendations to Contractors. The project site is an active stormwater facility. The contractor is responsible for planning their efforts and staging their work to allow the facility to continue to function during rainfall events.
- 4. What is the budget for the project?

#### Response:

- a. The budget is \$380,000.
- 5. Is the 3700 CY of cut shown in bid tab item 6 contained in the 28236 CY shown in line item 5 or is it over and above?

#### Response:

a. Line Item 6 quantity is in addition to line item 5 quantity. Total project cut is estimated to be 31,936 CY. Line item 5 represents in place volume of material which is to be excavated and removed from site. Line Item 5 represents, in place volume of material to be excavated, moved and placed on site to create final grades in areas of proposed fill.

#### <u>Additional Information</u>

Contractors shall be aware of (2) Temporary Work Easements obtained for this project. Contractor is expected to coordinate with two property owners in regard to fencing their property. Both property owners have pets/animals. Temporary fencing may need to be erected. The cost for temporary fencing shall be included in the "Remove and Replace Hogwire Fence" pay item. Escambia County will provide contact information for both property owners. See Attachment C.

Sheet C-018 shows "...pipe run will be part of Phase II". Please note, Structure 11 FDOT Type P-8 Manhole (4.0') shall be installed. In addition, one length on pipe will be installed from S-11 to the north for the future phase.

Contractors shall be aware of the conditions and stipulations of the General Environmental Resource Permit. See Attachment D.

If a Contractor would like to visit the site and familiarize themselves with the project prior to bid deadline, a County representative will unlock the gate at the

east end of Western Pines Road on January 31st from 3:00 p.m. to 4:00 p.m. The County representative will not answer any questions.

This Addendum Number 1 is furnished to all known prospective bidders. Please sign and return one copy of this Addendum, with original signature, with your bid as an acknowledgement of you having received same. You may photo copy for your record.

| Sincerely,  |                   |
|---|-------------------|
| Emily D. Weddington, CPPE<br>Purchasing Coordinator | 3                 |
| Acknowledgement of Receip                           | ot of Addendum 1: |
| SIGNED:   |                   |
| COMPANY:  | 1                 |
| Attachments   |                   |

#### Addendum 1 - Attachment A

Pam Childers
CLERK OF THE CIRCUIT COURT
ESCAMBIA COUNTY FLORIDA
INST# 2018055528 7/16/2018 9:18 AM
OFF REC BK: 7933 PG: 869 Doc Type: ESM
Recording \$44.00

This document was prepared by: Stacey S. Ward Escambia County Public Works Department 3363 West Park Place Pensacola, Florida 32505

A Portion of 38-1N-31-2306-000-007 Crockett Drainage Project

STATE OF FLORIDA COUNTY OF ESCAMBIA

THIS DRAINAGE EASEMENT made this 3 day of \_\_\_\_\_\_\_\_, 2018, by and between David A. Farish, a single man, whose mailing address is 2853 Pine Forest Road, Cantonment, Florida 32533 (Grantor), and Escambia County, a political subdivision of the State of Florida, acting by and through its duly authorized Board of County Commissioners, whose mailing address is 221 Palafox Place, Pensacola, Florida 32502 (Grantee).

(Wherever used, the terms "Grantor" and "Grantee" shall include the singular and plural, masculine and feminine, heirs, legal representatives, successors and assigns.)

#### WITNESSETH

WHEREAS Grantee proposes to construct and/or maintain a drainage easement across real property located in Section 38, Township 1N, Range 31 West, Escambia County, Florida; and

WHEREAS, Grantor is the owner of the real property, over, across, and upon which Grantee proposes to construct and maintain said drainage easement;

NOW, THEREFORE, in consideration of One Dollar (\$1.00), the promises contained herein and other good and valuable consideration, Grantor does hereby grant to Grantee, a permanent drainage easement over the real property described below for the purposes of constructing and/or maintaining a drainage easement, together with the right of ingress and egress over and across the drainage easement and the right to excavate, construct and maintain the drainage easement.

#### See attached "Exhibit A"

GRANTOR also hereby grants, bargains, conveys, transfers, dedicates, and delivers to Grantee the right to clear, keep clear, and remove from the drainage easement, all trees, undergrowth and other obstructions that may interfere with the location, excavation, operation or maintenance of the drainage easement or any structures installed thereon by Grantee. Notwithstanding the issuance of any permit to construct or erect any structure in the drainage easement, Grantor agrees not to build, construct or create or permit others to build, construct or create any building or other structure in the drainage easement that may interfere with the location, excavation, operation or maintenance of the drainage easement or any structures installed thereon. Easily removable improvements, such as fences, may be constructed with the prior consent of Grantee.

In the event of any discrepancy between the actual location of drainage improvements and the legal description of the drainage easement, the actual location of drainage improvements shall control to the extent of such discrepancy and said legal description shall be deemed to have been modified, and the Grantor agrees to execute corrective instruments as may be required by Grantee.

GRANTOR does hereby covenant with Grantee that it is lawfully seized and possessed of the real property above described and that the easement is free from all encumbrances that would prohibit Grantee from using the easement for drainage, and Grantor hereby waives any right to compensation for Grantee's use of the drainage easement and an appraisal of the drainage easement unless otherwise provided for herein.

TO HAVE AND TO HOLD said drainage easement upon the said Grantee forever.

IN WITNESS WHEREOF, Grantor has hereunto set its hand and seal the date first above written.

SIGNED IN THE PRESENCE OF:

**GRANTORS:** 

By:

David A. Farish

STATE OF FLORIDA COUNTY OF ESCAMBIA

The foregoing instrument was acknowledged before me this day of day of day of 2018, by David A. Farish. He is personally known to me, or produced current as identification.

(Notary Seal)

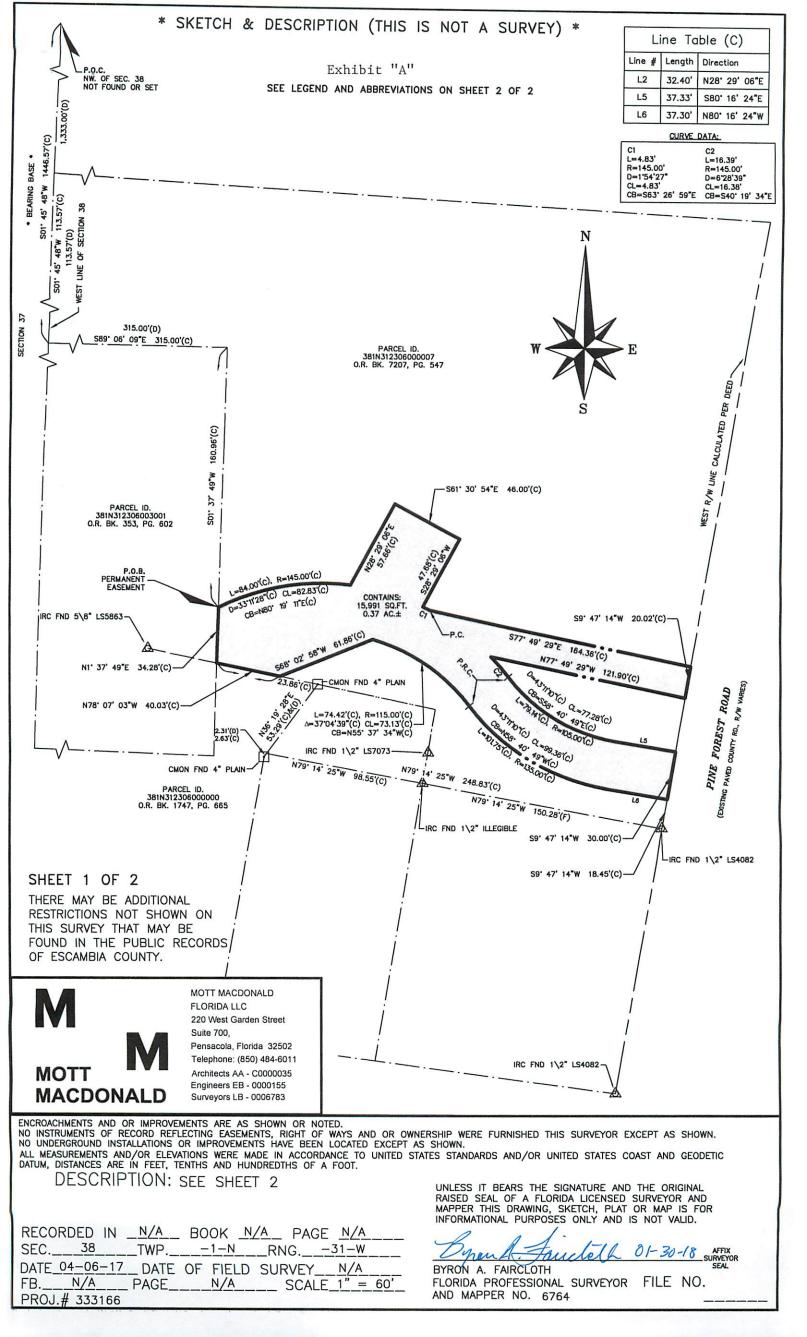
Witness \_\_\_\_\_
Print Name

Printed Name of Notary Public

Signature of Notary Public

### ACCEPTANCE

| This Drainage Easement was accepted          | by Escambia County, Florida, on the day of ized by the Board of County Commissioners of Escambia day of gure, 2018,   |
|--|---|
| Pam Childers Clerk of the Court Deputy Clerk | BOARD OF COUNTY, PLORIDA  Jeff Bergosh, Chairman  Date Executed   |
|  | This document approved as to form and legal sufficiency.  By:  Title:  Date:  This document approved as to form and legal sufficiency.  County Afforms  4, 2011 |



#### PERMANENT EASEMENT

PERMANENT EASEMENT

A PORTION OF LAND DESCRIBED IN OFFICIAL RECORDS BOOK 7207, PAGE 547 AND LOCATED IN SECTION 38, TOWNSHIP 1 NORTH, RANGE 31 WEST, ESCAMBIA COUNTY, FLORIDA. COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 38; THENCE S 01'45'48" W, ALONG SAID WEST LINE, FOR A DISTANCE OF 160.96 FEET; THENCE DEPARTING SAID WEST LINE S 89'06'09" E, FOR A DISTANCE OF 315.00 FEET; THENCE S 01'37'49" W, FOR A THENCE ALONG SAID CURVE 84.00 FEET ALONG THE ARC OF SAID CURVE (HAVING A CHORD BEARING OF N 80'19'11" E AND HAVING A CHORD DISTANCE OF 46.00 FEET; THENCE S 28"29'06" W, FOR A DISTANCE OF 46.00 FEET; THENCE S 28"29'06" W, FOR A DISTANCE OF 57.66 FEET; THENCE S 61'30'54" E, FOR A DISTANCE OF 145.00 FEET; THENCE S 28"29'06" W, FOR A DISTANCE OF 47.68 FEET TO A POINT OF CURVATURE CONCAVE TO THE SOUTH HAVING A CHORD DISTANCE OF 4.83 FEET); THENCE SOUTHEAST 4.83 FEET ALONG THE ARC OF 57.68 FEET TO A POINT OF CURVATURE CONCAVE TO THE SOUTH HAVING A CHORD DISTANCE OF 4.83 FEET); THENCE SOUTHEAST 4.83 FEET ALONG THE ARC OF 57.68 FEET TO A POINT OF CURVATURE CONCAVE TO THE SOUTH HAVING A CHORD DISTANCE OF 4.83 FEET); THENCE DEPARTING SAID CURVE STY49'29" E, FOR A DISTANCE OF 164.36 FEET TO WEST RIGHT OF WAY DEPART OF WAY LINE NOT THE SOUTH HAVING A CHORD DISTANCE OF 164.36 FEET TO WEST RIGHT OF WAY DEPART OF WAY LINE NOT THE SOUTH HAVING A CHORD DISTANCE OF 164.36 FEET TO WEST RIGHT OF WAY DEPART OF WAY LINE NOT THE SOUTH HAVING A CHORD DISTANCE OF 163.86 FEET TO WEST RIGHT OF WAY LINE NOT THE SOUTH HAVING A RADIUS OF 145.00 DISTANCE OF 163.86 FEET) TO A POINT OF REVERSE CURVATURE CONCAVE TO THE NORTH HAVING A RADIUS OF 145.00 DISTANCE OF 163.86 FEET) TO A POINT OF REVERSE CURVATURE CONCAVE TO THE NORTH HAVING A RADIUS OF 105.00 FEET; THENCE NORTHEAST THENCE SOUTH HAVING A CHORD DISTANCE OF 58'10'49" WAY LINE OF PINE FOREST THENCE NORTHEAST 10.75 FEET ALONG THE ARC OF SAID CURVE (HAVING A CHORD BEARING OF S 58'40'49" WAY DISTANCE OF 37.30 FEET TO A POINT OF CURVATURE CONCAVE NORTH HAVING A CHORD DISTANCE OF 99.36 FEET) T

CONTAINING 15,991 SQUARE FEET OR 0.37 ACRES MORE OR LESS.

#### SURVEYOR'S NOTES

- 1. NORTH AND BEARINGS ARE ASSUMED BASED ON THE WEST LINE OF SECTION 38, TOWNSHIP 1 NORTH, RANGE 31 WEST, HAVING A BEARING OF S 01'45'48" W.
- 2. NO TITLE SEARCH WAS PERFORMED BY NOR FURNISHED TO MOTT MACDONALD FLORIDA, LLC FOR THE PURPOSES OF THE SKETCH AND DESCRIPTION SHOWN HEREON.
- 3. THE OPINION OF THE LOCATION AND EXTENT OF THE PROPERTY REPRESENTED BY THE SKETCH AND DESCRIPTION DOES NOT GUARANTEE TITLE TO OR DETERMINE OWNERSHIP TO ANY PERSONS OR PARTIES.

#### **LEGEND & ABBREVIATIONS**

#### SHEET 2 OF 2

THERE MAY BE ADDITIONAL RESTRICTIONS NOT SHOWN ON THIS SURVEY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF ESCAMBIA COUNTY.

# MOTT MACDONALD

MOTT MACDONALD FLORIDA LLC 220 West Garden Street Suite 700, Pensacola, Florida 32502 Telephone: (850) 484-6011 Architects AA - C0000035 Engineers EB - 0000155

Surveyors LB - 0006783

| LJ     | -  | LICENSED SURVETUR   | ш =  | LICENSE BUSINESS   |  |
|--------|--|---|--|--|--|
| R      | =  | RADIUS  | CB =   | CHORD BEARING  |  |
| CL     | -  | CHORD LENGTH  | L =  | ARC LENGTH   |  |
| D      | -  | DELTA   | IRC -  | RON ROD & CAP  |  |
| FND.   | -  | FOUND   | CMON =   | 4" CONCRETE MONUMENT   |  |
| (C)    | -  | CALCULATED  |  |  |  |
| (D)    | =  | DEED MEASUREMENT  | SQ. FT. =  | SQUARE FEET  |  |
| (F)    | -  | FIELD MEASUREMENT   | AC. =  | ACRES  |  |
| SEC.   | =  | SECTION   | ± =  | PLUS OR MINUS  |  |
| TWP.   | =  | TOWNSHIP  | O.R  | OFFICIAL RECORDS   |  |
|        |  |   |  |  |  |
|        |  |   |  |  |  |
|        |  |   |  |  |  |
| Q.     | -  | CENTERLINE  | P.T. =   | POINT OF TANGENCY  |  |
| R/W    | =  | RIGHT OF WAY  | <b>-√</b>  | NOT TO SCALE   |  |
| T.C.E. | -  | TEMPORARY CONSTRUCTION  | EASEMENT   |  |  |
| _      | _  |   | - SECTI  | ON LINE  |  |
| -      | _  |   | - RIGHT  | OF WAY LINE  |  |
| _      |  | —·—·—·  | PROP   | erty line  |  |
|        | -  |   | == BOUN  | DARY LINE  |  |
|        | _  |   | -= EASE  | MENT LINE  |  |
|        |  |   |  |  |  |
|        | R CL D FND. (C) (D) (F) SEC. TWP. RNG. P.O.C. P.O.B. & R/W | R = CL = D = FND. = (C) = (F) = SEC. = TWP. = P.O.B. = P.O.B. = R/W = | (F) = FIELD MEASUREMENT SEC. = SECTION TWP. = TOWNSHIP RNG. = RANGE P.O.C. = POINT OF COMMENCEMENT P.O.B. = POINT OF BEGINNING Q = CENTERLINE R/W = RIGHT OF WAY T.C.E. = TEMPORARY CONSTRUCTION | R = RADIUS  CL = CHORD LENGTH  D = DELTA  FND. = FOUND  (C) = CALCULATED  (D) = DEED MEASUREMENT  SEC. = SECTION  TWP. = TOWNSHIP  RNG. = RANGE  P.O.C. = POINT OF COMMENCEMENT  P.O.B. = POINT OF BEGINNING  Q = CENTERLINE  R/W = RIGHT OF WAY  T.C.E. = TEMPORARY CONSTRUCTION EASEMENT  = PROP  BOUN | R = RADIUS CL = CHORD LENGTH D = DELTA FND. = FOUND CC) = CALCULATED D = DEED MEASUREMENT (F) = FIELD MEASUREMENT SEC. = SECTION TWP. = TOWNSHIP RNG. = RANGE P.O.C. = POINT OF COMMENCEMENT P.O.B. = POINT OF BEGINNING Q = CENTERLINE CE = CHORD BEARING L = ARC LENGTH IRC = IRON ROD & CAP CMON = 4* CONCRETE MONUMENT ID. = IDENTIFICATION SQ. FT. = SQUARE FEET ACRES FT. = SQUARE FEET ACRES BY. = BOOK BY. = BOOK P.C. = POINT OF CURVATURE P.C. = POINT OF TANGENCY |

ENCROACHMENTS AND OR IMPROVEMENTS ARE AS SHOWN OR NOTED.
NO INSTRUMENTS OF RECORD REFLECTING EASEMENTS, RIGHT OF WAYS AND OR OWNERSHIP WERE FURNISHED THIS SURVEYOR EXCEPT AS SHOWN.
NO UNDERGROUND INSTALLATIONS OR IMPROVEMENTS HAVE BEEN LOCATED EXCEPT AS SHOWN.
ALL MEASUREMENTS AND/OR ELEVATIONS WERE MADE IN ACCORDANCE TO UNITED STATES STANDARDS AND/OR UNITED STATES COAST AND GEODETIC DATUM, DISTANCES ARE IN FEET, TENTHS AND HUNDREDTHS OF A FOOT.

DESCRIPTION: SEE ABOVE

RECORDED IN NA BOOK NA PAGE NA \_TWP.\_\_\_\_\_1\_N \_\_\_RNG.\_\_\_\_31\_W DATE 04-06-17 DATE OF FIELD SURVEY\_\_ N/A PAGE\_\_ N/A SCALE N/A FB. PROJ.# 333166

UNLESS ACCOMPANIED BY A SIGNED AND SEALED SHEET 1, THEN THIS DRAWING, SKETCH, PLAT, MAP OR DESCRIPTION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID.

FILE NO.

Since 1976

November 4, 2015

Mr. Steven D. White, PE Senior Project Engineer Hatch Mott MacDonald 5111 N. 12<sup>th</sup> Avenue Pensacola, FL 32504

SUBJECT: Report of Geot

Report of Geotechnical Exploration
Crocket Street Drainage Improvements

Escambia County, Florida

LMJ File #: 15-163

Dear Steven,

This report forwards the results of our geotechnical exploration for the proposed **Crocket Street Drainage Improvements** project in Escambia County, Florida. The purpose of this exploration was to determine the general subsurface conditions near the culvert replacement area and use this information to provide recommendations for pipe bedding and stormwater pond retrofit design. Our geotechnical exploration included three hand auger/probe borings, one Standard Penetration Test (SPT) boring, classification of the samples obtained in the field, and analysis by our engineering staff.

<u>Site and Project Conditions</u>: The project site begins near the intersection of West Roberts Road and Crockett Drive and continues south for approximately 1,320 feet to the existing stormwater pond area east of Western Pines Road in Escambia County, Florida. We understand that the project consists of the installation of a stormwater pipe along this easement to improve drainage in the area as well as improvements to the existing stormwater pond area. If this information changes or is incorrect, the geotechnical engineer should be notified, and changes to our recommendations may be needed.

Subsurface Exploration: Our geotechnical exploration included one Standard Penetration Test (SPT) boring drilled to a depth of 41 feet below grade at the time of drilling and three hand auger/probe borings drilled to a depth of 5.5-10 feet below existing grade at the time of drilling. Site access was limited and required hand transported equipment to be used. The SPT consists of driving a 2-inch diameter split spoon sampler into the ground using a 140-pound hammer dropped 30 inches. The number of blows required to drive the sampler one foot after seating it six inches is referred to as the blow count or "N" value and is a measure of the relative density of soils. "N" values can be found in **Figure #2** adjacent to the soil descriptions. The SPT boring was drilled in general accordance with ASTM D1586 using a portable tripod mounted drill rig and was advanced between sampling using the mud jetting technique with a Bentonite drilling mud. The hand auger borings were advanced and probed with a steel rod at 6 inch increments. Each sample was removed from the sampler or auger, classified in the field by the driller, and packaged for visual classification by our engineering staff.

<u>Subsurface Conditions</u>: Boring locations are shown in the attached **Figure #1** and should be considered approximate. The subsurface conditions encountered in the borings are shown in **Figure #2**, and descriptions of the soils encountered are accompanied by their Unified Classification symbol (SP, SM, etc.)



based on a visual examination unless accompanied by laboratory results. Boundaries between soil layers and soil depths should be considered approximate, since the actual transition between soil layers may be gradual. A generalized summary of the subsurface conditions encountered in the borings is below, and a detailed description can be found on **Figure #2**.

The stormwater piping borings (B-1 to B-3) generally encountered 6-24 inches of brown and tan medium dense slightly silty sand over orange and tan with some brown and red silty sand or slightly clayey silty sand to the final boring depths of 5-10 feet. The borings were generally dense or medium dense except for boring B-1 which was very loose from approximately 2-7 feet. Note that boring B-1 encountered layers of slightly clayey sand and clay from 9-10 feet and boring B-2 was terminated at five feet due to iron rock.

The stormwater pond boring (B-4) encountered orange, tan, and brown loose to medium dense silty sand to a depth of 7.5 feet over 1.5 feet of tan/brown stiff silty clay underlain by orange/yellow medium dense silty sand to a depth of 14 feet. The boring continued with yellow/orange dense sand to a depth of 19 feet over white, orange, and pink very dense and dense slightly silty sand to the final boring depth of 41 feet.

Free groundwater was not encountered in the auger borings (B-1 to B-3) at the time of drilling. Moisture content testing on samples from boring B-4 indicated that the soil was nearly saturated beginning at the 15 foot sample, relatively dry in the 20 foot sample, and saturated or nearly saturated in the 25 and 30 foot samples, and we assumed that the groundwater level was approximately ±23 feet below existing grade at the time of drilling. The borings were drilled during a seasonally moderate rainfall period. Water is expected to temporarily perch on the slowly draining layers encountered in the borings following periods of high rainfall. Groundwater levels under the existing pond will vary with the amount of local rainfall and will substantially lag the rainfall, and may be different at other times.

<u>Basis of Recommendations</u>: Recommendations rendered herein are based on assumed and/or design information available at the time of this report, the subsurface conditions encountered in the test borings, commonly accepted Geotechnical Engineering principles and practices, and our experience with similar soil/groundwater conditions. Should the final project design information differ from the design information used in this report or should any soil conditions not discussed in this report be encountered during construction, our office should be notified and retained so that this report can be modified as needed.

Regardless of the care exercised in performing a Geotechnical Exploration, the possibility always exists that soil and/or groundwater conditions between the test borings will differ from those encountered at the specific boring locations. In addition, construction operations may alter the soil conditions. Therefore, it is recommended that a representative from Larry M. Jacobs & Associates, Inc. (LMJ) remain involved throughout construction to provide construction testing and quality assurance services and additional recommendations if needed due to unforeseen conditions.

<u>Summary and General Comments</u>: The conditions encountered in the borings appear to be suitable for stormwater piping support on firm undisturbed soils or compacted subgrade based on the results of the borings. Boring B-1 encountered very loose conditions from 2-6 feet and borings B-2 and B-3 encountered mostly dense conditions which appear to be suitable for placing the piping on firm undisturbed soils. The bottom of the culvert trench should be probed at the time of construction and



any loose or disturbed areas should be properly compacted or if wet, should be undercut and replaced with dry compactable soils in a timely manner.

The pond boring (B-4) was located in the bottom of the pond and encountered slow draining soils extending to 14 feet below existing grade at the time of drilling including a 1.5 foot thick confining clay layer. The boring continued with moderately permeable medium dense sand to very dense or dense somewhat lower permeability slightly silty sand soils. A sand chimney installed to 20 feet below existing grade would improve the performance of the stormwater pond, with the performance of the chimney being related to the groundwater levels. The following sections provide our recommendations for site preparation and excavation, stormwater piping bedding and backfilling, and stormwater pond recommendations.

Stormwater Piping Site Preparation and Excavation Recommendations: The contractor will need to maintain shoring and/or bracing, if needed. A trench box is typically used to shore trenches and minimize trench width and would be acceptable for this purpose. Note that significant rainfall events and flowing water (seepage forces) through the sides of excavations can destabilize open cuts, and surface water runoff, erosion, and stormwater infiltration seepage should be controlled for all excavations. If infiltrating perched water is encountered in the stormwater piping excavations, it should be pumped out or removed with the excavator bucket in a timely manor to minimize wetting of the soils at the bottom of the trenches. The contractor is solely responsible for designing and constructing safe excavations as required to maintain stability during construction. All excavations should be constructed in accordance with the latest local, state, and federal safety regulations.

Stormwater Piping Bedding and Backfill Recommendations: The stormwater piping should be placed on firm undisturbed soils where encountered. Boring B-1 encountered loose conditions from 2-6 feet below existing grade. We recommend that a representative from our office evaluate the stormwater piping subgrade by probing. Where loose conditions are encountered, we recommend compacting the bottom of the trench excavation for a minimum depth of 12 inches to a minimum of 92% of the Modified Proctor Test (ASTM D1557) density using a jumping jack tamper or large mechanical sled tamper. Compaction of loose or disturbed areas should be verified using in-place density testing. Backfill should be compacted to a minimum of 92% of the Modified Proctor Test (ASTM D1557) density in maximum 6-inch lifts using hand operated equipment around the stormwater piping and above the piping to final subgrade.

Stormwater Pond Improvements Recommendations: The pond boring B-4 was located in the bottom of the existing stormwater pond and encountered primarily slow draining silty sand soils to a depth of 14 feet below grade at the time of drilling with a 1.5 foot layer of confining silty clay from 7.5-9 feet. The boring continued with moderately permeable sand extending to a depth of 19 feet below existing grade underlain by somewhat slower draining very dense slightly silty sand. Groundwater appeared to be roughly ±23 feet below existing grade based on the results of soil moisture content tests.

The soils deeper than 14 feet below existing grade could be used to key in a sand chimney. A Shelby tube sample could not be retrieved due to the location of the boring and the required use of portable equipment required for accessing the site. The chimney outflow rate was estimated using the results of the basic laboratory tests on samples from boring B-4 to estimate the hydraulic conductivity of the soil layers in conjunction with published correlations, and our experience with similar soils. The



estimated rate does not include a factor of safety. Appropriate safety factors should be used for the design of the chimney.

We have calculated the outflow rate for a sand chimney to be on the order of 100 ft³/day/foot of sand chimney for a single long chimney based on the single boring B-4 during similar rainfall conditions. The rate of the chimney would be reduced to on the order of 25 ft³/day/foot of sand chimney during and following periods of high rainfall. The chimney should be a long and narrow trench, a minimum of 5 feet wide, embedded to a depth of 20 feet below existing grade at the time of drilling. The depth of the chimney may be limited by groundwater levels and construction should be scheduled for a historically dry period, if practical. The chimney installation should be monitored by the GER to verify that the soils the chimney will be placed into meet or exceed the basis of design, and we recommend putting a note on the plans requiring this.

Chimney backfill material should be clean sand containing less than 3% fines with a minimum vertical permeability of 30 feet per day when compacted to 100 percent of a Standard Proctor Test (ASTM D698). Using good chimney sand is critical to the performance of the chimney, and a sample of the proposed chimney material should be submitted to our lab for testing and evaluation prior to purchase. We recommend mounding the chimney sand on the bottom of the pond over the chimney to promote the settlement of fines away from the chimney to reduce maintenance requirements. When the top and sides of this mound becomes silted over during or after construction, it should be scraped off and replaced with similar clean chimney sand material.

We hope that this report provides sufficient information for your current requirements. If you have any questions or comments, please do not hesitate to call.

Sincerely.

LARRY M. JACOBS & ASSOCIATES

David L. Liechty, PE Project Engineer

Florida Reg. #64774

Larry M. Jacobs, PE

Principal Geotechnical Engineer

Florida Reg. #19690

Attachments

## **BORING LOCATION PLAN**







Project #: 15-163 Scale: NTS

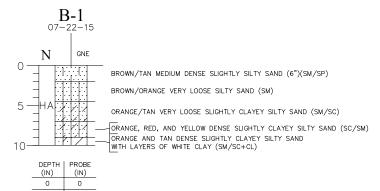
Date: 10/27/2015 Checked By: DLL

Project: Crockett Street and Crestfield Cr.

Location: Escambia County. Florida



## **BORING LOGS**



18 2 24 72

30 0

48 0

54 0 60 1

66 1

96 1

102 0 108

42

96 102 108 1 114 1

| 07-22       | 2–15   |
|-------------|--|
| N<br>HA     | GNE BROWN DENSE SLIGHTLY SILTY SAND (6")(SM/SP) DARK TAN DENSE SLIGHTLY SILTY SAND (SM/SP) ORANGE/TAN DENSE SLIGHTLY SAND (SM) ORANGE/TAN DENSE SLIGHTLY CLAYEY SILTY SAND (SC/SM) IRON ROCK |
| NOTE: BORIN | IG REFUSED AT 5 FEET DUE TO IRON ROCK  |

| DEPTH<br>(IN) | PROBE<br>(IN) |
|---------------|---------------|
| 0             | 0             |
| 6             | 0             |
| 12            | 0             |
| 18            | 0             |
| 24            | 1             |
| 30            | 0             |
| 36            | 0             |
| 42            | 0             |
| 48            | 0             |
| 54            | 0             |
| 60            | 0             |

B-2

B-3 N BROWN MEDIUM DENSE SILTY SAND (6")(SM) ORANGE/TAN MEDIUM DENSE SILTY SAND (SM) ORANGE/TAN DENSE SLIGHTLY CLAYEY SILTY SAND (SM/SC) RED/ORANGE DENSE SILTY SAND (SM) ORANGE/RED MEDIUM DENSE SILTY SAND (SM) 12 1 18 1 24 0

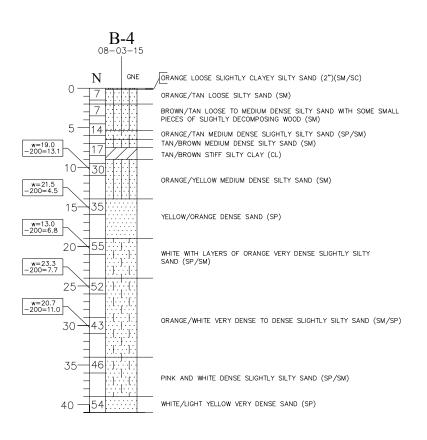


Figure #2

LEGEND

| <br>SAND   |                | SLIGHTLY<br>SILTY SAND |
|------------|----------------|------------------------|
| SILTY SAND |                | SILT                   |
| CLAY       | /··/.<br>//:// | CLAYEY SAND            |
| PEAT       |                | GRAVEL                 |

GRANULAR MATERIALS

| SPT BLOWS/FOOT (N) | RELATIVE DENSITY |
|--------------------|------------------|
| 0-4                | VERY LOOSE       |
| 5-10               | LOOSE            |
| 11-30              | MEDIUM DENSE     |
| 31-50              | DENSE            |
| GREATER THAN 50    | VERY DENSE       |
|                    |                  |

SILTS AND CLAY

| SPT BLOWS/FOOT (N)       | RELATIVE DENSITY   |
|--------------------------|--------------------|
| 0-2<br>3-4               | VERY SOFT          |
| 5-8                      | MEDIUM STIFF       |
| 9-16                     | STIFF              |
| 17-32<br>GREATER THAN 32 | VERY STIFF<br>HARD |
| GREATER THAN 32          | HAND               |

GNE GROUNDWATER NOT ENCOUNTERED AT TIME OF DRILLING

STANDARD PENETRATION RESISTANCE IN BLOWS PER FOOT

ENCOUNTERED GROUNDWATER LEVEL

ENCOUNTERED PERCHED WATER LEVEL

50/2" NUMBER OF BLOWS REQUIRED (50) TO ADVANCE SPLIT SPOON SAMPLER A SPECIFIC DISTÂNCE (2) INCHES

HW = SPLIT SPOON SAMPLER ADVANCED UNDER

WEIGHT OF ROD AND HAMMER

W = NATURAL MOISTURE CONTENT (%)

FINES PASSING #200 SIEVE (%)

LL = ATTERBERG LIMITS (%) LL=LIQUID LIMIT, PL=PLASTIC LIMIT

LI = LIQUIDITY INDEX

c = APPROXIMATE COHESION VALUE (PSF) BASED ON POCKET PENETROMETER READINGS

 $K_V = SATURATED VERTICAL HYDRAULIC CONDUCTIVITY (FT/DAY)$ 

 $\gamma_d$  = DRY UNIT WEIGHT (pcf)

= SHELBY TUBE SAMPLE

HA = HAND AUGER

 $\gamma$  = estimated moist unit weight (PCF)

 $\phi$  = ESTIMATED ANGLE OF INTERNAL FRICTION (DEGREES)

#### NOTES:

- 1) SPT BORINGS PERFORMED IN GENERAL ACCORDANCE WITH ASTM D1586
- SUBSURFACE CONDITIONS ARE AT BORING LOCATIONS AND ACTUAL CONDITIONS BETWEEN BORINGS MAY VARY
- ALL CLASSIFICATIONS ARE BASED ON VISUAL EXAMINATION UNLESS ACCOMPANIED BY LABORATORY TEST RESULTS
- BOUNDARIES BETWEEN SOIL LAYERS SHOULD BE CONSIDERED APPROXIMATE AS THE ACTUAL TRANSITION MAY BE GRADUAL
- DEPTH OF BORING IS BELOW EXISTING GRADE AT TIME OF DRILLING
- 6) ELEVATIONS ESTIMATED FROM PROVIDED TOPOGRAPHIC SURVEY

Project #: 15-163 Scale: NTS

Date: 10/28/2015 Checked By: DLL

Project: Crockett Street and Crestfield Cr.

Location: Escambia County, Florida



KWE COPY

SOV - 1 2038

Georechnical Assessment Blue Pit Dam Escambia County, Florida Project No. 06-4025-0009

Escambia County Engineering Department

Submitted by:

Thompsom Engineering, Inc.



celebrating 50 years of engineering

engineering excellence



October 31, 2006

Mr. Colby Brown
Escambia County Engineering Department
1190 West Leonard Street
Pensacola, Florida 32501

Subject: Blue Pit Dam Escambia County, Florida

Thompson Engineering has completed the subsurface exploration and geotechnical assessment of soil conditions encountered at the above referenced site. Presented in this report are the results of the field exploration and laboratory testing programs with our geotechnical recommendations regarding the soils information to assist in the design of the Blue Pit Dam.

#### **PROJECT INFORMATION**

An existing topography plan was provided by the Escambia County Engineering Department and a typical cross section of the dam was provided by the County's consultant. Hatch Mott MacDonald. The site is located south of West Roberts Road and west of Hwy 29 in Escambia County. Based on the information provided, we understand the project includes the construction of a dam with a top of dam elevation of 100 ft-NGVD with a 3:1 side slope. The proposed dam is part of the County's drainage design in the subject area. Based on the existing topography the maximum fill height of 10 feet will be required to achieve finish dam height.

#### SOILS EXPLORATIONS AND LABORATORY TESTING

#### FIELD ACTIVITIES

Soil Test Borings: A total of four (4) Standard Penetration Test (SPT) soil borings were performed within the proposed dam and surrounding areas. Two (2) borings were performed to a depth of 15 feet and the other two (2) borings were performed to a depth of 40 feet. Two borings were performed within the dam footprint while the other two were performed on either side of the dam. Dozer clearing of trees and shrubs was required to access all borings.

All borings were made with an ATV rotary drill rig using a four-inch O.D. continuous flight auger to advance the borings to the depth of the encountered groundwater. To maintain borehole stability below the water table, the borings were advanced using the mud-rotary drilling technique. Split-barrel sampling operations were performed continuous to a depth of 7.5 feet, at 10 feet, and then on 5 0-foot intervals to the maximum boring termination depths.

Standard Penetration Test (SPT) values (N-values) were obtained using a standard split-barrel sampler with a 2.0 inch outer diameter and a recovery barrel length of greater than 14 inches. At each depth interval, the

split-barrel sampler was driven into "undisturbed" soils by repetitive blows of a standard 140 pound hammer free-falling a distance of 30 inches. The final 12 inches of sampler penetration, after first seating six inches, is defined as the SPT value. Test procedures are described in the American Society for Testing and Materials (ASTM) Specification D 1586.

SPT values, expressed in units of blows per foot, are presented numerically and graphically opposite the respective depth interval on the Soil Boring Logs attached. Soil samples were taken from all borings in accordance with the procedures presented in ASTM D 1586 "Standard Method for Penetration Test and Split Barrel Sampling of Soils." The samples recovered from all borings were visually classified, logged, placed in moisture-tight plastic bags, and transported to the laboratory. At the laboratory, all samples were examined by a trained soils technician, and visual classifications were adjusted where necessary. The depths where the samples were taken, the results of the standard penetration tests, and the visual classifications of the soils encountered are presented by the Boring Logs attached. All testing was performed in accordance with ASTM standards.

#### LABORATORY ACTIVITIES

Each soil sample recovered during the subsurface exploration program was visually classified in the field and then re-examined in the soils engineering laboratory by qualified soils technicians with classifications adjusted as necessary. The visual classifications were assigned based on an estimate of relative particle size distribution and soil plasticity characteristics. U.S. Standard sieve analyses and Atterberg Limits tests were performed on selected samples to confirm the visual classifications.

Based on the laboratory test data and visual classifications. Unified Soil Classification System (USCS) designations were assigned in accordance with the technical provisions of ASTM D-2487. Soil descriptions presented on the Soil Boring Logs include results of the soil classifications with evidence of inclusions. General relative densities (predominately granular soils) and general consistencies (predominately fine grained soils) were assigned based on field reported Standard Penetration Test values (N-values) and shear strength tests results.

SPT values, expressed in units of blows per foot, are presented numerically and graphically opposite the respective depth interval on the Soil Boring Logs presented in Appendix A of this report. A key to the boring log symbols is presented as well. Test procedures were in accordance with the American Society for Testing and Materials (ASTM) specification D-1586.

Soil Classifications: Based on laboratory test data, Unified Soil Classification System (USCS) designations were assigned in accordance with the technical provisions of ASTM D-2487. Soil descriptions presented on the Soil Boring Logs include results of the soil classifications with evidence of inclusions. General relative densities (predominately granular soils) and general consistencies (predominately fine grained soils) were assigned based on reported Standard Penetration Test values and shear strength test results.

Grain Size Tests: Relative grain size distribution was determined by performing U.S. Standard Sieve analyses. In performing the tests, each soil sample was oven dried and then washed over a U.S. Standard No. 200 Sieve. The material retained on the sieve was then oven dried, weighed, and passed through a U.S. Standard set of mesh sieves to determine the percent by weight retained on each sieve. The percent combined silt and clay fraction is defined as the percent by weight of material passing the No. 200 sieve. Test procedures were in accordance with ASTM D-422.

Atterberg Limits Test: To obtain information regarding soil consistency with variations in soil water content or soil plasticity characteristics. Atterberg Limits Tests are performed. The Atterberg Limits are defined as the Liquid Limit (LL) and Plastic Limit (PL) which are the moisture contents at which the soil sample is in the boundary condition between the liquid and plastic state, and between the plastic and semi-solid state, respectively. The Plastic Index (Pl) represents the range of moisture content over which the soil will behave as a deformable material and is determined as the numerical difference between the LL and PL. Test methods are described in ASTM D-4318-84.

Natural Moisture Content Determinations: Additional information regarding soil compressibility characteristics and geologic preloading (of fine grained soils) may be estimated through water content values in conjunction with Atterberg Limits. The water content is defined as the weight of water in a moist sample expressed as a percentage of the soil sample's total oven dry weight. Moisture content tests were performed in accordance with ASTM D-2216-80.

Permeability Test (Falling Head): To obtain information regarding the flow of water through a saturated soil, re-molded permeability tests were performed. In order to determine the coefficient of permeability (k), also hydraulic conductivity, an undisturbed or remolded sample is placed within a laten membrane within a triaxial pressure chamber, a confining stress is applied to the sample, and the sample is allowed to saturate. Upon saturation, a hydraulic gradient is applied through the sample. The head loss through the sample over time is measured and used to compute the coefficient of permeability. Permeability tests were performed in accordance with ASTM D-5084. The test results are attached. On-site soils range from  $3 \times 10^{-5}$  to  $6 \times 10^{-5}$  cm/sec.

#### GENERAL SITE AND SOIL CONDITIONS

The site of the Blue Pit Dam is located in Escambia County just south of West Roberts Road and west of Hwy 29. At the time of our field activities, the site was heavily wooded. For engineering purposes, the soils encountered consisted of the following strata which are distinguished by their soil type and relative density (as determined by the SPT blow count, N-values):

- Very loose to loose (N-values of 3 to 8) sands and silty sands (SM & SP) were encountered from the ground surface to depths ranging from 3.0 to 7.0 feet below.
- Below and extending to an approximate depths of 35 feet, loose to firm (N-values of 7 to 30) sands and silty sands (SM & SP) were typically sampled.
- Below and extending to the boring termination depth of 40 feet below the existing ground surface, firm to dense (N-values of 30 to 40) were typically encountered.

At the time of our field activities, groundwater was not encountered within the boring termination depth of 40 feet below the existing ground surface. It is important to note, however, that subsurface conditions may vary between boring locations and subsurface water levels will fluctuate with variations in seasonal and hydrological activities.

#### GEOTECHNICAL ASSESSMENT AND RECOMMENDATIONS

Our geotechnical assessment of subsurface conditions at the project site was based on subsurface exploration and laboratory test data presented in this report. In evaluating the data, we have used published correlations that have been previously made between Standard Penetration Test values, and soil test strength and behavioral characteristics observed in soil conditions similar to those encountered at the project site. The geotechnical design criteria presented in this report are predominately based on guidelines found in Design

Manual NAVFAC DM-7 "Soil Mechanics, Foundations, and Earth Structures" prepared by the Department of The Navy and USCOE technical manuals.

Using the soils information presented herein, together with design cross section provided and the topographic survey, a profile section was developed for the slope stability analyses. Design criteria used for the slope stability analyses [including method used in determining soil strength parameters, method of analyses, and method for determining factor(s) of safety], design recommendations for the general slope stabilization are presented herein.

Slope Stability Analyses: This slope stability analysis represents existing and proposed six site soil conditions at the site. Our method of evaluating the stability of a given ground profile incorporates a limit equilibrium method which is based on a two-dimensional slope and subsurface profile. As a measure of stability, a factor of safety is computed by summing driving and restraining forces, along potential shear surfaces of individual slices of the soil mass defined by the ground surface, and the potential shear surface. Shear surfaces may be specified for circular and noncircular profiles. Individual evaluation procedures for computing the factor of safety, which may be employed, are the simplified Bishop procedure, the Corps of Engineer's Modified Swedish procedure and the Spencer's procedure. To aid in the computations, a computer program entitled UTEXAS3 was employed.

Soil Strength Parameters: In the slope stability analyses, a scale profile of the pre-existing profile is graphically developed incorporating the applicable topographic data and soil parameters which were compiled from the field and laboratory programs. Soil strength characteristics are assigned based on the soil sample classifications and specific laboratory test data. A geometric model is created in the form of an input file and is computer analyzed using previously mentioned evaluation methods. Estimated worst case groundwater and soil strength characteristics are to be utilized in these analyses to evaluate the probability of a slope failure situation. A computed factor of safety against slope failure equal to or greater than 1.3 is generally considered acceptable in typical long-term loading conditions. For the short-term, a lower factor of safety may be acceptable.

Soil strength design parameters were developed based on published correlation with Standard Penetration Resistance Number (N), Atterberg Limits test results, Unconsolidated Undrained Shear Tests and Consolidated Undrained Shear Tests. These strength parameters were incorporated into the subsurface soil profiles. Total undrained stress or "Short Term" and effective stress "Long Term", "S" design parameters were incorporated into the design analyses. As indicated in the laboratory test data (see Appendix A), the total stress "Short Term" and effective stress "Long Term", "S" design parameter strengths are summarized below. Due to the sandy material encountered the Long Term and Short Terms design parameters are assumed to be the same.

Table 1. Profile (typical cross sectional representation)

| Soil Layer |           | Soil Description | Cohe             | Phi             |            |           |  |
|------------|-----------|------------------|------------------|-----------------|------------|-----------|--|
|            | Son Layer | Son Description  | Short Term (psf) | Long Term (psf) | Short Term | Long Term |  |
|            | Layer 1   | Loose Silty Sand | 0                | 0               | 27         | 27        |  |
|            | Layer 2   | Firm Silty Sand  | 0                | 0               | 29         | 29        |  |
|            | Layer 3   | Dense Sand       | 0                | 0               | 30         | 30        |  |

Methods of Analyses: The existing profile was evaluated utilizing the above parameters. The required conditions as listed in Corp's of Engineers Specifications for each design category, that applied to this specific project, are provided below. The design strengths of the soils are assumed to be the same for both cases.

Case 1: In this case the profile is analyzed with minimum flood conditions, the groundwater at 40 feet below existing grades.

Case II: This case represents a "drawdown" condition. The profile is analyzed with the maximum flood conditions of 100-yr 24-hr storm event at elevation +99 ft-NGVD and then is receded to model the groundwater-near the existing grades elevations

Factor of Safety: In performing the slope stability analyses using the computer program "UTEXAS3", the minimum factor of safety for the profile is determined based on soil parameters and loading conditions (dike height) specified. In determining the most critical factor of safety, the program defines a potential failure surface and subdivides the bounded soil mass into a finite number of vertical slices, using an iterative procedure to compute the factor of safety. An initial trial surface is specified, then the program moves the initial trial surfaces until the minimum factor of safety is obtained. A minimum factor of safety of 1.3 is typically considered acceptable.

In performing the slope stability analyses, different profile scenarios were evaluated until the minimum specified allowable factor of safety is met. Presented in the following table are the required minimum factors of safety for each method of analyses based on general USCEO guidelines.

Table 2. Minimum Factors of Safety

| Mathod of Evoluation | Minimum Factor of Safety      |                          |  |  |  |  |  |
|----------------------|-------------------------------|--------------------------|--|--|--|--|--|
| Method of Evaluation | USCOE's General Guideline (1) | Thompson Design Analyses |  |  |  |  |  |
| Short Term           | 1.0                           | 1.:                      |  |  |  |  |  |
| Long Term            | See Note 2.                   | 1.5                      |  |  |  |  |  |

Notes:

- 1. Source: U.S. Army Corps of Engineer. Design and Construction of Levees. March 31, 1971. EM 1111-11-1913, Pages 6-7.
- 2. A factor of safety for the "Long Term" Analyses was not specified in the USCOF's "Design and Construction of Levees" manual.

Results of Analysis: The soil profile was used in the slope stability analyses, using the "UTEXAS?" computer program. The proposed profile cases are summarized below:

Table 3. Results

| Case    | Factor of Safety |
|---------|------------------|
| Case l  | 1.92             |
| Case II | 1.26             |

Based on the slope stability analyses, the above table illustrates the proposed dam profile is within the minimum factors of safety.

<u>Site Preparation</u>: Our geotechnical assessment of soil conditions at the project site was based on subsurface information presented earlier in this report. In evaluating the data, we used correlations which have been previously made between Standard Penetration Test Values and soil test strength and behavioral characteristics observed in soil conditions similar to those encountered at the project site.

The subsurface conditions encountered are suitable for the proposed dam fill height and site preparation recommendations outlined herein are incorporated. The following concern is the presence of the loose to very loose sandy soils encountered within the upper 4 to 7 feet of the site. Reuse of this material for the dam is possible provided proper site preparations are in place. Specific site preparation recommendations are presented in the following report sections.

#### Site Preparation:

- 1. Clearing and grubbing operations shall consist of removal of any surficial organics, topsoil, utility lines, and other items that would interfere with construction operations. Strip the site to remove topsoil material to a depth of approximately six (6) inches. This material may be stockpiled for later use in landscape areas.
- Use off-site Clayey Material or on-site sandy material as specified below to obtain design grades. Material placement shall proceed in 12 inch loose lifts with each lift compacted to 90 percent Standard Proctor Density as per ASTM-D698.
- 3. Off-site and on-site materials shall consist of the following:
  - "On-site sands" shall be a sandy material free of organics, debris, and otherwise deleterious materials.
  - "Off-site core materials" shall consist of a clayey material with a hydraulic conductivity, of 1x10-6 cm/sec or better and a Pl less than 25 is recommended.
- 4. The "off-site core material" shall be at least three (3) feet thick for the entire height of the dam. If the "core material" option is not chosen, a clay or synthetic material shall be used on the face of the dam.
- 5. Slope protection is recommended to prevent erosion.

#### GENERAL

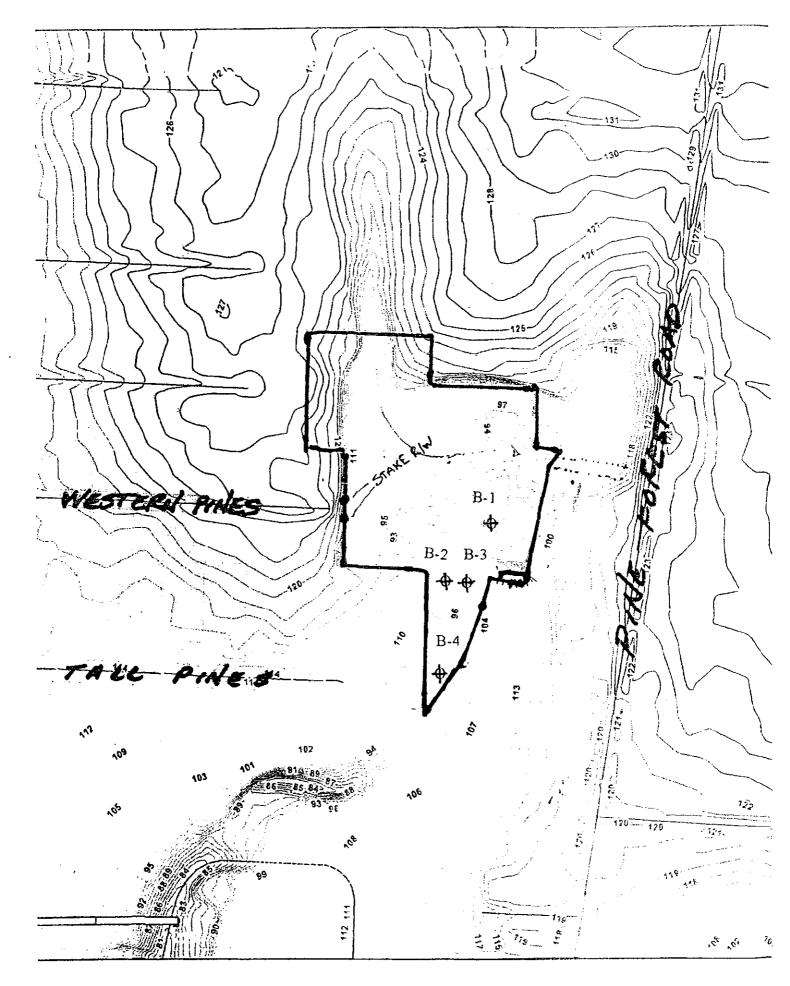
Thompson Engineering would appreciate the opportunity to review the plans and specifications for the project prior to design finalization and provide the pertinent quality assurance inspection and testing services during construction. These additional services will be performed to provide assurance that the ideas contained in this report have been properly conveyed to the designers and constructors of the project. Thompson Engineering appreciates the opportunity to be of service to Escambia County Engineering Department. If additional information is needed or if questions regarding this submittal arise, please advise.

THOMPSON ENGINEERING, INC.

Amy DiRusso, P.E.

Project Geotechnical Engineer Florida Registration No.: 62669

Reviewed by: bds



BORING LOCATION PLAN









CLIENT: ESCAMBIA COUNTY ENGINEERING DEPARTMENT

**GROUND ELEVATION: +90.8 FT** 

PROJECT: BLUE PIT DAM

**DATUM: SEE TOPOGRAPHIC SURVEY** 

JOB NO.: 06-4025-0009

DATE DRILLED: 10/4/06

| BORING NO.: B-1 LOCATION: SEE BORING LOCATION PLAN TYPE BORING: ASTM D-1586 |        |        |                                       |   |                    |     |             |              |     |      |           |      |                |              |                  |
|---|--------|--------|---------------------------------------|---|--------------------|-----|-------------|--------------|-----|------|-----------|------|----------------|--------------|------------------|
| DEPTH   | SYMBOL | T CAMP | ֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓ | DESCRIPTION                                     | SAMPLE<br>I.D. NO. | В   | LOWS        | PER F        | 001 |      |           | %    | ATTERI<br>LIMI | BERG  <br>TS | PERCENT<br>FINER |
| FEET  | SYN    |        |                                       |   | SAN<br>1.D.        | NO. | 10 20 30 40 |              | ľ   | N.C. | L.L.      | P.I. | #200<br>SIEVE  |              |                  |
| 0   | 1      | ·      |                                       | LOOSE to FIRM yellowish brown fine SAND (SP-SM) | S-1                | 6   |             |              |     |      |           |      |                |              | 10               |
|   |        |        |                                       |   | S-2                | - 6 | 4           |              |     |      |           |      |                |              |                  |
| - 5 -   | · .    | ·Z     |                                       | -Brown  | S-3                | 7   |             |              |     |      |           |      |                |              |                  |
|   | •      | Z      |                                       |   | S-4                | 16  |             |              |     |      |           |      |                |              |                  |
|   |        |        |                                       | Mallor tall and                                 | S-5                | 9   | (           |              |     |      |           |      |                |              |                  |
| - 10 -  | .      |        |                                       | -Yellowish red                                  | ·S-6               | 11  |             | 1            |     | _    |           |      |                |              |                  |
|   |        | •      |                                       |   |                    |     |             |              |     |      |           |      |                |              |                  |
|   |        | •      |                                       | -Yellowish brown                                |                    |     |             | 4            |     |      |           |      |                |              |                  |
| - 15 -  | - -    |        | +                                     | B.T. @ 15.0 FEET                                | \$-7               | 11  |             | ļ            |     | _    | $\square$ |      |                |              |                  |
|   |        |        |                                       |   |                    |     |             |              |     |      |           |      |                |              |                  |
|   |        |        | Ì                                     |   |                    |     |             |              |     |      |           |      |                |              |                  |
| - 20 -  |        |        |                                       |   |                    | :   |             | <u> </u><br> |     |      |           |      |                |              |                  |
|   |        |        |                                       |   |                    |     |             |              |     |      |           |      |                |              |                  |
|   |        |        |                                       |   |                    |     |             |              |     |      |           |      |                |              |                  |
| - 25 -  |        |        |                                       |   |                    |     |             |              |     |      |           |      |                |              |                  |
|   |        |        |                                       |   |                    |     |             |              |     |      |           |      | :              |              |                  |
| - 30 -  |        |        |                                       |   |                    |     |             |              |     |      |           |      |                |              |                  |
|   |        |        |                                       |   |                    |     |             |              |     |      |           |      |                |              |                  |
|   |        |        |                                       |   |                    |     |             |              |     |      |           |      |                |              |                  |
| - 35 -  |        |        |                                       |   |                    |     |             |              |     |      |           |      |                |              |                  |
|   |        |        |                                       |   |                    |     |             |              |     |      |           |      |                |              |                  |
| <u> </u>  |        |        |                                       |   |                    |     |             |              |     |      |           |      |                |              |                  |
| - 40 -  |        |        |                                       |   |                    |     |             |              |     |      |           |      |                |              |                  |









CLIENT: ESCAMBIA COUNTY ENGINEERING DEPARTMENT

GROUND ELEVATION: +90.6 FT

PROJECT: BLUE PIT DAM

DATUM: SEE TOPOGRAPHIC SURVEY

JOB NO.: 06-4025-0009

DATE DRILLED: 10/5/06

| BORI        |                 |           | B-2 LOCATION: SEE BO   |                    | OCATION | PLAN   | TYPE   | BORI      | NG: | ASTM |              | DEDE | benoen          |
|-------------|-----------------|-----------|--|--------------------|---------|--|--|-----------|-----|------|--------------|------|-----------------|
| DEPTH<br>IN | SYMBOL          | PLE       | DESCRIPTION  | IPLE<br>NO.        | В       | LOWS   | PER FO   | TO        |     | %    | ATTER<br>LIM |      | PERCEN<br>FINER |
| FEET        | SYM             | SAMPLE    | DESCRIPTION  | SAMPLE<br>I.D. NO. | NO.     | 10   | ) 20   | 30        | 40  | W.C. | L.L.         | P.I. | #200<br>SIEVE   |
| 0           | • •             | 1         | LOOSE to DENSE yellow medium to fine SAND, with 2" topsoil (SP-SM) | S-1                | 5       |  |  |           |     |      |              |      | 7.6             |
| <del></del> |                 | 7         |  | S-2                | 5       | Appendix of the last of the la | [  | ŀ         |     |      |              |      |                 |
|             |                 | 7         |  | S-3                | 5       |  |  | ļ         |     |      |              |      |                 |
| 5 -         |                 |           |  |                    |         |  |  |           | -   |      |              |      |                 |
|             |                 |           |  | S-4                | 6       | )  |  |           |     |      |              |      |                 |
|             | ·               |           |  | S-5                | 5       |  |  |           |     |      |              |      |                 |
|             | ·               | 1         | -Reddish yellow  | S-6                | 7       |  |  |           |     |      |              |      |                 |
| 10 -        |                 |           |  |                    | ·       |  |  |           |     |      |              |      |                 |
|             | [:•:            |           |  | 1                  |         |  |  |           |     |      |              | 1    |                 |
|             | . · .           |           | -Light brown   |                    |         |  | $\setminus$                                      |           |     |      |              |      |                 |
| 15 -        | ļ. · .          |           |  | S-7                | 12      |  | <b>\</b>   | -         | +   | -    |              |      |                 |
| -           |                 | ·         |  |                    |         |  | \  | [<br>]    |     |      |              |      |                 |
|             | · . ·           | •         |  |                    |         |  |  |           |     |      |              |      |                 |
|             |                 | 7         | -Brownish yellow   | S-8                | 16      |  |  |           |     |      |              |      |                 |
| 20 -        |                 |           |  |                    | 10      |  | /  |           |     |      |              | 1    |                 |
|             | <b>.     </b> , | .         |  |                    |         |  |  |           |     |      |              |      |                 |
|             | • • •           |           |  |                    |         |  | /  |           |     | 1    |              | }    |                 |
| 25 -        |                 |           |  | S-9                | 10      | ļ  | <u> </u>   |           | 44  | -    |              |      |                 |
|             | •               |           |  |                    |         |  |  |           |     |      |              |      |                 |
|             |                 |           |  |                    |         |  |  |           |     |      |              |      |                 |
|             |                 | . 7       | -Very pale brown   | S-10               | 20      |  |  |           |     |      |              |      |                 |
| 30 -        |                 | ·广        |  | 0.10               | 20      |  | · · · · · · · · · · · · · · · · · · ·            |           |     | 1    |              |      |                 |
|             | • ]             | $\cdot  $ |  |                    |         |  |  |           |     |      |              |      |                 |
|             | .               | ۱_        | -Light reddish brown and pale red                                  |                    |         |  |  |           |     |      |              |      |                 |
| 35 -        | <u> </u>        |           |  | S-11               | 23      | ļ  |  |           | -   |      |              |      |                 |
|             | ]. •            |           |  |                    |         |  |  | $ \cdot $ |     |      |              |      |                 |
|             | . '             | -         |  |                    |         |  |  | \         |     |      | -            |      |                 |
|             | ·               | •         | Reddish brown  | 6 40               | 39      |  |  |           |     |      |              |      |                 |
| 40 -        | <u> </u>        | 1         | B.T. @ 40.0 FEET   | S-12               | 39      | 1  | <del>                                     </del> | 1 1       | 1   | 1    |              |      |                 |







CLIENT: ESCAMBIA COUNTY ENGINEERING DEPARTMENT

**GROUND ELEVATION: +90.4 FT** 

PROJECT: BLUE PIT DAM

DATUM: SEE TOPOGRAPHIC SURVEY

JOB NO.: 06-4025-0009 DATE DRILLED: 10/5/06

| BOR        | T        |         |        | B-3 LOCATION: SEE BO  |                    |     | LOWS            |     |      |      |                              |  | ATTER        | BERG " | PERCENT     |
|------------|----------|---------|--------|---|--------------------|-----|-----------------|-----|------|------|------------------------------|--|--------------|--------|-------------|
| IN<br>FEET | SYMBOL   |         | SAMPLE | DESCRIPTION   | SAMPLE<br>1.D. NO. | NO. |                 |     |      |      | - 1                          | %<br>W.C.  | L.L.         | P.I.   | #200        |
| 0          | •        | ·       |        | VERY LOOSE red SILTY medium to fine SAND, 2" topsoil (SM)             |                    |     | 10              | 0 : | 20 3 | 0 40 |                              |  |              |        | SIEVE<br>24 |
|            | •        | ·       |        | VERY LOOSE to LOOSE reddish brown and yellowish red fine SAND (SP-SM) | \$-1<br>\$-2       | 3   |                 |     |      |      |                              |  |              |        | ŀ           |
|            | ٠.       | ·       |        | yenema naa mie eyne (en emy   | S-3                | 5   |                 |     |      |      |                              |  |              |        |             |
| - 5 -      |          | j       |        | -Reddish yellow   | S-4                | 7   | <del>-\</del> - |     |      |      | $\dashv$                     |  | :            |        |             |
|            |          |         |        | -Yellowish brown  | S-5                | 4   |                 |     |      |      |                              |  |              |        | ļ           |
|            | ١.       | ٠       |        | -Brownish yellow  |                    |     |                 |     |      |      |                              |  |              |        |             |
| - 10 -     |          |         |        | ·   | S-6                | 8   | -               |     |      |      |                              |  |              | }      |             |
|            | . :      | $\cdot$ |        |   |                    |     |                 |     |      |      |                              |  |              |        |             |
| <b> </b>   | ٠.       |         |        | -Dusky red  |                    |     |                 |     |      |      | ,                            |  |              | }      |             |
| - 15 -     | <u>:</u> |         |        | B.T. <b>②</b> 15.0 FEET   | S-7                | 7   |                 |     | -    |      |                              |  |              |        |             |
|            |          |         | 1      | 5.1. & 10.01 EE1  |                    |     |                 |     |      |      |                              |  |              |        |             |
| \          |          |         |        |   |                    |     |                 |     |      |      |                              |  | <br>         |        |             |
| - 20 -     |          |         |        |   |                    |     |                 |     |      |      |                              |  |              |        |             |
|            |          |         |        |   |                    |     |                 |     |      |      |                              |  |              |        |             |
|            |          | -       |        |   |                    |     |                 |     |      |      |                              |  |              |        |             |
| - 25 -     |          |         |        |   |                    |     |                 |     |      | -    |                              |  |              |        |             |
|            |          |         |        |   |                    |     |                 |     |      |      |                              |  | <u> </u><br> |        |             |
|            |          |         |        |   |                    |     |                 |     |      |      |                              |  | <u> </u>     |        |             |
| - 30 -     |          |         | Ì      |   |                    |     |                 |     |      |      |                              |  |              |        |             |
|            |          |         |        |   |                    |     |                 |     |      |      |                              |  |              |        |             |
|            |          |         |        |   |                    |     |                 |     |      |      |                              |  |              |        |             |
| <b></b>    |          |         |        |   |                    |     |                 |     |      |      | and the second second second |  |              |        |             |
| - 35 -     |          |         |        |   |                    |     |                 |     |      |      | :                            |  |              |        |             |
|            |          |         |        |   |                    |     |                 |     |      |      |                              | Name of the latest two parts o |              |        |             |
|            |          |         |        |   |                    |     |                 |     |      |      |                              |  |              |        |             |
| - 40 -     |          |         |        |   |                    |     |                 |     |      |      |                              |  |              |        |             |









CLIENT: ESCAMBIA COUNTY ENGINEERING DEPARTMENT **GROUND ELEVATION: +89.3 FT** 

PROJECT: BLUE PIT DAM

DATUM: SEE TOPOGRAPHIC SURVEY

JOB NO.: 06-4025-0009

DATE DRILLED: 10/5/06

| DEPTH<br>IN | SYMBOL | SAMPLE | DESCRIPTION   | SAMPLE<br>I.D. NO. | В   | LOWS PER FO | 10  | %  |                      | RBERG<br>IITS | PERCENT<br>FINER |
|-------------|--------|--------|---|--------------------|-----|-------------|---|--|----------------------|---------------|------------------|
| FEET        | SYM    | SAM    | DESCRIPTION   | SAM<br>I.D.        | NO. | 10 20       | 0 30 40   | W.C  | L.L.                 | P.I.          | #200<br>SIEVE    |
| 0           |        |        | LOOSE red SILTY medium to fine SAND,<br>with trace GRAVEL and CLAY pockets (SM)<br>-Red SILTY SAND, with CLAY pockets | S-1                | 10  |             |   |  |                      |               | 32.0             |
|             |        |        |   | S-2                | 7   |             |   |  |                      |               |                  |
|             | //     | 1      | MEDIUM STIFF reddish yellow SANDY CLAY (CL)   | S-3                | 8   |             |   |  |                      |               |                  |
| 5 -         | • .    | •      | FIRM light reddish brown and reddish yellow medium to fine SAND (SP-SM)   | S-4                | 14  |             |   |  |                      |               |                  |
|             | •      |        |   | S-5                | 13  |             |   |  |                      |               |                  |
| <u>/48</u>  |        |        | -Very pale brown  |                    |     |             |   |  |                      |               |                  |
| 10 -        |        |        |   | S-6                | 17  | )           |   |  |                      |               |                  |
|             | . :    | •      |   |                    |     |             |   |  |                      |               |                  |
|             | ٠.     | •      | le a secret bathers   |                    |     |             |   |  |                      |               |                  |
|             |        |        | -Yellow   | S-7                | 7   |             |   |  |                      |               |                  |
| 15 -        |        |        |   |                    |     |             |   |  |                      |               |                  |
|             |        |        |   |                    |     |             | -   |  |                      |               |                  |
|             | · .    |        | -Reddish yellow   |                    |     |             |   |  |                      |               |                  |
| 20 -        |        | -      |   | S-8                | 21  |             |   | +  |                      |               |                  |
|             |        |        |   |                    |     |             |   |  | riceasing decreasing |               |                  |
|             |        |        | Wallani   |                    |     |             |   |  |                      |               |                  |
| 25 -        |        | •      | -Yellow   | S-9                | 27  |             |   |  |                      |               |                  |
|             | ٠.     | •      |   |                    |     |             |   |  |                      |               |                  |
|             | [:•    |        |   |                    |     |             |   |  |                      |               |                  |
|             |        |        | -Reddish yellow   | S-10               | 24  |             | 100 mm and |  |                      |               |                  |
| 30 -        | · :    | •      |   | 3-10               | 24  |             |   |  |                      |               |                  |
|             |        | 1      |   |                    |     |             |   |  |                      |               |                  |
|             |        |        |   |                    |     |             |   | A THE STATE OF THE | -                    |               |                  |
| 35 -        |        |        |   | S-11               | 29  |             |   |  |                      |               |                  |
|             |        |        |   |                    |     |             |   | D. Collinson of Collinson  |                      |               |                  |
|             |        | •      |   | 0.18               |     |             |   |  |                      |               |                  |
|             |        | 1      |   | S-12               | 38  |             |   |  |                      |               |                  |
| 40 -        |        | 7      | B.T. @ 40.0 FEET  |                    |     |             |   |  |                      |               |                  |



## thompson

ENGINEERING

#### HYDRAULIC CONDUCTIVITY OF GRANULAR SOIL (CONSTANT HEAD) RIGID WALL PERMEAMETER ASTM D 2434

October 27,2006

CLIENT: Escambia County Engineering

PROJECT: Blue Pit Dam

JOB #: <u>06-4025-0009</u>

SAMPLE DESCRIPTION: Yellowish red fine SAND

SAMPLE IDENTIFICATION: Composite sample B-1, B-2 & B-4 S-1, S-2, S-3, S-4

DATES

SAMPLED: 10/4/06

**TECHNICIAN** 

SAMPLED: H.P.

TESTED: R.R.

| TESTED: 10/26/06        | TESTED. N.B. |                               |        |  |  |  |  |  |
|-------------------------|--------------|-------------------------------|--------|--|--|--|--|--|
| INITIAL MOISTURE (%)    | 6.6          | AVERAGE WATER TEMPERATURE (c) | 22.2   |  |  |  |  |  |
| FINAL MOISTURE (%)      | 28.0         | FLUID HEAD (CM)               | 98     |  |  |  |  |  |
| WET DENSITY (PCF)       | 107.91       | SATURATION TIME (HR)          | 1      |  |  |  |  |  |
| DRY DENSITY (PCF)       | 101.27       | DEGREE OF SATURATION (%)      | 116.31 |  |  |  |  |  |
| HEIGHT OF SPECIMEN (cm) | 5.20         | AREA SPECIMEN (cm2)           | 81.03  |  |  |  |  |  |
| DIA. OF SPECIMEN (cm)   | 10.16        | TOTAL VOLUME (cm3)            | 421.37 |  |  |  |  |  |
| SOIL DRY WEIGHT (g)     | 683.6        | SOIL WET WEIGHT (g)           | 728.7  |  |  |  |  |  |
| VOLUME OF SOLIDS (cm3)  | 256.99       | SPECIFIC GRAVITY              | 2.66   |  |  |  |  |  |
| POROSITY (%)            | 39.01        | VOID RATIO (e)                | 0.64   |  |  |  |  |  |
| 3.133                   |              |                               |        |  |  |  |  |  |

| TIME     | VOLUME        | WATER       | PERMEABILITY   |
|----------|---------------|-------------|----------------|
| INTERVAL | OF WATER      | TEMPERATURE | (CM/SEC)       |
| SECONDS  | OVER INTERVAL | (c)         | @ 20 DEGREES C |
| 52       | 460           | 22.0        | 5.787E-03      |
| 53       | 455           | 22.0        | 5.616E-03      |
| 38       | 340           | 22.0        | 5.853E-03      |
| 41       | 380           | 22.0        | 6.063E-03      |
| 50       | 465           | 22.0        | 6.084E-03      |
|          |               |             |                |

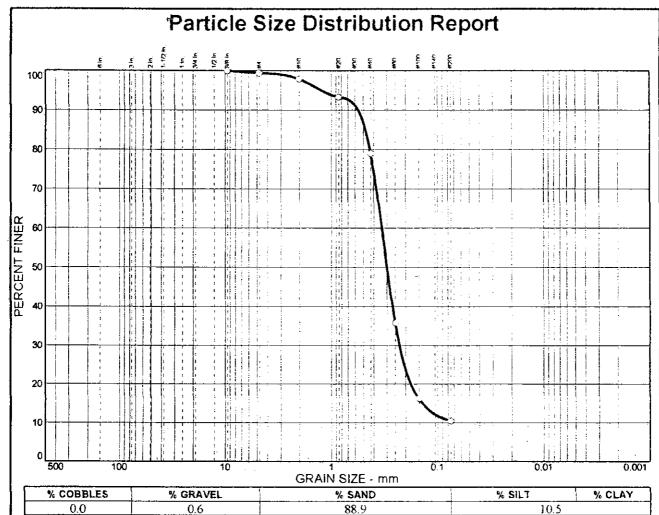
<u>AVERAGE</u> **多380主83**章

3707 Cottage Hill Road Mobile, At 36609 251.666.2443 ph / 251.665.5491 fox

www.thompsonengineering.com

MATERIALS ENGINEERING LABORATORY

A THOMPSON HOLDINGS COMPANY



| SIEVE       | PERCENT      | SPEC.*  | PASS?  |
|-------------|--------------|---------|--------|
| SIZE        | FINER        | PERCENT | (X=NO) |
| 3/8 in.     | 100.0        |         |        |
| #4<br>#10   | 99.4<br>97.9 |         |        |
| #20         | 93.3         |         |        |
| #40         | 79.0         |         |        |
| #60<br>#100 | 35.8<br>16.3 |         |        |
| #200        | 10.5         |         |        |
|             |              |         |        |
|             |              |         |        |
|             | 1            |         |        |
|             | •            | i       |        |
|             |              |         |        |
|             |              |         |        |
|             |              |         |        |
|             |              |         |        |

| LOOSE to FIRM y  | Soil Description  LOOSE to FIRM yellowish brown fine SAND (SP-SM)                      |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|
| PL≈  | Atterberg Limits   | <u>\$</u><br>PI=                             |  |  |  |  |  |  |  |  |
| D <sub>85</sub> = 0.477<br>D <sub>30</sub> = 0.228<br>C <sub>u</sub> = | Coefficients<br>D <sub>60</sub> = 0.334<br>D <sub>15</sub> = 0.138<br>C <sub>c</sub> = | D <sub>50</sub> = 0.298<br>D <sub>10</sub> = |  |  |  |  |  |  |  |  |
| USCS= SP-SM  | Classification<br>AASH   | TO= A-3                                      |  |  |  |  |  |  |  |  |
|  | Remarks  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

(no specification provided)

Sample No.: S-1 Location:

Source of Sample: B-1

Date: 10/26/06

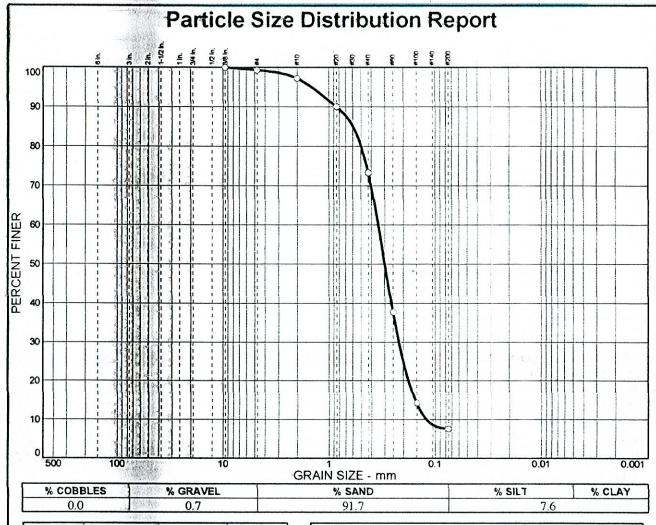
Elev./Depth: 0.0

**Thompson Engineering** 

Client: ESCAMBIA COUNTY ENGINEERING DEPARTMENT

Project: BLUE PIT DAM

Project No: 06-4025-0009



|   |  | SIZE  |
|---|--|---|
| v | 100.0<br>99.3<br>97.2<br>90.0<br>73.3<br>37.7<br>14.3<br>7.6 | 3/8 in.<br>#4<br>#10<br>#20<br>#40<br>#60<br>#100<br>#200 |
|   |  |   |
|   | ·  |   |

|   | Atterberg Limits   |  |
|---|--|--|
| PL=   | LL=  | PI=  |
| D <sub>85</sub> = 0.592<br>D <sub>30</sub> = 0.220<br>C <sub>u</sub> = 2.85 | Coefficients D <sub>60</sub> = 0.343 D <sub>15</sub> = 0.154 C <sub>c</sub> = 1.17 | D <sub>50</sub> = 0.299<br>D <sub>10</sub> = 0.120 |
| USCS= SP-SM   | Classification<br>AASHT  | O= A-3   |
|   | Remarks  |  |

(no specification provided)

Sample No.: S-1

Source of Sample: B-2

Date: 10/26/06

Location:

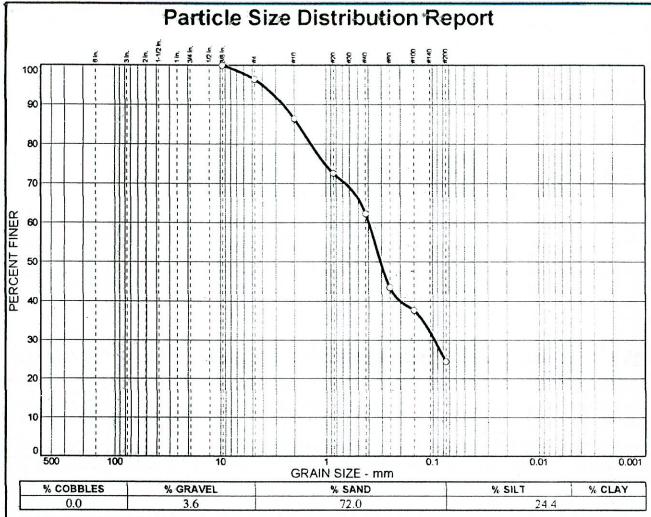
Elev./Depth: 0.0

**Thompson Engineering** 

Client: ESCAMBIA COUNTY ENGINEERING DEPARTMENT

Project: BLUE PIT DAM

Project No: 06-4025-0009.



| SIEVE         | PERCENT<br>FINER | SPEC.* PERCENT | PASS? |
|---------------|------------------|----------------|-------|
| 3/8 in.<br>#4 | 100.0            | , Enough       | (X-NO |
| #10           | 96.4<br>86.4     |                |       |
| #20<br>#40    | 72.6<br>62.3     | Y III          |       |
| #60<br>#100   | 43.5<br>37.6     |                |       |
| #200          | 24.4             |                |       |
|               |                  |                |       |
|               |                  |                |       |
|               |                  |                |       |
|               |                  |                |       |
|               |                  |                |       |
|               |                  |                |       |

| SILTY_medium<br>Atterberg Lim<br>LL=                                    | its  Pl=   |
|---|--|
|   |  |
|   |  |
| Coefficients D <sub>60</sub> = 0.396 D <sub>15</sub> = C <sub>c</sub> = | D <sub>50</sub> = 0.305<br>D <sub>10</sub> =   |
| Classificatio<br>AAS  | <u>n</u><br>HTO= A-2-4(0)  |
| Remarks   |  |
|   |  |
|   | D <sub>60</sub> = 0.396<br>D <sub>15</sub> =<br>C <sub>c</sub> =<br>Classificatio<br>AAS |

(no specification provided)

Sample No.: S-1

Source of Sample: B-3

Date: 10/26/06

Location:

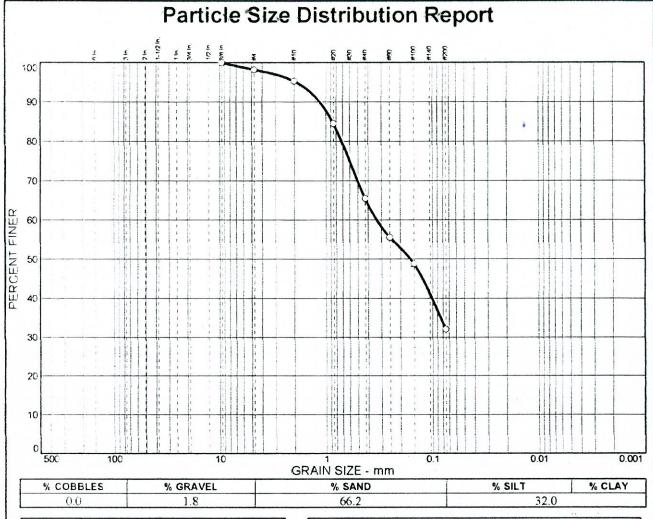
Elev./Depth: 0.0

Thompson Engineering

Client: ESCAMBIA COUNTY ENGINEERING DEPARTMENT

Project: BLUE PIT DAM

Project No: 06-4025-0009



| SIEVE       | PERCENT<br>FINER | SPEC.* PERCENT | PASS? |
|-------------|------------------|----------------|-------|
| 3.8 m       | 100.0            |                |       |
| =4<br>=10   | 98.2<br>95.3     |                |       |
| ≠20         | 84.5             |                |       |
| #40         | 65.5             |                |       |
| ≠60<br>≠100 | 55.6<br>48.8     |                |       |
| =200        | 32.0             |                |       |
|             |                  |                |       |
|             |                  |                |       |
|             |                  |                |       |
|             |                  |                |       |
|             |                  |                |       |
|             |                  |                |       |
|             |                  |                |       |
|             |                  |                |       |

| DI -   | Atterberg Limits  | <u>\$</u><br>Pl=                             |
|--|---|--|
| PL=  | LL=   | PI=  |
| D <sub>85</sub> = 0.869<br>D <sub>30</sub> =<br>C <sub>u</sub> = | Coefficients D <sub>60</sub> = 0.330 D <sub>15</sub> = C <sub>c</sub> = | D <sub>50</sub> = 0.162<br>D <sub>10</sub> = |
| USCS= SM   | Classification<br>AASH  | TO= A-2-4(0)                                 |
|  | Remarks   |  |

Soil Description

(no specification provided)

Sample No.: S-1

Source of Sample: B-4

Date: 10/26/06

Location:

Elev./Depth: 0.0

**Thompson Engineering** 

Client: ESCAMBIA COUNTY ENGINEERING DEPARTMENT

Project: BLUE PIT DAM ...

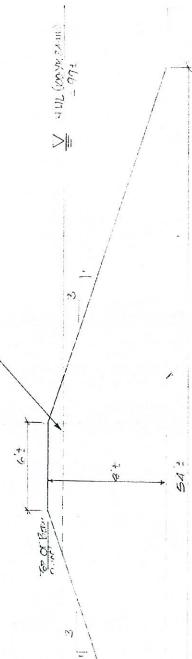
Project No: 06-4025-0009

Project Name ELLLIC FT PLANNES BAIL
Project & 288922 Rage | of
subject BAILY Sec. 201 Sheet "

Calculated by WILLOCK

Date 1013/06

-BOTTOM OF SPILLIKY CHUMEL (BEYOUT) +1,0



From Som Boun Koun X- Section

ECTA TOURS TEST

V. S (W. T. O. T. GRAML)

This document was prepared by: Stephen G. West, Senior Assistant County Attorney Escambia County Attorney's Office 221 Palafox Place, Suite 430 Pensacola, Florida 32502

Crockett Street/Crestfield Drive Drainage Project A Portion of 38-1N-31-2306-000-007

STATE OF FLORIDA COUNTY OF ESCAMBIA

#### TEMPORARY CONSTRUCTION EASEMENT

THIS GRANT OF TEMPORARY CONSTRUCTION EASEMENT is made this day of \_\_\_\_\_\_, 2018, by and between David A. Farish, a single man, whose mailing address is 2853 Pine Forest Road, Cantonment, FL 32533 (Grantor), and Escambia County, a political subdivision of the State of Florida, whose address is 221 Palafox Place, Pensacola, Florida 32502 (Grantee).

#### WITNESSETH:

WHEREAS, Grantor is the owner of the real property (the Property) described in the attached Exhibit A; and

WHEREAS, Grantee desires to enter upon a portion of Grantor's Property for the purpose of repairing and constructing a stormwater drainage structure; and

WHEREAS, Grantor has agreed to grant a Temporary Construction: Easement to Grantee over and across a portion of Grantor's Property under the terms and conditions set forth below,

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) and other valuable consideration, Grantor does grant to Grantee, a temporary construction easement for the above-described purposes over and across a portion of Grantor's Property, as more particularly described in the attached Exhibit A.

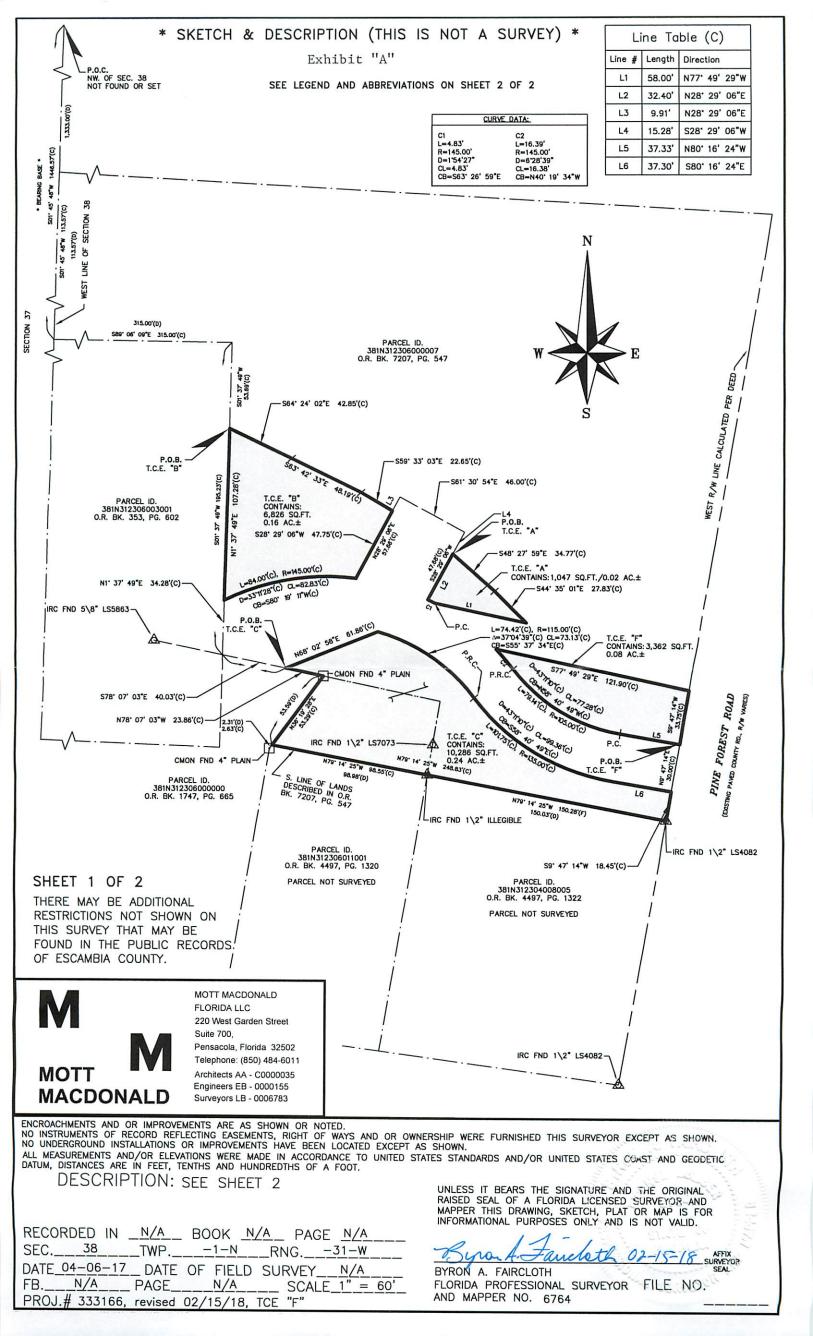
THIS TEMPORARY CONSTRUCTION EASEMENT shall expire upon completion of the drainage project, but not later than <u>December 2019</u>. Prior to expiration, Grantee shall stabilize the disturbed areas and otherwise return easement area substantially to the condition that existed prior to this Temporary Construction Easement, or to the greatest extent allowed by permitting agencies.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

Signed, sealed and delivered in our presence as Witnesses:

| in our presence as writiesses.   | GRANTOR:  |  |  |
|--|---|--|--|
| Witness Print Name David J. Beasley  | By: David A. Farish   |  |  |
| Witness Print Name Kury Ban  | Date: MAY 30, 2018  |  |  |
| STATE OF FLORIDA<br>COUNTY OF ESCAMBIA   |   |  |  |
| The foregoing instrument was acknowledged before me this 30 day of 2018, by David A. Farish. He is personally known to me, or () produced current as identification.   |   |  |  |
| (Notary Sest)  NOTAR  N | Signature of Notary Public  Printed Name of Notary Public   |  |  |
| ACCEPTANCE   |   |  |  |
| Commissioners of Escambia County, Florida at   | 2015.h. 1 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |  |  |
| PAM CHILDERS Clerk of the Court Deputy Clerk   | BOARD OF COUNTY COMMISSIONERS ESCAMBIA COUNTY FLORIDA  Jeff Bergosh, Chairman  This document approved as to form and legal sufficiency. By: |  |  |

Date: June 4



#### TEMPORARY CONSTRUCTION EASEMENT (T.C.E.) "A"

A PORTION OF LAND DESCRIBED IN OFFICIAL RECORDS BOOK 7207, PAGE 547 AND LOCATED IN SECTION 38, TOWNSHIP 1 NORTH, RANGE 31 WEST, ESCAMBIA COUNTY, FLORIDA. COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 38; THENCE S 01'45'48" W ALONG SAID WEST LINE, FOR A DISTANCE OF 1,446.57 FEET; THENCE DEPARTING SAID WEST LINE S 89'06'09" E, FOR A DISTANCE OF 315.00 FEET; THENCE S 01'37'49" W, FOR A DISTANCE OF 53.69 FEET; THENCE S 64'24'02" E, FOR A DISTANCE OF 42.85 FEET; THENCE S 63'42'33" E, FOR A DISTANCE OF 48.19 FEET; THENCE S 59'33'03" E, FOR A DISTANCE OF 22.65 FEET; THENCE N 28'29'06" E, FOR A DISTANCE OF 9.91 FEET; THENCE S 61'30'54" E, FOR A DISTANCE OF 46.00 FEET; THENCE S 28'29'06" W, FOR A DISTANCE OF 15.28 FEET TO THE POINT OF BEGINNING; THENCE S 48'27'59" E, FOR A DISTANCE OF 34.77 FEET; THENCE S 44'35'01" E, FOR A DISTANCE OF 77'49'29" W, FOR A DISTANCE OF 58.00 FEET TO A POINT OF CURVATURE CONCAVE SOUTH HAVING A RADIUS 145.00 FEET; THENCE NORTHWEST 4.83 FEET ALONG THE ARC OF SAID CURVE (HAWING A CHORD BEARING OF N 63'26'59" W AND A CHORD LENGTH OF 4.83 FEET); THENCE DEPARTING SAID CURVE N 28'29'06" E, FOR A DISTANCE OF 32.40 FEET TO THE POINT OF BEGINNING.

CONTAINING 1,047 SQUARE FEET OR 0.02 ACRES MORE OR LESS

#### **TEMPORARY CONSTRUCTION EASEMENT (T.C.F.) "B"**

A PORTION OF LAND DESCRIBED IN OFFICIAL RECORDS BOOK 7207, PAGE 547 AND LOCATED IN SECTION 38, TOWNSHIP 1 NORTH, RANGE 31 WEST, ESCAMBIA COUNTY, FLORIDA. COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 38; THENCE S 01'45'48" W, ALONG SAID WEST LINE, FOR A DISTANCE OF 1,446.57 FEET; THENCE DEPARTING SAID WEST LINE S 89'06'09" E, FOR A DISTANCE OF 315.00 FEET; THENCE S 01'37'49" W, FOR A DISTANCE OF 53.69 FEET TO THE POINT OF BEGINNING; THENCE S 64'24'02" E, FOR A DISTANCE OF 42.85 FEET; THENCE S 63'42'33" E, FOR A DISTANCE OF 48.19 FEET; THENCE S 59'33'03" E, FOR A DISTANCE OF 22.65 FEET; THENCE S 28'29'06" W, FOR A DISTANCE OF 47.75 FEET TO A CURVE CONCAVE SOUTH HAVING A RADIUS OF 145.00 FEET; THENCE SOUTHWEST 84.00 FEET ALONG THE ARC OF SAID CURVE (HAVING A CHORD BEARING S 80'19'11" W AND A CHORD LENGTH OF 82.83 FEET); THENCE DEPARTING SAID CURVE N 01'37'49" E, FOR A DISTANCE OF 107.28 FEET TO THE POINT OF BEGINNING.

CONTAINING 6,826 SQUARE FEET OR 0.16 ACRES MORE OR LESS

#### DESCRIPTION:

#### **IEMPORARY CONSTRUCTION EASEMENT (T.C.E.) "C":**

A PORTION OF LAND DESCRIBED IN OFFICIAL RECORDS BOOK 7207, PAGE 547 AND LOCATED IN SECTION 38, TOWNSHIP 1 NORTH, RANGE 31 WEST, ESCAMBIA COUNTY, FLORIDA. COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 38; THENCE S 01'45'48" W, ALONG SAID WEST LINE, FOR A DISTANCE OF 1,446.57 FEET; THENCE DEPARTING SAID WEST LINE S 89'06'09" E, FOR A DISTANCE OF 35.00 FEET; THENCE S 01'37'49" W, FOR A DISTANCE OF 195.23 FEET; THENCE S 78'07'03" E, FOR A DISTANCE OF 40.03 FEET TO THE POINT OF BEGINNING; THENCE N 68'02'58" E, FOR A DISTANCE OF 61.86 FEET TO A POINT OF CURVATURE CONCAVE SOUTH HAVING A RADIUS OF 115.00 FEET; THENCE SOUTHEAST 74.42 ALONG THE ARC OF SAID CURVE (HAVING A CHORD BEARING OF S 55'37'34" E AND A CHORD LENGTH OF 73.13 FEET) TO A POINT OF REVERSE CURVATURE CONCAVE NORTH HAVING A RADIUS OF 135.00 FEET; THENCE SOUTHEAST 101.75 FEET ALONG THE ARC OF SAID CURVE (HAVING A CHORD BEARING OF S 58'40'49" E AND A CHORD DISTANCE OF 99.36 FEET; THENCE S 80'16'24" E, FOR A DISTANCE OF 37.30 FEET TO THE WEST RIGHT OF WAY LINE OF PINE FOREST ROAD; THENCE S 09'47'14" W ALONG SAID WEST LINE, FOR A DISTANCE OF 18.45 FEET; THENCE DEPARTING SAID WEST LINE N 79'14'25" W, FOR A DISTANCE OF BEGINNING; REGINNING

CONTAINING 10,923 SQUARE FEET OR 0.25 ACRES MORE OR LESS.

#### TEMPORARY CONSTRUCTION EASEMENT (T.C.E.) "F":

A PORTION OF LAND DESCRIBED IN OFFICIAL RECORDS BOOK 7207, PAGE 547 AND LOCATED IN SECTION 38, TOWNSHIP 1 NORTH, RANGE 31 WEST, ESCAMBIA COUNTY, FLORIDA. COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 38; THENCE S 01'45'48" W, ALONG SAID WEST LINE, FOR A DISTANCE OF 1,446.57 FEET; THENCE DEPARTING SAID WEST LINE S 89'06'09" E, FOR A DISTANCE OF 315.00 FEET; THENCE S 01'37'49" W, FOR A DISTANCE OF 195.23 FEET; THENCE S 78'07'03" E, FOR A DISTANCE OF 40.03 FEET; THENCE N 68'02'58" E, FOR A DISTANCE OF 61.86 FEET TO A POINT OF CURVATURE CONCAVE SOUTH HAVING A RADIUS OF 115.00 FEET; THENCE SOUTHEAST 74.42 FEET ALONG THE ARC OF SAID CURVE (HAVING A CHORD BEARING OF S 55'37'34" E AND A CHORD LENGTH OF 73.13 FEET) TO A POINT OF REVERSE CURVATURE CONCAVE NORTH HAVING A RADIUS OF 135.00 FEET; THENCE SOUTHEAST 101.75 FEET ALONG THE ARC OF SAID CURVE (HAVING A CHORD BEARING OF S 58'40'49" E AND A CHORD DISTANCE OF 99.36 FEET); THENCE S 80'16'24" E, FOR A DISTANCE OF 37.30 FEET TO THE WEST RIGHT OF WAY LINE OF PINE FOREST ROAD; THENCE N 09'47'14" E ALONG SAID WEST LINE, FOR A DISTANCE OF 30.00 FEET TO THE POINT OF BEGINNING; THENCE DEPART SAID WEST RIGHT OF WAY LINE N 80'16'24" W, FOR A DISTANCE OF 37.33 FEET TO A POINT OF CURVATURE CONCAVE NORTH HAVING A RADIUS OF 105.00 FEET; THENCE NORTHWEST 79.14 FEET ALONG THE ARC OF SAID CURVE (HAVING A CHORD BEARING OF N 58'40'49" W AND A CHORD LENGTH OF 77.28 FEET) TO A POINT OF REVERSE CURVATURE CONCAVE SOUTH HAVING A RADIUS OF 145.00 FEET; THENCE NORTHWEST 16.39 FEET ALONG THE ARC OF SAID CURVE (HAVING A CHORD BEARING OF N 40'19'34" W AND A CHORD LENGTH OF 16.38 FEET); THENCE S 09'47'14" W, ALONG SAID WEST RIGHT OF WAY LINE OF SAID CURVE (HAVING A CHORD BEARING OF N 40'19'34" W AND A CHORD LENGTH OF 16.38 FEET); THENCE S 77'49'29" E, FOR A DISTANCE OF 33.75 FEET TO THE POINT OF BEGINNING.

CONTAINING 3,362 SQUARE FEET OR 0.08 ACRES MORE OR LESS.

#### SURVEYOR'S NOTES

- 1. NORTH AND BEARINGS ARE ASSUMED BASED ON THE WEST LINE OF SECTION 38, TOWNSHIP 1 NORTH, RANGE 31 WEST, HAVING A BEARING OF S 01'45'48" W.
- 2. NO TITLE SEARCH WAS PERFORMED BY NOR FURNISHED TO MOTT MACDONALD FLORIDA, LLC FOR THE PURPOSES OF THE SKETCH AND DESCRIPTION SHOWN HEREON.
- 3. THE OPINION OF THE LOCATION AND EXTENT OF THE PROPERTY REPRESENTED BY THE SKETCH AND DESCRIPTION DOES NOT GUARANTEE TITLE TO OR DETERMINE OWNERSHIP TO ANY PERSONS OR PARTIES. LEGEND & ABBREVIATIONS

#### SHEET 2 OF 2

THERE MAY BE ADDITIONAL RESTRICTIONS NOT SHOWN ON THIS SURVEY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF ESCAMBIA COUNTY.

MOTT **MACDONALD**  MOTT MACDONALD FLORIDA LLC 220 West Garden Street Suite 700. Pensacola, Florida 32502 Telephone: (850) 484-6011 Architects AA - C0000035 Engineers EB - 0000155 Surveyors LB - 0006783

| LS = LICENSED SURVEYOR          | LB = LICENSE BUSINESS       |
|---------------------------------|-----------------------------|
| R = RADIUS                      | CB = CHORD BEARING          |
| CL = CHORD LENGTH               | L = ARC LENGTH              |
| D = DELTA                       | IRC = IRON ROD & CAP        |
| FND. = FOUND                    | CMON = 4" CONCRETE MONUMENT |
| (C) = CALCULATED                | ID. = IDENTIFICATION        |
| (D) = DEED MEASUREMENT          | SO, FT. = SQUARE FEET       |
| (F) = FIELD MEASUREMENT         | AC. = ACRES                 |
| SEC. = SECTION                  | ± = PLUS OR MINUS           |
|                                 | O.R. = OFFICIAL RECORDS     |
| RNG. = RANGE                    | BK. = BOOK                  |
| P.O.C. = POINT OF COMMENCEMENT  |                             |
| P.O.B. = POINT OF BEGINNING     | P.C. = POINT OF CURVATURE   |
|                                 | P.T. = POINT OF TANGENCY    |
| Q = CENTERLINE                  | - NOT TO SCALE              |
| R/W = RIGHT OF WAY              | V = MOI TO SCALE            |
| T.C.E. = TEMPORARY CONSTRUCTION | n easement                  |
|                                 | = SECTION LINE              |
|                                 | RIGHT OF WAY LINE           |
|                                 | PROPERTY LINE               |
|                                 | BOUNDARY LINE               |
|                                 |                             |
|                                 | EASEMENT LINE               |
|                                 |                             |

ENCROACHMENTS AND OR IMPROVEMENTS ARE AS SHOWN OR NOTED.

NO INSTRUMENTS OF RECORD REFLECTING EASEMENTS, RIGHT OF WAYS AND OR OWNERSHIP WERE FURNISHED THIS SURVEYOR EXCEPT AS SHOWN.

NO UNDERGROUND INSTALLATIONS OR IMPROVEMENTS HAVE BEEN LOCATED EXCEPT AS SHOWN.

ALL MEASUREMENTS AND/OR ELEVATIONS WERE MADE IN ACCORDANCE TO UNITED STATES STANDARDS AND/OR UNITED STATES COAST AND GEODETIC DATUM, DISTANCES ARE IN FEET, TENTHS AND HUNDREDTHS OF A FOOT.

DESCRIPTION: SEE ABOVE

RECORDED IN N/A BOOK N/A PAGE N/A \_\_1\_N\_\_\_RNG.\_\_\_31\_W 38 \_TWP.\_ SEC.\_ DATE\_04-06-17 \_DATE OF FIELD SURVEY\_ N/A N/A <u> N/A</u> \_\_\_ SCALE<u>N/A</u> FB. \_ PAGE\_ PROJ.# 333166

UNLESS ACCOMPANIED BY A SIGNED AND SEALED SHEET 1, THEN THIS DRAWING, SKETCH, PLAT, MAP OR DESCRIPTION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID.

FILE NO.

### TEMPORARY WORK AGREEMENT

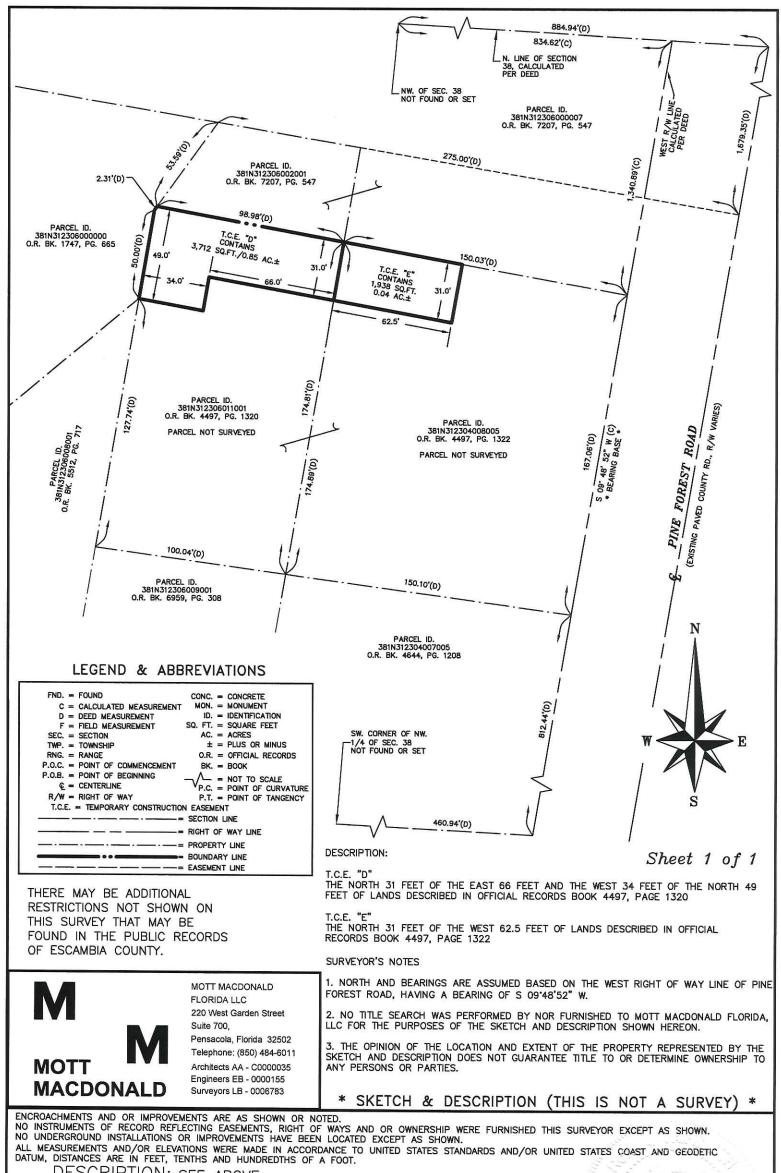
## STATE OF FLORIDA COUNTY OF ESCAMBIA

| $\pm b$   |
|---|
| THIS AGREEMENT made and entered into this Z day of January  |
| 20/9, by and between Mr. Deuclas W. Sam ; as  |
| THIS AGREEMENT made and entered into this 28th day of January 2019, by and between Mr. Douglas W. Sapp , as Party of the first part, and the Board of County Commissioners of Escambia County, Florida, Party of the Second Part.   |
| WHEREAS, the Party of the First Part owns and has title to that certain parcel of real property described below:  |
| Parcel ID: <u>381N312304008005</u>  |
| NOW, THEREFORE, it is hereby agreed as follows:   |
| The Party of the First Part does hereby grant, assign and set over unto the Party of the Second Part the right to enter upon the above-described property with men, equipment, materials and supplies to make repairs to existing stormwater facility and related infrastructure. |
| This Agreement shall expire <u>Jan. 28, 2020</u> .  |
| IN WITNESS WHEREOF, the Party of the First Part has hereunto set their hand and seal the date first above written.  |
| Signed and delivered  |
| in the presence of:   |
| James 5. Holls Wayle le Seff  |
| Witness   |
| Print or Type Witness Name  Douglas W. SAPP   |
| Print or Type Witness Name  Print Name  Print Name  |
| Clan L. Marco   |
| Witness   |
| James L. Hagon  |
| Print or Type Witness Name  |

## TEMPORARY WORK AGREEMENT

STATE OF FLORIDA COUNTY OF ESCAMBIA

| the second secon |
|--|
| THIS AGREEMENT made and entered into this 29 day of an use v   |
| 20 19, by and between Mr. Donalas W. Sam   |
| THIS AGREEMENT made and entered into this 29th day of January 2019, by and between Mr. Douglas W. Sage , as Party of the first part, and the Board of County Commissioners of Escambia County, Florida, Party of the Second Part.  |
| <b>WHEREAS</b> , the Party of the First Part owns and has title to that certain parcel of real property described below:   |
| Parcel ID: <u>381N312306011001</u>   |
| NOW, THEREFORE, it is hereby agreed as follows:  |
| ,  |
| The Party of the First Part does hereby grant, assign and set over unto the Party of the Second Part the right to enter upon the above-described property with men, equipment, materials and supplies to make repairs to existing stormwater facility and related infrastructure.  |
| This Agreement shall expire Jan 28, 2020.  |
| IN WITNESS WHEREOF, the Party of the First Part has hereunto set their hand and seal the date first above written.   |
| Signed and delivered   |
| in the presence of:  |
| Witness. F. Hoggs  Maylor Witness.   |
| Print or Type Witness Name    Jouglas W SAPP   Print District   Print Dist |
| Jan L Hage Witness   |
| James L. Hagon   |
| Print or Type Witness Name   |



ALL MEASUREMENTS AND/OR ELEVATIONS WERE MADE IN ACCORDANCE TO UNITED STATES STANDARDS AND/OR UNITED STATES COAST AND GEODET DATUM, DISTANCES ARE IN FEET, TENTHS AND HUNDREDTHS OF A FOOT.

DESCRIPTION: SEE ABOVE

UNLESS IT BEARS THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER THIS DRAWING, SKETCH, PLAT OR MAP IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT VALID.

RECORDED IN \_N/A \_ BOOK \_N/A \_ PAGE \_N/A \_ SEC. \_ 38 \_ TWP. \_ -1-N \_ RNG. \_ -31-W \_ SUBJECT: SUBJ

SEC. 38 TWP. -1-N RNG. -31-W

DATE 04-06-17 DATE OF FIELD SURVEY N/A

FB. N/A PAGE N/A SCALE 1" = 40'

PROJ.# 333166

BYRON A. FAIRCLOTH FLORIDA PROFESSIONAL SURVEYOR FILE NO. AND MAPPER NO. 6764

#### Addendum 1 - Attachment D



# Northwest Florida Water Management District

180 E. Redstone Avenue, Crestview, FL 32539

Phone: (850) 683-5044 • Fax: (850) 683-5050

February 15, 2018

Joy D. Blackmon Escambia County Public Works 3363 West Park Place Pensacola, FL 32505

RE: Notice of Final Agency Action – Determination of Qualification

General Environmental Resource Permit Project Number: GEN-033-18350-1

Permit Name: Crockett Drive & Crestfield Circle Drainage Improvements

#### Dear Joy D. Blackmon:

The District has received your notice of intent to use a General Environmental Resource Permit. Based upon the submitted information, the proposed activity qualifies for a General Environmental Resource Permit pursuant to Chapter 62-330, Florida Administrative Code (F.A.C.). The proposed activity is subject to the general conditions in Rule 62-330.405, F.A.C. (see attached Exhibit A) and the specific conditions (see attached Exhibit B) if any. Deviations from these conditions may subject you to enforcement action and possible penalties. You are responsible for conducting construction in a manner that satisfies all criteria.

Please be advised that the District has not published a notice in the newspaper advising the public that this activity has qualified for the use of a General Environmental Resource Permit. Publication, using the District form, notifies the public of their right to challenge the issuance of this permit. If proper notice is given by publication, third parties have a 21-day time limit to file a petition opposing the issuance of the permit. If you do not publish, a party's right to challenge the issuance of the permit extends for an indefinite period of time. If you wish to have certainty that the period for filing such a challenge is closed, then you may publish, at your own expense, such a notice in a newspaper of general circulation. A copy of the form of the notice and a list of newspapers of general circulation is attached for your information. If you do publish a notice, please submit a copy of the published notice to the District for our records.

This verification of qualification to use a General Environmental Resource Permit does not eliminate the need for obtaining all necessary permits or approvals from other agencies.

GEORGE ROBERTS Chair Panama City JERRYPATE Vice Chair Pensacola JOHN W. ALTER Secretary-Treasurer Malone GUS ANDREWS DeFuniak Springs Should you have any questions regarding your permit or its conditions, please contact your permit reviewer, Ted Reese, at (850) 683-5044 or by e-mail: Ted.Reese@nwfwater.com and Javier Montiel, at (850) 683-5044 or by e-mail: Javier.Montiel@nwfwater.com

Sincerely,

\_\_\_\_\_

Andrew Joslyn ERP Bureau Chief

cc:

#### Consultant:

Tyler Mitchell Mott MacDonald 220 West Garden St, Suite 700 Pensacola, FL 32502

Steve White Mott MacDonald 220 West Garden St, Suite 700 Pensacola, FL 32502

Enc:

Notice of Rights Sample Newspaper Notice

# NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT GENERAL ENVIRONMENTAL RESOURCE PERMIT

**PERMIT NO:** GEN-033-18350-1 **DATE ISSUED:** February 15, 2018 **PROJECT NAME:** Crockett Drive & Crestfield Circle Drainage Improvements

#### A PERMIT AUTHORIZING:

The use of Section 62-330.451, F.A.C. – General Permit to Counties, Municipalities, and other Agencies to Conduct Stormwater Retrofit Activities. The retrofit activities will consist of improvements to two sites along West Roberts Road and to Blue Pit Pond to provide additional treatment and attenuation capacity and capability, resulting in a reduction of existing conveyance and flooding problems in the overall drainage basin near Cantonment, (Escambia County). The proposed retrofit activities include improvements to route a portion of stormwater runoff through a new piping system along an existing unopened County right-of-way to convey runoff toward the reconfigured and reshaped Blue Pit Pond. The improvements will also include the installation of drainage inlets and pipes near the intersection of Crestfield Circle and West Roberts Road, to alleviate the flooding within the open conveyance ditches. The proposed improvements are in accordance with the approved plans prepared by Mott MacDonald.

**Escambia County** 

#### **ISSUED TO:**

Escambia County Public Works 3363 West Park Place Pensacola, FL 32505

Permittee agrees to hold and save the Northwest Florida Water Management District and its successors harmless from any and all damages, claims, or liabilities which may arise from permit issuance. Said application, including all plans and specifications attached thereto, is by reference made a part hereof.

The use of a General Environmental Resource permit does not convey to permittee any property rights or any rights or privileges other than those specified herein, nor relieve the permittee from complying with any law, regulation or requirement affecting the rights of other bodies or agencies. All structures and works installed by permittee hereunder shall remain the property of the permittee.

This permit may be revoked, modified or transferred at any time pursuant to the appropriate provisions of Chapter 373, Florida Statutes:

Activities conducted under this permit are subject to the following conditions:

See conditions on attached "Exhibit A", dated February 15, 2018

**AUTHORIZED BY:** Northwest Florida Water Management District

Division of Resource Regulation

Andrew Joslyn

ERP Bureau Chief

# "EXHIBIT A" CONDITIONS FOR ISSUANCE OF PERMIT NUMBER GEN-033-18350-1 Crockett Drive & Crestfield Circle Drainage Improvements

# DATED February 15, 2018

- 1. The general permit is valid only for the specific activity indicated. Any deviation from the specified activity and the conditions for undertaking that activity shall constitute a violation of the permit and may subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.
- 2. This general permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any construction, alteration, operation, maintenance, removal or abandonment authorized by this permit.
- 3. This general permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the general permit.
- 4. The general permit does not relieve the permittee from liability and penalties when the permitted activity causes harm or injury to: human health or welfare; animal, plant or aquatic life; or property. It does not allow the permittee to cause pollution that violates state water quality standards.
- 5. Section 253.77, F.S., provides that a person may not commence any excavation, construction, or other activity involving the use of state-owned or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required consent, lease, easement, or other form of authorization authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on state-owned lands.
- 6. The authorization to conduct activities under a general permit may be modified, suspended or revoked in accordance with Chapter 120, F.S., and Section 373.429, F.S.
- 7. This permit shall not be transferred to a third party except pursuant to Rule 62-330.340, F.A.C. The permittee transferring the general permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to sale, conveyance, or other transfer of ownership or control of the permitted project, activity, or the real property at which the permitted project or activity is located.
- 8. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the permitted system to ensure conformity with the plans and specifications approved by the permit.
- 9. The permittee shall maintain any permitted project or activity in accordance with the plans submitted to the Agency and authorized in this general permit.
- 10. A permitee's right to conduct a specific activity under this general permit is authorized for a duration of five years.
- 11. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be implemented and maintained immediately prior to, during, and after construction as needed to stabilize all disturbed areas, including other measures

specified in the permit to prevent adverse impacts to the water resources and adjacent lands. Erosion and sediment control measures shall be installed and maintained in accordance with the State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), available at

www.dep.state.fl.us/water/wetlands/docs/erp/FLErosionSedimentManual\_6\_07.pdf, and the Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), available at www.dep.state.fl.us/water/nonpoint/docs/erosion/erosion-inspectors-manual.pdf.

- 12. Unless otherwise specified in the general permit, temporary vehicular access within wetlands during construction shall be performed using vehicles generating minimum ground pressure to minimize rutting and other environmental impacts. Within forested wetlands, the permittee shall choose alignments that minimize the destruction of mature wetland trees to the greatest extent practicable. When needed to prevent rutting or soil compaction, access vehicles shall be operated on wooden, composite, metal, or other non-earthen construction mats. In all cases, access in wetlands shall comply with the following:
  - a. Access within forested wetlands shall not include the cutting or clearing of any native wetland tree having a diameter 4 inches or greater at breast height;
  - b. The maximum width of the construction access area shall be limited to 15 feet;
  - c. All mats shall be removed within 72 hours after the work commences; and
  - d. Areas disturbed for access shall be restored to natural grades immediately after the maintenance or repair is completed.
- 13. Barges or other work vessels used to conduct in-water activities shall be operated in a manner that prevents unauthorized dredging, water quality violations, and damage to submerged aquatic communities.
- 14. The construction, alteration, or use of the authorized project shall not adversely impede navigation or create a navigational hazard in the water body.
- 15. Except where specifically authorized in a general permit, activities must not:
  - a. Impound or obstruct existing water flow, cause adverse impacts to existing surface water storage and conveyance capabilities, or otherwise cause adverse water quantity or flooding impacts to receiving water and adjacent lands;
  - b. Cause an adverse impact to the maintenance of surface or ground water levels or surface water flows established pursuant to Section 373.042, F.S., or a Works of the District established pursuant to Section 373.086, F.S.; or
- 16. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.
- 17. The activity must be capable, based on generally accepted engineering and scientific principles, of being performed and of functioning as proposed, and must comply with any applicable District special basin and geographic area criteria.

- 18. The permittee shall comply with the following when performing work within waters accessible to federally- or state-listed aquatic species, such as manatees, marine turtles, smalltooth sawfish, and Gulf sturgeon:
  - a. All vessels associated with the project shall operate at "Idle Speed/No Wake" at all times while in the work area and where the draft of the vessels provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.
  - b. All deployed siltation or turbidity barriers shall be properly secured, monitored, and maintained to prevent entanglement or entrapment of listed species.
  - c. All in-water activities, including vessel operation, must be shutdown if a listed species comes within 50 feet of the work area. Activities shall not resume until the animal(s) has moved beyond a 50-foot radius of the in-water work, or until 30 minutes elapses since the last sighting within 50 feet. Animals must not be herded away or harassed into leaving. All on-site project personnel are responsible for observing water-related activities for the presence of listed species.
  - d. Any listed species that is killed or injured by work associated with activities performed shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1(888)404-3922 and ImperiledSpecies@myFWC.com.
  - e. Whenever there is a spill or frac-out of drilling fluid into waters accessible to the above species during a directional drilling operation, the FWC shall be notified at imperiledspecies@myfwc.com with details of the event within 24 hours following detection of the spill or frac-out.
- 19. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any activity authorized by the general permit.
- 20. The permittee shall immediately notify the Agency in writing of any submitted information that is discovered to be inaccurate.



# NOTICE OF RIGHTS

Northwest Florida Water Management District 152 Water Management Drive, Havana, FL 32333-4712 (850) 539-5999 Fax (850) 539-2693 www.nwfwater.com



The following information addresses procedures to be followed if you desire an administrative hearing or other review of agency action.

#### PETITION FOR FORMAL ADMINISTRATIVE PROCEEDINGS

Any person whose substantial interests are or may be affected by the action described in the enclosed Notice of Agency Action, may petition for an administrative hearing in accordance with the requirements of section 28-106.201, Florida Administrative Code, or may choose to pursue mediation as an alternative remedy under section 120.573, Florida Statutes, before the deadline for filing a petition. Pursuit of mediation will not adversely affect the right to administrative proceedings in the event mediation does not result in a settlement. Petitions for an administrative hearing must be filed with the Agency Clerk of the Northwest Florida Water Management District, 81 Water Management Drive, Havana, Florida 32333-9700 by the deadline specified in the attached cover letter. Failure to file a petition within this time period shall constitute a waiver of any rights such person may have to request an administrative determination (hearing) under section 120.57, Florida Statutes, concerning the subject permit application. Petitions which are not filed in accordance with the above provisions are subject to dismissal.

#### DISTRICT COURT OF APPEAL

A party who is adversely affected by final agency action on the permit application and who has exhausted available administrative remedies is entitled to judicial review in the District Court of Appeal pursuant to section 120.68, Florida Statutes. Review under section 120.68, Florida Statutes, is initiated by filing a Notice of Appeal in the appropriate District Court of Appeal in accordance with Florida Rule of Appellate Procedure 9.110.

#### SECTION 28-106.201, FLORIDA ADMINISTRATIVE CODE, INITIATION OF PROCEEDINGS

- (1) Unless otherwise provided by statute, and except for agency enforcement and disciplinary actions that shall be initiated under Rule 28-106.2015, F.A.C., initiation of proceedings shall be made by written petition to the agency responsible for rendering final agency action. The term "petition" includes any document that requests an evidentiary proceeding and asserts the existence of a disputed issue of material fact. Each petition shall be legible and on 8 1/2 by 11 inch white paper. Unless printed, the impression shall be on one side of the paper only and lines shall be double-spaced.
- (2) All petitions filed under these rules shall contain:
  - (a) The name and address of each agency affected and each agency's file or identification number, if known;
  - (b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
  - (c) A statement of when and how the petitioner received notice of the agency decision;
  - (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate:
  - (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action;
  - (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
  - (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.
- (3) Upon receipt of a petition involving disputed issues of material fact, the agency shall grant or deny the petition, and if granted shall, unless otherwise provided by law, refer the matter to the Division of Administrative Hearings with a request that an administrative law judge be assigned to conduct the hearing. The request shall be accompanied by a copy of the petition and a copy of the notice of agency action.

Rulemaking Authority 14.202, 120.54(3), (5) FS. Law Implemented 120.54(3) FS. History–New 4-1-97, Amended 9-17-98, 1-15-07, 2-5-13.

#### NOTICING PUBLICATION INFORMATION

The District's action regarding the issuance or denial of a permit, a petition or qualification for an exemption only becomes closed to future legal challenges from members of the public ("third parties"), if 1) "third parties" have been properly notified of the District's action regarding the permit or exemption, and 2) no "third party" objects to the District's action within a specific period of time following the notification.

Notification of "third parties" is provided through publication of certain information in a newspaper of general circulation in the county where the proposed activities are to occur. Publication of notice informs "third parties" of their right to have a 21-day time limit in which to file a petition opposing the District's action. However, if no notice to "third parties" is published, there is no time limit to a party's right to challenge the District's action. The District has not published a notice to "third parties" that it has taken final action on your application. If you want to ensure that the period of time in which a petition opposing the District's action regarding your application is limited to the time frame state above, you may publish, at your own expense, a notice in a newspaper of general circulation. A copy of the Notice of Agency Action the District uses for publication is attached. You may use this format or create your own, as long as the essential information is included.

If you do decide to publish a Notice of Final Agency Action, please provide the District a copy of the Proof of Publication when you receive it. That will provide us notice that action on this permit application is closed after the 21 days following publication.

# Notice of Final Agency Action Taken by the Northwest Florida Water Management District

Notice is given that Environmental Resource permit number GEN-033-18350-1 was issued on February 15, 2018 to Joy D. Blackmon

Escambia County Public Works for the construction of a new surface water management system designed to accommodate the retrofit activities that provide a net benefit to two areas along West Roberts Road in northwest Escambia County. The proposed activities will be to provide additional stormwater conveyance and storage within a previously dug borrow pit (according to historic permitting is known as Blue Pit Pond, that was permitted under Chapter 62-25, F.A.C., under permit number 0280719-0010RG to provide attenuation volume to an area that did not have any) and existing linear retention ponds that are owned, operated, and maintained by Escambia County Public Works Department. The proposed improvements will consist of the installation of drainage inlets and up-sized pipes at the intersection of Crockett Drive and West Roberts Road to reroute a portion of stormwater runoff through a new piping system along an existing unopened County rightof-way. The right-of-way will convey runoff toward the reconfigured Blue Pit Pond located to the south. The improvements will also include the installation of drainage inlets and pipes near the intersection of Crestfield Circle and West Roberts Road, to alleviate flooding within the open conveyance ditches. The proposed project intends to increase capacity of the Blue Pit Pond to serve additional drainage area and provide additional detention. The retrofit activities appear to meet or exceed the requirements of Section 62-330.451, F.A.C. - General Permit to Counties. Municipalities, and other Agencies to Conduct Stormwater Retrofit Activities. The proposed activities will be constructed, operated, and maintained by the City of Pensacola. There are no wetlands located within the project limits. The project is located at Intersection of West Roberts Road and Crockett St. Intersection of West Roberts Road and Crestfield Circle, Escambia County.

The file containing the application for this permit is available for inspection Monday through Friday (except for legal holidays), 8:00 a.m. to 5:00 p.m. at the Northwest Florida Water Management District's ERP Office, 180 E. Redstone Avenue, Crestview, FL 32539

A person whose substantial interests are affected by the District permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S., or may choose to pursue mediation as an alternative remedy under Section 120.573, Florida Statutes, and Rules 28-106.111 and 28-106.401-404, Florida Administrative Code. Petitions must comply with the requirements of Florida Administrative Code, Chapter 28-106 and be filed with (received by) the District Clerk located at District Headquarters, 81 Water Management Drive, Havana, FL 32333-4712. Petitions for administrative hearing on the above application must be filed within twenty-one (21) days of publication of this notice or within twenty-six (26) days of the District depositing notice of this intent in the mail for those persons to whom the District mails actual notice. Failure to file a petition within this time period shall constitute a waiver of any right(s) such person(s) may have to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., concerning the subject permit. Petitions which are not filed in accordance with the above provisions are subject to dismissal.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the District's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the District on the application have the right to petition to become a party to the proceedings, in accordance with the requirements set forth above.